Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-EXT-4590	07C	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	5	5	11-Aug-27	19-Aug-27
HS-EXT-4740	08A	Install Windows	20	20	20-Aug-27	20-Sep-27
HS-EXT-4920	04A	Install Masonry Veneer, Sills & Headers	26	26	27-Aug-27	08-Oct-27
HS-EXT-5150	04A	Install Main Entrance Cast Stone Header And Cornice	10	10	11-Oct-27	26-Oct-27
HS-EXT-5160	08A	Caulk Windows	5	5	11-Oct-27	18-Oct-27
HS-EXT-5310	07G	Caulk Brick	5	5	27-Oct-27	02-Nov-27
HS-EXT-5320	09B	Install Exterior Soffit Framing	5	5	27-Oct-27	02-Nov-27
HS-EXT-5430	26B	Rough In Soffit Lighting	2	2	03-Nov-27	05-Nov-27
HS-EXT-5470	09B	Install Exterior Soffit Sheathing	2	2	08-Nov-27	09-Nov-27
HS-EXT-5480	09B	Install Exterior Soffit Finish	5	5	10-Nov-27	17-Nov-27
HS-EXT-5490	08A	Install Exterior Entrance Storefront & Door System	5	5	18-Nov-27	24-Nov-27
Elevation HS 8a - HS Mechanical Penthouse			17	17	09-Aug-27	02-Sep-27
HS-EXT-1100	09B	Install CFMF Stud Walls	2	2	09-Aug-27	10-Aug-27
HS-EXT-3510	09B	Install CFMF Roof Truss System	5	5	11-Aug-27	19-Aug-27
HS-EXT-3730	05B	Install Roof Decking	1	1	20-Aug-27	20-Aug-27
HS-EXT-4000	09B	Install Base Of Wall Framing, Insulation & Sheathing	5	5	23-Aug-27	27-Aug-27
HS-EXT-4400	07E	Install Base Of Wall Flashing System	2	2	30-Aug-27	31-Aug-27
HS-EXT-4600	09B	Install Gyp Sheathing	2	2	01-Sep-27	02-Sep-27
Elevation HS 9 - Area H - North (A1/A236)			52	52	18-Jun-27	10-Sep-27
HS-EXT-1110	09B	Layout Walls	2	2	18-Jun-27	21-Jun-27
HS-EXT-3520	09B	Install CFMF Stud Framing	10	10	22-Jun-27	08-Jul-27
HS-EXT-3740	09B	Install Base Of Wall Framing, Insulation & Sheathing	5	5	09-Jul-27	16-Jul-27
HS-EXT-4010	09B	Install Gyp Sheathing	5	5	19-Jul-27	26-Jul-27
HS-EXT-4410	04A	Install Base Thru Wall Flashing (2-Piece System)	5	5	27-Jul-27	02-Aug-27
HS-EXT-4420	09B	Install Steel Head And Sill Support Angles	0	0	27-Jul-27	27-Jul-27
HS-EXT-4610	06C	Install Window Blocking	5	5	27-Jul-27	02-Aug-27
HS-EXT-4760	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	2	2	04-Aug-27	05-Aug-27
HS-EXT-4940	08A	Install Windows	10	10	06-Aug-27	23-Aug-27
HS-EXT-4950	06C	Install Z-Girts & Fiber Cement Panel System	18	18	06-Aug-27	02-Sep-27
HS-EXT-5340	08A	Caulk Windows	5	5	03-Sep-27	10-Sep-27
Elevation HS 9a - Area H - North (A1/A236)			36	36	22-Jun-27	20-Aug-27
HS-EXT-1120	09B	Layout Walls	2	2	22-Jun-27	23-Jun-27
HS-EXT-3530	09B	Install CFMF Stud Framing	10	10	09-Jul-27	26-Jul-27
HS-EXT-3750	09B	Install Base Of Wall Framing, Insulation & Sheathing	2	2	27-Jul-27	28-Jul-27
HS-EXT-4020	09B	Install Gyp Sheathing	5	5	29-Jul-27	05-Aug-27
HS-EXT-4430	04A	Install Base Thru Wall Flashing (2-Piece System)	2	2	06-Aug-27	09-Aug-27
HS-EXT-4440	09B	Install Steel Head And Sill Support Angles	1	1	06-Aug-27	06-Aug-27
HS-EXT-4620	06C	Install Window Blocking	1	1	09-Aug-27	09-Aug-27
HS-EXT-4770	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	1	1	10-Aug-27	10-Aug-27
HS-EXT-4960	08A	Install Windows	2	2	11-Aug-27	13-Aug-27
HS-EXT-4970	06C	Install Z-Girts & Fiber Cement Panel Support System	5	5	11-Aug-27	19-Aug-27
HS-EXT-5200	06C	Install Mineral Wool Insulation	0	0	20-Aug-27	20-Aug-27
HS-EXT-5210	06C	Install Fiber Cement Panels	0	0	20-Aug-27	20-Aug-27
HS-EXT-5350	08A	Caulk Windows	1	1	20-Aug-27	20-Aug-27
Elevation HS 10 - Area H - Clerestory			34	34	20-Aug-27	13-Oct-27
HS-EXT-1130	09B	Install CFMF Stud Wall Framing	5	5	20-Aug-27	26-Aug-27
HS-EXT-3540	09B	Install Fascia Framing At Perimeter Of Roof	0	0	27-Aug-27	27-Aug-27
HS-EXT-3550	09B	Install Base Of Wall Framing, Insulation & Sheathing	5	5	27-Aug-27	02-Sep-27
HS-EXT-3760	07C	Install Base Thru Wall Flashing (2-Piece System)	5	5	03-Sep-27	10-Sep-27
HS-EXT-3770	09B	Install Gyp Sheathing	2	2	03-Sep-27	06-Sep-27
HS-EXT-4030	06C	Install Window Blocking	2	2	08-Sep-27	09-Sep-27
HS-EXT-4450	07C	Install Flashing	2	2	10-Sep-27	13-Sep-27
HS-EXT-4630	07A	Install AVB System	1	1	14-Sep-27	14-Sep-27
HS-EXT-4780	07C	Install Z-Girts & Metal Panel Support System	10	10	15-Sep-27	01-Oct-27
HS-EXT-4980	07C	Install Mineral Wool Insulation	0	0	04-Oct-27	04-Oct-27
HS-EXT-4990	07C	Install Metal Panels	0	0	04-Oct-27	04-Oct-27
HS-EXT-5220	08A	Install Storefront Windows	5	5	04-Oct-27	11-Oct-27
HS-EXT-5230	09B	Install Soffit Framing & Sheathing	0	0	04-Oct-27	04-Oct-27
HS-EXT-5360	07C	Field Measure Soffit & Fascia Metal Panels	1	1	04-Oct-27	04-Oct-27
HS-EXT-5440	07C	Install Soffit & Fascia Panels	5	5	06-Oct-27	12-Oct-27
HS-EXT-5370	08A	Caulk Windows	2	2	12-Oct-27	13-Oct-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
Elevation HS 10a - HS Academic Wing Rooftop Knee Walls			**4**	**4**	**18-Jun-27**	**23-Jun-27**
HS-EXT-1140	09B	Frame Rooftop Partition Knee Walls	1	1	18-Jun-27	18-Jun-27
HS-EXT-3560	09B	Insulate Walls	1	1	21-Jun-27	21-Jun-27
HS-EXT-3780	09B	Install Plywood Sheathing	1	1	22-Jun-27	22-Jun-27
HS-EXT-4040	06C	Install Blocking	1	1	23-Jun-27	23-Jun-27
Elevation HS 11 - HS East Academic Wing East (D3/A231)			**73**	**73**	**14-Jul-27**	**10-Nov-27**
HS-EXT-1150	09B	Layout Wall	5	5	14-Jul-27	22-Jul-27
HS-EXT-3570	09B	Install CFMF Stud Framing	10	10	23-Jul-27	06-Aug-27
HS-EXT-4060	05B	Install Steel Head & Sill Support Angles	15	15	23-Jul-27	16-Aug-27
HS-EXT-3790	09B	Install Gyp Sheathing	5	5	09-Aug-27	16-Aug-27
HS-EXT-4050	04A	Install Base Course Of Brick And Truwall Flashing	2	2	18-Aug-27	19-Aug-27
HS-EXT-4070	06C	Install Window Blocking	10	10	18-Aug-27	31-Aug-27
HS-EXT-4080	04A	Install Brick Ties	5	5	18-Aug-27	24-Aug-27
HS-EXT-4460	07A	AVB Detailing & Spray Insulation	2	2	01-Sep-27	02-Sep-27
HS-EXT-4640	08A	Install Windows	20	20	03-Sep-27	07-Oct-27
HS-EXT-4790	04A	Install Masonry Veneer, Sills & Headers	15	15	11-Oct-27	02-Nov-27
HS-EXT-5000	07G	Caulk Brick	5	5	03-Nov-27	10-Nov-27
HS-EXT-5010	08A	Caulk Windows	5	5	03-Nov-27	10-Nov-27
Elevation HS 12 - HS Athletic Courtyard Academic Wing East (C1/A236)			**98**	**98**	**14-Jul-27**	**28-Dec-27**
HS-EXT-1160	09B	Layout Wall	5	5	14-Jul-27	22-Jul-27
HS-EXT-3580	09B	Install CFMF Stud Framing	10	10	23-Jul-27	06-Aug-27
HS-EXT-4100	05B	Install Steel Head & Sill Support Angles	15	15	23-Jul-27	16-Aug-27
HS-EXT-3800	09B	Install Gyp Sheathing	5	5	09-Aug-27	16-Aug-27
HS-EXT-4090	04A	Install Base Course Of Brick And Truwall Flashing	2	2	18-Aug-27	19-Aug-27
HS-EXT-4110	06C	Install Window Blocking	10	10	18-Aug-27	31-Aug-27
HS-EXT-4120	04A	Install Brick Ties	5	5	18-Aug-27	24-Aug-27
HS-EXT-4470	07A	AVB Detailing & Spray Insulation	2	2	01-Sep-27	02-Sep-27
HS-EXT-4650	08A	Install Windows	22	22	03-Sep-27	11-Oct-27
HS-EXT-4800	04A	Install Masonry Veneer, Sills & Headers	15	15	19-Nov-27	20-Dec-27
HS-EXT-5020	07G	Caulk Brick	5	5	21-Dec-27	28-Dec-27
HS-EXT-5030	08A	Caulk Windows	5	5	21-Dec-27	28-Dec-27
Elevation HS 13 - HS East Academic Wing South (A1/A231)			**75**	**75**	**23-Jul-27**	**22-Nov-27**
HS-EXT-1170	09B	Layout Wall	1	1	23-Jul-27	23-Jul-27
HS-EXT-3590	09B	Install CFMF Stud Framing	10	10	09-Aug-27	24-Aug-27
HS-EXT-3810	09B	Install Gyp Sheathing	5	5	25-Aug-27	31-Aug-27
HS-EXT-4130	04A	Install Base Course Of Brick And Truwall Flashing	2	2	01-Sep-27	02-Sep-27
HS-EXT-4140	09B	Install Steel Head & Sill Support Angles	5	5	01-Sep-27	08-Sep-27
HS-EXT-4150	06C	Install Window Blocking	5	5	01-Sep-27	08-Sep-27
HS-EXT-4160	04A	Install Brick Ties	2	2	01-Sep-27	02-Sep-27
HS-EXT-4480	07A	AVB Detailing & Spray Insulation	1	1	09-Sep-27	09-Sep-27
HS-EXT-4660	08A	Install Windows	10	10	10-Sep-27	27-Sep-27
HS-EXT-4810	04A	Install Masonry Veneer, Sills & Headers	10	10	03-Nov-27	18-Nov-27
HS-EXT-5040	07G	Caulk Brick	2	2	19-Nov-27	22-Nov-27
HS-EXT-5050	08A	Caulk Windows	2	2	19-Nov-27	22-Nov-27
Elevation HS 14 - HS West Academic Wing West (A6/A232)			**59**	**59**	**26-May-27**	**30-Aug-27**
HS-EXT-1180	09B	Layout Wall	1	1	26-May-27	26-May-27
HS-EXT-3600	09B	Install CFMF Stud Framing	2	2	28-May-27	31-May-27
HS-EXT-3820	09B	Install Gyp Sheathing	2	2	02-Jun-27	03-Jun-27
HS-EXT-4170	04A	Install Base Course Of Brick And Truwall Flashing	2	2	04-Jun-27	07-Jun-27
HS-EXT-4180	09B	Install Steel Head & Sill Support Angles	5	5	04-Jun-27	10-Jun-27
HS-EXT-4190	06C	Install Window Blocking	1	1	04-Jun-27	04-Jun-27
HS-EXT-4200	04A	Install Brick Ties	1	1	04-Jun-27	04-Jun-27
HS-EXT-4490	07A	AVB Detailing & Spray Insulation	1	1	11-Jun-27	11-Jun-27
HS-EXT-4670	08A	Install Windows	1	1	14-Jun-27	14-Jun-27
HS-EXT-4820	04A	Install Masonry Veneer, Sills & Headers	2	2	25-Aug-27	26-Aug-27
HS-EXT-5060	07G	Caulk Brick	2	2	27-Aug-27	30-Aug-27
HS-EXT-5070	08A	Caulk Windows	1	1	27-Aug-27	27-Aug-27
Elevation HS 15 - HS Locker / Gym Entry Northeast (E2/A233 & C4/A233)			**100**	**100**	**21-Apr-27**	**04-Oct-27**
HS-EXT-1190	09B	Layout Wall	2	2	21-Apr-27	22-Apr-27
HS-EXT-3610	09B	Install CFMF Stud Framing	10	10	23-Apr-27	11-May-27
HS-EXT-4220	05B	Install Steel Head & Sill Support Angles	10	10	05-May-27	20-May-27

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Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-EXT-3830	09B	Install Gyp Sheathing	5	5	12-May-27	20-May-27
HS-EXT-4210	04A	Install Base Course Of Brick And Truwall Flashing	5	5	21-May-27	28-May-27
HS-EXT-4230	06C	Install Window Blocking	5	5	21-May-27	28-May-27
HS-EXT-4240	04A	Install Brick Ties & Flashing	5	5	21-May-27	28-May-27
HS-EXT-4500	07A	Spray Insulation	2	2	31-May-27	02-Jun-27
HS-EXT-4680	08A	Install Windows	10	10	03-Jun-27	16-Jun-27
HS-EXT-4690	04A	Install Masonry Veneer, Sills & Headers	20	20	23-Jul-27	24-Aug-27
HS-EXT-4830	07G	Caulk Brick	5	5	25-Aug-27	31-Aug-27
HS-EXT-4840	09B	Install Canopy And Soffit Framing	10	10	25-Aug-27	08-Sep-27
HS-EXT-4850	08A	Install Exterior Entrance Storefront & Door System	10	10	25-Aug-27	08-Sep-27
HS-EXT-5080	26B	Rough In Canopy Lights	2	2	09-Sep-27	10-Sep-27
HS-EXT-5090	07G	Caulk Windows	5	5	09-Sep-27	15-Sep-27
HS-EXT-5240	09B	Install Canopy Sheathing	2	2	13-Sep-27	14-Sep-27
HS-EXT-5380	07A	Install Canopy AVB	1	1	15-Sep-27	15-Sep-27
HS-EXT-5450	07C	Install Metal Panel Soffit & Fascia	10	10	17-Sep-27	04-Oct-27
Elevation HS 16 - HS Gym Entry Clerestory (A1/A5/C4/A233)			85	85	25-Jun-27	11-Nov-27
HS-EXT-1200	09B	Layout Wall	2	2	25-Jun-27	28-Jun-27
HS-EXT-3620	09B	Install CFMF Stud Framing	15	15	27-Jul-27	19-Aug-27
HS-EXT-3840	09B	Install Gyp Sheathing	5	5	20-Aug-27	26-Aug-27
HS-EXT-1210	09B	Install Soffit Framing & Sheathing	5	5	20-Aug-27	26-Aug-27
HS-EXT-4250	04A	Install Base Course Of Masonry And Truwall Flashing	5	5	27-Aug-27	02-Sep-27
HS-EXT-4260	05B	Install Steel Head And Sill Support Angles	5	5	27-Aug-27	02-Sep-27
HS-EXT-4270	06C	Install Window Blocking	5	5	27-Aug-27	02-Sep-27
HS-EXT-4280	04A	Install Brick Ties	1	1	27-Aug-27	27-Aug-27
HS-EXT-3630	07C	Field Measure Soffit & Fascia Metal Panels	1	1	27-Aug-27	27-Aug-27
HS-EXT-3850	07C	Install Soffit & Fascia Panels	10	10	30-Aug-27	13-Sep-27
HS-EXT-4510	07A	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	2	2	03-Sep-27	06-Sep-27
HS-EXT-4700	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	5	5	08-Sep-27	14-Sep-27
HS-EXT-4860	08A	Install Windows	15	15	15-Sep-27	11-Oct-27
HS-EXT-5100	04A	Install Masonry Veneer And Cast Stone Headers / Sills	10	10	12-Oct-27	27-Oct-27
HS-EXT-5250	07G	Caulk Brick	1	1	28-Oct-27	28-Oct-27
HS-EXT-5260	06C	Install Z-Girts & Fiber Cement Panel Support System	5	5	28-Oct-27	03-Nov-27
HS-EXT-5270	08A	Install Exterior Entrance Storefront & Door System	0	0	28-Oct-27	28-Oct-27
HS-EXT-5390	06C	Install Mineral Wool Insulation	0	0	05-Nov-27	05-Nov-27
HS-EXT-5400	06C	Install Fiber Cement Panels	0	0	05-Nov-27	05-Nov-27
HS-EXT-5460	08A	Caulk Windows	5	5	05-Nov-27	11-Nov-27
HS Firewalls			20	20	21-Apr-27	25-May-27
HS-EXT-5790	04A	Install CMU - Area K - Fire Wall	5	5	21-Apr-27	28-Apr-27
HS-EXT-5780	04A	Install CMU - Area H/K - Fire Wall	10	10	30-Apr-27	17-May-27
HS-EXT-5880	07H	Install Spray Fireproofing - Area K - Fire Wall	5	5	30-Apr-27	07-May-27
HS-EXT-6530	07H	Install Spray Fireproofing - Area H/K - Fire Wall	5	5	19-May-27	25-May-27
HS Courtyard Leaveout Elevations			28	28	08-May-28	21-Jun-28
HS-EXT-6190	09B	Layout Wall	2	2	08-May-28	09-May-28
HS-EXT-6200	09B	Install CFMF Stud Framing	2	2	10-May-28	12-May-28
HS-EXT-6210	09B	Install Gyp Sheathing	2	2	15-May-28	17-May-28
HS-EXT-6220	04A	Install Base Course Of Brick And Truwall Flashing	5	5	18-May-28	24-May-28
HS-EXT-6230	09B	Install Steel Head & Sill Support Angles	5	5	18-May-28	24-May-28
HS-EXT-6240	06C	Install Window Blocking	2	2	18-May-28	19-May-28
HS-EXT-6250	04A	Install Brick Ties & Flashing	2	2	18-May-28	19-May-28
HS-EXT-6260	07A	Spray Insulation	2	2	26-May-28	29-May-28
HS-EXT-6270	08A	Install Windows	5	5	30-May-28	05-Jun-28
HS-EXT-6280	04A	Install Masonry Veneer, Sills & Headers	5	5	30-May-28	05-Jun-28
HS-EXT-6290	07G	Caulk Brick	2	2	06-Jun-28	07-Jun-28
HS-EXT-6300	09B	Install Canopy And Soffit Framing	5	5	06-Jun-28	12-Jun-28
HS-EXT-6350	08A	Install Exterior Entrance Storefront & Door System	5	5	06-Jun-28	12-Jun-28
HS-EXT-6310	26B	Rough In Canopy Lights	2	2	13-Jun-28	14-Jun-28
HS-EXT-6360	07G	Caulk Windows	2	2	13-Jun-28	14-Jun-28
HS-EXT-6320	09B	Install Canopy Sheathing	0	0	16-Jun-28	16-Jun-28
HS-EXT-6330	07A	Install Canopy AVB	1	1	16-Jun-28	16-Jun-28
HS-EXT-6340	07C	Install Metal Panel Soffit & Fascia	2	2	19-Jun-28	21-Jun-28
HS Roofing			394	394	24-Aug-26	20-Mar-28

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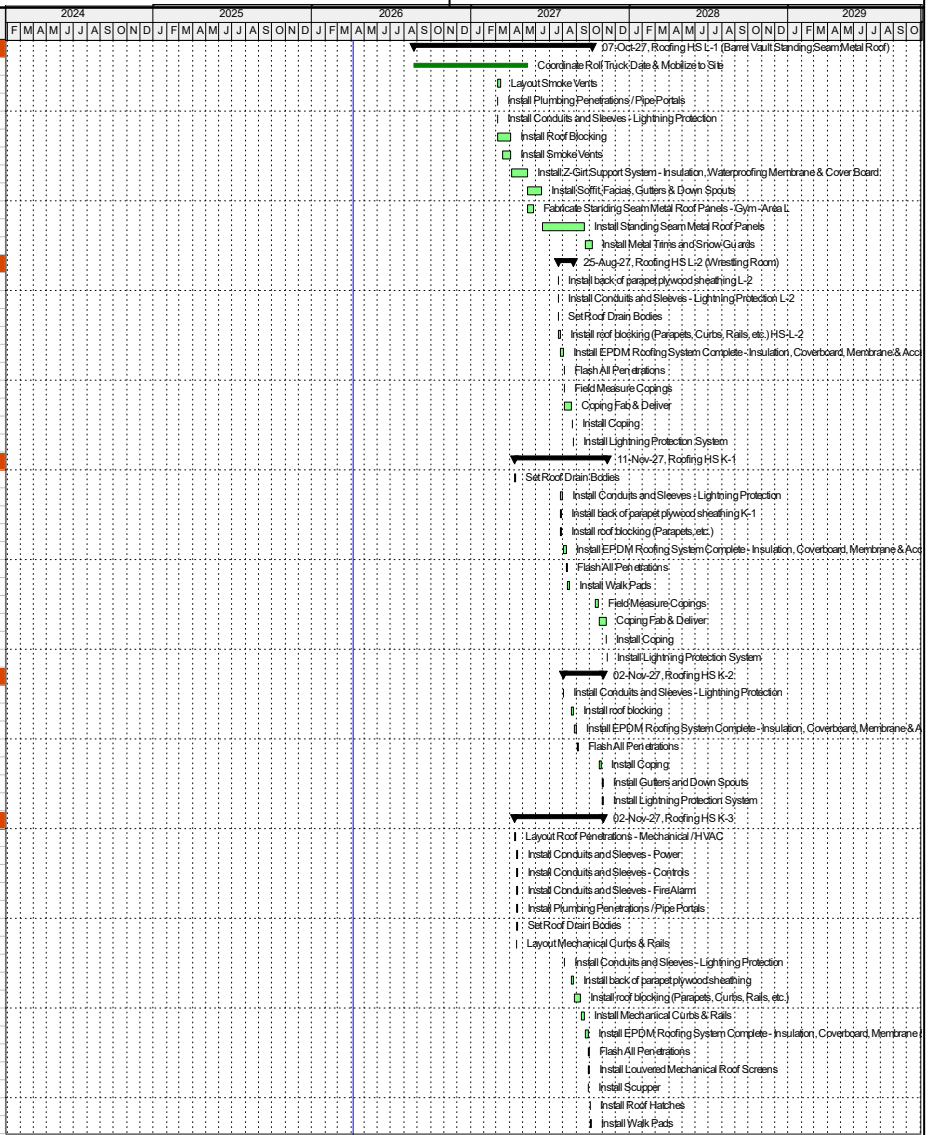
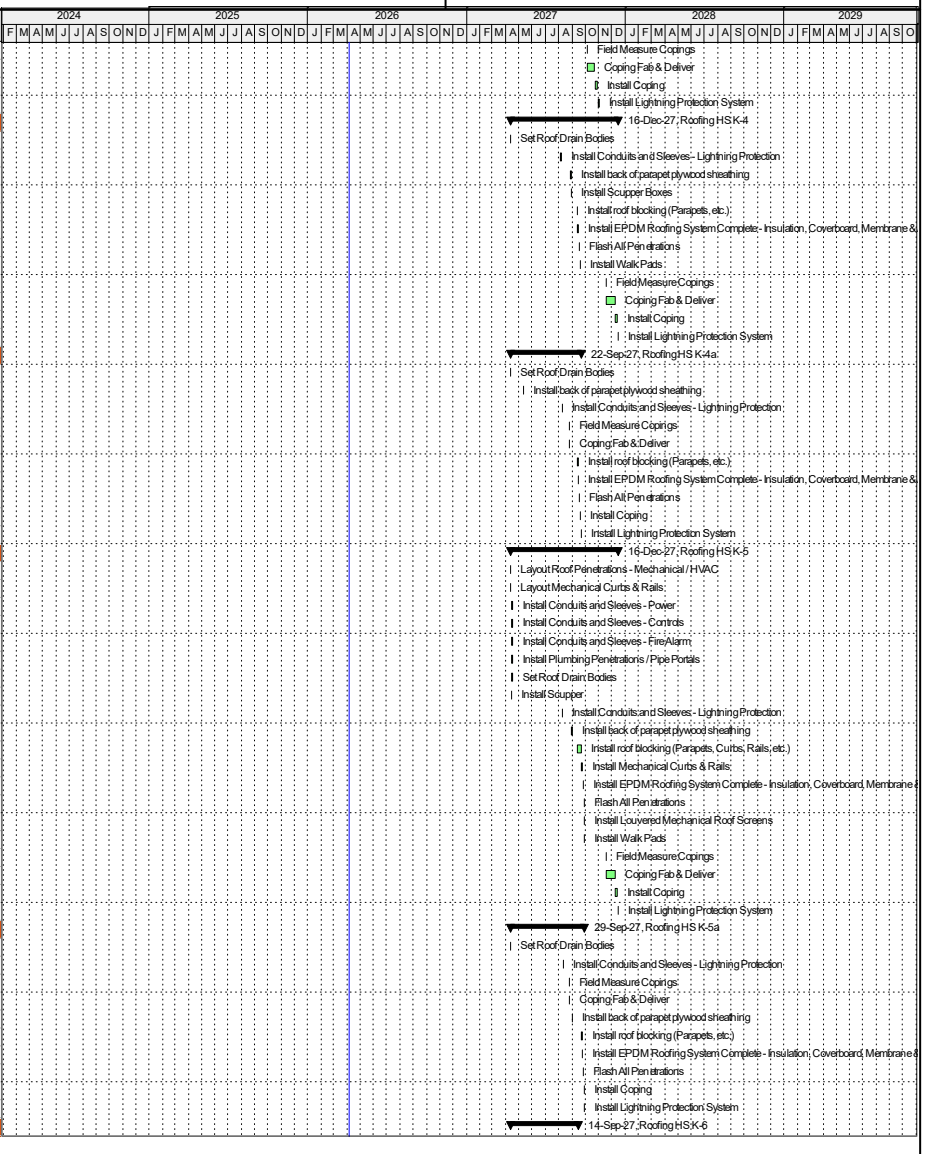
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
Roofing HS L-1 (Barrel Vault Standing Seam Metal Roof)			282	282	24-Aug-26	07-Oct-27
HS-EXT-5670	07E	Coordinate Roll Truck Date & Mobilize to Site	133	133	24-Aug-26	11-May-27
HS-EXT-1220	07E	Layout Smoke Vents	5	5	05-Mar-27	12-Mar-27
HS-EXT-1230	22A	Install Plumbing Penetrations / Pipe Portals	1	1	05-Mar-27	05-Mar-27
HS-EXT-1240	26B	Install Conduits and Sleeves - Lightning Protection	1	1	05-Mar-27	05-Mar-27
HS-EXT-1250	06C	Install Roof Blocking	15	15	05-Mar-27	02-Apr-27
HS-EXT-1290	07E	Install Smoke Vents	10	10	15-Mar-27	02-Apr-27
HS-EXT-1260	07E	Install Z-Girt Support System - Insulation, Waterproofing Membrane & Cover Board	22	22	05-Apr-27	11-May-27
HS-EXT-1310	07E	Install Soffit, Facias, Gutters & Down Spouts	20	20	12-May-27	14-Jun-27
HS-EXT-5680	07E	Fabricate Standing Seam Metal Roof Panels - Gym - Area L	10	10	12-May-27	25-May-27
HS-EXT-1280	07E	Install Standing Seam Metal Roof Panels	60	60	15-Jun-27	20-Sep-27
HS-EXT-1300	07E	Install Metal Trims and Snow Guards	10	10	22-Sep-27	07-Oct-27
Roofing HS L-2 (Wrestling Room)			21	21	23-Jul-27	25-Aug-27
HS-EXT-1320	09B	Install back of parapet plywood sheathing L-2	0	0	23-Jul-27	23-Jul-27
HS-EXT-1330	26B	Install Conduits and Sleeves - Lightning Protection L-2	1	1	23-Jul-27	23-Jul-27
HS-EXT-1340	22A	Set Roof Drain Bodies	1	1	23-Jul-27	23-Jul-27
HS-EXT-1350	06C	Install roof blocking (Parapets, Curbs, Rails, etc.) HS-L-2	2	2	23-Jul-27	26-Jul-27
HS-EXT-1360	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	27-Jul-27	02-Aug-27
HS-EXT-1370	07E	Flash All Penetrations	1	1	04-Aug-27	04-Aug-27
HS-EXT-1380	07E	Field Measure Copings	1	1	04-Aug-27	04-Aug-27
HS-EXT-1390	07E	Coping Fab & Deliver	10	10	05-Aug-27	20-Aug-27
HS-EXT-1400	07E	Install Coping	2	2	23-Aug-27	24-Aug-27
HS-EXT-1410	26B	Install Lightning Protection System	1	1	25-Aug-27	25-Aug-27
Roofing HS K-1			129	129	13-Apr-27	11-Nov-27
HS-EXT-1440	22A	Set Roof Drain Bodies	2	2	13-Apr-27	14-Apr-27
HS-EXT-1430	26B	Install Conduits and Sleeves - Lightning Protection	5	5	26-Jul-27	30-Jul-27
HS-EXT-1420	09B	Install back of parapet plywood sheathing K-1	2	2	27-Jul-27	28-Jul-27
HS-EXT-1450	06C	Install roof blocking (Parapets, etc.)	2	2	27-Jul-27	28-Jul-27
HS-EXT-1470	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	02-Aug-27	09-Aug-27
HS-EXT-1480	07E	Flash All Penetrations	2	2	10-Aug-27	11-Aug-27
HS-EXT-1490	07E	Install Walk Pads	2	2	13-Aug-27	16-Aug-27
HS-EXT-1500	07E	Field Measure Copings	5	5	15-Oct-27	22-Oct-27
HS-EXT-1510	07E	Coping Fab & Deliver	10	10	25-Oct-27	08-Nov-27
HS-EXT-1520	07E	Install Coping	2	2	09-Nov-27	10-Nov-27
HS-EXT-1530	26B	Install Lightning Protection System	1	1	11-Nov-27	11-Nov-27
Roofing HS K-2			57	57	02-Aug-27	02-Nov-27
HS-EXT-1540	26B	Install Conduits and Sleeves - Lightning Protection	1	1	02-Aug-27	02-Aug-27
HS-EXT-1550	06C	Install roof blocking	5	5	20-Aug-27	26-Aug-27
HS-EXT-1560	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	27-Aug-27	02-Sep-27
HS-EXT-1570	07E	Flash All Penetrations	2	2	03-Sep-27	06-Sep-27
HS-EXT-1580	07E	Install Coping	5	5	25-Oct-27	29-Oct-27
HS-EXT-1590	07E	Install Gutters and Down Spouts	2	2	01-Nov-27	02-Nov-27
HS-EXT-1600	26B	Install Lightning Protection System	1	1	01-Nov-27	01-Nov-27
Roofing HS K-3			123	123	13-Apr-27	02-Nov-27
HS-EXT-1620	23A	Layout Roof Penetrations - Mechanical / HVAC	2	2	13-Apr-27	14-Apr-27
HS-EXT-1630	26B	Install Conduits and Sleeves - Power	2	2	16-Apr-27	19-Apr-27
HS-EXT-1650	25A	Install Conduits and Sleeves - Controls	2	2	16-Apr-27	19-Apr-27
HS-EXT-1660	28A	Install Conduits and Sleeves - Fire Alarm	2	2	16-Apr-27	19-Apr-27
HS-EXT-1670	22A	Install Plumbing Penetrations / Pipe Portals	2	2	16-Apr-27	19-Apr-27
HS-EXT-1680	22A	Set Roof Drain Bodies	2	2	16-Apr-27	19-Apr-27
HS-EXT-1690	23A	Layout Mechanical Curbs & Rails	1	1	16-Apr-27	16-Apr-27
HS-EXT-1640	26B	Install Conduits and Sleeves - Lightning Protection	2	2	04-Aug-27	05-Aug-27
HS-EXT-1610	09B	Install back of parapet plywood sheathing	5	5	20-Aug-27	26-Aug-27
HS-EXT-1700	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	10	10	27-Aug-27	10-Sep-27
HS-EXT-1710	23A	Install Mechanical Curbs & Rails	5	5	13-Sep-27	20-Sep-27
HS-EXT-1720	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	22-Sep-27	28-Sep-27
HS-EXT-1730	07E	Flash All Penetrations	2	2	29-Sep-27	01-Oct-27
HS-EXT-1800	05C	Install Louvered Mechanical Roof Screens	2	2	29-Sep-27	01-Oct-27
HS-EXT-5900	07E	Install Scupper	1	1	29-Sep-27	29-Sep-27
HS-EXT-1740	07E	Install Roof Hatches	1	1	04-Oct-27	04-Oct-27
HS-EXT-1750	07E	Install Walk Pads	2	2	04-Oct-27	06-Oct-27



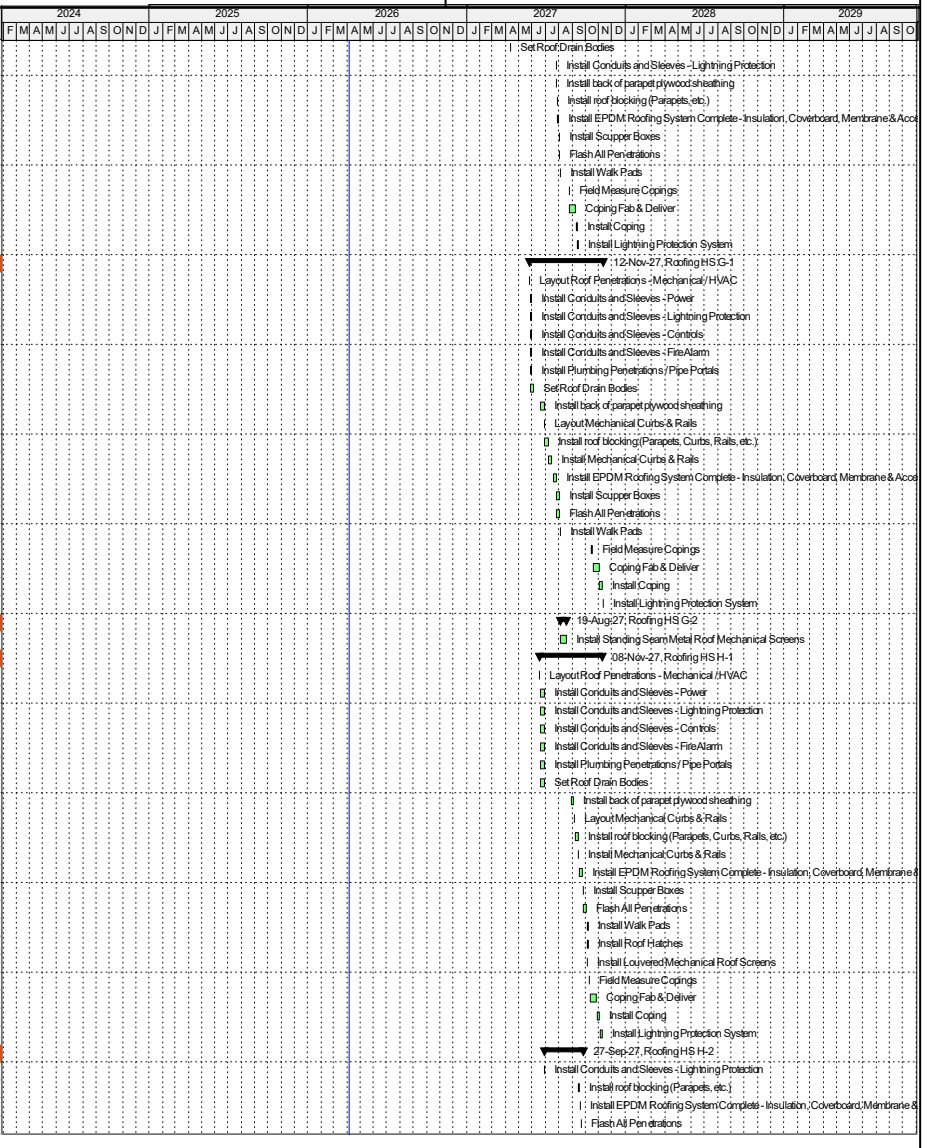
Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-EXT-1760	07E	Field Measure Copings	1	1	06-Oct-27	06-Oct-27
HS-EXT-1770	07E	Coping Fab & Deliver	10	10	07-Oct-27	22-Oct-27
HS-EXT-1780	07E	Install Coping	5	5	25-Oct-27	29-Oct-27
HS-EXT-1790	26B	Install Lightning Protection System	2	2	01-Nov-27	02-Nov-27
Roofing HS K-4			146	146	13-Apr-27	16-Dec-27
HS-EXT-1830	22A	Set Roof Drain Bodies	1	1	13-Apr-27	13-Apr-27
HS-EXT-1820	26B	Install Conduits and Sleeves - Lightning Protection	1	1	06-Aug-27	06-Aug-27
HS-EXT-1810	09B	Install back of parapet plywood sheathing	2	2	27-Aug-27	30-Aug-27
HS-EXT-1850	07E	Install Scupper Boxes	1	1	31-Aug-27	31-Aug-27
HS-EXT-1840	06C	Install roof blocking (Parapets, etc.)	1	1	13-Sep-27	13-Sep-27
HS-EXT-1860	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	2	2	14-Sep-27	15-Sep-27
HS-EXT-1870	07E	Flash All Penetrations	1	1	17-Sep-27	17-Sep-27
HS-EXT-1880	07E	Install Walk Pads	1	1	20-Sep-27	20-Sep-27
HS-EXT-1890	07E	Field Measure Copings	1	1	18-Nov-27	18-Nov-27
HS-EXT-1900	07E	Coping Fab & Deliver	10	10	19-Nov-27	08-Dec-27
HS-EXT-1910	07E	Install Coping	2	2	10-Dec-27	14-Dec-27
HS-EXT-1920	26B	Install Lightning Protection System	1	1	16-Dec-27	16-Dec-27
Roofing HS K-4a			98	98	13-Apr-27	22-Sep-27
HS-EXT-5940	22A	Set Roof Drain Bodies	1	1	13-Apr-27	13-Apr-27
HS-EXT-5910	09B	Install back of parapet plywood sheathing	1	1	12-May-27	12-May-27
HS-EXT-5930	26B	Install Conduits and Sleeves - Lightning Protection	1	1	09-Aug-27	09-Aug-27
HS-EXT-5920	07E	Field Measure Copings	1	1	25-Aug-27	25-Aug-27
HS-EXT-5960	07E	Coping Fab & Deliver	1	1	26-Aug-27	26-Aug-27
HS-EXT-5950	06C	Install roof blocking (Parapets, etc.)	1	1	14-Sep-27	14-Sep-27
HS-EXT-5970	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	15-Sep-27	15-Sep-27
HS-EXT-5980	07E	Flash All Penetrations	1	1	17-Sep-27	17-Sep-27
HS-EXT-5990	07E	Install Coping	1	1	20-Sep-27	20-Sep-27
HS-EXT-6000	26B	Install Lightning Protection System	1	1	22-Sep-27	22-Sep-27
Roofing HS K-5			146	146	13-Apr-27	16-Dec-27
HS-EXT-2140	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	13-Apr-27	13-Apr-27
HS-EXT-2210	23A	Layout Mechanical Curbs & Rails	1	1	13-Apr-27	13-Apr-27
HS-EXT-2150	26B	Install Conduits and Sleeves - Power	2	2	14-Apr-27	16-Apr-27
HS-EXT-2170	25A	Install Conduits and Sleeves - Controls	2	2	14-Apr-27	16-Apr-27
HS-EXT-2180	28A	Install Conduits and Sleeves - Fire Alarm	2	2	14-Apr-27	16-Apr-27
HS-EXT-2190	22A	Install Plumbing Penetrations / Pipe Portals	2	2	14-Apr-27	16-Apr-27
HS-EXT-2200	22A	Set Roof Drain Bodies	2	2	14-Apr-27	16-Apr-27
HS-EXT-2320	07E	Install Scupper	1	1	14-Apr-27	14-Apr-27
HS-EXT-2160	26B	Install Conduits and Sleeves - Lightning Protection	2	2	09-Aug-27	10-Aug-27
HS-EXT-2130	09B	Install back of parapet plywood sheathing	2	2	31-Aug-27	01-Sep-27
HS-EXT-2220	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	14-Sep-27	22-Sep-27
HS-EXT-2230	23A	Install Mechanical Curbs & Rails	2	2	23-Sep-27	24-Sep-27
HS-EXT-2240	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	27-Sep-27	27-Sep-27
HS-EXT-2250	07E	Flash All Penetrations	1	1	28-Sep-27	28-Sep-27
HS-EXT-2310	05C	Install Louvered Mechanical Roof Screens	2	2	28-Sep-27	29-Sep-27
HS-EXT-2260	07E	Install Walk Pads	1	1	29-Sep-27	29-Sep-27
HS-EXT-2270	07E	Field Measure Copings	1	1	18-Nov-27	18-Nov-27
HS-EXT-2280	07E	Coping Fab & Deliver	10	10	19-Nov-27	08-Dec-27
HS-EXT-2290	07E	Install Coping	2	2	10-Dec-27	14-Dec-27
HS-EXT-2300	26B	Install Lightning Protection System	1	1	16-Dec-27	16-Dec-27
Roofing HS K-5a			103	103	13-Apr-27	29-Sep-27
HS-EXT-6040	22A	Set Roof Drain Bodies	1	1	13-Apr-27	13-Apr-27
HS-EXT-6030	26B	Install Conduits and Sleeves - Lightning Protection	1	1	11-Aug-27	11-Aug-27
HS-EXT-6020	07E	Field Measure Copings	1	1	25-Aug-27	25-Aug-27
HS-EXT-6060	07E	Coping Fab & Deliver	1	1	26-Aug-27	26-Aug-27
HS-EXT-6010	09B	Install back of parapet plywood sheathing	1	1	02-Sep-27	02-Sep-27
HS-EXT-6050	06C	Install roof blocking (Parapets, etc.)	1	1	23-Sep-27	23-Sep-27
HS-EXT-6070	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	24-Sep-27	24-Sep-27
HS-EXT-6080	07E	Flash All Penetrations	1	1	27-Sep-27	27-Sep-27
HS-EXT-6090	07E	Install Coping	1	1	28-Sep-27	28-Sep-27
HS-EXT-6100	26B	Install Lightning Protection System	1	1	29-Sep-27	29-Sep-27
Roofing HS K-6			94	94	13-Apr-27	14-Sep-27



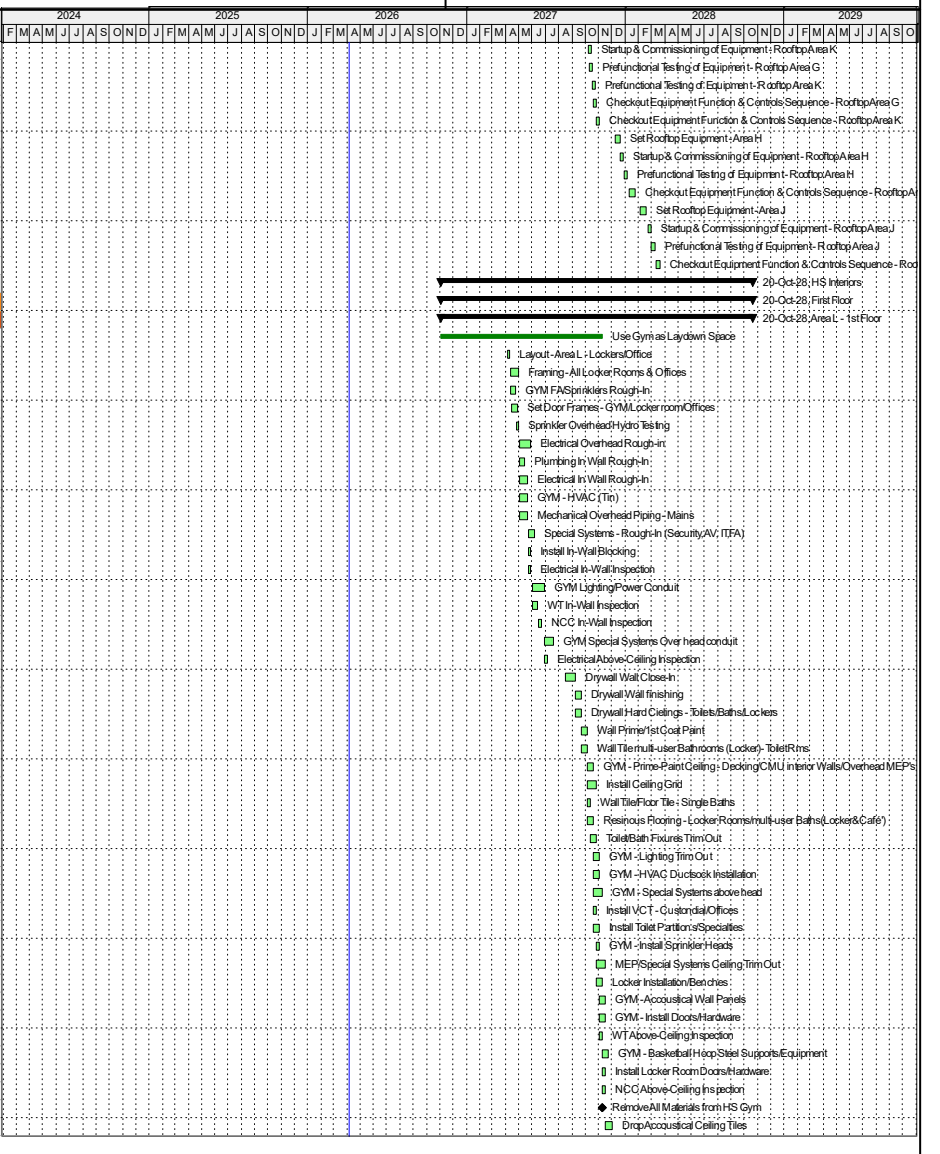
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-EXT-2420	22A	Set Roof Drain Bodies	1	1	13-Apr-27	13-Apr-27
HS-EXT-2410	26B	Install Conduits and Sleeves - Lightning Protection	1	1	26-Jul-27	26-Jul-27
HS-EXT-2400	09B	Install back of parapet plywood sheathing	1	1	27-Jul-27	27-Jul-27
HS-EXT-2430	06C	Install roof blocking (Parapets, etc.)	2	2	28-Jul-27	29-Jul-27
HS-EXT-2450	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	30-Jul-27	30-Jul-27
HS-EXT-2440	07E	Install Scupper Boxes	1	1	02-Aug-27	02-Aug-27
HS-EXT-2460	07E	Flash All Penetrations	1	1	02-Aug-27	02-Aug-27
HS-EXT-2470	07E	Install Walk Pads	1	1	04-Aug-27	04-Aug-27
HS-EXT-2480	07E	Field Measure Copings	1	1	25-Aug-27	25-Aug-27
HS-EXT-2490	07E	Coping Fab & Deliver	10	10	26-Aug-27	09-Sep-27
HS-EXT-2500	07E	Install Coping	2	2	10-Sep-27	13-Sep-27
HS-EXT-2510	26B	Install Lightning Protection System	1	1	14-Sep-27	14-Sep-27
Roofing HS G-1			105	105	26-May-27	12-Nov-27
HS-EXT-2530	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	26-May-27	26-May-27
HS-EXT-2540	26B	Install Conduits and Sleeves - Power	2	2	28-May-27	31-May-27
HS-EXT-2550	26B	Install Conduits and Sleeves - Lightning Protection	2	2	28-May-27	31-May-27
HS-EXT-2560	25A	Install Conduits and Sleeves - Controls	2	2	28-May-27	31-May-27
HS-EXT-2570	28A	Install Conduits and Sleeves - Fire Alarm	2	2	28-May-27	31-May-27
HS-EXT-2580	22A	Install Plumbing Penetrations / Pipe Portals	2	2	28-May-27	31-May-27
HS-EXT-2590	22A	Set Roof Drain Bodies	5	5	28-May-27	04-Jun-27
HS-EXT-2520	09B	Install back of parapet plywood sheathing	5	5	21-Jun-27	28-Jun-27
HS-EXT-2600	23A	Layout Mechanical Curbs & Rails	1	1	29-Jun-27	29-Jun-27
HS-EXT-2610	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	30-Jun-27	08-Jul-27
HS-EXT-2620	23A	Install Mechanical Curbs & Rails	5	5	09-Jul-27	16-Jul-27
HS-EXT-2640	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	19-Jul-27	26-Jul-27
HS-EXT-2630	07E	Install Scupper Boxes	5	5	27-Jul-27	02-Aug-27
HS-EXT-2650	07E	Flash All Penetrations	5	5	27-Jul-27	02-Aug-27
HS-EXT-2660	07E	Install Walk Pads	2	2	04-Aug-27	05-Aug-27
HS-EXT-2670	07E	Field Measure Copings	2	2	15-Oct-27	18-Oct-27
HS-EXT-2680	07E	Coping Fab & Deliver	10	10	20-Oct-27	02-Nov-27
HS-EXT-2690	07E	Install Coping	5	5	03-Nov-27	10-Nov-27
HS-EXT-2700	26B	Install Lightning Protection System	2	2	11-Nov-27	12-Nov-27
Roofing HS G-2			10	10	04-Aug-27	19-Aug-27
HS-EXT-2710	07E	Install Standing Seam Metal Roof Mechanical Screens	10	10	04-Aug-27	19-Aug-27
Roofing HS H-1			86	86	18-Jun-27	08-Nov-27
HS-EXT-2730	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	18-Jun-27	18-Jun-27
HS-EXT-2740	26B	Install Conduits and Sleeves - Power	5	5	21-Jun-27	28-Jun-27
HS-EXT-2750	26B	Install Conduits and Sleeves - Lightning Protection	5	5	21-Jun-27	28-Jun-27
HS-EXT-2760	25A	Install Conduits and Sleeves - Controls	5	5	21-Jun-27	28-Jun-27
HS-EXT-2770	28A	Install Conduits and Sleeves - Fire Alarm	5	5	21-Jun-27	28-Jun-27
HS-EXT-2780	22A	Install Plumbing Penetrations / Pipe Portals	5	5	21-Jun-27	28-Jun-27
HS-EXT-2790	22A	Set Roof Drain Bodies	5	5	21-Jun-27	28-Jun-27
HS-EXT-2720	09B	Install back of parapet plywood sheathing	5	5	30-Aug-27	03-Sep-27
HS-EXT-2800	23A	Layout Mechanical Curbs & Rails	1	1	06-Sep-27	06-Sep-27
HS-EXT-2810	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	08-Sep-27	14-Sep-27
HS-EXT-2820	23A	Install Mechanical Curbs & Rails	1	1	15-Sep-27	15-Sep-27
HS-EXT-2840	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	17-Sep-27	24-Sep-27
HS-EXT-2830	07E	Install Scupper Boxes	1	1	27-Sep-27	27-Sep-27
HS-EXT-2850	07E	Flash All Penetrations	5	5	27-Sep-27	04-Oct-27
HS-EXT-2860	07E	Install Walk Pads	2	2	06-Oct-27	07-Oct-27
HS-EXT-2870	07E	Install Roof Hatches	2	2	06-Oct-27	07-Oct-27
HS-EXT-2920	05C	Install Louvered Mechanical Roof Screens	0	0	06-Oct-27	06-Oct-27
HS-EXT-2880	07E	Field Measure Copings	1	1	11-Oct-27	11-Oct-27
HS-EXT-2890	07E	Coping Fab & Deliver	10	10	12-Oct-27	27-Oct-27
HS-EXT-2900	07E	Install Coping	5	5	28-Oct-27	03-Nov-27
HS-EXT-2910	26B	Install Lightning Protection System	2	2	05-Nov-27	08-Nov-27
Roofing HS H-2			55	55	29-Jun-27	27-Sep-27
HS-EXT-2930	26B	Install Conduits and Sleeves - Lightning Protection	2	2	29-Jun-27	30-Jun-27
HS-EXT-2940	06C	Install roof blocking (Parapets, etc.)	2	2	15-Sep-27	17-Sep-27
HS-EXT-2950	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	20-Sep-27	20-Sep-27
HS-EXT-2960	07E	Flash All Penetrations	1	1	22-Sep-27	22-Sep-27



Remaining Level of Effort | Actual Level of Effort | Actual Work

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-EXT-2970	07E	Install Walk Pads	1	1	23-Sep-27	23-Sep-27
HS-EXT-2990	07E	Install Coping	2	2	23-Sep-27	24-Sep-27
HS-EXT-3000	07E	Install Gutters and Down Spouts	1	1	27-Sep-27	27-Sep-27
HS-EXT-3010	26B	Install Lightning Protection System	1	1	27-Sep-27	27-Sep-27
Roofing HS H-3			60	60	09-Jul-27	15-Oct-27
HS-EXT-3020	09B	Install back of parapet plywood sheathing	1	1	09-Jul-27	09-Jul-27
HS-EXT-3030	26B	Install Conduits and Sleeves - Lightning Protection	1	1	12-Jul-27	12-Jul-27
HS-EXT-3040	22A	Set Roof Drain Bodies	1	1	12-Jul-27	12-Jul-27
HS-EXT-3050	06C	Install Roof Blocking (Parapets, etc.)	1	1	20-Sep-27	20-Sep-27
HS-EXT-3060	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	22-Sep-27	22-Sep-27
HS-EXT-3070	07E	Flash All Penetrations	1	1	23-Sep-27	23-Sep-27
HS-EXT-3080	07E	Field Measure Copings	1	1	11-Oct-27	11-Oct-27
HS-EXT-3090	07E	Coping Fab & Deliver	1	1	12-Oct-27	12-Oct-27
HS-EXT-3100	07E	Install Coping	1	1	13-Oct-27	13-Oct-27
HS-EXT-3110	26B	Install Lightning Protection System	1	1	15-Oct-27	15-Oct-27
Roofing HS H-4			59	59	12-Jul-27	15-Oct-27
HS-EXT-3120	09B	Install back of parapet plywood sheathing	1	1	12-Jul-27	12-Jul-27
HS-EXT-3130	26B	Install Conduits and Sleeves - Lightning Protection	1	1	13-Jul-27	13-Jul-27
HS-EXT-3140	22A	Set Roof Drain Bodies	1	1	13-Jul-27	13-Jul-27
HS-EXT-3150	06C	Install roof blocking (Parapets, etc.)	1	1	20-Sep-27	20-Sep-27
HS-EXT-3160	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	22-Sep-27	22-Sep-27
HS-EXT-3170	07E	Flash All Penetrations	1	1	23-Sep-27	23-Sep-27
HS-EXT-3180	07E	Field Measure Copings	1	1	11-Oct-27	11-Oct-27
HS-EXT-3190	07E	Coping Fab & Deliver	1	1	12-Oct-27	12-Oct-27
HS-EXT-3200	07E	Install Coping	1	1	13-Oct-27	13-Oct-27
HS-EXT-3210	26B	Install Lightning Protection System	1	1	15-Oct-27	15-Oct-27
Roofing HS J-1			86	86	25-Aug-27	04-Feb-28
HS-EXT-3220	09B	Install back of parapet plywood sheathing	5	5	25-Aug-27	31-Aug-27
HS-EXT-3230	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	01-Sep-27	01-Sep-27
HS-EXT-3300	23A	Layout Mechanical Curbs & Rails	1	1	01-Sep-27	01-Sep-27
HS-EXT-3240	26B	Install Conduits and Sleeves - Power	5	5	02-Sep-27	09-Sep-27
HS-EXT-3250	26B	Install Conduits and Sleeves - Lightning Protection	1	1	02-Sep-27	02-Sep-27
HS-EXT-3260	25A	Install Conduits and Sleeves - Controls	1	1	02-Sep-27	02-Sep-27
HS-EXT-3270	28A	Install Conduits and Sleeves - FireAlarm	1	1	02-Sep-27	02-Sep-27
HS-EXT-3280	22A	Install Plumbing Penetrations / Pipe Portals	5	5	02-Sep-27	09-Sep-27
HS-EXT-3290	22A	Set Roof Drain Bodies	2	2	02-Sep-27	03-Sep-27
HS-EXT-3330	07E	Install Scupper Boxes	1	1	02-Sep-27	02-Sep-27
HS-EXT-3310	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	22-Sep-27	28-Sep-27
HS-EXT-3320	23A	Install Mechanical Curbs & Rails	2	2	29-Sep-27	01-Oct-27
HS-EXT-3340	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	04-Oct-27	11-Oct-27
HS-EXT-3350	07E	Flash All Penetrations	5	5	12-Oct-27	20-Oct-27
HS-EXT-3360	07E	Install Walk Pads	2	2	21-Oct-27	22-Oct-27
HS-EXT-3370	07E	Field Measure Copings	1	1	21-Dec-27	21-Dec-27
HS-EXT-3380	07E	Coping Fab & Deliver	10	10	22-Dec-27	10-Jan-28
HS-EXT-3390	07E	Install Coping	5	5	14-Jan-28	28-Jan-28
HS-EXT-3400	26B	Install Lightning Protection System	2	2	02-Feb-28	04-Feb-28
HS-EXT-6110	05C	Install Parapet Step over	1	1	02-Feb-28	02-Feb-28
Roofing HS J-2			10	10	12-Oct-27	27-Oct-27
HS-EXT-3410	07E	Install Standing Seam Metal Roof Mechanical Screens	10	10	12-Oct-27	27-Oct-27
Roofing HS Penthouse			60	60	03-Sep-27	17-Dec-27
HS-EXT-6120	26B	Install Conduits and Sleeves - Lightning Protection	2	2	03-Sep-27	06-Sep-27
HS-EXT-6130	06C	Install Roof Blocking	5	5	03-Sep-27	10-Sep-27
HS-EXT-6140	07E	Install Intregal Gutters	15	15	13-Sep-27	07-Oct-27
HS-EXT-6150	07E	Install Z-Girt Support System - Insulation, Waterproofing Membrane & Cover Board	10	10	08-Oct-27	25-Oct-27
HS-EXT-6160	07E	Install Soffit & Facias	5	5	26-Oct-27	01-Nov-27
HS-EXT-6170	07E	Install Standing Seam Metal Roof Panels	20	20	02-Nov-27	07-Dec-27
HS-EXT-6180	07E	Install Metal Trims and Snow Guards	5	5	08-Dec-27	17-Dec-27
HS Rooftop Equipment			87	87	23-Sep-27	20-Mar-28
HS-EXT-6370	23A	Set Rooftop Equipment - Area G	5	5	23-Sep-27	29-Sep-27
HS-EXT-6400	23A	Set Rooftop Equipment - Area K	5	5	29-Sep-27	07-Oct-27
HS-EXT-6410	23A	Startup & Commissioning of Equipment - Rooftop Area G	5	5	01-Oct-27	08-Oct-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-EXT-6500	23A	Startup & Commissioning of Equipment - Rooftop Area K	5	5	08-Oct-27	15-Oct-27
HS-EXT-6420	23A	Prefunctional Testing of Equipment - Rooftop Area G	5	5	11-Oct-27	18-Oct-27
HS-EXT-6510	23A	Prefunctional Testing of Equipment - Rooftop Area K	5	5	18-Oct-27	25-Oct-27
HS-EXT-6430	23A	Checkout Equipment Function & Controls Sequence - Rooftop Area G	5	5	20-Oct-27	26-Oct-27
HS-EXT-6520	23A	Checkout Equipment Function & Controls Sequence - Rooftop Area K	5	5	26-Oct-27	01-Nov-27
HS-EXT-6380	23A	Set Rooftop Equipment - Area H	5	5	10-Dec-27	20-Dec-27
HS-EXT-6440	23A	Startup & Commissioning of Equipment - Rooftop Area H	5	5	21-Dec-27	28-Dec-27
HS-EXT-6450	23A	Prefunctional Testing of Equipment - Rooftop Area H	5	5	30-Dec-27	06-Jan-28
HS-EXT-6460	23A	Checkout Equipment Function & Controls Sequence - Rooftop Area H	5	5	10-Jan-28	24-Jan-28
HS-EXT-6390	23A	Set Rooftop Equipment - Area J	5	5	04-Feb-28	18-Feb-28
HS-EXT-6470	23A	Startup & Commissioning of Equipment - Rooftop Area J	5	5	22-Feb-28	29-Feb-28
HS-EXT-6480	23A	Prefunctional Testing of Equipment - Rooftop Area J	5	5	01-Mar-28	09-Mar-28
HS-EXT-6490	23A	Checkout Equipment Function & Controls Sequence - Rooftop Area J	5	5	13-Mar-28	20-Mar-28
HS Interiors			495	495	03-Nov-26	20-Oct-28
First Floor			495	495	03-Nov-26	20-Oct-28
Area L - 1st Floor			495	495	03-Nov-26	20-Oct-28
HS-INT-L1-1000	09B	Use Gym as Laydown Space	255	255	03-Nov-26	09-Nov-27
HS-INT-L1-1005	09B	Layout - Area L - Lockers/Office	5	5	05-Apr-27	09-Apr-27
HS-INT-L1-1020	09B	Framing - All Locker Rooms & Offices	15	15	12-Apr-27	30-Apr-27
HS-INT-L1-1110	21A	GYM FA/Sprinklers Rough-In	10	10	12-Apr-27	23-Apr-27
HS-INT-L1-1010	06C	Set Door Frames - GYM/Locker room/Offices	10	10	14-Apr-27	27-Apr-27
HS-INT-L1-1630	21A	Sprinkler Overhead Hydro Testing	5	5	26-Apr-27	30-Apr-27
HS-INT-L1-1030	26B	Electrical Overhead Rough-in	20	20	03-May-27	28-May-27
HS-INT-L1-1050	22A	Plumbing In Wall Rough-In	10	10	03-May-27	14-May-27
HS-INT-L1-1060	26B	Electrical In Wall Rough-In	15	15	03-May-27	21-May-27
HS-INT-L1-1130	23A	GYM - HVAC (Tin)	15	15	03-May-27	21-May-27
HS-INT-L1-1045	23A	Mechanical Overhead Piping - Mains	15	15	03-May-27	21-May-27
HS-INT-L1-1070	28A	Special Systems - Rough-In (Security,AV, ITFA)	10	10	24-May-27	07-Jun-27
HS-INT-L1-1080	06C	Install In-Wall Blocking	5	5	24-May-27	28-May-27
HS-INT-L1-1330	26B	Electrical In-Wall Inspection	5	5	24-May-27	28-May-27
HS-INT-L1-1100	26B	GYM Lighting/Power Conduit	20	20	01-Jun-27	28-Jun-27
HS-INT-L1-1220	00-WT	WT In-Wall Inspection	10	10	01-Jun-27	14-Jun-27
HS-INT-L1-1090	01A	NCC In-Wall Inspection	5	5	15-Jun-27	21-Jun-27
HS-INT-L1-1120	28A	GYM Special Systems Over head conduit	15	15	29-Jun-27	20-Jul-27
HS-INT-L1-1560	26B	Electrical Above-Ceiling Inspection	5	5	29-Jun-27	06-Jul-27
HS-INT-L1-1290	09B	Drywall Wall Close-In	15	15	17-Aug-27	07-Sep-27
HS-INT-L1-1300	09B	Drywall Wall finishing	10	10	08-Sep-27	21-Sep-27
HS-INT-L1-1320	09B	Drywall Hard Cielings - Toilets/Baths/Lockers	10	10	08-Sep-27	21-Sep-27
HS-INT-L1-1310	09K	Wall Prime/1st Coat Paint	10	10	22-Sep-27	05-Oct-27
HS-INT-L1-1360	09D	Wall Tile multi-user Bathrooms (Locker)- Toilet Rms	10	10	22-Sep-27	05-Oct-27
HS-INT-L1-1140	09K	GYM - Prime-Paint Ceiling - Decking/CMU interior Walls/Overhead MEP's	10	10	06-Oct-27	19-Oct-27
HS-INT-L1-1340	09E	Install Ceiling Grid	15	15	06-Oct-27	26-Oct-27
HS-INT-L1-1370	09D	Wall Tile/Floor Tile - Single Baths	5	5	06-Oct-27	12-Oct-27
HS-INT-L1-1380	09H	Resinous Flooring - Locker Rooms/multi-user Baths(Locker&Café')	10	10	06-Oct-27	19-Oct-27
HS-INT-L1-1440	06C	Toilet/Bath Fixures Trim Out	10	10	13-Oct-27	26-Oct-27
HS-INT-L1-1150	26B	GYM - Lighting Trim Out	10	10	20-Oct-27	02-Nov-27
HS-INT-L1-1160	23A	GYM - HVAC Ductsock Installation	10	10	20-Oct-27	02-Nov-27
HS-INT-L1-1180	28A	GYM - Special Systems above head	15	15	20-Oct-27	09-Nov-27
HS-INT-L1-1400	09C	Install VCT - Custondial/Offices	5	5	20-Oct-27	26-Oct-27
HS-INT-L1-1450	06C	Install Toilet Partitions/Specialties	10	10	20-Oct-27	02-Nov-27
HS-INT-L1-1170	21A	GYM - Install Sprinkler Heads	5	5	27-Oct-27	02-Nov-27
HS-INT-L1-1350	23A	MEP/Special Systems Ceiling Trim Out	15	15	27-Oct-27	16-Nov-27
HS-INT-L1-1420	06C	Locker Installation/Benches	10	10	27-Oct-27	09-Nov-27
HS-INT-L1-1230	09E	GYM - Accoustical Wall Panels	10	10	03-Nov-27	16-Nov-27
HS-INT-L1-1460	06C	GYM - Install Doors/Hardware	10	10	03-Nov-27	16-Nov-27
HS-INT-L1-1610	00-WT	WT Above-Ceiling Inspection	5	5	03-Nov-27	09-Nov-27
HS-INT-L1-1200	11C	GYM - Basketball Hoop Steel Supports/Equipment	10	10	10-Nov-27	23-Nov-27
HS-INT-L1-1430	06C	Install Locker Room Doors/Hardware	5	5	10-Nov-27	16-Nov-27
HS-INT-L1-1620	01A	NCC Above-Ceiling Inspection	5	5	10-Nov-27	16-Nov-27
HS-INT-L1-1690	00-WT	Remove All Materials from HS Gym	0	0	10-Nov-27	
HS-INT-L1-1410	09E	Drop Accoustical Ceiling Tiles	10	10	17-Nov-27	02-Dec-27

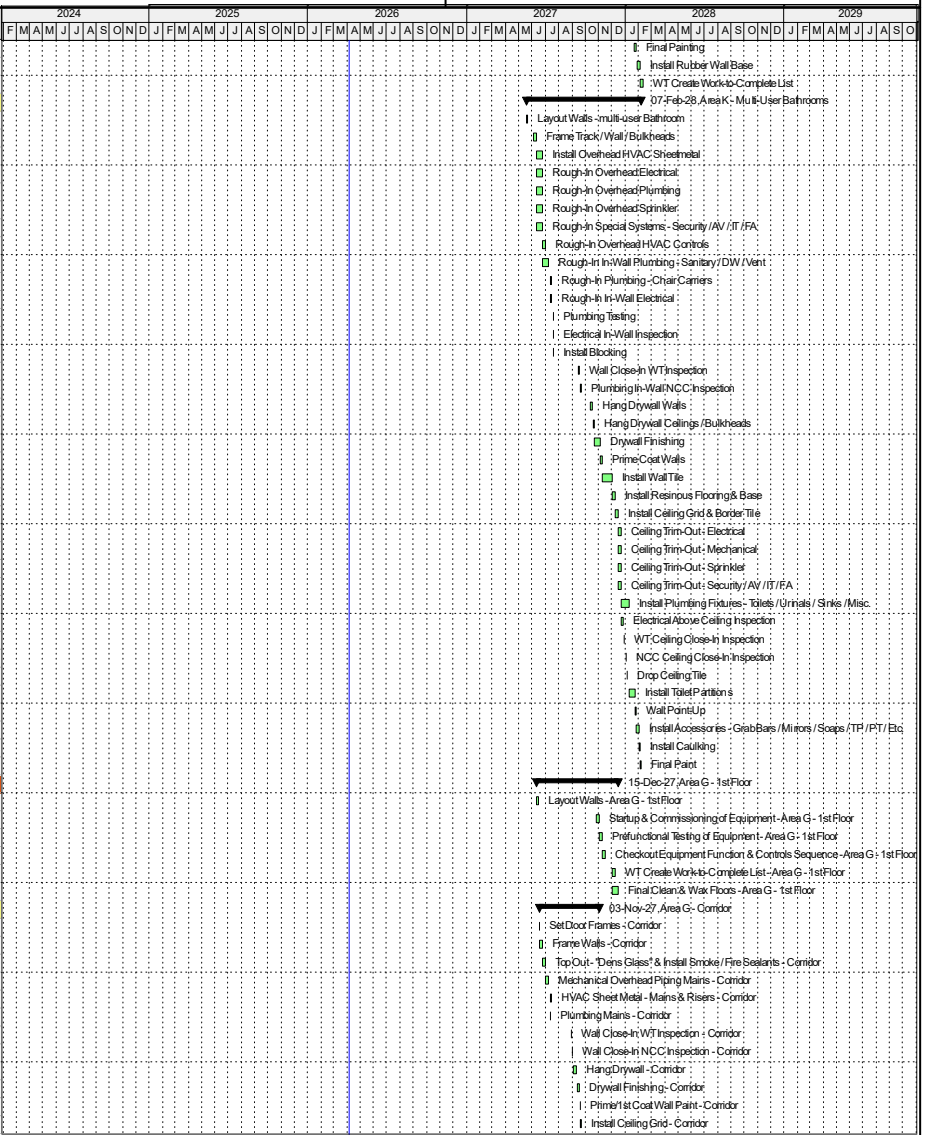


Remaining Level of Effort | Actual Level of Effort | Actual Work

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-L1-1470	09B	Wall Point Ups	5	5	17-Nov-27	23-Nov-27
HS-INT-L1-1660	23A	Startup & Commissioning of Equipment - Area L	5	5	17-Nov-27	23-Nov-27
HS-INT-L1-1210	11C	GYM - Divider Curtains - Rails/motor/Supports	5	5	24-Nov-27	02-Dec-27
HS-INT-L1-1480	09K	Final Paint	10	10	24-Nov-27	09-Dec-27
HS-INT-L1-1670	23A	Prefunctional Testing of Equipment - Area L	5	5	24-Nov-27	02-Dec-27
HS-INT-L1-1680	23A	Checkout Equipment Function & Controls Sequence - Area L	5	5	03-Dec-27	09-Dec-27
HS-INT-L1-1390	09C	Fitness - Rubber Flooring	10	10	10-Dec-27	23-Dec-27
HS-INT-L1-1040	09F	Condition Space for Wood Floor Installation	40	40	03-May-28	28-Jun-28
HS-INT-L1-1240	09F	GYM - Subfloor	20	20	29-Jun-28	27-Jul-28
HS-INT-L1-1250	09F	GYM - Maple Final Flooring	20	20	07-Jul-28	03-Aug-28
HS-INT-L1-1260	09K	GYM - Floor Painting	5	5	04-Aug-28	10-Aug-28
HS-INT-L1-1700	09F	GYM - Floor Paint Cure Time	10	10	11-Aug-28	24-Aug-28
HS-INT-L1-1270	11C	GYM - Bleachers	20	20	25-Aug-28	22-Sep-28
HS-INT-L1-1190	09C	GYM Storage - VCT Flooring	10	10	25-Sep-28	06-Oct-28
HS-INT-L1-1280	11C	GYM - Wall Pads	10	10	25-Sep-28	06-Oct-28
HS-INT-L1-1640	00-WT	WT Create Work-to-Complete List	5	5	09-Oct-28	13-Oct-28
HS-INT-L1-1650	00-WT	Final Clean & Wax Floors - Area L - 1st Floor	10	10	09-Oct-28	20-Oct-28
Area L - Running Track Level (Alternate)			85	85	24-Aug-27	23-Dec-27
HS-INT-L1-1490	09F	GYM - Running Track Flooring	10	10	24-Aug-27	07-Sep-27
HS-INT-L1-1500	09K	GYM - Track Floor Painting	5	5	08-Sep-27	14-Sep-27
HS-INT-L1-1530	09B	Drywall Wall Close-In	15	15	08-Sep-27	28-Sep-27
HS-INT-L1-1510	11C	GYM - Bleachers	20	20	15-Sep-27	12-Oct-27
HS-INT-L1-1540	09B	Drywall Wall Finishing	10	10	22-Sep-27	05-Oct-27
HS-INT-L1-1550	09K	Wall Prime/1st Coat Paint	10	10	06-Oct-27	19-Oct-27
HS-INT-L1-1520	11C	GYM - Wall Pads	10	10	13-Oct-27	26-Oct-27
HS-INT-L1-1570	09E	Ceiling Grid	15	15	20-Oct-27	09-Nov-27
HS-INT-L1-1580	23A	MEP/Special Systems Ceiling Trim Out	15	15	10-Nov-27	02-Dec-27
HS-INT-L1-1590	09B	Wall Point Ups	5	5	03-Dec-27	09-Dec-27
HS-INT-L1-1600	09K	Final Paint	10	10	10-Dec-27	23-Dec-27
Area K			259	259	04-May-27	10-May-28
HS-INT-K1-1000	09B	Layout Walls - Area K - 1st Floor	5	5	04-May-27	10-May-27
HS-INT-K1-2260	23A	Startup & Commissioning of Equipment - Area K - 1st Floor	5	5	23-Mar-28	29-Mar-28
HS-INT-K1-2270	23A	Prefunctional Testing of Equipment - Area K - 1st Floor	5	5	30-Mar-28	05-Apr-28
HS-INT-K1-2280	23A	Checkout Equipment Function & Controls Sequence - Area K - 1st Floor	5	5	06-Apr-28	12-Apr-28
HS-INT-K1-2250	00-WT	WT Create Work-to-Complete List - Area K - 1st Floor	5	5	27-Apr-28	03-May-28
HS-INT-K1-2290	00-WT	Final Clean & Wax Floors - Area K - 1st Floor	10	10	27-Apr-28	10-May-28
Area K - Corridor / Gym Lobby			244	244	11-May-27	26-Apr-28
HS-INT-K1-1010	06C	Set Door Frames - Corridor & Gym Lobby	2	2	11-May-27	12-May-27
HS-INT-K1-1020	09B	Frame Walls - Corridor & Gym Lobby	5	5	13-May-27	19-May-27
HS-INT-K1-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor & Gym Lobby	10	10	20-May-27	03-Jun-27
HS-INT-K1-1050	23A	Mechanical Overhead Piping Mains - Corridor & Gym Lobby	15	15	04-Jun-27	24-Jun-27
HS-INT-K1-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor & Gym Lobby	15	15	25-Jun-27	16-Jul-27
HS-INT-K1-1150	22A	Plumbing Mains - Corridor & Gym Lobby	15	15	25-Jun-27	16-Jul-27
HS-INT-K1-1330	01A	Wall Close-In WT Inspection - Corridor & Gym Lobby	5	5	19-Oct-27	25-Oct-27
HS-INT-K1-1350	01A	Wall Close-In NCC Inspection - Corridor & Gym Lobby	5	5	26-Oct-27	01-Nov-27
HS-INT-K1-1370	09B	Hang Drywall - Corridor & Gym Lobby	15	15	02-Nov-27	22-Nov-27
HS-INT-K1-1420	09D	Wall Tile - Corridor & Gym Lobby	15	15	22-Nov-27	14-Dec-27
HS-INT-K1-1390	09B	Drywall Finishing - Corridor & Gym Lobby	15	15	23-Nov-27	15-Dec-27
HS-INT-K1-1580	06C	Install Div 10 Specialties - Corridor & Gym Lobby	5	5	15-Dec-27	21-Dec-27
HS-INT-K1-1410	09K	Prime/1st Coat Wall Paint - Corridor & Gym Lobby	5	5	16-Dec-27	22-Dec-27
HS-INT-K1-2200	09G	Terrazzo - Gym Lobby - Prep	10	10	23-Dec-27	10-Jan-28
HS-INT-K1-2210	09G	Terrazzo - Gym Lobby - Layout & Install Strips	5	5	11-Jan-28	17-Jan-28
HS-INT-K1-2220	09G	Terrazzo - Gym Lobby - Pour Terrazo	10	10	18-Jan-28	31-Jan-28
HS-INT-K1-2230	09G	Terrazzo - Gym Lobby - Grind & Polish	10	10	01-Feb-28	14-Feb-28
HS-INT-K1-2240	09G	Terrazzo - Gym Lobby - Apply Sealant	5	5	15-Feb-28	21-Feb-28
HS-INT-K1-1510	09C	Install VCT Flooring - Corridor & Gym Lobby	5	5	22-Feb-28	28-Feb-28
HS-INT-K1-1440	09E	Install Ceiling Grid - Corridor & Gym Lobby	12	12	22-Feb-28	08-Mar-28
HS-INT-K1-1630	06C	Install Doors & Hardware - Corridor & Gym Lobby	5	5	29-Feb-28	06-Mar-28
HS-INT-K1-1520	21A	Sprinkler Ceiling Trim-Out - Corridor & Gym Lobby	10	10	09-Mar-28	22-Mar-28
HS-INT-K1-1530	28A	Special Systems - Ceiling Trim out (Security, AV, ITFA) - Corridor & Gym Lobby	10	10	09-Mar-28	22-Mar-28
HS-INT-K1-1540	09K	Wall Point Ups - Second Coat Paint - Corridor & Gym Lobby	10	10	09-Mar-28	22-Mar-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-K1-1550	26B	Install Lights - Corridor & Gym Lobby	10	10	09-Mar-28	22-Mar-28
HS-INT-K1-1560	23A	Mechanical Ceiling Trim-Out - Corridor & Gym Lobby	10	10	09-Mar-28	22-Mar-28
HS-INT-K1-1570	09E	Cut Ceiling Tile - Corridor & Gym Lobby	10	10	09-Mar-28	22-Mar-28
HS-INT-K1-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor & Gym Lobby	10	10	23-Mar-28	05-Apr-28
HS-INT-K1-1640	01A	Fire Marshal Fire Damper Inspection - Corridor & Gym Lobby	3	3	23-Mar-28	27-Mar-28
HS-INT-K1-1650	01A	Ceiling Close-In WT Inspections - Corridor & Gym Lobby	3	3	23-Mar-28	27-Mar-28
HS-INT-K1-1670	01A	Ceiling Close-In NCC Inspections - Corridor & Gym Lobby	3	3	28-Mar-28	30-Mar-28
HS-INT-K1-1700	09E	Drop Ceiling Tile - Corridor & Gym Lobby	5	5	31-Mar-28	06-Apr-28
HS-INT-K1-1680	09K	Final Painting - Corridor & Gym Lobby	5	5	06-Apr-28	12-Apr-28
HS-INT-K1-1710	09C	Install Rubber Wall Base - Corridor & Gym Lobby	5	5	13-Apr-28	19-Apr-28
HS-INT-K1-1740	00-WT	WT Create Work-to-Complete List - Corridor & Gym Lobby	5	5	20-Apr-28	26-Apr-28
Area K - Classrooms / Childcare Rooms			183	183	20-May-27	10-Feb-28
HS-INT-K1-1040	09B	Frame Walls - Classrooms / Childcare Rooms	10	10	20-May-27	03-Jun-27
HS-INT-K1-1060	22A	Plumbing In Wall Rough-In	10	10	04-Jun-27	17-Jun-27
HS-INT-K1-1070	26B	Electrical In Wall Rough-In	10	10	04-Jun-27	17-Jun-27
HS-INT-K1-1080	23A	Mechanical Overhead Piping - Expansion Loops	10	10	04-Jun-27	17-Jun-27
HS-INT-K1-1100	26C	Special Systems - Rough-In (Security,AV, ITFA)	15	15	18-Jun-27	09-Jul-27
HS-INT-K1-1110	06C	Install Blocking	5	5	18-Jun-27	24-Jun-27
HS-INT-K1-1140	22A	Plumbing In Wall Insulation	10	10	18-Jun-27	01-Jul-27
HS-INT-K1-1090	23A	Hang FCUs	5	5	18-Jun-27	24-Jun-27
HS-INT-K1-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	25-Jun-27	09-Jul-27
HS-INT-K1-1160	23A	Install Condensate Piping	5	5	25-Jun-27	01-Jul-27
HS-INT-K1-1170	23B	Measure / Fab / Install Ductwork Transitions	15	15	25-Jun-27	16-Jul-27
HS-INT-K1-1190	25A	Install HVAC Controls & Valves	10	10	12-Jul-27	23-Jul-27
HS-INT-K1-1220	26B	Electrical In-Wall WT Inspection	2	2	12-Jul-27	13-Jul-27
HS-INT-K1-1280	26B	Electrical In-Wall Inspection	2	2	14-Jul-27	15-Jul-27
HS-INT-K1-1180	23B	HVAC Sheet Metal - Classrooms	15	15	19-Jul-27	06-Aug-27
HS-INT-K1-1210	22A	Plumbing In-Wall WT Inspection	2	2	19-Jul-27	20-Jul-27
HS-INT-K1-1270	22A	Plumbing In-Wall NCC Inspection	2	2	21-Jul-27	22-Jul-27
HS-INT-K1-1260	23A	Mechanical Piping - Testing Above Ceiling	5	5	26-Jul-27	30-Jul-27
HS-INT-K1-1290	23A	Mechanical Piping Insulation	5	5	02-Aug-27	06-Aug-27
HS-INT-K1-1230	26B	Electrical Overhead Rough-in - Classrooms	15	15	09-Aug-27	27-Aug-27
HS-INT-K1-1250	23B	Duct Testing	2	2	09-Aug-27	10-Aug-27
HS-INT-K1-1300	23B	HVAC Sheet Metal Insulation	10	10	11-Aug-27	24-Aug-27
HS-INT-K1-1240	21A	Sprinkler Overhead Rough-In	10	10	30-Aug-27	13-Sep-27
HS-INT-K1-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	14-Sep-27	15-Sep-27
HS-INT-K1-1200	09B	In-Wall Insulation	5	5	12-Oct-27	18-Oct-27
HS-INT-K1-1320	01A	Wall Close-In WT Inspection	2	2	19-Oct-27	20-Oct-27
HS-INT-K1-1340	01A	Wall Close-In NCC Inspection	2	2	21-Oct-27	22-Oct-27
HS-INT-K1-1360	09B	Hang Drywall	5	5	25-Oct-27	29-Oct-27
HS-INT-K1-1380	09B	Drywall Finishing	10	10	01-Nov-27	12-Nov-27
HS-INT-K1-1400	09K	Prime/1st Coat Wall Paint	5	5	15-Nov-27	19-Nov-27
HS-INT-K1-1430	09E	Install Ceiling Grid	5	5	22-Nov-27	30-Nov-27
HS-INT-K1-1450	21A	Sprinkler Ceiling Trim-Out	5	5	01-Dec-27	07-Dec-27
HS-INT-K1-1460	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	01-Dec-27	07-Dec-27
HS-INT-K1-1470	09K	Wall Point Ups - Second Coat Paint	5	5	01-Dec-27	07-Dec-27
HS-INT-K1-1480	26B	Install Lights	5	5	01-Dec-27	07-Dec-27
HS-INT-K1-1490	23A	Mechanical Ceiling Trim-Out	5	5	01-Dec-27	07-Dec-27
HS-INT-K1-1500	09E	Cut Ceiling Tile	5	5	01-Dec-27	07-Dec-27
HS-INT-K1-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	08-Dec-27	14-Dec-27
HS-INT-K1-1600	01A	Fire Marshal Fire Damper Inspection	2	2	08-Dec-27	09-Dec-27
HS-INT-K1-1610	00-WT	Ceiling Close-In WT Inspections	2	2	08-Dec-27	09-Dec-27
HS-INT-K1-1660	01A	Ceiling Close-In NCC Inspections	2	2	10-Dec-27	13-Dec-27
HS-INT-K1-1690	09E	Drop Ceiling Tile	5	5	14-Dec-27	20-Dec-27
HS-INT-K1-1720	09H	Resinous Flooring - Science Labs	10	10	21-Dec-27	06-Jan-28
HS-INT-K1-1730	12A	Install Casework - Classroom	5	5	21-Dec-27	29-Dec-27
HS-INT-K1-1750	09C	VCT Flooring - Classroom	5	5	30-Dec-27	06-Jan-28
HS-INT-K1-1770	28A	Audio Enhancement System Trim-Out	5	5	30-Dec-27	06-Jan-28
HS-INT-K1-1760	12A	Install Casework - Science Labs	5	5	07-Jan-28	13-Jan-28
HS-INT-K1-1780	06C	Install Doors & Hardware	5	5	14-Jan-28	20-Jan-28
HS-INT-K1-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	14-Jan-28	20-Jan-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-K1-1800	09K	Final Painting	5	5	21-Jan-28	27-Jan-28
HS-INT-K1-1810	09C	Install Rubber Wall Base	5	5	28-Jan-28	03-Feb-28
HS-INT-K1-1820	00-WT	WT Create Work-to-Complete List	5	5	04-Feb-28	10-Feb-28
Area K - Multi-User Bathrooms			180	180	20-May-27	07-Feb-28
HS-INT-K1-1830	09B	Layout Walls - multi-user Bathroom	1	1	20-May-27	20-May-27
HS-INT-K1-1840	09B	Frame Track / Wall / Bulkheads	5	5	04-Jun-27	10-Jun-27
HS-INT-K1-1850	23B	Install Overhead HVAC Sheetmetal	10	10	11-Jun-27	24-Jun-27
HS-INT-K1-1860	26B	Rough-In Overhead Electrical	10	10	11-Jun-27	24-Jun-27
HS-INT-K1-1870	22A	Rough-In Overhead Plumbing	10	10	11-Jun-27	24-Jun-27
HS-INT-K1-1890	21A	Rough-In Overhead Sprinkler	10	10	11-Jun-27	24-Jun-27
HS-INT-K1-1950	28A	Rough-In Special Systems - Security / AV / IT / FA	10	10	11-Jun-27	24-Jun-27
HS-INT-K1-1880	23B	Rough-In Overhead HVAC Controls	5	5	25-Jun-27	01-Jul-27
HS-INT-K1-1910	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	10	10	25-Jun-27	09-Jul-27
HS-INT-K1-1900	22A	Rough-In Plumbing - Chair Carriers	5	5	12-Jul-27	16-Jul-27
HS-INT-K1-1930	26B	Rough-In In-Wall Electrical	5	5	12-Jul-27	16-Jul-27
HS-INT-K1-1920	22A	Plumbing Testing	2	2	19-Jul-27	20-Jul-27
HS-INT-K1-1940	26B	Electrical In-Wall Inspection	2	2	19-Jul-27	20-Jul-27
HS-INT-K1-1960	06C	Install Blocking	2	2	19-Jul-27	20-Jul-27
HS-INT-K1-1970	00-WT	Wall Close-In WT Inspection	2	2	16-Sep-27	17-Sep-27
HS-INT-K1-1980	01A	Plumbing In-Wall NCC Inspection	2	2	20-Sep-27	21-Sep-27
HS-INT-K1-1990	09B	Hang Drywall Walls	5	5	12-Oct-27	18-Oct-27
HS-INT-K1-2000	09B	Hang Drywall Ceilings / Bulkheads	3	3	19-Oct-27	21-Oct-27
HS-INT-K1-2010	09B	Drywall Finishing	10	10	22-Oct-27	04-Nov-27
HS-INT-K1-2020	09K	Prime Coat Walls	2	2	05-Nov-27	08-Nov-27
HS-INT-K1-2040	09D	Install Wall Tile	15	15	09-Nov-27	01-Dec-27
HS-INT-K1-2050	09C	Install Resinous Flooring & Base	5	5	02-Dec-27	08-Dec-27
HS-INT-K1-2030	09E	Install Ceiling Grid & Border Tile	5	5	09-Dec-27	15-Dec-27
HS-INT-K1-2060	26B	Ceiling Trim-Out - Electrical	5	5	16-Dec-27	22-Dec-27
HS-INT-K1-2070	23B	Ceiling Trim-Out - Mechanical	5	5	16-Dec-27	22-Dec-27
HS-INT-K1-2080	21A	Ceiling Trim-Out - Sprinkler	5	5	16-Dec-27	22-Dec-27
HS-INT-K1-2090	28A	Ceiling Trim-Out - Security / AV / IT / FA	5	5	16-Dec-27	22-Dec-27
HS-INT-K1-2120	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks / Misc.	10	10	23-Dec-27	10-Jan-28
HS-INT-K1-2190	26B	Electrical Above Ceiling Inspection	2	2	23-Dec-27	28-Dec-27
HS-INT-K1-2100	00-WT	WT Ceiling Close-In Inspection	2	2	29-Dec-27	30-Dec-27
HS-INT-K1-2180	01A	NCC Ceiling Close-In Inspection	2	2	03-Jan-28	04-Jan-28
HS-INT-K1-2110	09E	Drop Ceiling Tile	2	2	05-Jan-28	06-Jan-28
HS-INT-K1-2130	22A	Install Toilet Partitions	10	10	11-Jan-28	24-Jan-28
HS-INT-K1-2140	09B	Wall Point-Up	1	1	25-Jan-28	25-Jan-28
HS-INT-K1-2150	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	5	5	26-Jan-28	01-Feb-28
HS-INT-K1-2160	07G	Install Caulking	2	2	02-Feb-28	03-Feb-28
HS-INT-K1-2170	09K	Final Paint	2	2	04-Feb-28	07-Feb-28
Area G - 1st Floor			131	131	10-Jun-27	15-Dec-27
HS-INT-G1-1000	09B	Layout Walls - Area G - 1st Floor	5	5	10-Jun-27	16-Jun-27
HS-INT-G1-3110	23A	Startup & Commissioning of Equipment - Area G - 1st Floor	5	5	27-Oct-27	02-Nov-27
HS-INT-G1-3120	23A	Prefunctional Testing of Equipment - Area G - 1st Floor	5	5	03-Nov-27	09-Nov-27
HS-INT-G1-3130	23A	Checkout Equipment Function & Controls Sequence - Area G - 1st Floor	5	5	10-Nov-27	16-Nov-27
HS-INT-G1-2000	00-WT	WT Create Work-to-Complete List - Area G - 1st Floor	5	5	02-Dec-27	08-Dec-27
HS-INT-G1-3140	00-WT	Final Clean & Wax Floors - Area G - 1st Floor	10	10	02-Dec-27	15-Dec-27
Area G - Corridor			98	98	17-Jun-27	03-Nov-27
HS-INT-G1-1010	06C	Set Door Frames - Corridor	1	1	17-Jun-27	17-Jun-27
HS-INT-G1-1020	09B	Frame Walls - Corridor	5	5	18-Jun-27	24-Jun-27
HS-INT-G1-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	25-Jun-27	01-Jul-27
HS-INT-G1-1050	23A	Mechanical Overhead Piping Mains - Corridor	5	5	02-Jul-27	09-Jul-27
HS-INT-G1-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	12-Jul-27	16-Jul-27
HS-INT-G1-1150	22A	Plumbing Mains - Corridor	2	2	12-Jul-27	13-Jul-27
HS-INT-G1-1330	00-WT	Wall Close-In WT Inspection - Corridor	2	2	30-Aug-27	31-Aug-27
HS-INT-G1-1350	01A	Wall Close-In NCC Inspection - Corridor	2	2	01-Sep-27	02-Sep-27
HS-INT-G1-1370	09B	Hang Drywall - Corridor	5	5	03-Sep-27	10-Sep-27
HS-INT-G1-1390	09B	Drywall Finishing - Corridor	5	5	13-Sep-27	17-Sep-27
HS-INT-G1-1410	09K	Prime/1st Coat Wall Paint - Corridor	1	1	20-Sep-27	20-Sep-27
HS-INT-G1-1440	09E	Install Ceiling Grid - Corridor	1	1	21-Sep-27	21-Sep-27



Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-G1-1520	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	22-Sep-27	22-Sep-27
HS-INT-G1-1530	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	1	1	22-Sep-27	22-Sep-27
HS-INT-G1-1540	09K	Wall Point Ups - Second Coat Paint - Corridor	2	2	22-Sep-27	23-Sep-27
HS-INT-G1-1550	26B	Install Lights - Corridor	2	2	22-Sep-27	23-Sep-27
HS-INT-G1-1560	23A	Mechanical Ceiling Trim-Out - Corridor	2	2	22-Sep-27	23-Sep-27
HS-INT-G1-1570	09E	Cut Ceiling Tile - Corridor	1	1	22-Sep-27	22-Sep-27
HS-INT-G1-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	2	2	24-Sep-27	27-Sep-27
HS-INT-G1-1650	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	24-Sep-27	27-Sep-27
HS-INT-G1-1670	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	28-Sep-27	29-Sep-27
HS-INT-G1-1420	09D	Wall Tile - Corridor	10	10	06-Oct-27	19-Oct-27
HS-INT-G1-1510	09C	Install VCT Flooring - Corridor	5	5	20-Oct-27	26-Oct-27
HS-INT-G1-1580	06C	Install Div 10 Specialties - Corridor	2	2	20-Oct-27	21-Oct-27
HS-INT-G1-1640	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	22-Oct-27	25-Oct-27
HS-INT-G1-1700	09E	Drop Ceiling Tile - Corridor	1	1	26-Oct-27	26-Oct-27
HS-INT-G1-1630	06C	Install Doors & Hardware - Corridor	2	2	27-Oct-27	28-Oct-27
HS-INT-G1-1680	09K	Final Painting - Corridor	1	1	29-Oct-27	29-Oct-27
HS-INT-G1-1710	09C	Install Rubber Wall Base - Corridor	1	1	01-Nov-27	01-Nov-27
HS-INT-G1-1740	00-WT	WT Create Work-to-Complete List - Corridor	2	2	02-Nov-27	03-Nov-27
Area G - Classrooms / Offices			110	110	25-Jun-27	01-Dec-27
HS-INT-G1-1040	09B	Frame Walls - Classrooms / Offices	3	3	25-Jun-27	29-Jun-27
HS-INT-G1-1060	22A	Plumbing In Wall Rough-In	10	10	30-Jun-27	14-Jul-27
HS-INT-G1-1070	26B	Electrical In Wall Rough-In	5	5	30-Jun-27	07-Jul-27
HS-INT-G1-1090	23A	Hang FCUs	5	5	30-Jun-27	07-Jul-27
HS-INT-G1-1080	23A	Mechanical Overhead Piping - Expansion Loops	5	5	02-Jul-27	09-Jul-27
HS-INT-G1-1100	26C	Special Systems - Rough-In (Security, AV, ITFA)	5	5	08-Jul-27	14-Jul-27
HS-INT-G1-1160	23A	Install Condensate Piping	2	2	08-Jul-27	09-Jul-27
HS-INT-G1-1170	23B	Measure / Fab / Install Ductwork Transitions	10	10	08-Jul-27	21-Jul-27
HS-INT-G1-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	2	2	12-Jul-27	13-Jul-27
HS-INT-G1-1190	25A	Install HVAC Controls & Valves	2	2	14-Jul-27	15-Jul-27
HS-INT-G1-1110	06C	Install Blocking	5	5	15-Jul-27	21-Jul-27
HS-INT-G1-1140	22A	Plumbing In Wall Insulation	5	5	15-Jul-27	21-Jul-27
HS-INT-G1-1220	26B	Electrical In-Wall WT Inspection	2	2	15-Jul-27	16-Jul-27
HS-INT-G1-1260	23A	Mechanical Piping - Testing Above Ceiling	2	2	16-Jul-27	19-Jul-27
HS-INT-G1-1280	26B	Electrical In-Wall Inspection	2	2	19-Jul-27	20-Jul-27
HS-INT-G1-1290	23A	Mechanical Piping Insulation	5	5	20-Jul-27	26-Jul-27
HS-INT-G1-1180	23B	HVAC Sheet Metal - Classrooms	5	5	22-Jul-27	28-Jul-27
HS-INT-G1-1210	22A	Plumbing In-Wall WT Inspection	2	2	22-Jul-27	23-Jul-27
HS-INT-G1-1270	22A	Plumbing In-Wall NCC Inspection	2	2	26-Jul-27	27-Jul-27
HS-INT-G1-1230	26B	Electrical Overhead Rough-in - Classrooms	5	5	29-Jul-27	04-Aug-27
HS-INT-G1-1240	21A	Sprinkler Overhead Rough-In	5	5	29-Jul-27	04-Aug-27
HS-INT-G1-1250	23B	Duct Testing	2	2	29-Jul-27	30-Jul-27
HS-INT-G1-1300	23B	HVAC Sheet Metal Insulation	2	2	02-Aug-27	03-Aug-27
HS-INT-G1-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	05-Aug-27	06-Aug-27
HS-INT-G1-1200	07A	In-Wall Insulation	2	2	26-Aug-27	27-Aug-27
HS-INT-G1-1320	01A	Wall Close-In WT Inspection	2	2	30-Aug-27	31-Aug-27
HS-INT-G1-1340	01A	Wall Close-In NCC Inspection	2	2	01-Sep-27	02-Sep-27
HS-INT-G1-1360	09B	Hang Drywall	10	10	03-Sep-27	17-Sep-27
HS-INT-G1-1380	09B	Drywall Finishing	10	10	20-Sep-27	01-Oct-27
HS-INT-G1-1400	09K	Prime/1st Coat Wall Paint	2	2	04-Oct-27	05-Oct-27
HS-INT-G1-1430	09E	Install Ceiling Grid	5	5	06-Oct-27	12-Oct-27
HS-INT-G1-1450	21A	Sprinkler Ceiling Trim-Out	5	5	13-Oct-27	19-Oct-27
HS-INT-G1-1460	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	2	2	13-Oct-27	14-Oct-27
HS-INT-G1-1470	09K	Wall Point Ups - Second Coat Paint	5	5	13-Oct-27	19-Oct-27
HS-INT-G1-1480	26B	Install Lights	5	5	13-Oct-27	19-Oct-27
HS-INT-G1-1490	23A	Mechanical Ceiling Trim-Out	2	2	13-Oct-27	14-Oct-27
HS-INT-G1-1500	09E	Cut Ceiling Tile	2	2	13-Oct-27	14-Oct-27
HS-INT-G1-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	20-Oct-27	26-Oct-27
HS-INT-G1-1600	01A	Fire Marshal Fire Damper Inspection	2	2	20-Oct-27	21-Oct-27
HS-INT-G1-1610	00-WT	Ceiling Close-In WT Inspections	2	2	20-Oct-27	21-Oct-27
HS-INT-G1-1660	01A	Ceiling Close-In NCC Inspections	2	2	22-Oct-27	25-Oct-27
HS-INT-G1-1690	09E	Drop Ceiling Tile	2	2	26-Oct-27	27-Oct-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-G1-1720	09H	Resinous Flooring - Science Labs	10	10	28-Oct-27	10-Nov-27
HS-INT-G1-1730	12A	Install Casework - Classroom	5	5	28-Oct-27	03-Nov-27
HS-INT-G1-1750	09C	VCT Flooring - Classroom	2	2	04-Nov-27	05-Nov-27
HS-INT-G1-1770	28A	Audio Enhancement System Trim-Out	2	2	04-Nov-27	05-Nov-27
HS-INT-G1-1760	12A	Install Casework - Science Labs	5	5	11-Nov-27	17-Nov-27
HS-INT-G1-1780	06C	Install Doors & Hardware	2	2	18-Nov-27	19-Nov-27
HS-INT-G1-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	2	2	18-Nov-27	19-Nov-27
HS-INT-G1-1800	09K	Final Painting	2	2	22-Nov-27	23-Nov-27
HS-INT-G1-1810	09C	Install Rubber Wall Base	2	2	24-Nov-27	29-Nov-27
HS-INT-G1-1820	00-WT	WT Create Work-to-Complete List	2	2	30-Nov-27	01-Dec-27
Area G - Career Center / Reception			101	101	17-Jun-27	08-Nov-27
Area G - Career Center / Reception - Corridor			76	76	17-Jun-27	04-Oct-27
HS-INT-G1-2630	06C	Set Door Frames - Reception Corridor	2	2	17-Jun-27	18-Jun-27
HS-INT-G1-1830	09B	Frame Walls - Reception Corridor	5	5	30-Jun-27	07-Jul-27
HS-INT-G1-1840	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Reception Corridor	5	5	08-Jul-27	14-Jul-27
HS-INT-G1-2650	09B	Frame Bulkheads & Hard Ceilings - Reception Corridor	5	5	08-Jul-27	14-Jul-27
HS-INT-G1-1850	23A	Mechanical Overhead Piping Mains - Reception Corridor	2	2	15-Jul-27	16-Jul-27
HS-INT-G1-2090	23B	HVAC Sheet Metal - Mains & Risers - Reception Corridor	5	5	19-Jul-27	23-Jul-27
HS-INT-G1-2260	22A	Plumbing Mains - Reception Corridor	10	10	19-Jul-27	30-Jul-27
HS-INT-G1-2570	00-WT	Wall Close-In WT Inspection - Reception Corridor	2	2	18-Aug-27	19-Aug-27
HS-INT-G1-2520	01A	Wall Close-In NCC Inspection - Reception Corridor	2	2	20-Aug-27	23-Aug-27
HS-INT-G1-2400	09B	Hang Drywall - Reception Corridor	2	2	24-Aug-27	25-Aug-27
HS-INT-G1-2410	09B	Drywall Finishing - Reception Corridor	5	5	26-Aug-27	01-Sep-27
HS-INT-G1-2660	09B	Hang Drywall Bulkheads & Hard Ceilings - Reception Corridor	2	2	26-Aug-27	27-Aug-27
HS-INT-G1-2670	09B	Drywall Finishing Bulkheads & Hard Ceilings - Reception Corridor	5	5	30-Aug-27	03-Sep-27
HS-INT-G1-2420	09K	Prime/1st Coat Wall Paint - Reception Corridor	1	1	07-Sep-27	07-Sep-27
HS-INT-G1-2430	09E	Install Ceiling Grid - Reception Corridor	2	2	08-Sep-27	09-Sep-27
HS-INT-G1-2690	08A	Install Storefront System - Reception Corridor	2	2	08-Sep-27	09-Sep-27
HS-INT-G1-2440	21A	Sprinkler Ceiling Trim-Out - Reception Corridor	1	1	10-Sep-27	10-Sep-27
HS-INT-G1-2450	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Reception Corridor	2	2	10-Sep-27	13-Sep-27
HS-INT-G1-2480	09K	Wall Point Ups - Second Coat Paint - Reception Corridor	1	1	10-Sep-27	10-Sep-27
HS-INT-G1-2540	26B	Install Lights - Reception Corridor	5	5	10-Sep-27	16-Sep-27
HS-INT-G1-2550	23A	Mechanical Ceiling Trim-Out - Reception Corridor	2	2	10-Sep-27	13-Sep-27
HS-INT-G1-2600	09E	Cut Ceiling Tile - Reception Corridor	1	1	10-Sep-27	10-Sep-27
HS-INT-G1-2460	28A	Wall Trim Out - (Elect/Special systems, FA) - Reception Corridor	2	2	13-Sep-27	14-Sep-27
HS-INT-G1-2580	00-WT	Ceiling Close-In WT Inspections - Reception Corridor	2	2	17-Sep-27	20-Sep-27
HS-INT-G1-1950	09D	Wall Tile - Reception Corridor	0	0	21-Sep-27	21-Sep-27
HS-INT-G1-2390	09C	Install VCT Flooring - Reception Corridor	0	0	21-Sep-27	21-Sep-27
HS-INT-G1-2470	01A	Ceiling Close-In NCC Inspections - Reception Corridor	2	2	21-Sep-27	22-Sep-27
HS-INT-G1-2490	06C	Install Doors & Hardware - Reception Corridor	5	5	21-Sep-27	27-Sep-27
HS-INT-G1-2620	06C	Install Div 10 Specialties - Reception Corridor	2	2	21-Sep-27	22-Sep-27
HS-INT-G1-2530	01A	Fire Marshal Fire Damper Inspection - Reception Corridor	2	2	23-Sep-27	24-Sep-27
HS-INT-G1-2500	09E	Drop Ceiling Tile - Reception Corridor	1	1	27-Sep-27	27-Sep-27
HS-INT-G1-2510	09K	Final Painting - Reception Corridor	1	1	28-Sep-27	28-Sep-27
HS-INT-G1-2680	09C	Install Carpet Flooring - Reception Corridor	2	2	28-Sep-27	29-Sep-27
HS-INT-G1-2560	09C	Install Rubber Wall Base - Reception Corridor	1	1	30-Sep-27	30-Sep-27
HS-INT-G1-2590	00-WT	WT Create Work-to-Complete List - Reception Corridor	2	2	01-Oct-27	04-Oct-27
Area G - Career Center / Reception - Main Space			87	87	08-Jul-27	08-Nov-27
HS-INT-G1-2250	09B	Frame Walls - Reception	5	5	08-Jul-27	14-Jul-27
HS-INT-G1-1880	22A	Plumbing In Wall Rough-In - Reception	1	1	15-Jul-27	15-Jul-27
HS-INT-G1-1890	26B	Electrical In Wall Rough-In - Reception	5	5	15-Jul-27	21-Jul-27
HS-INT-G1-2110	23A	Mechanical Overhead Piping - Expansion Loops - Reception	2	2	15-Jul-27	16-Jul-27
HS-INT-G1-2310	23A	Hang FCUs - Reception	2	2	15-Jul-27	16-Jul-27
HS-INT-G1-2700	09B	Frame Bulkheads & Hard Ceilings - Reception	2	2	15-Jul-27	16-Jul-27
HS-INT-G1-1910	06C	Install Blocking - Reception	2	2	16-Jul-27	19-Jul-27
HS-INT-G1-2190	22A	Plumbing In Wall Insulation - Reception	1	1	16-Jul-27	16-Jul-27
HS-INT-G1-2100	23A	Mechanical Overhead Piping - FCUs - Reception	2	2	19-Jul-27	20-Jul-27
HS-INT-G1-2380	23A	Install Condensate Piping - Reception	2	2	19-Jul-27	20-Jul-27
HS-INT-G1-2640	23B	Measure / Fab / Install Ductwork Transitions - Reception	5	5	19-Jul-27	23-Jul-27
HS-INT-G1-2170	25A	Install HVAC Controls & Valves - Reception	5	5	21-Jul-27	27-Jul-27
HS-INT-G1-1900	26C	Special Systems - Rough-In (Security, AV, ITFA) - Reception	2	2	22-Jul-27	23-Jul-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-G1-2120	23B	HVAC Sheet Metal - Reception	10	10	26-Jul-27	06-Aug-27
HS-INT-G1-2340	26B	Electrical In-Wall WT Inspection - Reception	2	2	26-Jul-27	27-Jul-27
HS-INT-G1-2270	07A	In-Wall Insulation - Reception	2	2	27-Jul-27	28-Jul-27
HS-INT-G1-2140	23A	Mechanical Piping - Testing Above Ceiling - Reception	2	2	28-Jul-27	29-Jul-27
HS-INT-G1-2210	26B	Electrical In-Wall Inspection - Reception	2	2	28-Jul-27	29-Jul-27
HS-INT-G1-2150	23A	Mechanical Piping Insulation - Reception	2	2	30-Jul-27	02-Aug-27
HS-INT-G1-2320	22A	Plumbing In-Wall WT Inspection - Reception	2	2	02-Aug-27	03-Aug-27
HS-INT-G1-2200	22A	Plumbing In-Wall NCC Inspection - Reception	2	2	04-Aug-27	05-Aug-27
HS-INT-G1-1860	26B	Electrical Overhead Rough-in - Reception	5	5	09-Aug-27	13-Aug-27
HS-INT-G1-1870	21A	Sprinkler Overhead Rough-In - Reception	5	5	09-Aug-27	13-Aug-27
HS-INT-G1-2130	23B	Duct Testing - Reception	2	2	09-Aug-27	10-Aug-27
HS-INT-G1-2160	23B	HVAC Sheet Metal Insulation - Reception	5	5	11-Aug-27	17-Aug-27
HS-INT-G1-2180	21A	Sprinkler Overhead Hydro-Testing - Reception	2	2	16-Aug-27	17-Aug-27
HS-INT-G1-2330	00-WT	Wall Close-In WT Inspection - Reception	2	2	18-Aug-27	19-Aug-27
HS-INT-G1-2220	01A	Wall Close-In NCC Inspection - Reception	2	2	20-Aug-27	23-Aug-27
HS-INT-G1-1920	09B	Hang Drywall - Reception	5	5	26-Aug-27	01-Sep-27
HS-INT-G1-1930	09B	Drywall Finishing - Reception	10	10	02-Sep-27	16-Sep-27
HS-INT-G1-2710	09B	Hang Drywall Bulkheads & Hard Ceilings - Reception	2	2	02-Sep-27	03-Sep-27
HS-INT-G1-1940	09K	Prime/1st Coat Wall Paint - Reception	2	2	17-Sep-27	20-Sep-27
HS-INT-G1-2720	09B	Drywall Finishing Bulkheads & Hard Ceilings - Reception	5	5	17-Sep-27	23-Sep-27
HS-INT-G1-1960	09E	Install Ceiling Grid - Reception	10	10	21-Sep-27	04-Oct-27
HS-INT-G1-1970	21A	Sprinkler Ceiling Trim-Out - Reception	2	2	05-Oct-27	06-Oct-27
HS-INT-G1-1980	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Reception	2	2	05-Oct-27	06-Oct-27
HS-INT-G1-2040	09K	Wall Point Ups - Second Coat Paint - Reception	1	1	05-Oct-27	05-Oct-27
HS-INT-G1-2280	26B	Install Lights - Reception	5	5	05-Oct-27	11-Oct-27
HS-INT-G1-2290	23A	Mechanical Ceiling Trim-Out - Reception	5	5	05-Oct-27	11-Oct-27
HS-INT-G1-2370	09E	Cut Ceiling Tile - Reception	1	1	05-Oct-27	05-Oct-27
HS-INT-G1-1990	28A	Wall Trim Out - (Elect/Special systems, FA) - Reception	5	5	06-Oct-27	12-Oct-27
HS-INT-G1-2230	01A	Fire Marshal Fire Damper Inspection - Reception	2	2	07-Oct-27	08-Oct-27
HS-INT-G1-2350	00-WT	Ceiling Close-In WT Inspections - Reception	2	2	12-Oct-27	13-Oct-27
HS-INT-G1-2010	01A	Ceiling Close-In NCC Inspections - Reception	2	2	14-Oct-27	15-Oct-27
HS-INT-G1-2060	09E	Drop Ceiling Tile - Reception	2	2	18-Oct-27	19-Oct-27
HS-INT-G1-2020	12A	Install Casework - Reception	1	1	20-Oct-27	20-Oct-27
HS-INT-G1-2240	12A	Install Casework - Reception	5	5	20-Oct-27	26-Oct-27
HS-INT-G1-2730	09C	Install Carpet Flooring - Reception	5	5	20-Oct-27	26-Oct-27
HS-INT-G1-2030	09C	VCT Flooring - Reception	1	1	21-Oct-27	21-Oct-27
HS-INT-G1-2050	06C	Install Doors & Hardware - Reception	5	5	27-Oct-27	02-Nov-27
HS-INT-G1-2070	06C	Marker boards/Smart Boards, TV, Misc Specialties - Reception	5	5	27-Oct-27	02-Nov-27
HS-INT-G1-2080	09K	Final Painting - Reception	1	1	03-Nov-27	03-Nov-27
HS-INT-G1-2300	09C	Install Rubber Wall Base - Reception	1	1	04-Nov-27	04-Nov-27
HS-INT-G1-2360	00-WT	WT Create Work-to-Complete List	2	2	05-Nov-27	08-Nov-27
Area G - Career Center / Reception - Toilet Rooms			62	62	15-Jul-27	11-Oct-27
HS-INT-G1-2770	26B	Rough-In Overhead Electrical	2	2	15-Jul-27	16-Jul-27
HS-INT-G1-2780	22A	Rough-In Overhead Plumbing	5	5	15-Jul-27	21-Jul-27
HS-INT-G1-2790	23B	Rough-In Overhead HVAC Controls	1	1	15-Jul-27	15-Jul-27
HS-INT-G1-2800	21A	Rough-In Overhead Sprinkler	1	1	15-Jul-27	15-Jul-27
HS-INT-G1-2860	28A	Rough-In Special Systems - Security / AV / IT / FA	1	1	15-Jul-27	15-Jul-27
HS-INT-G1-2840	26B	Rough-In In-Wall Electrical	2	2	19-Jul-27	20-Jul-27
HS-INT-G1-2850	26B	Electrical In-Wall Inspection	2	2	21-Jul-27	22-Jul-27
HS-INT-G1-2820	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	2	2	22-Jul-27	23-Jul-27
HS-INT-G1-2810	22A	Rough-In Plumbing - Chair Carriers	2	2	26-Jul-27	27-Jul-27
HS-INT-G1-2830	22A	Plumbing Testing	2	2	28-Jul-27	29-Jul-27
HS-INT-G1-2870	06C	Install Blocking	5	5	28-Jul-27	03-Aug-27
HS-INT-G1-2880	00-WT	Wall Close-In WT Inspection	2	2	04-Aug-27	05-Aug-27
HS-INT-G1-2890	01A	Plumbing In-Wall NCC Inspection	2	2	06-Aug-27	09-Aug-27
HS-INT-G1-2900	09B	Hang Drywall Walls	2	2	26-Aug-27	27-Aug-27
HS-INT-G1-2920	09B	Drywall Finishing	5	5	30-Aug-27	03-Sep-27
HS-INT-G1-2930	09K	Prime Coat Walls	1	1	07-Sep-27	07-Sep-27
HS-INT-G1-2950	09D	Install Wall & Floor Tile	10	10	08-Sep-27	21-Sep-27
HS-INT-G1-2940	09E	Install Ceiling Grid & Border Tile	2	2	22-Sep-27	23-Sep-27
HS-INT-G1-2970	26B	Ceiling Trim-Out - Electrical	1	1	24-Sep-27	24-Sep-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-G1-2980	23B	Ceiling Trim-Out - Mechanical	1	1	24-Sep-27	24-Sep-27
HS-INT-G1-2990	21A	Ceiling Trim-Out - Sprinkler	1	1	24-Sep-27	24-Sep-27
HS-INT-G1-3000	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	24-Sep-27	24-Sep-27
HS-INT-G1-3030	22A	Install Plumbing Fixtures - Toilets / Sinks / Misc.	5	5	27-Sep-27	01-Oct-27
HS-INT-G1-3100	26B	Electrical Above Ceiling Inspection	2	2	27-Sep-27	28-Sep-27
HS-INT-G1-3010	00-WT	WT Ceiling Close-In Inspection	2	2	29-Sep-27	30-Sep-27
HS-INT-G1-3090	01A	NCC Ceiling Close-In Inspection	2	2	01-Oct-27	04-Oct-27
HS-INT-G1-3050	09B	Wall Point-Up	1	1	04-Oct-27	04-Oct-27
HS-INT-G1-3020	09E	Drop Ceiling Tile	2	2	05-Oct-27	06-Oct-27
HS-INT-G1-3060	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	2	2	05-Oct-27	06-Oct-27
HS-INT-G1-3070	07G	Install Caulking	2	2	07-Oct-27	08-Oct-27
HS-INT-G1-3080	09K	Final Paint	1	1	11-Oct-27	11-Oct-27
Area H - 1st Floor			165	165	02-Jul-27	28-Feb-28
HS-INT-H1-1000	09B	Layout Walls - Area H - 1st Floor	5	5	02-Jul-27	09-Jul-27
HS-INT-H1-3980	23A	Startup & Commissioning of Equipment - Area H - 1st Floor	5	5	25-Jan-28	31-Jan-28
HS-INT-H1-3990	23A	Prefunctional Testing of Equipment - Area H - 1st Floor	5	5	01-Feb-28	07-Feb-28
HS-INT-H1-4000	23A	Checkout Equipment Function & Controls Sequence - Area H - 1st Floor	5	5	08-Feb-28	14-Feb-28
HS-INT-H1-2250	00-WT	WT Create Work-to-Complete List - Area H - 1st Floor	5	5	15-Feb-28	21-Feb-28
HS-INT-H1-4010	00-WT	Final Clean & Wax Floors - Area H - 1st Floor	10	10	15-Feb-28	28-Feb-28
Area H - Corridor / HS Lobby			127	127	12-Jul-27	12-Jan-28
HS-INT-H1-1010	06C	Set Door Frames - Corridor & HS Lobby	5	5	12-Jul-27	16-Jul-27
HS-INT-H1-2320	09B	Install Elevator Shaft Walls - Floors 1 thru 3	10	10	12-Jul-27	23-Jul-27
HS-INT-H1-1020	09B	Frame Walls - Corridor & HS Lobby	5	5	25-Aug-27	31-Aug-27
HS-INT-H1-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor & HS Lobby	5	5	01-Sep-27	08-Sep-27
HS-INT-H1-1050	23A	Mechanical Overhead Piping Mains - Corridor & HS Lobby	5	5	09-Sep-27	15-Sep-27
HS-INT-H1-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor & HS Lobby	5	5	16-Sep-27	22-Sep-27
HS-INT-H1-1150	22A	Plumbing Mains - Corridor & HS Lobby	5	5	16-Sep-27	22-Sep-27
HS-INT-H1-1330	01A	Wall Close-In WT Inspection - Corridor & HS Lobby	2	2	12-Oct-27	13-Oct-27
HS-INT-H1-1350	01A	Wall Close-In NCC Inspection - Corridor & HS Lobby	2	2	14-Oct-27	15-Oct-27
HS-INT-H1-1370	09B	Hang Drywall - Corridor & HS Lobby	5	5	18-Oct-27	22-Oct-27
HS-INT-H1-1390	09B	Drywall Finishing - Corridor & HS Lobby	10	10	25-Oct-27	05-Nov-27
HS-INT-H1-1410	09K	Prime/1st Coat Wall Paint - Corridor & HS Lobby	1	1	08-Nov-27	08-Nov-27
HS-INT-H1-3930	09G	Terrazzo - HS Lobby - Layout & Install Strips	5	5	09-Nov-27	15-Nov-27
HS-INT-H1-3940	09G	Terrazzo - HS Lobby - Preperation	1	1	16-Nov-27	16-Nov-27
HS-INT-H1-3950	09G	Terrazzo - HS Lobby - Pour Terrazo	5	5	17-Nov-27	23-Nov-27
HS-INT-H1-3960	09G	Terrazzo - HS Lobby - Grind & Polish	5	5	24-Nov-27	02-Dec-27
HS-INT-H1-3970	09G	Terrazzo - HS Lobby - Apply Sealant	1	1	03-Dec-27	03-Dec-27
HS-INT-H1-1420	09D	Wall Tile - Corridor & HS Lobby	10	10	06-Dec-27	17-Dec-27
HS-INT-H1-1440	09E	Install Ceiling Grid - Corridor & HS Lobby	2	2	06-Dec-27	07-Dec-27
HS-INT-H1-1520	21A	Sprinkler Ceiling Trim-Out - Corridor & HS Lobby	5	5	08-Dec-27	14-Dec-27
HS-INT-H1-1530	28A	Special Systems - Ceiling Trim out (Security, AV, ITFA) - Corridor & HS Lobby	2	2	08-Dec-27	09-Dec-27
HS-INT-H1-1540	09K	Wall Point Ups - Second Coat Paint - Corridor & HS Lobby	1	1	08-Dec-27	08-Dec-27
HS-INT-H1-1550	26B	Install Lights - Corridor & HS Lobby	2	2	08-Dec-27	09-Dec-27
HS-INT-H1-1560	23A	Mechanical Ceiling Trim-Out - Corridor & HS Lobby	2	2	08-Dec-27	09-Dec-27
HS-INT-H1-1570	09E	Cut Ceiling Tile - Corridor & HS Lobby	1	1	08-Dec-27	08-Dec-27
HS-INT-H1-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor & HS Lobby	1	1	09-Dec-27	09-Dec-27
HS-INT-H1-1650	00-WT	Ceiling Close-In WT Inspections - Corridor & HS Lobby	2	2	15-Dec-27	16-Dec-27
HS-INT-H1-1670	01A	Ceiling Close-In NCC Inspections - Corridor & HS Lobby	2	2	17-Dec-27	20-Dec-27
HS-INT-H1-1510	09C	Install VCT Flooring - Corridor & HS Lobby	5	5	20-Dec-27	28-Dec-27
HS-INT-H1-1580	06C	Install Div 10 Specialties - Corridor & HS Lobby	1	1	20-Dec-27	20-Dec-27
HS-INT-H1-1640	01A	Fire Marshal Fire Damper Inspection - Corridor & HS Lobby	2	2	21-Dec-27	22-Dec-27
HS-INT-H1-1700	09E	Drop Ceiling Tile - Corridor & HS Lobby	1	1	23-Dec-27	23-Dec-27
HS-INT-H1-1630	06C	Install Doors & Hardware - Corridor & HS Lobby	5	5	29-Dec-27	05-Jan-28
HS-INT-H1-1680	09K	Final Painting - Corridor & HS Lobby	1	1	06-Jan-28	06-Jan-28
HS-INT-H1-1710	09C	Install Rubber Wall Base - Corridor & HS Lobby	2	2	07-Jan-28	10-Jan-28
HS-INT-H1-1740	00-WT	WT Create Work-to-Complete List - Corridor & HS Lobby	2	2	11-Jan-28	12-Jan-28
Area H - Classrooms			97	97	01-Sep-27	21-Jan-28
HS-INT-H1-1040	09B	Frame Walls - Classrooms	5	5	01-Sep-27	08-Sep-27
HS-INT-H1-1060	22A	Plumbing In Wall Rough-In	5	5	09-Sep-27	15-Sep-27
HS-INT-H1-1070	26B	Electrical In Wall Rough-In	5	5	09-Sep-27	15-Sep-27
HS-INT-H1-1080	23A	Mechanical Overhead Piping - Expansion Loops	2	2	09-Sep-27	10-Sep-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H1-1090	23A	Hang FCUs	2	2	09-Sep-27	10-Sep-27
HS-INT-H1-1160	23A	Install Condensate Piping	5	5	13-Sep-27	17-Sep-27
HS-INT-H1-1170	23B	Measure / Fab / Install Ductwork Transitions	5	5	13-Sep-27	17-Sep-27
HS-INT-H1-1100	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	16-Sep-27	22-Sep-27
HS-INT-H1-1110	06C	Install Blocking	2	2	16-Sep-27	17-Sep-27
HS-INT-H1-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	2	2	16-Sep-27	17-Sep-27
HS-INT-H1-1140	22A	Plumbing In Wall Insulation	2	2	16-Sep-27	17-Sep-27
HS-INT-H1-1190	25A	Install HVAC Controls & Valves	2	2	20-Sep-27	21-Sep-27
HS-INT-H1-1260	23A	Mechanical Piping - Testing Above Ceiling	2	2	22-Sep-27	23-Sep-27
HS-INT-H1-1180	23B	HVAC Sheet Metal - Classrooms	5	5	23-Sep-27	29-Sep-27
HS-INT-H1-1210	22A	Plumbing In-Wall WT Inspection	2	2	23-Sep-27	24-Sep-27
HS-INT-H1-1220	26B	Electrical In-Wall WT Inspection	2	2	23-Sep-27	24-Sep-27
HS-INT-H1-1290	23A	Mechanical Piping Insulation	1	1	24-Sep-27	24-Sep-27
HS-INT-H1-1270	22A	Plumbing In-Wall NCC Inspection	2	2	27-Sep-27	28-Sep-27
HS-INT-H1-1280	26B	Electrical In-Wall Inspection	2	2	27-Sep-27	28-Sep-27
HS-INT-H1-1230	26B	Electrical Overhead Rough-in - Classrooms	5	5	30-Sep-27	06-Oct-27
HS-INT-H1-1240	21A	Sprinkler Overhead Rough-In	5	5	30-Sep-27	06-Oct-27
HS-INT-H1-1250	23B	Duct Testing	2	2	30-Sep-27	01-Oct-27
HS-INT-H1-1300	23B	HVAC Sheet Metal Insulation	2	2	04-Oct-27	05-Oct-27
HS-INT-H1-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	07-Oct-27	08-Oct-27
HS-INT-H1-1200	07A	In-Wall Insulation	2	2	08-Oct-27	11-Oct-27
HS-INT-H1-1320	00-WT	Wall Close-In WT Inspection	2	2	12-Oct-27	13-Oct-27
HS-INT-H1-1340	01A	Wall Close-In NCC Inspection	2	2	14-Oct-27	15-Oct-27
HS-INT-H1-1360	09B	Hang Drywall	15	15	18-Oct-27	05-Nov-27
HS-INT-H1-1380	09B	Drywall Finishing	10	10	08-Nov-27	19-Nov-27
HS-INT-H1-1400	09K	Prime/1st Coat Wall Paint	2	2	22-Nov-27	23-Nov-27
HS-INT-H1-1430	09E	Install Ceiling Grid	5	5	24-Nov-27	02-Dec-27
HS-INT-H1-1450	21A	Sprinkler Ceiling Trim-Out	5	5	03-Dec-27	09-Dec-27
HS-INT-H1-1460	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	03-Dec-27	09-Dec-27
HS-INT-H1-1470	09K	Wall Point Ups - Second Coat Paint	1	1	03-Dec-27	03-Dec-27
HS-INT-H1-1480	26B	Install Lights	5	5	03-Dec-27	09-Dec-27
HS-INT-H1-1490	23A	Mechanical Ceiling Trim-Out	2	2	03-Dec-27	06-Dec-27
HS-INT-H1-1500	09E	Cut Ceiling Tile	2	2	03-Dec-27	06-Dec-27
HS-INT-H1-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	06-Dec-27	10-Dec-27
HS-INT-H1-1600	01A	Fire Marshal Fire Damper Inspection	2	2	10-Dec-27	13-Dec-27
HS-INT-H1-1610	00-WT	Ceiling Close-In WT Inspections	2	2	10-Dec-27	13-Dec-27
HS-INT-H1-1660	01A	Ceiling Close-In NCC Inspections	2	2	14-Dec-27	15-Dec-27
HS-INT-H1-1690	09E	Drop Ceiling Tile	5	5	16-Dec-27	22-Dec-27
HS-INT-H1-1720	09H	Resinous Flooring - Science Labs	10	10	23-Dec-27	10-Jan-28
HS-INT-H1-1730	12A	Install Casework - Classroom	2	2	23-Dec-27	28-Dec-27
HS-INT-H1-1750	09C	VCT Flooring - Classroom	5	5	29-Dec-27	05-Jan-28
HS-INT-H1-1770	28A	Audio Enhancement System Trim-Out	1	1	29-Dec-27	29-Dec-27
HS-INT-H1-1760	12A	Install Casework - Science Labs	2	2	11-Jan-28	12-Jan-28
HS-INT-H1-1780	06C	Install Doors & Hardware	2	2	13-Jan-28	14-Jan-28
HS-INT-H1-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	2	2	13-Jan-28	14-Jan-28
HS-INT-H1-1800	09K	Final Painting	1	1	17-Jan-28	17-Jan-28
HS-INT-H1-1810	09C	Install Rubber Wall Base	2	2	18-Jan-28	19-Jan-28
HS-INT-H1-1820	00-WT	WT Create Work-to-Complete List	2	2	20-Jan-28	21-Jan-28
Area H - Multi-User Bathroom			94	94	01-Sep-27	18-Jan-28
HS-INT-H1-1830	09B	Layout Walls - multi-user Bathroom	2	2	01-Sep-27	02-Sep-27
HS-INT-H1-1840	09B	Frame Track / Wall / Bulkheads	5	5	09-Sep-27	15-Sep-27
HS-INT-H1-1850	23B	Install Overhead HVAC Sheetmetal	5	5	16-Sep-27	22-Sep-27
HS-INT-H1-1860	26B	Rough-In Overhead Electrical	2	2	16-Sep-27	17-Sep-27
HS-INT-H1-1870	22A	Rough-In Overhead Plumbing	5	5	16-Sep-27	22-Sep-27
HS-INT-H1-1890	21A	Rough-In Overhead Sprinkler	2	2	16-Sep-27	17-Sep-27
HS-INT-H1-1950	28A	Rough-In Special Systems - Security / AV / IT / FA	2	2	16-Sep-27	17-Sep-27
HS-INT-H1-1930	26B	Rough-In In-Wall Electrical	2	2	20-Sep-27	21-Sep-27
HS-INT-H1-1940	26B	Electrical In-Wall Inspection	2	2	22-Sep-27	23-Sep-27
HS-INT-H1-1880	23B	Rough-In Overhead HVAC Controls	5	5	23-Sep-27	29-Sep-27
HS-INT-H1-1910	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	10	10	23-Sep-27	06-Oct-27
HS-INT-H1-1900	22A	Rough-In Plumbing - Chair Carriers	5	5	07-Oct-27	13-Oct-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H1-1920	22A	Plumbing Testing	2	2	14-Oct-27	15-Oct-27
HS-INT-H1-1960	06C	Install Blocking	1	1	14-Oct-27	14-Oct-27
HS-INT-H1-1970	00-WT	Wall Close-In WT Inspection	2	2	18-Oct-27	19-Oct-27
HS-INT-H1-1980	01A	Plumbing In-Wall NCC Inspection	2	2	20-Oct-27	21-Oct-27
HS-INT-H1-1990	09B	Hang Drywall Walls	1	1	22-Oct-27	22-Oct-27
HS-INT-H1-2000	09B	Hang Drywall Ceilings / Bulkheads	1	1	25-Oct-27	25-Oct-27
HS-INT-H1-2010	09B	Drywall Finishing	5	5	26-Oct-27	01-Nov-27
HS-INT-H1-2020	09K	Prime Coat Walls	1	1	02-Nov-27	02-Nov-27
HS-INT-H1-2040	09D	Install Wall Tile	13	13	03-Nov-27	19-Nov-27
HS-INT-H1-2050	09C	Install Resinous Flooring & Base	10	10	22-Nov-27	07-Dec-27
HS-INT-H1-2030	09E	Install Ceiling Grid & Border Tile	2	2	08-Dec-27	09-Dec-27
HS-INT-H1-2060	26B	Ceiling Trim-Out - Electrical	2	2	10-Dec-27	13-Dec-27
HS-INT-H1-2070	23B	Ceiling Trim-Out - Mechanical	1	1	10-Dec-27	10-Dec-27
HS-INT-H1-2080	21A	Ceiling Trim-Out - Sprinkler	1	1	10-Dec-27	10-Dec-27
HS-INT-H1-2090	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	10-Dec-27	10-Dec-27
HS-INT-H1-2120	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks / Misc.	10	10	14-Dec-27	29-Dec-27
HS-INT-H1-2190	26B	Electrical Above Ceiling Inspection	2	2	14-Dec-27	15-Dec-27
HS-INT-H1-2100	00-WT	WT Ceiling Close-In Inspection	2	2	16-Dec-27	17-Dec-27
HS-INT-H1-2180	01A	NCC Ceiling Close-In Inspection	2	2	20-Dec-27	21-Dec-27
HS-INT-H1-2110	09E	Drop Ceiling Tile	1	1	22-Dec-27	22-Dec-27
HS-INT-H1-2130	22A	Install Toilet Partitions	5	5	30-Dec-27	06-Jan-28
HS-INT-H1-2140	09B	Wall Point-Up	1	1	07-Jan-28	07-Jan-28
HS-INT-H1-2150	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	5	5	10-Jan-28	14-Jan-28
HS-INT-H1-2160	07G	Install Caulking	1	1	17-Jan-28	17-Jan-28
HS-INT-H1-2170	09K	Final Paint	1	1	18-Jan-28	18-Jan-28
Area H - Admin Areas			132	132	12-Jul-27	19-Jan-28
Area H - Admin Areas - Corridor			101	101	12-Jul-27	02-Dec-27
HS-INT-H1-2980	06C	Set Door Frames - Admin Corridor	2	2	12-Jul-27	13-Jul-27
HS-INT-H1-2200	09B	Frame Walls - Admin Corridor	1	1	16-Sep-27	16-Sep-27
HS-INT-H1-2210	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Admin Corridor	5	5	17-Sep-27	23-Sep-27
HS-INT-H1-3000	09B	Frame Bulkheads & Hard Ceilings - Admin Corridor	2	2	17-Sep-27	20-Sep-27
HS-INT-H1-2220	23A	Mechanical Overhead Piping Mains - Admin Corridor	5	5	24-Sep-27	30-Sep-27
HS-INT-H1-2450	23B	HVAC Sheet Metal - Mains & Risers - Admin Corridor	10	10	01-Oct-27	14-Oct-27
HS-INT-H1-2620	22A	Plumbing Mains - Admin Corridor	2	2	01-Oct-27	04-Oct-27
HS-INT-H1-3010	09B	Hang Drywall Bulkheads & Hard Ceilings - Admin Corridor	2	2	08-Oct-27	11-Oct-27
HS-INT-H1-3020	09B	Drywall Finishing Bulkheads & Hard Ceilings - Admin Corridor	5	5	12-Oct-27	18-Oct-27
HS-INT-H1-2930	01A	Wall Close-In WT Inspection - Admin Corridor	2	2	28-Oct-27	29-Oct-27
HS-INT-H1-2880	01A	Wall Close-In NCC Inspection - Admin Corridor	2	2	01-Nov-27	02-Nov-27
HS-INT-H1-2760	09B	Hang Drywall - Admin Corridor	1	1	03-Nov-27	03-Nov-27
HS-INT-H1-2770	09B	Drywall Finishing - Admin Corridor	5	5	04-Nov-27	10-Nov-27
HS-INT-H1-2780	09K	Prime/1st Coat Wall Paint - Admin Corridor	1	1	11-Nov-27	11-Nov-27
HS-INT-H1-2790	09E	Install Ceiling Grid - Admin Corridor	1	1	12-Nov-27	12-Nov-27
HS-INT-H1-3040	08A	Install Storefront System - Admin Corridor	2	2	12-Nov-27	15-Nov-27
HS-INT-H1-2800	21A	Sprinkler Ceiling Trim-Out - Admin Corridor	1	1	15-Nov-27	15-Nov-27
HS-INT-H1-2810	28A	Special Systems - Ceiling Trim out (Security, AV, IT/FA) - Admin Corridor	1	1	15-Nov-27	15-Nov-27
HS-INT-H1-2900	26B	Install Lights - Admin Corridor	2	2	15-Nov-27	16-Nov-27
HS-INT-H1-2910	23A	Mechanical Ceiling Trim-Out - Admin Corridor	1	1	15-Nov-27	15-Nov-27
HS-INT-H1-2960	09E	Cut Ceiling Tile - Admin Corridor	1	1	15-Nov-27	15-Nov-27
HS-INT-H1-2840	09K	Wall Point Ups - Second Coat Paint - Admin Corridor	1	1	16-Nov-27	16-Nov-27
HS-INT-H1-2820	28A	Wall Trim Out - (Elect/Special systems, FA) - Admin Corridor	1	1	17-Nov-27	17-Nov-27
HS-INT-H1-2850	06C	Install Doors & Hardware - Admin Corridor	5	5	17-Nov-27	23-Nov-27
HS-INT-H1-2940	00-WT	Ceiling Close-In WT Inspections - Admin Corridor	2	2	17-Nov-27	18-Nov-27
HS-INT-H1-2970	06C	Install Div 10 Specialties - Admin Corridor	1	1	17-Nov-27	17-Nov-27
HS-INT-H1-2890	01A	Fire Marshal Fire Damper Inspection - Admin Corridor	2	2	18-Nov-27	19-Nov-27
HS-INT-H1-2830	01A	Ceiling Close-In NCC Inspections - Admin Corridor	2	2	19-Nov-27	22-Nov-27
HS-INT-H1-2860	09E	Drop Ceiling Tile - Admin Corridor	1	1	23-Nov-27	23-Nov-27
HS-INT-H1-2870	09K	Final Painting - Admin Corridor	1	1	24-Nov-27	24-Nov-27
HS-INT-H1-3030	09C	Install Carpet Flooring - Admin Corridor	2	2	24-Nov-27	29-Nov-27
HS-INT-H1-2920	09C	Install Rubber Wall Base - Admin Corridor	1	1	30-Nov-27	30-Nov-27
HS-INT-H1-2950	00-WT	WT Create Work-to-Complete List - Admin Corridor	2	2	01-Dec-27	02-Dec-27
Area H - Admin Areas - Admin Offices			69	69	17-Sep-27	28-Dec-27

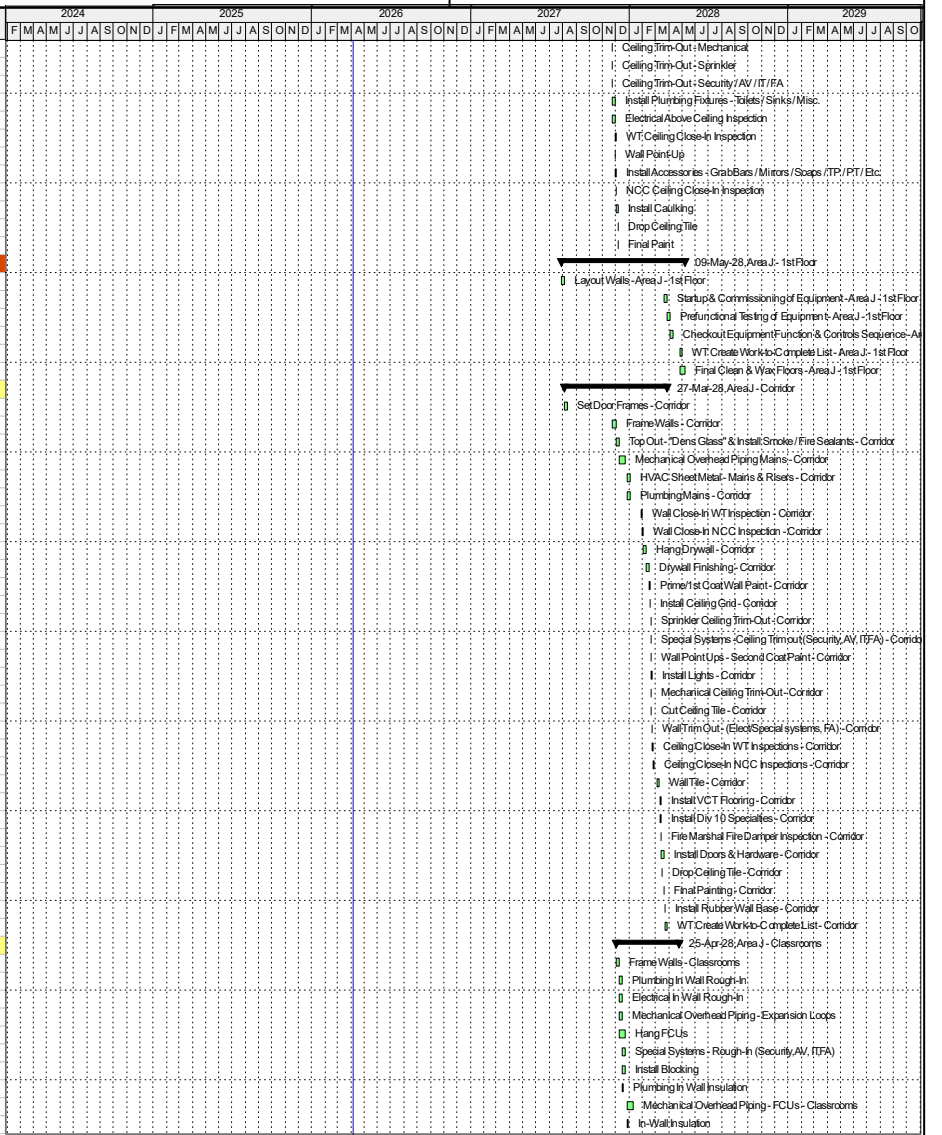
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H1-2280	06C	Install Blocking - Admin	2	2	17-Sep-27	20-Sep-27
HS-INT-H1-2610	09B	Frame Walls - Admin	5	5	17-Sep-27	23-Sep-27
HS-INT-H1-2260	26B	Electrical In Wall Rough-In - Admin	5	5	24-Sep-27	30-Sep-27
HS-INT-H1-2470	23A	Mechanical Overhead Piping - Expansion Loops - Admin	1	1	24-Sep-27	24-Sep-27
HS-INT-H1-2670	23A	Hang FCUs - Admin	1	1	24-Sep-27	24-Sep-27
HS-INT-H1-3050	09B	Frame Bulkheads & Hard Ceilings - Admin	2	2	24-Sep-27	27-Sep-27
HS-INT-H1-2740	23A	Install Condensate Piping - Admin	1	1	27-Sep-27	27-Sep-27
HS-INT-H1-2990	23B	Measure / Fab / Install Ductwork Transitions - Admin	5	5	27-Sep-27	01-Oct-27
HS-INT-H1-2270	26C	Special Systems - Rough-In (Security,AV, ITFA) - Admin	2	2	01-Oct-27	04-Oct-27
HS-INT-H1-2460	23A	Mechanical Overhead Piping - FCUs - Admin	1	1	01-Oct-27	01-Oct-27
HS-INT-H1-2530	25A	Install HVAC Controls & Valves - Admin	1	1	04-Oct-27	04-Oct-27
HS-INT-H1-2500	23A	Mechanical Piping - Testing Above Ceiling - Admin	2	2	05-Oct-27	06-Oct-27
HS-INT-H1-2700	26B	Electrical In-Wall WT Inspection - Admin	2	2	05-Oct-27	06-Oct-27
HS-INT-H1-2510	23A	Mechanical Piping Insulation - Admin	2	2	07-Oct-27	08-Oct-27
HS-INT-H1-2570	26B	Electrical In-Wall Inspection - Admin	2	2	07-Oct-27	08-Oct-27
HS-INT-H1-2630	07A	In-Wall Insulation - Admin	2	2	08-Oct-27	11-Oct-27
HS-INT-H1-2480	23B	HVAC Sheet Metal - Admin	5	5	15-Oct-27	21-Oct-27
HS-INT-H1-2230	26B	Electrical Overhead Rough-in - Admin	5	5	22-Oct-27	28-Oct-27
HS-INT-H1-2240	21A	Sprinkler Overhead Rough-In - Admin	2	2	22-Oct-27	25-Oct-27
HS-INT-H1-2490	23B	Duct Testing - Admin	2	2	22-Oct-27	25-Oct-27
HS-INT-H1-2520	23B	HVAC Sheet Metal Insulation - Admin	2	2	26-Oct-27	27-Oct-27
HS-INT-H1-2540	21A	Sprinkler Overhead Hydro-Testing - Admin	2	2	26-Oct-27	27-Oct-27
HS-INT-H1-2690	00-WT	Wall Close-In WT Inspection - Admin	2	2	28-Oct-27	29-Oct-27
HS-INT-H1-2580	01A	Wall Close-In NCC Inspection - Admin	2	2	01-Nov-27	02-Nov-27
HS-INT-H1-2290	09B	Hang Drywall - Admin	5	5	03-Nov-27	09-Nov-27
HS-INT-H1-2300	09B	Drywall Finishing - Admin	5	5	10-Nov-27	16-Nov-27
HS-INT-H1-3060	09B	Hang Drywall Bulkheads & Hard Ceilings - Admin	2	2	10-Nov-27	11-Nov-27
HS-INT-H1-3070	09B	Drywall Finishing Bulkheads & Hard Ceilings - Admin	5	5	17-Nov-27	23-Nov-27
HS-INT-H1-2310	09K	Prime/1st Coat Wall Paint - Admin	1	1	24-Nov-27	24-Nov-27
HS-INT-H1-2330	09E	Install Ceiling Grid - Admin	2	2	29-Nov-27	30-Nov-27
HS-INT-H1-2340	21A	Sprinkler Ceiling Trim-Out - Admin	2	2	01-Dec-27	02-Dec-27
HS-INT-H1-2350	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Admin	2	2	01-Dec-27	02-Dec-27
HS-INT-H1-2400	09K	Wall Point Ups - Second Coat Paint - Admin	1	1	01-Dec-27	01-Dec-27
HS-INT-H1-2640	26B	Install Lights - Admin	2	2	01-Dec-27	02-Dec-27
HS-INT-H1-2650	23A	Mechanical Ceiling Trim-Out - Admin	1	1	01-Dec-27	01-Dec-27
HS-INT-H1-2730	09E	Cut Ceiling Tile - Admin	1	1	01-Dec-27	01-Dec-27
HS-INT-H1-2360	28A	Wall Trim Out - (Elect/Special systems, FA) - Admin	2	2	02-Dec-27	03-Dec-27
HS-INT-H1-2590	01A	Fire Marshal Fire Damper Inspection - Admin	2	2	03-Dec-27	06-Dec-27
HS-INT-H1-2710	00-WT	Ceiling Close-In WT Inspections - Admin	2	2	03-Dec-27	06-Dec-27
HS-INT-H1-2370	01A	Ceiling Close-In NCC Inspections - Admin	2	2	07-Dec-27	08-Dec-27
HS-INT-H1-2420	09E	Drop Ceiling Tile - Admin	2	2	09-Dec-27	10-Dec-27
HS-INT-H1-2600	12A	Install Casework - Admin	2	2	13-Dec-27	14-Dec-27
HS-INT-H1-2390	09C	VCT Flooring - Admin	2	2	15-Dec-27	16-Dec-27
HS-INT-H1-3080	09C	Install Carpet Flooring - Admin	5	5	15-Dec-27	21-Dec-27
HS-INT-H1-2410	06C	Install Doors & Hardware - Admin	2	2	17-Dec-27	20-Dec-27
HS-INT-H1-2430	06C	Marker boards/Smart Boards, TV, Misc Specialties - Admin	2	2	17-Dec-27	20-Dec-27
HS-INT-H1-2440	09K	Final Painting - Admin	1	1	21-Dec-27	21-Dec-27
HS-INT-H1-2660	09C	Install Rubber Wall Base - Admin	1	1	22-Dec-27	22-Dec-27
HS-INT-H1-2720	00-WT	WT Create Work-to-Complete List	2	2	23-Dec-27	28-Dec-27
Area H - Admin Areas - Nurse & Wellness			79	79	24-Sep-27	19-Jan-28
HS-INT-H1-3620	23A	Mechanical Overhead Piping - Expansion Loops - Nurse & Wellness	5	5	24-Sep-27	30-Sep-27
HS-INT-H1-3760	09B	Frame Walls - Nurse & Wellness	5	5	24-Sep-27	30-Sep-27
HS-INT-H1-3420	22A	Plumbing In Wall Rough-In - Nurse & Wellness	5	5	01-Oct-27	07-Oct-27
HS-INT-H1-3430	26B	Electrical In Wall Rough-In - Nurse & Wellness	5	5	01-Oct-27	07-Oct-27
HS-INT-H1-3610	23A	Mechanical Overhead Piping - FCUs - Nurse & Wellness	5	5	01-Oct-27	07-Oct-27
HS-INT-H1-3810	23A	Hang FCUs - Nurse & Wellness	0	0	01-Oct-27	01-Oct-27
HS-INT-H1-3880	23A	Install Condensate Piping - Nurse & Wellness	2	2	01-Oct-27	04-Oct-27
HS-INT-H1-3890	23B	Measure / Fab / Install Ductwork Transitions - Nurse & Wellness	5	5	01-Oct-27	07-Oct-27
HS-INT-H1-3900	09B	Frame Bulkheads & Hard Ceilings - Nurse & Wellness	1	1	01-Oct-27	01-Oct-27
HS-INT-H1-3440	26C	Special Systems - Rough-In (Security,AV, ITFA) - Nurse & Wellness	5	5	08-Oct-27	14-Oct-27
HS-INT-H1-3450	06C	Install Blocking - Nurse & Wellness	2	2	08-Oct-27	11-Oct-27

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H1-3630	23B	HVAC Sheet Metal - Nurse & Wellness	10	10	08-Oct-27	21-Oct-27
HS-INT-H1-3680	25A	Install HVAC Controls & Valves - Nurse & Wellness	1	1	08-Oct-27	08-Oct-27
HS-INT-H1-3700	22A	Plumbing In Wall Insulation - Nurse & Wellness	2	2	08-Oct-27	11-Oct-27
HS-INT-H1-3650	23A	Mechanical Piping - Testing Above Ceiling - Nurse & Wellness	2	2	11-Oct-27	12-Oct-27
HS-INT-H1-3770	07A	In-Wall Insulation - Nurse & Wellness	2	2	12-Oct-27	13-Oct-27
HS-INT-H1-3820	22A	Plumbing In-Wall WT Inspection - Nurse & Wellness	2	2	12-Oct-27	13-Oct-27
HS-INT-H1-3660	23A	Mechanical Piping Insulation - Nurse & Wellness	2	2	13-Oct-27	14-Oct-27
HS-INT-H1-3710	22A	Plumbing In-Wall NCC Inspection - Nurse & Wellness	2	2	14-Oct-27	15-Oct-27
HS-INT-H1-3840	26B	Electrical In-Wall WT Inspection - Nurse & Wellness	2	2	15-Oct-27	18-Oct-27
HS-INT-H1-3720	26B	Electrical In-Wall Inspection - Nurse & Wellness	2	2	19-Oct-27	20-Oct-27
HS-INT-H1-3400	26B	Electrical Overhead Rough-in - Nurse & Wellness	5	5	22-Oct-27	28-Oct-27
HS-INT-H1-3410	21A	Sprinkler Overhead Rough-In - Nurse & Wellness	5	5	22-Oct-27	28-Oct-27
HS-INT-H1-3640	23B	Duct Testing - Nurse & Wellness	2	2	22-Oct-27	25-Oct-27
HS-INT-H1-3670	23B	HVAC Sheet Metal Insulation - Nurse & Wellness	2	2	26-Oct-27	27-Oct-27
HS-INT-H1-3830	00-WT	Wall Close-In WT Inspection - Nurse & Wellness	2	2	28-Oct-27	29-Oct-27
HS-INT-H1-3690	21A	Sprinkler Overhead Hydro-Testing - Nurse & Wellness	2	2	29-Oct-27	01-Nov-27
HS-INT-H1-3730	01A	Wall Close-In NCC Inspection - Nurse & Wellness	2	2	01-Nov-27	02-Nov-27
HS-INT-H1-3460	09B	Hang Drywall - Nurse & Wellness	5	5	03-Nov-27	09-Nov-27
HS-INT-H1-3470	09B	Drywall Finishing - Nurse & Wellness	5	5	10-Nov-27	16-Nov-27
HS-INT-H1-3910	09B	Hang Drywall Bulkheads & Hard Ceilings - Nurse & Wellness	1	1	10-Nov-27	10-Nov-27
HS-INT-H1-3920	09B	Drywall Finishing Bulkheads & Hard Ceilings - Nurse & Wellness	2	2	17-Nov-27	18-Nov-27
HS-INT-H1-3480	09K	Prime/1st Coat Wall Paint - Nurse & Wellness	2	2	19-Nov-27	22-Nov-27
HS-INT-H1-3490	09E	Install Ceiling Grid - Nurse & Wellness	5	5	23-Nov-27	01-Dec-27
HS-INT-H1-3500	21A	Sprinkler Ceiling Trim-Out - Nurse & Wellness	2	2	02-Dec-27	03-Dec-27
HS-INT-H1-3510	28A	Special Systems -Ceiling Trim out (Security, AV, IT/FA) - Nurse & Wellness	2	2	02-Dec-27	03-Dec-27
HS-INT-H1-3560	09K	Wall Point Ups - Second Coat Paint - Nurse & Wellness	1	1	02-Dec-27	02-Dec-27
HS-INT-H1-3780	26B	Install Lights - Nurse & Wellness	5	5	02-Dec-27	08-Dec-27
HS-INT-H1-3790	23A	Mechanical Ceiling Trim-Out - Nurse & Wellness	2	2	02-Dec-27	03-Dec-27
HS-INT-H1-3870	09E	Cut Ceiling Tile - Nurse & Wellness	2	2	02-Dec-27	03-Dec-27
HS-INT-H1-3520	28A	Wall Trim Out - (Elect/Special systems, FA) - Nurse & Wellness	2	2	03-Dec-27	06-Dec-27
HS-INT-H1-3590	06C	Marker boards/Smart Boards, TV, Misc Specialties - Nurse & Wellness	2	2	03-Dec-27	06-Dec-27
HS-INT-H1-3740	01A	Fire Marshal Fire Damper Inspection - Nurse & Wellness	2	2	06-Dec-27	07-Dec-27
HS-INT-H1-3850	00-WT	Ceiling Close-In WT Inspections - Nurse & Wellness	2	2	09-Dec-27	10-Dec-27
HS-INT-H1-3530	01A	Ceiling Close-In NCC Inspections - Nurse & Wellness	2	2	13-Dec-27	14-Dec-27
HS-INT-H1-3580	09E	Drop Ceiling Tile - Nurse & Wellness	2	2	15-Dec-27	16-Dec-27
HS-INT-H1-3750	09C	Install Sheet Vinyl Flooring - Nurse & Wellness	10	10	17-Dec-27	04-Jan-28
HS-INT-H1-3540	12A	Install Casework - Nurse & Wellness	2	2	05-Jan-28	06-Jan-28
HS-INT-H1-3570	06C	Install Doors & Hardware - Nurse & Wellness	5	5	05-Jan-28	11-Jan-28
HS-INT-H1-3600	09K	Final Painting - Nurse & Wellness	2	2	12-Jan-28	13-Jan-28
HS-INT-H1-3800	09C	Install Rubber Wall Base - Nurse & Wellness	2	2	14-Jan-28	17-Jan-28
HS-INT-H1-3860	00-WT	WT Create Work-to-Complete List	2	2	18-Jan-28	19-Jan-28
Area H - Admin Areas - Toilet Rooms			51	51	24-Sep-27	07-Dec-27
HS-INT-H1-3090	26B	Rough-In Overhead Electrical	2	2	24-Sep-27	27-Sep-27
HS-INT-H1-3110	23B	Rough-In Overhead HVAC Controls	2	2	24-Sep-27	27-Sep-27
HS-INT-H1-3120	21A	Rough-In Overhead Sprinkler	2	2	24-Sep-27	27-Sep-27
HS-INT-H1-3180	28A	Rough-In Special Systems - Security / AV / IT / FA	1	1	24-Sep-27	24-Sep-27
HS-INT-H1-3160	26B	Rough-In In-Wall Electrical	1	1	28-Sep-27	28-Sep-27
HS-INT-H1-3170	26B	Electrical In-Wall Inspection	2	2	29-Sep-27	30-Sep-27
HS-INT-H1-3100	22A	Rough-In Overhead Plumbing	5	5	05-Oct-27	11-Oct-27
HS-INT-H1-3140	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	2	2	12-Oct-27	13-Oct-27
HS-INT-H1-3130	22A	Rough-In Plumbing - Chair Carriers	2	2	14-Oct-27	15-Oct-27
HS-INT-H1-3150	22A	Plumbing Testing	2	2	18-Oct-27	19-Oct-27
HS-INT-H1-3190	06C	Install Blocking	2	2	18-Oct-27	19-Oct-27
HS-INT-H1-3200	00-WT	Wall Close-In WT Inspection	2	2	20-Oct-27	21-Oct-27
HS-INT-H1-3210	01A	Plumbing In-Wall NCC Inspection	2	2	22-Oct-27	25-Oct-27
HS-INT-H1-3220	09B	Hang Drywall Walls	2	2	26-Oct-27	27-Oct-27
HS-INT-H1-3230	09B	Drywall Finishing	5	5	28-Oct-27	03-Nov-27
HS-INT-H1-3240	09K	Prime Coat Walls	1	1	04-Nov-27	04-Nov-27
HS-INT-H1-3260	09D	Install Wall & Floor Tile	10	10	05-Nov-27	18-Nov-27
HS-INT-H1-3250	09E	Install Ceiling Grid & Border Tile	2	2	19-Nov-27	22-Nov-27
HS-INT-H1-3270	26B	Ceiling Trim-Out - Electrical	1	1	23-Nov-27	23-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H1-3280	23B	Ceiling Trim-Out - Mechanical	1	1	23-Nov-27	23-Nov-27
HS-INT-H1-3290	21A	Ceiling Trim-Out - Sprinkler	1	1	23-Nov-27	23-Nov-27
HS-INT-H1-3300	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	23-Nov-27	23-Nov-27
HS-INT-H1-3330	22A	Install Plumbing Fixtures - Toilets / Sinks / Misc.	2	2	24-Nov-27	29-Nov-27
HS-INT-H1-3390	26B	Electrical Above Ceiling Inspection	2	2	24-Nov-27	29-Nov-27
HS-INT-H1-3310	00-WT	WT Ceiling Close-In Inspection	2	2	30-Nov-27	01-Dec-27
HS-INT-H1-3340	09B	Wall Point-Up	1	1	30-Nov-27	30-Nov-27
HS-INT-H1-3350	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	2	2	01-Dec-27	02-Dec-27
HS-INT-H1-3380	01A	NCC Ceiling Close-In Inspection	2	2	02-Dec-27	03-Dec-27
HS-INT-H1-3360	07G	Install Caulking	2	2	03-Dec-27	06-Dec-27
HS-INT-H1-3320	09E	Drop Ceiling Tile	1	1	06-Dec-27	06-Dec-27
HS-INT-H1-3370	09K	Final Paint	1	1	07-Dec-27	07-Dec-27
Area J - 1st Floor			198	198	29-Jul-27	09-May-28
HS-INT-J1-1000	09B	Layout Walls - Area J - 1st Floor	5	5	29-Jul-27	04-Aug-27
HS-INT-J1-1840	23A	Startup & Commissioning of Equipment - Area J - 1st Floor	5	5	21-Mar-28	27-Mar-28
HS-INT-J1-1850	23A	Prefunctional Testing of Equipment - Area J - 1st Floor	5	5	28-Mar-28	03-Apr-28
HS-INT-J1-1860	23A	Checkout Equipment Function & Controls Sequence - Area J - 1st Floor	5	5	04-Apr-28	10-Apr-28
HS-INT-J1-1830	00-WT	WT Create Work-to-Complete List - Area J - 1st Floor	5	5	26-Apr-28	02-May-28
HS-INT-J1-1870	00-WT	Final Clean & Wax Floors - Area J - 1st Floor	10	10	26-Apr-28	09-May-28
Area J - Corridor			162	162	05-Aug-27	27-Mar-28
HS-INT-J1-1010	06C	Set Door Frames - Corridor	5	5	05-Aug-27	11-Aug-27
HS-INT-J1-1020	09B	Frame Walls - Corridor	5	5	24-Nov-27	02-Dec-27
HS-INT-J1-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	03-Dec-27	09-Dec-27
HS-INT-J1-1050	23A	Mechanical Overhead Piping Mains - Corridor	10	10	10-Dec-27	23-Dec-27
HS-INT-J1-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	28-Dec-27	04-Jan-28
HS-INT-J1-1150	22A	Plumbing Mains - Corridor	5	5	28-Dec-27	04-Jan-28
HS-INT-J1-1330	00-WT	Wall Close-In WT Inspection - Corridor	2	2	28-Jan-28	31-Jan-28
HS-INT-J1-1350	01A	Wall Close-In NCC Inspection - Corridor	2	2	01-Feb-28	02-Feb-28
HS-INT-J1-1370	09B	Hang Drywall - Corridor	5	5	03-Feb-28	09-Feb-28
HS-INT-J1-1390	09B	Drywall Finishing - Corridor	5	5	10-Feb-28	16-Feb-28
HS-INT-J1-1410	09K	Prime/1st Coat Wall Paint - Corridor	1	1	17-Feb-28	17-Feb-28
HS-INT-J1-1440	09E	Install Ceiling Grid - Corridor	1	1	18-Feb-28	18-Feb-28
HS-INT-J1-1520	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	21-Feb-28	21-Feb-28
HS-INT-J1-1530	28A	Special Systems - Ceiling Trim out (Security, AV, IT/FA) - Corridor	1	1	21-Feb-28	21-Feb-28
HS-INT-J1-1540	09K	Wall Point Ups - Second Coat Paint - Corridor	1	1	21-Feb-28	21-Feb-28
HS-INT-J1-1550	26B	Install Lights - Corridor	2	2	21-Feb-28	22-Feb-28
HS-INT-J1-1560	23A	Mechanical Ceiling Trim-Out - Corridor	1	1	21-Feb-28	21-Feb-28
HS-INT-J1-1570	09E	Cut Ceiling Tile - Corridor	1	1	21-Feb-28	21-Feb-28
HS-INT-J1-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	1	1	22-Feb-28	22-Feb-28
HS-INT-J1-1650	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	23-Feb-28	24-Feb-28
HS-INT-J1-1670	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	25-Feb-28	28-Feb-28
HS-INT-J1-1420	09D	Wall Tile - Corridor	5	5	06-Mar-28	10-Mar-28
HS-INT-J1-1510	09C	Install VCT Flooring - Corridor	2	2	13-Mar-28	14-Mar-28
HS-INT-J1-1580	06C	Install Div 10 Specialties - Corridor	1	1	13-Mar-28	13-Mar-28
HS-INT-J1-1640	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	14-Mar-28	15-Mar-28
HS-INT-J1-1630	06C	Install Doors & Hardware - Corridor	5	5	15-Mar-28	21-Mar-28
HS-INT-J1-1700	09E	Drop Ceiling Tile - Corridor	1	1	16-Mar-28	16-Mar-28
HS-INT-J1-1680	09K	Final Painting - Corridor	1	1	22-Mar-28	22-Mar-28
HS-INT-J1-1710	09C	Install Rubber Wall Base - Corridor	1	1	23-Mar-28	23-Mar-28
HS-INT-J1-1740	00-WT	WT Create Work-to-Complete List - Corridor	2	2	24-Mar-28	27-Mar-28
Area J - Classrooms			100	100	03-Dec-27	25-Apr-28
HS-INT-J1-1040	09B	Frame Walls - Classrooms	5	5	03-Dec-27	09-Dec-27
HS-INT-J1-1060	22A	Plumbing In Wall Rough-In	5	5	10-Dec-27	16-Dec-27
HS-INT-J1-1070	26B	Electrical In Wall Rough-In	5	5	10-Dec-27	16-Dec-27
HS-INT-J1-1080	23A	Mechanical Overhead Piping - Expansion Loops	5	5	10-Dec-27	16-Dec-27
HS-INT-J1-1090	23A	Hang FCUs	10	10	10-Dec-27	23-Dec-27
HS-INT-J1-1100	26C	Special Systems - Rough-In (Security, AV, IT/FA)	5	5	17-Dec-27	23-Dec-27
HS-INT-J1-1110	06C	Install Blocking	5	5	17-Dec-27	23-Dec-27
HS-INT-J1-1140	22A	Plumbing In Wall Insulation	1	1	17-Dec-27	17-Dec-27
HS-INT-J1-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	28-Dec-27	11-Jan-28
HS-INT-J1-1200	07A	In-Wall Insulation	2	2	28-Dec-27	29-Dec-27



Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-J1-1220	26B	Electrical In-Wall WT Inspection	2	2	28-Dec-27	29-Dec-27
HS-INT-J1-1160	23A	Install Condensate Piping	5	5	28-Dec-27	04-Jan-28
HS-INT-J1-1170	23B	Measure / Fab / Install Ductwork Transitions	10	10	28-Dec-27	11-Jan-28
HS-INT-J1-1280	26B	Electrical In-Wall Inspection	2	2	30-Dec-27	03-Jan-28
HS-INT-J1-1210	22A	Plumbing In-Wall WT Inspection	2	2	05-Jan-28	06-Jan-28
HS-INT-J1-1270	22A	Plumbing In-Wall NCC Inspection	2	2	07-Jan-28	10-Jan-28
HS-INT-J1-1180	23B	HVAC Sheet Metal - Classrooms	5	5	12-Jan-28	18-Jan-28
HS-INT-J1-1190	25A	Install HVAC Controls & Valves	5	5	12-Jan-28	18-Jan-28
HS-INT-J1-1230	26B	Electrical Overhead Rough-in - Classrooms	5	5	19-Jan-28	25-Jan-28
HS-INT-J1-1240	21A	Sprinkler Overhead Rough-In	5	5	19-Jan-28	25-Jan-28
HS-INT-J1-1250	23B	Duct Testing	2	2	19-Jan-28	20-Jan-28
HS-INT-J1-1260	23A	Mechanical Piping - Testing Above Ceiling	2	2	19-Jan-28	20-Jan-28
HS-INT-J1-1290	23A	Mechanical Piping Insulation	5	5	21-Jan-28	27-Jan-28
HS-INT-J1-1300	23B	HVAC Sheet Metal Insulation	5	5	21-Jan-28	27-Jan-28
HS-INT-J1-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	26-Jan-28	27-Jan-28
HS-INT-J1-1320	00-WT	Wall Close-In WT Inspection	2	2	28-Jan-28	31-Jan-28
HS-INT-J1-1340	01A	Wall Close-In NCC Inspection	2	2	01-Feb-28	02-Feb-28
HS-INT-J1-1360	09B	Hang Drywall	10	10	03-Feb-28	16-Feb-28
HS-INT-J1-1380	09B	Drywall Finishing	10	10	17-Feb-28	01-Mar-28
HS-INT-J1-1400	09K	Prime/1st Coat Wall Paint	2	2	02-Mar-28	03-Mar-28
HS-INT-J1-1430	09E	Install Ceiling Grid	5	5	06-Mar-28	10-Mar-28
HS-INT-J1-1450	21A	Sprinkler Ceiling Trim-Out	5	5	13-Mar-28	17-Mar-28
HS-INT-J1-1460	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	13-Mar-28	17-Mar-28
HS-INT-J1-1470	09K	Wall Point Ups - Second Coat Paint	2	2	13-Mar-28	14-Mar-28
HS-INT-J1-1480	26B	Install Lights	5	5	13-Mar-28	17-Mar-28
HS-INT-J1-1490	23A	Mechanical Ceiling Trim-Out	5	5	13-Mar-28	17-Mar-28
HS-INT-J1-1500	09E	Cut Ceiling Tile	2	2	13-Mar-28	14-Mar-28
HS-INT-J1-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	15-Mar-28	21-Mar-28
HS-INT-J1-1600	01A	Fire Marshal Fire Damper Inspection	2	2	20-Mar-28	21-Mar-28
HS-INT-J1-1610	00-WT	Ceiling Close-In WT Inspections	2	2	20-Mar-28	21-Mar-28
HS-INT-J1-1660	01A	Ceiling Close-In NCC Inspections	2	2	22-Mar-28	23-Mar-28
HS-INT-J1-1690	09E	Drop Ceiling Tile	2	2	24-Mar-28	27-Mar-28
HS-INT-J1-1720	09H	Resinous Flooring - Science Labs	0	0	28-Mar-28	28-Mar-28
HS-INT-J1-1730	12A	Install Casework - Classroom	5	5	28-Mar-28	03-Apr-28
HS-INT-J1-1760	12A	Install Casework - Science Labs	5	5	28-Mar-28	03-Apr-28
HS-INT-J1-1750	09C	VCT Flooring - Classroom	10	10	04-Apr-28	17-Apr-28
HS-INT-J1-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	04-Apr-28	10-Apr-28
HS-INT-J1-1770	28A	Audio Enhancement System Trim-Out	1	1	04-Apr-28	04-Apr-28
HS-INT-J1-1780	06C	Install Doors & Hardware	1	1	18-Apr-28	18-Apr-28
HS-INT-J1-1800	09K	Final Painting	1	1	19-Apr-28	19-Apr-28
HS-INT-J1-1810	09C	Install Rubber Wall Base	2	2	20-Apr-28	21-Apr-28
HS-INT-J1-1820	00-WT	WT Create Work-to-Complete List	2	2	24-Apr-28	25-Apr-28
Second Floor			237	237	17-Jun-27	23-May-28
Area G - 2nd Floor			159	159	17-Jun-27	03-Feb-28
HS-INT-G2-1000	09B	Layout Walls - Area G - 2nd Floor	5	5	17-Jun-27	23-Jun-27
HS-INT-G2-2460	23A	Startup & Commissioning of Equipment - Area G - 2nd Floor	5	5	07-Dec-27	13-Dec-27
HS-INT-G2-2470	23A	Prefunctional Testing of Equipment - Area G - 2nd Floor	5	5	14-Dec-27	20-Dec-27
HS-INT-G2-2480	23A	Checkout Equipment Function & Controls Sequence - Area G - 2nd Floor	5	5	21-Dec-27	29-Dec-27
HS-INT-G2-2450	00-WT	WT Create Work-to-Complete List - Area G - 2nd Floor	5	5	21-Jan-28	27-Jan-28
HS-INT-G2-2490	00-WT	Final Clean & Wax Floors - Area G - 2nd Floor	10	10	21-Jan-28	03-Feb-28
Area G - Corridor			120	120	24-Jun-27	14-Dec-27
HS-INT-G2-1010	06C	Set Door Frames - Corridor	2	2	24-Jun-27	25-Jun-27
HS-INT-G2-1020	09B	Frame Walls - Corridor	5	5	19-Jul-27	23-Jul-27
HS-INT-G2-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	26-Jul-27	30-Jul-27
HS-INT-G2-1050	23A	Mechanical Overhead Piping Mains - Corridor	5	5	02-Aug-27	06-Aug-27
HS-INT-G2-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-1150	22A	Plumbing Mains - Corridor	1	1	09-Aug-27	09-Aug-27
HS-INT-G2-1330	00-WT	Wall Close-In WT Inspection - Corridor	2	2	14-Oct-27	15-Oct-27
HS-INT-G2-1350	01A	Wall Close-In NCC Inspection - Corridor	2	2	18-Oct-27	19-Oct-27
HS-INT-G2-1370	09B	Hang Drywall - Corridor	5	5	20-Oct-27	26-Oct-27
HS-INT-G2-1390	09B	Drywall Finishing - Corridor	5	5	27-Oct-27	02-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-G2-14 10	09K	Prime/1st Coat Wall Paint - Corridor	1	1	03-Nov-27	03-Nov-27
HS-INT-G2-14 40	09E	Install Ceiling Grid - Corridor	2	2	04-Nov-27	05-Nov-27
HS-INT-G2-15 20	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	08-Nov-27	08-Nov-27
HS-INT-G2-15 30	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	1	1	08-Nov-27	08-Nov-27
HS-INT-G2-15 40	09K	Wall Point Ups - Second Coat Paint - Corridor	2	2	08-Nov-27	09-Nov-27
HS-INT-G2-15 50	26B	Install Lights - Corridor	5	5	08-Nov-27	12-Nov-27
HS-INT-G2-15 60	23A	Mechanical Ceiling Trim-Out - Corridor	1	1	08-Nov-27	08-Nov-27
HS-INT-G2-15 70	09E	Cut Ceiling Tile - Corridor	2	2	08-Nov-27	09-Nov-27
HS-INT-G2-16 20	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	1	1	10-Nov-27	10-Nov-27
HS-INT-G2-16 50	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	15-Nov-27	16-Nov-27
HS-INT-G2-16 70	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	17-Nov-27	18-Nov-27
HS-INT-G2-14 20	09D	Wall Tile - Corridor	5	5	19-Nov-27	29-Nov-27
HS-INT-G2-15 10	09C	Install VCT Flooring - Corridor	2	2	30-Nov-27	01-Dec-27
HS-INT-G2-15 80	06C	Install Div 10 Specialties - Corridor	2	2	30-Nov-27	01-Dec-27
HS-INT-G2-16 30	06C	Install Doors & Hardware - Corridor	5	5	02-Dec-27	08-Dec-27
HS-INT-G2-16 40	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	02-Dec-27	03-Dec-27
HS-INT-G2-17 00	09E	Drop Ceiling Tile - Corridor	1	1	06-Dec-27	06-Dec-27
HS-INT-G2-16 80	09K	Final Painting - Corridor	1	1	09-Dec-27	09-Dec-27
HS-INT-G2-17 10	09C	Install Rubber Wall Base - Corridor	1	1	10-Dec-27	10-Dec-27
HS-INT-G2-17 40	00-WT	WT Create Work-to-Complete List - Corridor	2	2	13-Dec-27	14-Dec-27
Area G - Classrooms			123	123	26-Jul-27	20-Jan-28
HS-INT-G2-10 40	09B	Frame Walls - Classrooms	5	5	26-Jul-27	30-Jul-27
HS-INT-G2-10 60	22A	Plumbing In Wall Rough-In	5	5	02-Aug-27	06-Aug-27
HS-INT-G2-10 70	26B	Electrical In Wall Rough-In	5	5	02-Aug-27	06-Aug-27
HS-INT-G2-10 80	23A	Mechanical Overhead Piping - Expansion Loops	10	10	02-Aug-27	13-Aug-27
HS-INT-G2-10 90	23A	Hang FCUs	10	10	02-Aug-27	13-Aug-27
HS-INT-G2-11 00	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-11 10	06C	Install Blocking	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-11 40	22A	Plumbing In Wall Insulation	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-11 30	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	16-Aug-27	27-Aug-27
HS-INT-G2-12 10	22A	Plumbing In-Wall WT Inspection	2	2	16-Aug-27	17-Aug-27
HS-INT-G2-12 20	26B	Electrical In-Wall WT Inspection	2	2	16-Aug-27	17-Aug-27
HS-INT-G2-11 60	23A	Install Condensate Piping	5	5	16-Aug-27	20-Aug-27
HS-INT-G2-11 70	23B	Measure / Fab / Install Ductwork Transitions	10	10	16-Aug-27	27-Aug-27
HS-INT-G2-12 70	22A	Plumbing In-Wall NCC Inspection	2	2	18-Aug-27	19-Aug-27
HS-INT-G2-12 80	26B	Electrical In-Wall Inspection	2	2	18-Aug-27	19-Aug-27
HS-INT-G2-11 80	23B	HVAC Sheet Metal - Classrooms	5	5	30-Aug-27	03-Sep-27
HS-INT-G2-11 90	25A	Install HVAC Controls & Valves	5	5	30-Aug-27	03-Sep-27
HS-INT-G2-12 30	26B	Electrical Overhead Rough-in - Classrooms	10	10	07-Sep-27	20-Sep-27
HS-INT-G2-12 40	21A	Sprinkler Overhead Rough-In	5	5	07-Sep-27	13-Sep-27
HS-INT-G2-12 50	23B	Duct Testing	2	2	07-Sep-27	08-Sep-27
HS-INT-G2-12 60	23A	Mechanical Piping - Testing Above Ceiling	2	2	07-Sep-27	08-Sep-27
HS-INT-G2-12 90	23A	Mechanical Piping Insulation	2	2	09-Sep-27	10-Sep-27
HS-INT-G2-13 00	23B	HVAC Sheet Metal Insulation	5	5	09-Sep-27	15-Sep-27
HS-INT-G2-13 10	21A	Sprinkler Overhead Hydro-Testing	2	2	14-Sep-27	15-Sep-27
HS-INT-G2-12 00	07A	In-Wall Insulation	2	2	12-Oct-27	13-Oct-27
HS-INT-G2-13 20	00-WT	Wall Close-In WT Inspection	2	2	14-Oct-27	15-Oct-27
HS-INT-G2-13 40	01A	Wall Close-In NCC Inspection	2	2	18-Oct-27	19-Oct-27
HS-INT-G2-13 60	09B	Hang Drywall	10	10	20-Oct-27	02-Nov-27
HS-INT-G2-13 80	09B	Drywall Finishing	10	10	03-Nov-27	16-Nov-27
HS-INT-G2-14 00	09K	Prime/1st Coat Wall Paint	2	2	17-Nov-27	18-Nov-27
HS-INT-G2-14 30	09E	Install Ceiling Grid	5	5	19-Nov-27	29-Nov-27
HS-INT-G2-14 50	21A	Sprinkler Ceiling Trim-Out	5	5	30-Nov-27	06-Dec-27
HS-INT-G2-14 60	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	30-Nov-27	06-Dec-27
HS-INT-G2-14 70	09K	Wall Point Ups - Second Coat Paint	2	2	30-Nov-27	01-Dec-27
HS-INT-G2-14 80	26B	Install Lights	5	5	30-Nov-27	06-Dec-27
HS-INT-G2-14 90	23A	Mechanical Ceiling Trim-Out	5	5	30-Nov-27	06-Dec-27
HS-INT-G2-15 00	09E	Cut Ceiling Tile	2	2	30-Nov-27	01-Dec-27
HS-INT-G2-15 90	28A	Wall Trim Out - (Elect/Special systems, FA)	15	15	02-Dec-27	22-Dec-27
HS-INT-G2-16 00	01A	Fire Marshal Fire Damper Inspection	2	2	07-Dec-27	08-Dec-27
HS-INT-G2-16 10	00-WT	Ceiling Close-In WT Inspections	2	2	07-Dec-27	08-Dec-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-G2-16600	01A	Ceiling Close-In NCC Inspections	2	2	09-Dec-27	10-Dec-27
HS-INT-G2-16900	09E	Drop Ceiling Tile	2	2	13-Dec-27	14-Dec-27
HS-INT-G2-17200	09H	Resinous Flooring - Science Labs	12	12	15-Dec-27	04-Jan-28
HS-INT-G2-17300	12A	Install Casework - Classroom	10	10	15-Dec-27	30-Dec-27
HS-INT-G2-17500	09C	VCT Flooring - Classroom	2	2	03-Jan-28	04-Jan-28
HS-INT-G2-17700	28A	Audio Enhancement System Trim-Out	2	2	03-Jan-28	04-Jan-28
HS-INT-G2-17600	12A	Install Casework - Science Labs	5	5	05-Jan-28	11-Jan-28
HS-INT-G2-17800	06C	Install Doors & Hardware	2	2	12-Jan-28	13-Jan-28
HS-INT-G2-17900	06C	Marker boards/Smart Boards, TV, Misc Specialties	2	2	12-Jan-28	13-Jan-28
HS-INT-G2-18000	09K	Final Painting	1	1	14-Jan-28	14-Jan-28
HS-INT-G2-18100	09C	Install Rubber Wall Base	2	2	17-Jan-28	18-Jan-28
HS-INT-G2-18200	00-WT	WT Create Work-to-Complete List	2	2	19-Jan-28	20-Jan-28
Area G - Media Center			115	115	02-Aug-27	17-Jan-28
HS-INT-G2-18300	09B	Frame Walls - Media Center	5	5	02-Aug-27	06-Aug-27
HS-INT-G2-18400	22A	Plumbing In Wall Rough-In	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-18500	26B	Electrical In Wall Rough-In	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-18600	23A	Mechanical Overhead Piping	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-18700	23A	Hang FCUs	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-20300	09B	Frame Bulkheads / Soffits	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-22500	22A	Plumbing Overhead Main Rough-In	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-22800	08A	Layout Curtainwall Framing	5	5	09-Aug-27	13-Aug-27
HS-INT-G2-18800	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	16-Aug-27	20-Aug-27
HS-INT-G2-18900	06C	Install Blocking	5	5	16-Aug-27	20-Aug-27
HS-INT-G2-19000	23A	Mechanical Overhead Piping - FCUs - Media Center	5	5	16-Aug-27	20-Aug-27
HS-INT-G2-19100	22A	Plumbing In Wall Insulation	5	5	16-Aug-27	20-Aug-27
HS-INT-G2-19200	23A	Install Condensate Piping	5	5	16-Aug-27	20-Aug-27
HS-INT-G2-19300	23B	Measure / Fab / Install Ductwork Transitions	5	5	16-Aug-27	20-Aug-27
HS-INT-G2-19400	23B	HVAC Sheet Metal - Media Center	5	5	23-Aug-27	27-Aug-27
HS-INT-G2-19500	25A	Install HVAC Controls & Valves	5	5	23-Aug-27	27-Aug-27
HS-INT-G2-20700	07A	In-Wall Insulation	5	5	23-Aug-27	27-Aug-27
HS-INT-G2-19600	22A	Plumbing In-Wall WT Inspection	5	5	23-Aug-27	27-Aug-27
HS-INT-G2-19700	26B	Electrical In-Wall Inspection	5	5	23-Aug-27	27-Aug-27
HS-INT-G2-19800	26B	Electrical Overhead Rough-in - Media Center	5	5	30-Aug-27	03-Sep-27
HS-INT-G2-19900	21A	Sprinkler Overhead Rough-In	5	5	30-Aug-27	03-Sep-27
HS-INT-G2-20000	23B	Duct Testing	5	5	30-Aug-27	03-Sep-27
HS-INT-G2-20100	23A	Mechanical Piping - Testing Above Ceiling	5	5	30-Aug-27	03-Sep-27
HS-INT-G2-20200	22A	Plumbing In-Wall NCC Inspection	5	5	30-Aug-27	03-Sep-27
HS-INT-G2-20400	23A	Mechanical Piping Insulation	5	5	07-Sep-27	13-Sep-27
HS-INT-G2-20500	23B	HVAC Sheet Metal Insulation	5	5	07-Sep-27	13-Sep-27
HS-INT-G2-20600	21A	Sprinkler Overhead Hydro-Testing	5	5	07-Sep-27	13-Sep-27
HS-INT-G2-20800	00-WT	Wall Close-In WT Inspection	5	5	14-Sep-27	20-Sep-27
HS-INT-G2-20900	01A	Wall Close-In NCC Inspection	5	5	21-Sep-27	27-Sep-27
HS-INT-G2-21000	09B	Hang Drywall - Walls & Soffits	5	5	28-Sep-27	04-Oct-27
HS-INT-G2-21100	09B	Drywall Finishing - Walls & Soffits	5	5	05-Oct-27	11-Oct-27
HS-INT-G2-23900	09D	Install Floor Tile - Bathroom	5	5	05-Oct-27	11-Oct-27
HS-INT-G2-21200	09K	Prime/1st Coat Wall Paint	5	5	12-Oct-27	18-Oct-27
HS-INT-G2-23800	08A	Install Interior Storefronts & All-Glass Partition Glazing	5	5	12-Oct-27	18-Oct-27
HS-INT-G2-24000	09D	Install Wall Tile - Bathroom	5	5	12-Oct-27	18-Oct-27
HS-INT-G2-21300	09E	Install Ceiling Grid	5	5	19-Oct-27	25-Oct-27
HS-INT-G2-24100	22A	Set Plumbing Fixtures - Bathroom	5	5	19-Oct-27	25-Oct-27
HS-INT-G2-24200	06C	Install Specialties - Grab Bars / Toilet Accessories / Mirrors	5	5	19-Oct-27	25-Oct-27
HS-INT-G2-21400	21A	Sprinkler Ceiling Trim-Out	5	5	26-Oct-27	01-Nov-27
HS-INT-G2-21500	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	26-Oct-27	01-Nov-27
HS-INT-G2-21600	09K	Wall Point Ups - Second Coat Paint	5	5	26-Oct-27	01-Nov-27
HS-INT-G2-21700	26B	Install Lights	5	5	26-Oct-27	01-Nov-27
HS-INT-G2-21800	23A	Mechanical Ceiling Trim-Out	5	5	26-Oct-27	01-Nov-27
HS-INT-G2-21900	09E	Cut Ceiling Tile	5	5	26-Oct-27	01-Nov-27
HS-INT-G2-22000	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	02-Nov-27	08-Nov-27
HS-INT-G2-23100	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	02-Nov-27	08-Nov-27
HS-INT-G2-22100	01A	Fire Marshal Fire Damper Inspection	5	5	02-Nov-27	08-Nov-27
HS-INT-G2-23500	26B	Electrical Above-Ceiling Inspection	5	5	02-Nov-27	08-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-G2-2220	00-WT	Ceiling Close-In WT Inspections	5	5	09-Nov-27	15-Nov-27
HS-INT-G2-2230	01A	Ceiling Close-In NCC Inspections	5	5	16-Nov-27	22-Nov-27
HS-INT-G2-2240	09E	Drop Ceiling Tile	5	5	23-Nov-27	01-Dec-27
HS-INT-G2-2260	12A	Install Casework - Circulation Desk & Media Center Counters	5	5	02-Dec-27	08-Dec-27
HS-INT-G2-2360	12A	Install Casework - Work Room	5	5	02-Dec-27	08-Dec-27
HS-INT-G2-2270	09C	VCT & Carpet Flooring - Storage / Work Room / Seminar	5	5	09-Dec-27	15-Dec-27
HS-INT-G2-2290	28A	Audio Enhancement System Trim-Out	5	5	09-Dec-27	15-Dec-27
HS-INT-G2-2370	09C	LVT & Carpet Flooring - Media Center	5	5	09-Dec-27	15-Dec-27
HS-INT-G2-2440	22A	Set Plumbing Fixtures - Work Room	5	5	09-Dec-27	15-Dec-27
HS-INT-G2-2300	06C	Install Doors & Hardware	5	5	16-Dec-27	22-Dec-27
HS-INT-G2-2320	09K	Final Painting	5	5	23-Dec-27	03-Jan-28
HS-INT-G2-2330	09C	Install Rubber Wall Base	5	5	04-Jan-28	10-Jan-28
HS-INT-G2-2430	12C	Install Window Treatments	5	5	04-Jan-28	10-Jan-28
HS-INT-G2-2340	00-WT	WT Create Work-to-Complete List	5	5	11-Jan-28	17-Jan-28
Area H - 2nd Floor			200	200	12-Jul-27	24-Apr-28
HS-INT-H2-1000	09B	Layout Walls - Area H - 2nd Floor	5	5	12-Jul-27	16-Jul-27
HS-INT-H2-2220	23A	Startup & Commissioning of Equipment - Area H - 2nd Floor	5	5	15-Feb-28	21-Feb-28
HS-INT-H2-2230	23A	Prefunctional Testing of Equipment - Area H - 2nd Floor	5	5	22-Feb-28	28-Feb-28
HS-INT-H2-2240	23A	Checkout Equipment Function & Controls Sequence - Area H - 2nd Floor	5	5	29-Feb-28	06-Mar-28
HS-INT-H2-2210	00-WT	WT Create Work-to-Complete List - Area H - 2nd Floor	5	5	11-Apr-28	17-Apr-28
HS-INT-H2-2250	00-WT	Final Clean & Wax Floors - Area H - 2nd Floor	10	10	11-Apr-28	24-Apr-28
Area H - Corridor			165	165	19-Jul-27	13-Mar-28
HS-INT-H2-1010	06C	Set Door Frames - Corridor	5	5	19-Jul-27	23-Jul-27
HS-INT-H2-1020	09B	Frame Walls - Corridor	5	5	04-Oct-27	08-Oct-27
HS-INT-H2-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	11-Oct-27	15-Oct-27
HS-INT-H2-1050	23A	Mechanical Overhead Piping Mains - Corridor	5	5	18-Oct-27	22-Oct-27
HS-INT-H2-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	25-Oct-27	29-Oct-27
HS-INT-H2-1150	22A	Plumbing Mains - Corridor	0	0	25-Oct-27	25-Oct-27
HS-INT-H2-1330	00-WT	Wall Close-In WT Inspection - Corridor	2	2	10-Dec-27	13-Dec-27
HS-INT-H2-1350	01A	Wall Close-In NCC Inspection - Corridor	2	2	14-Dec-27	15-Dec-27
HS-INT-H2-1370	09B	Hang Drywall - Corridor	5	5	16-Dec-27	22-Dec-27
HS-INT-H2-1390	09B	Drywall Finishing - Corridor	5	5	23-Dec-27	03-Jan-28
HS-INT-H2-1410	09K	Prime/1st Coat Wall Paint - Corridor	1	1	04-Jan-28	04-Jan-28
HS-INT-H2-1440	09E	Install Ceiling Grid - Corridor	5	5	05-Jan-28	11-Jan-28
HS-INT-H2-2200	05C	Install Handrails - Corridor	10	10	05-Jan-28	18-Jan-28
HS-INT-H2-2260	08C	Install Horizontal Fire Curtain	5	5	05-Jan-28	11-Jan-28
HS-INT-H2-1520	21A	Sprinkler Ceiling Trim-Out - Corridor	5	5	12-Jan-28	18-Jan-28
HS-INT-H2-1530	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	2	2	12-Jan-28	13-Jan-28
HS-INT-H2-1540	09K	Wall Point Ups - Second Coat Paint - Corridor	2	2	12-Jan-28	13-Jan-28
HS-INT-H2-1550	26B	Install Lights - Corridor	5	5	12-Jan-28	18-Jan-28
HS-INT-H2-1560	23A	Mechanical Ceiling Trim-Out - Corridor	2	2	12-Jan-28	13-Jan-28
HS-INT-H2-1570	09E	Cut Ceiling Tile - Corridor	1	1	12-Jan-28	12-Jan-28
HS-INT-H2-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	2	2	14-Jan-28	17-Jan-28
HS-INT-H2-1650	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	19-Jan-28	20-Jan-28
HS-INT-H2-1670	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	21-Jan-28	24-Jan-28
HS-INT-H2-1420	09D	Wall Tile - Corridor	10	10	01-Feb-28	14-Feb-28
HS-INT-H2-1510	09C	Install VCT Flooring - Corridor	5	5	15-Feb-28	21-Feb-28
HS-INT-H2-1580	06C	Install Div 10 Specialties - Corridor	2	2	15-Feb-28	16-Feb-28
HS-INT-H2-1640	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	17-Feb-28	18-Feb-28
HS-INT-H2-1700	09E	Drop Ceiling Tile - Corridor	2	2	21-Feb-28	22-Feb-28
HS-INT-H2-1630	06C	Install Doors & Hardware - Corridor	10	10	22-Feb-28	06-Mar-28
HS-INT-H2-1680	09K	Final Painting - Corridor	2	2	07-Mar-28	08-Mar-28
HS-INT-H2-1710	09C	Install Rubber Wall Base - Corridor	1	1	09-Mar-28	09-Mar-28
HS-INT-H2-1740	00-WT	WT Create Work-to-Complete List - Corridor	2	2	10-Mar-28	13-Mar-28
Area H - Classrooms			126	126	11-Oct-27	10-Apr-28
HS-INT-H2-1040	09B	Frame Walls - Classrooms	10	10	11-Oct-27	22-Oct-27
HS-INT-H2-1080	23A	Mechanical Overhead Piping - Expansion Loops	5	5	18-Oct-27	22-Oct-27
HS-INT-H2-1060	22A	Plumbing In Wall Rough-In	10	10	25-Oct-27	05-Nov-27
HS-INT-H2-1070	26B	Electrical In Wall Rough-In	10	10	25-Oct-27	05-Nov-27
HS-INT-H2-1090	23A	Hang FCUs	5	5	25-Oct-27	29-Oct-27
HS-INT-H2-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	01-Nov-27	12-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H2-1160	23A	Install Condensate Piping	10	10	01-Nov-27	12-Nov-27
HS-INT-H2-1170	23B	Measure / Fab / Install Ductwork Transitions	10	10	01-Nov-27	12-Nov-27
HS-INT-H2-1100	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	08-Nov-27	12-Nov-27
HS-INT-H2-1110	06C	Install Blocking	5	5	08-Nov-27	12-Nov-27
HS-INT-H2-1140	22A	Plumbing In Wall Insulation	5	5	08-Nov-27	12-Nov-27
HS-INT-H2-1180	23B	HVAC Sheet Metal - Classrooms	10	10	15-Nov-27	30-Nov-27
HS-INT-H2-1190	25A	Install HVAC Controls & Valves	5	5	15-Nov-27	19-Nov-27
HS-INT-H2-1200	07A	In-Wall Insulation	5	5	15-Nov-27	19-Nov-27
HS-INT-H2-1210	22A	Plumbing In-Wall WT Inspection	2	2	15-Nov-27	16-Nov-27
HS-INT-H2-1220	26B	Electrical In-Wall WT Inspection	2	2	15-Nov-27	16-Nov-27
HS-INT-H2-1270	22A	Plumbing In-Wall NCC Inspection	2	2	17-Nov-27	18-Nov-27
HS-INT-H2-1280	26B	Electrical In-Wall Inspection	2	2	17-Nov-27	18-Nov-27
HS-INT-H2-1260	23A	Mechanical Piping - Testing Above Ceiling	2	2	22-Nov-27	23-Nov-27
HS-INT-H2-1290	23A	Mechanical Piping Insulation	5	5	24-Nov-27	02-Dec-27
HS-INT-H2-1230	26B	Electrical Overhead Rough-in - Classrooms	15	15	01-Dec-27	21-Dec-27
HS-INT-H2-1240	21A	Sprinkler Overhead Rough-In	5	5	01-Dec-27	07-Dec-27
HS-INT-H2-1250	23B	Duct Testing	2	2	01-Dec-27	02-Dec-27
HS-INT-H2-1300	23B	HVAC Sheet Metal Insulation	5	5	03-Dec-27	09-Dec-27
HS-INT-H2-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	08-Dec-27	09-Dec-27
HS-INT-H2-1320	00-WT	Wall Close-In WT Inspection	2	2	10-Dec-27	13-Dec-27
HS-INT-H2-1340	01A	Wall Close-In NCC Inspection	2	2	14-Dec-27	15-Dec-27
HS-INT-H2-1360	09B	Hang Drywall	15	15	16-Dec-27	10-Jan-28
HS-INT-H2-1380	09B	Drywall Finishing	10	10	11-Jan-28	24-Jan-28
HS-INT-H2-1400	09K	Prime/1st Coat Wall Paint	5	5	25-Jan-28	31-Jan-28
HS-INT-H2-1430	09E	Install Ceiling Grid	5	5	01-Feb-28	07-Feb-28
HS-INT-H2-1450	21A	Sprinkler Ceiling Trim-Out	5	5	08-Feb-28	14-Feb-28
HS-INT-H2-1460	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	08-Feb-28	14-Feb-28
HS-INT-H2-1470	09K	Wall Point Ups - Second Coat Paint	2	2	08-Feb-28	09-Feb-28
HS-INT-H2-1480	26B	Install Lights	10	10	08-Feb-28	21-Feb-28
HS-INT-H2-1490	23A	Mechanical Ceiling Trim-Out	5	5	08-Feb-28	14-Feb-28
HS-INT-H2-1500	09E	Cut Ceiling Tile	5	5	08-Feb-28	14-Feb-28
HS-INT-H2-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	10-Feb-28	16-Feb-28
HS-INT-H2-1600	01A	Fire Marshal Fire Damper Inspection	2	2	15-Feb-28	16-Feb-28
HS-INT-H2-1610	00-WT	Ceiling Close-In WT Inspections	2	2	22-Feb-28	23-Feb-28
HS-INT-H2-1660	01A	Ceiling Close-In NCC Inspections	2	2	24-Feb-28	25-Feb-28
HS-INT-H2-1690	09E	Drop Ceiling Tile	5	5	28-Feb-28	03-Mar-28
HS-INT-H2-1720	09H	Resinous Flooring - Science Labs	5	5	06-Mar-28	10-Mar-28
HS-INT-H2-1730	12A	Install Casework - Classroom	5	5	06-Mar-28	10-Mar-28
HS-INT-H2-1750	09C	VCT Flooring - Classroom	10	10	13-Mar-28	24-Mar-28
HS-INT-H2-1760	12A	Install Casework - Science Labs	2	2	13-Mar-28	14-Mar-28
HS-INT-H2-1770	28A	Audio Enhancement System Trim-Out	1	1	13-Mar-28	13-Mar-28
HS-INT-H2-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	15-Mar-28	21-Mar-28
HS-INT-H2-1780	06C	Install Doors & Hardware	5	5	27-Mar-28	31-Mar-28
HS-INT-H2-1800	09K	Final Painting	2	2	03-Apr-28	04-Apr-28
HS-INT-H2-1810	09C	Install Rubber Wall Base	2	2	05-Apr-28	06-Apr-28
HS-INT-H2-1820	00-WT	WT Create Work-to-Complete List	2	2	07-Apr-28	10-Apr-28
Area H - Multi-User Bathroom			95	95	11-Oct-27	25-Feb-28
HS-INT-H2-1830	09B	Layout Walls - multi-user Bathroom	1	1	11-Oct-27	11-Oct-27
HS-INT-H2-1840	09B	Frame Track / Wall / Bulkheads	5	5	25-Oct-27	29-Oct-27
HS-INT-H2-1850	23B	Install Overhead HVAC Sheetmetal	5	5	01-Nov-27	05-Nov-27
HS-INT-H2-1860	26B	Rough-In Overhead Electrical	2	2	01-Nov-27	02-Nov-27
HS-INT-H2-1870	22A	Rough-In Overhead Plumbing	2	2	01-Nov-27	02-Nov-27
HS-INT-H2-1890	21A	Rough-In Overhead Sprinkler	2	2	01-Nov-27	02-Nov-27
HS-INT-H2-1950	28A	Rough-In Special Systems - Security / AV / IT / FA	2	2	01-Nov-27	02-Nov-27
HS-INT-H2-1910	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	10	10	03-Nov-27	16-Nov-27
HS-INT-H2-1930	26B	Rough-In In-Wall Electrical	2	2	03-Nov-27	04-Nov-27
HS-INT-H2-1940	26B	Electrical In-Wall Inspection	2	2	05-Nov-27	08-Nov-27
HS-INT-H2-1880	23B	Rough-In Overhead HVAC Controls	5	5	08-Nov-27	12-Nov-27
HS-INT-H2-1900	22A	Rough-In Plumbing - Chair Carriers	5	5	17-Nov-27	23-Nov-27
HS-INT-H2-1920	22A	Plumbing Testing	2	2	24-Nov-27	29-Nov-27
HS-INT-H2-1960	06C	Install Blocking	1	1	24-Nov-27	24-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H2-1970	00-WT	Wall Close-In WT Inspection	2	2	30-Nov-27	01-Dec-27
HS-INT-H2-1980	01A	Plumbing In-Wall NCC Inspection	2	2	02-Dec-27	03-Dec-27
HS-INT-H2-1990	09B	Hang Drywall Walls	5	5	06-Dec-27	10-Dec-27
HS-INT-H2-2000	09B	Hang Drywall Ceilings / Bulkheads	1	1	13-Dec-27	13-Dec-27
HS-INT-H2-2010	09B	Drywall Finishing	10	10	14-Dec-27	29-Dec-27
HS-INT-H2-2020	09K	Prime Coat Walls	2	2	30-Dec-27	03-Jan-28
HS-INT-H2-2040	09D	Install Wall Tile	10	10	04-Jan-28	17-Jan-28
HS-INT-H2-2050	09C	Install Resinous Flooring & Base	5	5	18-Jan-28	24-Jan-28
HS-INT-H2-2030	09E	Install Ceiling Grid & Border Tile	2	2	25-Jan-28	26-Jan-28
HS-INT-H2-2060	26B	Ceiling Trim-Out - Electrical	2	2	27-Jan-28	28-Jan-28
HS-INT-H2-2070	23B	Ceiling Trim-Out - Mechanical	2	2	27-Jan-28	28-Jan-28
HS-INT-H2-2080	21A	Ceiling Trim-Out - Sprinkler	2	2	27-Jan-28	28-Jan-28
HS-INT-H2-2090	28A	Ceiling Trim-Out - Security / AV / IT / FA	2	2	27-Jan-28	28-Jan-28
HS-INT-H2-2120	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks / Misc.	10	10	31-Jan-28	11-Feb-28
HS-INT-H2-2190	26B	Electrical Above Ceiling Inspection	2	2	31-Jan-28	01-Feb-28
HS-INT-H2-2100	00-WT	WT Ceiling Close-In Inspection	2	2	02-Feb-28	03-Feb-28
HS-INT-H2-2180	01A	NCC Ceiling Close-In Inspection	2	2	04-Feb-28	07-Feb-28
HS-INT-H2-2110	09E	Drop Ceiling Tile	2	2	08-Feb-28	09-Feb-28
HS-INT-H2-2130	22A	Install Toilet Partitions	5	5	14-Feb-28	18-Feb-28
HS-INT-H2-2140	09B	Wall Point-Up	1	1	21-Feb-28	21-Feb-28
HS-INT-H2-2150	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	2	2	22-Feb-28	23-Feb-28
HS-INT-H2-2160	07G	Install Caulking	1	1	24-Feb-28	24-Feb-28
HS-INT-H2-2170	09K	Final Paint	1	1	25-Feb-28	25-Feb-28
Area J - 2nd Floor			200	200	10-Aug-27	23-May-28
HS-INT-J2-1000	09B	Layout Walls - Area J - 2nd Floor	5	5	10-Aug-27	16-Aug-27
HS-INT-J2-1840	23A	Startup & Commissioning of Equipment - Area J - 2nd Floor	5	5	03-Apr-28	07-Apr-28
HS-INT-J2-1850	23A	Prefunctional Testing of Equipment - Area J - 2nd Floor	5	5	10-Apr-28	14-Apr-28
HS-INT-J2-1860	23A	Checkout Equipment Function & Controls Sequence - Area J - 2nd Floor	5	5	17-Apr-28	21-Apr-28
HS-INT-J2-1830	00-WT	WT Create Work-to-Complete List - Area J - 2nd Floor	5	5	10-May-28	16-May-28
HS-INT-J2-1870	00-WT	Final Clean & Wax Floors - Area J - 2nd Floor	10	10	10-May-28	23-May-28
Area J - Corridor			164	164	17-Aug-27	10-Apr-28
HS-INT-J2-1010	06C	Set Door Frames - Corridor	5	5	17-Aug-27	23-Aug-27
HS-INT-J2-1020	09B	Frame Walls - Corridor	5	5	10-Dec-27	16-Dec-27
HS-INT-J2-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	17-Dec-27	23-Dec-27
HS-INT-J2-1050	23A	Mechanical Overhead Piping Mains - Corridor	10	10	28-Dec-27	11-Jan-28
HS-INT-J2-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	12-Jan-28	18-Jan-28
HS-INT-J2-1150	22A	Plumbing Mains - Corridor	5	5	12-Jan-28	18-Jan-28
HS-INT-J2-1330	00-WT	Wall Close-In WT Inspection - Corridor	2	2	11-Feb-28	14-Feb-28
HS-INT-J2-1350	01A	Wall Close-In NCC Inspection - Corridor	2	2	15-Feb-28	16-Feb-28
HS-INT-J2-1370	09B	Hang Drywall - Corridor	5	5	17-Feb-28	23-Feb-28
HS-INT-J2-1390	09B	Drywall Finishing - Corridor	5	5	24-Feb-28	01-Mar-28
HS-INT-J2-1410	09K	Prime/1st Coat Wall Paint - Corridor	1	1	02-Mar-28	02-Mar-28
HS-INT-J2-1440	09E	Install Ceiling Grid - Corridor	1	1	03-Mar-28	03-Mar-28
HS-INT-J2-1520	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	06-Mar-28	06-Mar-28
HS-INT-J2-1530	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	1	1	06-Mar-28	06-Mar-28
HS-INT-J2-1540	09K	Wall Point Ups - Second Coat Paint - Corridor	1	1	06-Mar-28	06-Mar-28
HS-INT-J2-1550	26B	Install Lights - Corridor	2	2	06-Mar-28	07-Mar-28
HS-INT-J2-1560	23A	Mechanical Ceiling Trim-Out - Corridor	1	1	06-Mar-28	06-Mar-28
HS-INT-J2-1570	09E	Cut Ceiling Tile - Corridor	1	1	06-Mar-28	06-Mar-28
HS-INT-J2-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	1	1	07-Mar-28	07-Mar-28
HS-INT-J2-1650	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	08-Mar-28	09-Mar-28
HS-INT-J2-1670	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	10-Mar-28	13-Mar-28
HS-INT-J2-1420	09D	Wall Tile - Corridor	5	5	20-Mar-28	24-Mar-28
HS-INT-J2-1510	09C	Install VCT Flooring - Corridor	2	2	27-Mar-28	28-Mar-28
HS-INT-J2-1580	06C	Install Div 10 Specialties - Corridor	1	1	27-Mar-28	27-Mar-28
HS-INT-J2-1640	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	28-Mar-28	29-Mar-28
HS-INT-J2-1630	06C	Install Doors & Hardware - Corridor	5	5	29-Mar-28	04-Apr-28
HS-INT-J2-1700	09E	Drop Ceiling Tile - Corridor	1	1	30-Mar-28	30-Mar-28
HS-INT-J2-1680	09K	Final Painting - Corridor	1	1	05-Apr-28	05-Apr-28
HS-INT-J2-1710	09C	Install Rubber Wall Base - Corridor	1	1	06-Apr-28	06-Apr-28
HS-INT-J2-1740	00-WT	WT Create Work-to-Complete List - Corridor	2	2	07-Apr-28	10-Apr-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
Area J - Classrooms			100	100	17-Dec-27	09-May-28
HS-INT-J2-1040	09B	Frame Walls - Classrooms	5	5	17-Dec-27	23-Dec-27
HS-INT-J2-1060	22A	Plumbing In Wall Rough-In	5	5	28-Dec-27	04-Jan-28
HS-INT-J2-1070	26B	Electrical In Wall Rough-In	5	5	28-Dec-27	04-Jan-28
HS-INT-J2-1080	23A	Mechanical Overhead Piping - Expansion Loops	5	5	28-Dec-27	04-Jan-28
HS-INT-J2-1090	23A	Hang FCUs	10	10	28-Dec-27	11-Jan-28
HS-INT-J2-1100	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	05-Jan-28	11-Jan-28
HS-INT-J2-1110	06C	Install Blocking	5	5	05-Jan-28	11-Jan-28
HS-INT-J2-1140	22A	Plumbing In Wall Insulation	1	1	05-Jan-28	05-Jan-28
HS-INT-J2-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	12-Jan-28	25-Jan-28
HS-INT-J2-1200	07A	In-Wall Insulation	2	2	12-Jan-28	13-Jan-28
HS-INT-J2-1220	26B	Electrical In-Wall WT Inspection	2	2	12-Jan-28	13-Jan-28
HS-INT-J2-1160	23A	Install Condensate Piping	5	5	12-Jan-28	18-Jan-28
HS-INT-J2-1170	23B	Measure / Fab / Install Ductwork Transitions	10	10	12-Jan-28	25-Jan-28
HS-INT-J2-1280	26B	Electrical In-Wall Inspection	2	2	14-Jan-28	17-Jan-28
HS-INT-J2-1210	22A	Plumbing In-Wall WT Inspection	2	2	19-Jan-28	20-Jan-28
HS-INT-J2-1270	22A	Plumbing In-Wall NCC Inspection	2	2	21-Jan-28	24-Jan-28
HS-INT-J2-1180	23B	HVAC Sheet Metal - Classrooms	5	5	26-Jan-28	01-Feb-28
HS-INT-J2-1190	25A	Install HVAC Controls & Valves	5	5	26-Jan-28	01-Feb-28
HS-INT-J2-1230	26B	Electrical Overhead Rough-in - Classrooms	5	5	02-Feb-28	08-Feb-28
HS-INT-J2-1240	21A	Sprinkler Overhead Rough-In	5	5	02-Feb-28	08-Feb-28
HS-INT-J2-1250	23B	Duct Testing	2	2	02-Feb-28	03-Feb-28
HS-INT-J2-1260	23A	Mechanical Piping - Testing Above Ceiling	2	2	02-Feb-28	03-Feb-28
HS-INT-J2-1290	23A	Mechanical Piping Insulation	5	5	04-Feb-28	10-Feb-28
HS-INT-J2-1300	23B	HVAC Sheet Metal Insulation	5	5	04-Feb-28	10-Feb-28
HS-INT-J2-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	09-Feb-28	10-Feb-28
HS-INT-J2-1320	00-WT	Wall Close-In WT Inspection	2	2	11-Feb-28	14-Feb-28
HS-INT-J2-1340	01A	Wall Close-In NCC Inspection	2	2	15-Feb-28	16-Feb-28
HS-INT-J2-1360	09B	Hang Drywall	10	10	17-Feb-28	01-Mar-28
HS-INT-J2-1380	09B	Drywall Finishing	10	10	02-Mar-28	15-Mar-28
HS-INT-J2-1400	09K	Prime/1st Coat Wall Paint	2	2	16-Mar-28	17-Mar-28
HS-INT-J2-1430	09E	Install Ceiling Grid	5	5	20-Mar-28	24-Mar-28
HS-INT-J2-1450	21A	Sprinkler Ceiling Trim-Out	5	5	27-Mar-28	31-Mar-28
HS-INT-J2-1460	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	27-Mar-28	31-Mar-28
HS-INT-J2-1470	09K	Wall Point Ups - Second Coat Paint	2	2	27-Mar-28	28-Mar-28
HS-INT-J2-1480	26B	Install Lights	5	5	27-Mar-28	31-Mar-28
HS-INT-J2-1490	23A	Mechanical Ceiling Trim-Out	5	5	27-Mar-28	31-Mar-28
HS-INT-J2-1500	09E	Cut Ceiling Tile	2	2	27-Mar-28	28-Mar-28
HS-INT-J2-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	29-Mar-28	04-Apr-28
HS-INT-J2-1600	01A	Fire Marshal Fire Damper Inspection	2	2	03-Apr-28	04-Apr-28
HS-INT-J2-1610	00-WT	Ceiling Close-In WT Inspections	2	2	03-Apr-28	04-Apr-28
HS-INT-J2-1660	01A	Ceiling Close-In NCC Inspections	2	2	05-Apr-28	06-Apr-28
HS-INT-J2-1690	09E	Drop Ceiling Tile	2	2	07-Apr-28	10-Apr-28
HS-INT-J2-1720	09H	Resinous Flooring - Science Labs	0	0	11-Apr-28	11-Apr-28
HS-INT-J2-1730	12A	Install Casework - Classroom	5	5	11-Apr-28	17-Apr-28
HS-INT-J2-1760	12A	Install Casework - Science Labs	5	5	11-Apr-28	17-Apr-28
HS-INT-J2-1750	09C	VCT Flooring - Classroom	10	10	18-Apr-28	01-May-28
HS-INT-J2-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	18-Apr-28	24-Apr-28
HS-INT-J2-1770	28A	Audio Enhancement System Trim-Out	1	1	18-Apr-28	18-Apr-28
HS-INT-J2-1780	06C	Install Doors & Hardware	1	1	02-May-28	02-May-28
HS-INT-J2-1800	09K	Final Painting	1	1	03-May-28	03-May-28
HS-INT-J2-1810	09C	Install Rubber Wall Base	2	2	04-May-28	05-May-28
HS-INT-J2-1820	00-WT	WT Create Work-to-Complete List	2	2	08-May-28	09-May-28
Third Floor			239	239	24-Jun-27	02-Jun-28
Area G - 3rd Floor			154	154	24-Jun-27	03-Feb-28
HS-INT-G3-1000	09B	Layout Walls - Area G - 3rd Floor	5	5	24-Jun-27	30-Jun-27
HS-INT-G3-1840	23A	Startup & Commissioning of Equipment - Area G - 3rd Floor	5	5	02-Dec-27	08-Dec-27
HS-INT-G3-1850	23A	Prefunctional Testing of Equipment - Area G - 3rd Floor	5	5	09-Dec-27	15-Dec-27
HS-INT-G3-1860	23A	Checkout Equipment Function & Controls Sequence - Area G - 3rd Floor	5	5	16-Dec-27	22-Dec-27
HS-INT-G3-1830	00-WT	WT Create Work-to-Complete List - Area G - 3rd Floor	5	5	21-Jan-28	27-Jan-28
HS-INT-G3-1870	00-WT	Final Clean & Wax Floors - Area G - 3rd Floor	10	10	21-Jan-28	03-Feb-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
Area G - Corridor			112	112	01-Jul-27	09-Dec-27
HS-INT-G3-1010	06C	Set Door Frames - Corridor	2	2	01-Jul-27	02-Jul-27
HS-INT-G3-1020	09B	Frame Walls - Corridor	5	5	16-Aug-27	20-Aug-27
HS-INT-G3-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	23-Aug-27	27-Aug-27
HS-INT-G3-1050	23A	Mechanical Overhead Piping Mains - Corridor	5	5	30-Aug-27	03-Sep-27
HS-INT-G3-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	07-Sep-27	13-Sep-27
HS-INT-G3-1150	22A	Plumbing Mains - Corridor	1	1	07-Sep-27	07-Sep-27
HS-INT-G3-1330	00-WT	Wall Close-In WT Inspection - Corridor	2	2	11-Oct-27	12-Oct-27
HS-INT-G3-1350	01A	Wall Close-In NCC Inspection - Corridor	2	2	13-Oct-27	14-Oct-27
HS-INT-G3-1370	09B	Hang Drywall - Corridor	5	5	15-Oct-27	21-Oct-27
HS-INT-G3-1390	09B	Drywall Finishing - Corridor	5	5	22-Oct-27	28-Oct-27
HS-INT-G3-1410	09K	Prime/1st Coat Wall Paint - Corridor	1	1	29-Oct-27	29-Oct-27
HS-INT-G3-1440	09E	Install Ceiling Grid - Corridor	2	2	01-Nov-27	02-Nov-27
HS-INT-G3-1520	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	03-Nov-27	03-Nov-27
HS-INT-G3-1530	28A	Special Systems -Ceiling Trim out (Security,AV, ITFA) - Corridor	1	1	03-Nov-27	03-Nov-27
HS-INT-G3-1540	09K	Wall Point Ups - Second Coat Paint - Corridor	2	2	03-Nov-27	04-Nov-27
HS-INT-G3-1550	26B	Install Lights - Corridor	5	5	03-Nov-27	09-Nov-27
HS-INT-G3-1560	23A	Mechanical Ceiling Trim-Out - Corridor	1	1	03-Nov-27	03-Nov-27
HS-INT-G3-1570	09E	Cut Ceiling Tile - Corridor	2	2	03-Nov-27	04-Nov-27
HS-INT-G3-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	1	1	05-Nov-27	05-Nov-27
HS-INT-G3-1650	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	10-Nov-27	11-Nov-27
HS-INT-G3-1670	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	12-Nov-27	15-Nov-27
HS-INT-G3-1420	09D	Wall Tile - Corridor	5	5	16-Nov-27	22-Nov-27
HS-INT-G3-1510	09C	Install VCT Flooring - Corridor	2	2	23-Nov-27	24-Nov-27
HS-INT-G3-1580	06C	Install Div 10 Specialties - Corridor	2	2	23-Nov-27	24-Nov-27
HS-INT-G3-1630	06C	Install Doors & Hardware - Corridor	5	5	29-Nov-27	03-Dec-27
HS-INT-G3-1640	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	29-Nov-27	30-Nov-27
HS-INT-G3-1700	09E	Drop Ceiling Tile - Corridor	1	1	01-Dec-27	01-Dec-27
HS-INT-G3-1680	09K	Final Painting - Corridor	1	1	06-Dec-27	06-Dec-27
HS-INT-G3-1710	09C	Install Rubber Wall Base - Corridor	1	1	07-Dec-27	07-Dec-27
HS-INT-G3-1740	00-WT	WT Create Work-to-Complete List - Corridor	2	2	08-Dec-27	09-Dec-27
Area G - Classrooms			103	103	23-Aug-27	20-Jan-28
HS-INT-G3-1040	09B	Frame Walls - Classrooms	2	2	23-Aug-27	24-Aug-27
HS-INT-G3-1060	22A	Plumbing In Wall Rough-In	5	5	25-Aug-27	31-Aug-27
HS-INT-G3-1070	26B	Electrical In Wall Rough-In	5	5	25-Aug-27	31-Aug-27
HS-INT-G3-1090	23A	Hang FCUs	10	10	25-Aug-27	08-Sep-27
HS-INT-G3-1080	23A	Mechanical Overhead Piping - Expansion Loops	10	10	30-Aug-27	13-Sep-27
HS-INT-G3-1100	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	01-Sep-27	08-Sep-27
HS-INT-G3-1110	06C	Install Blocking	5	5	01-Sep-27	08-Sep-27
HS-INT-G3-1140	22A	Plumbing In Wall Insulation	5	5	01-Sep-27	08-Sep-27
HS-INT-G3-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	09-Sep-27	22-Sep-27
HS-INT-G3-1200	07A	In-Wall Insulation	2	2	09-Sep-27	10-Sep-27
HS-INT-G3-1210	22A	Plumbing In-Wall WT Inspection	2	2	09-Sep-27	10-Sep-27
HS-INT-G3-1220	26B	Electrical In-Wall WT Inspection	2	2	09-Sep-27	10-Sep-27
HS-INT-G3-1160	23A	Install Condensate Piping	5	5	09-Sep-27	15-Sep-27
HS-INT-G3-1170	23B	Measure / Fab / Install Ductwork Transitions	10	10	09-Sep-27	22-Sep-27
HS-INT-G3-1270	22A	Plumbing In-Wall NCC Inspection	2	2	13-Sep-27	14-Sep-27
HS-INT-G3-1280	26B	Electrical In-Wall Inspection	2	2	13-Sep-27	14-Sep-27
HS-INT-G3-1180	23B	HVAC Sheet Metal - Classrooms	5	5	23-Sep-27	29-Sep-27
HS-INT-G3-1190	25A	Install HVAC Controls & Valves	5	5	23-Sep-27	29-Sep-27
HS-INT-G3-1230	26B	Electrical Overhead Rough-in - Classrooms	10	10	30-Sep-27	13-Oct-27
HS-INT-G3-1240	21A	Sprinkler Overhead Rough-In	5	5	30-Sep-27	06-Oct-27
HS-INT-G3-1250	23B	Duct Testing	2	2	30-Sep-27	01-Oct-27
HS-INT-G3-1260	23A	Mechanical Piping - Testing Above Ceiling	2	2	30-Sep-27	01-Oct-27
HS-INT-G3-1290	23A	Mechanical Piping Insulation	2	2	04-Oct-27	05-Oct-27
HS-INT-G3-1300	23B	HVAC Sheet Metal Insulation	5	5	04-Oct-27	08-Oct-27
HS-INT-G3-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	07-Oct-27	08-Oct-27
HS-INT-G3-1320	00-WT	Wall Close-In WT Inspection	2	2	11-Oct-27	12-Oct-27
HS-INT-G3-1340	01A	Wall Close-In NCC Inspection	2	2	13-Oct-27	14-Oct-27
HS-INT-G3-1360	09B	Hang Drywall	10	10	15-Oct-27	28-Oct-27
HS-INT-G3-1380	09B	Drywall Finishing	10	10	29-Oct-27	11-Nov-27

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-G3-1400	09K	Prime/1st Coat Wall Paint	2	2	12-Nov-27	15-Nov-27
HS-INT-G3-1430	09E	Install Ceiling Grid	5	5	16-Nov-27	22-Nov-27
HS-INT-G3-1450	21A	Sprinkler Ceiling Trim-Out	5	5	23-Nov-27	01-Dec-27
HS-INT-G3-1460	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	23-Nov-27	01-Dec-27
HS-INT-G3-1470	09K	Wall Point Ups - Second Coat Paint	2	2	23-Nov-27	24-Nov-27
HS-INT-G3-1480	26B	Install Lights	5	5	23-Nov-27	01-Dec-27
HS-INT-G3-1490	23A	Mechanical Ceiling Trim-Out	5	5	23-Nov-27	01-Dec-27
HS-INT-G3-1500	09E	Cut Ceiling Tile	2	2	23-Nov-27	24-Nov-27
HS-INT-G3-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	10	10	29-Nov-27	10-Dec-27
HS-INT-G3-1600	01A	Fire Marshal Fire Damper Inspection	2	2	02-Dec-27	03-Dec-27
HS-INT-G3-1610	00-WT	Ceiling Close-In WT Inspections	2	2	02-Dec-27	03-Dec-27
HS-INT-G3-1660	01A	Ceiling Close-In NCC Inspections	2	2	06-Dec-27	07-Dec-27
HS-INT-G3-1690	09E	Drop Ceiling Tile	2	2	08-Dec-27	09-Dec-27
HS-INT-G3-1720	09H	Resinous Flooring - Science Labs	0	0	10-Dec-27	10-Dec-27
HS-INT-G3-1730	12A	Install Casework - Classroom	10	10	10-Dec-27	23-Dec-27
HS-INT-G3-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	2	2	10-Dec-27	13-Dec-27
HS-INT-G3-1760	12A	Install Casework - Science Labs	0	0	10-Dec-27	10-Dec-27
HS-INT-G3-1750	09C	VCT Flooring - Classroom	10	10	28-Dec-27	11-Jan-28
HS-INT-G3-1770	28A	Audio Enhancement System Trim-Out	2	2	28-Dec-27	29-Dec-27
HS-INT-G3-1780	06C	Install Doors & Hardware	2	2	12-Jan-28	13-Jan-28
HS-INT-G3-1800	09K	Final Painting	1	1	14-Jan-28	14-Jan-28
HS-INT-G3-1810	09C	Install Rubber Wall Base	2	2	17-Jan-28	18-Jan-28
HS-INT-G3-1820	00-WT	WT Create Work-to-Complete List	2	2	19-Jan-28	20-Jan-28
Area H - 3rd Floor			212	212	19-Jul-27	17-May-28
HS-INT-H3-1000	09B	Layout Walls - Area H - 3rd Floor	5	5	19-Jul-27	23-Jul-27
HS-INT-H3-2220	23A	Startup & Commissioning of Equipment - Area H - 3rd Floor	5	5	09-Mar-28	15-Mar-28
HS-INT-H3-2230	23A	Prefunctional Testing of Equipment - Area H - 3rd Floor	5	5	16-Mar-28	22-Mar-28
HS-INT-H3-2240	23A	Checkout Equipment Function & Controls Sequence - Area H - 3rd Floor	5	5	23-Mar-28	29-Mar-28
HS-INT-H3-2210	00-WT	WT Create Work-to-Complete List - Area H - 3rd Floor	5	5	04-May-28	10-May-28
HS-INT-H3-2250	00-WT	Final Clean & Wax Floors - Area H - 3rd Floor	10	10	04-May-28	17-May-28
Area H - Corridor			177	177	26-Jul-27	05-Apr-28
HS-INT-H3-1010	06C	Set Door Frames - Corridor	5	5	26-Jul-27	30-Jul-27
HS-INT-H3-1020	09B	Frame Walls - Corridor	2	2	01-Nov-27	02-Nov-27
HS-INT-H3-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	03-Nov-27	09-Nov-27
HS-INT-H3-1050	23A	Mechanical Overhead Piping Mains - Corridor	5	5	10-Nov-27	16-Nov-27
HS-INT-H3-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	17-Nov-27	23-Nov-27
HS-INT-H3-1150	22A	Plumbing Mains - Corridor	0	0	17-Nov-27	17-Nov-27
HS-INT-H3-1330	00-WT	Wall Close-In WT Inspection - Corridor	2	2	07-Jan-28	10-Jan-28
HS-INT-H3-1350	01A	Wall Close-In NCC Inspection - Corridor	2	2	11-Jan-28	12-Jan-28
HS-INT-H3-1370	09B	Hang Drywall - Corridor	5	5	13-Jan-28	19-Jan-28
HS-INT-H3-1390	09B	Drywall Finishing - Corridor	5	5	20-Jan-28	26-Jan-28
HS-INT-H3-1410	09K	Prime/1st Coat Wall Paint - Corridor	1	1	27-Jan-28	27-Jan-28
HS-INT-H3-1440	09E	Install Ceiling Grid - Corridor	5	5	28-Jan-28	03-Feb-28
HS-INT-H3-2200	05C	Install Handrails - Corridor	10	10	28-Jan-28	10-Feb-28
HS-INT-H3-2260	08C	Install Horizontal Fire Curtain	5	5	28-Jan-28	03-Feb-28
HS-INT-H3-1520	21A	Sprinkler Ceiling Trim-Out - Corridor	5	5	04-Feb-28	10-Feb-28
HS-INT-H3-1530	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	2	2	04-Feb-28	07-Feb-28
HS-INT-H3-1540	09K	Wall Point Ups - Second Coat Paint - Corridor	2	2	04-Feb-28	07-Feb-28
HS-INT-H3-1550	26B	Install Lights - Corridor	5	5	04-Feb-28	10-Feb-28
HS-INT-H3-1560	23A	Mechanical Ceiling Trim-Out - Corridor	2	2	04-Feb-28	07-Feb-28
HS-INT-H3-1570	09E	Cut Ceiling Tile - Corridor	1	1	04-Feb-28	04-Feb-28
HS-INT-H3-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	2	2	08-Feb-28	09-Feb-28
HS-INT-H3-1650	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	11-Feb-28	14-Feb-28
HS-INT-H3-1670	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	15-Feb-28	16-Feb-28
HS-INT-H3-1420	09D	Wall Tile - Corridor	10	10	24-Feb-28	08-Mar-28
HS-INT-H3-1510	09C	Install VCT Flooring - Corridor	5	5	09-Mar-28	15-Mar-28
HS-INT-H3-1580	06C	Install Div 10 Specialties - Corridor	2	2	09-Mar-28	10-Mar-28
HS-INT-H3-1640	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	13-Mar-28	14-Mar-28
HS-INT-H3-1700	09E	Drop Ceiling Tile - Corridor	2	2	15-Mar-28	16-Mar-28
HS-INT-H3-1630	06C	Install Doors & Hardware - Corridor	10	10	16-Mar-28	29-Mar-28
HS-INT-H3-1680	09K	Final Painting - Corridor	2	2	30-Mar-28	31-Mar-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H3-1710	09C	Install Rubber Wall Base - Corridor	1	1	03-Apr-28	03-Apr-28
HS-INT-H3-1740	00-WT	WT Create Work-to-Complete List - Corridor	2	2	04-Apr-28	05-Apr-28
Area H - Classrooms			126	126	03-Nov-27	03-May-28
HS-INT-H3-1040	09B	Frame Walls - Classrooms	10	10	03-Nov-27	16-Nov-27
HS-INT-H3-1080	23A	Mechanical Overhead Piping - Expansion Loops	5	5	10-Nov-27	16-Nov-27
HS-INT-H3-1060	22A	Plumbing In Wall Rough-In	10	10	17-Nov-27	02-Dec-27
HS-INT-H3-1070	26B	Electrical In Wall Rough-In	10	10	17-Nov-27	02-Dec-27
HS-INT-H3-1090	23A	Hang FCUs	5	5	17-Nov-27	23-Nov-27
HS-INT-H3-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	24-Nov-27	09-Dec-27
HS-INT-H3-1160	23A	Install Condensate Piping	10	10	24-Nov-27	09-Dec-27
HS-INT-H3-1170	23B	Measure / Fab / Install Ductwork Transitions	10	10	24-Nov-27	09-Dec-27
HS-INT-H3-1100	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	03-Dec-27	09-Dec-27
HS-INT-H3-1110	06C	Install Blocking	5	5	03-Dec-27	09-Dec-27
HS-INT-H3-1140	22A	Plumbing In Wall Insulation	5	5	03-Dec-27	09-Dec-27
HS-INT-H3-1180	23B	HVAC Sheet Metal - Classrooms	10	10	10-Dec-27	23-Dec-27
HS-INT-H3-1190	25A	Install HVAC Controls & Valves	5	5	10-Dec-27	16-Dec-27
HS-INT-H3-1200	07A	In-Wall Insulation	5	5	10-Dec-27	16-Dec-27
HS-INT-H3-1210	22A	Plumbing In-Wall WT Inspection	2	2	10-Dec-27	13-Dec-27
HS-INT-H3-1220	26B	Electrical In-Wall WT Inspection	2	2	10-Dec-27	13-Dec-27
HS-INT-H3-1270	22A	Plumbing In-Wall NCC Inspection	2	2	14-Dec-27	15-Dec-27
HS-INT-H3-1280	26B	Electrical In-Wall Inspection	2	2	14-Dec-27	15-Dec-27
HS-INT-H3-1260	23A	Mechanical Piping - Testing Above Ceiling	2	2	17-Dec-27	20-Dec-27
HS-INT-H3-1290	23A	Mechanical Piping Insulation	5	5	21-Dec-27	29-Dec-27
HS-INT-H3-1230	26B	Electrical Overhead Rough-in - Classrooms	15	15	28-Dec-27	18-Jan-28
HS-INT-H3-1240	21A	Sprinkler Overhead Rough-In	5	5	28-Dec-27	04-Jan-28
HS-INT-H3-1250	23B	Duct Testing	2	2	28-Dec-27	29-Dec-27
HS-INT-H3-1300	23B	HVAC Sheet Metal Insulation	5	5	30-Dec-27	06-Jan-28
HS-INT-H3-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	05-Jan-28	06-Jan-28
HS-INT-H3-1320	00-WT	Wall Close-In WT Inspection	2	2	07-Jan-28	10-Jan-28
HS-INT-H3-1340	01A	Wall Close-In NCC Inspection	2	2	11-Jan-28	12-Jan-28
HS-INT-H3-1360	09B	Hang Drywall	15	15	13-Jan-28	02-Feb-28
HS-INT-H3-1380	09B	Drywall Finishing	10	10	03-Feb-28	16-Feb-28
HS-INT-H3-1400	09K	Prime/1st Coat Wall Paint	5	5	17-Feb-28	23-Feb-28
HS-INT-H3-1430	09E	Install Ceiling Grid	5	5	24-Feb-28	01-Mar-28
HS-INT-H3-1450	21A	Sprinkler Ceiling Trim-Out	5	5	02-Mar-28	08-Mar-28
HS-INT-H3-1460	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	02-Mar-28	08-Mar-28
HS-INT-H3-1470	09K	Wall Point Ups - Second Coat Paint	2	2	02-Mar-28	03-Mar-28
HS-INT-H3-1480	26B	Install Lights	10	10	02-Mar-28	15-Mar-28
HS-INT-H3-1490	23A	Mechanical Ceiling Trim-Out	5	5	02-Mar-28	08-Mar-28
HS-INT-H3-1500	09E	Cut Ceiling Tile	5	5	02-Mar-28	08-Mar-28
HS-INT-H3-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	06-Mar-28	10-Mar-28
HS-INT-H3-1600	01A	Fire Marshal Fire Damper Inspection	2	2	09-Mar-28	10-Mar-28
HS-INT-H3-1610	00-WT	Ceiling Close-In WT Inspections	2	2	16-Mar-28	17-Mar-28
HS-INT-H3-1660	01A	Ceiling Close-In NCC Inspections	2	2	20-Mar-28	21-Mar-28
HS-INT-H3-1690	09E	Drop Ceiling Tile	5	5	22-Mar-28	28-Mar-28
HS-INT-H3-1720	09H	Resinous Flooring - Science Labs & Art Rooms	5	5	29-Mar-28	04-Apr-28
HS-INT-H3-1730	12A	Install Casework - Classroom	5	5	29-Mar-28	04-Apr-28
HS-INT-H3-1750	09C	VCT Flooring - Classroom	10	10	05-Apr-28	18-Apr-28
HS-INT-H3-1760	12A	Install Casework - Science Labs & Art Rooms	5	5	05-Apr-28	11-Apr-28
HS-INT-H3-1770	28A	Audio Enhancement System Trim-Out	1	1	05-Apr-28	05-Apr-28
HS-INT-H3-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	12-Apr-28	18-Apr-28
HS-INT-H3-1780	06C	Install Doors & Hardware	5	5	19-Apr-28	25-Apr-28
HS-INT-H3-1800	09K	Final Painting	2	2	26-Apr-28	27-Apr-28
HS-INT-H3-1810	09C	Install Rubber Wall Base	2	2	28-Apr-28	01-May-28
HS-INT-H3-1820	00-WT	WT Create Work-to-Complete List	2	2	02-May-28	03-May-28
Area H - Multi-User Bathroom			96	96	03-Nov-27	22-Mar-28
HS-INT-H3-1830	09B	Layout Walls - multi-user Bathroom	2	2	03-Nov-27	04-Nov-27
HS-INT-H3-1840	09B	Frame Track / Wall / Bulkheads	5	5	17-Nov-27	23-Nov-27
HS-INT-H3-1850	23B	Install Overhead HVAC Sheetmetal	10	10	24-Nov-27	09-Dec-27
HS-INT-H3-1860	26B	Rough-In Overhead Electrical	2	2	24-Nov-27	29-Nov-27
HS-INT-H3-1870	22A	Rough-In Overhead Plumbing	2	2	24-Nov-27	29-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-H3-1890	21A	Rough-In Overhead Sprinkler	2	2	24-Nov-27	29-Nov-27
HS-INT-H3-1950	28A	Rough-In Special Systems - Security /AV / IT / FA	2	2	24-Nov-27	29-Nov-27
HS-INT-H3-1910	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	10	10	30-Nov-27	13-Dec-27
HS-INT-H3-1930	26B	Rough-In In-Wall Electrical	2	2	30-Nov-27	01-Dec-27
HS-INT-H3-1940	26B	Electrical In-Wall Inspection	2	2	02-Dec-27	03-Dec-27
HS-INT-H3-1880	23B	Rough-In Overhead HVAC Controls	5	5	10-Dec-27	16-Dec-27
HS-INT-H3-1900	22A	Rough-In Plumbing - Chair Carriers	5	5	14-Dec-27	20-Dec-27
HS-INT-H3-1920	22A	Plumbing Testing	2	2	21-Dec-27	22-Dec-27
HS-INT-H3-1960	06C	Install Blocking	1	1	21-Dec-27	21-Dec-27
HS-INT-H3-1970	00-WT	Wall Close-In WT Inspection	2	2	23-Dec-27	28-Dec-27
HS-INT-H3-1980	01A	Plumbing In-Wall NCC Inspection	2	2	29-Dec-27	30-Dec-27
HS-INT-H3-1990	09B	Hang Drywall Walls	1	1	03-Jan-28	03-Jan-28
HS-INT-H3-2000	09B	Hang Drywall Ceilings / Bulkheads	1	1	04-Jan-28	04-Jan-28
HS-INT-H3-2010	09B	Drywall Finishing	5	5	05-Jan-28	11-Jan-28
HS-INT-H3-2020	09K	Prime Coat Walls	1	1	12-Jan-28	12-Jan-28
HS-INT-H3-2040	09D	Install Wall Tile	13	13	13-Jan-28	31-Jan-28
HS-INT-H3-2050	09C	Install Resinous Flooring & Base	10	10	01-Feb-28	14-Feb-28
HS-INT-H3-2030	09E	Install Ceiling Grid & Border Tile	2	2	15-Feb-28	16-Feb-28
HS-INT-H3-2060	26B	Ceiling Trim-Out - Electrical	2	2	17-Feb-28	18-Feb-28
HS-INT-H3-2070	23B	Ceiling Trim-Out - Mechanical	1	1	17-Feb-28	17-Feb-28
HS-INT-H3-2080	21A	Ceiling Trim-Out - Sprinkler	1	1	17-Feb-28	17-Feb-28
HS-INT-H3-2090	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	17-Feb-28	17-Feb-28
HS-INT-H3-2120	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks / Misc.	10	10	21-Feb-28	03-Mar-28
HS-INT-H3-2190	26B	Electrical Above Ceiling Inspection	2	2	21-Feb-28	22-Feb-28
HS-INT-H3-2100	00-WT	WT Ceiling Close-In Inspection	2	2	23-Feb-28	24-Feb-28
HS-INT-H3-2180	01A	NCC Ceiling Close-In Inspection	2	2	25-Feb-28	28-Feb-28
HS-INT-H3-2110	09E	Drop Ceiling Tile	1	1	29-Feb-28	29-Feb-28
HS-INT-H3-2130	22A	Install Toilet Partitions	5	5	06-Mar-28	10-Mar-28
HS-INT-H3-2140	09B	Wall Point-Up	1	1	13-Mar-28	13-Mar-28
HS-INT-H3-2150	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	5	5	14-Mar-28	20-Mar-28
HS-INT-H3-2160	07G	Install Caulking	1	1	21-Mar-28	21-Mar-28
HS-INT-H3-2170	09K	Final Paint	1	1	22-Mar-28	22-Mar-28
Area J - 3rd Floor			202	202	17-Aug-27	02-Jun-28
HS-INT-J3-1000	09B	Layout Walls - Area J - 3rd Floor	5	5	17-Aug-27	23-Aug-27
HS-INT-J3-1840	23A	Startup & Commissioning of Equipment - Area J - 3rd Floor	5	5	12-Apr-28	18-Apr-28
HS-INT-J3-1850	23A	Prefunctional Testing of Equipment - Area J - 3rd Floor	5	5	19-Apr-28	25-Apr-28
HS-INT-J3-1860	23A	Checkout Equipment Function & Controls Sequence - Area J - 3rd Floor	5	5	26-Apr-28	02-May-28
HS-INT-J3-1830	00-WT	WT Create Work-to-Complete List - Area J - 3rd Floor	5	5	19-May-28	25-May-28
HS-INT-J3-1870	00-WT	Final Clean & Wax Floors - Area J - 3rd Floor	10	10	19-May-28	02-Jun-28
Area J - Corridor			166	166	24-Aug-27	19-Apr-28
HS-INT-J3-1010	06C	Set Door Frames - Corridor	5	5	24-Aug-27	30-Aug-27
HS-INT-J3-1020	09B	Frame Walls - Corridor	2	2	28-Dec-27	29-Dec-27
HS-INT-J3-1030	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	30-Dec-27	06-Jan-28
HS-INT-J3-1050	23A	Mechanical Overhead Piping Mains - Corridor	10	10	07-Jan-28	20-Jan-28
HS-INT-J3-1120	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	21-Jan-28	27-Jan-28
HS-INT-J3-1150	22A	Plumbing Mains - Corridor	5	5	21-Jan-28	27-Jan-28
HS-INT-J3-1330	01A	Wall Close-In WT Inspection - Corridor	2	2	22-Feb-28	23-Feb-28
HS-INT-J3-1350	01A	Wall Close-In NCC Inspection - Corridor	2	2	24-Feb-28	25-Feb-28
HS-INT-J3-1370	09B	Hang Drywall - Corridor	2	2	28-Feb-28	29-Feb-28
HS-INT-J3-1390	09B	Drywall Finishing - Corridor	5	5	01-Mar-28	07-Mar-28
HS-INT-J3-1410	09K	Prime/1st Coat Wall Paint - Corridor	1	1	08-Mar-28	08-Mar-28
HS-INT-J3-1440	09E	Install Ceiling Grid - Corridor	1	1	09-Mar-28	09-Mar-28
HS-INT-J3-1520	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	10-Mar-28	10-Mar-28
HS-INT-J3-1530	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	1	1	10-Mar-28	10-Mar-28
HS-INT-J3-1540	09K	Wall Point Ups - Second Coat Paint - Corridor	1	1	10-Mar-28	10-Mar-28
HS-INT-J3-1550	26B	Install Lights - Corridor	2	2	10-Mar-28	13-Mar-28
HS-INT-J3-1560	23A	Mechanical Ceiling Trim-Out - Corridor	1	1	10-Mar-28	10-Mar-28
HS-INT-J3-1570	09E	Cut Ceiling Tile - Corridor	1	1	10-Mar-28	10-Mar-28
HS-INT-J3-1620	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	1	1	13-Mar-28	13-Mar-28
HS-INT-J3-1650	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	14-Mar-28	15-Mar-28
HS-INT-J3-1670	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	16-Mar-28	17-Mar-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

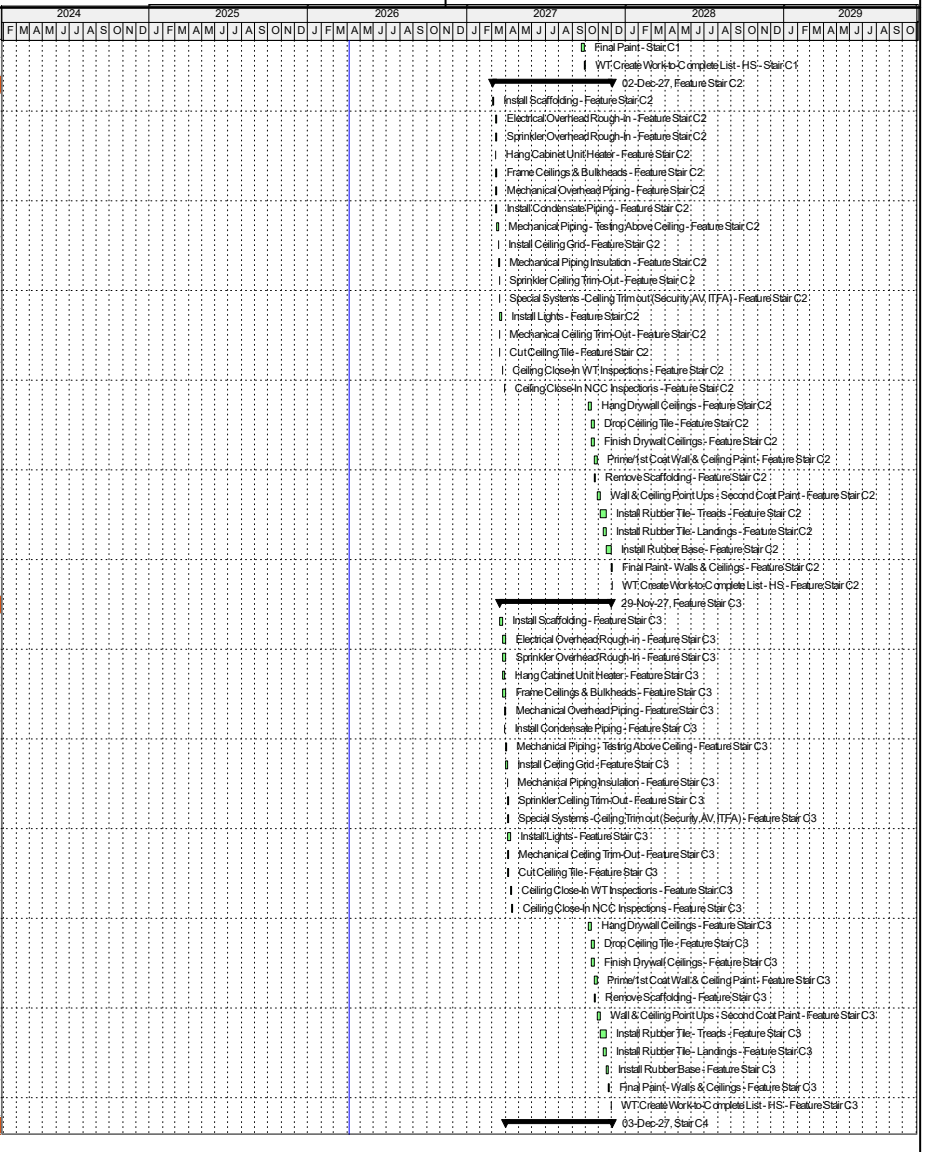
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-J3-1420	09D	Wall Tile - Corridor	5	5	29-Mar-28	04-Apr-28
HS-INT-J3-1510	09C	Install VCT Flooring - Corridor	2	2	05-Apr-28	06-Apr-28
HS-INT-J3-1580	06C	Install Div 10 Specialties - Corridor	1	1	05-Apr-28	05-Apr-28
HS-INT-J3-1640	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	06-Apr-28	07-Apr-28
HS-INT-J3-1630	06C	Install Doors & Hardware - Corridor	5	5	07-Apr-28	13-Apr-28
HS-INT-J3-1700	09E	Drop Ceiling Tile - Corridor	1	1	10-Apr-28	10-Apr-28
HS-INT-J3-1680	09K	Final Painting - Corridor	1	1	14-Apr-28	14-Apr-28
HS-INT-J3-1710	09C	Install Rubber Wall Base - Corridor	1	1	17-Apr-28	17-Apr-28
HS-INT-J3-1740	00-WT	WT Create Work-to-Complete List - Corridor	2	2	18-Apr-28	19-Apr-28
Area J - Classrooms			100	100	30-Dec-27	18-May-28
HS-INT-J3-1040	09B	Frame Walls - Classrooms	5	5	30-Dec-27	06-Jan-28
HS-INT-J3-1060	22A	Plumbing In Wall Rough-In	5	5	07-Jan-28	13-Jan-28
HS-INT-J3-1070	26B	Electrical In Wall Rough-In	5	5	07-Jan-28	13-Jan-28
HS-INT-J3-1080	23A	Mechanical Overhead Piping - Expansion Loops	5	5	07-Jan-28	13-Jan-28
HS-INT-J3-1090	23A	Hang FCUs	10	10	07-Jan-28	20-Jan-28
HS-INT-J3-1100	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	14-Jan-28	20-Jan-28
HS-INT-J3-1110	06C	Install Blocking	5	5	14-Jan-28	20-Jan-28
HS-INT-J3-1140	22A	Plumbing In Wall Insulation	1	1	14-Jan-28	14-Jan-28
HS-INT-J3-1130	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	21-Jan-28	03-Feb-28
HS-INT-J3-1200	07A	In-Wall Insulation	2	2	21-Jan-28	24-Jan-28
HS-INT-J3-1220	26B	Electrical In-Wall WT Inspection	2	2	21-Jan-28	24-Jan-28
HS-INT-J3-1160	23A	Install Condensate Piping	5	5	21-Jan-28	27-Jan-28
HS-INT-J3-1170	23B	Measure / Fab / Install Ductwork Transitions	10	10	21-Jan-28	03-Feb-28
HS-INT-J3-1280	26B	Electrical In-Wall Inspection	2	2	25-Jan-28	26-Jan-28
HS-INT-J3-1210	22A	Plumbing In-Wall WT Inspection	2	2	28-Jan-28	31-Jan-28
HS-INT-J3-1270	22A	Plumbing In-Wall NCC Inspection	2	2	01-Feb-28	02-Feb-28
HS-INT-J3-1180	23B	HVAC Sheet Metal - Classrooms	5	5	04-Feb-28	10-Feb-28
HS-INT-J3-1190	25A	Install HVAC Controls & Valves	5	5	04-Feb-28	10-Feb-28
HS-INT-J3-1230	26B	Electrical Overhead Rough-in - Classrooms	5	5	11-Feb-28	17-Feb-28
HS-INT-J3-1240	21A	Sprinkler Overhead Rough-In	5	5	11-Feb-28	17-Feb-28
HS-INT-J3-1250	23B	Duct Testing	2	2	11-Feb-28	14-Feb-28
HS-INT-J3-1260	23A	Mechanical Piping - Testing Above Ceiling	2	2	11-Feb-28	14-Feb-28
HS-INT-J3-1290	23A	Mechanical Piping Insulation	5	5	15-Feb-28	21-Feb-28
HS-INT-J3-1300	23B	HVAC Sheet Metal Insulation	5	5	15-Feb-28	21-Feb-28
HS-INT-J3-1310	21A	Sprinkler Overhead Hydro-Testing	2	2	18-Feb-28	21-Feb-28
HS-INT-J3-1320	01A	Wall Close-In WT Inspection	2	2	22-Feb-28	23-Feb-28
HS-INT-J3-1340	01A	Wall Close-In NCC Inspection	2	2	24-Feb-28	25-Feb-28
HS-INT-J3-1360	09B	Hang Drywall	10	10	28-Feb-28	10-Mar-28
HS-INT-J3-1380	09B	Drywall Finishing	10	10	13-Mar-28	24-Mar-28
HS-INT-J3-1400	09K	Prime/1st Coat Wall Paint	2	2	27-Mar-28	28-Mar-28
HS-INT-J3-1430	09E	Install Ceiling Grid	5	5	29-Mar-28	04-Apr-28
HS-INT-J3-1450	21A	Sprinkler Ceiling Trim-Out	5	5	05-Apr-28	11-Apr-28
HS-INT-J3-1460	28A	Special Systems -Ceiling Trim out (Security,AV, ITFA)	5	5	05-Apr-28	11-Apr-28
HS-INT-J3-1470	09K	Wall Point Ups - Second Coat Paint	2	2	05-Apr-28	06-Apr-28
HS-INT-J3-1480	26B	Install Lights	5	5	05-Apr-28	11-Apr-28
HS-INT-J3-1490	23A	Mechanical Ceiling Trim-Out	5	5	05-Apr-28	11-Apr-28
HS-INT-J3-1500	09E	Cut Ceiling Tile	2	2	05-Apr-28	06-Apr-28
HS-INT-J3-1590	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	07-Apr-28	13-Apr-28
HS-INT-J3-1600	01A	Fire Marshal Fire Damper Inspection	2	2	12-Apr-28	13-Apr-28
HS-INT-J3-1610	00-WT	Ceiling Close-In WT Inspections	2	2	12-Apr-28	13-Apr-28
HS-INT-J3-1660	01A	Ceiling Close-In NCC Inspections	2	2	14-Apr-28	17-Apr-28
HS-INT-J3-1690	09E	Drop Ceiling Tile	2	2	18-Apr-28	19-Apr-28
HS-INT-J3-1720	09H	Resinous Flooring - Science Labs	0	0	20-Apr-28	20-Apr-28
HS-INT-J3-1730	12A	Install Casework - Classroom	5	5	20-Apr-28	26-Apr-28
HS-INT-J3-1760	12A	Install Casework - Science Labs	5	5	20-Apr-28	26-Apr-28
HS-INT-J3-1750	09C	VCT Flooring - Classroom	10	10	27-Apr-28	10-May-28
HS-INT-J3-1790	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	27-Apr-28	03-May-28
HS-INT-J3-1770	28A	Audio Enhancement System Trim-Out	1	1	27-Apr-28	27-Apr-28
HS-INT-J3-1780	06C	Install Doors & Hardware	1	1	11-May-28	11-May-28
HS-INT-J3-1800	09K	Final Painting	1	1	12-May-28	12-May-28
HS-INT-J3-1810	09C	Install Rubber Wall Base	2	2	15-May-28	16-May-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-J3-1820	00-WT	WT Create Work-to-Complete List	2	2	17-May-28	18-May-28
HS Penthouse			173	173	18-Jun-27	24-Feb-28
HS-INT-PH-1280	23A	Install Mechanical Equipment - HS Penthouse	10	10	18-Jun-27	01-Jul-27
HS-INT-PH-1290	23A	Startup & Commissioning of Equipment - HS Penthouse	5	5	16-Sep-27	22-Sep-27
HS-INT-PH-1300	23A	Prefunctional Testing of Equipment - HS Penthouse	5	5	23-Sep-27	29-Sep-27
HS-INT-PH-1310	23A	Checkout Equipment Function & Controls Sequence - HS Penthouse	5	5	30-Sep-27	06-Oct-27
HS-INT-PH-1000	09B	Frame Walls	5	5	08-Dec-27	14-Dec-27
HS-INT-PH-1090	21A	Sprinkler Overhead Rough-In	2	2	15-Dec-27	16-Dec-27
HS-INT-PH-1010	22A	Plumbing In Wall Rough-In	10	10	15-Dec-27	30-Dec-27
HS-INT-PH-1020	26B	Electrical In Wall Rough-In	15	15	15-Dec-27	07-Jan-28
HS-INT-PH-1260	23A	Install Mechanical Piping	10	10	15-Dec-27	30-Dec-27
HS-INT-PH-1130	21A	Sprinkler Overhead Hydro-Testing	2	2	17-Dec-27	20-Dec-27
HS-INT-PH-1040	06C	Install Blocking	2	2	03-Jan-28	04-Jan-28
HS-INT-PH-1060	22A	Plumbing In-Wall WT Inspection	2	2	03-Jan-28	04-Jan-28
HS-INT-PH-1270	23A	Install Mechanical Piping Insulation	5	5	03-Jan-28	07-Jan-28
HS-INT-PH-1100	22A	Plumbing In-Wall NCC Inspection	2	2	05-Jan-28	06-Jan-28
HS-INT-PH-1050	07A	In-Wall Insulation	1	1	05-Jan-28	05-Jan-28
HS-INT-PH-1030	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	10-Jan-28	14-Jan-28
HS-INT-PH-1200	26B	Install Lights	2	2	10-Jan-28	11-Jan-28
HS-INT-PH-1070	00-WT	Electrical In-Wall WT Inspection	2	2	17-Jan-28	18-Jan-28
HS-INT-PH-1080	26B	Electrical Overhead Rough-in	5	5	19-Jan-28	25-Jan-28
HS-INT-PH-1110	26B	Electrical In-Wall Inspection	2	2	19-Jan-28	20-Jan-28
HS-INT-PH-1140	00-WT	Wall Close-In WT Inspection	2	2	21-Jan-28	24-Jan-28
HS-INT-PH-1150	01A	Wall Close-In NCC Inspection	2	2	25-Jan-28	26-Jan-28
HS-INT-PH-1160	09B	Hang Drywall	5	5	27-Jan-28	02-Feb-28
HS-INT-PH-1170	09B	Drywall Finishing	5	5	03-Feb-28	09-Feb-28
HS-INT-PH-1180	09K	Prime/1st Coat Wall Paint	1	1	10-Feb-28	10-Feb-28
HS-INT-PH-1230	06C	Install Doors & Hardware	1	1	10-Feb-28	10-Feb-28
HS-INT-PH-1190	09K	Wall Point Ups - Second Coat Paint	1	1	11-Feb-28	11-Feb-28
HS-INT-PH-1210	28A	Wall Trim Out - (Elect/Special systems, FA)	2	2	14-Feb-28	15-Feb-28
HS-INT-PH-1240	09K	Final Painting	1	1	16-Feb-28	16-Feb-28
HS-INT-PH-1220	01A	Fire Marshal Inspection	2	2	16-Feb-28	17-Feb-28
HS-INT-PH-1250	00-WT	WT Create Work-to-Complete List - HS Penthouse	5	5	18-Feb-28	24-Feb-28
HS Stairs / Elevator			220	220	22-Jan-27	03-Dec-27
Stair C1			176	176	22-Jan-27	30-Sep-27
HS-INT-VT-1220	06C	Install Scaffolding - Stair C1	5	5	22-Jan-27	28-Jan-27
HS-INT-VT-1020	26B	Electrical Overhead Rough-in - Stair C1	5	5	29-Jan-27	04-Feb-27
HS-INT-VT-1030	21A	Sprinkler Overhead Rough-In - Stair C1	2	2	29-Jan-27	01-Feb-27
HS-INT-VT-1270	09B	Frame Ceilings & Bulkheads - Stair C1	0	0	29-Jan-27	29-Jan-27
HS-INT-VT-1140	23A	Hang Cabinet Unit Heater - Stair C1	2	2	18-Mar-27	19-Mar-27
HS-INT-VT-1090	23A	Mechanical Overhead Piping - Stair C1	2	2	22-Mar-27	23-Mar-27
HS-INT-VT-1180	23A	Install Condensate Piping - Stair C1	2	2	22-Mar-27	23-Mar-27
HS-INT-VT-1040	09E	Install Ceiling Grid - Stair C1	1	1	24-Mar-27	24-Mar-27
HS-INT-VT-1100	23A	Mechanical Piping - Testing Above Ceiling - Stair C1	2	2	24-Mar-27	25-Mar-27
HS-INT-VT-1050	21A	Sprinkler Ceiling Trim-Out - Stair C1	2	2	25-Mar-27	29-Mar-27
HS-INT-VT-1060	28A	Special Systems -Ceiling Trim out (Security,AV, ITFA) - Stair C1	2	2	25-Mar-27	29-Mar-27
HS-INT-VT-1120	26B	Install Lights - Stair C1	5	5	25-Mar-27	01-Apr-27
HS-INT-VT-1130	23A	Mechanical Ceiling Trim-Out - Stair C1	2	2	25-Mar-27	29-Mar-27
HS-INT-VT-1170	09E	Cut Ceiling Tile - Stair C1	2	2	25-Mar-27	29-Mar-27
HS-INT-VT-1110	23A	Mechanical Piping Insulation - Stair C1	2	2	29-Mar-27	30-Mar-27
HS-INT-VT-1150	00-WT	Ceiling Close-In WT Inspections - Stair C1	2	2	02-Apr-27	05-Apr-27
HS-INT-VT-1070	01A	Ceiling Close-In NCC Inspections - Stair C1	2	2	06-Apr-27	07-Apr-27
HS-INT-VT-1010	09B	Hang Drywall Ceilings - Stair C1	0	0	26-Aug-27	26-Aug-27
HS-INT-VT-1190	09B	Finish Drywall Ceilings - Stair C1	0	0	26-Aug-27	26-Aug-27
HS-INT-VT-1200	09K	Prime/1st Coat Ceiling Paint - Stair C1	5	5	26-Aug-27	01-Sep-27
HS-INT-VT-1080	09E	Drop Ceiling Tile - Stair C1	2	2	02-Sep-27	03-Sep-27
HS-INT-VT-1210	09K	Ceiling Point Ups - Second Coat Paint - Stair C1	5	5	02-Sep-27	09-Sep-27
HS-INT-VT-1230	06C	Remove Scaffolding - Stair C1	5	5	07-Sep-27	13-Sep-27
HS-INT-VT-1250	09C	Install Rubber Tile - Landings - Stair C1	5	5	14-Sep-27	20-Sep-27
HS-INT-VT-1260	09C	Install Rubber Tile - Treads - Stair C1	5	5	14-Sep-27	20-Sep-27
HS-INT-VT-1000	09C	Install Rubber Base - Stair C1	2	2	21-Sep-27	22-Sep-27

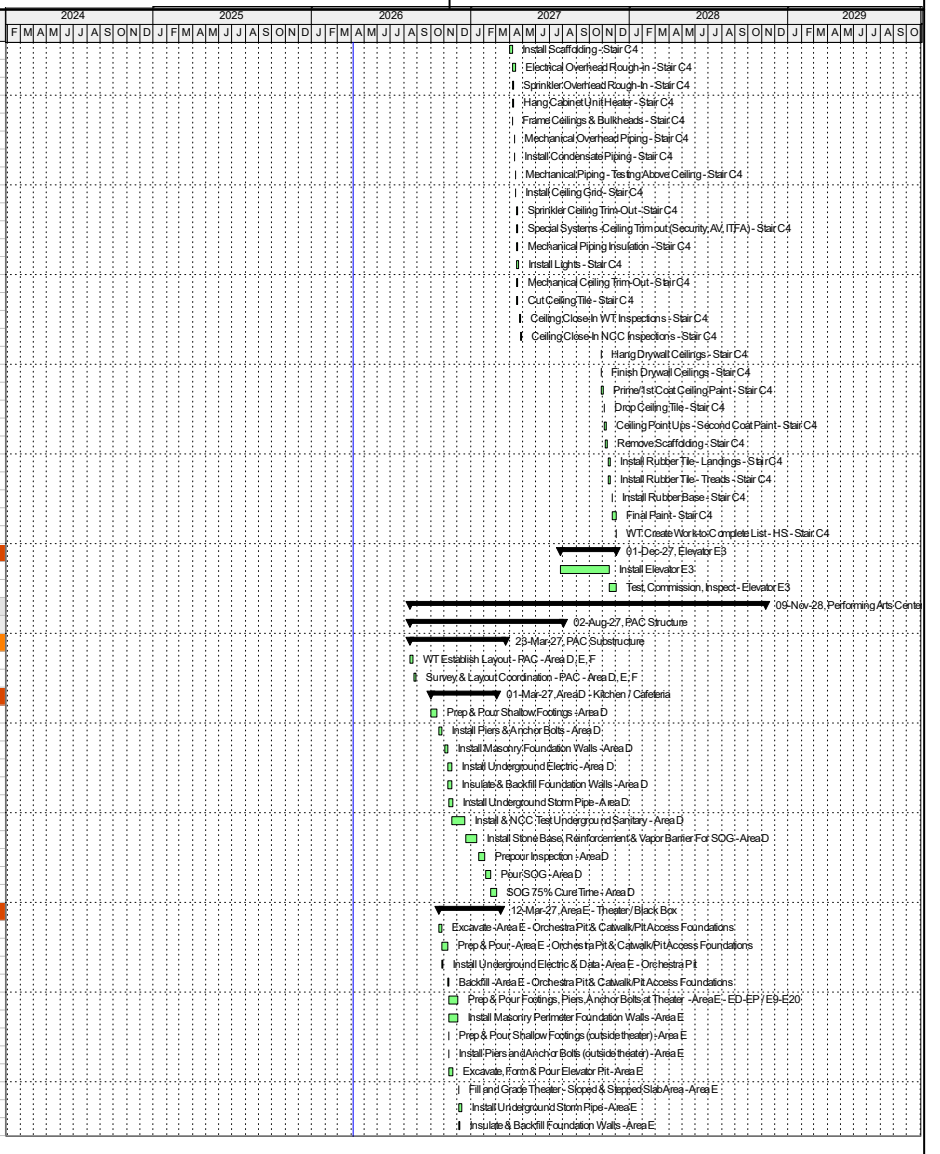
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-VT-1240	09K	Final Paint - Stair C1	5	5	23-Sep-27	29-Sep-27
HS-INT-VT-1160	00-WT	WT Create Work-to-Complete List - HS - Stair C1	1	1	30-Sep-27	30-Sep-27
Feature Stair C2			193	193	01-Mar-27	02-Dec-27
HS-INT-VT-2000	06C	Install Scaffolding - Feature Stair C2	5	5	01-Mar-27	05-Mar-27
HS-INT-VT-2010	26B	Electrical Overhead Rough-in - Feature Stair C2	5	5	08-Mar-27	12-Mar-27
HS-INT-VT-2020	21A	Sprinkler Overhead Rough-In - Feature Stair C2	5	5	08-Mar-27	12-Mar-27
HS-INT-VT-2030	23A	Hang Cabinet Unit Heater - Feature Stair C2	2	2	08-Mar-27	09-Mar-27
HS-INT-VT-2040	09B	Frame Ceilings & Bulkheads - Feature Stair C2	5	5	08-Mar-27	12-Mar-27
HS-INT-VT-2050	23A	Mechanical Overhead Piping - Feature Stair C2	2	2	10-Mar-27	11-Mar-27
HS-INT-VT-2060	23A	Install Condensate Piping - Feature Stair C2	1	1	10-Mar-27	10-Mar-27
HS-INT-VT-2080	23A	Mechanical Piping - Testing Above Ceiling - Feature Stair C2	2	2	12-Mar-27	15-Mar-27
HS-INT-VT-2070	09E	Install Ceiling Grid - Feature Stair C2	2	2	15-Mar-27	16-Mar-27
HS-INT-VT-2110	23A	Mechanical Piping Insulation - Feature Stair C2	2	2	16-Mar-27	17-Mar-27
HS-INT-VT-2090	21A	Sprinkler Ceiling Trim-Out - Feature Stair C2	2	2	17-Mar-27	18-Mar-27
HS-INT-VT-2100	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Feature Stair C2	2	2	17-Mar-27	18-Mar-27
HS-INT-VT-2120	26B	Install Lights - Feature Stair C2	5	5	17-Mar-27	23-Mar-27
HS-INT-VT-2130	23A	Mechanical Ceiling Trim-Out - Feature Stair C2	2	2	17-Mar-27	18-Mar-27
HS-INT-VT-2140	09E	Cut Ceiling Tile - Feature Stair C2	2	2	17-Mar-27	18-Mar-27
HS-INT-VT-2150	00-WT	Ceiling Close-In WT Inspections - Feature Stair C2	2	2	24-Mar-27	25-Mar-27
HS-INT-VT-2160	01A	Ceiling Close-In NCC Inspections - Feature Stair C2	2	2	29-Mar-27	30-Mar-27
HS-INT-VT-2170	09B	Hang Drywall Ceilings - Feature Stair C2	5	5	08-Oct-27	14-Oct-27
HS-INT-VT-2180	09E	Drop Ceiling Tile - Feature Stair C2	5	5	15-Oct-27	21-Oct-27
HS-INT-VT-2190	09B	Finish Drywall Ceilings - Feature Stair C2	5	5	15-Oct-27	21-Oct-27
HS-INT-VT-2210	09K	Prime/1st Coat Wall & Ceiling Paint - Feature Stair C2	5	5	22-Oct-27	28-Oct-27
HS-INT-VT-2200	06C	Remove Scaffolding - Feature Stair C2	2	2	22-Oct-27	25-Oct-27
HS-INT-VT-2220	09K	Wall & Ceiling Point Ups - Second Coat Paint - Feature Stair C2	5	5	29-Oct-27	04-Nov-27
HS-INT-VT-2240	09C	Install Rubber Tile - Treads - Feature Stair C2	10	10	05-Nov-27	18-Nov-27
HS-INT-VT-2230	09C	Install Rubber Tile - Landings - Feature Stair C2	5	5	12-Nov-27	18-Nov-27
HS-INT-VT-2250	09C	Install Rubber Base - Feature Stair C2	5	5	19-Nov-27	29-Nov-27
HS-INT-VT-2260	09K	Final Paint - Walls & Ceilings - Feature Stair C2	2	2	30-Nov-27	01-Dec-27
HS-INT-VT-2270	00-WT	WT Create Work-to-Complete List - HS - Feature Stair C2	1	1	02-Dec-27	02-Dec-27
Feature Stair C3			177	177	18-Mar-27	29-Nov-27
HS-INT-VT-3000	06C	Install Scaffolding - Feature Stair C3	5	5	18-Mar-27	24-Mar-27
HS-INT-VT-3010	26B	Electrical Overhead Rough-in - Feature Stair C3	5	5	25-Mar-27	01-Apr-27
HS-INT-VT-3020	21A	Sprinkler Overhead Rough-In - Feature Stair C3	5	5	25-Mar-27	01-Apr-27
HS-INT-VT-3030	23A	Hang Cabinet Unit Heater - Feature Stair C3	2	2	25-Mar-27	29-Mar-27
HS-INT-VT-3040	09B	Frame Ceilings & Bulkheads - Feature Stair C3	5	5	25-Mar-27	01-Apr-27
HS-INT-VT-3050	23A	Mechanical Overhead Piping - Feature Stair C3	2	2	30-Mar-27	31-Mar-27
HS-INT-VT-3060	23A	Install Condensate Piping - Feature Stair C3	1	1	30-Mar-27	30-Mar-27
HS-INT-VT-3080	23A	Mechanical Piping - Testing Above Ceiling - Feature Stair C3	2	2	01-Apr-27	02-Apr-27
HS-INT-VT-3070	09E	Install Ceiling Grid - Feature Stair C3	2	2	02-Apr-27	05-Apr-27
HS-INT-VT-3110	23A	Mechanical Piping Insulation - Feature Stair C3	2	2	05-Apr-27	06-Apr-27
HS-INT-VT-3090	21A	Sprinkler Ceiling Trim-Out - Feature Stair C3	2	2	06-Apr-27	07-Apr-27
HS-INT-VT-3100	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Feature Stair C3	2	2	06-Apr-27	07-Apr-27
HS-INT-VT-3120	26B	Install Lights - Feature Stair C3	5	5	06-Apr-27	12-Apr-27
HS-INT-VT-3130	23A	Mechanical Ceiling Trim-Out - Feature Stair C3	2	2	06-Apr-27	07-Apr-27
HS-INT-VT-3140	09E	Cut Ceiling Tile - Feature Stair C3	2	2	06-Apr-27	07-Apr-27
HS-INT-VT-3150	00-WT	Ceiling Close-In WT Inspections - Feature Stair C3	2	2	13-Apr-27	14-Apr-27
HS-INT-VT-3160	01A	Ceiling Close-In NCC Inspections - Feature Stair C3	2	2	15-Apr-27	16-Apr-27
HS-INT-VT-3170	09B	Hang Drywall Ceilings - Feature Stair C3	5	5	08-Oct-27	14-Oct-27
HS-INT-VT-3180	09E	Drop Ceiling Tile - Feature Stair C3	5	5	15-Oct-27	21-Oct-27
HS-INT-VT-3190	09B	Finish Drywall Ceilings - Feature Stair C3	5	5	15-Oct-27	21-Oct-27
HS-INT-VT-3210	09K	Prime/1st Coat Wall & Ceiling Paint - Feature Stair C3	5	5	22-Oct-27	28-Oct-27
HS-INT-VT-3200	06C	Remove Scaffolding - Feature Stair C3	2	2	22-Oct-27	25-Oct-27
HS-INT-VT-3220	09K	Wall & Ceiling Point Ups - Second Coat Paint - Feature Stair C3	5	5	29-Oct-27	04-Nov-27
HS-INT-VT-3240	09C	Install Rubber Tile - Treads - Feature Stair C3	10	10	05-Nov-27	18-Nov-27
HS-INT-VT-3230	09C	Install Rubber Tile - Landings - Feature Stair C3	5	5	12-Nov-27	18-Nov-27
HS-INT-VT-3250	09C	Install Rubber Base - Feature Stair C3	2	2	19-Nov-27	22-Nov-27
HS-INT-VT-3260	09K	Final Paint - Walls & Ceilings - Feature Stair C3	2	2	23-Nov-27	24-Nov-27
HS-INT-VT-3270	00-WT	WT Create Work-to-Complete List - HS - Feature Stair C3	1	1	29-Nov-27	29-Nov-27
Stair C4			172	172	01-Apr-27	03-Dec-27



Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

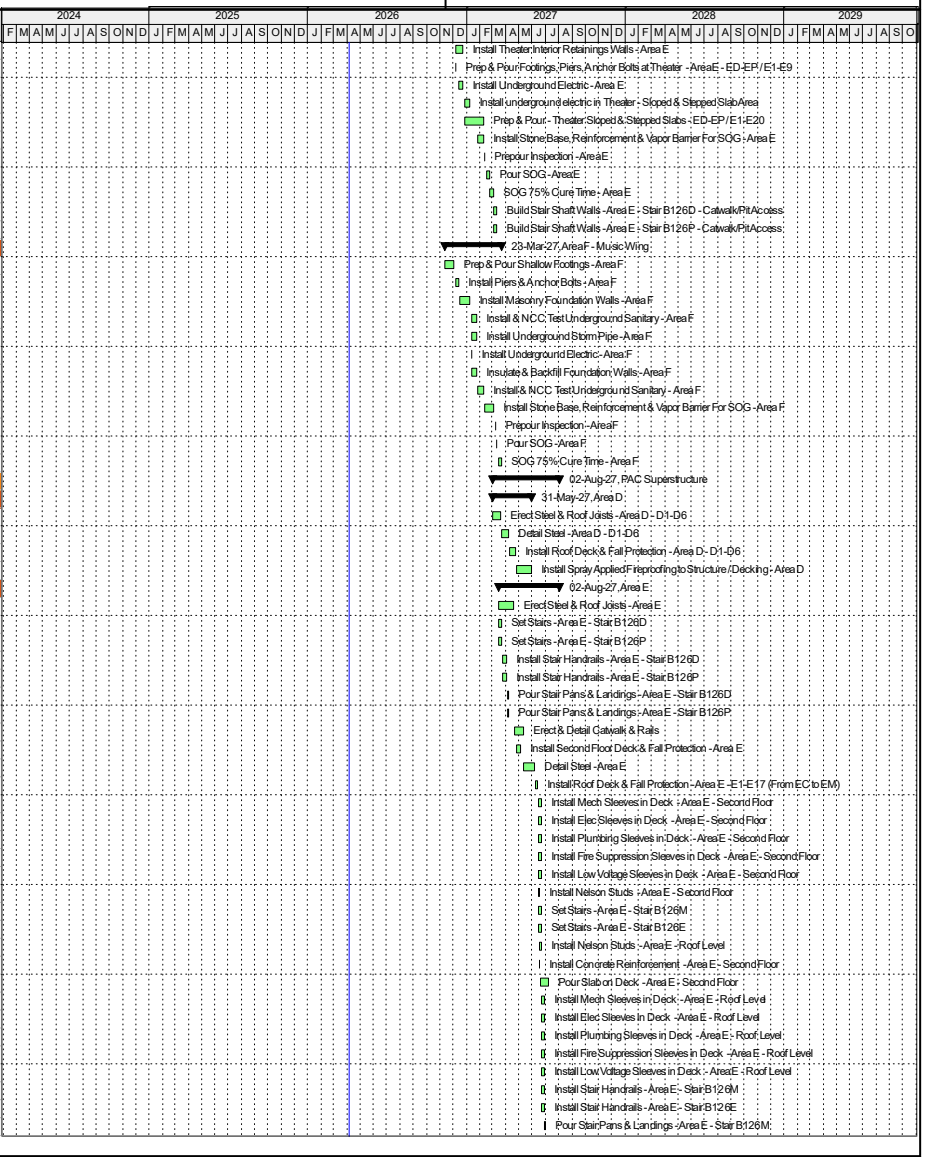
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
HS-INT-VT-4220	06C	Install Scaffolding - Stair C4	5	5	01-Apr-27	07-Apr-27
HS-INT-VT-4020	26B	Electrical Overhead Rough-in - Stair C4	5	5	08-Apr-27	14-Apr-27
HS-INT-VT-4030	21A	Sprinkler Overhead Rough-In - Stair C4	2	2	08-Apr-27	09-Apr-27
HS-INT-VT-4140	23A	Hang Cabinet Unit Heater - Stair C4	2	2	08-Apr-27	09-Apr-27
HS-INT-VT-4270	09B	Frame Ceilings & Bulkheads - Stair C4	0	0	08-Apr-27	08-Apr-27
HS-INT-VT-4090	23A	Mechanical Overhead Piping - Stair C4	2	2	12-Apr-27	13-Apr-27
HS-INT-VT-4180	23A	Install Condensate Piping - Stair C4	2	2	12-Apr-27	13-Apr-27
HS-INT-VT-4100	23A	Mechanical Piping - Testing Above Ceiling - Stair C4	2	2	14-Apr-27	15-Apr-27
HS-INT-VT-4040	09E	Install Ceiling Grid - Stair C4	1	1	15-Apr-27	15-Apr-27
HS-INT-VT-4050	21A	Sprinkler Ceiling Trim-Out - Stair C4	2	2	16-Apr-27	19-Apr-27
HS-INT-VT-4060	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Stair C4	2	2	16-Apr-27	19-Apr-27
HS-INT-VT-4110	23A	Mechanical Piping Insulation - Stair C4	2	2	16-Apr-27	19-Apr-27
HS-INT-VT-4120	26B	Install Lights - Stair C4	5	5	16-Apr-27	22-Apr-27
HS-INT-VT-4130	23A	Mechanical Ceiling Trim-Out - Stair C4	2	2	16-Apr-27	19-Apr-27
HS-INT-VT-4170	09E	Cut Ceiling Tile - Stair C4	2	2	16-Apr-27	19-Apr-27
HS-INT-VT-4150	00-WT	Ceiling Close-In WT Inspections - Stair C4	2	2	23-Apr-27	26-Apr-27
HS-INT-VT-4070	01A	Ceiling Close-In NCC Inspections - Stair C4	2	2	27-Apr-27	28-Apr-27
HS-INT-VT-4010	09B	Hang Drywall Ceilings - Stair C4	0	0	28-Oct-27	28-Oct-27
HS-INT-VT-4190	09B	Finish Drywall Ceilings - Stair C4	0	0	28-Oct-27	28-Oct-27
HS-INT-VT-4200	09K	Prime/1st Coat Ceiling Paint - Stair C4	5	5	28-Oct-27	03-Nov-27
HS-INT-VT-4080	09E	Drop Ceiling Tile - Stair C4	2	2	04-Nov-27	05-Nov-27
HS-INT-VT-4210	09K	Ceiling Point Ups - Second Coat Paint - Stair C4	5	5	04-Nov-27	10-Nov-27
HS-INT-VT-4230	06C	Remove Scaffolding - Stair C4	5	5	08-Nov-27	12-Nov-27
HS-INT-VT-4250	09C	Install Rubber Tile - Landings - Stair C4	5	5	15-Nov-27	19-Nov-27
HS-INT-VT-4260	09C	Install Rubber Tile - Treads - Stair C4	5	5	15-Nov-27	19-Nov-27
HS-INT-VT-4000	09C	Install Rubber Base - Stair C4	2	2	22-Nov-27	23-Nov-27
HS-INT-VT-4240	09K	Final Paint - Stair C4	5	5	24-Nov-27	02-Dec-27
HS-INT-VT-4160	00-WT	WT Create Work-to-Complete List - HS - Stair C4	1	1	03-Dec-27	03-Dec-27
Elevator E3			90	90	26-Jul-27	01-Dec-27
HS-INT-VT-5000	14A	Install Elevator E3	80	80	26-Jul-27	15-Nov-27
HS-INT-VT-5010	01A	Test, Commission, Inspect - Elevator E3	10	10	16-Nov-27	01-Dec-27
Performing Arts Center (PAC)			565	565	14-Aug-26	09-Nov-28
PAC Structure			241	241	14-Aug-26	02-Aug-27
PAC Substructure			111	111	14-Aug-26	23-Mar-27
PAC-STR-1000	01B	WT Establish Layout - PAC - Area D, E, F	5	5	14-Aug-26	21-Aug-26
PAC-STR-1010	01B	Survey & Layout Coordination - PAC - Area D, E, F	5	5	24-Aug-26	28-Aug-26
Area D - Kitchen / Cafeteria			70	70	01-Oct-26	01-Mar-27
PAC-STR-1020	03A	Prep & Pour Shallow Footings - Area D	10	10	01-Oct-26	16-Oct-26
PAC-STR-1040	03A	Install Piers & Anchor Bolts - Area D	5	5	19-Oct-26	26-Oct-26
PAC-STR-1070	04A	Install Masonry Foundation Walls - Area D	5	5	03-Nov-26	09-Nov-26
PAC-STR-1140	26B	Install Underground Electric - Area D	5	5	10-Nov-26	18-Nov-26
PAC-STR-1100	31A	Insulate & Backfill Foundation Walls - Area D	5	5	10-Nov-26	18-Nov-26
PAC-STR-1130	22A	Install Underground Storm Pipe - Area D	5	5	13-Nov-26	20-Nov-26
PAC-STR-1120	22A	Install & NCC Test Underground Sanitary - Area D	15	15	19-Nov-26	18-Dec-26
PAC-STR-1250	03A	Install Stone Base, Reinforcement & Vapor Barrier For SOG - Area D	10	10	21-Dec-26	15-Jan-27
PAC-STR-1260	00-WT	Prepour Inspection - Area D	5	5	19-Jan-27	02-Feb-27
PAC-STR-1270	03A	Pour SOG - Area D	5	5	04-Feb-27	16-Feb-27
PAC-STR-1280	03A	SOG 75% Cure Time - Area D	5	5	17-Feb-27	01-Mar-27
Area E - Theater / Black Box			67	67	19-Oct-26	12-Mar-27
PAC-STR-1030	03A	Excavate - Area E - Orchestra Pit & Catwalk/Pit Access Foundations	5	5	19-Oct-26	26-Oct-26
PAC-STR-1050	03A	Prep & Pour - Area E - Orchestra Pit & Catwalk/Pit Access Foundations	10	10	27-Oct-26	09-Nov-26
PAC-STR-1060	26B	Install Underground Electric & Data - Area E - Orchestra Pit	2	2	27-Oct-26	28-Oct-26
PAC-STR-1080	03A	Backfill - Area E - Orchestra Pit & Catwalk/Pit Access Foundations	2	2	10-Nov-26	12-Nov-26
PAC-STR-1110	03A	Prep & Pour Footings, Piers, Anchor Bolts at Theater - Area E - ED-EP / E9-E20	10	10	13-Nov-26	02-Dec-26
PAC-STR-1240	04A	Install Masonry Perimeter Foundation Walls - Area E	10	10	13-Nov-26	02-Dec-26
PAC-STR-1090	03A	Prep & Pour Shallow Footings (outside theater) - Area E	0	0	13-Nov-26	13-Nov-26
PAC-STR-1170	03A	Install Piers and Anchor Bolts (outside theater) - Area E	0	0	13-Nov-26	13-Nov-26
PAC-STR-2090	03A	Excavate, Form & Pour Elevator Pit - Area E	5	5	13-Nov-26	20-Nov-26
PAC-STR-1160	03A	Fill and Grade Theater - Sloped & Stepped Slab Area - Area E	1	1	04-Dec-26	04-Dec-26
PAC-STR-1320	22A	Install Underground Storm Pipe - Area E	5	5	04-Dec-26	11-Dec-26
PAC-STR-1290	31A	Insulate & Backfill Foundation Walls - Area E	2	2	04-Dec-26	07-Dec-26



Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-STR-1190	04A	Install Theater Interior Retainings Walls - Area E	10	10	07-Dec-26	23-Dec-26
PAC-STR-1200	03A	Prep & Pour Footings, Piers, Anchor Bolts at Theater -AreaE - ED-EP / E1-E9	0	0	07-Dec-26	07-Dec-26
PAC-STR-1370	26B	Install Underground Electric - Area E	5	5	14-Dec-26	22-Dec-26
PAC-STR-1220	26B	Install underground electric in Theater - Sloped & Stepped Slab Area	5	5	28-Dec-26	07-Jan-27
PAC-STR-1230	03A	Prep & Pour - Theater Sloped & Stepped Slabs - ED-EP / E1-E20	15	15	28-Dec-26	10-Feb-27
PAC-STR-1400	03A	Install Stone Base, Reinforcement & Vapor Barrier For SOG - Area E	5	5	27-Jan-27	10-Feb-27
PAC-STR-1420	00-WT	Prepour Inspection - Area E	1	1	11-Feb-27	11-Feb-27
PAC-STR-1430	03A	Pour SOG - Area E	2	2	17-Feb-27	23-Feb-27
PAC-STR-1450	03A	SOG 75% Cure Time - Area E	5	5	24-Feb-27	03-Mar-27
PAC-STR-1470	04A	Build Stair Shaft Walls - Area E - Stair B126D - Catwalk/PitAccess	5	5	05-Mar-27	12-Mar-27
PAC-STR-1480	04A	Build Stair Shaft Walls - Area E - Stair B126P - Catwalk/PitAccess	5	5	05-Mar-27	12-Mar-27
Area F - Music Wing			55	55	13-Nov-26	23-Mar-27
PAC-STR-1150	03A	Prep & Pour Shallow Footings - Area F	10	10	13-Nov-26	02-Dec-26
PAC-STR-1180	03A	Install Piers & Anchor Bolts - Area F	5	5	07-Dec-26	14-Dec-26
PAC-STR-1210	04A	Install Masonry Foundation Walls - Area F	10	10	16-Dec-26	07-Jan-27
PAC-STR-1310	22A	Install & NCC Test Underground Sanitary - Area F	5	5	13-Jan-27	25-Jan-27
PAC-STR-1360	22A	Install Underground Storm Pipe - Area F	5	5	13-Jan-27	25-Jan-27
PAC-STR-1390	26B	Install Underground Electric - Area F	1	1	13-Jan-27	13-Jan-27
PAC-STR-1330	31A	Insulate & Backfill Foundation Walls - Area F	5	5	13-Jan-27	25-Jan-27
PAC-STR-1350	22A	Install & NCC Test Underground Sanitary - Area F	5	5	27-Jan-27	10-Feb-27
PAC-STR-1410	03A	Install Stone Base, Reinforcement & Vapor Barrier For SOG - Area F	10	10	11-Feb-27	05-Mar-27
PAC-STR-1460	00-WT	Prepour Inspection - Area F	2	2	08-Mar-27	09-Mar-27
PAC-STR-1490	03A	Pour SOG - Area F	2	2	11-Mar-27	12-Mar-27
PAC-STR-1520	03A	SOG 75% Cure Time - Area F	5	5	15-Mar-27	23-Mar-27
PAC Superstructure			107	107	02-Mar-27	02-Aug-27
Area D			50	50	02-Mar-27	31-May-27
PAC-STR-1300	05B	Erect Steel & Roof Joists - Area D - D1-D6	10	10	02-Mar-27	19-Mar-27
PAC-STR-1440	05B	Detail Steel - Area D - D1-D6	10	10	22-Mar-27	08-Apr-27
PAC-STR-1510	05B	Install Roof Deck & Fall Protection - Area D - D1-D6	10	10	09-Apr-27	23-Apr-27
PAC-STR-1540	07H	Install Spray Applied Fireproofing to Structure / Decking - Area D	20	20	26-Apr-27	31-May-27
Area E			98	98	15-Mar-27	02-Aug-27
PAC-STR-1530	05B	Erect Steel & Roof Joists - Area E	20	20	15-Mar-27	20-Apr-27
PAC-STR-1970	05C	Set Stairs - Area E - Stair B126D	5	5	15-Mar-27	23-Mar-27
PAC-STR-1990	05C	Set Stairs - Area E - Stair B126P	5	5	15-Mar-27	23-Mar-27
PAC-STR-2050	05C	Install Stair Handrails - Area E - Stair B126D	5	5	25-Mar-27	02-Apr-27
PAC-STR-2060	05C	Install Stair Handrails - Area E - Stair B126P	5	5	25-Mar-27	02-Apr-27
PAC-STR-1980	03A	Pour Stair Pans & Landings - Area E - Stair B126D	2	2	05-Apr-27	07-Apr-27
PAC-STR-2000	03A	Pour Stair Pans & Landings - Area E - Stair B126P	2	2	05-Apr-27	07-Apr-27
PAC-STR-1550	05B	Erect & Detail Catwalk & Rails	15	15	21-Apr-27	11-May-27
PAC-STR-1610	05B	Install Second Floor Deck & Fall Protection - Area E	5	5	26-Apr-27	05-May-27
PAC-STR-1580	05B	Detail Steel - Area E	15	15	12-May-27	07-Jun-27
PAC-STR-1650	05B	Install Roof Deck & Fall Protection - Area E - E1-E17 (From EC to EM)	5	5	08-Jun-27	14-Jun-27
PAC-STR-1700	23A	Install Mech Sleeves in Deck - Area E - Second Floor	5	5	15-Jun-27	21-Jun-27
PAC-STR-1710	26B	Install Elec Sleeves in Deck - Area E - Second Floor	5	5	15-Jun-27	21-Jun-27
PAC-STR-1720	22A	Install Plumbing Sleeves in Deck - Area E - Second Floor	5	5	15-Jun-27	21-Jun-27
PAC-STR-1730	21A	Install Fire Suppression Sleeves in Deck - Area E - Second Floor	5	5	15-Jun-27	21-Jun-27
PAC-STR-1740	26C	Install Low Voltage Sleeves in Deck - Area E - Second Floor	5	5	15-Jun-27	21-Jun-27
PAC-STR-1800	05B	Install Nelson Studs - Area E - Second Floor	3	3	15-Jun-27	17-Jun-27
PAC-STR-2010	05C	Set Stairs - Area E - Stair B126M	5	5	15-Jun-27	21-Jun-27
PAC-STR-2030	05C	Set Stairs - Area E - Stair B126E	5	5	15-Jun-27	21-Jun-27
PAC-STR-1860	05B	Install Nelson Studs - Area E - Roof Level	3	3	18-Jun-27	22-Jun-27
PAC-STR-1870	03A	Install Concrete Reinforcement - Area E - Second Floor	1	1	18-Jun-27	18-Jun-27
PAC-STR-1900	03A	Pour Slab on Deck - Area E - Second Floor	10	10	21-Jun-27	07-Jul-27
PAC-STR-1750	23A	Install Mech Sleeves in Deck - Area E - Roof Level	5	5	22-Jun-27	29-Jun-27
PAC-STR-1760	26B	Install Elec Sleeves in Deck - Area E - Roof Level	5	5	22-Jun-27	29-Jun-27
PAC-STR-1770	22A	Install Plumbing Sleeves in Deck - Area E - Roof Level	5	5	22-Jun-27	29-Jun-27
PAC-STR-1780	21A	Install Fire Suppression Sleeves in Deck - Area E - Roof Level	5	5	22-Jun-27	29-Jun-27
PAC-STR-1790	26C	Install Low Voltage Sleeves in Deck - Area E - Roof Level	5	5	22-Jun-27	29-Jun-27
PAC-STR-2070	05C	Install Stair Handrails - Area E - Stair B126M	5	5	22-Jun-27	29-Jun-27
PAC-STR-2080	05C	Install Stair Handrails - Area E - Stair B126E	5	5	22-Jun-27	29-Jun-27
PAC-STR-2020	03A	Pour Stair Pans & Landings - Area E - Stair B126M	2	2	30-Jun-27	01-Jul-27



Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-STR-2040	03A	Pour Stair Pans & Landings - Area E - Stair B126E	2	2	30-Jun-27	01-Jul-27
PAC-STR-2110	07H	Install Spray Applied Fireproofing to Structure / Decking - Area E	20	20	30-Jun-27	02-Aug-27
Area F			25	25	12-May-27	21-Jun-27
PAC-STR-1590	05B	Erect Steel & Roof Joists - Area F	5	5	12-May-27	20-May-27
PAC-STR-1630	05B	Detail Steel - Area F	10	10	21-May-27	07-Jun-27
PAC-STR-1680	05B	Install Roof Deck & Fall Protection - Area F	5	5	08-Jun-27	14-Jun-27
PAC-STR-1810	23A	Install Mech Sleeves in Deck - Area F - Roof Level	5	5	15-Jun-27	21-Jun-27
PAC-STR-1820	26B	Install Elec Sleeves in Deck - Area F - Roof Level	5	5	15-Jun-27	21-Jun-27
PAC-STR-1830	22A	Install Plumbing Sleeves in Deck - Area F - Roof Level	5	5	15-Jun-27	21-Jun-27
PAC-STR-1840	21A	Install Fire Suppression Sleeves in Deck - Area F - Roof Level	5	5	15-Jun-27	21-Jun-27
PAC-STR-1850	26C	Install Low Voltage Sleeves in Deck - Area F - Roof Level	5	5	15-Jun-27	21-Jun-27
PAC Exterior			199	199	26-Apr-27	08-Feb-28
PAC-EXT-9000	00-WT	WT Create Work-to-Complete List - PAC Exteriors / Roofing	10	10	25-Jan-28	07-Feb-28
PAC Elevations			154	154	26-Apr-27	20-Jan-28
Elevation PAC 1 - PAC Entry / Loading North (B1/A221, C5/A222)			64	64	26-Apr-27	10-Aug-27
PAC-EXT-1050	09B	Layout Wall	2	2	26-Apr-27	28-Apr-27
PAC-EXT-3370	09B	Install CFMF Stud Framing	10	10	30-Apr-27	17-May-27
PAC-EXT-3520	09B	Install Gyp Sheathing	10	10	19-May-27	03-Jun-27
PAC-EXT-4330	04A	Install Base Course Of Brick And Truwall Flashing	5	5	04-Jun-27	10-Jun-27
PAC-EXT-3670	09B	Install Steel Head & Sill Support Angles	0	0	04-Jun-27	04-Jun-27
PAC-EXT-3680	06C	Install Window Blocking	0	0	04-Jun-27	04-Jun-27
PAC-EXT-3690	04A	Install Brick Ties & Flashing	5	5	04-Jun-27	10-Jun-27
PAC-EXT-3940	07A	Spray Insulation	2	2	11-Jun-27	14-Jun-27
PAC-EXT-4020	08A	Install Windows	0	0	15-Jun-27	15-Jun-27
PAC-EXT-4380	04A	Install Masonry Veneer, Sills & Headers	12	12	15-Jun-27	01-Jul-27
PAC-EXT-4430	07G	Caulk Brick	2	2	05-Jul-27	07-Jul-27
PAC-EXT-4440	09B	Install Canopy And Soffit Framing	5	5	05-Jul-27	12-Jul-27
PAC-EXT-4450	08A	Install Exterior Entrance Storefront & Door System	5	5	05-Jul-27	12-Jul-27
PAC-EXT-4560	26B	Rough In Canopy Lights	2	2	13-Jul-27	14-Jul-27
PAC-EXT-4570	07G	Caulk Windows	2	2	13-Jul-27	14-Jul-27
PAC-EXT-4650	09B	Install Canopy Sheathing	5	5	16-Jul-27	23-Jul-27
PAC-EXT-4700	07A	Install Canopy AVB	1	1	26-Jul-27	26-Jul-27
PAC-EXT-4770	07C	Install Metal Panel Soffit & Fascia	10	10	27-Jul-27	10-Aug-27
Elevation PAC 2 - PAC Theater North / South / West (A4/C1/C4/A224)			64	64	27-Aug-27	17-Dec-27
PAC-EXT-1030	09B	Install CFMF Stud Wall Framing PAC-2	15	15	27-Aug-27	20-Sep-27
PAC-EXT-3350	09B	Install Base of Wall Framing, Insulation & Sheathing	5	5	22-Sep-27	28-Sep-27
PAC-EXT-3500	07C	Install Base Thru Wall Flashing (2-piece system)	5	5	29-Sep-27	07-Oct-27
PAC-EXT-3650	09B	Install Gyp Sheathing	10	10	08-Oct-27	25-Oct-27
PAC-EXT-3920	06C	Install Blocking	5	5	26-Oct-27	01-Nov-27
PAC-EXT-4000	07C	Install Flashing	2	2	02-Nov-27	03-Nov-27
PAC-EXT-4090	07A	Install AVB System	2	2	05-Nov-27	08-Nov-27
PAC-EXT-4150	07C	Install Z-Girts & Metal Panel Support System	20	20	09-Nov-27	16-Dec-27
PAC-EXT-4210	07C	Install Mineral Wool Insulation	0	0	17-Dec-27	17-Dec-27
PAC-EXT-4220	07C	Install Metal Panels	0	0	17-Dec-27	17-Dec-27
Elevation PAC 3 - PAC Theater Stage (A1/A4/C1/C4/A222)			77	77	04-Aug-27	14-Dec-27
PAC-EXT-1040	09B	Install CFMF Stud Wall Framing PAC-3	15	15	04-Aug-27	26-Aug-27
PAC-EXT-3360	09B	Install Base of Wall Framing, Insulation & Sheathing	5	5	27-Aug-27	02-Sep-27
PAC-EXT-3510	07C	Install Base Thru Wall Flashing (2-piece system)	5	5	03-Sep-27	10-Sep-27
PAC-EXT-3660	09B	Install Gyp Sheathing	10	10	13-Sep-27	28-Sep-27
PAC-EXT-3930	06C	Install Blocking	5	5	29-Sep-27	07-Oct-27
PAC-EXT-4010	07C	Install Flashing	5	5	08-Oct-27	15-Oct-27
PAC-EXT-4100	07A	Install AVB System	2	2	18-Oct-27	20-Oct-27
PAC-EXT-4160	07C	Install Z-Girts & Metal Panel Support System	30	30	21-Oct-27	10-Dec-27
PAC-EXT-4230	07C	Install Mineral Wool Insulation	0	0	14-Dec-27	14-Dec-27
PAC-EXT-4240	07C	Install Metal Panels	0	0	14-Dec-27	14-Dec-27
Elevation PAC 4 - PAC Entry (D1/A221, A6/A223)			68	68	16-Jun-27	06-Oct-27
PAC-EXT-1060	09B	Layout Wall	2	2	16-Jun-27	17-Jun-27
PAC-EXT-3380	09B	Install CFMF Stud Framing PAC-4	10	10	23-Jun-27	09-Jul-27
PAC-EXT-3530	09B	Install Gyp Sheathing	5	5	12-Jul-27	19-Jul-27
PAC-EXT-4340	04A	Install Base Course Of Brick And Truwall Flashing	5	5	21-Jul-27	27-Jul-27
PAC-EXT-3700	09B	Install Steel Head & Sill Support Angles	0	0	21-Jul-27	21-Jul-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-EXT-3710	06C	Install Window Blocking	2	2	21-Jul-27	22-Jul-27
PAC-EXT-3720	04A	Install Brick Ties & Flashing	5	5	21-Jul-27	27-Jul-27
PAC-EXT-3950	07A	Spray Insulation	2	2	28-Jul-27	29-Jul-27
PAC-EXT-4030	08A	Install Windows	0	0	30-Jul-27	30-Jul-27
PAC-EXT-4390	04A	Install Masonry Veneer, Sills & Headers	12	12	30-Jul-27	19-Aug-27
PAC-EXT-4460	07G	Caulk Brick	2	2	20-Aug-27	23-Aug-27
PAC-EXT-4470	09B	Install Canopy And Soffit Framing	10	10	20-Aug-27	02-Sep-27
PAC-EXT-4480	08A	Install Exterior Entrance Storefront & Door System	10	10	20-Aug-27	02-Sep-27
PAC-EXT-4580	26B	Rough In Canopy Lights	2	2	03-Sep-27	06-Sep-27
PAC-EXT-4590	07G	Caulk Windows	5	5	03-Sep-27	10-Sep-27
PAC-EXT-4660	09B	Install Canopy Sheathing	5	5	08-Sep-27	14-Sep-27
PAC-EXT-4710	07A	Install Canopy AVB	2	2	15-Sep-27	17-Sep-27
PAC-EXT-4780	07C	Install Metal Panel Soffit & Fascia	10	10	20-Sep-27	06-Oct-27
Elevation PAC 5 - PAC Clerestory West (C2/A222)			46	46	27-Aug-27	10-Nov-27
PAC-EXT-1070	09B	Layout Wall	1	1	27-Aug-27	27-Aug-27
PAC-EXT-3390	09B	Install CFMF Stud Framing PAC-5	10	10	30-Aug-27	13-Sep-27
PAC-EXT-3540	09B	Install Gyp Sheathing	5	5	14-Sep-27	22-Sep-27
PAC-EXT-4350	04A	Install Base Course Of Brick And Truwall Flashing	2	2	23-Sep-27	24-Sep-27
PAC-EXT-3730	09B	Install Steel Head & Sill Support Angles	2	2	23-Sep-27	24-Sep-27
PAC-EXT-3740	06C	Install Window Blocking	2	2	23-Sep-27	24-Sep-27
PAC-EXT-3750	04A	Install Brick Ties & Flashing	1	1	23-Sep-27	23-Sep-27
PAC-EXT-3960	07A	Spray Insulation	1	1	27-Sep-27	27-Sep-27
PAC-EXT-4040	08A	Install Windows	5	5	28-Sep-27	06-Oct-27
PAC-EXT-4400	04A	Install Masonry Veneer, Sills & Headers	5	5	28-Sep-27	06-Oct-27
PAC-EXT-4490	07G	Caulk Brick	2	2	07-Oct-27	08-Oct-27
PAC-EXT-4500	09B	Install Canopy And Soffit Framing	10	10	07-Oct-27	22-Oct-27
PAC-EXT-4510	08A	Install Exterior Entrance Storefront & Door System	0	0	07-Oct-27	07-Oct-27
PAC-EXT-4610	07G	Caulk Windows	5	5	07-Oct-27	13-Oct-27
PAC-EXT-4600	26B	Rough In Canopy Lights	0	0	25-Oct-27	25-Oct-27
PAC-EXT-4670	09B	Install Canopy Sheathing	5	5	25-Oct-27	29-Oct-27
PAC-EXT-4720	07A	Install Canopy AVB	2	2	01-Nov-27	02-Nov-27
PAC-EXT-4790	07C	Install Metal Panel Soffit & Fascia	5	5	03-Nov-27	10-Nov-27
Elevation PAC 5a - Rooftop Partition Walls			11	11	30-Aug-27	14-Sep-27
PAC-EXT-1100	09B	Frame Rooftop Partition Knee Walls PAC-5a	5	5	30-Aug-27	03-Sep-27
PAC-EXT-3420	09B	Insulate Walls	2	2	06-Sep-27	08-Sep-27
PAC-EXT-3570	09B	Install Plywood Sheathing	2	2	09-Sep-27	10-Sep-27
PAC-EXT-3830	06C	Install Blocking	2	2	13-Sep-27	14-Sep-27
Elevation PAC 6 & 6a - HS Cafeteria Clerestory (E2/E5/D5/A221)			79	79	30-Aug-27	20-Jan-28
PAC-EXT-1140	09B	Install CFMF Stud Wall Framing PAC 6 & 6a	10	10	30-Aug-27	13-Sep-27
PAC-EXT-3460	09B	Install Fascia Framing At Perimeter Of Roof	10	10	14-Sep-27	29-Sep-27
PAC-EXT-3470	09B	Install Base Of Wall Framing, Insulation & Sheathing	5	5	14-Sep-27	22-Sep-27
PAC-EXT-3610	07C	Install Base Thru Wall Flashing (2-Piece System)	5	5	23-Sep-27	29-Sep-27
PAC-EXT-3620	09B	Install Gyp Sheathing	5	5	01-Oct-27	08-Oct-27
PAC-EXT-3870	06C	Install Window Blocking	5	5	11-Oct-27	18-Oct-27
PAC-EXT-3990	07C	Install Flashing	5	5	20-Oct-27	26-Oct-27
PAC-EXT-4080	07A	Install AVB System	2	2	27-Oct-27	28-Oct-27
PAC-EXT-4260	08A	Install Storefront Windows	10	10	29-Oct-27	12-Nov-27
PAC-EXT-4140	07C	Install Z-Girts & Fiber Cement Panel Support System	15	15	15-Nov-27	14-Dec-27
PAC-EXT-4300	08A	Caulk Windows	5	5	15-Nov-27	22-Nov-27
PAC-EXT-4190	07C	Install Mineral Wool Insulation	0	0	16-Dec-27	16-Dec-27
PAC-EXT-4200	07C	Install Fiber Cement Panels	0	0	16-Dec-27	16-Dec-27
PAC-EXT-4270	09B	Install Soffit Framing & Sheathing	10	10	16-Dec-27	31-Dec-27
PAC-EXT-4290	07C	Field Measure Soffit & Fascia Metal Panels	2	2	03-Jan-28	04-Jan-28
PAC-EXT-4320	07C	Install Soffit & Fascia Panels	5	5	06-Jan-28	20-Jan-28
Elevation PAC 7 - PAC Band / Chorus (A1/D6/A223, F4/A224, E6/A233)			86	86	18-Jun-27	08-Nov-27
PAC-EXT-1080	09B	Layout Wall	5	5	18-Jun-27	25-Jun-27
PAC-EXT-3400	09B	Install CFMF Stud Framing PAC 7	10	10	12-Jul-27	27-Jul-27
PAC-EXT-3550	09B	Install Gyp Sheathing	10	10	21-Jul-27	04-Aug-27
PAC-EXT-4360	04A	Install Base Course Of Brick And Truwall Flashing	10	10	05-Aug-27	20-Aug-27
PAC-EXT-3760	09B	Install Steel Head & Sill Support Angles	10	10	05-Aug-27	20-Aug-27
PAC-EXT-3770	06C	Install Window Blocking	10	10	05-Aug-27	20-Aug-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-EXT-3780	04A	Install Brick Ties & Flashing	5	5	05-Aug-27	11-Aug-27
PAC-EXT-3970	07A	Spray Insulation	5	5	23-Aug-27	27-Aug-27
PAC-EXT-4050	08A	Install Windows	20	20	30-Aug-27	29-Sep-27
PAC-EXT-4410	04A	Install Masonry Veneer, Sills & Headers	25	25	30-Aug-27	08-Oct-27
PAC-EXT-4520	07G	Caulk Brick	5	5	11-Oct-27	18-Oct-27
PAC-EXT-4530	09B	Install Canopy And Soffit Framing	5	5	11-Oct-27	18-Oct-27
PAC-EXT-4540	08A	Install Exterior Entrance Storefront & Door System	5	5	11-Oct-27	18-Oct-27
PAC-EXT-4620	26B	Rough In Canopy Lights	2	2	20-Oct-27	21-Oct-27
PAC-EXT-4630	07G	Caulk Windows	5	5	20-Oct-27	26-Oct-27
PAC-EXT-4680	09B	Install Canopy Sheathing	5	5	22-Oct-27	28-Oct-27
PAC-EXT-4730	07A	Install Canopy AVB	1	1	29-Oct-27	29-Oct-27
PAC-EXT-4800	07C	Install Metal Panel Soffit & Fascia	5	5	01-Nov-27	08-Nov-27
Elevation PAC 8 - HS/PAC Courtyard			92	92	28-Jun-27	24-Nov-27
PAC-EXT-1150	09B	Layout Wall	2	2	28-Jun-27	29-Jun-27
PAC-EXT-3480	09B	Install CFMF Stud Framing PAC-8	10	10	28-Jul-27	11-Aug-27
PAC-EXT-3630	09B	Install Gyp Sheathing	10	10	05-Aug-27	20-Aug-27
PAC-EXT-3880	04A	Install Base Course Of Masonry And Truwall Flashing	5	5	23-Aug-27	27-Aug-27
PAC-EXT-3890	09B	Install Steel Head And Sill Support Angles	10	10	23-Aug-27	03-Sep-27
PAC-EXT-3900	06C	Install Window Blocking	10	10	23-Aug-27	03-Sep-27
PAC-EXT-4370	04A	Install Brick Ties	2	2	23-Aug-27	24-Aug-27
PAC-EXT-4420	07A	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	2	2	06-Sep-27	08-Sep-27
PAC-EXT-4550	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	2	2	09-Sep-27	10-Sep-27
PAC-EXT-4640	08A	Install Windows	10	10	13-Sep-27	28-Sep-27
PAC-EXT-4690	04A	Install Masonry Veneer And Cast Stone Headers / Sills	12	12	11-Oct-27	28-Oct-27
PAC-EXT-4740	07G	Caulk Brick	2	2	29-Oct-27	01-Nov-27
PAC-EXT-4750	06C	Install Z-Girts & Fiber Cement Panel Support System	12	12	29-Oct-27	17-Nov-27
PAC-EXT-4760	08A	Install Exterior Entrance Storefront & Door System	2	2	29-Oct-27	01-Nov-27
PAC-EXT-4810	06C	Install Mineral Wool Insulation	0	0	18-Nov-27	18-Nov-27
PAC-EXT-4820	06C	Install Fiber Cement Panels	0	0	18-Nov-27	18-Nov-27
PAC-EXT-4830	08A	Caulk Windows	5	5	18-Nov-27	24-Nov-27
Elevation PAC 8a - Rooftop Partition Walls			6	6	13-Aug-27	23-Aug-27
PAC-EXT-1110	09B	Frame Rooftop Partition Knee Walls PAC-8a	2	2	13-Aug-27	16-Aug-27
PAC-EXT-3430	09B	Insulate Walls	1	1	18-Aug-27	18-Aug-27
PAC-EXT-3580	09B	Install Plywood Sheathing	2	2	19-Aug-27	20-Aug-27
PAC-EXT-3840	06C	Install Blocking	1	1	23-Aug-27	23-Aug-27
Elevation PAC 9 - Media Center Rooftop Partition Walls			6	6	22-Sep-27	29-Sep-27
PAC-EXT-1120	09B	Frame Rooftop Partition Knee Walls PAC-9	2	2	22-Sep-27	23-Sep-27
PAC-EXT-3440	09B	Insulate Walls	1	1	24-Sep-27	24-Sep-27
PAC-EXT-3590	09B	Install Plywood Sheathing	2	2	27-Sep-27	28-Sep-27
PAC-EXT-3850	06C	Install Blocking	1	1	29-Sep-27	29-Sep-27
Elevation PAC 10 - Media Center Rooftop Partition Walls			6	6	23-Jun-27	01-Jul-27
PAC-EXT-1130	09B	Frame Rooftop Partition Knee Walls PAC-10	2	2	23-Jun-27	25-Jun-27
PAC-EXT-3450	09B	Insulate Walls	1	1	28-Jun-27	28-Jun-27
PAC-EXT-3600	09B	Install Plywood Sheathing	2	2	29-Jun-27	30-Jun-27
PAC-EXT-3860	06C	Install Blocking	1	1	01-Jul-27	01-Jul-27
Elevation PAC 11 - PAC Front Entry (F6/A221)			47	47	28-Jun-27	10-Sep-27
PAC-EXT-1090	09B	Layout Wall	2	2	28-Jun-27	29-Jun-27
PAC-EXT-3410	09B	Install CFMF Stud Framing PAC-11	5	5	30-Jun-27	08-Jul-27
PAC-EXT-3560	09B	Install Gyp Sheathing	5	5	09-Jul-27	16-Jul-27
PAC-EXT-3790	04A	Install Base Course Of Brick And Truwall Flashing	2	2	19-Jul-27	21-Jul-27
PAC-EXT-3800	09B	Install Steel Head & Sill Support Angles	5	5	19-Jul-27	26-Jul-27
PAC-EXT-3810	06C	Install Window Blocking	5	5	19-Jul-27	26-Jul-27
PAC-EXT-3820	04A	Install Brick Ties & Flashing	1	1	19-Jul-27	19-Jul-27
PAC-EXT-3980	07A	Spray Insulation	1	1	27-Jul-27	27-Jul-27
PAC-EXT-4060	08A	Install Windows	5	5	28-Jul-27	04-Aug-27
PAC-EXT-4070	04A	Install Masonry Veneer, Sills & Headers	10	10	05-Aug-27	20-Aug-27
PAC-EXT-4110	07G	Caulk Brick	2	2	23-Aug-27	24-Aug-27
PAC-EXT-4120	09B	Install Canopy And Soffit Framing	5	5	23-Aug-27	27-Aug-27
PAC-EXT-4130	08A	Install Exterior Entrance Storefront & Door System	10	10	23-Aug-27	03-Sep-27
PAC-EXT-4170	26B	Rough In Canopy Lights	1	1	30-Aug-27	30-Aug-27
PAC-EXT-4250	09B	Install Canopy Sheathing	2	2	31-Aug-27	01-Sep-27

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

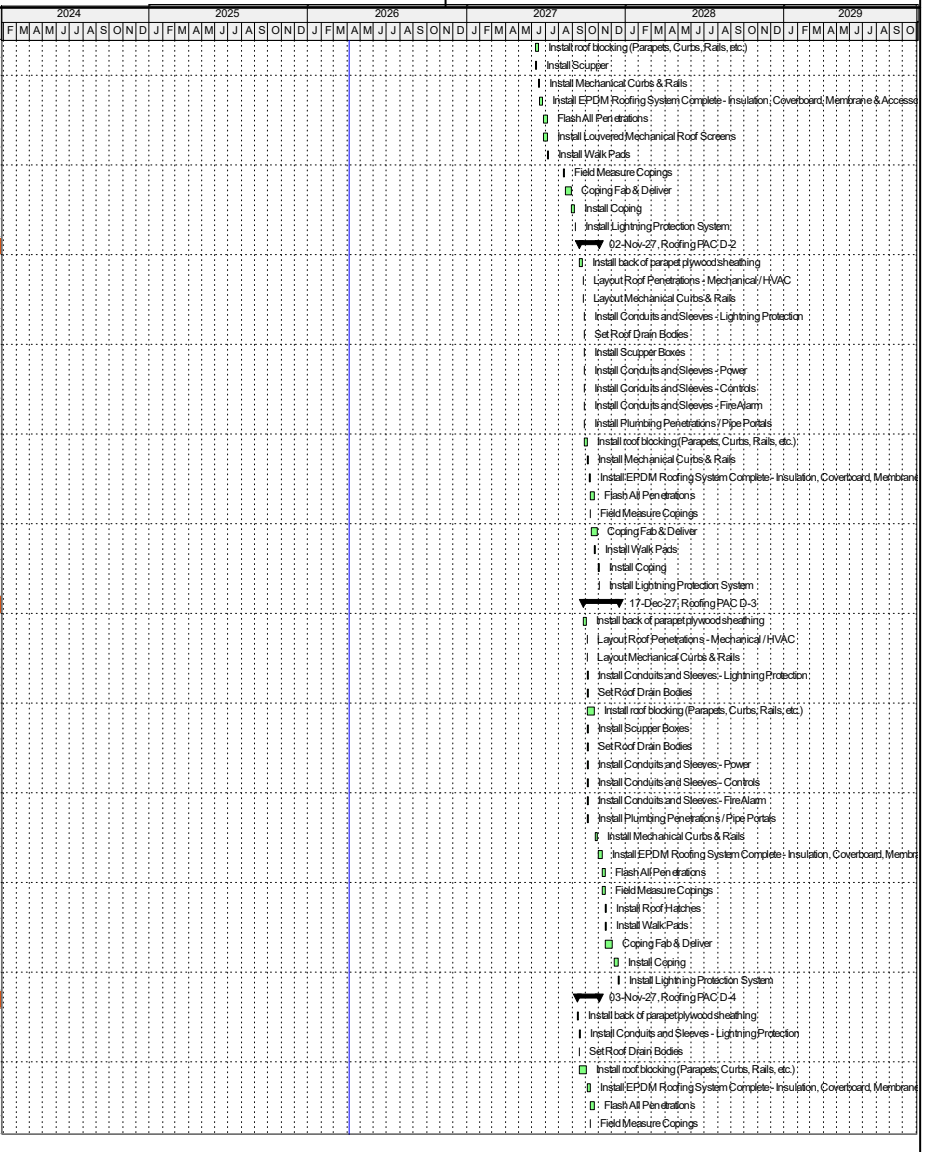
ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-EXT-4280	07A	Install Canopy AVB	1	1	02-Sep-27	02-Sep-27
PAC-EXT-4310	07C	Install Metal Panel Soffit & Fascia	5	5	03-Sep-27	10-Sep-27
PAC-EXT-4180	07G	Caulk Windows	2	2	06-Sep-27	08-Sep-27
Elevation PAC 12 - MS Courtyard South (E2/F6/E5/A215)			68	68	30-Apr-27	20-Aug-27
PAC-EXT-6000	09B	Layout Wall	2	2	30-Apr-27	03-May-27
PAC-EXT-6020	09B	Install CFMF Stud Framing PAC-12	10	10	19-May-27	03-Jun-27
PAC-EXT-6030	09B	Install Gyp Sheathing	10	10	04-Jun-27	17-Jun-27
PAC-EXT-6100	04A	Install Base Course Of Masonry And Truwall Flashing	2	2	18-Jun-27	21-Jun-27
PAC-EXT-6110	09B	Install Steel Head And Sill Support Angles	5	5	18-Jun-27	25-Jun-27
PAC-EXT-6120	06C	Install Window Blocking	2	2	18-Jun-27	21-Jun-27
PAC-EXT-6130	04A	Install Brick Ties	2	2	18-Jun-27	21-Jun-27
PAC-EXT-6170	07A	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	2	2	28-Jun-27	29-Jun-27
PAC-EXT-6180	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	1	1	30-Jun-27	30-Jun-27
PAC-EXT-6200	08A	Install Windows	5	5	01-Jul-27	09-Jul-27
PAC-EXT-6210	04A	Install Masonry Veneer And Cast Stone Headers / Sills	10	10	12-Jul-27	27-Jul-27
PAC-EXT-6270	07G	Caulk Brick	1	1	28-Jul-27	28-Jul-27
PAC-EXT-6280	06C	Install Z-Girts & Fiber Cement Panel Support System	10	10	28-Jul-27	11-Aug-27
PAC-EXT-6290	08A	Install Exterior Entrance Storefront & Door System	5	5	28-Jul-27	04-Aug-27
PAC-EXT-6300	06C	Install Mineral Wool Insulation	0	0	13-Aug-27	13-Aug-27
PAC-EXT-6310	06C	Install Fiber Cement Panels	0	0	13-Aug-27	13-Aug-27
PAC-EXT-6320	08A	Caulk Windows	5	5	13-Aug-27	20-Aug-27
Elevation PAC 13 - MS Courtyard West (C2/A215)			43	43	15-Jun-27	24-Aug-27
PAC-EXT-6010	09B	Layout Wall	1	1	15-Jun-27	15-Jun-27
PAC-EXT-6040	09B	Install CFMF Stud Framing PAC-13	5	5	16-Jun-27	22-Jun-27
PAC-EXT-6050	09B	Install Gyp Sheathing	2	2	23-Jun-27	25-Jun-27
PAC-EXT-6060	04A	Install Base Course Of Masonry And Truwall Flashing	2	2	28-Jun-27	29-Jun-27
PAC-EXT-6070	09B	Install Steel Head And Sill Support Angles	5	5	28-Jun-27	05-Jul-27
PAC-EXT-6080	06C	Install Window Blocking	2	2	28-Jun-27	29-Jun-27
PAC-EXT-6090	04A	Install Brick Ties	1	1	28-Jun-27	28-Jun-27
PAC-EXT-6140	07A	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	1	1	07-Jul-27	07-Jul-27
PAC-EXT-6150	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	1	1	08-Jul-27	08-Jul-27
PAC-EXT-6160	08A	Install Windows	5	5	09-Jul-27	16-Jul-27
PAC-EXT-6190	04A	Install Masonry Veneer And Cast Stone Headers / Sills	5	5	28-Jul-27	04-Aug-27
PAC-EXT-6220	07G	Caulk Brick	1	1	05-Aug-27	05-Aug-27
PAC-EXT-6230	06C	Install Z-Girts & Fiber Cement Panel Support System	10	10	05-Aug-27	20-Aug-27
PAC-EXT-6240	06C	Install Mineral Wool Insulation	0	0	23-Aug-27	23-Aug-27
PAC-EXT-6250	06C	Install Fiber Cement Panels	0	0	23-Aug-27	23-Aug-27
PAC-EXT-6260	08A	Caulk Windows	2	2	23-Aug-27	24-Aug-27
PAC Firewall & Stage (CMU)			50	50	15-Jun-27	02-Sep-27
PAC-EXT-4840	04A	Install PAC Firewall	25	25	15-Jun-27	26-Jul-27
PAC-EXT-4850	26B	Install Electrical Conduit & Boxes in Firewall CMU	5	5	15-Jun-27	21-Jun-27
PAC-EXT-4860	28A	Install Special Systems Conduit & Boxes in Firewall CMU	5	5	15-Jun-27	21-Jun-27
PAC-EXT-4870	26C	Install Tele-Data Conduit & Boxes in Firewall CMU	5	5	15-Jun-27	21-Jun-27
PAC-EXT-4880	26B	Install Theater AV & Performance Lighting Conduit & Boxes in Firewall CMU	5	5	15-Jun-27	21-Jun-27
PAC-EXT-4890	04A	Install Stage CMU	25	25	27-Jul-27	02-Sep-27
PAC-EXT-4900	26B	Install Electrical Conduit & Boxes in Stage CMU	5	5	27-Jul-27	02-Aug-27
PAC-EXT-4910	28A	Install Special Systems Conduit & Boxes in Stage CMU	5	5	27-Jul-27	02-Aug-27
PAC-EXT-4920	26C	Install Tele-Data Conduit & Boxes in Stage CMU	5	5	27-Jul-27	02-Aug-27
PAC-EXT-4930	26B	Install Theater AV & Performance Lighting Conduit & Boxes in Stage CMU	5	5	27-Jul-27	02-Aug-27
PAC-EXT-4940	07H	Install Spray Fireproofing - PAC Firewall	5	5	27-Jul-27	02-Aug-27
PAC Roofing			137	137	04-Jun-27	08-Feb-28
Roofing PAC D-1			61	61	04-Jun-27	09-Sep-27
PAC-EXT-1160	09B	Install back of parapet plywood sheathing	2	2	04-Jun-27	07-Jun-27
PAC-EXT-1170	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	08-Jun-27	08-Jun-27
PAC-EXT-1240	23A	Layout Mechanical Curbs & Rails	1	1	08-Jun-27	08-Jun-27
PAC-EXT-1180	26B	Install Conduits and Sleeves - Power	2	2	09-Jun-27	10-Jun-27
PAC-EXT-1190	26B	Install Conduits and Sleeves - Lightning Protection	2	2	09-Jun-27	10-Jun-27
PAC-EXT-1200	25A	Install Conduits and Sleeves - Controls	2	2	09-Jun-27	10-Jun-27
PAC-EXT-1210	28A	Install Conduits and Sleeves - Fire Alarm	2	2	09-Jun-27	10-Jun-27
PAC-EXT-1220	22A	Install Plumbing Penetrations / Pipe Portals	5	5	09-Jun-27	15-Jun-27
PAC-EXT-1230	22A	Set Roof Drain Bodies	2	2	09-Jun-27	10-Jun-27

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-EXT-1250	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	09-Jun-27	15-Jun-27
PAC-EXT-3330	07E	Install Scupper	2	2	09-Jun-27	10-Jun-27
PAC-EXT-1260	23A	Install Mechanical Curbs & Rails	2	2	16-Jun-27	17-Jun-27
PAC-EXT-1270	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	18-Jun-27	25-Jun-27
PAC-EXT-1280	07E	Flash All Penetrations	5	5	28-Jun-27	05-Jul-27
PAC-EXT-1350	05C	Install Louvered Mechanical Roof Screens	5	5	28-Jun-27	05-Jul-27
PAC-EXT-1300	07E	Install Walk Pads	2	2	07-Jul-27	08-Jul-27
PAC-EXT-1310	07E	Field Measure Copings	1	1	13-Aug-27	13-Aug-27
PAC-EXT-1320	07E	Coping Fab & Deliver	10	10	16-Aug-27	30-Aug-27
PAC-EXT-1330	07E	Install Coping	5	5	31-Aug-27	06-Sep-27
PAC-EXT-1340	26B	Install Lightning Protection System	2	2	08-Sep-27	09-Sep-27
Roofing PAC D-2			28	28	17-Sep-27	02-Nov-27
PAC-EXT-1360	09B	Install back of parapet plywood sheathing	5	5	17-Sep-27	24-Sep-27
PAC-EXT-5000	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	27-Sep-27	27-Sep-27
PAC-EXT-5050	23A	Layout Mechanical Curbs & Rails	1	1	27-Sep-27	27-Sep-27
PAC-EXT-1370	26B	Install Conduits and Sleeves - Lightning Protection	1	1	28-Sep-27	28-Sep-27
PAC-EXT-1380	22A	Set Roof Drain Bodies	2	2	28-Sep-27	29-Sep-27
PAC-EXT-1400	07E	Install Scupper Boxes	1	1	28-Sep-27	28-Sep-27
PAC-EXT-5010	26B	Install Conduits and Sleeves - Power	2	2	28-Sep-27	29-Sep-27
PAC-EXT-5020	25A	Install Conduits and Sleeves - Controls	2	2	28-Sep-27	29-Sep-27
PAC-EXT-5030	28A	Install Conduits and Sleeves - Fire Alarm	2	2	28-Sep-27	29-Sep-27
PAC-EXT-5040	22A	Install Plumbing Penetrations / Pipe Portals	2	2	28-Sep-27	29-Sep-27
PAC-EXT-5060	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	28-Sep-27	06-Oct-27
PAC-EXT-5070	23A	Install Mechanical Curbs & Rails	2	2	07-Oct-27	08-Oct-27
PAC-EXT-1410	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	2	2	11-Oct-27	12-Oct-27
PAC-EXT-1420	07E	Flash All Penetrations	5	5	13-Oct-27	21-Oct-27
PAC-EXT-1440	07E	Field Measure Copings	1	1	13-Oct-27	13-Oct-27
PAC-EXT-1450	07E	Coping Fab & Deliver	10	10	15-Oct-27	29-Oct-27
PAC-EXT-1430	07E	Install Walk Pads	2	2	22-Oct-27	25-Oct-27
PAC-EXT-1460	07E	Install Coping	1	1	01-Nov-27	01-Nov-27
PAC-EXT-1470	26B	Install Lightning Protection System	1	1	02-Nov-27	02-Nov-27
Roofing PAC D-3			47	47	27-Sep-27	17-Dec-27
PAC-EXT-1480	09B	Install back of parapet plywood sheathing	5	5	27-Sep-27	04-Oct-27
PAC-EXT-5080	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	06-Oct-27	06-Oct-27
PAC-EXT-5090	23A	Layout Mechanical Curbs & Rails	1	1	06-Oct-27	06-Oct-27
PAC-EXT-1490	26B	Install Conduits and Sleeves - Lightning Protection	1	1	07-Oct-27	07-Oct-27
PAC-EXT-1500	22A	Set Roof Drain Bodies	2	2	07-Oct-27	08-Oct-27
PAC-EXT-1510	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	10	10	07-Oct-27	22-Oct-27
PAC-EXT-1520	07E	Install Scupper Boxes	1	1	07-Oct-27	07-Oct-27
PAC-EXT-5100	22A	Set Roof Drain Bodies	2	2	07-Oct-27	08-Oct-27
PAC-EXT-5110	26B	Install Conduits and Sleeves - Power	2	2	07-Oct-27	08-Oct-27
PAC-EXT-5120	25A	Install Conduits and Sleeves - Controls	2	2	07-Oct-27	08-Oct-27
PAC-EXT-5130	28A	Install Conduits and Sleeves - Fire Alarm	2	2	07-Oct-27	08-Oct-27
PAC-EXT-5140	22A	Install Plumbing Penetrations / Pipe Portals	2	2	07-Oct-27	08-Oct-27
PAC-EXT-5150	23A	Install Mechanical Curbs & Rails	5	5	25-Oct-27	29-Oct-27
PAC-EXT-1530	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	01-Nov-27	08-Nov-27
PAC-EXT-1540	07E	Flash All Penetrations	5	5	09-Nov-27	15-Nov-27
PAC-EXT-1570	07E	Field Measure Copings	5	5	09-Nov-27	15-Nov-27
PAC-EXT-1550	07E	Install Roof Hatches	1	1	17-Nov-27	17-Nov-27
PAC-EXT-1560	07E	Install Walk Pads	2	2	17-Nov-27	18-Nov-27
PAC-EXT-1580	07E	Coping Fab & Deliver	10	10	17-Nov-27	02-Dec-27
PAC-EXT-1590	07E	Install Coping	5	5	07-Dec-27	16-Dec-27
PAC-EXT-1600	26B	Install Lightning Protection System	1	1	17-Dec-27	17-Dec-27
Roofing PAC D-4			31	31	14-Sep-27	03-Nov-27
PAC-EXT-1610	09B	Install back of parapet plywood sheathing	2	2	14-Sep-27	15-Sep-27
PAC-EXT-1620	26B	Install Conduits and Sleeves - Lightning Protection	2	2	17-Sep-27	20-Sep-27
PAC-EXT-1630	22A	Set Roof Drain Bodies	1	1	17-Sep-27	17-Sep-27
PAC-EXT-1640	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	10	10	17-Sep-27	04-Oct-27
PAC-EXT-1660	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	06-Oct-27	12-Oct-27
PAC-EXT-1670	07E	Flash All Penetrations	5	5	13-Oct-27	21-Oct-27
PAC-EXT-1690	07E	Field Measure Copings	1	1	13-Oct-27	13-Oct-27



Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

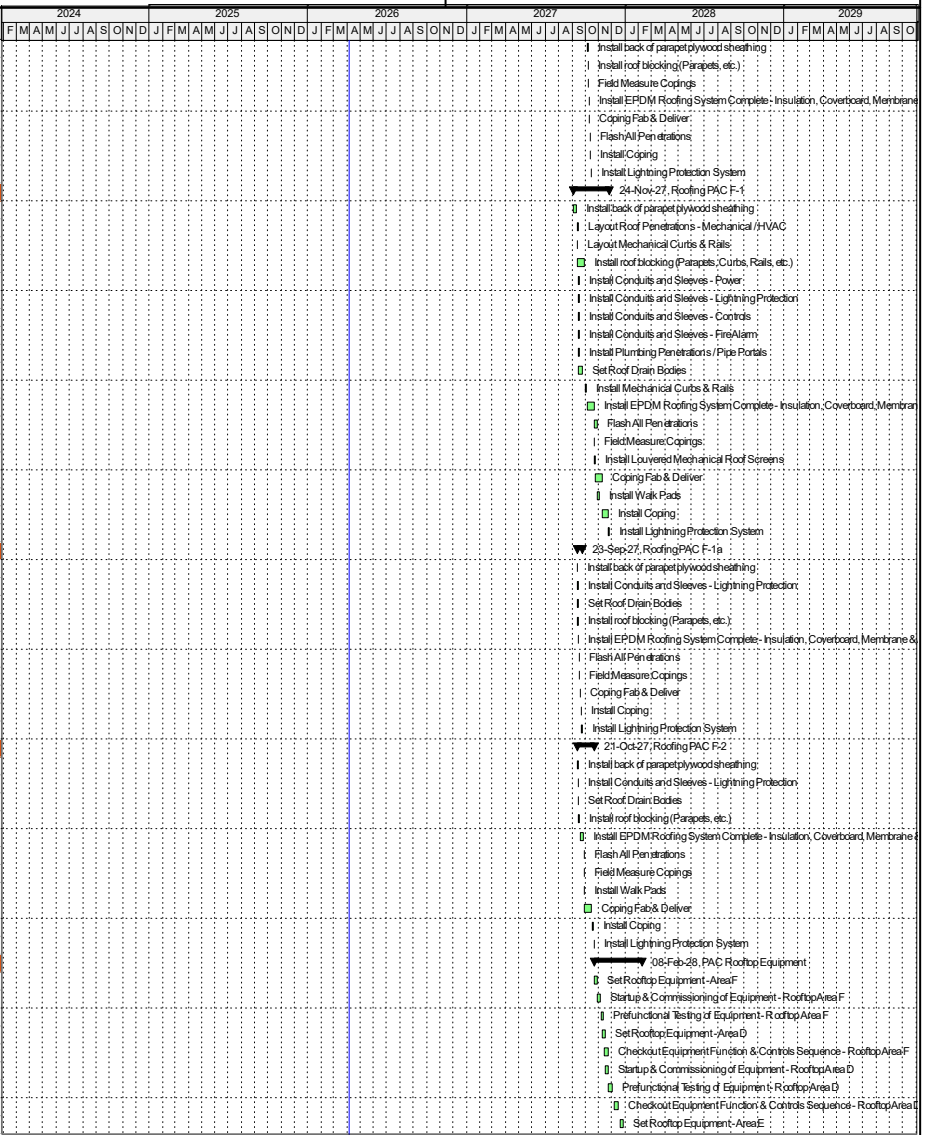
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-EXT-1700	07E	Coping Fab & Deliver	10	10	15-Oct-27	29-Oct-27
PAC-EXT-1680	07E	Install Walk Pads	1	1	22-Oct-27	22-Oct-27
PAC-EXT-1710	07E	Install Coping	2	2	01-Nov-27	02-Nov-27
PAC-EXT-1720	26B	Install Lightning Protection System	1	1	03-Nov-27	03-Nov-27
Roofing PAC E-1			79	79	27-Aug-27	18-Jan-28
PAC-EXT-1730	09B	Install back of parapet plywood sheathing	5	5	27-Aug-27	02-Sep-27
PAC-EXT-1740	26B	Install Conduits and Sleeves - Lightning Protection	1	1	03-Sep-27	03-Sep-27
PAC-EXT-1750	22A	Install Plumbing Penetrations / Pipe Portals	2	2	03-Sep-27	06-Sep-27
PAC-EXT-1760	06C	Install roof blocking (Parapets, etc.)	5	5	03-Sep-27	10-Sep-27
PAC-EXT-1790	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	13-Sep-27	20-Sep-27
PAC-EXT-1780	07E	Install Scupper Boxes	1	1	22-Sep-27	22-Sep-27
PAC-EXT-1800	07E	Flash All Penetrations	5	5	22-Sep-27	28-Sep-27
PAC-EXT-1810	07E	Install Roof Hatches	1	1	29-Sep-27	29-Sep-27
PAC-EXT-1820	07E	Install Smoke Vents	5	5	29-Sep-27	07-Oct-27
PAC-EXT-1860	07E	Install Conductor Heads & Down Spouts	2	2	29-Sep-27	01-Oct-27
PAC-EXT-1830	07E	Field Measure Copings	1	1	14-Dec-27	14-Dec-27
PAC-EXT-1840	07E	Coping Fab & Deliver	10	10	16-Dec-27	31-Dec-27
PAC-EXT-1850	07E	Install Coping	5	5	03-Jan-28	14-Jan-28
PAC-EXT-1870	26B	Install Lightning Protection System	1	1	18-Jan-28	18-Jan-28
Roofing PAC E-2			66	66	22-Sep-27	24-Jan-28
PAC-EXT-5160	09B	Install back of parapet plywood sheathing	5	5	22-Sep-27	28-Sep-27
PAC-EXT-5180	26B	Install Conduits and Sleeves - Lightning Protection	1	1	29-Sep-27	29-Sep-27
PAC-EXT-5190	22A	Install Plumbing Penetrations / Pipe Portals	1	1	29-Sep-27	29-Sep-27
PAC-EXT-5200	06C	Install roof blocking (Parapets, etc.)	10	10	29-Sep-27	15-Oct-27
PAC-EXT-5210	07E	Install Scupper Boxes	0	0	29-Sep-27	29-Sep-27
PAC-EXT-5230	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	10	10	18-Oct-27	01-Nov-27
PAC-EXT-5240	07E	Flash All Penetrations	2	2	02-Nov-27	03-Nov-27
PAC-EXT-5260	07E	Install Smoke Vents	2	2	05-Nov-27	08-Nov-27
PAC-EXT-5280	07E	Install Conductor Heads & Down Spouts	5	5	05-Nov-27	11-Nov-27
PAC-EXT-5170	07E	Field Measure Copings	1	1	17-Dec-27	17-Dec-27
PAC-EXT-5220	07E	Coping Fab & Deliver	10	10	20-Dec-27	04-Jan-28
PAC-EXT-5270	07E	Install Coping	5	5	06-Jan-28	20-Jan-28
PAC-EXT-5290	26B	Install Lightning Protection System	1	1	24-Jan-28	24-Jan-28
Roofing PAC E-3			41	41	29-Sep-27	08-Dec-27
PAC-EXT-5300	09B	Install back of parapet plywood sheathing	5	5	29-Sep-27	07-Oct-27
PAC-EXT-2030	26B	Install Conduits and Sleeves - Lightning Protection	1	1	08-Oct-27	08-Oct-27
PAC-EXT-2040	06C	Install roof blocking	5	5	08-Oct-27	15-Oct-27
PAC-EXT-2050	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	10	10	02-Nov-27	17-Nov-27
PAC-EXT-2060	07E	Flash All Penetrations	5	5	18-Nov-27	24-Nov-27
PAC-EXT-2070	07E	Install Smoke Vents	5	5	29-Nov-27	07-Dec-27
PAC-EXT-2080	07E	Install Coping	5	5	29-Nov-27	07-Dec-27
PAC-EXT-2090	07E	Install Gutters and Down Spouts	5	5	29-Nov-27	07-Dec-27
PAC-EXT-2100	26B	Install Lightning Protection System	1	1	08-Dec-27	08-Dec-27
Roofing PAC E-4			52	52	08-Oct-27	10-Jan-28
PAC-EXT-2110	09B	Install back of parapet plywood sheathing	5	5	08-Oct-27	15-Oct-27
PAC-EXT-2120	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	18-Oct-27	18-Oct-27
PAC-EXT-2190	23A	Layout Mechanical Curbs & Rails	1	1	18-Oct-27	18-Oct-27
PAC-EXT-2130	26B	Install Conduits and Sleeves - Power	2	2	20-Oct-27	21-Oct-27
PAC-EXT-2140	26B	Install Conduits and Sleeves - Lightning Protection	2	2	20-Oct-27	21-Oct-27
PAC-EXT-2150	25A	Install Conduits and Sleeves - Controls	2	2	20-Oct-27	21-Oct-27
PAC-EXT-2160	28A	Install Conduits and Sleeves - Fire Alarm	2	2	20-Oct-27	21-Oct-27
PAC-EXT-2170	22A	Install Plumbing Penetrations / Pipe Portals	2	2	20-Oct-27	21-Oct-27
PAC-EXT-2180	22A	Set Roof Drain Bodies	2	2	20-Oct-27	21-Oct-27
PAC-EXT-2200	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	20-Oct-27	26-Oct-27
PAC-EXT-2210	23A	Install Mechanical Curbs & Rails	2	2	27-Oct-27	28-Oct-27
PAC-EXT-2220	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	10	10	18-Nov-27	07-Dec-27
PAC-EXT-2230	07E	Flash All Penetrations	5	5	08-Dec-27	17-Dec-27
PAC-EXT-2260	07E	Field Measure Copings	1	1	08-Dec-27	08-Dec-27
PAC-EXT-2300	05C	Install Louvered Mechanical Roof Screens	5	5	08-Dec-27	17-Dec-27
PAC-EXT-2270	07E	Coping Fab & Deliver	10	10	10-Dec-27	28-Dec-27
PAC-EXT-2240	07E	Install Walk Pads	2	2	20-Dec-27	21-Dec-27

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-EXT-2250	07E	Install Smoke Vents	5	5	20-Dec-27	27-Dec-27
PAC-EXT-2280	07E	Install Coping	5	5	30-Dec-27	06-Jan-28
PAC-EXT-2290	26B	Install Lightning Protection System	1	1	10-Jan-28	10-Jan-28
Roofing PAC E-5			52	52	18-Oct-27	28-Jan-28
PAC-EXT-5310	09B	Install back of parapet plywood sheathing	2	2	18-Oct-27	20-Oct-27
PAC-EXT-5330	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	21-Oct-27	21-Oct-27
PAC-EXT-5340	23A	Layout Mechanical Curbs & Rails	1	1	21-Oct-27	21-Oct-27
PAC-EXT-5360	26B	Install Conduits and Sleeves - Power	1	1	22-Oct-27	22-Oct-27
PAC-EXT-5370	26B	Install Conduits and Sleeves - Lightning Protection	1	1	22-Oct-27	22-Oct-27
PAC-EXT-5380	25A	Install Conduits and Sleeves - Controls	1	1	22-Oct-27	22-Oct-27
PAC-EXT-5390	28A	Install Conduits and Sleeves - Fire Alarm	1	1	22-Oct-27	22-Oct-27
PAC-EXT-5400	22A	Install Plumbing Penetrations / Pipe Portals	1	1	22-Oct-27	22-Oct-27
PAC-EXT-5410	22A	Set Roof Drain Bodies	1	1	22-Oct-27	22-Oct-27
PAC-EXT-5420	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	22-Oct-27	28-Oct-27
PAC-EXT-5430	23A	Install Mechanical Curbs & Rails	1	1	29-Oct-27	29-Oct-27
PAC-EXT-5440	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	08-Dec-27	17-Dec-27
PAC-EXT-5450	07E	Flash All Penetrations	5	5	20-Dec-27	27-Dec-27
PAC-EXT-5320	07E	Field Measure Copings	1	1	20-Dec-27	20-Dec-27
PAC-EXT-5460	05C	Install Louvered Mechanical Roof Screens	0	0	20-Dec-27	20-Dec-27
PAC-EXT-5350	07E	Coping Fab & Deliver	10	10	21-Dec-27	06-Jan-28
PAC-EXT-5470	07E	Install Walk Pads	1	1	28-Dec-27	28-Dec-27
PAC-EXT-5480	07E	Install Smoke Vents	0	0	28-Dec-27	28-Dec-27
PAC-EXT-5490	07E	Install Coping	5	5	10-Jan-28	24-Jan-28
PAC-EXT-5500	26B	Install Lightning Protection System	1	1	28-Jan-28	28-Jan-28
Roofing PAC E-6			41	41	04-Oct-27	14-Dec-27
PAC-EXT-2510	09B	Install back of parapet plywood sheathing	2	2	04-Oct-27	06-Oct-27
PAC-EXT-2520	26B	Install Conduits and Sleeves - Lightning Protection	1	1	07-Oct-27	07-Oct-27
PAC-EXT-2530	22A	Set Roof Drain Bodies	1	1	07-Oct-27	07-Oct-27
PAC-EXT-2540	06C	Install roof blocking (Parapets, etc.)	2	2	07-Oct-27	08-Oct-27
PAC-EXT-2550	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	2	2	11-Oct-27	12-Oct-27
PAC-EXT-2560	07E	Flash All Penetrations	2	2	13-Oct-27	15-Oct-27
PAC-EXT-3340	07E	Install Scupper	1	1	13-Oct-27	13-Oct-27
PAC-EXT-2570	07E	Field Measure Copings	1	1	18-Nov-27	18-Nov-27
PAC-EXT-2580	07E	Coping Fab & Deliver	10	10	19-Nov-27	08-Dec-27
PAC-EXT-2590	07E	Install Coping	1	1	10-Dec-27	10-Dec-27
PAC-EXT-2600	26B	Install Lightning Protection System	1	1	14-Dec-27	14-Dec-27
Roofing PAC E-7			37	37	24-Sep-27	23-Nov-27
PAC-EXT-2610	09B	Install back of parapet plywood sheathing	5	5	24-Sep-27	01-Oct-27
PAC-EXT-2620	26B	Install Conduits and Sleeves - Lightning Protection	2	2	04-Oct-27	06-Oct-27
PAC-EXT-2630	22A	Set Roof Drain Bodies	5	5	04-Oct-27	11-Oct-27
PAC-EXT-2640	06C	Install roof blocking (Parapets, etc.)	5	5	04-Oct-27	11-Oct-27
PAC-EXT-2660	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	10	10	12-Oct-27	27-Oct-27
PAC-EXT-2650	07E	Install Scupper Boxes	1	1	28-Oct-27	28-Oct-27
PAC-EXT-2670	07E	Flash All Penetrations	2	2	28-Oct-27	29-Oct-27
PAC-EXT-2690	07E	Field Measure Copings	1	1	28-Oct-27	28-Oct-27
PAC-EXT-2700	07E	Coping Fab & Deliver	10	10	29-Oct-27	12-Nov-27
PAC-EXT-2680	07E	Install Walk Pads	1	1	01-Nov-27	01-Nov-27
PAC-EXT-2710	07E	Install Coping	5	5	15-Nov-27	22-Nov-27
PAC-EXT-2720	26B	Install Lightning Protection System	1	1	23-Nov-27	23-Nov-27
Roofing PAC E-7a			18	18	04-Oct-27	01-Nov-27
PAC-EXT-2730	09B	Install back of parapet plywood sheathing	2	2	04-Oct-27	06-Oct-27
PAC-EXT-2740	26B	Install Conduits and Sleeves - Lightning Protection	1	1	07-Oct-27	07-Oct-27
PAC-EXT-2750	22A	Set Roof Drain Bodies	1	1	07-Oct-27	07-Oct-27
PAC-EXT-2760	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	2	2	07-Oct-27	08-Oct-27
PAC-EXT-2770	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	11-Oct-27	11-Oct-27
PAC-EXT-2780	07E	Flash All Penetrations	1	1	12-Oct-27	12-Oct-27
PAC-EXT-2790	07E	Field Measure Copings	1	1	12-Oct-27	12-Oct-27
PAC-EXT-2800	07E	Coping Fab & Deliver	10	10	13-Oct-27	28-Oct-27
PAC-EXT-2810	07E	Install Coping	1	1	29-Oct-27	29-Oct-27
PAC-EXT-2820	26B	Install Lightning Protection System	1	1	01-Nov-27	01-Nov-27
Roofing PAC E-7b			6	6	07-Oct-27	15-Oct-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-EXT-2830	09B	Install back of parapet plywood sheathing	1	1	07-Oct-27	07-Oct-27
PAC-EXT-2840	06C	Install roof blocking (Parapets, etc.)	1	1	08-Oct-27	08-Oct-27
PAC-EXT-2870	07E	Field Measure Copings	1	1	08-Oct-27	08-Oct-27
PAC-EXT-2850	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	11-Oct-27	11-Oct-27
PAC-EXT-2880	07E	Coping Fab & Deliver	1	1	11-Oct-27	11-Oct-27
PAC-EXT-2860	07E	Flash All Penetrations	1	1	12-Oct-27	12-Oct-27
PAC-EXT-2890	07E	Install Coping	1	1	13-Oct-27	13-Oct-27
PAC-EXT-2900	26B	Install Lightning Protection System	1	1	15-Oct-27	15-Oct-27
Roofing PAC F-1			50	50	03-Sep-27	24-Nov-27
PAC-EXT-2910	09B	Install back of parapet plywood sheathing	5	5	03-Sep-27	10-Sep-27
PAC-EXT-2920	23A	Layout Roof Penetrations - Mechanical / HVAC	2	2	13-Sep-27	14-Sep-27
PAC-EXT-2990	23A	Layout Mechanical Curbs & Rails	1	1	13-Sep-27	13-Sep-27
PAC-EXT-3000	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	10	10	14-Sep-27	29-Sep-27
PAC-EXT-2930	26B	Install Conduits and Sleeves - Power	2	2	15-Sep-27	17-Sep-27
PAC-EXT-2940	26B	Install Conduits and Sleeves - Lightning Protection	2	2	15-Sep-27	17-Sep-27
PAC-EXT-2950	25A	Install Conduits and Sleeves - Controls	2	2	15-Sep-27	17-Sep-27
PAC-EXT-2960	28A	Install Conduits and Sleeves - Fire Alarm	2	2	15-Sep-27	17-Sep-27
PAC-EXT-2970	22A	Install Plumbing Penetrations / Pipe Portals	2	2	15-Sep-27	17-Sep-27
PAC-EXT-2980	22A	Set Roof Drain Bodies	5	5	15-Sep-27	23-Sep-27
PAC-EXT-3010	23A	Install Mechanical Curbs & Rails	2	2	01-Oct-27	04-Oct-27
PAC-EXT-3020	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	10	10	06-Oct-27	21-Oct-27
PAC-EXT-3030	07E	Flash All Penetrations	5	5	22-Oct-27	28-Oct-27
PAC-EXT-3060	07E	Field Measure Copings	1	1	22-Oct-27	22-Oct-27
PAC-EXT-3100	05C	Install Louvered Mechanical Roof Screens	2	2	22-Oct-27	25-Oct-27
PAC-EXT-3070	07E	Coping Fab & Deliver	10	10	25-Oct-27	08-Nov-27
PAC-EXT-3050	07E	Install Walk Pads	2	2	29-Oct-27	01-Nov-27
PAC-EXT-3080	07E	Install Coping	10	10	09-Nov-27	23-Nov-27
PAC-EXT-3090	26B	Install Lightning Protection System	1	1	24-Nov-27	24-Nov-27
Roofing PAC F-1a			7	7	13-Sep-27	23-Sep-27
PAC-EXT-3110	09B	Install back of parapet plywood sheathing	1	1	13-Sep-27	13-Sep-27
PAC-EXT-3120	26B	Install Conduits and Sleeves - Lightning Protection	1	1	14-Sep-27	14-Sep-27
PAC-EXT-3130	22A	Set Roof Drain Bodies	1	1	14-Sep-27	14-Sep-27
PAC-EXT-3140	06C	Install roof blocking (Parapets, etc.)	1	1	14-Sep-27	14-Sep-27
PAC-EXT-3150	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	15-Sep-27	15-Sep-27
PAC-EXT-3160	07E	Flash All Penetrations	1	1	17-Sep-27	17-Sep-27
PAC-EXT-3170	07E	Field Measure Copings	1	1	17-Sep-27	17-Sep-27
PAC-EXT-3180	07E	Coping Fab & Deliver	1	1	20-Sep-27	20-Sep-27
PAC-EXT-3190	07E	Install Coping	1	1	22-Sep-27	22-Sep-27
PAC-EXT-3200	26B	Install Lightning Protection System	1	1	23-Sep-27	23-Sep-27
Roofing PAC F-2			23	23	13-Sep-27	21-Oct-27
PAC-EXT-3210	09B	Install back of parapet plywood sheathing	2	2	13-Sep-27	14-Sep-27
PAC-EXT-3220	26B	Install Conduits and Sleeves - Lightning Protection	1	1	15-Sep-27	15-Sep-27
PAC-EXT-3230	22A	Set Roof Drain Bodies	1	1	15-Sep-27	15-Sep-27
PAC-EXT-3240	06C	Install roof blocking (Parapets, etc.)	2	2	15-Sep-27	17-Sep-27
PAC-EXT-3260	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	20-Sep-27	27-Sep-27
PAC-EXT-3270	07E	Flash All Penetrations	1	1	28-Sep-27	28-Sep-27
PAC-EXT-3290	07E	Field Measure Copings	1	1	28-Sep-27	28-Sep-27
PAC-EXT-3280	07E	Install Walk Pads	1	1	29-Sep-27	29-Sep-27
PAC-EXT-3300	07E	Coping Fab & Deliver	10	10	29-Sep-27	15-Oct-27
PAC-EXT-3310	07E	Install Coping	2	2	18-Oct-27	20-Oct-27
PAC-EXT-3320	26B	Install Lightning Protection System	1	1	21-Oct-27	21-Oct-27
PAC Rooftop Equipment			52	52	22-Oct-27	08-Feb-28
PAC-EXT-3910	23A	Set Rooftop Equipment - Area F	5	5	22-Oct-27	28-Oct-27
PAC-EXT-5540	23A	Startup & Commissioning of Equipment - Rooftop Area F	5	5	29-Oct-27	05-Nov-27
PAC-EXT-5550	23A	Prefunctional Testing of Equipment - Rooftop Area F	5	5	08-Nov-27	12-Nov-27
PAC-EXT-3490	23A	Set Rooftop Equipment - Area D	5	5	09-Nov-27	15-Nov-27
PAC-EXT-5560	23A	Checkout Equipment Function & Controls Sequence - Rooftop Area F	5	5	15-Nov-27	22-Nov-27
PAC-EXT-5510	23A	Startup & Commissioning of Equipment - Rooftop Area D	5	5	17-Nov-27	23-Nov-27
PAC-EXT-5520	23A	Prefunctional Testing of Equipment - Rooftop Area D	5	5	24-Nov-27	02-Dec-27
PAC-EXT-5530	23A	Checkout Equipment Function & Controls Sequence - Rooftop Area D	5	5	07-Dec-27	16-Dec-27
PAC-EXT-3640	23A	Set Rooftop Equipment - Area E	5	5	20-Dec-27	27-Dec-27



Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-EXT-5570	23A	Startup & Commissioning of Equipment - Rooftop Area E	5	5	28-Dec-27	04-Jan-28
PAC-EXT-5580	23A	Prefunctional Testing of Equipment - Rooftop Area E	5	5	06-Jan-28	20-Jan-28
PAC-EXT-5590	23A	Checkout Equipment Function & Controls Sequence - Rooftop Area E	5	5	24-Jan-28	08-Feb-28
PAC Interiors			388	388	03-May-27	09-Nov-28
Area D			314	314	03-May-27	27-Jul-28
PAC-INT-D1-2040	09B	Layout - Area D	5	5	01-Jun-27	07-Jun-27
PAC-INT-D1-3160	23A	Startup & Commissioning of Equipment - Area D	5	5	21-Feb-28	25-Feb-28
PAC-INT-D1-3170	23A	Prefunctional Testing of Equipment - Area D	5	5	28-Feb-28	03-Mar-28
PAC-INT-D1-3180	23A	Checkout Equipment Function & Controls Sequence - Area D	5	5	06-Mar-28	10-Mar-28
PAC-INT-D1-3190	00-WT	WT Create Work-to-Complete List - Area D	5	5	24-Apr-28	28-Apr-28
PAC-INT-D1-3720	00-WT	Final Clean & Wax Floors - Area D	10	10	24-Apr-28	05-May-28
Area D - Kitchen / Serveries			197	197	08-Jun-27	17-Mar-28
PAC-INT-D1-2050	06C	Set Door Frames - Kitchen	5	5	08-Jun-27	14-Jun-27
PAC-INT-D1-2070	11A	Cold Box Instalation/Construciton - Cooler/Freezer	10	10	08-Jun-27	21-Jun-27
PAC-INT-D1-2060	09B	Track/Framing - Walls - Kitchen	5	5	15-Jun-27	21-Jun-27
PAC-INT-D1-2160	09B	Soffit Framing - Kitchen	5	5	22-Jun-27	28-Jun-27
PAC-INT-D1-2080	22A	Overhead Plumbing Mains - HW/CW/HWR/140WR & R/Gas	15	15	22-Jun-27	13-Jul-27
PAC-INT-D1-2090	23A	Overhead HVAC Duct Mains/FCU's/Risers	20	20	22-Jun-27	20-Jul-27
PAC-INT-D1-2100	23A	Mechaicnal Overhead Piping	15	15	22-Jun-27	13-Jul-27
PAC-INT-D1-2110	26B	Electrical Overhead Rough-In	15	15	22-Jun-27	13-Jul-27
PAC-INT-D1-2120	23A	HVAC Control Rough-in above ceiling	10	10	22-Jun-27	06-Jul-27
PAC-INT-D1-2130	21A	Sprinkler Rough-In	10	10	22-Jun-27	06-Jul-27
PAC-INT-D1-2140	22A	Plumbing In wall rough In	15	15	22-Jun-27	13-Jul-27
PAC-INT-D1-2150	08C	Overhead Door Installation	5	5	22-Jun-27	28-Jun-27
PAC-INT-D1-2170	01A	Cold Boxes - Inspection	5	5	22-Jun-27	28-Jun-27
PAC-INT-D1-2180	11A	Install Hoods	5	5	22-Jun-27	28-Jun-27
PAC-INT-D1-2190	23A	Install HVAC Sheet Metal - Hoods	15	15	29-Jun-27	20-Jul-27
PAC-INT-D1-2200	01A	Fire Marshall Inspection	5	5	29-Jun-27	06-Jul-27
PAC-INT-D1-2210	21A	Sprinkler Hydro-Testing	5	5	07-Jul-27	13-Jul-27
PAC-INT-D1-2220	25A	Controls/Valves - Mechaincal Piping/FCU's	10	10	14-Jul-27	27-Jul-27
PAC-INT-D1-2230	28A	Electrical/Systems/Controls/FA In Wall Rough-In	10	10	14-Jul-27	27-Jul-27
PAC-INT-D1-2240	28A	Plumbing Testing - In-Wall Componants	10	10	14-Jul-27	27-Jul-27
PAC-INT-D1-2250	06C	Blocking	5	5	14-Jul-27	20-Jul-27
PAC-INT-D1-2260	01A	Plumbing Inspection	5	5	14-Jul-27	20-Jul-27
PAC-INT-D1-2270	21A	Install Sprinkler Heads	5	5	14-Jul-27	20-Jul-27
PAC-INT-D1-2630	23B	Measure / Fab / Install Ductwork Transitions	5	5	21-Jul-27	27-Jul-27
PAC-INT-D1-2280	23A	Mechaical Piping Testing	5	5	28-Jul-27	03-Aug-27
PAC-INT-D1-2290	23B	HVAC - Duct Testing - Area D	5	5	28-Jul-27	03-Aug-27
PAC-INT-D1-2310	26B	Inspections - Electrical	5	5	28-Jul-27	03-Aug-27
PAC-INT-D1-2320	23A	Mechaincal piping loop testing - Area D	5	5	04-Aug-27	10-Aug-27
PAC-INT-D1-2350	22A	Overhead Insulation - Plumbing	5	5	11-Aug-27	17-Aug-27
PAC-INT-D1-2330	23A	Ductwork Insulation	10	10	15-Nov-27	30-Nov-27
PAC-INT-D1-2300	22A	Plumbing Insulation	10	10	15-Nov-27	30-Nov-27
PAC-INT-D1-2340	22A	In wall Insulation	5	5	15-Nov-27	19-Nov-27
PAC-INT-D1-2370	23A	Kitchen Hood Insulation	5	5	01-Dec-27	07-Dec-27
PAC-INT-D1-2360	00-WT	WT In-Wall Inspection	5	5	01-Dec-27	07-Dec-27
PAC-INT-I-1500	01A	NCC In-Wall Inspection	5	5	08-Dec-27	14-Dec-27
PAC-INT-D1-2380	09B	Hang Drywall - Walls & Soffits	5	5	15-Dec-27	21-Dec-27
PAC-INT-D1-2390	09B	Wall & Soffit Finishing	5	5	22-Dec-27	30-Dec-27
PAC-INT-D1-2400	09K	Prime/First Coat Paint	5	5	03-Jan-28	07-Jan-28
PAC-INT-D1-2410	09E	Ceiling Wall Angle & Grid	5	5	10-Jan-28	14-Jan-28
PAC-INT-D1-2420	26B	Electrical Trim Out - Ceiling	5	5	17-Jan-28	21-Jan-28
PAC-INT-D1-2430	23A	HVAC Trim Out - Ceiling	5	5	17-Jan-28	21-Jan-28
PAC-INT-D1-2440	21A	Sprinkler Trim out - Ceiling	5	5	17-Jan-28	21-Jan-28
PAC-INT-D1-2450	28A	FA/Speakers/Specialties - Ceiling Mounted equipment	5	5	17-Jan-28	21-Jan-28
PAC-INT-D1-2460	09D	Wall Tile - Servery	5	5	17-Jan-28	21-Jan-28
PAC-INT-D1-2470	26B	Electrical Above ceiling inseption	5	5	24-Jan-28	28-Jan-28
PAC-INT-D1-2480	22A	Plumbing fixture/trim out - Bath/Jan.	5	5	24-Jan-28	28-Jan-28
PAC-INT-D1-2490	06C	Wall Protection - Kicthen. Dish room/Typ	5	5	24-Jan-28	28-Jan-28
PAC-INT-D1-2500	00-WT	WT Above-Ceiling Inspections	5	5	31-Jan-28	04-Feb-28
PAC-INT-D1-2510	09H	Resinous Flooring Installation	5	5	31-Jan-28	04-Feb-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-D1-2530	09B	Point up/2nd coat paint	5	5	07-Feb-28	11-Feb-28
PAC-INT-D1-1510	01A	NCC Above Ceiling Inspection	5	5	07-Feb-28	11-Feb-28
PAC-INT-D1-2520	09E	Drop Ceiling Tile	5	5	14-Feb-28	18-Feb-28
PAC-INT-D1-2560	26B	Wall Trim Out - Electrical/Systems/FA	5	5	14-Feb-28	18-Feb-28
PAC-INT-D1-2580	06C	Install Doors & Hardware	5	5	14-Feb-28	18-Feb-28
PAC-INT-D1-2540	11A	Set and Connect Kitchen Equipment	5	5	21-Feb-28	25-Feb-28
PAC-INT-D1-2600	09K	Final Coat Paint	5	5	21-Feb-28	25-Feb-28
PAC-INT-D1-2550	11A	Hood - Install Sprinkler Systems	5	5	28-Feb-28	03-Mar-28
PAC-INT-D1-2570	11A	Start-Up & Testing Equipment	5	5	28-Feb-28	03-Mar-28
PAC-INT-D1-2590	11A	Start-up Testing Range Hood	5	5	06-Mar-28	10-Mar-28
PAC-INT-D1-2610	01A	Health Inspection	5	5	13-Mar-28	17-Mar-28
PAC-INT-D1-2620	01A	Fire Marshal - Final Kitchen Inspection	5	5	13-Mar-28	17-Mar-28
HS Cafeteria			212	212	22-Jun-27	21-Apr-28
PAC-INT-D1-1540	09B	Track/Framing - Walls	5	5	22-Jun-27	28-Jun-27
PAC-INT-D1-1530	06C	Set Door Frames	5	5	29-Jun-27	06-Jul-27
PAC-INT-D1-1550	09B	Soffit Framing	5	5	29-Jun-27	06-Jul-27
PAC-INT-D1-1560	22A	Overhead Plumbing Mains Corridor - HW/CW/HWR/140WR & R/Gas -	15	15	29-Jun-27	20-Jul-27
PAC-INT-D1-1580	23A	Mechanical Overhead Piping	15	15	29-Jun-27	20-Jul-27
PAC-INT-D1-1590	23A	Ductwork - Mains/Riser	10	10	29-Jun-27	13-Jul-27
PAC-INT-D1-1650	26B	Electrical Overhead Rough-In	15	15	29-Jun-27	20-Jul-27
PAC-INT-D1-1670	21A	Sprinkler rough-in	15	15	29-Jun-27	20-Jul-27
PAC-INT-D1-1680	28A	Electrical/Systems/Controls/FA In Wall Rough-In	10	10	29-Jun-27	13-Jul-27
PAC-INT-D1-1690	22A	Plumbing In wall rough In	5	5	29-Jun-27	06-Jul-27
PAC-INT-D1-1700	22A	Plumbing Testing - In-Wall Components	5	5	07-Jul-27	13-Jul-27
PAC-INT-D1-1720	06C	Install Blocking	5	5	07-Jul-27	13-Jul-27
PAC-INT-D1-1570	23A	Overhead HVAC Duct Mains/FCU's/Risers	15	15	14-Jul-27	03-Aug-27
PAC-INT-D1-1660	25A	HVAC Control Rough-in above ceiling	15	15	14-Jul-27	03-Aug-27
PAC-INT-D1-1600	23A	Controls/Valves - Mechaincal Piping/FCU's	10	10	21-Jul-27	03-Aug-27
PAC-INT-D1-1730	26B	Inspections - Electrical	5	5	21-Jul-27	27-Jul-27
PAC-INT-D1-1740	01A	Inspections - Plumbing	5	5	21-Jul-27	27-Jul-27
PAC-INT-D1-1610	23A	Mechaical Piping Testing - Café	5	5	04-Aug-27	10-Aug-27
PAC-INT-D1-1620	23B	HVAC - Duct Testing - Café	5	5	04-Aug-27	10-Aug-27
PAC-INT-D1-1630	22A	Overhead Insuation - Plumbing	15	15	15-Nov-27	07-Dec-27
PAC-INT-D1-1640	23A	Ductwork Insulation	20	20	15-Nov-27	14-Dec-27
PAC-INT-D1-1710	22A	Plumbing Insualtion	20	20	15-Nov-27	14-Dec-27
PAC-INT-D1-1750	22A	In wall Insulation	10	10	15-Nov-27	30-Nov-27
PAC-INT-D1-1780	09B	Drywall - Clerestory	15	15	15-Nov-27	07-Dec-27
PAC-INT-D1-1800	09B	Wall Finishing - Cafeteria Soffits @ clerestory	15	15	22-Nov-27	14-Dec-27
PAC-INT-D1-1760	01A	Inspecitons - NCC Close In Wall	5	5	01-Dec-27	07-Dec-27
PAC-INT-D1-1770	09B	Drywall - Walls	10	10	08-Dec-27	21-Dec-27
PAC-INT-D1-1790	09B	Wall Finishing - Walls, Soffits(bathrooms)	15	15	22-Dec-27	14-Jan-28
PAC-INT-D1-1810	09K	Prime/First coat - Walls, soffits, exposed deck	10	10	17-Jan-28	28-Jan-28
PAC-INT-D1-1820	09E	Ceiling Wall Angle/Grid - Cafeterie, Storage, Bathrooms	5	5	31-Jan-28	04-Feb-28
PAC-INT-D1-1890	09E	Hanging Ceiling Clouds - Clerestory	15	15	31-Jan-28	18-Feb-28
PAC-INT-D1-1920	09D	Wall Tile - Bathrooms	10	10	31-Jan-28	11-Feb-28
PAC-INT-D1-1940	09D	Wall Tile - Single toilet rooms @ Theater	5	5	31-Jan-28	04-Feb-28
PAC-INT-D1-1830	26B	Electrical Trim Out - ceiling	15	15	07-Feb-28	25-Feb-28
PAC-INT-D1-1840	23A	HVAC trim out - Ceiling	10	10	07-Feb-28	18-Feb-28
PAC-INT-D1-1860	28A	FA/Speakers/Specialties - Ceiling Mounted equipment	10	10	07-Feb-28	18-Feb-28
PAC-INT-D1-1930	09C	Floor Tile - Single toilet Rooms @ Theater	5	5	14-Feb-28	18-Feb-28
PAC-INT-D1-1850	21A	Sprinkler Trim out - Ceiling	10	10	21-Feb-28	03-Mar-28
PAC-INT-D1-1950	22A	Set Bathroom Fixtures	15	15	21-Feb-28	10-Mar-28
PAC-INT-D1-2000	09B	Wall Pointing	15	15	21-Feb-28	10-Mar-28
PAC-INT-D1-1870	26B	Electrical Above ceiling insepction	5	5	28-Feb-28	03-Mar-28
PAC-INT-D1-1880	01A	NCC Above ceiling close in inspections	5	5	06-Mar-28	10-Mar-28
PAC-INT-D1-1910	09H	Resinour Flooring - Bathrooms	10	10	06-Mar-28	17-Mar-28
PAC-INT-D1-2030	06C	Doors and Hardware	10	10	06-Mar-28	17-Mar-28
PAC-INT-D1-1900	09E	Dropping Ceiling Tile	10	10	13-Mar-28	24-Mar-28
PAC-INT-D1-1960	09G	Terrazzo Prep flooring/Layout	5	5	20-Mar-28	24-Mar-28
PAC-INT-D1-1970	09G	Terrazzo trowel flooring	5	5	27-Mar-28	31-Mar-28
PAC-INT-D1-2020	09E	Accoustical Wall Panels	5	5	27-Mar-28	31-Mar-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-D1-1980	09G	Polish & Finish Terrazzo	5	5	03-Apr-28	07-Apr-28
PAC-INT-D1-1990	09K	Floor Sealing	5	5	10-Apr-28	14-Apr-28
PAC-INT-D1-2010	09K	Final Coat Painting	10	10	10-Apr-28	21-Apr-28
Area D - Multi-User Bathroom			182	182	08-Jun-27	25-Feb-28
PAC-INT-D1-1000	09B	Layout Walls - multi-user Bathroom	5	5	08-Jun-27	14-Jun-27
PAC-INT-D1-1010	09B	Frame Track / Wall / Bulkheads	5	5	29-Jun-27	06-Jul-27
PAC-INT-D1-1020	23B	Install Overhead HVAC Sheetmetal	5	5	07-Jul-27	13-Jul-27
PAC-INT-D1-1030	26B	Rough-In Overhead Electrical	5	5	07-Jul-27	13-Jul-27
PAC-INT-D1-1040	22A	Rough-In Overhead Plumbing	5	5	07-Jul-27	13-Jul-27
PAC-INT-D1-1060	21A	Rough-In Overhead Sprinkler	5	5	07-Jul-27	13-Jul-27
PAC-INT-D1-1120	28A	Rough-In Special Systems - Security / AV / IT / FA	5	5	07-Jul-27	13-Jul-27
PAC-INT-D1-1050	23B	Rough-In Overhead HVAC Controls	5	5	14-Jul-27	20-Jul-27
PAC-INT-D1-1080	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	5	5	14-Jul-27	20-Jul-27
PAC-INT-D1-1100	26B	Rough-In In-Wall Electrical	5	5	14-Jul-27	20-Jul-27
PAC-INT-D1-1070	22A	Rough-In Plumbing - Chair Carriers	5	5	21-Jul-27	27-Jul-27
PAC-INT-D1-1110	26B	Electrical In-Wall Inspection	5	5	21-Jul-27	27-Jul-27
PAC-INT-D1-1090	22A	Plumbing Testing	5	5	28-Jul-27	03-Aug-27
PAC-INT-D1-1130	06C	Install Blocking	5	5	28-Jul-27	03-Aug-27
PAC-INT-D1-1140	00-WT	Wall Close-In WT Inspection	5	5	04-Aug-27	10-Aug-27
PAC-INT-D1-1150	01A	Plumbing In-Wall NCC Inspection	5	5	11-Aug-27	17-Aug-27
PAC-INT-D1-1160	09B	Hang Drywall Walls	5	5	15-Nov-27	19-Nov-27
PAC-INT-D1-1170	09B	Hang Drywall Ceilings / Bulkheads	5	5	22-Nov-27	30-Nov-27
PAC-INT-D1-1180	09B	Drywall Finishing	5	5	01-Dec-27	07-Dec-27
PAC-INT-D1-1190	09K	Prime Coat Walls	5	5	08-Dec-27	14-Dec-27
PAC-INT-D1-1210	09D	Install Wall Tile	5	5	15-Dec-27	21-Dec-27
PAC-INT-D1-1220	09C	Install Resinous Flooring & Base	5	5	22-Dec-27	30-Dec-27
PAC-INT-D1-1200	09E	Install Ceiling Grid & Border Tile	5	5	03-Jan-28	07-Jan-28
PAC-INT-D1-1230	26B	Ceiling Trim-Out - Electrical	5	5	10-Jan-28	14-Jan-28
PAC-INT-D1-1240	23B	Ceiling Trim-Out - Mechanical	5	5	10-Jan-28	14-Jan-28
PAC-INT-D1-1250	21A	Ceiling Trim-Out - Sprinkler	5	5	10-Jan-28	14-Jan-28
PAC-INT-D1-1260	28A	Ceiling Trim-Out - Security / AV / IT / FA	5	5	10-Jan-28	14-Jan-28
PAC-INT-D1-1290	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks / Misc.	5	5	17-Jan-28	21-Jan-28
PAC-INT-D1-1360	26B	Electrical Above Ceiling Inspection	5	5	17-Jan-28	21-Jan-28
PAC-INT-D1-1270	00-WT	WT Ceiling Close-In Inspection	5	5	24-Jan-28	28-Jan-28
PAC-INT-D1-1300	22A	Install Toilet Partitions	5	5	24-Jan-28	28-Jan-28
PAC-INT-D1-1310	09B	Wall Point-Up	5	5	31-Jan-28	04-Feb-28
PAC-INT-D1-1350	01A	NCC Ceiling Close-In Inspection	5	5	31-Jan-28	04-Feb-28
PAC-INT-D1-1280	09E	Drop Ceiling Tile	5	5	07-Feb-28	11-Feb-28
PAC-INT-D1-1320	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	5	5	07-Feb-28	11-Feb-28
PAC-INT-D1-1330	07G	Install Caulking	5	5	14-Feb-28	18-Feb-28
PAC-INT-D1-1340	09K	Final Paint	5	5	21-Feb-28	25-Feb-28
Mech / Elec / FP / MDF / Facilities Area			314	314	03-May-27	27-Jul-28
PAC-INT-D1-3810	26B	Install DELMARVA Transformer	5	5	03-May-27	07-May-27
PAC-INT-D1-3790	26B	Pull Feeders From Transformer to Gear	5	5	10-May-27	14-May-27
PAC-INT-D1-3730	26B	Install Main Electrical Gear	5	5	17-May-27	21-May-27
PAC-INT-D1-3200	09B	Frame Walls - Mech / Elec / FP / MDF / Facilities Area	5	5	08-Jun-27	14-Jun-27
PAC-INT-D1-3220	22A	Plumbing In Wall Rough-In	10	10	15-Jun-27	28-Jun-27
PAC-INT-D1-3230	26B	Electrical In Wall Rough-In	10	10	15-Jun-27	28-Jun-27
PAC-INT-D1-3210	23A	Mechanical Overhead Piping - Expansion Loops	2	2	15-Jun-27	16-Jun-27
PAC-INT-D1-3240	23A	Hang FCUs	2	2	15-Jun-27	16-Jun-27
PAC-INT-D1-3750	26B	Install Subpanels / MDPs	5	5	15-Jun-27	21-Jun-27
PAC-INT-D1-3760	23A	Install Unit Heaters	2	2	15-Jun-27	16-Jun-27
PAC-INT-D1-3290	23A	Mechanical Overhead Piping - FCUs	10	10	17-Jun-27	30-Jun-27
PAC-INT-D1-3320	23A	Install Condensate Piping	5	5	17-Jun-27	23-Jun-27
PAC-INT-D1-3330	23B	Measure / Fab / Install Ductwork Transitions	10	10	17-Jun-27	30-Jun-27
PAC-INT-D1-3740	26B	Install Conduit	5	5	22-Jun-27	28-Jun-27
PAC-INT-D1-3250	26C	Special Systems - Rough-In (Security,AV, IT,FA)	5	5	29-Jun-27	06-Jul-27
PAC-INT-D1-3260	06C	Install Blocking	5	5	29-Jun-27	06-Jul-27
PAC-INT-D1-3270	22A	Plumbing In Wall Insulation	5	5	29-Jun-27	06-Jul-27
PAC-INT-D1-3370	23B	HVAC Sheet Metal	5	5	01-Jul-27	08-Jul-27
PAC-INT-D1-3360	25A	Install HVAC Controls & Valves	5	5	01-Jul-27	08-Jul-27

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-D1-3280	22A	Plumbing In-Wall WT Inspection	2	2	07-Jul-27	08-Jul-27
PAC-INT-D1-3340	26B	Electrical In-Wall WT Inspection	2	2	07-Jul-27	08-Jul-27
PAC-INT-D1-3400	26B	Electrical Overhead Rough-in	15	15	09-Jul-27	29-Jul-27
PAC-INT-D1-3410	21A	Sprinkler Overhead Rough-In	10	10	09-Jul-27	22-Jul-27
PAC-INT-D1-3420	23B	Duct Testing	2	2	09-Jul-27	12-Jul-27
PAC-INT-D1-3380	23A	Mechanical Piping - Testing Above Ceiling	2	2	09-Jul-27	12-Jul-27
PAC-INT-D1-3300	22A	Plumbing In-Wall NCC Inspection	2	2	09-Jul-27	12-Jul-27
PAC-INT-D1-3350	26B	Electrical In-Wall Inspection	2	2	09-Jul-27	12-Jul-27
PAC-INT-D1-3390	23A	Mechanical Piping Insulation	5	5	13-Jul-27	19-Jul-27
PAC-INT-D1-3430	23B	HVAC Sheet Metal Insulation	5	5	13-Jul-27	19-Jul-27
PAC-INT-D1-3440	21A	Sprinkler Overhead Hydro-Testing	2	2	23-Jul-27	26-Jul-27
PAC-INT-D1-3310	07A	In-Wall Insulation	2	2	15-Nov-27	16-Nov-27
PAC-INT-D1-3450	00-WT	Wall Close-In WT Inspection	2	2	17-Nov-27	18-Nov-27
PAC-INT-D1-3460	01A	Wall Close-In NCC Inspection	2	2	19-Nov-27	22-Nov-27
PAC-INT-D1-3470	09B	Hang Drywall	5	5	23-Nov-27	01-Dec-27
PAC-INT-D1-3480	09B	Drywall Finishing	5	5	02-Dec-27	08-Dec-27
PAC-INT-D1-3490	09K	Prime/1st Coat Wall Paint	2	2	09-Dec-27	10-Dec-27
PAC-INT-D1-3500	09E	Install Ceiling Grid	2	2	13-Dec-27	14-Dec-27
PAC-INT-D1-3510	21A	Sprinkler Ceiling Trim-Out	5	5	15-Dec-27	21-Dec-27
PAC-INT-D1-3520	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	2	2	15-Dec-27	16-Dec-27
PAC-INT-D1-3530	09K	Wall Point Ups - Second Coat Paint	2	2	15-Dec-27	16-Dec-27
PAC-INT-D1-3540	26B	Install Lights	10	10	15-Dec-27	30-Dec-27
PAC-INT-D1-3550	23A	Mechanical Ceiling Trim-Out	5	5	15-Dec-27	21-Dec-27
PAC-INT-D1-3560	09E	Cut Ceiling Tile	2	2	15-Dec-27	16-Dec-27
PAC-INT-D1-3570	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	17-Dec-27	23-Dec-27
PAC-INT-D1-3580	01A	Fire Marshal Fire Damper Inspection	2	2	22-Dec-27	23-Dec-27
PAC-INT-D1-3590	00-WT	Ceiling Close-In WT Inspections	2	2	03-Jan-28	04-Jan-28
PAC-INT-D1-3600	01A	Ceiling Close-In NCC Inspections	2	2	05-Jan-28	06-Jan-28
PAC-INT-D1-3610	09E	Drop Ceiling Tile	2	2	07-Jan-28	10-Jan-28
PAC-INT-D1-3620	09H	Resinous Flooring	0	0	11-Jan-28	11-Jan-28
PAC-INT-D1-3630	12A	Install Casework - VCT Areas	2	2	11-Jan-28	12-Jan-28
PAC-INT-D1-3660	06C	Marker boards/Smart Boards, TV, Misc Specialties	1	1	11-Jan-28	11-Jan-28
PAC-INT-D1-3640	12A	Install Casework - Resinous Areas	0	0	11-Jan-28	11-Jan-28
PAC-INT-D1-3650	09C	VCT Flooring	5	5	13-Jan-28	19-Jan-28
PAC-INT-D1-3670	28A	Audio Enhancement System Trim-Out	1	1	13-Jan-28	13-Jan-28
PAC-INT-D1-3680	06C	Install Doors & Hardware	2	2	20-Jan-28	21-Jan-28
PAC-INT-D1-3690	09K	Final Painting	5	5	24-Jan-28	28-Jan-28
PAC-INT-D1-3700	09C	Install Rubber Wall Base	2	2	31-Jan-28	01-Feb-28
PAC-INT-D1-3710	00-WT	WT Create Work-to-Complete List - Mech / Elec / FP / MDF / Facilities Area	1	1	02-Feb-28	02-Feb-28
Power Distribution			274	274	29-Jun-27	27-Jul-28
PAC-INT-D1-4050	26B	Pull Feeders - Area L	10	10	29-Jun-27	13-Jul-27
PAC-INT-D1-4040	26B	Pull Feeders - Area K	10	10	14-Jul-27	27-Jul-27
PAC-INT-D1-4080	26B	Terminate at Panels - Area L	5	5	14-Jul-27	20-Jul-27
PAC-INT-D1-4110	26B	Cut in Power - Area L	10	10	21-Jul-27	03-Aug-27
PAC-INT-D1-3930	26B	Pull Feeders - Area G	10	10	28-Jul-27	10-Aug-27
PAC-INT-D1-4070	26B	Terminate at Panels - Area K	5	5	28-Jul-27	03-Aug-27
PAC-INT-D1-3970	26B	Terminate at Panels - Area G	5	5	11-Aug-27	17-Aug-27
PAC-INT-D1-3940	26B	Pull Feeders - Area H	10	10	11-Aug-27	24-Aug-27
PAC-INT-D1-3980	26B	Terminate at Panels - Area H	5	5	25-Aug-27	31-Aug-27
PAC-INT-D1-4030	26B	Pull Feeders - Area J	10	10	25-Aug-27	08-Sep-27
PAC-INT-D1-3860	26B	Pull Feeders - Area D	10	10	09-Sep-27	22-Sep-27
PAC-INT-D1-4060	26B	Terminate at Panels - Area J	5	5	09-Sep-27	15-Sep-27
PAC-INT-D1-3880	26B	Terminate at Panels - Area D	5	5	23-Sep-27	29-Sep-27
PAC-INT-D1-3910	26B	Pull Feeders - Area E	10	10	23-Sep-27	06-Oct-27
PAC-INT-D1-3950	26B	Terminate at Panels - Area E	5	5	07-Oct-27	13-Oct-27
PAC-INT-D1-3920	26B	Pull Feeders - Area F	10	10	07-Oct-27	20-Oct-27
PAC-INT-D1-3850	26B	Pull Feeders - Area C	10	10	21-Oct-27	03-Nov-27
PAC-INT-D1-3960	26B	Terminate at Panels - Area F	5	5	21-Oct-27	27-Oct-27
PAC-INT-D1-3820	26B	Pull Feeders - Area B	10	10	04-Nov-27	17-Nov-27
PAC-INT-D1-3870	26B	Terminate at Panels - Area C	5	5	04-Nov-27	10-Nov-27
PAC-INT-D1-4010	26B	Cut in Power - Area G	30	30	09-Nov-27	22-Dec-27

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-D1-3770	26B	Pull Feeders - Area A	10	10	18-Nov-27	03-Dec-27
PAC-INT-D1-3830	26B	Terminate at Panels - Area B	5	5	18-Nov-27	24-Nov-27
PAC-INT-D1-3780	26B	Terminate at Panels - Area A	5	5	06-Dec-27	10-Dec-27
PAC-INT-D1-4100	26B	Cut in Power - Area K	10	10	29-Dec-27	12-Jan-28
PAC-INT-D1-4000	26B	Cut in Power - Area F	10	10	24-Jan-28	04-Feb-28
PAC-INT-D1-3890	26B	Cut in Power - Area C	10	10	03-Feb-28	16-Feb-28
PAC-INT-D1-4090	26B	Cut in Power - Area J	30	30	18-Feb-28	30-Mar-28
PAC-INT-D1-4020	26B	Cut in Power - Area H	30	30	23-Feb-28	04-Apr-28
PAC-INT-D1-3990	26B	Cut in Power - Area E	10	10	28-Feb-28	10-Mar-28
PAC-INT-D1-3900	26B	Cut in Power - Area D	10	10	06-Mar-28	17-Mar-28
PAC-INT-D1-3840	26B	Cut in Power - Area B	20	20	15-May-28	12-Jun-28
PAC-INT-D1-3800	26B	Cut in Power - Area A	20	20	29-Jun-28	27-Jul-28
Loading Dock			90	90	08-Jun-27	13-Oct-27
PAC-INT-D1-5000	00-WT	Loading Dock Fitout	90	90	08-Jun-27	13-Oct-27
Area E			324	324	03-Aug-27	09-Nov-28
PAC-INT-E1-1810	09B	Layout Walls - Area E	5	5	03-Aug-27	09-Aug-27
PAC-INT-E1-1770	23A	Startup & Commissioning of Equipment - Area E	5	5	09-Aug-28	15-Aug-28
PAC-INT-E1-1780	23A	Prefunctional Testing of Equipment - Area E	5	5	16-Aug-28	22-Aug-28
PAC-INT-E1-1790	23A	Checkout Equipment Function & Controls Sequence - Area E	5	5	23-Aug-28	29-Aug-28
PAC-INT-E1-1800	00-WT	WT Create Work-to-Complete List - Area E	5	5	30-Aug-28	06-Sep-28
PAC-INT-E1-2260	00-WT	Final Clean & Wax Floors - Area E	10	10	30-Aug-28	13-Sep-28
PAC / Theater Lobby			156	156	10-Aug-27	22-Mar-28
PAC-INT-E1-1820	06C	Set Door Frames - PAC / Theater Lobby	5	5	10-Aug-27	16-Aug-27
PAC-INT-E1-2090	09B	Install Elevator Shaft Walls - Floor 1 thru 2	5	5	10-Aug-27	16-Aug-27
PAC-INT-E1-1830	09B	Frame Walls - PAC / Theater Lobby	5	5	17-Aug-27	23-Aug-27
PAC-INT-E1-1840	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - PAC / Theater Lobby	5	5	24-Aug-27	30-Aug-27
PAC-INT-E1-2240	09B	Layout Storefront Framing - PAC / Theater Lobby	2	2	24-Aug-27	25-Aug-27
PAC-INT-E1-1850	23A	Mechanical Overhead Piping Mains - PAC / Theater Lobby	5	5	31-Aug-27	07-Sep-27
PAC-INT-E1-1860	23B	HVAC Sheet Metal - PAC / Theater Lobby	10	10	08-Sep-27	21-Sep-27
PAC-INT-E1-1870	22A	Plumbing Mains - PAC / Theater Lobby	10	10	08-Sep-27	21-Sep-27
PAC-INT-E1-2170	00-WT	Plumbing In-Wall WT Inspection - PAC / Theater Lobby	2	2	22-Sep-27	23-Sep-27
PAC-INT-E1-2190	23B	HVAC Sheetmetal Insulation - PAC / Theater Lobby	5	5	22-Sep-27	28-Sep-27
PAC-INT-E1-2180	01A	Plumbing In-Wall NCC Inspection - PAC / Theater Lobby	2	2	24-Sep-27	27-Sep-27
PAC-INT-E1-1880	01A	Wall Close-In WT Inspection - PAC / Theater Lobby	2	2	28-Sep-27	29-Sep-27
PAC-INT-E1-1890	01A	Wall Close-In NCC Inspection - PAC / Theater Lobby	2	2	30-Sep-27	01-Oct-27
PAC-INT-E1-1900	09B	Hang Drywall - PAC / Theater Lobby	10	10	09-Nov-27	22-Nov-27
PAC-INT-E1-1910	09B	Drywall Finishing - PAC / Theater Lobby	10	10	23-Nov-27	08-Dec-27
PAC-INT-E1-1920	09K	Prime/1st Coat Wall Paint - PAC / Theater Lobby	5	5	09-Dec-27	15-Dec-27
PAC-INT-E1-2200	06A	Install Wood Wall Paneling - Navy Island - PAC / Theater Lobby	25	25	09-Dec-27	17-Jan-28
PAC-INT-E1-1930	09G	Terrazzo - PAC / Theater Lobby - Layout & Install Strips	5	5	16-Dec-27	22-Dec-27
PAC-INT-E1-1940	09G	Terrazzo - PAC / Theater Lobby - Preperation	5	5	23-Dec-27	03-Jan-28
PAC-INT-E1-1950	09G	Terrazzo - PAC / Theater Lobby - Pour Terrazo	5	5	04-Jan-28	10-Jan-28
PAC-INT-E1-1960	09G	Terrazzo - PAC / Theater Lobby - Grind & Polish	5	5	11-Jan-28	17-Jan-28
PAC-INT-E1-1970	09G	Terrazzo - PAC / Theater Lobby - Apply Sealant	2	2	18-Jan-28	19-Jan-28
PAC-INT-E1-1980	09D	Wall Tile - Vestibule - PAC / Theater Lobby	10	10	20-Jan-28	02-Feb-28
PAC-INT-E1-1990	09E	Install Ceiling Grid - PAC / Theater Lobby	10	10	20-Jan-28	02-Feb-28
PAC-INT-E1-2210	09G	Install Precast Terrazzo Treads - Theater Stairs to PAC Lobby	5	5	20-Jan-28	26-Jan-28
PAC-INT-E1-2250	09B	Install Storefront & Glazing - PAC / Theater Lobby	5	5	20-Jan-28	26-Jan-28
PAC-INT-E1-2220	06C	Install Wood Veneer Risers - Theater Stairs to PAC Lobby	5	5	27-Jan-28	02-Feb-28
PAC-INT-E1-2000	21A	Sprinkler Ceiling Trim-Out - PAC / Theater Lobby	10	10	03-Feb-28	16-Feb-28
PAC-INT-E1-2010	28A	Special Systems - Ceiling Trim out (Security, AV, ITFA) - PAC / Theater Lobby	5	5	03-Feb-28	09-Feb-28
PAC-INT-E1-2020	09K	Wall Point Ups - Second Coat Paint - PAC / Theater Lobby	5	5	03-Feb-28	09-Feb-28
PAC-INT-E1-2030	26B	Install Lights - PAC / Theater Lobby	15	15	03-Feb-28	23-Feb-28
PAC-INT-E1-2040	23A	Mechanical Ceiling Trim-Out - PAC / Theater Lobby	5	5	03-Feb-28	09-Feb-28
PAC-INT-E1-2050	09E	Cut Ceiling Tile - PAC / Theater Lobby	10	10	03-Feb-28	16-Feb-28
PAC-INT-E1-2100	06C	Install Div 10 Specialties - PAC / Theater Lobby	5	5	03-Feb-28	09-Feb-28
PAC-INT-E1-2230	05C	Install Handrails - Theater Stairs to PAC / Theater Lobby	5	5	03-Feb-28	09-Feb-28
PAC-INT-E1-2060	28A	Wall Trim Out - (Elect/Special systems, FA) - PAC / Theater Lobby	5	5	10-Feb-28	16-Feb-28
PAC-INT-E1-2130	06C	Install Doors & Hardware - PAC / Theater Lobby	5	5	10-Feb-28	16-Feb-28
PAC-INT-E1-2140	09K	Final Painting - PAC / Theater Lobby	2	2	17-Feb-28	18-Feb-28
PAC-INT-E1-2110	01A	Fire Marshal Fire Damper Inspection - PAC / Theater Lobby	2	2	17-Feb-28	18-Feb-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-E1-2070	00-WT	Ceiling Close-In WT Inspections - PAC / Theater Lobby	2	2	24-Feb-28	25-Feb-28
PAC-INT-E1-2080	01A	Ceiling Close-In NCC Inspections - PAC / Theater Lobby	2	2	28-Feb-28	29-Feb-28
PAC-INT-E1-2120	09E	Drop Ceiling Tile - PAC /Theater Lobby	15	15	01-Mar-28	21-Mar-28
PAC-INT-E1-2160	00-WT	WT Create Work-to-Complete List - PAC /Theater Lobby	1	1	22-Mar-28	22-Mar-28
Auditorium			271	271	18-Oct-27	09-Nov-28
Theater			271	271	18-Oct-27	09-Nov-28
PAC-INT-E1-3000	06B	Install Scaffold Platform System for Lift Access	15	15	18-Oct-27	05-Nov-27
PAC-INT-E1-3010	09B	Layout Perimeter Walls	5	5	01-Nov-27	05-Nov-27
PAC-INT-E1-3020	06C	Set Door Frames	5	5	08-Nov-27	12-Nov-27
PAC-INT-E1-3030	26B	Install Temporary Lighting - Gallery Level	5	5	08-Nov-27	12-Nov-27
PAC-INT-E1-3040	09B	Frame Perimeter Walls	10	10	15-Nov-27	30-Nov-27
PAC-INT-E1-3050	26B	Electrical in-wall rough-in	5	5	01-Dec-27	07-Dec-27
PAC-INT-E1-3060	28A	Special Systems in-wall rough-in	5	5	01-Dec-27	07-Dec-27
PAC-INT-E1-3070	06C	Install in-wall blocking	5	5	01-Dec-27	07-Dec-27
PAC-INT-E1-3080	26C	Tele/Data in-wall rough-in	5	5	01-Dec-27	07-Dec-27
PAC-INT-E1-3090	09B	Insulate & Hang Drywall at Perimeter Walls	15	15	08-Dec-27	30-Dec-27
PAC-INT-E1-3100	26B	Rough-in Electrical - Above Galeries Level	15	15	08-Dec-27	30-Dec-27
PAC-INT-E1-3110	26B	Rough-in Theater A/V Systems - Above Galeries Level	15	15	08-Dec-27	30-Dec-27
PAC-INT-E1-3120	26B	Rough-in Theater Performance Lighting - Above Galeries Level	15	15	08-Dec-27	30-Dec-27
PAC-INT-E1-3130	09B	Finish Drywall at Perimeter Walls	10	10	03-Jan-28	14-Jan-28
PAC-INT-E1-3140	09K	Prime Paint Perimeter Walls	5	5	17-Jan-28	21-Jan-28
PAC-INT-E1-3150	28A	Rough-in Special Systems - Above Galeries Level	5	5	24-Jan-28	28-Jan-28
PAC-INT-E1-3160	26C	Rough-in Tele/Data - Above Galeries Level	5	5	24-Jan-28	28-Jan-28
PAC-INT-E1-3170	21A	Rough-in Sprinkler - Above Galeries Level	5	5	24-Jan-28	28-Jan-28
PAC-INT-E1-3180	23B	Rough-in Ductwork - Above Galeries Level	10	10	31-Jan-28	11-Feb-28
PAC-INT-E1-3200	07H	Patch Fireproofing	5	5	14-Feb-28	18-Feb-28
PAC-INT-E1-3210	09B	Point-up GWB - Above Galeries Level	5	5	14-Feb-28	18-Feb-28
PAC-INT-E1-3220	09K	Paint Walls, Exposed Structure & MEP - Above Galeries Level	5	5	21-Feb-28	25-Feb-28
PAC-INT-E1-3230	09B	Frame Balcony Fronts, Soffits & Bulkheads - Level 2 & Level 3	15	15	28-Feb-28	17-Mar-28
PAC-INT-E1-3250	26B	Above Ceiling Rough-in Electrical - Level 2 & Level 3	5	5	13-Mar-28	17-Mar-28
PAC-INT-E1-3260	26B	Above Ceiling Rough-in Theater A/V Systems - Level 2 & Level 3	5	5	13-Mar-28	17-Mar-28
PAC-INT-E1-3270	26B	Above Ceiling Rough-in Theater Performance Lighting - Level 2 & Level 3	5	5	13-Mar-28	17-Mar-28
PAC-INT-E1-3240	09B	Frame Stage Front and Proscenium	10	10	20-Mar-28	31-Mar-28
PAC-INT-E1-3280	28A	Above Ceiling Rough-in Special Systems - Level 2 & Level 3	5	5	20-Mar-28	24-Mar-28
PAC-INT-E1-3290	26C	Above Ceiling Rough-in Tele/Data - Level 2 & Level 3	5	5	20-Mar-28	24-Mar-28
PAC-INT-E1-3300	23B	Above Ceiling Rough-in Ductwork - Level 2 & Level 3	5	5	27-Mar-28	31-Mar-28
PAC-INT-E1-3310	01A	Above Ceiling Inspection	5	5	03-Apr-28	07-Apr-28
PAC-INT-E1-3320	09B	Hang & Finish Hard Ceilings - Level 3	10	10	10-Apr-28	21-Apr-28
PAC-INT-E1-3330	09B	Hang & Finish Soffits & Bulkheads	10	10	24-Apr-28	05-May-28
PAC-INT-E1-3340	09B	Install Plywood Sheathing on Balcony Fronts - Level 2 & Level 3	5	5	08-May-28	12-May-28
PAC-INT-E1-3350	09K	Prime and First Coat Paint - Level 2 & Level 3	5	5	08-May-28	12-May-28
PAC-INT-E1-3360	09K	Install Plywood Sheathing on Proscenium	5	5	15-May-28	19-May-28
PAC-INT-E1-3390	09E	Install Cloud Ceiling System (Row-by-row Coordinate with MEP/FP)	20	20	15-May-28	12-Jun-28
PAC-INT-E1-3400	23B	Install Duct Drops & GRD's at Cloud Ceiling Level (Row-by-row Coordinate with Ceiling / MEP/FP)	20	20	15-May-28	12-Jun-28
PAC-INT-E1-3410	21A	Install Sprinkler Drops & Heads at Cloud Ceiling Level (Row-by-row Coordinate with Ceiling / MEP/FP)	20	20	15-May-28	12-Jun-28
PAC-INT-E1-3420	28A	Install Special Systems Devices at Cloud Ceiling Level (Row-by-row Coordinate with Ceiling / MEP/FP)	20	20	15-May-28	12-Jun-28
PAC-INT-E1-3430	26C	Install Tele/Data Devices at Cloud Ceiling Level (Row-by-row Coordinate with Ceiling / MEP/FP)	20	20	15-May-28	12-Jun-28
PAC-INT-E1-3440	26B	Install Lighting at Cloud Ceiling Level (Row-by-row Coordinate with Ceiling / MEP/FP)	20	20	15-May-28	12-Jun-28
PAC-INT-E1-3450	00-WT	Create and Issue Progress WTC List - Cloud Ceiling Level	5	5	13-Jun-28	19-Jun-28
PAC-INT-E1-3460	00-WT	Complete Progress WTC List - Cloud Ceiling Level	5	5	20-Jun-28	26-Jun-28
PAC-INT-E1-3470	09E	Install Ceiling Grid - Below Balcony Level	5	5	27-Jun-28	03-Jul-28
PAC-INT-E1-3480	06A	Install Balcony Front Millwork Panels - Galeries Level	10	10	27-Jun-28	11-Jul-28
PAC-INT-E1-3490	06B	Remove Scaffold Platform System	10	10	27-Jun-28	11-Jul-28
PAC-INT-E1-3500	26B	Install Lights in Ceiling Grid - Below Balcony Level	5	5	05-Jul-28	11-Jul-28
PAC-INT-E1-3510	28A	Install Special Systems Devices in Ceiling Grid - Below Balcony Level	5	5	12-Jul-28	18-Jul-28
PAC-INT-E1-3520	06A	Install Balcony Front Millwork Panels - Level 2	10	10	12-Jul-28	25-Jul-28
PAC-INT-E1-3530	09B	Frame Knee Walls & Stage Front at Lower Seating Level	5	5	12-Jul-28	18-Jul-28
PAC-INT-E1-3540	21A	Install Sprinkler Heads in Ceiling Grid - Below Balcony Level	5	5	19-Jul-28	25-Jul-28
PAC-INT-E1-3550	26B	In-wall rough in Electrical & Theater A/V Systems - Knee Walls at Lower Seating Level	5	5	19-Jul-28	25-Jul-28
PAC-INT-E1-3560	26C	Install Tele/Data Devices in Ceiling Grid - Below Balcony Level	5	5	26-Jul-28	01-Aug-28
PAC-INT-E1-3570	06A	Install Proscenium Surround Millwork - Above Stage Level	10	10	26-Jul-28	08-Aug-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-E1-3580	09B	Hang Sheathing at Knee Walls at Lower Seating Level	5	5	26-Jul-28	01-Aug-28
PAC-INT-E1-3590	23B	Install GRDs in Ceiling Grid - Below Balcony Level	5	5	02-Aug-28	08-Aug-28
PAC-INT-E1-3600	06A	Install Millwork Panels and Caps at Lower Seating Level	5	5	02-Aug-28	08-Aug-28
PAC-INT-E1-3610	00-WT	Ceiling Close-in Inspection - Below Balcony Level	5	5	09-Aug-28	15-Aug-28
PAC-INT-E1-3620	06A	Install Millwork Panels and Caps at Stage Front	5	5	09-Aug-28	15-Aug-28
PAC-INT-E1-3630	26B	Pull Cables and Terminate Theater A/V Boxes	15	15	09-Aug-28	29-Aug-28
PAC-INT-E1-3640	09E	Drop Ceiling Tiles	5	5	16-Aug-28	22-Aug-28
PAC-INT-E1-3650	09K	Install 2nd Coat Paint	5	5	16-Aug-28	22-Aug-28
PAC-INT-E1-3660	09H	Install Resinous Flooring Under Seating Area	15	15	23-Aug-28	13-Sep-28
PAC-INT-E1-3670	09E	Install Acoustical Wall Treatments	10	10	23-Aug-28	06-Sep-28
PAC-INT-E1-3680	26B	Install Wall Mounted Light Fixtures and Sconces	10	10	23-Aug-28	06-Sep-28
PAC-INT-E1-3690	09B	Point Up Drywall	5	5	07-Sep-28	13-Sep-28
PAC-INT-E1-3700	26B	Install power to Fixed Audience Seating Rows	5	5	14-Sep-28	20-Sep-28
PAC-INT-E1-3710	09K	Final Paint	5	5	14-Sep-28	20-Sep-28
PAC-INT-E1-3720	12B	Install Fixed Audience Seating (Level 1 and 2)	15	15	21-Sep-28	11-Oct-28
PAC-INT-E1-3730	05C	Install Aisle Rails	5	5	12-Oct-28	18-Oct-28
PAC-INT-E1-3740	26B	Terminate Power to Fixed Audience Seating	5	5	12-Oct-28	18-Oct-28
PAC-INT-E1-3750	09C	Install Carpet	10	10	19-Oct-28	01-Nov-28
PAC-INT-E1-3760	06C	Install Doors and Hardware	5	5	02-Nov-28	08-Nov-28
PAC-INT-E1-3770	00-WT	Create Theater Work-to-Complete List	1	1	09-Nov-28	09-Nov-28
Stage & Orchestra Pit			240	240	08-Nov-27	18-Oct-28
PAC-INT-E1-4000	09K	Install Block Filler & Paint on Stage Walls, Exposed Structure & Decking	5	5	08-Nov-27	12-Nov-27
PAC-INT-E1-4010	26B	Install Temporary Lighting	5	5	15-Nov-27	19-Nov-27
PAC-INT-E1-4020	26B	Rough-in overhead Electrical - Power & Lighting	15	15	22-Nov-27	14-Dec-27
PAC-INT-E1-4030	26B	Rough-in overhead A/V System	15	15	22-Nov-27	14-Dec-27
PAC-INT-E1-4040	26B	Rough-in overhead Performance Lighting	15	15	22-Nov-27	14-Dec-27
PAC-INT-E1-4050	28A	Rough-in overhead Special Systems	5	5	15-Dec-27	21-Dec-27
PAC-INT-E1-4060	26C	Rough-in overhead Tele/Data	5	5	22-Dec-27	30-Dec-27
PAC-INT-E1-4070	21A	Rough-in overhead Sprinkler	5	5	03-Jan-28	07-Jan-28
PAC-INT-E1-4080	23B	Rough in overhead Ductwork	5	5	10-Jan-28	14-Jan-28
PAC-INT-E1-4090	26B	Install Electrical Backboxes, Conduits and Raceways - Stage Perimeter Walls	15	15	17-Jan-28	04-Feb-28
PAC-INT-E1-4100	26B	Install A/V Sytem Backboxes, Conduits and Raceways - Stage Perimeter Walls	15	15	17-Jan-28	04-Feb-28
PAC-INT-E1-4110	26B	Install Performance Lighting System Backboxes, Conduits and Raceways - Stage Perimeter Walls	15	15	17-Jan-28	04-Feb-28
PAC-INT-E1-4120	26C	Install Tele/Data Backboxes, Conduits an dRaceways - Stage Perimeter Walls	5	5	07-Feb-28	11-Feb-28
PAC-INT-E1-4130	26B	Pull & Terminate Electrical - Stage Perimeter Walls	15	15	07-Feb-28	25-Feb-28
PAC-INT-E1-4140	26B	Pull & Terminate A/V Sytem Backboxes, Conduits and Raceways - Stage Perimeter Walls	15	15	07-Feb-28	25-Feb-28
PAC-INT-E1-4150	26B	Pull & Terminate Performance Lighting System Backboxes, Conduits and Raceways - Stage Perimeter Walls	15	15	07-Feb-28	25-Feb-28
PAC-INT-E1-4160	28A	Install Special Systems Backboxes, Conduits and Raceways - Stage Perimeter Walls	5	5	14-Feb-28	18-Feb-28
PAC-INT-E1-4170	09K	Install 2nd Coat of Paint on Walls & Exposed Boxes, Conduits, & Raceways	5	5	21-Feb-28	25-Feb-28
PAC-INT-E1-4180	26C	Install Tele/Data Backboxes, Conduits an dRaceways - Stage Perimeter Walls	5	5	28-Feb-28	03-Mar-28
PAC-INT-E1-4340	14A	Install Wheelchair Lift	10	10	28-Feb-28	10-Mar-28
PAC-INT-E1-4190	28A	Install Special Systems Backboxes, Conduits and Raceways - Stage Perimeter Walls	5	5	06-Mar-28	10-Mar-28
PAC-INT-E1-4200	00-WT	Create Preliminary WTC List	5	5	13-Mar-28	17-Mar-28
PAC-INT-E1-4210	00-WT	Complete Preliminary WTC List	5	5	20-Mar-28	24-Mar-28
PAC-INT-E1-4220	11B	Install Theater Rigging System & Motors	50	50	27-Mar-28	05-Jun-28
PAC-INT-E1-4230	26B	Install Power Connections to Theater Rigging System	15	15	06-Jun-28	26-Jun-28
PAC-INT-E1-4240	08C	Install Overhead Coiling Door	5	5	06-Jun-28	12-Jun-28
PAC-INT-E1-4250	26B	Install A/V System Connections to Theater Rigging System	15	15	27-Jun-28	18-Jul-28
PAC-INT-E1-4260	26B	Install Performance Lighting System Connections to Theater Rigging System	15	15	19-Jul-28	08-Aug-28
PAC-INT-E1-4270	11B	Pre-Functional Testing - Theater Rigging System	10	10	09-Aug-28	22-Aug-28
PAC-INT-E1-4280	09F	Install Stage Flooring	15	15	23-Aug-28	13-Sep-28
PAC-INT-E1-4290	06C	Install Doors & Hardware	5	5	14-Sep-28	20-Sep-28
PAC-INT-E1-4300	09K	Final Paint	5	5	21-Sep-28	27-Sep-28
PAC-INT-E1-4310	09K	Install Concrete Sealer in Orchestra Pit	5	5	28-Sep-28	04-Oct-28
PAC-INT-E1-4320	11B	Install Stage Curtains	10	10	28-Sep-28	11-Oct-28
PAC-INT-E1-4330	00-WT	Create WTC List	5	5	12-Oct-28	18-Oct-28
Control Room, Sound Stage & Dimmer Room			160	160	01-Dec-27	18-Jul-28
PAC-INT-E1-5000	09B	Frame Walls Control Room & Sound Stage	5	5	01-Dec-27	07-Dec-27
PAC-INT-E1-5010	26B	In-Wall Rough-In Electrical - Power & Lighting - Control Room & Sound Stage	15	15	08-Dec-27	30-Dec-27
PAC-INT-E1-5020	26B	In-Wall Rough-In A/V System - Control Room & Sound Stage	15	15	08-Dec-27	30-Dec-27
PAC-INT-E1-5030	26B	In-Wall Rough-In Performance Lighting - Control Room & Sound Stage	15	15	08-Dec-27	30-Dec-27

Remaining Level of Effort | Actual Level of Effort | Actual Work

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-E1-5040	09B	Frame Walls Dimmer Room	5	5	08-Dec-27	14-Dec-27
PAC-INT-E1-5050	28A	In-Wall Rough-In Special Systems - Control Room & Sound Stage	5	5	03-Jan-28	07-Jan-28
PAC-INT-E1-5060	26B	In-Wall Rough-In Electrical - Power & Lighting - Dimmer Room	15	15	03-Jan-28	21-Jan-28
PAC-INT-E1-5070	26B	In-Wall Rough-In A/V System - Dimmer Room	15	15	03-Jan-28	21-Jan-28
PAC-INT-E1-5080	26B	In-Wall Rough-In Performance Lighting - Dimmer Room	15	15	03-Jan-28	21-Jan-28
PAC-INT-E1-5090	26C	In-Wall Rough-In Tele/Data - Control Room & Sound Stage	5	5	10-Jan-28	14-Jan-28
PAC-INT-E1-5100	01A	In-Wall Inspection - Control Room & Sound Stage	5	5	17-Jan-28	21-Jan-28
PAC-INT-E1-5110	28A	In-Wall Rough-In Special Systems - Dimmer Room	5	5	24-Jan-28	28-Jan-28
PAC-INT-E1-5120	09B	Hang and Finish Drywall - Control Room & Sound Stage	10	10	24-Jan-28	04-Feb-28
PAC-INT-E1-5130	26C	In-Wall Rough-In Tele/Data - Dimmer Room	5	5	31-Jan-28	04-Feb-28
PAC-INT-E1-5140	21A	Rough-in overhead Sprinkler - Control Room & Sound Stage	5	5	07-Feb-28	11-Feb-28
PAC-INT-E1-5150	01A	In-Wall Inspection - Dimmer Room	5	5	07-Feb-28	11-Feb-28
PAC-INT-E1-5160	09K	Prime & First Coat Paint - Control Room & Sound Stage	5	5	07-Feb-28	11-Feb-28
PAC-INT-E1-5170	23B	Rough in overhead Ductwork - Control Room & Sound Stage	5	5	14-Feb-28	18-Feb-28
PAC-INT-E1-5180	09B	Hang and Finish Drywall - Dimmer Room	5	5	14-Feb-28	18-Feb-28
PAC-INT-E1-5190	21A	Rough-in overhead sprinkler - Dimmer Room	5	5	21-Feb-28	25-Feb-28
PAC-INT-E1-5200	26B	Pull Wire & Terminate Panels - Control Room & Sound Stage	20	20	21-Feb-28	17-Mar-28
PAC-INT-E1-5210	09K	Prime & First Coat Paint - Dimmer Room	2	2	21-Feb-28	22-Feb-28
PAC-INT-E1-5220	23A	Install Mini-split system - Dimmer Room	10	10	28-Feb-28	10-Mar-28
PAC-INT-E1-5230	26B	Pull Wire & Terminate Panels - Dimmer Room	20	20	20-Mar-28	14-Apr-28
PAC-INT-E1-5240	09E	Install Ceiling Grid - Control Room & Sound Stage	5	5	20-Mar-28	24-Mar-28
PAC-INT-E1-5250	26B	Install Lights in Grid - Control Room & Sound Stage	5	5	27-Mar-28	31-Mar-28
PAC-INT-E1-5260	28A	Install Special Systems Devices in Grid - Control Room & Sound Stage	5	5	03-Apr-28	07-Apr-28
PAC-INT-E1-5270	23B	Install GRDs - Control Room & Sound Stage	5	5	10-Apr-28	14-Apr-28
PAC-INT-E1-5280	09E	Install Ceiling Grid - Dimmer Room	5	5	17-Apr-28	21-Apr-28
PAC-INT-E1-5290	21A	Install Sprinkler Heads in Grid - Control Room & Sound Stage	5	5	17-Apr-28	21-Apr-28
PAC-INT-E1-5300	26B	Install Lights in Grid - Dimmer Room	5	5	24-Apr-28	28-Apr-28
PAC-INT-E1-5310	01A	Above Ceiling Inspection - Control Room & Sound Stage	5	5	24-Apr-28	28-Apr-28
PAC-INT-E1-5320	28A	Install Special Systems Devices in Grid - Dimmer Room	5	5	01-May-28	05-May-28
PAC-INT-E1-5330	09E	Drop Ceiling Tiles - Control Room & Sound Stage	5	5	01-May-28	05-May-28
PAC-INT-E1-5340	23B	Install GRDs - Dimmer Room	5	5	08-May-28	12-May-28
PAC-INT-E1-5350	08A	Install Windows - Control Room & Sound Stage	5	5	08-May-28	12-May-28
PAC-INT-E1-5360	21A	Install Sprinkler Heads in Grid - Dimmer Room	5	5	15-May-28	19-May-28
PAC-INT-E1-5370	12A	Install Casework & Countertops - Control Room & Sound Stage	5	5	15-May-28	19-May-28
PAC-INT-E1-5380	01A	Above Ceiling Inspection - Dimmer Room	5	5	22-May-28	26-May-28
PAC-INT-E1-5390	09K	Install Final Paint - Control Room & Sound Stage	5	5	22-May-28	26-May-28
PAC-INT-E1-5400	05C	Install Handrails - Control Room & Sound Stage	5	5	30-May-28	05-Jun-28
PAC-INT-E1-5410	09E	Drop Ceiling Tiles - Dimmer Room	5	5	30-May-28	05-Jun-28
PAC-INT-E1-5420	09C	Install Flooring & Base - Control Room & Sound Stage	5	5	06-Jun-28	12-Jun-28
PAC-INT-E1-5430	09K	Install Final Paint - Dimmer Room	5	5	06-Jun-28	12-Jun-28
PAC-INT-E1-5440	09C	Install Flooring & Base - Dimmer Room	5	5	13-Jun-28	19-Jun-28
PAC-INT-E1-5450	26B	Install Racks & Rack Mounted Equipment - Control Room & Sound Stage	15	15	13-Jun-28	03-Jul-28
PAC-INT-E1-5460	26B	Install Racks & Rack Mounted Equipment - Dimmer Room	15	15	20-Jun-28	11-Jul-28
PAC-INT-E1-5470	00-WT	Create Preliminary WTC List	5	5	12-Jul-28	18-Jul-28
Black Box & Scene Shop			282	282	23-Sep-27	01-Nov-28
PAC-INT-E1-6000	09B	Layout Walls	5	5	23-Sep-27	29-Sep-27
PAC-INT-E1-6010	06C	Set Door Frames	5	5	30-Sep-27	06-Oct-27
PAC-INT-E1-6020	09B	Frame Walls	5	5	15-Dec-27	21-Dec-27
PAC-INT-E1-6030	09B	Top-out GWB and Finish	5	5	22-Dec-27	30-Dec-27
PAC-INT-E1-6060	23B	Install Duct Hangers	5	5	03-Jan-28	07-Jan-28
PAC-INT-E1-6070	21A	Install Sprinkler Hangers	5	5	10-Jan-28	14-Jan-28
PAC-INT-E1-6080	26B	Install Overhead Electrical Boxes and Conduit - Power & Lighting	15	15	17-Jan-28	04-Feb-28
PAC-INT-E1-6090	26B	Install Overhead A/V Boxes and Conduit	15	15	17-Jan-28	04-Feb-28
PAC-INT-E1-6100	26B	Install Overhead Performance Lighting Boxes and Conduit	15	15	17-Jan-28	04-Feb-28
PAC-INT-E1-6110	28A	Install Overhead Special Systems Rough-in	10	10	07-Feb-28	18-Feb-28
PAC-INT-E1-6120	26C	Install Overhead Tele/Data Rough-in	10	10	07-Feb-28	18-Feb-28
PAC-INT-E1-6040	09E	Install Ceiling Type 7 to Deck	5	5	21-Feb-28	25-Feb-28
PAC-INT-E1-6050	09K	Install Spray Acoustical Insulation	5	5	28-Feb-28	03-Mar-28
PAC-INT-E1-6130	09K	Paint Exposed Structure and Decking	5	5	06-Mar-28	10-Mar-28
PAC-INT-E1-6140	23B	Install Ductwork	5	5	13-Mar-28	17-Mar-28
PAC-INT-E1-6150	21A	Install Sprinkler Drops	5	5	20-Mar-28	24-Mar-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-E1-6160	26B	In-Wall Rough In - Power & Lighting	20	20	27-Mar-28	21-Apr-28
PAC-INT-E1-6170	26B	In-Wall Rough In - A/V System	20	20	27-Mar-28	21-Apr-28
PAC-INT-E1-6180	26B	In-Wall Rough In - Performance Lighting System	20	20	27-Mar-28	21-Apr-28
PAC-INT-E1-6190	28A	In-Wall Rough In - Special Systems Rough-in	10	10	24-Apr-28	05-May-28
PAC-INT-E1-6200	26C	In-Wall Rough In - Tele/Data Rough-in	10	10	24-Apr-28	05-May-28
PAC-INT-E1-6210	01A	In-Wall Inspection	5	5	08-May-28	12-May-28
PAC-INT-E1-6220	09B	Insulate, Hang, and Finish Drywall	15	15	15-May-28	05-Jun-28
PAC-INT-E1-6230	09K	Prime and First Coat Paint	5	5	06-Jun-28	12-Jun-28
PAC-INT-E1-6240	26B	Pull and Terminate - Power & Lighting	15	15	13-Jun-28	03-Jul-28
PAC-INT-E1-6250	26B	Pull and Terminate - A/V System	15	15	13-Jun-28	03-Jul-28
PAC-INT-E1-6260	26B	Pull and Terminate - Performance Lighting	15	15	13-Jun-28	03-Jul-28
PAC-INT-E1-6270	05B	Install Catwalk Guardrails & Light Rails	10	10	13-Jun-28	26-Jun-28
PAC-INT-E1-6280	09B	Frame and Hang Acoustical Reflector Bulkheads	20	20	13-Jun-28	11-Jul-28
PAC-INT-E1-6290	08C	Install Overhead Doors	5	5	13-Jun-28	19-Jun-28
PAC-INT-E1-6300	08A	Install Control Room Windows	5	5	13-Jun-28	19-Jun-28
PAC-INT-E1-6330	09E	Install Ceiling Grid - Control Room & Dimmer Room	5	5	20-Jun-28	26-Jun-28
PAC-INT-E1-6340	26B	Install Lights in Grid - Control Room & Dimmer Room	5	5	27-Jun-28	03-Jul-28
PAC-INT-E1-6350	28A	Install Special Systems Devices in Grid - Control Room & Dimmer Room	5	5	05-Jul-28	11-Jul-28
PAC-INT-E1-6420	26B	Install Lights in Exposed Structure Areas	5	5	05-Jul-28	11-Jul-28
PAC-INT-E1-6450	26B	Install A/V Racks & Equipment	20	20	05-Jul-28	01-Aug-28
PAC-INT-E1-6310	11B	Install Wire Rope Grid Rigging System	20	20	12-Jul-28	08-Aug-28
PAC-INT-E1-6360	23B	Install GRDs - Control Room & Dimmer Room	5	5	12-Jul-28	18-Jul-28
PAC-INT-E1-6370	01A	Above Ceiling Inspection - Control Room & Dimmer Room	5	5	19-Jul-28	25-Jul-28
PAC-INT-E1-6380	09E	Drop Ceiling Tiles - Control Room & Dimmer Room	5	5	26-Jul-28	01-Aug-28
PAC-INT-E1-6460	26B	Install A/V Devices	10	10	02-Aug-28	15-Aug-28
PAC-INT-E1-6320	09K	Install 2nd Coat Paint	5	5	09-Aug-28	15-Aug-28
PAC-INT-E1-6470	26B	Install Performance Lighting	5	5	09-Aug-28	15-Aug-28
PAC-INT-E1-6390	12A	Install Casework & Countertops	5	5	16-Aug-28	22-Aug-28
PAC-INT-E1-6410	09C	Install Flooring and Base	10	10	16-Aug-28	29-Aug-28
PAC-INT-E1-6430	09E	Install Acoustical Panels	10	10	16-Aug-28	29-Aug-28
PAC-INT-E1-6480	26B	Test & Commission A/V & Performance Lighting	15	15	16-Aug-28	06-Sep-28
PAC-INT-E1-6400	09F	Install Wood Floor - Black Box Theater	15	15	30-Aug-28	20-Sep-28
PAC-INT-E1-6440	11C	Install Telescopic Seating System	10	10	21-Sep-28	04-Oct-28
PAC-INT-E1-6490	06C	Install Doors and Hardware	5	5	21-Sep-28	27-Sep-28
PAC-INT-E1-6500	09B	Final Point Drywall	5	5	05-Oct-28	11-Oct-28
PAC-INT-E1-6510	09K	Final Paint	5	5	12-Oct-28	18-Oct-28
PAC-INT-E1-6520	00-WT	Create WTC List	5	5	19-Oct-28	25-Oct-28
PAC-INT-E1-6530	00-WT	Complete WTC List	5	5	26-Oct-28	01-Nov-28
Area F			180	180	10-Aug-27	25-Apr-28
PAC-INT-F1-3080	09B	Layout Walls - Area F	5	5	10-Aug-27	16-Aug-27
PAC-INT-F1-1370	23A	Startup & Commissioning of Equipment - Area F	5	5	28-Jan-28	03-Feb-28
PAC-INT-F1-1380	23A	Prefunctional Testing of Equipment - Area F	5	5	04-Feb-28	10-Feb-28
PAC-INT-F1-1390	23A	Checkout Equipment Function & Controls Sequence - Area F	5	5	11-Feb-28	17-Feb-28
PAC-INT-F1-1400	00-WT	WT Create Work-to-Complete List - Area F	5	5	12-Apr-28	18-Apr-28
PAC-INT-F1-3070	00-WT	Final Clean & Wax Floors - Area F	10	10	12-Apr-28	25-Apr-28
Area F - HS Music Corridor			112	112	17-Aug-27	27-Jan-28
PAC-INT-F1-2210	06C	Set Door Frames - Corridor	5	5	17-Aug-27	23-Aug-27
PAC-INT-F1-1410	09B	Frame Walls - Corridor	2	2	08-Sep-27	09-Sep-27
PAC-INT-F1-1420	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	10-Sep-27	16-Sep-27
PAC-INT-F1-1430	23A	Mechanical Overhead Piping Mains - Corridor	5	5	17-Sep-27	23-Sep-27
PAC-INT-F1-1670	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	24-Sep-27	30-Sep-27
PAC-INT-F1-1840	22A	Plumbing Mains - Corridor	5	5	24-Sep-27	30-Sep-27
PAC-INT-F1-2150	00-WT	Wall Close-In WT Inspection - Corridor	2	2	16-Nov-27	17-Nov-27
PAC-INT-F1-2100	01A	Wall Close-In NCC Inspection - Corridor	2	2	18-Nov-27	19-Nov-27
PAC-INT-F1-1980	09B	Hang Drywall - Corridor	5	5	22-Nov-27	30-Nov-27
PAC-INT-F1-1990	09B	Drywall Finishing - Corridor	5	5	01-Dec-27	07-Dec-27
PAC-INT-F1-2000	09K	Prime/1st Coat Wall Paint - Corridor	2	2	08-Dec-27	09-Dec-27
PAC-INT-F1-2010	09E	Install Ceiling Grid - Corridor	1	1	10-Dec-27	10-Dec-27
PAC-INT-F1-2020	21A	Sprinkler Ceiling Trim-Out - Corridor	2	2	13-Dec-27	14-Dec-27
PAC-INT-F1-2030	28A	Special Systems - Ceiling Trim out (Security, AV, ITFA) - Corridor	2	2	13-Dec-27	14-Dec-27
PAC-INT-F1-2060	09K	Wall Point Ups - Second Coat Paint - Corridor	2	2	13-Dec-27	14-Dec-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-F1-2120	26B	Install Lights - Corridor	2	2	13-Dec-27	14-Dec-27
PAC-INT-F1-2130	23A	Mechanical Ceiling Trim-Out - Corridor	2	2	13-Dec-27	14-Dec-27
PAC-INT-F1-2180	09E	Cut Ceiling Tile - Corridor	1	1	13-Dec-27	13-Dec-27
PAC-INT-F1-2040	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	2	2	15-Dec-27	16-Dec-27
PAC-INT-F1-2160	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	15-Dec-27	16-Dec-27
PAC-INT-F1-2050	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	17-Dec-27	20-Dec-27
PAC-INT-F1-1530	09D	Wall Tile - Corridor	5	5	03-Jan-28	07-Jan-28
PAC-INT-F1-1970	09C	Install VCT Flooring - Corridor	5	5	10-Jan-28	14-Jan-28
PAC-INT-F1-2200	06C	Install Div 10 Specialties - Corridor	2	2	10-Jan-28	11-Jan-28
PAC-INT-F1-2110	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	12-Jan-28	13-Jan-28
PAC-INT-F1-2080	09E	Drop Ceiling Tile - Corridor	2	2	14-Jan-28	17-Jan-28
PAC-INT-F1-2070	06C	Install Doors & Hardware - Corridor	5	5	17-Jan-28	21-Jan-28
PAC-INT-F1-2090	09K	Final Painting - Corridor	2	2	24-Jan-28	25-Jan-28
PAC-INT-F1-2140	09C	Install Rubber Wall Base - Corridor	1	1	26-Jan-28	26-Jan-28
PAC-INT-F1-2170	00-WT	WT Create Work-to-Complete List - Corridor	1	1	27-Jan-28	27-Jan-28
Area F - HS Music Rooms			148	148	10-Sep-27	11-Apr-28
PAC-INT-F1-1830	09B	Frame Walls - Remaining	5	5	10-Sep-27	16-Sep-27
PAC-INT-F1-1460	22A	Plumbing In Wall Rough-In	5	5	17-Sep-27	23-Sep-27
PAC-INT-F1-1470	26B	Electrical In Wall Rough-In	5	5	17-Sep-27	23-Sep-27
PAC-INT-F1-1690	23A	Mechanical Overhead Piping - Expansion Loops	5	5	17-Sep-27	23-Sep-27
PAC-INT-F1-1890	23A	Hang FCUs	5	5	17-Sep-27	23-Sep-27
PAC-INT-F1-1480	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	24-Sep-27	30-Sep-27
PAC-INT-F1-1490	06C	Install Blocking	5	5	24-Sep-27	30-Sep-27
PAC-INT-F1-1680	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	24-Sep-27	07-Oct-27
PAC-INT-F1-1770	22A	Plumbing In Wall Insulation	1	1	24-Sep-27	24-Sep-27
PAC-INT-F1-1960	23A	Install Condensate Piping	10	10	24-Sep-27	07-Oct-27
PAC-INT-F1-2220	23B	Measure / Fab / Install Ductwork Transitions	10	10	24-Sep-27	07-Oct-27
PAC-INT-F1-1900	22A	Plumbing In-Wall WT Inspection	2	2	01-Oct-27	04-Oct-27
PAC-INT-F1-1920	26B	Electrical In-Wall WT Inspection	2	2	01-Oct-27	04-Oct-27
PAC-INT-F1-1780	22A	Plumbing In-Wall NCC Inspection	2	2	05-Oct-27	06-Oct-27
PAC-INT-F1-1790	26B	Electrical In-Wall Inspection	2	2	05-Oct-27	06-Oct-27
PAC-INT-F1-1700	23B	HVAC Sheet Metal - Classrooms	20	20	08-Oct-27	04-Nov-27
PAC-INT-F1-1750	25A	Install HVAC Controls & Valves	15	15	08-Oct-27	28-Oct-27
PAC-INT-F1-1850	07A	In-Wall Insulation	5	5	21-Oct-27	27-Oct-27
PAC-INT-F1-1720	23A	Mechanical Piping - Testing Above Ceiling	2	2	29-Oct-27	01-Nov-27
PAC-INT-F1-1730	23A	Mechanical Piping Insulation	5	5	02-Nov-27	08-Nov-27
PAC-INT-F1-1440	26B	Electrical Overhead Rough-in - Classrooms	5	5	05-Nov-27	11-Nov-27
PAC-INT-F1-1450	21A	Sprinkler Overhead Rough-In	5	5	05-Nov-27	11-Nov-27
PAC-INT-F1-1710	23B	Duct Testing	2	2	05-Nov-27	08-Nov-27
PAC-INT-F1-1740	23B	HVAC Sheet Metal Insulation	5	5	09-Nov-27	15-Nov-27
PAC-INT-F1-1760	21A	Sprinkler Overhead Hydro-Testing	2	2	12-Nov-27	15-Nov-27
PAC-INT-F1-1910	00-WT	Wall Close-In WT Inspection	2	2	16-Nov-27	17-Nov-27
PAC-INT-F1-1800	01A	Wall Close-In NCC Inspection	2	2	18-Nov-27	19-Nov-27
PAC-INT-F1-1500	09B	Hang Drywall	10	10	22-Nov-27	07-Dec-27
PAC-INT-F1-1510	09B	Drywall Finishing	10	10	08-Dec-27	21-Dec-27
PAC-INT-F1-1520	09K	Prime/1st Coat Wall Paint	5	5	22-Dec-27	30-Dec-27
PAC-INT-F1-1540	09E	Install Ceiling Grid	5	5	03-Jan-28	07-Jan-28
PAC-INT-F1-1550	21A	Sprinkler Ceiling Trim-Out	5	5	10-Jan-28	14-Jan-28
PAC-INT-F1-1560	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	10-Jan-28	14-Jan-28
PAC-INT-F1-1620	09K	Wall Point Ups - Second Coat Paint	5	5	10-Jan-28	14-Jan-28
PAC-INT-F1-1860	26B	Install Lights	12	12	10-Jan-28	25-Jan-28
PAC-INT-F1-1870	23A	Mechanical Ceiling Trim-Out	10	10	10-Jan-28	21-Jan-28
PAC-INT-F1-1950	09E	Cut Ceiling Tile	5	5	10-Jan-28	14-Jan-28
PAC-INT-F1-1570	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	17-Jan-28	21-Jan-28
PAC-INT-F1-1810	01A	Fire Marshal Fire Damper Inspection	2	2	17-Jan-28	18-Jan-28
PAC-INT-F1-3050	09E	Install Acoustical Sound Panels	10	10	17-Jan-28	28-Jan-28
PAC-INT-F1-1930	00-WT	Ceiling Close-In WT Inspections	2	2	26-Jan-28	27-Jan-28
PAC-INT-F1-1590	01A	Ceiling Close-In NCC Inspections	2	2	28-Jan-28	31-Jan-28
PAC-INT-F1-1640	09E	Drop Ceiling Tile	10	10	01-Feb-28	14-Feb-28
PAC-INT-F1-1580	09H	Resinous Flooring - Science Labs	0	0	15-Feb-28	15-Feb-28
PAC-INT-F1-1600	12A	Install Casework - Classroom	10	10	15-Feb-28	28-Feb-28

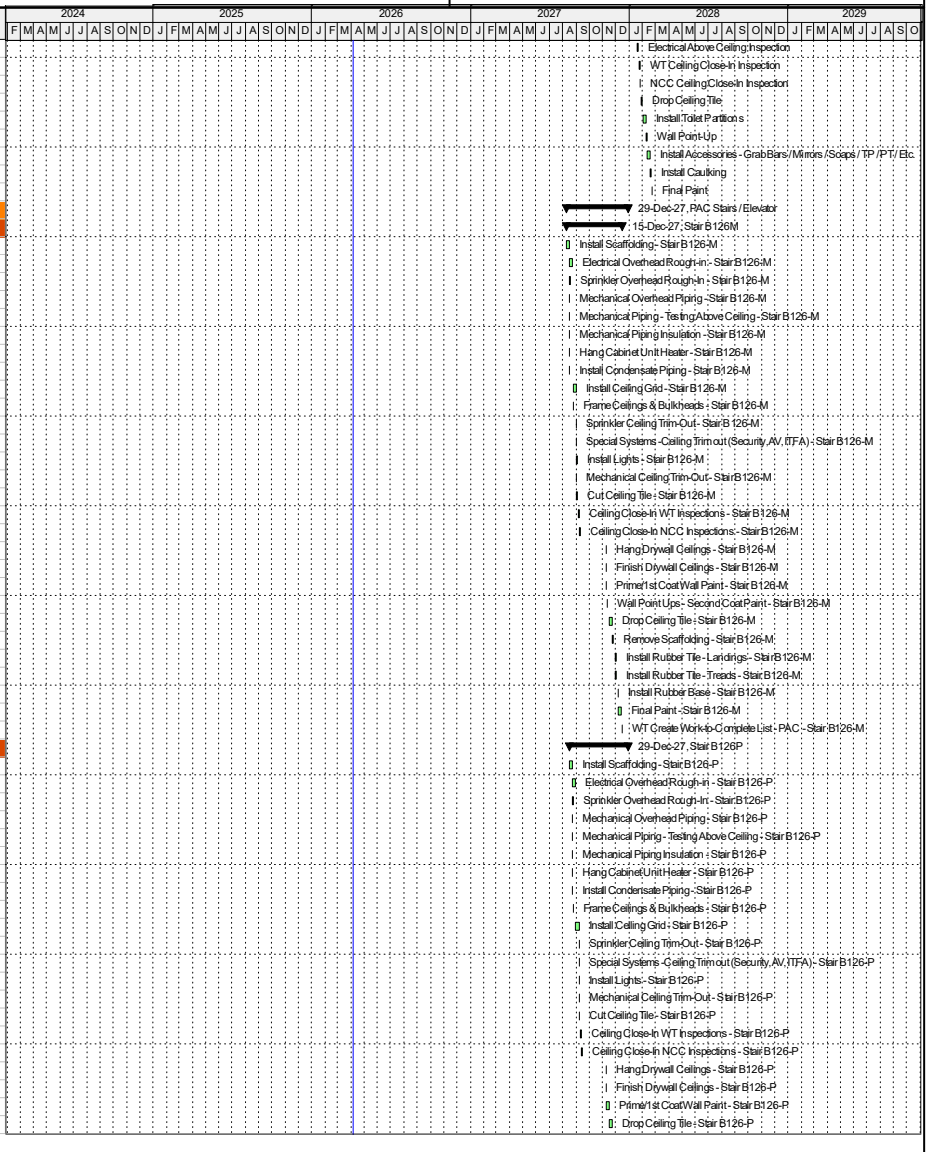
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-F1-1820	12A	Install Casework	10	10	15-Feb-28	28-Feb-28
PAC-INT-F1-1610	09C	VCT Flooring - Classroom	10	10	29-Feb-28	13-Mar-28
PAC-INT-F1-1650	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	29-Feb-28	06-Mar-28
PAC-INT-F1-2190	28A	Audio Enhancement System Trim-Out	5	5	29-Feb-28	06-Mar-28
PAC-INT-F1-1630	06C	Install Doors & Hardware	10	10	14-Mar-28	27-Mar-28
PAC-INT-F1-1660	09K	Final Painting	5	5	28-Mar-28	03-Apr-28
PAC-INT-F1-1880	09C	Install Rubber Wall Base	5	5	04-Apr-28	10-Apr-28
PAC-INT-F1-1940	00-WT	WT Create Work-to-Complete List	1	1	11-Apr-28	11-Apr-28
Area F - MS Music Corridor			117	117	17-Aug-27	03-Feb-28
PAC-INT-F1-3030	06C	Set Door Frames - Corridor	5	5	17-Aug-27	23-Aug-27
PAC-INT-F1-2230	09B	Frame Walls - Corridor	2	2	17-Sep-27	20-Sep-27
PAC-INT-F1-2240	09B	Top Out - "Dens Glass" & Install Smoke / Fire Sealants - Corridor	5	5	21-Sep-27	27-Sep-27
PAC-INT-F1-2250	23A	Mechanical Overhead Piping Mains - Corridor	10	10	28-Sep-27	11-Oct-27
PAC-INT-F1-2490	23B	HVAC Sheet Metal - Mains & Risers - Corridor	10	10	12-Oct-27	25-Oct-27
PAC-INT-F1-2660	22A	Plumbing Mains - Corridor	5	5	12-Oct-27	18-Oct-27
PAC-INT-F1-2970	00-WT	Wall Close-In WT Inspection - Corridor	2	2	29-Nov-27	30-Nov-27
PAC-INT-F1-2920	01A	Wall Close-In NCC Inspection - Corridor	2	2	01-Dec-27	02-Dec-27
PAC-INT-F1-2800	09B	Hang Drywall - Corridor	5	5	03-Dec-27	09-Dec-27
PAC-INT-F1-2810	09B	Drywall Finishing - Corridor	5	5	10-Dec-27	16-Dec-27
PAC-INT-F1-2820	09K	Prime/1st Coat Wall Paint - Corridor	2	2	17-Dec-27	20-Dec-27
PAC-INT-F1-2830	09E	Install Ceiling Grid - Corridor	2	2	21-Dec-27	22-Dec-27
PAC-INT-F1-2840	21A	Sprinkler Ceiling Trim-Out - Corridor	2	2	23-Dec-27	28-Dec-27
PAC-INT-F1-2850	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	2	2	23-Dec-27	28-Dec-27
PAC-INT-F1-2880	09K	Wall Point Ups - Second Coat Paint - Corridor	2	2	23-Dec-27	28-Dec-27
PAC-INT-F1-2940	26B	Install Lights - Corridor	5	5	23-Dec-27	03-Jan-28
PAC-INT-F1-2950	23A	Mechanical Ceiling Trim-Out - Corridor	2	2	23-Dec-27	28-Dec-27
PAC-INT-F1-3000	09E	Cut Ceiling Tile - Corridor	2	2	23-Dec-27	28-Dec-27
PAC-INT-F1-2860	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	2	2	29-Dec-27	30-Dec-27
PAC-INT-F1-2980	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	04-Jan-28	05-Jan-28
PAC-INT-F1-2870	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	06-Jan-28	07-Jan-28
PAC-INT-F1-2350	09D	Wall Tile - Corridor	5	5	07-Jan-28	13-Jan-28
PAC-INT-F1-2790	09C	Install VCT Flooring - Corridor	5	5	14-Jan-28	20-Jan-28
PAC-INT-F1-3020	06C	Install Div 10 Specialties - Corridor	2	2	14-Jan-28	17-Jan-28
PAC-INT-F1-2930	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	18-Jan-28	19-Jan-28
PAC-INT-F1-2900	09E	Drop Ceiling Tile - Corridor	2	2	20-Jan-28	21-Jan-28
PAC-INT-F1-2890	06C	Install Doors & Hardware - Corridor	5	5	21-Jan-28	27-Jan-28
PAC-INT-F1-2910	09K	Final Painting - Corridor	2	2	28-Jan-28	31-Jan-28
PAC-INT-F1-2960	09C	Install Rubber Wall Base - Corridor	2	2	01-Feb-28	02-Feb-28
PAC-INT-F1-2990	00-WT	WT Create Work-to-Complete List - Corridor	1	1	03-Feb-28	03-Feb-28
Area F - MS Music Rooms			137	137	21-Sep-27	05-Apr-28
PAC-INT-F1-2650	09B	Frame Walls - Remaining	5	5	21-Sep-27	27-Sep-27
PAC-INT-F1-2280	22A	Plumbing In Wall Rough-In	5	5	28-Sep-27	04-Oct-27
PAC-INT-F1-2290	26B	Electrical In Wall Rough-In	10	10	28-Sep-27	11-Oct-27
PAC-INT-F1-2510	23A	Mechanical Overhead Piping - Expansion Loops	2	2	28-Sep-27	29-Sep-27
PAC-INT-F1-2710	23A	Hang FCUs	2	2	28-Sep-27	29-Sep-27
PAC-INT-F1-2780	23A	Install Condensate Piping	2	2	30-Sep-27	01-Oct-27
PAC-INT-F1-3040	23B	Measure / Fab / Install Ductwork Transitions	10	10	30-Sep-27	13-Oct-27
PAC-INT-F1-2310	06C	Install Blocking	5	5	05-Oct-27	11-Oct-27
PAC-INT-F1-2590	22A	Plumbing In Wall Insulation	1	1	05-Oct-27	05-Oct-27
PAC-INT-F1-2300	26C	Special Systems - Rough-In (Security, AV, ITFA)	5	5	12-Oct-27	18-Oct-27
PAC-INT-F1-2500	23A	Mechanical Overhead Piping - FCUs - Classrooms	2	2	12-Oct-27	13-Oct-27
PAC-INT-F1-2570	25A	Install HVAC Controls & Valves	5	5	14-Oct-27	20-Oct-27
PAC-INT-F1-2720	22A	Plumbing In-Wall WT Inspection	2	2	19-Oct-27	20-Oct-27
PAC-INT-F1-2740	26B	Electrical In-Wall WT Inspection	2	2	19-Oct-27	20-Oct-27
PAC-INT-F1-2540	23A	Mechanical Piping - Testing Above Ceiling	2	2	21-Oct-27	22-Oct-27
PAC-INT-F1-2600	22A	Plumbing In-Wall NCC Inspection	2	2	21-Oct-27	22-Oct-27
PAC-INT-F1-2610	26B	Electrical In-Wall Inspection	2	2	21-Oct-27	22-Oct-27
PAC-INT-F1-2670	07A	In-Wall Insulation	5	5	21-Oct-27	27-Oct-27
PAC-INT-F1-2550	23A	Mechanical Piping Insulation	5	5	25-Oct-27	29-Oct-27
PAC-INT-F1-2520	23B	HVAC Sheet Metal - Classrooms	10	10	26-Oct-27	08-Nov-27
PAC-INT-F1-2260	26B	Electrical Overhead Rough-in - Classrooms	10	10	09-Nov-27	22-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-F1-2270	21A	Sprinkler Overhead Rough-In	5	5	09-Nov-27	15-Nov-27
PAC-INT-F1-2530	23B	Duct Testing	2	2	09-Nov-27	10-Nov-27
PAC-INT-F1-2560	23B	HVAC Sheet Metal Insulation	10	10	11-Nov-27	24-Nov-27
PAC-INT-F1-2580	21A	Sprinkler Overhead Hydro-Testing	2	2	16-Nov-27	17-Nov-27
PAC-INT-F1-2730	00-WT	Wall Close-In WT Inspection	2	2	29-Nov-27	30-Nov-27
PAC-INT-F1-2620	01A	Wall Close-In NCC Inspection	2	2	01-Dec-27	02-Dec-27
PAC-INT-F1-2320	09B	Hang Drywall	10	10	03-Dec-27	16-Dec-27
PAC-INT-F1-2330	09B	Drywall Finishing	10	10	17-Dec-27	04-Jan-28
PAC-INT-F1-2340	09K	Prime/1st Coat Wall Paint	2	2	05-Jan-28	06-Jan-28
PAC-INT-F1-2360	09E	Install Ceiling Grid	10	10	07-Jan-28	20-Jan-28
PAC-INT-F1-2370	21A	Sprinkler Ceiling Trim-Out	5	5	21-Jan-28	27-Jan-28
PAC-INT-F1-2380	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	21-Jan-28	27-Jan-28
PAC-INT-F1-2440	09K	Wall Point Ups - Second Coat Paint	2	2	21-Jan-28	24-Jan-28
PAC-INT-F1-2680	26B	Install Lights	10	10	21-Jan-28	03-Feb-28
PAC-INT-F1-2690	23A	Mechanical Ceiling Trim-Out	5	5	21-Jan-28	27-Jan-28
PAC-INT-F1-2770	09E	Cut Ceiling Tile	5	5	21-Jan-28	27-Jan-28
PAC-INT-F1-2390	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	25-Jan-28	31-Jan-28
PAC-INT-F1-3060	09E	Install Acoustical Sound Panels	10	10	25-Jan-28	07-Feb-28
PAC-INT-F1-2630	01A	Fire Marshal Fire Damper Inspection	2	2	28-Jan-28	31-Jan-28
PAC-INT-F1-2750	00-WT	Ceiling Close-In WT Inspections	2	2	04-Feb-28	07-Feb-28
PAC-INT-F1-2410	01A	Ceiling Close-In NCC Inspections	2	2	08-Feb-28	09-Feb-28
PAC-INT-F1-2460	09E	Drop Ceiling Tile	10	10	10-Feb-28	23-Feb-28
PAC-INT-F1-2400	09H	Resinous Flooring - Science Labs	5	5	24-Feb-28	01-Mar-28
PAC-INT-F1-2420	12A	Install Casework - Classroom	10	10	24-Feb-28	08-Mar-28
PAC-INT-F1-2470	06C	Marker boards/Smart Boards, TV, Misc Specialties	5	5	02-Mar-28	08-Mar-28
PAC-INT-F1-2640	12A	Install Casework - Science Labs	0	0	02-Mar-28	02-Mar-28
PAC-INT-F1-2430	09C	VCT Flooring - Classroom	10	10	09-Mar-28	22-Mar-28
PAC-INT-F1-3010	28A	Audio Enhancement System Trim-Out	10	10	09-Mar-28	22-Mar-28
PAC-INT-F1-2450	06C	Install Doors & Hardware	5	5	23-Mar-28	29-Mar-28
PAC-INT-F1-2480	09K	Final Painting	2	2	30-Mar-28	31-Mar-28
PAC-INT-F1-2700	09C	Install Rubber Wall Base	2	2	03-Apr-28	04-Apr-28
PAC-INT-F1-2760	00-WT	WT Create Work-to-Complete List	1	1	05-Apr-28	05-Apr-28
Area F - multi-user Bathroom			130	130	17-Aug-27	22-Feb-28
PAC-INT-F1-1000	09B	Layout Walls - Gang Bathroom	2	2	17-Aug-27	18-Aug-27
PAC-INT-F1-1010	09B	Frame Track / Wall / Bulkheads	5	5	28-Sep-27	04-Oct-27
PAC-INT-F1-1020	23B	Install Overhead HVAC Sheetmetal	10	10	05-Oct-27	18-Oct-27
PAC-INT-F1-1030	26B	Rough-In Overhead Electrical	5	5	05-Oct-27	11-Oct-27
PAC-INT-F1-1040	22A	Rough-In Overhead Plumbing	5	5	05-Oct-27	11-Oct-27
PAC-INT-F1-1060	21A	Rough-In Overhead Sprinkler	5	5	05-Oct-27	11-Oct-27
PAC-INT-F1-1120	28A	Rough-In Special Systems - Security /AV / IT / FA	2	2	05-Oct-27	06-Oct-27
PAC-INT-F1-1080	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	10	10	12-Oct-27	25-Oct-27
PAC-INT-F1-1100	26B	Rough-In In-Wall Electrical	5	5	12-Oct-27	18-Oct-27
PAC-INT-F1-1050	23B	Rough-In Overhead HVAC Controls	5	5	19-Oct-27	25-Oct-27
PAC-INT-F1-1110	26B	Electrical In-Wall Inspection	2	2	19-Oct-27	20-Oct-27
PAC-INT-F1-1070	22A	Rough-In Plumbing - Chair Carriers	10	10	26-Oct-27	08-Nov-27
PAC-INT-F1-1090	22A	Plumbing Testing	2	2	09-Nov-27	10-Nov-27
PAC-INT-F1-1130	06C	Install Blocking	2	2	09-Nov-27	10-Nov-27
PAC-INT-F1-1140	00-WT	Wall Close-In WT Inspection	2	2	11-Nov-27	12-Nov-27
PAC-INT-F1-1150	01A	Plumbing In-Wall NCC Inspection	2	2	15-Nov-27	16-Nov-27
PAC-INT-F1-1160	09B	Hang Drywall Walls	5	5	17-Nov-27	23-Nov-27
PAC-INT-F1-1170	09B	Hang Drywall Ceilings / Bulkheads	5	5	24-Nov-27	02-Dec-27
PAC-INT-F1-1180	09B	Drywall Finishing	5	5	03-Dec-27	09-Dec-27
PAC-INT-F1-1190	09K	Prime Coat Walls	2	2	10-Dec-27	13-Dec-27
PAC-INT-F1-1210	09D	Install Wall Tile	10	10	14-Dec-27	29-Dec-27
PAC-INT-F1-1220	09C	Install Resinous Flooring & Base	10	10	30-Dec-27	13-Jan-28
PAC-INT-F1-1200	09E	Install Ceiling Grid & Border Tile	2	2	14-Jan-28	17-Jan-28
PAC-INT-F1-1230	26B	Ceiling Trim-Out - Electrical	2	2	18-Jan-28	19-Jan-28
PAC-INT-F1-1240	23B	Ceiling Trim-Out - Mechanical	2	2	18-Jan-28	19-Jan-28
PAC-INT-F1-1250	21A	Ceiling Trim-Out - Sprinkler	2	2	18-Jan-28	19-Jan-28
PAC-INT-F1-1260	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	18-Jan-28	18-Jan-28
PAC-INT-F1-1290	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks / Misc.	10	10	20-Jan-28	02-Feb-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-F1-1360	26B	Electrical Above Ceiling Inspection	2	2	20-Jan-28	21-Jan-28
PAC-INT-F1-1270	00-WT	WT Ceiling Close-In Inspection	2	2	24-Jan-28	25-Jan-28
PAC-INT-F1-1350	01A	NCC Ceiling Close-In Inspection	2	2	26-Jan-28	27-Jan-28
PAC-INT-F1-1280	09E	Drop Ceiling Tile	2	2	28-Jan-28	31-Jan-28
PAC-INT-F1-1300	22A	Install Toilet Partitions	5	5	03-Feb-28	09-Feb-28
PAC-INT-F1-1310	09B	Wall Point-Up	1	1	10-Feb-28	10-Feb-28
PAC-INT-F1-1320	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	5	5	11-Feb-28	17-Feb-28
PAC-INT-F1-1330	07G	Install Caulking	2	2	18-Feb-28	21-Feb-28
PAC-INT-F1-1340	09K	Final Paint	1	1	22-Feb-28	22-Feb-28
PAC Stairs / Elevator			97	97	10-Aug-27	29-Dec-27
Stair B126M			89	89	10-Aug-27	15-Dec-27
PAC-INT-VT-1220	06C	Install Scaffolding - Stair B126-M	5	5	10-Aug-27	16-Aug-27
PAC-INT-VT-1020	26B	Electrical Overhead Rough-in - Stair B126-M	5	5	17-Aug-27	23-Aug-27
PAC-INT-VT-1030	21A	Sprinkler Overhead Rough-In - Stair B126-M	2	2	17-Aug-27	18-Aug-27
PAC-INT-VT-1090	23A	Mechanical Overhead Piping - Stair B126-M	0	0	17-Aug-27	17-Aug-27
PAC-INT-VT-1100	23A	Mechanical Piping - Testing Above Ceiling - Stair B126-M	0	0	17-Aug-27	17-Aug-27
PAC-INT-VT-1110	23A	Mechanical Piping Insulation - Stair B126-M	0	0	17-Aug-27	17-Aug-27
PAC-INT-VT-1140	23A	Hang Cabinet Unit Heater - Stair B126-M	0	0	17-Aug-27	17-Aug-27
PAC-INT-VT-1180	23A	Install Condensate Piping - Stair B126-M	0	0	17-Aug-27	17-Aug-27
PAC-INT-VT-1040	09E	Install Ceiling Grid - Stair B126-M	5	5	26-Aug-27	01-Sep-27
PAC-INT-VT-1270	09B	Frame Ceilings & Bulkheads - Stair B126-M	0	0	26-Aug-27	26-Aug-27
PAC-INT-VT-1050	21A	Sprinkler Ceiling Trim-Out - Stair B126-M	1	1	02-Sep-27	02-Sep-27
PAC-INT-VT-1060	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Stair B126-M	1	1	02-Sep-27	02-Sep-27
PAC-INT-VT-1120	26B	Install Lights - Stair B126-M	2	2	02-Sep-27	03-Sep-27
PAC-INT-VT-1130	23A	Mechanical Ceiling Trim-Out - Stair B126-M	1	1	02-Sep-27	02-Sep-27
PAC-INT-VT-1170	09E	Cut Ceiling Tile - Stair B126-M	2	2	02-Sep-27	03-Sep-27
PAC-INT-VT-1150	00-WT	Ceiling Close-In WT Inspections - Stair B126-M	2	2	07-Sep-27	08-Sep-27
PAC-INT-VT-1070	01A	Ceiling Close-In NCC Inspections - Stair B126-M	2	2	09-Sep-27	10-Sep-27
PAC-INT-VT-1010	09B	Hang Drywall Ceilings - Stair B126-M	0	0	09-Nov-27	09-Nov-27
PAC-INT-VT-1190	09B	Finish Drywall Ceilings - Stair B126-M	0	0	09-Nov-27	09-Nov-27
PAC-INT-VT-1200	09K	Prime/1st Coat Wall Paint - Stair B126-M	2	2	09-Nov-27	10-Nov-27
PAC-INT-VT-1210	09K	Wall Point Ups - Second Coat Paint - Stair B126-M	2	2	11-Nov-27	12-Nov-27
PAC-INT-VT-1080	09E	Drop Ceiling Tile - Stair B126-M	5	5	16-Nov-27	22-Nov-27
PAC-INT-VT-1230	06C	Remove Scaffolding - Stair B126-M	2	2	23-Nov-27	24-Nov-27
PAC-INT-VT-1250	09C	Install Rubber Tile - Landings - Stair B126-M	5	5	29-Nov-27	03-Dec-27
PAC-INT-VT-1260	09C	Install Rubber Tile - Treads - Stair B126-M	5	5	29-Nov-27	03-Dec-27
PAC-INT-VT-1000	09C	Install Rubber Base - Stair B126-M	2	2	06-Dec-27	07-Dec-27
PAC-INT-VT-1240	09K	Final Paint - Stair B126-M	5	5	08-Dec-27	14-Dec-27
PAC-INT-VT-1160	00-WT	WT Create Work-to-Complete List - PAC - Stair B126-M	1	1	15-Dec-27	15-Dec-27
Stair B126P			92	92	17-Aug-27	29-Dec-27
PAC-INT-VT-2220	06C	Install Scaffolding - Stair B126-P	5	5	17-Aug-27	23-Aug-27
PAC-INT-VT-2020	26B	Electrical Overhead Rough-in - Stair B126-P	5	5	24-Aug-27	30-Aug-27
PAC-INT-VT-2030	21A	Sprinkler Overhead Rough-In - Stair B126-P	2	2	24-Aug-27	25-Aug-27
PAC-INT-VT-2090	23A	Mechanical Overhead Piping - Stair B126-P	0	0	24-Aug-27	24-Aug-27
PAC-INT-VT-2100	23A	Mechanical Piping - Testing Above Ceiling - Stair B126-P	0	0	24-Aug-27	24-Aug-27
PAC-INT-VT-2110	23A	Mechanical Piping Insulation - Stair B126-P	0	0	24-Aug-27	24-Aug-27
PAC-INT-VT-2140	23A	Hang Cabinet Unit Heater - Stair B126-P	0	0	24-Aug-27	24-Aug-27
PAC-INT-VT-2180	23A	Install Condensate Piping - Stair B126-P	0	0	24-Aug-27	24-Aug-27
PAC-INT-VT-2270	09B	Frame Ceilings & Bulkheads - Stair B126-P	0	0	26-Aug-27	26-Aug-27
PAC-INT-VT-2040	09E	Install Ceiling Grid - Stair B126-P	5	5	31-Aug-27	07-Sep-27
PAC-INT-VT-2050	21A	Sprinkler Ceiling Trim-Out - Stair B126-P	1	1	08-Sep-27	08-Sep-27
PAC-INT-VT-2060	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Stair B126-P	1	1	08-Sep-27	08-Sep-27
PAC-INT-VT-2120	26B	Install Lights - Stair B126-P	2	2	08-Sep-27	09-Sep-27
PAC-INT-VT-2130	23A	Mechanical Ceiling Trim-Out - Stair B126-P	1	1	08-Sep-27	08-Sep-27
PAC-INT-VT-2170	09E	Cut Ceiling Tile - Stair B126-P	2	2	08-Sep-27	09-Sep-27
PAC-INT-VT-2150	00-WT	Ceiling Close-In WT Inspections - Stair B126-P	2	2	10-Sep-27	13-Sep-27
PAC-INT-VT-2070	01A	Ceiling Close-In NCC Inspections - Stair B126-P	2	2	14-Sep-27	15-Sep-27
PAC-INT-VT-2010	09B	Hang Drywall Ceilings - Stair B126-P	0	0	09-Nov-27	09-Nov-27
PAC-INT-VT-2190	09B	Finish Drywall Ceilings - Stair B126-P	0	0	09-Nov-27	09-Nov-27
PAC-INT-VT-2200	09K	Prime/1st Coat Wall Paint - Stair B126-P	5	5	09-Nov-27	15-Nov-27
PAC-INT-VT-2080	09E	Drop Ceiling Tile - Stair B126-P	5	5	16-Nov-27	22-Nov-27



Appoquinimink School District Summit Campus MS / HS - Bid Schedule

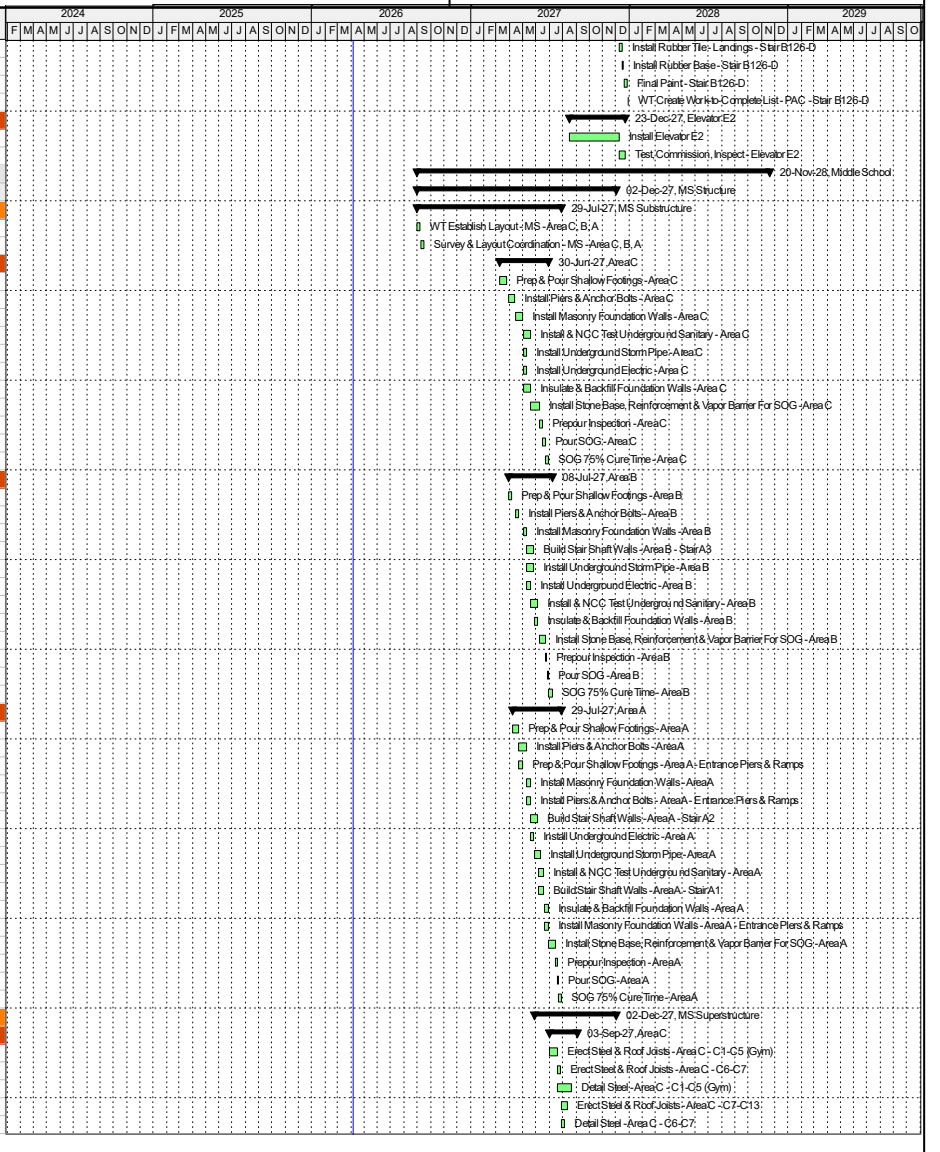
ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-VT-2210	09K	Wall Point Ups - Second Coat Paint - Stair B126-P	5	5	16-Nov-27	22-Nov-27
PAC-INT-VT-2230	06C	Remove Scaffolding - Stair B126-P	5	5	23-Nov-27	01-Dec-27
PAC-INT-VT-2260	09C	Install Rubber Tile - Treads - Stair B126-P	10	10	02-Dec-27	15-Dec-27
PAC-INT-VT-2250	09C	Install Rubber Tile - Landings - Stair B126-P	5	5	09-Dec-27	15-Dec-27
PAC-INT-VT-2000	09C	Install Rubber Base - Stair B126-P	2	2	16-Dec-27	17-Dec-27
PAC-INT-VT-2240	09K	Final Paint - Stair B126-P	5	5	20-Dec-27	28-Dec-27
PAC-INT-VT-2160	00-WT	WT Create Work-to-Complete List - PAC - Stair B126-P	1	1	29-Dec-27	29-Dec-27
Stair B126E			79	79	24-Aug-27	15-Dec-27
PAC-INT-VT-3220	06C	Install Scaffolding - Stair B126-E	5	5	24-Aug-27	30-Aug-27
PAC-INT-VT-3020	26B	Electrical Overhead Rough-in - Stair B126-E	5	5	31-Aug-27	07-Sep-27
PAC-INT-VT-3030	21A	Sprinkler Overhead Rough-In - Stair B126-E	2	2	31-Aug-27	01-Sep-27
PAC-INT-VT-3090	23A	Mechanical Overhead Piping - Stair B126-E	0	0	31-Aug-27	31-Aug-27
PAC-INT-VT-3100	23A	Mechanical Piping - Testing Above Ceiling - Stair B126-E	0	0	31-Aug-27	31-Aug-27
PAC-INT-VT-3110	23A	Mechanical Piping Insulation - Stair B126-E	0	0	31-Aug-27	31-Aug-27
PAC-INT-VT-3140	23A	Hang Cabinet Unit Heater - Stair B126-E	0	0	31-Aug-27	31-Aug-27
PAC-INT-VT-3180	23A	Install Condensate Piping - Stair B126-E	0	0	31-Aug-27	31-Aug-27
PAC-INT-VT-3270	09B	Frame Ceilings & Bulkheads - Stair B126-E	0	0	31-Aug-27	31-Aug-27
PAC-INT-VT-3040	09E	Install Ceiling Grid - Stair B126-E	5	5	08-Sep-27	14-Sep-27
PAC-INT-VT-3050	21A	Sprinkler Ceiling Trim-Out - Stair B126-E	1	1	15-Sep-27	15-Sep-27
PAC-INT-VT-3060	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Stair B126-E	1	1	15-Sep-27	15-Sep-27
PAC-INT-VT-3120	26B	Install Lights - Stair B126-E	2	2	15-Sep-27	16-Sep-27
PAC-INT-VT-3130	23A	Mechanical Ceiling Trim-Out - Stair B126-E	1	1	15-Sep-27	15-Sep-27
PAC-INT-VT-3170	09E	Cut Ceiling Tile - Stair B126-E	2	2	15-Sep-27	16-Sep-27
PAC-INT-VT-3150	00-WT	Ceiling Close-In WT Inspections - Stair B126-E	2	2	17-Sep-27	20-Sep-27
PAC-INT-VT-3070	01A	Ceiling Close-In NCC Inspections - Stair B126-E	2	2	21-Sep-27	22-Sep-27
PAC-INT-VT-3010	09B	Hang Drywall Ceilings - Stair B126-E	0	0	09-Nov-27	09-Nov-27
PAC-INT-VT-3190	09B	Finish Drywall Ceilings - Stair B126-E	0	0	09-Nov-27	09-Nov-27
PAC-INT-VT-3200	09K	Prime/1st Coat Wall Paint - Stair B126-E	2	2	09-Nov-27	10-Nov-27
PAC-INT-VT-3210	09K	Wall Point Ups - Second Coat Paint - Stair B126-E	2	2	11-Nov-27	12-Nov-27
PAC-INT-VT-3080	09E	Drop Ceiling Tile - Stair B126-E	5	5	16-Nov-27	22-Nov-27
PAC-INT-VT-3230	06C	Remove Scaffolding - Stair B126-E	2	2	23-Nov-27	24-Nov-27
PAC-INT-VT-3250	09C	Install Rubber Tile - Landings - Stair B126-E	5	5	29-Nov-27	03-Dec-27
PAC-INT-VT-3260	09C	Install Rubber Tile - Treads - Stair B126-E	5	5	29-Nov-27	03-Dec-27
PAC-INT-VT-3000	09C	Install Rubber Base - Stair B126-E	2	2	06-Dec-27	07-Dec-27
PAC-INT-VT-3240	09K	Final Paint - Stair B126-E	5	5	08-Dec-27	14-Dec-27
PAC-INT-VT-3160	00-WT	WT Create Work-to-Complete List - PAC - Stair B126-E	1	1	15-Dec-27	15-Dec-27
Stair B126D			82	82	31-Aug-27	29-Dec-27
PAC-INT-VT-4220	06C	Install Scaffolding - Stair B126-D	5	5	31-Aug-27	07-Sep-27
PAC-INT-VT-4020	26B	Electrical Overhead Rough-in - Stair B126-D	5	5	08-Sep-27	14-Sep-27
PAC-INT-VT-4030	21A	Sprinkler Overhead Rough-In - Stair B126-D	2	2	08-Sep-27	09-Sep-27
PAC-INT-VT-4090	23A	Mechanical Overhead Piping - Stair B126-D	0	0	08-Sep-27	08-Sep-27
PAC-INT-VT-4100	23A	Mechanical Piping - Testing Above Ceiling - Stair B126-D	0	0	08-Sep-27	08-Sep-27
PAC-INT-VT-4110	23A	Mechanical Piping Insulation - Stair B126-D	0	0	08-Sep-27	08-Sep-27
PAC-INT-VT-4140	23A	Hang Cabinet Unit Heater - Stair B126-D	0	0	08-Sep-27	08-Sep-27
PAC-INT-VT-4180	23A	Install Condensate Piping - Stair B126-D	0	0	08-Sep-27	08-Sep-27
PAC-INT-VT-4270	09B	Frame Ceilings & Bulkheads - Stair B126-D	0	0	08-Sep-27	08-Sep-27
PAC-INT-VT-4040	09E	Install Ceiling Grid - Stair B126-D	5	5	15-Sep-27	21-Sep-27
PAC-INT-VT-4050	21A	Sprinkler Ceiling Trim-Out - Stair B126-D	1	1	22-Sep-27	22-Sep-27
PAC-INT-VT-4060	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Stair B126-D	1	1	22-Sep-27	22-Sep-27
PAC-INT-VT-4120	26B	Install Lights - Stair B126-D	2	2	22-Sep-27	23-Sep-27
PAC-INT-VT-4130	23A	Mechanical Ceiling Trim-Out - Stair B126-D	1	1	22-Sep-27	22-Sep-27
PAC-INT-VT-4170	09E	Cut Ceiling Tile - Stair B126-D	2	2	22-Sep-27	23-Sep-27
PAC-INT-VT-4150	00-WT	Ceiling Close-In WT Inspections - Stair B126-D	2	2	24-Sep-27	27-Sep-27
PAC-INT-VT-4070	01A	Ceiling Close-In NCC Inspections - Stair B126-D	2	2	28-Sep-27	29-Sep-27
PAC-INT-VT-4010	09B	Hang Drywall Ceilings - Stair B126-D	0	0	09-Nov-27	09-Nov-27
PAC-INT-VT-4190	09B	Finish Drywall Ceilings - Stair B126-D	0	0	09-Nov-27	09-Nov-27
PAC-INT-VT-4200	09K	Prime/1st Coat Wall Paint - Stair B126-D	5	5	09-Nov-27	15-Nov-27
PAC-INT-VT-4080	09E	Drop Ceiling Tile - Stair B126-D	5	5	16-Nov-27	22-Nov-27
PAC-INT-VT-4210	09K	Wall Point Ups - Second Coat Paint - Stair B126-D	5	5	16-Nov-27	22-Nov-27
PAC-INT-VT-4230	06C	Remove Scaffolding - Stair B126-D	5	5	23-Nov-27	01-Dec-27
PAC-INT-VT-4260	09C	Install Rubber Tile - Treads - Stair B126-D	10	10	02-Dec-27	15-Dec-27

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
PAC-INT-VT-4250	09C	Install Rubber Tile - Landings - Stair B126-D	5	5	09-Dec-27	15-Dec-27
PAC-INT-VT-4000	09C	Install Rubber Base - Stair B126-D	2	2	16-Dec-27	17-Dec-27
PAC-INT-VT-4240	09K	Final Paint - Stair B126-D	5	5	20-Dec-27	28-Dec-27
PAC-INT-VT-4160	00-WT	WT Create Work-to-Complete List - PAC - Stair B126-D	1	1	29-Dec-27	29-Dec-27
Elevator E2			90	90	17-Aug-27	23-Dec-27
PAC-INT-VT-5000	14A	Install Elevator E2	80	80	17-Aug-27	09-Dec-27
PAC-INT-VT-5010	01A	Test, Commission, Inspect - Elevator E2	10	10	10-Dec-27	23-Dec-27
Middle School			561	561	31-Aug-26	20-Nov-28
MS Structure			252	252	31-Aug-26	02-Dec-27
MS Substructure			176	176	31-Aug-26	29-Jul-27
MS-STR-1000	01A	WT Establish Layout - MS - Area C, B, A	5	5	31-Aug-26	07-Sep-26
MS-STR-1010	01B	Survey & Layout Coordination - MS - Area C, B, A	5	5	08-Sep-26	16-Sep-26
Area C			67	67	08-Mar-27	30-Jun-27
MS-STR-1020	03A	Prep & Pour Shallow Footings - Area C	10	10	08-Mar-27	25-Mar-27
MS-STR-1050	03A	Install Piers & Anchor Bolts - Area C	10	10	29-Mar-27	13-Apr-27
MS-STR-1070	04A	Install Masonry Foundation Walls - Area C	10	10	14-Apr-27	30-Apr-27
MS-STR-1110	22A	Install & NCC Test Underground Sanitary - Area C	10	10	03-May-27	19-May-27
MS-STR-1120	22A	Install Underground Storm Pipe - Area C	5	5	03-May-27	10-May-27
MS-STR-1130	26B	Install Underground Electric - Area C	5	5	03-May-27	10-May-27
MS-STR-1100	31A	Insulate & Backfill Foundation Walls - Area C	10	10	03-May-27	19-May-27
MS-STR-1160	03A	Install Stone Base, Reinforcement & Vapor Barrier For SOG - Area C	12	12	20-May-27	08-Jun-27
MS-STR-1170	00-WT	Prepour Inspection - Area C	5	5	09-Jun-27	15-Jun-27
MS-STR-1180	03A	Pour SOG - Area C	5	5	16-Jun-27	22-Jun-27
MS-STR-1190	03A	SOG 75% Cure Time - Area C	5	5	23-Jun-27	30-Jun-27
Area B			61	61	29-Mar-27	08-Jul-27
MS-STR-1030	03A	Prep & Pour Shallow Footings - Area B	5	5	29-Mar-27	05-Apr-27
MS-STR-1060	03A	Install Piers & Anchor Bolts - Area B	5	5	14-Apr-27	21-Apr-27
MS-STR-1090	04A	Install Masonry Foundation Walls - Area B	5	5	03-May-27	10-May-27
MS-STR-1150	04A	Build Stair Shaft Walls - Area B - Stair A3	10	10	11-May-27	26-May-27
MS-STR-1280	22A	Install Underground Storm Pipe - Area B	10	10	11-May-27	26-May-27
MS-STR-1290	26B	Install Underground Electric - Area B	5	5	11-May-27	19-May-27
MS-STR-1270	22A	Install & NCC Test Underground Sanitary - Area B	10	10	20-May-27	04-Jun-27
MS-STR-1240	31A	Insulate & Backfill Foundation Walls - Area B	5	5	28-May-27	04-Jun-27
MS-STR-1400	03A	Install Stone Base, Reinforcement & Vapor Barrier For SOG - Area B	10	10	09-Jun-27	22-Jun-27
MS-STR-1420	00-WT	Prepour Inspection - Area B	2	2	23-Jun-27	25-Jun-27
MS-STR-1440	03A	Pour SOG - Area B	2	2	28-Jun-27	29-Jun-27
MS-STR-1470	03A	SOG 75% Cure Time - Area B	5	5	30-Jun-27	08-Jul-27
Area A			69	69	07-Apr-27	29-Jul-27
MS-STR-1040	03A	Prep & Pour Shallow Footings - Area A	10	10	07-Apr-27	21-Apr-27
MS-STR-1080	03A	Install Piers & Anchor Bolts - Area A	10	10	22-Apr-27	10-May-27
MS-STR-2250	03A	Prep & Pour Shallow Footings - Area A - Entrance Piers & Ramps	5	5	22-Apr-27	30-Apr-27
MS-STR-1140	04A	Install Masonry Foundation Walls - Area A	5	5	11-May-27	19-May-27
MS-STR-2260	03A	Install Piers & Anchor Bolts - Area A - Entrance Piers & Ramps	5	5	11-May-27	19-May-27
MS-STR-1230	04A	Build Stair Shaft Walls - Area A - Stair A2	10	10	20-May-27	04-Jun-27
MS-STR-1390	26B	Install Underground Electric - Area A	5	5	20-May-27	26-May-27
MS-STR-1380	22A	Install Underground Storm Pipe - Area A	10	10	28-May-27	11-Jun-27
MS-STR-1370	22A	Install & NCC Test Underground Sanitary - Area A	10	10	07-Jun-27	18-Jun-27
MS-STR-1300	04A	Build Stair Shaft Walls - Area A - Stair A1	10	10	07-Jun-27	18-Jun-27
MS-STR-1350	03A	Insulate & Backfill Foundation Walls - Area A	5	5	21-Jun-27	28-Jun-27
MS-STR-2270	04A	Install Masonry Foundation Walls - Area A - Entrance Piers & Ramps	5	5	21-Jun-27	28-Jun-27
MS-STR-1430	03A	Install Stone Base, Reinforcement & Vapor Barrier For SOG - Area A	10	10	29-Jun-27	14-Jul-27
MS-STR-1490	00-WT	Prepour Inspection - Area A	2	2	16-Jul-27	19-Jul-27
MS-STR-1520	03A	Pour SOG - Area A	2	2	21-Jul-27	22-Jul-27
MS-STR-1530	03A	SOG 75% Cure Time - Area A	5	5	23-Jul-27	29-Jul-27
MS Superstructure			115	115	28-May-27	02-Dec-27
Area C			40	40	01-Jul-27	03-Sep-27
MS-STR-1220	05A	Erect Steel & Roof Joists - Area C - C1-C5 (Gym)	10	10	01-Jul-27	19-Jul-27
MS-STR-1250	05A	Erect Steel & Roof Joists - Area C - C6-C7	5	5	21-Jul-27	27-Jul-27
MS-STR-1260	05A	Detail Steel - Area C - C1-C5 (Gym)	20	20	21-Jul-27	20-Aug-27
MS-STR-1320	05A	Erect Steel & Roof Joists - Area C - C7-C13	10	10	28-Jul-27	11-Aug-27
MS-STR-1410	05A	Detail Steel - Area C - C6-C7	5	5	28-Jul-27	04-Aug-27



Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-STR-1330	05A	Install Roof Deck & Fall Protection - Area C - C1-C5 (Gym)	5	5	28-Jul-27	04-Aug-27
MS-STR-1460	05A	Install Roof Deck & Fall Protection - Area C - C6-C7	2	2	05-Aug-27	06-Aug-27
MS-STR-1340	05A	Erect Steel & Roof Joists - Area C - CA-CE (From A16 to A29)	5	5	13-Aug-27	20-Aug-27
MS-STR-1450	05A	Detail Steel - Area C - C7-C13	5	5	13-Aug-27	20-Aug-27
MS-STR-1500	05A	Detail Steel - Area C - CA-CE (From A16 to A29)	5	5	23-Aug-27	27-Aug-27
MS-STR-1510	05A	Install Roof Deck & Fall Protection - Area C - C7-C13	5	5	23-Aug-27	27-Aug-27
MS-STR-1560	05A	Install Roof Deck & Fall Protection - Area C - CA-CE (From A16 to A29)	5	5	30-Aug-27	03-Sep-27
Area B			87	87	28-May-27	18-Oct-27
MS-STR-1210	05C	Set Stairs - Area B - Stair A3	5	5	28-May-27	04-Jun-27
MS-STR-2300	05C	Install Stair Handrails - Area B - Stair A3	5	5	07-Jun-27	11-Jun-27
MS-STR-1480	05A	Erect Steel & Roof Joists - Area B - A30-B4	5	5	23-Aug-27	27-Aug-27
MS-STR-1540	05A	Erect Steel & Roof Joists - Area B - B4-B8	5	5	30-Aug-27	03-Sep-27
MS-STR-1550	05A	Detail Steel - Area B - A30-B4	5	5	30-Aug-27	03-Sep-27
MS-STR-1570	05A	Erect Steel & Roof Joists - Area B - B8-B13	5	5	06-Sep-27	13-Sep-27
MS-STR-1580	05A	Detail Steel - Area B - B4-B8	5	5	06-Sep-27	13-Sep-27
MS-STR-1590	05A	Install Second Floor Deck & Fall Protection - Area B - A30-B4	2	2	06-Sep-27	08-Sep-27
MS-STR-1630	05A	Install Roof Deck & Fall Protection - Area B - A30-B4	2	2	09-Sep-27	10-Sep-27
MS-STR-1610	05A	Detail Steel - Area B - B8-B13	5	5	14-Sep-27	22-Sep-27
MS-STR-1620	05A	Install Second Floor Deck & Fall Protection - Area B - B4-B8	2	2	14-Sep-27	15-Sep-27
MS-STR-1670	05A	Install Roof Deck & Fall Protection - Area B - B4-B8	2	2	17-Sep-27	20-Sep-27
MS-STR-1660	05A	Install Second Floor Deck & Fall Protection - Area B - B8-B13	2	2	23-Sep-27	24-Sep-27
MS-STR-1710	05A	Install Roof Deck & Fall Protection - Area B - B8-B13	2	2	27-Sep-27	28-Sep-27
MS-STR-1720	23A	Install Mech Sleeves in Deck - Area B - Second Floor	5	5	27-Sep-27	04-Oct-27
MS-STR-1730	26B	Install Elec Sleeves in Deck - Area B - Second Floor	5	5	27-Sep-27	04-Oct-27
MS-STR-1740	22A	Install Plumbing Sleeves in Deck - Area B - Second Floor	5	5	27-Sep-27	04-Oct-27
MS-STR-1750	21A	Install Fire Suppression Sleeves in Deck - Area B - Second Floor	5	5	27-Sep-27	04-Oct-27
MS-STR-1760	26C	Install Low Voltage Sleeves in Deck - Area B - Second Floor	2	2	27-Sep-27	28-Sep-27
MS-STR-1830	26B	Install Elec Sleeves in Deck - Area B - Roof Level	0	0	29-Sep-27	29-Sep-27
MS-STR-1840	22A	Install Plumbing Sleeves in Deck - Area B - Roof Level	0	0	29-Sep-27	29-Sep-27
MS-STR-1850	21A	Install Fire Suppression Sleeves in Deck - Area B - Roof Level	0	0	29-Sep-27	29-Sep-27
MS-STR-1860	26C	Install Low Voltage Sleeves in Deck - Area B - Roof Level	0	0	29-Sep-27	29-Sep-27
MS-STR-1770	05A	Install Nelson Studs - Area B - Second Floor	2	2	06-Oct-27	07-Oct-27
MS-STR-1870	03A	Install Concrete Reinforcement - Area B - Second Floor	2	2	08-Oct-27	11-Oct-27
MS-STR-1930	03A	Pour Slab on Deck - Area B - Second Floor	2	2	12-Oct-27	13-Oct-27
MS-STR-2020	03A	Pour Stair Pans & Landings - Area B - Stair A3	2	2	15-Oct-27	18-Oct-27
MS-STR-1980	03A	Slab on Deck 75% Cure Time - Area B - Second Floor	2	2	15-Oct-27	18-Oct-27
Area A			110	110	07-Jun-27	02-Dec-27
MS-STR-1310	05C	Set Stairs - Area A - Stair A2	5	5	07-Jun-27	11-Jun-27
MS-STR-2290	05C	Install Stair Handrails - Area A - Stair A2	5	5	14-Jun-27	18-Jun-27
MS-STR-1360	05C	Set Stairs - Area A - Stair A1	5	5	21-Jun-27	28-Jun-27
MS-STR-2280	05C	Install Stair Handrails - Area A - Stair A1	5	5	29-Jun-27	07-Jul-27
MS-STR-1600	05A	Erect Steel & Roof Joists - Area A - A1-A5	5	5	14-Sep-27	22-Sep-27
MS-STR-1640	05A	Erect Steel & Roof Joists - Area A - A5-A9	5	5	23-Sep-27	29-Sep-27
MS-STR-1650	05A	Detail Steel - Area A - A1-A5	5	5	23-Sep-27	29-Sep-27
MS-STR-1680	05A	Erect Steel & Roof Joists - Area A - A9-A12	5	5	01-Oct-27	08-Oct-27
MS-STR-1690	05A	Detail Steel - Area A - A5-A9	5	5	01-Oct-27	08-Oct-27
MS-STR-1700	05A	Install Second Floor Deck & Fall Protection - Area A - A1-A5	2	2	01-Oct-27	04-Oct-27
MS-STR-1810	05A	Install Roof Deck & Fall Protection - Area A - A1-A5	2	2	06-Oct-27	07-Oct-27
MS-STR-1780	05A	Erect Steel & Roof Joists - Area A - A12-A17	5	5	11-Oct-27	18-Oct-27
MS-STR-1790	05A	Detail Steel - Area A - A9-A12	5	5	11-Oct-27	18-Oct-27
MS-STR-1800	05A	Install Second Floor Deck & Fall Protection - Area A - A5-A9	2	2	11-Oct-27	12-Oct-27
MS-STR-1920	05A	Install Roof Deck & Fall Protection - Area A - A5-A9	2	2	13-Oct-27	15-Oct-27
MS-STR-1890	05A	Erect Steel & Roof Joists - Area A - A17-A29	5	5	20-Oct-27	26-Oct-27
MS-STR-1900	05A	Detail Steel - Area A - A12-A17	5	5	20-Oct-27	26-Oct-27
MS-STR-1910	05A	Install Second Floor Deck & Fall Protection - Area A - A9-A12	2	2	20-Oct-27	21-Oct-27
MS-STR-2220	03A	Pour Stair Pans & Landings - Area A - Stair A2	2	2	20-Oct-27	21-Oct-27
MS-STR-1970	05A	Install Roof Deck & Fall Protection - Area A - A9-A12	2	2	22-Oct-27	25-Oct-27
MS-STR-2240	03A	Pour Stair Pans & Landings - Area A - Stair A1	2	2	22-Oct-27	25-Oct-27
MS-STR-1950	05A	Detail Steel - Area A - A17-A29	5	5	27-Oct-27	02-Nov-27
MS-STR-1960	05A	Install Second Floor Deck & Fall Protection - Area A - A12-A17	2	2	27-Oct-27	28-Oct-27
MS-STR-2010	05A	Install Roof Deck & Fall Protection - Area A - A12-A17	2	2	29-Oct-27	01-Nov-27

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

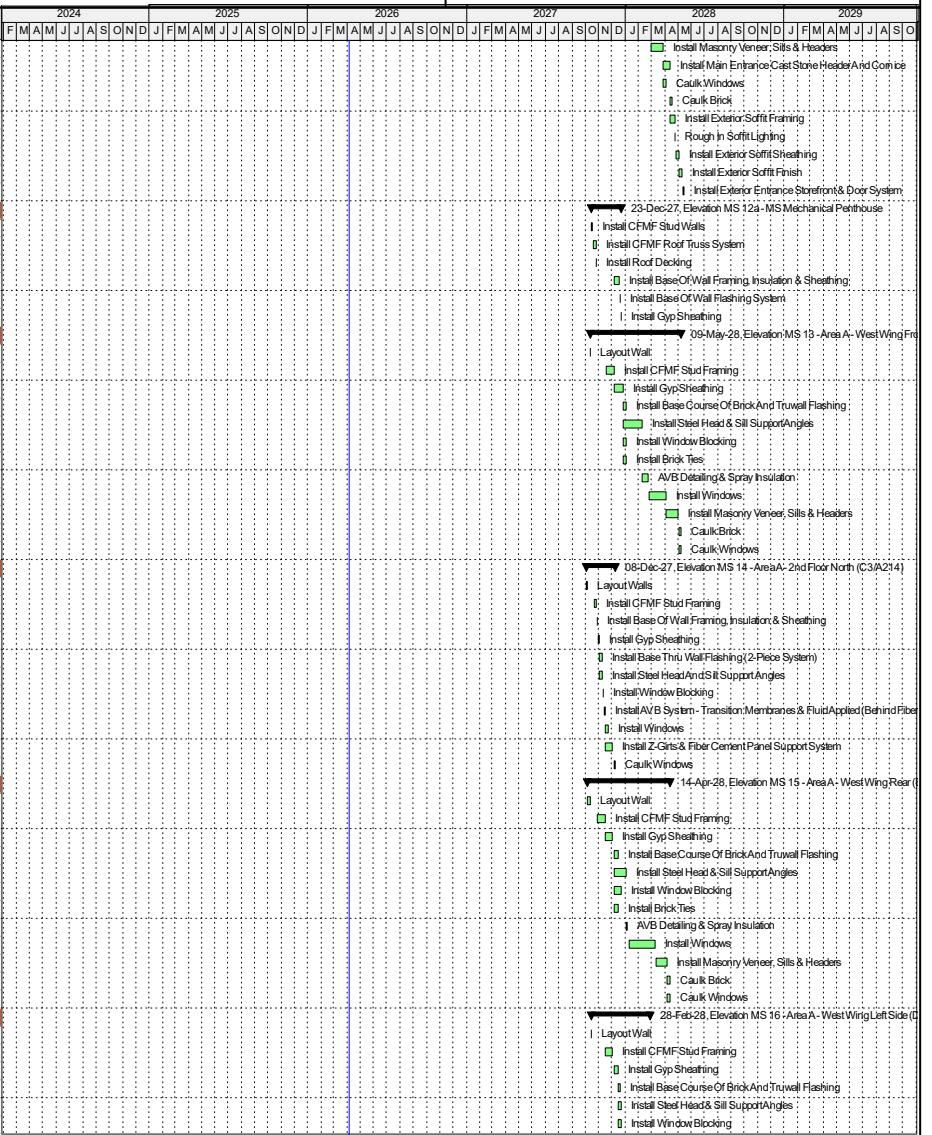
ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-STR-2000	05A	Install Second Floor Deck & Fall Protection - Area A - A17-A29	2	2	03-Nov-27	05-Nov-27
MS-STR-2040	05A	Install Roof Deck & Fall Protection - Area A - A17-A29	2	2	08-Nov-27	09-Nov-27
MS-STR-2050	23A	Install Mech Sleeves in Deck - Area A - Second Floor	5	5	08-Nov-27	12-Nov-27
MS-STR-2060	26B	Install Elec Sleeves in Deck - Area A - Second Floor	5	5	08-Nov-27	12-Nov-27
MS-STR-2070	22A	Install Plumbing Sleeves in Deck - Area A - Second Floor	5	5	08-Nov-27	12-Nov-27
MS-STR-2080	21A	Install Fire Suppression Sleeves in Deck - Area A - Second Floor	5	5	08-Nov-27	12-Nov-27
MS-STR-2090	26C	Install Low Voltage Sleeves in Deck - Area A - Second Floor	2	2	08-Nov-27	09-Nov-27
MS-STR-2100	23A	Install Mech Sleeves in Deck - Area A - Roof Level	2	2	10-Nov-27	11-Nov-27
MS-STR-2110	26B	Install Elec Sleeves in Deck - Area A - Roof Level	2	2	10-Nov-27	11-Nov-27
MS-STR-2120	22A	Install Plumbing Sleeves in Deck - Area A - Roof Level	2	2	10-Nov-27	11-Nov-27
MS-STR-2130	21A	Install Fire Suppression Sleeves in Deck - Area A - Roof Level	2	2	10-Nov-27	11-Nov-27
MS-STR-2140	26C	Install Low Voltage Sleeves in Deck - Area A - Roof Level	2	2	10-Nov-27	11-Nov-27
MS-STR-2160	03A	Install Nelson Studs - Area A - Roof Level	1	1	12-Nov-27	12-Nov-27
MS-STR-2150	05A	Install Nelson Studs - Area A - Second Floor	2	2	15-Nov-27	17-Nov-27
MS-STR-2180	03A	Install Concrete Reinforcement - Area A - Roof Level	1	1	15-Nov-27	15-Nov-27
MS-STR-2200	03A	Pour Slab on Deck - Area A - Roof Level	1	1	17-Nov-27	17-Nov-27
MS-STR-2170	03A	Install Concrete Reinforcement - Area A - Second Floor	2	2	18-Nov-27	19-Nov-27
MS-STR-2230	03A	Slab on Deck 75% Cure Time - Area A - Roof Level	5	5	18-Nov-27	24-Nov-27
MS-STR-2190	03A	Pour Slab on Deck - Area A - Second Floor	2	2	22-Nov-27	23-Nov-27
MS-STR-2210	03A	Slab on Deck 75% Cure Time - Area A - Second Floor	5	5	24-Nov-27	02-Dec-27
MS Exterior			281	281	06-Sep-27	13-Oct-28
MS-EXT-9000	00-WT	WT Create Work-to-Complete List - MS Exteriors / Roofing	10	10	02-Oct-28	13-Oct-28
Middle School Elevations			213	213	06-Sep-27	29-Sep-28
Elevation MS 1 - Area C - MS Gym East (F1/A213)			40	40	06-Sep-27	10-Nov-27
MS-EXT-4070	03A	Install CMU Back-Up Wall	10	10	06-Sep-27	22-Sep-27
MS-EXT-4100	09A	Install Base Of Wall Framing, Insulation & Sheathing	2	2	23-Sep-27	24-Sep-27
MS-EXT-4110	09A	Install CFMF Studs & Headers At TG Glazing Locations	2	2	23-Sep-27	24-Sep-27
MS-EXT-4140	07C	Install Base Thru Wall Flashing (2-Piece System)	2	2	27-Sep-27	28-Sep-27
MS-EXT-4150	09A	Install Gyp Sheathing	2	2	27-Sep-27	28-Sep-27
MS-EXT-4200	06C	Install Window Blocking	2	2	29-Sep-27	01-Oct-27
MS-EXT-4260	07C	Install Flashing	2	2	04-Oct-27	06-Oct-27
MS-EXT-4320	07A	Install AVB System	1	1	07-Oct-27	07-Oct-27
MS-EXT-4370	07C	Install Z-Girts & Metal Panel Support System	5	5	08-Oct-27	15-Oct-27
MS-EXT-4420	07C	Install Mineral Wool Insulation	0	0	18-Oct-27	18-Oct-27
MS-EXT-4430	07C	Install Metal Panels	0	0	18-Oct-27	18-Oct-27
MS-EXT-4480	08A	Install TG Glazing System	5	5	18-Oct-27	25-Oct-27
MS-EXT-4490	09A	Install Soffit & Fascia Framing And Sheathing	5	5	18-Oct-27	25-Oct-27
MS-EXT-4550	07C	Field Measure Metal Panels	1	1	26-Oct-27	26-Oct-27
MS-EXT-4610	07C	Install Soffit & Fascia Panels	10	10	27-Oct-27	10-Nov-27
Elevation MS 2 - Area C - MS Gym South (F5/A213)			50	50	23-Sep-27	20-Dec-27
MS-EXT-4120	04A	Install CMU Back-Up Wall	10	10	23-Sep-27	08-Oct-27
MS-EXT-4160	04A	Install Base Course Of Brick And Truwall Flashing	2	2	11-Oct-27	12-Oct-27
MS-EXT-4170	09A	Install CFMF Studs & Headers At TG Glazing Locations	5	5	11-Oct-27	18-Oct-27
MS-EXT-4210	09A	Install Gyp Sheathing	1	1	20-Oct-27	20-Oct-27
MS-EXT-4270	06C	Install Window Blocking	5	5	21-Oct-27	27-Oct-27
MS-EXT-4330	04A	Install Flashing	2	2	28-Oct-27	29-Oct-27
MS-EXT-4380	07A	Install AVB System - Transition Membranes & Spray Foam	1	1	01-Nov-27	01-Nov-27
MS-EXT-4440	04A	Install Masonry Veneer & Sills	10	10	02-Nov-27	17-Nov-27
MS-EXT-4500	06C	Install Fiber Cement Siding System	5	5	18-Nov-27	24-Nov-27
MS-EXT-4510	08A	Install Aluminum & FRP Doors	1	1	18-Nov-27	18-Nov-27
MS-EXT-4560	08A	Install TG Glazing System	10	10	29-Nov-27	17-Dec-27
MS-EXT-4570	09A	Install Soffit & Fascia Framing And Sheathing	5	5	29-Nov-27	07-Dec-27
MS-EXT-4620	07C	Field Measure Metal Panels	1	1	08-Dec-27	08-Dec-27
MS-EXT-4710	07C	Install Soffit & Fascia Panels	5	5	10-Dec-27	20-Dec-27
Elevation MS 3 - Area C - MS Gym West (D5/A213)			51	51	11-Oct-27	10-Jan-28
MS-EXT-4180	04A	Install CMU Back-Up Wall	10	10	11-Oct-27	26-Oct-27
MS-EXT-1000	07C	***What Are We Doing With The Architectural Slanted Columns? They're Just Painted Steel....	5	5	27-Oct-27	02-Nov-27
MS-EXT-4220	04A	Install Base Course Of Brick And Truwall Flashing	2	2	27-Oct-27	28-Oct-27
MS-EXT-4230	09A	Install CFMF Studs & Headers At TG Glazing Locations	5	5	27-Oct-27	02-Nov-27
MS-EXT-4290	09A	Install Gyp Sheathing	2	2	03-Nov-27	05-Nov-27
MS-EXT-4350	06C	Install Window Blocking	5	5	08-Nov-27	12-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-EXT-4400	04A	Install Flashing	2	2	15-Nov-27	17-Nov-27
MS-EXT-4460	07A	Install AVB System - Transition Membranes & Spray Foam	1	1	18-Nov-27	18-Nov-27
MS-EXT-4530	04A	Install Masonry Veneer & Sills	10	10	19-Nov-27	08-Dec-27
MS-EXT-4590	06C	Install Fiber Cement Siding System	5	5	10-Dec-27	20-Dec-27
MS-EXT-4670	08A	Install TG Glazing System	5	5	21-Dec-27	28-Dec-27
MS-EXT-4680	09A	Install Soffit & Fascia Framing And Sheathing	5	5	21-Dec-27	28-Dec-27
MS-EXT-4730	07C	Field Measure Metal Panels	1	1	30-Dec-27	30-Dec-27
MS-EXT-4780	07C	Install Soffit & Fascia Panels	5	5	31-Dec-27	10-Jan-28
Elevation MS 4 - Area C - MS Gym North (B5/A213)			53	53	27-Oct-27	22-Feb-28
MS-EXT-4240	04A	Install CMU Back-Up Wall	10	10	27-Oct-27	10-Nov-27
MS-EXT-4300	04A	Install Base Course Of Brick And Truwall Flashing	2	2	11-Nov-27	12-Nov-27
MS-EXT-4310	09A	Install CFMF Studs & Headers At TG Glazing Locations	5	5	11-Nov-27	18-Nov-27
MS-EXT-4360	09A	Install Gyp Sheathing	1	1	19-Nov-27	19-Nov-27
MS-EXT-4410	06C	Install Window Blocking	5	5	22-Nov-27	30-Nov-27
MS-EXT-4470	04A	Install Flashing	5	5	01-Dec-27	10-Dec-27
MS-EXT-4540	07A	Install AVB System - Transition Membranes & Spray Foam	1	1	14-Dec-27	14-Dec-27
MS-EXT-4600	04A	Install Masonry Veneer & Sills	10	10	16-Dec-27	31-Dec-27
MS-EXT-4690	06C	Install Fiber Cement Siding System	5	5	03-Jan-28	14-Jan-28
MS-EXT-4700	08A	Install Aluminum & FRP Doors	1	1	03-Jan-28	03-Jan-28
MS-EXT-4740	08A	Install TG Glazing System	10	10	18-Jan-28	18-Feb-28
MS-EXT-4750	09A	Install Soffit & Fascia Framing And Sheathing	5	5	18-Jan-28	02-Feb-28
MS-EXT-4790	07C	Field Measure Metal Panels	1	1	04-Feb-28	04-Feb-28
MS-EXT-4830	07C	Install Soffit & Fascia Panels	5	5	08-Feb-28	22-Feb-28
Elevation MS 5 - Area C - MS Lobby / Cafeteria / Kitchen North (A2/A213)			56	56	17-Sep-27	23-Dec-27
MS-EXT-4450	09A	Layout Wall	5	5	17-Sep-27	24-Sep-27
MS-EXT-4520	09A	Install CFMF Stud Framing	10	10	27-Sep-27	12-Oct-27
MS-EXT-4580	09A	Install Gyp Sheathing	10	10	13-Oct-27	28-Oct-27
MS-EXT-4630	04A	Install Base Course Of Brick And Truwall Flashing	5	5	29-Oct-27	05-Nov-27
MS-EXT-4640	09A	Install Steel Head & Sill Support Angles	2	2	29-Oct-27	01-Nov-27
MS-EXT-4650	06C	Install Window Blocking	2	2	29-Oct-27	01-Nov-27
MS-EXT-4660	04A	Install Brick Ties & Flashing	5	5	29-Oct-27	05-Nov-27
MS-EXT-4720	07A	Spray Insulation	2	2	08-Nov-27	09-Nov-27
MS-EXT-4760	08A	Install Windows	5	5	10-Nov-27	17-Nov-27
MS-EXT-4770	04A	Install Masonry Veneer, Sills & Headers	14	14	10-Nov-27	02-Dec-27
MS-EXT-4800	07G	Caulk Brick	2	2	07-Dec-27	08-Dec-27
MS-EXT-4810	09A	Install Canopy And Soffit Framing	2	2	07-Dec-27	08-Dec-27
MS-EXT-4820	08A	Install Exterior Entrance Storefront & Door System	5	5	07-Dec-27	16-Dec-27
MS-EXT-4840	26B	Rough In Canopy Lights	1	1	10-Dec-27	10-Dec-27
MS-EXT-4860	09A	Install Canopy Sheathing	1	1	14-Dec-27	14-Dec-27
MS-EXT-4870	07A	Install Canopy AVB	1	1	16-Dec-27	16-Dec-27
MS-EXT-4880	07C	Install Metal Panel Soffit & Fascia	5	5	17-Dec-27	23-Dec-27
MS-EXT-4850	07G	Caulk Windows	2	2	17-Dec-27	20-Dec-27
Elevation MS 6 - Area C - MS Cafeteria Clerestory			42	42	06-Sep-27	12-Nov-27
MS-EXT-1010	09A	Install CFMF Stud Wall Framing	5	5	06-Sep-27	13-Sep-27
MS-EXT-2420	09A	Install Fascia Framing At Perimeter Of Roof	5	5	14-Sep-27	22-Sep-27
MS-EXT-2430	09A	Install Base Of Wall Framing, Insulation & Sheathing	2	2	14-Sep-27	15-Sep-27
MS-EXT-2560	07C	Install Base Thru Wall Flashing (2-Piece System)	2	2	17-Sep-27	20-Sep-27
MS-EXT-2570	09A	Install Gyp Sheathing	2	2	23-Sep-27	24-Sep-27
MS-EXT-2700	06C	Install Window Blocking	5	5	27-Sep-27	04-Oct-27
MS-EXT-3070	07C	Install Flashing	2	2	06-Oct-27	07-Oct-27
MS-EXT-3230	07A	Install AVB System	1	1	08-Oct-27	08-Oct-27
MS-EXT-3350	07C	Install Z-Girts & Metal Panel Support System	5	5	11-Oct-27	18-Oct-27
MS-EXT-3470	07C	Install Mineral Wool Insulation	0	0	20-Oct-27	20-Oct-27
MS-EXT-3480	07C	Install Metal Panels	0	0	20-Oct-27	20-Oct-27
MS-EXT-3650	08A	Install Storefront Windows	5	5	20-Oct-27	26-Oct-27
MS-EXT-3660	09A	Install Soffit Framing & Sheathing	5	5	20-Oct-27	26-Oct-27
MS-EXT-3810	07C	Field Measure Soffit & Fascia Metal Panels	2	2	27-Oct-27	28-Oct-27
MS-EXT-3870	08A	Caulk Windows	2	2	27-Oct-27	28-Oct-27
MS-EXT-3950	07C	Install Soffit & Fascia Panels	10	10	29-Oct-27	12-Nov-27
Elevation MS 6a - Area C - MS Cafeteria / Kitchen Rooftop Knee Walls			7	7	14-Sep-27	24-Sep-27
MS-EXT-1020	09A	Frame Rooftop Partition Knee Walls	2	2	14-Sep-27	15-Sep-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-EXT-2440	09A	Insulate Walls	1	1	17-Sep-27	17-Sep-27
MS-EXT-2580	09A	Install Plywood Sheathing	2	2	20-Sep-27	22-Sep-27
MS-EXT-2710	06C	Install Blocking	2	2	23-Sep-27	24-Sep-27
Elevation MS 9 - MS Courtyard North (C5/A215)			74	74	29-Sep-27	01-Mar-28
MS-EXT-1090	09A	Layout Wall	2	2	29-Sep-27	01-Oct-27
MS-EXT-2510	09A	Install CFMF Stud Framing	10	10	04-Oct-27	20-Oct-27
MS-EXT-2650	09A	Install Gyp Sheathing	5	5	21-Oct-27	27-Oct-27
MS-EXT-2870	04A	Install Base Course Of Masonry And Truwall Flashing	2	2	28-Oct-27	29-Oct-27
MS-EXT-2880	09A	Install Steel Head And Sill Support Angles	15	15	28-Oct-27	19-Nov-27
MS-EXT-2890	06C	Install Window Blocking	10	10	28-Oct-27	11-Nov-27
MS-EXT-2900	04A	Install Brick Ties	5	5	28-Oct-27	03-Nov-27
MS-EXT-3180	07A	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	1	1	22-Nov-27	22-Nov-27
MS-EXT-3300	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	2	2	23-Nov-27	24-Nov-27
MS-EXT-3420	08A	Install Windows	15	15	29-Nov-27	27-Dec-27
MS-EXT-3560	04A	Install Masonry Veneer And Cast Stone Headers / Sills	10	10	28-Dec-27	20-Jan-28
MS-EXT-3770	07G	Caulk Brick	2	2	24-Jan-28	28-Jan-28
MS-EXT-3780	06C	Install Z-Girts & Fiber Cement Panel Support System	12	12	24-Jan-28	28-Feb-28
MS-EXT-3900	06C	Install Mineral Wool Insulation	0	0	29-Feb-28	29-Feb-28
MS-EXT-3910	06C	Install Fiber Cement Panels	0	0	29-Feb-28	29-Feb-28
MS-EXT-3990	08A	Caulk Windows	2	2	29-Feb-28	01-Mar-28
Elevation MS 10 - MS Courtyard East (A5/A215)			71	71	20-Oct-27	17-Mar-28
MS-EXT-1100	09A	Layout Wall	1	1	20-Oct-27	20-Oct-27
MS-EXT-2520	09A	Install CFMF Stud Framing	5	5	20-Dec-27	27-Dec-27
MS-EXT-2660	09A	Install Gyp Sheathing	2	2	28-Dec-27	30-Dec-27
MS-EXT-2910	04A	Install Base Course Of Masonry And Truwall Flashing	2	2	31-Dec-27	03-Jan-28
MS-EXT-2920	09A	Install Steel Head And Sill Support Angles	5	5	31-Dec-27	10-Jan-28
MS-EXT-2930	06C	Install Window Blocking	2	2	31-Dec-27	03-Jan-28
MS-EXT-2940	04A	Install Brick Ties	1	1	31-Dec-27	31-Dec-27
MS-EXT-3190	07A	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	1	1	14-Jan-28	14-Jan-28
MS-EXT-3310	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	2	2	18-Jan-28	20-Jan-28
MS-EXT-3430	08A	Install Windows	10	10	24-Jan-28	23-Feb-28
MS-EXT-3570	04A	Install Masonry Veneer And Cast Stone Headers / Sills	5	5	24-Feb-28	03-Mar-28
MS-EXT-3790	07G	Caulk Brick	2	2	06-Mar-28	07-Mar-28
MS-EXT-3800	06C	Install Z-Girts & Fiber Cement Panel Support System	5	5	06-Mar-28	15-Mar-28
MS-EXT-3920	06C	Install Mineral Wool Insulation	0	0	16-Mar-28	16-Mar-28
MS-EXT-3930	06C	Install Fiber Cement Panels	0	0	16-Mar-28	16-Mar-28
MS-EXT-4000	08A	Caulk Windows	2	2	16-Mar-28	17-Mar-28
Elevation MS 11 - Area B - East Wing Front (E2/A211)			90	90	29-Sep-27	30-Mar-28
MS-EXT-1040	09A	Layout Wall	2	2	29-Sep-27	01-Oct-27
MS-EXT-2460	09A	Install CFMF Stud Framing	10	10	13-Oct-27	28-Oct-27
MS-EXT-2600	09A	Install Gyp Sheathing	10	10	29-Oct-27	12-Nov-27
MS-EXT-2760	04A	Install Base Course Of Brick And Truwall Flashing	5	5	15-Nov-27	22-Nov-27
MS-EXT-2770	09A	Install Steel Head & Sill Support Angles	15	15	15-Nov-27	14-Dec-27
MS-EXT-2780	06C	Install Window Blocking	5	5	15-Nov-27	22-Nov-27
MS-EXT-2790	04A	Install Brick Ties	5	5	15-Nov-27	22-Nov-27
MS-EXT-3090	07A	AVB Detailing & Spray Insulation	5	5	16-Dec-27	22-Dec-27
MS-EXT-3250	08A	Install Windows	22	22	23-Dec-27	23-Feb-28
MS-EXT-3370	04A	Install Masonry Veneer, Sills & Headers	15	15	24-Feb-28	23-Mar-28
MS-EXT-3500	07G	Caulk Brick	5	5	24-Mar-28	30-Mar-28
MS-EXT-3580	08A	Caulk Windows	5	5	24-Mar-28	30-Mar-28
Elevation MS 12 - Area A - Main Entry Front (A4/A211)			113	113	04-Oct-27	15-May-28
MS-EXT-1050	09A	Layout Walls	5	5	04-Oct-27	11-Oct-27
MS-EXT-2470	09A	Install CFMF Stud Framing	12	12	29-Oct-27	17-Nov-27
MS-EXT-2610	09A	Install Entry Column Framing	5	5	18-Nov-27	24-Nov-27
MS-EXT-2800	09A	Install Gyp Sheathing	10	10	29-Nov-27	17-Dec-27
MS-EXT-3100	04A	Install Base Course Of Brick And Truwall Flashing	5	5	20-Dec-27	27-Dec-27
MS-EXT-3110	09A	Install Steel Head & Sill Support Angles	15	15	20-Dec-27	20-Jan-28
MS-EXT-3120	06C	Install Window Blocking	10	10	20-Dec-27	04-Jan-28
MS-EXT-3130	04A	Install Brick Ties	5	5	20-Dec-27	27-Dec-27
MS-EXT-3260	07C	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	2	2	24-Jan-28	28-Jan-28
MS-EXT-3380	08A	Install Windows	10	10	02-Feb-28	28-Feb-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-EXT-3510	04A	Install Masonry Veneer, Sills & Headers	15	15	29-Feb-28	27-Mar-28
MS-EXT-3700	04A	Install Main Entrance Cast Stone Header And Cornice	10	10	28-Mar-28	13-Apr-28
MS-EXT-3710	08A	Caulk Windows	5	5	28-Mar-28	03-Apr-28
MS-EXT-3840	07G	Caulk Brick	2	2	14-Apr-28	17-Apr-28
MS-EXT-3850	09A	Install Exterior Soffit Framing	5	5	14-Apr-28	24-Apr-28
MS-EXT-3960	26B	Rough In Soffit Lighting	1	1	25-Apr-28	25-Apr-28
MS-EXT-4010	09A	Install Exterior Soffit Sheathing	5	5	26-Apr-28	03-May-28
MS-EXT-4020	09A	Install Exterior Soffit Finish	5	5	04-May-28	10-May-28
MS-EXT-4030	08A	Install Exterior Entrance Storefront & Door System	2	2	12-May-28	15-May-28
Elevation MS 12a - MS Mechanical Penthouse			40	40	15-Oct-27	23-Dec-27
MS-EXT-1060	09A	Install CFMF Stud Walls	2	2	15-Oct-27	18-Oct-27
MS-EXT-2480	09A	Install CFMF Roof Truss System	5	5	20-Oct-27	26-Oct-27
MS-EXT-2620	07E	Install Roof Decking	1	1	27-Oct-27	27-Oct-27
MS-EXT-2810	09A	Install Base Of Wall Framing, Insulation & Sheathing	5	5	08-Dec-27	17-Dec-27
MS-EXT-3140	07E	Install Base Of Wall Flashing System	2	2	20-Dec-27	21-Dec-27
MS-EXT-3270	09A	Install Gyp Sheathing	2	2	22-Dec-27	23-Dec-27
Elevation MS 13 - Area A - West Wing Front (F4/A212)			105	105	12-Oct-27	09-May-28
MS-EXT-1110	09A	Layout Wall	2	2	12-Oct-27	13-Oct-27
MS-EXT-2530	09A	Install CFMF Stud Framing	10	10	18-Nov-27	07-Dec-27
MS-EXT-2670	09A	Install Gyp Sheathing	10	10	08-Dec-27	27-Dec-27
MS-EXT-2950	04A	Install Base Course Of Brick And Truwall Flashing	5	5	28-Dec-27	04-Jan-28
MS-EXT-2960	09A	Install Steel Head & Sill Support Angles	15	15	28-Dec-27	08-Feb-28
MS-EXT-2970	06C	Install Window Blocking	5	5	28-Dec-27	04-Jan-28
MS-EXT-2980	04A	Install Brick Ties	5	5	28-Dec-27	04-Jan-28
MS-EXT-3200	07A	AVB Detailing & Spray Insulation	5	5	10-Feb-28	23-Feb-28
MS-EXT-3320	08A	Install Windows	22	22	24-Feb-28	03-Apr-28
MS-EXT-3440	04A	Install Masonry Veneer, Sills & Headers	15	15	05-Apr-28	01-May-28
MS-EXT-3590	07G	Caulk Brick	5	5	03-May-28	09-May-28
MS-EXT-3600	08A	Caulk Windows	5	5	03-May-28	09-May-28
Elevation MS 14 - Area A - 2nd Floor North (C3/A214)			39	39	04-Oct-27	08-Dec-27
MS-EXT-1070	09A	Layout Walls	2	2	04-Oct-27	06-Oct-27
MS-EXT-2490	09A	Install CFMF Stud Framing	5	5	21-Oct-27	27-Oct-27
MS-EXT-2630	09A	Install Base Of Wall Framing, Insulation & Sheathing	2	2	28-Oct-27	29-Oct-27
MS-EXT-2820	09A	Install Gyp Sheathing	2	2	01-Nov-27	02-Nov-27
MS-EXT-3150	04A	Install Base Thru Wall Flashing (2-Piece System)	5	5	03-Nov-27	10-Nov-27
MS-EXT-3160	09A	Install Steel Head And Sill Support Angles	5	5	03-Nov-27	10-Nov-27
MS-EXT-3280	06C	Install Window Blocking	2	2	11-Nov-27	12-Nov-27
MS-EXT-3400	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	1	1	15-Nov-27	15-Nov-27
MS-EXT-3530	08A	Install Windows	5	5	17-Nov-27	23-Nov-27
MS-EXT-3540	06C	Install Z-Girts & Fiber Cement Panel Support System	10	10	17-Nov-27	02-Dec-27
MS-EXT-3940	08A	Caulk Windows	2	2	07-Dec-27	08-Dec-27
Elevation MS 15 - Area A - West Wing Rear (B1/B4/A212)			94	94	07-Oct-27	14-Apr-28
MS-EXT-1120	09A	Layout Wall	5	5	07-Oct-27	13-Oct-27
MS-EXT-2540	09A	Install CFMF Stud Framing	12	12	28-Oct-27	15-Nov-27
MS-EXT-2680	09A	Install Gyp Sheathing	10	10	17-Nov-27	02-Dec-27
MS-EXT-2990	04A	Install Base Course Of Brick And Truwall Flashing	5	5	07-Dec-27	16-Dec-27
MS-EXT-3000	09A	Install Steel Head & Sill Support Angles	15	15	07-Dec-27	03-Jan-28
MS-EXT-3010	06C	Install Window Blocking	10	10	07-Dec-27	23-Dec-27
MS-EXT-3020	04A	Install Brick Ties	5	5	07-Dec-27	16-Dec-27
MS-EXT-3210	07A	AVB Detailing & Spray Insulation	2	2	04-Jan-28	06-Jan-28
MS-EXT-3330	08A	Install Windows	22	22	10-Jan-28	09-Mar-28
MS-EXT-3450	04A	Install Masonry Veneer, Sills & Headers	15	15	13-Mar-28	05-Apr-28
MS-EXT-3610	07G	Caulk Brick	5	5	07-Apr-28	14-Apr-28
MS-EXT-3620	08A	Caulk Windows	5	5	07-Apr-28	14-Apr-28
Elevation MS 16 - Area A - West Wing Left Side (D4/A212)			63	63	15-Oct-27	28-Feb-28
MS-EXT-1130	09A	Layout Wall	1	1	15-Oct-27	15-Oct-27
MS-EXT-2550	09A	Install CFMF Stud Framing	10	10	17-Nov-27	02-Dec-27
MS-EXT-2690	09A	Install Gyp Sheathing	5	5	07-Dec-27	16-Dec-27
MS-EXT-3030	04A	Install Base Course Of Brick And Truwall Flashing	2	2	17-Dec-27	20-Dec-27
MS-EXT-3040	09A	Install Steel Head & Sill Support Angles	5	5	17-Dec-27	23-Dec-27
MS-EXT-3050	06C	Install Window Blocking	5	5	17-Dec-27	23-Dec-27



Remaining Level of Effort | Actual Level of Effort | Actual Work

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-EXT-3060	04A	Install Brick Ties	5	5	17-Dec-27	23-Dec-27
MS-EXT-3220	07A	AVB Detailing & Spray Insulation	1	1	27-Dec-27	27-Dec-27
MS-EXT-3340	08A	Install Windows	10	10	28-Dec-27	20-Jan-28
MS-EXT-3460	04A	Install Masonry Veneer, Sills & Headers	10	10	24-Jan-28	23-Feb-28
MS-EXT-3630	07G	Caulk Brick	2	2	24-Feb-28	28-Feb-28
MS-EXT-3640	08A	Caulk Windows	2	2	24-Feb-28	28-Feb-28
MS Firewalls			39	39	11-Nov-27	08-Feb-28
MS-EXT-4280	04A	Install CMU -Area C - Fire Wall	10	10	11-Nov-27	29-Nov-27
MS-EXT-4340	04A	Install CMU - Area B - Fire Wall	14	14	30-Nov-27	27-Dec-27
MS-EXT-5480	07E	Install Spray Fireproofing - Area C - Fire Wall	5	5	30-Nov-27	08-Dec-27
MS-EXT-4390	04A	Install CMU - Area D - Cafeteria Fire Wall	10	10	28-Dec-27	20-Jan-28
MS-EXT-5490	07E	Install Spray Fireproofing - Area B - Fire Wall	5	5	28-Dec-27	04-Jan-28
MS-EXT-5500	07E	Install Spray Fireproofing - Area D - Fire Wall	5	5	24-Jan-28	08-Feb-28
MS Courtyard Leaveout Elevations			39	39	28-Jul-28	29-Sep-28
MS-EXT-5200	09A	Layout Wall	2	2	28-Jul-28	31-Jul-28
MS-EXT-5210	09A	Install CFMF Stud Framing	5	5	01-Aug-28	07-Aug-28
MS-EXT-5220	09A	Install Gyp Sheathing	2	2	09-Aug-28	10-Aug-28
MS-EXT-5230	04A	Install Base Course Of Masonry And Truwall Flashing	2	2	11-Aug-28	14-Aug-28
MS-EXT-5240	09A	Install Steel Head And Sill Support Angles	5	5	11-Aug-28	18-Aug-28
MS-EXT-5250	06C	Install Window Blocking	2	2	11-Aug-28	14-Aug-28
MS-EXT-5260	04A	Install Brick Ties	1	1	11-Aug-28	11-Aug-28
MS-EXT-5270	07A	Install AVB System - Transition Membranes & Spray Insulation (Behind Masonry)	1	1	21-Aug-28	21-Aug-28
MS-EXT-5280	07A	Install AVB System - Transition Membranes & Fluid Applied (Behind Fiber Cement Panels)	2	2	23-Aug-28	24-Aug-28
MS-EXT-5290	08A	Install Windows	10	10	25-Aug-28	08-Sep-28
MS-EXT-5300	04A	Install Masonry Veneer And Cast Stone Headers / Sills	5	5	11-Sep-28	18-Sep-28
MS-EXT-5310	07G	Caulk Brick	2	2	20-Sep-28	21-Sep-28
MS-EXT-5320	06C	Install Z-Girts & Fiber Cement Panel Support System	5	5	20-Sep-28	26-Sep-28
MS-EXT-5330	06C	Install Mineral Wool Insulation	0	0	27-Sep-28	27-Sep-28
MS-EXT-5340	06C	Install Fiber Cement Panels	0	0	27-Sep-28	27-Sep-28
MS-EXT-5350	08A	Caulk Windows	2	2	27-Sep-28	29-Sep-28
Middle School Roofing			139	139	06-Sep-27	31-May-28
Roofing MS C-1			25	25	06-Sep-27	18-Oct-27
MS-EXT-1140	26B	Install Conduits and Sleeves - Lightning Protection	2	2	06-Sep-27	08-Sep-27
MS-EXT-1150	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	06-Sep-27	13-Sep-27
MS-EXT-1160	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	10	10	14-Sep-27	29-Sep-27
MS-EXT-1180	07E	Install Gutters and Down Spouts	2	2	01-Oct-27	04-Oct-27
MS-EXT-1190	07E	Install Smoke Vents	2	2	06-Oct-27	07-Oct-27
MS-EXT-1170	07E	Flash All Penetrations	5	5	08-Oct-27	15-Oct-27
MS-EXT-1200	26B	Install Lightning Protection System	1	1	18-Oct-27	18-Oct-27
Roofing MS C-2			32	32	13-Oct-27	07-Dec-27
MS-EXT-1210	09A	Install back of parapet plywood sheathing	5	5	13-Oct-27	21-Oct-27
MS-EXT-1220	23A	Layout curbs, rails, and roof penetrations - Mechanical / HVAC	2	2	22-Oct-27	25-Oct-27
MS-EXT-1350	07E	Field Measure Copings	1	1	22-Oct-27	22-Oct-27
MS-EXT-1360	07E	Coping Fab & Deliver	10	10	25-Oct-27	08-Nov-27
MS-EXT-1230	26B	Install Conduits and Sleeves - Power	2	2	26-Oct-27	27-Oct-27
MS-EXT-1240	26B	Install Conduits and Sleeves - Lightning Protection	2	2	26-Oct-27	27-Oct-27
MS-EXT-1250	25A	Install Conduits and Sleeves - Controls	2	2	26-Oct-27	27-Oct-27
MS-EXT-1260	28A	Install Conduits and Sleeves - Fire Alarm	2	2	26-Oct-27	27-Oct-27
MS-EXT-1270	22A	Install Plumbing Penetrations / Pipe Portals	5	5	26-Oct-27	01-Nov-27
MS-EXT-1280	22A	Set Roof Drain Bodies	1	1	26-Oct-27	26-Oct-27
MS-EXT-1290	23A	Layout Mechanical Curbs & Rails	1	1	26-Oct-27	26-Oct-27
MS-EXT-1300	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	27-Oct-27	02-Nov-27
MS-EXT-1310	23A	Install Mechanical Curbs & Rails	2	2	03-Nov-27	05-Nov-27
MS-EXT-1320	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	08-Nov-27	12-Nov-27
MS-EXT-1330	07E	Flash All Penetrations	5	5	15-Nov-27	22-Nov-27
MS-EXT-1340	07E	Install Walk Pads	2	2	23-Nov-27	24-Nov-27
MS-EXT-1370	07E	Install Coping	5	5	23-Nov-27	01-Dec-27
MS-EXT-1390	05C	Install Louvered Mechanical Roof Screens	5	5	29-Nov-27	07-Dec-27
MS-EXT-1380	26B	Install Lightning Protection System	1	1	02-Dec-27	02-Dec-27
Roofing MS C-3			17	17	03-Nov-27	01-Dec-27
MS-EXT-1400	26B	Install Conduits and Sleeves - Lightning Protection	2	2	03-Nov-27	05-Nov-27

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-EXT-1410	06C	Install roof blocking	5	5	03-Nov-27	10-Nov-27
MS-EXT-4890	07E	Field Measure Copings	1	1	03-Nov-27	03-Nov-27
MS-EXT-1420	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	11-Nov-27	18-Nov-27
MS-EXT-1460	07E	Install Gutters and Down Spouts	2	2	19-Nov-27	22-Nov-27
MS-EXT-1440	07E	Install Smoke Vents	2	2	23-Nov-27	24-Nov-27
MS-EXT-1430	07E	Flash All Penetrations	1	1	29-Nov-27	29-Nov-27
MS-EXT-1470	26B	Install Lightning Protection System	1	1	30-Nov-27	30-Nov-27
MS-EXT-4900	07E	Install Coping	2	2	30-Nov-27	01-Dec-27
Roofing MS C-4			40	40	22-Oct-27	31-Dec-27
MS-EXT-1480	09A	Install back of parapet plywood sheathing	5	5	22-Oct-27	28-Oct-27
MS-EXT-1500	22A	Set Roof Drain Bodies	2	2	29-Oct-27	01-Nov-27
MS-EXT-1490	26B	Install Conduits and Sleeves - Lightning Protection	2	2	08-Nov-27	09-Nov-27
MS-EXT-1510	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	2	2	11-Nov-27	12-Nov-27
MS-EXT-1520	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	15-Nov-27	22-Nov-27
MS-EXT-1530	07E	Flash All Penetrations	2	2	23-Nov-27	24-Nov-27
MS-EXT-1540	07E	Install Walk Pads	1	1	29-Nov-27	29-Nov-27
MS-EXT-1550	07E	Field Measure Copings	1	1	30-Nov-27	30-Nov-27
MS-EXT-1560	07E	Coping Fab & Deliver	10	10	01-Dec-27	21-Dec-27
MS-EXT-1570	07E	Install Coping	5	5	22-Dec-27	30-Dec-27
MS-EXT-1580	26B	Install Lightning Protection System	1	1	31-Dec-27	31-Dec-27
MS-EXT-4910	05C	Install Parapet Stepover	1	1	31-Dec-27	31-Dec-27
Roofing MS C-4a			16	16	18-Feb-28	20-Mar-28
MS-EXT-1590	09A	Install back of parapet plywood sheathing	1	1	18-Feb-28	18-Feb-28
MS-EXT-1630	07E	Field Measure Copings	1	1	18-Feb-28	18-Feb-28
MS-EXT-1640	07E	Coping Fab & Deliver	10	10	22-Feb-28	09-Mar-28
MS-EXT-1600	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	1	1	13-Mar-28	13-Mar-28
MS-EXT-1610	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	1	1	15-Mar-28	15-Mar-28
MS-EXT-1620	07E	Flash All Penetrations	1	1	16-Mar-28	16-Mar-28
MS-EXT-1650	07E	Install Coping	1	1	17-Mar-28	17-Mar-28
MS-EXT-1660	26B	Install Lightning Protection System	1	1	20-Mar-28	20-Mar-28
Roofing MS C-5			25	25	10-Feb-28	30-Mar-28
MS-EXT-1670	09A	Install back of parapet plywood sheathing	2	2	10-Feb-28	14-Feb-28
MS-EXT-1750	07E	Field Measure Copings	1	1	10-Feb-28	10-Feb-28
MS-EXT-1760	07E	Coping Fab & Deliver	10	10	14-Feb-28	06-Mar-28
MS-EXT-1680	26B	Install Conduits and Sleeves - Lightning Protection	1	1	18-Feb-28	18-Feb-28
MS-EXT-1690	22A	Set Roof Drain Bodies	2	2	18-Feb-28	22-Feb-28
MS-EXT-1710	07E	Install Scupper Boxes	1	1	18-Feb-28	18-Feb-28
MS-EXT-1700	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	2	2	07-Mar-28	09-Mar-28
MS-EXT-1720	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	13-Mar-28	20-Mar-28
MS-EXT-1730	07E	Flash All Penetrations	1	1	21-Mar-28	21-Mar-28
MS-EXT-1740	07E	Install Walk Pads	1	1	23-Mar-28	23-Mar-28
MS-EXT-1770	07E	Install Coping	5	5	23-Mar-28	29-Mar-28
MS-EXT-1780	26B	Install Lightning Protection System	1	1	30-Mar-28	30-Mar-28
Roofing MS B-1			35	35	28-Dec-27	23-Mar-28
MS-EXT-1790	09A	Install back of parapet plywood sheathing	5	5	28-Dec-27	04-Jan-28
MS-EXT-1940	07E	Field Measure Copings	1	1	28-Dec-27	28-Dec-27
MS-EXT-1950	07E	Coping Fab & Deliver	10	10	30-Dec-27	24-Jan-28
MS-EXT-1800	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	06-Jan-28	06-Jan-28
MS-EXT-1810	26B	Install Conduits and Sleeves - Power	5	5	06-Jan-28	20-Jan-28
MS-EXT-1820	26B	Install Conduits and Sleeves - Lightning Protection	2	2	06-Jan-28	10-Jan-28
MS-EXT-1830	25A	Install Conduits and Sleeves - Controls	2	2	06-Jan-28	10-Jan-28
MS-EXT-1840	28A	Install Conduits and Sleeves - Fire Alarm	2	2	06-Jan-28	10-Jan-28
MS-EXT-1850	22A	Install Plumbing Penetrations / Pipe Portals	5	5	06-Jan-28	20-Jan-28
MS-EXT-1860	22A	Set Roof Drain Bodies	5	5	06-Jan-28	20-Jan-28
MS-EXT-1870	23A	Layout Mechanical Curbs & Rails	1	1	06-Jan-28	06-Jan-28
MS-EXT-1900	07E	Install Scupper Boxes	2	2	06-Jan-28	10-Jan-28
MS-EXT-1880	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	10-Jan-28	24-Jan-28
MS-EXT-1890	23A	Install Mechanical Curbs & Rails	2	2	28-Jan-28	02-Feb-28
MS-EXT-1910	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	10	10	04-Feb-28	29-Feb-28
MS-EXT-1920	07E	Flash All Penetrations	5	5	01-Mar-28	09-Mar-28
MS-EXT-1930	07E	Install Walk Pads	5	5	13-Mar-28	20-Mar-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-EXT-1960	07E	Install Coping	5	5	13-Mar-28	20-Mar-28
MS-EXT-1970	26B	Install Lightning Protection System	2	2	21-Mar-28	23-Mar-28
MS-EXT-4920	05C	Install Parapet Stepover	1	1	21-Mar-28	21-Mar-28
Roofing MS B-2 (Standing Seam Roof Screen)			5	5	01-Mar-28	09-Mar-28
MS-EXT-1980	07E	Install Standing Seam Metal Roof Mechanical Screens	5	5	01-Mar-28	09-Mar-28
Roofing MS A-1			26	26	06-Jan-28	16-Mar-28
MS-EXT-1990	09A	Install back of parapet plywood sheathing	5	5	06-Jan-28	20-Jan-28
MS-EXT-2170	07E	Field Measure Copings	1	1	06-Jan-28	06-Jan-28
MS-EXT-2180	07E	Coping Fab & Deliver	10	10	10-Jan-28	10-Feb-28
MS-EXT-2000	23A	Layout Roof Penetrations - Mechanical / HVAC	2	2	24-Jan-28	28-Jan-28
MS-EXT-2070	23A	Layout Mechanical Curbs & Rails	1	1	24-Jan-28	24-Jan-28
MS-EXT-4930	08A	Layout Skylight & Roof Hatch	1	1	24-Jan-28	24-Jan-28
MS-EXT-2080	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	5	5	28-Jan-28	10-Feb-28
MS-EXT-2090	08A	Install Skylight Curb	1	1	28-Jan-28	28-Jan-28
MS-EXT-2010	26B	Install Conduits and Sleeves - Power	2	2	02-Feb-28	04-Feb-28
MS-EXT-2020	26B	Install Conduits and Sleeves - Lightning Protection	2	2	02-Feb-28	04-Feb-28
MS-EXT-2030	25A	Install Conduits and Sleeves - Controls	2	2	02-Feb-28	04-Feb-28
MS-EXT-2040	28A	Install Conduits and Sleeves - FireAlarm	2	2	02-Feb-28	04-Feb-28
MS-EXT-2050	22A	Install Plumbing Penetrations / Pipe Portals	2	2	02-Feb-28	04-Feb-28
MS-EXT-2060	22A	Set Roof Drain Bodies	2	2	02-Feb-28	04-Feb-28
MS-EXT-2110	07E	Install Scupper Boxes	2	2	02-Feb-28	04-Feb-28
MS-EXT-2100	23A	Install Mechanical Curbs & Rails	2	2	14-Feb-28	18-Feb-28
MS-EXT-2120	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	5	5	22-Feb-28	29-Feb-28
MS-EXT-2130	07E	Flash All Penetrations	2	2	01-Mar-28	03-Mar-28
MS-EXT-2210	05C	Install Louvered Mechanical Roof Screens	2	2	01-Mar-28	03-Mar-28
MS-EXT-2140	07E	Install Walk Pads	5	5	06-Mar-28	15-Mar-28
MS-EXT-2150	07E	Install Roof Hatches	1	1	06-Mar-28	06-Mar-28
MS-EXT-2160	08A	Install Skylight	1	1	06-Mar-28	06-Mar-28
MS-EXT-2190	07E	Install Coping	5	5	06-Mar-28	15-Mar-28
MS-EXT-2200	26B	Install Lightning Protection System	1	1	16-Mar-28	16-Mar-28
Roofing MS A-2			42	42	24-Jan-28	24-Apr-28
MS-EXT-4940	09A	Install back of parapet plywood sheathing	5	5	24-Jan-28	08-Feb-28
MS-EXT-4950	07E	Field Measure Copings	2	2	24-Jan-28	28-Jan-28
MS-EXT-5050	07E	Coping Fab & Deliver	10	10	02-Feb-28	28-Feb-28
MS-EXT-4960	23A	Layout Roof Penetrations - Mechanical / HVAC	1	1	10-Feb-28	10-Feb-28
MS-EXT-4970	26B	Install Conduits and Sleeves - Power	2	2	10-Feb-28	14-Feb-28
MS-EXT-4980	26B	Install Conduits and Sleeves - Lightning Protection	2	2	10-Feb-28	14-Feb-28
MS-EXT-4990	25A	Install Conduits and Sleeves - Controls	2	2	10-Feb-28	14-Feb-28
MS-EXT-5000	28A	Install Conduits and Sleeves - FireAlarm	2	2	10-Feb-28	14-Feb-28
MS-EXT-5010	22A	Install Plumbing Penetrations / Pipe Portals	2	2	10-Feb-28	14-Feb-28
MS-EXT-5020	22A	Set Roof Drain Bodies	5	5	10-Feb-28	23-Feb-28
MS-EXT-5030	23A	Layout Mechanical Curbs & Rails	1	1	10-Feb-28	10-Feb-28
MS-EXT-5040	07E	Install Scupper Boxes	5	5	10-Feb-28	23-Feb-28
MS-EXT-5060	06C	Install roof blocking (Parapets, Curbs, Rails, etc.)	10	10	14-Feb-28	06-Mar-28
MS-EXT-5070	23A	Install Mechanical Curbs & Rails	5	5	07-Mar-28	16-Mar-28
MS-EXT-5080	07E	Install EPDM Roofing System Complete - Insulation, Coverboard, Membrane & Accessories	10	10	17-Mar-28	31-Mar-28
MS-EXT-5090	07E	Flash All Penetrations	5	5	03-Apr-28	11-Apr-28
MS-EXT-5100	07E	Install Walk Pads	2	2	13-Apr-28	14-Apr-28
MS-EXT-5110	07E	Install Coping	5	5	13-Apr-28	21-Apr-28
MS-EXT-5120	26B	Install Lightning Protection System	1	1	24-Apr-28	24-Apr-28
Roofing MS A-3			5	5	03-Apr-28	11-Apr-28
MS-EXT-2410	07E	Install Standing Seam Metal Roof Mechanical Screens	5	5	03-Apr-28	11-Apr-28
Roofing MS Penthouse			60	60	27-Dec-27	04-May-28
MS-EXT-5130	26B	Install Conduits and Sleeves - Lightning Protection	2	2	27-Dec-27	28-Dec-27
MS-EXT-5140	06C	Install Roof Blocking	5	5	27-Dec-27	03-Jan-28
MS-EXT-5150	07E	Install Intregal Gutters	15	15	04-Jan-28	22-Feb-28
MS-EXT-5160	07E	Install Z-Girt Support System - Insulation, Waterproofing Membrane & Cover Board	10	10	23-Feb-28	13-Mar-28
MS-EXT-5170	07E	Install Soffit & Facias	5	5	15-Mar-28	21-Mar-28
MS-EXT-5180	07E	Install Standing Seam Metal Roof Panels	20	20	23-Mar-28	26-Apr-28
MS-EXT-5190	07E	Install Metal Trims and Snow Guards	5	5	27-Apr-28	04-May-28
MS Rooftop Equipment			47	47	13-Mar-28	31-May-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

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Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-EXT-5370	23A	Set Rooftop HVAC Equipment - Area B	5	5	13-Mar-28	20-Mar-28
MS-EXT-5380	23A	Set Rooftop HVAC Equipment - Area C	5	5	21-Mar-28	28-Mar-28
MS-EXT-5390	23A	Startup & Commissioning of Equipment - RooftopArea B	5	5	21-Mar-28	28-Mar-28
MS-EXT-5400	23A	Prefunctional Testing of Equipment - Rooftop Area B	5	5	29-Mar-28	05-Apr-28
MS-EXT-5420	23A	Startup & Commissioning of Equipment - RooftopArea C	5	5	29-Mar-28	05-Apr-28
MS-EXT-5410	23A	Checkout Equipment Function & Controls Sequence - RooftopArea B	5	5	07-Apr-28	14-Apr-28
MS-EXT-5430	23A	Prefunctional Testing of Equipment - Rooftop Area C	5	5	07-Apr-28	14-Apr-28
MS-EXT-5440	23A	Checkout Equipment Function & Controls Sequence - RooftopArea C	5	5	17-Apr-28	25-Apr-28
MS-EXT-5360	23A	Set Rooftop HVAC Equipment - Area A	5	5	28-Apr-28	05-May-28
MS-EXT-5450	23A	Startup & Commissioning of Equipment - RooftopArea A	5	5	08-May-28	15-May-28
MS-EXT-5460	23A	Prefunctional Testing of Equipment - Rooftop AreaA	5	5	17-May-28	23-May-28
MS-EXT-5470	23A	Checkout Equipment Function & Controls Sequence - RooftopAreaA	5	5	24-May-28	31-May-28
MS Interiors			307	307	07-Sep-27	20-Nov-28
First Floor			307	307	07-Sep-27	20-Nov-28
Area C			307	307	07-Sep-27	20-Nov-28
MS-INT-C1-3000	09A	Layout Walls - Area C	5	5	07-Sep-27	13-Sep-27
MS-INT-C1-1890	09A	Layout Walls - Area C - MS Gym - Lockers/Office	5	5	11-Nov-27	17-Nov-27
MS-INT-C1-2420	23A	Startup & Commissioning of Equipment - Area C - 1st Floor	5	5	21-Jun-28	27-Jun-28
MS-INT-C1-2430	23A	Prefunctional Testing of Equipment - Area C - 1st Floor	5	5	28-Jun-28	05-Jul-28
MS-INT-C1-2440	23A	Checkout Equipment Function & Controls Sequence - Area C - 1st Floor	5	5	06-Jul-28	12-Jul-28
MS-INT-C1-2450	00-WT	WT Create Work-to-Complete List - Area C - 1st Floor	5	5	07-Nov-28	13-Nov-28
MS-INT-C1-2460	00-WT	Final Clean & Wax Floors - Area C - 1st Floor	10	10	07-Nov-28	20-Nov-28
MS Gym & Locker Rooms			250	250	11-Nov-27	06-Nov-28
MS-INT-C1-1880	09A	Use MS Gym as Laydown Space	148	148	11-Nov-27	13-Jun-28
MS-INT-C1-1900	09A	Framing - All Locker rms & Offices	15	15	18-Nov-27	10-Dec-27
MS-INT-C1-1910	21A	GYM FASprinklers Rough-In	10	10	18-Nov-27	03-Dec-27
MS-INT-C1-1920	06C	Set Door Frames - GYM/Locker room/Offices	10	10	22-Nov-27	07-Dec-27
MS-INT-C1-1930	21A	Sprinkler Overhead Hydro Testing	5	5	06-Dec-27	10-Dec-27
MS-INT-C1-1940	26B	Electrical Overhead Rough-in	20	20	13-Dec-27	12-Jan-28
MS-INT-C1-1950	22A	Plumbing In Wall Rough-In	10	10	13-Dec-27	28-Dec-27
MS-INT-C1-1960	26B	Electrical In Wall Rough-In	15	15	13-Dec-27	05-Jan-28
MS-INT-C1-1970	23A	GYM - HVAC (Tin)	15	15	13-Dec-27	05-Jan-28
MS-INT-C1-1980	23A	Mechanical Overhead Piping - Mains	15	15	13-Dec-27	05-Jan-28
MS-INT-C1-1990	28A	Special Systems - Rough-In (Security,AV, ITFA)	10	10	06-Jan-28	19-Jan-28
MS-INT-C1-2000	06C	Install In-Wall Blocking	5	5	06-Jan-28	12-Jan-28
MS-INT-C1-2010	26B	Electrical In-Wall Inspection	5	5	06-Jan-28	12-Jan-28
MS-INT-C1-2020	26B	GYM Lighting/Power Conduit	10	10	13-Jan-28	26-Jan-28
MS-INT-C1-2030	00-WT	WT In-Wall Inspection	5	5	13-Jan-28	19-Jan-28
MS-INT-C1-2040	26B	Electrical Above-Ceiling Inspection	5	5	13-Jan-28	19-Jan-28
MS-INT-C1-2050	01A	NCC In-Wall Inspection	5	5	20-Jan-28	26-Jan-28
MS-INT-C1-2060	28A	GYM Special Systems Overhead conduit	10	10	27-Jan-28	09-Feb-28
MS-INT-C1-2070	09A	Drywall Wall Close-In	15	15	21-Mar-28	10-Apr-28
MS-INT-C1-2480	09F	Condition Space for Wood Floor Installation	10	10	28-Mar-28	10-Apr-28
MS-INT-C1-2080	09A	Drywall Wall finishing	10	10	11-Apr-28	24-Apr-28
MS-INT-C1-2090	09A	Drywall Hard Cielings - Toilets/Baths/Lockers	10	10	11-Apr-28	24-Apr-28
MS-INT-C1-2100	09J	Wall Prime/1st Coat Paint	10	10	25-Apr-28	08-May-28
MS-INT-C1-2110	09D	Wall Tile multi-user Bathrooms (Locker)- Toilet Rms	10	10	25-Apr-28	08-May-28
MS-INT-C1-2120	09J	GYM - Prime-Paint Ceiling - Decking/CMU interior Walls/Overhead MEP's	10	10	09-May-28	22-May-28
MS-INT-C1-2130	09E	Install Ceiling Grid	15	15	09-May-28	30-May-28
MS-INT-C1-2140	09D	Wall Tile/Floor Tile - Single Baths	5	5	09-May-28	15-May-28
MS-INT-C1-2150	09H	Resinous Flooring - Locker Rooms/multi-user Baths(Locker&Café')	10	10	09-May-28	22-May-28
MS-INT-C1-2160	06C	Toilet/Bath Fixures Trim Out	10	10	16-May-28	30-May-28
MS-INT-C1-2170	26B	GYM - Lighting Trim Out	10	10	23-May-28	06-Jun-28
MS-INT-C1-2180	23A	GYM - HVAC Ductsock Installation	10	10	23-May-28	06-Jun-28
MS-INT-C1-2190	28A	GYM - Special Systems above head	15	15	23-May-28	13-Jun-28
MS-INT-C1-2200	09C	Install VCT - Custondial/Offices	5	5	23-May-28	30-May-28
MS-INT-C1-2210	06C	Install Toilet Partitions/Specialties	10	10	23-May-28	06-Jun-28
MS-INT-C1-2220	21A	GYM - Install Sprinkler Heads	5	5	31-May-28	06-Jun-28
MS-INT-C1-2230	23A	MEP/Special Systems Ceiling Trim Out	15	15	31-May-28	20-Jun-28
MS-INT-C1-2240	06C	Locker Installation/Benches	10	10	31-May-28	13-Jun-28
MS-INT-C1-2250	09E	GYM - Accoustical Wall Panels	10	10	07-Jun-28	20-Jun-28

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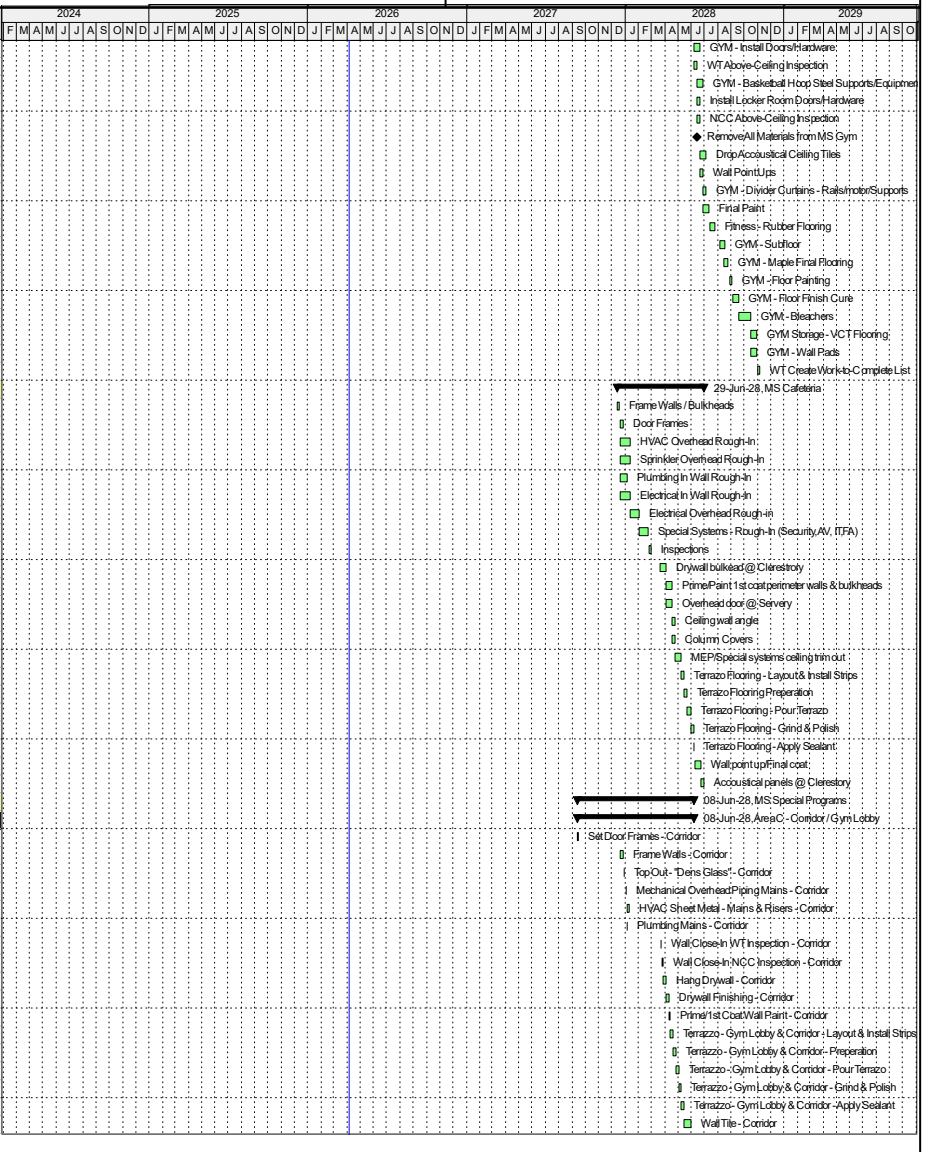
Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-C1-2260	06C	GYM - Install Doors/Hardware	10	10	07-Jun-28	20-Jun-28
MS-INT-C1-2270	00-WT	WT Above-Ceiling Inspection	5	5	07-Jun-28	13-Jun-28
MS-INT-C1-2340	11C	GYM - Basketball Hoop Steel Supports/Equipment	10	10	14-Jun-28	27-Jun-28
MS-INT-C1-2280	06C	Install Locker Room Doors/Hardware	5	5	14-Jun-28	20-Jun-28
MS-INT-C1-2290	01A	NCC Above-Ceiling Inspection	5	5	14-Jun-28	20-Jun-28
MS-INT-C1-2470	00-WT	Remove All Materials from MS Gym	0	0	14-Jun-28	
MS-INT-C1-2300	09E	Drop Accoustical Ceiling Tiles	10	10	21-Jun-28	05-Jul-28
MS-INT-C1-2310	09A	Wall Point Ups	5	5	21-Jun-28	27-Jun-28
MS-INT-C1-2350	11C	GYM - Divider Curtains - Rails/motor/Supports	5	5	28-Jun-28	05-Jul-28
MS-INT-C1-2320	09J	Final Paint	10	10	28-Jun-28	12-Jul-28
MS-INT-C1-2330	09C	Fitness - Rubber Flooring	10	10	13-Jul-28	26-Jul-28
MS-INT-C1-2360	09F	GYM - Subfloor	10	10	07-Aug-28	18-Aug-28
MS-INT-C1-2370	09F	GYM - Maple Final Flooring	10	10	14-Aug-28	25-Aug-28
MS-INT-C1-2380	09F	GYM - Floor Painting	5	5	28-Aug-28	01-Sep-28
MS-INT-C1-2490	09F	GYM - Floor Finish Cure	10	10	05-Sep-28	18-Sep-28
MS-INT-C1-2390	11C	GYM - Bleachers	20	20	19-Sep-28	16-Oct-28
MS-INT-C1-2400	09C	GYM Storage - VCT Flooring	10	10	17-Oct-28	30-Oct-28
MS-INT-C1-2410	11C	GYM - Wall Pads	10	10	17-Oct-28	30-Oct-28
MS-INT-C1-1870	00-WT	WT Create Work-to-Complete List	5	5	31-Oct-28	06-Nov-28
MS Cafeteria			140	140	13-Dec-27	29-Jun-28
MS-INT-C1-3010	09A	Frame Walls / Bulkheads	5	5	13-Dec-27	17-Dec-27
MS-INT-C1-3020	06C	Door Frames	5	5	20-Dec-27	28-Dec-27
MS-INT-C1-3030	23A	HVAC Overhead Rough-In	15	15	20-Dec-27	12-Jan-28
MS-INT-C1-3040	21A	Sprinkler Overhead Rough-In	15	15	20-Dec-27	12-Jan-28
MS-INT-C1-3050	22A	Plumbing In Wall Rough-In	10	10	20-Dec-27	05-Jan-28
MS-INT-C1-3060	26B	Electrical In Wall Rough-In	15	15	20-Dec-27	12-Jan-28
MS-INT-C1-3070	26B	Electrical Overhead Rough-in	15	15	13-Jan-28	02-Feb-28
MS-INT-C1-3080	28A	Special Systems - Rough-In (Security,AV, ITFA)	15	15	03-Feb-28	23-Feb-28
MS-INT-C1-3090	01A	Inspections	5	5	24-Feb-28	01-Mar-28
MS-INT-C1-3100	09A	Drywall bulkead @ Clerestrory	10	10	21-Mar-28	03-Apr-28
MS-INT-C1-3110	09J	Prime/Paint 1st coat perimeter walls & bulkheads	10	10	04-Apr-28	17-Apr-28
MS-INT-C1-3120	08C	Overhead door @ Servery	10	10	04-Apr-28	17-Apr-28
MS-INT-C1-3130	09E	Ceiling wall angle	5	5	18-Apr-28	24-Apr-28
MS-INT-C1-3140	07C	Column Covers	5	5	18-Apr-28	24-Apr-28
MS-INT-C1-3150	26C	MEP/Special systems ceiling trim out	10	10	25-Apr-28	08-May-28
MS-INT-C1-3160	09G	Terrazo Flooring - Layout & Install Strips	5	5	09-May-28	15-May-28
MS-INT-C1-3170	09G	Terrazo Flooring Preperation	5	5	16-May-28	22-May-28
MS-INT-C1-3180	09G	Terrazo Flooring - Pour Terrazo	5	5	23-May-28	30-May-28
MS-INT-C1-3190	09G	Terrazo Flooring - Grind & Polish	5	5	31-May-28	06-Jun-28
MS-INT-C1-3200	09G	Terrazo Flooring - Apply Sealant	2	2	07-Jun-28	08-Jun-28
MS-INT-C1-3210	09A	Wall point up/Final coat	10	10	09-Jun-28	22-Jun-28
MS-INT-C1-3220	09E	Accoustical panels @ Clerestory	5	5	23-Jun-28	29-Jun-28
MS Special Programs			187	187	14-Sep-27	08-Jun-28
Area C - Corridor / Gym Lobby			187	187	14-Sep-27	08-Jun-28
MS-INT-C1-1800	06C	Set Door Frames - Corridor	1	1	14-Sep-27	14-Sep-27
MS-INT-C1-1000	09A	Frame Walls - Corridor	5	5	20-Dec-27	28-Dec-27
MS-INT-C1-1010	09A	Top Out - "Dens Glass" - Corridor	2	2	29-Dec-27	30-Dec-27
MS-INT-C1-1020	23A	Mechanical Overhead Piping Mains - Corridor	2	2	03-Jan-28	04-Jan-28
MS-INT-C1-1260	23B	HVAC Sheet Metal - Mains & Risers - Corridor	5	5	05-Jan-28	11-Jan-28
MS-INT-C1-1430	22A	Plumbing Mains - Corridor	2	2	05-Jan-28	06-Jan-28
MS-INT-C1-1740	00-WT	Wall Close-In WT Inspection - Corridor	2	2	23-Mar-28	24-Mar-28
MS-INT-C1-1690	01A	Wall Close-In NCC Inspection - Corridor	2	2	27-Mar-28	28-Mar-28
MS-INT-C1-1570	09A	Hang Drywall - Corridor	5	5	29-Mar-28	04-Apr-28
MS-INT-C1-1580	09A	Drywall Finishing - Corridor	5	5	05-Apr-28	11-Apr-28
MS-INT-C1-1590	09J	Prime/1st Coat Wall Paint - Corridor	2	2	12-Apr-28	13-Apr-28
MS-INT-C1-1820	09G	Terrazzo - Gym Lobby & Corridor - Layout & Install Strips	5	5	14-Apr-28	20-Apr-28
MS-INT-C1-1830	09G	Terrazzo - Gym Lobby & Corridor - Preperation	5	5	21-Apr-28	27-Apr-28
MS-INT-C1-1840	09G	Terrazzo - Gym Lobby & Corridor - Pour Terrazo	5	5	28-Apr-28	04-May-28
MS-INT-C1-1850	09G	Terrazzo - Gym Lobby & Corridor - Grind & Polish	2	2	05-May-28	08-May-28
MS-INT-C1-1860	09G	Terrazzo - Gym Lobby & Corridor -Apply Sealant	5	5	09-May-28	15-May-28
MS-INT-C1-1120	09D	Wall Tile - Corridor	10	10	16-May-28	30-May-28



Appoquinimink School District Summit Campus MS / HS - Bid Schedule

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Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-C1-1600	09E	Install Ceiling Grid - Corridor	1	1	16-May-28	16-May-28
MS-INT-C1-1610	21A	Sprinkler Ceiling Trim-Out - Corridor	2	2	17-May-28	18-May-28
MS-INT-C1-1620	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	2	2	17-May-28	18-May-28
MS-INT-C1-1650	09J	Wall Point Ups - Second Coat Paint - Corridor	2	2	17-May-28	18-May-28
MS-INT-C1-1710	26B	Install Lights - Corridor	1	1	17-May-28	17-May-28
MS-INT-C1-1720	23A	Mechanical Ceiling Trim-Out - Corridor	1	1	17-May-28	17-May-28
MS-INT-C1-1770	09E	Cut Ceiling Tile - Corridor	1	1	17-May-28	17-May-28
MS-INT-C1-1630	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	2	2	19-May-28	22-May-28
MS-INT-C1-1750	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	19-May-28	22-May-28
MS-INT-C1-1640	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	23-May-28	24-May-28
MS-INT-C1-1560	09C	Install VCT Flooring - Corridor	0	0	31-May-28	31-May-28
MS-INT-C1-1660	06C	Install Doors & Hardware - Corridor	1	1	31-May-28	31-May-28
MS-INT-C1-1790	06C	Install Div 10 Specialties - Corridor	2	2	31-May-28	01-Jun-28
MS-INT-C1-1680	09J	Final Painting - Corridor	2	2	01-Jun-28	02-Jun-28
MS-INT-C1-1700	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	02-Jun-28	05-Jun-28
MS-INT-C1-1730	09C	Install Rubber Wall Base - Corridor	1	1	05-Jun-28	05-Jun-28
MS-INT-C1-1670	09E	Drop Ceiling Tile - Corridor	1	1	06-Jun-28	06-Jun-28
MS-INT-C1-1760	00-WT	WT Create Work-to-Complete List - Corridor	2	2	07-Jun-28	08-Jun-28
Area C - Classrooms			106	106	29-Dec-27	25-May-28
MS-INT-C1-1420	09A	Frame Walls - Classrooms	2	2	29-Dec-27	30-Dec-27
MS-INT-C1-1050	22A	Plumbing In Wall Rough-In	2	2	03-Jan-28	04-Jan-28
MS-INT-C1-1060	26B	Electrical In Wall Rough-In	2	2	03-Jan-28	04-Jan-28
MS-INT-C1-1280	23A	Mechanical Overhead Piping - Expansion Loops	2	2	03-Jan-28	04-Jan-28
MS-INT-C1-1480	23A	Hang FCUs	1	1	03-Jan-28	03-Jan-28
MS-INT-C1-1550	23A	Install Condensate Piping	2	2	04-Jan-28	05-Jan-28
MS-INT-C1-1810	23B	Measure / Fab / Install Ductwork Transitions	5	5	04-Jan-28	10-Jan-28
MS-INT-C1-1070	26C	Special Systems - Rough-In (Security,AV, ITFA)	2	2	05-Jan-28	06-Jan-28
MS-INT-C1-1080	06C	Install Blocking	2	2	05-Jan-28	06-Jan-28
MS-INT-C1-1270	23A	Mechanical Overhead Piping - FCUs - Classrooms	2	2	05-Jan-28	06-Jan-28
MS-INT-C1-1360	22A	Plumbing In Wall Insulation	1	1	05-Jan-28	05-Jan-28
MS-INT-C1-1340	25A	Install HVAC Controls & Valves	2	2	07-Jan-28	10-Jan-28
MS-INT-C1-1490	22A	Plumbing In-Wall WT Inspection	2	2	07-Jan-28	10-Jan-28
MS-INT-C1-1510	26B	Electrical In-Wall WT Inspection	2	2	07-Jan-28	10-Jan-28
MS-INT-C1-1310	23A	Mechanical Piping - Testing Above Ceiling	2	2	11-Jan-28	12-Jan-28
MS-INT-C1-1370	22A	Plumbing In-Wall NCC Inspection	2	2	11-Jan-28	12-Jan-28
MS-INT-C1-1380	26B	Electrical In-Wall Inspection	2	2	11-Jan-28	12-Jan-28
MS-INT-C1-1290	23B	HVAC Sheet Metal - Classrooms	5	5	12-Jan-28	18-Jan-28
MS-INT-C1-1320	23A	Mechanical Piping Insulation	2	2	13-Jan-28	14-Jan-28
MS-INT-C1-1030	26B	Electrical Overhead Rough-in - Classrooms	5	5	19-Jan-28	25-Jan-28
MS-INT-C1-1040	21A	Sprinkler Overhead Rough-In	5	5	19-Jan-28	25-Jan-28
MS-INT-C1-1300	23B	Duct Testing	2	2	19-Jan-28	20-Jan-28
MS-INT-C1-1330	23B	HVAC Sheet Metal Insulation	2	2	21-Jan-28	24-Jan-28
MS-INT-C1-1350	21A	Sprinkler Overhead Hydro-Testing	2	2	26-Jan-28	27-Jan-28
MS-INT-C1-1440	07A	In-Wall Insulation	2	2	21-Mar-28	22-Mar-28
MS-INT-C1-1500	01A	Wall Close-In WT Inspection	2	2	23-Mar-28	24-Mar-28
MS-INT-C1-1390	01A	Wall Close-In NCC Inspection	2	2	27-Mar-28	28-Mar-28
MS-INT-C1-1090	09A	Hang Drywall	5	5	29-Mar-28	04-Apr-28
MS-INT-C1-1100	09A	Drywall Finishing	5	5	05-Apr-28	11-Apr-28
MS-INT-C1-1110	09J	Prime/1st Coat Wall Paint	2	2	12-Apr-28	13-Apr-28
MS-INT-C1-1130	09E	Install Ceiling Grid	2	2	14-Apr-28	17-Apr-28
MS-INT-C1-1140	21A	Sprinkler Ceiling Trim-Out	2	2	18-Apr-28	19-Apr-28
MS-INT-C1-1150	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	2	2	18-Apr-28	19-Apr-28
MS-INT-C1-1210	09J	Wall Point Ups - Second Coat Paint	1	1	18-Apr-28	18-Apr-28
MS-INT-C1-1450	26B	Install Lights	2	2	18-Apr-28	19-Apr-28
MS-INT-C1-1460	23A	Mechanical Ceiling Trim-Out	5	5	18-Apr-28	24-Apr-28
MS-INT-C1-1540	09E	Cut Ceiling Tile	2	2	18-Apr-28	19-Apr-28
MS-INT-C1-1160	28A	Wall Trim Out - (Elect/Special systems, FA)	2	2	19-Apr-28	20-Apr-28
MS-INT-C1-1400	01A	Fire Marshal Fire Damper Inspection	2	2	20-Apr-28	21-Apr-28
MS-INT-C1-1520	00-WT	Ceiling Close-In WT Inspections	2	2	25-Apr-28	26-Apr-28
MS-INT-C1-1180	01A	Ceiling Close-In NCC Inspections	2	2	27-Apr-28	28-Apr-28
MS-INT-C1-1230	09E	Drop Ceiling Tile	2	2	01-May-28	02-May-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

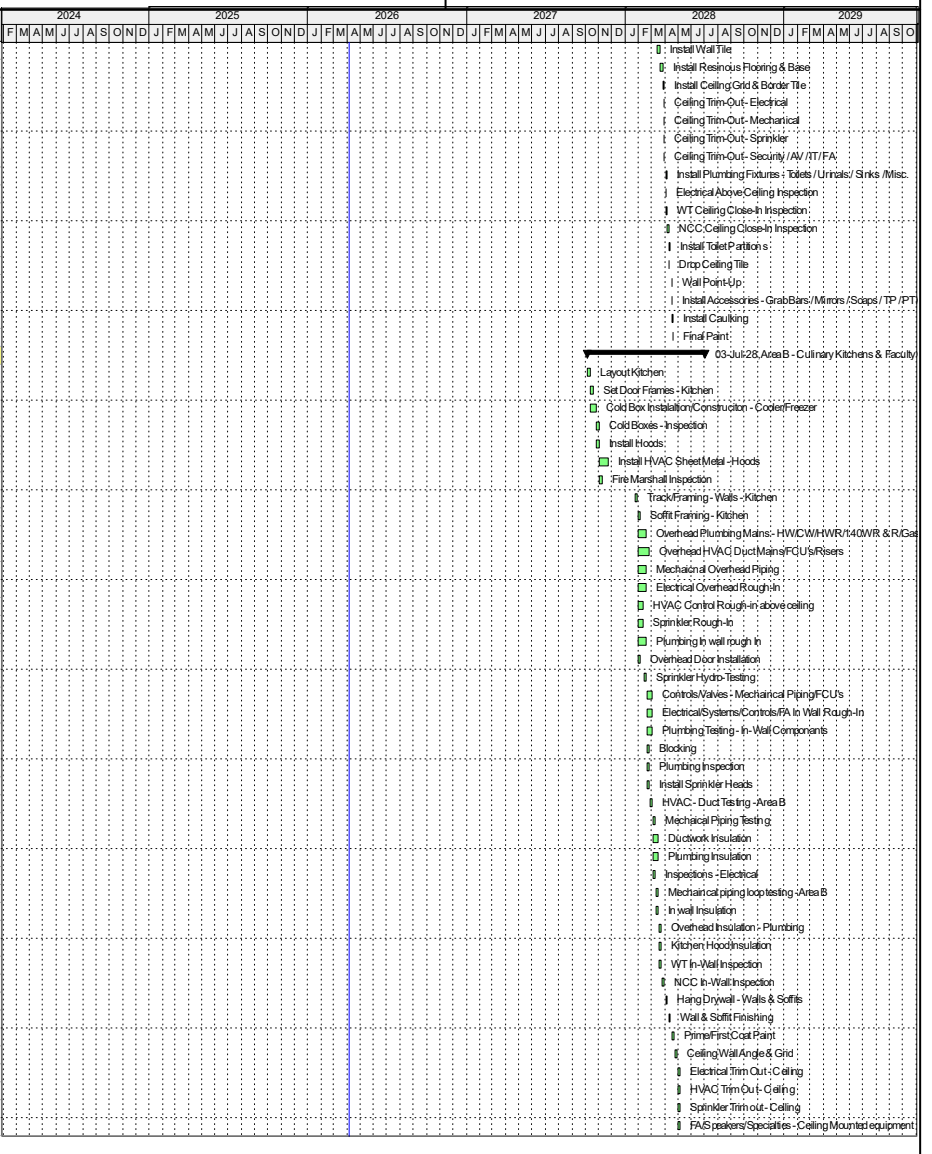
Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-C1-1170	09H	Resinous Flooring - Science Labs	0	0	03-May-28	03-May-28
MS-INT-C1-1190	12A	Install Casework - Classroom	5	5	03-May-28	09-May-28
MS-INT-C1-1240	06C	Marker boards/Smart Boards, TV, Misc Specialties	1	1	03-May-28	03-May-28
MS-INT-C1-1410	12A	Install Casework - Science Labs	0	0	03-May-28	03-May-28
MS-INT-C1-1200	09C	VCT Flooring - Classroom	5	5	10-May-28	16-May-28
MS-INT-C1-1780	28A	Audio Enhancement System Trim-Out	2	2	10-May-28	11-May-28
MS-INT-C1-1220	06C	Install Doors & Hardware	2	2	17-May-28	18-May-28
MS-INT-C1-1250	09J	Final Painting	1	1	19-May-28	19-May-28
MS-INT-C1-1470	09C	Install Rubber Wall Base	2	2	22-May-28	23-May-28
MS-INT-C1-1530	00-WT	WT Create Work-to-Complete List	2	2	24-May-28	25-May-28
Area B			235	235	29-Sep-27	31-Aug-28
MS-INT-B1-1260	09A	Layout Walls - Area B - 1st Floor	5	5	29-Sep-27	05-Oct-27
MS-INT-B1-2810	23A	Startup & Commissioning of Equipment - Area B - 1st Floor	5	5	19-May-28	25-May-28
MS-INT-B1-2820	23A	Prefunctional Testing of Equipment - Area B - 1st Floor	5	5	26-May-28	02-Jun-28
MS-INT-B1-2830	23A	Checkout Equipment Function & Controls Sequence - Area B - 1st Floor	5	5	05-Jun-28	09-Jun-28
MS-INT-B1-2840	00-WT	WT Create Work-to-Complete List - Area B - 1st Floor	5	5	18-Aug-28	24-Aug-28
MS-INT-B1-2850	00-WT	Final Clean & Wax Floors - Area B - 1st Floor	10	10	18-Aug-28	31-Aug-28
Area B - Corridor			163	163	06-Oct-27	26-May-28
MS-INT-B1-1810	06C	Set Door Frames - Corridor	5	5	06-Oct-27	12-Oct-27
MS-INT-B1-1000	09A	Frame Walls - Corridor	5	5	03-Jan-28	07-Jan-28
MS-INT-B1-1010	09A	Top Out - "Dens Glass" - Corridor	2	2	10-Jan-28	11-Jan-28
MS-INT-B1-1020	23A	Mechanical Overhead Piping Mains - Corridor	5	5	12-Jan-28	18-Jan-28
MS-INT-B1-1270	23B	HVAC Sheet Metal - Mains & Risers - Corridor	10	10	19-Jan-28	01-Feb-28
MS-INT-B1-1440	22A	Plumbing Mains - Corridor	5	5	19-Jan-28	25-Jan-28
MS-INT-B1-1750	00-WT	Wall Close-In WT Inspection - Corridor	2	2	14-Mar-28	15-Mar-28
MS-INT-B1-1700	01A	Wall Close-In NCC Inspection - Corridor	2	2	16-Mar-28	17-Mar-28
MS-INT-B1-1580	09A	Hang Drywall - Corridor	5	5	20-Mar-28	24-Mar-28
MS-INT-B1-1590	09A	Drywall Finishing - Corridor	5	5	27-Mar-28	31-Mar-28
MS-INT-B1-1600	09J	Prime/1st Coat Wall Paint - Corridor	1	1	03-Apr-28	03-Apr-28
MS-INT-B1-1610	09E	Install Ceiling Grid - Corridor	1	1	04-Apr-28	04-Apr-28
MS-INT-B1-1620	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	05-Apr-28	05-Apr-28
MS-INT-B1-1630	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Corridor	1	1	05-Apr-28	05-Apr-28
MS-INT-B1-1660	09J	Wall Point Ups - Second Coat Paint - Corridor	1	1	05-Apr-28	05-Apr-28
MS-INT-B1-1720	26B	Install Lights - Corridor	2	2	05-Apr-28	06-Apr-28
MS-INT-B1-1730	23A	Mechanical Ceiling Trim-Out - Corridor	2	2	05-Apr-28	06-Apr-28
MS-INT-B1-1780	09E	Cut Ceiling Tile - Corridor	1	1	05-Apr-28	05-Apr-28
MS-INT-B1-1640	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	1	1	06-Apr-28	06-Apr-28
MS-INT-B1-1760	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	07-Apr-28	10-Apr-28
MS-INT-B1-1650	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	11-Apr-28	12-Apr-28
MS-INT-B1-1120	09D	Wall Tile - Corridor	10	10	28-Apr-28	11-May-28
MS-INT-B1-1570	09C	Install VCT Flooring - Corridor	5	5	12-May-28	18-May-28
MS-INT-B1-1800	06C	Install Div 10 Specialties - Corridor	2	2	12-May-28	15-May-28
MS-INT-B1-1710	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	16-May-28	17-May-28
MS-INT-B1-1680	09E	Drop Ceiling Tile - Corridor	1	1	18-May-28	18-May-28
MS-INT-B1-1670	06C	Install Doors & Hardware - Corridor	2	2	19-May-28	22-May-28
MS-INT-B1-1690	09J	Final Painting - Corridor	1	1	23-May-28	23-May-28
MS-INT-B1-1740	09C	Install Rubber Wall Base - Corridor	1	1	24-May-28	24-May-28
MS-INT-B1-1770	00-WT	WT Create Work-to-Complete List - Corridor	2	2	25-May-28	26-May-28
Area B - Classrooms			157	157	10-Jan-28	17-Aug-28
MS-INT-B1-1430	09A	Frame Walls - Classrooms	5	5	10-Jan-28	14-Jan-28
MS-INT-B1-1290	23A	Mechanical Overhead Piping - Expansion Loops	5	5	12-Jan-28	18-Jan-28
MS-INT-B1-1050	22A	Plumbing In Wall Rough-In	10	10	17-Jan-28	28-Jan-28
MS-INT-B1-1060	26B	Electrical In Wall Rough-In	5	5	17-Jan-28	21-Jan-28
MS-INT-B1-1490	23A	Hang FCUs	10	10	17-Jan-28	28-Jan-28
MS-INT-B1-1070	26C	Special Systems - Rough-In (Security, AV, ITFA)	10	10	24-Jan-28	04-Feb-28
MS-INT-B1-1080	06C	Install Blocking	5	5	31-Jan-28	04-Feb-28
MS-INT-B1-1280	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	31-Jan-28	11-Feb-28
MS-INT-B1-1370	22A	Plumbing In Wall Insulation	5	5	31-Jan-28	04-Feb-28
MS-INT-B1-1560	23A	Install Condensate Piping	10	10	31-Jan-28	11-Feb-28
MS-INT-B1-1820	23B	Measure / Fab / Install Ductwork Transitions	5	5	31-Jan-28	04-Feb-28
MS-INT-B1-1300	23B	HVAC Sheet Metal - Classrooms	11	11	07-Feb-28	21-Feb-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-B1-1500	22A	Plumbing In-Wall WT Inspection	2	2	07-Feb-28	08-Feb-28
MS-INT-B1-1520	26B	Electrical In-Wall WT Inspection	2	2	07-Feb-28	08-Feb-28
MS-INT-B1-1380	22A	Plumbing In-Wall NCC Inspection	2	2	09-Feb-28	10-Feb-28
MS-INT-B1-1390	26B	Electrical In-Wall Inspection	2	2	09-Feb-28	10-Feb-28
MS-INT-B1-1350	25A	Install HVAC Controls & Valves	5	5	14-Feb-28	18-Feb-28
MS-INT-B1-1320	23A	Mechanical Piping - Testing Above Ceiling	2	2	21-Feb-28	22-Feb-28
MS-INT-B1-1030	26B	Electrical Overhead Rough-in - Classrooms	10	10	22-Feb-28	06-Mar-28
MS-INT-B1-1040	21A	Sprinkler Overhead Rough-In	10	10	22-Feb-28	06-Mar-28
MS-INT-B1-1310	23B	Duct Testing	5	5	22-Feb-28	28-Feb-28
MS-INT-B1-1330	23A	Mechanical Piping Insulation	10	10	23-Feb-28	07-Mar-28
MS-INT-B1-1340	23B	HVAC Sheet Metal Insulation	10	10	29-Feb-28	13-Mar-28
MS-INT-B1-1450	07A	In-Wall Insulation	5	5	01-Mar-28	07-Mar-28
MS-INT-B1-1360	21A	Sprinkler Overhead Hydro-Testing	2	2	07-Mar-28	08-Mar-28
MS-INT-B1-1510	00-WT	Wall Close-In WT Inspection	2	2	14-Mar-28	15-Mar-28
MS-INT-B1-1400	01A	Wall Close-In NCC Inspection	2	2	16-Mar-28	17-Mar-28
MS-INT-B1-1090	09A	Hang Drywall	12	12	20-Mar-28	04-Apr-28
MS-INT-B1-1100	09A	Drywall Finishing	15	15	05-Apr-28	25-Apr-28
MS-INT-B1-1110	09J	Prime/1st Coat Wall Paint	2	2	26-Apr-28	27-Apr-28
MS-INT-B1-1130	09E	Install Ceiling Grid	10	10	28-Apr-28	11-May-28
MS-INT-B1-1140	21A	Sprinkler Ceiling Trim-Out	5	5	12-May-28	18-May-28
MS-INT-B1-1150	28A	Special Systems -Ceiling Trim out (Security, AV, IT/FA)	10	10	12-May-28	25-May-28
MS-INT-B1-1210	09J	Wall Point Ups - Second Coat Paint	5	5	12-May-28	18-May-28
MS-INT-B1-1460	26B	Install Lights	10	10	12-May-28	25-May-28
MS-INT-B1-1470	23A	Mechanical Ceiling Trim-Out	5	5	12-May-28	18-May-28
MS-INT-B1-1550	09E	Cut Ceiling Tile	5	5	12-May-28	18-May-28
MS-INT-B1-1160	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	19-May-28	25-May-28
MS-INT-B1-1410	01A	Fire Marshal Fire Damper Inspection	2	2	26-May-28	30-May-28
MS-INT-B1-1530	00-WT	Ceiling Close-In WT Inspections	2	2	26-May-28	30-May-28
MS-INT-B1-1180	01A	Ceiling Close-In NCC Inspections	2	2	31-May-28	01-Jun-28
MS-INT-B1-1230	09E	Drop Ceiling Tile	5	5	02-Jun-28	08-Jun-28
MS-INT-B1-1170	09H	Resinous Flooring - Science Labs	10	10	09-Jun-28	22-Jun-28
MS-INT-B1-1190	12A	Install Casework - Classroom	10	10	09-Jun-28	22-Jun-28
MS-INT-B1-1200	09C	VCT Flooring - Classroom	14	14	23-Jun-28	13-Jul-28
MS-INT-B1-1240	06C	Marker boards/Smart Boards, TV, Misc Specialties	10	10	23-Jun-28	07-Jul-28
MS-INT-B1-1420	12A	Install Casework - Science Labs	0	0	23-Jun-28	23-Jun-28
MS-INT-B1-1790	28A	Audio Enhancement System Trim-Out	5	5	23-Jun-28	29-Jun-28
MS-INT-B1-1220	06C	Install Doors & Hardware	10	10	14-Jul-28	27-Jul-28
MS-INT-B1-1250	09J	Final Painting	5	5	28-Jul-28	03-Aug-28
MS-INT-B1-1480	09C	Install Rubber Wall Base	5	5	04-Aug-28	10-Aug-28
MS-INT-B1-1540	00-WT	WT Create Work-to-Complete List	5	5	11-Aug-28	17-Aug-28
Area B - multi-user Bathroom			74	74	10-Jan-28	20-Apr-28
MS-INT-B1-1830	09A	Layout Walls - multi-user Bathroom	1	1	10-Jan-28	10-Jan-28
MS-INT-B1-1840	09A	Frame Track / Wall / Bulkheads	5	5	17-Jan-28	21-Jan-28
MS-INT-B1-1850	23B	Install Overhead HVAC Sheetmetal	1	1	24-Jan-28	24-Jan-28
MS-INT-B1-1860	26B	Rough-In Overhead Electrical	1	1	24-Jan-28	24-Jan-28
MS-INT-B1-1870	22A	Rough-In Overhead Plumbing	2	2	24-Jan-28	25-Jan-28
MS-INT-B1-1890	21A	Rough-In Overhead Sprinkler	1	1	24-Jan-28	24-Jan-28
MS-INT-B1-1950	28A	Rough-In Special Systems - Security /AV / IT / FA	1	1	24-Jan-28	24-Jan-28
MS-INT-B1-1880	23B	Rough-In Overhead HVAC Controls	0	0	25-Jan-28	25-Jan-28
MS-INT-B1-1930	26B	Rough-In In-Wall Electrical	1	1	25-Jan-28	25-Jan-28
MS-INT-B1-1910	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	2	2	26-Jan-28	27-Jan-28
MS-INT-B1-1940	26B	Electrical In-Wall Inspection	2	2	26-Jan-28	27-Jan-28
MS-INT-B1-1900	22A	Rough-In Plumbing - Chair Carriers	5	5	28-Jan-28	03-Feb-28
MS-INT-B1-1920	22A	Plumbing Testing	2	2	04-Feb-28	07-Feb-28
MS-INT-B1-1960	06C	Install Blocking	1	1	04-Feb-28	04-Feb-28
MS-INT-B1-1970	00-WT	Wall Close-In WT Inspection	2	2	08-Feb-28	09-Feb-28
MS-INT-B1-1980	01A	Plumbing In-Wall NCC Inspection	2	2	10-Feb-28	11-Feb-28
MS-INT-B1-1990	09A	Hang Drywall Walls	2	2	01-Mar-28	02-Mar-28
MS-INT-B1-2000	09A	Hang Drywall Ceilings / Bulkheads	1	1	03-Mar-28	03-Mar-28
MS-INT-B1-2010	09A	Drywall Finishing	5	5	06-Mar-28	10-Mar-28
MS-INT-B1-2020	09J	Prime Coat Walls	1	1	13-Mar-28	13-Mar-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-B1-2040	09D	Install Wall Tile	5	5	14-Mar-28	20-Mar-28
MS-INT-B1-2050	09C	Install Resinous Flooring & Base	5	5	21-Mar-28	27-Mar-28
MS-INT-B1-2030	09E	Install Ceiling Grid & Border Tile	2	2	28-Mar-28	29-Mar-28
MS-INT-B1-2060	26B	Ceiling Trim-Out - Electrical	2	2	30-Mar-28	31-Mar-28
MS-INT-B1-2070	23B	Ceiling Trim-Out - Mechanical	1	1	30-Mar-28	30-Mar-28
MS-INT-B1-2080	21A	Ceiling Trim-Out - Sprinkler	1	1	30-Mar-28	30-Mar-28
MS-INT-B1-2090	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	30-Mar-28	30-Mar-28
MS-INT-B1-2120	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks /Misc.	5	5	03-Apr-28	07-Apr-28
MS-INT-B1-2190	26B	Electrical Above Ceiling Inspection	2	2	03-Apr-28	04-Apr-28
MS-INT-B1-2100	00-WT	WT Ceiling Close-In Inspection	2	2	05-Apr-28	06-Apr-28
MS-INT-B1-2180	01A	NCC Ceiling Close-In Inspection	2	2	07-Apr-28	10-Apr-28
MS-INT-B1-2130	22A	Install Toilet Partitions	5	5	10-Apr-28	14-Apr-28
MS-INT-B1-2110	09E	Drop Ceiling Tile	1	1	11-Apr-28	11-Apr-28
MS-INT-B1-2140	09A	Wall Point-Up	1	1	17-Apr-28	17-Apr-28
MS-INT-B1-2150	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	1	1	18-Apr-28	18-Apr-28
MS-INT-B1-2160	07G	Install Caulking	1	1	19-Apr-28	19-Apr-28
MS-INT-B1-2170	09J	Final Paint	1	1	20-Apr-28	20-Apr-28
Area B - Culinary Kitchens & Faculty Cafe			188	188	06-Oct-27	03-Jul-28
MS-INT-B1-2200	09A	Layout Kitchen	5	5	06-Oct-27	12-Oct-27
MS-INT-B1-2210	06C	Set Door Frames - Kitchen	5	5	13-Oct-27	19-Oct-27
MS-INT-B1-2230	11A	Cold Box Instalation/Construciton - Cooler/Freezer	10	10	13-Oct-27	26-Oct-27
MS-INT-B1-2330	01A	Cold Boxes - Inspection	5	5	27-Oct-27	02-Nov-27
MS-INT-B1-2340	11A	Install Hoods	5	5	27-Oct-27	02-Nov-27
MS-INT-B1-2350	23A	Install HVAC Sheet Metal - Hoods	15	15	03-Nov-27	23-Nov-27
MS-INT-B1-2360	01A	Fire Marshall Inspection	5	5	03-Nov-27	09-Nov-27
MS-INT-B1-2220	09A	Track/Framing - Walls - Kitchen	5	5	24-Jan-28	28-Jan-28
MS-INT-B1-2320	09A	Soffit Framing - Kitchen	5	5	31-Jan-28	04-Feb-28
MS-INT-B1-2240	22A	Overhead Plumbing Mains - HW/CW/HWR/140WR & R/Gas	15	15	31-Jan-28	18-Feb-28
MS-INT-B1-2250	23A	Overhead HVAC Duct Mains/FCU's/Risers	20	20	31-Jan-28	25-Feb-28
MS-INT-B1-2260	23A	Mechaical Overhead Piping	15	15	31-Jan-28	18-Feb-28
MS-INT-B1-2270	26B	Electrical Overhead Rough-In	15	15	31-Jan-28	18-Feb-28
MS-INT-B1-2280	23A	HVAC Control Rough-in above ceiling	10	10	31-Jan-28	11-Feb-28
MS-INT-B1-2290	21A	Sprinkler Rough-In	10	10	31-Jan-28	11-Feb-28
MS-INT-B1-2300	22A	Plumbing In wall rough In	15	15	31-Jan-28	18-Feb-28
MS-INT-B1-2310	08C	Overhead Door Installation	5	5	31-Jan-28	04-Feb-28
MS-INT-B1-2370	21A	Sprinkler Hydro-Testing	5	5	14-Feb-28	18-Feb-28
MS-INT-B1-2380	25A	Controls/Valves - Mechaincal Piping/FCU's	10	10	21-Feb-28	03-Mar-28
MS-INT-B1-2390	28A	Electrical/Systems/Controls/FA In Wall Rough-In	10	10	21-Feb-28	03-Mar-28
MS-INT-B1-2400	28A	Plumbing Testing - In-Wall Components	10	10	21-Feb-28	03-Mar-28
MS-INT-B1-2410	06C	Blocking	5	5	21-Feb-28	25-Feb-28
MS-INT-B1-2420	01A	Plumbing Inspection	5	5	21-Feb-28	25-Feb-28
MS-INT-B1-2430	21A	Install Sprinkler Heads	5	5	21-Feb-28	25-Feb-28
MS-INT-B1-2450	23B	HVAC - Duct Testing - Area B	5	5	28-Feb-28	03-Mar-28
MS-INT-B1-2440	23A	Mechaical Piping Testing	5	5	06-Mar-28	10-Mar-28
MS-INT-B1-2490	23A	Ductwork Insulation	10	10	06-Mar-28	17-Mar-28
MS-INT-B1-2460	22A	Plumbing Insulation	10	10	06-Mar-28	17-Mar-28
MS-INT-B1-2470	26B	Inspections - Electrical	5	5	06-Mar-28	10-Mar-28
MS-INT-B1-2480	23A	Mechaincal piping loop testing - Area B	5	5	13-Mar-28	17-Mar-28
MS-INT-B1-2500	22A	In wall Insulation	5	5	13-Mar-28	17-Mar-28
MS-INT-B1-2510	22A	Overhead Insulation - Plumbing	5	5	20-Mar-28	24-Mar-28
MS-INT-B1-2530	23A	Kitchen Hood Insulation	5	5	20-Mar-28	24-Mar-28
MS-INT-B1-2520	00-WT	WT In-Wall Inspection	5	5	20-Mar-28	24-Mar-28
MS-INT-B1-2800	01A	NCC In-Wall Inspection	5	5	27-Mar-28	31-Mar-28
MS-INT-B1-2540	09A	Hang Drywall - Walls & Soffits	5	5	03-Apr-28	07-Apr-28
MS-INT-B1-2550	09A	Wall & Soffit Finishing	5	5	10-Apr-28	14-Apr-28
MS-INT-B1-2560	09J	Prime/First Coat Paint	5	5	17-Apr-28	21-Apr-28
MS-INT-B1-2570	09E	Ceiling Wall Angle & Grid	5	5	24-Apr-28	28-Apr-28
MS-INT-B1-2580	26B	Electrical Trim Out - Ceiling	5	5	01-May-28	05-May-28
MS-INT-B1-2590	23A	HVAC Trim Out - Ceiling	5	5	01-May-28	05-May-28
MS-INT-B1-2600	21A	Sprinkler Trim out - Ceiling	5	5	01-May-28	05-May-28
MS-INT-B1-2610	28A	FA/Speakers/Specialties - Ceiling Mounted equipment	5	5	01-May-28	05-May-28



Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-B1-2620	09D	Wall Tile - Servery	5	5	01-May-28	05-May-28
MS-INT-B1-2630	26B	Electrical Above ceiling inspection	5	5	08-May-28	12-May-28
MS-INT-B1-2640	22A	Plumbing fixture/trim out - Bath/Jan.	5	5	08-May-28	12-May-28
MS-INT-B1-2650	06C	Wall Protection - Kicthen. Dish room/Typ	5	5	08-May-28	12-May-28
MS-INT-B1-2660	00-WT	WT Above-Ceiling Inspections	5	5	15-May-28	19-May-28
MS-INT-B1-2670	09H	Resinous Flooring Installation	5	5	15-May-28	19-May-28
MS-INT-B1-2690	09A	Point up/2nd coat paint	5	5	22-May-28	26-May-28
MS-INT-B1-2790	01A	NCC Above Ceiling Inspection	5	5	22-May-28	26-May-28
MS-INT-B1-2680	09E	Drop Ceiling Tile	5	5	30-May-28	05-Jun-28
MS-INT-B1-2720	26B	Wall Trim Out - Electrical/Systems/FA	5	5	30-May-28	05-Jun-28
MS-INT-B1-2740	06C	Install Doors & Hardware	5	5	30-May-28	05-Jun-28
MS-INT-B1-2700	11A	Set and Connect Kitchen Equipment	5	5	06-Jun-28	12-Jun-28
MS-INT-B1-2760	09J	Final Coat Paint	5	5	06-Jun-28	12-Jun-28
MS-INT-B1-2710	11A	Hood - Install Sprinkler Systems	5	5	13-Jun-28	19-Jun-28
MS-INT-B1-2730	11A	Start-Up & Testing Equipment	5	5	13-Jun-28	19-Jun-28
MS-INT-B1-2750	11A	Start-up Testing Range Hood	5	5	20-Jun-28	26-Jun-28
MS-INT-B1-2770	01A	Health Inspection	5	5	27-Jun-28	03-Jul-28
MS-INT-B1-2780	01A	Fire Marshal - Final Kitchen Inspection	5	5	27-Jun-28	03-Jul-28
Area A			245	245	10-Nov-27	27-Oct-28
MS-INT-A1-1020	09A	Layout Walls - Area A - 1st Floor	5	5	10-Nov-27	16-Nov-27
MS-INT-A1-4770	23A	Startup & Commissioning of Equipment - Area A - 1st Floor	5	5	17-Jul-28	21-Jul-28
MS-INT-A1-4780	23A	Prefunctional Testing of Equipment - Area A - 1st Floor	5	5	24-Jul-28	28-Jul-28
MS-INT-A1-4790	23A	Checkout Equipment Function & Controls Sequence - Area A - 1st Floor	5	5	31-Jul-28	04-Aug-28
MS-INT-A1-4800	00-WT	WT Create Work-to-Complete List - Area A - 1st Floor	5	5	16-Oct-28	20-Oct-28
MS-INT-A1-4810	00-WT	Final Clean & Wax Floors - Area A - 1st Floor	10	10	16-Oct-28	27-Oct-28
Area A- Corridor / MS Lobby			177	177	17-Nov-27	31-Jul-28
MS-INT-A1-3060	06C	Set Door Frames - Corridor & MS Lobby	2	2	17-Nov-27	18-Nov-27
MS-INT-A1-4820	09A	Install Elevator Shaft Walls - Floors 1 thru 2	5	5	17-Nov-27	23-Nov-27
MS-INT-A1-2770	09A	Frame Walls - Corridor & MS Lobby	10	10	28-Feb-28	10-Mar-28
MS-INT-A1-2780	09A	Top Out - "Dens Glass" - Corridor & MS Lobby	5	5	13-Mar-28	17-Mar-28
MS-INT-A1-2790	23A	Mechanical Overhead Piping Mains - Corridor & MS Lobby	5	5	20-Mar-28	24-Mar-28
MS-INT-A1-3010	01A	Wall Close-In WT Inspection - Corridor & MS Lobby	2	2	20-Mar-28	21-Mar-28
MS-INT-A1-2960	01A	Wall Close-In NCC Inspection - Corridor & MS Lobby	2	2	22-Mar-28	23-Mar-28
MS-INT-A1-2810	23B	HVAC Sheet Metal - Mains & Risers - Corridor & MS Lobby	10	10	27-Mar-28	07-Apr-28
MS-INT-A1-2820	22A	Plumbing Mains - Corridor & MS Lobby	10	10	27-Mar-28	07-Apr-28
MS-INT-A1-2840	09A	Hang Drywall - Corridor & MS Lobby	10	10	12-Apr-28	25-Apr-28
MS-INT-A1-2850	09A	Drywall Finishing - Corridor & MS Lobby	10	10	26-Apr-28	09-May-28
MS-INT-A1-2860	09J	Prime/1st Coat Wall Paint - Corridor & MS Lobby	2	2	10-May-28	11-May-28
MS-INT-A1-4720	09G	Terrazzo - MS Lobby - Layout & Install Strips	5	5	12-May-28	18-May-28
MS-INT-A1-4830	08C	Install Horizontal Fire Curtain	5	5	12-May-28	18-May-28
MS-INT-A1-4730	09G	Terrazzo - MS Lobby - Preperation	2	2	19-May-28	22-May-28
MS-INT-A1-4740	09G	Terrazzo - MS Lobby - Pour Terrazo	5	5	23-May-28	30-May-28
MS-INT-A1-4750	09G	Terrazzo - MS Lobby - Grind & Polish	5	5	31-May-28	06-Jun-28
MS-INT-A1-4760	09G	Terrazzo - MS Lobby - Apply Sealant	2	2	07-Jun-28	08-Jun-28
MS-INT-A1-2800	09D	Wall Tile - Corridor & MS Lobby	10	10	09-Jun-28	22-Jun-28
MS-INT-A1-2870	09E	Install Ceiling Grid - Corridor & MS Lobby	12	12	09-Jun-28	26-Jun-28
MS-INT-A1-2830	09C	Install VCT Flooring - Corridor & MS Lobby	2	2	23-Jun-28	26-Jun-28
MS-INT-A1-3050	06C	Install Div 10 Specialties - Corridor & MS Lobby	1	1	23-Jun-28	23-Jun-28
MS-INT-A1-2880	21A	Sprinkler Ceiling Trim-Out - Corridor & MS Lobby	5	5	27-Jun-28	03-Jul-28
MS-INT-A1-2890	28A	Special Systems - Ceiling Trim out (Security, AV, ITFA) - Corridor & MS Lobby	5	5	27-Jun-28	03-Jul-28
MS-INT-A1-2920	09J	Wall Point Ups - Second Coat Paint - Corridor & MS Lobby	5	5	27-Jun-28	03-Jul-28
MS-INT-A1-2930	06C	Install Doors & Hardware - Corridor & MS Lobby	10	10	27-Jun-28	11-Jul-28
MS-INT-A1-2980	26B	Install Lights - Corridor & MS Lobby	10	10	27-Jun-28	11-Jul-28
MS-INT-A1-2990	23A	Mechanical Ceiling Trim-Out - Corridor & MS Lobby	5	5	27-Jun-28	03-Jul-28
MS-INT-A1-3040	09E	Cut Ceiling Tile - Corridor & MS Lobby	5	5	27-Jun-28	03-Jul-28
MS-INT-A1-2900	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor & MS Lobby	5	5	05-Jul-28	11-Jul-28
MS-INT-A1-2970	01A	Fire Marshal Fire Damper Inspection - Corridor & MS Lobby	2	2	05-Jul-28	06-Jul-28
MS-INT-A1-2950	09J	Final Painting - Corridor & MS Lobby	5	5	12-Jul-28	18-Jul-28
MS-INT-A1-3020	00-WT	Ceiling Close-In WT Inspections - Corridor & MS Lobby	2	2	12-Jul-28	13-Jul-28
MS-INT-A1-2910	01A	Ceiling Close-In NCC Inspections - Corridor & MS Lobby	2	2	14-Jul-28	17-Jul-28
MS-INT-A1-2940	09E	Drop Ceiling Tile - Corridor & MS Lobby	5	5	18-Jul-28	24-Jul-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A1-3000	09C	Install Rubber Wall Base - Corridor & MS Lobby	0	0	19-Jul-28	19-Jul-28
MS-INT-A1-3030	00-WT	WT Create Work-to-Complete List - Corridor & MS Lobby	5	5	25-Jul-28	31-Jul-28
Area A - Classrooms			152	152	13-Mar-28	13-Oct-28
MS-INT-A1-1090	09A	Frame Walls - Classrooms	5	5	13-Mar-28	17-Mar-28
MS-INT-A1-1130	22A	Plumbing In Wall Rough-In	10	10	20-Mar-28	31-Mar-28
MS-INT-A1-1140	26B	Electrical In Wall Rough-In	12	12	20-Mar-28	04-Apr-28
MS-INT-A1-1160	23A	Mechanical Overhead Piping - Expansion Loops	5	5	20-Mar-28	24-Mar-28
MS-INT-A1-1190	23A	Hang FCUs	5	5	20-Mar-28	24-Mar-28
MS-INT-A1-1250	23A	Mechanical Overhead Piping - FCUs - Classrooms	5	5	27-Mar-28	31-Mar-28
MS-INT-A1-1290	23A	Install Condensate Piping	10	10	27-Mar-28	07-Apr-28
MS-INT-A1-1300	23B	Measure / Fab / Install Ductwork Transitions	10	10	27-Mar-28	07-Apr-28
MS-INT-A1-1210	06C	Install Blocking	5	5	03-Apr-28	07-Apr-28
MS-INT-A1-1320	25A	Install HVAC Controls & Valves	5	5	03-Apr-28	07-Apr-28
MS-INT-A1-1260	22A	Plumbing In Wall Insulation	5	5	03-Apr-28	07-Apr-28
MS-INT-A1-1200	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	05-Apr-28	11-Apr-28
MS-INT-A1-1310	23B	HVAC Sheet Metal - Classrooms	10	10	10-Apr-28	21-Apr-28
MS-INT-A1-1440	23A	Mechanical Piping - Testing Above Ceiling	2	2	10-Apr-28	11-Apr-28
MS-INT-A1-1370	22A	Plumbing In-Wall WT Inspection	2	2	10-Apr-28	11-Apr-28
MS-INT-A1-1490	23A	Mechanical Piping Insulation	5	5	12-Apr-28	18-Apr-28
MS-INT-A1-1470	22A	Plumbing In-Wall NCC Inspection	2	2	12-Apr-28	13-Apr-28
MS-INT-A1-1350	07A	In-Wall Insulation	5	5	12-Apr-28	18-Apr-28
MS-INT-A1-1380	26B	Electrical In-Wall WT Inspection	2	2	12-Apr-28	13-Apr-28
MS-INT-A1-1480	26B	Electrical In-Wall Inspection	2	2	14-Apr-28	17-Apr-28
MS-INT-A1-1390	26B	Electrical Overhead Rough-in - Classrooms	10	10	24-Apr-28	05-May-28
MS-INT-A1-1400	21A	Sprinkler Overhead Rough-In	10	10	24-Apr-28	05-May-28
MS-INT-A1-1430	23B	Duct Testing	2	2	24-Apr-28	25-Apr-28
MS-INT-A1-1500	23B	HVAC Sheet Metal Insulation	10	10	26-Apr-28	09-May-28
MS-INT-A1-1510	21A	Sprinkler Overhead Hydro-Testing	2	2	08-May-28	09-May-28
MS-INT-A1-1580	01A	Wall Close-In WT Inspection	2	2	10-May-28	11-May-28
MS-INT-A1-1630	01A	Wall Close-In NCC Inspection	2	2	12-May-28	15-May-28
MS-INT-A1-1660	09A	Hang Drywall	10	10	16-May-28	30-May-28
MS-INT-A1-1700	09A	Drywall Finishing	15	15	31-May-28	20-Jun-28
MS-INT-A1-1740	09J	Prime/1st Coat Wall Paint	2	2	21-Jun-28	22-Jun-28
MS-INT-A1-1790	09E	Install Ceiling Grid	5	5	23-Jun-28	29-Jun-28
MS-INT-A1-1840	21A	Sprinkler Ceiling Trim-Out	10	10	30-Jun-28	14-Jul-28
MS-INT-A1-1850	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	30-Jun-28	07-Jul-28
MS-INT-A1-1860	09J	Wall Point Ups - Second Coat Paint	10	10	30-Jun-28	14-Jul-28
MS-INT-A1-1910	26B	Install Lights	15	15	30-Jun-28	21-Jul-28
MS-INT-A1-1920	23A	Mechanical Ceiling Trim-Out	10	10	30-Jun-28	14-Jul-28
MS-INT-A1-1930	09E	Cut Ceiling Tile	5	5	30-Jun-28	07-Jul-28
MS-INT-A1-2020	28A	Wall Trim Out - (Elect/Special systems, FA)	10	10	17-Jul-28	28-Jul-28
MS-INT-A1-2060	01A	Fire Marshal Fire Damper Inspection	2	2	17-Jul-28	18-Jul-28
MS-INT-A1-2070	00-WT	Ceiling Close-In WT Inspections	2	2	24-Jul-28	25-Jul-28
MS-INT-A1-2120	01A	Ceiling Close-In NCC Inspections	2	2	26-Jul-28	27-Jul-28
MS-INT-A1-2200	09E	Drop Ceiling Tile	10	10	28-Jul-28	10-Aug-28
MS-INT-A1-2250	09H	Resinous Flooring - Science Labs	10	10	11-Aug-28	24-Aug-28
MS-INT-A1-2260	12A	Install Casework - Classroom	10	10	11-Aug-28	24-Aug-28
MS-INT-A1-2300	09C	VCT Flooring - Classroom	14	14	25-Aug-28	14-Sep-28
MS-INT-A1-2330	12A	Install Casework - Science Labs	10	10	25-Aug-28	08-Sep-28
MS-INT-A1-2340	28A	Audio Enhancement System Trim-Out	5	5	25-Aug-28	31-Aug-28
MS-INT-A1-2360	06C	Marker boards/Smart Boards, TV, Misc Specialties	10	10	11-Sep-28	22-Sep-28
MS-INT-A1-2350	06C	Install Doors & Hardware	5	5	15-Sep-28	21-Sep-28
MS-INT-A1-2370	09J	Final Painting	5	5	25-Sep-28	29-Sep-28
MS-INT-A1-2380	09C	Install Rubber Wall Base	5	5	02-Oct-28	06-Oct-28
MS-INT-A1-2390	00-WT	WT Create Work-to-Complete List	5	5	09-Oct-28	13-Oct-28
Area A - multi-user Bathroom			150	150	17-Nov-27	21-Jun-28
MS-INT-A1-2400	09A	Layout Walls - multi-user Bathroom	1	1	17-Nov-27	17-Nov-27
MS-INT-A1-2410	09A	Frame Track / Wall / Bulkheads	5	5	20-Mar-28	24-Mar-28
MS-INT-A1-2420	23B	Install Overhead HVAC Sheetmetal	1	1	27-Mar-28	27-Mar-28
MS-INT-A1-2430	26B	Rough-In Overhead Electrical	1	1	27-Mar-28	27-Mar-28
MS-INT-A1-2460	21A	Rough-In Overhead Sprinkler	1	1	27-Mar-28	27-Mar-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A1-2520	28A	Rough-In Special Systems - Security /AV / IT / FA	1	1	27-Mar-28	27-Mar-28
MS-INT-A1-2450	23B	Rough-In Overhead HVAC Controls	5	5	28-Mar-28	03-Apr-28
MS-INT-A1-2500	26B	Rough-In In-Wall Electrical	1	1	28-Mar-28	28-Mar-28
MS-INT-A1-2510	26B	Electrical In-Wall Inspection	2	2	29-Mar-28	30-Mar-28
MS-INT-A1-2440	22A	Rough-In Overhead Plumbing	2	2	10-Apr-28	11-Apr-28
MS-INT-A1-2480	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	2	2	12-Apr-28	13-Apr-28
MS-INT-A1-2470	22A	Rough-In Plumbing - Chair Carriers	5	5	14-Apr-28	20-Apr-28
MS-INT-A1-2490	22A	Plumbing Testing	2	2	21-Apr-28	24-Apr-28
MS-INT-A1-2530	06C	Install Blocking	1	1	21-Apr-28	21-Apr-28
MS-INT-A1-2540	00-WT	Wall Close-In WT Inspection	2	2	25-Apr-28	26-Apr-28
MS-INT-A1-2550	01A	Plumbing In-Wall NCC Inspection	2	2	27-Apr-28	28-Apr-28
MS-INT-A1-2560	09A	Hang Drywall Walls	2	2	01-May-28	02-May-28
MS-INT-A1-2570	09A	Hang Drywall Ceilings / Bulkheads	1	1	03-May-28	03-May-28
MS-INT-A1-2580	09A	Drywall Finishing	5	5	04-May-28	10-May-28
MS-INT-A1-2590	09J	Prime Coat Walls	1	1	11-May-28	11-May-28
MS-INT-A1-2610	09D	Install Wall Tile	5	5	12-May-28	18-May-28
MS-INT-A1-2620	09C	Install Resinous Flooring & Base	5	5	19-May-28	25-May-28
MS-INT-A1-2600	09E	Install Ceiling Grid & Border Tile	2	2	26-May-28	30-May-28
MS-INT-A1-2630	26B	Ceiling Trim-Out - Electrical	2	2	31-May-28	01-Jun-28
MS-INT-A1-2640	23B	Ceiling Trim-Out - Mechanical	1	1	31-May-28	31-May-28
MS-INT-A1-2650	21A	Ceiling Trim-Out - Sprinkler	1	1	31-May-28	31-May-28
MS-INT-A1-2660	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	31-May-28	31-May-28
MS-INT-A1-2690	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks /Misc.	5	5	02-Jun-28	08-Jun-28
MS-INT-A1-2760	26B	Electrical Above Ceiling Inspection	2	2	02-Jun-28	05-Jun-28
MS-INT-A1-2670	00-WT	WT Ceiling Close-In Inspection	2	2	06-Jun-28	07-Jun-28
MS-INT-A1-2750	01A	NCC Ceiling Close-In Inspection	2	2	08-Jun-28	09-Jun-28
MS-INT-A1-2700	22A	Install Toilet Partitions	5	5	09-Jun-28	15-Jun-28
MS-INT-A1-2680	09E	Drop Ceiling Tile	1	1	12-Jun-28	12-Jun-28
MS-INT-A1-2710	09A	Wall Point-Up	1	1	16-Jun-28	16-Jun-28
MS-INT-A1-2720	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	1	1	19-Jun-28	19-Jun-28
MS-INT-A1-2730	07G	Install Caulking	1	1	20-Jun-28	20-Jun-28
MS-INT-A1-2740	09J	Final Paint	1	1	21-Jun-28	21-Jun-28
Area A- Admin Areas			88	88	27-Mar-28	28-Jul-28
Area A- Admin Areas - Corridor			65	65	27-Mar-28	26-Jun-28
MS-INT-A1-3070	09A	Frame Walls - Admin Corridor	2	2	27-Mar-28	28-Mar-28
MS-INT-A1-3080	09A	Top Out - "Dens Glass" - Admin Corridor	5	5	29-Mar-28	04-Apr-28
MS-INT-A1-3780	06C	Set Door Frames - Admin Corridor	2	2	29-Mar-28	30-Mar-28
MS-INT-A1-3800	09A	Frame Bulkheads & Hard Ceilings - Admin Corridor	5	5	29-Mar-28	04-Apr-28
MS-INT-A1-3090	23A	Mechanical Overhead Piping Mains - Admin Corridor	5	5	05-Apr-28	11-Apr-28
MS-INT-A1-3290	23B	HVAC Sheet Metal - Mains & Risers - Admin Corridor	2	2	12-Apr-28	13-Apr-28
MS-INT-A1-3440	22A	Plumbing Mains - Admin Corridor	2	2	12-Apr-28	13-Apr-28
MS-INT-A1-3810	09A	Hang Drywall Bulkheads & Hard Ceilings - Admin Corridor	2	2	12-Apr-28	13-Apr-28
MS-INT-A1-3820	09A	Drywall Finishing Bulkheads & Hard Ceilings - Admin Corridor	5	5	14-Apr-28	20-Apr-28
MS-INT-A1-3730	01A	Wall Close-In WT Inspection - Admin Corridor	2	2	12-May-28	15-May-28
MS-INT-A1-3680	01A	Wall Close-In NCC Inspection - Admin Corridor	2	2	16-May-28	17-May-28
MS-INT-A1-3560	09A	Hang Drywall - Admin Corridor	1	1	18-May-28	18-May-28
MS-INT-A1-3570	09A	Drywall Finishing - Admin Corridor	5	5	19-May-28	25-May-28
MS-INT-A1-3580	09J	Prime/1st Coat Wall Paint - Admin Corridor	1	1	26-May-28	26-May-28
MS-INT-A1-3590	09E	Install Ceiling Grid - Admin Corridor	5	5	30-May-28	05-Jun-28
MS-INT-A1-3840	08A	Install Storefront System - Admin Corridor	2	2	30-May-28	31-May-28
MS-INT-A1-3600	21A	Sprinkler Ceiling Trim-Out - Admin Corridor	1	1	06-Jun-28	06-Jun-28
MS-INT-A1-3610	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Admin Corridor	1	1	06-Jun-28	06-Jun-28
MS-INT-A1-3640	09J	Wall Point Ups - Second Coat Paint - Admin Corridor	1	1	06-Jun-28	06-Jun-28
MS-INT-A1-3700	26B	Install Lights - Admin Corridor	5	5	06-Jun-28	12-Jun-28
MS-INT-A1-3710	23A	Mechanical Ceiling Trim-Out - Admin Corridor	5	5	06-Jun-28	12-Jun-28
MS-INT-A1-3760	09E	Cut Ceiling Tile - Admin Corridor	1	1	06-Jun-28	06-Jun-28
MS-INT-A1-3620	28A	Wall Trim Out - (Elect/Special systems, FA) - Admin Corridor	1	1	07-Jun-28	07-Jun-28
MS-INT-A1-3650	06C	Install Doors & Hardware - Admin Corridor	2	2	07-Jun-28	08-Jun-28
MS-INT-A1-3770	06C	Install Div 10 Specialties - Admin Corridor	1	1	07-Jun-28	07-Jun-28
MS-INT-A1-3690	01A	Fire Marshal Fire Damper Inspection - Admin Corridor	2	2	08-Jun-28	09-Jun-28
MS-INT-A1-3670	09J	Final Painting - Admin Corridor	2	2	09-Jun-28	12-Jun-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A1-3740	00-WT	Ceiling Close-In WT Inspections - Admin Corridor	2	2	13-Jun-28	14-Jun-28
MS-INT-A1-3630	01A	Ceiling Close-In NCC Inspections - Admin Corridor	2	2	15-Jun-28	16-Jun-28
MS-INT-A1-3660	09E	Drop Ceiling Tile - Admin Corridor	2	2	19-Jun-28	20-Jun-28
MS-INT-A1-3830	09C	Install Carpet Flooring - Admin Corridor	1	1	21-Jun-28	21-Jun-28
MS-INT-A1-3720	09C	Install Rubber Wall Base - Admin Corridor	1	1	22-Jun-28	22-Jun-28
MS-INT-A1-3750	00-WT	WT Create Work-to-Complete List - Admin Corridor	2	2	23-Jun-28	26-Jun-28
Area A- Admin Areas - Admin Offices			86	86	29-Mar-28	28-Jul-28
MS-INT-A1-3140	06C	Install Blocking - Admin	1	1	29-Mar-28	29-Mar-28
MS-INT-A1-3430	09A	Frame Walls - Admin	5	5	29-Mar-28	04-Apr-28
MS-INT-A1-3450	07A	In-Wall Insulation - Admin	2	2	30-Mar-28	31-Mar-28
MS-INT-A1-3120	26B	Electrical In Wall Rough-In - Admin	5	5	05-Apr-28	11-Apr-28
MS-INT-A1-3310	23A	Mechanical Overhead Piping - Expansion Loops - Admin	5	5	05-Apr-28	11-Apr-28
MS-INT-A1-3490	23A	Hang FCUs - Admin	5	5	05-Apr-28	11-Apr-28
MS-INT-A1-3850	09A	Frame Bulkheads & Hard Ceilings - Admin	2	2	05-Apr-28	06-Apr-28
MS-INT-A1-3130	26C	Special Systems - Rough-In (Security,AV, ITFA) - Admin	2	2	12-Apr-28	13-Apr-28
MS-INT-A1-3300	23A	Mechanical Overhead Piping - FCUs - Admin	5	5	12-Apr-28	18-Apr-28
MS-INT-A1-3550	23A	Install Condensate Piping - Admin	5	5	12-Apr-28	18-Apr-28
MS-INT-A1-3790	23B	Measure / Fab / Install Ductwork Transitions - Admin	10	10	12-Apr-28	25-Apr-28
MS-INT-A1-3510	26B	Electrical In-Wall WT Inspection - Admin	2	2	14-Apr-28	17-Apr-28
MS-INT-A1-3390	26B	Electrical In-Wall Inspection - Admin	2	2	18-Apr-28	19-Apr-28
MS-INT-A1-3370	25A	Install HVAC Controls & Valves - Admin	5	5	19-Apr-28	25-Apr-28
MS-INT-A1-3320	23B	HVAC Sheet Metal - Admin	5	5	26-Apr-28	02-May-28
MS-INT-A1-3340	23A	Mechanical Piping - Testing Above Ceiling - Admin	2	2	26-Apr-28	27-Apr-28
MS-INT-A1-3350	23A	Mechanical Piping Insulation - Admin	5	5	28-Apr-28	04-May-28
MS-INT-A1-3100	26B	Electrical Overhead Rough-in - Admin	5	5	03-May-28	09-May-28
MS-INT-A1-3110	21A	Sprinkler Overhead Rough-In - Admin	5	5	03-May-28	09-May-28
MS-INT-A1-3330	23B	Duct Testing - Admin	2	2	03-May-28	04-May-28
MS-INT-A1-3360	23B	HVAC Sheet Metal Insulation - Admin	5	5	05-May-28	11-May-28
MS-INT-A1-3380	21A	Sprinkler Overhead Hydro-Testing - Admin	2	2	10-May-28	11-May-28
MS-INT-A1-3500	00-WT	Wall Close-In WT Inspection - Admin	2	2	12-May-28	15-May-28
MS-INT-A1-3400	01A	Wall Close-In NCC Inspection - Admin	2	2	16-May-28	17-May-28
MS-INT-A1-3150	09A	Hang Drywall - Admin	5	5	18-May-28	24-May-28
MS-INT-A1-3160	09A	Drywall Finishing - Admin	5	5	25-May-28	01-Jun-28
MS-INT-A1-3860	09A	Hang Drywall Bulkheads & Hard Ceilings - Admin	2	2	25-May-28	26-May-28
MS-INT-A1-3870	09A	Drywall Finishing Bulkheads & Hard Ceilings - Admin	5	5	02-Jun-28	08-Jun-28
MS-INT-A1-3170	09J	Prime/1st Coat Wall Paint - Admin	1	1	09-Jun-28	09-Jun-28
MS-INT-A1-3180	09E	Install Ceiling Grid - Admin	5	5	12-Jun-28	16-Jun-28
MS-INT-A1-3190	21A	Sprinkler Ceiling Trim-Out - Admin	2	2	19-Jun-28	20-Jun-28
MS-INT-A1-3200	28A	Special Systems - Ceiling Trim out (Security, AV, ITFA) - Admin	2	2	19-Jun-28	20-Jun-28
MS-INT-A1-3240	09J	Wall Point Ups - Second Coat Paint - Admin	2	2	19-Jun-28	20-Jun-28
MS-INT-A1-3460	26B	Install Lights - Admin	5	5	19-Jun-28	23-Jun-28
MS-INT-A1-3470	23A	Mechanical Ceiling Trim-Out - Admin	5	5	19-Jun-28	23-Jun-28
MS-INT-A1-3540	09E	Cut Ceiling Tile - Admin	5	5	19-Jun-28	23-Jun-28
MS-INT-A1-3210	28A	Wall Trim Out - (Elect/Special systems, FA) - Admin	5	5	21-Jun-28	27-Jun-28
MS-INT-A1-3410	01A	Fire Marshal Fire Damper Inspection - Admin	2	2	21-Jun-28	22-Jun-28
MS-INT-A1-3520	00-WT	Ceiling Close-In WT Inspections - Admin	2	2	26-Jun-28	27-Jun-28
MS-INT-A1-3220	01A	Ceiling Close-In NCC Inspections - Admin	2	2	28-Jun-28	29-Jun-28
MS-INT-A1-3260	09E	Drop Ceiling Tile - Admin	2	2	30-Jun-28	03-Jul-28
MS-INT-A1-3420	12A	Install Casework - Admin	2	2	05-Jul-28	06-Jul-28
MS-INT-A1-3230	09C	VCT Flooring - Admin	5	5	07-Jul-28	13-Jul-28
MS-INT-A1-3880	09C	Install Carpet Flooring - Admin	2	2	07-Jul-28	10-Jul-28
MS-INT-A1-3250	06C	Install Doors & Hardware - Admin	5	5	14-Jul-28	20-Jul-28
MS-INT-A1-3270	06C	Marker boards/Smart Boards, TV, Misc Specialties - Admin	1	1	14-Jul-28	14-Jul-28
MS-INT-A1-3280	09J	Final Painting - Admin	2	2	21-Jul-28	24-Jul-28
MS-INT-A1-3480	09C	Install Rubber Wall Base - Admin	2	2	25-Jul-28	26-Jul-28
MS-INT-A1-3530	00-WT	WT Create Work-to-Complete List	2	2	27-Jul-28	28-Jul-28
Area A- Admin Areas - Nurse & Wellness			73	73	05-Apr-28	18-Jul-28
MS-INT-A1-4410	23A	Mechanical Overhead Piping - Expansion Loops - Nurse & Wellness	2	2	05-Apr-28	06-Apr-28
MS-INT-A1-4540	09A	Frame Walls - Nurse & Wellness	2	2	05-Apr-28	06-Apr-28
MS-INT-A1-4220	22A	Plumbing In Wall Rough-In - Nurse & Wellness	5	5	07-Apr-28	13-Apr-28
MS-INT-A1-4230	26B	Electrical In Wall Rough-In - Nurse & Wellness	2	2	07-Apr-28	10-Apr-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A1-4590	23A	Hang FCUs - Nurse & Wellness	2	2	07-Apr-28	10-Apr-28
MS-INT-A1-4680	09A	Frame Bulkheads & Hard Ceilings - Nurse & Wellness	1	1	07-Apr-28	07-Apr-28
MS-INT-A1-4240	26C	Special Systems - Rough-In (Security,AV, ITFA) -Nurse & Wellness	1	1	11-Apr-28	11-Apr-28
MS-INT-A1-4400	23A	Mechanical Overhead Piping - FCUs - Nurse & Wellness	5	5	11-Apr-28	17-Apr-28
MS-INT-A1-4660	23A	Install Condensate Piping - Nurse & Wellness	5	5	11-Apr-28	17-Apr-28
MS-INT-A1-4670	23B	Measure / Fab / Install Ductwork Transitions - Nurse & Wellness	5	5	11-Apr-28	17-Apr-28
MS-INT-A1-4620	26B	Electrical In-Wall WT Inspection - Nurse & Wellness	2	2	12-Apr-28	13-Apr-28
MS-INT-A1-4250	06C	Install Blocking - Nurse & Wellness	1	1	14-Apr-28	14-Apr-28
MS-INT-A1-4490	22A	Plumbing In Wall Insulation - Nurse & Wellness	1	1	14-Apr-28	14-Apr-28
MS-INT-A1-4510	26B	Electrical In-Wall Inspection - Nurse & Wellness	2	2	14-Apr-28	17-Apr-28
MS-INT-A1-4550	07A	In-Wall Insulation - Nurse & Wellness	1	1	17-Apr-28	17-Apr-28
MS-INT-A1-4600	22A	Plumbing In-Wall WT Inspection - Nurse & Wellness	2	2	17-Apr-28	18-Apr-28
MS-INT-A1-4420	23B	HVAC Sheet Metal - Nurse & Wellness	5	5	18-Apr-28	24-Apr-28
MS-INT-A1-4470	25A	Install HVAC Controls & Valves - Nurse & Wellness	5	5	18-Apr-28	24-Apr-28
MS-INT-A1-4500	22A	Plumbing In-Wall NCC Inspection - Nurse & Wellness	2	2	19-Apr-28	20-Apr-28
MS-INT-A1-4200	26B	Electrical Overhead Rough-in - Nurse & Wellness	2	2	25-Apr-28	26-Apr-28
MS-INT-A1-4210	21A	Sprinkler Overhead Rough-In - Nurse & Wellness	2	2	25-Apr-28	26-Apr-28
MS-INT-A1-4430	23B	Duct Testing - Nurse & Wellness	2	2	25-Apr-28	26-Apr-28
MS-INT-A1-4440	23A	Mechanical Piping - Testing Above Ceiling - Nurse & Wellness	2	2	25-Apr-28	26-Apr-28
MS-INT-A1-4450	23A	Mechanical Piping Insulation - Nurse & Wellness	5	5	27-Apr-28	03-May-28
MS-INT-A1-4460	23B	HVAC Sheet Metal Insulation - Nurse & Wellness	2	2	27-Apr-28	28-Apr-28
MS-INT-A1-4480	21A	Sprinkler Overhead Hydro-Testing - Nurse & Wellness	2	2	27-Apr-28	28-Apr-28
MS-INT-A1-4610	00-WT	Wall Close-In WT Inspection - Nurse & Wellness	2	2	04-May-28	05-May-28
MS-INT-A1-4520	01A	Wall Close-In NCC Inspection - Nurse & Wellness	2	2	08-May-28	09-May-28
MS-INT-A1-4260	09A	Hang Drywall - Nurse & Wellness	2	2	10-May-28	11-May-28
MS-INT-A1-4270	09A	Drywall Finishing - Nurse & Wellness	5	5	12-May-28	18-May-28
MS-INT-A1-4690	09A	Hang Drywall Bulkheads & Hard Ceilings - Nurse & Wellness	1	1	12-May-28	12-May-28
MS-INT-A1-4700	09A	Drywall Finishing Bulkheads & Hard Ceilings - Nurse & Wellness	1	1	19-May-28	19-May-28
MS-INT-A1-4280	09J	Prime/1st Coat Wall Paint - Nurse & Wellness	1	1	22-May-28	22-May-28
MS-INT-A1-4290	09E	Install Ceiling Grid - Nurse & Wellness	5	5	23-May-28	30-May-28
MS-INT-A1-4300	21A	Sprinkler Ceiling Trim-Out - Nurse & Wellness	2	2	31-May-28	01-Jun-28
MS-INT-A1-4310	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Nurse & Wellness	2	2	31-May-28	01-Jun-28
MS-INT-A1-4350	09J	Wall Point Ups - Second Coat Paint - Nurse & Wellness	2	2	31-May-28	01-Jun-28
MS-INT-A1-4560	26B	Install Lights - Nurse & Wellness	5	5	31-May-28	06-Jun-28
MS-INT-A1-4570	23A	Mechanical Ceiling Trim-Out - Nurse & Wellness	5	5	31-May-28	06-Jun-28
MS-INT-A1-4650	09E	Cut Ceiling Tile - Nurse & Wellness	2	2	31-May-28	01-Jun-28
MS-INT-A1-4320	28A	Wall Trim Out - (Elect/Special systems, FA) - Nurse & Wellness	5	5	02-Jun-28	08-Jun-28
MS-INT-A1-4380	06C	Marker boards/Smart Boards, TV, Misc Specialties - Nurse & Wellness	1	1	02-Jun-28	02-Jun-28
MS-INT-A1-4530	01A	Fire Marshal Fire Damper Inspection - Nurse & Wellness	0	0	02-Jun-28	02-Jun-28
MS-INT-A1-4630	00-WT	Ceiling Close-In WT Inspections - Nurse & Wellness	2	2	07-Jun-28	08-Jun-28
MS-INT-A1-4330	01A	Ceiling Close-In NCC Inspections - Nurse & Wellness	2	2	09-Jun-28	12-Jun-28
MS-INT-A1-4370	09E	Drop Ceiling Tile - Nurse & Wellness	1	1	13-Jun-28	13-Jun-28
MS-INT-A1-4710	09C	Install Sheet Vinyl Flooring - Nurse & Wellness	10	10	14-Jun-28	27-Jun-28
MS-INT-A1-4340	12A	Install Casework - Nurse & Wellness	2	2	28-Jun-28	29-Jun-28
MS-INT-A1-4360	06C	Install Doors & Hardware - Nurse & Wellness	5	5	28-Jun-28	05-Jul-28
MS-INT-A1-4390	09J	Final Painting - Nurse & Wellness	2	2	06-Jul-28	07-Jul-28
MS-INT-A1-4580	09C	Install VTC Flooring & Rubber Wall Base - Nurse & Wellness	5	5	10-Jul-28	14-Jul-28
MS-INT-A1-4640	00-WT	WT Create Work-to-Complete List	2	2	17-Jul-28	18-Jul-28
Area A - Admin Areas - Toilet Rooms			38	38	05-Apr-28	26-May-28
MS-INT-A1-3890	26B	Rough-In Overhead Electrical	1	1	05-Apr-28	05-Apr-28
MS-INT-A1-3910	23B	Rough-In Overhead HVAC Controls	0	0	05-Apr-28	05-Apr-28
MS-INT-A1-3920	21A	Rough-In Overhead Sprinkler	1	1	05-Apr-28	05-Apr-28
MS-INT-A1-3980	28A	Rough-In Special Systems - Security /AV / IT / FA	1	1	05-Apr-28	05-Apr-28
MS-INT-A1-3960	26B	Rough-In In-Wall Electrical	1	1	06-Apr-28	06-Apr-28
MS-INT-A1-3970	26B	Electrical In-Wall Inspection	2	2	07-Apr-28	10-Apr-28
MS-INT-A1-3900	22A	Rough-In Overhead Plumbing	1	1	14-Apr-28	14-Apr-28
MS-INT-A1-3940	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	2	2	17-Apr-28	18-Apr-28
MS-INT-A1-3930	22A	Rough-In Plumbing - Chair Carriers	1	1	19-Apr-28	19-Apr-28
MS-INT-A1-3950	22A	Plumbing Testing	2	2	20-Apr-28	21-Apr-28
MS-INT-A1-3990	06C	Install Blocking	1	1	20-Apr-28	20-Apr-28
MS-INT-A1-4000	00-WT	Wall Close-In WT Inspection	2	2	24-Apr-28	25-Apr-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A1-4010	01A	Plumbing In-Wall NCC Inspection	2	2	26-Apr-28	27-Apr-28
MS-INT-A1-4020	09A	Hang Drywall Walls	1	1	28-Apr-28	28-Apr-28
MS-INT-A1-4030	09A	Drywall Finishing	5	5	01-May-28	05-May-28
MS-INT-A1-4040	09J	Prime Coat Walls	1	1	08-May-28	08-May-28
MS-INT-A1-4060	09D	Install Wall & Floor Tile	5	5	09-May-28	15-May-28
MS-INT-A1-4050	09E	Install Ceiling Grid & Border Tile	1	1	16-May-28	16-May-28
MS-INT-A1-4070	26B	Ceiling Trim-Out - Electrical	1	1	17-May-28	17-May-28
MS-INT-A1-4080	23B	Ceiling Trim-Out - Mechanical	1	1	17-May-28	17-May-28
MS-INT-A1-4090	21A	Ceiling Trim-Out - Sprinkler	1	1	17-May-28	17-May-28
MS-INT-A1-4100	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	17-May-28	17-May-28
MS-INT-A1-4130	22A	Install Plumbing Fixtures - Toilets / Sinks / Misc.	2	2	18-May-28	19-May-28
MS-INT-A1-4190	26B	Electrical Above Ceiling Inspection	2	2	18-May-28	19-May-28
MS-INT-A1-4110	00-WT	WT Ceiling Close-In Inspection	2	2	22-May-28	23-May-28
MS-INT-A1-4140	09A	Wall Point-Up	1	1	22-May-28	22-May-28
MS-INT-A1-4150	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	1	1	23-May-28	23-May-28
MS-INT-A1-4160	07G	Install Caulking	1	1	24-May-28	24-May-28
MS-INT-A1-4180	01A	NCC Ceiling Close-In Inspection	2	2	24-May-28	25-May-28
MS-INT-A1-4170	09J	Final Paint	1	1	25-May-28	25-May-28
MS-INT-A1-4120	09E	Drop Ceiling Tile	1	1	26-May-28	26-May-28
Second Floor			255	255	06-Oct-27	06-Oct-28
Area B			255	255	06-Oct-27	06-Oct-28
MS-INT-B2-1260	09A	Layout Walls - Area B - 2nd Floor	5	5	06-Oct-27	12-Oct-27
MS-INT-B2-2200	23A	Startup & Commissioning of Equipment - Area B - 2nd Floor	5	5	26-Jun-28	30-Jun-28
MS-INT-B2-2210	23A	Prefunctional Testing of Equipment - Area B - 2nd Floor	5	5	03-Jul-28	10-Jul-28
MS-INT-B2-2220	23A	Checkout Equipment Function & Controls Sequence - Area B - 2nd Floor	5	5	11-Jul-28	17-Jul-28
MS-INT-B2-2230	00-WT	WT Create Work-to-Complete List - Area B - 2nd Floor	5	5	25-Sep-28	29-Sep-28
MS-INT-B2-2240	00-WT	Final Clean & Wax Floors - Area B - 2nd Floor	10	10	25-Sep-28	06-Oct-28
Area B - Corridor			183	183	13-Oct-27	03-Jul-28
MS-INT-B2-1810	06C	Set Door Frames - Corridor	5	5	13-Oct-27	19-Oct-27
MS-INT-B2-1000	09A	Frame Walls - Corridor	5	5	07-Feb-28	11-Feb-28
MS-INT-B2-1010	09A	Top Out - "Dens Glass" - Corridor	2	2	14-Feb-28	15-Feb-28
MS-INT-B2-1020	23A	Mechanical Overhead Piping Mains - Corridor	5	5	16-Feb-28	22-Feb-28
MS-INT-B2-1270	23B	HVAC Sheet Metal - Mains & Risers - Corridor	10	10	23-Feb-28	07-Mar-28
MS-INT-B2-1440	22A	Plumbing Mains - Corridor	5	5	23-Feb-28	29-Feb-28
MS-INT-B2-1750	00-WT	Wall Close-In WT Inspection - Corridor	2	2	18-Apr-28	19-Apr-28
MS-INT-B2-1700	01A	Wall Close-In NCC Inspection - Corridor	2	2	20-Apr-28	21-Apr-28
MS-INT-B2-1580	09A	Hang Drywall - Corridor	5	5	24-Apr-28	28-Apr-28
MS-INT-B2-1590	09A	Drywall Finishing - Corridor	5	5	01-May-28	05-May-28
MS-INT-B2-1600	09J	Prime/1st Coat Wall Paint - Corridor	1	1	08-May-28	08-May-28
MS-INT-B2-1610	09E	Install Ceiling Grid - Corridor	1	1	09-May-28	09-May-28
MS-INT-B2-1620	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	10-May-28	10-May-28
MS-INT-B2-1630	28A	Special Systems -Ceiling Trim out (Security, AV, IT/FA) - Corridor	1	1	10-May-28	10-May-28
MS-INT-B2-1660	09J	Wall Point Ups - Second Coat Paint - Corridor	1	1	10-May-28	10-May-28
MS-INT-B2-1720	26B	Install Lights - Corridor	2	2	10-May-28	11-May-28
MS-INT-B2-1730	23A	Mechanical Ceiling Trim-Out - Corridor	2	2	10-May-28	11-May-28
MS-INT-B2-1780	09E	Cut Ceiling Tile - Corridor	1	1	10-May-28	10-May-28
MS-INT-B2-1640	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	1	1	11-May-28	11-May-28
MS-INT-B2-1760	01A	Ceiling Close-In WT Inspections - Corridor	2	2	12-May-28	15-May-28
MS-INT-B2-1650	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	16-May-28	17-May-28
MS-INT-B2-1120	09D	Wall Tile - Corridor	10	10	05-Jun-28	16-Jun-28
MS-INT-B2-1570	09C	Install VCT Flooring - Corridor	5	5	19-Jun-28	23-Jun-28
MS-INT-B2-1800	06C	Install Div 10 Specialties - Corridor	2	2	19-Jun-28	20-Jun-28
MS-INT-B2-1710	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	21-Jun-28	22-Jun-28
MS-INT-B2-1680	09E	Drop Ceiling Tile - Corridor	1	1	23-Jun-28	23-Jun-28
MS-INT-B2-1670	06C	Install Doors & Hardware - Corridor	2	2	26-Jun-28	27-Jun-28
MS-INT-B2-1690	09J	Final Painting - Corridor	1	1	28-Jun-28	28-Jun-28
MS-INT-B2-1740	09C	Install Rubber Wall Base - Corridor	1	1	29-Jun-28	29-Jun-28
MS-INT-B2-1770	00-WT	WT Create Work-to-Complete List - Corridor	2	2	30-Jun-28	03-Jul-28
Area B - Classrooms			157	157	14-Feb-28	22-Sep-28
MS-INT-B2-1430	09A	Frame Walls - Classrooms	5	5	14-Feb-28	18-Feb-28
MS-INT-B2-1290	23A	Mechanical Overhead Piping - Expansion Loops	5	5	16-Feb-28	22-Feb-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-B2-1050	22A	Plumbing In Wall Rough-In	10	10	21-Feb-28	03-Mar-28
MS-INT-B2-1060	26B	Electrical In Wall Rough-In	5	5	21-Feb-28	25-Feb-28
MS-INT-B2-1490	23A	Hang FCUs	10	10	21-Feb-28	03-Mar-28
MS-INT-B2-1070	26C	Special Systems - Rough-In (Security,AV, IT,FA)	10	10	28-Feb-28	10-Mar-28
MS-INT-B2-1080	06C	Install Blocking	5	5	06-Mar-28	10-Mar-28
MS-INT-B2-1280	23A	Mechanical Overhead Piping - FCUs - Classrooms	10	10	06-Mar-28	17-Mar-28
MS-INT-B2-1370	22A	Plumbing In Wall Insulation	5	5	06-Mar-28	10-Mar-28
MS-INT-B2-1560	23A	Install Condensate Piping	10	10	06-Mar-28	17-Mar-28
MS-INT-B2-1820	23B	Measure / Fab / Install Ductwork Transitions	5	5	06-Mar-28	10-Mar-28
MS-INT-B2-1300	23B	HVAC Sheet Metal - Classrooms	11	11	13-Mar-28	27-Mar-28
MS-INT-B2-1450	07A	In-Wall Insulation	5	5	13-Mar-28	17-Mar-28
MS-INT-B2-1500	22A	Plumbing In-Wall WT Inspection	2	2	13-Mar-28	14-Mar-28
MS-INT-B2-1520	26B	Electrical In-Wall WT Inspection	2	2	13-Mar-28	14-Mar-28
MS-INT-B2-1380	22A	Plumbing In-Wall NCC Inspection	2	2	15-Mar-28	16-Mar-28
MS-INT-B2-1390	26B	Electrical In-Wall Inspection	2	2	15-Mar-28	16-Mar-28
MS-INT-B2-1350	25A	Install HVAC Controls & Valves	5	5	20-Mar-28	24-Mar-28
MS-INT-B2-1320	23A	Mechanical Piping - Testing Above Ceiling	2	2	27-Mar-28	28-Mar-28
MS-INT-B2-1030	26B	Electrical Overhead Rough-in - Classrooms	10	10	28-Mar-28	10-Apr-28
MS-INT-B2-1040	21A	Sprinkler Overhead Rough-In	10	10	28-Mar-28	10-Apr-28
MS-INT-B2-1310	23B	Duct Testing	5	5	28-Mar-28	03-Apr-28
MS-INT-B2-1330	23A	Mechanical Piping Insulation	10	10	29-Mar-28	11-Apr-28
MS-INT-B2-1340	23B	HVAC Sheet Metal Insulation	10	10	04-Apr-28	17-Apr-28
MS-INT-B2-1360	21A	Sprinkler Overhead Hydro-Testing	2	2	11-Apr-28	12-Apr-28
MS-INT-B2-1510	00-WT	Wall Close-In WT Inspection	2	2	18-Apr-28	19-Apr-28
MS-INT-B2-1400	01A	Wall Close-In NCC Inspection	2	2	20-Apr-28	21-Apr-28
MS-INT-B2-1090	09A	Hang Drywall	12	12	24-Apr-28	09-May-28
MS-INT-B2-1100	09A	Drywall Finishing	15	15	10-May-28	31-May-28
MS-INT-B2-1110	09J	Prime/1st Coat Wall Paint	2	2	01-Jun-28	02-Jun-28
MS-INT-B2-1130	09E	Install Ceiling Grid	10	10	05-Jun-28	16-Jun-28
MS-INT-B2-1140	21A	Sprinkler Ceiling Trim-Out	5	5	19-Jun-28	23-Jun-28
MS-INT-B2-1150	28A	Special Systems -Ceiling Trim out (Security, AV, IT,FA)	10	10	19-Jun-28	30-Jun-28
MS-INT-B2-1210	09J	Wall Point Ups - Second Coat Paint	5	5	19-Jun-28	23-Jun-28
MS-INT-B2-1460	26B	Install Lights	10	10	19-Jun-28	30-Jun-28
MS-INT-B2-1470	23A	Mechanical Ceiling Trim-Out	5	5	19-Jun-28	23-Jun-28
MS-INT-B2-1550	09E	Cut Ceiling Tile	5	5	19-Jun-28	23-Jun-28
MS-INT-B2-1160	28A	Wall Trim Out - (Elect/Special systems, FA)	5	5	26-Jun-28	30-Jun-28
MS-INT-B2-1410	01A	Fire Marshal Fire Damper Inspection	2	2	03-Jul-28	05-Jul-28
MS-INT-B2-1530	00-WT	Ceiling Close-In WT Inspections	2	2	03-Jul-28	05-Jul-28
MS-INT-B2-1180	01A	Ceiling Close-In NCC Inspections	2	2	06-Jul-28	07-Jul-28
MS-INT-B2-1230	09E	Drop Ceiling Tile	5	5	10-Jul-28	14-Jul-28
MS-INT-B2-1170	09H	Resinous Flooring - Science Labs	10	10	17-Jul-28	28-Jul-28
MS-INT-B2-1190	12A	Install Casework - Classroom	10	10	17-Jul-28	28-Jul-28
MS-INT-B2-1200	09C	VCT Flooring - Classroom	14	14	31-Jul-28	17-Aug-28
MS-INT-B2-1240	06C	Marker boards/Smart Boards, TV, Misc Specialties	10	10	31-Jul-28	11-Aug-28
MS-INT-B2-1420	12A	Install Casework - Science Labs	0	0	31-Jul-28	31-Jul-28
MS-INT-B2-1790	28A	Audio Enhancement System Trim-Out	5	5	31-Jul-28	04-Aug-28
MS-INT-B2-1220	06C	Install Doors & Hardware	10	10	18-Aug-28	31-Aug-28
MS-INT-B2-1250	09J	Final Painting	5	5	01-Sep-28	08-Sep-28
MS-INT-B2-1480	09C	Install Rubber Wall Base	5	5	11-Sep-28	15-Sep-28
MS-INT-B2-1540	00-WT	WT Create Work-to-Complete List	5	5	18-Sep-28	22-Sep-28
Area B - multi-user Bathroom			62	62	14-Feb-28	09-May-28
MS-INT-B2-1830	09A	Layout Walls - multi-user Bathroom	1	1	14-Feb-28	14-Feb-28
MS-INT-B2-1840	09A	Frame Track / Wall / Bulkheads	5	5	21-Feb-28	25-Feb-28
MS-INT-B2-1850	23B	Install Overhead HVAC Sheetmetal	1	1	28-Feb-28	28-Feb-28
MS-INT-B2-1860	26B	Rough-In Overhead Electrical	1	1	28-Feb-28	28-Feb-28
MS-INT-B2-1870	22A	Rough-In Overhead Plumbing	2	2	28-Feb-28	29-Feb-28
MS-INT-B2-1890	21A	Rough-In Overhead Sprinkler	1	1	28-Feb-28	28-Feb-28
MS-INT-B2-1950	28A	Rough-In Special Systems - Security / AV / IT / FA	1	1	28-Feb-28	28-Feb-28
MS-INT-B2-1880	23B	Rough-In Overhead HVAC Controls	0	0	29-Feb-28	29-Feb-28
MS-INT-B2-1930	26B	Rough-In In-Wall Electrical	1	1	29-Feb-28	29-Feb-28
MS-INT-B2-1910	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	2	2	01-Mar-28	02-Mar-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-B2-1940	26B	Electrical In-Wall Inspection	2	2	01-Mar-28	02-Mar-28
MS-INT-B2-1900	22A	Rough-In Plumbing - Chair Carriers	5	5	03-Mar-28	09-Mar-28
MS-INT-B2-1920	22A	Plumbing Testing	2	2	10-Mar-28	13-Mar-28
MS-INT-B2-1960	06C	Install Blocking	1	1	10-Mar-28	10-Mar-28
MS-INT-B2-1970	00-WT	Wall Close-In WT Inspection	2	2	14-Mar-28	15-Mar-28
MS-INT-B2-1980	01A	Plumbing In-Wall NCC Inspection	2	2	16-Mar-28	17-Mar-28
MS-INT-B2-1990	09A	Hang Drywall Walls	2	2	20-Mar-28	21-Mar-28
MS-INT-B2-2000	09A	Hang Drywall Ceilings / Bulkheads	1	1	22-Mar-28	22-Mar-28
MS-INT-B2-2010	09A	Drywall Finishing	5	5	23-Mar-28	29-Mar-28
MS-INT-B2-2020	09J	Prime Coat Walls	1	1	30-Mar-28	30-Mar-28
MS-INT-B2-2040	09D	Install Wall Tile	5	5	31-Mar-28	06-Apr-28
MS-INT-B2-2050	09C	Install Resinous Flooring & Base	5	5	07-Apr-28	13-Apr-28
MS-INT-B2-2030	09E	Install Ceiling Grid & Border Tile	2	2	14-Apr-28	17-Apr-28
MS-INT-B2-2060	26B	Ceiling Trim-Out - Electrical	2	2	18-Apr-28	19-Apr-28
MS-INT-B2-2070	23B	Ceiling Trim-Out - Mechanical	1	1	18-Apr-28	18-Apr-28
MS-INT-B2-2080	21A	Ceiling Trim-Out - Sprinkler	1	1	18-Apr-28	18-Apr-28
MS-INT-B2-2090	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	18-Apr-28	18-Apr-28
MS-INT-B2-2120	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks / Misc.	5	5	20-Apr-28	26-Apr-28
MS-INT-B2-2190	26B	Electrical Above Ceiling Inspection	2	2	20-Apr-28	21-Apr-28
MS-INT-B2-2100	00-WT	WT Ceiling Close-In Inspection	2	2	24-Apr-28	25-Apr-28
MS-INT-B2-2180	01A	NCC Ceiling Close-In Inspection	2	2	26-Apr-28	27-Apr-28
MS-INT-B2-2130	22A	Install Toilet Partitions	5	5	27-Apr-28	03-May-28
MS-INT-B2-2110	09E	Drop Ceiling Tile	1	1	28-Apr-28	28-Apr-28
MS-INT-B2-2140	09A	Wall Point-Up	1	1	04-May-28	04-May-28
MS-INT-B2-2150	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	1	1	05-May-28	05-May-28
MS-INT-B2-2160	07G	Install Caulking	1	1	08-May-28	08-May-28
MS-INT-B2-2170	09J	Final Paint	1	1	09-May-28	09-May-28
Area A			225	225	17-Nov-27	06-Oct-28
MS-INT-A2-1260	09A	Layout Walls - Area A - 2nd Floor	5	5	17-Nov-27	23-Nov-27
MS-INT-A2-3870	23A	Startup & Commissioning of Equipment - Area A - 2nd Floor	5	5	14-Jul-28	20-Jul-28
MS-INT-A2-3880	23A	Prefunctional Testing of Equipment - Area A - 2nd Floor	5	5	21-Jul-28	27-Jul-28
MS-INT-A2-3890	23A	Checkout Equipment Function & Controls Sequence - Area A - 2nd Floor	5	5	28-Jul-28	03-Aug-28
MS-INT-A2-3900	00-WT	WT Create Work-to-Complete List - Area A - 2nd Floor	5	5	25-Sep-28	29-Sep-28
MS-INT-A2-3910	00-WT	Final Clean & Wax Floors - Area A - 2nd Floor	10	10	25-Sep-28	06-Oct-28
Area A - Corridors			152	152	24-Nov-27	30-Jun-28
MS-INT-A2-1810	06C	Set Door Frames - Corridor	5	5	24-Nov-27	02-Dec-27
MS-INT-A2-1000	09A	Frame Walls - Corridor	5	5	03-Dec-27	09-Dec-27
MS-INT-A2-1010	09A	Top Out - "Dens Glass" - Corridor	2	2	10-Dec-27	13-Dec-27
MS-INT-A2-1020	23A	Mechanical Overhead Piping Mains - Corridor	5	5	14-Dec-27	20-Dec-27
MS-INT-A2-1270	23B	HVAC Sheet Metal - Mains & Risers - Corridor	10	10	21-Dec-27	06-Jan-28
MS-INT-A2-1440	22A	Plumbing Mains - Corridor	5	5	21-Dec-27	29-Dec-27
MS-INT-A2-1750	00-WT	Wall Close-In WT Inspection - Corridor	2	2	19-Apr-28	20-Apr-28
MS-INT-A2-1700	01A	Wall Close-In NCC Inspection - Corridor	2	2	21-Apr-28	24-Apr-28
MS-INT-A2-1580	09A	Hang Drywall - Corridor	5	5	25-Apr-28	01-May-28
MS-INT-A2-1590	09A	Drywall Finishing - Corridor	5	5	02-May-28	08-May-28
MS-INT-A2-1600	09J	Prime/1st Coat Wall Paint - Corridor	1	1	09-May-28	09-May-28
MS-INT-A2-1610	09E	Install Ceiling Grid - Corridor	1	1	10-May-28	10-May-28
MS-INT-A2-1620	21A	Sprinkler Ceiling Trim-Out - Corridor	1	1	11-May-28	11-May-28
MS-INT-A2-1630	28A	Special Systems - Ceiling Trim out (Security, AV, IT/FA) - Corridor	1	1	11-May-28	11-May-28
MS-INT-A2-1660	09J	Wall Point Ups - Second Coat Paint - Corridor	1	1	11-May-28	11-May-28
MS-INT-A2-1720	26B	Install Lights - Corridor	2	2	11-May-28	12-May-28
MS-INT-A2-1730	23A	Mechanical Ceiling Trim-Out - Corridor	2	2	11-May-28	12-May-28
MS-INT-A2-1780	09E	Cut Ceiling Tile - Corridor	1	1	11-May-28	11-May-28
MS-INT-A2-1640	28A	Wall Trim Out - (Elect/Special systems, FA) - Corridor	1	1	12-May-28	12-May-28
MS-INT-A2-1760	00-WT	Ceiling Close-In WT Inspections - Corridor	2	2	15-May-28	16-May-28
MS-INT-A2-1650	01A	Ceiling Close-In NCC Inspections - Corridor	2	2	17-May-28	18-May-28
MS-INT-A2-1120	09D	Wall Tile - Corridor	10	10	02-Jun-28	15-Jun-28
MS-INT-A2-1570	09C	Install VCT Flooring - Corridor	5	5	16-Jun-28	22-Jun-28
MS-INT-A2-1800	06C	Install Div 10 Specialties - Corridor	2	2	16-Jun-28	19-Jun-28
MS-INT-A2-1710	01A	Fire Marshal Fire Damper Inspection - Corridor	2	2	20-Jun-28	21-Jun-28
MS-INT-A2-1680	09E	Drop Ceiling Tile - Corridor	1	1	22-Jun-28	22-Jun-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A2-1670	06C	Install Doors & Hardware - Corridor	2	2	23-Jun-28	26-Jun-28
MS-INT-A2-1690	09J	Final Painting - Corridor	1	1	27-Jun-28	27-Jun-28
MS-INT-A2-1740	09C	Install Rubber Wall Base - Corridor	1	1	28-Jun-28	28-Jun-28
MS-INT-A2-1770	00-WT	WT Create Work-to-Complete List - Corridor	2	2	29-Jun-28	30-Jun-28
Area A- Classrooms			200	200	10-Dec-27	22-Sep-28
MS-INT-A2-1430	09A	Frame Walls - Classrooms	5	5	10-Dec-27	16-Dec-27
MS-INT-A2-1290	23A	Mechanical Overhead Piping - Expansion Loops	5	5	14-Dec-27	20-Dec-27
MS-INT-A2-1050	22A	Plumbing In Wall Rough-In	10	10	17-Dec-27	04-Jan-28
MS-INT-A2-1060	26B	Electrical In Wall Rough-In	12	12	17-Dec-27	06-Jan-28
MS-INT-A2-1490	23A	Hang FCUs	5	5	17-Dec-27	23-Dec-27
MS-INT-A2-1280	23A	Mechanical Overhead Piping - FCUs - Classrooms	5	5	28-Dec-27	04-Jan-28
MS-INT-A2-1560	23A	Install Condensate Piping	10	10	28-Dec-27	11-Jan-28
MS-INT-A2-1820	23B	Measure / Fab / Install Ductwork Transitions	10	10	28-Dec-27	11-Jan-28
MS-INT-A2-1080	06C	Install Blocking	5	5	05-Jan-28	11-Jan-28
MS-INT-A2-1350	25A	Install HVAC Controls & Valves	5	5	05-Jan-28	11-Jan-28
MS-INT-A2-1370	22A	Plumbing In Wall Insulation	5	5	05-Jan-28	11-Jan-28
MS-INT-A2-1070	26C	Special Systems - Rough-In (Security,AV, ITFA)	5	5	07-Jan-28	13-Jan-28
MS-INT-A2-1300	23B	HVAC Sheet Metal - Classrooms	10	10	12-Jan-28	25-Jan-28
MS-INT-A2-1320	23A	Mechanical Piping - Testing Above Ceiling	2	2	12-Jan-28	13-Jan-28
MS-INT-A2-1500	22A	Plumbing In-Wall WT Inspection	2	2	12-Jan-28	13-Jan-28
MS-INT-A2-1330	23A	Mechanical Piping Insulation	5	5	14-Jan-28	20-Jan-28
MS-INT-A2-1380	22A	Plumbing In-Wall NCC Inspection	2	2	14-Jan-28	17-Jan-28
MS-INT-A2-1520	26B	Electrical In-Wall WT Inspection	2	2	14-Jan-28	17-Jan-28
MS-INT-A2-1390	26B	Electrical In-Wall Inspection	2	2	18-Jan-28	19-Jan-28
MS-INT-A2-1030	26B	Electrical Overhead Rough-in - Classrooms	10	10	26-Jan-28	08-Feb-28
MS-INT-A2-1040	21A	Sprinkler Overhead Rough-In	10	10	26-Jan-28	08-Feb-28
MS-INT-A2-1310	23B	Duct Testing	2	2	26-Jan-28	27-Jan-28
MS-INT-A2-1340	23B	HVAC Sheet Metal Insulation	10	10	28-Jan-28	10-Feb-28
MS-INT-A2-1360	21A	Sprinkler Overhead Hydro-Testing	2	2	09-Feb-28	10-Feb-28
MS-INT-A2-1450	07A	In-Wall Insulation	5	5	12-Apr-28	18-Apr-28
MS-INT-A2-1510	00-WT	Wall Close-In WT Inspection	2	2	19-Apr-28	20-Apr-28
MS-INT-A2-1400	01A	Wall Close-In NCC Inspection	2	2	21-Apr-28	24-Apr-28
MS-INT-A2-1090	09A	Hang Drywall	10	10	25-Apr-28	08-May-28
MS-INT-A2-1100	09A	Drywall Finishing	15	15	09-May-28	30-May-28
MS-INT-A2-1110	09J	Prime/1st Coat Wall Paint	2	2	31-May-28	01-Jun-28
MS-INT-A2-1130	09E	Install Ceiling Grid	5	5	02-Jun-28	08-Jun-28
MS-INT-A2-1140	21A	Sprinkler Ceiling Trim-Out	10	10	09-Jun-28	22-Jun-28
MS-INT-A2-1150	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA)	5	5	09-Jun-28	15-Jun-28
MS-INT-A2-1210	09J	Wall Point Ups - Second Coat Paint	10	10	09-Jun-28	22-Jun-28
MS-INT-A2-1460	26B	Install Lights	15	15	09-Jun-28	29-Jun-28
MS-INT-A2-1470	23A	Mechanical Ceiling Trim-Out	10	10	09-Jun-28	22-Jun-28
MS-INT-A2-1550	09E	Cut Ceiling Tile	5	5	09-Jun-28	15-Jun-28
MS-INT-A2-1160	28A	Wall Trim Out - (Elect/Special systems, FA)	10	10	23-Jun-28	07-Jul-28
MS-INT-A2-1410	01A	Fire Marshal Fire Damper Inspection	2	2	23-Jun-28	26-Jun-28
MS-INT-A2-1530	00-WT	Ceiling Close-In WT Inspections	2	2	30-Jun-28	03-Jul-28
MS-INT-A2-1180	01A	Ceiling Close-In NCC Inspections	2	2	05-Jul-28	06-Jul-28
MS-INT-A2-1230	09E	Drop Ceiling Tile	10	10	07-Jul-28	20-Jul-28
MS-INT-A2-1170	09H	Resinous Flooring - Science Labs	10	10	21-Jul-28	03-Aug-28
MS-INT-A2-1190	12A	Install Casework - Classroom	10	10	21-Jul-28	03-Aug-28
MS-INT-A2-1200	09C	VCT Flooring - Classroom	14	14	04-Aug-28	23-Aug-28
MS-INT-A2-1420	12A	Install Casework - Science Labs	10	10	04-Aug-28	17-Aug-28
MS-INT-A2-1790	28A	Audio Enhancement System Trim-Out	5	5	04-Aug-28	10-Aug-28
MS-INT-A2-1240	06C	Marker boards/Smart Boards, TV, Misc Specialties	10	10	18-Aug-28	31-Aug-28
MS-INT-A2-1220	06C	Install Doors & Hardware	5	5	24-Aug-28	30-Aug-28
MS-INT-A2-1250	09J	Final Painting	5	5	01-Sep-28	08-Sep-28
MS-INT-A2-1480	09C	Install Rubber Wall Base	5	5	11-Sep-28	15-Sep-28
MS-INT-A2-1540	00-WT	WT Create Work-to-Complete List	5	5	18-Sep-28	22-Sep-28
Area A- Multi-user Bathroom			152	152	10-Dec-27	17-Jul-28
MS-INT-A2-1830	09A	Layout Walls - multi-user Bathroom	1	1	10-Dec-27	10-Dec-27
MS-INT-A2-1840	09A	Frame Track / Wall / Bulkheads	5	5	17-Dec-27	23-Dec-27
MS-INT-A2-1850	23B	Install Overhead HVAC Sheetmetal	1	1	28-Dec-27	28-Dec-27

Remaining Level of Effort | Actual Level of Effort | Actual Work

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A2-1860	26B	Rough-In Overhead Electrical	1	1	28-Dec-27	28-Dec-27
MS-INT-A2-1890	21A	Rough-In Overhead Sprinkler	1	1	28-Dec-27	28-Dec-27
MS-INT-A2-1950	28A	Rough-In Special Systems - Security /AV / IT / FA	1	1	28-Dec-27	28-Dec-27
MS-INT-A2-1880	23B	Rough-In Overhead HVAC Controls	0	0	29-Dec-27	29-Dec-27
MS-INT-A2-1930	26B	Rough-In In-Wall Electrical	1	1	29-Dec-27	29-Dec-27
MS-INT-A2-1940	26B	Electrical In-Wall Inspection	2	2	30-Dec-27	03-Jan-28
MS-INT-A2-1870	22A	Rough-In Overhead Plumbing	2	2	03-May-28	04-May-28
MS-INT-A2-1910	22A	Rough-In In-Wall Plumbing - Sanitary / DW / Vent	2	2	05-May-28	08-May-28
MS-INT-A2-1900	22A	Rough-In Plumbing - Chair Carriers	5	5	09-May-28	15-May-28
MS-INT-A2-1920	22A	Plumbing Testing	2	2	16-May-28	17-May-28
MS-INT-A2-1960	06C	Install Blocking	1	1	16-May-28	16-May-28
MS-INT-A2-1970	00-WT	Wall Close-In WT Inspection	2	2	18-May-28	19-May-28
MS-INT-A2-1980	01A	Plumbing In-Wall NCC Inspection	2	2	22-May-28	23-May-28
MS-INT-A2-1990	09A	Hang Drywall Walls	2	2	24-May-28	25-May-28
MS-INT-A2-2000	09A	Hang Drywall Ceilings / Bulkheads	1	1	26-May-28	26-May-28
MS-INT-A2-2010	09A	Drywall Finishing	5	5	30-May-28	05-Jun-28
MS-INT-A2-2020	09J	Prime Coat Walls	1	1	06-Jun-28	06-Jun-28
MS-INT-A2-2040	09D	Install Wall Tile	5	5	07-Jun-28	13-Jun-28
MS-INT-A2-2050	09C	Install Resinous Flooring & Base	5	5	14-Jun-28	20-Jun-28
MS-INT-A2-2030	09E	Install Ceiling Grid & Border Tile	2	2	21-Jun-28	22-Jun-28
MS-INT-A2-2060	26B	Ceiling Trim-Out - Electrical	2	2	23-Jun-28	26-Jun-28
MS-INT-A2-2070	23B	Ceiling Trim-Out - Mechanical	1	1	23-Jun-28	23-Jun-28
MS-INT-A2-2080	21A	Ceiling Trim-Out - Sprinkler	1	1	23-Jun-28	23-Jun-28
MS-INT-A2-2090	28A	Ceiling Trim-Out - Security / AV / IT / FA	1	1	23-Jun-28	23-Jun-28
MS-INT-A2-2120	22A	Install Plumbing Fixtures - Toilets / Urinals / Sinks / Misc.	5	5	27-Jun-28	03-Jul-28
MS-INT-A2-2190	26B	Electrical Above Ceiling Inspection	2	2	27-Jun-28	28-Jun-28
MS-INT-A2-2100	00-WT	WT Ceiling Close-In Inspection	2	2	29-Jun-28	30-Jun-28
MS-INT-A2-2180	01A	NCC Ceiling Close-In Inspection	2	2	03-Jul-28	05-Jul-28
MS-INT-A2-2130	22A	Install Toilet Partitions	5	5	05-Jul-28	11-Jul-28
MS-INT-A2-2110	09E	Drop Ceiling Tile	1	1	06-Jul-28	06-Jul-28
MS-INT-A2-2140	09A	Wall Point-Up	1	1	12-Jul-28	12-Jul-28
MS-INT-A2-2150	06C	Install Accessories - Grab Bars / Mirrors / Soaps / TP / PT / Etc.	1	1	13-Jul-28	13-Jul-28
MS-INT-A2-2160	07G	Install Caulking	1	1	14-Jul-28	14-Jul-28
MS-INT-A2-2170	09J	Final Paint	1	1	17-Jul-28	17-Jul-28
Area A - Art Room / Admin			187	187	24-Nov-27	21-Aug-28
Area A - Art Room / Admin - Corridor			164	164	24-Nov-27	19-Jul-28
MS-INT-A2-2910	06C	Set Door Frames - Admin Corridor	5	5	24-Nov-27	02-Dec-27
MS-INT-A2-2200	09A	Frame Walls - Admin Corridor	2	2	10-Apr-28	11-Apr-28
MS-INT-A2-2210	09A	Top Out - "Dens Glass" - Admin Corridor	5	5	12-Apr-28	18-Apr-28
MS-INT-A2-2930	09A	Frame Bulkheads & Hard Ceilings - Admin Corridor	5	5	12-Apr-28	18-Apr-28
MS-INT-A2-2220	23A	Mechanical Overhead Piping Mains - Admin Corridor	5	5	19-Apr-28	25-Apr-28
MS-INT-A2-2940	09A	Hang Drywall Bulkheads & Hard Ceilings - Admin Corridor	2	2	19-Apr-28	20-Apr-28
MS-INT-A2-2950	09A	Drywall Finishing Bulkheads & Hard Ceilings - Admin Corridor	5	5	21-Apr-28	27-Apr-28
MS-INT-A2-2420	23B	HVAC Sheet Metal - Mains & Risers - Admin Corridor	5	5	26-Apr-28	02-May-28
MS-INT-A2-2570	22A	Plumbing Mains - Admin Corridor	5	5	26-Apr-28	02-May-28
MS-INT-A2-2860	01A	Wall Close-In WT Inspection - Admin Corridor	2	2	05-Jun-28	06-Jun-28
MS-INT-A2-2810	01A	Wall Close-In NCC Inspection - Admin Corridor	2	2	07-Jun-28	08-Jun-28
MS-INT-A2-2690	09A	Hang Drywall - Admin Corridor	1	1	09-Jun-28	09-Jun-28
MS-INT-A2-2700	09A	Drywall Finishing - Admin Corridor	5	5	12-Jun-28	16-Jun-28
MS-INT-A2-2710	09J	Prime/1st Coat Wall Paint - Admin Corridor	1	1	19-Jun-28	19-Jun-28
MS-INT-A2-2720	09E	Install Ceiling Grid - Admin Corridor	5	5	20-Jun-28	26-Jun-28
MS-INT-A2-2970	08A	Install Storefront System - Admin Corridor	2	2	20-Jun-28	21-Jun-28
MS-INT-A2-2730	21A	Sprinkler Ceiling Trim-Out - Admin Corridor	1	1	27-Jun-28	27-Jun-28
MS-INT-A2-2740	28A	Special Systems -Ceiling Trim out (Security, AV, IT/FA) - Admin Corridor	1	1	27-Jun-28	27-Jun-28
MS-INT-A2-2770	09J	Wall Point Ups - Second Coat Paint - Admin Corridor	1	1	27-Jun-28	27-Jun-28
MS-INT-A2-2830	26B	Install Lights - Admin Corridor	2	2	27-Jun-28	28-Jun-28
MS-INT-A2-2840	23A	Mechanical Ceiling Trim-Out - Admin Corridor	1	1	27-Jun-28	27-Jun-28
MS-INT-A2-2890	09E	Cut Ceiling Tile - Admin Corridor	2	2	27-Jun-28	28-Jun-28
MS-INT-A2-2750	28A	Wall Trim Out - (Elect/Special systems, FA) - Admin Corridor	1	1	28-Jun-28	28-Jun-28
MS-INT-A2-2780	06C	Install Doors & Hardware - Admin Corridor	5	5	28-Jun-28	05-Jul-28
MS-INT-A2-2900	06C	Install Div 10 Specialties - Admin Corridor	1	1	28-Jun-28	28-Jun-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A2-2820	01A	Fire Marshal Fire Damper Inspection - Admin Corridor	2	2	29-Jun-28	30-Jun-28
MS-INT-A2-2870	00-WT	Ceiling Close-In WT Inspections - Admin Corridor	2	2	29-Jun-28	30-Jun-28
MS-INT-A2-2760	01A	Ceiling Close-In NCC Inspections - Admin Corridor	2	2	03-Jul-28	05-Jul-28
MS-INT-A2-2790	09E	Drop Ceiling Tile - Admin Corridor	2	2	06-Jul-28	07-Jul-28
MS-INT-A2-2800	09J	Final Painting - Admin Corridor	1	1	06-Jul-28	06-Jul-28
MS-INT-A2-2960	09C	Install Carpet Flooring (CHANGE TO VCT) - Admin Corridor	5	5	10-Jul-28	14-Jul-28
MS-INT-A2-2850	09C	Install Rubber Wall Base - Admin Corridor	1	1	17-Jul-28	17-Jul-28
MS-INT-A2-2880	00-WT	WT Create Work-to-Complete List - Admin Corridor	2	2	18-Jul-28	19-Jul-28
Area A- Admin Offices			92	92	12-Apr-28	21-Aug-28
MS-INT-A2-2270	06C	Install Blocking - Admin	1	1	12-Apr-28	12-Apr-28
MS-INT-A2-2560	09A	Frame Walls - Admin	2	2	12-Apr-28	13-Apr-28
MS-INT-A2-2580	07A	In-Wall Insulation - Admin	2	2	13-Apr-28	14-Apr-28
MS-INT-A2-2250	26B	Electrical In Wall Rough-In - Admin	5	5	14-Apr-28	20-Apr-28
MS-INT-A2-2620	23A	Hang FCUs - Admin	5	5	14-Apr-28	20-Apr-28
MS-INT-A2-2980	09A	Frame Bulkheads & Hard Ceilings - Admin	1	1	14-Apr-28	14-Apr-28
MS-INT-A2-2440	23A	Mechanical Overhead Piping - Expansion Loops - Admin	5	5	19-Apr-28	25-Apr-28
MS-INT-A2-2260	26C	Special Systems - Rough-In (Security,AV, ITFA) - Admin	2	2	21-Apr-28	24-Apr-28
MS-INT-A2-2680	23A	Install Condensate Piping - Admin	10	10	21-Apr-28	04-May-28
MS-INT-A2-2920	23B	Measure / Fab / Install Ductwork Transitions - Admin	5	5	21-Apr-28	27-Apr-28
MS-INT-A2-2640	26B	Electrical In-Wall WT Inspection - Admin	2	2	25-Apr-28	26-Apr-28
MS-INT-A2-2430	23A	Mechanical Overhead Piping - FCUs - Admin	5	5	26-Apr-28	02-May-28
MS-INT-A2-2520	26B	Electrical In-Wall Inspection - Admin	2	2	27-Apr-28	28-Apr-28
MS-INT-A2-2450	23B	HVAC Sheet Metal - Admin	10	10	03-May-28	16-May-28
MS-INT-A2-2500	25A	Install HVAC Controls & Valves - Admin	5	5	03-May-28	09-May-28
MS-INT-A2-2470	23A	Mechanical Piping - Testing Above Ceiling - Admin	2	2	10-May-28	11-May-28
MS-INT-A2-2480	23A	Mechanical Piping Insulation - Admin	5	5	12-May-28	18-May-28
MS-INT-A2-2230	26B	Electrical Overhead Rough-in - Admin	5	5	17-May-28	23-May-28
MS-INT-A2-2240	21A	Sprinkler Overhead Rough-In - Admin	2	2	17-May-28	18-May-28
MS-INT-A2-2460	23B	Duct Testing - Admin	2	2	17-May-28	18-May-28
MS-INT-A2-2490	23B	HVAC Sheet Metal Insulation - Admin	10	10	19-May-28	02-Jun-28
MS-INT-A2-2510	21A	Sprinkler Overhead Hydro-Testing - Admin	2	2	19-May-28	22-May-28
MS-INT-A2-2630	00-WT	Wall Close-In WT Inspection - Admin	2	2	05-Jun-28	06-Jun-28
MS-INT-A2-2530	01A	Wall Close-In NCC Inspection - Admin	2	2	07-Jun-28	08-Jun-28
MS-INT-A2-2280	09A	Hang Drywall - Admin	5	5	09-Jun-28	15-Jun-28
MS-INT-A2-2290	09A	Drywall Finishing - Admin	5	5	16-Jun-28	22-Jun-28
MS-INT-A2-2990	09A	Hang Drywall Bulkheads & Hard Ceilings - Admin	1	1	16-Jun-28	16-Jun-28
MS-INT-A2-3000	09A	Drywall Finishing Bulkheads & Hard Ceilings - Admin	2	2	23-Jun-28	26-Jun-28
MS-INT-A2-2300	09J	Prime/1st Coat Wall Paint - Admin	2	2	27-Jun-28	28-Jun-28
MS-INT-A2-2310	09E	Install Ceiling Grid - Admin	5	5	29-Jun-28	06-Jul-28
MS-INT-A2-2320	21A	Sprinkler Ceiling Trim-Out - Admin	5	5	07-Jul-28	13-Jul-28
MS-INT-A2-2330	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Admin	2	2	07-Jul-28	10-Jul-28
MS-INT-A2-2370	09J	Wall Point Ups - Second Coat Paint - Admin	2	2	07-Jul-28	10-Jul-28
MS-INT-A2-2590	26B	Install Lights - Admin	5	5	07-Jul-28	13-Jul-28
MS-INT-A2-2600	23A	Mechanical Ceiling Trim-Out - Admin	5	5	07-Jul-28	13-Jul-28
MS-INT-A2-2670	09E	Cut Ceiling Tile - Admin	5	5	07-Jul-28	13-Jul-28
MS-INT-A2-2340	28A	Wall Trim Out - (Elect/Special systems, FA) - Admin	5	5	11-Jul-28	17-Jul-28
MS-INT-A2-2540	01A	Fire Marshal Fire Damper Inspection - Admin	2	2	14-Jul-28	17-Jul-28
MS-INT-A2-2650	00-WT	Ceiling Close-In WT Inspections - Admin	2	2	14-Jul-28	17-Jul-28
MS-INT-A2-2350	01A	Ceiling Close-In NCC Inspections - Admin	2	2	18-Jul-28	19-Jul-28
MS-INT-A2-2390	09E	Drop Ceiling Tile - Admin	2	2	20-Jul-28	21-Jul-28
MS-INT-A2-2550	12A	Install Casework - Admin	2	2	24-Jul-28	25-Jul-28
MS-INT-A2-2360	09C	VCT Flooring - Admin	2	2	26-Jul-28	27-Jul-28
MS-INT-A2-3010	09C	Install Carpet Flooring - Admin	5	5	26-Jul-28	01-Aug-28
MS-INT-A2-2380	06C	Install Doors & Hardware - Admin	5	5	28-Jul-28	03-Aug-28
MS-INT-A2-2400	06C	Marker boards/Smart Boards, TV, Misc Specialties - Admin	2	2	28-Jul-28	31-Jul-28
MS-INT-A2-2410	09J	Final Painting - Admin	5	5	04-Aug-28	10-Aug-28
MS-INT-A2-2610	09C	Install Rubber Wall Base - Admin	5	5	11-Aug-28	17-Aug-28
MS-INT-A2-2660	00-WT	WT Create Work-to-Complete List	2	2	18-Aug-28	21-Aug-28
Area A- Art Rooms			49	49	14-Apr-28	22-Jun-28
MS-INT-A2-3670	09A	Frame Walls - Art Rooms	1	1	14-Apr-28	14-Apr-28
MS-INT-A2-3360	26B	Electrical In Wall Rough-In - Art Rooms	2	2	17-Apr-28	18-Apr-28

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-A2-3720	23A	Hang FCUs - Art Rooms	1	1	17-Apr-28	17-Apr-28
MS-INT-A2-3810	09A	Frame Bulkheads & Hard Ceilings - Art Rooms	2	2	17-Apr-28	18-Apr-28
MS-INT-A2-3530	23A	Mechanical Overhead Piping - FCUs - Art Rooms	1	1	18-Apr-28	18-Apr-28
MS-INT-A2-3790	23A	Install Condensate Piping - Art Rooms	1	1	18-Apr-28	18-Apr-28
MS-INT-A2-3800	23B	Measure / Fab / Install Ductwork Transitions - Art Rooms	5	5	18-Apr-28	24-Apr-28
MS-INT-A2-3370	26C	Special Systems - Rough-In (Security,AV, ITFA) - Art Rooms	1	1	19-Apr-28	19-Apr-28
MS-INT-A2-3540	23A	Mechanical Overhead Piping - Expansion Loops - Art Rooms	1	1	19-Apr-28	19-Apr-28
MS-INT-A2-3600	25A	Install HVAC Controls & Valves - Art Rooms	1	1	19-Apr-28	19-Apr-28
MS-INT-A2-3570	23A	Mechanical Piping - Testing Above Ceiling - Art Rooms	2	2	20-Apr-28	21-Apr-28
MS-INT-A2-3750	26B	Electrical In-Wall WT Inspection - Art Rooms	2	2	20-Apr-28	21-Apr-28
MS-INT-A2-3580	23A	Mechanical Piping Insulation - Art Rooms	2	2	24-Apr-28	25-Apr-28
MS-INT-A2-3640	26B	Electrical In-Wall Inspection - Art Rooms	2	2	24-Apr-28	25-Apr-28
MS-INT-A2-3550	23B	HVAC Sheet Metal - Art Rooms	2	2	25-Apr-28	26-Apr-28
MS-INT-A2-3330	26B	Electrical Overhead Rough-in - Art Rooms	5	5	27-Apr-28	03-May-28
MS-INT-A2-3340	21A	Sprinkler Overhead Rough-In - Art Rooms	1	1	27-Apr-28	27-Apr-28
MS-INT-A2-3560	23B	Duct Testing - Art Rooms	2	2	27-Apr-28	28-Apr-28
MS-INT-A2-3610	21A	Sprinkler Overhead Hydro-Testing - Art Rooms	2	2	28-Apr-28	01-May-28
MS-INT-A2-3590	23B	HVAC Sheet Metal Insulation - Art Rooms	1	1	01-May-28	01-May-28
MS-INT-A2-3350	22A	Plumbing In Wall Rough-In - Art Rooms	1	1	03-May-28	03-May-28
MS-INT-A2-3380	06C	Install Blocking - Art Rooms	1	1	04-May-28	04-May-28
MS-INT-A2-3620	22A	Plumbing In Wall Insulation - Art Rooms	1	1	04-May-28	04-May-28
MS-INT-A2-3680	07A	In-Wall Insulation - Art Rooms	1	1	05-May-28	05-May-28
MS-INT-A2-3730	22A	Plumbing In-Wall WT Inspection - Art Rooms	2	2	05-May-28	08-May-28
MS-INT-A2-3740	00-WT	Wall Close-In WT Inspection - Art Rooms	2	2	08-May-28	09-May-28
MS-INT-A2-3630	22A	Plumbing In-Wall NCC Inspection - Art Rooms	2	2	09-May-28	10-May-28
MS-INT-A2-3650	01A	Wall Close-In NCC Inspection - Art Rooms	2	2	10-May-28	11-May-28
MS-INT-A2-3390	09A	Hang Drywall - Art Rooms	1	1	12-May-28	12-May-28
MS-INT-A2-3400	09A	Drywall Finishing - Art Rooms	5	5	15-May-28	19-May-28
MS-INT-A2-3820	09A	Hang Drywall Bulkheads & Hard Ceilings - Art Rooms	1	1	15-May-28	15-May-28
MS-INT-A2-3830	09A	Drywall Finishing Bulkheads & Hard Ceilings - Art Rooms	5	5	22-May-28	26-May-28
MS-INT-A2-3410	09J	Prime/1st Coat Wall Paint - Art Rooms	1	1	30-May-28	30-May-28
MS-INT-A2-3420	09E	Install Ceiling Grid - Art Rooms	2	2	31-May-28	01-Jun-28
MS-INT-A2-3430	21A	Sprinkler Ceiling Trim-Out - Art Rooms	1	1	02-Jun-28	02-Jun-28
MS-INT-A2-3440	28A	Special Systems - Ceiling Trim out (Security,AV, ITFA) - Art Rooms	1	1	02-Jun-28	02-Jun-28
MS-INT-A2-3480	09J	Wall Point Ups - Second Coat Paint - Art Rooms	1	1	02-Jun-28	02-Jun-28
MS-INT-A2-3690	26B	Install Lights - Art Rooms	2	2	02-Jun-28	05-Jun-28
MS-INT-A2-3700	23A	Mechanical Ceiling Trim-Out - Art Rooms	1	1	02-Jun-28	02-Jun-28
MS-INT-A2-3780	09E	Cut Ceiling Tile - Art Rooms	1	1	02-Jun-28	02-Jun-28
MS-INT-A2-3450	28A	Wall Trim Out - (Elect/Special systems, FA) - Art Rooms	2	2	05-Jun-28	06-Jun-28
MS-INT-A2-3510	06C	Marker boards/Smart Boards, TV, Misc Specialties - Art Rooms	1	1	05-Jun-28	05-Jun-28
MS-INT-A2-3660	01A	Fire Marshal Fire Damper Inspection - Art Rooms	0	0	05-Jun-28	05-Jun-28
MS-INT-A2-3760	00-WT	Ceiling Close-In WT Inspections - Art Rooms	2	2	06-Jun-28	07-Jun-28
MS-INT-A2-3460	01A	Ceiling Close-In NCC Inspections - Art Rooms	2	2	08-Jun-28	09-Jun-28
MS-INT-A2-3500	09E	Drop Ceiling Tile - Art Rooms	1	1	12-Jun-28	12-Jun-28
MS-INT-A2-3470	12A	Install Casework - Art Rooms	1	1	13-Jun-28	13-Jun-28
MS-INT-A2-3490	06C	Install Doors & Hardware - Art Rooms	1	1	13-Jun-28	13-Jun-28
MS-INT-A2-3850	09C	Install Carpet Flooring - Art Rooms	0	0	13-Jun-28	13-Jun-28
MS-INT-A2-3860	09C	Install VCT Flooring - Art Rooms	0	0	13-Jun-28	13-Jun-28
MS-INT-A2-3520	09J	Final Painting - Art Rooms	1	1	14-Jun-28	14-Jun-28
MS-INT-A2-3840	09H	Install Resinous Flooring & Base - Art Rooms	5	5	14-Jun-28	20-Jun-28
MS-INT-A2-3710	09C	Install Rubber Wall Base - Art Rooms	0	0	15-Jun-28	15-Jun-28
MS-INT-A2-3770	00-WT	WT Create Work-to-Complete List	2	2	21-Jun-28	22-Jun-28
MS Penthouse			95	95	29-Nov-27	12-Apr-28
MS-INT-PH-1000	23A	Install Mechanical Equipment	20	20	29-Nov-27	28-Dec-27
MS-INT-PH-1010	09A	Frame Walls	10	10	29-Dec-27	12-Jan-28
MS-INT-PH-1020	21A	Sprinkler Overhead Rough-In	5	5	13-Jan-28	19-Jan-28
MS-INT-PH-1030	22A	Plumbing In Wall Rough-In	10	10	13-Jan-28	26-Jan-28
MS-INT-PH-1040	26B	Electrical In Wall Rough-In	1	1	13-Jan-28	13-Jan-28
MS-INT-PH-1050	23A	Install Mechanical Piping	25	25	13-Jan-28	16-Feb-28
MS-INT-PH-1060	26C	Special Systems - Rough-In (Security,AV, ITFA)	15	15	14-Jan-28	03-Feb-28
MS-INT-PH-1080	21A	Sprinkler Overhead Hydro-Testing	2	2	20-Jan-28	21-Jan-28

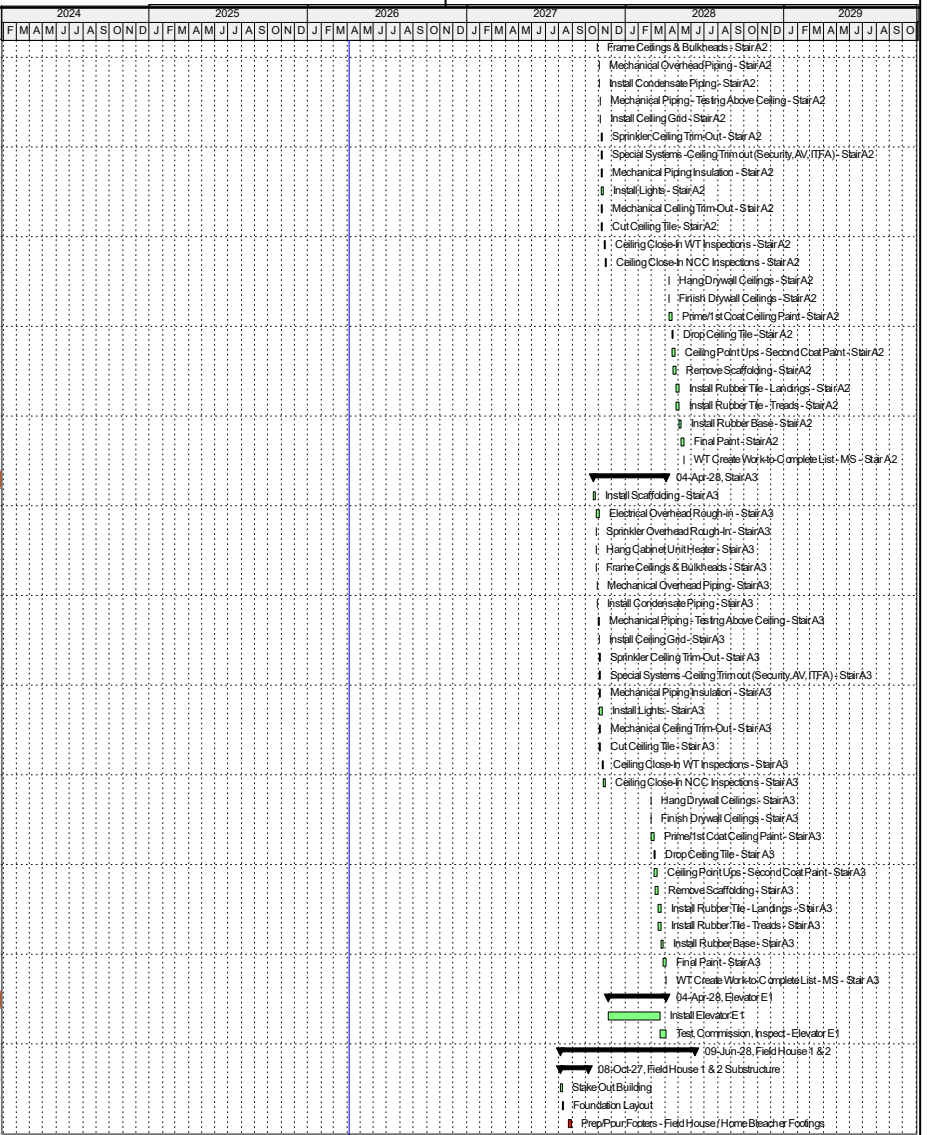
Remaining Level of Effort | Actual Level of Effort | Actual Work

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-PH-1070	06C	Install Blocking	0	0	27-Jan-28	27-Jan-28
MS-INT-PH-1110	22A	Plumbing In-Wall NCC Inspection	2	2	27-Jan-28	28-Jan-28
MS-INT-PH-1120	07A	In-Wall Insulation	2	2	27-Jan-28	28-Jan-28
MS-INT-PH-1090	22A	Plumbing In-Wall WT Inspection	0	0	27-Jan-28	27-Jan-28
MS-INT-PH-1140	00-WT	Electrical In-Wall WT Inspection	2	2	04-Feb-28	07-Feb-28
MS-INT-PH-1150	26B	Electrical Overhead Rough-in	15	15	08-Feb-28	28-Feb-28
MS-INT-PH-1160	26B	Electrical In-Wall Inspection	2	2	08-Feb-28	09-Feb-28
MS-INT-PH-1170	00-WT	Wall Close-In WT Inspection	2	2	10-Feb-28	11-Feb-28
MS-INT-PH-1180	01A	Wall Close-In NCC Inspection	2	2	14-Feb-28	15-Feb-28
MS-INT-PH-1190	09A	Hang Drywall	5	5	16-Feb-28	22-Feb-28
MS-INT-PH-1100	23A	Install Mechanical Piping Insulation	20	20	17-Feb-28	15-Mar-28
MS-INT-PH-1200	09A	Drywall Finishing	2	2	23-Feb-28	24-Feb-28
MS-INT-PH-1210	09J	Prime/1st Coat Wall Paint	2	2	25-Feb-28	28-Feb-28
MS-INT-PH-1220	06C	Install Doors & Hardware	5	5	25-Feb-28	02-Mar-28
MS-INT-PH-1230	09J	Wall Point Ups - Second Coat Paint	2	2	03-Mar-28	06-Mar-28
MS-INT-PH-1240	28A	Wall Trim Out - (Elect/Special systems, FA)	15	15	07-Mar-28	27-Mar-28
MS-INT-PH-1130	26B	Install Lights	5	5	16-Mar-28	22-Mar-28
MS-INT-PH-1280	23A	Startup & Commissioning of Equipment - MS Penthouse	5	5	16-Mar-28	22-Mar-28
MS-INT-PH-1290	23A	Prefunctional Testing of Equipment - MS Penthouse	5	5	23-Mar-28	29-Mar-28
MS-INT-PH-1250	09J	Final Painting	2	2	28-Mar-28	29-Mar-28
MS-INT-PH-1260	01A	Fire Marshal Inspection	2	2	28-Mar-28	29-Mar-28
MS-INT-PH-1300	23A	Checkout Equipment Function & Controls Sequence - MS Penthouse	5	5	30-Mar-28	05-Apr-28
MS-INT-PH-1270	00-WT	WT Create Work-to-Complete List	5	5	06-Apr-28	12-Apr-28
MS Stairs / Elevator			169	169	19-Oct-27	19-Jun-28
Feature Stair A1			164	164	26-Oct-27	19-Jun-28
MS-INT-VT-1000	09D	Install Wall Tile - Feature Stair A1	15	15	26-Oct-27	15-Nov-27
MS-INT-VT-1010	06C	Install Scaffolding - Feature Stair A1	5	5	16-Nov-27	22-Nov-27
MS-INT-VT-1020	26B	Electrical Overhead Rough-in - Feature Stair A1	5	5	23-Nov-27	01-Dec-27
MS-INT-VT-1030	21A	Sprinkler Overhead Rough-In - Feature Stair A1	5	5	23-Nov-27	01-Dec-27
MS-INT-VT-1040	09E	Install Ceiling Grid - Feature Stair A1	5	5	23-Nov-27	01-Dec-27
MS-INT-VT-1050	23A	Hang Cabinet Unit Heater - Feature Stair A1	2	2	23-Nov-27	24-Nov-27
MS-INT-VT-1080	23A	Mechanical Overhead Piping - Feature Stair A1	2	2	29-Nov-27	30-Nov-27
MS-INT-VT-1120	23A	Install Condensate Piping - Feature Stair A1	1	1	29-Nov-27	29-Nov-27
MS-INT-VT-1130	23A	Mechanical Piping - Testing Above Ceiling - Feature Stair A1	2	2	01-Dec-27	02-Dec-27
MS-INT-VT-1060	21A	Sprinkler Ceiling Trim-Out - Feature Stair A1	2	2	02-Dec-27	03-Dec-27
MS-INT-VT-1070	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Feature Stair A1	2	2	02-Dec-27	03-Dec-27
MS-INT-VT-1090	26B	Install Lights - Feature Stair A1	5	5	02-Dec-27	08-Dec-27
MS-INT-VT-1100	23A	Mechanical Ceiling Trim-Out - Feature Stair A1	2	2	02-Dec-27	03-Dec-27
MS-INT-VT-1110	09E	Cut Ceiling Tile - Feature Stair A1	2	2	02-Dec-27	03-Dec-27
MS-INT-VT-1140	23A	Mechanical Piping Insulation - Feature Stair A1	2	2	03-Dec-27	06-Dec-27
MS-INT-VT-1150	00-WT	Ceiling Close-In WT Inspections - Feature Stair A1	2	2	09-Dec-27	10-Dec-27
MS-INT-VT-1160	01A	Ceiling Close-In NCC Inspections - Feature Stair A1	2	2	13-Dec-27	14-Dec-27
MS-INT-VT-1170	09A	Hang Drywall Ceilings - Feature Stair A1	0	0	12-Apr-28	12-Apr-28
MS-INT-VT-1190	09A	Finish Drywall Ceilings - Feature Stair A1	0	0	12-Apr-28	12-Apr-28
MS-INT-VT-1210	09J	Prime/1st Coat Ceiling Paint - Feature Stair A1	0	0	12-Apr-28	12-Apr-28
MS-INT-VT-1220	09J	Ceiling Point Ups - Second Coat Paint - Feature Stair A1	0	0	12-Apr-28	12-Apr-28
MS-INT-VT-1180	09E	Drop Ceiling Tile - Feature Stair A1	2	2	19-Apr-28	20-Apr-28
MS-INT-VT-1200	06C	Remove Scaffolding - Feature Stair A1	5	5	21-Apr-28	27-Apr-28
MS-INT-VT-1230	09G	Terrazzo - Feature Stair A1 - Layout & Install Strips - Landings	5	5	28-Apr-28	04-May-28
MS-INT-VT-1240	09G	Terrazzo - Feature Stair A1 - Preperation - Landings	2	2	05-May-28	08-May-28
MS-INT-VT-1250	09G	Terrazzo - Feature Stair A1 - Pour Terrazo - Landings	5	5	09-May-28	15-May-28
MS-INT-VT-1260	09G	Terrazzo - Feature Stair A1 - Grind & Polish - Landings	10	10	16-May-28	30-May-28
MS-INT-VT-1270	09G	Terrazzo - Feature Stair A1 - Apply Sealant - Landings	2	2	31-May-28	01-Jun-28
MS-INT-VT-1280	09G	Terrazzo - Feature Stair A1 - Install Precast Treads	10	10	02-Jun-28	15-Jun-28
MS-INT-VT-1290	09J	Final Paint - Feature Stair A1	1	1	16-Jun-28	16-Jun-28
MS-INT-VT-1300	00-WT	WT Create Work-to-Complete List - MS - Feature Stair A1	1	1	19-Jun-28	19-Jun-28
Stair A2			143	143	22-Oct-27	16-May-28
MS-INT-VT-2220	06C	Install Scaffolding - Stair A2	5	5	22-Oct-27	28-Oct-27
MS-INT-VT-2020	26B	Electrical Overhead Rough-in - Stair A2	5	5	29-Oct-27	04-Nov-27
MS-INT-VT-2030	21A	Sprinkler Overhead Rough-In - Stair A2	2	2	29-Oct-27	01-Nov-27
MS-INT-VT-2140	23A	Hang Cabinet Unit Heater - Stair A2	2	2	29-Oct-27	01-Nov-27

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
MS-INT-VT-2270	09A	Frame Ceilings & Bulkheads - Stair A2	0	0	29-Oct-27	29-Oct-27
MS-INT-VT-2090	23A	Mechanical Overhead Piping - Stair A2	2	2	02-Nov-27	03-Nov-27
MS-INT-VT-2180	23A	Install Condensate Piping - Stair A2	2	2	02-Nov-27	03-Nov-27
MS-INT-VT-2100	23A	Mechanical Piping - Testing Above Ceiling - Stair A2	2	2	04-Nov-27	05-Nov-27
MS-INT-VT-2040	09E	Install Ceiling Grid - Stair A2	1	1	05-Nov-27	05-Nov-27
MS-INT-VT-2050	21A	Sprinkler Ceiling Trim-Out - Stair A2	2	2	08-Nov-27	09-Nov-27
MS-INT-VT-2060	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Stair A2	2	2	08-Nov-27	09-Nov-27
MS-INT-VT-2110	23A	Mechanical Piping Insulation - Stair A2	2	2	08-Nov-27	09-Nov-27
MS-INT-VT-2120	26B	Install Lights - Stair A2	5	5	08-Nov-27	12-Nov-27
MS-INT-VT-2130	23A	Mechanical Ceiling Trim-Out - Stair A2	2	2	08-Nov-27	09-Nov-27
MS-INT-VT-2170	09E	Cut Ceiling Tile - Stair A2	2	2	08-Nov-27	09-Nov-27
MS-INT-VT-2150	00-WT	Ceiling Close-In WT Inspections - Stair A2	2	2	15-Nov-27	16-Nov-27
MS-INT-VT-2070	01A	Ceiling Close-In NCC Inspections - Stair A2	2	2	17-Nov-27	18-Nov-27
MS-INT-VT-2010	09A	Hang Drywall Ceilings - Stair A2	0	0	12-Apr-28	12-Apr-28
MS-INT-VT-2190	09A	Finish Drywall Ceilings - Stair A2	0	0	12-Apr-28	12-Apr-28
MS-INT-VT-2200	09J	Prime/1st Coat Ceiling Paint - Stair A2	5	5	12-Apr-28	18-Apr-28
MS-INT-VT-2080	09E	Drop Ceiling Tile - Stair A2	2	2	19-Apr-28	20-Apr-28
MS-INT-VT-2210	09J	Ceiling Point Ups - Second Coat Paint - Stair A2	5	5	19-Apr-28	25-Apr-28
MS-INT-VT-2230	06C	Remove Scaffolding - Stair A2	5	5	21-Apr-28	27-Apr-28
MS-INT-VT-2250	09C	Install Rubber Tile - Landings - Stair A2	5	5	28-Apr-28	04-May-28
MS-INT-VT-2260	09C	Install Rubber Tile - Treads - Stair A2	5	5	28-Apr-28	04-May-28
MS-INT-VT-2000	09C	Install Rubber Base - Stair A2	2	2	05-May-28	08-May-28
MS-INT-VT-2240	09J	Final Paint - Stair A2	5	5	09-May-28	15-May-28
MS-INT-VT-2160	00-WT	WT Create Work-to-Complete List - MS - Stair A2	1	1	16-May-28	16-May-28
Stair A3			116	116	19-Oct-27	04-Apr-28
MS-INT-VT-3220	06C	Install Scaffolding - Stair A3	5	5	19-Oct-27	25-Oct-27
MS-INT-VT-3020	26B	Electrical Overhead Rough-in - Stair A3	5	5	26-Oct-27	01-Nov-27
MS-INT-VT-3030	21A	Sprinkler Overhead Rough-In - Stair A3	2	2	26-Oct-27	27-Oct-27
MS-INT-VT-3140	23A	Hang Cabinet Unit Heater - Stair A3	2	2	26-Oct-27	27-Oct-27
MS-INT-VT-3270	09A	Frame Ceilings & Bulkheads - Stair A3	0	0	26-Oct-27	26-Oct-27
MS-INT-VT-3090	23A	Mechanical Overhead Piping - Stair A3	2	2	28-Oct-27	29-Oct-27
MS-INT-VT-3180	23A	Install Condensate Piping - Stair A3	2	2	28-Oct-27	29-Oct-27
MS-INT-VT-3100	23A	Mechanical Piping - Testing Above Ceiling - Stair A3	2	2	01-Nov-27	02-Nov-27
MS-INT-VT-3040	09E	Install Ceiling Grid - Stair A3	1	1	02-Nov-27	02-Nov-27
MS-INT-VT-3050	21A	Sprinkler Ceiling Trim-Out - Stair A3	2	2	03-Nov-27	04-Nov-27
MS-INT-VT-3060	28A	Special Systems -Ceiling Trim out (Security, AV, ITFA) - Stair A3	2	2	03-Nov-27	04-Nov-27
MS-INT-VT-3110	23A	Mechanical Piping Insulation - Stair A3	2	2	03-Nov-27	04-Nov-27
MS-INT-VT-3120	26B	Install Lights - Stair A3	5	5	03-Nov-27	09-Nov-27
MS-INT-VT-3130	23A	Mechanical Ceiling Trim-Out - Stair A3	2	2	03-Nov-27	04-Nov-27
MS-INT-VT-3170	09E	Cut Ceiling Tile - Stair A3	2	2	03-Nov-27	04-Nov-27
MS-INT-VT-3150	00-WT	Ceiling Close-In WT Inspections - Stair A3	2	2	10-Nov-27	11-Nov-27
MS-INT-VT-3070	01A	Ceiling Close-In NCC Inspections - Stair A3	2	2	12-Nov-27	15-Nov-27
MS-INT-VT-3010	09A	Hang Drywall Ceilings - Stair A3	0	0	01-Mar-28	01-Mar-28
MS-INT-VT-3190	09A	Finish Drywall Ceilings - Stair A3	0	0	01-Mar-28	01-Mar-28
MS-INT-VT-3200	09J	Prime/1st Coat Ceiling Paint - Stair A3	5	5	01-Mar-28	07-Mar-28
MS-INT-VT-3080	09E	Drop Ceiling Tile - Stair A3	2	2	08-Mar-28	09-Mar-28
MS-INT-VT-3210	09J	Ceiling Point Ups - Second Coat Paint - Stair A3	5	5	08-Mar-28	14-Mar-28
MS-INT-VT-3230	06C	Remove Scaffolding - Stair A3	5	5	10-Mar-28	16-Mar-28
MS-INT-VT-3250	09C	Install Rubber Tile - Landings - Stair A3	5	5	17-Mar-28	23-Mar-28
MS-INT-VT-3260	09C	Install Rubber Tile - Treads - Stair A3	5	5	17-Mar-28	23-Mar-28
MS-INT-VT-3000	09C	Install Rubber Base - Stair A3	2	2	24-Mar-28	27-Mar-28
MS-INT-VT-3240	09J	Final Paint - Stair A3	5	5	28-Mar-28	03-Apr-28
MS-INT-VT-3160	00-WT	WT Create Work-to-Complete List - MS - Stair A3	1	1	04-Apr-28	04-Apr-28
Elevator E1			90	90	24-Nov-27	04-Apr-28
MS-INT-VT-5000	14A	Install Elevator E1	80	80	24-Nov-27	21-Mar-28
MS-INT-VT-5010	01A	Test, Commission, Inspect - Elevator E1	10	10	22-Mar-28	04-Apr-28
Field House 1 & 2			214	214	06-Aug-27	09-Jun-28
Field House 1 & 2 Substructure			39	39	06-Aug-27	08-Oct-27
FH-1020	01B	Stake Out Building	2	2	06-Aug-27	09-Aug-27
FH-1030	03A	Foundation Layout	2	2	10-Aug-27	11-Aug-27
FH-1040	03A	Prep/Pour Footers - Field House / Home Bleacher Footings	5	5	24-Aug-27	30-Aug-27



Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
FH-1070	04A	Masonry Foundation Walls	10	10	31-Aug-27	14-Sep-27
FH-1080	04A	Install Foundation Wall Insulation/Waterproofing	5	5	15-Sep-27	23-Sep-27
FH-1090	03A	Backfill Foundation Wall	2	2	24-Sep-27	27-Sep-27
FH-1100	22A	Underground Plumbing	5	5	28-Sep-27	06-Oct-27
FH-1110	26B	Underground Electric	5	5	28-Sep-27	06-Oct-27
FH-1120	03A	Prep/Pour Slab	2	2	07-Oct-27	08-Oct-27
Field House 1 & 2 Superstructure			114	114	11-Oct-27	23-Mar-28
FH-1140	06C	Set Exterior Hollow Metal Door Frames	2	2	11-Oct-27	12-Oct-27
FH-1125	04A	Block Exterior Walls to Bearing Elevation	20	20	11-Oct-27	10-Nov-27
FH-1150	06C	Install Window Blocking	5	5	11-Nov-27	18-Nov-27
FH-1170	04A	Set Bearing Plates	2	2	11-Nov-27	12-Nov-27
FH-1180	05A	Set Roof Trusses	5	5	15-Nov-27	22-Nov-27
FH-1330	07A	Install Exterior Wall Insulation	5	5	19-Nov-27	29-Nov-27
FH-1190	05A	Install Roof Decking	5	5	23-Nov-27	01-Dec-27
FH-1160	04A	Top Out Block Walls	10	10	02-Dec-27	22-Dec-27
FH-1200	06C	Install Roof Blocking	10	10	02-Dec-27	22-Dec-27
FH-1590	04A	Masonry Veneer	25	25	02-Dec-27	02-Feb-28
FH-1310	07E	Facia & Soffit Layout/Field measure	5	5	23-Dec-27	31-Dec-27
FH-1320	06C	Facia & Soffit Blocking	10	10	03-Jan-28	02-Feb-28
FH-1340	07E	Facia & Soffit Install	10	10	04-Feb-28	29-Feb-28
FH-1370	06C	Install Exterior Doors	5	5	04-Feb-28	18-Feb-28
FH-1270	07E	Install Roofing System (Insulation, EPDM etc.)	10	10	01-Mar-28	20-Mar-28
FH-1380	07E	Install Gutters and Down Spouts	2	2	21-Mar-28	23-Mar-28
Field House 1 & 2 Interiors			133	133	02-Dec-27	09-Jun-28
FH-1130	04A	Wall Layout	2	2	02-Dec-27	03-Dec-27
FH-1240	21A	Sprinkler Rough-In	5	5	02-Dec-27	08-Dec-27
FH-1210	26B	Electrical Rough-In	30	30	06-Dec-27	19-Jan-28
FH-1260	22A	Sanitary Rough-In	20	20	06-Dec-27	05-Jan-28
FH-1600	04A	Interior Block 'Dry' Walls	20	20	06-Dec-27	05-Jan-28
FH-1530	21A	Sprinkler Hydro Testing	5	5	09-Dec-27	15-Dec-27
FH-1250	00-OWN	Domestic Rough-In	20	20	13-Dec-27	12-Jan-28
FH-1220	26B	Fire Alarm Rough-In	10	10	20-Dec-27	05-Jan-28
FH-1620	01A	Plumbing Inspections	20	20	20-Dec-27	19-Jan-28
FH-1610	04A	Close up Masonry Wet Walls	25	25	29-Dec-27	02-Feb-28
FH-1230	23A	HVAC Rough-In	20	20	06-Jan-28	02-Feb-28
FH-1290	01A	Electrical Inspection	2	2	20-Jan-28	21-Jan-28
FH-1390	08A	Install Windows	5	5	03-Feb-28	09-Feb-28
FH-1400	08C	Install Overhead Coiling Door	5	5	03-Feb-28	09-Feb-28
FH-1410	09J	Prime & First Coat Paint Interior Walls	20	20	21-Feb-28	17-Mar-28
FH-1280	26B	Install FA Devices	2	2	20-Mar-28	21-Mar-28
FH-1420	09E	Install Ceiling Grid	5	5	20-Mar-28	24-Mar-28
FH-1300	23A	Set HVAC Units	5	5	21-Mar-28	27-Mar-28
FH-1540	00-WT	WT Work to Complete - Field House	5	5	24-Mar-28	30-Mar-28
FH-1450	23B	Install GRDs	5	5	27-Mar-28	31-Mar-28
FH-1460	26B	Install Light Fixtures	5	5	27-Mar-28	31-Mar-28
FH-1470	21A	Cut Back Sprinkler Heads	5	5	27-Mar-28	31-Mar-28
FH-1360	01A	WT Above Ceiling Inspection	2	2	03-Apr-28	04-Apr-28
FH-1650	23A	Startup & Commissioning of Equipment - FH	5	5	03-Apr-28	07-Apr-28
FH-1630	01A	NCC Above Ceiling Inspection	2	2	05-Apr-28	06-Apr-28
FH-1430	09H	Install Flooring	10	10	07-Apr-28	20-Apr-28
FH-1660	23A	Prefunctional Testing of Equipment - FH	5	5	10-Apr-28	14-Apr-28
FH-1350	22A	Install Plumbing Fixtures	10	10	14-Apr-28	27-Apr-28
FH-1670	23A	Checkout Equipment Function & Controls Sequence - FH	5	5	17-Apr-28	21-Apr-28
FH-1480	06C	Install lockers & Benches	10	10	21-Apr-28	04-May-28
FH-1490	09J	Second Coat Paint	5	5	21-Apr-28	27-Apr-28
FH-1440	09E	Drop Ceiling Tiles	5	5	24-Apr-28	28-Apr-28
FH-1500	06C	Install Toilet Partitions	10	10	28-Apr-28	11-May-28
FH-1520	06C	Hang Doors/Install Hardware	5	5	28-Apr-28	04-May-28
FH-1510	06C	Install Bathroom Accessories	5	5	12-May-28	18-May-28
FH-1550	09J	Final Coat Paint	5	5	19-May-28	25-May-28
FH-1560	01A	Fire Marshal First Inspection	5	5	19-May-28	25-May-28

Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
FH-1640	00-WT	Final Clean - Field House	10	10	26-May-28	09-Jun-28
Agriculture / AeroSpace Bldg			207	207	06-Aug-27	31-May-28
Ag / Aero Bldg Substructure			38	38	06-Aug-27	07-Oct-27
AG-1000	01B	Stake Out Building	5	5	06-Aug-27	13-Aug-27
AG-1010	26B	Underground Electric	5	5	17-Sep-27	24-Sep-27
AG-1020	22A	Underground Plumbing	5	5	17-Sep-27	24-Sep-27
AG-1030	03A	Slab on Grade Prep	5	5	27-Sep-27	04-Oct-27
AG-1040	03A	Pour Slab on Grade/Finish Concrete	2	2	06-Oct-27	07-Oct-27
Ag / Aero Bldg Superstructure			25	25	16-Aug-27	23-Sep-27
AG-2000	06D	Posts + Frame/Sheath Walls	5	5	16-Aug-27	23-Aug-27
AG-2010	06D	Install Trusses and Bracing	5	5	24-Aug-27	30-Aug-27
AG-2020	06D	Install Exterior Wall Weather Barrier	1	1	31-Aug-27	31-Aug-27
AG-2030	06D	Install Exterior Canopies	5	5	31-Aug-27	06-Sep-27
AG-2040	06D	Install Roof Sheathing	2	2	31-Aug-27	01-Sep-27
AG-2100	01A	Framing Inspection	2	2	02-Sep-27	03-Sep-27
AG-2050	06D	Install Sloped Roof Weather Barrier	1	1	02-Sep-27	02-Sep-27
AG-2060	06D	Install Exterior Wall Insulation	1	1	06-Sep-27	06-Sep-27
AG-2070	06D	Install Fascia	1	1	08-Sep-27	08-Sep-27
AG-2080	06D	Install Exterior Metal Wall Panels	5	5	08-Sep-27	14-Sep-27
AG-2090	06D	Install Metal Roof	5	5	09-Sep-27	15-Sep-27
AG-2110	06C	Set Door Frames	1	1	15-Sep-27	15-Sep-27
AG-2120	08A	Install Storefront System	5	5	15-Sep-27	23-Sep-27
AG-2130	08A	Install Windows	2	2	15-Sep-27	17-Sep-27
AG-2140	06D	Install Roof Gutters & Downspouts	2	2	17-Sep-27	20-Sep-27
Ag / Aero Bldg Interiors			163	163	08-Oct-27	31-May-28
AG-2200	09A	Wall Layout	2	2	08-Oct-27	11-Oct-27
AG-2210	09A	Frame Interior Walls	5	5	12-Oct-27	18-Oct-27
AG-2220	26B	Electrical Rough-In/Box-Out	5	5	19-Oct-27	25-Oct-27
AG-2230	26B	Fire Alarm Rough-In/Box-Out	5	5	19-Oct-27	25-Oct-27
AG-2240	23A	HVAC Rough-In	5	5	19-Oct-27	25-Oct-27
AG-2250	21A	Sprinkler Rough-In	5	5	19-Oct-27	25-Oct-27
AG-2260	22A	Sanitary Rough-In	5	5	19-Oct-27	25-Oct-27
AG-2270	26B	Electrical In-Wall Inspection	2	2	26-Oct-27	27-Oct-27
AG-2280	22A	Domestic Rough-In	5	5	26-Oct-27	01-Nov-27
AG-2300	09A	Drywall One-Side Interior Walls	1	1	02-Nov-27	02-Nov-27
AG-2310	09A	Install In-Wall Insulation	1	1	03-Nov-27	03-Nov-27
AG-2320	01A	Wall Close-In Inspection	2	2	04-Nov-27	05-Nov-27
AG-2330	09A	Install Balance Drywall	2	2	08-Nov-27	09-Nov-27
AG-2290	23A	Set HVAC Unit	2	2	10-Nov-27	11-Nov-27
AG-2340	09E	Install Ceiling Grids	5	5	10-Nov-27	16-Nov-27
AG-2350	09E	Install Ceiling Insulation	2	2	17-Nov-27	18-Nov-27
AG-2360	21A	Install Sprinkler Heads	2	2	17-Nov-27	18-Nov-27
AG-2370	01A	Above Ceiling Inspection	2	2	19-Nov-27	22-Nov-27
AG-2380	09E	Install Ceilings	5	5	23-Nov-27	01-Dec-27
AG-2390	09A	Hang Tape/Finish Drywall	5	5	02-Dec-27	08-Dec-27
AG-2400	09J	Prime Coat Walls/Ceilings	2	2	09-Dec-27	10-Dec-27
AG-2410	23B	Install GRDs	2	2	13-Dec-27	14-Dec-27
AG-2420	22A	Install Plumbing Fixtures	5	5	13-Dec-27	17-Dec-27
AG-2430	26B	Install FA Devices	2	2	13-Dec-27	14-Dec-27
AG-2440	26B	Install Light Fixtures (Interior/Exterior)	5	5	13-Dec-27	17-Dec-27
AG-2540	23A	Startup & Commissioning of Equipment - AG	5	5	24-Jan-28	28-Jan-28
AG-2550	23A	Prefunctional Testing of Equipment - AG	5	5	31-Jan-28	04-Feb-28
AG-2560	23A	Checkout Equipment Function & Controls Sequence - AG	5	5	07-Feb-28	11-Feb-28
AG-2450	06A	Install Casework	2	2	24-Apr-28	25-Apr-28
AG-2470	09J	First Coat of Paint	1	1	26-Apr-28	26-Apr-28
AG-2480	09A	Point-up/Touch-up	2	2	27-Apr-28	28-Apr-28
AG-2500	09J	Final Paint / Touch-up	2	2	01-May-28	02-May-28
AG-2460	09H	Install Floor + Base	5	5	01-May-28	05-May-28
AG-2520	06C	Install Room Signage	1	1	03-May-28	03-May-28
AG-2490	06C	Hang Doors	1	1	08-May-28	08-May-28
AG-2510	06C	Install Door Hardware	1	1	09-May-28	09-May-28

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
AG-1620	00-WT	WT Work to Complete - Ag / Aero Building	5	5	24-May-28	31-May-28
AG-2530	00-WT	Final Clean - Ag / Aero Building	5	5	24-May-28	31-May-28
Ag / Aero Bldg Site			175	175	15-Sep-27	23-May-28
AG-1180	06C	Install Exterior Signage	2	2	15-Sep-27	16-Sep-27
AG-1190	31A	Form/Pour Sidewalks	5	5	21-Sep-27	27-Sep-27
AG-1220	31A	Install Fence	5	5	28-Sep-27	04-Oct-27
AG-1230	31A	Install Benches	1	1	28-Sep-27	28-Sep-27
AG-1310	32B	Install Sod or Seed (Month Dependent)	1	1	05-Oct-27	05-Oct-27
AG-1570	06D	Frame Out Greenhouse Structure	5	5	09-May-28	15-May-28
AG-1600	06D	Install Greenhouse Glass	5	5	16-May-28	22-May-28
AG-1610	06C	Install Greenhouse Benches	1	1	23-May-28	23-May-28
Closeout			387	387	08-Feb-28	16-Aug-29
Final Inspections - C of O			282	282	31-Mar-28	11-May-29
CLOSE-1060	01A	Final Fire Marshal Inspection - FH	10	10	31-Mar-28	13-Apr-28
CLOSE-1070	01A	Final NCC Inspection - FH	10	10	31-Mar-28	13-Apr-28
CLOSE-3070	00-WT	Request / Receive TCO - FH	5	5	14-Apr-28	20-Apr-28
CLOSE-1080	01A	Final Fire Marshal Inspection - AG	10	10	01-Jun-28	14-Jun-28
CLOSE-1090	01A	Final NCC Inspection - AG	10	10	01-Jun-28	14-Jun-28
CLOSE-3080	00-WT	Request / Receive TCO - AG	5	5	15-Jun-28	21-Jun-28
CLOSE-1110	01A	NCC Sewer Final Inspection - Site	10	10	05-Jul-28	18-Jul-28
CLOSE-1040	01A	Final Fire Marshal Inspection - PAC	10	10	07-Sep-28	20-Sep-28
CLOSE-1050	01A	Final NCC Inspection - PAC	10	10	07-Sep-28	20-Sep-28
CLOSE-1020	01A	Final Fire Marshal Inspection - HS	10	10	16-Oct-28	27-Oct-28
CLOSE-1030	01A	Final NCC Inspection - HS	10	10	16-Oct-28	27-Oct-28
CLOSE-1000	01A	Final Fire Marshal Inspection - MS	10	10	14-Nov-28	29-Nov-28
CLOSE-1010	01A	Final NCC Inspection - MS	10	10	14-Nov-28	29-Nov-28
CLOSE-3050	00-WT	Request / Receive TCO - HS / MS / PAC	5	5	30-Nov-28	06-Dec-28
CLOSE-1120	01A	Fire Marshal Record Plan Final Inspection - Site	10	10	11-Apr-29	24-Apr-29
CLOSE-1130	01A	NCC Site Final Inspection - Site	10	10	23-Apr-29	04-May-29
CLOSE-1140	01A	DENREC Final Inspection - Site	10	10	23-Apr-29	04-May-29
CLOSE-3130	01A	Request / Receive Final CofO - HS / MS / PAC	5	5	07-May-29	11-May-29
Punchlist			387	387	08-Feb-28	16-Aug-29
Exteriors - Elevations / Roofing			211	211	08-Feb-28	05-Dec-28
CLOSE-3170	00-WT	WT / Design Team - Pre-Punch - PAC Exteriors	5	5	08-Feb-28	14-Feb-28
CLOSE-3180	00-DES	Design Team / Owner - Create & Issue Punch List - PAC Exteriors	10	10	15-Feb-28	28-Feb-28
CLOSE-3190	00-WT	Complete Punchlist Items - PAC Exteriors	20	20	29-Feb-28	27-Mar-28
CLOSE-3140	00-WT	WT / Design Team - Pre-Punch - HS Exteriors	5	5	22-Jun-28	28-Jun-28
CLOSE-3150	00-DES	Design Team / Owner - Create & Issue Punch List - HS Exteriors	10	10	29-Jun-28	13-Jul-28
CLOSE-3160	00-WT	Complete Punchlist Items - HS Exteriors	20	20	14-Jul-28	10-Aug-28
CLOSE-3200	00-WT	WT / Design Team - Pre-Punch - MS Exteriors	5	5	16-Oct-28	20-Oct-28
CLOSE-3210	00-DES	Design Team / Owner - Create & Issue Punch List - MS Exteriors	10	10	23-Oct-28	03-Nov-28
CLOSE-3220	00-WT	Complete Punchlist Items - MS Exteriors	20	20	06-Nov-28	05-Dec-28
FH/AG Bldgs			42	42	01-Jun-28	31-Jul-28
CLOSE-2120	00-WT	WT / Design Team - Pre-Punch - AG	5	5	01-Jun-28	07-Jun-28
CLOSE-2130	00-DES	Design Team / Owner - Create & Issue Punch List - AG	10	10	08-Jun-28	21-Jun-28
CLOSE-2090	00-WT	WT / Design Team - Pre-Punch - FH	5	5	12-Jun-28	16-Jun-28
CLOSE-2100	00-DES	Design Team / Owner - Create & Issue Punch List - FH	10	10	19-Jun-28	30-Jun-28
CLOSE-2140	00-WT	Complete Punchlist Items - AG	20	20	22-Jun-28	20-Jul-28
CLOSE-2110	00-WT	Complete Punchlist Items - FH	20	20	03-Jul-28	31-Jul-28
HS Interiors			94	94	23-Oct-28	08-Mar-29
CLOSE-2000	00-WT	WT / Design Team - Pre-Punch - HS	64	64	23-Oct-28	25-Jan-29
CLOSE-2010	00-DES	Design Team / Owner - Create & Issue Punch List - HS	10	10	26-Jan-29	08-Feb-29
CLOSE-2020	00-WT	Complete Punchlist Items - HS	20	20	09-Feb-29	08-Mar-29
PAC Interiors			94	94	10-Nov-28	28-Mar-29
CLOSE-2060	00-WT	WT / Design Team - Pre-Punch - PAC	64	64	10-Nov-28	14-Feb-29
CLOSE-2070	00-DES	Design Team / Owner - Create & Issue Punch List - PAC	10	10	15-Feb-29	28-Feb-29
CLOSE-2080	00-WT	Complete Punchlist Items - PAC	20	20	01-Mar-29	28-Mar-29
MS Interiors			94	94	21-Nov-28	09-Apr-29
CLOSE-2030	00-WT	WT / Design Team - Pre-Punch - MS	64	64	21-Nov-28	23-Feb-29
CLOSE-2040	00-DES	Design Team / Owner - Create & Issue Punch List - MS	10	10	26-Feb-29	09-Mar-29
CLOSE-2050	00-WT	Complete Punchlist Items - MS	20	20	12-Mar-29	09-Apr-29

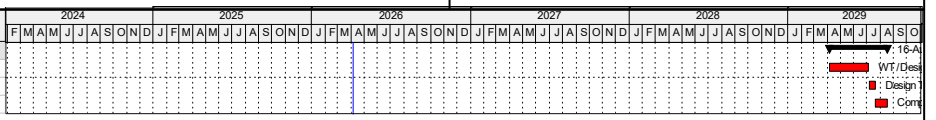
Remaining Level of Effort | Actual Level of Effort | Actual Work

Data Date: 07-Apr-26

Appoquinimink School District Summit Campus MS / HS - Bid Schedule

ASD26-SCMHS-BP2 - Addendum #7 - 04/28/2026

Activity ID	ASD_TRAD	Activity Name	Original Duration	Remaining Duration	Start	Finish
Site			94	94	05-Apr-29	16-Aug-29
CLOSE-3090	00-WT	WT / Design Team - Pre-Punch - Site	64	64	05-Apr-29	05-Jul-29
CLOSE-3100	00-DES	Design Team / Owner - Create & Issue Punch List - Site	10	10	06-Jul-29	19-Jul-29
CLOSE-3110	00-WT	Complete Punchlist Items - Site	20	20	20-Jul-29	16-Aug-29



SECTION 01 35 00 – SPECIAL PROJECT PROCEDURES

1.0 PROCEDURES

1.1 CONSTRUCTION MANAGER

A. The Construction Manager shall control, enforce, direct, instruct, and otherwise implement regulations and restrictions as set forth in this section.

1.2 OWNER'S REPRESENTATIVE

A. All communications with the owner and owner's representative(s) and consultant(s) shall be thru the Construction Manager unless otherwise noted in the General Conditions.

1.3 NOISE CONTROL

A. The Contractor shall execute the Work in this Contract as quietly as practicable to avoid unnecessary disturbances.

B. Any complaints duly registered by the Construction Manager of unacceptable noise levels shall be cause for the use of special precautions and methods of operation by the Contractor to reduce noise to acceptable levels.

C. The Owner and Construction Manager shall be the sole judge of the tolerability of noise levels.

D. Use of portable radios or tape recorders will not be allowed on the premises other than two-way communication radios.

E. The Contractor shall prepare a "Noise Schedule" as soon as practicable indicated the type of noise inducing work showing the dates, times and duration of such work. The Contractor should note any special instruction and/or time requirement in the Scopes of Work.

1.4 PERSONNEL IDENTIFICATION

A. All employees of the Contractor and all subcontractors may be required to wear numbered identification badges while on the premises of existing buildings.

B. The identification badges shall be conspicuously fixed to outer garments above elbow level.

C. Any of the Contractor's personnel or subcontractor's personnel who do not comply with this requirement at all times will be denied access to the facility or will be escorted off the premises by Security Guards or owner representative(s).

1.5 PERSONNEL PARKING

A. At no time shall the employees of the Contractor or subcontractor employed by Contractor be allowed to park their vehicles on-site without prior approval from the Construction Manager.

2.0 LIMIT OF OPERATIONS

A. It shall be noted that, adjacent streets will remain open throughout the duration of this Project. The Construction Manager will provide a perimeter fence, which will establish limits of operation.

B. The Contractor's normal limit of operations shall be confined within the Limits of Work Area as designated on the drawings.

C. The Owner, Architect, and other Contractors performing Work within these limits of operation, shall be allowed access at all times.

D. Construction operations must be planned and executed in a manner which allows emergency access to project.

3.0 SCHEDULING AND COORDINATION

3.1 SCHEDULING

A. All arrangements for work which will involve interference with normal Owner or adjacent properties functions, particularly in occupied areas, or adjacent thereto, shall be scheduled a minimum of 14 days in advance with the Construction Manager to provide for minimum of disruption and inconvenience.

3.2 OUTAGES

A. Utility and service outages shall be kept to a minimum, and will be permitted only with written approval of the Construction Manager and the Owner.

B. All requests for the outages shall be made a minimum of fourteen working days in advance of their need.

C. Requests for outages will not be considered unless they include an identification of all areas which will be affected by the proposed outage. Blank outage forms will be provided by the Construction Manager upon request.

D. All outages shall occur **after normal working hours.** All costs including premium time shall be included in the Bid amounts.

END OF SECTION 01 35 00

SECTION 01 35 20 – EH&S PLAN

CONTRACTOR / SUBCONTRACTOR EH&S MANUAL

All contractors and subcontractors on Whiting-Turner's projects bid and awarded after January 1, 2019 or earlier if provided in the Subcontract by Whiting- Turner, are expected to be in full compliance with all applicable requirements of the Whiting-Turner Contracting Company's Contractor/Subcontractor EH&S Manual ("Manual"). This Manual incorporates current Whiting- Turner requirements along with new practices that have become available and generally accepted in the industry. To obtain a copy of the Manual please contact the Whiting-Turner Project Manager on your project.

The information contained in this Manual is not intended to serve as a substitute for the exercise of good engineering judgment by the engineers nor as a substitute for determinations made by contractors/subcontractors of appropriate manner and methods of operations and safety aspects of work under their control. This Manual is also not intended to be all inclusive or replace a contractor's or subcontractor's corporate or site-specific safety program and is not intended to, nor shall it, supersede any more stringent federal, state, local and other applicable laws, codes, rules, regulations, and/or practices. All contractor's and subcontractor's site-specific safety programs must meet or exceed the requirements of the Whiting-Turner EH&S program, the contract documents and all federal, state, local and other applicable laws, codes, rules, regulations, and/or practices. In the event of any conflicts between the material contained therein and any more stringent laws, codes, rules, regulations, and/or practices, the more stringent laws, codes, rules, regulations, and/or practices shall govern.

This Manual and all information contained therein is confidential and intended for the sole use of contractors and subcontractors on Whiting-Turner projects. Contractors/subcontractors are prohibited from distributing this information to any third parties. The Whiting-Turner Contracting Company expressly disclaims warranties for the information contained in this Manual and makes no representations to third parties regarding the reliability, suitability, correctness, or completeness of such information. Whiting-Turner assumes no responsibility or liability and shall not be responsible and/or liable for damages or losses of any kind, including but not limited to direct, indirect, incidental, exemplary, special or consequential damages or losses, arising from, attributable to and/or resulting from the use of such information by third parties however caused and on any theory of liability, whether in contract, strict liability or tort.

For contractor/subcontractor convenience only, a synopsis of the Manual requirements is attached hereto. This synopsis is not intended to, nor shall it alleviate contractors'/subcontractors' obligations to comply with the requirements of the Manual as applicable to their work.

(Revised 1/2/19)

The Whiting-Turner Contracting Company
Contractor/Subcontractor EH&S Manual Synopsis

DISCLAIMER: For Contractor/Subcontractor's convenience only, the following is a Synopsis of some of the more significant provisions of The Whiting-Turner Contracting Company's Contractor/Subcontractor EH&S Manual ("Manual") requirements. This Synopsis is not intended to, nor shall it alleviate Contractor/Subcontractor's obligations to comply with all of the requirements of the Manual as applicable to Contractor/Subcontractor's scope of work, whether or not they are included in the Synopsis.

The information in the Manual and this Synopsis are not intended to serve as a substitute for the exercise of good engineering judgment by the engineers nor as a substitute for determinations made by Contractor/Subcontractor of appropriate manner and methods of operations and safety aspects of work under their control. The Manual and this Synopsis are also not intended to be all inclusive or replace a contractor's or subcontractor's corporate or site-specific safety program and is not intended to, nor shall they, supersede any more stringent federal, state, local and other applicable laws, codes, rules, regulations, and/or practices. All contractor's and subcontractor's site-specific safety programs must meet or exceed the requirements of the Whiting-Turner EH&S program, the contract documents and all federal, state, local and other applicable laws, codes, rules, regulations, and/or practices. In the event of any conflicts between the material contained therein and any more stringent laws, codes, rules, regulations, and/or practices, the more stringent laws, codes, rules, regulations, and/or practices shall govern.

The Contractor/ Subcontractor EH&S Manual, this Synopsis, and all information contained therein is confidential and intended for the sole use of contractors and subcontractors on Whiting-Turner projects. Contractors/subcontractors are prohibited from distributing this information to any third parties. The Whiting- Turner Contracting Company expressly disclaims warranties for the information contained in the Manual and this Synopsis and makes no representations to third parties regarding the reliability, suitability, correctness, or completeness of such information. Whiting-Turner assumes no responsibility or liability and shall not be responsible and/or liable for damages or losses of any kind, including but not limited to direct, indirect, incidental, exemplary, special or consequential damages or losses, arising from, attributable to and/or resulting from the use of such information by third parties however caused and on any theory of liability, whether in contract, strict liability or tort.

Pre-Construction Submittals

1. Contractor/subcontractor must identify and submit the qualifications of a safety representative/competent person to Whiting-Turner as the primary, on-site contact for safety related issues.
   - The safety representative may be a supervisor and they shall have as a minimum, the OSHA 30-hour Outreach Training Program for Construction.
   - The subcontractor will provide a first aid/CPR/AED trained competent person when one or more of the subcontractor's employees are working

2. Contractor/subcontractor must submit a completed prequalification form and respond in writing to Whiting-Turner's requests for additional information/explanation.

3. A site-specific safety plan (SSSP) shall be developed for the project by each contractor/subcontractor. The plan should address hazards and mitigation strategies related to the scope of work for the project. Activity Hazard Analysis (AHA) for major phases of work, submitted with the company safety program may be accepted in lieu of SSSP – at the discretion of the Whiting-Turner project team.

4. Site-specific Safety Data Sheets (SDS) are required to be submitted prior to bringing any chemical product on site. A current chemical inventory is to be maintained with Whiting- Turner.

5. An Activity Hazard Analysis (AHA) shall be submitted ten days prior to the start of work.

6. A competent person's acknowledgement form must be completed, and their qualifications submitted for activities where OSHA requires a competent person.

Safety Management

1. All on site personnel, (contractor/subcontractors, tiered contractors/subcontractors, and their employees) are required to participate in a mandatory safety orientation session prior to commencing with any work on site. Contractor/subcontractor shall provide a translator for any non-English speaking employees during orientation and any job wide meetings/stand- downs. Employees may be asked to attend orientation again for repeat violations or deficiencies.

2. Each contractor/subcontractor is required to designate a site safety representative (SSR). SSR shall be on site at all times and shall have the knowledge and authority of the competent person. SSR shall be able to conduct site walks with Whiting-Turner personnel to ensure the safety of contractor's/subcontractor's workers on the project. Manpower totals below include all tiered contractor/subcontractor employees. Proof of training must be submitted prior to mobilization or at orientation. The qualifications for the SSR are as follows:
   - Minimum requirement proof of OSHA 30 hour submitted
   - Contractors/subcontractors with (30) or more workers on site will be evaluated by the Whiting-Turner's management team along with Whiting-Turner's EH&S Manager regarding the contractor's/subcontractor's site-specific safety performance. If the contractor's/subcontractor's past or current site safety performance indicates improved safe work practices and conditions are needed to help ensure the safety of the contractor/subcontractor crews and others, Whiting-Turner at its discretion, may require the contractor/subcontractor to provide a fulltime Site Safety Representative to be present onsite with no other collateral duties.

3. The contractor's/subcontractor's supervisor(s) and safety representative must make frequent and regular inspections of their work areas and activities.
   - Hazards identified that are under their control must be corrected immediately and all other identified hazards must be reported to the Whiting-Turner superintendent.
   - One documented inspection shall be conducted each week.

4. The contractor's/subcontractor's on-site supervisor and the contractor's/subcontractor's designated on-site safety representative must schedule and attend a pre-construction safety meeting with the Whiting-Turner Superintendent to discuss the contractor/subcontractor safety requirements.
   - The pre-construction safety meeting should take place at least five (5) working days before startup to allow for review of required documentation.

5. The subcontractor shall provide a translator whenever there are non-English speaking tradespersons on site.

6. Contractor/subcontractors, who in turn contract out parts of their work, have sole responsibility to see that their lower tier contractors comply with project safety requirements. Additionally, Whiting-Turner's Project Manager and/or Whiting-Turner's Superintendent shall be notified that the lower tier contractors are arriving at least five (5) days before work starts. The Contractor/subcontractors will be held directly accountable for all lower tier contractors. Contractors/subcontractors must provide a competent person onsite fulltime to oversee and direct lower tier contractors' while actively performing work.

7. The subcontractor's superintendent(s) and/or designated safety representative must attend the weekly coordination meeting where safety issues will be addressed.

8. Emergencies shall be handled through the Whiting-Turner Field Office according to the posted Emergency Action Plan.

9. All work-related injuries, regardless of severity, must be reported to Whiting-Turner immediately. An accident/incident investigation report must be completed by the appropriate subcontractor supervisor and submitted to Whiting-Turner within 24 hours of the incident. Further, all work-related injuries will be recorded on an injury log. A completed injury log will be submitted to Whiting-Turner by the 5th of the month for the previous month.
10. Incidents involving the public, regardless of severity, must be reported to Whiting-Turner immediately. An accident/incident investigation report must be completed by the appropriate subcontractor supervisor and submitted to Whiting-Turner within 24 hours of the incident.

11. Only communication radios are permitted on Whiting-Turner projects.

General Safe Work Practices and Guidelines

The following are prohibited on Whiting-Turner Projects

1. The use of the following administrative controls as a means of fall protection
   - Controlled Access Zone as a means of fall protection
   - Controlled Decking Zone as a means of fall protection
   - Safety Monitor System as a means of fall protection
2. The use of load handling equipment to hoist personnel—please see the Manual for exceptions and provisions
3. Working from the midrail or top rail of any lift
4. The use of cell phones for signaling of cranes and equipment
5. The use of open hooks during lifting operations/picks.
6. Fish tapes or lines made of metal or any other conductive material when potential for contact with energized circuits exists
7. The use of particle board, medium density fiber board (MDF) or similar material as floor hole covers
8. The use of open turnbuckles as part of the perimeter cable system
9. Other construction processes below steel erection are prohibited unless overhead protection for the employees below is provided
10. Harassment of any kind, to any person
11. Smoking or use of vaporized equipment (except in designated areas)
12. Radios, media players, headphones, or other listening devices
13. Guns or weapons of any kind
14. Use or possession of alcohol or drugs of any kind (except for prescription drugs)
15. Riding on equipment that is not equipped with proper seating and seat belt
16. Open fires, fire barrels, or hot boxes
17. The use of metal ladders

Carbon Monoxide Exposure Prevention

1. In enclosed or poorly ventilated spaces tools and equipment shall be powered by electricity, batteries, or compressed air.
2. All fuel driven equipment being used indoors or in partially enclosed spaces must have scrubbers where carbon monoxide exposure exists.

3. When using gasoline powered generators and compressors, place them outside away from air intakes to ensure that the exhaust is not being drawn back indoors.

Concrete and Masonry

1. Each contractor/subcontractor, with employees exposed to a fall 6' or greater to a lower level must ensure that effective fall protection measures and rescue procedures are addressed in their company Activity Hazard Analysis prior to beginning work on site. This is to include the name and qualifications of the designated competent person.

Confined Space Entry

1. It is Whiting-Turner's position that all confined spaces are permit required until proven otherwise [in writing] by the contractor/subcontractor's competent person.

2. All confined spaces, regardless of classification, shall have continuous multi-gas/4-gas air monitoring while the space is occupied by tradespersons.

Cranes and Derricks

1. Personnel hoisting requirements - The use of load handling equipment to hoist personnel is prohibited unless the employer can demonstrate that other methods would be more hazardous and is able to comply with the personnel hoisting requirements that are established in the standard.
2. Hoisting personnel on Whiting-Turner projects shall be considered a critical lift or activity, and therefore shall meet all requirements of a critical lift before the lift may begin.
3. A crane checklist must be completed prior to each initial lift.
4. Post Assembly – a post assembly inspection is required for all Crawlers and Tower Cranes by a person properly trained and qualified to inspect such equipment.
5. Boom-tip anemometer or equivalent device is required.
6. All loads to be lifted at Whiting-Turner project sites shall have a tag line attached.
   - The competent person shall determine the size, rope materials, and length of the tag line.
   - The line shall be attached in a way that maintains control of the load to reduce the risk of caught-in/-between and struck-by hazards to employees and surroundings during any lift.

Critical Lifts

1. The Whiting-Turner Contracting Company identifies a critical or special lift as
   - any lift where the total weight of the load and the deductions for the equipment combined exceeds 75% of the capacity of the crane capacity chart at the specific boom length and radius of the load,
   - any lift where there will be more than one (1) crane or piece of load handling equipment attached to the load at a time;
   - any lift that involves the lifting of personnel;
   - any lift where the contents of the lift are considered hazardous to health or environment, and an accidental release could result harm to either;
   - any lift where encroachments precautions are required for power lines.

Demolition

1. Contractor/subcontractor shall verify that all local ordinances and permitting issues have been addressed as they relate to demolition.
2. Generic safety data sheets for demolished material must be provided by the creating contractor.
3. Task lighting—which meets or exceeds the requirements of the standard—shall be provided by the demolition contractor/subcontractor.

Electrical Hazards Prevention

1. Whiting-Turner requires that all projects are 100% GFCI compliant. An Assured Equipment Grounding Conductor Program may be used in addition to—but not in lieu of—the GFCI program.
2. The installing contractor, i.e. the electrical contractor/subcontractor, shall test each power receptacle for proper installation including polarity, grounding, etc. and forward that documentation to Whiting-Turner before the circuit is used.
3. The electrical contractor/subcontractor will conduct and document monthly tests after the initial installation.
4. Only round, heavy-duty (type S, SJO, SJTW, ST, SO, STD) extension cords are acceptable for use on a construction site; at least 12 gauge or larger.
5. Damaged cords may only be repaired by a qualified electrician in accordance with manufacturer's requirements for such repairs.
6. Where feasible, all extension cords will be suspended (8') above the floor or working surface.
7. Extension cords shall not be fastened with staples, hung from nails, or suspended with non- insulated wire.
8. All temporary lighting circuits must originate from GFCI protected breakers.
9. Temporary wiring must be rated for all conditions it may be subjected to and be installed as per NEC, OSHA, NFPA and Authorities Having Jurisdiction requirements

Energy Control

1. Lockout/tagout (LOTO) shall not be considered for use until all other avenues of attaining a "zero-energy state" have been exhausted.
2. All contractor/subcontractors working with electrical systems are required to have a written Lockout/tagout procedure. A competent person shall be responsible to control all aspects of the LOTO procedure. They will ensure coordination with the appropriate tradesmen.
3. If a system can be locked out through design or by other means, this will be the preferred method.
4. The lockout device shall be substantial enough to prevent removal.
5. The lock shall be a separately keyed lock for use only with the lockout system.
6. The lockout device must be tagged with the name of the employee and their company. There shall be one lock for each employee (including Whiting-Turner) exposed to the system.
7. The use of 100% LOTO must be maintained until the completion of the task. Verification by all competent persons in charge of the LOTO shall be completed prior to re-energizing the system.
8. In the event an employee is discovered tampering with or violating the LOTO procedure, the employee will be removed from the project indefinitely.
9. A log shall be maintained on site that identifies the following:
    - Date of usage
    - Number of locks and tags used
    - Contractors involved
    - Time of LOTO initiation
    - Time of LOTO removal
    - Designated competent persons
    - Location of LOTO Devices
10. Electrical or piping & instrumentation drawings or identifying specific locations of the LOTO devices shall accompany the LOTO log.

Excavations

1. Prior to the commencement of excavation activities where the excavation will be greater than 3 feet in depth, a pre-excavation checklist must be completed by the contractor/subcontractor's competent person and submitted to Whiting-Turner upon request.
2. Underground utility installations must be identified and marked prior to beginning any excavation. To prevent unintentional contact, all necessary measures must be employed to locate underground utilities prior to excavating. Acceptable methods include but are not limited to the following: test pitting, ground penetrating

radar (GPR), use of as-built drawings and any other obtainable information.

3. A competent person must be identified on Whiting-Turner's competent person designation form and their qualifications submitted to Whiting-Turner prior to the start of work.
4. All excavations shall be protected by snow fence, at a minimum.
5. Persons walking or working adjacent to a trench with vertical/shear walls that is equal to or greater than six (6) feet in depth must be protected from fall hazards unless it has been determined by the competent person that it is infeasible or creates a greater hazard.
6. Persons crossing an excavation that is equal to or greater than six (6) feet in depth must be protected from fall hazards by means of a guardrail system.
7. See Utility Location and Avoidance Policy for additional requirements.

Fall Protection and Prevention

1. Prior to creating a hole or opening in any elevated work surfaces, contractors/subcontractors must submit an elevated surface modification permit.
2. Particle board, medium density fiber board (MDF) or similar material is prohibited from being used as floor hole covers on Whiting-Turner projects All holes must remain properly covered, secured, and labeled / signed.
3. Each contractor/subcontractor, with employees exposed to a fall 6' or greater to a lower level must ensure that effective fall protection measures and rescue procedures are addressed in their company Activity Hazard Analysis prior to beginning work on site. This is to include the name and qualifications of the designated competent person.
4. A Personal Fall Arrest System (PFAS) [comprised of a full body harness, double lanyards, anchorage point and anchorage connector], a personal fall restraint system (PFRS) [comprised of a full body harness, lanyard, anchorage point and anchorage connector], a guardrail, or safety net system must be in place to protect all trade persons from exposure to falls working at or above 6 feet.
5. Employees working on ladders must be at least one and a half times the height of the ladder away from any perimeter, shaft, stairway, and opening where the fall distance exceeds 6'. If that distance isn't feasible, a conventional fall protection method must be employed.
6. Stilts are only permitted in broom swept areas, where there is no change in elevation.
7. Every hatchway and chute floor opening shall be guarded by a hinged floor-opening cover. The opening shall be barricaded with railings to leave only one exposed side. The exposed side shall be provided either with a swinging gate or so offset that a person cannot walk into the opening.
8. An extension platform outside a wall opening onto which materials can be hoisted for handling shall have a standard railing that meets handrail standards. However, one side of an extension platform may have removable railings to facilitate handling materials; in this instance a personal fall restraint or arrest system shall be utilized to protect the exposed worker.
9. Perimeter cable shall not be less than 3/8" steel cable.
10. Corner uprights must be braced so that the required tension may be maintained.
11. The cable must be terminated with three U-bolt wire rope clips that maintain an efficiency rating of at least 80% of the wire rope's breaking strength as proven through product documentation (e.g. Crosby clips).
12. Perimeter cable shall not be used as part of a personal fall arrest or fall restraint system unless designed to be used in that manner by a registered engineer.
13. The use of open turnbuckles as part of the perimeter cable system is prohibited.
14. All guardrail systems [with the exception of scaffold systems or where it can be proven to create a greater hazard] must be equipped with orange perimeter screening or mesh to prevent the ability to breach the system by climbing through rails. The installation of the screening must be compliant with Whiting-Turner's orange perimeter screening guidelines.
15. A fall restraint system must be employed when working from articulating boom lifts.
16. A PFAS is not required when climbing up or down a ladder. Fall protection shall be considered by the competent person if employees work from a ladder 6' or more above a lower level and are exposed to a fall.

17. Steel erectors and metal decking installers must utilize 100% fall protection devices at all times when working over 6'.
18. Horizontal lifelines must be designed by an engineer and installed under the supervision of a qualified person. A safety factor of two must be maintained.
19. Adequate fall protection devices must be provided, installed, and used at all loading platforms by the contractor/subcontractor wishing to remove existing perimeter protection prior to its removal.
20. All anchorage points utilized in a personal fall arrest system must be capable of supporting a load of no less than 5000 lbs.
21. Retraining documentation—to include instructor's name and qualifications, training literature and sign-in sheet—must be submitted to Whiting-Turner on company letterhead.

Fire Prevention and Protection

1. A 20 lb. ABC dry chemical fire extinguisher or equivalent must be provided for each 3,000 square feet of protected building area. An extinguisher shall be placed at every stairwell on each level.
2. Residential-like wood framing construction shall have a 20 lb. ABC dry chemical fire extinguisher or equivalent for each 1,500 square feet of protected building area.
3. Storage of flammable/combustible liquids on or inside of buildings under construction shall be no more than one-day supply.
4. Provide a 20-pound ABC dry chemical type extinguisher between 25'-75' from areas where flammable liquids are being handled.

Housekeeping

1. Clean-as-you-go practices are required.
2. Sort and organize material, sweep daily, and standardize activities to aid in the elimination of storage of excess/unused material in active work areas
3. Work that may temporarily block emergency exits, safety showers, elevators, corridors, and hallways will require prior Whiting-Turner approval.
4. Materials stored in the vicinity of the area where work is performed should be limited to only those materials that will be used in the same shift.
5. Any material stored in a work area longer than 24 hours must be approved by Whiting-Turner.
6. Gang boxes, toolboxes, and sea containers/conex boxes shall not have materials stored on top of them.
7. All chemicals brought on site must be approved by Whiting-Turner.
8. The user of the chemical must provide Whiting-Turner an SDS prior to bringing the substance on site.
9. Chemical/gas cylinders (welding, purging, leak detection cylinders, etc.) must be secured.
10. All dedicated chemical storage areas must have safety data sheets (SDS) available at the storage location.

Mobile Elevated Work Platform

1. Employees must keep both feet on the floor of the basket; use of guardrails to gain additional height is prohibited on Whiting-Turner project sites.
2. Where aerial and scissor lifts are used on concrete slabs, any floor depressions or grade changes are required to be barricaded to restrict travel onto that area.
3. The area(s) below the basket or platform of aerial lifts shall be cordoned off using reinforced danger tape—or something of equivalent or greater tensile strength—and by using signage to identify the overhead hazard when a potential for falling objects exists
4. Field modifications are not allowed on aerial lifts. Aerial lifts shall not be used to hoist, raise, or position material outside of the platform or basket unless manufactured to do so.

Personal Protective Equipment

1. Prescription eyeglasses and sunglasses that do not comply with ANSI Z87.1 are prohibited.
2. Aluminum hardhats, and bump caps are not permitted on Whiting-Turner projects.

3. For security and identification purposes, all hardhats shall display the contractor/subcontractor name and/or decal identifying the employer as well as the employee's name.
4. Employees exposed to electrical voltages of 600 V or greater shall wear hardhats that meet the requirements of ANSI Z89.2 type Hardhats
5. Hand protection is required when employee's hands are exposed to hazards such as those from skin absorption of harmful substances, cuts or lacerations, abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes.
6. High visibility vests/gear are required by each person on site.
7. Long pants and shirts with at least a 4" sleeve is required. Shorts, cut offs, tank tops, and net shirts are not permitted.

Scaffolds

1. Contractor/subcontractor whose employees will need to access a scaffold system for work shall have a competent person present to inspect and sign off on the scaffold prior to the start of work each day.
2. Employees erecting or dismantling a scaffold are required to utilize appropriate fall protection at heights six (6) feet or above unless proven to be infeasible or more hazardous as determined by their company's competent person.
3. All scaffolds, including carpenters' bracket scaffolds, over six (6) feet in height shall have guardrails on all open sides. If guardrails cannot be used on a walking/working platform, contractor/subcontractors are required to use another means to protect employees from a fall.
4. Cross-braces are not considered to be an adequate guardrail (fall protection) system and shall not be used as a top or mid rail on Whiting-Turner projects.
5. Contractors shall utilize a scaffold tag system. The scaffold tag system shall be color coded and visible. The competent person shall inspect the scaffolding system before each work shift. The competent person shall sign and date the scaffold tag.
    - Green tags are reserved for complete systems
    - Red tags are reserved for erection/dismantling activities and for scaffolds with deficiencies in the system
    - Yellow tags are reserved for systems that require the use of both PFAS and guardrail systems for incomplete scaffold systems or platforms.

Signs, Signals and Barricades

1. All caution and danger tape used on Whiting-Turner project sites shall be of the reinforced type and shall be supplemented with a tag/label affixed with the responsible party's name, company, contact number, and potential hazard.
2. All flagmen shall be trained on appropriate procedures before controlling traffic, as required by the Manual on Uniform Traffic Control Devices (MUTCD) and any municipal or state guidelines.
3. All flagmen shall utilize sign paddles and shall be outfitted with high visibility garments, as required by current ANSI standards. All PPE and traffic control equipment shall be outfitted with reflectorized material for night work as required by current ANSI standards.

Stairways and Ladders

All aluminum and commercially manufactured wooden ladders shall not be used on Whiting- Turner projects.

Fall protection shall be considered by the competent person if employees work from a ladder 6' or more above a lower level and are exposed to a fall.

Employees working on ladders must be at least one and a half times the height of the ladder away from any perimeter, shaft, stairway, and opening where the fall distance exceeds 6' without employing additional means of fall protection.

Subcontractors shall provide ladders with duty ratings that meet the needs of their employees. Workers are required to select ladders that are capable of safely supporting their weight and the weight of their tools.

Steel Erection

1. Fall protection provided by the steel erector shall remain in the area where steel erection activity has been completed to be used by other trades; if / when Whiting-Turner accepts and takes custody of the system.
2. All tradespersons, including connectors, engaged in steel erection activities on a walking/working surface with an unprotected side or edge more than six (6) feet above a lower level shall be protected from fall hazards by a conventional fall protection method.
3. Roof penetrations are to be made only when equipment is ready to be installed.
4. Safety latches on hooks shall not be disengaged or made inoperable.

Welding and Cutting

1. A Hot Work Permit must be completed daily by each contractor/subcontractor performing all welding, burning/cutting operations.
2. Contractor/subcontractors are responsible for providing a fire watch and a charged, 20lb ABC dry chemical fire extinguisher for each welding and burning activity.
3. A fire watch is always required to remain in place during the hot work activity and for a minimum of one half (1/2) hour after the welding or burning operation has been completed.
4. Additional permits may be required by the local Fire Department and will be at the contractor/subcontractor's expense.
5. All shields shall be compatible with a hardhat.
6. All cylinders shall be considered in storage at the end of each shift; cylinders must have gauges removed and caps in place.

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ISSUED FOR BID – 05/28/2026

WHITING-TURNER

ENVIRONMENTAL, HEALTH & SAFETY

Contractor/Subcontractor EH&S Manual

Rev 1—November 15, 2018

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DISCLAIMER: The information contained in this Manual is not intended to serve as a substitute for the exercise of good engineering judgment by the engineers nor as a substitute for determinations made by contractors/subcontractors of appropriate manner and methods of operations and safety aspects of work under their control. This Manual is also not intended to be all inclusive or replace a contractor's or subcontractor's corporate or site-specific safety program and is not intended to, nor shall it, supersede any more stringent federal, state, local and other applicable laws, codes, rules, regulations, and/or practices. All contractor's and subcontractor's site-specific safety programs must meet or exceed the requirements of the Whiting-Turner EH&S program, the contract documents and all federal, state, local and other applicable laws, codes, rules, regulations, and/or practices. In the event of any conflicts between the material contained therein and any more stringent laws, codes, rules, regulations, and/or practices, the more stringent laws, codes, rules, regulations, and/or practices shall govern.

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1. Contractor/Subcontractor EH&S Requirements

Policy Statement

The following establishes Whiting-Turner's minimal EH&S requirements for all contractors/ subcontractors on a Whiting-Turner project. This Manual is not meant to be all inclusive and it does not, in any way, excuse the contractor/subcontractor from adhering to the entirety of the Owner's requirements and OSHA's 29 CFR 1926 Safety and Health Guidelines for Construction nor is it a substitute for the contractor/subcontractor's own site-specific safety program. The contractor/subcontractor's own site-specific safety program must meet or exceed the requirements of the Whiting-Turner Contractor/Subcontractor EH&S Manual, the Contract documents and the most current federal, state, local or other applicable codes and regulations.

General Requirements

1. Each contractor/subcontractor must identify and submit the qualifications of a safety representative/competent person to Whiting-Turner as the primary, on-site contact for safety related issues.
    a. The safety representative may be a supervisor and they shall have, at a minimum, the OSHA 30-hour Outreach Training Program for Construction.
    b. The contractor/subcontractor will provide a first aid/CPR trained person when one or more of the contractor/subcontractor's employees are working

2. The contractor/subcontractor's supervisor(s) and safety representative must make frequent and regular inspections of their work areas and activities.
    a. Hazards identified that are under their control must be corrected immediately and all other identified hazards must be reported to the Whiting-Turner Project Superintendent.
    b. One documented inspection shall be conducted each week and made available at Whiting-Turner's request.

3. The contractor/subcontractor's on-site supervisor and the contractor/subcontractor's designated on-site safety representative must schedule and attend a pre-construction safety meeting with the Whiting-Turner Superintendent and Site Safety Manager to discuss the contractor/subcontractor safety requirements.
    a. The pre-construction safety meeting should take place at least five (5) working days before startup to allow for review of required documentation.

4. The contractor/subcontractor shall provide a translator whenever there are non-English speaking workers on site. Subcontractor supervisors must be able to communicate in English.

5. Contractor/subcontractors, who in turn contract out parts of their work, have sole responsibility to see that their lower tier contractors comply with project safety requirements. Additionally, Whiting-Turner's Project Manager and/or Whiting-Turner's Superintendent shall be notified that the lower tier contractors are arriving at least five (5)

days before work starts. The Contractor/subcontractors will be held directly accountable for all lower tier contractors. Contractors/subcontractors must provide a competent person onsite fulltime to oversee and direct lower tier contractors' while actively performing work.

6. The contractor/subcontractor's superintendent(s) and/or designated safety representative must attend the weekly coordination meeting where safety issues will be addressed. Emergencies should be handled through the Whiting-Turner Field Office according to the posted Emergency Action Plan.

7. All work-related injuries, regardless of severity, must be reported to Whiting-Turner immediately. An accident/incident investigation report must be completed by the appropriate contractor/subcontractor supervisor and submitted to the Whiting-Turner project team within 24 hours of the incident. Further, all work-related injuries will be recorded on the injury log. A completed injury log will be submitted to the Whiting-Turner project team by the 5th of the month for the previous month.

8. Incidents involving the general public, regardless of severity, must be reported to Whiting-Turner immediately. An accident/incident investigation report must be completed by the appropriate contractor/subcontractor supervisor and submitted to the Whiting-Turner project team within 24 hours of the incident.

9. Each contractor/subcontractor with chemicals on site shall have a spill kit on the project with the appropriate materials for adequate and prompt clean-up. In addition, their site-specific safety plan shall address spill prevention and containment measures.

10. Only communication radios are permitted on Whiting-Turner projects.

Activity Hazard Analysis (AHA) and Pre-task Planning (PTP)

Activity Hazard Analysis.

For each phase or major type of work/definable feature of work an AHA will be completed to identify the following:

- Health and safety considerations
- Description of steps to be performed
- Hazards associated with each step
- Required action to eliminate or control the hazard
- Focus four hazards and controls
- Contractor/subcontractor supervision sign-off

The AHA is required to be submitted to the Whiting-Turner project team ten (10) days prior to start of the task. The contractor/subcontractor shall not be released to work until the AHA is received by the Whiting-Turner Superintendent or their designee.

Contractors/subcontractors involved in abatement, demolition, steel erection, confined space, and lockout/tagout operations must submit their site-specific safety plan for review by the Whiting-Turner Superintendent or Area EH&S Manager prior to the start of work.

Pre-task Planning.

This daily plan is designed to take place at the start of each work shift. Contractor/subcontractor supervisors are encouraged to meet with their crews to discuss the tasks to be accomplished and the steps that need to take place to work safely. All tradespersons should review and sign the relevant PTP for their assigned work. The main components of the Pre-task Plan will include the following:

- Evaluating the work area
- Potential hazard checklist
- Required actions to eliminate or control the hazard
- Crew sign-off

A copy of the PTP, if used, shall be kept near the work location.

The information the supervisors are relaying to the tradespersons is the same that was developed in the AHA however, the PTP will greater define the plan for that phase of work as it applies to each crew performing the work.

Aerial and Scissor Lifts

Fall protection is required in all aerial on Whiting-Turner projects. Contractor/subcontractor employees shall comply with their company's or project requirements for fall protection when working from a scissor lift. Climbing above the platform of any lift is prohibited; workers observed committing this unsafe act will be removed from the project for a minimum of 3 days—prior to returning to work they must be retrained by their employer. Manufacturer instructions must be followed for movement of any lift.

Chemicals and Other Potentially Hazardous Materials

A copy of the contractor/subcontractor's site-specific Chemical Inventory List and site specific SDS must be submitted to the Whiting-Turner project team and updated as applicable. The chemical inventory list shall be reviewed on a monthly basis by a qualified person. A Project Hazcom Station [containing a hard copy all safety data sheets applicable to the site] will be established and maintained in the Whiting-Turner Project Office. The Whiting-Turner Hazcom Station does not eliminate the need or requirement for the Contractor/subcontractor to establish and maintain a site-specific chemical inventory.

In the event unknown and/or potentially hazardous materials are encountered during construction, that portion of the work will stop, and Whiting-Turner will be notified immediately. Work will not resume until the Whiting-Turner Project Manager, Superintendent, EH&S Manager or third-party administrator authorizes it.

Communication and Compliance

Contractor/subcontractor management personnel is responsible for ensuring that all EH&S principles, policies and procedures are clearly communicated and understood by their respective employees. Managers and supervisors are expected to enforce all requirements uniformly.

All persons working on a Whiting-Turner project are responsible for using safe work practices. In addition, it is expected that each person follows all procedural safeguards and assists in maintaining a safe work environment.

Disciplinary Action

When safety policies and procedural safeguards are violated or frequent involvement in accidents or infractions is revealed, disciplinary action must be considered. The intent of any disciplinary action taken is to convey the severity or potential severity of the infraction and bring about desired safe work practices.

When a person is observed committing an unsafe act, they must be informed by means of a written safety notice and he/she must attend the next scheduled jobsite safety orientation. In addition, employees observed committing unsafe acts while performing a task that exposes them to fall, electrical, caught-in/between or struck-by hazards must be retrained by their employer prior to attending the jobsite orientation and returning to work. At the discretion of Whiting-Turner management, depending on the severity of the violation by a contractor/subcontractor employee, the person may be suspended from the project for an allotted time or removed from the project permanently.

When a contractor/subcontractor implements their own company procedures for safety infractions committed by their employees on a Whiting-Turner job site, the contractor/subcontractor shall notify Whiting-Turner and provide a copy of the notice of infraction and related disciplinary actions to Whiting-Turner.

Drug & Alcohol Testing

All contractors/subcontractors are required to perform testing as required to comply with all owner requirements and Whiting-Turner's policy for a drug free workplace.

Employee Safety Training

A site-specific safety orientation shall be conducted prior to allowing any workers access to the field. All employees completing the orientation will be issued a numbered orientation sticker or badge to be displayed on their person.

- Additional OSHA Construction Standards that require specific training include, but are not limited to:
    - Hazard Communication Training - 29 CFR 1926.1200.
    - Stairway and Ladder Safety Training - 29 CFR 1926.1050.
    - Fall Protection Training - 29 CFR 1926. 503
    - Personal Protective Equipment - 29 CFR 1926.95
    - Scaffold Training - 29 CFR 1926.450

Contractors/subcontractors are responsible for ensuring their employees receive proper training before authorizing them to work on site.

Weekly Safety Meetings

Project workers must attend at least one safety meeting each week. Copies of meeting minutes must be submitted to the Whiting-Turner project team with the Contractor/subcontractor Daily Progress Report for the day the meeting is held. Meeting minutes must indicate the name of the Contractor/subcontractor and date of the meeting. The supervisor(s) and the attendees must sign minutes.

1.1. Bloodborne Pathogen Exposure Prevention

Introduction

This baseline expectation applies to all contractor/subcontractor employees who could be *reasonably anticipated*, as a result of performing job duties, to come in contact with blood and other potentially infectious bodily fluids. Whiting-Turner employees trained and certified in first aid and cardio pulmonary resuscitation (CPR), who might be *reasonably anticipated* to come in contact with bodily fluids also must follow the guidelines set forth in this section.

Procedures

- When dealing with blood or other bodily fluids, Whiting-Turner and contractor/subcontractor employees are required to follow universal precautions. Accordingly, all human blood and other human body fluids are treated as if known to be contaminated with bloodborne infectious diseases.

- Contractors/subcontractors must provide their employees with disposable latex free gloves and one-way resuscitation masks for use in the event of an emergency.

- All certified first aid providers are required to wear disposable latex free gloves and eye protection while performing first aid on an injured individual. If rescue breathing or CPR is performed, a one-way resuscitation mask shall be provided for the protection of the injured and the provider.

- All blood spills shall be immediately contained and cleaned with an anti-viral solution, or by a solution of 5:1 water to bleach. In the event of a serious accident, the Whiting-Turner project team shall contract an outside biohazardous materials firm.

- Any material saturated with blood or other bodily fluid must be considered regulated waste. Discarded band-aids and gauze containing small amounts of blood products are not considered regulated waste. Disposal of all regulated waste must be conducted by an outside biohazardous waste firm or emergency medical personnel.

1.2. Carbon Monoxide Exposure Prevention

Introduction

Carbon monoxide (CO) is a highly-toxic, flammable, non-irritating, tasteless, odorless gas that is slightly lighter than air. CO is one of the most common asphyxiants encountered in the construction industry. CO is produced in copious amounts by internal combustion engines such as automobiles, diesel powered compressors, welding machines, concrete mixers, and forklifts. Some of the common symptoms of carbon monoxide poisoning are shortness of breath, headache, dizziness, muscular weakness, and nausea.

Procedures

- The use of fuel powered engines and tools—which could potentially increase the likelihood of carbon monoxide exposures beyond the permissible exposure limit—are prohibited in poorly ventilated areas on Whiting-Turner projects.

- In enclosed or poorly ventilated spaces tools and equipment shall be powered by electricity, batteries, or compressed air.

- When using fuel powered generators and compressors, place them outside away from air intakes to ensure that the exhaust is not being drawn back indoors.

- All fuel driven equipment being used indoors or in partially enclosed spaces—that does not meet the Final Tier 4 engine requirements—must have scrubbers where carbon monoxide exposure exists.

- Equipment meeting the Final Tier 4 emissions standards are permitted—continuous air monitoring for the concentration of CO is required.

- Where the potential for exposure beyond the permissible exposure limit is probable—using any device that discharges the products of combustion into a work area—the following testing requirements shall be followed:
    - Monitor the work area continuously for the concentration of carbon monoxide,
    - Monitor several different points within the area at the working/breathing heights of employees.
    - Remove the employees from the area when the concentration of carbon monoxide reaches 35 PPM. Supplemental ventilation and reduction or elimination of the source shall be provided to reduce the concentration below 35 PPM before the employees are allowed to resume work in the area.

1.3. Concrete and Masonry

Introduction

Each contractor/subcontractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart Q – Concrete and Masonry Construction in addition to the following guidelines.

Procedures

General requirements.

- No construction load may be placed on a concrete structure unless a qualified person, knowledgeable in structural design, determines that the structure is capable of supporting the load.
- Protruding reinforced steel—and similar protrusions—onto or into which employees could fall, must be protected and maintained by the creating contractor to eliminate the hazard of impalement.
- Contractors/subcontractors whose work involves working at heights 6 feet or above a lower level must submit a fall protection and rescue procedures to Whiting-Turner, including the name and qualifications of the designated competent person.
- Eyewash stations and washing facilities must be provided per 29 CFR 1926.50(g) and 29 CFR 1926.51(f)(1), respectively.
- Ensure that proper concrete washout stations are provided and maintained to prevent runoff of liquids and to consolidate solids for disposal.

Equipment and tool requirements.

- Powered and rotating concrete troweling machines must have a “dead man” switch that automatically shuts off power whenever the hands of the operator are removed from the machine.
- Masonry saws must be provided with a semi-circular guard.
- Machines and equipment must be locked and tagged out of service before employees can perform any maintenance or repair work.

Cast-in-place concrete requirements.

- Formwork must be designed, fabricated, erected, supported, braced, and maintained so it can support all anticipated lateral and vertical loads.
- All shoring equipment must be inspected prior to erection to determine if it meets the requirements specified in the formwork drawings.
- Erected shoring equipment must be inspected immediately prior to, during, and after concrete placement.
- Wherever single post shores are used on top of one another a qualified designer must prepare the design of the shoring and an engineer qualified in structural design must inspect the erected shoring prior to concrete placement. Written documentation must be provided to Whiting-Turner prior to the start of the pour.
- Forms and shores shall not be removed until the employer determines that the concrete has gained sufficient strength.

- Fall protection shall be maintained while employees are climbing rebar including point to point movement anytime they are exposed to falls six (6) feet or greater.
- Fall protection is required on all decks where gaps or voids exist in the decking 10" or greater. At the building's perimeter where the decking steps down to allow for a beam pour, the height of the rails shall be increased accordingly to ensure that guardrail protection remains adequate for persons working on the deck.
- Areas where form stripping is to be performed must be properly barricaded with tape or fence and signage must be posted on all sides. This should include areas below stripping.
- Protruding nails in stripped lumber shall be removed or bent immediately.
- Outrigger platforms used for material movement in and out of the building via a crane or forklift must be designed by an engineer and incorporate 100% fall protection systems. Workers using the platform must utilize PFAS if any guardrail is removed.

Concrete forms, falsework, and vertical shoring.

- The concrete contractor/subcontractor shall install guardrails along all perimeter edges and interior floor openings.
    - The installation of the perimeter guardrail system must progress as the leading-edge progresses forward.
    - Proper guardrail heights shall be maintained during the formwork phase and again after the concrete has been placed; the proper top-rail height is between 39"-45" above the walking/working surface and the mid-rail is half that distance.
    - If at any time a worker breaches the height of a guardrail system, that worker shall be protected by a personal fall arrest system or a tiered guardrail system that provides adequate protection.
        1. If the distance from a person's walking/working surface and the top-rail is less than 39 inches, that person has breached the fall protection system and another method of protection must be employed.
        2. Likewise, if the distance from a person's walking/working surface and the top-rail exceeds 45 inches, that person is considered to have inadequate protection and another method of protection must be employed.

Masonry requirements.

- A limited access zone must be established prior to the start of any masonry work.
- The zone must be equal to the height of the wall, plus four feet.
- Employees that are working at heights greater than six (6) feet and are reaching more than 10 inches below the level of the walking / working surface on which they are working, must be protected from falling by personal fall arrest systems.
- For overhand bricklaying from a scaffold, fall protection is required if the working side of the scaffold has a gap greater than 14" between the scaffold and structure.

1.4. Confined Spaces

Introduction

No Whiting-Turner or contractor/subcontractor employee shall enter into any type of confined space until it has been identified and labeled by their respective employer's competent person and all applicable safety requirements contained in 29 CFR 1926 Subpart AA – Confined Spaces in Construction and this section have been met. All contractors/subcontractors involved in confined space activities shall submit a program—which meets or exceeds all federal, state and local regulations as well as the directives contained herein—to Whiting-Turner prior to the commencement of work in said spaces.

Procedures

General.

All confined spaces, regardless of classification, shall have continuous multi-gas/4-gas air monitoring while the space is occupied by tradespersons. Atmospheric testing shall also be performed prior to persons entering the space.

Pre-entry assessment.

Prior to confined space entry, each employer must ensure that a competent person identifies all confined spaces in which one or more of the employees it directs may work, identifies each space that is a permit space, through consideration and evaluation of the elements of that space, including testing.

It is Whiting-Turner's position that all confined spaces are permit required until proven otherwise [in writing] by the contractor/subcontractor's competent person. Depending upon the type of confined space identified, specific criteria must be satisfied before entry.

Signage.

All confined spaces shall be labeled. If the workplace contains permit spaces, the entry supervisor shall inform employees by posting danger signs at all entrances of confined spaces. The signs will be legible in English and in the predominant language of non-English reading workers. At a minimum, the following information will be included:

DANGER
PERMIT-REQUIRED CONFINED SPACE
DO NOT ENTER

Authorized entry.

If permit spaces exist in the workplace, only authorized employees may enter the spaces. The entry supervisor shall take effective measures to prevent unauthorized employees from entering into permit spaces. No work will be permitted in confined spaces until the contractor/subcontractor has initiated, maintained, completed, and posted a permit accepted by a designated Whiting-Turner employee.

Modification of non-permit spaces.

If non-permit spaces are modified, or experience any change that causes an increased hazard to entrants, the supervisor of the exposed employees, shall ensure that the space is reevaluated by the competent person.

Permit required spaces.

If permit spaces are identified, the following program elements, at a minimum, must be addressed in a written project specific confined space procedure.

- Environmental Controls – to ensure that pre-entry precautions (i.e. hazard evaluations, operating procedures, isolation methods, safety equipment, etc.) have been implemented.
- Atmospheric Testing – for oxygen content, explosive vapors, toxic substances and carbon monoxide to ensure that acceptable entry conditions exist.
- Assigned Duties – of each participant must be established and clearly communicated.
- Rescue Equipment and Emergency Services – develop and implement procedures for summoning rescue and emergency services, for rescuing entrants from permit spaces, for providing necessary emergency services to rescued employees and for preventing unauthorized personnel from attempting a rescue.
- Entry Permit System – used to record critical data and serve as official entry authorization must be implemented and managed accordingly following the completion of permit space work.
- Training – of employees expected to enter permit required confined spaces must be provided to ensure that understanding of assigned duties and the requirements of 29 CFR 1926.1207.
- Medical Surveillance Program – for all employees who must enter permit spaces shall be established to ensure that they have been medically evaluated and cleared to work in such spaces.

1.5. Cranes and Derricks

Introduction

Each contractor working on a Whiting-Turner project will comply with 29 CFR 1926 Subpart CC – Cranes & Derricks in Construction in addition to the following guidelines.

Procedures

General requirements.

- No crane or hoist shall be placed in service on a Whiting-Turner project until an annual, third party inspection and supplemental reports are submitted to the Whiting-Turner project team indicating that the crane or hoist meets the manufacturer's inspection criteria.
- If the manufacturer's inspection criterion does not exist, a structural engineer, familiar with crane or hoist's design and dynamics, may develop or use existing inspection criteria.
- Whiting-Turner requires all crane operators to be certified or qualified in accordance with the requirements of Subpart CC.
    - Copies of all certifications shall be submitted to the Whiting-Turner project team prior to the start of work.
    - A certified operator license must be provided where state or local ordinances require additional certifications.
- Mobile crane movement on site must be in accordance with manufacturer's recommendations.
- The swing radius of cranes must be properly barricaded at all times while working on site.
- Wire rope, its attachments, fittings, sheaves, and safety devices must be inspected according to the manufacturer's recommendations. Copies of the inspections must be submitted to the Whiting-Turner project team.
- Wedge sockets and fittings must be the proper size to match the wire rope and must not move when holding the wire rope under load. The dead end must be terminated according to ANSI B30.5 and must not be attached, in any manner, to the live side of the load line.
- An anti-two-block or warning device is required on all cranes except those engaged in driving piles.
- A qualified rigger must inspect the rigging prior to each lift.
- All windows in cabs must be safety glass that produces no visible distortion that will interfere with the safe operation of the machine.
- Outriggers shall be fully extended unless proven to be a hindrance to the safe operation of the crane or infeasible by the operator. In all cases, the use intermediate outriggers may only be considered if it is permitted by the manufacturer.
- Whiting-Turner's crane checklist shall be completed prior to each initial lift.

Lift plans.

- All pick & place lifts—excluding standard deliveries—requires a formal lift plan.
  - This plan must be submitted to the Whiting-Turner project team for record and review prior to the commencement of the lift.
  - Whiting-Turner personnel shall not approve lift plans; however, Whiting-Turner reserves the right to reject lift plans or require additional information if deemed necessary.
- All completed documentation with reference to the lift—including Whiting-Turner Crane Authorization Form—shall be onsite prior to beginning and for the duration of the activity.

Ground conditions.

- Unless otherwise agreed upon, the Whiting-Turner Superintendent must ensure that appropriate ground preparations are provided—firm, drained and graded.
- The agreement of acceptable ground conditions and notification of known underground hazards shall be considered completed once the competent persons have signed the Whiting-Turner Crane Authorization Form.

Controlling loads.

- All loads to be lifted at Whiting-Turner project sites shall have a tag line attached.
  - The competent person shall determine the size, rope materials, and length of the tag line.
  - The line shall be attached in a way that maintains control of the load to reduce the risk of caught-in/-between and struck-by hazards to employees and surroundings during any lift.
  - Where encroachment precautions are required, taglines must be of nonconductive material.

Assembly/disassembly.

- Manufacturer
  - When assembling or disassembling equipment (or attachments), the contractor shall comply with all applicable manufacturer exclusions and procedures for assembly or disassembly.
- General Requirements
  - Assembly/disassembly must be directed by a person who meets the criteria for both a competent person and a qualified person, or by a competent person who is assisted by one or more qualified persons.

Power line safety. (Up to 350 kV)

- Equipment Operations
  - Before beginning equipment operations, the employer must identify the work zone.
  - If during the operations any part of the equipment will get closer than 20 feet to a power line, the employer must ensure that (a) The power line is de-energized and visibly grounded at the worksite, (b) No part of the equipment gets closer

than 20 feet to the power line; or (c) A table in the standard is used to determine the minimum safe distance based on the line's voltage.

Inspections.

- Copies of all required inspections completed shall be submitted to the Whiting-Turner project team after completion of the inspection for record at the project site.
- Inspections are required during the following intervals and specifications
    - Modified equipment – Modified equipment must be inspected by a qualified person after the modifications have been completed, but prior to initial use.
    - Repaired and Adjusted Equipment – Repaired and adjusted equipment must be inspected by a qualified person after the repairs or adjustments have been completed, but prior to initial use.
    - Post Assembly – Upon completion of assembly, a qualified person must inspect the equipment to assure that it is configured in accordance with manufacturer equipment criteria.
    - Post Assembly – a post assembly inspection is required for all Crawlers and Tower Cranes by a person properly trained and qualified to inspect such equipment.
    - Each Shift – A competent person must begin a visual inspection prior to each shift the equipment will be used, which must be completed before or during that shift.
    - Monthly – Each month that the equipment is in service it must be inspected in accordance with the criteria established in the standard.
    - Annual Comprehensive – At least every 12 months the equipment must be inspected by a qualified person in accordance with the criteria established in the standard.
    - Severe Service – When the equipment is used enough that there is a reasonable possibility of damage or excessive wear the employer must stop using the equipment and have it inspected by a qualified person using the inspection criteria established in the standard.
    - Equipment Not in Regular Use – Equipment that has been idle for three (3) months or more must be inspected by a qualified person using the inspection criteria established in the standard.
- Any crane with a deficiency that could potentially affect the safe operation of the equipment shall be taken out of service immediately and remain so until documented repairs have been made.

Safety devices.

- The following safety devices are required on all equipment unless otherwise specified in 29 CFR 1926 Subpart CC:
    - Crane level indicator
    - Boom stops (except for derricks and hydraulic booms)
    - Jib stops (if jib is attached)
    - Locks on equipment with foot pedal brakes

- Integral holding device/check valves on hydraulic outrigger jacks and hydraulic stabilizer jacks
- Rail clamps and rail stops on equipment on rails (except for portal cranes)
- Horn
- Boom-tip anemometer or equivalent device

Operations.

- Contractors must comply with all manufacturer procedures applicable to the operational functions of equipment, including its use with attachments.

Authority to stop operation.

- Whenever there is a concern about safety, the operator has the authority to stop and refuse to handle loads until a qualified person has determined that the safety concern has been resolved.

Signals.

- A signal person must be provided in each of the following situations:
  - When the point of operation is not in full view of the operator
  - When the view in the direction of travel is obstructed when the equipment is traveling
  - When site specific safety concerns are an issue because either the operator or the person handling the load determines that it is necessary.
- Types of Signals
  - Signals to operators must be by hand, voice, audible, or new signals.
  - Whiting-Turner prohibits the use of cell phones for signaling of cranes and equipment
- Suitability – The signals used and means of transmitting them must be appropriate for the site conditions.
- During Operations – During the operations the ability to transmit signals must be maintained. If that ability is interrupted the operator must safely stop all operations until the ability to transmit is re-established and a proper signal is given and understood.
- Safety Problems - If the operator becomes aware of a safety problem and needs to communicate with the signal person, the operator must safely stop all operations.
- The operations must not resume until the operator and signal person agree that the problem has been resolved.
- Only One Signaler - Only one person may give signals to a crane or derrick at a time, except for those giving the emergency stop signal.
- Safety Problems Alert - Anyone who becomes aware of a safety problem must alert the operator or signal person by giving the stop or emergency stop signal.
- Communication with Multiple Cranes/Derricks - Where a signal person is in communication with more than one crane/derrick, a system must be used for identifying the crane/derrick each signal is for as follows:
  - For each signal, prior to giving the function/direction, the signal person must identify the crane/derrick the signal is for or must use an equally effective method of identifying which crane/derrick for which the signal is intended.

- Testing Signal Transmission Devices - The devices used to transmit signals must be tested on site before beginning operations to ensure that the signal transmission is effective, clear, and reliable.
- Dedicated Channels - Signal transmission must be through a dedicated channel, except:
    - Multiple cranes/derricks or more than one signal person may share a dedicated channel for coordinating operations; and
    - Where a crane is being operated on or adjacent to railroad tracks, and the actions of the crane operator need to be coordinated with the movement of other equipment or trains on the same/or adjacent tracks.
- Language - The operator, signal person and lift director (if applicable), must be able to effectively communicate in the language used.

Work area control.

- Swing radius hazards – Workers must be protected from foreseeable risks of being struck by and/or pinched or crushed by the equipment's rotating superstructure.
- Training – Affected tradespersons must be trained to recognize struck by and pinch/crush hazard areas posed by the rotating superstructure.
- Barriers – Control lines, warning lines, railings or similar barriers must be erected to mark the boundaries of the hazardous areas. All barriers must be equipped with a warning sign (such as “danger-swing/crush zone”).
- Protecting tradespersons in the hazard area – Before a worker goes to a location in the hazard area that is out of the view of the operator, the worker (or someone instructed by the worker) must ensure that the operator is informed that he/she is going to that location.

Keeping clear of the load.

- Hoisting routes - Where available, hoisting routes that minimize the exposure of tradespersons to hoisted loads must be used.
- Workers in fall zone - While the operator is not moving a suspended load, no worker must be within the fall zone except for the following:
    - Workers engaged in hooking, unhooking, or guiding a load
    - Workers engaged in the initial attachment of the load to a component or structure
    - Workers operating a concrete hopper or concrete bucket

Safety criteria for tradespersons in fall zone.

When affected tradespersons must be in the fall zone the following criteria must be met:

- The materials being hoisted must be rigged to prevent unintentional displacement.
- Hooks with self-closing latches or its equivalent must be used.
- A qualified rigger must do the rigging.

Safety criteria for lifting over occupied buildings.

Every reasonable effort should be made to avoid lifting over an occupied building. In cases where the competent person for this operation has determined that a lift over an occupied building is necessary and other options are infeasible, the following criteria must be met:

- Prior to the lift, the area of the top two floors that is within the fall zone shall be evacuated
  - If the contractor's/subcontractor's qualified, competent person determines it—after a thorough hazard assessment—that evacuation is not necessary, this decision shall be submitted to the Whiting-Turner project team be in writing. In addition, the contractor's/subcontractor's competent person must ensure that the critical lift protocols are followed.
- All affected paths of access and egress must be barricaded to prevent access to the restricted area or fall zone
- Signage notifying occupants of the activity and their new path of travel shall be conspicuously posted.

Safety criteria for receiving a load.

Only tradespersons receiving the load can be within the fall zone when the load is being landed.

Safety criteria for tilt up or tilt down operations.

During tilt up or tilt down operations the following criteria apply:

- No worker may be directly under the load.
- Only tradespersons essential to the operation can be in the fall zone but may not be directly under the load.

Workers essential to the operation.

Workers are essential to the operation only if the following apply:

- It is infeasible for the worker to perform the operation from outside the fall zone and;
- The worker is physically guiding the load; or
- The worker is closely monitoring and giving instructions regarding the loads movement; or
- The worker must detach the load or initially attach the load to another component or structure.

Operator qualification and certification.

- Qualification or certification - The employer must ensure that the operator is qualified or certified in accordance with the standard. Employer options for getting affected operators qualified or certified follow:
  - Certification by an accredited crane operator testing organization;
  - Qualification by an audited employer program;
  - Qualification by the U.S. military; or
  - Licensing by a government entity.
- Exceptions to qualification and certification requirements - Operators of derricks, side-boom cranes, or equipment with a maximum manufacturer-rated hoisting/lifting capacity of 2,000 pounds or less are exempt from qualification and certification requirements.

Signal person qualifications.

- Qualification Requirements - The employer must ensure that signal persons meet the following qualification requirements before giving any signals to operators:
    - Obtain documentation from a third party qualified evaluator showing that the signal person meets the qualification requirements established in the standard; or
    - Obtain documentation from the employer's qualified evaluator (not a third party) showing that the signal person meets the qualification requirements established in the standard.
- Documentation Availability - The employer must make signaler qualification documentation available at the site where the signal person is employed.
- Knowledge Requirements - Each signal person must demonstrate the following:
    - Knowledge and understanding of the type of signals used. If hand signals are used, the signal person must know and understand the Standard Method for hand signals;
    - Competence in the application of the types of signals used;
    - Basic understanding of the equipment operation and limitations, including the crane dynamics involved in swinging and stopping loads and boom deflection from hoisting loads;
    - Knowledge and understanding of the relevant requirements of the standard covered in the sections on Signals-General Requirements, Signals - Hand Signal Chart, and Signal Person Qualifications; and
    - That he or she meets the qualification requirements through successful completion of an oral or written test and a practical test.

Qualifications of maintenance & repair employees.

- Maintenance, inspection, and repair personnel are permitted to operate the equipment only where specified requirements are met as established in the standard.

Hoisting personnel.

- Personnel hoisting requirements - The use of equipment to hoist personnel is prohibited unless the employer can demonstrate that other methods would be more hazardous and is able to comply with the personnel hoisting requirements that are established in the standard.
- Hoisting personnel on Whiting-Turner project sites shall be done only after review of the plan and deemed feasible by Vice President and the Area EH&S Manager assigned to the project.
- Hoisting personnel on Whiting-Turner projects shall be considered a critical lift or activity, and therefore shall meet all requirements of a critical lift before the lift may begin.

1.5.1 Critical Lifts

Introduction

The goal of this section is to assure that crane lifts which meet the criteria stated below are done with understanding of the regulatory requirements as well stated guidelines contained herein.

The Whiting-Turner Contracting Company identifies a critical or special lift as

- any lift where the total weight of the load and the deductions for the equipment combined exceeds 75% of the capacity of the crane capacity chart at the specific boom length and radius of the load,
- any lift where there will be more than one (1) crane or piece of load handling equipment attached to the load at a time;
- any lift that involves the lifting of personnel;
- any lift where the contents of the lift are considered hazardous to health or environment, and an accidental release could result harm to either;
- any lift where encroachments precautions are required for power lines.

Lift Plan Development

The load.

- Identify loads weight, center of gravity, and dimensions, and the sources of that information.
- Identify any components that could shift during the lift and develop a method to secure any items identified if required.
- Identify load attachment points and assure they are suitable for the load to be handled, while maintaining load integrity.
- Identify the requirements to be met for the loads orientation and securement prior to the release of the load handling equipment and rigging.

Load handling equipment.

- Identify the load handling equipment and the anticipated configuration(s).
- Assure the load handling equipment can handle the total anticipated load, including the rigging, accessories, and attachments in the intended configuration(s).
- Ensure the load handling equipment is in compliance with the requirements of the site, the manufacturer or qualified person, industry-recognized standard, local, state, and federal regulations.
- Establish the process to setup, erect, or install, and dismantle the load handling equipment using the information provided by the following:
    - The manufacturer
    - A qualified person
    - Site specific recommendations
    - Applicable regulatory requirements
- Identify all required inspections and tests on the load handling equipment that need to be performed. Additional inspections may be necessary for repetitive critical lifts.

Rigging.

- Establish rigging method that will support and secure the load and is suitable for the activity.
- Ensure that the rigging method and the equipment have the capacity to support the load in the configuration or geometry required by considering the following:
  - Dynamic Effects
  - Adverse environmental conditions, temperature, wind, lightning etc.
  - Position of the center of gravity relative to rigging support points
  - D/d ratio
- Identify the weight of the rigging, accessories, and attachments, as well the sources of that information
- Establish the process to ensure that rigging equipment meets the manufacturer's specifications, regulations, and industry-recognized standards (e.g. ASME B30.9, B30.20, and B30.26) and onsite requirements.
- Identify all necessary inspections and tests for the rigging equipment and that they are carried out prior to the lift
- For repetitive lifts ensure a more frequent inspection process is in place.
- Establish the process to install and disassemble the rigging equipment using the manufacturers' information and other applicable standards.
- Ensure that the rigging will be protected from damage during the activity.

The travel path.

- Identify the path of travel for the load and the load handling equipment
- Establish a process to minimize the exposure to overhead loads by way of barricades, spotters, or lookouts to ensure only authorized personnel are allowed into the fall zone
- Ensure the load and the load handling equipment has adequate clearance to prevent contact with site-specific hazards or obstructions during the activity
- Ensure a tagline of proper type and length is obtained for load control
- Ensure that the path taken if pick and carry operation is instituted that level and substantial support are established.

Personnel.

- Identify the tasks to be completed prior to, during, and after the load handling activity, and the personnel required to complete each task.
- Identify the specialized training required for these tasks and ensure copies of these training completion documents are attached to the plan.

Site, services, and ancillary equipment.

- Identify the equipment necessary to assist the load handling operation, (high reach, personnel lift, boom lift etc.)
- Identify and ensure specialized training is completed and copies of the completion are attached to the lift plan if required.
- Ensure that ground conditions for equipment support and that proper all underground hazards and placement have been identified and marked for adequate clearance.

- Ensure that all equipment is used and operated in accordance with manufacturer, regulatory and industry standards.

Communication system.

- Identify the suitable communication system to be used during the activity. Acceptable methods for Whiting-Turner project sites are:
  - Voice or radio signals
  - Hand signals
  - Other methods of signals are available but would require review prior to being permitted in respect to effectiveness and applicability.
- Identify back up system to be used in the event of interruption from initial communication system plans

Site control.

- Identify vehicular and pedestrian access and traffic controls to be used.
- Ensure the plan addresses the following:
  - Vehicular and pedestrian traffic in and around the site that could potentially be affected by the load handling activity
  - Potential interference for other site activities and the controls to used
  - Location of barricades or other measures which may be put in place to restrict traffic or prohibit interference during the load handling activity

Contingency considerations.

- The plan should address, at minimum, the following potential events that could cause deviation from the original lift plan:
  - Equipment malfunction or loss of power (e.g. loss of power, fouled rigging, radio communication failure etc.)
  - Adverse changes to the environment (weather, visibility)
  - Deviation from the planned load characteristics identified
  - Adverse changes to the site conditions (surrounding activities, change in ground conditions, and unauthorized entry to the fall zone).

Emergency action plan.

- Review the existing Emergency Action Plan and coordinate modifications created by the load handling activity if applicable.

Pre-lift meeting.

The lift director shall conduct the meeting and the Whiting-Turner supervisor in charge of the operation or other designated person from Whiting-Turner shall attend the meeting along with all associated personnel to the lift.

- At a minimum, the following elements should be reviewed with all load handling activity personnel:
  - Overview of the load handling activity
  - LHE, rigging, and other equipment involved in the load handling activity

- The sequence of events and step-by-step procedures for the entire load handling activity
- Safety measures, as required (e.g. work task plan action items)
- Load handling activity personnel assignments, addressing
  1. Individual responsibilities (e.g. location, time, task)
  2. Work location hazards (e.g. pinch points)
  3. Communication methods
  4. Personal protective equipment requirements
  5. Qualification(s) of assigned personnel

- Concern raised during this meeting shall be addressed prior to proceeding with the load handling activity
- At the completion of the pre-lift meeting, the lift director should confirm that the attendees understand the plan and respective roles and responsibilities during the load handling activity
- For repetitive lifts, the lift director should decide the frequency of pre-lift meetings. Pre-lift meetings are not required prior to each repetition of the load handling activity.

Executing the critical lift plan.

- Preparation for the load handling activity - the lift director should confirm that all setup and preparation requirements of the plan are in place and all required inspections and tests on the LHE(s) and rigging equipment have been completed.
- Initiating the Load Handling Activity - immediately prior to performing the load handling activity, the lift director should ensure that either:
  - All requirements of the plan continue to be met and no conditions exist that would preclude implementation of the plan; or
  - If a deviation exists, the load handling activity is not initiated until the deviation is addressed by a qualified person or the lift director determines that conditions are acceptable to allow the activity to begin.
- During the Load Handling Activity - the lift director should ensure that the load handling activity continues to comply with the plan.
  - If the operation deviates from the plan, the load handling activity should be stopped and evaluated to determine if
    1. The load handling activity can resume according to plan;
    2. The contingency measures can be implemented
    3. The plan can be readily modified at the site to accommodate an unexpected condition or event; or
    4. The load handling activity can no longer be implemented a planned, requiring a modified plan to be prepared. In such case, the load and the LHE shall be secured, if possible, until a new plan can be developed
    5. Changes or modifications to the plan should be communicated to all affected load handling personnel prior to initiating the change.
    6. If the load handling activity is stopped for any reason, only the lift director may initiate restart.
- After the completion of the load handling activity, the lift director should

  - Review the development, planning, and execution of the load handling activity with the load handling personnel. Items for review should include, but not be limited to, the requirements of all previous sections.
  - Identify potential measures to improve future load handling activity
  - Communicate any recommendations identified during the activity to the appropriate personnel for future considerations
- For repetitive lifts, decide the frequency of post-lift reviews and evaluation of the lift plan. Post-lift reviews may not be required after each repetitions of the load handling activity.

1.5.2 Tower Cranes

Introduction

Certain projects, due to size and scope, require the use of tower cranes. The quantity and location of towers cranes will vary from project to project. In some cases, due to project requirements, multiple tower cranes may be in a manner resulting in an overlapping operating zone (i.e. area where the operating zone or radius of working jib intersects the operating zone of another tower crane). While this will increase the hook access across the working deck and enhance the effectiveness of each crane, it brings with it significant safety concerns. For that reason, Whiting-Turner has established the following guidelines. In addition, notice to the Federal Aviation Administration (FAA) guidelines set forth in 14 CFR—Aeronautics and Space, Part 77—Safe, Efficient Use, and Preservation of Navigable Airspace, must be adhered to.

Procedures

Employers using tower cranes must comply with specific provisions in the standard that cover the following subjects:

- Erecting, Climbing and Dismantling
- Signs
- Safety Devices
- Operational Aids
- Inspections

Overlapping operating zones.

Multiple tower cranes operating with an overlapping operating zone have the potential to come into contact with each other. Such an occurrence has the potential to cause damage to the crane and/or its components; cause the crane or cranes to fail and topple; and/or cause severe injury and even death to tradespersons and/or the public. The safe operation of multiple tower cranes with an overlapping operating zone is determined by the communication and coordination of experienced and skilled operators. Nevertheless, by taking a proactive approach to safety and risk management, there is an opportunity to promote safe crane operations and minimize the potential for crane related accidents resulting from overlapping operating zones.

Written operating procedures must be developed and implemented to coordinate lifting tasks in the overlapping operating zone to prevent contact, collision, or interference between a component or suspended load of one crane with a component or suspended load of another crane. The following safety procedures / protocols should be considered if a project has multiple tower cranes with an overlapping operating zone to minimize, if not eliminate, the potential for contact/collision between cranes.

- Establish a means and protocol for communicating between the crane operators when a crane operates in the overlapping zone. Communicating protocols may include the following:
    - Crane operators must have the ability to communicate to each other (via radio - same channel)

  - Reduce distracting background noise on radios by ensuring crane operators, monitor, and limited riggers have separate radio channels
- Include protocols that all crane operators must follow before entering another crane's operating zone. Consider including the following:
  - Visually ensure it is safe to enter the other crane's operating zone
  - Communicate entry intent into that zone to the other operator
  - Receive an acknowledgement response from the other operator. If the entering operator does not receive acknowledgement from the other operator than the entering operator must not proceed with entering the other operator's operating zone
- Standardize the language used for all communication between crane operators (English)
- Consider limiting the number of individuals that can communicate directly with the operators (i.e. individuals on the working deck or other requesting use or support of the crane, etc.)
- Establish clearance requirements for loads passing over or near another tower crane
- Proximity alarms must be utilized to decrease the potential for tower crane contact/collision. Various zone protection and boundary protection safety systems exist in the marketplace (e.g. TAC-3000 Tower Crane Collision / Accident Avoidance Safety System)
- Consider creating a 'right-of-way' procedure giving one crane priority for working in the overlapping operating zone.
- Consider assigning a monitor to observe / supervise all crane activity and provide that monitor with the ability to stop all crane activity should violations of protocol occur, or potentially hazardous situations be observed. The following elements / activities should be considered related to use of said monitor:
  - Monitor shall be equipped with radio to communicate with all crane operators
  - Demonstrate bright, highly visible outerwear unique to the monitor so to be easily distinguishable to the operators and other tradespersons (e.g. bright colored vest and/or hardhat, etc.).
  - Monitor shall be solely dedicated to its role as monitor and shall not participate in any other activities on the project while acting as monitor
  - Monitor shall observe crane activity to ensure that proper protocol is followed
  - Monitor shall listen to communication between operators to ensure that protocol is followed:
  - If operators fail to communicate with each other as protocol requires, the monitor shall issue a reminder to the operators requiring compliance to protocol
  - Monitor shall record instances when operators fail to comply with protocol and inquire why the violation took place
  - Violations in protocol should be copied to the appropriate supervisor / Superintendent and safety personnel of the responsible trade. Documentation shall also be made available to Whiting-Turner
  - Monitor should have the ability to stop crane activity if required to maintain safe crane operations. Methods for delivering an "ALL STOP" directive may include the following:

1. Outfit monitor with air horn to be used to alert a stop directive to operators. Test procedure in field to identify most effective method for communicating signal to operators.
2. Outfit monitor and operators with a separate and dedicated radio to deliver the stop directive. The separate radio is reserved for stop directive between monitor and operators only and would ensure that operators receive directive.

- Monitor shall be a competent person and subject to Whiting-Turner approval

- Help to better identify the counter deck of the lower crane by installing bright flags or other markings on the back of the counter deck.
- Identify counter deck radius of lower crane on the current working deck by means of flags, cones, or other clear delineators to be conspicuously visible. Confirm that delineators are clearly visible to operators and other crane related personnel.
- Formal overlapping operating zone plan shall be distributed to and acknowledged by the responsible contractor's Superintendents, foremen, operators, monitor(s), and safety personnel – at a minimum.
- Disciplinary procedures to address violations in protocol, etc. should be included.
  - Appropriate disciplinary procedures should be identified and implemented on the responsible party if crane contact or associated accident, etc. takes place (e.g. removal of operator or responsible party from the project).
  - Responsible trade shall identify how it will determine who the responsible party is should an occurrence take place requiring disciplinary action.
  - Whiting-Turner shall be copied on all recorded non-conformances with protocol as well as related disciplinary procedures/actions.
- If it is determined that only one tower crane is needed for a given activity or shift of work, the overlapping work zone plan must address the crane that is not in use to avoid interference with the working crane. Procedures for this situation may include the following:
  - If the non-working crane is the higher crane it can be allowed to weathervane and the working crane (lower) can work unobstructed.
  - If the non-working crane is the lower crane:
    1. Non-working crane shall be operated, but not used, to keep non-working crane from *weathervaning* or movement of the non-working crane into the working crane's operating zone.
    2. Investigate to determine whether the non-working crane is outfitted with a locking mechanism to keep the crane from *weathervaning* except under extreme weather conditions. If this is the case, the non-working crane can be locked to prevent *weathervaning* into the working crane's operating zone. At certain wind speeds (determined by crane manufacturer) the lockdown function will be overridden, and the non-working crane will be allowed to weathervane. Weather conditions and wind speed causing this override will require all crane activity to stop in this scenario.

1.6. Demolition

Introduction

Each contractor/subcontractor performing demolition on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart T – Demolition, in addition to the following guidelines.

Procedure

Preparatory operations.

- Prior to initiating demolition activities, a competent person must make an engineering survey of the building to determine the condition of the structure and identify areas subject to unplanned collapse. A copy of this inspection must remain on site.
- All utilities must be shut off, capped, or locked out of service beyond the building line before demolition work is initiated.
- Prior to the start of work, a hazard assessment must be performed to identify any hazardous chemicals, gases, explosives, flammable materials, or similarly dangerous substances that may have been used on the property.
- Where employees are exposed to fall hazards, guardrail and personal fall arrest systems must be used. All hole covers must be identified and secured against accidental displacement.
- Any openings cut in a floor for the disposal of materials can be no larger than 25% of the aggregate of the total floor area, unless the lateral supports of the removed flooring remain in place.
- Contractor/subcontractor shall verify that all local ordinances and permitting issues have been addressed as they relate to demolition.
- Safety data sheets for known demolished material must be provided by the demolition contractor.
- Task lighting—which meets or exceeds the requirements of the standard—shall be provided by the demolition contractor/subcontractor.

Stairs, passageways, and ladders.

- Access to a structure being demolished shall be restricted; tradespersons shall be rerouted to designated stairways, passageways, and ladders. All other points of access shall remain closed.
- All designated access points shall clearly be marked, inspected periodically, and maintained in a clean, safe condition.

Chutes.

- No material may be dropped to a point outside the building unless that area is delineated with a protective barricade and the distance to any point does not exceed 20 feet.
- All chutes must be entirely enclosed except for openings equipped with enclosures at or slightly above the floor level for the insertion of materials.
- At all stories below the top floor chute openings shall remain closed.

- A substantial gate must be installed in each chute at or near the discharge end. A competent person must be assigned to control the operation of the gate and the backing and loading of trucks.
- Chutes must be designed and constructed of such strength as to eliminate failure due to the impact of material and debris loaded into them.
- Fall protection may be required where chute opening may create a fall exposure

Removal of walls, masonry sections and chimneys.

- Masonry walls, including sections of walls, will not be permitted to fall onto the floor of the building under demolition unless an engineer has determined that the floor can withstand the imposed load.
- No wall section, more than one story in height, will be permitted to stand alone without lateral bracing unless it was designed to stand alone.
- Structural or load-supporting members of any floor will not be cut or removed until all stories above such a floor have been demolished or removed.

Removal of walls, floors, and material with equipment.

- Mechanical equipment will not be used on floors unless the floors are of sufficient strength to safely support the equipment.
- Mechanical equipment will only be used for its intended purpose according to the manufacturer's recommendations.
- Curbs or stop logs must be installed and maintained by the demo subcontractor where a possibility exists for equipment going over the edge.

Removal of steel construction.

- Steel construction will be dismantled column length by column length, tier by tier.
- When floors have been removed planking—18" wide by 2" thick—must be used by employees engaged in razing the steel framing.

Mechanical demolition.

- No employees will be permitted in an area where "ball" or "clam" work is being performed. Only employees necessary for the performance of the operation may be permitted in this area.
- The area must be identified with warning barricades and signs.
- During this operation continuous observations, by the competent person, must be made to identifying potential areas of failure.

1.7. Electrical Hazards Prevention

Introduction

Use of electricity on the jobsite poses serious hazards, with employees potentially becoming exposed to such dangers as electric shock, electrocution, fires, and explosions. All Whiting-Turner employees and contractors/subcontractors working on a Whiting-Turner project will comply with NFPA 70E Electrical Safety Practices and 29 CFR 1926, Construction Industry Regulations, Subpart K – Electrical, in addition to the following guidelines.

Procedures

Working on or near exposed energized parts.

- It is Whiting-Turner's policy that no one works on live electrical circuits. If a situation arises where it is impossible to perform a task with the circuit de-energized, the Whiting-Turner Superintendent or Project Manager shall contact the Vice President and submit a formal request detailing why the circuits cannot be deenergized with a live electrical work plan prior to performing the work. An Area EH&S Manager must review the plan. A formal pre-construction meeting shall occur prior to any such work occurring.
- Only qualified electricians may work on electric circuit parts that have not been de-energized under the procedures of 1910.333.
- Such persons must be capable of working safely on energized circuits and shall be familiar with the proper use of special precautionary techniques, personal protective equipment, insulating and shielding materials and insulated tools.
- All work must be completed with strict compliance to NFPA 70-E requirements and guidelines.
- The contractor/subcontractor shall provide proof of training for all tradespersons when requested by Whiting-Turner.
- Light switches and receptacles must be protected by permanent or temporary cover plates prior to energizing the circuit.

Ground fault circuit interrupters.

- All 120-volt, single-phase 15 and 20 ampere receptacle outlets which are not part of the permanent wiring of the structure and which are in use by employees shall have approved GFCI's.
- Whiting-Turner requires that all projects are 100% GFCI compliant. An Assured Equipment Grounding Conductor Program may be used in addition to—but not in lieu of—the GFCI program. If permanent power outlets are to be utilized portable GFCI units shall be provided and utilized.
- All GFCI receptacles and circuit breakers shall be tested monthly to ensure the GFCI is properly functioning and protecting the worker. It is the responsibility of the electrical contractor/subcontractor to perform inspection and testing. The documentation shall be made available upon request.

Electric tools.

- All portable electric tools such as saws, hammers, drills, vibrators, and float machines must bear the label of a Certified Testing Agency, such as Underwriters Laboratories, CSA, ETL, or the like.

Extension cords.

- Only round, heavy-duty (type S, SJO, SJTW, ST, SO, STD) are acceptable for use on a construction site; at least 12 gauges or larger.
- Cords must be maintained in their original design configuration.
- Any cord which is damaged or has the grounding pin removed shall be removed from service, including power tools.
- Whenever an extension cord is plugged into permanent power, a GFCI is required between the extension cord and the receptacle.
- All electrical cords shall be out of the hallway, corridor, aisle, stairway, doorways, and exit areas where a tripping hazard may occur.
- All electrical cords shall be protected from damage by equipment, carts, trucks, and other rolling objects.
- Where possible, all extension cords will be suspended (8') above the floor or working surface.
- Extension cords shall not be fastened with staples, hung from nails, suspended with non-insulated wire, or hang from fire sprinklers.
- Extension cords shall not be run thru or laid over sharp metal objects that could subject the cord to cuts and possible unintentional energization.

Temporary wiring.

- All temporary wiring and lighting must meet current NEC codes.
- Temporary lighting must never be put on the same circuit as temporary receptacles.
- All temporary lighting circuits must originate from GFCI protected breakers.
- Temporary wiring must be rated for all conditions to which it may be subjected and installed per the requirements of NEC, OSHA, NFPA, and other authorities having jurisdiction.

Temporary lighting.

- The minimum illumination level 5 foot-candles; this shall be maintained by the electrical contractor at all times.
- Installation of temporary lighting must be per manufacturer's specifications and in compliance with OSHA, NFPA, NEC and local codes.

Fish tapes.

- Fish tapes or lines made of metal or any other conductive material are prohibited when the potential for contact with energized circuits exist; non-conductive tapes and lines will be used instead.

1.8. Energy Control Policy

Introduction

The intent and purpose of this procedure is to reduce or eliminate the danger of the unexpected release of stored or residual energy that could cause injury or death to the employee or to the public. Each contractor/subcontractor working on a Whiting-Turner project will comply with 29 CFR §1926.417, "Locking and Tagging of Circuits", in addition to 29 CFR §1910.147, "The Control of Hazardous Energy" along with the following guidelines.

Procedures

- Lockout/tagout (LOTO) shall not be considered for use until all other avenues of attaining a "zero-energy state" (all potential sources of any type including re-energization or stored) have been exhausted.

- All contractors/subcontractors working with electrical systems are required to have a written lockout/tagout procedure. A competent person shall be responsible to control all aspects of the LOTO procedure. They will ensure coordination with the appropriate tradesmen.

- If a system can be locked out through design or by other means, this will be the preferred method.

- The lockout device shall be substantial enough to prevent removal.

- The lock shall be a separately keyed lock for use only with the lockout system.

- The lockout device must be tagged with the name of the employee and their company. There shall be one lock for each employee (including Whiting-Turner) exposed to the system.

- If working in a multi-shift environment each worker shall remove their respective locks at the end of their shift. If work on the system is to continue, the next shift worker shall be present to install his lock immediately following removal of the lock from the previous shift. The creating contractor shall have a system in place to ensure that exposure is eliminated by controlling the potential hazardous energy by means of LOTO.

- Workers shall not leave locks on after the completion of their task. This does not apply to the competent person or supervisor. The use of 100% LOTO must be maintained by the responsible contractor/subcontractor until the completion of the task. Verification by all competent persons in charge of the LOTO shall be completed prior to re-energizing the system.

- If the energy isolation device cannot be locked out and a tag must be used, authorization from the Area EH&S Manager and Vice President is required prior to start of work.

- Tag out devices, including the means of attachment, shall be substantial enough to prevent accidental removal.

- The tag shall warn against energizing the tagged-out system such as: do not start, do not open, do not close, do not energize, do not operate, etc.

- The name of each employee shall be displayed on respective tags.

- The competent person shall be responsible for removing the tag and activating the system after all exposed employees have removed their tags.

- In the event an employee is discovered tampering with or violating the LOTO procedure, the employee will be removed from the project indefinitely.

Training and Documentation

- Each employer utilizing LOTO must establish a program and utilize procedures for affixing appropriate lockout or tagout devices to energy isolating devices, and to otherwise disable machines, piping, or equipment to prevent unexpected release of stored or residual energy to prevent injury to employees.

- Each employee affected by the LOTO procedure shall be trained in the procedure. Records of training will be kept on site and be made available to Whiting-Turner upon request.

- Each contractor/subcontractor involved in LOTO procedures shall maintain a log on site that identifies the following:
  - Date of usage
  - Number of locks and tags used
  - Persons involved
  - Time of LOTO initiation
  - Time of LOTO removal
  - Designated competent persons
  - Location of LOTO Devices

- Electrical or piping and instrumentation drawings identifying specific locations of the LOTO devices shall accompany the log.

- Locks shall only be removed by the person who applied the lock. In extreme circumstances, after "all reasonable means" to contact the employee who was responsible for the lock were exhausted, the Whiting-Turner Superintendent shall request a meeting with the Area EH&S Manager and contractor's/subcontractor's competent person. This process is to ensure that the contractor's/subcontractor's competent person has considered and documented all the necessary steps to keep the workforce safe prior to removing the lock. The decision to remove a lock rests solely with the contractor's/subcontractor's

competent person. However, the decision to remove a lock may be overridden by the Area EH&S Manager, if deemed necessary.

1.9. Excavations Policy

Introduction

The intent of this policy is to limit and/or eliminate the dangers associated with excavation and trenching operations that could expose tradespersons to the possibility of severe injury or death. Each contractor/subcontractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart P – Excavations, in addition to the following guidelines.

Procedures

Prior to the commencement of excavation activities where the excavation will be greater than three (3) feet in depth, a pre-excavation checklist must be completed by the contractor's/subcontractor's competent person and submitted to the Whiting-Turner project team.

Specific excavation requirements.

- Subcontractors whose employees will be entering trenches or excavations must ensure that a comprehensive training program in the recognition, identification, evaluation, and control of excavation hazards must be provided to all tradespersons prior to working in an excavation or trenching operation. This must also include a review of the geo-technical report.
- Underground utility installations must be identified and marked prior to beginning any excavation. To prevent unintentional contact, all necessary measures must be employed to locate underground utilities prior to excavating. Acceptable methods include but are not limited to the following: test pitting, ground penetrating radar (GPR), use of as-built drawings and any other obtainable information.
- When an excavation is performed within 3 feet of any utility line, a non-damaging method of excavation shall be used. The non-damaging method shall be hand digging with nonconductive tools. Other non-damaging methods, such as soft digging, vacuum digging, pneumatic hand tools, may be considered subject to approval by the competent person.
- A competent person must be identified on Whiting-Turner's competent person acknowledgment form and their qualifications submitted to the Whiting-Turner project team prior to the start of work.
- The competent person will be on-site during all excavation work to determine the soil type and its stability by performing one visual and one manual test in accordance with 29 CFR 1926, Subpart P Appendix A.
- Inspections must be conducted daily and after every rainstorm or other hazard-increasing occurrence. Daily inspection reports must be submitted to the Whiting-Turner project team upon request.
- All trenches, unless otherwise specified, shall be protected by snow fence, at a minimum.

Requirements for protective systems.

- Excavations greater than 5 feet in depth must be protected by one or more of the following systems as determined by the subcontractor's competent person:
    - Sloping / benching of sides to allowable configurations and slopes as per soil type.
    - Shielding (i.e. trench boxes) or shoring which shall have the manufacturer's tabulated data and specifications—or a professional engineer stamp—and current annual inspection documentation; all the aforementioned must be on site.
    - Using a slope or shield system designed by a registered professional engineer. Refer to 29 CFR Subpart P, Appendix B.
- Temporary and permanent spoils shall not exceed the angle of repose and shall be kept back at least two feet from the edge of an excavation.
- A registered professional engineer must design sloping or benching systems for excavations greater than 20 feet in depth.

Requirements for fall protection.

- Persons walking or working adjacent to a trench with vertical/shear walls that is equal to or greater than six (6) feet in depth must be protected from fall hazards unless it has been determined by the contractor's/subcontractor's competent person that it is infeasible or creates a greater hazard.
- Person crossing an excavation that is equal to or greater than six (6) feet in depth must be protected from fall hazards by means of a guardrail system.

Training Requirements

- Subcontractors whose employees will be entering a trench or excavation must have received training on recognizing and avoiding hazardous atmospheres, caught-in/between hazards due to cave-in/collapse, entrapment due to access & egress hazards, struck-by falling objects and equipment and falls into excavations.
- Atmospheric monitoring, if deemed necessary by the competent person or other competent party, must be documented, and conducted by someone trained in the use of atmospheric monitoring equipment.

1.10. Fall Protection and Prevention Policy

Introduction

Falls continue to be the leading cause of fatalities in the construction industry; in consequence, Whiting-Turner has zero tolerance for failure to comply with all provisions of our fall protection and prevention policy. Any tradespersons found violating said policy must be retrained. In addition, at the discretion of Whiting-Turner personnel, violators may be permanently removed from the project. Any contractor/subcontractor with any fall exposure must submit to Whiting-Turner the resume of their competent person trained in fall protection techniques. All Whiting-Turner employees and all contractor/subcontractor employees working on a Whiting-Turner project shall comply with 29 CFR 1926, Construction Industry Regulations, Subpart M - Fall Protection, in addition to the following guidelines.

Procedures

General fall protection requirements.

- Each contractor/subcontractor, with employees exposed to a fall 6' or greater to a lower level must ensure that effective fall protection measures and rescue procedures are addressed in their company activity hazard analysis (AHA) prior to beginning work on site. This is to include the name and qualifications of the designated competent person.
    - Exception: The provisions of this part do not apply when inspectors and competent persons are briefly inspecting, investigating, or assessing workplace conditions.
    - Exception: Fall protection policy includes any surface, except ladders, vehicles, or trailers.
    - Under the terms of 1926.500, fall protection is not required for employees who are on vehicles and trailers when the employee must be on the vehicle or trailer to perform his or her duties. For example, if the employee must climb on the tractor trailer rigs to connect the rigging for loading and unloading materials and equipment, the employer will utilize the sound judgement of their competent person for Fall Protection activities to determine how to best proceed.

- If at any time during work at heights, it is observed that the means as stated in the subcontractor's AHA for protecting the workers from falls are perceived as ineffective, work will be suspended until the subcontractor's competent person assesses the situation and makes necessary corrections. If corrections determined by the competent person involve modified work practices listed in the subcontractor's AHA, then these changes must be completed, and any necessary retraining must be provided to affected workers prior to allowing the continuation of the subcontractor's work at heights.
- At no time shall a safety monitor system be used as a sole means of fall protection.
- The use of controlled access zones (CAZ) and controlled decking zones (CDZ) as a means of fall protection are prohibited on Whiting-Turner projects.
- A Personal Fall Arrest System (PFAS) [comprised of a full body harness, double lanyards, anchorage point and anchorage connector], a personal fall restraint system

(PFRS) [comprised of a full body harness, lanyard, anchorage point and anchorage connector], a guardrail, or safety net system must be in place to protect all trade persons from exposure to falls working at or above 6 feet.

- Employees must be protected from falling objects by the installation of toe boards, barricades, or canopy structures.
- Employees working on ladders must be at least one and a half times the height of the ladder away from any perimeter, shaft, stairway, and opening where the fall distance exceeds 6'. If that distance is not feasible, a conventional fall protection method must be employed.
- Stilts are only permitted in broom swept areas, where there is no change in elevation.
- Non-roofing activities – contractors/subcontractors other than roofers who must perform work on roofs must develop a written/drawn plan showing the roof area where work is planned to take place to protect their workers from potential exposure to falls. The plan must be provided to the Whiting-Turner team for review by Whiting-Turner's Superintendent and EH&S Manager.

Floor and wall holes and openings.

- Prior to creating a hole or opening in any elevated work surfaces, contractors/subcontractors must submit an elevated work surface modification permit.
- All floor and roof openings into which persons can accidentally walk or fall through shall be guarded by a physical barrier or covered.
- All floor and roof holes through which equipment, materials, or debris can fall shall be covered.
- All floor holes greater than 12" x 12" must have a Whiting-Turner floor hole cover sign in place. Smaller holes shall be labeled "hole" in accordance with the OSHA standard.
- Coverings for floor and roof openings shall be of sufficient strength to support two times the maximum intended load that may be imposed and shall be secured in place to prevent accidental removal or displacement.
- Conduits, trenches, and manhole covers and their supports, when exposed to vehicles or equipment, shall be designed to carry a truck rear axle load of two times the maximum anticipated load.
- Particle board, medium density fiber board (MDF) or similar material is prohibited from being used as floor hole covers on Whiting-Turner projects.
- Wall openings 18" or greater in width from which there is a drop of 6' feet or greater and the bottom of the opening is less than 39" above the working surface, shall be guarded with a top rail or a top rail and intermediate rail or a standard guardrail. A toe board or enclosing screen shall be provided where the bottom of the wall opening, regardless of width, is less than 3 ½ inches above the working surface.
- Wall opening protection shall meet one of the following requirements:
    - Barriers of such construction and mounting that, when in place at the opening, the barrier can withstand a load of at least 200 pounds applied in any direction (except upward) with a minimum of deflection at any point on the top rail or corresponding member.

- A hinged floor-opening cover shall guard every hatchway and chute floor opening. Or the opening shall be barricaded with railings to leave only one exposed side. The exposed side shall be provided either with a swinging gate or so offset that a person cannot walk into the opening.
- An extension platform outside a wall opening onto which materials can be hoisted for handling shall have a standard railing that meets handrail standards. However, the inside of an extension platform may have removable railings to facilitate handling materials. Workers removing guardrails must utilize personal fall prevention equipment to tie off while working on or near platforms that are not 100% protected by guardrail.

Fall protection systems.

- Guardrail Systems
  - The top rail height of a guardrail system must be 42", + or – 3". Midrail heights must be half of that distance.
  - Perimeter cable shall not be less than 3/8" steel cable.
  - Corner uprights must be braced so that the required tension may be maintained.
  - The cable must be terminated with three U-bolt wire rope clips that maintain an efficiency rating of at least 80% of the wire rope's breaking strength as proven through product documentation (e.g. Crosby clips).
  - The U-bolt clips must have the U-bolt section on the dead or short end of the rope and the saddle on the live or running end of the rope.
  - The use of any combination of hook turnbuckles as part of the perimeter cable system is prohibited.
  - A Personal Fall Arrest System (PFAS) must not be attached to a guardrail system unless a registered professional engineer designs the system to accommodate the PFAS; documentation of that design must be maintained on site.
  - The top rail of guardrail systems must be able to withstand a force of 200 lbs. in all directions, without failure, and must be smooth surfaced to prevent hand injuries.
  - The contractor/subcontractor installing the perimeter cable guardrail system shall submit a design with details on how the system will be installed and maintained.
  - All guardrail systems [with the exception of scaffolds systems or where it can be proven to create a greater hazard] must be equipped with orange perimeter screening or mesh to prevent the ability to breach the system by climbing through rails. The installation of the screening must be compliant with Whiting-Turner's orange perimeter screening guidelines. The orange perimeter screening policy satisfies the requirement of flagging a wire rope guardrail system every 6' for high visibility.

- Personal Fall Arrest Systems and Fall Restraint Systems

- A PFAS must be used when working from suspended scaffolds, when breaching any guardrail systems, and when working near unprotected floor openings and perimeter edges.
- A fall restraint system must be employed when working from articulating boom man lifts.
- A competent person must assure that fall distance calculations have been evaluated in each circumstance where a PFAS is used.
- A PFAS is not required when climbing up or down a ladder. Fall protection shall be considered by the competent person if employees work from a ladder 6' or more above a lower level and are exposed to a fall.
- Employees must use positive fall protection devices when working in proximity to any leading edge.
- Retractable lanyards must incorporate either a 3/16" steel wire cable or a nylon strap with a minimum width of 1".
- All anchorage points utilized in a personal fall arrest system must be capable of supporting a load of no less than 5000 lbs.
- Steel erectors and metal decking installers shall utilize 100% fall protection devices at all times when working at 6' or above.
- Horizontal lifelines must be designed by a registered engineer and installed under the supervision of a qualified person. A safety factor of two must be maintained.
- Adequate fall protection devices must be provided, installed, and used at all loading platforms by the contractor/subcontractor wishing to remove existing perimeter protection prior to its removal.
- Rescue procedures must be provided in writing when using a personal fall arrest system.

Training Requirements

- Each employee exposed to a fall hazard must be trained by a competent person in the recognition and avoidance of such a hazard. Proof of training shall be made available to Whiting-Turner upon request.

- Specific training includes, but is not limited to the following:
  - The type of fall exposures expected
  - The correct procedures for erecting, maintaining, dismantling, and inspecting of any fall protection system used by the employee

- When employee lacks the understanding and demonstrative skill required for the proper application of fall protection systems, the employer shall provide retraining of such employee(s).

- Retraining documentation—to include instructor's name and qualifications, training literature and sign-in sheet—must be submitted to the Whiting-Turner project team on subcontractor's letterhead.

1.11. Fire Protection and Prevention

Introduction

Each contractor/subcontractor working on a Whiting-Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart F – Fire Protection and Prevention, in addition to the following guidelines.

Procedures

General requirements.

- Contractor/subcontractors involved in any spark producing activity must plan to provide adequate fire extinguishers no less than 10' from their work.
- Contractor/subcontractor fire watch personnel must be trained in the use and limitations of fire extinguishers.
- Client requirements permit procedures, fire watches, shields and blankets must be considered when developing site-specific fire prevention procedures.
- All firefighting equipment must be clearly visible and access to the equipment must be maintained at all times.
- Travel distance to a fire extinguisher shall not exceed 100 feet.
- Each portable fire extinguisher shall undergo an annual certification & have an inspection tag affixed. These services shall be performed by qualified, authorized, certified and actively licensed fire extinguisher companies.
- Portable fire extinguishers must be inspected monthly. The documentation must be a weather resistant tag attached to the extinguisher. A fire extinguisher log is recommended for back-up.

Fire prevention.

- Temporary offices or trailers, when located inside of a building under construction, must be constructed of fire retardant materials.
- Combustible materials, such as cardboard, wooden pallets, etc., must be removed from the work area immediately.

Flammable liquids.

- All storage, handling or use of flammable liquids shall be under the supervision of qualified persons.
- All sources of ignition shall be prohibited in areas where flammable liquids are stored, handled, and processed. Suitable NO SMOKING OR OPEN FLAMES signs shall be posted in all such areas.
- Contractor/subcontractor must provide and mount a 20lb ABC fire extinguisher between 25'-75' from flammable storage.
- Flammable liquids shall not be stored in areas used for exits, stairways or used for safe passage of people.
- Dispensing systems shall be electrically bonded and grounded.

- Above ground storage tanks shall be double-walled or provided with a secondary means of containment. Secondary containment shall have a capacity at least equal in volume to that of the largest tank plus 10 percent of all other tanks enclosed. Provision shall be made for draining off accumulations of ground or rainwater or spills. Drain plugs shall remain in place except when draining.
- A metal cabinet meeting the requirements of NFPA 30, Flammable and Combustible Liquids, shall be provided for the storage of more than a total of 25 gallons of flammable liquids and greases in buildings used for other than storage or processing. Not more than a total of 60 gallons shall be stored in any one cabinet. Individual containers must be metal, kept tightly closed, and shall not exceed five (5) gallons capacity.
- Smoking or open flames within 50 feet of where flammables are being used or transferred or where equipment is being fueled is prohibited.
- Areas in which flammable liquids are transferred, in quantities greater than 5 gallons from one tank or container to another tank or container, shall be separated from other operations by 20 feet or by a five-foot partition, having a fire resistance of at least one hour. Drainage or other means shall be provided to control spills, Natural or mechanical ventilation shall be provided to maintain the concentration of flammable vapor at or below 10 percent of the lower flammable limit.
- Workers shall be required to guard carefully against any part of their clothing becoming contaminated with flammable liquids. They shall not be allowed to continue work when their clothing becomes contaminated and must remove or wet down the clothing as soon as possible.
- Equipment using flammable liquid fuel shall be shut down during refueling, servicing or maintenance.
- Where an automatic extinguishing system is provided, the system shall be designed and installed in accordance with NFPA recommendations.
- In every inside storage room there shall be one clear aisle maintained at least three feet wide.
- Outdoor portable tanks shall be at least 20 feet from buildings. Individual tanks shall be at least 5 feet apart.
- The dispensing units shall be protected against collision damage.
- Handling of all flammable liquids by hand shall be in safety containers with flame arresters. This requirement shall not apply to those flammable liquid materials that are extremely hard to pour, that may be handled in original shipping containers. For quantities of one gallon or less, only the original container or approved metal safety cans shall be used for storage, use and handling of flammable liquids.
- Storage of flammable/combustible liquids on or inside of buildings under construction shall be no more than one-day supply.

Paints and painting.

- Paints, varnishes, lacquers, thinners, or other volatile painting materials and containers shall be kept tightly closed when not in use and shall be stored in accordance with NFPA recommendations.

- Unopened containers of paint, varnishes, lacquers, thinners, and other flammable paint materials shall be kept in a well-ventilated location, free of excessive heat, smoke, sparks, flame, or direct rays of the sun.
- Paint-soiled clothing and drop cloths, when not in use, shall not be stored on site.
- Paint scraping, and paint-saturated debris shall be removed daily from the premises.
- Ventilation adequate to prevent the accumulation of flammable vapors to hazardous levels shall be provided in all areas where painting is done, or paints are mixed.

Liquid petroleum gases.

- Storage, handling, installation and use of liquefied petroleum gases and systems shall be in accordance with NFPA 58. LP gas shall not be stored indoors.
- Liquefied petroleum gas containers and equipment shall not be used in unventilated spaces below grade in pits, below decks and other such spaces where dangerous accumulations of heavier-than-air gas may accumulate due to leaks or equipment failure.
- Equipment using liquefied petroleum gas shall be shut down during refueling operations.
- Filling of fuel containers for motor vehicles from bulk storage containers shall be performed not less than 10 feet from the nearest masonry-walled building, or not less than 25 feet from the nearest building or other construction and, in any event, not less than 25 feet from any building opening.
- Filling of portable containers or containers mounted on skids from storage containers shall be performed no less than 50 feet from the nearest building.

Gasoline power.

- Fire
    - Only approved containers are allowed for the storage of flammable liquids. An approved container is one which is constructed of metal, has a spring-loaded top that allows venting of fumes and contains a flash arresting screen and spout cover.
    - Provide a 20-pound ABC dry chemical type extinguisher between 25'-75' from area where flammable liquids are being handled
    - "No Smoking" and "No Open Flame" signs must be conspicuously posted in service, refueling, or flammable liquid storage areas.
    - All drums shall be properly labeled in accordance with 29 CFR 1910.1200 Hazard Communication.
- Fumes
    - Gas engines exhaust carbon dioxide and carbon monoxide. Dioxide is heavier than air; monoxide slightly lighter. A mixture of the gases usually is heavier than air although heat may cause it to rise. Both are without color, taste or smell. Light concentrations cause headache and nausea. Death is swift in heavy concentrations. A few minutes may be too long. Do not discount this hazard. If anyone exhibits symptoms, do not attempt rescue without proper personal protection equipment.
    - Do not run gas engines in pits, manholes or confined spaces.

- If gas engines are to be used inside buildings, excavations, crawl spaces under basement floors, hoist engineers' shanties, then the following must be done:
  1. Ventilation shall be required
  2. Testing the space for carbon monoxide shall be done before starting the engines
  3. Continuous monitoring

Temporary heating devices.

- Fresh air must be supplied in quantities sufficient to maintain the health and safety of all employees. If a competent person deems natural airflow inadequate, then mechanical ventilation must be provided.
- Heaters used in the vicinity of tarpaulins, canvas or similar coverings must be located at least 10' from the covering and be secured to prevent ignition due to wind.
- Open fires are not allowed on Whiting-Turner projects.
- All gas piping shall be labeled and flagged or painted; shutoff valves shall remain in place.
- Whiting-Turner permits the use of direct fired and indirect fired heaters for temporary power. Clearance from combustibles shall be maintained per the manufacturer's requirements. Direct fired temporary heaters must be equipped with the following:
  - High temperature limit switch—monitors operating temperature of equipment; provides automatic shutdown.
  - Air proving control—continuously monitors operating airflow, provides automatic shutdown.
  - Low voltage reset—provides protection for insufficient incoming power.
  - Redundant solenoids—dual gas valves as required, for redundant gas flow protection.
  - Electronic ignition sequence—flam safety start-up with continuous electronic monitoring of equipment in firing mode of operation.

Note: Housekeeping is the best defense against fires. All trash and debris shall be placed in proper containers.

1.12. Hand and Power Tools Policy

Introduction

All Whiting-Turner Employees and Contractors/subcontractors working on a Whiting-Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart I – Tools – Hand and Power, the manufacturer's safety recommendations, and the following guidelines.

Procedures

General requirements.

- Hand and power tools must be maintained in a safe condition, per manufacturer's guidelines.
- If the tool is designed to accommodate a guard, the guard must be in place while the tool is being used.
- Tools manufactured with a handle shall be used with the handle in place.
- All two-handed tools must be used with two hands.
- Additional personal protective equipment (PPE), such as a face shield or hearing protection, may be required while operating a tool. If so, they must be in use.
- Any person found making a tool guard inoperable will be immediately removed from the site.

Hand tools.

- Drift pins, wedges, chisels, and other impact tools must be kept free of mushroomed heads.
- Wrenches must not be issued or used when the jaws are sprung, and slippage is probable.

Electric powered tools.

- All power tools must be double insulated or provided with a three wire, grounded connection.

Pneumatic power tools.

- Each connection on a pneumatic tool and air hose must be secured with a "whip-check" or similar device.
- All air hoses, with an inside diameter exceeding ½ inch, must have a flow reduction device (OSHA valve) at the supply source to reduce pressure in case of hose failure.
- Compressed air must not be used for cleaning unless the pressure is reduced to less than 30 psi and appropriate guarding and PPE are in place.

Fuel powered tools.

- Fuel powered tools must be stopped and turned off while being refueled, serviced, or maintained.

Powder-actuated tools.

- Users of powder actuated tools must be properly trained and certified to operate the equipment. Certification must always be kept on the user's person while the tool is in use.
- The manufacturer, or a representative thereof, must train workers in the safe use of powder-actuated tools.
- The tool must be tested each day, according to manufacturer's recommendations, before loading to see that safety devices are in proper working condition.
- Tools must not be loaded until just prior to the intended firing time.
- Loaded tools must not be left unattended.
- All tools must be used with the correct shield, guard or attachment recommended by the manufacturer.
- Unspent shots must be disposed of according to the manufacturer's recommendation and must be removed from the site by the user each day.

Abrasive wheels and tools.

- The RPM rating on all grinding machine motors must not exceed the speed rating of the grinding wheel attachment.
- The grinding wheel shall be compatible with the grinder for which it is being used (i.e. proper size and type).
- All abrasive wheels must be closely inspected, and ring tested before mounting to ensure they are free from cracks or defects.

Woodworking tools.

- All portable, power driven circular saws must be equipped with guards above and below the base plate or shoe.
- When the tool is withdrawn from the wood, the lower guard must automatically and instantly return to the covering position.
- Any worker found disabling a blade guard will be immediately removed from the site.
- Saws must have the electrical cord unplugged when making blade adjustments or changing blades.

1.13. Hearing Conservation

Introduction

Whiting-Turner recognizes that excessive noise can cause permanent hearing loss if appropriate administrative or engineering controls or personal protective equipment is not used. Limiting exposure to excessive noise through engineering controls is Whiting-Turner's preferred method of control.

Procedures

Permissible Noise Exposures

Duration per day, hours	Sound level dba, slow response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

- Protection against the effects of noise exposure must be provided when the sound levels exceed those shown in the table above. The measurement must be observed on the A-scale of a sound level meter at slow response.

- When employees are subjected to sound levels exceeding those shown above, feasible administrative or engineering controls must be utilized.

- If such controls fail to reduce sound levels within the levels shown above, personal protective equipment must be provided and used to reduce the noise exposure.

- In all cases where the sound levels exceed the values shown in the table above, a continuing, effective hearing conservation program must be administered.

- If the noise levels are determined to cause an 8-hour TWA exposure greater than 85 dba, the contractor/subcontractor must provide a comprehensive hearing conservation program before continuing work. At a minimum this program shall include:
  - Noise survey data for typical work they perform.
  - Noise dosimetry data for typical exposures from the work they perform.
  - Training records for employees working on the Whiting-Turner Project.

1.14. Hexavalent Chromium

Introduction

Hexavalent chromium (Cr(VI)) compounds are widely used in the chemical industry as ingredients and catalysts in pigments, metal plating and chemical synthesis. Hexavalent chromium can also be found in the construction industry through welding on stainless steel or on hexavalent chromium painted surfaces. The major health effects include lung cancer, nasal septum, skin ulcerations, and contact dermatitis. The purpose of this policy is to prevent employee exposure to hexavalent chromium compounds during construction activity. Each contractor working on a Whiting-Turner project must comply with 29 CFR §1926.1126, Chromium (VI), in addition to the following guidelines.

Procedures

Permissible exposure limit.

- Since this construction activity is limited to specialty work, Whiting-Turner will direct the Contractor/subcontractor to provide specific Activity Hazard Analysis (AHA) meetings to address potential exposure.
- The Employer must ensure that no employee is exposed to an airborne concentration Cr(VI) in excess of 5 micrograms per cubic meter of air (5 ug/m^3) calculated as an 8-hour time-weighted average (TWA).
- Engineering controls are the preferred method to achieve the Permissible Exposure Limit (PEL).

Exposure determination.

- The contractor/subcontractor must determine the 8-hour TWA exposure for each employee exposed to Cr(VI). This may be accomplished using two options; scheduled or performance-oriented monitoring.
- Scheduled Monitoring
    - The contractor/subcontractor must perform initial monitoring to determine the 8-hour TWA for each employee based on a sufficient number of personal breathing zone samples.
    - If the contractor/subcontractor does representative sampling, it must be conducted on the employee(s) expected to receive the highest exposure.
    - If the monitoring indicates that employee exposures are below the action level (1/2 the PEL or 2.5 ug/m3), the employee may discontinue monitoring.
    - If the monitoring indicates that employee exposures are at or above the action level, the contractor/subcontractor must perform periodic monitoring at least every six months.
- Performance-Oriented Monitoring
    - If this option is chosen, the contractor/subcontractor must determine the 8-hour TWA for each employee based on any combination of air monitoring, historical data, or objective data sufficient to accurately characterize employee exposure to Cr(VI).

Methods of compliance.

- As stated previously, engineering and work practice controls must be used to reduce and maintain employee exposure to Cr(VI) to or below the PEL.
- If feasible engineering and work practice controls are insufficient to reduce exposure below the PEL, then respiratory protection must be used.
- The contractor/subcontractor will not be allowed to rotate employees to different jobs to achieve compliance with the PEL.

Respiratory protection.

- Respiratory protection use must comply with OSHA's Respiratory Protection requirements.
- The contractor/subcontractor must provide respiratory protection in the following circumstances:
    - Periods necessary to install or implement feasible engineering or work practice controls.
    - Work operations where an employer has implemented all feasible engineering and work practice controls and such controls are not sufficient to reduce the PEL.
    - Emergencies

Protective work clothing and equipment.

- Where there may be a hazard to the skin or eyes from exposure to Cr(VI) the contractor/subcontractor must provide protective clothing or equipment to the employee.
- The contractor/subcontractor must ensure that the employees remove all clothing and equipment that may be contaminated with Cr(VI) when the work is complete or at the end of the shift.
- The contractor/subcontractor must ensure that chromium-contaminated clothing is not removed from the workplace.
- When contaminated protective clothing or equipment is removed for laundering or cleaning, the contractor/subcontractor must ensure that it is stored and transported in impermeable bags or containers.
- The contractor/subcontractor must inform any person who launders or cleans clothing or equipment of the potential effects of exposure to Cr(VI) and that the clothing or equipment should be laundered or cleaned in a manner that minimizes skin or eye contact.

Hygiene areas and practices.

- Where protective clothing and equipment is required, the contractor/subcontractor must provide change rooms that comply with 29 CFR 1926.51.
- Where skin contact may occur, the contractor/subcontractor must provide hand-washing facilities that comply with the previously noted standard.

Medical surveillance.

- The contractor/subcontractor must make medical surveillance available, at no cost, to employees who meet the following criteria:
    - o Those who are or may be occupationally exposed to Cr(VI) at or above the action level for 30 or more days a year
    - o Those who are experiencing signs or symptoms of adverse health effects associated with Cr(VI) exposure
    - o Those exposed in an emergency

Communication.

- Must follow the same communication of hazardous chemicals highlighted in Whiting-Turner's Hazard Communication Program.

Recordkeeping.

- The contractor/subcontractor must maintain the following data records:
    - o Air monitoring
    - o Historical monitoring
    - o Objective data
    - o Medical surveillance

1.15. Housekeeping

Introduction

These requirements apply to all work performed by Whiting-Turner employees, contractors/subcontractors, and vendors. Each contractor/subcontractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart C – General Safety and Health Provisions

Procedures

- Work areas and paths of ingress/egress must be kept clear and free of obstructions by material/debris.
  - Clean-as-you-go practices are required.
  - Require contractors/subcontractors to sort and organize material, sweep daily, and standardize activities to aid in the elimination of storage of excess/unused material in active work areas
  - Materials shall not be stored in a manner that will block, restrict, impede, or prevent access to an egress path or emergency equipment, such as fire extinguishers, emergency eyewash or shower, emergency shutoff buttons or emergency disconnect devices.
  - Work that may temporarily block emergency exits, safety showers, elevators, corridors, and hallways will require prior Whiting-Turner approval.

- Power Cord Management:
  - All cords must be inspected before use.
  - At no time shall cords be strung across exits or in front of emergency equipment.
  - Run cords overhead in a supported fashion with nonconductive material, when feasible.
  - Run cords around perimeters, when feasible.
  - Tape cords down or use cord covers if they present a tripping hazard.
  - Support all cords that run through floors or ceilings with appropriate means.
  - All cords must be stored and put away after use. (i.e. not coiled up on floor).
  - All extension cords must be equipped with GFCI protection or be plugged into an outlet equipped with GFCI protection.
  - If the above listed safety requirements cannot be met, temporary wiring must be installed to facilitate proper cord management.

- Material Storage:
  - Materials stored near the area where work is performed should be limited to only those materials that will be used in the same shift.
  - Any material stored in a work area longer than 24 hours must be approved by Whiting-Turner.
  - Store all items neatly in cabinets or on shelves.
  - Gang boxes, toolboxes, and sea containers/conex boxes shall not have materials stored on top of them.

- If more storage area is needed, contact Whiting-Turner Superintendent.

- Chemical Storage:
  - All chemicals brought on site must have been specified for use on the project.
  - The user of the chemical must provide Whiting-Turner an SDS prior to bringing the substance on site.
  - All chemicals and equipment containing chemicals must be stored in approved areas (i.e. chemical cabinet).
  - Contractors are responsible for removing all unused chemicals from the Whiting-Turner project site at the completion of their contract.
  - All chemical containers must be properly labeled.
  - Chemical/gas cylinders (welding, purging, leak detection cylinders, etc.) must be secured at all times.
  - All dedicated chemical storage areas must have safety data sheets (SDS) available at the storage location.

- Material/Waste Disposal:
  - Waste disposal methods shall be specified within each contract/subcontractor's Activity Hazard Analysis (AHA) and Work task Plan (PTP).
  - All hazardous waste must be disposed of in accordance with Federal, State, and Local regulations and shall comply with applicable Whiting-Turner hazardous waste programs.
  - All hazardous waste must be properly labeled.
  - Hazardous waste materials must be discarded into proper disposal containers
  - Non-hazardous waste must be disposed of into appropriate recycle or disposal containers.

1.16. Materials Handling and Rigging Policy

Introduction

Material handling and rigging incidents account for many tradespersons compensation claims annually. Each contractor working on a Whiting-Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart H – Materials Handling, Storage, Use and Disposal, in addition to the following guidelines.

Procedures

General material storage.

- Aisles and passageways shall be kept clear at all times for the safe movement of material handling equipment and employees.
- Materials shall not be stored within 6' of any hoist way or interior floor opening.
- Materials shall not be stored within 10' of an exterior wall which does not extend above the material.

Rigging.

- General Requirements
  - Before each use rigging equipment, including its fastenings and attachments, must be inspected by a competent person/qualified rigger.
  - Inspections must also be conducted during use and where additional service conditions warrant.
  - Defective or damaged slings must be removed from service immediately and destroyed or tagged out of service.
  - Taglines shall be utilized to minimize worker exposure to falling and swinging loads.

- Lifting Chains
  - Alloy steel lifting chains must have a permanently affixed, durable identification tag stating size, grade, rated capacity, and sling manufacturer.
  - Attachments, including, but not limited to hooks, rings, oblong links, pear-shaped links or other welded or mechanical links, must have a rated capacity at least equal to the lifting chain.
  - Job made shop hooks or links, makeshift fasteners formed from rebar or bolts or other such attachments are not allowed on Whiting-Turner projects.
  - Additional lifting chain inspection criteria is based upon the frequency of use, the severity of the service conditions, the nature of the lifts being made, and the experience gained on the service life of slings used in similar circumstances.
  - Lifting chains shall be inspected, prior to each use.

- Wire Rope Slings
  - The manufacturer's safe working loads must be followed at all times.

- Wire rope must not be used if, in any length of eight diameters, the total number of visible broken wires exceeds 10% of the total number of wires.
- Wire rope must not be used if it shows signs of excessive wear, corrosion, or defects.
- Slings shall not be shortened with knots, bolts, or other makeshift devices.
- Slings must be protected from sharp edges with padding, softeners, or similar devices.
- Shock loading of a sling is prohibited, and slings must not be pulled from under a load when the load is resting on the sling.

- Synthetic Slings
  - Each synthetic sling must be identified with the name of the manufacturer, rated capacities, and type of material.
  - Synthetic slings must be immediately removed from service if any of the following conditions are present; acid or caustic burns, melting or charring of any of the sling surface, snag, puncture, tear or cut, broken, or worn stitches or distorted fittings.
  - Slings must be protected from sharp edges with padding, softeners, or similar devices.

1.17. Medical Services Staffing Policy

Introduction

Each contractor/subcontractor must have one person on site with a valid certificate in first aid and cardio pulmonary resuscitation (CPR) while actively engaged in work activities. The Whiting-Turner Contracting Company will have, at all times, an individual on site with a valid certificate in first aid and cardio pulmonary resuscitation (CPR).

Procedures

- In addition to the first aid kit Whiting-Turner supplies, each contractor's/subcontractor's first aid kit must be in compliance with Whiting-Turner's Bloodborne Pathogen Policy.
- The contents of the first aid kit shall be placed in a weatherproof container with individual sealed packages for each type of item and must be inspected at least weekly.
- Emergency telephone numbers shall be conspicuously posted.
- Where the eyes or body of any person may be exposed to injurious corrosive materials (e.g. during concrete placement), suitable facilities for quick drenching or flushing of the eyes and body must be provided within the work area for immediate emergency use.

1.18. Mobile Elevated Work Platforms

Introduction

Each contractor/subcontractor using an aerial lift on a Whiting-Turner project must comply with 29 CFR §1926.453, in addition to the following guidelines.

Procedures

- Only authorized and trained individuals may operate aerial lifts. Companies will make verification of training available to Whiting-Turner upon request.
- Aerial lifts shall be inspected by the trained operator each day prior to use, in accordance with the manufacturer's requirements.
- All aerial and scissor lifts shall be tagged according to Whiting-Turner's scaffold tagging policy
- Fall protection requirements for aerial lift use shall comply with the manufacturer's recommendations.
- Worker must use personal fall arrest systems (PFAS) or personal fall restraint systems (PFRS)—whichever the manufacturer requires—when working from articulating boom platforms.
- Workers must keep both feet on the floor of the basket; use of guardrails or toe boards to gain additional height is prohibited on Whiting-Turner projects. Persons observed committing this unsafe act will be removed from site for a minimum of 3 days; their employer must retrain them prior to their return to the site.
- Where aerial and scissor lifts are used on concrete slabs, any floor depressions or grade changes are required to be barricaded to restrict travel onto that area.
- The area(s) below the basket or platform of aerial lifts shall be cordoned off using reinforced danger tape—or something of equivalent or greater tensile strength—and by using signage to identify the overhead hazard if/when the possibility of falling objects exist.
- Field modifications are not allowed on aerial lifts. Aerial lifts shall not be used to hoist, raise, or position material outside of the platform or basket unless manufactured to do so.

1.19. Motor Vehicles, Mechanized Equipment, and Marine Operations Policy

Introduction

Each contractor/subcontractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart O – Motor Vehicles, Mechanized Equipment, and Marine Operations in addition to the following guidelines.

Procedures

- All operations requiring the use of heavy equipment will require a pre-planning meeting, contractors/subcontractors must include strategies to prevent injuries to tradespersons and the public.

- All fuel driven equipment being used indoors or in partially enclosed spaces—that does not meet the Final Tier 4 engine requirements—must have scrubbers where the potential for carbon monoxide overexposure exists.

- Equipment meeting the Final Tier 4 emissions standards are permitted—continuous air monitoring for the concentration of CO is required.

- Keys are to be removed at the end of the shift and cab doors locked.

- All material handling equipment, with an obstructed view to the rear, must have a back-up alarm that is functional and distinctly audible.

- A “spotter”, wearing an ANSI approved high visibility traffic vest, may be used in lieu of an alarm, but only if such devices are not routinely supplied on such a vehicle. Vehicles must never back “blind” on a Whiting-Turner project.

- If the competent person determines that the back-up alarm is not sufficient, a spotter must be present to help facilitate the rear operation of the equipment.

- Equipment and dump trucks equipped with faulty back-up alarms shall be repaired within 24hrs or taken out of service until back-up alarms are repaired. During that 24hr period, to remain in service, a spotter must be present to help facilitate the rear operation of the equipment.

- Forklift operator training records must be submitted to the Whiting-Turner project team prior to site use.

- A seatbelt must be provided and used when operating equipment on a Whiting-Turner project.

- All windows must be in full working condition. Any equipment with broken glass of any size, including mirrors will be taken out of service.

- Equipment without a rollover protective structure (ROPS) or seatbelt is not allowed on any Whiting-Turner project unless it was manufactured in such a way and determined to be more hazardous with such protections.

- Use of cell phones and radios are not permitted while operating machinery.

- No one may work within 20' of motorized equipment like an excavator, backhoe, loader etc. unless that person's presence is fundamental to the operation underway and the operator can observe the person at all times.

- All equipment with a rotating superstructure shall have swing radius protection or a designated spotter.

Hoisting personnel.

- Personnel hoisting requirements - The use of load handling equipment to hoist personnel is prohibited unless the employer can demonstrate that other methods would be more hazardous and is able to comply with the personnel hoisting requirements that are established in the standard.
- Hoisting personnel on Whiting-Turner project sites shall be done only after review of the plan and deemed feasible by Vice President and the Area EH&S Manager assigned to the project.
- Hoisting personnel on Whiting-Turner projects shall be considered a critical lift or activity, and therefore shall meet all requirements of a critical lift before the lift may begin.

1.20. Personal Protective Equipment

Introduction

All Whiting-Turner and contractor/subcontractor employees on Whiting-Turner projects must wear all the personal protective equipment necessary to complete their jobs safely. Mandatory personal protective equipment required on the project site includes, but is not limited to, hardhat, safety glasses, high visibility vests, and sturdy leather work boots. A competent person onsite will determine additional necessary equipment. Each contractor/subcontractor working on a Whiting-Turner project site will comply with 29 CFR 1926, Construction Industry Regulations, Subpart E – Personal Protective and Lifesaving Equipment; in addition to the following guidelines.

Procedures

- All Whiting-Turner employees, contractor/subcontractor employees and visitors to project sites are required to wear safety glasses that comply with ANSI Z87.1.
    - Dark lenses are not to be worn inside of buildings, in enclosed areas, or at night.
    - Tinted lenses must be worn on light colored membrane roofs.
    - Prescription eyeglasses and sunglasses that do not comply with ANSI Z87.1 are prohibited.
    - A full-face shield is required while grinding concrete.
    - Face shields are required for: welding, burning, and cutting; using abrasive wheels; chop saws; portable grinders or files, chippings concrete, stone, or metal; drilling or working under dusty conditions; using explosive actuated fastening or nailing tools; overhead work; work with hazardous liquids or gases.
    - Face shields must be compatible with a hard hat.

- All Whiting-Turner employees, contractor/subcontractor employees and visitors to project sites are required to wear hardhats that comply with ANSI Z89.1.
    - Aluminum hardhats, and bump caps are not permitted on Whiting-Turner projects.
    - For security and identification purposes, all hardhats shall display the contractor/subcontractor name and/or decal indicating for whom the employee works as well as the employee's name.
    - Employees exposed to electrical voltages of 600V or greater shall wear hardhats that meet the requirements of ANSI Z89.2 type hardhats.

- All Whiting-Turner employees, contractor/subcontractor employees and visitors to project sites are required to wear substantial leather work boots.
    - Employees working with jackhammers, tampers and similar equipment are required to utilize metatarsal guards over their work boots.

- Where necessary, each employee shall use equipment with filter lenses that have a shade number appropriate for the work being performed for protection from injurious light radiation.

- Hand protection is required when employee's hands are exposed to hazards such as those from skin absorption of harmful substances, cuts or lacerations, abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes.

- Workers exposed to roofing tar must wear long sleeved shirts and gloves. Workers who are directly exposed to hot tar must also wear a full apron and face shield.

- Personal protective equipment labeled "WT" or Whiting-Turner" is reserved for the use of Whiting-Turner employees only.

Roles and Responsibilities

Contractor/subcontractor management shall
- provide necessary PPE and training,
- monitor use of PPE,
- provide replacement PPE when needed,
- identify any new hazards that would require the use of PPE; and
- be responsible for the assurances of PPE adequacy, maintenance, and sanitation.

Contractor/subcontractor employees shall
- properly use and care for assigned PPE and
- immediately inform supervisor if PPE is damaged or not effective.

1.21. Respiratory Protection

Any contractor/subcontractor with employees who are required to wear respiratory protection must submit their company's respiratory protection program prior to start of work. Compliance with this requirement applies to filtering face-piece respirators (N95 Respirators) as well.

All programs shall meet or exceed Whiting-Turner policies as well as the most current federal, state, and local regulatory requirements.

1.22. Sanitation Guidelines

Introduction

Each contractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart D - Occupational Health and Environmental Controls; employers shall establish and maintain basic sanitation provisions for all employees in all places of employment as specified in the following paragraphs.

Procedures

Drinking water supply.

- An adequate supply of drinking water shall be provided; cool water shall be provided during hot weather.
- Only approved potable water systems shall be used for the distribution of drinking water.
- Portable drinking water dispensers shall be designed, constructed, and serviced to ensure sanitary conditions; shall be capable of being closed, and shall have a tap.
- Containers shall be clearly marked as "drinking water" and shall not be used for other purposes.
- Workers shall use cups when drinking from portable water coolers/containers.
- Unused disposable cups shall be kept in sanitary containers and a waste receptacle shall be provided for used cups.

Non-potable water.

- On outlets dispensing non-potable water, signs cautioning that the water is unsafe for drinking, washing, or cooking will be conspicuously posted

Toilets.

- When sanitary sewers are not available, one of the following facilities, unless prohibited by local codes, shall be provided: chemical toilets, recirculating toilets, or other toilet systems as approved by state/local governments.
- Each toilet facility shall be equipped with a toilet seat and toilet seat cover. Each toilet facility - except those specifically designed and designated for females - shall be equipped with a metal, plastic, or porcelain urinal trough. All shall be provided with an adequate supply of toilet paper and a holder for each seat.
- Toilet facilities shall be so constructed that the occupants shall be protected against weather and falling objects; all cracks shall be sealed, and the door shall be tight-fitting, self-closing, and capable of being latched.
- One toilet facility shall be provided for every ten (10) persons on site.
- Separate toilet facilities shall be provided for each sex.
- Provisions for routinely servicing and cleaning all toilets and disposing of the sewage shall be established before placing toilet facilities into operation.

Washing facilities.

- Washing facilities shall be provided at toilet facilities and as needed to maintain healthful and sanitary conditions.
- Each washing facility shall be maintained in a sanitary condition and provided with water (either hot and cold running water or tepid running water), soap, and individual means of drying. However, where it is not practical to provide running water, hand sanitizers may be used as a substitute.
- Whenever employees are required by a standard to wear protective clothing, change rooms with storage facilities for street clothes and separate storage facilities for protective clothing shall be provided.

Vermin control.

- Enclosed workplaces shall be constructed and maintained, as far as practical, to prevent the entrance or harborage of rodents, insects, and other vermin. An effective extermination program shall be instituted where the presence of such vermin is detected.

1.23. Scaffolds

Introduction

Each contractor/subcontractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart L – Scaffolds, in addition to the following guidelines.

Procedures

- Scaffolds are required to be designed, erected, and inspected by a competent person in accordance with OSHA 1926 – Subpart L Scaffolding Standards.

- Contractors/subcontractors erecting scaffolding must submit a scaffold erection plan/drawing to the Whiting-Turner team showing a section view of necessary components including ties/braces, platforms and means of access.

- Employees erecting or dismantling a scaffold are required to utilize appropriate fall protection at heights six (6) feet or above unless proven to be infeasible or more hazardous as determined by their company's competent person.

- Base plates/screw jacks and mudsills or other adequate firm foundation are required to be used as part of a complete support scaffold.

- All scaffolds, including carpenters' bracket scaffolds, over six (6) feet in height shall have guardrails on all open sides, unless otherwise specified by the manufacturer. If guardrails cannot be used on a walking/working platform, contractors/subcontractors are required to use another means to protect employees from a fall.

- Cross-braces are not considered to be an adequate guardrail (fall protection) system and shall not be used as a top or mid rail on Whiting-Turner projects.

- Contractors shall comply with Whiting-Turner's scaffold tagging policy. The scaffold tag system shall be color coded and visible. The competent person shall inspect the scaffolding system before each work shift. The competent person shall sign and date the scaffold tag.
    - Green tags are reserved for complete systems
    - Red tags are reserved for erection/dismantling activities and for scaffolds with deficiencies in the system
    - Yellow tags are reserved for systems that require the use of both PFAS and guardrail systems for incomplete scaffold systems or platforms.

- Scaffold tags are required at each entry point of the scaffold system.

- Each contractor/subcontractor using the scaffold system shall have its competent person place a tag at each point of entry for their employees.

  - In the case of stair towers, the responsible party's competent person shall put the tags in place and inspect the stair towers daily.

- Fall protection is required when walking/working at six (6) feet or above.

- The scaffold erection competent person will consider/determine if a horizontal, diagonal brace shall be in place to prevent the scaffold from wracking.

- Scaffold working platforms are required to have a fully planked deck (5 planks). Walking platforms for use during the erection/dismantling of a scaffold are required to be at least two (2) planks wide.

- Walking/working surfaces are required to be made of scaffold grade planks. Planking is to be inspected by the competent person erecting the scaffold prior to installation during the scaffold erection. Damaged planks found during the initial inspection and all concurrent inspections are to be immediately removed from service and replaced.

- Walking/working surfaces are required to comply with the following.
  - Planking that does not extend at least six (6) inches past the bearing surface are required to be secured in such a manner to prevent accidental displacement.
  - Planking that is less than ten (10) feet in length is not to extend more than twelve (12) inches past the bearing surface and planking greater than ten (10) feet in length is not to extend past the bearing surface more than eighteen (18) inches without adequate barricades to prevent employees from stepping on the cantilevered end. Al planking must rest on bearers.

- Contractors/subcontractors are to provide a proper and safe access/egress for employees working on a scaffold. Only approved built-in scaffold stairs or ladders are to be used for access and egress while working on scaffolds.

- Contractors/subcontractors are required to load materials (brick, block, stone, etc.) as close to the load bearing surface as possible. Loading in the center of the scaffold bay is not permitted. Scaffolds shall be designed to support 4x the intended load; load capacity ratings shall not be exceeded.

- Contractors/subcontractors performing work on scaffolding are required to complete a daily scaffold inspection prior to allowing their employees on the scaffold. The above-mentioned inspection is required to be completed by an employee competent in scaffold safety.

- Contractors/subcontractors are responsible for training their employees and must submit the training documentation to Whiting-Turner upon request.

- Rolling/mobile scaffold systems 30" or less in width (baker-type scaffolds) are required to have guardrails on all sides unless otherwise specified by manufacturer or local jurisdiction having authority; all wheels are required to be locked when an employee is on the working

platform. Outriggers are required when the height of scaffold exceeds 3x the base width or according to the manufacturer's recommendation, whichever is more stringent. Self-propelling/skateboarding is not permitted.

- Suspended scaffolds shall be designed, constructed, operated, inspected, tested, and maintained as specified in the operating manual for the device; all operating instructions and design specification shall be submitted to the Whiting-Turner project team prior to installation and a copy shall remain on the jobsite.

1.24. Signs, Signals and Barricades

Introduction

All employees of the Whiting-Turner and its contractors/subcontractors will comply with 29 CFR 1926, Construction Industry Regulations, Subpart G, Signs, Signals and Barricades.

Procedures

- Signs must be posted to warn others that a temporary hazard exist in the area where the subcontractor is working.

- Barricades must be utilized to deter the passage of persons or vehicles when necessary.

- Required signs will comply with the OSHA standards described in 1926.200.

- Where areas may require additional awareness or present unique danger, the use of warning tape may be necessary.
    - For areas that require additional caution, (e.g. uneven surfaces, wet surfaces) yellow caution tape should be used. Caution tape does not prohibit access.
    - For areas where entry and travel are prohibited, (e.g. areas where fall protection is being erected or areas with overhead work being performed) red danger tape should be used. Danger tape is intended to prohibit access.
    - Caution/danger tape has limitations; therefore, it shall not be used in lieu of physical barricades when an occurrence calls for a physical barricade.
    - The intent of the warning tape is to notify of hazards that may arise during construction activities. Every effort must be made to correct these situations with permanent solutions in a timely fashion.
    - All caution and danger tape used on Whiting-Turner project sites shall be of the reinforced type and shall be supplemented with a tag/label affixed with the responsible party's name, company, contact number, and potential hazard.

- All flagmen shall be trained on appropriate procedures before controlling traffic, as required by the Manual on Uniform Traffic Control Devices (MUTCD) and any municipal or state guidelines.

- All flagmen shall utilize sign paddles and shall be outfitted with high visibility garments, as required by current ANSI standards. All PPE and traffic control equipment shall be outfitted with reflectorized material for night work as required by current ANSI standards.

- All crane and hoist signals shall comply with applicable ANSI standards.

- All traffic control devices shall comply with the MUTCD and any applicable Municipal or State guidelines.

- All signs shall be secured in such a way that would allow venting in the event of high winds.

1.25. Silica Exposure Control Plan

Exposure to silica can lead to silicosis, a serious and sometimes fatal respiratory disease. Silicosis develops from being exposed to and breathing in silica dust. Excessive amounts of silica dust may be generated during activities such as, but not limited to: sandblasting, rock drilling, roof bolting, foundry work, stonecutting, drilling, quarrying, brick/block/concrete cutting, gunite operations, lead-based paint encapsulate applications, asphalt paving, cement products manufacturing, demolition operations, hammering, and chipping and sweeping concrete or masonry, drywall sanding and concrete saw cutting.

Any contractor/subcontractor whose work potentially exposes their workers to silica above allowable limits is required to submit their company's Silica Exposure Control Plan to Whiting-Turner prior to start of work. The contractor's/subcontractor's plan must be in compliance with the requirements set forth in 29 CFR 1926.1153.

Releases of plumes of silica laden dust are prohibited on Whiting-Turner projects. Observation of such activities will require cessation of the task and a meeting with the creating contractor/subcontractor to determine what engineering or work practices need to be put in place to ensure these releases are reduced and/or eliminated as prescribed in their silica exposure control plan.

1.26. Stairways and Ladders

Introduction

Each contractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart X – Stairways and Ladders, in addition to the following guidelines.

Procedures

General requirements.

- A stairway or ladder must be provided at all personnel points of access where there is a break in elevation of 19" or more.
- A double-cleated ladder or two or more separate ladders must be used when ladders are the only means of egress from a working area with 25 or more employees.
- All aluminum and commercially manufactured wooden ladders shall not be used on Whiting-Turner projects.

Stairways.

- When doors from an office or storage trailer open directly onto a stairway, a platform must be provided, and the swing of the door must allow an additional 20" to prevent the door from striking an employee.
- Workers are not allowed to use metal pan stairs unless they have been fitted with wooden filler blocks or poured with concrete.
- Incomplete/unsafe stairways must be physically blocked off to prevent unauthorized use; barricade tape would be an insufficient restrictive method.
- Stairways with four or more risers or rising more than 30", whichever is less, must have a handrail and a stair rail along each unprotected side or edge.

Ladders.

- All hazards must be evaluated by a competent person when employees are engaged in work from a ladder 6' or more above an adjacent surface.
- Fall protection shall be considered by the competent person if employees work from a ladder 6' or more above a lower level and are exposed to a fall.
- Employees working on ladders must be at least one and a half times the height of the ladder away from any perimeter, shaft, stairway, and opening where the fall distance exceeds 6' without employing additional means of fall protection.
- Contractors/subcontractors shall provide ladders with duty ratings that meet the needs of their employees.
- Workers are required to select ladders that are capable of safely supporting their weight and the weight of their tools.
- When employees ascend or descend a ladder, they must maintain three-points of contact (e.g. two hands and a foot or two feet and a hand).
- Pull ropes should be placed at all access ladders so employees can safely lift tools or equipment to upper levels.

- Stepladders must be opened fully and set level when in use.
- When ladders are used to access upper landings, the side rails must extend at least 3 feet above the landing and secured from displacement at the bottom and top.
- When ladders are used to access upper landings, a guardrail system/corral shall be placed around the opening through which the ladder is protruding.
- All ladders must be used for the purpose for which they were designed.
- The base of an extension and or straight ladder is to be placed 1 foot horizontal from the face of the surface for every 4 feet vertical.

Job made ladder requirements.

- Job made wooden ladders must meet ANSI ASC A.14.4-2009 specifications.

Training.

- Each worker involved in stair and ladder use must be trained by their company's competent person in the recognition and avoidance of stair and ladder hazards.

1.27. Steel Erection

Introduction

Each contractor/subcontractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart R – Steel Erection. In addition to the items listed in this section, all contractors are to comply with all federal, state, and local requirements and codes including those in other sections of this Manual, and those imposed by the owner. All contactors shall be required to comply with all parts of these requirements based on their scope of work.

Procedures

This section set forth requirements to protect tradespersons from hazards associated with steel erection activities involved in construction.

When floors are ready for turn over the steel erection contractor must notify Whiting-Turner. Whiting-Turner will evaluate the installation and condition of the guardrail cable system provided by the steel erector and decide to accept custody of the system or to have the system removed.

The steel erection contractor has a responsibility to inspect and control fall protection in their work areas based on their scope of work.

Structure steel design.

- Column anchorage
  - All columns shall be anchored by a minimum of four (4) anchor bolts.
  - When two structural members on opposite sides of a column web, or a beam web over a column, are connected sharing common connection holes, at least one bolt with its wrench-tight nut shall remain connected to the first member unless a shop-attached or field-attached seat or equivalent connection device is supplied with the member to secure the first member and prevent the column from being displaced. If a seat or equivalent device is used, the seat (or device) shall be designed to support the load during the double connection process. It shall be bolted or welded to both a supporting member and the first member before the nuts on the shared bolts are removed to make the double connection.
  - The perimeter columns have holes or other devices in or attached to perimeter columns at 42-45 inches above the finished floor and the midpoint between the finished floor and the top cable to permit installation of perimeter safety cables. Welded nuts are not permitted as part of the perimeter safety fall protection system.

General requirements.

- Pre-Steel Construction Meeting
  - A pre-steel construction meeting shall be held prior to beginning steel erections on our projects. This meeting will be held with all parties involved in steel erection activities including but not limited to the following: steel erector, steel

fabricator, owner and/or owner representative and architect and/or structure engineer.

- This pre-construction meeting will address issues and items relating to all activities to steel erection including but not limited to the following:
  1. Adequate access roads shall be provided into and through the site for the safe delivery and movement of derricks, cranes, trucks, other necessary equipment, and the material to be erected and means and methods for pedestrian and vehicular control.
  2. A firm, properly graded, drained area, readily accessible to the work with adequate space for the safe storage of materials and the safe operation of the erector's equipment shall also be provided.
  3. The Steel Erector must be prepared to notify Whiting-Turner of the compaction requirements necessary to adequately support the crane at 360° capacities.
  4. Written notification that the concrete in footings, piers and walls and the mortar in the masonry piers and walls has attained 75 percent of the intended minimum compressive design strength, based on the appropriate ASTM standard test methods performed by Whiting-Turner's 3rd party testing agency. The steel erection contractor shall not erect steel until it has received the written notification.
  5. Pre-planning steel erection actives to ensure hoisting of structure steel avoid hazards associated with overhead operation.

- Site specific erection plans are to be posted and must including the following topics:
  - Material deliveries, material staging and storage
  - Coordination with other trades and construction activities.
  - Path for overhead loads
  - Critical lifts, including rigging supplies and equipment.
  - A description of steel erection activities and procedures
  - Stability considerations requiring temporary bracing and guying
  - Erection bridging terminus point
  - Columns and beams connections
  - Decking installation
  - Ornamental and miscellaneous iron.
  - Procedures that will be used to comply with protection from falling objects.
  - Special procedures required for hazardous non-routine tasks.

Repairs and/or modifications.

- Prior to the erection of a column, Whiting-Turner shall provide written notification to the steel erector if there has been any repair, replacement, or modification of the anchor bolts of that column.
- Anchor bolts shall not be repaired, replaced or field-modified without the approval of the project structural engineer of record.
- Columns shall be set on level finished floors, pre-grouted leveling plates, leveling nuts, or shim packs which are adequate to transfer the construction loads.

Fall protection.

- Fall Protection shall be installed and/or used along all edges of structure that are six (6) feet or more in height and shall remain in the area where the steel erection activity has been completed for Whiting-Turner to decide to accept custody or direct removal.
- All tradespersons, including connectors, engaged in steel erection activities on a walking/working surface with an unprotected side or edge more than six (6) feet above a lower level shall be protected from fall hazards by a conventional fall protection method.
- All hoisting operations in steel erection shall be pre-planned to ensure that the project requirements are met for employee protection.
- Other construction processes below steel erection are prohibited unless overhead protection for the employees below is provided.
- Full body harnesses are required for fall arrest and these harnesses require daily inspections of this equipment.
- Fall protection is required in baskets of aerial lifts.
- Roof penetrations are to be made only when equipment is ready to be installed. Later removal of the decking will require the use of an elevated surface modification permit.
- On multi-story structures, perimeter safety cables shall be installed at the final interior and exterior perimeters of the floors as soon as the metal decking has been installed.
- All materials, equipment, and tools, which are not in use while aloft, shall be secured against accidental displacement.

Cranes.

- Each contractor is responsible for complying and providing documentation based on the following requirements and providing a description of the crane selection and placement procedures.
- All operators shall submit to documentation showing that they meet the requirements to operate the crane provided.
- A description of the crane and placement procedures shall be submitted in writing to Whiting-Turner prior to delivery of this equipment.
- Each crane shall have a current annual inspection conducted by a third party and document shall be submitted to the Whiting-Turner project team.
- Cranes are to have the following in cab areas; load charts, manufacture manual, fire extinguisher and hand signal poster.
- Operator shall perform daily inspections on the crane that they will operate.
- The operator shall not operate the crane until the counter weight is properly barricaded as per OSHA standards.
- Each contractor is required to inspect the rigging equipment that will be used before each lift, and prior to placing that equipment in service, such as; grab hooks, spreader bars, extension devices, slings, and wire ropes, etc.

Structural steel erection.

- Beams and columns

- During the final placing of solid web structural members, the load shall not be released from the hoisting line until the members are secured with at least two bolts per connection, of the same size and strength as shown in the erection drawings, drawn up wrench-tight as specified by the project structural engineer of record.
- A competent person shall determine if more than two bolts are necessary to ensure the stability of cantilevered members; if additional bolts are needed, they shall be installed.
- Solid web structural members used as diagonal bracing shall be secured by at least one bolt per connection drawn up wrench-tight or the equivalent as specified by the project structural engineer of record.

- Hoisting and rigging
  - The steel erection contractor shall ensure that all the following provisions are complied with as applicable to hoisting and rigging.
  - A competent person shall visually inspect cranes being used in steel erection activities prior to each shift; the inspection shall include observation for deficiencies during operation. At a minimum this inspection shall include the following:
    1. All control mechanisms for maladjustments
    2. Control and drive mechanism for excessive wear of components and contamination by lubricants, water, or other foreign matter.
    3. Safety devices, including but not limited to boom angle indicators, boom stops, boom kick out devices, anti-two block devices, and load moment indicators where required.
    4. Air, hydraulic, and other pressurized lines for deterioration or leakage, particularly those that flex in normal operation.
    5. Hooks and latches for deformation, chemical damage, cracks, or wear.
    6. Wire rope reeving for compliance with hoisting equipment manufacturer's specifications.
    7. Electrical apparatus for malfunctioning, signs of excessive deterioration, dirt, or moisture accumulation.
    8. Hydraulic system for proper fluid level
    9. Ground conditions around the hoisting equipment for proper support, including ground settling under and around outriggers, ground water accumulation, or similar conditions.
    10. The hoisting equipment for level position; and the hoisting equipment for level position after each move and setup.
  - If any deficiency is identified, the competent person shall make an immediate determination as to whether the deficiency constitutes a hazard.
  - If the deficiency is determined to constitute a hazard, the hoisting equipment shall be removed from service until the deficiency has been corrected.
  - The operator shall be responsible for those operations under the operator's direct control. Whenever there is any doubt as to safety, the operator shall have the authority to stop and refuse to handle loads until safety has been assured.

- A qualified rigger (a rigger who is also a qualified person) shall inspect the rigging prior to each lift.
- The headache ball, hook or load shall not be used to transport personnel except unless all the OSHA standards are being met to hoist employees on a personnel platform and written approval has been granted by executive management (See Cranes).
- Safety latches on hooks shall not be deactivated or made inoperable.

- Working under loads

  Routes for suspended loads shall be pre-planned to ensure that no employee is required to work directly below a suspended load except for:
  - Employees engaged in the initial connection of the steel; or
  - Employees necessary for the hooking or unhooking of the load.
  - When working under suspended loads, the following criteria shall be met:
    1. Materials being hoisted shall be rigged to prevent unintentional displacement;
    2. Hooks with self-closing safety latches or their equivalent shall be used to prevent components from slipping out of the hook; and
    3. A qualified rigger shall rig all loads

- Structural steel assembly
  - Structural stability shall be maintained during the erection process.
  - The following additional requirements shall apply for multi-story structures:
    1. The permanent floors shall be installed as the erection of structural members progress, and there shall be not more than eight stories between the erection floor and the upper-most permanent floor, except where the structural integrity is maintained because of the design.
    2. At no time shall there be more than four floors or 48 feet, whichever is less, of unfinished bolting or welding above the foundation or uppermost permanently secured floor, except where the structural integrity is maintained because of the design.
    3. A fully planked or decked floor or nets shall be maintained within two stories or 30 feet, whichever is less, directly under any erection work being performed.

- Plumbing-up
  - The steel erector shall evaluate to determine whether guying or bracing is needed; if guying or bracing is needed and if determined, it shall be installed.
  - When deemed necessary by a competent person, plumbing-up equipment shall be installed in conjunction with the steel erection process to ensure the stability of the structure.
  - When used, plumbing-up equipment shall be in place and properly installed before the structure is loaded with construction material such as loads of joists, bundles of decking or bundles of bridging.

- Plumbing-up equipment shall be removed only with the approval of a competent person.
- Hoisting, landing, and placing of metal decking bundles.
- Bundle packaging and strapping shall not be used for hoisting unless specifically designed for that purpose.
- If loose items such as dunnage, flashing, or other materials are placed on the top of metal decking bundles to be hoisted, such items shall be secured to the bundles.
- Bundles of metal decking on joists shall be landed in accordance with OSHA standards.
- Metal decking bundles shall be landed on framing members so that enough support is provided to allow removal of banding without dislodging the bundles from the supports.
- At the end of the shift or when environmental or jobsite conditions require, metal decking shall be secured against displacement.

- Roof and floor holes and opening
  - Metal decking at roof and floor holes and openings shall be installed as follows:
    1. Metal deck openings shall have structural members turned down to allow continuous deck installation except where not allowed by structural design constraints or constructability.
    2. Roof and floor holes and openings shall be decked over. Where large size, configuration or other structural design does not allow openings to be decked over (such as elevator shafts, stair wells, etc.) employees shall be protected in accordance with OSHA standards.
    3. Metal decking holes and openings shall not be cut until immediately prior to being permanently filled with the equipment or structure needed or intended to fulfill its specific use and which meets the strength requirements of this section policy or shall be immediately covered.

- Covering roof and floor openings
  - Covers for roof and floor openings shall be capable of supporting, without failure, twice the weight of the employees, equipment and materials that may be imposed on the cover at any one time.
  - All covers shall be secured when installed to prevent accidental displacement by the wind, equipment, or employees.
  - All floor holes greater than 12” x 12” must have a Whiting-Turner floor hole cover sign in place. Smaller holes shall be labeled “hole” in accordance with the OSHA standard.
  - Particle board, medium density fiber board (MDF) or similar material is prohibited from being used as floor hole covers on Whiting-Turner projects.
  - Smoke dome or skylight fixtures that have been installed are not considered covers for the purpose of this section unless they meet the strength requirements.

- Decking gaps around columns
  - Wire mesh, exterior plywood, or equivalent, shall be installed around columns where planks or metal decking do not fit tightly.
  - The materials used must be of sufficient strength to provide fall protection for personnel and prevent objects from falling through.

- Installation of metal decking
  - Metal decking shall be laid tightly and immediately secured upon placement to prevent accidental movement or displacement.
  - During initial placement, metal decking panels shall be placed to ensure full support by structural members.

- Erection of steel joists
  - Both sides of the seat of one end of each steel joist that requires bridging under OSHA requirements shall meet those requirements set forth in Tables A and B shall be attached to the support structure before hoisting cables are released.
  - For joists over 60 feet, both ends of the joist shall be attached as specified in the OSHA regulations before the hoisting cables are released.
  - Connections shall be drawn up, wrench tight with 2 bolts minimum before releasing the load.
  - On steel joists that do not require erection bridging under Tables A and B, only one employee shall not be allowed on the joist until all bridging is installed and anchored.
  - Employees shall not be allowed on steel joists where the span of the steel joist is equal to or greater than the span shown in Tables A and B of subpart R.
  - When permanent bridging terminus points cannot be used during erection, additional temporary bridging terminus points are required to provide stability.
  - Bar joists unless specified by the engineer of record shall not be used as fall protection anchorage points.

- Training

  The requirements in this section are mandatory and the contractor shall provide certification for each employee who has received training for performing steel erection operations based upon OSHA standards.

- Competent person

  Each contractor shall list the qualified and competent persons based on OSHA definition and the steel erector shall have a competent person knowledgeable of current OSHA standards with an OSHA 30-hour certification. This person shall remain on site during the completion of their work activities. If the contractor/subcontractor uses lower tier steel erectors to erect steel onsite the contractor/subcontractor with whom Whiting-Turner holds the contract must provide an onsite competent person to direct their lower tier contractor.

- Fall hazard training

The contractor shall provide a training program for all employees exposed to fall hazards. The program shall include but not limited to the following training and instructions in the following areas:

- The recognition and identification of fall hazards in the work area;
- The use and operation of guardrail systems (including perimeter safety cable systems), personal fall arrest systems, positioning device systems, fall restraint systems, safety net systems, and other protection to be used;
- The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;
- The procedures to be followed to prevent falls to lower levels and through or into holes and openings in walking/working surfaces and walls; and
- The fall protection requirements of this subpart.

- Additional training requirements

  In addition to the training requirements above in this section, the contractor shall provide special training to employees engaged in the following activities.

  - Multiple Lift Rigging Procedure - The contractor shall ensure that each employee who performs multiple lift rigging has been provided training in the following areas:
    1. The nature of the hazards associated with multiple lifts; and
    2. The proper procedures and equipment to perform multiple lifts.
    3. Multiple lifts must utilize a multiple lift rigging assembly and meet all other criteria as listed in OSHA standards regarding multiple lifts.
  - Connector Procedures - The contractor shall ensure that each connector has been provided training in the following areas:
    1. The nature of the hazards associated with connecting; and
    2. The establishment, access, proper connecting techniques and work practices.

1.28. Temporary Facilities

Introduction

Contractor/subcontractor providing temporary construction buildings, facilities, fencing, and access routes and anchoring systems for temporary structures shall be submitted to the Whiting-Turner project team for review.

Procedures

- The design and construction of temporary structures shall consider the following loadings:
  - Dead and live loads
  - Soil and hydrostatic pressures
  - Wind loads
  - Rain and snow loads
  - Seismic forces

- Trailers and other temporary structures used as field offices, to house personnel, or for storage shall be anchored with rods and cables or by steel straps to ground anchors. The anchor system shall be designed to withstand winds and must meet applicable State or local standards for anchoring mobile trailer homes.

- Fencing and warning signs
  - Temporary project fencing shall be installed per Whiting-Turner's fencing policy particularly on all projects located in areas of active use by members of the public. More careful consideration will also be given to those areas proximate to family housing areas and/or school facilities.
  - Signs warning of the presence of construction hazards and requiring unauthorized persons to keep out of the construction area shall be posted on the fencing. At the minimum, posting shall be on all fenced sides of the project and spaced one sign every 100 feet.

1.29. Underground Construction, Caissons, Cofferdams and Compressed Air Policy

Introduction

Each contractor working on a Whiting-Turner project will comply with 29 CFR 1926, Construction Industry Regulations, Subpart S – Underground Construction, Caissons, Cofferdams and Compressed Air, in addition to the following guidelines.

Procedures

- The employer must control access to all openings to prevent unauthorized entry underground.
- Unused chutes, manways, or other openings must be tightly covered, bulk headed, or fenced off and must be posted with warning signs stating, "Keep Out", or similar language.
- The employer must assign and submit the qualifications of the competent person responsible for monitoring the air quality during underground construction.
- The atmosphere in all underground work must be tested as often as necessary to assure that the atmosphere contains at least 19.5% oxygen, but no more than 23.5% oxygen. These tests must be conducted before testing for air contaminants.
- The atmosphere in all underground work must also be tested quantitatively for hazardous materials such as carbon monoxide, nitrogen dioxide, hydrogen sulfide, and other toxic gases, dusts, vapors, mists, and fumes.
- If an IDLH (Immediately Dangerous to Life and Health) atmosphere is present, the caisson then becomes a permit required confined space and exposed/controlling contractor's Confined Space Entry program is implemented.
- The competent person must keep a daily record of all air quality test results and submit those results to Whiting-Turner, upon request.
- Casing or bracing must support the full depth of the shaft.
- The casing or bracing must extend 42" + or – 3" above ground level. This height may be reduced to 12", provided a standard railing is installed, the ground surrounding the shaft is sloped away from the shaft and effective barriers are in place to prevent mobile equipment from jumping over the 12" barrier.

1.30. Welding and Cutting Policy

Introduction

All Whiting-Turner employees and all contractor/subcontractor employees working on a Whiting-Turner project must comply with 29 CFR 1926, Construction Industry Regulations, Subpart J – Welding and Cutting, in addition to the following guidelines.

Procedure

- The contractor/subcontractor will assure that adequate precautionary measures have been taken to protect all personnel and property from contact with flash or contact with falling slag and sparks.

- Welders, cutters, and their supervisor shall be trained in the safe operation of their equipment, safe welding/cutting practices, and welding/cutting respiratory and fire protection.

- All contractors performing welding, burning/cutting operations shall submit an AHA to the Superintendent prior to the commencement of work.

- Contractors/subcontractors are required to use welding shields between the welding operation and the public/other trades for protection against arc flash.

- All welding lead connection lugs are required to have non-conductive boot covers installed.

- A Hot Work Permit must be completed daily by each contractor/subcontractor performing all welding, burning/cutting operations.
    - The hot work permit will designate the location of the operation, date of the operation, type of work to be done and the time commenced and completed.
    - A hot work permit is required to be submitted by the contractor/subcontractor prior to beginning the hot work activity.
    - The hot work permit shall be conspicuously located near the area where the activity is taking place.
    - Contractors/subcontractors are responsible for providing a charged, 20lb ABC dry chemical fire extinguisher for each welding and burning activity.
    - Other hot work activities besides welding and burning may require the use of a fire watch, as designated by Whiting-Turner.
    - Whiting-Turner life safety fire extinguishers shall not be used for fire watch duties.
    - A fire watch is to be positioned at each location where sparks/slag and/or molten metal can fall/drop/strike combustible material, potentially resulting in a fire.
    - A fire watch is required to remain in place at all times during the hot work activity and for a minimum of one half (1/2) hour after the welding or burning operation has been completed or longer periods of time as determined by the project-specific rules.

  - The fire watch is to be replaced by another fire watch if the person needs to leave the area for any reason.
  - Additional permits may be required by the local Fire Department and will be at the contractor's/subcontractor's expense.
  - Copies of these additional permits are to be submitted to the Whiting-Turner project team upon request.
  - Upon completion of the work, the completed hot work permit must be returned to Whiting-Turner for file retention.

- Local fire department fire details may be required, and all costs associated with the detail will be the responsibility of the contractor/subcontractor doing the hot work requiring the detail.

- Contractors/subcontractors may be required to provide adequate engineering controls (ventilation and/or smoke eaters) for welding and burning operations.

- Contractors/subcontractors performing welding and/or burning operations may be required to provide air monitoring in areas with adequate ventilation.

- All employees engaged in hot work activities shall wear the appropriate personal protective equipment (PPE); shields shall be compatible with a hardhat.

- Oxy-fuel gas welding shall have hoses that are readily distinguishable.

- Welding and cutting systems using cylinder-hose-torch shall have a reverse-flow check valve and a flash arrestor.

- Oxygen cylinders in storage shall be separated from fuel gas cylinders or combustible material by 20 feet or by a non-combustible barrier at least five (5) feet high having a fire-resistance rating of at least ½ hour.

- All cylinders shall be considered in storage at the end of each shift; cylinders must have gauges removed and caps in place.

- All compressed gas cylinders shall be secured against displacement by cinch straps or chains.

2. Premobilization Safety Submittals and Ongoing Safety Management

- Each contractor/subcontractor must identify (on the competent person acknowledgement form) and submit the qualifications of a competent person to Whiting-Turner prior to the start of work.

- Contractor/subcontractor shall submit a site-specific safety plan (SSSP) prior to start of work.
    - Activity hazard analyses (AHA) for major phases of work, submitted with company safety program may be accepted in lieu of SSSP—at the discretion of the Whiting-Turner project team.
    - Contractor/subcontractor supervisor is responsible to maintain a copy of these plans at the worksite and review with their employees for each new task or phase.

- Site specific safety data sheets (SDS) and chemical inventories are to be provided to Whiting-Turner prior to start of work.
    - SDS must be submitted for all hazardous chemicals/products to be used on the project.
    - Contractor/subcontractor supervisor is responsible to maintain copies of SDS and chemical inventory at the worksite.
    - Contractor/subcontractor supervisor is responsible for updating Whiting-Turner each time a new chemical is brought on site; the update must be reflected in their SDS binder and chemical inventory list.

- Each contractor/subcontractor is required to designate a site safety representative (SSR). SSR shall be on site at all times and shall have the knowledge and authority of the competent person. SSR shall be able to conduct site walks with Whiting-Turner personnel to ensure the safety of contractor's/subcontractor's workers on the project. Manpower totals below include all tiered contractor/subcontractor employees. Proof of training must be submitted prior to mobilization or at orientation. The qualifications for the SSR are as follows:
    - Minimum requirement proof of OSHA 30 hour submitted
    - Contractors/subcontractors with (30) or more workers on site will be evaluated by the Whiting-Turner's management team along with Whiting-Turner's EH&S Manager regarding the contractor's/subcontractor's site-specific safety performance. If the contractor's/subcontractor's past or current site safety performance indicates improved safe work practices and conditions are needed to help ensure the safety of the contractor/subcontractor crews and others, Whiting-Turner at its discretion, may require the contractor/subcontractor to provide a fulltime Site Safety Representative to be present onsite with no other collateral duties.

- Certification for operators of powered industrial trucks and cranes is required to be submitted to the Whiting-Turner project team prior to the operation of said equipment.

- All on site personnel, (contractor/subcontractors, tiered contractors/subcontractors, and their employees) are required to participate in a mandatory safety orientation session prior to commencing with any work on site. Contractor/subcontractor shall provide a translator for any non-English speaking employees during orientation and any job wide meetings/stand-downs. Employees may be asked to attend orientation again for repeat violations or deficiencies.

- Contractor/subcontractor shall conduct weekly safety meetings for all workers (employed or contracted). Whiting-Turner Superintendent and/or other Whiting-Turner personnel may attend this safety meeting.
    - Provide a legible sign-in sheet and meeting agenda to the Whiting-Turner field office at the conclusion of the meeting.
    - Contractor/subcontractor is also required to submit daily work reports to the Superintendent, on Whiting-Turner's form.

- In coordination with the contractor's/subcontractor's AHA, complete a Pre-task Plan (PTP) at least once per day, per crew/task.
    - PTPs shall be updated as hazards or conditions change. If necessary, a new PTP may be completed and reviews with the crew.
    - Copies of PTP(s) must be submitted to the Whiting-Turner project team upon request.
    - Tasks should be reviewed in the area where work is to be performed, and crew members should be involved in the development of the plan (safety "huddle").

- Documented pre-shift inspections are to be completed for mobile equipment, heavy equipment, and cranes.
    - Equipment is to be taken out of service for deficiencies noted.
    - These inspections are to be maintained in the work area for review.

3. Compliance Enforcement and Incentive Guidelines

Enforcement Guidelines.

Introduction:
In an effort to ensure compliance with this program and all other established OSHA standards, the Whiting-Turner Contracting Company has established this procedure of compliance enforcement for all contractors/subcontractors. This is established to promote safety excellence and eliminate offenders. This program may be used or may be superseded with more severe discipline based on the degree of the infraction(s). In any case, Whiting-Turner has sole authority in what type of discipline is issued relating to the project, up to and including removal from the project. Contractor/subcontractors are required to provide Whiting-Turner with any written disciplinary notices issued to site employees by their management.

To assist in our efforts to provide a safe work place, the following disciplinary plan shall be used on each Whiting-Turner project.

- 1st infraction: written warning; coach the employee.

- 2nd infraction: written warning and a meeting must be held between the employee, his/her supervisor and the Whiting-Turner Superintendent—or their designee.
    - A copy of the written warning is sent to the employee's company's office.
    - A written warning requires the contractor/subcontractor's supervisor to assure the employee has satisfactorily completed an appropriate training session related to the safety policy violated.
        1. This training must be completed within five (5) working days from issuance of the written warning. Until that training has occurred the employees shall not resume the same work activity.
        2. Proof of training or retraining shall be provided to Whiting-Turner.

- 3rd infraction the worker is removed from the project, indefinitely.

- If repeat occurrences with other crewmembers are found the supervisor of said crewmembers shall be subject to removal from the project.

- All warnings, verbal or otherwise, shall be documented in a log to be used as a reference point by the project team to track unsafe trends and to act as a tool to enhance safety.

It is the discretion of the Whiting-Turner project team to issue a monetary fine for safety violations. Violation fines may decrease or increase based on severity.

All fines collected shall be added to the project safety incentive program. Fines will be assessed to the employee's company. In addition to the above, Monthly Payment Applications/Invoices will be reduced for any fines resulting in these violations.

Fine Schedule

Failure to wear hard-hat, safety glasses, or another required PPE	$50 per occurrence
No protective system installed for trenching / excavation operations 5' and deeper	$1000 per occurrence
Removal of safety barricade, guardrail, or other protection and leaving area unattended	$1000 per occurrence
Removal of or failure to provide floor opening protection and/or leaving area unattended (includes manholes)	$1000 per occurrence
Employees not using proper or no fall protection	$1000 per occurrence
Unprotected energized electrical panel	$1000 per occurrence
Failure to protect from impalement hazards	$100 per occurrence
Failure to provide adequate or sufficient employee safety training	$200 per occurrence
Failure to properly store, secure or cap compressed gas cylinders	$500 per occurrence
Fire extinguisher and/or watch not provided for welding or cutting operations	$250 per occurrence
Improper access provided to scaffolding work platform.	$250 per occurrence
Inadequate housekeeping.	$250 per occurrence
Unsafe or damaged tools and/or power cords.	$250/Immediate Removal
All "non-communication music type" radios on the project.	$250/Immediate Removal
Metal ladders on the project.	$250/Immediate Removal
Failure to safely or properly use scissor and aerial lifts.	$500 per occurrence
Failure to properly use and/or set up ladders.	$250 per occurrence
Failure to provide ground fault circuit interrupters (GFCI)	$500 per occurrence
Observed littering on the jobsite	$100 per occurrence
Failure to prevent arc welding flash from the public and other trades.	$500 per occurrence
Any non-compliance of Whiting-Turner, federal or state OSHA Standards, and applicable NFPA, ANSI, ASME codes.	Up to $1000 per occurrence

Safety Incentive Program Guidelines.

Introduction:

The implementation of a project safety incentive program is at the discretion the Whiting-Turner project team. The project's safety awards and incentives will be based primarily upon the data collected during safety observations. All superintendents, project managers and safety managers are required to perform inspections.

There are two important aspects of safety award programs that need to be kept in mind:

1. Provide safety awards for safe behavior and for activities related to maintaining a safe work environment.
2. Make safety awards and incentives significant enough to support compliance but not significant enough to generate false reporting of safety data.

BID PACKAGE 02A
ISSUED FOR BID – 05/28/2026

BID PACKAGE 02A
ISSUED FOR BID – 05/28/2026

WHITING-TURNER

UTILITY LOCATION AVOIDANCE POLICY REVISION

March 2025

Confidentiality Statement

This document has been distributed to you on a confidential basis for use on your project only. By accepting it, you agree not to disseminate it to any other person or entity unrelated to the project and not to use the information for any purpose other than following the Utility Location Avoidance Policy in accordance with The Whiting-Turner Contracting Company. This document is the property of The Whiting-Turner Contracting Company and is protected information under, among other laws, Exemption 4 of the Freedom of Information Act and/or any state or local government equivalent. No part of this document, including all original concepts and ideas contained herein, may be reproduced, or transmitted in any form, or by any means, electronic or mechanical, for any purpose without the express written permission of The Whiting-Turner Contracting Company. The original concepts and ideas provided by The Whiting-Turner Contracting Company herein must not be used for any purpose unless used in connection with the engagement of The Whiting-Turner Contracting Company to execute the policy on commercially reasonable terms.

UTILITY LOCATION | AVOIDANCE POL

INTRODUCTION

The intent of this policy is to reduce the risk of danger associated with striking underground utilities when performing excavation work tasks. The policy defines the actions to be performed for a "strike free" excavation and the personnel responsible for performing these actions.

SCOPE

All Whiting-Turner Project teams, including relevant trade partners and contractors, shall ensure that the following process for underground utility location is adhered to on all Whiting-Turner Job Sites.

PROCESS

STEP 1: AS-BUILT DRAWINGS AND EXISTING CONDITION DOCUMENTS

Whiting Turner Project Team

Determine who is responsible under the Owner Contract for identifying the location and condition of all underground utilities. Request from Owner copies of all as-builts, surveys, and other such documents identifying utility locations for the Project site. Please reference attached template Requesting Information on Existing Conditions. If Contractor is responsible for identifying underground utilities, excavation shall not proceed without approval from the Whiting-Turner Senior Vice President and Regional EHS Director.

- Request and collect any as-builts and other such documents that identify the location and condition of all underground utilities and obstructions that could be in the pathways of future Whiting-Turner excavations.
- These documents must be obtained before work commences for all excavations and/or changes in excavation locations.

Should these documents be unobtainable or insufficient to identify anticipated utilities, excavation will not proceed without Whiting-Turner Senior Vice President (SVP) and Regional EHS Director approval on how to proceed.

STEP 2: DAILY AS-BUILT DEVELOPMENT

Whiting Turner Project Team

I. Owner-provided documentation will be transposed onto a medium (site maps, BIM, as examples) that can incorporate contractor as-built requirements and accuracy to include:

- Elevation set control points/ survey point/ GPS/ at all intersections and at two points to recreate a straight line in field.
- Intermeadiate points every 50'
- Stubs, Valves, and irregularities
- Temporary utilities

Excavating Subcontractor

I. Notify utility one call center (811) or private locators to identify and mark utility locations at the excavation locations, including, at minimum:

- Elevation set control points/ survey point/ GPS/ at all intersections and at two points to recreate a straight line in field.
- Intermediate points every 50'
- Stubs, Valves, and irregularities
- Temporary utilities

NOTE: Excavating Subcontractor markings must be maintained during the duration of the excavating work. That responsibility will extend to any other subcontractor performing excavation work in the area.

II. Each Excavating Subcontractor will provide a "Dig Zone" drawing of the work they are about to perform and include the following:
- Utility locator utility identification markings
- Dig Zone size including grading, over dig, sloping, benching and depth
- Comparison of Dig Zone versus as-builts
- Each Excavating Subcontractor is responsible for updating the Project as-built drawings on a daily basis to include their utility installations performed on that day.

NOTE: Any utilities identified from as-builts that are within 10' radius of the proposed Dig Zone will require "Utility Verification."

STEP 3: UTILITY VERIFICATION

Excavating Subcontractor

I. Should Dig Zone drawings reveal a utility within a 10' radius of the edge of the proposed excavation, the excavating subcontractor(s) will conduct Utility Verification. Verification will include:

- Utility locator markings are in place and legible
- Utility Verification has been performed
- Validate Dig Zone drawings are up to date and complete

II. Non-invasive exploration (see definitions) is performed to physically locate anticipated utilities. At a minimum:

- Exploration test holes will be performed for all known utilities within a 10' radius of the proposed excavation path and, to a depth of at least 5' below that proposed excavation.
- At the point where the anticipated utility is to be intersected by the planned excavation
- At two verification points should the excavation run parallel to the utility and the excavation is no greater than 50' in length.
- Should a parallel excavation be more than 50' in length, then additional explorations will be performed at 50' intervals.

NOTE: Test holing will be performed regardless of surface conditions (concrete or asphalt, as examples). Should surface conditions prove to be such that routine non-invasive methods are ineffective, excavation activities will stop and Whiting-Turner Supervision will be informed.

- Update the Dig Zone Drawing with the results and conclusions of the verification efforts.

Should explorations fail to identify anticipated utilities, excavation will not proceed without Whiting-Turner Senior Vice President (SVP) and Regional EHS Director approval on how to proceed.

STEP 4: EXCAVATION PRECONSTRUCTION REVIEW MEETING

Whiting Turner Project Team

I. Schedule and perform a **mandatory attendance** Excavation/Utilities Subcontractor Preconstruction Review meeting with:

- Whiting-Turner Project Manager and Lead Superintendent
- Excavating Subcontractor's authorized competent person
- Representatives of owners/design teams, with direct knowledge of existing underground conditions

II. Should owners/design teams fail to participate in the Excavation Preconstruction Review Meeting, the excavation will not proceed without Whiting-Turner Vice President (VP) approval on how to proceed.

III. Invite and urge attendance for:
- Utility company representatives (on public property)
- Utility locator

IV. Perform the Excavation/Utilities Subcontractor Preconstruction Review using Whiting-Turner Subcontractor Preconstruction Review form as the agenda of the meeting. The assigned superintendent or project manager will complete and document the actions on the form.

V. Conduct a walk/discussion of the work area with all required parties. Discussions will include:
- Dig Zone observations and anticipated excavation safe work actions
- Utility Verification methods and locations

VI. Assure at completion of the meeting, all parties sign the form where applicable

STEP 5: PRE-DIG HUDDLE

Excavating Subcontractor

I. The Excavation Subcontractor will coordinate with Whiting-Turner Project personnel to conduct a Pre-Dig Huddle prior to beginning excavation work for the first time. The Excavating Subcontractor will lead and document the meeting on the Pre-Dig Huddle form. At a minimum, the following personnel will be in attendance:

- Whiting-Turner assigned Project Superintendent
- Excavating Subcontractor Competent Person
- Excavating subcontractor Foreman
- Excavating subcontractor Operator who will be performing the digging

II. The Excavating Subcontractor will provide Whiting-Turner a completed Verification Review Checklist (See Page 11) verifying the following information:

- As-Builts have been received
- Utility locator markings have been established and are legible
- Utilities have been located
- Process for daily utility installation updates
- Existing utility Dig Zone Emergency Contacts are current
- Utility shut offs are located and owner contact personnel identified with contact information
- Process for daily Dig Zone Drawing reviews are performed
- Machine excavation will not be performed within 3-feet of an underground utility. Non-invasive methods will be used up to the utility until it is physically located.
- If required, WT Sr. Vice President and Regional EHS Director have approved of digging methods.

Note: Should local authorities require distances greater than 3-feet from the utility before machine digging, the Project will follow those requirements.

III. The Excavation Subcontractor will perform additional Pre-Dig Huddle should any of the original excavation personnel change (competent person, operator, as examples), work is suspended for 3 weeks or greater, or a material change in conditions affecting the excavation (i.e. adverse weather, unexpected subsurface conditions).

Whiting-Turner Project Team

I. The Whiting-Turner Project representative will ensure that all the talking points reiterating the digging protocols are discussed and acknowledged on the Pre-Dig Meeting form and that the form is signed off by all attendees.

STEP 6: UTILITY IDENTIFICATION FOR NEW AND TEMPORARY UTILITY INSTALLATIONS

Methods for Physically Identifying New and Temporary Utility Installations

I. At a minimum, all new permanent and temporary utilities will be installed with Detectable Underground Warning Tape, or another method listed in the attached LIST OF METHODS FOR PHYSICALLY AND/OR ELECTRONICALLY IDENTIFYING NEW AND TEMPORARY UTILITY INSTALLATIONS.

- Detectable Underground Warning Tape is used for detecting, locating, identifying and protecting buried utility lines for gas, water, sewer, telecommunication and electrical markets.

Note: The width of tape used is determined by the size of, and depth at which the underground utility line is buried. The depth at which detectable tape is buried is determined by the width of the tape used. Utility type is identified by the American Public Works Administration (APWA) color-code.

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5. LIST OF METHODS FOR PHYSICALLY AND/OR ELECTRONICALLY IDENTIFYING NEW AND TEMPORARY UTILITY INSTALLATIONS .....pg. 13
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- As-builts: Revised drawings that reflect all changes made in the specifications and working drawings during the construction process and show the dimensions, geometry and location of all elements of the work completed.

- Dig Zone: The excavation area plus a 10' radius around the excavation. The Dig Zone is the area of concern when existing underground utilities are identified within the Dig Zone.

- Dig Zone Drawings: Drawings developed by the excavation subcontractor that capture all the data developed to identify, locate and protect existing underground utilities.

- Excavation: Any man-made cut, cavity, trench, or depression in the Earth's surface formed by earth removal. This may also include earth disturbing actives (driven posts, stakes, directional boring, piling, sheeting, drilling, etc.).

- Excavation Preconstruction Meeting: A meeting of all applicable parties involved in an excavation to evaluate the data obtained in locating existing utilities, discuss means and methods of excavation and the protection of existing utilities. This meeting must be performed prior to excavation and attended by all mandatory attendees.

- Non-invasive exploration: Any method used to locate an underground utility that can be done without damaging the utility. (This is often referred to as "test holing.") Examples include vacuum trucks, water lancing, hand digging.

- Pre-Dig Huddle: A huddle of all personnel involved in the actual excavation. The intent of the huddle is to re-confirm conditions/resolutions resulting from the Preconstruction Meeting and to ensure that personnel involved in the dig understand the expectations and limitations of the excavation work task.

- Test hole (pothole): Are smaller hole(s) made in the ground in order to understand subsurface utility information and location

Subject: Request for Underground Utility and As-Built Information

Dear

I hope this message finds you well. I am writing to formally request access to all available surveys, underground utility and as-build information related to:
This information is critical for project planning, construction, and maintenance activities.

Specifically, we are seeking:

1. Details of underground utility locations, including water, sewer, gas, electrical, communication lines and any other buried asset information.
2. As-built drawings, plans, models, and documentation that reflect the actual construction of the site.
3. Any additional relevant records or reports related to underground infrastructure.

Accurate and up-to-date information is essential to ensure safety, compliance, and efficiency in our work. Your assistance in providing these records will significantly aid us in avoiding any unnecessary disruptions and potential risks during the project.

Please let us know if there are any processes, forms, or fees associated with obtaining this information. We are happy to coordinate further to facilitate the request and accommodate any specific requirements. Thank you for your time and consideration. If you have any questions or need additional information from our end, please do not hesitate to contact me at or

I look forward to your response at your earliest convenience.

UTILITY LOCATION | AVOIDANCE PO

SUBCONTRACTOR PRECONSTRUCTION REVIEW MEETING

Whiting-Turner Lead Superintendent and Project Manager will record and lead the discussion on items below.

Job Name : _____ Date : _____

Activity Start Date : _____ Activity End Date : _____

Activity Start Time : _____ Activity End Time : _____

Excavation subcontractor : _____ Sub-Tier Contractors : _____

Location of Excavation : _____

Excavation Purpose : _____

_____

_____

1. Place check marks in boxes next to utilities that are known and marked on provided as built drawings.

☐ Electric ☐ Gas ☐ Tele/Data ☐ Water ☐ Sanitary Sewer

☐ Cable ☐ Steam Line ☐ Other :

2. Which of the following will be utilized to provide underground utility identification?

Subcontractor Authorized Person: _____

State Locator (MISS Utility, Call Before You Dig, etc.)Ticket #: _____

Private 3rd Party Locator: _____

3. After utilities are marked on this date : _____, a representative from the Owner, Whiting-Turner, Excavation subcontractor, Utility Locator and the Equipment Operator(s) will walk the work area to review and discuss where known and potentially unknown utilities may be located prior to commencement of soil disturbing activities.

4. Name of Excavation subcontractor authorized competent person responsible for reviewing as-built drawings, interpreting marks left by locators, identifying all services to buildings, consulting maps, field sketches and surveying the site for additional signs and curb markings.

Name : _____ Title : _____

5. Name of Excavation subcontractor authorized competent person responsible for ensuring that all persons involved in the work (including Equipment Operators) are aware of safe work practices and procedures to perform the work.

Name : _____ Title : _____ Contact # : _____

[Should a parallel excavation be more than 50′ in length, then additional explorations will be performed at 50′ intervals.]

6.1 Name of the Vacuum Truck company the excavating subcontractor will use to perform vacuum potholing.

_____

6.2 If a utility strike or other emergency occurs, name the subcontractor authorized competent person who will be responsible for notifying the appropriate emergency contact personnel listed below:

Electric : _____

Name of Contact : _____ Contact # : _____

Water : _____

Name of Contact : _____ Contact # : _____

Gas : _____

Name of Contact : _____ Contact # : _____

Steam : _____

Name of Contact : _____ Contact # : _____

Fire : _____

Name of Contact : _____ Contact # : _____

Whiting-Turner Lead Superintendent : _____ Contact # : _____

7. Care must be taken to prevent non-construction personnel from entering work areas. What type of barricades will you as the Excavation Subcontractor be utilizing to ensure that the work area is isolated from non-construction personnel?

_____

_____

_____

_____

8. If the work will take place next to adjacent buildings, the subcontractor authorized competent person must ensure that exhaust and dust does not enter building air intakes. What methods will you as the excavation subcontractor be utilizing to control this exposure?

_____

_____

_____

_____

9. Attach copies of as-built drawings, documentation of interpreting marks let by locators, consulting maps/field sketches, models and any other information utilized to predetermine potential utility locations and services to the building.

10. Prior to backfill of excavation, subcontractor must verify and provide Whiting-Turner Superintendent with utilities GPS locations and depths.

Subcontractor Representatives

Company Name :

Name : _____ Date : _____

Signature : _____

Name : _____ Date : _____

Signature : _____

Name : _____ Date : _____

Signature : _____

Subcontractor Operator

Company Name :

Operator Name : _____ Date : _____

Signature : _____

Operator Name : _____ Date : _____

Signature : _____

Owner / Design Team Representatives

Company Name :

Name : _____ Date : _____

Signature : _____

Name : _____ Date : _____

Signature : _____

Whiting-Turner Representatives

Whiting-Turner Project Manager : _____ Date : _____

Signature : _____

Whiting-Turner Superintendent : _____ Date : _____

Signature : _____

Note: This review has been conducted for the work, days and times listed above. Any change in operation will require a new review conducted by affected parties prior to start of new work.

PRE-DIG HUDDLE

This huddle was performed as required by the Whiting-Turner Utility Location and Avoidance Policy.

Required attendees are identified by title on the attendance roster (additional personnel may be added) and must be present and all listed pre-dig verification checks must be completed satisfactorily prior to digging operations.

Whiting-Turner Project Name _____

Project Location _____

Date : _____ Time : _____

Huddle Leader : _____ _____

Attending (Print) (Signature)

Whiting-Turner Lead Superintendent

Name : _____ _____

Subcontractor Competent Person

Name : _____ _____

Subcontractor Foreman

Name : _____ _____

Subcontractor Operator

Name : _____ _____

Use additional attendance records if additional personnel attend.

UTILITY LOCATION | AVOIDANCE PO

VERIFICATION REVIEW AT PRE-DIG HUDDLE

The following will be reviewed and checked completed prior to excavation by the Excavating Subcontractor:

Check box to indicate completion

- [ ] Preconstruction meeting has been completed, reviewed and a copy is at the dig site.
- [ ] Utility locator markings have been established and are legible.
- [ ] Each day the Excavation Competent Person will review the Project As-Built to ensure that there are no new conditions within their Dig-Zone that would require additional hazard evaluations prior to the start of that days' dig.
- [ ] Dig Zone Drawings has been reviewed and a copy is at the dig site.
- [ ] Utility shut offs are located and the owner's contact personnel identified with contact information.
- [ ] Existing utility Dig Zone Emergency Contacts are current.
- [ ] Validate Utility Emergency Contact information on Preconstruction Meeting Form.
- [ ] Excavation Competent Person is on site and available.
- [ ] Equipment operators have full understanding of excavation hazard points.
- [ ] Reiterate: No machine digging within 3-feet of identified utility.
- [ ] Reiterate: Stop Work Authority and expectation.
- [ ] If anyone is unsure of how to proceed safely, stop and seek guidance from your supervisor.
- [ ] Reminder to update Dig Zone drawings after each day
- [ ] If required, WT Sr. Vice President and Regional EHS Director have approved of digging Methods.

UTILITY LOCATION | AVOIDANCE PO

ADDITIONAL PRE-DIG ATTENDEES

Attending (Print)	(Signature)
Title:	
Name:	
Title:	
Name:	
Title:	
Name:	
Title:	
Name:	
Title:	
Name:	
Title:	
Name:	
Title:	
Name:	
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Name:	
Title:	
Name:	
Title:	
Name:	
Title:	
Name:	

Electronic Identifiers

Product	Description
Trace Wire	Tracer wire is a single conductor wire laid along pipes and other underground utilities during installation. Once installed, tracer wire helps workers find those assets later on. Available products include copper, copper clad steel, and stainless steel, and can be insulated with several options. Once a pipe, conduit, or other utility is installed, tracer wire is placed along the length of it and buried. This wire is searched for when the utility needs to be located (hence the name). Though most of the wire is buried underground, each dead end is connected to a grounded point. This connection creates a properly grounded tracer wire system that can be easily found by above-ground locating equipment. To find underground wires, crews use a wire tracer – an above-ground device that emits a low-frequency signal to find the non-energized wire. Using a wire tracer eliminates the need to send electricity through a tracer wire for it to find underground assets. For many applications, tracer wire is often a low-cost insurance policy that prevents costly mistakes from occurring while performing necessary repairs or new installations.
Detectable Underground Warning Tape	Detectable Marking Tape is used for detecting, locating, identifying, and protecting buried utility lines for gas, water, sewer, telecommunication, and electrical markets. The width of tape used, is determined by the size of, and depth at which the underground utility line is buried. The depth at which detectable tape is buried, is determined by the width of the tape used. • DETECT: Aluminum core is detected through means of inductive locating. • LOCATE: Line is located and marked after inductive locating is performed. • IDENTIFY: Utility type is identified by both the APWA color-code and utility legend printed on the marking tape. • PROTECT: Detectable tape works 24 hours a day and year round, even if tape is not inductively located during excavation, the tape provides a "stop-sign" effect that is highly visible.
3M Electronic Marker System (EMS) Ball Markers – RFID Technology	The 3M™ Ball Marker makes the job of precisely locating underground facilities easier. Other buried markers can be disturbed by backfill dirt or installed improperly so they don't stay positioned correctly. The 3M ball marker's unique self-leveling design ensures the marker is always in an accurate, horizontal position regardless of how it is placed into the ground. The addition of the new 3M-iD markers provides additional functionality by enabling facility data to be stored in the marker to ensure positive identification of facilities. The pre-programmed unique serial number integrates with back office mapping and GIS systems when used for mapping new and legacy assets and points of special interest for construction and maintenance applications. The ball marker is buried over key facilities during construction or maintenance. Later, the marker is easily and accurately located using a 3M™ Dynatel™ Locator. The locator transmits a signal to the buried marker. The marker returns the signal to the locator, indicating the marker's exact position. The compact electronic locator gives both a visual reading and an audible tone.
Line Marker Stakes	Utility Marking Stakes are a method of identifying buried utility lines as well as survey and boundary identification. High-performance marking stakes are constructed with a symmetrical three-rib design intended to be malleable, allowing for flexibility and durability

Product	Description	Application	Limitation(s)	Benefits	Resources
GPR	Ground Penetrating Radar - Non-invasive method of identifying underground features. Common Industry tool to find buried utilities. Can "See" utilities through reflective waves.	Discovering buried utilities	Non-Metallic Pipes, Clay, Wet Soils, Deep Utilities	Widely available, range of tools	External Vendors
Sonar/Acoustic	Similar to GPR - Non-invasive method of identifying underground features. Best for Plastic pipes/conduits. Can "Hear" utilities through sound transfer.	Discovering buried utilities	Cannot find all types of utilities	Complimentary to GPR technology	External Vendors
Radio/EM	Radio Identification / Electromagnetic / Metal Detecting technologies. Capable of identifying live and/or metallic underground utilities via a variety of signals	Discovering Buried Utilities	Must be conductive	Effective Mapping for specific types of utilities. Common Industry tools	External Vendors
Drones	Aerial Vehicles utilizing images via photogrammetry to identify visible utilities and features.	Documenting Exposed Utilities	Internal Whiting-Turner/External Flight restrictions/ planning. Must be able to see utilities	Quick data capture. Cost efficient	External Vendors
GPS/RTS	Global Positioning System / Robotic Total Stations - Survey Style technology to measure specific points. Can callout specific points and lines of interest from a virtual 2D/3D model to the real world. Can utilize existing documentation (such as old site drawings) to geolocate likely positioning of existing utilities underground.	Documenting Exposed Utilities / Identifying historical data in the field	Must be able to see features of interest or have a drawing of existing utilities.	Widely available. Very Accurate. Quick data capture	In-House Service or Rental(s)
Laser Scanning	Captures millions of measurement points to capture surrounding conditions and identify locations of visible utilities and features.	Documenting Exposed Utilities	Must be able to see features of interest. Relatively slower data capture	Comprehensive data capture	In-House Service or Rental(s)

SECTION 01 36 00 – QUALITY MANAGEMENT PLAN

PROJECT-SPECIFIC QUALITY MANAGEMENT PLAN

Effective January 2019, all contractors and subcontractors on Whiting-Turner's projects are expected to be in full compliance with all applicable requirements of Whiting-Turner's project-specific Quality Management Plan (QMP). A copy of this project-specific QMP has been provided to this contractor / subcontractor. If a copy of this QMP has not yet been received, this contractor / subcontractor must provide a written request to the lead Whiting-Turner Project Manager to obtain a copy.

The information contained in this QMP is not intended to serve as a substitute for the exercise of good engineering judgment by the engineers nor as a substitute for determinations made by contractors/subcontractors of appropriate manner and methods of operations and aspects of work under their control. This QMP is also not intended to be all inclusive or replace a contractor's or subcontractor's corporate or site-specific quality management plan and is not intended to, nor shall it, supersede any federal, state, local and other applicable laws, codes, rules, regulations, and/or practices. All contractor's and subcontractor's site-specific quality management plans must meet or exceed the requirements of the Whiting-Turner project-specific Quality Management Plan, the contract documents (including any applicable Owner Quality Management Plans referenced therein), and all federal, state, local and other applicable laws, codes, rules, regulations, and/or practices.

This QMP and all information contained herein is confidential and intended for the sole use of contractors and subcontractors on Whiting-Turner projects. Contractors/subcontractors are prohibited from distributing this information to any third parties. The Whiting-Turner Contracting Company expressly disclaims warranties for the information contained in this QMP and makes no representations to such third parties regarding the reliability, suitability, correctness, or completeness of such information. Whiting-Turner assumes no responsibility or liability and shall not be responsible and/or liable for damages or losses of any kind, including but not limited to direct, indirect, incidental, exemplary, special or consequential damages or losses, arising from, attributable to and/or resulting from the use of such information by third parties however caused and on any theory of liability, whether in contract, strict liability or tort.

END OF SECTION 01 36 00

SECTION 01 37 00 – VIRTUAL BUILD – BIM REQUIREMENTS

The provisions outlined in the Scope of Work shall apply to all items of this section.

A. DEFINITIONS

a. **As-Built Model(s)** means the federated model(s) provided by Whiting-Turner and its trade partners which is reflective of the installed conditions onsite. Unless otherwise noted, the format of this deliverable shall be provided in a Navisworks Document (.NWD) at the agreed upon level of development prescribed in the Virtual Build BIM Execution Plan (BEP). The native file format used by trade partners for the production of shop drawings will also be provided as part of this package.

b. **BIM Execution Plan (also described as a PXP or BEP)** means the document used to outline the overall goals and implementation details for the Virtual Build program jointly developed between Whiting-Turner, the Client, and the Design team. This document outlines BIM Goals and Uses, Information Exchanges, and supporting implementation procedures for Building Information Modeling. It may be updated at different points in the project life cycle including but not limited to the start of the Design and Construction Phases.

c. **Building Information Modeling (BIM)** means a digital representation of physical and functional characteristics of a facility. A BIM is a shared knowledge resource for information about a facility forming a reliable basis for decisions during its lifecycle; defined as existing from earliest conception to demolition. A basic premise of BIM is the collaboration by different stakeholders at different phases of the life cycle of a facility to insert, extract, update or modify information in the BIM to support and reflect the roles of that stakeholder.

d. **Coordination Model(s)** means the federated model comprised of each trade's fabrication models combined with elements of the Design Intent Model which used to conduct clash detection and coordination. The agreed upon level of development for each corresponding model is prescribed in the BIM Execution Plan (PxP).

e. **Design Intent Model(s)** means the model(s) used to create Construction Documents by the Design Consultant and its Sub-Consultants which are reflective of Design Intent. These Model(s) shall be delivered at the agreed upon level of development prescribed in the BIM Execution Plan (PxP) to include all accurate and relevant geometry and facility information required to design the facility. The required software file format and version for these models is prescribed in the BIM Execution Plan.

f. **Detailer** means staff member assigned from a specific subcontractor to create and update fabrication models and associated 2-Dimensional deliverables as a by-product of the Virtual Build.

g. **Fabrication Model(s)** means the model(s) created by the subcontractor created at the agreed upon level of development prescribed in the BIM Project Execution Plan (PxP) to be used for the production of shop drawings and prefabrication.

h. **Issue Resolution Log (IRL)** means a live log documenting action items, design discrepancies, subcontractor questions, RFIs, conflicts or issues needing resolution which are generated during the Virtual Build Process.

i. **Level of Development (LOD**) means the degree to which project team members may rely on a modeled element's geometry and attached information and the corresponding level of confidence in a modeled element over the project life cycle. For this exhibit, the BIMForum Specification Definitions shall be used in congruence with AIA schema previously defined.

j. **Native File Format** means the file format and version of the original model authoring platform that was used to generate a model.

k. **Navisworks Manage** means a software utilized to conduct clash detection to facilitate the Virtual Build process.

l. **Record Model(s)** means a federated model provided by the design team reflective of the all issued revisions, Change Directives, Supplemental Instructions (when issued as a change to drawings or models), and incorporating all as-constructed and/or red-line information provided by the construction team of all installed Architectural, MEP, and Structural conditions onsite. The format of this deliverable shall be provided in a Revit Model (.RVT) at the agreed upon level of development prescribed in the BIM Execution Plan (BEP). It is differentiated from the Coordination and As-Built Models in two primary ways: (1) the record model is completely in Revit, and (2) it most often contains more data and is delivered at a lower LOD. Record models can also be referred to as conformed models.

m. **Release to Commence Shop Drawings** means a signed document signifying all subcontractors' acknowledgement that an area, zone, floor or the entire model is substantially coordinated and substantiates mutual agreement to begin production of Shop Drawings.

n. **Revit** means a proprietary software produced by Autodesk utilized for the generation of Building Information models.

o. **Virtual Build** means the process and deliverables associated with trade coordination which involves virtual creation of 3-Dimensional fabrication models to facilitate conflict prevention, risk mitigation, shop drawing creation and prefabrication.

p. **Virtual Build Kickoff Meeting** means a meeting established at the start of the project to review the BIM Execution Plan, Virtual Build Schedule and project requirements for subcontractors contributing to the Virtual Build Program.

B. GENERAL REQUIREMENTS

1. Subcontractors are required to participate in a Virtual Build Program.
2. Whiting-Turner will deploy a BIM Execution Plan (BEP) that will be reviewed and discussed by all participants at project kickoff.
    a. This document and its associated attachments may be updated as the project evolves with consent of all participants.
    b. The requirements set forth in this document do not relieve subcontractors of other requirements noted elsewhere in the Contract Documents.
3. Prior to the start of model creation, Subcontractors are required to conduct a thorough constructability review of the Contract Documents to ensure enough information is available to complete a first model iteration.

C. STAFFING

1. Subcontractors shall provide qualified resources dedicated to BIM detailing, project management, and field installation for the duration of the Virtual Build, construction installation, and project handover.
    a. These individuals shall have sufficient BIM experience required for the size and complexity of the project and shall have relevant proficiency in BIM authoring and coordination software.
    b. These individuals shall have knowledge of field installation requirements and procedures.
    c. These individuals shall have the authority to make decisions concerning coordination and fabrication.
    d. A minimum of at least one designated Detailer shall serve as the main point of contact between Whiting-Turner and other participants for the duration of the Virtual Build process including but not limited to:
        i. Ductwork
        ii. Mechanical Piping
        iii. Plumbing
        iv. Electrical
        v. Fire protection
        vi. Structure
        vii. Telecommunications
        viii. Theater Rigging & Orchestra Shells

2. Whiting-Turner must approve and prequalify the use of any third-party contractors utilized to supplement the Virtual Build labor effort.

D. REQUIRED CONTRIBUTIONS

1. Detailers and a selected Project Manager, Foreman or similar role shall be required to participate in mandatory Virtual Build meetings conducted onsite or online as approved by Whiting-Turner over the course of the project.
    a. The frequency and duration of these meetings will be dictated by the CPM Schedule.
    b. Additional working sessions may be required as the project demands.
    c. Failure to participate in a Virtual Build meeting may result in a penalty by the nonperformance section of the subcontractor contract. If the primary detailer cannot participate, a competent replacement must be pre-arranged with Whiting-Turner's approval.

2. An Issue Resolution Log (IRL) will be maintained by Whiting-Turner throughout the Virtual Build process to keep track of critical items that need answers or resolutions to effectively move forward the coordination process.

3. Subcontractors are required to create a Fabrication Model for the purpose of shop drawing creation, material procurement, and onsite installation which completely and accurately represents their scope of work in accordance with the Contract Documents and BIM Execution Plan.

E. PROJECT DATA CONFIDENTIALITY

1. **Confidentiality:** The RVT, DWG, IFC, PDF files, shop drawings, RFI's, as-built drawings, etc. (collectively "Project Information") provided to Subcontractors to facilitate the Virtual Build Program are the property of Whiting-Turner.
    a. Subcontractors agree to keep all Project Information in strict confidence and will not use on any other project or for any other reason not required to complete the Scope of Services on this project.
    b. Subcontractors further agree to not disseminate the Project Information to anyone except subcontractors' own personnel with a need to know and will return all Project Information to the Contractor when services requiring the Project Information are complete.

F. VIRTUAL BUILD SCHEDULE

1. A Virtual Build schedule will be provided in the Virtual Build Kickoff Meeting outlining expected deliverable dates required for each level and/or area in order to meet field installation.
    a. Subcontractors will have a designated review period to provide feedback on the schedule. Review period durations are contingent upon award timeline and the pace of the physical build.
    b. If no exception is found with the deliverable dates listed, subcontractors shall adhere to the schedule provided.
    c. If the Subcontractor is behind schedule or will not be able to maintain the virtual build schedule, Subcontractor shall submit a remedial plan to recover, shall work overtime, shift work, or work in an altered sequence, if deemed necessary, in the judgment of the Contractor to maintain the progress of the work.
    d. Any such overtime, acceleration, shift or altered sequence work required to maintain progress or to complete the work on a timely basis shall be at Subcontractor's expense and shall not entitle Subcontractor to an extension of time or additional compensation.
    e. Contractor may supplement Subcontractor's forces, at Subcontractor's expense, if deemed necessary by the Contractor to maintain the Project schedule.
2. Deliverables associated with the Virtual Build process shall be treated with the same level of precedence as CPM milestones.
    a. Virtual Build activities have a direct impact to the physical build and may result in schedule delays.
    b. Failure to submit any submittal associated with the virtual build including but not limited to models, Penetration drawings, Reflected Ceiling Plans, Shop Drawings, etc. in the designated required timeframe indicated in the schedule may result in a penalty by the nonperformance section of the subcontractor contract. If work cannot be completed by the designated submission time, Whiting-Turner must be given prior notice.
    c. If any of the above submittal types fails to contain the entirety of the required scope, it will be treated as a non-submission.

G. 3D MODEL REQUIREMENTS

1. **Model Right of Reliance:** Subcontractors will provide fabrication model(s) that are complete and accurately represent their scope of work in its entirety, including **all** code required, maintenance access, and installation required clearances.
    a. Detailers shall ensure the dimensional accuracy and representation in their own model as it relates to the contract documents.

b. Models and Model Elements must be modeled at their intended installation location, including the correct elevation.

c. Subcontractors are required to submit models that are free from self-intersecting objects. Whiting-Turner will **not run** additional clash tests on systems within the same discipline or file.

2. **Software**: Prior to the start of work, the software and version used to create subcontractor's fabrication models shall be approved by Whiting-Turner.
   a. Subcontractors shall not change software platforms, update versions, or change model delivery methods without written consent from Whiting-Turner.
3. **File format**: All models will be developed in a software package that is compatible with the agreed upon version of Navisworks Manage at the start of the project. Subcontractors are to provide Whiting-Turner with a 3D model in their native file format and in a Navisworks compliant format such as .nwc, .ifc or .dwg.
   a. Subcontractors are required to own a license of Navisworks Manage to facilitate clash resolution.
   b. (If Revit requirement dictated by owner) Subcontractors are required to author models in Revit Version XXX.
      i. Subcontractors are to provide Whiting-Turner with a 3D model in their native file format and in a Navisworks compliant format such as .nwc, .ifc or .dwg.
      ii. Subcontractors responsible for multiple disciplines shall have a separate Revit file for each discipline to facilitate ease of composite drawing creation.
4. **Level of Development:** A matrix outlining the required modeled objects and their Level of Development (LoD) is outlined in the BIM Execution Plan. Refer to **Specific Model Requirements** for specific objects to be modeled per division.
   a. The required LOD for all model components will be LoD 350 unless otherwise noted.
   b. Refer to the latest BIM Forum Level of Development Specification located at Level of Development (LOD) Specification – BIM Forum.
   c. Subcontractors are responsible for ensuring the accuracy of their models within detailing platforms for construction coordination and reliability of installation in the field.
5. **Layering**: Layer names and/or Revit Family Categories and Types should reflect the nature of the group of objects that they include, such as walls, beams, etc. and as a subset more specific descriptors such as wall type, beam type, supply duct, outside air duct, domestic hot water supply/return, etc.
   a. Each CAD-based model must include an independent layer labeled "GRID" which represents the column grids. Each Revit-based model must include grids and levels to match the design files.
   b. Insulation must be modeled as a separate selectable layer or Revit material to facilitate ease of selection in Navisworks.
   c. Clearances must be modeled as a separate selectable layer or Revit material to facilitate ease of selection in Navisworks.
   d. Flex systems must be modeled as a separate selectable layer or Revit material to facilitate the ease of selection in Navisworks.
   e. Hangers and other secondary supports must be modeled as a separate selectable layer or Revit material to facilitate the ease of selection in Navisworks.
6. **Model Structure**: Models should be created floor by floor and designated areas set forth by Whiting-Turner. Whiting-Turner will maintain construction models as agreed upon by all Virtual Build participants, i.e. Building, Level, Zone, Area.

7. **Established Project Coordinates**: Once established by Whiting-Turner, all subcontractors must use the same agreed upon coordinates for the duration of the Project.
    a. The model point of origin shall be prescribed by Whiting-Turner at the beginning of the Virtual Build process.

H. VIRTUAL BUILD PROCESS

1. Whiting-Turner will serve as a facilitator of the Virtual Build process. They will guide the process and provide a strategy for clash resolution. However, that does not absolve subcontractors from the responsibility of coordinating themselves and communicating with other trades.
2. Whiting-Turner will establish and maintain a dedicated file sharing site for uploading the models produced by all project team members and archiving all important coordination documentation and model versions. These models will be accessible to all parties for individual coordination purposes outside of regular Virtual Build meetings.
3. Subcontractors will be required to upload their fabrication model files to a Project Sharing site at a frequency agreed to and established in the BIM Execution Plan.
4. Whiting-Turner will compile a coordination model that will include all subcontractor's fabrication model files aggregated in an organized fashion leveraging tools such as sets, clash reports, Saved Viewpoints and analysis tools.
    a. Whiting-Turner reserves the right to use additional software such as Revizto, ACC BIM Collaborate, FlyPaper, BIMTrack, Procore Coordination Issues etc. for leveraging cloud-based model sharing and clash detection. Upon the use of an extended software, Whiting-Turner will include an appendix in the BEP outlining the usage.
5. Issues discussed during Virtual Build meetings shall be tracked and maintained in an Issue Resolution Log as a supplemental tool to the coordination model.
6. Subcontractors are required to continually review the coordination model and work among themselves to resolve conflicts found within the clash tests. Conflicts that cannot be resolved outside of meetings are to be brought up during the Virtual Build meetings for further discussion.
7. Subcontractors are expected to address clash results and action items assigned to them in a timely manner. Items assigned that cannot be resolved without needing additional design input shall be provided to Whiting-Turner through an RFI.

I. VIRTUAL BUILD RELEASE TO COMMENCE SHOP DRAWINGS

1. Once each area is coordinated to the satisfaction of all subcontractors, a dated coordination model will be archived to the file sharing site.
2. The Virtual Build Release Document signifies that all parties acknowledge that an area, zone, floor or the entire model is substantially coordinated and substantiates mutual agreement to begin production of Shop Drawings.
3. By signing the release document each trade contractor acknowledges that they have reviewed the coordination model and list of exceptions for any potential conflicts, that coordination has been completed to their own requirements and that their scope of work in its entirety can be installed in accordance with the model as shown.
    a. Failure to sign the document within ten business days without official written notice to Whiting-Turner shall constitute **acceptance** of the document.

4. Subcontractors may be held responsible for costs arising from deficiencies in the Virtual Build coordination effort. This includes but is not limited to costs arising from inaccurate or out of date models, lack of required modeling detail or components not installed per the model. The costs may include but are not limited to re-coordination costs, rework, and/or costs related to associated schedule impacts. This includes costs incurred by Whiting-Turner, the Owner and other subcontractors.
5. Subcontractors are responsible to communicate to their field personnel when coordination is complete by level and zone to ensure what has been signed off is being installed accurately in the field.
6. Models shall be updated concurrent to construction including but not limited to: the incorporation of RFIs, Change Orders, Design Drawing Changes, and As-Built field conditions.
7. Any installation modifications that deviate from the dated coordination model are to be communicated within 5 workdays to subcontractor detailers to adjust 3D models to as-built conditions.

J. VIRTUAL BUILD SUBMITTAL REQUIREMENTS

1. Subcontractors will be responsible for producing annotated 2D shop drawings for the designers' approval as per the contract documents. This may be at the completion of an area, level or the entire project as is required to meet the procurement schedule.
2. Shop drawings are to be generated from the Virtual Build model and should be delivered in PDF and Revit and/orAutoCAD format.
    a. Shop drawings are to be provided in accordance with the contract documents and AEC standard of care practices.
3. Shop drawings may also be compiled into composite drawings depending on contract requirements.
    a. Formatting for these submissions shall comply with the BIM Execution Plan.

K. CONSTRUCTION HANDOVER

1. Subcontractors are responsible for incorporating any as-built conditions, RFI responses and modifications made in the field as installation progresses into an As-Built model at project completion.
2. Subcontractors shall participate in As-Built meetings to ensure field conditions are being captured in the As-Built models transmitted at handover.
    a. The meeting frequency will be determined by the field installation progress, construction schedule updates, and/or significant bulletin changes that impact what was coordinated at the time of the Release to Commence Shop Drawings
3. As-Built models will be created by each discipline for inclusion in a comprehensive "As-Built Model" assembled by Whiting-Turner as a federated model and transmitted to the owner if deemed a contract deliverable.

L. SPECIFIC MODEL REQUIREMENTS

Div. 05: Metals (LOD 350)

This section contains modeling requirements for structural steel and miscellaneous metals.

- Model all Beams and Columns
  - Specific sizes of main vertical and horizontal structural members to be modeled per defined structural grid with correct orientation, slope and elevation defined.
  - Model actual elevations and location of member connections.
  - Model metal connections to beams and columns such as base plates, gusset plates, anchor rods, pour stops, etc.
  - Model any beam or column reinforcements (eg. web stiffeners for penetrations, etc.)
  - Slab edges and penetrations of structural systems will be accurately located.
  - Model any other elements necessary for the successful coordination with other building trades.
  - Columns shall be spliced accurately in the event that 4D scheduling is used
- Model all Joists and trusses
  - Actual joist profile locations with accurate panel points.
  - Joist bridging and lateral braces.
  - Any miscellaneous steel pertaining to the joist.
  - Joist seat width.
  - Chord and web member section profiles are defined.
  - Joist layout in coordination with metal deck fasteners.
  - Non-standard joist seat depths and\or sloping joist seat.
  - Welds.
  - Connection plates.
  - Spacing.
  - Anchorage.
- Model all Miscellaneous Metals including but not limited to
  - Gusset plates.
  - Bracing.
  - Angles.
  - Knife plates.
  - Supports (for doors, operable partitions, equipment, bathroom partitions, etc.).
  - Kickers.
  - Bent plates and/or pour stops.
- Metal Stairs
  - Model all metal grating and metal pan stairs to accurate location and size.
  - Model all metal stairs and railings guardrails, including support locations.
  - Overall geometry of landings and flights.
  - Number of risers and treads, specific to tread width and riser height.
  - Stringers.
  - Nosing geometry.
  - Secondary support elements (hangers, brackets, etc.).
- Elevators
  - Guiding tracks, rails, angles, and supports.
  - Connection points between elevator components and building structures.
  - Elevator pit grating and ladders adjusted to actual manufacturer specifications.

- Exterior Façade and Edge of Slab Supports
    - Masonry relieving angles.
    - Model all kickers, braces, and misc. framing elements with correct size, shape, and orientation.
    - Anchorage layout and types.
    - CMU wall clips and lintels.
- Roof Ladders and Supports.
- Roof Anchors.

Div. 11: Kitchen Equipment (LOD 350)

- Model any food service equipment to exact submitted product data including but not limited to:
    - Equipment connection points which are required to be coordinated with MEP contractors
    - Required clearances
    - Required panels or controllers needed for serviceability.

Div. 11B: Theater Rigging & Orchestra Shells (LOD 350)

- Model all motorized hoists and winch systems
- Model all counterweight rigging systems
- Model all line sets, battens, lifting points and tracks.
- Model motor controllers, distribution cabinets and related components
- Model all rigging beams, gridiron members and attachment points
- Model all load distribution frames and secondary steel
- Model all travel paths of moving line sets, battens and hoists.
- Model all required clearance zones for service and maintenance

Div. 21: Fire Suppression (LOD 350)

- Model all Fire Protection Equipment including but not limited to: Pre-action Systems, Dry Systems, Main Fire Protection Systems, Hangers & Bracing, Valve Assemblies, Drain valves, Fire Department Valves, Fire Pump etc.
- Model all sprinkler system piping to proper size and slope requirements where applicable.
- Model all sprinkler head locations and sprinkler head types.
- Model any tanks in scope not included in the architectural or structural Models if applicable.
- Model all fittings, drains and test connections.
- Model the zone of influence for all hangers and deck inserts.
- Model “No-fly zones” above control panels as solids.
- Model all sleeves and inserts built into structure.
- Include in the 3D model Concrete Equipment pads, inertia pads and Access Doors. Housekeeping pads
- Identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.

Div. 22: Plumbing (LOD 350)

- Model all piping including systems for air, gas, showers, hot & cold water, sanitary sewer, storm sewer.
- Model foundation drainage piping.
- Model all piping insulation for piping systems as required. External insulation on piping must be modeled to scale.
- Model all accessories for sinks, water closets, service sinks, etc.
- Model all valves, gauges, and control valves and service access.
- Model any required Drip Pans if applicable.
- Model pipe hangers, supports and seismic bracing.
- Model the zone of influence for all hangers and deck inserts.
- Model all sleeves and inserts built into structure.
- Model all drip legs, drain pipes, blow down valves, and cleanouts.
- Model all underground piping.
- Model all Plumbing Equipment including but not limited to: Hot water recirculating pumps, Sump and Sewage Ejector Pumps, High purity water recirculating pumps, Domestic Water booster pump, High Purity water equipment, medical compressed air and Vacuum pumps, Automatic water filtration package, Expansion Tanks, Heat Exchangers, Storm/Roof Leaders, water heaters, in wall carriers, in wall plumbing equipment, backflow preventers, etc.
- Include in the 3D model Concrete Equipment pads and inertia pad where applicable.
- Identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.
- Means and methods (tie offs)
- Hanger clearance
- Objects must contain parameters that define the type of service and material for all piping.

Div. 23: Mechanical Duct and Piping (LOD 350)

- Model all ductwork to be shown as actual duct size with flanges, in the correct location in 3D space.
- External insulation on piping and ductwork must be modeled to scale; internal insulated duct is to be noted.
- Model all grilles, registers, louvers, diffusers and sound attenuating devices.
- Model all fire and smoke dampers and indicate service access requirement (i.e. access panel) if not readily accessible.
- Identify duct balance dampers and model service access requirements as solid objects.
- Model coil pull areas.
- Model all piping and piping insulation for piping systems as required
- Model duct/pipe hangers, supports and seismic bracing.
- Model the zone of influence for all hangers and deck inserts.
- Model all sleeves and inserts built into structure.
- Model Drip Pans and associated Supports between any/all water/sprinkler piping above electrical equipment.
- Model all Equipment in scope including but not limited to: Air Terminal Units, Exhaust Fans, AHUs, Custom AHUs, ERUs, FFUs, Air Cooled Chillers, FCUs, Canopy Hoods, Active

Chilled Beams, CRUs, Humidifiers, Steam Flash Tanks, Steam Generators, Expansion Tanks, Air separators, ALL Pumps, Fuel tanks, controls, heat exchangers, Unit heaters, Reverse Osmosis Units, etc.

- Model All Valves, steam traps, gauges & control valves, High & low point drains, and Starters, condensers, humidifiers, etc.
- Include in the 3D model Concrete Equipment pads, and inertia pads.
- Identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.
- Model clearance zones for all doors and openings for coordination.
- Model all BMS system panel locations with required clearances indicated.
- Objects must contain parameters that define the type of service and material for all piping and ductwork.

Div. 26: High & Low Voltage Electrical: (LOD 350)

- Model all conduit raceways 2” and larger.
    - Model all conduit of any size on racks containing four or more conduits.
- Model all underground conduits: medium voltage, high voltage, control conduits, etc.
- Model all junction boxes and/or pull boxes for modeled conduits and their required clearance zone for service.
- Model all cable trays and associated clearance zones.
- Model hangers, supports and bracing for modeled conduit.
- Model the zone of influence for all hangers and deck inserts.
- Model all sleeves and inserts built into structure.
- Model all light fixtures.
- Model all ceiling-mounted fire alarm devices.
- Model all lightning protection conduits.
- Model all Electrical Equipment, including but not limited to: switchgear, panelboards, transformers, switchboards, meters, distribution panels, ATS’s, lighting control panels, generators, starters, exit signs, AV equipment, UPS system.
- Include any required NEC clearance zones under separate layer.
- Include in the 3D model equipment pads, concrete ductbanks, and inertia pads.
- Identify under separate drawing layer access doors and accessibility requirements for above listed items for code and maintenance purposes.
- Model all infrastructure supporting Div 27 and 28 including but not limited to: raceways, conduit, cable trays, floor boxes, hangers and supports, poke thru devices, wall box connections, equipment racks, cable tray, and conduits 2” and larger.
- Model VFDs, disconnects, and motor controllers.
- Objects must contain parameters that define the type of service and material for all conduit.
- Means and methods (eg. temp lighting).

Div. 27: Communications (LOD 300)

- Model all security cameras locations at minimum in 2D CAD to facilitate RCP coordination if applicable
- Model all audio speakers and associated equipment at minimum in 2D CAD to facilitate RCP coordination.

- Model all communications racks, panels, and associated equipment
- Data racks to be accurate size location and orientation, door location and orientation must be modeled in 3D
- Model all clearances required to server clearances, IT clearances, etc.
- Identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.

Div. 27A: Theater A/V + Sound & Lighting: (LOD 350)

- Model all conduit raceways 3/4" and larger
- Model all junction boxes
- Model all pull boxes and required clearance zone for service.
- Model hangers, supports and bracing.
- Model the zone of influence for all hangers and deck inserts.
- Model all sleeves and inserts built into structure.
- Model all light fixtures
- Model all Equipment, including but not limited to: Speakers and arrays, Control equipment, equipment racks, panels,
- Model all infrastructure supporting Div 27A including but not limited to: raceways, conduit, cable trays, floor boxes, hangers and supports, poke thru devices, wall box connections, equipment racks.
- Identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.

Div. 28: Access Control & Video Surveillance: (LOD 350)

- Model all conduit raceways 3/4" and larger
- Model all junction boxes
- Model all pull boxes and required clearance zone for service.
- Model hangers, supports and bracing.
- Model the zone of influence for all hangers and deck inserts.
- Model all sleeves and inserts built into structure.
- Model door security junction boxes and automatic door openers.
- Model all Equipment, including but not limited to: Network Controller Interface, Door Controller Module, Input/Output Modules, Card Readers, Door Position Switches, ETC.
- Identify under separate drawing layer Access doors and Accessibility requirements for above listed items for code and maintenance purposes.

WHITING-TURNER

VIRTUAL BUILD EXECUTION PLAN

ASD SUMMIT CAMPUS

Date Revised: March 23, 2026

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1.0 PROJECT INFORMATION

1.1 PROJECT OWNER: APPOQUINIMINK SCHOOL DISTRICT

1.2 PROJECT NAME: ASD SUMMIT CAMPUS

1.3 PROJECT LOCATION & ADDRESS: 1420 AVIATOR WAY MIDDLETOWN, DE 19709

1.4 CONTRACT TYPE / DELIVERY METHOD:

1.5 PROJECT START & END DATE:

1.6 PROJECT DESCRIPTION:

Multiyear capital improvement program involves new combined high school and middle school at the Summit Campus in Middletown, DE

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2.0 VIRTUAL BUILD OVERVIEW

2.1 PROJECT VIRTUAL BUILD MISSION STATEMENT

The purpose of using Building Information Modeling (BIM), Virtual Design and Construction (VDC) and other innovative technologies on this project is to facilitate a seamless handoff between Design, Construction and Operations and to optimize coordination between all stakeholders, by creating a tool that conveys the design and installation intent of the project. This process will enable all parties to develop a solid understanding of the complexity of the project, to improve communication with the design team, to perform constructability analysis early in the project, and to improve the efficiency of construction.

2.2 DESIRED GOALS

The following describes the expected uses of BIM on this project. Refer to the Virtual Build Glossary of Terms for more detailed descriptions to the uses described below.

DESIGN & PRECON PHASE	CONSTRUCTION PHASE	OPERATION PHASE
X DESIGN AUTHORING	X DIGITAL FABRICATION	BUILDING MAINTENANCE SCHEDULING
X DESIGN REVIEWS	X LOGISTICS PLANNING	BUILDING SYSTEM ANALYSIS
VIRTUAL REALITY DESIGN REVIEWS	VIRTUAL REALITY REVIEW	ASSET MANAGEMENT
X 3D COORDINATION	X 3D COORDINATION	SPACE MANAGEMENT / TRACKING
LASER SCANNING	LASER SCANNING	DISASTER PLANNING
EXISTING CONDITIONS MODELING	EXISTING CONDITIONS MODELING	LEASING
OTHER ENG. ANALYSIS	X DIGITAL LAYOUT	BUILDING AUTOMATION/ MONITORING
SUSTAINABLITY (LEED) EVALUATION	X AS-BUILT MODELING	
PREFABRICATION STUDIES	PREFABRICATION STUDIES	
X PHASE PLANNING & 4D MODELING	X 4D SCHEDULING & PHASE PLANNING	
5D COST ESTIMATION	5D COST ESTIMATION	
ENERGY ANALYSIS	PRODUCTION TRACKING	
MECHANICAL ANALYSIS		
LIGHTING ANALYSIS		
STRUCTURAL ANALYSIS		
OTHER ENG. ANALYSIS		

2.3 ELECTRONIC COMMUNICATION PROTOCOLS

a) All Electronic Files transferred to subcontractors including but not limited to Revit design models, AutoCAD files, point clouds, gap models and other electronic file formats are provided for reference only to facilitate the coordination process. Reference the Whiting-Turner EFTA for further clarification. They in no way constitute the replacement of the PDF Contract Documents. If discrepancies are found, the contract drawings will by default govern over any other electronic media.

b) Confidentiality: The DWG, PDF files, shop drawings, RFI's, as-built drawings, etc. (collectively "Project Information") provided to subcontractors to facilitate the Virtual Build Program are the property of Whiting-Turner. Subcontractors agree to keep all Project Information in strict confidence and will not use on any other project or for any other reason not required to complete the Scope of Services on this project. Subcontractors further agree to not disseminate the Project Information to anyone except subcontractors' own personnel.

2.4 GENERAL NOTES

a) This document is specific to this project and is subject to change as standards and technology changes. Any changes will be provided to subcontractors for review.

b) Any party that fails to adhere by the guidelines in this document may be held in non-compliance, resulting in fines and the withholding of monthly pay applications.

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3.0 COLLABORATIVE ROLES & RESPONSIBILITIES

3.1 DESIGNERS OF RECORD

a) Delivery of all design models and CAD files with each critical design milestone and at contractor's reasonable request.

   i. 3D Models shall not be purged of pertinent content and shall include all sheets and views to facilitate additional CAD sheet extraction by Whiting-Turner.

   ii. All external references in their native formats including those derived from consultants.

   iii. All details and schedules if not derived from the 3D model shall be included.

   iv. All design models shall be 3-dimensionally coordinated and checked for dimensional accuracy and constructability and an accurate representation of the construction documents.

   v. Resolution of conflicts shall be reviewed with Whiting-Turner and resolved prior to the issuance of the next design milestone.

b) Active participation in coordination meetings upon request, or timely responses to RFIs and/or issues resulting from coordination and constructability reviews.

c) Management and updates to the design models and CAD files through the end of the construction phase, incorporating all design drawing updates and/or revisions. Design documents and associated Revit files will be updated concurrent to construction and transmitted through the issuance of design changes to capture RFIs, design directed changes, Owner Changes, etc.

d) Compilation and delivery of the final Record Documents to the owner.

3.2 WHITING-TURNER

a) Establish protocols and coordinate training to ensure Desired Goals (Section 2) are met.

b) Create and maintain the Virtual Build schedule ensuring integration with the CPM schedule.

c) Distribute design models to trades.

d) Perform high level constructability review of design models.

e) Extract CAD files from design team Revit models.

f) Define and manage the coordination process.

g) Set up and maintain access to file sharing location for all trades and consultants.

h) Endeavor to review that the modeling requirements published in this Execution Plan are met and ensure all trades are adhering to the Model Object Level of Development (LOD) Table in the Appendices.

i) Endeavor to perform supplemental QC checks of subcontractor's models to ensure proper coordination with the architectural and structural context.

j) Create and Maintain a virtual build model.

k) Set up and manage the weekly coordination meetings and the assignment and tracking of coordination related issues, RFIs and other action items.

l) Provide trade partners with model coordination sign-off document at the substantial completion of coordinated floor, level, zone/phase or building.

m) Review design model changes for potential re-coordination effort.

n) Endeavor to collect and QC trade layout points against the virtual build model and shop drawings.

o) Endeavor to QC field conditions to verify installed conditions match the virtual build models.

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p) Set up additional meetings as required to incorporate field or design changes and review for potential re-coordination effort.

q) At Project Substantial Completion, transmit red-line documents to the Designers of Record.

3.3 SUBCONTRACTORS

a) Produce a 3-dimensional fabrication models representing each subcontractor's scope of work in its entirety as it is intended for installation. Refer to the Level of Development (LOD) Table in the Appendices for scoped specific requirements.

   i. It is the responsibility of every subcontractor to ensure the dimensional accuracy, constructability, and completeness of their own modeled systems and that they are an accurate representation of the contract documents.

   ii. It is the responsibility of every subcontractor to ensure that their work can be installed as modeled, including the means and methods of installation.

b) Actively participate in all Virtual Build meetings. This may include additional meetings after initial coordination is complete for reasons such as: design changes, submittal comments, uncovered existing conditions, field changes, an owner requirement, etc.

c) Perform internal clash review of individual's system.

d) Collaborate outside the Virtual Build meeting in order to resolve trade clashes with all or any other trades with whom the clash involves.

e) Perform a complete and thorough constructability review of the design document and inform Whiting-Turner of any deficiencies and discrepancies.

f) Produce fabrication level shop drawings directly from the coordinated model.

g) Produce 2D drawings indicating the size and location of all in-slab elements and concrete penetrations (wall and slab); these must include the sleeve sizes required for approval by the structural engineer of record.

h) Produce 2D drawings indicating the size and location of all ceiling hosted infrastructure if requested by Whiting-Turner, the owner or a designer (including hanger locations).

i) If required by the structural engineer, the produce 2D point load drawings that specify the correct weight and spacing of elements to be supported by the building structure. Any requirements will be noted in the subcontract, scope documents or as an appendix to this document.

j) If required by regional codes, review the seismic design and incorporation of the seismic supports into the 3-dimensional model at turnover dates as determined by Whiting-Turner and the structural engineer.

k) When using digital layout, provide layout files (csv, txt or dwg) to Whiting-Turner.

l) Update 3D models with any modifications after virtual build model release, perform clash analysis against other trades, and provide updated model to Whiting-Turner VDC Coordinator.

   i. Any modifications made during installation must be updated by trades a timely manner to facilitate any necessary re-coordination.

m) Develop virtual mock-ups where applicable as requested by the owner and designers.

n) QC field conditions to verify installed conditions match the coordinated models.

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3.4 MODEL QUALITY CONTROL STRATEGY

There are several model quality control checks that must be made periodically through the Virtual Build process. The following table describes the responsibilities of each participant .

QC Method	Description	Responsible Party	Frequency
VISUAL CHECK	Ensure that there are no unintended model components and that the design intent has been followed.	Model Author	Weekly During Coordination
INTERFERENCE CHECK	Detect problems in the model where two building components are clashing.	Whiting-Turner & Subcontractors	Weekly During Coordination
STANDARDS CHECK	Ensure that the BIM and AEC CADD Standard have been followed. This includes layers, levels, styles, naming conventions, software version, etc.	Whiting-Turner	Monthly
MODEL INTEGRITY CHECKS	Ensure that the Project Facility Data set has no undefined, incorrectly defined or duplicated elements and the reporting process on non-compliant elements and corrective action plans are being taken	Model Author	Monthly
REVISION AUTHORITY CHECK	As design revisions occur, the models must be checked for potential conflicts.	Whiting-Turner	After each Design Revision

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4.0 MODELING REQUIREMENTS

4.1 GENERAL MODELING REQUIREMENTS

a) Each subcontractor will provide a model that is complete and accurately represents their scope of work in its entirety, including **all** code required, maintenance access, and installation required clearances.

b) Refer to the *Model Object LOD Table* in the Appendix for minimum modeling requirements. This list is not exhaustive, thus any objects **not** included in the table should be modeled to a minimum LOD 350.

c) It is the responsibility of every model author to ensure the dimensional accuracy and representation in their own model as it relates to the contract documents.

d) All objects must be modeled as 3D solids, including access requirements. 3D models submitted to Whiting-Turner should not include any 2D linework or wireframe objects (exception for column grids).

e) The models received from each subcontractor will only contain the relevant 3D data and no extraneous 2D data. All externally referenced files, links or imports must be purged prior to submission.

f) Models and Model Elements must be modeled at their intended installation location, including the correct elevation. Model Elements found not at the correct location must be corrected by the subcontractor within 1 week of discovery.

g) All models will be developed in a software package that is compatible with the agreed upon version of Navisworks Manage at the start of the project.

h) Subcontractors are to provide Whiting-Turner with a 3D model in their native file format and in a compliant format such as .nwc, .ifc or .dwg.

i) Subcontractors modeling in Revit shall use **Revit Version XXX.**
   i. Subcontractors responsible for multiple disciplines' scope shall have a separate distinct Revit file for each discipline to facilitate ease of composite drawing creation.

j) All necessary object enablers must be uploaded to the file sharing site.

k) Subcontractor models must show proposed sleeves, block out locations and sizes, as well as embed items in concrete walls, columns, floors, and beams.

l) Layer names and/or Revit Family Categories and Types should reflect the nature of the group of objects that they include, such as walls, beams, etc. and as a subset more specific descriptors such as wall type, beam type, supply duct, outside air duct, domestic hot water supply/return, etc.
   i. Each CAD-based model must include an independent layer labeled "GRID" which represents the column grids. Each Revit-based model must include grids and levels to match the design files.
   ii. Upon request, each trade model must include an independent layer labeled "CUBE" which represents the model reference benchmark located at a prescribed location in order to facilitate proper model alignment by the VDC Coordinator.
   iii. Insulation must be modeled as a separate selectable layer or Revit material to facilitate ease of selection.
   iv. Clearances must be modeled as a separate selectable layer or Revit material to facilitate ease of selection.
   v. Flex systems must be modeled as a separate selectable layer or Revit material to facilitate the ease of selection.
   vi. Hangers and other secondary supports must be modeled as a separate selectable layer or Revit material to facilitate the ease of selection.

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vii. For any modeling trade with light gauge structural framing in their scope of work, it is to be layered in two different selectable categories; one for critical stud framing members and one for field adjustable studs.

m) Subcontractors are required to submit models that are free from self-intersecting objects. Whiting-Turner will not run additional clash tests on systems within the same discipline or file.

n) Upon request models are to be colored per the Model Matrix in the Appendix.

5.0 VIRTUAL BUILD PROCESS

5.1 STANDARD REQUIRED CONTRIBUTIONS

a) Whiting-Turner will serve as a facilitator of the Virtual Build process. They will guide the process and provide a strategy for clash resolution. However, that does not absolve subcontractors from the responsibility of coordinating themselves and communicating with other trades.

b) Whiting-Turner will establish and maintain a dedicated file sharing site for uploading the models produced by all project team members and archiving all important coordination documentation and model versions. These models will be accessible to all parties for individual coordination purposes outside of regular Virtual Build meetings. Please see the *Data Exchange Protocols* in the Appendix for further description on the information exchange process and an example layout of the file sharing site.

c) Each subcontractor is responsible for providing all the hardware, software, and manpower required for the Virtual Build process. The model will be constructed and manipulated utilizing Navisworks Manage, thus all drafting and 3D modeling software must be compatible.

i. Whiting-Turner reserves the right to use additional software such as Revizto, ACC BIM Collaborate, FlyPaper, BIMTrack, Procore Coordination Issues etc. for leveraging cloud-based model sharing and clash detection. Upon the use of an extended software, Whiting-Turner will include an appendix outlining the usage.

d) Each team member must notify all participants every time a file is uploaded to the file sharing site. Whiting-Turner will do the same when posting the federated model. **Weekly model submissions are required no later than 24 hours prior to the coordination meeting time.**

i. Failure to submit models by the designated submission time may result in a penalty by the nonperformance section of the subcontractor contract. If work cannot be completed by the designated submission time, Whiting-Turner must be given prior notice.

ii. Models submitted less than 24 hours in advance of a coordination meeting will not be reviewed.

iii. Whiting-Turner will document when required file submissions are not made or are incomplete.

iv. Models are encouraged to be uploaded to Procore daily for transparency and lean communication, but daily uploads are not required.

e) Coordination meeting attendance is mandatory. Each trade shall have a designated employee in attendance and leading the coordination effort throughout the project. The individual responsible for modeling must be in attendance of all Virtual Build meetings in addition to the primary project manager for each modeled scope of work. It is expected that the modeler is either a) in attendance with hardware capable of running their native modeling software or b) have access to multiple screens to view the issues being discussed in the meeting and make the changes as the meeting progresses.

i. Failure to participate in a Virtual Build meeting may result in a penalty by the nonperformance section of the subcontractor contract. If the primary modeling contact cannot participate, a competent replacement must be pre-arranged with Whiting-Turner's approval.

ii. The frequency and duration of these meetings will be agreed upon by all participants. Additional

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working sessions may be required to meet the project's schedule demands.

f) The Whiting-Turner VDC Coordinator will perform coordination & clash detection and will assign clashes based upon their opinion of the simplest solution or by a predetermined priority matrix (if included as an appendix). It is the responsibility of the assigned contractor to ensure the resolution of their assigned clashes. They may either:

   i. Resolve the clash through moving their own system

   ii. Coordinate with another contractor the movement of a system

   iii. Request that the clash be reassigned to another contractor during the meeting and receive said party's acceptance to change the responsible party

g) Whiting-Turner will make a good faith effort to locate and assign clashes. This does not absolve subcontractors of their responsibility to locate clashes between their models and other trade's models.

   i. Many clashes that Whiting-Turner deems lower priority (ex. hangers, flexible lines, or easily moved objects) may not be assigned until a later date or may not be assigned at all.

   ii. It is each subcontractor's responsibility to ensure that their models do not contain any internal or external clashes and that their scope of work can be installed without impairment at the time of coordination substantial completion.

   iii. The coordination of the construction means and methods and the installation intent are the responsibility of each trade.

   iv. Any subcontractor must bring to light any issues they see which have not been assigned by Whiting-Turner.

h) Subcontractors will be expected to resolve clashes in a timely manner. In order to ensure that the schedule is being met, due dates will be assigned to issues in the model.

   i. Not all clashes will be reviewed during each Virtual Build meeting. It is the responsibility of each contractor to download the models each week and review clashes assigned to them.

i) The coordinated model is expected to comply with the design intent, specs, access requirements, code requirements and fabrication needs. WT will visually compare the installation of field infrastructure in accordance with the Quality Management program. If a party falls out of compliance with the documents produced in coordination, monetary compensation to the affected party will take place.

j) Whiting-Turner will maintain the right to schedule a conflict-resolution work session when the project team deems it fit. If Whiting-Turner decides to hold this work-session, team members are to expect this meeting to last as long as needed in order to resolve all conflicts, which may take as long as one full day. This meeting will be mandatory for all BIM Drafters, Coordinators, Project Managers, and all other parties involved in the area that is under coordination. This meeting may be held virtually or in person, and all parties are expected to bring their computers in order to resolve all conflicts during the session.

5.2 VIRTUAL BUILD SCHEDULE

a) Subcontractors acknowledge that the Virtual Build process is completed for the purpose of enabling physical installation.

   i. Virtual Build activities are listed in the CPM schedule and shall be treated as a part of the schedule of values when approving subcontractor payment.

   ii. The Virtual Build mirrors the physical sequence of work installed in order to meet procurement deadlines and identify potential prefabrication opportunities.

   iii. Certain areas or objects may be coordinated in advance of overhead coordination in order to meet specific schedule dates, ex. hanger inserts, risers or slab penetrations.

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b) A Baseline Virtual Build schedule has been initially provided outlining expected deliverable dates required for each level and area in order to meet field installation. It has been coordinated with the master CPM Project Schedule and Project Specs.

c) CPM Schedule updates will take place on a monthly basis. The Virtual Build schedule will be updated in the CPM Schedule whenever there is a change.

d) Subcontractors will have a designated review period of two weeks after receipt of this document to provide feedback on the schedule.
   i. If no exception is found subcontractors shall adhere to the schedule provided.

e) Subcontractors will be given a designated period to initially create their fabrication model prior to reviewing each subsequent coordination zone as a team.
   i. Failure to have scheduled modeled scope drawn in its entirety on the first day of coordination as defined in the schedule for each coordinated area may result in delayed payment as allowed by the subcontract.

f) Deliverables associated with the Virtual Build process shall be treated with the same level of precedence as schedule milestones. Virtual Build activities have a direct impact to the physical build and may result in schedule delays.
   i. Failure to submit any submittal associated with the virtual build including but not limited to Shop Drawings, Penetration drawings, Reflected Ceiling Plans, Hanger Point Loads, etc. in the designated required timeframe indicated on the project coordination schedule may result in delayed payment as allowed by the subcontract.
   ii. If any of the above submittal types fails to contain the entirety of the required scope, it will be treated as a non-submission.

5.3 VIRTUAL BUILD PROCEDURE

a) The following is a basic outline of the Virtual Build procedure. Additional project-specific procedures may be outlined in an Appendix.

b) Prior to each zone's first coordination meeting:
   i. Each Trade Contractor shall perform a coordination review of the design documents. The Trade Contractor must submit documentation stating that they have performed a coordination review of the design documents and that any coordination issues discovered have been submitted to Whiting-Turner.
   ii. If provided, any Architectural, Structural and MEP design models will be hosted on the dedicated file sharing site; each trade is required to download and use these files to create their system models in the sequence dictated by the Virtual Build schedule.
   iii. Subcontractors will be given a period to initially draw and create their fabrication model prior to reviewing each subsequent coordination zone as a team as dictated in the Virtual Build schedule.
   iv. In the event where submittals or product data are awaiting approval, subcontractors are to include the more stringent element of the basis of design or intended product at the required LOD.

c) The following steps will be repeated until an area is substantially complete and all parties agree to begin the shop drawing process:
   i. In the 24 hours before the meeting, the WT VDC Coordinator will compile the models and perform clash detection in the zones according to the Virtual Build schedule.
   ii. Trade Contractors shall conduct their own model coordination and clash detection and submit to Whiting-Turner viewpoints that should be reviewed during the meeting.
   iii. The Trade Contractors and Whiting-Turner will meet, review, and resolve clashes/conflicts within the

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Virtual Build model. Whiting-Turner may not review all clashes in this meeting. Time will be allotted for each trade to bring up additional clashes and concerns.

iv. The Virtual Build model with the any adjustments from the meeting will be saved and uploaded to the file sharing site. All clashes and conflicts will be saved as noted viewpoints.

v. Trade Contractors shall download and review the Virtual Build model and review all clashes assigned to them prior to the next meeting. Any clashes that have not been resolved will be reviewed during the following meeting.

vi. Any issues requiring design assistance will be added to an issue tracking log or submitted as an RFI.

5.4 VIRTUAL BUILD RELEASE TO COMMENCE SHOP DRAWINGS

a) The Virtual Build Release Document signifies that all parties acknowledge that an area, zone, floor or the entire model is substantially coordinated and substantiates mutual agreement to begin production of Shop Drawings.

b) Once each area is coordinated to the satisfaction between all Virtual Build participants, a dated Virtual Build model in NWD format will be uploaded to the release folder in the file sharing site.

i. Whiting-Turner reserves the right to determine when a model has been substantially coordinated. This may not include the coordination of flexible lines, supports, hangers. Any exceptions will be identified in the release document.

ii. It is the responsibility of each trade contractor to notify Whiting-Turner if any uncoordinated items must be coordinated prior to signing the release document.

c) By signing the release document each trade contractor acknowledges that they have reviewed the virtual build model and list of exceptions for any potential conflicts, that coordination has been completed to their own requirements and that their scope of work in its entirety can be installed in accordance with the Virtual Build model.

i. Failure to sign the document within three business days without official written notice to Whiting-Turner shall constitute acceptance of the document.

d) Whiting-Turner may hold individual trade contractors responsible for costs arising from deficiencies in the Virtual Build coordination effort. This includes but is not limited to costs arising from inaccurate or out of date models, lack of required modeling detail or components not installed per the Virtual Build model. The costs may include but are not limited to re-coordination costs, rework, and/or costs related to associated schedule impacts. This includes costs incurred by Whiting-Turner, the Owner and other subcontractors.

i. It is the responsibility of each trade contractor to ensure their scope is modeled accurately, completely and is kept up to date with drawing revisions and bulletins.

e) If a design change causes an impact to an area where the Virtual Build release document has been signed, each subcontractor must review their own model and identify any potential impacts in writing to Whiting-Turner. At which point Whiting-Turner will determine if the area must be re-coordinated.

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6.0 PROJECT DELIVERABLES

6.1 COORDINATED SHOP DRAWINGS

a) Each trade contractor will be responsible for producing fully annotated 2D shop drawings for the designers' approval as per the construction documents. This may be at the completion of an area, level or the entire project as is required to meet the procurement schedule.

b) Shop drawings are to be generated from the Virtual Build model and should be delivered in PDF and Revit/AutoCAD format.

c) Shop drawings and construction documents must be redlined through construction and transmitted to Whiting-Turner at the completion of an area or level.

   i. Deviations from the contract documents shall be fully explained in writing per Article 3 of the Whiting-Turner Long Form Subcontract.

d) Shop drawings are to be provided in accordance with the contract documents and AEC standard of care practices.

6.3 BILLINGS AND APPROVALS

a) Payment of Virtual Build related work is to adhere to the language in Article 5 of the Subcontract.

b) A schedule of values including the Modeling, Virtual Build, Shop Drawing Approval, and As-Built of each specified area shall be provided.

   i. Modeling: To be marked as 100% complete upon the completed initial modeling of the subcontractor's scope of work.

   ii. Virtual Build: To be marked as 100% with a completed area sign-off.

   iii. Shop Drawing Approval: To be marked as completed upon the returned approved shop drawing.

   iv. As-Built: To be marked as completed upon the verified submission of the as-built model.

c) In the event that the Subcontractor fails to meet its obligations outlined in this plan, the contractor reserves the right to withhold payment per Article 5 of the Subcontract.

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7.0 APPENDIX A – KEY PROJECT CONTACTS

Name	Company	Role	Phone	Email
Anthony DelValle	Whiting-Turner	VDC Manger	302-658-7760	Anthony.delvalle@whiting-turner.com
Jason Whitebread	Whiting-Turner	VDC Engineer	814-622-7095	jason.whitebread@whiting-turner.com
Dom Pavlik	Whiting-Turner	Project Manger	302-518-5879	dom.pavlik@whiting-turner.com

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8.0 APPENDIX B– MODEL NOMENCLATURE, ORIGIN, ALIGNMENT, & COLORS

8.1 MODEL NOMENCLATURE

a) All file names shall follow the naming convention specified below. 'D' Designation is for a design model and 'F' designation for a fabrication model. Each company shall select and use a 3-4 letter acronym.

b) ASD_[BUILDING]_[D/F]_[DISCIPLINE ACRONYM]_[COMPANY ACRONYM]_[ZONE/LEVEL]_ADDITIONAL IDENTIFIER

Discipline Acronyms			
ARCH	Architecture	FRAM	Interior Framing
CONC	Concrete	KTCH	Kitchen Equipment
DUCT	Mechanical Sheet Metal	PLMB	Plumbing
MECH	Mechanical Piping	LAB	Lab Casework
CIVL	Civil	MLWK	Millwork
COMM	Communications & Audio Visual	STL	Steel
ELEC	Electrical	STRU	Structural
FIRE	Fire Protection		

High School Level/Zone Acronyms			
HS	High School	Roof	Roof
UG	Underground		
L01	Level 1		
L02	Level 2		
L03	Level 3		

Middle School Level/Zone Acronyms	
MS	Middle School
UG	Underground
L01	Level 1
L02	Level 2
Roof	Roof

Performing Arts Center Level/Zone Acronyms	
PAC	Performing Arts Center
UG	Underground
L01	Level 1
Roof	Roof

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The following is a table of model list as they currently stand. This table will be updated as models are added.

Designation	Model Name	Scope	Author	Authoring Platform
Design				
Design				
Design				
Design				
Design				
Design				
Fabrication				
Fabrication				
Fabrication				
Fabrication				
Fabrication				

8.2 MODEL LOCATION AND ALIGNMENT

a) All trade models must be located within 1/256" of the locations specified in this section. This project will utilize the architectural design model coordinate system for the internal and site coordinates. The following chart describes the location of the project base point (or origin) in reference to the building grid.

Location Project Base Point to Building Grid (Internal Positioning)		
Direction	Distance	From Column Line
X	0'-0"	West of Column Line XX
Y	0'-0"	North of Column Line 00
Z	0'-0"	Above or Below Level 01 Finished Floor

a) The following chart describes the location of the project base point (or origin) in reference to the site coordinate system as described in the architectural design Revit model. This site coordinate system may not be the real-world coordinates used by the surveyors on-site.

Coordinates of Survey Point (Acquired Shared Coordinates)	
Direction	Distance
X	0'-0"
Y	0'-0"
Z	0'-0"
Rotation	0.000°

b) Due to the multi-level nature of the project, each trade shall break up their models by level. This may be done by modeling in multiple files or by modeling in a single file and exporting for Navisworks by level. The level elevations are defined in the table below. When using multiple files, the origins should all be the same such that when each file is imported into Navisworks they will all show up in the correct location and not require a transform.

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c) Separate Navisworks files will be kept for each designated coordination scope of work. Exceptions for specific model breakdowns may be approved upon request to the Whiting-Turner VDC Coordinator.

Elevations of each Level	
Level	Distance
01	0'-0"
02	14'-0"
03	28'-0"
HS Roof	42'-0"

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8.3 LAYER NOMENCLATURE

a) Layer names and/or Revit Family categories and Types should reflect the nature of the group of objects that they include, such as walls, beams, etc. and as a subset more specific descriptors such as wall type, beam type, supply duct, outside air duct, domestic hot water supply/return, etc.

b) System/Trade Colors: Each system/trade will be identifiable by a single color within Navisworks with the exception of architectural and structural elements as follows (note is important that the data for these elements is determinable in Navisworks, colors below will be assigned by WT's coordinator in the federated model, so if the parameter/layer is not discoverable by a search set, than the deliverable is not met):

System/Trade Colors	
Object	**Color**
Concrete	Grey
Structural/Misc. Steel	Maroon
Architectural Items including Walls and Ceilings	Light Grey
Fire Protection Mains	Red
Fire Protection PVC	Yellow
Fire Protection Heads	Orange
Plumbing Sanitary	Dark Green
Plumbing Storm	Magenta
Plumbing Ventilation	Pink
Plumbing Hot Water Supply	Dark Red
Plumbing Hot Water Return	Light Red
Plumbing Cold Water Supply	Dark Blue
Plumbing Cold Water Return	Light Blue
Plumbing Gas	Sea Green
HVAC Supply Air	Dark Purple
HVAC Return Air	Light Purple
HVAC Exhaust Air	Light Orange
HVAC Outside Air	Dark Orange
HVAC Pipe	Lime Green
HVAC Equipment	Navy Blue
Electrical Conduit	Cyan
Electrical Lights	Gold
Electrical Equipment	Light Green
Telecom	Blue
Audio Visual Equipment/Fixtures	Black
Access and Insulation Clearance Zones	50% Transparent Red
Insulation	25% Transparent Grey

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9.0 APPENDIX C – DATA EXCHANGE PROTOCOLS

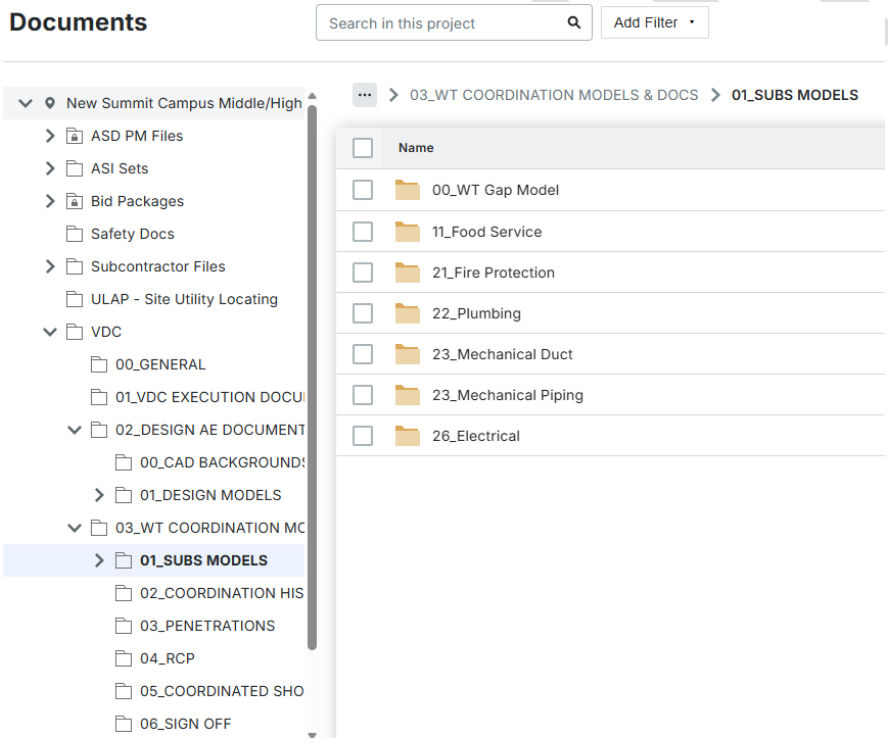
9.1 PROCORE GUIDELINES

For the purpose of maintaining a collaborative work environment for the Virtual Build stakeholders, Whiting-Turner will host a Procore Site where project information can be shared and maintained. Trade Partners will be given a folder that they are expected to upload their Virtual Build Data. Each team member must notify all participants every time a file is uploaded. Whiting-Turner will notify all participants when posting the consolidated Navisworks model.

Virtual Build Data is to be distributed on a daily basis, in order to ensure a LEAN communication and coordination process with exception of the day of the and leading up to the coordination meeting. An official coordination model submittal is due 24 hours prior to Coordination Meetings. No model is required the day of the meeting unless changes discussed in the meeting are implemented.

a) Rules of Engagement for Model Uploads:
   i. Nothing gets deleted once distributed to the team members.
   ii. Nobody changes/alters another's model (electronic file).

9.2 PROCORE EXAMPLES



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10.0 APPENDIX D – MODEL OBJECT LOD

The following table identifies the minimum level of development required for each model author.

Note that LOD 100 and 200 may indicate a schematic or 2-Dimensional BIM Scope.

Refer to the BIM Forum Level of Development Specification Part 1

This table does not remove or replace any requirements for 2D or 3D shop drawings as required by the contract documents.

Layer names and/or Revit Family categories and Types should reflect the nature of the group of objects that they include, such as walls, beams, etc. and as a subset more specific descriptors such as wall type, beam type, supply duct, outside air duct, domestic hot water supply/return, etc.

STEEL: Fabrication							
Angles	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Beams	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Bracing	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Columns	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Gusset Plates	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Joists	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Knife Plates	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Miscellaneous/Supplemental Steel	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Stairs and railings	Div 05 Contractor			MAROON	DWG, IFC, NWC	350	
Mechanical: Dry Fabrication							
Access Panels (Ceiling & In Wall)	Div 23 Contractor			PURPLE	RVT, NWC	350	All access doors must show door swing
Access/Clearance Zones	Div 23 Contractor			PURPLE	RVT, NWC	350	This must be modeled as an independent model layer or category.
Air Handling Unit (AHU)	Div 23 Contractor			PURPLE	RVT, NWC	350	Check scope of work
All Duct (Including Flex)	Div 23 Contractor			PURPLE	RVT, NWC	350	Flanged connections to be shown
All Hoods	Div 23 Contractor			PURPLE	RVT, NWC	350	
All Trapeze	Div 23 Contractor			PURPLE	RVT, NWC	350	
Balance Damper Access Clearance Zones	Div 23 Contractor			PURPLE	RVT, NWC	350	
Balance Dampers	Div 23 Contractor			PURPLE	RVT, NWC	350	
Booster Fan	Div 23 Contractor			PURPLE	RVT, NWC	350	
Booster Fan Access Clearance Zones	Div 23 Contractor			PURPLE	RVT, NWC	350	
Cabinet Unit Heaters	Div 23 Contractor			PURPLE	RVT, NWC	350	

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Code Clearance Zones	Div 23 Contractor			PURPLE	RVT, NWC	350	
Coil Pull Access Clearance Zones	Div 23 Contractor			PURPLE	RVT, NWC	350	
Compressor	Div 23 Contractor			PURPLE	RVT, NWC	350	
Computer Room Air Conditioning Unit (CRAC)	Div 23 Contractor			PURPLE	RVT, NWC	350	
Condensing Unit	Div 23 Contractor			PURPLE	RVT, NWC	350	
Cooling Towers	Div 23 Contractor			PURPLE	RVT, NWC	350	
Diffusers	Div 23 Contractor			PURPLE	RVT, NWC	350	
Duct Detectors Clearance Zones (Smoke)	Div 23 Contractor			PURPLE	RVT, NWC	350	
Electric Unit Heaters	Div 23 Contractor			PURPLE	RVT, NWC	350	
Equipment Pads	Div 23 Contractor			PURPLE	RVT, NWC	350	
Exhaust Fans	Div 23 Contractor			PURPLE	RVT, NWC	350	
Fan Coil Unit (FCU)	Div 23 Contractor			PURPLE	RVT, NWC	350	
Fire Damper Access Clearance Zones	Div 23 Contractor			PURPLE	RVT, NWC	350	
Fire Dampers	Div 23 Contractor			PURPLE	RVT, NWC	350	
Floor Stands	Div 23 Contractor			PURPLE	RVT, NWC	350	
Generators	Div 23 Contractor			PURPLE	RVT, NWC	350	
Grease Duct	Div 23 Contractor			PURPLE	RVT, NWC	350	Must provide access/clearance to grease duct clean outs
Grilles	Div 23 Contractor			PURPLE	RVT, NWC	350	
Hangers	Div 23 Contractor			PURPLE	RVT, NWC	350	Must be provided as a separate hanger/support model
Housekeeping Pads	Div 23 Contractor			PURPLE	RVT, NWC	350	
Humidifiers	Div 23 Contractor			PURPLE	RVT, NWC	350	
Insulation	Div 23 Contractor			PURPLE	RVT, NWC	350	This must be modeled as an independent model layer or category.
Louvers	Div 23 Contractor			PURPLE	RVT, NWC	350	
Project Specific Equipment	Div 23 Contractor			PURPLE	RVT, NWC	350	
Registers	Div 23 Contractor			PURPLE	RVT, NWC	350	
Riser Supports	Div 23 Contractor			PURPLE	RVT, NWC	350	Must be provided as a separate hanger/support model
Roof Curbs	Div 23 Contractor			PURPLE	RVT, NWC	350	
RTU's	Div 23 Contractor			PURPLE	RVT, NWC	350	
Seismic Bracing	Div 23 Contractor			PURPLE	RVT, NWC	350	If Required
Smoke Damper Access Clearance Zones	Div 23 Contractor			PURPLE	RVT, NWC	350	
Smoke Dampers	Div 23 Contractor			PURPLE	RVT, NWC	350	

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Smoke Detectors	Div 23 Contractor			PURPLE	RVT, NWC	350	
Variable Air Volume Box (VAV)	Div 23 Contractor			PURPLE	RVT, NWC	350	
Mechanical: Wet Fabrication							
Access Panels (Ceiling & In Wall)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	All access doors must show door swing
Access/Clearance Zones	Div 23 Contractor			LIME GREEN	RVT, NWC	350	This must be modeled as an independent model layer or category.
Actuators	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Air Handling Unit (AHU)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
All Piping (Mains and Branch)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
All Trapeze	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Back Flow Preventer	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Blow Down Valves	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Cabinet Unit Heaters	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Calcium Silicate Pipe Insulation	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Chain Operator	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Chain Operator Clearance Zones	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Cleanouts	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Code Clearance Zones	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Coil Pull Access Clearance Zones	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Compressor	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Computer Room Air Conditioning Unit (CRAC)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Condensing Unit	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Control Panels	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Control Valves	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Cooling Towers	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Drains and Testing Connections	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Drip Legs	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Drip Pans	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Electric Unit Heaters	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Energy Recovery Unit (ERU)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Equipment Pads	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Equipment Skids	Div 23 Contractor			LIME GREEN	RVT, NWC	350	

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Fan Coil Unit (FCU)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Fittings (Victaulic or Similar)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Flanges	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Gauges	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Hangers and Supports	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
High Point Vents	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Housekeeping Pads	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Humidifiers	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
In Wall Piping	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
In-Line Devices	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Insulation	Div 23 Contractor			LIME GREEN	RVT, NWC	350	This must be modeled as an independent model layer or category.
Isolators	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Low Point Drains	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Make-Up Air Unit (MAU)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Meters	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Project Specific Equipment	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Pumps	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Roller Hangers	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Seismic Bracing	Div 23 Contractor			LIME GREEN	RVT, NWC	350	If Required
Sleeves	Div 23 Contractor			LIME GREEN	RVT, NWC	350	Show any floor or wall penetrations as required per project specifications
Starters	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Tanks	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Trap Primers	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Unions	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Unit Heater	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Valves	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Variable Frequency Drives (VFD)	Div 23 Contractor			LIME GREEN	RVT, NWC	350	
Plumbing: Fabrication							
Access Panels (Ceiling & In Wall)	Div 22 Contractor			MAGNETA	RVT, NWC	350	All access doors must show door swing
Access/ Clearance Zones	Div 22 Contractor			MAGNETA	RVT, NWC	350	This must be modeled as an independent model layer or category.
Air Compressors	Div 22			MAGNETA	RVT, NWC	350	

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	Contractor						
All Piping (Mains and Branch)	Div 22 Contractor			MAGNETA	RVT, NWC	350	All pipe sizes must be modeled - no exceptions
All Storage Tanks	Div 22 Contractor			MAGNETA	RVT, NWC	350	
All Trapeze	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Back Flow Preventer	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Blow Down Valves	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Calcium Silicate Pipe Insulation	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Chain Operator	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Chain Operator Clearance Zones	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Cleanouts	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Code Clearance Zones	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Compressor	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Control Valves	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Drain Taps	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Drains	Div 22 Contractor			MAGNETA	RVT, NWC	350	Floor, trench and garage drains.
Drip Legs	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Equipment Pads	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Equipment Skids	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Eye Wash	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Fittings (Victaulic or Similar)	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Floor Cleanouts	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Fuel Oil Storage Tanks	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Gas Meter	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Gauges	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Grease Interceptor	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Hangers & Supports	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Heat Exchangers	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Hose Bibbs	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Housekeeping Pads	Div 22 Contractor			MAGNETA	RVT, NWC	350	
In Wall Piping	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Inline Filers	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Insulation	Div 22 Contractor			MAGNETA	RVT, NWC	350	This must be modeled as an independent model layer or

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							category.
Isolators	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Project Specific Equipment	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Pumps	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Regulators / Manifolds	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Roller Hangers	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Safety Shower	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Scuppers	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Seismic Bracing	Div 22 Contractor			MAGNETA	RVT, NWC	350	If Required
Sleeves	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Sumps	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Tanks	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Toilet and Urinal Carriers	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Trap Primer	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Valves, Gauges & Control Valves	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Wall Cleanouts	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Water Fountains/Water Coolers	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Water Heaters	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Water Meter	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Unions	Div 22 Contractor			MAGNETA	RVT, NWC	350	
Electrical: Fabrication							
Access Panels (Ceiling & In Wall)	Div 26 Contractor			CYAN	RVT, NWC	350	All access doors must show door swing
Access/Clearance Zones	Div 26 Contractor			CYAN	RVT, NWC	350	
All Panel Feeders	Div 26 Contractor			CYAN	RVT, NWC	350	
All Panels	Div 26 Contractor			CYAN	RVT, NWC	350	
All Trapeze	Div 26 Contractor			CYAN	RVT, NWC	350	
Automatic Transfer Switch (ATS)	Div 26 Contractor			CYAN	RVT, NWC	350	
Buss Access Clearance Zones	Div 26 Contractor			CYAN	RVT, NWC	350	
Buss Duct	Div 26 Contractor			CYAN	RVT, NWC	350	
Buss Plugs	Div 26 Contractor			CYAN	RVT, NWC	350	
Cable tray	Div 26 Contractor			CYAN	RVT, NWC	350	
Cable tray Access Clearance - Top & Side	Div 26 Contractor			CYAN	RVT, NWC	350	

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Cable tray Trapeze	Div 26 Contractor			CYAN	RVT, NWC	350	
Ceiling Mounted Fire Alarm Devices	Div 26 Contractor			CYAN	RVT, NWC	350	
Ceiling Mounted Projectors	Div 26 Contractor			CYAN	RVT, NWC	350	
Ceiling Mounted Security Devices	Div 26 Contractor			CYAN	RVT, NWC	350	
Ceiling Mounted Speakers	Div 26 Contractor			CYAN	RVT, NWC	350	
Code Clearance Zones	Div 26 Contractor			CYAN	RVT, NWC	350	
Conduit 3/4" & Larger (see comments)	Div 26 Contractor			CYAN	RVT, NWC	350	Conduit 3/4", 1", 1-1/4" & 1-1/2" When Mounted/Installed On A Trapeze/Unistrut System
Conduit 2" & Larger (see comments)	Div 26 Contractor			CYAN	RVT, NWC	350	All Conduit 2" Or Larger Regardless Of Mounting/Installation Type
Disconnects / Safety Switches	Div 26 Contractor			CYAN	RVT, NWC	350	
Duct Banks	Div 26 Contractor			CYAN	RVT, NWC	350	
Duct Detectors (Smoke)	Div 26 Contractor			CYAN	RVT, NWC	350	
Duct Detectors Clearance Zones (Smoke)	Div 26 Contractor			CYAN	RVT, NWC	350	
Electric Unit Heaters	Div 26 Contractor			CYAN	RVT, NWC	350	
Equipment Pads	Div 26 Contractor			CYAN	RVT, NWC	350	
Exhaust Fans	Div 26 Contractor			CYAN	RVT, NWC	350	
Fire Command Center (FCC)	Div 26 Contractor			CYAN	RVT, NWC	350	
Floor Boxes/Poke Thru's	Div 26 Contractor			CYAN	RVT, NWC	350	
Generators	Div 26 Contractor			CYAN	RVT, NWC	350	
Hand Hole (Within Footprint of Building)	Div 26 Contractor			CYAN	RVT, NWC	350	
Hangers and Supports	Div 26 Contractor			CYAN	RVT, NWC	350	
Housekeeping Pads	Div 26 Contractor			CYAN	RVT, NWC	350	
Fire Alarm Devices	Div 26 Contractor			CYAN	RVT, NWC	350	Exit signs, Emergency Battery Packs, etc.
Security Devices	Div 26 Contractor			CYAN	RVT, NWC	350	
Intermediate Distribution Frame (IDF)	Div 26 Contractor			CYAN	RVT, NWC	350	
Junction Box (8x8 or Larger)	Div 26 Contractor			CYAN	RVT, NWC	350	
Junction Box Access Clearance Zones	Div 26 Contractor			CYAN	RVT, NWC	350	
Lightning Protection System	Div 26 Contractor			CYAN	RVT, NWC	350	
Light Fixtures with Installation Clearance Zones	Div 26 Contractor			CYAN	RVT, NWC	350	
Main Distribution Frame (MDF)	Div 26 Contractor			CYAN	RVT, NWC	350	
Occupancy Sensors	Div 26 Contractor			CYAN	RVT, NWC	350	
Overhead Door Equipment	Div 26			CYAN	RVT, NWC	350	All objects not provided by OHD

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	Contractor						installer per scope
Panel Code Clearance - Top & Bottom	Div 26 Contractor			CYAN	RVT, NWC	350	
Project Specific Equipment	Div 26 Contractor			CYAN	RVT, NWC	350	
Pull Box Access Clearance Zones	Div 26 Contractor			CYAN	RVT, NWC	350	
Pull Boxes	Div 26 Contractor			CYAN	RVT, NWC	350	
Seismic Bracing	Div 26 Contractor			CYAN	RVT, NWC	350	If Required
Sleeves	Div 26 Contractor			CYAN	RVT, NWC	350	
Smoke Detectors	Div 26 Contractor			CYAN	RVT, NWC	350	
Speakers	Div 26 Contractor			CYAN	RVT, NWC	350	
Starters	Div 26 Contractor			CYAN	RVT, NWC	350	
Switchgear	Div 26 Contractor			CYAN	RVT, NWC	350	
Thermostat	Div 26 Contractor			CYAN	RVT, NWC	350	
Transformers	Div 26 Contractor			CYAN	RVT, NWC	350	
Uninterruptible Power Supply (UPS)	Div 26 Contractor			CYAN	RVT, NWC	350	
Wall Mounted Fire Alarm Devices	Div 26 Contractor			CYAN	RVT, NWC	350	
Wall Mounted Security Devices	Div 26 Contractor			CYAN	RVT, NWC	350	
Wall Mounted Speakers	Div 26 Contractor			CYAN	RVT, NWC	350	
Fire Protection: Fabrication							
Access Panels (Ceiling & In Wall)	Div 21 Contractor			RED	DWG, NWC	350	
Access/Clearance Zones	Div 21 Contractor			RED	DWG, NWC	350	
Air Compressor	Div 21 Contractor			RED	DWG, NWC	350	
All Dry System Equipment	Div 21 Contractor			RED	DWG, NWC	350	
All Piping	Div 21 Contractor			RED	DWG, NWC	350	
All Preaction Equipment	Div 21 Contractor			RED	DWG, NWC	350	
All Standpipe	Div 21 Contractor			RED	DWG, NWC	350	
All Trapeze	Div 21 Contractor			RED	DWG, NWC	350	
All Wet System Equipment	Div 21 Contractor			RED	DWG, NWC	350	
Back Flow Preventer	Div 21 Contractor			RED	DWG, NWC	350	
Bolted connections (Victaulic Type)	Div 21 Contractor			RED	DWG, NWC	350	
Branch Piping	Div 21 Contractor			RED	DWG, NWC	350	
Code Clearance Zones	Div 21 Contractor			RED	DWG, NWC	350	
Control Panels	Div 21 Contractor			RED	DWG, NWC	350	

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Drains and Testing Connections	Div 21 Contractor			RED	DWG, NWC	350	
Equipment Pads	Div 21 Contractor			RED	DWG, NWC	350	
Fire Department Connections	Div 21 Contractor			RED	DWG, NWC	350	
Fire Extinguisher Cabinets	Div 21 Contractor			RED	DWG, NWC	350	
Fire Hose Cabinet	Div 21 Contractor			RED	DWG, NWC	350	
Fire Hose Rack	Div 21 Contractor			RED	DWG, NWC	350	
Fire Pump	Div 21 Contractor			RED	DWG, NWC	350	
Fire Pump Equipment	Div 21 Contractor			RED	DWG, NWC	350	
Fittings (Victaulic or Similar)	Div 21 Contractor			RED	DWG, NWC	350	
Flex Head Bracket (Per Submittal)	Div 21 Contractor			RED	DWG, NWC	350	
Flex Head Line	Div 21 Contractor			RED	DWG, NWC	350	
Hangers and Supports	Div 21 Contractor			RED	DWG, NWC	350	
Hard Piped Heads	Div 21 Contractor			RED	DWG, NWC	350	
Inspectors/Testing Valves	Div 21 Contractor			RED	DWG, NWC	350	
Jockey Pumps	Div 21 Contractor			RED	DWG, NWC	350	
Piping Mains	Div 21 Contractor			RED	DWG, NWC	350	
Project Specific Equipment	Div 21 Contractor			RED	DWG, NWC	350	
Seismic Bracing	Div 21 Contractor			RED	DWG, NWC	350	If Required
Sprinkler Heads	Div 21 Contractor			RED	DWG, NWC	350	
Stand Pipes	Div 21 Contractor			RED	DWG, NWC	350	
Valves	Div 21 Contractor			RED	DWG, NWC	350	
Unions	Div 21 Contractor			RED	DWG, NWC	350	

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11.0 APPENDIX E – VIRTUAL BUILD SCHEDULE

a) The Virtual Build Schedule has been coordinated with the master CPM Project Schedule and Project Specs.

b) CPM Project Schedule updates are anticipated monthly, but the WT VDC team may distribute a separate virtual build schedule that contains more accurate dates as the project develops from week to week. Should a virtual build schedule be used outside of the CPM Project Schedule, WT will alert all disciplines involved in the virtual build effort and distribute for comment. The dates listed in the virtual build schedule will govern over the CPM Project Schedule dates, and subcontractors must adhere to those dates the same as they would in the CPM Project Schedule.

c) Due dates as follow are critical to success of the project and cannot be missed without the approved written consent of WT.

d) Schedule will be updated in the meeting minutes whenever there is a change.

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12.0 APPENDIX F – VIRTUAL BUILD PROCEDURE

12.1 CLASH RESOLUTION PROCESS REQUIREMENTS

a) Throughout the clash resolution process, each trade will maintain updated models including, but not limited to:
   i. Incorporation of RFIs, bulletins, change orders, submittals, etc. (No more than 10 business days from change receipt). Additional costs for updating the model to be billed at the Detailer's established unit rate and must be submitted as a change order within 10 business days.
   ii. Submittal comments and revisions on approved shop drawings
   iii. As-Built field modifications

b) An Issue Tracking Log will be created to document questions/ issues/ possible RFIs between weekly working sessions. This database will serve as an avenue for modelers/PMs to ask questions and inquire about possible concerns with the modeling efforts which will then be discussed, reviewed, and filtered to better track concerns and to minimize the number of RFIs.

c) Whiting-Turner maintains the right to schedule face-to-face conflict-resolution working sessions when the project team deems fit. If Whiting-Turner decides to hold this in-person work-session, team members expected to participate as long as needed in order to resolve all conflicts. This meeting will be held on-site and is mandatory for all BIM Drafters, Coordinators, Project Managers, and all other parties involved in the area that is under coordination. All parties are expected to bring functional laptops in order to resolve conflicts so that a sign-off sheet for an area can be written and completed.

12.2 CLASH RESOLUTION HIERARCHY

a) In the event the conflicts involving location and layout of work, the following model element priorities shall be used to resolve disputes.
b) ***NOTE*** *– Priorities to be reviewed and confirmed with BIM/VDC Team, A/E, Owner and End User in BIM VDC kickoff meeting. WT reserves the right to modify this list later in the coordination process once the installation sequence has been defined.*

   i. Structure and Partitions (Highest Priority)
   ii. Equipment location and access
   iii. Ceiling systems and light fixtures
   iv. Gravity/Sloping Systems
   v. High pressure ductwork and devices
   vi. Large pipe mains (4" or larger), valves and devices
   vii. Low pressure ductwork, diffusers, registers, grilles, HVAC equipment
   viii. Fire protection piping, devices and heads
   ix. Small piping (4" or smaller), tubing, electrical conduits and devices
   x. Cable tray
   xi. Sleeves through rated partitions
   xii. Access panels
   xiii. All remaining clashes

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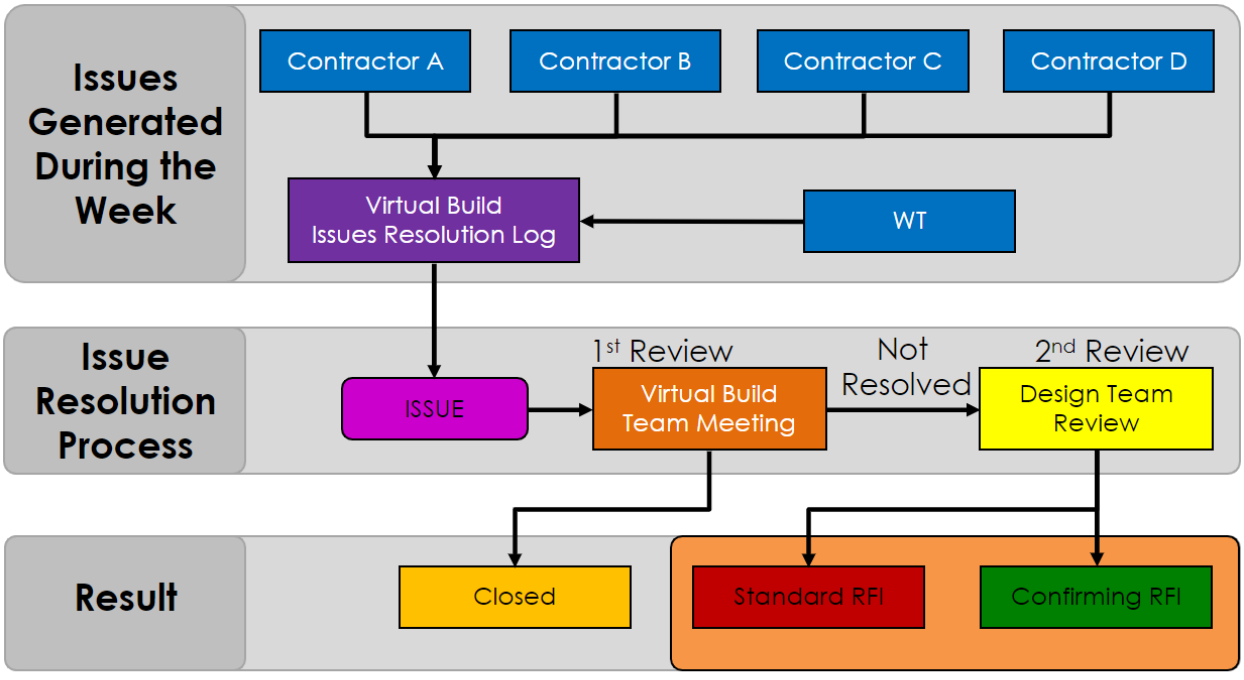
12.3 ISSUE RESOLUTION LOG (IRL)

a) If an issue cannot be resolved by the assigned party, that party is required to contact the responsible party of the clash that they are involved with to see if they can resolve the conflict. If still, no resolution can be reached, the responsible contractor is required to submit an entry into the Issues Tracking Log and translated into an RFI and a decision will be made as to what action should be taken and by whom.



Issues Resolution Log – Process Diagram

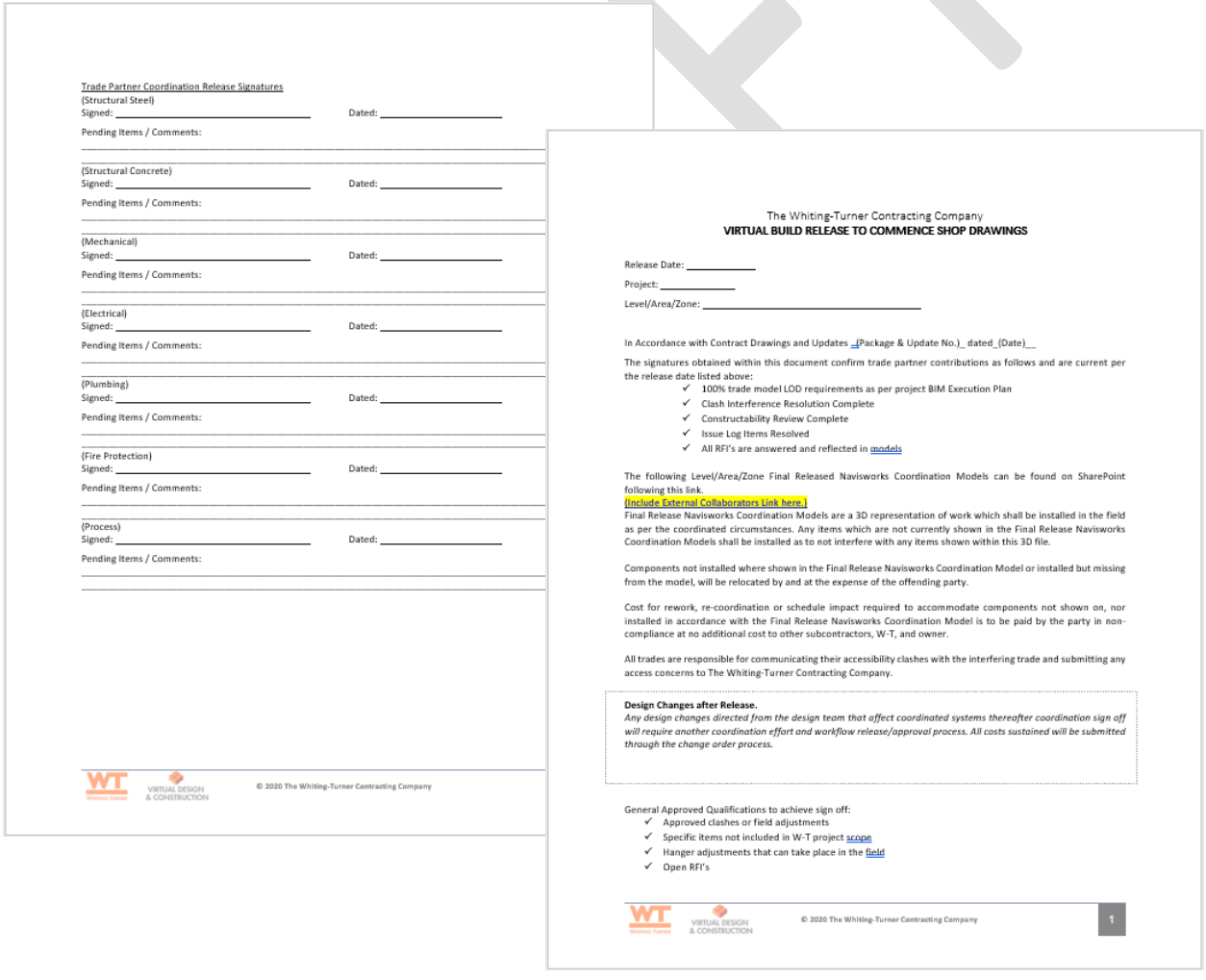
13.0 APPENDIX G – VIRTUAL BUILD RELEASE TO COMMENCE SHOP DRAWINGS

13.1 VIRTUAL BUILD RELEASE TO COMMENCE SHOP DRAWINGS PROCESS AND PROCEDURES

a) Upon substantial completion of a designated area/zone of the Virtual Build, parties will be required to sign a Virtual Build Release to Commence Shop Drawings Document. Upon receipt of the document, Virtual Build Participants will have ten (10) business days to produce fully annotated shop drawings of their respective systems generated directly from the model and submit them for review.

b) If during or following the creation of the shop drawings, changes are made that effect the location of coordinated objects, these changes must be brought to the attention of the project team immediately. Whiting-Turner will evaluate the nature of the changes and may require additional coordination meetings to resolve. However, depending on what and why the changes were made, Whiting-Turner may hold individual team members responsible for cost arising from the changes.

EXAMPLE DOCUMENT:



Trade Partner Coordination Release Signatures

(Structural Steel)
Signed: _____ Dated: _____
Pending Items / Comments:

(Structural Concrete)
Signed: _____ Dated: _____
Pending Items / Comments:

(Mechanical)
Signed: _____ Dated: _____
Pending Items / Comments:

(Electrical)
Signed: _____ Dated: _____
Pending Items / Comments:

(Plumbing)
Signed: _____ Dated: _____
Pending Items / Comments:

(Fire Protection)
Signed: _____ Dated: _____
Pending Items / Comments:

(Process)
Signed: _____ Dated: _____
Pending Items / Comments:

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VIRTUAL BUILD RELEASE TO COMMENCE SHOP DRAWINGS

Release Date: _____
Project: _____
Level/Area/Zone: _____

In Accordance with Contract Drawings and Updates _(Package & Update No.)_ dated_(Date)__

The signatures obtained within this document confirm trade partner contributions as follows and are current per the release date listed above:

- ✓ 100% trade model LOD requirements as per project BIM Execution Plan
- ✓ Clash Interference Resolution Complete
- ✓ Constructability Review Complete
- ✓ Issue Log Items Resolved
- ✓ All RFI's are answered and reflected in models

The following Level/Area/Zone Final Released Navisworks Coordination Models can be found on SharePoint following this link.
(Include External Collaborators Link here.)
Final Release Navisworks Coordination Models are a 3D representation of work which shall be installed in the field as per the coordinated circumstances. Any items which are not currently shown in the Final Release Navisworks Coordination Models shall be installed as to not interfere with any items shown within this 3D file.

Components not installed where shown in the Final Release Navisworks Coordination Model or installed but missing from the model, will be relocated by and at the expense of the offending party.

Cost for rework, re-coordination or schedule impact required to accommodate components not shown on, nor installed in accordance with the Final Release Navisworks Coordination Model is to be paid by the party in non-compliance at no additional cost to other subcontractors, W-T, and owner.

All trades are responsible for communicating their accessibility clashes with the interfering trade and submitting any access concerns to The Whiting-Turner Contracting Company.

Design Changes after Release.
Any design changes directed from the design team that affect coordinated systems thereafter coordination sign off will require another coordination effort and workflow release/approval process. All costs sustained will be submitted through the change order process.

General Approved Qualifications to achieve sign off:

- ✓ Approved clashes or field adjustments
- ✓ Specific items not included in W-T project scope
- ✓ Hanger adjustments that can take place in the field
- ✓ Open RFI's

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14.0 APPENDIX H – DETAILED SUBMITTAL REQUIREMENTS

14.1 GENERAL SUBMITTAL REQUIREMENTS

a) In addition to the Spec Requirements, each trade contractor will be responsible for producing 2D drawings including but not limited to Overhead Shop Drawings, Penetrations Drawings, Reflected Ceiling Plans, etc. as an output of the Virtual Build Process.

b) Shop drawings are to be generated directly from trade partner's fabrication models and should be delivered in PDF and Revit or AutoCAD format.

i. Deviations from the contract documents shall be fully explained in writing per Article 3 of the WT Long Form Subcontract.

ii. **Required drawing scale for each deliverable shall be discussed in the BIM kickoff meeting.**

c) The VDC Coordinator may create a composite drawing which includes all trades' submissions depending on contract requirements.

d) Depending on the pace of construction, overhead coordination may not be completed prior to the production of some of these submittals i.e. Penetrations.

e) The origin location of these submittals must adhere to the same standards outlined for model transmittals.

f) The following CAD standards are to be maintained for every AutoCAD submittal:

i. Purge and delete all referenced and inserted geometry, blocks, references, and layers.

i. Submitted files must reference the proper scale factor

ii. Nothing should be placed in the 0 or Defpoints layer.

iii. Maintain architectural units in Feet and Inches (xx'-xx").

g) Please use the following color standards for ALL submitted CAD files or Revit views:

i. Sprinkler = Red (RGB: 255,5,5)

ii. Electrical = Cyan (RGB: 0,255,255)

iii. Sheetmetal = Purple (RGB: 95,0,127)

iv. Mechanical Piping = Lime green (RGB: 0,255,0)

v. Plumbing = Magenta (RGB: 255,0,255)

vi. Other TBD = Blue (RGB: 0,0,255)

14.2 IN SLAB ELEMENTS & PENETRATIONS

e) Each trade will be responsible for producing 2D drawings indicating the size and location of all in-slab elements and penetrations for all floors.

f) The VDC Coordinator will create a composite drawing which includes all trades' submissions for review and submission to the structural engineer of record.

g) If the contractor is utilizing Revit to produce these documents, the following standards should be followed:

i. A floor plan view must be created for each floor, which will be mapped to a Linked View in Whiting-Turner's Master Model.

ii. The floor plan view scale should be **1/4" : 1'-0" UNO.**

iii. All annotations should be a **text size of 3/32".**

- Text annotations must identify the specific sleeve and/or penetration size, as well as the system type for each sleeve/ penetration.
- Dimension annotations must be taken from the center of penetration to gridline. Gridlines

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must be Copy Monitored from the linked design model in which grids govern. Whiting-Turner will direct subcontractors with what design model should be used for Copy Monitoring grids (typically this will be from either the architectural or structural models). All slab penetration dimensions must be taken from the Copy Monitored grids, not from the linked design model.

- Box outs must be dimensioned on all sides.
- All scope boxes must follow the key plan provided by Whiting-Turner. It is preferred that Dependent Views be used for each separate key plan area.
- Whiting-Turner should not need to modify the Linked View in any capacity. This means that filters, visibility graphics, annotations, etc. must be correct in the Linked View. Remove/ hide/ turn off annotations, modeled elements, links, etc. that are not relevant to the submission.
- The View Name for each area must be provided to Whiting-Turner in writing.
- The elements & annotations for each view must follow the color standards defined in Section 15.1
- A new Revit model (authored in Revit XXXX) must be provided with each slab penetration submission and/or revision to the appropriate directory on the project sharing site. Each discipline must have its own distinct Revit model.

h) If the contractor is utilizing AutoCAD to produce these documents, the following standards should be followed:

i. Each discipline must submit a separate DWG file per Floor/coordinated area to the appropriate level directory on the Project sharing site.

ii. The naming convention for this submittal shall be as follows: PROJECT ACRONYM - TRADE ACRONYM – (SLAB LEVEL) PENS

iii. Similar to model submissions, the template CAD file provided must be binded into the submission in order to reference the proper alignment and location of the building grid.

- All Grid Lines should remain in the layer S-GRID
- All Grid markers should remain in the layer S-GRID-IDEN
- Remove or freeze any grid dimension layers shown in the template in each submission.
- Text annotations must identify the specific sleeve and/or penetration size, as well as the system type for each sleeve/ penetration.
- Please keep all text labels as tight as possible to the item it identifies
- Use a text height of 4.000” for all text annotations in AutoCAD
- Use an annotation scale of 3/32” for all text annotations in Revit
- No background masks should be applied to any text, annotation or elements.
- Dimension annotations must be taken from the center of penetration to gridline or building control line.
- No additional background information should be visible in your drawing submission. Purge drawing of all elements not pertaining to the grids, penetrations and associated tags and dimensions.

14.3 REFLECTED CEILING PLANS

a) Each trade will be responsible for producing 2D drawings indicating the size and location of all ceiling hosted elements on all levels or coordinated areas.

b) The VDC Coordinator will create a composite drawing which includes all trades’ submissions for review and submission to the Architect of Record, if required by design specifications.

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c) This drawing will be a by-product of each coordinated level's sign-off.
d) These submittals shall include:
   i. All ceiling-hosted elements including but not limited to: sprinkler heads, diffusers/ grilles, light fixtures, access panels, above-ceiling access clearances, fire alarm devices, WAPs, security devices, audio-visual devices, speakers etc.
   ii. Access Doors in hard or specialty ceilings shall be:
      1) Dimensioned to center of panel to the nearest Grid Line
      2) A brief description of what the access panel is serving shall be tagged (Example: VAV (E01_100-01))
      3) The size of the panel shall be indicating with an appropriate tag.
   iii. Above-ceiling access clearances associated with equipment valves, etc. shall also be indicated in accessible ceiling areas.

e) If the contractor is utilizing AutoCAD to produce these documents, the following standards should be followed:

   i. Each trade must submit a separate DWG file to the appropriate level directory on the Project sharing site or provide their native Revit file with the appropriate penetration view created.
   i. The naming convention for this submittal shall be as follows: ASD - TRADE ACRONYM – (SLAB LEVEL) RCP
   ii. Similar to model submissions, the template CAD file provided must be bound into the submission in order to reference the proper alignment and location of the building grid.
      a. All Grid Lines should remain in the layer S-GRID
      b. All Grid markers should remain in the layer S-GRID-IDEN
      c. Remove or freeze any grid dimension layers shown in the template in each submission.
      d. Text annotations must identify the specific sleeve and/or penetration size, as well as the system type for each sleeve/ penetration.
      e. Please keep all text labels as tight as possible to the item it identifies
      f. Use a text height of 4.000" for all text annotations in AutoCAD
      g. Use an annotation scale of 3/32" for all text annotations in Revit
      h. No background masks should be applied to any text, annotation or elements.
      i. Each category of object should be referenced as a separate drawing layer i.e. Access panels should be in a separate layer than diffusers.
      j. No additional background information should be visible in your drawing submission. Purge drawing of all elements not pertaining to the grids, ceiling hosted items and associated tags and dimensions.

14.5 BIM SUBMITTAL LOG (TBD)

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15.0 APPENDIX I– GLOSSARY OF TERMS

1. ***3D Coordination*** A process in which Clash Detection is utilized to determine field conflicts by comparing 3D models of building systems and eliminate the major system conflicts prior to installation. This may be conducted at different phases in the project life cycle with models of varying LOD.

2. ***4D Scheduling & Phase Planning*** A process in which 3D modeled components are attached to scheduled tasks to visualize construction sequence of activities.

3. ***5D Cost Estimation*** A process in which model components may be used to derive, check and/validate quantity information to support cost estimates.

4. ***Analyze Design*** Examine and evaluate a built environment asset's design to assess its functionality, and compliance with various criteria and requirements.

5. ***As-Built Model(s)*** The federated model(s) provided by Whiting-Turner and its trade partners which is reflective of the installed conditions onsite. Unless otherwise noted, the format of this deliverable shall be provided in a Navisworks Document (.NWD) at the agreed upon level of development prescribed in the Virtual Build BIM Execution Plan (BEP). The native file format used by trade partners for the production of shop drawings will also be provided as part of this package.

6. ***Asset Management*** A process for managing the physical building, systems, surrounding environment, and equipment to aid in operations and maintenance of a facility. This process often utilizes the data contained in a record model provided at construction handover.

7. ***Augmented Reality (AR)*** An interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information.

8. ***Author Design*** Develop a design using BIM authoring software with 3D and attribute information for a built environment asset leveraging an object library of parametric elements.

9. Author Temporary Work Generate the design of non-permanent elements in a model necessary to construct a project.

10. ***BIM Execution Plan (also described as a PXP or BEP)*** The document used to outline the overall goals and implementation details for the Virtual Build program jointly developed between Whiting-Turner, the Client, and the Design team. This document outlines BIM Goals and Uses, Information Exchanges, and supporting implementation procedures for Building Information Modeling. It may be updated at different points in the project life cycle including but not limited to the start of the Design and Construction Phases.

11. ***BIM Use*** The purpose of applying for BIM. BIM Use includes name, definition, and related terms.

12. ***BIM Use Case*** A specific methodology and outcome achieved when applying a BIM Use on a project(s) or within an organization(s). A BIM Uses Case includes a BIM Use name, followed by the method, followed by the outcome.

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13. ***Building Automation/Monitoring*** The integration of Building Information Models with automation and control systems to monitor and control building-wide systems, such as HVAC, lighting, alarms, and security access and cameras.

14. ***Building Information Management (BIM)*** Functions of controlling the acquisition, analysis, retention, retrieval, and distribution of built environment asset information all within an information processing system.

15. ***Building Information Model (Model)*** A shared digital representation of physical and functional characteristics of a facility and built asset.

16. ***Building Information Modeling (Modeling)*** A digital representation of physical and functional characteristics of a facility. A BIM is a shared knowledge resource for information about a facility forming a reliable basis for decisions during its lifecycle; defined as existing from earliest conception to demolition. A basic premise of BIM is the collaboration by different stakeholders at different phases of the life cycle of a facility to insert, extract, update or modify information in the BIM to support and reflect the roles of that stakeholder.

17. ***Building Maintenance Scheduling*** The integration of Building Information Models and building asset data to support the scheduling of operations and maintenance tasks such work orders. This BIM use case may be integrated with a Computerized Maintenance Management System (CMMS).

18. ***Building System Analysis*** The design process associated with measurement of a building's performance compared to the specified design. Such analysis might include, but are not limited to, ventilated facade studies, lighting analysis, internal and external CFD airflow, occupant evacuation, and solar analysis.

19. ***Capture Condition*** Collect current information about the built environment to include in a model.

20. ***Compile Record Deliverables*** Capture and document project and asset information for the purpose of communicating the work performed, progress made, and compliance with requirements at project completion.

21. ***Coordinate Design and Construction*** Verify the design layout and spatial arrangement of systems by applying construction means and methods and additional spatial constraints (such as code requirements, maintenance access and clearances) to validate the constructability of the project.

22. ***Coordination Model(s)*** The federated model comprised of each trade's fabrication models combined with elements of the Design Intent Model which used to conduct clash detection and coordination. The agreed upon level of development for each corresponding model is prescribed in the BIM Execution Plan (PxP).

23. ***Design Intent Model(s)*** The model(s) used to create Construction Documents by the Design Consultant and its Sub-Consultants which are reflective of Design Intent. These Model(s) shall be delivered at the agreed upon level of development prescribed in the BIM Execution Plan (PxP) to include all accurate and relevant geometry and facility information required to design the facility. The required software file format and version for these models is prescribed in the BIM Execution Plan.

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24. ***Design Authoring*** A process in which 2D and 3D BIM authoring tools are used to translate a building's design intent and to facilitate the creation of construction drawings.

25. ***Design Reviews*** A process in which a 3D model is used to showcase the design to pertinent stakeholders and evaluate meeting the program and set criteria like layout, sightlines, lighting, security, ergonomics, acoustics, textures and colors, etc. This process may be used concurrently with Virtual mock-ups to analyze design alternatives and solve design and constructability issues.

26. ***Detailer*** staff member assigned from a specific subcontractor to create and update fabrication models and associated 2-Dimensional deliverables as a by-product of the Virtual Build.

27. ***Digital Fabrication*** A process that utilizes machine technology to manufacture objects directly from a 3D Model. The 3D Model is cut into appropriate sections and is fed into an assembly system for production.

28. ***Digital Layout*** A process that utilizes a model combined with a robotic total station to layout the building assemblies. Elements such as hangers, sleeves and walls may be laid out digital using a series of points generated from fabrication models.

29. ***Disaster Planning*** A process in which BIMs may be used by first responders to improve the efficiency of the emergency response time and minimize the safety risks. For this use case, BIM may be coupled with BAS to display the location of an emergency within the building and identify possible entry and exit routes to the area within the building.

30. ***Engineering Analysis (Structural, Lighting, Energy, Mechanical, Other)*** A process in which intelligent modeling software uses BIM to determine the most effective engineering method based on design specifications. These analysis tools and performance simulations can significantly improve the design of the facility and its energy consumption during its lifecycle in the future.

31. ***Establish Project Requirements*** Capture and monitor key project aspects and scope such as area, spatial, functional, asset, deliverable, code, end user, organizational, and other stakeholder requirements using a data-centric approach.

32. ***Existing Conditions Model*** A process in which a project team develops a 3D model of the existing conditions for a site, facilities on a site, or a specific area within a facility. This is often developed through use of Laser Scanning.

33. ***Fabrication Model(s)*** The model(s) created by the subcontractor created at the agreed upon level of development prescribed in the BIM Project Execution Plan (PxP) to be used for the production of shop drawings and prefabrication.

34. ***Generate Estimates*** Extract project, site, and asset quantity information from model(s) to support the development of project and/or lifecycle cost estimates.

35. ***Generate Fabrication Detail*** Generate the manufacturing and/or construction details in a model necessary to fabricate elements of a project.

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36. **Issue Resolution Log (IRL)** A live log documenting action items, design discrepancies, subcontractor questions, RFIs, conflicts or issues needing resolution which are generated during the Virtual Build Process.

37. ***Laser Scanning*** The controlled use of laser beams to conduct distance measurements and rapidly capture the surface shape of objects, buildings and landscapes through use of a Point Cloud which may be used to generate a 3D model. This process is often used to facilitate existing conditions capture.

38. ***Layout Construction*** Establish and mark features of work on a construction project using real-time positioning supported by model data.

39. ***Level of Development (LOD)*** The degree to which project team members may rely on a modeled element's geometry and attached information and the corresponding level of confidence in a modeled element over the project life cycle. For this exhibit, the BIMForum Specification Definitions shall be used in congruence with AIA schema previously defined.

40. ***Logistics Planning*** A process in which a virtual model is used to graphically describe the layout and/or phasing of both permanent and temporary facilities and components onsite. This use case may be coupled with 4D scheduling to create visual animations of scheduled activities.

41. ***Manage Assets*** Track asset performance and ensure proper maintenance to ensure longevity and optimal functionality.

42. ***Manage Space*** Allocate, organize, and optimize the use of the physical space of a built environment asset.

43. ***Means and Methods Model(s)*** A model used for coordination and planning of the construction which is representative of the means and methods to be used for the project. For the purposes of the BIM Exhibit, all means and methods model(s) are inherently part of, and reflected within, the coordination model and its source files.

44. ***Monitor Performance*** Assess and evaluate the performance of a built environment asset to ensure it operates efficiently, effectively, and with performance standards.

45. ***Native File Format*** The file format and version of the original model authoring platform that was used to generate a model.

46. ***Navisworks Manage*** A software utilized to conduct clash detection to facilitate the Virtual Build process.

47. ***Produce Construction Documentation*** Generate documentation to communicate design intent and construction details which may include plans, elevations, sections, renderings, data schedules, 3D diagrams, or specifications.

48. ***Production Tracking –*** The use of Building Information Models to support tracking of construction materials across various stages from planning to fabrication to delivery and installation.

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49. ***Record Model(s)*** A federated model provided by the design team reflective of the all issued revisions, Change Directives, Supplemental Instructions (when issued as a change to drawings or models), and incorporating all as-constructed and/or red-line information provided by the construction team of all installed Architectural, MEP, and Structural conditions onsite. The format of this deliverable shall be provided in a Revit Model (.RVT) at the agreed upon level of development prescribed in the BIM Execution Plan (BEP). It is differentiated from the Coordination and As-Built Models in two primary ways: (1) the record model is completely in Revit, and (2) it most often contains more data and is delivered at a lower LOD.

50. ***Release to Commence Shop Drawings*** A signed document signifying all subcontractors' acknowledgement that an area, zone, floor or the entire model is substantially coordinated and substantiates mutual agreement to begin production of Shop Drawings.

51. ***Revit*** A proprietary software produced by Autodesk utilized for the generation of Building Information models.

52. ***Review Design*** Validate the design intent and constructability of the project based on meeting project requirements and stakeholder expectations, and regulatory compliance (such as validating design quality, 3D model quality, and data quality).

53. ***Sequence Construction*** Represent and communicate the timing and/or sequencing of construction activities graphically using a model.

54. ***Space Management*** A process in which BIM and/or Computer Aided Drafting is applied to allocate, manage, and track assigned workspaces and resources. A BIM may be used to analyze the existing use of space and properly manage changes in clientele, usage, and future changes throughout the facility's lifecycle. Space management if often an application of the record model.

55. ***Sustainability (LEED) Evaluation*** A process in which a project is evaluated based on LEED or other sustainable criteria. This can refer to materials, performance, or a process. Sustainability Evaluations can be applied across all four phases of a construction project, Planning, Design, Construction, and Operation. BIM may facilitate modeling all sustainable aspects of a project throughout its life-cycle in order to obtain the desired LEED certification in the most efficient manner by condensing design analyses into a single database.

56. ***Virtual Build*** means the process and deliverables associated with trade coordination which involves virtual creation of 3-Dimensional fabrication models to facilitate conflict prevention, risk mitigation, shop drawing creation and prefabrication.

57. ***Virtual Building*** A dedicated track of Project Management which involves the use of models and other innovative technologies to support construction activities and visualize potential conflicts prior to physical installation.

58. ***Virtual Build Kickoff Meeting*** A meeting established at the start of the project to review the BIM Execution Plan, Virtual Build Schedule and project requirements for subcontractors contributing to the Virtual Build Program.

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59. *Virtual Reality (VR)* The process of creating a simulated experience that can be similar to or completely different from the real world often with the use of immersive technologies.

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SECTION 01 40 13
QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Quality assurance submittals.
B. Quality assurance.
C. References and standards.
D. Mock-ups
E. Sample Rooms
F. Control of installation.
G. Tolerances.
H. Testing and inspection services.
I. Contractor's construction-related professional design services.
J. Contractor's design-related professional design services.
K. Control of installation.
L. Manufacturers' field services.

1.02 RELATED REQUIREMENTS

A. Section 01 30 00 - Administrative Requirements: Submittal procedures.
B. Section 01 60 00 - Product Requirements: Requirements for material and product quality.

1.03 REFERENCE STANDARDS

A. ASTM C1021 - Standard Practice for Laboratories Engaged in Testing of Building Sealants; 2008 (Reapproved 2023).
B. ASTM C1077 - Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation; 2025.
C. ASTM C1093 - Standard Practice for Accreditation of Testing Agencies for Masonry; 2023.
D. ASTM D3740 - Standard Practice for Minimum Requirements for Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction; 2023.
E. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection; 2023.
F. ASTM E543 - Standard Specification for Agencies Performing Nondestructive Testing; 2021.
G. IAS AC89 - Accreditation Criteria for Testing Laboratories; 2021.

1.04 DEFINITIONS

A. Contractor's Professional Design Services: Design of some aspect or portion of the project by party other than the design professional of record. Provide these services as part of the Contract for Construction.
    1. Design Services Types Required:
        a. Construction-Related: Services Contractor needs to provide in order to carry out the Contractor’s sole responsibilities for construction means, methods, techniques, sequences, and procedures.
        b. Design-Related: Design services explicitly required to be performed by another design professional due to highly-technical and/or specialized nature of a portion of

the project. Services primarily involve engineering analysis, calculations, and design, and are not intended to alter the aesthetic aspects of the design.

B. Design Data: Design-related, signed and sealed drawings, calculations, specifications, certifications, shop drawings and other submittals provided by Contractor, and prepared directly by, or under direct supervision of, appropriately licensed design professional.

1.05 CONTRACTOR'S CONSTRUCTION-RELATED PROFESSIONAL DESIGN SERVICES

A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.

B. Provide such engineering design services as may be necessary to plan and safely conduct certain construction operations, pertaining to, but not limited to the following:

1. Temporary sheeting, shoring, or supports.
2. Temporary scaffolding.
3. Temporary bracing.
4. Temporary falsework for support of spanning or arched structures.
5. Temporary stairs or steps required for construction access only.
6. Temporary hoist(s) and rigging.
7. Investigation of soil conditions to support construction equipment.

1.06 CONTRACTOR'S DESIGN-RELATED PROFESSIONAL DESIGN SERVICES

A. Coordination: Contractor's professional design services are subject to requirements of project's Conditions for Construction Contract.

B. Base design on performance and/or design criteria indicated in individual specification sections.

C. Scope of Contractor's Professional Design Services: Provide for the following items of work:

1. Concrete Mix Design: As described in Section 03 30 00 - Cast-in-Place Concrete. No specific designer qualifications are required.
2. Concrete Mix and Structural Design: As described in Section 03 49 00 - Glass-Fiber Reinforced Concrete.
3. Structural Design of Steel Connections: As described in Section 05 12 00 - Structural Steel Framing.
4. Structural Design of Steel Connections: As described in Section 05 21 00 - Steel Joist Framing.
5. Structural Design of Metal Framing: As described in Section 05 40 00 - Cold-Formed Metal Framing.
6. Structural Design of Stairs: As described in Section 05 51 00 - Metal Stairs.
7. Structural Design of Railings: As described in Section 05 52 13 - Pipe and Tube Railings.
8. Structural Design: Include physical characteristics, engineering calculations, and resulting dimensional limitations as described in Section 08 43 13 - Aluminum-Framed Storefronts.
9. Structural Design: Include calculations for resisting wind loads, anchor locations, loads at points of attachment to building structure, physical characteristics, resulting dimensional limitations as described in Section 08 44 13 - Glazed Aluminum Curtain Walls.
10. Structural Design: Include calculations for resisting wind loads, physical characteristics, resulting dimensional limitations as described in Section 08 45 00 - Translucent Wall and Roof Assemblies.
11. Structural Design: Include calculations for resisting wind loads, physical characteristics, resulting dimensional limitations as described in Section 08 63 00 - Metal-Framed Skylights.
12. Structural Design of Canopy: As described in Section 10 73 16.13 - Metal Canopies.
13. Structural Design of Foundation: As described in Section 10 75 00 - Flagpoles.

14. Sprinkler Layout: Coordinate with ceiling installation, detailed pipe layout, and hydraulic calculations as described in Section 21 13 00 - Fire-Suppression Sprinkler Systems.

1.07 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Designer's Qualification Statement: Submit for Architect's knowledge as contract administrator, or for Owner's information.

1. Include information for each individual professional responsible for producing, or supervising production of, design-related professional services provided by Contractor.
    a. Full name.
    b. Professional licensure information.
    c. Statement addressing extent and depth of experience specifically relevant to design of items assigned to Contractor.

C. Testing Agency Qualifications:

1. Prior to start of Work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.

D. Design Data: Submit for Architect's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Owner's information.

1. Include calculations that have been used to demonstrate compliance to performance and regulatory criteria provided, and to determine design solutions.
2. Include a statement or certification attesting that design data complies with criteria indicated, such as building codes, loads, functional, and similar engineering requirements.
3. Include signature and seal of design professional responsible for allocated design services on calculations and drawings.

E. Test Reports: After each test/inspection, promptly electronic copy of report to Architect and to Construction Manager.

1. Include:
    a. Date issued.
    b. Project title and number.
    c. Name of inspector.
    d. Date and time of sampling or inspection.
    e. Identification of product and specifications section.
    f. Location in the Project.
    g. Type of test/inspection.
    h. Date of test/inspection.
    i. Results of test/inspection.
    j. Compliance with Contract Documents.
    k. When requested by Architect, provide interpretation of results.
2. Test report submittals are for Architect's knowledge as contract administrator for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents, or for Owner's information.

F. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.

1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.

G. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.

H. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Owner.

1. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.08 QUALITY ASSURANCE

A. Testing Agency Qualifications:

1. Prior to start of work, submit agency name, address, and telephone number, and names of full time registered Engineer and responsible officer.
2. Submit copy of report of laboratory facilities inspection made by NIST Construction Materials Reference Laboratory during most recent inspection, with memorandum of remedies of any deficiencies reported by the inspection.
3. Qualification Statement: Provide documentation showing testing laboratory is accredited under IAS AC89.

B. Designer Qualifications: Where professional engineering design services and design data submittals are specifically required of Contractor by Contract Documents, provide services of a Professional Engineer experienced in design of this type of work and licensed in Delaware.

1.09 REFERENCES AND STANDARDS

A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.

B. Conform to reference standard of date of issue current on date specified in the individual specification sections, except where a specific date is established by applicable code.

C. Obtain copies of standards where required by product specification sections.

D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.

E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.

F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.10 TESTING AND INSPECTION AGENCIES

A. Unless otherwise noted, Owner will employ and pay for services of an independent testing agency to perform specified testing and inspection.

B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.

C. Contractor shall employ and pay for the services of independent testing laboratories to test and certify certain materials which the contractor proposes to use on the project, where such tests and certification are prerequisites to approval of materials by the Architect.

D. Contractor Employed Agency:

1. Testing agency: Comply with requirements of ASTM E329, ASTM E543, ASTM C1021, ASTM C1077, and ASTM C1093.
2. Inspection agency: Comply with requirements of ASTM D3740 and ASTM E329.
3. Laboratory Qualifications: Accredited by IAS according to IAS AC89.
4. Laboratory: Authorized to operate in Delaware.
5. Laboratory Staff: Maintain a full time registered Engineer on staff to review services.
6. Testing Equipment: Calibrated at reasonable intervals either by NIST or using an NIST established Measurement Assurance Program, under a laboratory measurement quality assurance program.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
B. Comply with manufacturers' instructions, including each step in sequence.
C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
E. Have Work performed by persons qualified to produce required and specified quality.
F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS AND SAMPLE ROOMS

A. Before installing portions of the Work where mockups are required, construct mockups in location and size indicated for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work. The purpose of mock-up is to demonstrate the proposed range of aesthetic effects and workmanship.
B. Accepted mock-ups establish the standard of quality the Owner and Architect will use to judge the Work.
C. Integrated Exterior Mock-ups: construct integrated exterior mockup as indicated on Drawings. Coordinate installation of exterior envelope materials and products as required in individual Specification Sections. Provide adequate supporting structure for mockup materials as necessary.
    1. Construct the integrated exterior mock-up so that embeded components are visually accessible and remain visually accessible during the execution of the work, as an example of the standard level of workmanship reviewed and approved to be expected in the finished work.
    2. This mock-up shall also be used for confirmation of exterior material selections.
    3. Approval by the Owner and Architect of the integrated exterior mock-up is required prior to ordering material.

4. Coordinate with Construction Manager for scheduling and sequencing requirements. Mock-up production and final approval deadlines shall be indicated as milestones on the project procurement schedule.

D. Sample Room Mockups: Construct room mockups as indicated on Drawings. Coordinate installation of materials, products, and assemblies as required in Specification Sections; finish according to requirements. Provide required lighting and any supplemental lighting where required to enable Architect to evaluate quality of the mock-up.
   1. Sample Toilet Room: Construct one toilet room,complete with finishes and fixtures, in the location designated.
   2. Sample Classroom: Construct one classroom, complete with finishes and fixtures, in the location designated.
   3. Sample room mock-ups will not be used for confirmation of interior finishes. Finish materials for main project may be ordered concurrent with sample room mock-up.
   4. Sample room mock-up will be used to establish standard of quality and workmanship, and to confirm layouts of devices and accessories.
   5. Coordinate with Construction Manager for scheduling, and for designation of room(s) to be identified as sample room mock-ups.

E. Notify Architect and Owner fifteen (15) working days in advance of dates and times when mockups will be constructed.

F. Provide supervisory personnel who will oversee mockup construction. Provide workers that will be employed during the construction at Project.

G. Tests shall be performed under provisions identified in this section and identified in the respective product specification sections.

H. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.

I. Obtain Architect's approval of mockups before starting work, fabrication, or construction.
   1. Architect will issue written comments within seven (7) working days of initial review and each subsequent follow up review of each mockup.
   2. Make corrections as necessary until Architect's approval is issued.

J. Accepted mock-ups shall be a comparison standard for the remaining Work.

K. Where Integrated Exterior Mock-up has been accepted by Owner and Architect, protect mock-up throughout construction, and remove mock-up and clear area when directed to do so by Owner.

L. Where Sample Room Mock-ups have been accepted by the Owner and Architect, they may remain as part of the finished construction.

3.03 TOLERANCES

A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.

C. Adjust products to appropriate dimensions; position before securing products in place.

3.04 TESTING AND INSPECTION

A. See individual specification sections for testing required.

B. Testing Agency Duties:
   1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.

2. Perform specified sampling and testing of products in accordance with specified standards.
3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
4. Promptly notify Architect and Contractor of observed irregularities or non-conformance of Work or products.
5. Perform additional tests and inspections required by Architect.
6. Submit reports of all tests/inspections specified.

C. Limits on Testing/Inspection Agency Authority:
1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
2. Agency may not approve or accept any portion of the Work.
3. Agency may not assume any duties of Contractor.
4. Agency has no authority to stop the Work.

D. Contractor Responsibilities:
1. Deliver to agency at designated location, adequate samples of materials proposed to be used that require testing, along with proposed mix designs.
2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
3. Provide incidental labor and facilities:
   a. To provide access to Work to be tested/inspected.
   b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
   c. To facilitate tests/inspections.
   d. To provide storage and curing of test samples.
4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.

E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Architect.

F. Re-testing required because of non-conformance to specified requirements shall be paid for by Contractor.

3.05 MANUFACTURERS' FIELD SERVICES

A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance equipment as applicable, and to initiate instructions when necessary.

B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

END OF SECTION

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SECTION 01 50 00 – TEMPORARY FACILITIES AND CONTROLS

Refer to the specific scopes of work for clarification of responsibility of the items specified herein.

PART 1 – GENERAL INFORMATION

1.01 RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 0 and Division 1 Specification Sections, apply to this Section.

1.02 SUMMARY

This Section specifies requirements for temporary services and facilities, including utilities, construction and support facilities, security and protection, and shall be subject to the Construction Manager's approval.

A. **Temporary utilities** required include, but are not limited to:

- Water service and distribution
- Temporary electric power and light
- Telephone service
- Storm and sanitary sewer

B. **Temporary construction and support facilities** required include, but are not limited to:

- Dewatering facilities and drains
- Temporary heating, ventilating, humidification, and air conditioning
- Field offices and storage facilities
- Temporary roads and paving/construction parking/mud/snow and ice clean-up
- Sanitary facilities, including drinking water
- Temporary enclosures
- Hoists and temporary elevator use
- Temporary project identification signs and bulletin boards
- Waste disposal service and progress cleaning
- Construction aids and protection

C. **Security and safety facilities** required include, but are not limited to:

- Temporary fire protection
- Barricades, warning signs, lights
- Enclosure fence and security maintenance
- Environmental protection
- Safety requirements

D. **Controls**

- Workday
- Lunch wagons
- Erosion control
- Excavation material
- Excavation training
- Material inventories
- Deliveries

1.03 QUALITY ASSURANCE

A. **Regulations:** Comply with industry standards and applicable laws and regulations of authorities having jurisdiction, including but not limited to:

- Municipal and Labor & Industry Building Code requirements
- Health and safety regulations
- Utility company regulations
- Police, Fire Department and Rescue Squad rules
- Environmental protection regulations

B. **Inspections:** Arrange for authorities, having jurisdiction, to inspect and test each temporary utility before use. Obtain required certifications and permits.

1.04 PROJECT CONDITIONS

A. **Conditions of Use:** Keep temporary services and facilities clean and neat in appearance. Operate in a safe and efficient manner. Take necessary fire prevention measures. Do not overload facilities, or permit them to interfere with progress. Do not allow hazardous, dangerous, or unsanitary conditions, or public nuisances to develop or persist on the site. They shall be removed, relocated as required by the progress of the work, or directed by the Construction Manager.

B. **Existing Utilities and Systems:**

1. Existing systems shall be maintained at all times unless approved (48 hrs. notice of shutdown) by Owner. Permanent heating, plumbing and electrical systems shall be activated and maintained during owner occupancy of existing facilities. Facilities shall be maintained at 70°F.

2. Trade Contractors interrupting services due to their construction operations shall provide temporary utility lines, as required, to maintain services.

PART 2 - PRODUCTS

2.01 MATERIALS

A. **General:** Provide new materials; if acceptable to the Construction Manager, undamaged, previously used materials in serviceable condition may be used. Provide materials suitable for the use intended.

B. **Lumber and Plywood:** Comply with requirements in Division-6 Section "Rough Carpentry."

C. **Tarpaulins:** Provide waterproof, fire-resistant, UL-labeled tarpaulins with flame-spread rating of or less. For temporary enclosures, provide translucent, nylon-reinforced, laminated polyethylene or polyvinyl chloride fire retardant tarpaulins.

D. **Water:** Provide potable water approved by local health authorities.

E. **Open-Mesh Fencing:** Provide 11-gauge, galvanized two inch, chain link fabric fencing, six (6) feet high with galvanized steel pipe posts, 1-1/2" I.D. for line posts and 2-1/2" I.D. for corner posts.

2.02 EQUIPMENT

A. **General:** Provide new equipment; if acceptable to the Construction Manager, undamaged, previously used equipment in serviceable condition may be used. Provide equipment suitable for use intended.

B. **Water Hoses:** Provide 3/4" heavy-duty, abrasion-resistant, flexible rubber hoses 100 ft. long, with pressure rating greater than the maximum pressure of the water distribution system; provide adjustable shut-off nozzles at hose discharge.

C. **Electrical Outlets:** Provide properly configured NEMA polarized outlets to prevent insertion of volt plugs into higher voltage outlets. Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button, and pilot light, for connection of power tools, equipment, and GFI breakers.

D. **Electrical Power Cords:** Provide grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Provide waterproof connectors to connect separate lengths of electric cords if single lengths will not reach areas where construction activities are in progress.

E. **Electrical Welding Outlets:** These will not be provided. Each Trade Contractor will be responsible for his own welding power.

F. **Lamps and Light Fixtures:** Provide general service incandescent lamps of wattage required for adequate illumination. Provide guard cages or tempered glass enclosures where exposed to breakage. Provide exterior fixtures where exposed to moisture.

G. **Heating Units:** Provide temporary heating units that have been tested and labeled by UL, FM or another recognized trade association related to the type of fuel being consumed.

H. **Temporary Offices:** Provide prefabricated or mobile units or similar job-built construction with lockable entrances, operable windows and serviceable finishes. Provide heated and air-conditioned units on foundations adequate for normal loading.

I. **Temporary Toilet Units:** Provide self-contained, single-occupant toilet units of the chemical, aerated recirculation, or combustions type, properly vented and fully enclosed with a glass fiber, reinforced polyester shell or similar nonabsorbent material.

J. **First Aid Supplies:** Comply with governing regulations.

K. **Fire Extinguishers:** Provide hand-carried, portable UL-rated, class "A" fire extinguishers for temporary offices and similar spaces. In other locations, provide hand-carried, portable, UL-rated, class "ABC" dry chemical extinguishers, or a combination of extinguishers of NFPA recommended classes for the exposures.

Comply with NFPA 10 classification, extinguishing agent and size required by location and class of fire exposure.

PART 3 - EXECUTION/SCOPE RESPONSIBILITIES

3.01 INSTALLATION (BY APPLICABLE TRADE CONTRACTORS)

A. Use qualified personnel for installation of temporary facilities. Location facilities where they will serve the Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required.

B. Provide each facility ready for use when needed to avoid delay. Maintain and modify as required. Do not remove until facilities are no longer needed, or are replaced by authorized use of completed permanent facilities.

3.02 TEMPORARY UTILITY INSTALLATION (BY APPLICABLE TRADE CONTRACTORS)

A. **General:** Engage the appropriate local utility company to install temporary service or connect to existing service. Where the company provides only part of the service, provide the remainder with matching, compatible materials and equipment; comply with the company's recommendations.

1. Arrange with the company and existing users for a time when service can be interrupted, where necessary, to make connections for temporary services.

2. Provide adequate capacity at each stage of construction. Prior to temporary utility availability, each Trade Contractor shall provide trucked-in services at their expense as required to complete their work.

3. Obtain easements to bring temporary utilities to the site, where the Owner's easements cannot be used for that purpose.

Use Charges:

1. Cost or use charges for temporary facilities are to be paid by the Trade Contractor requiring or providing the temporary facility unless noted otherwise.

2. Owner will pay utility consumption costs during construction for construction activities only.

B. **Water Service:** The Plumbing Contractor shall install water service and distribution piping of sizes and pressures adequate for construction. Provide 3/4" hose bib termination at each story of construction work, located so that any area of building construction can be reached with a 100 ft. length of hose. Water service may be run from

a temporary or permanent source.

1. **Sterilization:** Sterilize temporary water piping prior to use.

2. Protect system from freezing.

3. Maintain 30 psig. water pressure with 5 gpm. flow rate.

4. Owner shall pay for cost of water consumed during construction. Trade Contractor shall take the necessary steps not to be wasteful.

C. **Temporary Electricity Power Service:**

1. After start of work at project site, when requested by the Construction Manager, the Electrical Contractor shall provide a temporary electrical power distribution system sufficient to accommodate temporary lighting and construction operations, including the use of power tools, and start-up of specified building equipment which must be tested, started or placed into use prior to completion of its permanent power connections. Provide 480 volts, 3 phase, 3 wires, 60 hertz and an equipment grounding conductor as well as 120 volts, 1 phase, 15 amperes, 60 hertz for lighting. Provide weatherproof, grounded wiring with overload protection; with direct wired connections, where feasible, and for voltages up to 220/208 volts. Locate multiple outlets for 120 volt power, not less than 4 gang, at each story of construction, spaced so that the entire area of construction can be reached by power tools on a single extension cord of 100' maximum length. Maximum 20 Amp circuit breaker, four (4) receptacles per circuit breaker.

2. The Owner will pay for cost of all electric energy used for construction activities.

3. The Electrical Trade Contractor shall provide and pay for maintenance, servicing, operation, and supervision of lines installed.

4. Provide service with ground fault circuit interrupter feature, as per NEC and OSHA requirements. The Electrical Trade Contractor shall have a cord inspection program in place. He shall maintain the inspection records on site.

5. As permanent power distribution system is accepted as substantially complete, either entire system or usable portions thereof, the Electrical Trade Contractor shall make suitable provisions for temporary use thereof, and remove unused portions of temporary system.

6. If required, provide meters for electrical power.

7. When temporary electrical lines are no longer required, they shall be removed by the Electrical Trade Contractor and any part, or parts, of the grounds or buildings disturbed or damaged shall be brought back to their original condition.

8. Electricity from existing lines may be used at no charge to the Trade Contractor. Each trade shall provide extension cords from the existing facilities, as required, for the execution of the Work. Electrical power for welding equipment will not be available.

9. The Electrical Trade Contractor shall maintain and operate permanent electrical supply and distribution system until time of final acceptance and transfer of operation to Owner's personnel.

10. The Electrical Trade Contractor shall install switching controls for all lighting which will enable turning off temporary lighting during off-construction hours.

11. Temporary power supplies to the Construction Manager's Office Conference/Office Complex shall be installed with service connection by the Electrical Trade Contractor.

12. The Electrical Trade Contractor will provide power for oil or gas fired temporary heaters, if required by the Construction Manager. It will be connected so that it can remain "live" when the lighting has been turned off.

13. The Electrical Trade Contractor will provide 24-hour temporary power to any heat tape (installed by others) on temporary water and/or fire lines. All temporary heat work will comply with existing OSHA requirements.

14. Construction circuits shall be separate and independent from temporary lighting.

D. **Temporary Lighting:** Whenever overhead floor of roof deck has been installed, the Electrical Trade Contractor shall provide temporary lighting with local switching.

The Electrical Trade Contractor shall provide sufficient temporary lighting to ensure proper workmanship everywhere; by combined use of daylight and general lighting as stated below:

1. Provide uniformly spaced general lighting utilizing one (1) 150 watt incandescent lamp equivalent to 1.0 watts/sq. ft. of floor areas (minimum one (1) lamp per room), and one (1) 100 watt lamp per 50' of corridor of per flight of stairs.

2. Limit lighting installations to intensities which will accommodate normal access and workmanship requirements, recognizing that each entity performing work requiring higher intensity lighting will provide supplementary plug in temporary lighting and localized areas where such work is in progress.

3. As permanent lighting system is substantially complete for each story or usable portion thereof, the Electrical Trade Contractor shall make suitable provisions for temporary use thereof and remove unused portions of temporary lighting system.

4. The Electrical Trade Contractor shall maintain and operate permanent lighting system until the time of final acceptance and transfer of operation to Owner's personnel, including turning off lighting during off-construction hours.

5. The Electrical Trade Contractor shall replace bulbs that are burned out or substantially dimmed by substantial hours of use.

6. Special lighting required for construction activities shall be provided by contractor requiring it.

7. The Electrical Trade Contractor shall provide safety lighting in the stairways, hallways, and exterior security lighting (as required) on a 24-hour basis.

8. The Electrical Trade Contractor will provide a termination box in the Trade Contractor's office trailer area for hook-up of the Trade Contractor's trailers. Cost for individual Trade Contractor trailer hook-up will be born by the Trade Contractor requiring this service. Use of electric heaters in those trailers and shanties will not be permitted.

E. **Temporary Telephones:**

1. Each Trade Contractor shall be responsible for and provide for his own temporary telephone service.

F. **Storm Sewers and Drainage:**

1. If storm sewers are available, the Sitework Trade Contractor shall provide temporary connections to remove effluent that can be discharged lawfully. If sewers are not available, or cannot be used, Sitework Trade Contractor shall provide drainage ditches, dry wells, stabilization ponds and similar facilities. If neither sewers nor drainage facilities can be lawfully used for discharge of effluent, Sitework Trade Contractor provide containers to remove and dispose of effluent off the site in a lawful manner.

2. Filter out excessive amounts of soil, construction debris, chemicals, oils and similar contaminants that might clog sewers or pollute waterways before discharge.

3. Comply with the soil erosion and sedimentation control plan and local authorities having jurisdiction.

3.03 TEMPORARY CONSTRUCTION AND SUPPORT FACILITIES INSTALLATION (BY APPLICABLE TRADE CONTRACTORS)

A. **General:**

1. Locate field offices, storage, sanitary facilities and other temporary construction and support facilities for easy access after approval from the Construction Manager.

2. Provide incombustible construction for offices, shops and sheds located within the construction area, or within 30 feet of building lines.

B. **Dewatering Facilities and Drains:**

1. For temporary drainage and dewatering facilities, and operations not directly associated with construction activities included under individual Sections, comply with dewatering requirements of applicable Division-2 Sections. Where feasible, utilize the same facilities.

2. The Sitework Trade Contractor shall be responsible to maintain the site, excavations and construction free of water. Review contract scopes for dewatering requirements

for each Trade Contractor.

3. Plumbing Trade Contractor shall provide temporary storm water drainage from the building and the Sitework Trade Contractor shall control roof drainage from building on site.

4. Sitework Trade Contractor shall be responsible to drain or pump water and remove debris from the site so as not to delay his continuous work or progress. This shall include operating pumps during second shift in order to facilitate next-day continuation of work.

5. Sitework Trade Contractor shall excavate in a manner that prevents all surface water from flowing into the building area. Sitework Trade Contractor shall be responsible to remove any runoff water or debris which enters the building area.

6. Sitework Trade Contractor shall continue to drain site and remove debris until designed grades are obtained.

7. Upon completion of building foundations, each Trade Contractor shall be responsible to remove water and debris required to complete his work.

C. **Temporary Heating, Ventilating & Air Conditioning:**

1. Temporary heating shall be provided and maintained by the Trade Contractor performing the work if the outside temperature falls below 40°F at anytime during the day or night for all exterior work or work performed prior to the building being generally enclosed by walls and roof.

2. Each Trade Contractor shall furnish temporary heat by acceptable means to provide sufficient heat to maintain a temperature of 55°F, 24 hours a day throughout the entire area of the work for which the Trade Contractor is responsible.

   Except where use of the permanent system is authorized, provide vented, self-contained LP gas or fuel oil heaters with individual space thermostatic control. Use of gasoline-burning space heaters, open flame, or salamander type heating units is prohibited. Temporary heating may not be provided using electrical heating equipment if using electrical power supplied by the Owner.

3. As soon as the building, or portions thereof, is generally enclosed with walls and roof and temporary heat is required for scheduled work, or required to facilitate proper workmanship, and permanent heating system is not yet operable or authorized for use, the Mechanical Trade Contractor shall provide temporary heat or air conditioning service for every entity authorized to do work at the project site. The Mechanical Trade Contractor shall maintain temperatures as indicated by other Specification Sections for each type of work to be performed. The Construction Manager shall be the sole arbiter of when the building is considered generally enclosed.

4. The Carpentry Trades shall install, maintain, and remove temporary enclosure of windows, doors and roof openings until the permanent materials are in place when such enclosures will result in the building being generally enclosed.

5. After the conditions of construction require continuous 24 hour heat in the building, as determined by the Construction Manager, the Mechanical Trade Contractor shall provide, operate, and maintain temporary radiation or unit heaters to provide required temperatures (minimum 55°F) for the conduct of the work. This service shall be continued until the permanent heating system has been completely installed and is in operation and the buildings of the project completed. The Mechanical Trade Contractor shall furnish and pay for all fuel as required for providing temporary heat and air conditioning after the building is generally enclosed. The Owner shall pay for all fuel costs incurred to operate the permanent HVAC systems for temporary purposes. As permanent heating/cooling system is substantially complete and operational for each story or usable portion thereof, the Mechanical Trade Contractor shall make suitable provisions for use thereof in temporary heating and cooling. The Mechanical Trade Contractor shall maintain and operate permanent system for temporary heating/cooling purposes, including service to occupied areas, if any, until time of final acceptance or transfer of operation to Owner's personnel, for major parts of system if not for entire heating system.

6. All permanent heating and air conditioning equipment used to supply temporary heat and air conditioning shall be completely cleaned and reconditioned by the Mechanical Trade Contractor prior to final acceptance. NOTE: All permanent equipment shall receive required scheduled maintenance while use for temporary service. Radiator traps and valves used in the heating system during the period of its operation to supply temporary heat shall not be reinstalled in the permanent system. Install new disposable filters and clean non-disposable filters prior to final acceptance. Replace significantly worn parts and parts that have been subject to unusual operating conditions.

7. The Mechanical Trade Contractor shall remove all soot, smudges, and other deposits from walls, ceilings, and all exposed surfaces which are the result of the use of any temporary heating equipment including the use of the permanent heating system for temporary heat purposes. Finish work shall not be done until all such surfaces are properly cleaned.

8. **Temporary Ventilation:** A Trade Contractor requiring ventilation for work shall provide fans or other necessary equipment to condition air, provided prior approval has been obtained from the Construction Manager.

9. **Humidification:** Where control of ambient humidity is required for proper performance of the work, or for curing/drying of installed work, or for protection of installed work from deterioration due to variations in ambient conditions, each Trade Contractor shall provide his own temporary humidification or dehumidification equipment to maintain the required conditions. Coordinate the use of the equipment with temporary heating to produce the required conditions with a minimum overall use of energy.

Permanent electrical power needed to operate permanent heating system must be provided by the Electrical Trade Contractor in conjunction with building enclosure, or the Electrical Trade Contractor shall furnish adequate temporary power to operate permanent heating system and bear all cost associated to provide that power.

D. **Field Offices:**

1. Trade Contractors shall provide offices for their own personnel. All type and location of jobsite offices and equipment will be approved by the Construction Manager. Trade Contractor's offices shall be a maximum of 40' in length.

2. **Storage and Fabrication Sheds:** Each Trade Contractor shall provide storage and fabrication sheds, sized, furnished and equipped to accommodate materials and equipment involved, including temporary utility service. Sheds may be open shelters or fully enclosed spaces. All steps and platforms connected to shelters must be per OSHA regulations.

3. All offices and sheds must have the Trade Contractor's identification on them.

E. **Temporary Roads and Paving, Construction Parking:**

1. Sitework Trade Contractor shall construct and maintain temporary roads, to adequately support the indicated loading and to withstand exposure to traffic during the construction period. Locate temporary paving for roads, storage areas and parking where the same permanent facilities will be located.

2. Snow removal will be performed by the Sitework Contractor for access roads and storage areas. Each Trade Contractor shall provide any additional snow removal required to maintain the schedule.

F. **Sanitary Facilities:**

1. The Construction Manager shall provide temporary toilets. Comply with regulations and health codes for the type, number, location, operation and maintenance of fixtures and facilities. Install where facilities will best serve the Project's needs.

   Provide toilet tissue for each facility.

2. **Toilets:** Install self-contained toilet units. Shield toilets to ensure privacy. Use of pit type privies will not be permitted. Provide means of locking facilities when construction is not in progress.

   Provide separate facilities or male and female personnel when both sexes are working in any capacity on project site.

   Provide one unit for use of Owner representative's office/conference meeting complex.

3. **Drinking Water Facilities:** Each Trade Contractor shall provide containerized tap-dispenser bottled-water type drinking water units, including paper supply. Where power is accessible, provide electric water coolers to maintain dispensed water temperature at 45° to 55°F (7° to 13°C).

G. **Temporary Enclosures:**

1. All temporary enclosures required for protection of **exterior** construction in progress and completed from exposure, bad weather, other construction operations, and similar activities and to maintain the progress schedule, shall be provided by each contractor as necessary to protect their work.

2. Prior to the building being enclosed, all temporary enclosures required for protection of **interior** construction in progress and completed from exposure, bad weather, other construction operations, and similar activities and to maintain the progress schedule, shall be provided by each contractor as necessary to protect their work.

3. Where heat is needed and the permanent building enclosure is not complete (windows, doors, and roof openings not complete), the Carpentry Contractor shall provide temporary enclosures where there is no other provision for containment of heat. Coordinate enclosure with ventilating and material drying or curing requirements to avoid dangerous conditions and effects.

4. Install tarpaulins securely with noncombustible wood framing and other materials. Close openings of 25 sq. ft. or less with plywood or similar materials.

5. Each Trade Contractor is required to construct, maintain, and remove dust partitions required to prevent dust from entering adjacent areas.

H. **Temporary Lifts and Hoists:**

1. Each Trade Contractor shall be responsible for their own hoisting.

2. Existing Elevators:

   A. N/A

3. New Elevators:

   A. N/A

I. **Project Identification and Temporary Signs**

1. The Construction Manager shall prepare project identification and other signs, as approved by the Owner of the size indicated; install signs where indicated to inform the public and persons seeking entrance to the Project. Support on posts or framing of preservative treated wood or steel.

2. Provide one (1) sign erected on the site, where directed, to identify the project. Sign shall include Project name, Owner's name, Architect's name, and Construction Manager's name. Size shall be 4' x 8'; color and lettering style shall be as designed by the Architect.

3. Engage an experienced sign painter to apply graphics.

4. **Temporary Signs:** The Construction Manager shall prepare signs to provide directional information to construction personnel and visitors as required by the Construction Manager.

5. The Construction Manager shall erect weathertight bulletin boards adjacent to the office/conference complex. Size of the boards shall be equivalent to 32 sq. ft., visible area.

J. **Waste Disposal Services:**

1. The Construction Manager will provide trash collection containers for construction debris, exclusive of masonry, rock, earth, etc., and pay for all debris disposal costs for them. Each Trade Contractor on the project will be required to clean up, and deposit in the dumpster, all debris generated by his trade contract work on a daily basis. This requirement shall be enforced by the Construction Manager and will result in cost assessment against a Trade Contractor who fails to perform daily clean-up. Each Trade Contractor will be responsible for flattening or crushing all trash as necessary when placed into the dumpster. Hazardous material shall not be placed in the collection container.

K. **Construction Aids, Protection and Facilities**

1. The Carpentry Trades Contractor shall provide temporary ladders, ramps, and walkways required to access upper levels until permanent systems are installed. They shall be installed and maintained throughout the duration of the project and comply with all OSHA requirements. Removal of these shall be by the Carpentry Contractor when requested by the Construction Manager.

2. The Concrete Contractor shall be responsible for providing safety railings around basement area prior to completion of metal deck and slab. Concrete Contractor shall also provide railing around floor opening for floor hatch into basement once concrete has been poured.

3. Each Trade Contractor will be responsible for protecting any floor openings that have been opened for work under his trade.

4. Each Trade Contractor, upon working in any of the area named in the above paragraph, shall remove the safety covering and handrail to perform his work. Upon completion of his work for the day, lunch, or breaks, or any time when the individual Trade Contractor is not working in that opening, the safety covering and handrail must be replaced by the Trade Contractor removing it. At the end of each day, each Trade Contractor will inspect the site and install all safety coverings and handrails. IF coverings and handrails are not being reinstalled by Trade Contractors responsible for replacement, then Construction Manager will replace at Trade Contractor's expense. At the end of the project, or in order to install permanent construction, the Construction Manager shall remove all coverings and handrails.

5. The Carpentry Trades Contractor shall provide safe, temporary stairs, constructed of secure, dimensional lumber, with all railings and closures according to OSHA regulations, until permanent stairs are installed. Temporary stairs must be provided at the point when above grade floors are framed and decked, and require access by trades, in addition to the steel erection crews.

6. The Trade Contractors requiring access to above grade work are responsible for

providing ladders, scaffolding and appropriate methods to access their work. Trade Contractors desiring use of in place above grade work platforms must arrange directly with the party that owns the equipment and make all rental and insurance arrangements directly with that party.

7. All work platforms, scaffolding, etc., on the project shall be available for access by the Owner, Architect, Municipal Authority, Test Agency and/or Construction Manager, and these parties shall be insured and held harmless when using these facilities by the Owner of the facility.

8. Each Trade Contractor shall be responsible for maintaining safe walkway and stair traffic areas, using anti-skid methods, routine sweeping, snow, mud and/or ice removal, and any other reasonable method for safe usage.

3.04 SECURITY AND SAFETY FACILITIES INSTALLATION

A. **Temporary Fire Safety**

1. Shall be maintained in place until permanent fire protection system is available for use. The Fire Protection Trade Contractor shall provide the permanent sprinkler fire protection system for use at the earliest possible date after building enclosure and 55°F temperatures are maintained to protect the building.

2. Until fire protection needs are supplied by permanent facilities, the Construction Manager shall install and maintain temporary fire protection facilities of the types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 10 “Standard for Portable Fire Extinguishers.”

3. Locate fire extinguishers where convenient and effective for their intended purpose, but not less than one extinguisher on each floor at or near each usable stairwell.

4. Store combustible materials in containers in fire-safe locations.

5. Maintain unobstructed access to fire extinguishers, fire hydrants, temporary fire protection facilities, stairways and other access routes for fighting fires. Prohibit smoking in hazardous fire exposure areas. Prohibit smoking within the enclosure building.

6. Provide supervision of welding operations, combustion type temporary heating units, and similar sources of fire ignition.

B. **Barricades, Warning Signs and Lights:** (Protection of Trade Contractors Work)

1. The responsible Trade Contractor shall comply with standards and code requirements for erection of structurally adequate barricades. Paint with appropriate colors, graphics, and warning signs to inform personnel and the public of the hazard being protected against.

C. **Building Security Enclosure and Lockup:**

1. Each Trade Contractor shall be responsible for assisting the Construction Manager

in maintaining a secure building at all times.

2. Each Trade Contractor is responsible for the secure storage of their own material and equipment on and off the site.

D. **Environmental Protection:**

1. To the fullest extent permitted by law, the Trade Contractor shall indemnify and hold harmless the Owner and Construction Manager, their employees and agents, from claims, losses, damage, and expenses including, but not limited to, attorney's fees arising out of performance of the work at it relates to any type of pollution related situations. This would apply to bodily injury, sickness, disease, or death, or to damages or destruction or contamination of tangible property arising out of the acts or omission of the Trade Contractor or the joint negligent acts of the Owner or Construction Manager, or anyone for whose acts the Trade Contractor may be liable.

2. The Construction Manager will designate area available for construction storage.

3. Each Trade Contractor shall provide protection, operate temporary facilities, and conduct construction in ways and methods that comply with all environmental regulations, and minimize the possibility that air, water, and soil become contaminated or polluted as a result of work or storage so supplies and materials, or equipment usage.

4. Each Trade Contractor will designate and train a responsible employee in environmental contamination procedures, including, but not limited to, emergency responses, material and waste inventories, spills and leak precautions and responses, inspections, housekeeping, security, and external factors.

5. Open burning will not be permitted.

E. **Safety Requirements**

1. All work shall be performed in accordance with rules, regulations, procedures and safe practice and/or OSHA and all other Government agencies having jurisdiction over the project.

2. Safety precautions and programs:

   a. Each container shall be responsible for initiating, maintaining and supervising safety precautions and programs in connection with the work. The name of the safety officer for each contractor shall be provided by the Construction Manager.

   b. All Trade Contractors shall comply with the provisions of the "Specific Safety Requirements of the Construction Safety Act," the "Occupational Safety and Health Act," and Federal, State and local requirements.

   c. If a contractor fails to maintain the safety precautions required by law or directed by the Construction Manager, the Construction Manager may take such action as necessary and charge the Trade Contractor for all incurred costs.

d. The failure of the Construction Manager to take any such action shall not relieve the Trade Contractor of his obligations.

e. The Trade Contractor individually shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance or operation.

f. Prior to mobilizing to the job, the Trade Contractor shall submit to the Construction Manager, in writing, a description of his safety program for review and comment. During the conduct of the work, the Trade Contractor shall immediately notify the Construction Manager, in writing, of all accidents and shall submit a written report describing in detail the circumstances of each accident within 24 hours of its occurrence.

g. All Trade Contractors shall notify the Construction Manager of any flammable, combustible and/or toxic materials intended for use on the project and shall furnish the Construction Manager with literature pertinent to the use and control of all materials, including, but limited to, MSDS sheets.

h. Each Trade Contractor shall delegate one representative who shall be responsible to maintain all safety requirements of the Trade Contractor, and shall attend all project safety meetings scheduled by the Construction Manager.

i. Each Trade Contractor shall conduct weekly safety discussions which shall be attended by all employees assigned to this project. A written safety given to the Construction Manager on a weekly basis.

3. Safety of persons and property:

a. The Trade Contractor shall take all reasonable precautions for the safety or, and shall provide all reasonable protection to prevent damage of loss to:

1. All employees on the work site and all other persons may be affected thereby.

2. All the work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody, or control of the Trade Contractor or any of his Subcontractors or Sub-Contractors.

3. Other property at the site or adjacent thereto, including, but not limited to, trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction and underground property.

b. The Trade Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority, including the Owner’s department of protective services, bearing on the safety of persons or property or their protection from damage, injury or loss.

c. The Trade Contractor shall erect and maintain, as required by existing

conditions and progress of the work, all reasonable safeguards for safety and protection, from his work, including danger signs and other warnings against hazards. He shall comply with safety regulations and notify the Construction Manager of possible effects on adjacent facilities. If the Trade Contractor fails to so comply, he shall, at the direction of the Construction Manager, remove forces from the project without cost or loss to the Owner or Construction Manager, until he is in compliance.

d. The Trade Contractor shall promptly remedy all damage or loss to any property caused in whole or in part by the Trade Contractor, his subcontractors, his Sub-subcontractors, or anyone directly employed by any of them, or by anyone for whose acts any of them be liable.

e. The Trade Contractor shall not load or permit any part of the work to be loaded so as to endanger its integrity and safety.

f. The use of audio equipment and headsets will not be permitted on the construction site.

4. Emergencies:

a. In any emergency affecting the safety of persons or property, the Trade Contractor shall act, at his discretion, to prevent threatened damage, injury or loss and shall immediately notify the Construction Manager of such emergency conditions. Any claims made by the Trade Contractor for additional compensation or extension of time on account of emergency work shall be processed in accordance with the Contract Documents.

5. Indemnification:

a. The Trade Contractor shall indemnify and hold harmless the Owner, the Construction Manager, the Architect/Engineer, all municipal authorities, and their agents and employees, from and against all claims, damages, losses, and expenses including, but limited to, attorney's fees arising out of or resulting from the performance of the work, provided that any such claim, damage, loss or expense (1) is attributable to bodily injury, sickness, disease or death, or to injury, sickness, disease or death, or to injury to or destruction of tangible property (other work than the work itself) including the loss of use resulting therefrom, and (2) is caused in whole or part by any negligent act or omission of the Trade Contractor, any Subcontractor, anyone directly or indirectly employed by any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.

b. In any and all claim against the Owner, the Construction Manager, the Architect/Engineer, or any of their agents or employees, by any employee of the Trade Contractor, and Sub-Contractor, anyone directly or indirectly employed by any of them may be liable, the indemnification obligation under this paragraph shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the type of damages, compensation or any Subcontractor under Worker's Compensation Acts, disability benefit acts or other employee benefit acts.

c. The obligations of the Trade Contractor under this paragraph shall not extend to the liability of the Architect/Engineer or the Construction Manager, his agents or employees arising out of (1) the preparation of approval of maps, drawings, opinions, reports, surveys, design or specifications, or (2) the giving of or failure to give directions or instructions by the Architect/Engineer or the Construction Manager, their agents or employees provided such giving or failure to give is the primary cause of the injury or damage.

d. No provision of this Subparagraph shall give rise to any duties on the part of the Architect or the Construction Manager not otherwise provided for by contract or by law.

e. In the event that any party is requested but refuses to honor the indemnity obligations hereunder, then the party refusing to honor such requests shall, in addition to all other obligations, pay the cost of bringing any such action, including attorney's fees to the party requesting indemnity.

3.05 CONTROLS

A. **Workday:**

1. **Normal work hours shall be from 8:00 a.m. to 4:30 p.m., Monday to Friday, and 9:00 a.m. to 5:30 pm on Saturday, when applicable.** The progress schedule may require contractors to perform work other than the normal workday and in addition to the normal workday, to meet milestones in the progress schedule for the project, or to make up time previously lost to regain the progress schedule requirements or to prevent interruption of the Owner's ongoing operation.

2. Working times other than the normal workday or in addition to the normal work day, must be arranged in advance with the Construction Manager.

3. Trade Contractors who require additional workday hours to regain work time previously lost to meet the requirements of the project schedule shall be assessed for all costs including Construction Manager supervision and other Trade Contractor cost necessary for the performance of their work.

B. **Lunch Wagons:**

1. Lunch wagons, catered events of other non-construction related functions shall not be permitted on the project site, except by the written permission of the Owner and Construction Manager.

2. No alcoholic beverages or controlled substances shall be allowed on the project at any time.

C. **Erosion Control:**

1. The Sitework Trade Contractor shall employ all methods required to comply with Local, State, and Federal requirements to control erosion from the project site, including drainage control ditches, sediment basins, straw bale dykes and silt

fencing.

D. **Excavation Training:**

1. Any Trade Contractor performing excavation shall have an OSHA trained person on site during all excavation operations. This person shall evaluate soil types and conditions to determine the required shoring and excavation methods.

E. **Material Inventories:**

1. Contractors shall coordinate the delivery and storage on the jobsite of all significant materials

2. Each Trade Contractor shall be responsible for the proper location, secure, and weather resistant storage as required of all materials. This includes placement of materials not to obstruct passage on site or within building structures or in any way which causes impediment or obstruction to other Trade Contractors.

3. All material inventories must be stored by the Trade Contractor to avoid excessive loads on building structure.

4. When directed by the Construction Manager, a Trade Contractor shall remove or relocate material inventories as required for the progress of the project.

F. **Deliveries:**

1. All contractors are required to properly instruct material suppliers and vendors to address deliveries to them specifically by named responsible party at the jobsite and require advance notice.

2. All deliveries addressed to the project in general, the Owner, Architect or Construction Manager, will be refused and returned to shipper.

3. The Owner will not be responsible for receipt, handing, or loss of any materials which are shipped to the Owner in error and received unknowing of relationship to the project.

4. Contractor receiving materials at the jobsite shall be responsible for prevention of any mud or other deposits on public roadways or other areas outside project limit lines, which may result due to methods of material delivery. Trade Contractor shall instruct delivery conveyor to take appropriate measures to prevent depositing mud or other construction deposits outside contract limit lines. Total responsibility of cleanup of mud or other construction deposit outside of contract limit lines will be the responsibility of the Trade Contractor receiving the delivery.

3.06 OPERATION, TERMINATION AND REMOVAL

A. **Supervision:** Enforce strict discipline in use of temporary facilities. Limit availability of temporary facilities to essential and intended use to minimize waste and abuse.

B. **Maintenance:** Maintain facilities in good operating condition until removal. Protect from

damage by freezing temperatures and similar elements.

1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a 24-hour day basis where required to achieve indicated results and to avoid possibility of damage.

2. **Protection:** Prevent water filled piping from freezing. Maintain markers for underground lines. Protect from damage during excavation operations.

C. **Termination and Removal:** Unless the Construction Manager requests that it be maintained longer, remove each temporary facility when the need has ended, or when replaced by authorized use of a permanent facility, or not later than Substantial Completion. Complete or, if necessary restore, permanent construction that may have been delayed because of interference with the temporary facility. Repair damaged work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.

1. Materials and facilities that constitute temporary facilities that constitute temporary facilities are property of the Trade Contractor. The Owner reserves the right to take possession of Project identification signs.

2. The Sitework Trade Contractor shall remove temporary paving that is not intended for or acceptable for integration into permanent paving. Where the area is intended for landscape development, remove soil and aggregate fill that does not comply with requirements for fill or subsoil in the area. Remove materials contaminated with road oil, asphalt, and other petrochemical compounds, and other substance which might impair growth of plant materials or lawns. Repair or replace street paving, curbs and sidewalks at the temporary entrances, as required by the governing authority.

END OF SECTION 01 50 00

SECTION 01 60 00 – PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.

B. Related Requirements:

1. Section 012300 "Alternates" for products selected under an alternate.
2. Section 012500 "Substitution Procedures" for requests for substitutions.

1.3 DEFINITIONS

A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
3. Comparable Product: Product that is demonstrated and approved through submittal process to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

B. Basis-of-Design Product Specification: A specification in which a specific manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of additional manufacturers named in the specification.

1.4 ACTION SUBMITTALS

A. Comparable Product Requests: Submit request for consideration of each comparable product. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Include data to indicate compliance with the requirements specified in "Comparable Products" Article.
2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor through Construction Manager of approval or rejection of proposed comparable product request within fifteen days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

    a. Form of Approval: As specified in Section 013300 "Submittal Procedures."
    b. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.

B. Basis-of-Design Product Specification Submittal: Comply with requirements in Section 013300 "Submittal Procedures." Show compliance with requirements.

1.5 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.

1. Each contractor is responsible for providing products and construction methods compatible with products and construction methods of other contractors.
2. If a dispute arises between contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.

4. Inspect products on delivery to determine compliance with the Contract Documents and to determine that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
4. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
5. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
6. Protect stored products from damage and liquids from freezing.
7. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

1.7 PRODUCT WARRANTIES

A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Written warranty furnished by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner.

B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
2. Specified Form: When specified forms are included with the Specifications, prepare a written document using indicated form properly executed.
3. See other Sections for specific content requirements and particular requirements for submitting special warranties.

C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
4. Where products are accompanied by the term "as selected," Architect will make selection.
5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
6. Or Equal: For products specified by name and accompanied by the term "or equal," or "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.

B. Product Selection Procedures:

1. Product: Wherever a citation in the Drawings and/or Specifications appears to indicate a single manufacturer and product, the citation shall be understood to be appended by the phrase “or approved equal.”
2. Manufacturer/Source: Wherever a citation in the Drawings and/or Specifications appears to indicate a single manufacturer or source, the citation shall be understood to be appended by the phrase “or other approved manufacturer or source.”
3. Products:

    a. Restricted List: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will be considered unless otherwise indicated.
    b. Nonrestricted List: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product.

4. Manufacturers:

    a. Restricted List: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will be considered unless otherwise indicated.
    b. Nonrestricted List: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed, or a product by an unnamed manufacturer, that complies with requirements. Comply with requirements in "Comparable Products" Article for consideration of an unnamed manufacturer's product.

5. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable

Products" Article for consideration of an unnamed product by one of the other named manufacturers.

C. Visual Matching Specification: Where Specifications require "match Architect's sample", provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.

D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 COMPARABLE PRODUCTS

A. Conditions for Consideration: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with these requirements:

1. Evidence that the proposed product does not require revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
3. Evidence that proposed product provides specified warranty.
4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION

SECTION 01 70 00
EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Examination, preparation, and general installation procedures.
B. Cutting and patching.
C. Cleaning and protection.
D. Starting of systems and equipment.
E. Demonstration and instruction of Owner personnel.
F. General requirements for maintenance service.

1.02 RELATED REQUIREMENTS

A. Section 01 77 50-Closeout Submittals: Project record documents, operation and maintenance data, warranties, and bonds.
B. Section 01 79 00 - Demonstration and Training: Demonstration of products and systems to be commissioned and where indicated in specific specification sections
C. Section 07 84 00 - Firestopping.

1.03 PROJECT CONDITIONS

A. Use of explosives is not permitted.
B. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
C. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
D. Perform dewatering activities, as required, for the duration of the project.
E. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
F. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.
G. Erosion and Sediment Control: Plan and execute work by methods to control surface drainage from cuts and fills, from borrow and waste disposal areas. Prevent erosion and sedimentation.
H. Pest and Rodent Control: Provide methods, means, and facilities to prevent pests and insects from damaging the work.
I. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

1.04 COORDINATION

A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
B. Notify affected utility companies and comply with their requirements.

C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on drawings. Follow routing indicated for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
F. Coordinate completion and clean-up of work of separate sections.
G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00 - Product Requirements.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
C. Examine and verify specific conditions described in individual specification sections.
D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

A. Clean substrate surfaces prior to applying next material or substance.
B. Seal cracks or openings of substrate prior to applying next material or substance.
C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 GENERAL INSTALLATION REQUIREMENTS

A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.04 CUTTING AND PATCHING

A. Whenever possible, execute the work by methods that avoid cutting or patching.
B. Perform whatever cutting and patching is necessary to:
    1. Complete the work.
    2. Fit products together to integrate with other work.
    3. Provide openings for penetration of mechanical, electrical, and other services.
    4. Match work that has been cut to adjacent work.
    5. Repair areas adjacent to cuts to required condition.
    6. Repair new work damaged by subsequent work.
    7. Remove samples of installed work for testing when requested.
    8. Remove and replace defective and non-complying work.
C. Execute work by methods that avoid damage to other work and that will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
F. Restore work with new products in accordance with requirements of Contract Documents.
G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with Section 07 84 00, to full thickness of the penetrated element.
I. Patching:
    1. Finish patched surfaces to match finish that existed prior to patching. On continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
    2. Match color, texture, and appearance.
    3. Repair patched surfaces that are damaged, lifted, discolored, or showing other imperfections due to patching work. If defects are due to condition of substrate, repair substrate prior to repairing finish.

3.05 PROGRESS CLEANING

A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.

C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.06 PROTECTION OF INSTALLED WORK

A. Protect installed work from damage by construction operations.
B. Provide special protection where specified in individual specification sections.
C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
G. Remove protective coverings when no longer needed; reuse or recycle coverings if possible.

3.07 SYSTEM STARTUP

A. Coordinate schedule for start-up of various equipment and systems.
B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
D. Verify that wiring and support components for equipment are complete and tested.
E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
F. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.
G. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.08 DEMONSTRATION AND INSTRUCTION

A. See Section 01 79 00 - Demonstration and Training.

3.09 ADJUSTING

A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.10 CLOSEOUT PROCEDURES

A. Make submittals that are required by governing or other authorities.
B. Accompany Project Coordinator on preliminary inspection to determine items to be listed for completion or correction in the Contractor's Correction Punch List for Contractor's Notice of Substantial Completion.
C. Notify Architect when work is considered ready for Architect's Substantial Completion inspection.
D. Submit written certification containing Contractor's Correction Punch List, that Contract Documents have been reviewed, work has been inspected, and that work is complete in

accordance with Contract Documents and ready for Architect's Substantial Completion inspection.

E. Conduct Substantial Completion inspection and create Final Correction Punch List containing Architect's and Contractor's comprehensive list of items identified to be completed or corrected and submit to Architect.
F. Correct items of work listed in Final Correction Punch List and comply with requirements for access to Owner-occupied areas.
G. Notify Architect when work is considered finally complete and ready for Architect's Substantial Completion final inspection.
H. Complete items of work determined by Architect listed in executed Certificate of Substantial Completion.

3.11 MAINTENANCE

A. Provide service and maintenance of components indicated in specification sections.
B. Maintenance Period: As indicated in specification sections or, if not indicated, not less than two years from the Date of Substantial Completion or the length of the specified warranty, whichever is longer.
C. Examine system components at a frequency consistent with reliable operation. Clean, adjust, and lubricate as required.
D. Include systematic examination, adjustment, and lubrication of components. Repair or replace parts whenever required. Use parts produced by the manufacturer of the original component.
E. Maintenance service shall not be assigned or transferred to any agent or subcontractor without prior written consent of the Owner.

END OF SECTION

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SECTION 01 74 19

CONSTRUCTION WASTE MANAGEMENT

PART 1 – GENERAL

1.1 SUMMARY

A. Section includes: Administrative and procedural requirements for construction waste management activities.

1.2 DEFINITIONS

A. Construction, Demolition, and Land clearing (CDL) Waste: Includes all non-hazardous solid wastes resulting from construction, remodeling, alterations, repair, demolition and land clearing. Includes material that is recycled, reused, salvaged or disposed as garbage.

B. Salvage: Recovery of materials for on-site reuse, sale or donation to a third party.

C. Reuse: Making use of a material without altering its form. Materials can be reused on-site or reused on other projects off-site. Examples include, but are not limited to the following: Crushing or grinding of concrete for use as sub-base material. Chipping of land clearing debris for use as mulch.

D. Recycling: The process of sorting, cleaning, treating, and reconstituting materials for the purpose of using the material in the manufacture of a new product.

E. Source-Separated CDL Recycling: The process of separating recyclable materials in separate containers as they are generated on the job-site. The separated materials are hauled directly to a recycling facility or transfer station.

F. Co-mingled CDL Recycling: The process of collecting mixed recyclable materials in one container on-site. The container is taken to a material recovery facility where materials are separated for recycling.

G. Approved Recycling Facility: Any of the following:

1. A facility that can legally accept CDL waste materials for the purpose of processing the materials into an altered form for the manufacture of a new product.

2. Material Recovery Facility: A general term used to describe a waste-sorting facility. Mechanical, hand-separation, or a combination of both procedures, are used to recover recyclable materials.

H. Universal waste components (UWC) are as follows: electric motors, PCB ballasts, non PCB ballasts, capacitors, contactors, circuit breakers, elemental and liquid mercury containing articles, transformers, lead acid batteries, fluorescent light bulbs, and all HID light bulbs.

1.3 SUBMITTALS

A. Contractor shall develop a Waste Management Plan: Submit 3 copies of plan within 14 days of date established for the **Notice to Proceed**.

B. Contractor shall provide Waste Management Report: Concurrent with each Application for Payment, submit **3** copies of report.

1.4 PERFORMANCE REQUIREMENTS

A. General: Divert a minimum of **75%** CDL waste, by weight, from the landfill by one, or a combination of the following activities:

1. Salvage
2. Reuse
3. Source-Separated CDL Recycling
4. Co-mingled CDL Recycling

B. CDL waste materials that can be salvaged, reused or recycled include, but are not limited to, the following:

1. Acoustical ceiling tiles
2. Asphalt
3. Asphalt shingles
4. Cardboard packaging
5. Carpet and carpet pad
6. Concrete
7. Drywall
8. Fluorescent lights and ballasts
9. Land clearing debris (vegetation, stumpage, dirt)
10. Metals
11. Paint (through hazardous waste outlets)
12. Wood
13. Plastic film (sheeting, shrink wrap, packaging)
14. Window glass
15. Wood
16. Field office waste, including office paper, aluminum cans, glass, plastic, and office cardboard.

1.5 QUALITY ASSURANCE

A. Waste Management Coordinator Qualifications: Experienced firm, with a record of successful waste management coordination of projects with similar requirements, that employs a LEED Accredited Professional, certified by the USGBC as waste management coordinator.

B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

C. Regulatory Requirements: Conduct construction waste management activities in accordance with hauling and disposal regulations of all authorities having jurisdiction and all other applicable laws and ordinances.

D. Preconstruction Conference: Schedule and conduct meeting at Project site prior to construction activities.

1. Attendees: Inform the following individuals, whose presence is required, of date and time of meeting.

a. Owner

b. Architect
c. Contractor's superintendent
d. Major subcontractors
e. Waste Management Coordinator
f. Other concerned parties.

2. Agenda Items: Review methods and procedures related to waste management including, but not limited to, the following:

a. Review and discuss waste management plan including responsibilities of Waste Management Coordinator.
b. Review requirements for documenting quantities of each type of waste and its disposition.
c. Review and finalize procedures for materials separation and verify availability of containers and bins needed to avoid delays.
d. Review procedures for periodic waste collection and transportation to recycling and disposal facilities.
e. Review waste management requirements for each trade.

3. Minutes: Record discussion. Distribute meeting minutes to all participants.
Note: If there is a Project Architect, they will perform this role.

1.6 WASTE MANAGEMENT PLAN – Contactor shall develop and document the following:

A. Develop a plan to meet the requirements listed in this section at a minimum. Plan shall consist of waste identification, waste reduction plan and cost/revenue analysis. Distinguish between demolition and construction waste. Indicate quantities by weight throughout the plan.

B. Indicate anticipated types and quantities of demolition, site-cleaning and construction waste generated by the project. List all assumptions made for the quantities estimates.

C. List each type of waste and whether it will be salvaged, recycled, or disposed of in an landfill. The plan should included the following information:

1. Types and estimated quantities, by weight, of CDL waste expected to be generated during demolition and construction.

2. Proposed methods for CDL waste salvage, reuse, recycling and disposal during demolition including, but not limited to, one or more of the following:

a. Contracting with a deconstruction specialist to salvage materials generated,
b. Selective salvage as part of demolition contractor’s work,
c. Reuse of materials on-site or sale or donation to a third party.

3. Proposed methods for salvage, reuse, recycling and disposal during construction including, but not limited to, one or more of the following:

a. Requiring subcontractors to take their CDL waste to a recycling facility;
b. Contracting with a recycling hauler to haul recyclable CDL waste to an approved recycling or material recovery facility;
c. Processing and reusing materials on-site;
d. Self-hauling to a recycling or material recovery facility.

4. Name of recycling or material recovery facility receiving the CDL wastes.

5. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location on project site where materials separation will be located.

D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:

1. Total quantity of waste.
2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
3. Total cost of disposal (with no waste management).
4. Revenue from salvaged materials.
5. Revenue from recycled materials.
6. Savings in hauling and tipping fees by donating materials.
7. Savings in hauling and tipping fees that are avoided.
8. Handling and transportation costs. Including cost of collection containers for each type of waste.
9. Net additional cost or net savings from waste management plan.

PART 2 - PRODUCTS (Not Used)

PART 3 – EXECUTION

3.1 CONSTRUCTION WASTE MANAGEMENT, GENERAL

A. Provide containers for CDL waste that is to be recycled clearly labeled as such with a list of acceptable and unacceptable materials. The list of acceptable materials must be the same as the materials recycled at the receiving material recovery facility or recycling processor.

B. The collection containers for recyclable CDL waste must contain no more than 10% non-recyclable material, by volume.

C. Provide containers for CDL waste that is disposed in a landfill clearly labeled as such.

D. Use detailed material estimates to reduce risk of unplanned and potentially wasteful cuts.

E. To the greatest extent possible, include in material purchasing agreements a waste reduction provision requesting that materials and equipment be delivered in packaging made of recyclable material, that they reduce the amount of packaging, that packaging be taken back for reuse or recycling, and to take back all unused product. Insure that subcontractors require the same provisions in their purchase agreements.

F. Conduct regular visual inspections of dumpsters and recycling bins to remove contaminants.

3.2 SOURCE SEPARATION

A. General: Contractor shall separate recyclable materials from CDL waste to the maximum extent possible.

Separate recyclable materials by type.

1. Provide containers, clearly labeled, by type of separated materials or provide other storage method for managing recyclable materials until they are removed from Project site.
2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water and to minimize pest attraction. Cover to prevent windblown dust.
3. Stockpile materials away from demolition area. Do not store within drip line of remaining trees.
4. Store components off the ground and protect from weather.

3.3 CO-MINGLED RECYCLING

A. General: Do not put CDL waste that will be disposed in a landfill into a co-mingled CDL waste recycling container.

3.4 REMOVAL OF CONSTRUCTION WASTE MATERIALS

A. Remove CDL waste materials from project site on a regular basis. Do not allow CDL waste to accumulate on-site.

B. Transport CDL waste materials off Owner's property and legally dispose of them.

C. Burning of CDL waste is not permitted.

3.5 UNIVERSAL WASTE DIVERSION

A. Remove all universal waste from fixtures, panels, and related devices for proper diversion and reclamation.

B. Store all universal waste in containers provided by contact person within facilities operations.

C. Store all universal waste in a secured location and request periodic removal from assigned contact person.

D. Exemption: electric motors, circuit breakers, transformers and lighting contactors are exempt from this provision provided the contractor chooses to salvage or reuse the components.

E. No identified universal waste will be discarded into the waste stream.

END OF SECTION

WASTE MANAGEMENT PROGRESS REPORT				
	DISPOSED IN MUNICIPAL SOLID WASTE LANDFILL	**DIVERTED FROM LANDFILL BY RECYCLING, SALVAGE OR REUSE**		
MATERIAL CATEGORY		Recycled	Salvaged	Reused
1. Acoustical Ceiling Tiles				
2. Asphalt				
3. Asphalt Shingles				
4. Cardboard Packaging				
5. Carpet and Carpet Pad				
6. Concrete				
7. Drywall				
8. Fluorescent Lights and Ballasts				
9. Land Clearing Debris (vegetation, stumpage, dirt)				
10. Metals				
11. Paint (through hazardous waste outlets)				
12. Wood				
13. Plastic Film (sheeting, shrink wrap, packaging)				
14. Window Glass				
15. Field Office Waste (office paper, aluminum cans, glass, plastic, and coffee cardboard)				
16. Other (insert description)				
17. Other (insert description)				
Total (In Weight)		(TOTAL OF ALL ABOVE VALUES – IN WEIGHT)		
	Percentage of Waste Diverted	(TOTAL WASTE DIVIDED BY TOTAL DIVERTED)		

SECTION 01 77 00 – CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
   1. Inspection procedures.
   2. Warranties.
   3. Final cleaning.

B. See Volume I "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.

C. See Division 1 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

D. See Division 1 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.

E. See Division 1 Section "Demonstration and Training" for requirements for instructing Owner's personnel.

F. See Divisions 2 through 16 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.2 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
   1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
   2. Advise Owner of pending insurance changeover requirements.
   3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
   4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
   5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.
   6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
   7. Make final changeover of permanent locks. Advise Owner's personnel of changeover in security provisions.
   8. Complete startup testing of systems.
   9. Submit test/adjust/balance records.

10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
11. Advise Owner of changeover in heat and other utilities.
12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
13. Complete final cleaning requirements, including touchup painting.
14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Construction Manager and Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
1. Reinspection: Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

1.3 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
1. Submit a final Application for Payment according to Division 1 Section "Payment Procedures."
2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report and warranty.
5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Use CSI Form 14.1A or approved comparable form.
1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding

from lowest floor to highest floor.

2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

1.5 WARRANTIES

A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
   1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
   2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
   3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
   1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
      a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
      b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other

foreign deposits.

c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
d. Remove tools, construction equipment, machinery, and surplus material from Project site.
e. Remove snow and ice to provide safe access to building.
f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
h. Sweep concrete floors broom clean in unoccupied spaces.
i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
k. Remove labels that are not permanent.
l. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
    1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
m. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
n. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
o. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
p. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
q. Leave Project clean and ready for occupancy.

C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.

D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 01 77 00

SECTION 01 77 50 – CLOSEOUT REQUIREMENTS

1. The following documents are included in this section:
   A. Trade Contractors Partial Release of Lien (to be submitted with each invoice)
   B. Partial Release of Lien – 2nd tier subcontractors and suppliers (to be submitted by every subcontractor and supplier when the contract is 50% billed)
   C. Trade Contractors Final Release of Lien (to be submitted with final invoice)
   D. Final Release of Lien – 2nd tier subcontractors and suppliers (to be submitted by every subcontractor and supplier prior to or with final invoice)
   E. Affidavit Taxes have been paid. (to be submitted prior to or with final invoice)
   F. Guarantee and Warranty (to be submitted prior to or with final invoice)
   G. AIA Document G706, Contractors Affidavit of Payment of Debts and Claims (to be submitted prior to or with final invoice)
   H. AIA Document G706A, Contractors Affidavit of Release of Liens (to be submitted prior to or with final invoice)
   I. AIA Document G707, Consent of Surety to Final Payment (to be submitted prior to or with final invoice) THIS FORM IS PROVIDED BY YOUR BONDING Co.

END OF SECTION 01 77 50
(ATTACHMENTS FOLLOW)

TRADE CONTRACTOR'S PARTIAL RELEASE, WAIVER OF LIEN AND AFFIDAVIT

TO: Appoquinimink School District

RE: Appoquinimink School District Contract No.:SCMHS-BP02A
CM: Whiting-Turner Contracting Company
PROJECT: Summit Campus Middle & High School
CURRENT INVOICE NO.:
FOR THE PERIOD ENDING:

The undersigned Contractor, in consideration of the payments previously made and payment for the period covered by the current invoice set forth above, hereby waives and releases all mechanic's, materialman's or other liens and, to the fullest extent permitted by law, all rights to file any such liens in the future, and all claims and demands against Owner, Construction Manager, and the real property on which the project is located, in any manner arising out of work, labor, services, equipment or materials, performed or furnished by Contractor, its subcontractors and suppliers, in connection with the Project and trade contract, through the period covered by the current invoice and all previous invoices. The release does not apply to retention, nor to extra work which Contractor has been authorized to proceed with by the Construction Manager, but for which payment has not yet been approved.

Except as noted below, Contractor acknowledges and represents that for the period and work covered by all previous invoices for which Contractor has received payment:

1. Contractor has paid in full all amounts for subcontracts, labor, materials and rented equipment.
2. Contractor has properly applied previous payments to pay all outstanding invoices related to the Project.
3. Contractor is aware of no claims nor any circumstances that could give rise to any future claims against Owner, Construction Manager, Architect or other Trade Contractor on the Project.
4. All payroll, withholding, sales and other taxes, union benefits, insurance premiums and any other amount required by law, regulation or agreement to be paid in connection with labor, materials, and equipment for the Project have been paid in full.

List exceptions, if any:

Contractor represents that the amounts set forth below are correct and that the amount of the current payment due will be applied promptly to full payment of all outstanding amounts due from Contractor to others in connection with the Project.

Contract Sum to Date	$
Total Completed and Stored to Date	$
Total Retention to Date	$
Total Earned Less Retention	$
Less Previous Payments	$
Current Payment Due	$

BY:
(Name of Subcontractor)

BY:
(Signature, Printed Name and Title), Duly Authorized Agent of Subcontractor

STATE OF)
(CITY)(COUNTY)OF)) to wit:

On this _____ day of _____, 20___, appeared before me _____ and he/she made oath in due form of law that the facts, information and representations set forth in the foregoing Trade Contractor's Partial Release, Waiver of lien and Affidavit, are true and accurate to the best of his/her knowledge, information and belief.

_____ My commission expires: _____
Notary Public

PARTIAL WAIVER AND RELEASE
FOR SECOND TIER SUBCONTRACTORS AND SUPPLIERS

TO: Appoquinimink School District *(Owner)* DATE: _____

CONSTRUCTION MANAGER: The Whiting-Turner Contracting Co.

PROJECT: Summit Campus Middle & High School

CONTRACTOR: _____

The undersigned Company, a subcontractor or supplier to the Trade Contractor named above, and hereinafter referred to as the "Company", in consideration of payments previously received and in consideration of payment for work performed through the current date set forth below, hereby waives and releases all mechanics', materialman's, or other liens and, to the fullest extent permitted by law, all rights to file any such liens in the future, and all claims and demands against the Owner, the Construction Manager and the real property on which the Project is located, and any claims arising out of work, labor, services, equipment or materials, performed or furnished by the Company, its subcontractors and suppliers, in connection with the Project, through the period covered by the current invoice.

Except as noted below, the Company further acknowledges and represents that all persons and entities which have provided labor or material, or rented equipment, for or through the Company in connection with the project have been paid in full, for the periods covered by previous payments, that previous payments to the Company have been properly applied to pay all outstanding invoices relating to the Project, that the Company is not aware of any claims, or circumstances which could give rise to future claims, against the Owner, the Construction Manager or the Project, and that all payroll, withholding and other taxes, union benefits, insurance premiums or other amounts required by law, regulation or agreement to be paid in connection with labor for the project have been paid in full through the last date of work covered by the current invoice.

List exceptions, if any:

Last date of work period covered by current Invoice: _____

_____
(Name of Company)

BY: _____ Address: _____
Signature, Duly Authorized Agent of Company

_____

_____
Printed Name and Title

STATE OF)
(CITY)(COUNTY)OF))to wit:

On this _____ day of _____, _____, appeared before me _____ and he/she made oath in due form of law that the facts, information and representations set forth in the foregoing Company's Partial Waiver and Release, are true and accurate to the best of his/her knowledge, information and belief.

_____ My commission expires: _____
Notary Public

TRADE CONTRACTOR'S FINAL RELEASE AND AFFIDAVIT

TO: Appoquinimink School District *(OWNER)* **DATE:**_____

FROM: _____ *(Trade Contractor)*

RE: _____ **DATED:**_____

CONSTRUCTION MANAGER: The Whiting-Turner Contracting Company

PROJECT: Summit Campus Middle & High School

The undersigned Trade Contractor, in consideration of final payment as set forth herein, hereby waives all mechanic's liens and rights to file mechanic's liens and generally releases, and agrees to indemnify and save harmless, the above Owner, the construction manager, their successors and assigns, from all causes of action, suits, debts, contracts, damages, judgments, decrees, claims, demands, liens, rights to assert liens, awards and expenses, including attorneys' fees, in law, equity or otherwise, which Trade Contractor, its subcontractors and suppliers, their successors and assigns and any persons claiming through them or based upon their acts or omissions ever had, now have or hereafter may have against the above Owner, the construction manager, and any real property or improvements of Owner, from the beginning of the world to the date of this Release, in any manner relating to or arising in connection with the above referenced contract or project.

Trade Contractor represents that the amounts set forth below are correct and that the amount of the current payment due will promptly be applied to full payment of all outstanding amounts due from Trade Contractor to others in connection with the Project.

Final Contract Amount	$_____
Less Previous Payments	$_____
Final Payment Due	$_____

I hereby certify, under penalties of perjury, that the information and representations set forth above are true and accurate to the best of my knowledge, information and belief.

_____
Trade Contractor

BY:_____ Address: _____

_____

Signature, Duly Authorized Agent of Trade Contractor

_____

_____
Printed Name and Title

STATE OF)
(CITY)(COUNTY)OF)) to wit:

On this _____ day of _____, 20___, appeared before me _____ and he/she made oath in due form of law that the facts, information and representations set forth in the foregoing

Trade Contractor's Final Release and Affidavit, are true and accurate to the best of his/her knowledge, information and belief.

_____ My commission expires: _____

_____

(Notary Public)

FINAL WAIVER AND RELEASE
FOR SECOND TIER SUBCONTRACTORS AND SUPPLIERS

OWNER: Appoquinimink School District DATE: _____

CONSTRUCTION MANAGER: The Whiting-Turner Contracting Co.

PROJECT: Summit Campus Middle & High School

CONTRACTOR: _____

The undersigned Company, a subcontractor or supplier to the contractor named above, and hereinafter referred to as the "Company", in consideration of payments previously received and in consideration of final payment set forth below, hereby waives and releases all mechanics', materialman's, or other liens and, to the fullest extent permitted by law, all rights to file any such liens in the future, and all claims and demands against the Owner, the Construction Manager and the real property on which the Project is located, and any claims arising out of work, labor, services, equipment or materials, performed or furnished by the Company, its subcontractors and suppliers, in connection with the Project, from the beginning of the world to the date of this Waiver and Release.

Except as noted below, the Company further acknowledges and represents that all persons and entities which have provided labor or material, or rented equipment, for or through the Company in connection with the project have been paid in full, that previous payments to the Company have been properly applied to pay all outstanding invoices relating to the project, that the Company is not aware of any claims, or circumstances which could give rise to future claims, against the Owner, the Construction Manager or the Project, and that all payroll, withholding and other taxes, union benefits, insurance premiums or other amounts required by law, regulation or agreement to be paid in connection with labor for the project have been paid in full.

Final Payment Due: $_____

_____
(Name of Company)

BY: _____ Address: _____

_____
Signature, Duly Authorized Agent of Company

_____

_____
Printed Name and Title

STATE OF)
(CITY)(COUNTY)OF))to wit:

On this _____ day of _____, _____, appeared before me _____ and he/she made oath in due form of law that the facts, information and representations set forth in the foregoing Company's Final Waiver and Release, are true and accurate to the best of his/her knowledge, information and belief.

My commission expires: _____

_____

_____

(Notary Public)

AFFIDAVIT THAT ALL TAXES HAVE BEEN PAID

RE: Summit Campus Middle & high School

Date: _____

TO: APPOQUINIMINK SCHOOL DISTRICT

The undersigned certifies that all federal, state and local taxes (including sales, consumer, use and excise taxes) applicable to the work and services performed and materials and equipment incorporated into the work, in each case pursuant to the contract referred to above, have been paid in full.

SUPPLIER/CONTRACTOR: _____

By: _____

Date: _____ Title: _____

STATE OF)

COUNTY OF)

On this _____ day of _____, ____, before me personally came _____

_____, to me known who, being by me duly sworn, did depose and say that he resides at _____ that he is _____ of _____ the corporation that executed the foregoing instrument and that he signed his name thereto by order of the Board of Directors of said corporation.

_____
Notary Public

My Commission Expires: _____

GUARANTEE AND WARRANTY

WHEREAS, _____, hereinafter called the "Guarantor," entered into a contract dated_____, hereinafter called the "Contract," with the Appoquinimink School District, hereinafter called the Owner, for the construction of the Summit Campus Middle & High School (hereinafter referred to as the "Work"), located at _____.

WHEREAS, the Owner has performed, kept, observed and fulfilled each and every one of the obligations, promises, stipulated, terms and conditions on its part, and

WHEREAS, by the terms of the Contract, one of the conditions precedent to the making of final payment is the execution and delivery by the Grantor of this guarantee and warranty; and

WHEREAS, the Guarantor is now desirous of obtaining payment pursuant to the terms of said Contract and as a condition precedent to such payment, furnishes this separate guarantee and warranty for all work and material included in said Contract,

NOW THEREFORE, in consideration of the premises and of the payments made to the Guarantor under said Contract and in further consideration of final payment, the Guarantor does hereby for itself and its successors, heirs and assigns, guarantee and warrant to the Owner, its successors and assigns, that the Guarantor has performed all the work required by said Contract in accordance with the terms thereof including but not limited to satisfactory operation of all equipment by means or acceptance tests, correction of items on punchlists prepared by the Architect, and that all portions of the work completed under the Contract are perfect as to materials and workmanship and will so remain from _____ for a period of two (2) years; and

The Guarantor does hereby further guarantee and warrant that the Guarantor will make good and replace at its own cost and expense all defects in material and workmanship appearing during the period aforesaid and the Guarantor will be responsible for all damage caused to the Owner by such defects or by the work required to remedy such defects. All corrections to material and workmanship shall be made at the convenience of the Owner and shall be performed in a good workmanlike manner.

The Guarantor does hereby warrant and represent that it has obtained warranties and guarantees from its material and equipment suppliers and from its subcontractors to the fullest extent possible and as customary in the various trades and has delivered all assignable warranties and guarantees to the Owner.

It is understood that this guarantee shall in no way be construed to limit in any manner any of the provisions of the Contract or to modify or limit any of the obligations, liabilities and duties of the Guarantor thereunder.

It is further understood that his guarantee shall remain binding and irrevocable during the above stated period and that the Guarantor shall not contest the validly of, or in any way attempt to revoke or withdraw from, this guarantee for any cause whatsoever, whatever arising before or after the execution of the Contract or this guarantee.

IN WITNESS WHEREOF, the Guarantor has caused this instrument to be signed and executed this _____ day of _____, 20____.

_____
(GUARANTOR)

WITNESS: BY: _____

_____ TITLE: _____

STATE OF)
COUNTY OF)

On this _____ day of _____, 20 ____, before me personally came _____, to me known who, being by me duly sworn, did depose and say that he resides at _____, that he is _____ of _____ _____, the corporation that executed the foregoing instrument and that he signed his name thereto by order of the Board of Directors of said corporation.

_____
NOTARY PUBLIC

My Commission Expires: _____

DRAFT

AIA® Document G706™ – 1994

Contractor's Affidavit of Payment of Debts and Claims

PROJECT: *(Name and address)*
Summit Campus Middle & High School
1470 Aviator Way
Middletown, DE 19709

ARCHITECT'S PROJECT NUMBER:

OWNER: ☐
ARCHITECT: ☐
CONTRACTOR: ☐
SURETY: ☐
OTHER: ☐

CONTRACT FOR: General Construction
CONTRACT DATED:

TO OWNER: *(Name and address)*
Appoquinimink School District
118 S. Sixth Street
Odessa, DE 19730

STATE OF:
COUNTY OF:

The undersigned hereby certifies that, except as listed below, payment has been made in full and all obligations have otherwise been satisfied for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referenced above for which the Owner or Owner's property might in any way be held responsible or encumbered.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Consent of Surety to Final Payment. Whenever Surety is involved, Consent of Surety is required. AIA Document G707, Consent of Surety, may be used for this purpose

Indicate Attachment ☐ Yes ☒ No

The following supporting documents should be attached hereto if required by the Owner:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.

2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

3. Contractor's Affidavit of Release of Liens (AIA Document G706A).

CONTRACTOR: *(Name and address)*

BY: _____
(Signature of authorized representative)

_____
(Printed name and title)

Subscribed and sworn to before me on this date:

Notary Public:
My Commission Expires:

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DRAFT

AIA® Document G706A™ – 1994

Contractor's Affidavit of Release of Liens

PROJECT: *(Name and address)*
Summit Campus Middle & High School
1470 Aviator Way
Middletown, DE 19709

ARCHITECT'S PROJECT NUMBER:

CONTRACT FOR: General Construction
CONTRACT DATED:

OWNER: ☐
ARCHITECT: ☐
CONTRACTOR: ☐
SURETY: ☐
OTHER: ☐

TO OWNER: *(Name and address)*
Appoquinimink School District
118 S. Sixth Street
Odessa, DE 19730

STATE OF:
COUNTY OF:

The undersigned hereby certifies that to the best of the undersigned's knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of Work, labor or services who have or may have liens or encumbrances or the right to assert liens or encumbrances against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS:

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.

2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR: *(Name and address)*

BY:

(Signature of authorized representative)

(Printed name and title)

Subscribed and sworn to before me on this date:

Notary Public:
My Commission Expires:

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AIA® Document G707™ – 1994

Consent Of Surety to Final Payment

PROJECT: *(Name and address)*
Summit Campus Middle & High School
1470 Aviator Way
Middletown, DE 19709

ARCHITECT'S PROJECT NUMBER:

CONTRACT FOR: General Construction

CONTRACT DATED:

OWNER: ☐
ARCHITECT: ☐
CONTRACTOR: ☐
SURETY: ☐
OTHER: ☐

TO OWNER: *(Name and address)*
Appoquinimink School District
118 S. Sixth Street
Odessa, DE 19730

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the
(Insert name and address of Surety)

, SURETY,

on bond of
(Insert name and address of Contractor)

, CONTRACTOR,

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety of any of its obligations to
(Insert name and address of Owner)

, OWNER,

as set forth in said Surety's bond.

IN WITNESS WHEREOF, the Surety has hereunto set its hand on this date:
(Insert in writing the month followed by the numeric date and year.)

(Surety)

(Signature of authorized representative)

Attest:
(Seal):

(Printed name and title)

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SECTION 01 79 00
DEMONSTRATION AND TRAINING

PART 1 GENERAL

1.01 SUMMARY

A. Demonstration of products and systems where indicated in specific specification sections.

B. Training of Owner personnel in operation and maintenance is required for:

1. All software-operated systems.
2. HVAC systems and equipment.
3. Plumbing equipment.
4. Electrical systems and equipment.
5. Conveying systems.

C. Training of Owner personnel in care, cleaning, maintenance, and repair is required for:

1. Roofing, waterproofing, and other weather-exposed or moisture protection products.
2. Finishes, including flooring, wall finishes, ceiling finishes.
3. Fixtures and fittings.
4. Items specified in individual product Sections.

1.02 RELATED REQUIREMENTS

A. Other Specification Sections: Additional requirements for demonstration and training.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures; except:

1. Make all submittals specified in this section, and elsewhere where indicated for commissioning purposes, directly to the Commissioning Authority.
2. Make commissioning submittals on time schedule specified by Commissioning Authority.

B. Training Plan: Owner will designate personnel to be trained; tailor training to needs and skill-level of attendees.

1. Submit to Architect for transmittal to Owner.
2. Submit not less than four weeks prior to start of training.
3. Revise and resubmit until acceptable.
4. Provide an overall schedule showing all training sessions.
5. Include at least the following for each training session:
    a. Identification, date, time, and duration.
    b. Description of products and/or systems to be covered.
    c. Name of firm and person conducting training; include qualifications.
    d. Intended audience, such as job description.
    e. Objectives of training and suggested methods of ensuring adequate training.
    f. Methods to be used, such as classroom lecture, live demonstrations, hands-on, etc.
    g. Media to be used, such a slides, hand-outs, etc.
    h. Training equipment required, such as projector, projection screen, etc., to be provided by Contractor.

C. Training Manuals: Provide training manual for each attendee; allow for minimum of two attendees per training session.

1. Include applicable portion of O&M manuals.
2. Include copies of all hand-outs, slides, overheads, video presentations, etc., that are not included in O&M manuals.
3. Provide one extra copy of each training manual to be included with operation and maintenance data.

D. Video Recordings: Submit digital video recording of each demonstration and training session for Owner's subsequent use.

1.04 QUALITY ASSURANCE

A. Instructor Qualifications: Familiar with design, operation, maintenance and troubleshooting of the relevant products and systems.
   1. Provide as instructors the most qualified trainer of those contractors and/or installers who actually supplied and installed the systems and equipment.
   2. Where a single person is not familiar with all aspects, provide specialists with necessary qualifications.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 DEMONSTRATION - GENERAL

A. Demonstrations conducted during system start-up do not qualify as demonstrations for the purposes of this section, unless approved in advance by Owner.
B. Demonstrations conducted during Functional Testing need not be repeated unless Owner personnel training is specified.
C. Demonstration may be combined with Owner personnel training if applicable.
D. Operating Equipment and Systems: Demonstrate operation in all modes, including start-up, shut-down, seasonal changeover, emergency conditions, and troubleshooting, and maintenance procedures, including scheduled and preventive maintenance.
   1. Perform demonstrations not less than two weeks prior to Substantial Completion.
   2. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
E. Non-Operating Products: Demonstrate cleaning, scheduled and preventive maintenance, and repair procedures.
   1. Perform demonstrations not less than two weeks prior to Substantial Completion.

3.02 TRAINING - GENERAL

A. Commissioning Authority will prepare the Training Plan based on draft plans submitted.
B. Conduct training on-site unless otherwise indicated.
C. Owner will provide classroom and seating at no cost to Contractor.
D. Do not start training until Functional Testing is complete, unless otherwise specified or approved by the Commissioning Authority.
E. Provide training in minimum two hour segments.
F. The Commissioning Authority is responsible for determining that the training was satisfactorily completed and will provide approval forms.
G. Training schedule will be subject to availability of Owner's personnel to be trained; re-schedule training sessions as required by Owner; once schedule has been approved by Owner failure to conduct sessions according to schedule will be cause for Owner to charge Contractor for personnel "show-up" time.
H. Review of Facility Policy on Operation and Maintenance Data: During training discuss:
   1. The location of the O&M manuals and procedures for use and preservation; backup copies.
   2. Typical contents and organization of all manuals, including explanatory information, system narratives, and product specific information.

3. Typical uses of the O&M manuals.

I. Product- and System-Specific Training:
   1. Review the applicable O&M manuals.
   2. For systems, provide an overview of system operation, design parameters and constraints, and operational strategies.
   3. Review instructions for proper operation in all modes, including start-up, shut-down, seasonal changeover and emergency procedures, and for maintenance, including preventative maintenance.
   4. Provide hands-on training on all operational modes possible and preventive maintenance.
   5. Emphasize safe and proper operating requirements; discuss relevant health and safety issues and emergency procedures.
   6. Discuss common troubleshooting problems and solutions.
   7. Discuss any peculiarities of equipment installation or operation.
   8. Discuss warranties and guarantees, including procedures necessary to avoid voiding coverage.
   9. Review recommended tools and spare parts inventory suggestions of manufacturers.
   10. Review spare parts and tools required to be furnished by Contractor.
   11. Review spare parts suppliers and sources and procurement procedures.

J. Be prepared to answer questions raised by training attendees; if unable to answer during training session, provide written response within three days.

END OF SECTION

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SECTION 019113 – GENERAL COMMISSIONING REQUIREMENTS

PART 1 - GENERAL

1.1. RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2. SUMMARY

A. This Section includes general requirements that apply to implementation of commissioning without regard to systems, subsystems, and equipment being commissioned.

B. Related Sections include the following:

1. Division 01 Section "HVAC Commissioning Requirements" for specific requirements for commissioning HVAC systems.
2. Division 01 Section "Electrical Commissioning Requirements" for specific requirements for commissioning electrical systems.
3. Division 01 Section "Plumbing System Commissioning Requirements" for specific requirements for commissioning Plumbing systems.
4. Division 01 Section "Contract Closeout" for specific requirements for closeout at substantial and final completion.
5. Division 01 Section "Contract Closeout" for Specific Requirements for training and demonstration of systems to Owner.
6. Division 01 Section "Contract Closeout" for Specific Requirements related to the Preparation of systems operation and maintenance manuals.

1.3. DEFINITIONS

A. CxA: Commissioning Authority.

B. OPR: Owner's Project Requirements.

C. Systems, Subsystems, and Equipment: Where these terms are used together or separately, they shall mean "as-built" systems, subsystems, and equipment.

D. TAB: Testing, Adjusting, and Balancing.

1.4. COMMISSIONING TEAM

A. Members Appointed by Contractor(s): Individuals, each having authority to act on behalf of the entity he or she represents, explicitly organized to implement the commissioning process through coordinated actions. The commissioning team shall consist of, but not be

limited to, representatives of Contractor, including Project superintendent and subcontractors, installers, suppliers, and specialists deemed appropriate by the CxA.

B. Members Appointed by Owner:

1. CxA: The designated person, company, or entity that plans, schedules, and coordinates the commissioning team to implement the commissioning process. Owner will engage the CxA under a separate contract.
2. All contractor commissioning requirements and costs associated with commissioning the project shall be included in the base bid.
3. Representatives of the facility user and operation and maintenance personnel.
4. Architect and Engineering design professionals.

1.5. OWNER'S RESPONSIBILITIES

A. Assign operation and maintenance personnel and schedule them to participate in commissioning team activities including, but not limited to, the following:

1. Coordination meetings.
2. Training in operation and maintenance of systems, subsystems, and equipment.
3. Testing meetings.
4. Demonstration of operation of systems, subsystems, and equipment.

1.6. CONTRACTOR'S RESPONSIBILITIES

A. Provide utility services required for the commissioning process.

B. Contractor shall assign representatives with expertise and authority to act on behalf of the Contractor and schedule them to participate in and perform commissioning team activities including, but not limited to, the following:

1. Participate in commissioning and construction-phase coordination meetings.
2. Participate in maintenance orientation and inspection.
3. Participate in operation and maintenance training sessions.
4. Participate in final review at acceptance meeting.
5. Certify that Work is complete and systems are operational according to the Contract Documents, including calibration of instrumentation and controls.
6. Evaluate performance deficiencies identified in test reports and, in collaboration with entity responsible for system and equipment installation, recommend corrective action.
7. Review and approve final commissioning documentation.
8. Certify that all pre-test work and pre-testing of functional performance tests are complete and operational prior to scheduling performed testing by CxA. Submit completed functional performance test forms with data from pre-testing.
9. During functional performance testing, a representative from the mechanical contractor, controls contractor, and test/balance engineer must be present and participate in testing.

C. Subcontractors shall assign representatives with expertise and authority to act on behalf of subcontractors and schedule them to participate in and perform commissioning team activities including, but not limited to, the following:

1. Pre-test all systems/equipment prior to engaging CxA for Functional Performance Testing.
2. Participate in commissioning and construction-phase coordination meetings.
3. Participate in maintenance orientation and inspection.
4. Participate in procedures meeting for testing.
5. Participate in final review at acceptance meeting.
6. Provide schedule for operation and maintenance data submittals, equipment startup, and testing to CxA for incorporation into the commissioning plan. Update schedule on a weekly basis throughout the construction period.
7. Provide information to the CxA for developing construction-phase commissioning plan.
8. Participate in training sessions for Owner's operation and maintenance personnel.
9. Provide updated Project Record Documents to the CxA on a daily basis.
10. Gather and submit operation and maintenance data for systems, subsystems, and equipment to the CxA, as specified in Division 01 Section "Operation and Maintenance Data."
11. Provide technicians who are familiar with the construction and operation of installed systems and who shall develop specific test procedures and participate in testing of installed systems, subsystems, and equipment.
12. The test/balance subcontractor, mechanical contractor, and automatic temperature controls subcontractor must be on-site and provide assistance during all functional performance testing.

D. Contractors and subcontractors must pre-inspect and pre-test all equipment and systems prior to requesting functional performance testing by the CxA. All pre-start/start-up checklists and functional performance test forms must be completed and submitted to Engineer prior to scheduling formal functional performance testing.

1.7. CXA'S RESPONSIBILITIES

A. Organize and lead the commissioning team.

B. Prepare a construction-phase commissioning plan. Collaborate with Contractor and with subcontractors to develop test and inspection procedures. Include design changes and scheduled commissioning activities coordinated with overall Project schedule. Identify commissioning team member responsibilities, by name, firm, and trade specialty, for performance of each commissioning task.

C. Convene commissioning team meetings for the purpose of coordination, communication, and conflict resolution; discuss progress of the commissioning processes. Responsibilities include arranging for facilities, preparing agenda and attendance lists, and notifying participants. The CxA shall prepare and distribute minutes to commissioning team members and attendees within five workdays of the commissioning meeting.

D. At a mutually agreed upon time, conduct an initial construction-phase coordination meeting for the purpose of reviewing the commissioning activities and establishing tentative schedules for operation and maintenance submittals; operation and maintenance training sessions; TAB Work; and Project completion.

E. Observe and inspect construction and report progress and deficiencies. In addition to compliance with the Contract Documents, inspect systems and equipment installation for adequate accessibility for maintenance and component replacement or repair.

F. Prepare Project-specific test and inspection procedures and checklists.

G. Schedule, direct, witness, and document tests, inspections, and systems startup.

H. Compile test data, inspection reports, and certificates and include them in the systems manual and commissioning report.

I. Certify date of acceptance and startup for each item of equipment for start of warranty periods.

J. Review Project Record Documents for accuracy. Request revisions from Contractor to achieve accuracy. Project Record Documents requirements are specified in Division 01 Section "Project Record Documents."

K. Review and comment on operation and maintenance documentation and systems manual outline for compliance with the Contract Documents. Operation and maintenance documentation requirements are specified in Division 01 Section "Operation and Maintenance Data."

L. Assemble the final commissioning documentation, including the commissioning report and Project Record Documents.

1.8. COMMISSIONING DOCUMENTATION

A. Commissioning Plan: A document, prepared by CxA, that outlines the schedule, allocation of resources, and documentation requirements of the commissioning process, and shall include, but is not limited to the following:

1. Plan for delivery and review of submittals, systems manuals, and other documents and reports. Identification of the relationship of these documents to other functions and a detailed description of submittals that are required to support the commissioning processes. Submittal dates shall include the latest date approved submittals must be received without adversely affecting commissioning plan.
2. Description of the organization, layout, and content of commissioning documentation (including systems manual) and a detailed description of documents to be provided along with identification of responsible parties.
3. Identification of systems and equipment to be commissioned.
4. Description of schedules for testing procedures along with identification of parties involved in performing and verifying tests.
5. Identification of items that must be completed before the next operation can proceed.
6. Description of responsibilities of commissioning team members.
7. Description of observations to be made.
8. Description of requirements for operation and maintenance training, including required training materials.
9. Description of expected performance for systems, subsystems, equipment, and controls.
10. Schedule for commissioning activities with specific dates coordinated with overall construction schedule.

11. Identification of installed systems, subsystems, and equipment, including design changes that occurred during the construction phase.
12. Process and schedule for documenting changes on a continuous basis to appear in Project Record Documents.
13. Process and schedule for completing prestart and startup checklists for systems, subsystems, and equipment to be verified and tested.
14. Step-by-step procedures for testing systems, subsystems, and equipment with descriptions for methods of verifying relevant data, recording the results obtained, and listing parties involved in performing and verifying tests.

B. Test Checklists: CxA, with assistance of Contractor and Subcontractors, shall develop test checklists for each system, subsystem, or equipment including interfaces and interlocks, and include a separate entry, with space for comments, for each item to be tested. Prepare separate checklists for each mode of operation and provide space to indicate whether the mode under test responded as required. Provide space for testing personnel to sign off on each checklist. Specific checklist content requirements are specified in Division 01 Section "HVAC Commissioning Requirements", "Electrical Commissioning Requirements" and "Plumbing System Commissioning Requirements". Test checklists will be jointly developed as the project progresses. Each checklist, regardless of system, subsystem, or equipment being tested, shall include, but not be limited to, the following:

1. Name and identification code of tested item.
2. Test number.
3. Time and date of test.
4. Indication of whether the record is for a first test or retest following correction of a problem or issue.
5. Dated signatures of the person performing test and of the witness, if applicable.
6. Individuals present for test.
7. Deficiencies.
8. Issue number, if any, generated as the result of test.

C. Certificate of Readiness: Certificate of Readiness shall be signed by Contractor, Subcontractor(s), Installer(s), and CxA certifying that systems, subsystems, equipment, and associated controls are ready for testing. Completed test checklists signed by the responsible parties shall accompany this certificate.

D. Test and Inspection Reports: CxA shall record test data, observations, and measurements on test checklists. Photographs, forms, and other means appropriate for the application shall be included with data. CxA shall compile test and inspection reports and test and inspection certificates and include them in systems manual and commissioning report.

E. Corrective Action Documents: CxA shall document corrective action taken for systems and equipment that fail tests. Include required modifications to systems and equipment and revisions to test procedures, if any. Retest systems and equipment requiring corrective action and document retest results.

F. Issues Log: CxA shall prepare and maintain an issues log that describes design, installation, and performance issues that are at variance with the Contract Documents. Identify and track issues as they are encountered, documenting the status of unresolved and resolved issues.

1. Creating an Issues Log Entry:

a. Identify the issue with unique numeric or alphanumeric identifier by which

the issue may be tracked.
b. Assign a descriptive title of the issue.
c. Identify date and time of the issue.
d. Identify test number of test being performed at the time of the observation, if applicable, for cross-reference.
e. Identify system, subsystem, and equipment to which the issue applies.
f. Identify location of system, subsystem, and equipment.
g. Include information that may be helpful in diagnosing or evaluating the issue.
h. Note recommended corrective action.
i. Identify commissioning team member responsible for corrective action.
j. Identify expected date of correction.
k. Identify person documenting the issue.

2. Documenting Issue Resolution:

a. Log date correction is completed or the issue is resolved.
b. Describe corrective action or resolution taken. Include description of diagnostic steps taken to determine root cause of the issue, if any.
c. Identify changes to the Contract Documents that may require action.
d. State that correction was completed and system, subsystem, and equipment is ready for retest, if applicable.
e. Identify person(s) who corrected or resolved the issue.
f. Identify person(s) documenting the issue resolution.

3. Issues Log Report: On a periodic basis, but not less than for each commissioning team meeting, CxA shall prepare a written narrative for review of outstanding issues and a status update of the issues log. As a minimum, CxA shall include the following information in the issues log and expand it in the narrative:

a. Issue number and title.
b. Date of the identification of the issue.
c. Name of the commissioning team member assigned responsibility for resolution.
d. Expected date of correction.

G. Commissioning Report: CxA shall document results of the commissioning process including unresolved issues and performance of systems, subsystems, and equipment. The commissioning report shall indicate whether systems, subsystems, and equipment have been completed and are performing according to the Contract Documents. The commissioning report shall include, but is not limited to, the following:

1. Lists and explanations of substitutions; compromises; variances in the Contract Documents; record of conditions; and, if appropriate, recommendations for resolution. This report shall be used to evaluate systems, subsystems, and equipment and shall serve as a future reference document during Owner occupancy and operation. It shall describe components and performance that exceed requirements of the Contract Documents and those that do not meet requirements of the Contract Documents. It may also include a recommendation for accepting or rejecting systems, subsystems, and equipment.
2. Commissioning plan.
3. Testing plans and reports.
4. Corrective modification documentation.
5. Issues log.

6. Completed test checklists.
7. Punch Lists.
8. Test/Balance Reports.
9. Listing of off-season test(s) not performed and a schedule for their completion.
10. All commissioning documents must be submitted to the building Owner within 90 days of the date of receipt of the Certificate of Occupancy.

H. Systems Manual: CxA shall gather required information and compile systems manual. Systems manual shall include, but is not limited to, the following:

1. Project Record Documents as specified in Division 01 Section "Project Record Documents."
2. Final commissioning plan.
3. Commissioning report.
4. Operation and maintenance data as specified in Division 01 Section "Operation and Maintenance Data."

1.9. SUBMITTALS

A. Test Checklists and Report Forms: CxA shall submit sample checklists and forms to Contractor quality-control manager and subcontractors for review and comment. Submit two copies of each checklist and report form.

B. Test and Inspection Reports: CxA shall submit test and inspection reports.

C. Corrective Action Documents: CxA shall submit corrective action documents.

1.10. QUALITY ASSURANCE

A. Instructor Qualifications: Factory-authorized service representatives, experienced in training, operation, and maintenance procedures for installed systems, subsystems, and equipment.

B. Test Equipment Calibration: Comply with test equipment manufacturer's calibration procedures and intervals. Recalibrate test instruments immediately whenever instruments have been repaired following damage or dropping. Affix calibration tags to test instruments. Instruments shall have been calibrated within six months prior to use.

1.11. COORDINATION

A. Coordinating Meetings: CxA shall conduct coordination meetings of the commissioning team to review progress on the commissioning plan, to discuss scheduling conflicts, and to discuss upcoming commissioning process activities.

B. Pretesting Meetings: CxA shall conduct pretest meetings of the commissioning team to review startup reports, pretest inspection results, testing procedures, testing personnel and instrumentation requirements, and manufacturers' authorized service representative services for each system, subsystem, equipment, and component to be tested.

C. Testing Coordination: CxA shall coordinate sequence of testing activities to accommodate

required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

D. Manufacturers' Field Services: CxA and Contractor shall coordinate services of manufacturers' field services.

1.12. ALTERNATES

A. Refer to Division 01 Section, “Alternates” for description of work under this section affected by alternates.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1. OPERATION AND MAINTENANCE TRAINING REQUIREMENTS

A. Training Preparation Conference: Before operation and maintenance training, CxA shall convene a training preparation conference to include Owner's operation and maintenance personnel, Contractor, and subcontractors. In addition to requirements specified in Division 01 Section "Demonstration and Training," perform the following:

1. Review installed systems, subsystems, and equipment.
2. Review instructor qualifications.
3. Review instructional methods and procedures.
4. Review training module outlines and contents.
5. Review course materials (including operation and maintenance manuals).
6. Inspect and discuss locations and other facilities required for instruction.
7. Review and finalize training schedule and verify availability of educational materials, instructors, audiovisual equipment, and facilities needed to avoid delays.
8. For instruction that must occur outside, review weather and forecasted weather conditions and procedures to follow if conditions are unfavorable.

B. Training Modules: Develop an instruction program that includes individual training modules for each system, subsystem, and equipment as specified in Division 01 Section "Demonstration and Training."

END OF SECTION

SECTION 019114– PLUMBING COMMISSIONING REQUIREMENTS

PART 1 - GENERAL

1.1. RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2. SUMMARY

A. This Section includes requirements for commissioning the plumbing system and its subsystems and equipment. This Section supplements the general requirements specified in Division 01 Section "General Commissioning Requirements."

B. Related Sections include the following:

1. Division 01 Section "General Commissioning Requirements" for general requirements for commissioning processes that apply to this Section.

C. The following systems and/or equipment shall be commissioned:

1. Backflow Preventers.
2. Backwater Valves.
3. Domestic Hot Water Heaters.
4. Domestic Hot Water Re-Circulating System.
5. Domestic Water Meters (Including Interlock to ATC System).
6. Emergency Fixtures and Thermostatic Mixing Valves.
7. Elevator Sump Pump
8. Gas Pressure Regulators.
9. High/Low Mixing Valves.
10. Kitchen Solenoid Gas Valve.
11. Makeup Water Meters.
12. Plumbing Fixtures including Kitchen Plumbing Fixtures.
13. Plumbing Pumps.
14. Pressure Reducing Valves.
15. Roof/Wall Hydrants.
16. Thermostatic Mixing Valves Below Hand Sinks/Lavs or Emergency Fixtures.
17. Trap Priming Stations.

1.3. DEFINITIONS

A. Architect: Includes Architect identified in the Contract for Construction between Owner and Contractor, plus consultant/design professionals responsible for design of plumbing

systems, electrical, communications, controls for plumbing systems, and other related systems.

B. CxA: Commissioning Authority.

C. Systems, Subsystems, and Equipment: Where these terms are used together or separately, they shall mean "as-built" systems, subsystems, and equipment.

D. TAB: Testing, Adjusting, and Balancing.

1.4. CONTRACTOR'S RESPONSIBILITIES

A. The following responsibilities are in addition to those specified in Division 01 Section "General Commissioning Requirements."

B. Contractor:

1. Attend procedures meeting for TAB Work.
2. Certify that TAB Work is complete.
3. Assist performing functional performance tests.

C. Mechanical Contractor:

1. Attend TAB verification testing.
2. Provide measuring instruments and logging devices to record test data, and data acquisition equipment to record data for the complete range of testing for the required test period.
3. Assist performing functional performance tests.
4. Assist testing flow rates of all plumbing fixtures and plumbing equipment.

D. HVAC Instrumentation and Control Contractor: With the CxA, review control designs for compliance with the Contract Documents, controllability with respect to actual equipment to be installed, and recommend adjustments to control designs and sequence of operation descriptions.

E. TAB Subcontractor:

1. Contract Documents Review: With the CxA, review the Contract Documents before developing TAB procedures.

a. Verify the following:
i. Accessibility of equipment and components required for TAB Work.
ii. Verify flush valve gallons per flush matches schedules/submittals.
iii. Adequate number and placement of balancing valves to allow proper balancing and recording of water flow.
iv. Adequate number and placement of test ports and test instrumentation to allow reading and compilation of system and equipment performance data needed to conduct both TAB and commissioning testing.
v. Flow rates and aerations have been specified and compared to

central equipment output capacities.

b. Identify discontinuities and omissions in the Contract Documents.

c. This review of the Contract Documents by the TAB Subcontractor satisfies requirements for a design review report as specified in Division 23 Section "Testing Adjusting & Balancing for HVAC & Plumbing."

d. Assist performing functional performance tests.

2. Additional Responsibilities: Participate in tests specified in Division 23 Sections "Instrumentation & Controls of HVAC & Plumbing Systems."

F. Electrical Contractor:

1. With the Mechanical Contractor, coordinate installations and connections between and among electrical and plumbing systems, subsystems, and equipment.
2. Attend TAB verification testing.

1.5. COMMISSIONING DOCUMENTATION

A. The following are in addition to documentation specified in Division 01 Section "General Commissioning Requirements."

B. Test Checklists: CxA with assistance of Contractor shall develop test checklists for plumbing systems, subsystems, and equipment, including interfaces and interlocks with other systems. CxA shall prepare separate checklists for each mode of operation and provide space to indicate whether the mode under test responded as required. In addition to the requirements specified in Division 01 Section "General Commissioning Requirements," checklists shall include, but not be limited to, the following:

1. Calibration of sensors and sensor function.
2. Testing conditions under which test was conducted, including (as applicable) ambient conditions, set points, override conditions, and status and operating conditions that impact the results of test.
3. Control sequences for plumbing systems and equipment.
4. Strength of control signal for each set point at specified conditions.
5. Responses to control signals at specified conditions.
6. Sequence of response(s) to control signals at specified conditions.
7. Electrical demand or power input at specified conditions.
8. Power quality and related measurements.
9. Expected performance of systems, subsystems, and equipment at each step of test.
10. Narrative description of observed performance of systems, subsystems, and equipment. Notation to indicate whether the observed performance at each step meets the expected results.
11. Interaction of auxiliary equipment.
12. Issues log.

1.6. SUBMITTALS

A. The following submittals are in addition to those specified in Division 01 Section "General Commissioning Requirements."

B. Testing Procedures: CxA shall submit detailed testing plan, procedures, and checklists for each series of tests. Submittals shall include samples of data reporting sheets that will be part of the reports.

C. Certificate of Readiness: CxA shall compile certificates of readiness from Contractor certifying that systems, subsystems, equipment, and associated controls are ready for testing.

D. Certificate of Completion of Installation, Prestart, and Startup: CxA shall certify that installation, prestart, and startup activities have been completed. Certification shall include completed checklists provided by TAB Subcontractor as specified in Division 23 Section "Testing Adjusting & Balancing for HVAC & Plumbing."

E. Certified Pipe Cleaning and Flushing Report: CxA shall certify that pipe cleaning, flushing, hydrostatic testing, and chemical treating have been completed.

F. Test and Inspection Reports: CxA shall compile and submit test and inspection reports and certificates, and shall include them in systems manual and commissioning report.

G. Corrective Action Documents: CxA shall submit corrective action documents.

H. Certified TAB Reports: CxA shall submit verified, certified TAB reports.

1.7. ALTERNATES

A. Refer to Division 01 Section, “Alternates” for description of work under this section affected by alternates.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1. TESTING PREPARATION

A. Prerequisites for Testing:

1. Certify that plumbing systems, subsystems, and equipment have been completed, calibrated, and started; are operating according to the Contract Documents; and that Certificates of Readiness are signed and submitted.
2. Certify that plumbing instrumentation and control systems have been completed and calibrated; are operating according to the Contract Documents; and that pretest set points have been recorded.
3. Certify that plumbing procedures have been completed, and that TAB reports have been submitted, discrepancies corrected, and corrective work approved.
4. Test systems and intersystem performance after approval of test checklists for systems, subsystems, and equipment.
5. Set systems, subsystems, and equipment into operating mode to be tested (e.g., normal shut down, normal auto position, normal manual position, unoccupied cycle, emergency power, and alarm conditions).

6. Verify each operating cycle after it has been running for a specified period and is operating in a steady-state condition.
7. Inspect and verify the position of each device and interlock identified on checklists. Sign off each item as acceptable, or failed. Repeat this test for each operating cycle that applies to system being tested.
8. Check safety cutouts, alarms, and interlocks with life-safety systems during each mode of operation.
9. Annotate checklist or data sheet when a deficiency is observed.
10. Verify equipment interface with monitoring and control system and TAB criteria; include the following:

    a. Backflow preventer cross connection tests.
    b. Discharge temperatures of water heaters.
    c. Domestic water meter total volume in gallons.
    d. Flow rates for domestic re-circulating systems.
    e. Flow rates in gallons per minute for showerheads.
    f. High/low emergency fixture and thermostatic mixing valve temperatures and water flow rates.
    g. Re-circ. pump pressures and flow rates.
    h. Roof hydrant operation and freeze protection.
    i. Trap priming station water discharge.
    j. Water heater temperatures and set points.
    k. Water meter flow rates and calibration.

11. Verify proper responses of monitoring and control system controllers and sensors to include the following:

    a. For each controller or sensor, record the indicated monitoring and control system reading and the test instrument reading. If initial test indicates that the test reading is outside of the control range of the installed device, check calibration of the installed device and adjust as required. Retest malfunctioning devices and record results on checklist or data sheet.
    b. Report deficiencies and prepare an issues log entry.

12. Verify that plumbing equipment field quality-control testing has been completed and approved. CxA shall direct, witness, and document field quality-control tests, inspections, and startup specified in individual Division 22 Sections.
13. Verify flow rates of all aerators.
14. Verify the operation and flow rates of all plumbing fixtures and plumbing equipment.

B. Testing Instrumentation: Install measuring instruments and logging devices to record test data for the required test period. Instrumentation shall monitor and record full range of operating conditions and shall allow for calculation of total capacity of system for each mode of operation. Operational modes include the following:

1. Occupied and unoccupied.
2. Emergency power supply.
3. Life-safety and safety systems.
4. Temporary upset of system operation.
5. Partial occupancy conditions.

6. Special cycles.
7. Alarm conditions.
8. Lead/lag operation where redundant equipment is indicated.
9. All alarms.

3.2. TAB VERIFICATION

A. TAB Subcontractor shall coordinate with CxA for work required in Division 23 Section "Testing Adjusting & Balancing for HVAC & Plumbing." TAB Subcontractor shall copy CxA with required reports, sample forms, checklists, and certificates.

B. Contractor, Plumbing Contractor, and CxA shall witness TAB Work.

C. TAB Preparation:

1. TAB Subcontractor shall provide CxA with data required for "Pre-Field TAB Engineering Reports" specified in Division 23 Section "Testing Adjusting & Balancing for HVAC & Plumbing."

a. CxA shall use this data to certify that prestart and startup activities have been completed for systems, subsystems, and equipment installation.

D. Verification of Final TAB Report:

1. CxA shall select, at random, 10 percent of report for field verification.
2. CxA shall notify TAB Subcontractor 10 days in advance of the date of field verification; however, notice shall not include data points to be verified. The TAB Subcontractor shall use the same instruments (by model and serial number) that were used when original data were collected.
3. Failure of an item is defined as follows:

a. A deviation of more than 10 percent.

4. Failure of more than 10 percent of selected items shall result in rejection of final TAB report.

E. If deficiencies are identified during verification testing, CxA shall notify the HVAC Contractor and Architect shall take action to remedy the deficiency. Architect shall review final tabulated checklists and data sheets to determine if verification is complete and that system is operating according to the Contract Documents.

F. CxA shall certify that TAB Work has been successfully completed.

3.3. TESTING

A. Test systems and intersystem performance after test checklists for systems, subsystems, and equipment have been approved.

B. Perform tests using design conditions whenever possible.

1. Simulate conditions by imposing an artificial load when it is not practical to test

under design conditions and when written approval for simulated conditions is received from CxA. Before simulating conditions, calibrate testing instruments. Set and document simulated conditions and methods of simulation. After tests, return settings to normal operating conditions.

2. Alter set points when simulating conditions is not practical and when written approval is received from CxA.
3. Alter sensor values with a signal generator when design or simulating conditions and altering set points are not practical. Do not use sensor to act as signal generator to simulate conditions or override values.

C. Scope of Plumbing Contractor Testing:

1. Testing scope shall include entire plumbing installation, from central hot water heating equipment for heat generation through distribution systems to each fixture. It shall include measuring capacities and effectiveness of operational and control functions.
2. Test all operating modes, interlocks, control responses, responses to abnormal or emergency conditions, and verify proper response of building automation system controllers and sensors.
3. Test all plumbing fixtures and kitchen plumbing fixtures and verify flow rates.
4. Test time to reach temperature and temperature of hot water at all fixtures with thermostatic mixing valves.
5. Test discharge temperature of high/low mixing valves.
6. Test discharge of all emergency fixture mixing valve discharge temperature.
7. Test discharge of water at all trap priming stations.
8. Verify that all backflow preventers have been tested. Document in writing.
9. Test operation of all water meters.
10. Test domestic water heaters.
11. Test water meters and interlock with ATC system.
12. Test operation, set points, and safeties of water heaters.
13. Verify that backflow preventers have been tested.
14. Test discharge of water at all trap priming stations.
15. Test the operation of all gas solenoid valves, including interlocks to kitchen ventilation system.
16. Test makeup water valve train flow meter.
17. Verify PRV setpoints.

D. Detailed Testing Procedures: CxA, with Plumbing Contractor, TAB Subcontractor, and Plumbing Instrumentation and Control Contractor, shall prepare detailed testing plans, procedures, and checklists for plumbing systems, subsystems, and equipment.

E. HVAC Instrumentation and Control System Testing:

1. Field testing plans and testing requirements are specified in Division 23 Section "Instrumentation & Controls of HVAC & Plumbing Systems." The CxA, Plumbing Contractor, and the HVAC Instrumentation and Control Contractor shall collaborate to prepare testing plans.
2. CxA shall convene a meeting of appropriate entities to review test report of HVAC instrumentation and control systems.

F. Plumbing System Testing: Plumbing Contractor shall prepare a testing plan to verify

performance of water heaters, domestic re-circulating systems, backflow preventers, plumbing fixtures, trap priming stations, high/low mixing valves, domestic pumps, domestic water meters, thermostatic mixing valves, and duplex sump pumps. Plan shall include the following:

1. Sequence of testing and testing procedures for each item of equipment and section of pipe to be tested, identified by identification marker. Markers shall be keyed to Drawings for each pipe section showing the physical location of each item of equipment and pipe test section. Drawings shall be formatted to allow each item of equipment and section of piping to be physically located and identified when referred to in the system testing plan.
2. Tracking checklist for managing and ensuring that all pipe sections have been tested.
3. Design and actual measurements for all equipment.

G. Deferred Testing:

1. If tests cannot be completed because of a deficiency outside the scope of the plumbing system, the deficiency shall be documented and reported to Owner. Deficiencies shall be resolved and corrected by appropriate parties and test rescheduled.
2. If the testing plan indicates specific seasonal testing, appropriate initial performance tests shall be completed and documented and additional tests scheduled.

H. Testing Reports:

1. Reports shall include measured data, data sheets, and a comprehensive summary describing the operation of systems at the time of testing.
2. Include data sheets for each controller to verify proper operation of the control system, the system it serves, the service it provides, and its location. For each controller, provide space for recording its readout, the reading at the controller's sensor(s), plus comments. Provide space for testing personnel to sign off on each data sheet.
3. Prepare a preliminary test report. Deficiencies will be evaluated by Architect to determine corrective action. Deficiencies shall be corrected and test repeated.

END OF SECTION

SECTION 019115 - HVAC COMMISSIONING REQUIREMENTS

PART 1 - GENERAL

1.1. RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2. SUMMARY

A. This Section includes requirements for commissioning the HVAC system and its subsystems and equipment. This Section supplements the general requirements specified in Division 01 Section "General Commissioning Requirements."

B. Related Sections include the following:

1. Division 01 Section "General Commissioning Requirements" for general requirements for commissioning processes that apply to this Section.

1.3. DEFINITIONS

A. Architect: Includes Architect identified in the Contract for Construction between Owner and Contractor, plus consultant/design professionals responsible for design of HVAC, electrical, communications, controls for HVAC systems, and other related systems.

B. CxA: Commissioning Authority.

C. Systems, Subsystems, and Equipment: Where these terms are used together or separately, they shall mean "as-built" systems, subsystems, and equipment.

D. TAB: Testing, Adjusting, and Balancing.

1.4. CONTRACTOR'S RESPONSIBILITIES

A. The following responsibilities are in addition to those specified in Division 01 Section "General Commissioning Requirements."

B. Contractor:

1. Attend procedures meeting for TAB Work.

2. Certify that TAB Work is complete.
3. Assist performing functional performance tests.

C. Mechanical Contractor:

1. Attend TAB verification testing.
2. Provide measuring instruments and logging devices to record test data, and data acquisition equipment to record data for the complete range of testing for the required test period.
3. Assist performing functional performance tests.

D. HVAC Instrumentation and Control Contractor: With the CxA, review control designs for compliance with the Contract Documents, controllability with respect to actual equipment to be installed, and recommend adjustments to control designs and sequence of operation descriptions. Assist with performing functional performance tests.

E. TAB Subcontractor:

1. Contract Documents Review: With the CxA, review the Contract Documents before developing TAB procedures.

    a. Verify the following:
        i. Accessibility of equipment and components required for TAB Work.
        ii. Adequate number and placement of duct balancing dampers to allow proper balancing while minimizing sound levels in occupied spaces.
        iii. Adequate number and placement of balancing valves to allow proper balancing and recording of water flow.
        iv. Adequate number and placement of test ports and test instrumentation to allow reading and compilation of system and equipment performance data needed to conduct both TAB and commissioning testing.
        v. Air and water flow rates have been specified and compared to central equipment output capacities.
    b. Identify discontinuities and omissions in the Contract Documents.
    c. This review of the Contract Documents by the TAB Subcontractor satisfies requirements for a design review report as specified in Division 23 Section "Testing Adjusting & Balancing for HVAC & Plumbing."
    d. Assist performing functional performance tests.

2. Additional Responsibilities: Participate in tests specified in Division 23 Sections "Instrumentation & Controls of HVAC & Plumbing Systems."

F. Electrical Contractor:

1. With the Mechanical Contractor, coordinate installations and connections between and among electrical and HVAC systems, subsystems, and equipment.
2. Attend TAB verification testing.

1.5. COMMISSIONING DOCUMENTATION

A. The following are in addition to documentation specified in Division 01 Section "General Commissioning Requirements."

B. Test Checklists: CxA with assistance of Contractor shall develop test checklists for HVAC systems, subsystems, and equipment, including interfaces and interlocks with other systems. CxA shall prepare separate checklists for each mode of operation and provide space to indicate whether the mode under test responded as required. In addition to the requirements specified in Division 01 Section "General Commissioning Requirements," checklists shall include, but not be limited to, the following:

1. Calibration of sensors and sensor function.
2. Testing conditions under which test was conducted, including (as applicable) ambient conditions, set points, override conditions, and status and operating conditions that impact the results of test.
3. Control sequences for HVAC systems.
4. Strength of control signal for each set point at specified conditions.
5. Responses to control signals at specified conditions.
6. Sequence of response(s) to control signals at specified conditions.
7. Electrical demand or power input at specified conditions.
8. Power quality and related measurements.
9. Expected performance of systems, subsystems, and equipment at each step of test.
10. Narrative description of observed performance of systems, subsystems, and equipment. Notation to indicate whether the observed performance at each step meets the expected results.
11. Interaction of auxiliary equipment.
12. Issues log.

1.6. SUBMITTALS

A. The following submittals are in addition to those specified in Division 01 Section "General Commissioning Requirements."

B. Testing Procedures: CxA shall submit detailed testing plan, procedures, and checklists for each series of tests. Submittals shall include samples of data reporting sheets that will be part of the reports.

C. Certificate of Readiness: CxA shall compile certificates of readiness from Contractor certifying that systems, subsystems, equipment, and associated controls are ready for testing.

D. Certificate of Completion of Installation, Prestart, and Startup: CxA shall certify that installation, prestart, and startup activities have been completed. Certification shall include completed checklists provided by TAB Subcontractor as specified in Division 23 Section "Testing Adjusting & Balancing for HVAC & Plumbing."

E. Test and Inspection Reports: CxA shall compile and submit test and inspection reports and certificates, and shall include them in systems manual and commissioning report.

F. Corrective Action Documents: CxA shall submit corrective action documents.

G. Certified TAB Reports: CxA shall submit verified, certified TAB reports.

1.7. ALTERNATES

A. Refer to Division 01 Section, “Alternates” for description of work under this section affected by alternates.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1. TESTING PREPARATION

A. Prerequisites for Testing:

1. Certify that HVAC systems, subsystems, and equipment have been completed, calibrated, and started; are operating according to the Contract Documents; and that Certificates of Readiness are signed and submitted.
2. Certify that HVAC instrumentation and control systems have been completed and calibrated; are operating according to the Contract Documents; and that pretest set points have been recorded.
3. Certify that TAB procedures have been completed, and that TAB reports have been submitted, discrepancies corrected, and corrective work approved.
4. Test systems and intersystem performance after approval of test checklists for systems, subsystems, and equipment.
5. Set systems, subsystems, and equipment into operating mode to be tested (e.g., normal shut down, normal auto position, normal manual position, unoccupied cycle, emergency power, and alarm conditions).
6. Verify each operating cycle after it has been running for a specified period and is operating in a steady-state condition.
7. Inspect and verify the position of each device and interlock identified on checklists. Sign off each item as acceptable, or failed. Repeat this test for each operating cycle that applies to system being tested.
8. Check safety cutouts, alarms, and interlocks with duct detectors and life-safety systems during each mode of operation.
9. Annotate checklist or data sheet when a deficiency is observed.
10. Verify equipment interface with monitoring and control system and TAB criteria

11. Verify proper responses of monitoring and control system controllers and sensors to include the following:
    a. For each controller or sensor, record the indicated monitoring and control system reading and the test instrument reading. If initial test indicates that the test reading is outside of the control range of the installed device, check calibration of the installed device and adjust as required. Retest malfunctioning devices and record results on checklist or data sheet.
    b. Report deficiencies and prepare an issues log entry.

12. Verify that HVAC equipment field quality-control testing has been completed and approved. CxA shall direct, witness, and document field quality-control tests, inspections, and startup specified in individual Division 23 Sections.

B. Testing Instrumentation: Install measuring instruments and logging devices to record test data for the required test period. Instrumentation shall monitor and record full range of operating conditions and shall allow for calculation of total capacity of system for each mode of operation. For individual room cooling tests, provide temporary heaters to impose a cooling load. Operational modes include the following:

1. Heating/Cooling Mode.
2. Occupied and unoccupied.
3. Warm up and cool down.
4. Economizer cycle/return air fan/damper operation.
5. Emergency power supply.
6. Life-safety and safety systems.
7. Duct detectors.
8. Fire safety.
9. Temporary upset of system operation.
10. Partial occupancy conditions.
11. Special cycles.
12. Lead/lag/standby modes of operation where redundant equipment is indicated.
13. All alarms.
14. Kitchen make-up air unit and exhaust air fan at full, partial, and minimum air flow rates.
15. Flow switch shut-down and alarm.
16. Condensate overflow safety switch shut-down and alarm.
17. Condensate pump operation.
18. Hot gas re-heat coils in dehumidification mode.

3.2. TAB VERIFICATION

A. TAB Subcontractor shall coordinate with CxA for work required in Division 23 Section "Testing Adjusting & Balancing for HVAC & Plumbing." TAB Subcontractor shall copy CxA with required reports, sample forms, checklists, and certificates.

B. Contractor, HVAC Contractor, and CxA shall witness TAB Work.

C. TAB Preparation:

1. TAB Subcontractor shall provide CxA with data required for "Pre-Field TAB Engineering Reports" specified in Division 23 Section "Testing Adjusting & Balancing for HVAC & Plumbing."

a. CxA shall use this data to certify that prestart and startup activities have been completed for systems, subsystems, and equipment installation.

D. Verification of Final TAB Report:

1. CxA shall select, at random, 10 percent of report for field verification.
2. CxA shall notify TAB Subcontractor 10 days in advance of the date of field verification; however, notice shall not include data points to be verified. The TAB Subcontractor shall use the same instruments (by model and serial number) that were used when original data were collected.
3. Failure of an item is defined as follows:

a. For all readings a deviation of more than 10 percent.

4. Failure of more than 10 percent of selected items shall result in rejection of final TAB report.

E. If deficiencies are identified during verification testing, CxA shall notify the HVAC Contractor and Architect and shall take action to remedy the deficiency. Architect shall review final tabulated checklists and data sheets to determine if verification is complete and that system is operating according to the Contract Documents.

F. CxA shall certify that TAB Work has been successfully completed.

3.3. TESTING

A. Test systems and intersystem performance after test checklists for systems, subsystems, and equipment have been approved.

B. Contractors and subcontractors must pre-inspect and pre-test all equipment and systems prior to requesting functional performance testing by the CxA. All pre-start/start-up checklists and functional performance test forms must be completed and submitted to Engineer prior to scheduling formal functional performance testing.

C. Perform tests using design conditions whenever possible.

1. Simulate conditions by imposing an artificial load when it is not practical to test under design conditions and when written approval for simulated conditions is received from CxA. Before simulating conditions, calibrate testing instruments. Set and document simulated conditions and methods of simulation. After tests, return settings to normal operating conditions.
2. Alter set points when simulating conditions is not practical and when written approval is received from CxA.
3. Alter sensor values with a signal generator when design or simulating conditions and altering set points are not practical. Do not use sensor to act as signal generator to simulate conditions or override values.

D. Scope of HVAC Contractor Testing:

1. Testing scope shall include entire HVAC installation, from central equipment for heat generation and refrigeration through distribution systems to each conditioned space. It shall include measuring capacities and effectiveness of operational and control functions.
2. Test all operating modes, interlocks, control responses, responses to abnormal or emergency conditions, and verify proper response of building automation system controllers and sensors.

E. Detailed Testing Procedures: CxA, with HVAC Contractor, TAB Subcontractor, and HVAC Instrumentation and Control Contractor, shall prepare detailed testing plans, procedures, and checklists for HVAC systems, subsystems, and equipment.

F. HVAC Instrumentation and Control System Testing:

1. Field testing plans and testing requirements are specified in Division 23 Section "Automatic Temperature Control". The CxA, HVAC Contractor, Equipment Provider/Manufacturer and the HVAC Instrumentation and Control Contractor shall collaborate to prepare testing plans.
2. CxA shall convene a meeting of appropriate entities to review test report of HVAC instrumentation and control systems.

G. Energy Supply System Testing: HVAC Contractor shall prepare a testing plan to verify performance of gas systems and equipment. Plan shall include the following:

1. Sequence of testing and testing procedures for each equipment item and pipe section to be tested, identified by pipe zone or sector identification marker. Markers shall be keyed to Drawings for each pipe sector showing the physical location of each designated pipe test section. Drawings keyed to pipe zones or sectors shall be formatted to allow each section of piping to be physically located and identified when referred to in system testing plan.
2. Tracking checklist for managing and ensuring that all pipe sections have been tested.

H. Heat-Generation System Testing: HVAC Contractor shall prepare a testing plan to verify performance of boilers, unit heaters, Cabinet heaters, hot water cols, steel radiators, Electirc Cabinet Unit Heater, Electric Wall Heater, Electric Steel Panel Baseboard, and conventional ductless units. Plan shall include the following:

1. Sequence of testing and testing procedures for each item of equipment and section of pipe to be tested, identified by identification marker. Markers shall be keyed to Drawings for each pipe sector showing the physical location of each item of equipment and pipe test section. Drawings shall be formatted to allow each item of equipment and section of piping to be physically located and identified when referred to in the system testing plan.
2. Tracking checklist for managing and ensuring that all pipe sections have been tested.
3. Variable refrigerant flow equipment volts, amps, temperatures, fluid flow rates, and modes of operation.

I. Refrigeration/Heat Rejection System Testing: HVAC Contractor shall prepare a testing

plan to verify performance of Air Cooled Water chiller, Split System Heat Pump Unit, Ductless Split systems Cooling unit,condensing unit, and other refrigeration systems. Plan shall include the following:

1. Sequence of testing and testing procedures for each item of equipment and section of pipe to be tested, identified by identification marker. Markers shall be keyed to Drawings showing the physical location of each item of equipment and pipe test section. Drawings shall be formatted to allow each item of equipment and section of piping to be physically located and identified when referred to in the system testing plan.
2. Tracking checklist for managing and ensuring that all pipe sections have been tested.
3. Variable refrigerant flow equipment volts, amps, temperatures, fluid flow rates, and modes of operation.

J. HVAC Distribution System Testing: HVAC Contractor shall prepare a testing plan to verify performance of air and hydronic distribution systems, special exhaust ERV unit supply and exhaust, kitchen ventilation systems, an other distribution systems. Include HVAC terminal equipment and unitary equipment. Plan shall include the following:

1. Sequence of testing and testing procedures for each item of equipment and section of pipe to be tested, identified by identification marker. Markers shall be keyed to Drawings showing the physical location of each item of equipment and pipe test section. Drawings shall be formatted to allow each item of equipment and section of piping to be physically located and identified when referred to in the system testing plan.
2. Tracking checklist for managing and ensuring that all pipe sections have been tested.
3. Equipment, air flow rates, air temperatures, fluid flow rates, safeties, freeze protection pump operation, and demand controlled ventilation.

K. Deferred Testing:

1. If tests cannot be completed because of a deficiency outside the scope of the HVAC system, the deficiency shall be documented and reported to Owner. Deficiencies shall be resolved and corrected by appropriate parties and test rescheduled.
2. If the testing plan indicates specific seasonal testing, appropriate initial performance tests shall be completed and documented and additional tests scheduled.

L. Testing Reports:

1. Reports shall include measured data, data sheets, and a comprehensive summary describing the operation of systems at the time of testing.
2. Include data sheets for each controller to verify proper operation of the control system, the system it serves, the service it provides, and its location. For each controller, provide space for recording its readout, the reading at the controller's sensor(s), plus comments. Provide space for testing personnel to sign off on each data sheet.
3. Prepare a preliminary test report. Deficiencies will be evaluated by Architect to determine corrective action. Deficiencies shall be corrected and test repeated.

END OF SECTION

SECTION 019116 – COMMISSIONING OF ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1. RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2. SUMMARY

A. This Section includes requirements for commissioning the electrical system and its subsystems and equipment. This Section supplements the general requirements specified in Division 01 Section "General Commissioning Requirements."

B. Related Sections include the following:

1. Division 01 Section "General Commissioning Requirements" for general requirements for commissioning processes that apply to this Section.

C. The following systems and/or equipment shall be commissioned:

1. Normal Power Supply System

    a. Main switchboard / service disconnect
    b. Distribution panelboards
    c. Branch panelboards
    d. Low-voltage transformers
    e. Enclosed switches for distribution
    f. Enclosed circuit breakers for distribution

2. Emergency/Standby Power Supply System(s)

    a. Generator
    b. Transfer switches
    c. Distribution panelboard(s)
    d. Branch panelboards
    e. Low-voltage transformer(s)
    f. Enclosed switches for distribution
    g. Enclosed circuit breakers for distribution

3. Lighting Control System(s)

    a. Lighting Control Panels
    b. Occupancy/Vacancy Sensors
    c. Daylight Sensors
    d. Wall Switches/Control Stations
    e. Plug-Load Control LED Receptacle Outlets

1.3. DEFINITIONS

A. Architect: Includes Architect identified in the Contract for Construction between Owner and Contractor, plus consultant/design professionals responsible for design of electrical systems, electrical, communications, and other related systems.

B. CxA: Commissioning Authority.

C. Systems, Subsystems, and Equipment: Where these terms are used together or separately, they shall mean "as-built" systems, subsystems, and equipment.

1.4. CONTRACTOR'S RESPONSIBILITIES

A. The following responsibilities are in addition to those specified in Division 01 Section "General Commissioning Requirements."

B. Electrical Contractor:

1. Provide certified and calibrated measuring instruments and logging devices to record test data, and data acquisition equipment to record data for the complete range of testing for the required test period.

C. Electrical Contractor:

1. With the Mechanical Contractor, coordinate installations and connections between and among electrical and HVAC systems, subsystems, and equipment.
2. Attend TAB verification testing.

1.5. COMMISSIONING DOCUMENTATION

A. The following are in addition to documentation specified in Division 01 Section "General Commissioning Requirements."

B. Test Checklists: CxA with assistance of Contractor shall develop test checklists for electrical systems, subsystems, and equipment, including interfaces and interlocks with other systems. CxA shall prepare separate checklists for each mode of operation and provide space to indicate whether the mode under test responded as required. In addition to the requirements specified in Division 01 Section "General Commissioning Requirements," checklists shall include, but not be limited to, the following:

1. Calibration of sensors and sensor function.
2. Testing conditions under which test was conducted, including (as applicable) ambient conditions, set points, override conditions, and status and operating conditions that impact the results of test.
3. Control sequences for electrical and emergency generator systems.
4. Strength of control signal for each set point at specified conditions.
5. Responses to control signals at specified conditions.
6. Sequence of response(s) to control signals at specified conditions.
7. Electrical demand or power input at specified conditions.

8. Power quality and related measurements.
9. Expected performance of systems, subsystems, and equipment at each step of test.
10. Narrative description of observed performance of systems, subsystems, and equipment. Notation to indicate whether the observed performance at each step meets the expected results.
11. Interaction of auxiliary equipment.
12. Issues log.

1.6. SUBMITTALS

A. The following submittals are in addition to those specified in Division 01 Section "General Commissioning Requirements."

B. Testing Procedures: CxA shall submit detailed testing plan, procedures, and checklists for each series of tests. Submittals shall include samples of data reporting sheets that will be part of the reports.

C. Certificate of Readiness: CxA shall compile certificates of readiness from Contractor certifying that systems, subsystems, equipment, and associated controls are ready for testing.

D. Certificate of Completion of Installation, Prestart, and Startup: CxA shall certify that installation, prestart, and startup activities have been completed.

E. Test and Inspection Reports: CxA shall compile and submit test and inspection reports and certificates, and shall include them in systems manual and commissioning report.

F. Corrective Action Documents: CxA shall submit corrective action documents.

1.7. ALTERNATES

A. Refer to Division 01 Section, “Alternates” for description of work under this Section affected by alternates.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1. TESTING PREPARATION

A. Prerequisites for Testing:

1. Certify that electrical systems, subsystems, and equipment have been completed, calibrated, and started; are operating according to the Contract Documents; and that Certificates of Readiness are signed and submitted.
2. Certify that electrical instrumentation and control systems have been completed and calibrated; are operating according to the Contract Documents; and that

pretest set points have been recorded.

3. Test systems and intersystem performance after approval of test checklists for systems, subsystems, and equipment.
4. Set systems, subsystems, and equipment into operating mode to be tested (e.g., normal shut down, normal auto position, normal manual position, unoccupied cycle, emergency power, and alarm conditions).
5. Verify each operating cycle after it has been running for a specified period and is operating in a steady-state condition.
6. Inspect and verify the position of each device and interlock identified on checklists. Sign off each item as acceptable or failed. Repeat this test for each operating cycle that applies to the system being tested.
7. Check safety cutouts, alarms, and interlocks with life-safety systems during each mode of operation.
8. Annotate checklist or data sheet when a deficiency is observed.
9. Verify proper responses of monitoring and control system controllers and sensors to include the following:

    a. For each controller or sensor, record the indicated monitoring and control system reading and the test instrument reading. If the initial test indicates that the test reading is outside of the control range of the installed device, check calibration of the installed device and adjust as required. Retest malfunctioning devices and record results on checklist or data sheet.
    b. Report deficiencies and prepare an issues log entry.

3.2. TESTING

A. Test systems and intersystem performance after test checklists for systems, subsystems, and equipment have been approved.

B. Perform tests using design conditions whenever possible.

1. Simulate conditions by imposing an artificial load when it is not practical to test under design conditions and when written approval for simulated conditions is received from CxA. Before simulating conditions, calibrate testing instruments. Set and document simulated conditions and methods of simulation. After tests, return settings to normal operating conditions.

C. Scope of Electrical Contractor Testing:

1. Testing scope shall include entire electrical installation, from incoming service through distribution systems to each space. It shall include measuring voltages and currents and effectiveness of operational and control functions.
2. Test all operating modes, interlocks, control responses, responses to abnormal or emergency conditions, and verify proper response of building automation system controllers and sensors.

D. Detailed Testing Procedures: CxA, with Electrical Contractor shall prepare detailed testing plans, procedures, and checklists for electrical systems, subsystems, and equipment.

E. Electrical System Testing: Electrical Contractor shall prepare a testing plan to verify performance of emergency generator, interior lighting control system, exterior lighting control systems, electrical distribution systems, fire alarm system, and solar system. Plan shall include the following:

1. Sequence of testing and testing procedures for each item of equipment and section of wiring to be tested, identified by identification marker. Markers shall be keyed to Drawings for each wiring sector showing the physical location of each item of equipment and electrical wiring test section. Drawings shall be formatted to allow each item of equipment and section of wiring to be physically located and identified when referred to in the system testing plan.
2. Tracking checklist for managing and ensuring that all wiring systems have been tested.

F. Deferred Testing:

1. If tests cannot be completed because of a deficiency outside the scope of the electrical system, the deficiency shall be documented and reported to the Owner. Deficiencies shall be resolved and corrected by appropriate parties and the test rescheduled.
2. If the testing plan indicates specific seasonal testing, appropriate initial performance tests shall be completed and documented and additional tests scheduled.

G. Testing Reports:

1. Reports shall include measured data, data sheets, and a comprehensive summary describing the operation of systems at the time of testing.
2. Include data sheets for each electrical system to verify proper operation of the electrical systems, the system it serves, the service it provides, and its location. Provide space for testing personnel to sign off on each data sheet.
3. Prepare a preliminary test report. Deficiencies will be evaluated by Architect to determine corrective action. Deficiencies shall be corrected and test repeated.

END OF SECTION

SECTION 02 32 00 - GEOTECHNICAL DATA

A copy of the Geotechnical Report dated July 5, 2024 and Geotechnical Engineering Services – Addendum 1 dated February 20, 2025 is bound into this Project Manual following this page.

ATTACHMENTS
Section 02 32 00.2 – Geotechnical Engineering Services Report – 722 Pages
Section 02 32 00.3 – Geotechnical Engineering Services Report – Addendum 1 – 136 Pages

END OF SECTION 02 32 00

July 5, 2024

LDMSE24001

Landmark Science & Engineering
Attn: Ted C. Williams, PE, FACEC, President
200 Continental Drive, Suite 400
Newark, DE 19713

RE: Geotechnical Engineering Services
Appoquinimink School District Summit Campus – Infiltration Testing Summary
Middletown, Delaware

Dear Mr. Williams:

We are pleased to submit our infiltration testing summary report for the Appoquinimink School District Summit Campus stormwater management study located in Middletown, DE. Work was initiated in general accordance with the scope of work presented in our proposal dated May 2, 2024, and your subsequent notice to proceed on May 7, 2024.

As you are aware, Pennoni is also providing geotechnical engineering services for this project.

To assist with this report development, Pennoni reviewed the following documents:

- A Drawing No. CR-01 titled "Appoquinimink Summit Campus – St. Georges Hundred – New Castle County – Delaware," prepared by Landmark Science & Engineering, dated April 21, 2021;
- An untitled RFP titled "P8582 – Appoquinimink School District," dated March 28, 2024;
- An undated Drawing titled "Boring Exhibit for Summit Campus – Phase 2," prepared by Landmark Science & Engineering; and
- Survey and stake information plan titled "2024-05-13 Survey bores," prepared by Landmark Science & Engineering, provided on May 13, 2024.

BACKGROUND

We understand the project consists of the construction of Phases B through D of the Appoquinimink School Districts (ASD) Summit Campus located in Middletown, Delaware. We understand that the construction consists of an approximate two story, 385,473 square feet (SF) middle and high school, one story, 10,800 SF field house, 2,957 SF greenhouse / AG building, athletic fields, stormwater management (SWM) facilities, and parking areas surrounding the proposed buildings. This report summarizes infiltration testing performed in support of design of the proposed SWM facilities.

A Geotechnical Engineering Services Report is also being prepared which summarizes the proposed construction of the middle/high school, field house, and associated parking areas separate from this report. SWM facilities consisting of subsurface basins are proposed throughout the parking areas and south of the existing roundabout. As the SWM facilities are still in the conceptual design phase the number, location, and size of the proposed SWM facilities has not yet been determined. We have assumed the inverts of the facilities are a maximum of 5 feet below existing grades.

The existing project site consists of the Crystal Run Elementary School, from Phase A of the project, and an agricultural field. The site is bound by residential properties to the north and south, an agricultural field to the east, and Route 896 to the west. Based on the provided topography the project site generally slopes downward from northwest to southeast with elevations ranging from approximately 66 to 55 feet (NAVD88) as indicated on the attached Site Location Sketch, SK-1. Existing utilities were noted to consist of an overhead electric line running west to east parallel with Beaston Road. An artesian water main was noted to run west to east along the northern perimeter of the site.

FIELD EXPLORATION

Twenty-five Standard Penetration Test (SPT, ASTM D1586) borings labeled "B-1" through "B-25" and fifty Cone Penetration Test (CPT, ASTM D5778) soundings labeled "C-1" through "C-50" were performed within the general footprints of the proposed middle/high school, field house, and football stadium bleachers. A summary of the SPT borings and CPT soundings are provided under a separate cover titled, "Geotechnical Engineering Services – Appoquinimink School district Summit Campus," prepared by Pennoni.

Forty (40) test pits labeled ("TP-1 through TP-40") and thirty-nine (39) single ring infiltration tests labeled ("INF-1" through "INF-40") were performed from May 13, 2024, to May 23, 2024. The test pits were performed by CGC Geoservices, LLC using a backhoe at the approximate locations selected by Landmark Engineering and indicated on the attached Testing Location Sketch, SK-2. The test locations were selected and established in the field by Pennoni personnel. Test pits "TP-1" through "TP-40" were performed to a minimum of three feet below the proposed SWM facilities invert elevations to estimate the soil horizons and determine if restricting layers such as groundwater table (GWT), seasonal high-water table (SHWT), and/or hardpan were present. Proposed inverts for the SWM facilities were assumed to be a maximum of 5 feet below the existing ground surface; therefore, the test pit excavations were performed to a minimum of 8 feet below the existing ground surface in general accordance with the Delaware Administrative Code Title 7, Section 5101, Sub-Section 12.0. Test pit logs are attached.

Concurrently with test pits "TP-1" through "TP-40," an adjacent pit was excavated to the proposed invert elevations for infiltration testing. Locations for the single ring infiltration tests were established a maximum of 5 feet away from their corresponding Test Pits "TP-1" through "TP-40." Thirty-nine single ring in-situ infiltration tests labeled ("INF-1" through "INF-40") were performed by Pennoni personnel at the approximate locations indicated on the attached Testing Location Sketch, SK-2. Grab samples were collected at the invert elevation of each infiltration test. Infiltration test "INF-33" was not performed due to shallow groundwater observed at 3 feet below the ground surface (Elev. 52.1 feet, NAVD88). Infiltration operations were directed by our T. Thomson, Jr. PhD, PE, BC. GE, LEED AP, and observed by our A. Spencer, PE, N. Francois, and N. Fisher.

The infiltration testing was performed in general accordance with the testing as described in the Delaware Administrative Code Title 7, Section 5101, Sub-Section 12.0. Following a one-hour pre-soak, two consistent test periods consisting of 15-minute time intervals and meeting one of the following was performed:

- A minimum of one hour;
- A drop of at least 12 inches in 15 minutes or less for a minimum of two time intervals;
- A difference of 0.25 inches or less of drop between the highest and lowest reading of four (4) consecutive time intervals for infiltration rates greater than two (2.0) inches per hour; or
- A difference of 0.125 inches or less of drop between the highest and lowest reading of four (4) consecutive readings for infiltration rates equal to or less than two (2.0) inches per hour.

Site conditions at the time of the infiltration testing on May 13, 2024 through May 23, 2024 were cloudy to sunny with temperatures ranging from 68 to 88 degrees Fahrenheit. No rainfall greater than one-half inch occurred in the general site area in the 24 hours prior to infiltration testing.

LABORATORY PROGRAM

Following conclusion of the infiltration testing, the soil samples were delivered to our laboratory for visual classification and testing. The geotechnical laboratory program for the stormwater management facilities consisted of the following:

- Moisture Content (ASTM D 2216) 39 tests
- Sieve Analysis (w/out hydrometer, ASTM D 422) 39 tests

Samples for testing were selected by Pennoni's geotechnical engineer and were generally selected at the estimated invert location of the basins. Results of the laboratory testing are attached.

GEOLOGY

According to the Physiographic Province of Delaware created by USGS, the project site is located within the Coastal Plain. The Coastal Plain is characterized by gently rolling hills and valleys. It is underlain by a southeastwardly thickening sequence of sediments that consists of sand and gravel aquifers interlayered with silt and clay confining units.

According to the Geologic Map (GM13) of New Castle County (Ramsey, K.W., 2005) the project site is located within the Columbia Formation. The Columbia Formation is described as yellow to red to brown, fine to coarse, feldspathic quartz sand with varying amounts of gravel. Typically, cross-bedded with cross-sets ranging from a few inches to over three feet in thickness. Scattered beds of tan to red to gray clayey silt is common. In places, the upper 5 to 25 feet consists of a gray to red to brown silt to very fine sand overlying medium to coarse sand. Near base of unit, clasts of cobbles to small boulders are found in gravel beds ranging from a few inches to three feet thick. Gravel fraction consists primarily of quartz with lesser amounts of chert. Clasts of sandstone, siltstone, and shale from the Valley and Ridge Province, and pegmatite, micaceous schist, and amphibolite from the Piedmont are present. The Columbia fills an eroded surface and ranges from less than 10 feet thick to over 100 feet thick.

According to USDA Web Soil Survey mapping, the project site consists of mainly Reybold silt loam (ReB), Reybold-Queponco Complex (RdA), Woodstown loam (WocA), and Sassafras sandy loam (SacC). Reybold silt loam is generally described as silt loam underlain by gravelly coarse sandy loam with linear down slope shape. Reybold silt loam is classified as hydrologic soil group B with moderately high to high infiltration rates of approximately 0.20 to 2.00 inches per hour. The depth to water table and restrictive features both exceed 80 inches. Reybold-Queponco Complex is generally described as silt loam underlain by gravelly coarse sandy loam with linear down slope shapes. Reybold-Queponco Complex is classified as hydrologic soil group B with moderately high to high infiltration rates of approximately 0.20 to 2.00 inches per hour. The depth to water table and restrictive features both exceed 80 inches. Woodstown loam is generally described as loam to sandy loam to fine sandy loam underlain by loamy sand with linear to concave down slope shapes. Woodstown sandy loam is classified as hydrologic soil group C with moderately high to high infiltration rates of approximately 0.57 to 1.98 inches per hour. Depth to water table is noted as 20 to 40 inches with depth to restrictive feature exceeding 80 inches. Sassafras sandy loam is generally described as sandy loam to sandy clay loam to loamy sand underlain by sand with linear down slope shape. Sassafras sandy loam is classified as hydrologic soil group B with moderately high to high infiltration rates of approximately 0.20 to 2.00 inches per hour. The depth to water table and restrictive features both exceed 80 inches. Approximate ground surface elevation was not provided in the mapping report prepared by the USDA. The USDA Web Soil Survey Report is attached.

SOIL STRATIGRAPHY

Subsurface stratigraphy encountered by the test pits generally consisted of a surficial layer of topsoil approximately 8 to 15 inches thick. This surficial layer of topsoil is generally underlain by fine to medium sand with trace to and silt/clay and trace fine to coarse gravel (Stratum B). Stratum A was only observed in six of the test pits beneath the topsoil and consisted of clay/silt with trace to little fine to medium sand, trace fine to coarse gravel. Underlying Strata A and B was a fine to medium to coarse sand with little to and fine to coarse gravel with trace to little silt or a fine to coarse gravel with little to and fine to medium to coarse sand and trace to little silt (Stratum C). Following Stratum C was a fine to medium to coarse sand with trace to little silt, and trace fine to coarse gravel (Stratum D). For descriptive purposes the soil layers can be classified as follows:

Stratum	Approximate Thickness (ft)	Description	USCS Classification
T	0.3	Topsoil	--
A[1]	1.0 – 3.0	Orange to gray SILT, trace to little fine sand (moist) OR Orange to brown to gray CLAY, trace to some fine to medium sand, trace fine to coarse gravel (moist)	ML CL
B[2]	1.0 – 8.5 +	Gray to orange to tan to brown to black to red fine to medium to coarse SAND, trace to and clay/silt, trace to some fine to coarse gravel (moist to wet)	SP to SM
C[3]	0.5 – 4.0 +	Brown to tan to orange fine to coarse GRAVEL, little to and fine to medium to coarse SAND, trace to little silt (moist to wet) OR Brown to orange to tan to black to gray fine to medium to coarse SAND, little to and fine to coarse gravel, trace to little silt (moist to wet)	GP SP
D[4]	0.5 – 4.5+	Tan to orange to brown to gray fine to medium to coarse SAND, trace to little silt, trace fine to coarse gravel (moist to wet)	SP

Notes:
[1] Stratum A was only encountered in test pits "TP-29," "TP-30," "TP-31," "TP-33," "TP-34" and "TP-37";
[2] Stratum B was not fully penetrated in test pits "TP-4," "TP-13," "TP-33," "TP-38,"and "TP-39". Stratum B was not encountered in Test Pit "TP-31";
[3] Stratum C was not fully penetrated in test pits "TP-1," "TP-3," "TP-5" through "TP-12," "TP-14" through "TP-22," "TP-25," and "TP-29". Stratum C was not encountered in test pits "TP-4," "TP-13," "TP-33," "TP-36," "TP-38," and "TP-39"; and
[4] Stratum D was not fully penetrated. Stratum D was only encountered in test pits "TP-2," "TP-23," TP-24," "TP-26," "TP-27," "TP-28," "TP-30," 'TP-31," "TP-32," "TP-34" through "TP-37," and "TP-40".

GROUNDWATER

Groundwater observations were made in each test pit during excavations and shortly after completion of each adjacent infiltration test. Apparent groundwater was encountered in test pits "TP-1," "TP-2," "TP-6," "TP-15" through "TP-18," and "TP-20" through "TP-36" at depths ranging approximately 3 feet to 10 feet below the ground surface (Elev. 50.4 feet to 56.9 feet, NAVD88). Groundwater was not encountered in the remaining test pits. These observations are for the times indicated and may not be indicative of seasonal or daily variations in the ground water levels. Seasonal variations on the order of several feet should be anticipated.

According to the Delaware Geologic Information Resource website, groundwater depths below the ground surface at the project site are noted to vary from 10 feet (Elev. 52.96 feet, relative to NAVD88) during "wet conditions" to 20 feet (Elev. 41.94.38 feet, relative to NAVD88) during "dry conditions."

Seasonal Highwater Table (SWHT)

Results from the field exploration were reviewed for soil composition and redoximorphic features (RMF). RMF, are defined as color patterns in a soil that are caused by loss or gain of pigment compared to the matrix color due to oxidation/reduction of iron and or manganese coupled with their removal, translocation, or accrual typically indicating the seasonal high-water table or a perched water condition. RMFs were observed within test pit "TP-37" at approximately 8 feet below the ground surface (Elev. 53.8 feet, NAVD88). RMFs were not observed within the remaining test pits at the site.

INFILTRATION TEST RESULTS

The following tables represent a summary of the field results for the thirty-nine single ring infiltration tests conducted at depths ranging from approximately 3 feet to 5 feet below the existing ground surface at approximate elevations ranging from 52.63 feet to 61.54 feet (NAVD88). Individual infiltration testing logs and infiltration rate graphs are attached.

Infiltration Test	Corresponding Test Pit	Date Tested	Corresponding Stratum	Testing Depth /Elevation (NAVD88)	Field Infiltration Rate (in/hr)	Design Infiltration Rate (in/hr)[1]
INF-1	TP-1	5/23/2024	B	3.0 / 59.86	0.25	N/A
INF-2	TP-2	5/23/2024	B	8.0 / 58.57	1.0	0.5
INF-3	TP-3	5/13/2024	B	5.0 / 57.11	0.5	N/A
INF-4	TP-4	5/13/2024	B	5.0 / 58.02	9.9	4.95
INF-5	TP-5	5/13/2024	B	5.0 / 56.96	13.0	6.5
INF-6	TP-6	5/13/2024	B	5.0 / 58.25	11.25	5.6
INF-7	TP-7	5/13/2024	B	5.0 / 57.39	10.0	5.0
INF-8	TP-8	5/13/2024	B	5.0 / 58.14	8.5	4.25
INF-9	TP-9	5/14/2024	B	5.0 / 59.46	12.0	6.0
INF-10	TP-10	5/14/2024	B	5.0 / 59.49	10.0	5.0
INF-11	TP-11	5/14/2024	B	5.0 / 59.89	10.0	5.0
INF-12	TP-12	5/14/2024	B	5.0 / 61.54	10.0	5.0
INF-13	TP-13	5/14/2024	B	5.0 / 60.47	10.0	5.0
INF-14	TP-14	5/16/2024	B	5.0 / 58.83	2.0	1.0
INF-15	TP-15	5/16/2024	B	5.0 / 57.46	8.0	4.0
INF-16	TP-16	5/16/2024	B	5.0 / 56.31	12.0	6.0
INF-17	TP-17	5/16/2024	B	5.0 / 55.79	2.0	1.0
INF-18	TP-18	5/16/2024	B	5.0 / 57.12	2.0	1.0
INF-19	TP-19	5/17/2024	B	5.0 / 58.09	8.0	4.0
INF-20	TP-20	5/17/2024	B	5.0 / 57.49	14.0	7.0
INF-21	TP-21	5/17/2024	B	5.0 / 57.36	12.0	6.0
INF-22	TP-22	5/17/2024	B	5.0 / 56.03	8.0	4.0
INF-23	TP-23	5/20/2024	B	5.0 / 55.57	2.2	1.1
INF-24	TP-24	5/20/2024	B	5.0 / 54.30	2.0	1.0
INF-25	TP-25	5/17/2024	B	5.0 / 54.98	8.0	4.0
INF-26	TP-26	5/20/2024	B	4.0 / 54.63	1.7	0.85
INF-27	TP-27	5/20/2024	B	3.0 / 54.66	3.5	1.75

(continued next page)

Infiltration Test	Corresponding Test Pit	Date Tested	Corresponding Stratum	Testing Depth /Elevation (NAVD88)	Field Infiltration Rate (in/hr)	Design Infiltration Rate (in/hr)[1]
INF-28	TP-28	5/20/2024	B	4.0 / 54.98	6.0	3.0
INF-29	TP-29	5/22/2024	B	5.0 / 54.71	9.0	4.5
INF-30	TP-30	5/22/2024	B	3.5 / 53.69	5.0	2.5
INF-31	TP-31	5/22/2024	A	3.0 / 52.63	0.0	N/A
INF-32	TP-32	5/21/2024	D	3.0 / 54.19	13.5	6.75
INF-34	TP-34	5/22/2024	B	3.0 / 54.32	1.0	0.5
INF-35	TP-35	5/22/2024	D	4.0 / 53.43	2.75	1.375
INF-36	TP-36	5/21/2024	D	3.0 / 54.68	21.0	10.5
INF-37	TP-37	5/21/2024	B	5.0 / 56.77	7.0	3.5
INF-38	TP-38	5/21/2024	B	5.0 / 57.90	4.0	2.0
INF-39	TP-39	5/21/2024	B	5.0 / 56.28	2.0	1.0
INF-40	TP-40	5/21/2024	B	5.0 / 58.02	0.5	N/A

[1] Design infiltration rate includes a factor of safety of 2.0 in accordance with Delaware Administrative Code Title 7, Section 5101, Sub-Section 12.0

Field infiltration rates were observed ranging from approximately 0.0 to 21.0 inches per hour within the site. Specifically, field infiltration rates of 0.0 incher per were observed within Stratum A. Field infiltration rates within Stratum B were observed to range from approximately 0.5 to 14.0 inches per hour. Within Stratum D field infiltration rates were observed to range from approximately 2.75 to 21.0 inches per hour. Design infiltration rates for single ring infiltration testing require a minimum factor of safety of two applied to the field infiltration rates.

CONCLUSIONS AND RECOMMENDATIONS

A completed DNREC Soil Investigation Report Submittal Checklist is attached. Based on the results of the field exploration, laboratory analysis, and review of published data the following has been concluded:

Groundwater Table

Observations for groundwater were performed in all test pits. Apparent groundwater was encountered in test pits “TP-1,” “TP-2,” “TP-6,” “TP-15” through “TP-18,” and “TP-20” through “TP-36” at depths ranging approximately 3.0 feet to 10.0 feet below the ground surface (Elev. 50.4 feet to 56.9 feet, NAVD88). All other test pits did not encounter groundwater throughout the excavations.

Groundwater, where encountered during this exploration, was generally higher than those mapped by the Delaware Geologic Survey. These observations are for the times indicated and may not be indicative of seasonal or daily variations in the ground water levels. Seasonal variations on the order of several feet should be anticipated.

Soil Conditions

- Indications of seasonal high-water table (SWHT) include redoximorphic features, defined as color patterns in a soil that are caused by loss or gain of pigment compared to the matrix color due to oxidation/reduction of iron and or manganese coupled with their removal, translocation, or accrual, were observed in test pit “TP-37.” RMFs were not observed within the remaining test pits.
- Observations of restrictive hardpan (cemented sand) were encountered within test pit “TP-3”. Restrictive hardpan was not observed within the remaining Test Pits.

- The strata found during the field explorations were generally consistent with those described in the USDA NRCS Web Soil Survey Report for Reybold silt loam (Reb). The field observations generally agree with the reported depth of the groundwater table exceeding 80 inches. Test pits "TP-1," "TP-27," "TP-30" through "TP-34," and "TP-36" were performed at lower elevations than the remainder of the test pits at the site and apparent groundwater was encountered approximately 36 to 72 inches below the ground surface.

Feasibility of Proposed Facilities

The field infiltration rates observed within Stratum A were observed to be 0.0 inches per hour. The field infiltration rates varied across the site due to the varying amounts of fine-grained materials within Stratum B and were observed to range from approximately 0.5 to 14.0 inches per hour. Field infiltration rates less than 1 inch per hour within Stratum B were observed in infiltration tests "INF-1," "INF-3," "INF-31," and "INF-40" due to percentage of fine-grained materials and the apparent groundwater table observed. Within Stratum D field infiltration rates were observed to range from approximately 2.75 to 21.0 inches per hour. The field infiltration rates observed within Strata B and D were generally higher than the rates reported for the Reybold Silt loam (0.2 to 2.0 inches per hour), as the material within these areas of testing generally appear more granular than the mapped soils.

According to the subsection 11.1.3.3 of the Delaware Sediment and Stormwater Regulations for native soils to meet infiltration feasibility criteria they must have a minimum field infiltration rate of 1 inch per hour. In general, the observed field infiltration rates indicate that the site is conducive to infiltration within Strata B and D soils. Strata B and D soils were observed between elevations 50.1 to 65.5 feet, NAVD88, and 47.6 to 54.8 feet, NAVD88, respectively. However, within Stratum B field infiltration rates less than 1 inch per hour were observed in infiltration tests "INF-1," "INF-3," "INF-31," and "INF-40" and indicate that these areas are not conducive to infiltration. Field infiltration rates observed within stratum A soils indicate that it is not conducive to infiltration. Shallow groundwater was observed at 3 feet below the ground surface (Elev. 52.1 feet, NAVD88) within test pit "TP-33" and indicates that this area is not conducive to infiltration.

As the invert elevation of each facility has not yet been finalized, we recommend that the facility inverts be designed between 3 and 5 feet below existing grade to avoid shallow groundwater observed at depths ranging approximately 3.0 feet to 10.0 feet below the ground surface (Elev. 50.4 feet to 56.9 feet, NAVD88).

These observations are based on the test results from the specific test locations only.

Earthwork

Prior to placing any new fill, and before the construction of the proposed stormwater management (SWM) facilities, construction debris, vegetation, and associated topsoil must be removed from the proposed construction areas. These materials can remain in proposed landscaped areas provided that future plans do not include building in those areas. SWM facilities shall be designed and constructed in accordance with the Delaware Sediment and Stormwater Regulations.

Our experience indicates that the on-site soils of Strata A, B, C, and D can be reused for the construction, provided all organics and debris larger than 3 inches in its greatest dimension be removed prior to reuse. Strata A and B soils were observed to contain a significant amount of fine-grained material (silts/clays). These types of soils are sensitive to moisture and may therefore require wetting or drying prior to compaction. Drying "wet" soil is difficult during wet periods and during lower temperatures. Therefore, provisions for importing structural fill should be included in the contract documents. If necessary, granular fill should consist of well-graded material with a maximum particle size less than 3 inches, not more than 20 percent passing the No. 200 sieve and have plasticity index (PI) not greater than 8 percent.

Fills should be placed in layers not exceeding 10 to 12 inches loose measure. This criterion might be adjusted by the geotechnical engineer in the field depending on the conditions present at the time of construction, on the compaction equipment used, and on the fill materials selected. Compaction of fill material and subgrade

will be highly dependent on whether the area will be utilized for infiltration. Where infiltration is being utilized, excessive compaction of the subgrade and fill is discouraged as this will tend to lower the infiltration rate. Specific guidance can be provided once the final design has been determined. Fills should extend and have side slopes not steeper than 2 horizontal to 1 vertical. Otherwise, settlement of the fill may occur.

Ground and Surface Water Management

The groundwater observations made in the test pits suggest that free standing water is not anticipated in excavations for the proposed SWM facilities. If wet conditions and/or seepage are encountered due to perched water, sumps and pumps should be adequate to maintain stable conditions during construction. During construction, surface runoff should be prevented from entering the basin excavations by creating soil berms or diversion swales along the perimeter if the excavations are expected to be open for a long period of time. Where ponding does occur, the water should be pumped immediately, and grades should then be established to prevent further ponding.

LIMITATIONS

This work has been done in accordance with our authorized scope of work and in accordance with generally accepted professional practice in the fields of geotechnical and foundation engineering. This warranty is in lieu of all other warranties either expressed or implied. Our conclusions and recommendations are based on the data revealed by this exploration. We are not responsible for any conclusions or opinions drawn from the data included herein, other than those specifically stated, nor are the recommendations presented in this report intended for direct use as construction specifications. This report is intended for use with regard to the specific project described herein; any changes in invert elevations and locations should be brought to our attention so that we may determine how they may affect our conclusions. An attempt has been made to provide for normal contingencies, but the possibility remains that unexpected conditions may be encountered during construction. If this should occur, or if additional or contradictory data are revealed in the future, we should be notified so that modifications to this report can be made, if necessary. If we do not review relevant construction documents and witness the relevant construction operations, then we cannot be responsible for any problems that may result from misinterpretation or misunderstanding of this report or failure to comply with our recommendations.

We trust that the information presented in this report is what you require at this time and we thank you for the opportunity to assist you with this project. If you have any questions, or if you need any further assistance with this project, please contact this office at your earliest convenience.

Sincerely,
PENNONI ASSOCIATES INC.

Nicholas Fisher
Graduate Geotechnical Engineer

Theodore A. Thomson, Jr., PhD, PE, BC. GE, LEED AP
Associate Vice President/Geotechnical Division Manager

Attachments: Site Location Sketch, SK-1 (1 page)
Testing Location Sketch, SK-2 (1 page)
Test Pit Logs (40 pages)
Laboratory Testing Results (12 pages)
Single Ring Infiltration Data Graphs (41 pages)
Soil Investigation Report Submittal Checklist (7 pages)
USDA Web Soil Survey Report (35 pages)

SITE LOCATION SKETCH

Site Location Sketch adapted from a Google Earth Image Dated April 12, 2023

Pennoni Associates, Inc.
121 Continental Drive, Suite 207
Newark, DE 19713

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

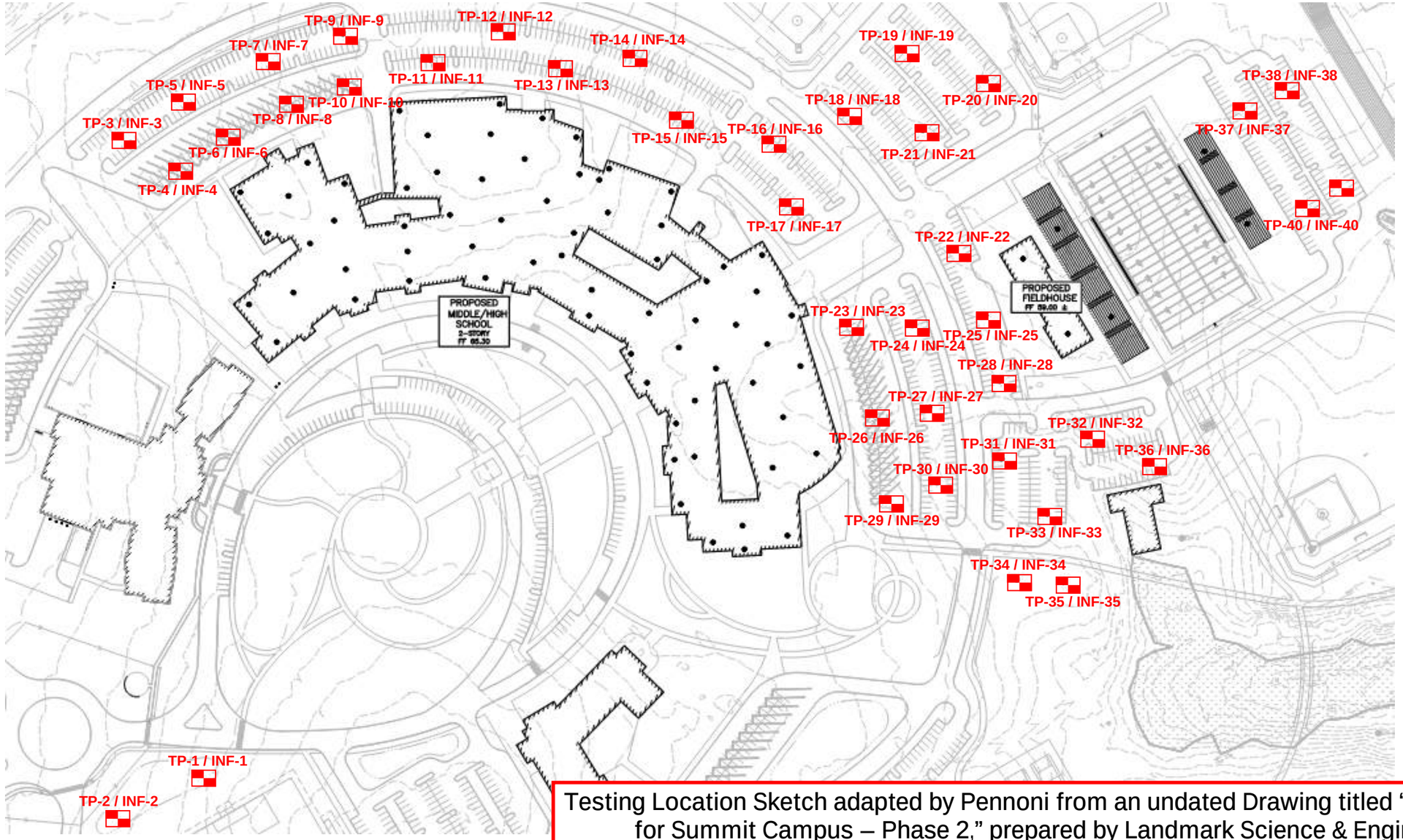
DRAWN BY:	SCALE:	DATE:
NPF	AS SHOWN	7/5/2024
CHECKED BY:	FIGURE No.	
TAT	SK-1	
PROJECT No:		
LDMSE24001		

ASD Summit Campus - Middletown, Delaware

TESTING LOCATION SKETCH

LEGEND

- Approximate Test Pit and Infiltration Test Location



Testing Location Sketch adapted by Pennoni from an undated Drawing titled “Boring Exhibit for Summit Campus – Phase 2,” prepared by Landmark Science & Engineering.

Pennoni Associates, Inc.
121 Continental Drive, Suite 207
Newark, DE 19713

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DRAWN BY:	SCALE:	DATE:
NPF	NTS	7/5/2024
CHECKED BY: TAT	FIGURE No. SK-2	
PROJECT No: LDMSE24001		

ASD Summit Campus - Middletown, Delaware

TEST PIT LOG

Test Pit TP-1

NORTHING 555020.9774

EASTING 571898.2232

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/23/24 **COMPLETED** 5/23/24

GROUND ELEVATION 62.9' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 6.0' / Elev 56.9'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 6.0' / Elev 56.9'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	1.0	12" TOPSOIL	61.9	
				2.0	Gray fine to medium SAND, some clay		
	S-1				Orange medium to fine to coarse SAND, little silt		Infiltration test INF-1 set at 3 ft
5			B	6.0	Tan fine to medium to coarse SAND, trace silt		
				8.0		54.9	
			C	8.5	Brown to tan fine to coarse GRAVEL and fine to medium to coarse SAND, trace silt	54.4	

Test Pit terminated at 8.5 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-2 (B)

NORTHING 554952.3572

EASTING 571755.9665

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/23/24 **COMPLETED** 5/23/24

GROUND ELEVATION 63.6' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 8.0' / Elev 55.6'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Measured

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION 8.0' / Elev 55.6'

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 62.6	
			B	Gray fine to medium SAND, some clay 2.0 Orange fine to medium to coarse SAND, little silt, trace fine gravel	
5	S-1			6.0 / 57.6	Infiltration test INF-2 set at 5 ft
			C	Brown to orange fine to coarse GRAVEL and fine to medium SAND, trace silt 8.0 / 55.6	
			D	Tan fine to medium to coarse SAND, trace silt 9.0 / 54.6	
				Test Pit terminated at 9.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.
Test pit offset 5 feet Northeast due to encountered utility.

TEST PIT LOG

Test Pit TP-3

NORTHING 556075.1078

EASTING 571764.7218

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/13/24 **COMPLETED** 5/13/24

GROUND ELEVATION 62.1' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T		15" TOPSOIL		
				1.3		60.9	
					Brown to black fine to medium SAND and CLAY		Moist
				4.0			
			B		Tan to brown fine to medium SAND, some silt		
5	S-1						Infiltration test INF-3 set at 5 ft Micaceous
				7.5		54.6	Cemented sand
			C	8.0	Brown to orange fine to medium to coarse SAND and fine to coarse GRAVEL, trace silt	54.1	
					Test Pit terminated at 8.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-4

PAGE 1 OF 1

NORTHING 556021.5946

EASTING 571860.26

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/13/24 **COMPLETED** 5/13/24

GROUND ELEVATION 63.0' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 62.0	
			B	Dark brown fine to medium SAND, some clay 2.5 Tan to brown medium to fine to coarse SAND, trace silt	Moist
5	S-1				Infiltration test INF-4 set at 5 ft
				8.0 / 55.0 Test Pit terminated at 8.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-5

NORTHING 556138.5597

EASTING 571864.8854

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/13/24 **COMPLETED** 5/13/24

GROUND ELEVATION 62.0' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	1.0	12" TOPSOIL	61.0	
			B	3.5	Dark brown fine to medium SAND, some clay Tan to brown fine to medium SAND, little silt		
5	S-1						Infiltration test INF-5 set at 5 ft
			C	7.0		55.0	Cobbles / Boulders
				8.0	Tan to brown fine to medium to coarse SAND, little silt, little fine to coarse gravel	54.0	Moist
					Test Pit terminated at 8.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-6

NORTHING 556077.9751

EASTING 571939.6653

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/13/24 **COMPLETED** 5/13/24

GROUND ELEVATION 63.3' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 10.0' / Elev 53.3'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 10.0' / Elev 53.3'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0			T	12" TOPSOIL Depth 1.0 — Elev. 62.3	
			B	Brown to tan fine to medium to coarse SAND, little silt	Moist
5	S-1				Infiltration test INF-6 set at 5 ft
				Depth 9.0 — Elev. 54.3	
10 ▼			C	Brown to black fine to medium to coarse SAND and fine to coarse GRAVEL, trace silt Depth 10.0 — Elev. 53.3	Wet Boulders / cobbles
				Test Pit terminated at 10.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-7

NORTHING 556205.68

EASTING 572004.5285

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/13/24 **COMPLETED** 5/13/24

GROUND ELEVATION 62.4' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION		REMARKS
0				Depth	Elev.	
			T	0.8 9" TOPSOIL	61.6	
			B	Brown to tan fine to medium SAND, little silt		Moist
5	S-1			5.0 Brown to tan medium to fine to coarse SAND, trace silt		Infiltration test INF-7 set at 5 ft
				6.0	56.4	
			C	Brown to black fine to medium to coarse SAND and fine to coarse GRAVEL, little silt		Boulders / Cobbles
				9.0	53.4	
				Test Pit terminated at 9.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-8

NORTHING 556133.1713

EASTING 572043.5084

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/13/24 **COMPLETED** 5/13/24

GROUND ELEVATION 63.1' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	10" TOPSOIL 0.8 / 62.3	
			B	Dark brown fine to medium SAND, some clay 2.5 Tan to brown medium to fine to coarse SAND, little silt, trace fine gravel	Moist
5	S-1				Infiltration test INF-8 set at 5 ft
				6.5 / 56.6	
			C	Tan to brown fine to medium to coarse SAND and fine to coarse GRAVEL, little silt	Boulders / Cobbles
				9.0 / 54.1	Wet
				Test Pit terminated at 9.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-9

NORTHING 556244.9813

EASTING 572134.2113

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 64.5' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	1.1	13" TOPSOIL	63.4	
			B		Brown medium to fine SAND and SILT		
5	S-1			5.0	Brown medium to fine to coarse SAND, little silt, trace fine gravel		Infiltration test INF-9 set at 5 ft
				8.0		56.5	
			C	9.0	Brown to gray medium to fine to coarse SAND and coarse to fine GRAVEL	55.5	
					Test Pit terminated at 9.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-10

NORTHING 556162.882

EASTING 572138.4103

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 64.5' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	0.9	11" TOPSOIL	63.6	
			B		Brown medium to fine SAND and SILT		
5	S-1			5.0	Brown medium to fine to coarse SAND, little silt, trace fine gravel		Infiltration test INF-10 set at 5 ft
				8.0		56.5	
			C	9.0	Brown to gray medium to fine to coarse SAND and coarse to fine GRAVEL	55.5	
					Test Pit terminated at 9.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-11

NORTHING 556201.9896

EASTING 572277.892

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 64.9' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION		REMARKS
				Depth	Elev.	
0			T	12" TOPSOIL 1.0	63.9	
			B	Brown to light brown fine to medium SAND and SILT 3.0 Brown to light brown fine to medium SAND, little silt		
5	S-1					Infiltration test INF-11 set at 5 ft
				7.0	57.9	
			C	Brown to gray medium to fine to coarse SAND and coarse to fine GRAVEL 9.0	55.9	
				Test Pit terminated at 9.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-12

NORTHING 556255.3831

EASTING 572392.2194

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 66.5' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T		12" TOPSOIL		
				1.0		65.5	
			B		Brown to light brown medium to fine SAND and SILT		
5	S-1			5.0	Brown medium to fine SAND, trace silt, trace fine gravel		Infiltration test INF-12 set at 5 ft
				9.0		57.5	
			C	9.5	Brown to gray medium to fine to coarse SAND and coarse to fine GRAVEL	57.0	
					Test Pit terminated at 9.5 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-13

PAGE 1 OF 1

NORTHING 556193.0617

EASTING 572487.3449

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 65.5' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	0.7 — 8" TOPSOIL — 64.8	
				Brown medium to fine SAND and SILT	
				2.0 — Brown to light brown fine to medium to coarse SAND, some silt	
5	S-1		B		Infiltration test INF-13 set at 5 ft
				9.0 — 56.5	
				Test Pit terminated at 9.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-14

PAGE 1 OF 1

NORTHING 556209.4369

EASTING 572611.8362

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/16/24 **COMPLETED** 5/16/24

GROUND ELEVATION 63.8' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION		REMARKS
0				Depth	Elev.	
			T	13" TOPSOIL		
				1.1	62.8	
			B	Brown medium to fine SAND, little fine gravel		
				4.0		
5			B	Brown to light brown fine to medium SAND, little silt		
	S-1					Infiltration test INF-14 set at 5 ft
				8.0	55.8	
			C	Brown medium to fine SAND and fine to coarse GRAVEL, trace silt		
				9.0	54.8	
				Test Pit terminated at 9.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-15

NORTHING 556107.9536

EASTING 572688.9258

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/16/24 **COMPLETED** 5/16/24

GROUND ELEVATION 62.5' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 8.0' / Elev 54.5'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 8.0' / Elev 54.5'

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 61.5	
			B	Brown medium to fine SAND, trace to little fine gravel, trace silt 4.0 Brown fine to medium SAND, trace silt	
5	S-1			5.0 / 57.5	Infiltration test INF-15 set at 5 ft
			C	Brown coarse SAND and fine GRAVEL, trace silt	
				9.0 / 53.5	
				Test Pit terminated at 9.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-16

NORTHING 556068.6144

EASTING 572840.4508

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/16/24 **COMPLETED** 5/16/24

GROUND ELEVATION 61.3' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 8.0' / Elev 53.3'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 8.0' / Elev 53.3'

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	0.7 — 8" TOPSOIL — 60.6	
			B	Brown to dark brown SAND, some fine gravel, trace silt	
				4.0 — Brown to light brown fine to medium to coarse SAND, little silt	
5	S-1				Infiltration test INF-16 set at 5 ft
				8.0 — 53.3	
			C	Brown to light brown medium to fine SAND and fine to coarse GRAVEL, trace silt	
				9.5 — 51.8	
				Test Pit terminated at 9.5 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-17

PAGE 1 OF 1

NORTHING 555963.3796

EASTING 572869.952

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/16/24 **COMPLETED** 5/16/24

GROUND ELEVATION 60.8' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 8.0' / Elev 52.8'

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	0.7	8" TOPSOIL	60.1	
			B		Brown to black medium to fine to coarse SAND, trace fine gravel, trace silt		
5	S-1			5.0	Brown to light brown fine to medium to coarse SAND and SILT		Infiltration test INF-17 set at 5 ft
				8.0		52.8	
			C		Brown medium to fine SAND and fine to coarse GRAVEL, trace silt		
				9.5		51.3	

Test Pit terminated at 9.5 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-18

NORTHING 556114.3253

EASTING 572962.8363

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/16/24 **COMPLETED** 5/16/24

GROUND ELEVATION 62.1' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 8.0' / Elev 54.1'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 8.0' / Elev 54.1'

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 61.1	
			B	Brown medium to fine SAND, some silt 3.0 Brown fine SAND, some silty clay	
5	S-1			5.0 Brown fine to medium to coarse SAND and Silty CLAY	Infiltration test INF-18 set at 5 ft
				7.0 / 55.1	
			C	Brown medium to fine SAND, little fine gravel, trace silt 8.0 / 54.1	
				Test Pit terminated at 8.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-19

PAGE 1 OF 1

NORTHING 556218.2202

EASTING 573060.5771

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/17/24 **COMPLETED** 5/17/24

GROUND ELEVATION 63.1' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	0.7	8" TOPSOIL	62.4	
			B		Brown medium to fine SAND, some silt, little fine gravel		
5	S-1		B	4.0	Brown to light brown fine to medium to coarse SAND, little silt		Infiltration test INF-19 set at 5 ft
			B	7.0		56.1	
			C		Brown medium to fine to coarse SAND and fine GRAVEL, trace silt		
			C	9.0		54.1	

Test Pit terminated at 9.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-20

NORTHING 556167.6914

EASTING 573196.4072

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/17/24 **COMPLETED** 5/17/24

GROUND ELEVATION 62.5' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 8.0' / Elev 54.5'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 8.0' / Elev 54.5'

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	0.8	10" TOPSOIL	61.7	
			B	4.0	Brown medium to fine SAND, some silt		
5	S-1				Brown to light brown medium to fine to coarse SAND, trace silt, trace fine gravel		Infiltration test INF-20 set at 5 ft
				7.0		55.5	
			C		Brown fine to medium SAND and fine to coarse GRAVEL, trace silt		
				9.0		53.5	
					Test Pit terminated at 9.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-21

NORTHING 556085.1287

EASTING 573092.2806

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/17/24 **COMPLETED** 5/17/24

GROUND ELEVATION 62.4' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 8.0' / Elev 54.4'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 8.0' / Elev 54.4'

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	0.7	8" TOPSOIL	61.7	
			B		Brown fine to medium SAND, some silt		
5	S-1			5.0		57.4	Infiltration test INF-21 set at 5 ft
			C		Brown fine SAND, some fine gravel, trace silt		
				8.0			
					Brown medium to fine SAND and fine GRAVEL, trace silt		
				9.0		53.4	
					Test Pit terminated at 9.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-22

NORTHING 555887.0436

EASTING 573146.0222

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/17/24 **COMPLETED** 5/17/24

GROUND ELEVATION 61.0' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 8.0' / Elev 53.0'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 8.0' / Elev 53.0'

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	0.5	6" TOPSOIL	60.5	
			B		Brown to dark brown medium to fine SAND, some silt, trace fine gravel		
				3.0	Brown to light brown fine to medium SAND, little silt		
5	S-1						Infiltration test INF-22 set at 5 ft
				7.0		54.0	
			C	8.0	Brown to light brown coarse to medium to fine SAND and fine GRAVEL, trace silt	53.0	
					Test Pit terminated at 8.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-23

PAGE 1 OF 1

NORTHING 555767.6145

EASTING 572967.111

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/20/24 **COMPLETED** 5/20/24

GROUND ELEVATION 60.6' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 9.0' / Elev 51.6'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Measured

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

▼ **AFTER EXCAVATION** 9.0' / Elev 51.6'

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T		12" TOPSOIL		
				1.0		59.6	
					Brown fine to medium SAND, some clay		
				2.0			
					Orange to brown fine to medium SAND, little silt, trace fine gravel		
			B				
5							
	S-1			5.0	Orange to brown fine to medium SAND, some silt		Infiltration test INF-23 set at 5 ft
				7.0		53.6	
			C	7.5	Brown fine to medium SAND and fine to coarse GRAVEL, trace silt	53.1	
			D		Tan fine to medium SAND, trace silt		
▼				9.0		51.6	
					Test Pit terminated at 9.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-24

NORTHING 555762.8482

EASTING 573075.2998

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/20/24 **COMPLETED** 5/20/24

GROUND ELEVATION 59.3' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 8.0' / Elev 51.3'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 8.0' / Elev 51.3'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION		REMARKS
0				Depth	Elev.	
			T	12" TOPSOIL 1.0	58.3	
			B	Brown fine to medium SAND, some clay 3.0 Brown to orange fine to medium to coarse SAND, little silt, trace fine gravel		
5	S-1					Infiltration test INF-24 set at 5 ft
				6.0	53.3	
			C	Brown fine to coarse GRAVEL and fine to medium SAND, trace silt 7.0	52.3	
▼			D	Tan fine to medium SAND, trace silt 8.0	51.3	
				Test Pit terminated at 8.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-25

NORTHING 555778.776

EASTING 573196.3805

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/17/24 **COMPLETED** 5/17/24

GROUND ELEVATION 60.0' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 8.0' / Elev 52.0'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 8.0' / Elev 52.0'

LOGGED BY N. Francois **CHECKED BY** A. Spencer

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 59.0	
			B	Brown medium to fine SAND, some silt 4.0	
5	S-1			Brown fine to medium SAND, little silt	Infiltration test INF-25 set at 5 ft
				7.0 / 53.0	
			C	Brown medium to fine SAND and fine GRAVEL, trace silt 9.0 / 51.0	
				Test Pit terminated at 9.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-26

NORTHING 555617.565

EASTING 573008.9161

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/20/24 **COMPLETED** 5/20/24

GROUND ELEVATION 58.6' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 8.0' / Elev 50.6'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 8.0' / Elev 50.6'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	1.0	12" TOPSOIL	57.6	
			B	3.0	Tan to gray fine to medium SAND, some silt Brown fine to medium SAND, little silt		
5	S-1			5.0		53.6	Infiltration test INF-26 set at 4 ft
			C	6.0	Dark brown fine to coarse GRAVEL, little to some fine to medium sand	52.6	
			D	8.0	Orange fine to medium SAND, little silt, trace fine to coarse gravel	50.6	

Test Pit terminated at 8.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-27

NORTHING 555627.1004

EASTING 573103.3025

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/20/24 **COMPLETED** 5/20/24

GROUND ELEVATION 57.7' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 6.0' / Elev 51.7'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 6.0' / Elev 51.7'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 56.7	
			B	Brown fine to medium SAND, some silt 2.0 Orange fine to medium to coarse SAND, some silt	
	S-1			3.5 / 54.2	Infiltration test INF-27 set at 3 ft
			C	Orange to brown fine to coarse GRAVEL and fine to medium to coarse SAND, trace silt 4.5 Orange to brown fine to medium SAND and fine to coarse GRAVEL, trace silt	
5				6.0 / 51.7	
▼			D	Tan fine to medium SAND, trace silt	
				8.0 / 49.7	

Test Pit terminated at 8.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-28

NORTHING 555671.9759

EASTING 573219.4274

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/20/24 **COMPLETED** 5/20/24

GROUND ELEVATION 59.0' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 8.0' / Elev 51.0'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 8.0' / Elev 51.0'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION		REMARKS
0				Depth	Elev.	
			T	12" TOPSOIL 1.0	58.0	
			B	Orange fine to medium SAND, some to and CLAY 3.0		
	S-1			Orange fine to medium SAND, little silt 4.0	55.0	Infiltration test INF-28 set at 4 ft
5			C	Orange to brown fine to medium SAND, some to and fine to coarse GRAVEL, trace silt 7.0	52.0	
			D	Tan fine to medium SAND, trace silt 8.0	51.0	
				Test Pit terminated at 8.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-29

NORTHING 555473.9041

EASTING 573036.2586

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 59.7' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 8.0' / Elev 51.7'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 8.0' / Elev 51.7'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 58.7	
			A	Orange SILT 3.0 Orange CLAY, trace to little fine to medium sand 4.0 / 55.7	
5	S-1		B	Orange to brown fine to medium to coarse SAND, little silt, trace fine gravel 6.0 / 53.7	Infiltration test INF-29 set at 5 ft
			C	Orange to brown fine to medium SAND and fine to coarse GRAVEL, little silt 8.0 / 51.7	

Test Pit terminated at 8.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-30

NORTHING 555502.6575

EASTING 573115.818

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 57.2' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 6.0' / Elev 51.2'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 6.0' / Elev 51.2'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0			T	Depth 12" TOPSOIL 1.0 Elev. 56.2	
			A	Orange to brown CLAY 3.5 53.7	Infiltration test INF-30 set at 3.5 ft
	S-1		B	Orange fine to medium SAND, little silt 5.0	
5				5.5 Brown fine to medium to coarse SAND, some fine to coarse gravel, little silt 51.7	
			C	Brown to orange fine to coarse GRAVEL, some fine to medium to coarse sand, little silt 7.5 49.7	
			D	Tan to orange fine to medium SAND, trace silt 9.0 48.2	
				Test Pit terminated at 9.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-31

PAGE 1 OF 1

NORTHING 555542.1548

EASTING 573222.3957

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 55.6' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 5.0' / Elev 50.6'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 5.0' / Elev 50.6'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 54.6	
			A	Brown CLAY 2.0 Gray to brown CLAY and fine to medium SAND	
	S-1			4.0 / 51.6	Infiltration test INF-31 set at 3 ft
5 ▼			C	Brown fine to medium to coarse SAND and fine to coarse GRAVEL 6.0 / 49.6	
			D	Brown fine to medium SAND, little silt 8.0 / 47.6	

Test Pit terminated at 8.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-32

NORTHING 555579.4342

EASTING 573365.7053

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 57.2' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 6.0' / Elev 51.2'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 6.0' / Elev 51.2'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION		REMARKS
				Depth	Elev.	
0			T	12" TOPSOIL 1.0	56.2	
			B	Brown fine to medium SAND, little silt 2.0	55.2	
			C	Brown fine to medium SAND and fine to coarse GRAVEL, little silt 3.0	54.2	
	S-1		D	Tan to orange fine to medium SAND, little fine gravel, trace silt		Infiltration test INF-32 set at 3 ft
5						
				8.0	49.2	

Test Pit terminated at 8.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-33

NORTHING 555451.5355

EASTING 573298.0031

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 55.1' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 4.0' / Elev 51.1'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 3.0' / Elev 52.1'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION		REMARKS
0				Depth	Elev.	
			T	12" TOPSOIL 1.0	54.1	
			A	Brown CLAY 2.0	53.1	
			B	Orange fine to medium SAND, some silt, trace fine to coarse gravel		No infiltration test due to shallow groundwater
				4.0 Orange fine to medium SAND, trace silt		
5				5.0 Test Pit terminated at 5.0 feet.	50.1	Excavation terminated due to perpetual cave in

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-34

NORTHING 555342.9244

EASTING 573247.9353

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 57.3' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 6.0' / Elev 51.3'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 6.0' / Elev 51.3'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	1.0	12" TOPSOIL	56.3	
			A	3.0	Brown CLAY, little to some fine to medium sand, trace fine to coarse gravel	54.3	Infiltration test INF-34 set at 3 ft
	S-1		B	4.0	Orange fine to medium to coarse SAND and SILT	53.3	
			C	4.5	Brown fine to medium to coarse SAND and fine to coarse GRAVEL, trace silt	52.8	
5			D	8.0	Orange fine to medium SAND, little silt	49.3	
					Test Pit terminated at 8.0 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-35

NORTHING 555339.046

EASTING 573324.8237

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 57.4' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

▽ **DURING EXCAVATION** 7.0' / Elev 50.4'

OPERATOR / HELPER Gene Blemings

▼ **AT END OF EXCAVATION** 7.0' / Elev 50.4'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 56.4	
			B	Brown to orange fine to medium SAND, trace silt, trace fine to coarse gravel 3.0 / 54.4	
			C	3.5 Orange to brown fine to medium SAND and fine to coarse GRAVEL 53.9	
	S-1			Orange to brown fine to medium to coarse SAND, little silt	Infiltration test INF-35 set at 4 ft
5			D		
				8.0 / 49.4	

Test Pit terminated at 8.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-36

NORTHING 555534.7658

EASTING 573468.0706

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 57.7' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION 6.0' / Elev 51.7'

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION 6.0' / Elev 51.7'

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	1.0	12" TOPSOIL	56.7	
			B	2.0	Orange to red fine to medium to coarse SAND, little silt, trace fine to coarse gravel		
				3.0	Orange to brown fine to medium to coarse SAND, some fine to coarse gravel, trace silt	54.7	Infiltration test INF-36 set at 3 ft
	S-1				Tan to orange medium to fine to coarse SAND, little silt, trace fine gravel		
5			D				
				8.0		49.7	

Test Pit terminated at 8.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-37

NORTHING 556121.421

EASTING 573620.1385

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 61.8' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	1.0	12" TOPSOIL	60.8	
			B	2.0	Brown fine to medium SAND, some silt	59.8	
			A	4.0	Gray SILT, little fine sand	57.8	
5	S-1		B	6.0	Orange fine to medium to coarse SAND, little silt, trace fine gravel	55.8	Infiltration test INF-37 set at 5 ft
			C	8.0	Brown to orange fine to medium to coarse SAND and fine to coarse GRAVEL, trace silt	53.8	
			D	8.5	Gray to orange fine to medium SAND, trace silt	53.3	Mottling
					Test Pit terminated at 8.5 feet.		

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-38

NORTHING 556154.7741

EASTING 573686.8144

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 62.9' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 61.9	
			B	Orange to gray fine to medium SAND, some clayey silt	
				4.0 Orange to tan fine to medium to coarse SAND, little silt, trace fine gravel	
5	S-1				Infiltration test INF-38 set at 5 ft
				7.0 Orange to brown fine to medium SAND, some fine to coarse gravel, little silt	
				8.0 8.5 Orange fine to medium SAND, little silt, trace fine to coarse gravel / 54.4	
				Test Pit terminated at 8.5 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-39

NORTHING 555997.181

EASTING 573779.1954

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 61.3' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0				Depth / Elev.	
			T	12" TOPSOIL 1.0 / 60.3	
			B	Orange to brown fine to medium SAND, some clay	
				3.0 Orange fine to medium SAND, little silt	
5	S-1				Infiltration test INF-39 set at 5 ft
				6.0 Orange fine to medium SAND, some fine to coarse gravel, trace silt	
				8.0 / 53.3 Test Pit terminated at 8.0 feet.	

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

TEST PIT LOG

Test Pit TP-40

NORTHING 555963.8889

EASTING 573722.5978

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, Delaware

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 60.8' NAVD88 +/-

EXCAVATION CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

EXCAVATION METHOD Mini-Excavator

DURING EXCAVATION Not Encountered

OPERATOR / HELPER Gene Blemings

AT END OF EXCAVATION Not Encountered

LOGGED BY N. Fisher **CHECKED BY** T. Thomson

AFTER EXCAVATION Not Encountered

DEPTH (ft)	SAMPLE TYPE NUMBER	GRAPHIC LOG	STRATA	Depth	DESCRIPTION	Elev.	REMARKS
0			T	1.0	12" TOPSOIL	59.8	
			B	3.0	Brown fine to medium SAND, some clay, trace fine to coarse gravel Orange fine to medium SAND, some silt		
5	S-1			5.0		55.8	Infiltration test INF-40 set at 4 ft
			C	6.0	Brown to orange fine to medium SAND and fine to coarse GRAVEL, trace silt	54.8	
			D	8.0	Orange fine to medium SAND, trace silt	52.8	

Test Pit terminated at 8.0 feet.

NOTES:

Northing, easting, and surface elevations provided by Landmark Science & Engineering.

SUMMARY OF LABORATORY DATA

BORING NUMBER	SAMPLE NUMBER	DEPTH (ft)	SOIL GROUP SYMBOL	GRAIN SIZE DISTRIBUTION				PLASTICITY				MOISTURE CONTENT w %	VOLUMETRIC				COMPACTION DATA			Organic Content (%)			SHEAR STRENGTH		
				GRAVEL %	SAND %	SILT %	CLAY %	LIQUID LIMIT w_l	PLASTIC LIMIT wp	PLASTICITY INDEX I_p	LIQUIDITY INDEX I_L		SPECIFIC GRAVITY (G)	DRY UNIT WEIGHT (pcf)	VOID RATIO (e)	DEGREE OF SATURATION %	MAXIMUM DRY DENSITY (pcf)	OPTIMUM MOISTURE CONTENT %	STANDARD/MODIFIED				UNCONFINED COMPRESSIVE STRENGTH (tsf)	COHESION (tsf)	AXIAL STRAIN (%)
TP-1	S-1	3'		0	89	11						9.1													
TP-2(B)	S-1	5'		5	84	11						12.0													
TP-3	S-1	5'		0	79	21						24.8													
TP-4	S-1	5'		0	51	9						9.3													
TP-5	S-1	5'		0	87	13						10.2													
TP-6	S-1	5'		0	88							8.5													
TP-7	S-1	5'		0	91	9						7.1													
TP-8	S-1	5'		1	87	12						7.7													
TP-9	S-1	5'		2	85	13						10.1													
TP-10	S-1	5'		1	89	10						8.6													
TP-11	S-1	5'		0	89	11						8.1													
TP-12	S-1	5'		1	91	8						6.7													

PENNONI ASSOCIATES INC.	DRAWN BY: JTR CHECKED BY:	DATE: 7/2/2024 DATE:
PROJECT: **Appoquinimink School District Campus** LOCATION: **Middletown, DE**	JOB No.: **LDMSE24001** TABLE No.: **L-1**	

SUMMARY OF LABORATORY DATA

BORING NUMBER	SAMPLE NUMBER	DEPTH (ft)	SOIL GROUP SYMBOL	GRAIN SIZE DISTRIBUTION				PLASTICITY				MOISTURE CONTENT w %	VOLUMETRIC				COMPACTION DATA			Organic Content (%)			SHEAR STRENGTH		
				GRAVEL %	SAND %	SILT %	CLAY %	LIQUID LIMIT w_l	PLASTIC LIMIT wp	PLASTICITY INDEX I_p	LIQUIDITY INDEX I_L		SPECIFIC GRAVITY (G)	DRY UNIT WEIGHT (pcf)	VOID RATIO (e)	DEGREE OF SATURATION %	MAXIMUM DRY DENSITY (pcf)	OPTIMUM MOISTURE CONTENT %	STANDARD/MODIFIED				UNCONFINED COMPRESSIVE STRENGTH (tsf)	COHESION (tsf)	AXIAL STRAIN (%)
TP-13	S-1	5'		0	69	31						14.3													
TP-14	S-1	5'		0	88	12						12.7													
TP-15	S-1	5'		0	97	3						6.3													
TP-16	S-1	5'		0	85	15						10.5													
TP-17	S-1	5'		0	51	49						12.4													
TP-18	S-1	5'		0	63	37						10.0													
TP-19	S-1	5'		0	86	14						9.4													
TP-20	S-1	5'		5	86	9						8.3													
TP-21	S-1	5'		0	75	25						12.3													
TP-22	S-1	5'		0	85	15						11.7													
TP-23	S-1	5'		0	74	26						14.4													
TP-24	S-1	5'		3	84	13						14.5													

PENNONI ASSOCIATES INC.	DRAWN BY: JTR CHECKED BY:	DATE: 7/2/2024 DATE:	PROJECT: **Appoquinimink School District Campus** LOCATION: **Middletown, DE**	JOB No.: **LDMSE24001** TABLE No.: **L-1**

SUMMARY OF LABORATORY DATA

BORING NUMBER	SAMPLE NUMBER	DEPTH (ft)	SOIL GROUP SYMBOL	GRAIN SIZE DISTRIBUTION				PLASTICITY				MOISTURE CONTENT w %	VOLUMETRIC				COMPACTION DATA			Organic Content (%)			SHEAR STRENGTH		
				GRAVEL %	SAND %	SILT %	CLAY %	LIQUID LIMIT w_l	PLASTIC LIMIT wp	PLASTICITY INDEX I_p	LIQUIDITY INDEX I_L		SPECIFIC GRAVITY (G)	DRY UNIT WEIGHT (pcf)	VOID RATIO (e)	DEGREE OF SATURATION %	MAXIMUM DRY DENSITY (pcf)	OPTIMUM MOISTURE CONTENT %	STANDARD/MODIFIED				UNCONFINED COMPRESSIVE STRENGTH (tsf)	COHESION (tsf)	AXIAL STRAIN (%)
TP-25	S-1	5'		0	85	15						15.1													
TP-26	S-1	4'		0	85	15						13.8													
TP-27	S-1	3'		0	79	21						15.4													
TP-28	S-1	4'		0	87	13						9.7													
TP-29	S-1	5'		4	80	16						10.4													
TP-30	S-1	3.5'		0	84	16						13.1													
TP-31	S-1	3'		0	47	53						15.8													
TP-32	S-1	3'		14	79	7						9.2													
TP-34	S-1	3'		0	60	40						13.7													
TP-35	S-1	4'		0	86	14						9.6													
TP-36	S-1	3'		5	85	10						6.1													
TP-37	S-1	5'		1	84	15						11.5													

PENNONI ASSOCIATES INC.	DRAWN BY: JTR CHECKED BY:	DATE: 7/3/2024 DATE:
PROJECT: **Appoquinimink School District Campus** LOCATION: **Middletown, DE**	JOB No.: **LDMSE24001** TABLE No.: **L-1**	

SUMMARY OF LABORATORY DATA

BORING NUMBER	SAMPLE NUMBER	DEPTH (ft)	SOIL GROUP SYMBOL	GRAIN SIZE DISTRIBUTION				PLASTICITY				MOISTURE CONTENT w %	VOLUMETRIC				COMPACTION DATA			Organic Content (%)			SHEAR STRENGTH		
				GRAVEL %	SAND %	SILT %	CLAY %	LIQUID LIMIT w_l	PLASTIC LIMIT wp	PLASTICITY INDEX I_p	LIQUIDITY INDEX I_L		SPECIFIC GRAVITY (G)	DRY UNIT WEIGHT (pcf)	VOID RATIO (e)	DEGREE OF SATURATION %	MAXIMUM DRY DENSITY (pcf)	OPTIMUM MOISTURE CONTENT %	STANDARD/MODIFIED				UNCONFINED COMPRESSIVE STRENGTH (tsf)	COHESION (tsf)	AXIAL STRAIN (%)
TP-38	S-1	5'		4	78	18						10.4													
TP-39	S-1	4'		0	85	15						14.2													
TP-40	S-1	3'		0	78	22						18.3													

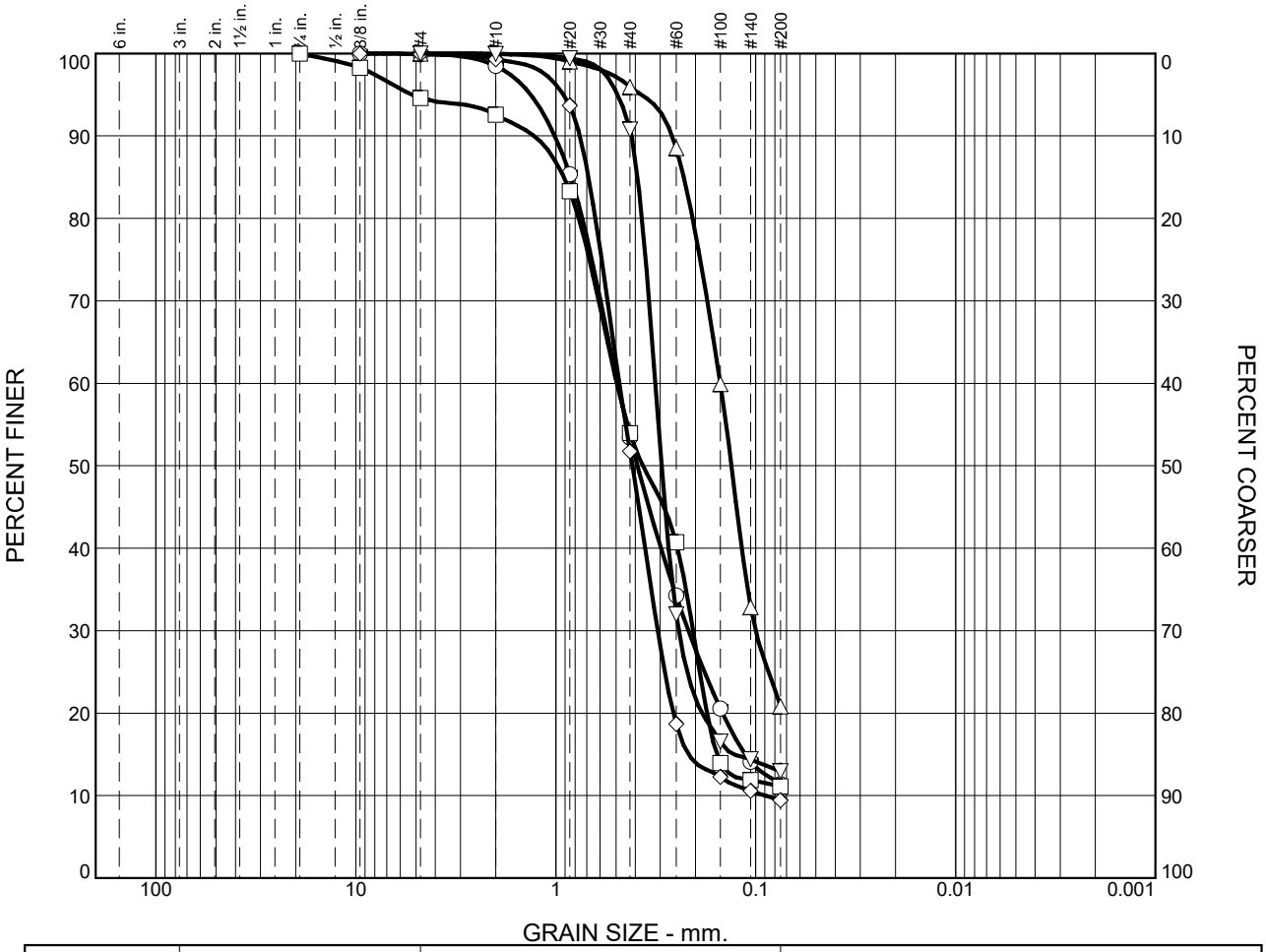
PENNONI ASSOCIATES INC.	DRAWN BY: JTR	DATE: 7/3/2024	PROJECT: **Appoquinimink School District Campus**
	CHECKED BY:	DATE:	LOCATION: **Middletown, DE**

JOB No.: **LDMSE24001**

TABLE No.: **L-1**

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical s

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	2	45	42	11	
□	0	0	5	2	39	43	11	
△	0	0	0	0	4	75	21	
◇	0	0	0	1	47	43	9	
▽	0	0	0	0	9	78	13	

SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	TP-1	S-1	3'	M/F/C SAND, LITTLE SILT/CLAY	
□	TP-2(B)	S-1	5'	F/M/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	
△	TP-3	S-1	5'	F/M SAND, SOME SILT/CLAY	
◇	TP-4	S-1	5'	M/F/C SAND, TRACE SILT/CLAY	
▽	TP-5	S-1	5'	F/M SAND, LITTLE SILT/CLAY	

PENNONI ASSOCIATES INC.

Client: Landmark Science & Engineering

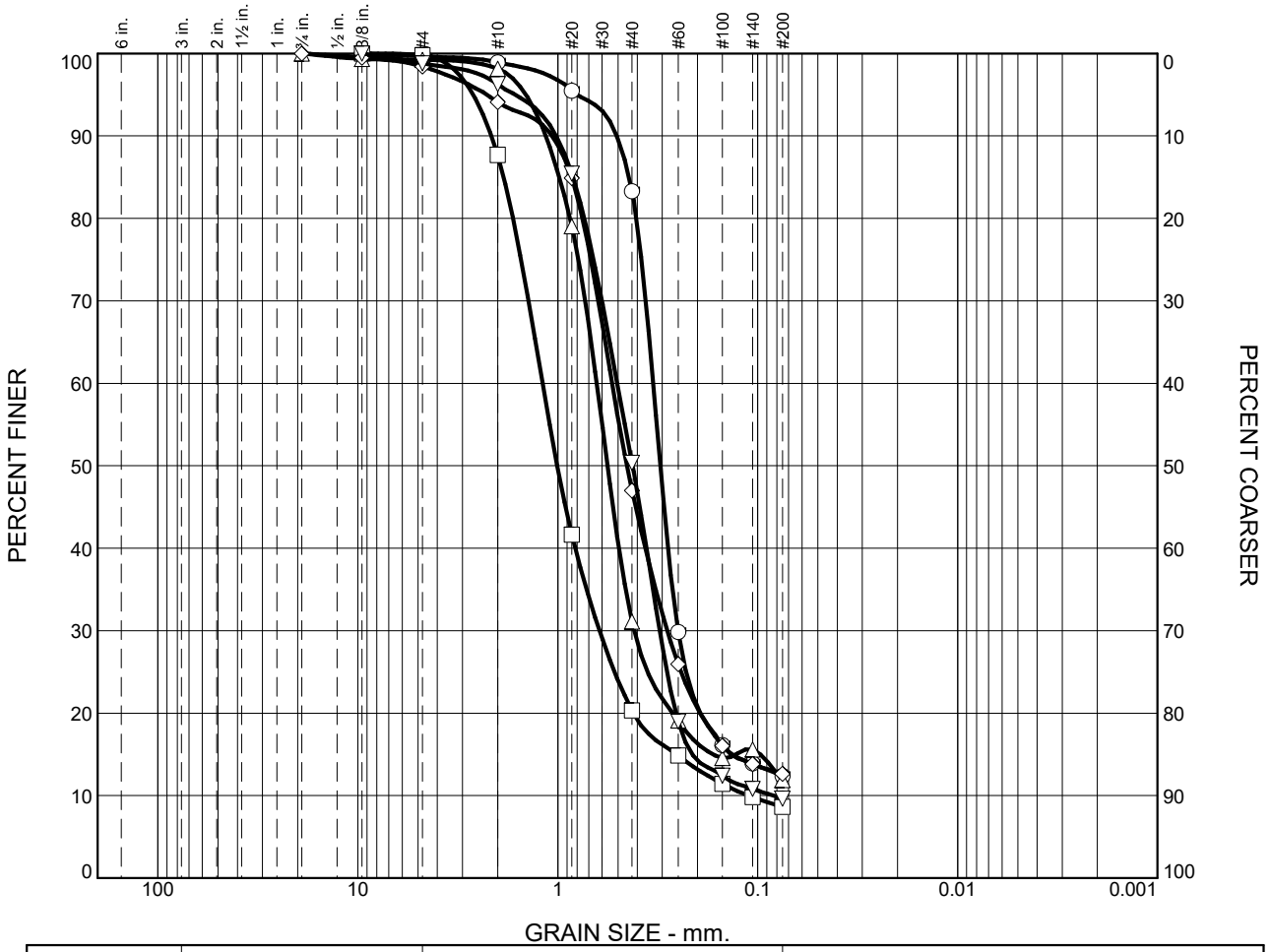
Project: Appoquinimink School District Summit Campus

Project No.: LDMSE24001 **Figure** S-1

Checked By: JTR

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical s

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	1	16	71	12	
□	0	0	0	12	68	11	9	
△	0	0	1	1	67	19	12	
◇	0	0	2	4	47	34	13	
▽	0	0	1	3	46	40	10	

SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	TP-6	S-1	5'	F/M/C SAND, LITTLE SILT/CLAY	
□	TP-7	S-1	5'	M/C/F SAND, TRACE SILT/CLAY	
△	TP-8	S-1	5'	M/F/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	
◇	TP-9	S-1	5'	M/F/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	
▽	TP-10	S-1	5'	M/F/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	

PENNONI ASSOCIATES INC.

Client: Landmark Science & Engineering

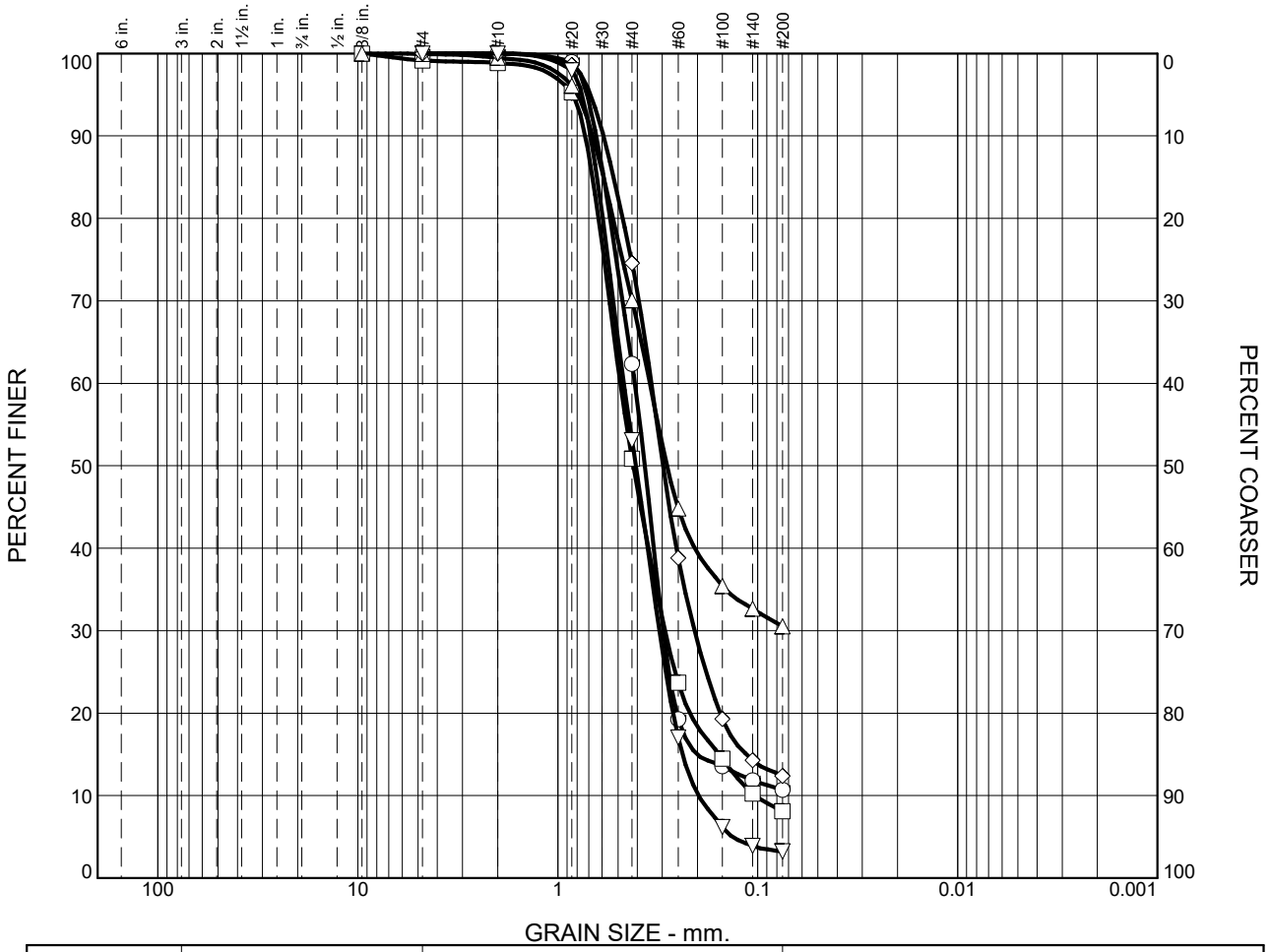
Project: Appoquinimink School District Summit Campus

Project No.: LDMSE24001 **Figure** S-2

Checked By: JTR

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical s

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	0	38	51	11	
□	0	0	1	0	48	43	8	
△	0	0	0	1	29	39	31	
◇	0	0	0	0	25	63	12	
▽	0	0	0	0	47	50	3	

SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	TP-11	S-1	5'	F/M SAND, LITTLE SILT/CLAY	
□	TP-12	S-1	5'	M/F SAND, TRACE SILT/CLAY, TRACE FINE GRAVEL	
△	TP-13	S-1	5'	F/M/C SAND, SOME SILT/CLAY	
◇	TP-14	S-1	5'	F/M SAND, LITTLE SILT/CLAY	
▽	TP-15	S-1	5'	F/M SAND, TRACE SILT/CLAY	SP

PENNONI ASSOCIATES INC.

Client: Landmark Science & Engineering

Project: Appoquinimink School District Summit Campus

Project No.: LDMSE24001 **Figure** S-3

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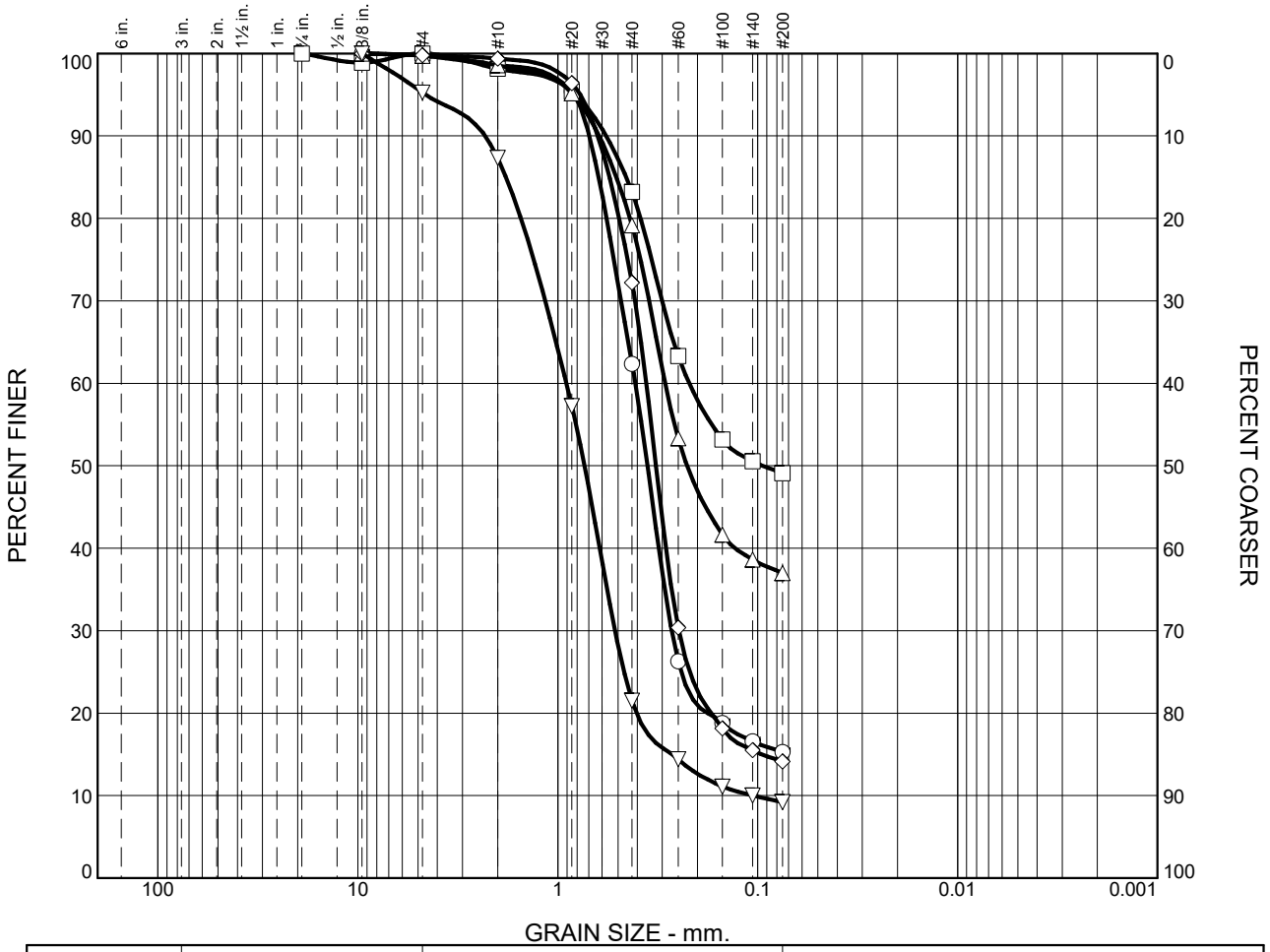
Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	1	37	47	15	
□	0	0	0	2	15	34	49	
△	0	0	0	1	20	42	37	
◇	0	0	0	1	27	58	14	
▽	0	0	5	8	65	13	9	

SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	TP-16	S-1	5'	F/M/C SAND, LITTLE SILT/CLAY	
□	TP-17	S-1	5'	F/M/C SAND, AND SILT/CLAY	
△	TP-18	S-1	5'	F/M/C SAND, AND SILT/CLAY	
◇	TP-19	S-1	5'	F/M/C SAND, LITTLE SILT/CLAY	
▽	TP-20	S-1	5'	M/F/C SAND, TRACE SILT/CLAY, TRACE FINE GRAVEL	

PENNONI ASSOCIATES INC.

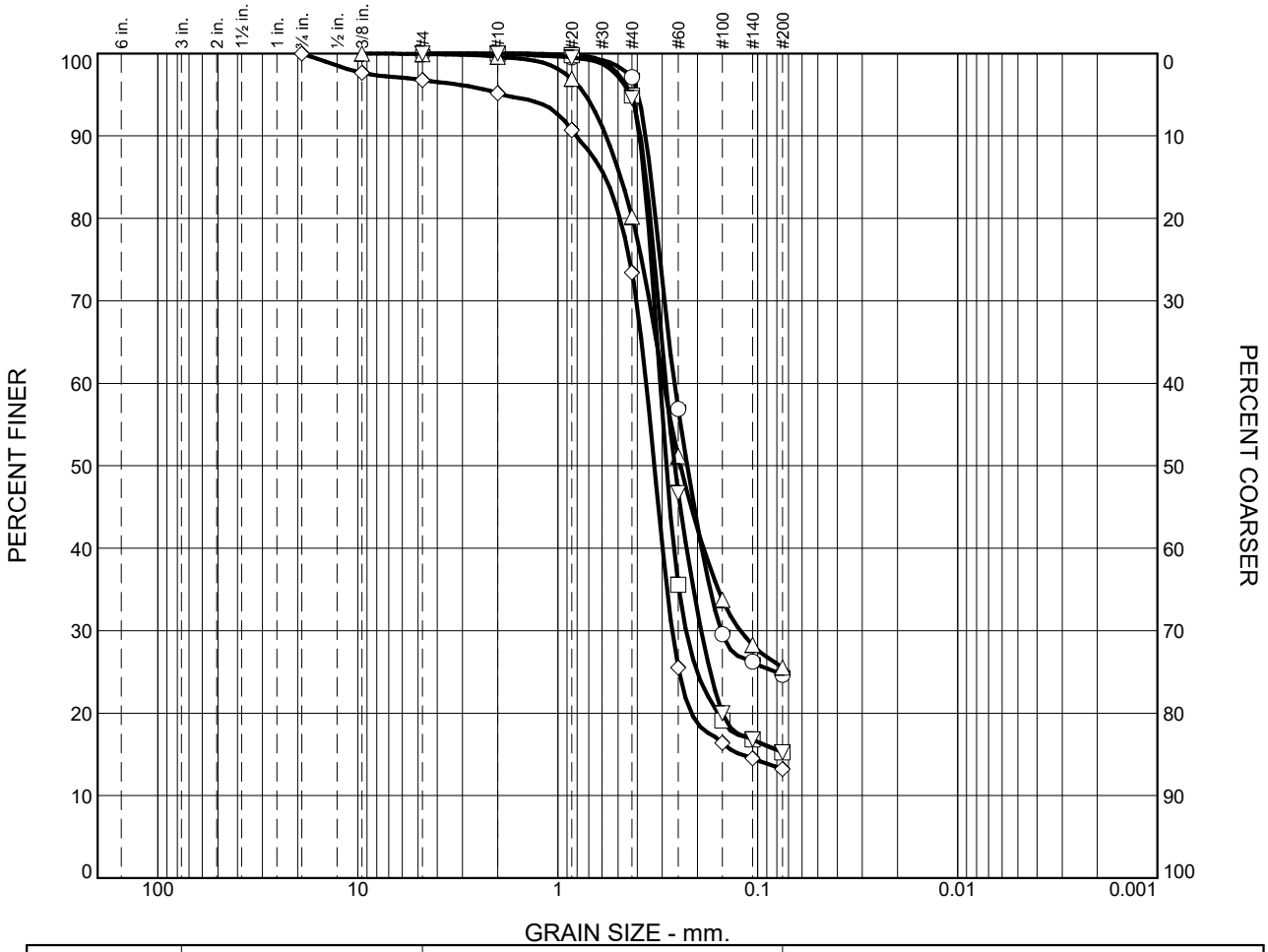
Client: Landmark Science & Engineering

Project: Appoquinimink School District Summit Campus

Project No.: LDMSE24001 **Figure** S-4

Checked By: JTR

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	0	3	72	25	
□	0	0	0	0	5	80	15	
△	0	0	0	0	20	54	26	
◇	0	0	3	2	22	60	13	
▽	0	0	0	0	5	80	15	

SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	TP-21	S-1	5'	F/M SAND, SOME SILT/CLAY	
□	TP-22	S-1	5'	F/M SAND, LITTLE SILT/CLAY	
△	TP-23	S-1	5'	F/M SAND, SOME SILT/CLAY	
◇	TP-24	S-1	5'	F/M/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	
▽	TP-25	S-1	5'	F/M SAND, LITTLE SILT/CLAY	

PENNONI ASSOCIATES INC.

Client: Landmark Science & Engineering

Project: Appoquinimink School District Summit Campus

Project No.: LDMSE24001 **Figure** S-5

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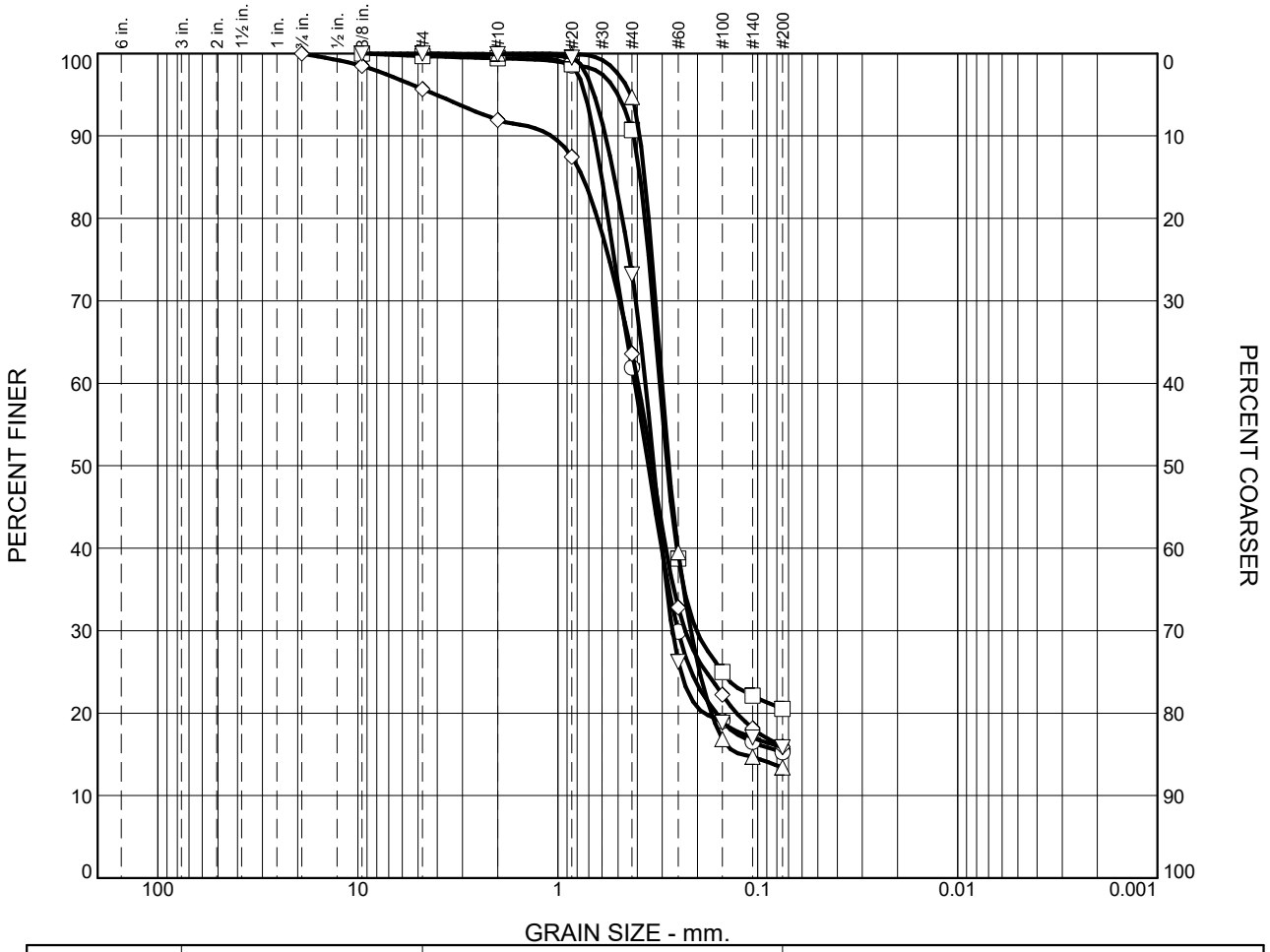
Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	0	38	47	15	
□	0	0	0	1	8	70	21	
△	0	0	0	0	5	82	13	
◇	0	0	4	4	28	48	16	
▽	0	0	0	0	27	57	16	

SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	TP-26	S-1	4'	F/M SAND, LITTLE SILT/CLAY	
□	TP-27	S-1	3'	F/M/C SAND, SOME SILT/CLAY	
△	TP-28	S-1	4'	F/M SAND, LITTLE SILT/CLAY	
◇	TP-29	S-1	5'	F/M/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	
▽	TP-30	S-1	3.5'	F/M SAND, LITTLE SILT/CLAY	

PENNONI ASSOCIATES INC.

Client: Landmark Science & Engineering

Project: Appoquinimink School District Summit Campus

Project No.: LDMSE24001 **Figure** S-6

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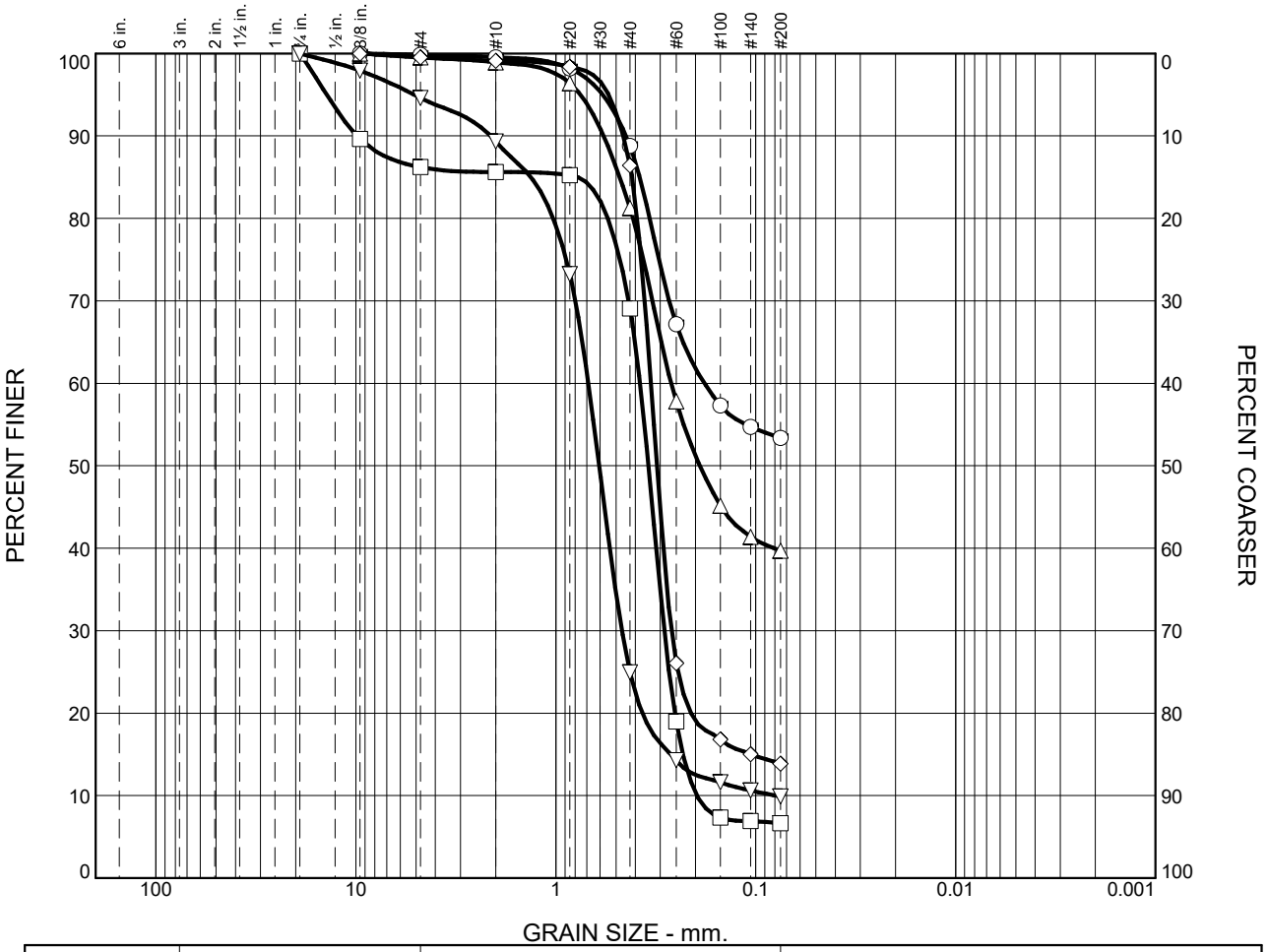
Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	0	11	36	53	
□	0	0	14	0	17	62	7	
△	0	0	0	1	18	41	40	
◇	0	0	0	1	13	72	14	
▽	0	0	5	6	64	15	10	

SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	TP-31	S-1	3'	SILT/CLAY, AND F/M SAND	
□	TP-32	S-1	3'	F/M SAND, LITTLE FINE GRAVEL, TRACE SILT/CLAY	
△	TP-34	S-1	3'	F/M/C SAND, AND SILT/CLAY	
◇	TP-35	S-1	4'	F/M/C SAND, LITTLE SILT/CLAY	
▽	TP-36	S-1	3'	M/F/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	

PENNONI ASSOCIATES INC.

Client: Landmark Science & Engineering

Project: Appoquinimink School District Summit Campus

Project No.: LDMSE24001 **Figure** S-7

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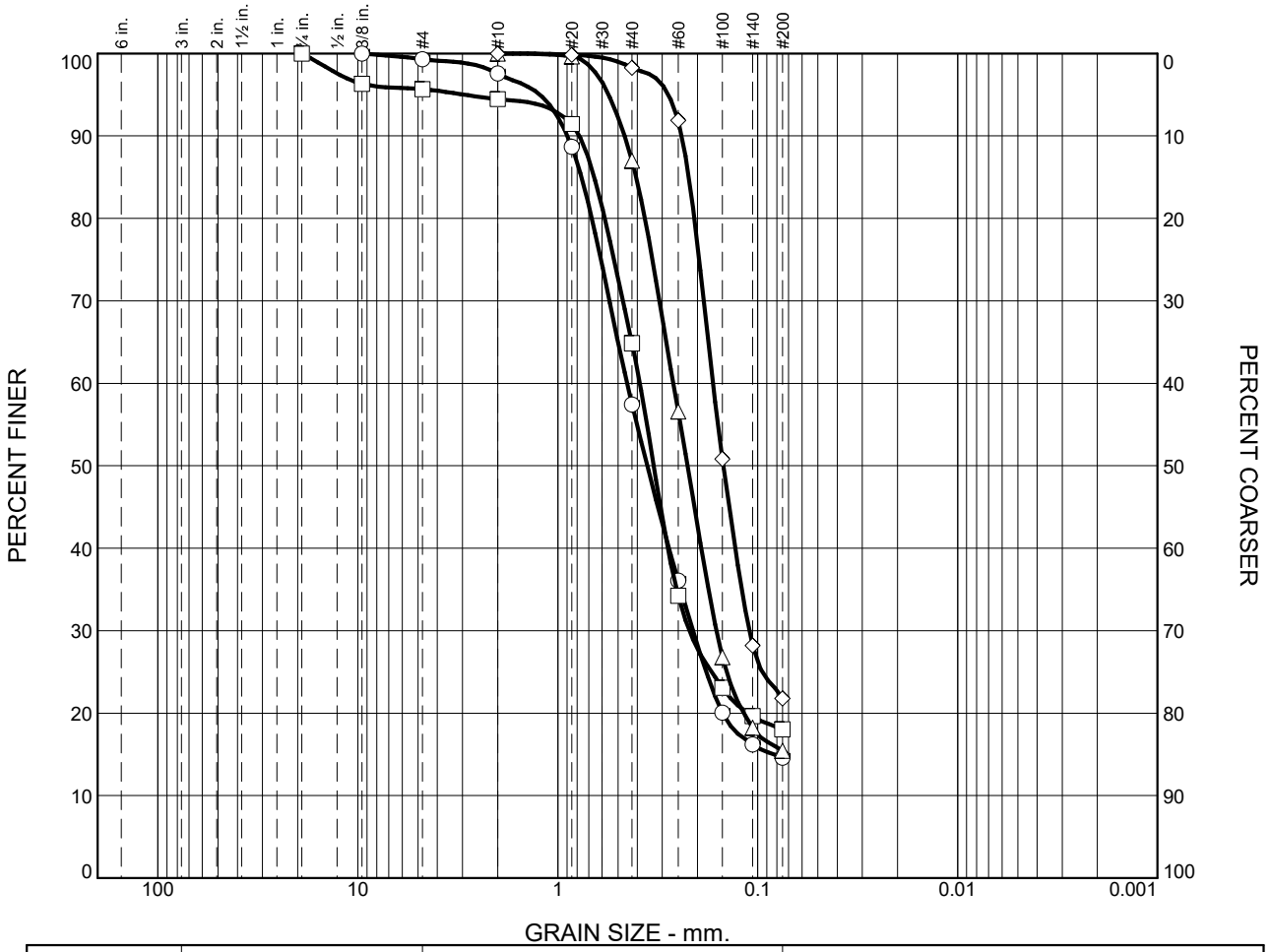
Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	1	1	41	42	15	
□	0	0	4	2	29	47	18	
△	0	0	0	0	13	72	15	
◇	0	0	0	0	2	76	22	

SOIL DATA

	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	TP-37	S-1	5'	F/M/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	
□	TP-38	S-1	5'	F/M/C SAND, LITTLE SILT/CLAY, TRACE FINE GRAVEL	
△	TP-39	S-1	5'	F/M SAND, LITTLE SILT/CLAY	
◇	TP-40	S-1	4'	F/M SAND, SOME SILT/CLAY	

PENNONI ASSOCIATES INC.

Client: Landmark Science & Engineering

Project: Appoquinimink School District Summit Campus

Project No.: LDMSE24001 **Figure** S-8

Checked By: JTR

Single Ring Infiltration Log

INF - 1

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/23/2024 Completed 5/23/2024	Testing Depth / Elev.	3 ft / 59.86 ft
Test Performed By	N. Fisher	Water Depth /Elev.	6 ft / 56.86 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	8:36	9:36	60	4.00	2.8750	1.1250	--
P2							
1	9:36	9:51	15	4.00	3.813	0.188	0.75
2	9:51	10:06	15	4.00	3.813	0.188	0.75
3	10:06	10:21	15	4.00	3.813	0.188	0.75
4	10:21	10:36	15	4.00	3.875	0.125	0.50
5	10:36	10:51	15	4.00	3.875	0.125	0.50
6	10:51	11:06	15	4.00	3.938	0.063	0.25
7	11:06	11:21	15	4.00	3.938	0.063	0.25
8	11:21	11:36	15	4.00	3.938	0.063	0.25
					Field Infiltration Rate:		**0.25**

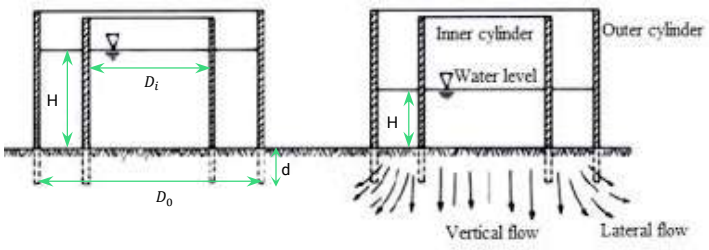
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

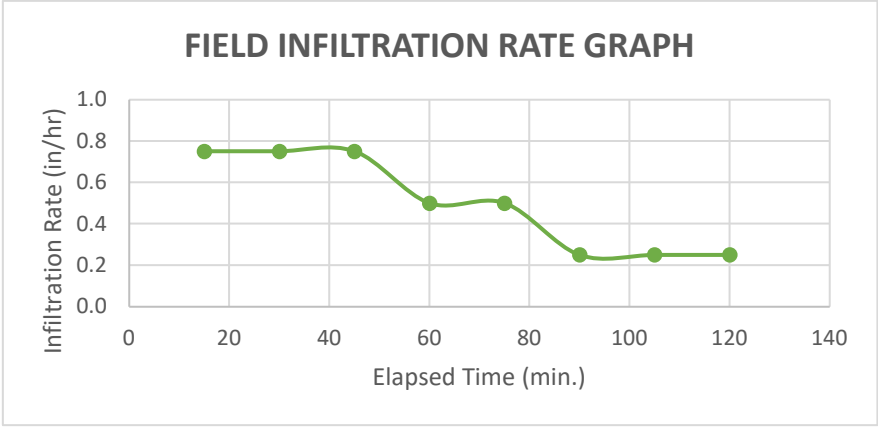
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 1





Single Ring Infiltration Log

INF - 2

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/23/2024 Completed 5/23/2024	Testing Depth / Elev.	5 ft / 58.57 ft
Test Performed By	N. Fisher	Water Depth /Elev.	8 ft / 55.57 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	9:30	10:30	60	4.00	2.4375	1.5625	--
P2							
1	9:36	9:51	15	4.00	3.625	0.375	1.50
2	9:51	10:06	15	4.00	3.750	0.250	1.00
3	10:06	10:21	15	4.00	3.750	0.250	1.00
4	10:21	10:36	15	4.00	3.750	0.250	1.00
5	10:36	10:51	15	4.00	3.750	0.250	1.00
6	10:51	11:06	15	4.00	3.750	0.250	1.00
7	11:06	11:21	15	4.00	3.750	0.250	1.00
8	11:21	11:36	15	4.00	3.750	0.250	1.00
					Field Infiltration Rate:		**1.0**

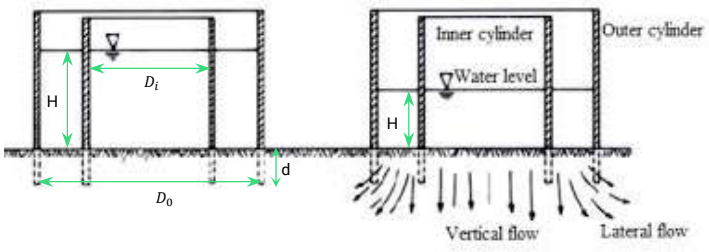
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

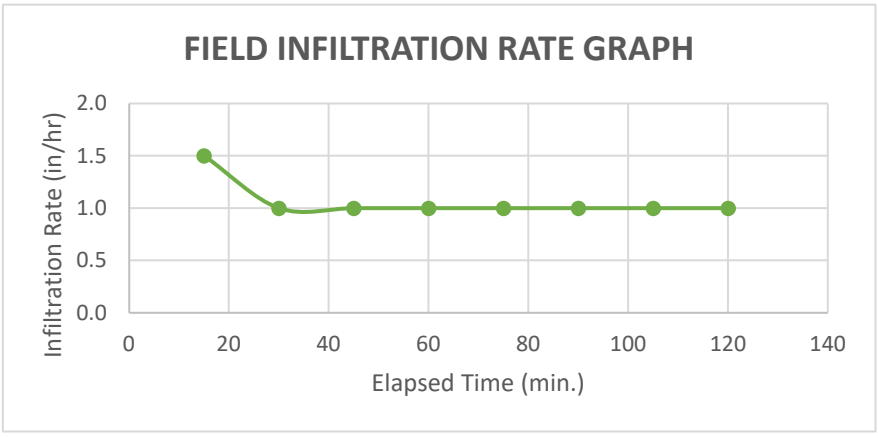
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 2





Single Ring Infiltration Log

INF - 3

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/13/2024 Completed 5/13/2024	Testing Depth / Elev.	5 ft / 57.11 ft
Test Performed By	A. Spencer	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	9:38	10:08	30	3.00	2.7500	0.2500	--
P2	10:08	10:38	30	3.00	2.7500	0.2500	--
1	10:38	10:53	15	3.00	2.875	0.125	0.50
2	10:53	11:08	15	3.00	2.875	0.125	0.50
3	11:08	11:23	15	3.00	2.875	0.125	0.50
4	11:23	11:38	15	3.00	2.875	0.125	0.50
5	11:38	11:53	15	3.00	2.875	0.125	0.50
6	11:53	12:08	15	3.00	2.875	0.125	0.50
7	12:08	12:23	15	3.00	2.875	0.125	0.50
8	12:23	12:38	15	3.00	2.875	0.125	0.50
					Field Infiltration Rate:		**0.5**

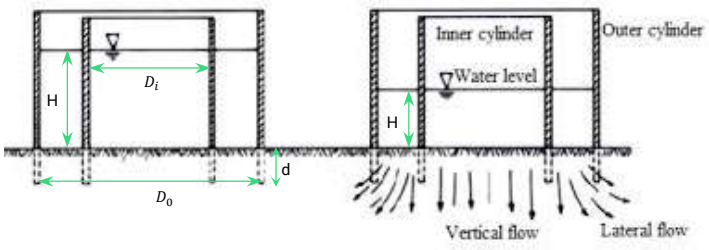
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

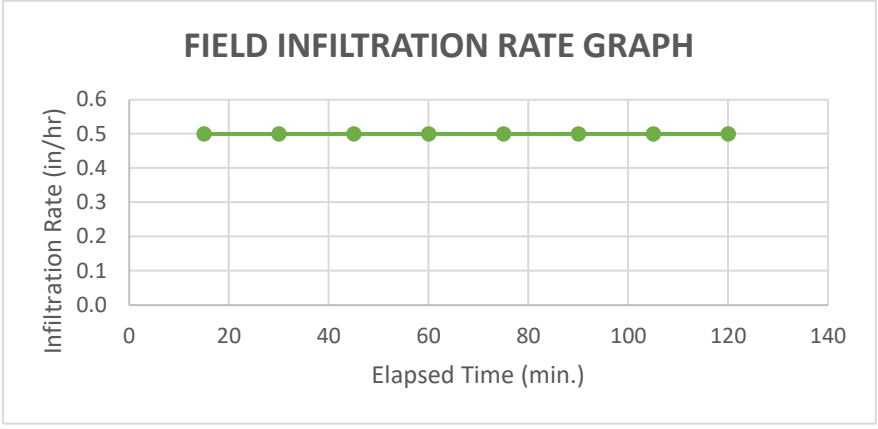
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 3





Single Ring Infiltration Log

INF - 4

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/13/2024 Completed 5/13/2024	Testing Depth / Elev.	5 ft / 58.02 ft
Test Performed By	A. Spencer	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	9:03	9:33	30	4.00	0.0000	4.0000	--
P2	9:33	10:03	30	4.00	0.0000	4.0000	--
1	10:03	10:18	15	4.00	1.250	2.750	11.00
2	10:18	10:33	15	4.00	1.250	2.750	11.00
3	10:33	10:48	15	4.00	1.250	2.750	11.00
4	10:48	11:03	15	4.00	1.375	2.625	10.50
5	11:03	11:18	15	4.00	1.500	2.500	10.00
6	11:18	11:33	15	4.00	1.500	2.500	10.00
7	11:33	11:48	15	4.00	1.500	2.500	10.00
8	11:48	12:03	15	4.00	1.625	2.375	9.50
					Field Infiltration Rate:		**9.9**

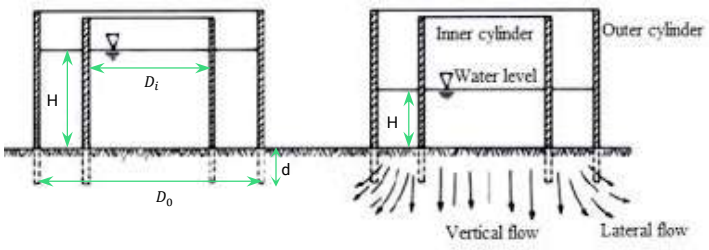
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

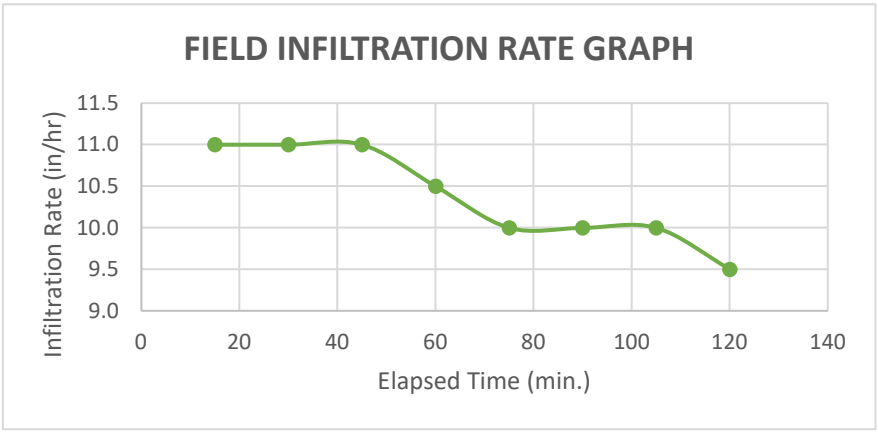
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 4





Single Ring Infiltration Log

INF - 5

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/13/2024 Completed 5/13/2024	Testing Depth / Elev.	5 ft / 56.96 ft
Test Performed By	A. Spencer	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	10:25	10:55	30	4.00	0.0000	5.0000	--
P2	10:55	11:25	30	4.00	0.0000	5.0000	--
1	11:25	11:40	15	4.00	0.250	3.750	15.00
2	11:40	11:55	15	4.00	0.250	3.750	15.00
3	11:55	12:10	15	4.00	0.250	3.750	15.00
4	12:10	12:25	15	4.00	0.750	3.250	13.00
5	12:25	12:40	15	4.00	0.750	3.250	13.00
6	12:40	12:55	15	4.00	0.750	3.250	13.00
7	12:55	1:10	15	4.00	0.750	3.250	13.00
8	1:10	1:25	15	4.00	0.750	3.250	13.00
					Field Infiltration Rate:		**13.0**

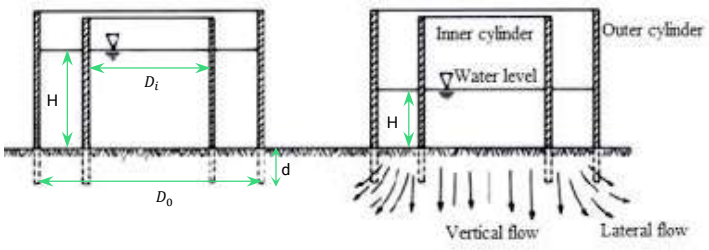
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

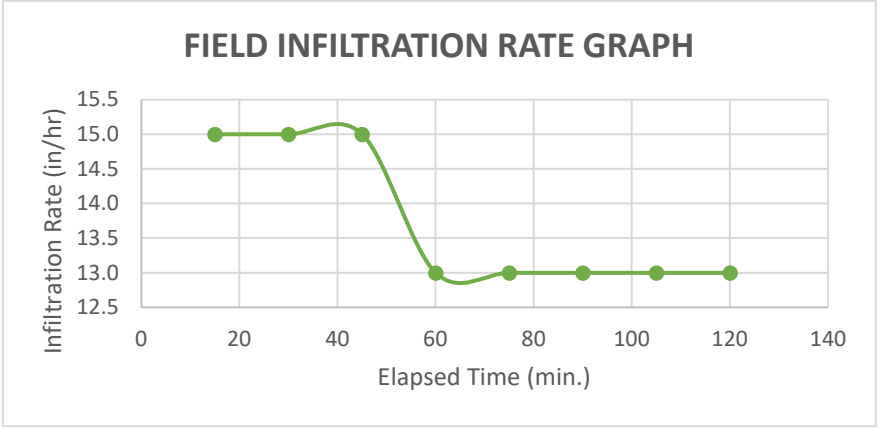
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 5





Single Ring Infiltration Log

INF - 6

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/13/2024 Completed 5/13/2024	Testing Depth / Elev.	5 ft / 58.25 ft
Test Performed By	A. Spencer	Water Depth /Elev.	10 ft / 53.25 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	10:57	11:27	30	4.00	0.0000	5.0000	--
P2	11:27	11:57	30	4.00	0.0000	5.0000	--
1	11:57	12:12	15	4.00	0.750	3.250	13.00
2	12:12	12:27	15	4.00	1.000	3.000	12.00
3	12:27	12:42	15	4.00	1.000	3.000	12.00
4	12:42	12:57	15	4.00	1.125	2.875	11.50
5	12:57	1:12	15	4.00	1.125	2.875	11.50
6	1:12	1:27	15	4.00	1.125	2.875	11.50
7	1:27	1:42	15	4.00	1.250	2.750	11.00
8	1:42	1:57	15	4.00	1.250	2.750	11.00
					Field Infiltration Rate:		**11.25**

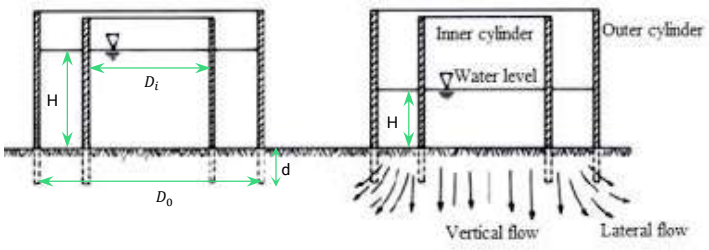
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

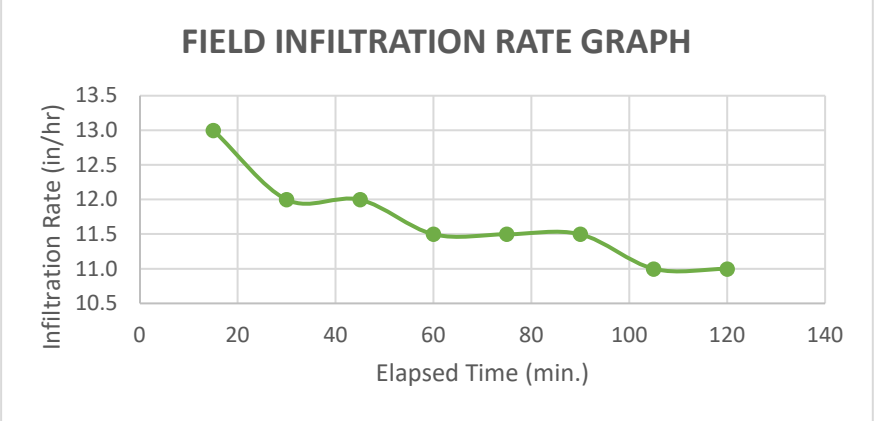
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 6





Single Ring Infiltration Log

INF - 7

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/13/2024 Completed 5/13/2024	Testing Depth / Elev.	5 ft / 57.39 ft
Test Performed By	A. Spencer	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	11:35	12:05	30	5.00	0.0000	5.0000	--
P2	12:05	12:35	30	5.00	0.0000	5.0000	--
1	12:35	12:50	15	5.00	1.750	3.250	13.00
2	12:50	1:05	15	5.00	1.750	3.250	13.00
3	1:05	1:20	15	5.00	2.125	2.875	11.50
4	1:20	1:35	15	5.00	2.250	2.750	11.00
5	1:35	1:50	15	5.00	2.250	2.750	11.00
6	1:50	2:05	15	5.00	2.500	2.500	10.00
7	2:05	2:20	15	5.00	2.500	2.500	10.00
8	2:20	2:35	15	5.00	2.500	2.500	10.00
					Field Infiltration Rate:		**10.0**

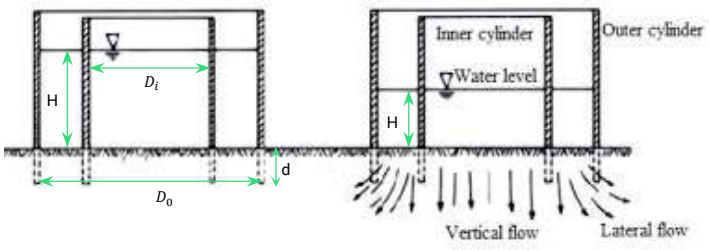
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

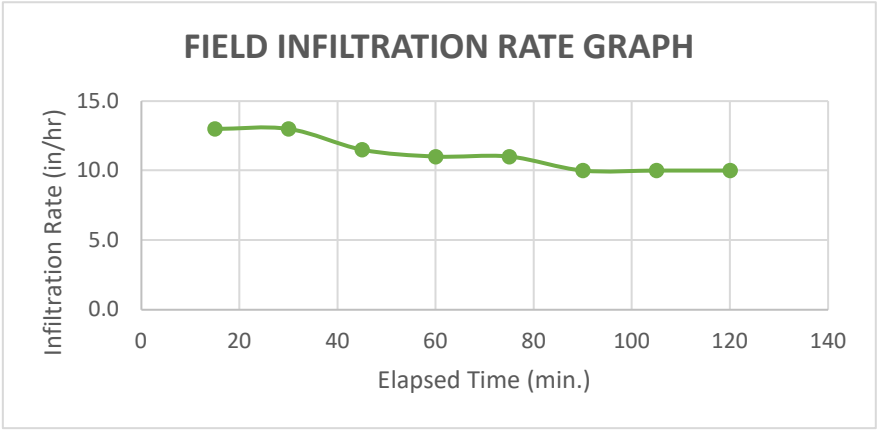
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 7





Single Ring Infiltration Log

INF - 8

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/13/2024 Completed 5/13/2024	Testing Depth / Elev.	5 ft / 58.14 ft
Test Performed By	A. Spencer	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	1:00	1:30	30	4.00	0.0000	5.0000	--
P2	1:30	2:00	30	4.00	0.0000	5.0000	--
1	2:00	2:15	15	4.00	1.250	2.750	11.00
2	2:15	2:30	15	4.00	1.750	2.250	9.00
3	2:30	2:45	15	4.00	1.750	2.250	9.00
4	2:45	3:00	15	4.00	1.875	2.125	8.50
5	3:00	3:15	15	4.00	1.875	2.125	8.50
6	3:15	3:30	15	4.00	1.875	2.125	8.50
7	3:30	3:45	15	4.00	1.875	2.125	8.50
8	3:45	4:00	15	4.00	1.875	2.125	8.50
					Field Infiltration Rate:		**8.5**

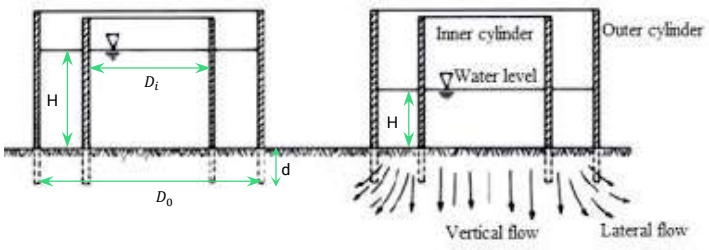
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

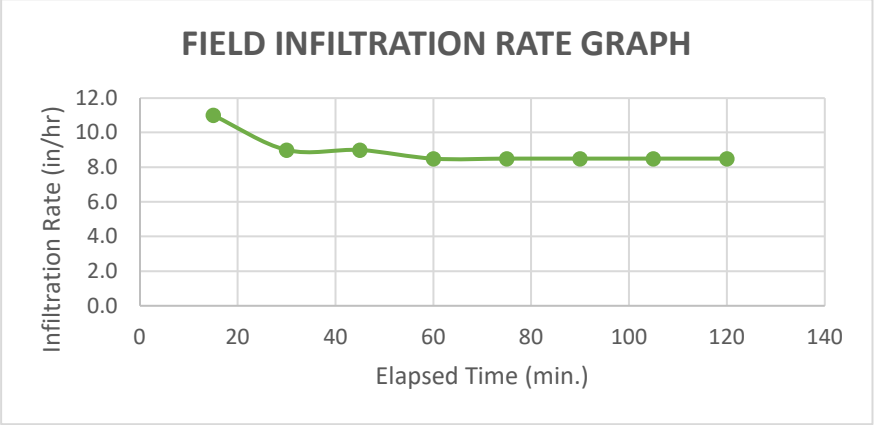
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 8





Single Ring Infiltration Log

INF - 9

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/14/2024 Completed 5/14/2024	Testing Depth / Elev.	5 ft / 59.46 ft
Test Performed By	N. Francois	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:56	9:26	30	3.00	0.00	3.00	--
P2	9:26	9:56	30	3.00	0.00	3.00	--
1	9:56	10:11	15	3.00	0.00	3.00	12.0
2	10:11	10:26	15	3.00	0.00	3.00	12.0
3	10:26	10:41	15	3.00	0.00	3.00	12.0
4	10:41	10:56	15	3.00	0.00	3.00	12.0
5	10:56	11:11	15	3.00	0.00	3.00	12.0
6	11:11	11:26	15	3.00	0.00	3.00	12.0
7	11:26	11:41	15	3.00	0.00	3.00	12.0
8	11:41	11:56	15	3.00	0.00	3.00	12.0
						Field Infiltration Rate:	**12.0**

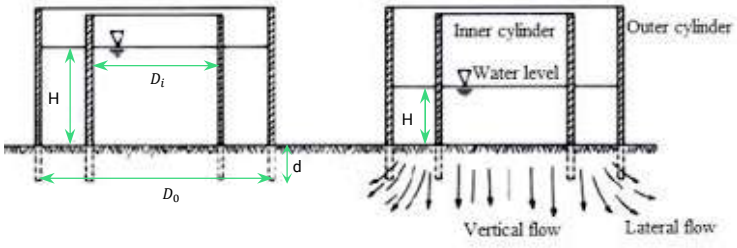
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

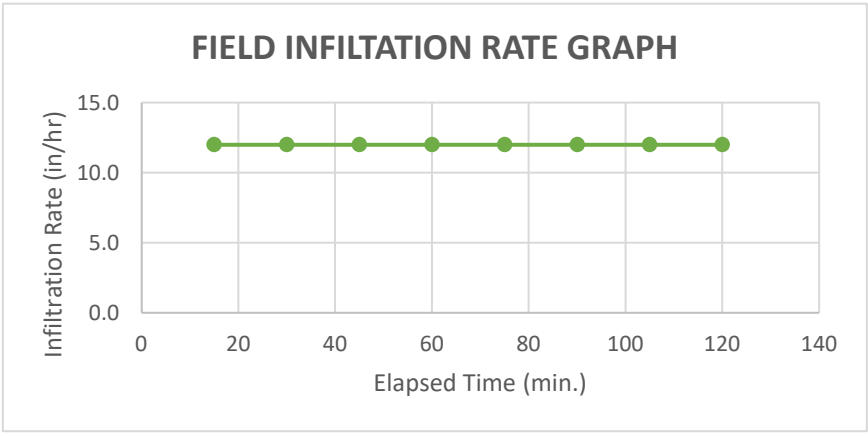
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 9





Single Ring Infiltration Log

INF - 10

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/14/2024 Completed 5/14/2024	Testing Depth / Elev.	5 ft / 59.49 ft
Test Performed By	N. Francois	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	9:10	9:40	30	3.00	0.00	3.00	--
P2	9:40	10:10	30	3.00	0.00	3.00	--
1	10:10	10:25	15	3.00	0.00	3.00	12.0
2	10:25	10:40	15	3.00	0.50	2.50	10.0
3	10:40	10:55	15	3.00	0.00	3.00	12.0
4	10:55	11:10	15	3.00	0.00	3.00	12.0
5	11:10	11:25	15	3.00	0.50	2.50	10.0
6	11:25	11:40	15	3.00	0.50	2.50	10.0
7	11:40	11:55	15	3.00	0.50	2.50	10.0
8	11:55	12:10	15	3.00	0.50	2.50	10.0
					Field Infiltration Rate:		**10.0**

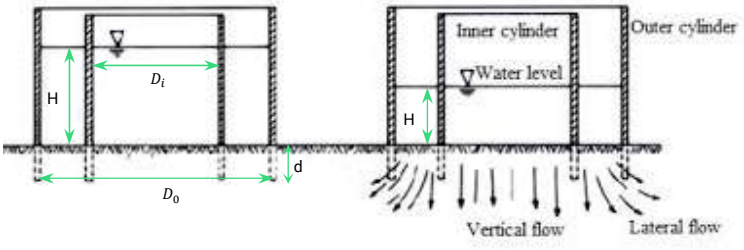
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

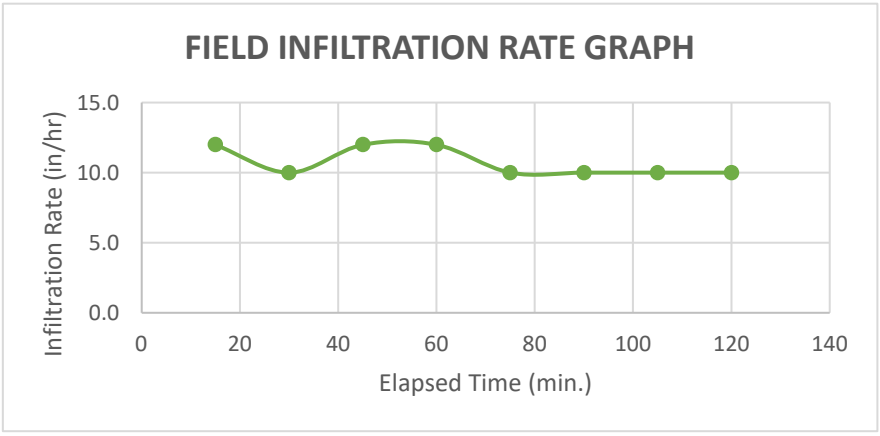
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 10





Single Ring Infiltration Log

INF - 11

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/14/2024 Completed 5/14/2024	Testing Depth / Elev.	5 ft / 59.89 ft
Test Performed By	N. Francois	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	11:36	12:06	30	3.00	0.00	3.00	--
P2	12:06	12:36	30	3.00	0.00	3.00	--
1	12:36	12:51	15	3.00	0.00	3.00	12.0
2	12:51	1:06	15	3.00	0.00	3.00	12.0
3	1:06	1:21	15	3.00	0.50	2.50	10.0
4	1:21	1:36	15	3.00	0.50	2.50	10.0
5	1:36	1:51	15	3.00	0.50	2.50	10.0
6	1:51	2:06	15	3.00	0.50	2.50	10.0
7	2:06	2:21	15	3.00	0.50	2.50	10.0
8	2:21	2:36	15	3.00	0.50	2.50	10.0
					Field Infiltration Rate:		**10.0**

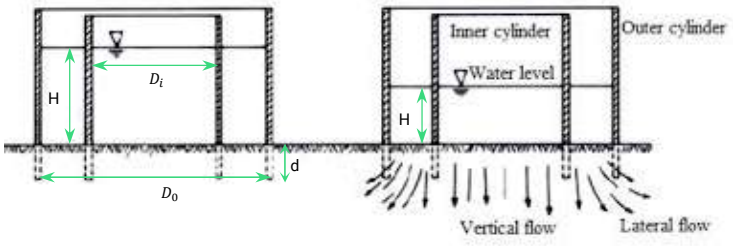
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

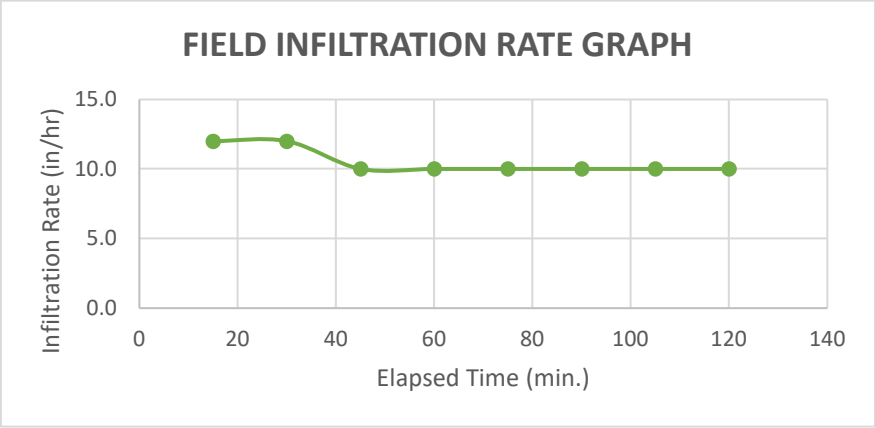
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 11





Single Ring Infiltration Log

INF - 12

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/14/2024 Completed 5/14/2024	Testing Depth / Elev.	5 ft / 61.54 ft
Test Performed By	N. Francois	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	11:42	12:12	30	3.00	0.00	3.00	--
P2	12:12	12:42	30	3.00	0.00	3.00	--
1	12:42	12:57	15	3.00	0.00	3.00	12.0
2	12:57	1:12	15	3.00	0.00	3.00	12.0
3	1:12	1:27	15	3.00	0.50	2.50	10.0
4	1:27	1:42	15	3.00	0.50	2.50	10.0
5	1:42	1:57	15	3.00	0.50	2.50	10.0
6	1:57	2:12	15	3.00	0.50	2.50	10.0
7	2:12	2:21	15	3.00	0.50	2.50	10.0
8	2:21	2:36	15	3.00	0.50	2.50	10.0
					Field Infiltration Rate:		**10.0**

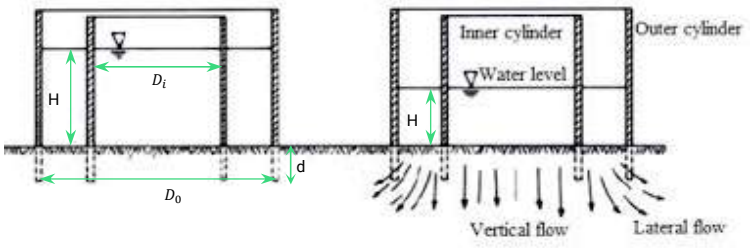
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

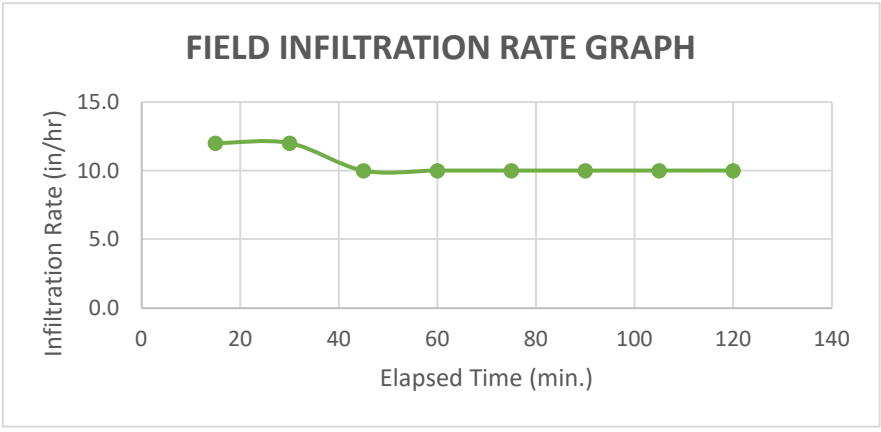
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 12





Single Ring Infiltration Log

INF - 13

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/14/2024 Completed 5/14/2024	Testing Depth / Elev.	5 ft / 60.47 ft
Test Performed By	N. Francois	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	12:20	12:50	30	3.00	0.50	2.50	--
P2	12:50	1:20	30	3.00	0.50	2.50	--
1	1:20	1:35	15	3.00	0.50	2.50	10.0
2	1:35	1:50	15	3.00	0.50	2.50	10.0
3	1:50	2:05	15	3.00	0.50	2.50	10.0
4	2:05	2:20	15	3.00	0.50	2.50	10.0
5	2:20	2:35	15	3.00	0.50	2.50	10.0
6	2:35	2:50	15	3.00	0.50	2.50	10.0
7	2:50	3:05	15	3.00	0.50	2.50	10.0
8	3:05	3:20	15	3.00	0.50	2.50	10.0
						Field Infiltration Rate:	**10.0**

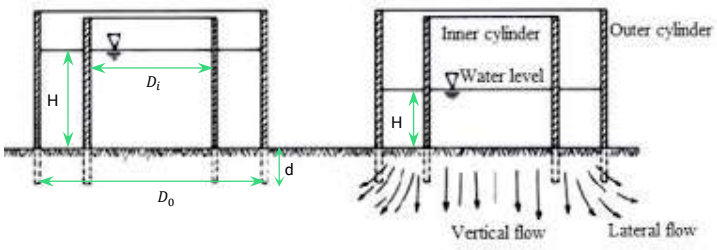
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

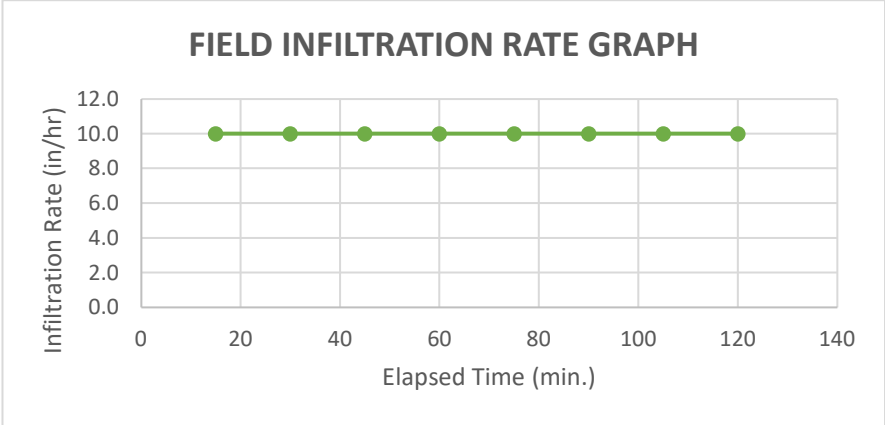
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 13





Single Ring Infiltration Log

INF - 14

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/16/2024 Completed 5/16/2024	Testing Depth / Elev.	5 ft / 58.83 ft
Test Performed By	N. Francois	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:32	9:02	30	4.00	2.00	2.00	--
P2	9:02	9:32	30	4.00	1.50	2.50	--
1	9:32	9:47	15	4.00	3.00	1.00	4.0
2	9:47	10:02	15	4.00	3.50	0.50	2.0
3	10:02	10:17	15	4.00	3.50	0.50	2.0
4	10:17	10:32	15	4.00	3.50	0.50	2.0
5	10:32	10:47	15	4.00	3.50	0.50	2.0
6	10:47	11:02	15	4.00	3.50	0.50	2.0
7	11:02	11:17	15	4.00	3.50	0.50	2.0
8	11:17	11:32	15	4.00	3.50	0.50	2.0
					Field Infiltration Rate:		**2.0**

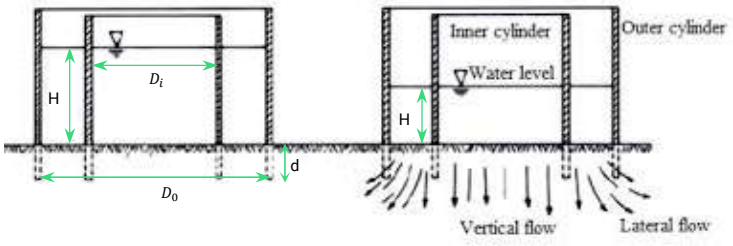
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

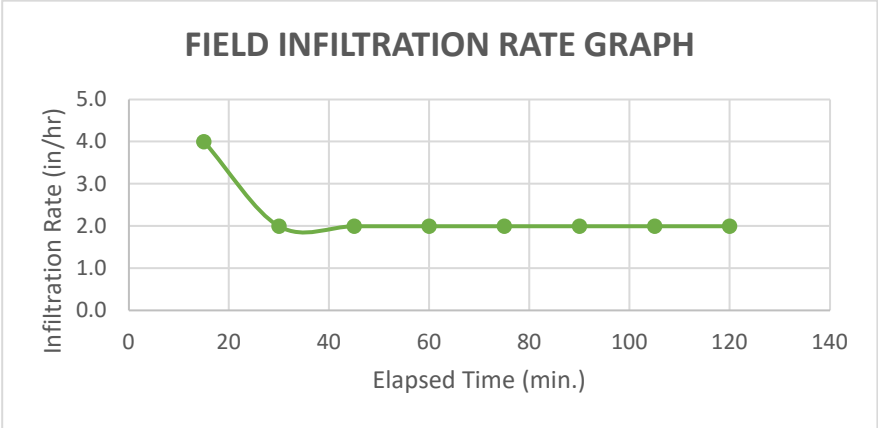
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 14





Single Ring Infiltration Log

INF - 15

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/16/2024 Completed 5/16/2024	Testing Depth / Elev.	5 ft / 57.46 ft
Test Performed By	N. Francois	Water Depth /Elev.	8 ft / 54.46 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:47	9:17	30	4.00	0.00	4.00	--
P2	9:17	9:47	30	4.00	0.00	4.00	--
1	9:47	10:02	15	4.00	0.38	3.63	14.5
2	10:02	10:17	15	4.00	0.50	3.50	14.0
3	10:17	10:32	15	4.00	0.50	3.50	14.0
4	10:32	10:47	15	4.00	0.50	3.50	14.0
5	10:47	11:02	15	4.00	2.00	2.00	8.0
6	11:02	11:17	15	4.00	2.00	2.00	8.0
7	11:17	11:32	15	4.00	2.00	2.00	8.0
8	11:32	11:47	15	4.00	2.00	2.00	8.0
					Field Infiltration Rate:		**8.0**

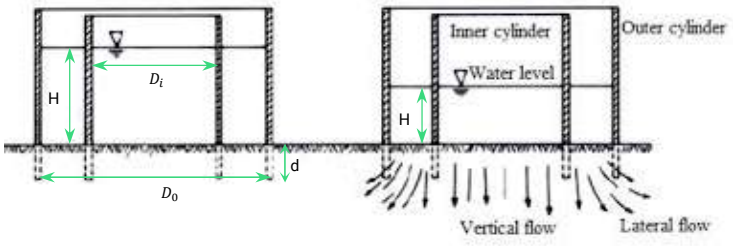
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

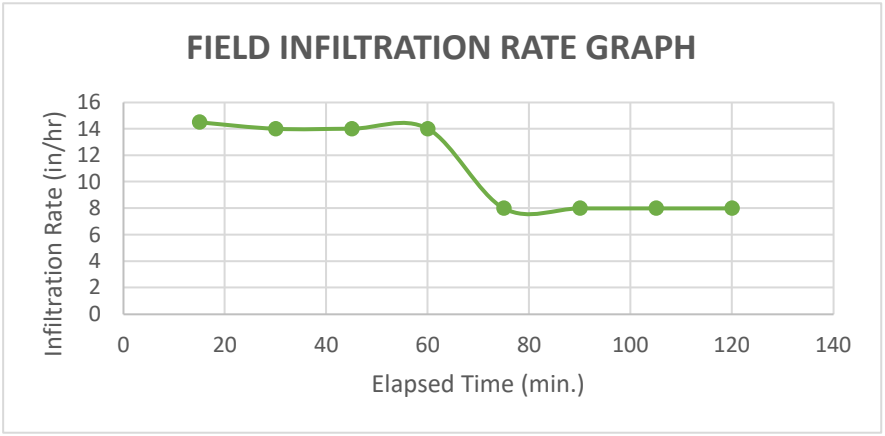
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 15





Single Ring Infiltration Log

INF - 16

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/16/2024 Completed 5/16/2024	Testing Depth / Elev.	5 ft / 56.31 ft
Test Performed By	N. Francois	Water Depth /Elev.	8 ft / 53.31 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:57	9:23	30	4.00	0.00	4.00	--
P2	9:23	9:53	30	4.00	0.00	4.00	--
1	9:53	10:08	15	4.00	0.25	3.75	15.0
2	10:08	10:23	15	4.00	1.00	3.00	12.0
3	10:23	10:38	15	4.00	1.00	3.00	12.0
4	10:38	10:53	15	4.00	1.00	3.00	12.0
5	10:53	11:08	15	4.00	1.00	3.00	12.0
6	11:08	11:23	15	4.00	1.00	3.00	12.0
7	11:23	11:38	15	4.00	1.00	3.00	12.0
8	11:38	11:53	15	4.00	1.00	3.00	12.0
					Field Infiltration Rate:		**12.0**

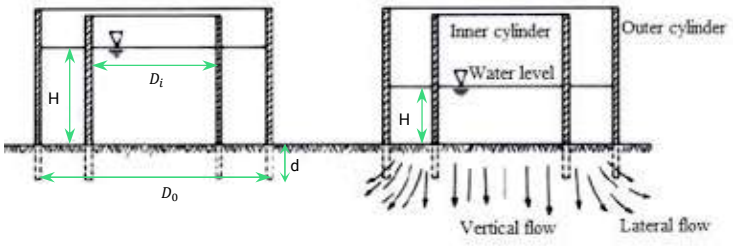
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

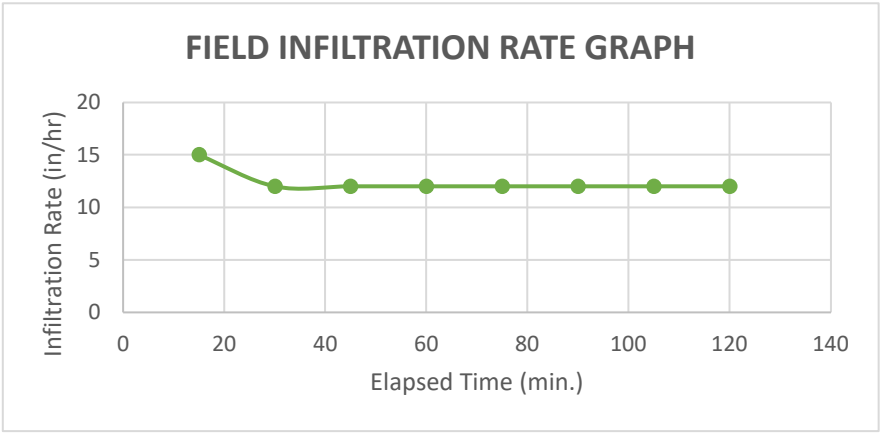
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 16





Single Ring Infiltration Log

INF - 17

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/16/2024 Completed 5/16/2024	Testing Depth / Elev.	5 ft / 55.79 ft
Test Performed By	N. Francois	Water Depth /Elev.	8 ft / 52.79 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	11:43	12:13	30	4.00	3.00	1.00	--
P2	12:43	1:13	30	4.00	3.00	1.00	--
1	1:13	1:28	15	4.00	3.00	1.00	4.0
2	1:28	1:43	15	4.00	3.50	0.50	2.0
3	1:43	1:58	15	4.00	3.50	0.50	2.0
4	1:58	2:13	15	4.00	3.50	0.50	2.0
5	2:13	2:28	15	4.00	3.50	0.50	2.0
6	2:28	2:43	15	4.00	3.50	0.50	2.0
7	2:43	2:58	15	4.00	3.50	0.50	2.0
8	2:58	3:13	15	4.00	3.50	0.50	2.0
					Field Infiltration Rate:		**2.0**

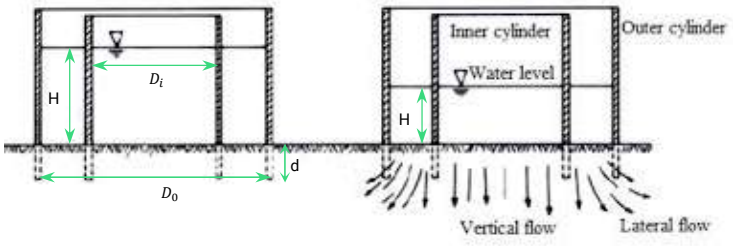
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

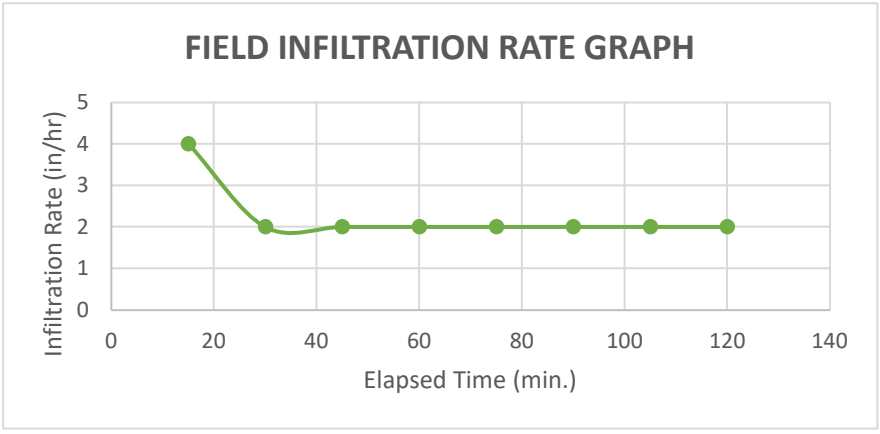
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 17





Single Ring Infiltration Log

INF - 18

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/16/2024 Completed 5/16/2024	Testing Depth / Elev.	5 ft / 57.12 ft
Test Performed By	N. Francois	Water Depth /Elev.	8 ft / 54.12 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	11:48	12:18	30	4.00	2.00	2.00	--
P2	12:18	1:18	30	4.00	2.00	2.00	--
1	1:18	1:33	15	4.00	3.00	1.00	4.0
2	1:33	1:48	15	4.00	3.00	1.00	4.0
3	1:48	2:03	15	4.00	3.00	1.00	4.0
4	2:03	2:18	15	4.00	3.50	0.50	2.0
5	2:18	2:33	15	4.00	3.50	0.50	2.0
6	2:33	2:48	15	4.00	3.50	0.50	2.0
7	2:48	3:03	15	4.00	3.50	0.50	2.0
8	3:03	3:18	15	4.00	3.50	0.50	2.0
					Field Infiltration Rate:		**2.0**

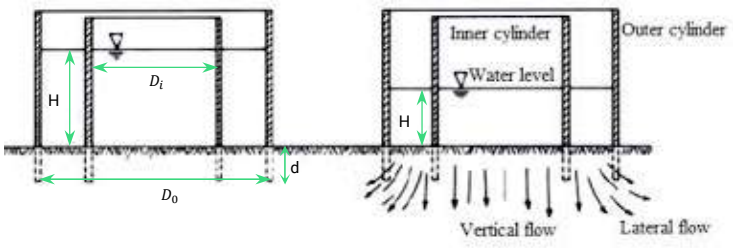
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

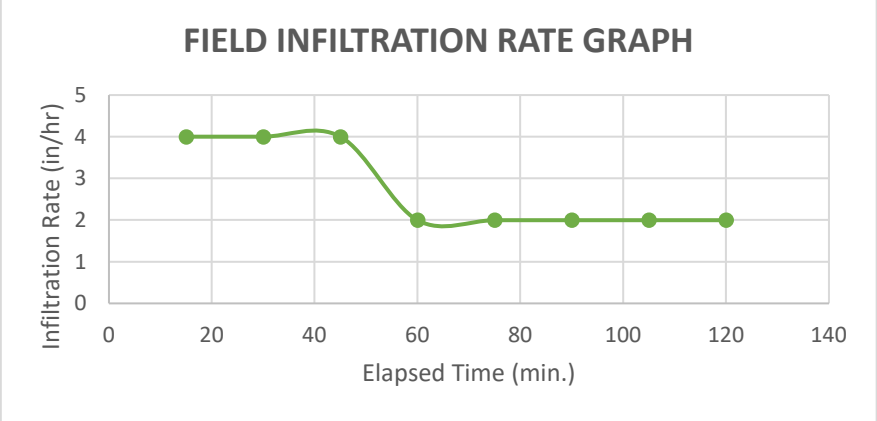
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 18





Single Ring Infiltration Log

INF - 19

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/17/2024 Completed 5/17/2024	Testing Depth / Elev.	5 ft / 58.09 ft
Test Performed By	N. Francois	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:26	8:56	30	4.00	0.00	4.00	--
P2	8:56	9:26	30	4.00	0.50	3.50	--
1	9:26	9:41	15	4.00	2.00	2.00	8.0
2	9:41	9:56	15	4.00	2.00	2.00	8.0
3	9:56	10:11	15	4.00	2.00	2.00	8.0
4	10:11	10:26	15	4.00	2.00	2.00	8.0
5	10:26	10:41	15	4.00	2.00	2.00	8.0
6	10:41	10:56	15	4.00	2.00	2.00	8.0
7	10:56	11:11	15	4.00	2.00	2.00	8.0
8	11:11	11:26	15	4.00	2.00	2.00	8.0
					Field Infiltration Rate:		**8.0**

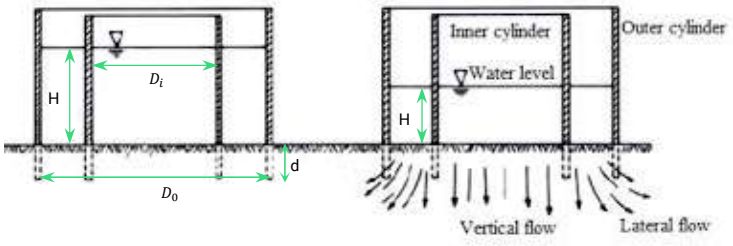
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

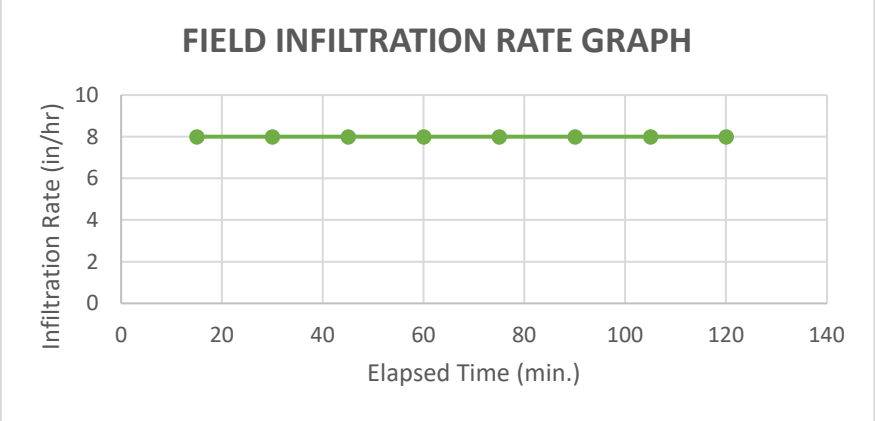
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 19





Single Ring Infiltration Log

INF - 20

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/17/2024 Completed 5/17/2024	Testing Depth / Elev.	5 ft / 57.49 ft
Test Performed By	N. Francois	Water Depth /Elev.	8 ft / 54.49 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:58	9:28	30	4.00	0.00	4.00	--
P2	9:28	9:58	30	4.00	0.00	4.00	--
1	9:58	10:13	15	4.00	0.00	4.00	16.0
2	10:13	10:28	15	4.00	0.00	4.00	16.0
3	10:28	10:43	15	4.00	0.00	4.00	16.0
4	10:43	10:58	15	4.00	0.00	4.00	16.0
5	10:58	11:13	15	4.00	0.50	3.50	14.0
6	11:13	11:28	15	4.00	0.50	3.50	14.0
7	11:28	11:43	15	4.00	0.50	3.50	14.0
8	11:43	11:58	15	4.00	0.50	3.50	14.0
					Field Infiltration Rate:		**14.0**

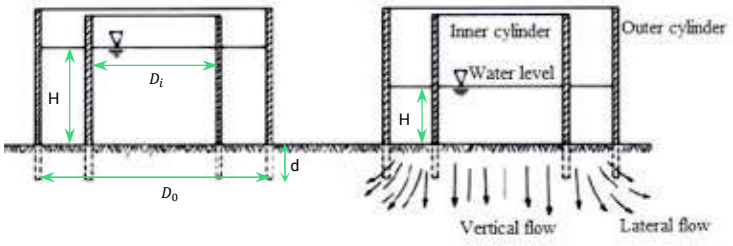
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

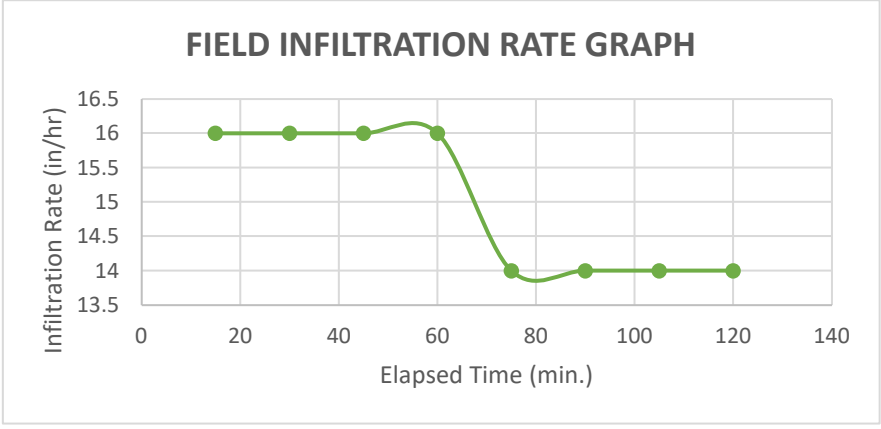
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 20





Single Ring Infiltration Log

INF - 21

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/17/2024 Completed 5/17/2024	Testing Depth / Elev.	5 ft / 57.36 ft
Test Performed By	N. Francois	Water Depth /Elev.	8 ft / 54.36 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:39	9:09	30	4.00	0.00	4.00	--
P2	9:09	9:39	30	4.00	0.50	3.50	--
1	9:39	9:54	15	4.00	0.50	3.50	14.0
2	9:54	10:09	15	4.00	1.00	3.00	12.0
3	10:09	10:24	15	4.00	1.00	3.00	12.0
4	10:24	10:39	15	4.00	1.00	3.00	12.0
5	10:39	10:54	15	4.00	1.00	3.00	12.0
6	10:54	11:09	15	4.00	1.00	3.00	12.0
7	11:09	11:24	15	4.00	1.00	3.00	12.0
8	11:24	11:39	15	4.00	1.00	3.00	12.0
					Field Infiltration Rate:		**12.0**

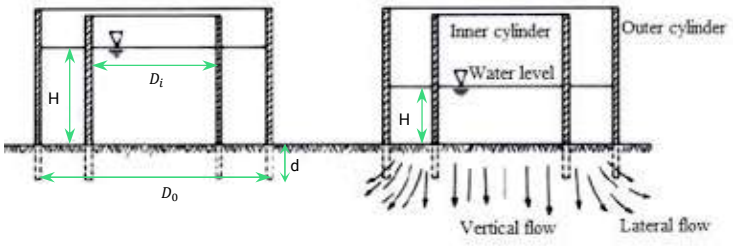
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

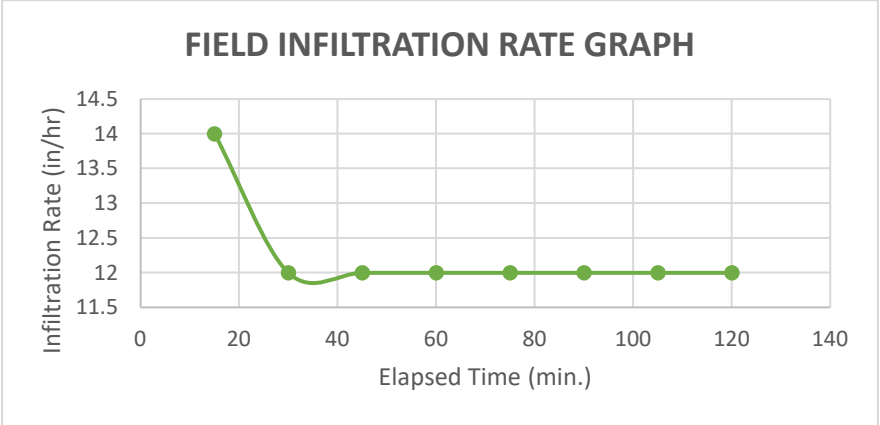
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 21





Single Ring Infiltration Log

INF - 22

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/17/2024 Completed 5/17/2024	Testing Depth / Elev.	5 ft / 56.03 ft
Test Performed By	N. Francois	Water Depth /Elev.	8 ft / 53.03 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	9:20	9:50	30	4.00	0.00	4.00	--
P2	9:50	10:20	30	4.00	0.00	4.00	--
1	10:20	10:35	15	4.00	0.00	4.00	16.0
2	10:35	10:50	15	4.00	0.00	4.00	16.0
3	10:50	11:05	15	4.00	1.00	3.00	12.0
4	11:05	11:20	15	4.00	2.00	2.00	8.0
5	11:20	11:35	15	4.00	2.00	2.00	8.0
6	11:35	11:50	15	4.00	2.00	2.00	8.0
7	11:50	12:05	15	4.00	2.00	2.00	8.0
8	12:05	12:20	15	4.00	2.00	2.00	8.0
					Field Infiltration Rate:		**8.0**

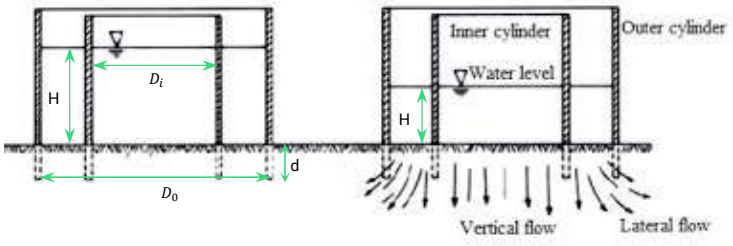
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

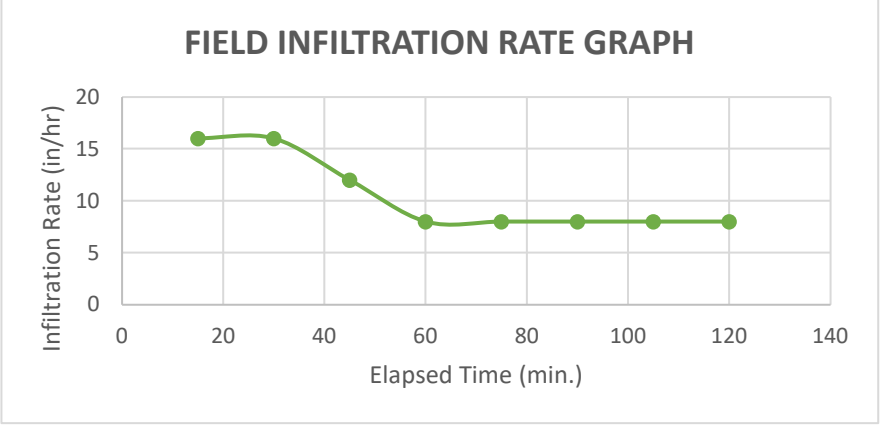
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 22





Single Ring Infiltration Log

INF - 23

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/20/2024 Completed 5/20/2024	Testing Depth / Elev.	5 ft / 55.57 ft
Test Performed By	N. Fisher	Water Depth /Elev.	9 ft / 51.57 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:50	9:50	60	5.00	3.0000	2.0000	--
P2							
1	9:50	10:05	15	5.00	4.000	1.000	4.00
2	10:05	10:20	15	5.00	4.250	0.750	3.00
3	10:20	10:35	15	5.00	4.313	0.687	2.75
4	10:35	10:50	15	5.00	4.313	0.687	2.75
5	10:50	11:05	15	5.00	4.375	0.625	2.50
6	11:05	11:20	15	5.00	4.375	0.625	2.50
7	11:20	11:35	15	5.00	4.375	0.625	2.50
8	11:35	11:50	15	5.00	4.438	0.563	2.25
9	11:50	12:05	15	5.00	4.500	0.500	2.00
10	12:05	12:20	15	5.00	4.500	0.500	2.00
					Field Infiltration Rate:		**2.2**

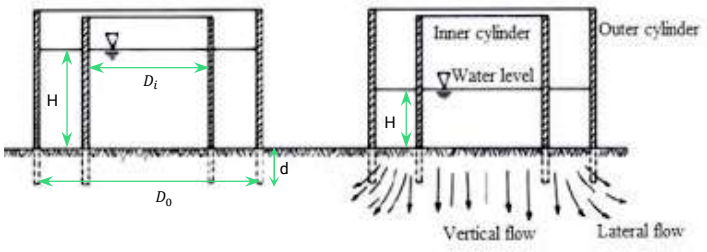
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

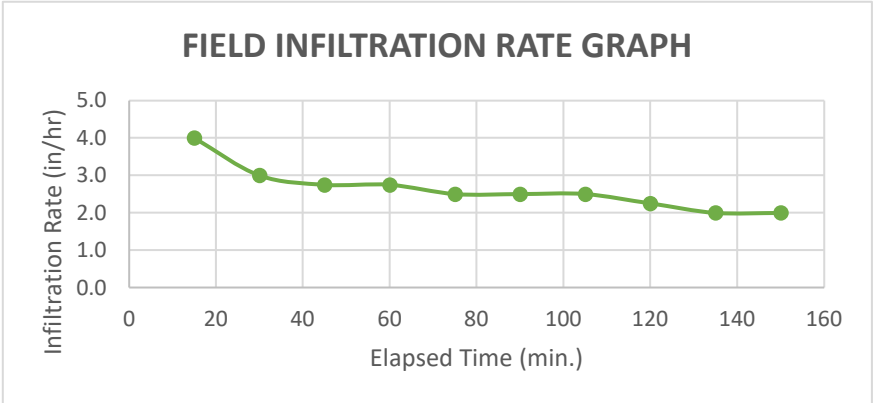
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 23





Single Ring Infiltration Log

INF - 24

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/20/2024 Completed 5/20/2024	Testing Depth / Elev.	5 ft / 54.30 ft
Test Performed By	N. Fisher	Water Depth /Elev.	8 ft / 51.30 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	8:30	9:30	60	3.50	1.0000	2.5000	--
P2							
1	9:30	9:45	15	3.50	2.750	0.750	3.00
2	9:45	10:00	15	3.50	2.938	0.563	2.25
3	10:00	10:15	15	3.50	2.938	0.563	2.25
4	10:15	10:30	15	3.50	2.938	0.563	2.25
5	10:30	10:45	15	3.50	3.000	0.500	2.00
6	10:45	11:00	15	3.50	3.000	0.500	2.00
7	11:00	11:15	15	3.50	3.000	0.500	2.00
8	11:15	11:30	15	3.50	3.000	0.500	2.00
					Field Infiltration Rate:		**2.0**

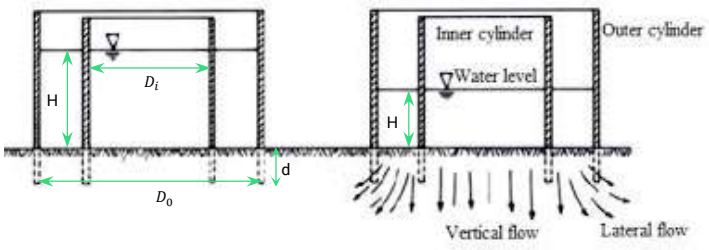
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

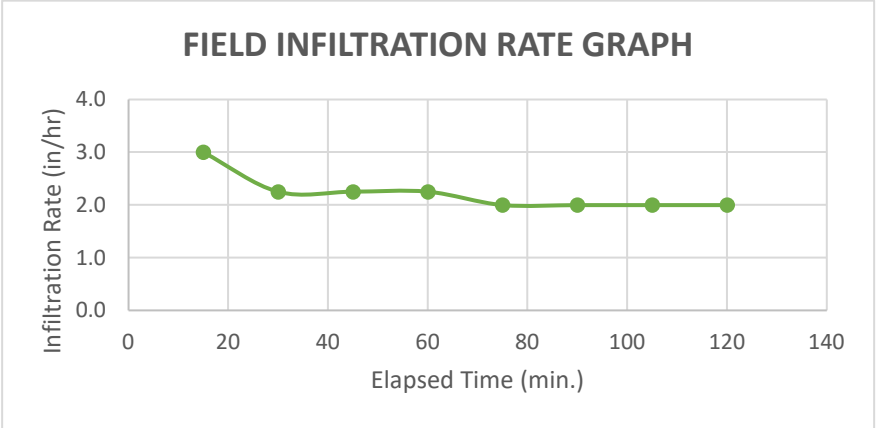
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 24





Single Ring Infiltration Log

INF - 25

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/17/2024 Completed 5/17/2024	Testing Depth / Elev.	5 ft / 54.98 ft
Test Performed By	N. Francois	Water Depth /Elev.	8 ft / 51.98 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	11:51	12:21	30	4.00	0.50	3.50	--
P2	12:21	12:51	30	4.00	0.50	3.50	--
1	12:51	1:06	15	4.00	2.50	1.50	6.0
2	1:06	1:21	15	4.00	2.00	2.00	8.0
3	1:21	1:36	15	4.00	2.00	2.00	8.0
4	1:36	1:51	15	4.00	2.00	2.00	8.0
5	1:51	2:06	15	4.00	2.00	2.00	8.0
6	2:06	2:21	15	4.00	2.00	2.00	8.0
7	2:21	2:36	15	4.00	2.00	2.00	8.0
8	2:36	2:51	15	4.00	2.00	2.00	8.0
					Field Infiltration Rate:		**8.0**

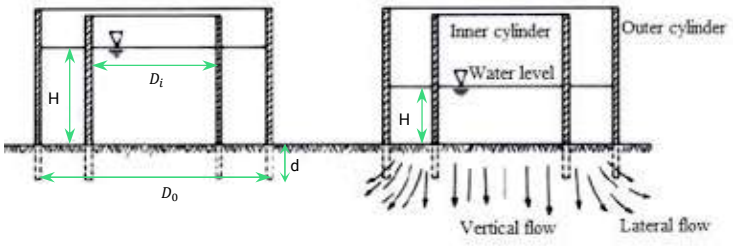
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

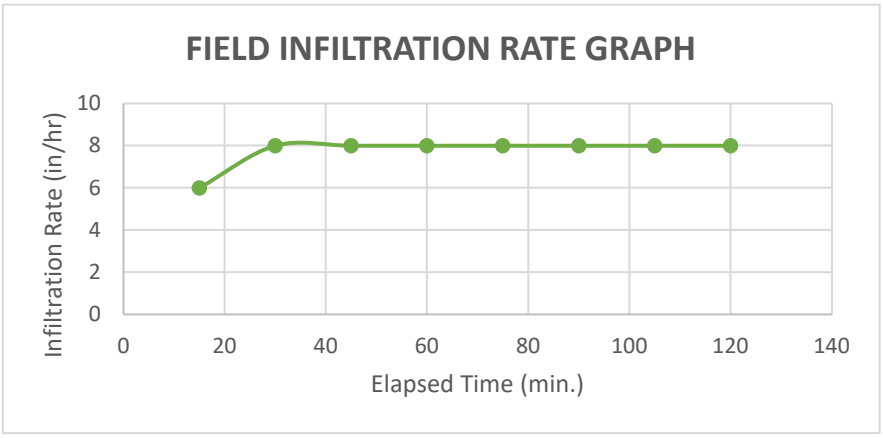
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 25





Single Ring Infiltration Log

INF - 26

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/20/2024 Completed 5/20/2024	Testing Depth / Elev.	4 ft / 54.63 ft
Test Performed By	N. Fisher	Water Depth /Elev.	8 ft / 50.63 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	9:25	10:25	60	5.50	2.0000	3.5000	--
P2							
1	10:25	10:40	15	5.50	4.750	0.750	3.00
2	10:40	10:55	15	5.50	4.875	0.625	2.50
3	10:55	11:10	15	5.50	4.938	0.563	2.25
4	11:10	11:25	15	5.50	5.000	0.500	2.00
5	11:25	11:40	15	5.50	5.000	0.500	2.00
6	11:40	11:55	15	5.50	5.000	0.500	2.00
7	11:55	12:10	15	5.50	5.063	0.438	1.75
8	12:10	12:25	15	5.50	5.125	0.375	1.50
9	12:25	12:40	15	5.50	5.125	0.375	1.50
					Field Infiltration Rate:		**1.7**

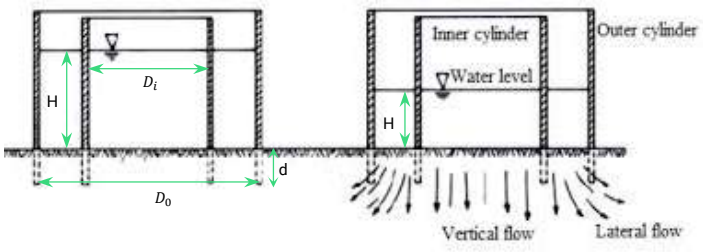
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

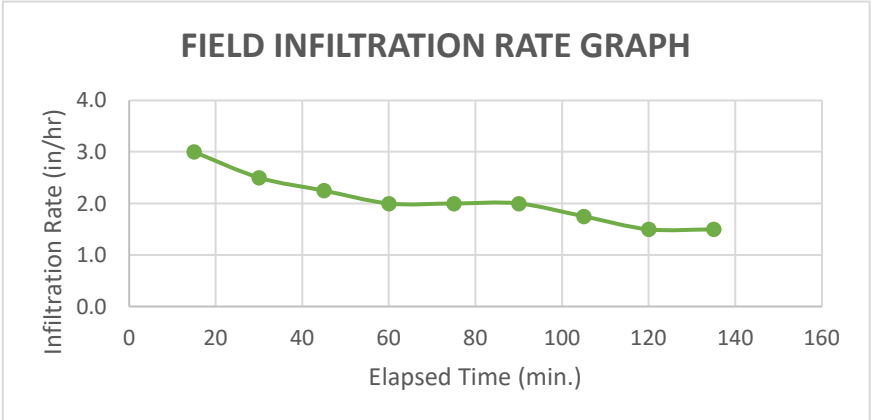
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 26





Single Ring Infiltration Log

INF - 27

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/20/2024 Completed 5/20/2024	Testing Depth / Elev.	3 ft / 54.66 ft
Test Performed By	N. Fisher	Water Depth /Elev.	6 ft / 51.66 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	11:15	12:15	60	4.00	0.0000	4.0000	--
P2							
1	12:15	12:30	15	4.00	3.000	1.000	4.00
2	12:30	12:45	15	4.00	3.125	0.875	3.50
3	12:45	1:00	15	4.00	3.125	0.875	3.50
4	1:00	1:15	15	4.00	3.125	0.875	3.50
5	1:15	1:30	15	4.00	3.125	0.875	3.50
6	1:30	1:45	15	4.00	3.125	0.875	3.50
7	1:45	2:00	15	4.00	3.125	0.875	3.50
8	2:00	2:15	15	4.00	3.125	0.875	3.50
					Field Infiltration Rate:		**3.5**

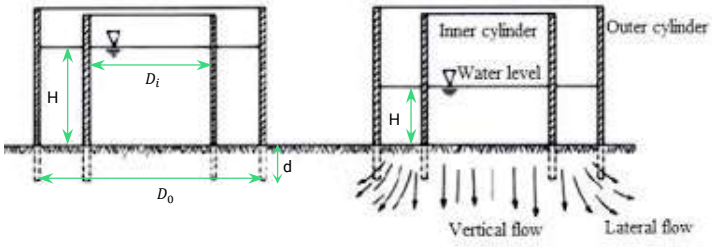
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

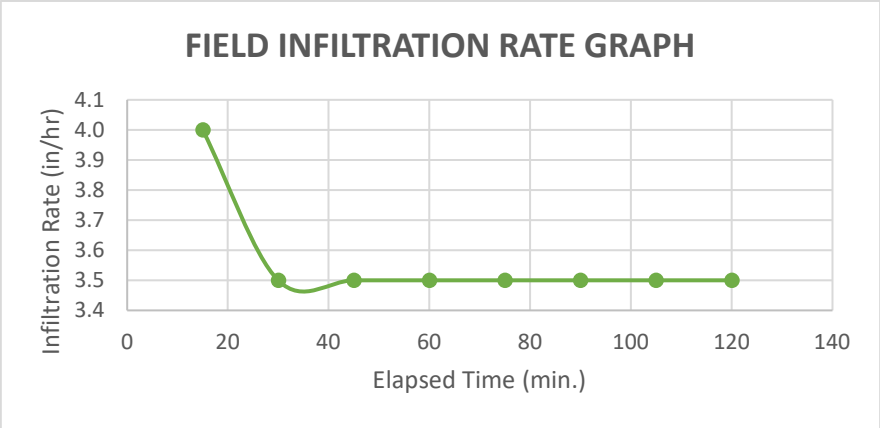
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 27





Single Ring Infiltration Log

INF - 28

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/20/2024 Completed 5/20/2024	Testing Depth / Elev.	4 ft / 54.98 ft
Test Performed By	N. Fisher	Water Depth /Elev.	8 ft / 50.98 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	11:50	12:50	60	3.00	0.0000	3.0000	--
P2							
1	12:50	1:05	15	3.00	0.750	2.250	9.00
2	1:05	1:20	15	3.00	0.750	2.250	9.00
3	1:20	1:35	15	3.00	1.500	1.500	6.00
4	1:35	1:50	15	3.00	1.500	1.500	6.00
5	1:50	2:05	15	3.00	1.500	1.500	6.00
6	2:05	2:20	15	3.00	1.500	1.500	6.00
7	2:20	2:35	15	3.00	1.500	1.500	6.00
8	2:35	2:50	15	3.00	1.500	1.500	6.00
9	2:50	3:05	15	3.00	1.500	1.500	6.00
					Field Infiltration Rate:		**6.0**

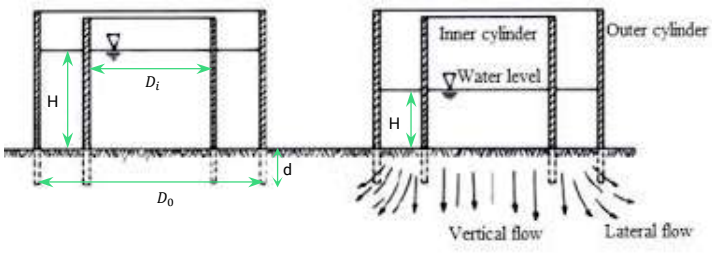
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

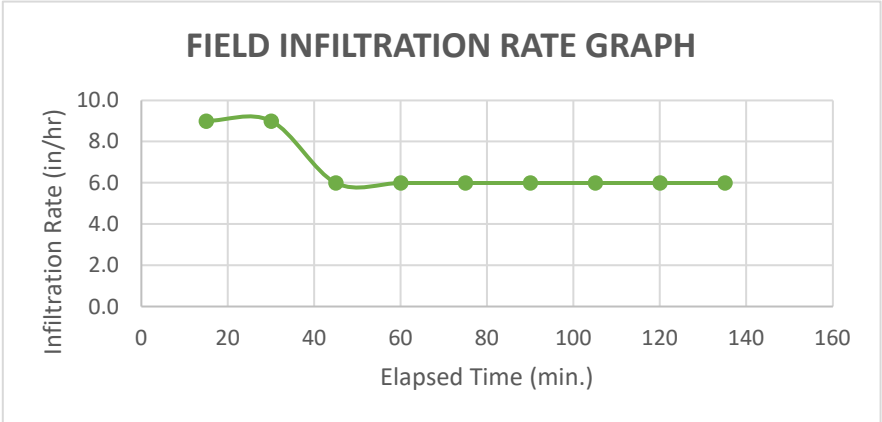
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 28





Single Ring Infiltration Log

INF - 29

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/22/2024 Completed 5/22/2024	Testing Depth / Elev.	5 ft / 54.71 ft
Test Performed By	N. Fisher	Water Depth /Elev.	8 ft / 51.71 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	8:33	9:33	60	5.00	0.0000	5.0000	--
P2							
1	9:33	9:48	15	5.00	2.000	3.000	12.00
2	9:48	10:03	15	5.00	2.000	3.000	12.00
3	10:03	10:18	15	5.00	2.000	3.000	12.00
4	10:18	10:33	15	5.00	2.125	2.875	11.50
5	10:33	10:48	15	5.00	2.250	2.750	11.00
6	10:48	11:03	15	5.00	2.250	2.750	11.00
7	11:03	11:18	15	5.00	2.250	2.750	11.00
8	11:18	11:33	15	5.00	2.650	2.350	9.40
9	11:33	11:48	15	5.00	2.750	2.250	9.00
10	11:48	12:03	15	5.00	2.750	2.250	9.00
11	12:03	12:18	15	5.00	2.750	2.250	9.00
					Field Infiltration Rate:		**9.0**

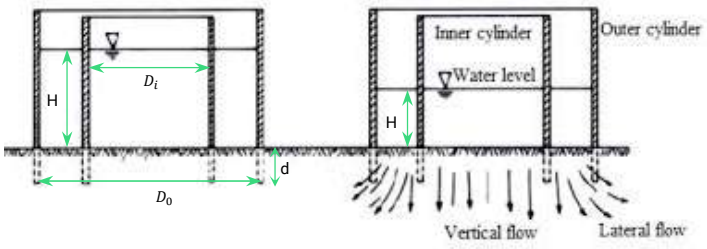
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

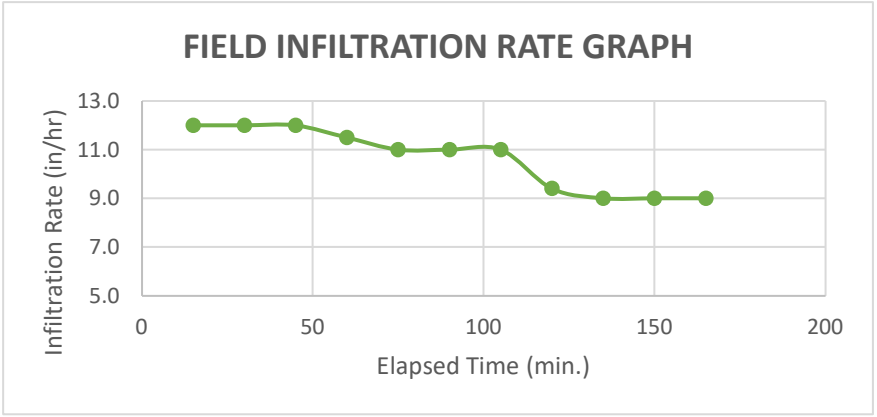
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 29





Single Ring Infiltration Log

INF - 30

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/22/2024 Completed 5/22/2024	Testing Depth / Elev.	3.5 ft / 53.69 ft
Test Performed By	N. Fisher	Water Depth /Elev.	6 ft / 51.19 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	8:36	9:36	60	4.00	0.0000	4.0000	--
P2							
1	9:36	9:51	15	4.00	2.500	1.500	6.00
2	9:51	10:06	15	4.00	2.500	1.500	6.00
3	10:06	10:21	15	4.00	2.625	1.375	5.50
4	10:21	10:36	15	4.00	2.625	1.375	5.50
5	10:36	10:51	15	4.00	2.750	1.250	5.00
6	10:51	11:06	15	4.00	2.750	1.250	5.00
7	11:06	11:21	15	4.00	2.750	1.250	5.00
8	11:21	11:36	15	4.00	2.750	1.250	5.00
					Field Infiltration Rate:		**5.0**

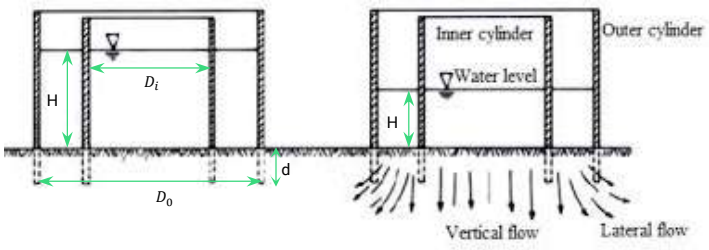
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

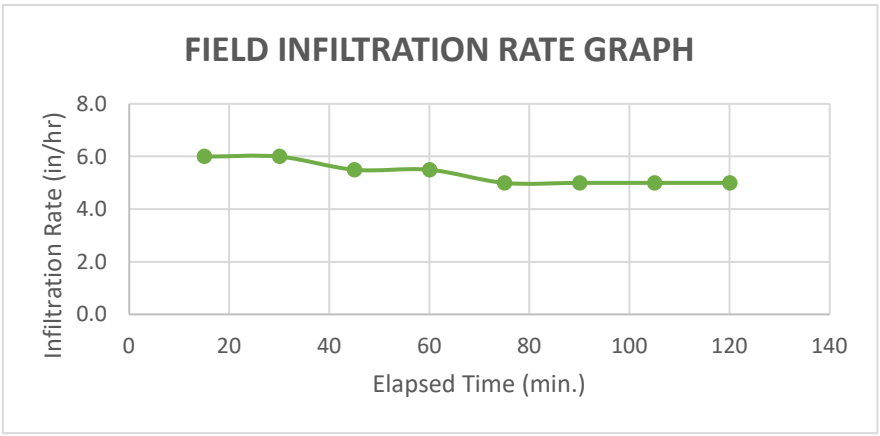
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 30





Single Ring Infiltration Log

INF - 31

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/22/2024 Completed 5/22/2024	Testing Depth / Elev.	3 ft / 52.63 ft
Test Performed By	N. Fisher	Water Depth /Elev.	5 ft / 50.63 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	8:39	9:39	60	4.00	4.0000	0.0000	--
P2							
1	9:39	9:54	15	4.00	4.000	0.000	0.00
2	9:54	10:09	15	4.00	4.000	0.000	0.00
3	10:09	10:24	15	4.00	4.000	0.000	0.00
4	10:24	10:39	15	4.00	4.000	0.000	0.00
5	10:39	10:54	15	4.00	4.000	0.000	0.00
6	10:54	11:09	15	4.00	4.000	0.000	0.00
7	11:09	11:24	15	4.00	4.000	0.000	0.00
8	11:24	11:39	15	4.00	4.000	0.000	0.00
					Field Infiltration Rate:		**0.0**

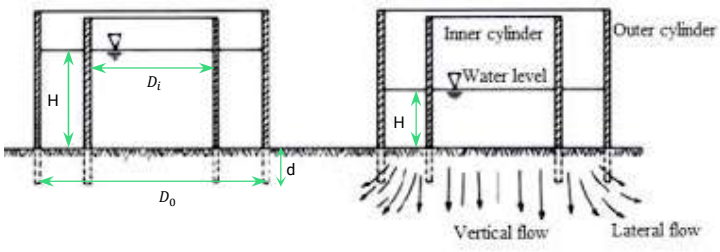
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

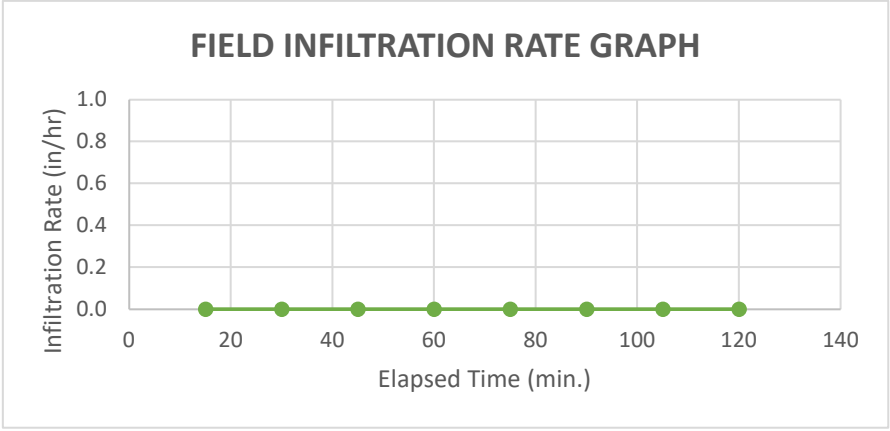
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 31





Single Ring Infiltration Log

INF - 32

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/21/2024 Completed 5/22/2024	Testing Depth / Elev.	3 ft / 54.19 ft
Test Performed By	N. Fisher	Water Depth /Elev.	6 ft / 51.19 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

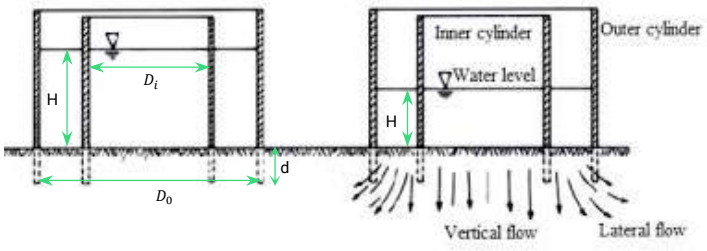
Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	12:05	12:10	5	4.00	0.0000	4.0000	--
P2	12:15	12:25	10	4.00	0.0000	4.0000	--
P3	12:27	12:37	10	4.00	0.0000	4.0000	--
P4	12:37	12:47	10	4.00	0.0000	4.0000	--
P5	12:50	1:02	12	4.00	0.0000	4.0000	--
1	1:05	1:10	5	4.00	2.500	1.500	18.00
2	1:10	1:15	5	4.00	2.500	1.500	18.00
3	1:15	1:20	5	4.00	2.625	1.375	16.50
4	1:20	1:25	5	4.00	2.625	1.375	16.50
5	1:25	1:30	5	4.00	2.625	1.375	16.50
6	1:30	1:35	5	4.00	2.625	1.375	16.50
7	1:35	1:40	5	4.00	2.750	1.250	15.00
8	1:40	1:45	5	4.00	2.750	1.250	15.00
9	1:45	1:50	5	4.00	2.750	1.250	15.00
10	1:50	1:55	5	4.00	2.750	1.250	15.00
11	1:55	2:00	5	4.00	2.750	1.250	15.00
12	2:00	2:05	5	4.00	2.750	1.250	15.00
13	2:05	2:10	5	4.00	2.875	1.125	13.50
14	2:10	2:15	5	4.00	2.875	1.125	13.50
15	2:15	2:20	5	4.00	2.875	1.125	13.50
16	2:20	2:25	5	4.00	2.875	1.125	13.50
17	2:25	2:30	5	4.00	2.875	1.125	13.50
18	2:30	2:35	5	4.00	2.875	1.125	13.50
19	2:35	2:40	5	4.00	2.875	1.125	13.50
20	2:40	2:45	5	4.00	2.875	1.125	13.50
21	2:45	2:50	5	4.00	2.875	1.125	13.50
22	2:50	2:55	5	4.00	2.875	1.125	13.50
23	2:55	3:00	5	4.00	2.875	1.125	13.50
24	3:00	3:05	5	4.00	2.875	1.125	13.50
					Field Infiltration Rate:		**13.5**

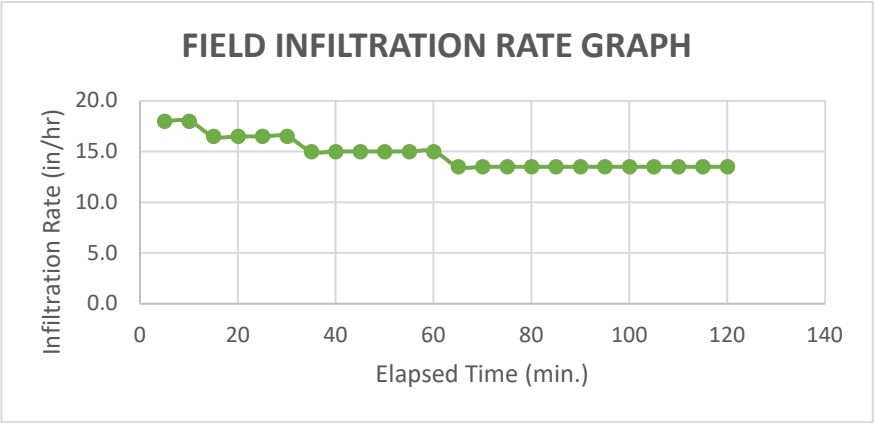
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

Notes:

Diameter Inner Ring, Di: 6 in
Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 32





Single Ring Infiltration Log

INF - 34

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/22/2024 Completed 5/22/2024	Testing Depth / Elev.	3 ft / 54.32 ft
Test Performed By	N. Fisher	Water Depth /Elev.	6 ft / 51.32 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	11:46	12:46	60	3.00	0.0000	3.0000	--
P2							
1	9:33	9:48	15	3.00	2.500	0.500	2.00
2	9:48	10:03	15	3.00	2.625	0.375	1.50
3	10:03	10:18	15	3.00	2.750	0.250	1.00
4	10:18	10:33	15	3.00	2.750	0.250	1.00
5	10:33	10:48	15	3.00	2.750	0.250	1.00
6	10:48	11:03	15	3.00	2.750	0.250	1.00
7	11:03	11:18	15	3.00	2.750	0.250	1.00
8	11:18	11:33	15	3.00	2.750	0.250	1.00
9	11:33	11:48	15	3.00	2.750	0.250	1.00
					Field Infiltration Rate:		**1.0**

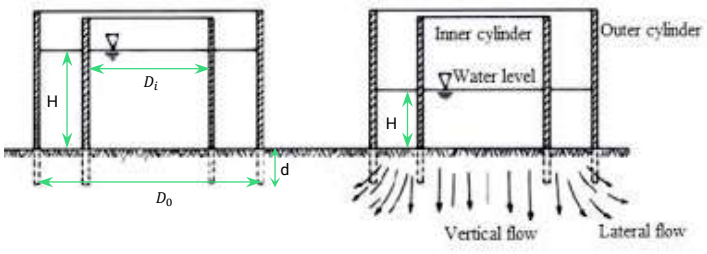
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

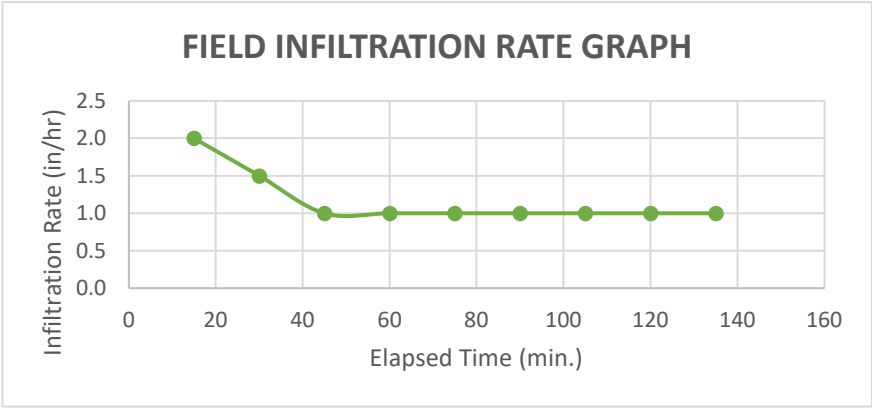
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 34





Single Ring Infiltration Log

INF - 35

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/22/2024 Completed 5/22/2024	Testing Depth / Elev.	4 ft / 53.43 ft
Test Performed By	N. Fisher	Water Depth /Elev.	7 ft / 50.43 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	11:49	12:49	60	4.00	0.8750	3.1250	--
P2							
1	12:49	1:04	15	4.00	3.063	0.938	3.75
2	1:04	1:19	15	4.00	3.125	0.875	3.50
3	1:19	1:34	15	4.00	3.125	0.875	3.50
4	1:34	1:49	15	4.00	3.188	0.813	3.25
5	1:49	2:04	15	4.00	3.250	0.750	3.00
6	2:04	2:19	15	4.00	3.313	0.688	2.75
7	2:19	2:34	15	4.00	3.313	0.688	2.75
8	2:34	2:49	15	4.00	3.313	0.688	2.75
					Field Infiltration Rate:		**2.75**

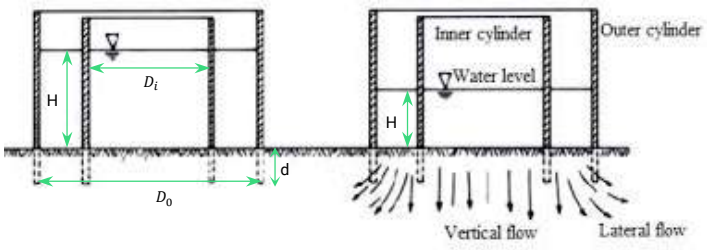
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

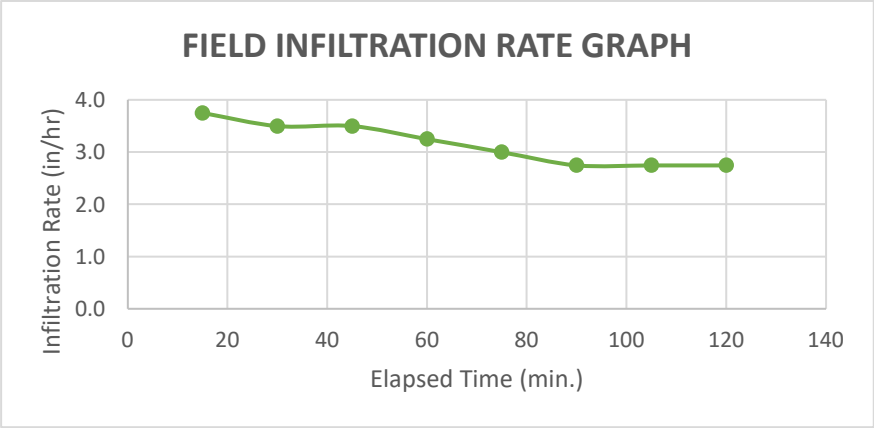
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 35





Single Ring Infiltration Log

INF - 36

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/21/2024 Completed 5/22/2024	Testing Depth / Elev.	3 ft / 54.68 ft
Test Performed By	N. Fisher	Water Depth /Elev.	6 ft / 51.68 ft
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

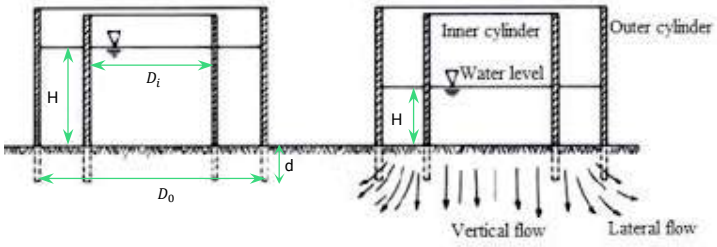
Trial #	Start time	End Time	DT (min)	H1 (in.)	H2 (in.)	DH (in.)	Rate (in/hr)
P1	12:10	12:14	4	4.00	0.0000	4.0000	--
P2	12:20	12:26	6	4.00	0.0000	4.0000	--
P3	12:29	12:37	8	4.00	0.0000	4.0000	--
P4	12:37	12:47	10	4.00	0.0000	4.0000	--
P5	12:50	1:02	12	4.00	0.0000	4.0000	--
1	1:08	1:13	5	4.00	1.625	2.375	28.50
2	1:18	1:23	5	4.00	1.625	2.375	28.50
3	1:28	1:33	5	4.00	1.625	2.375	28.50
4	1:33	1:38	5	4.00	1.750	2.250	27.00
5	1:38	1:43	5	4.00	2.000	2.000	24.00
6	1:43	1:48	5	4.00	2.000	2.000	24.00
7	1:48	1:53	5	4.00	2.000	2.000	24.00
8	1:53	1:58	5	4.00	2.000	2.000	24.00
9	1:58	2:03	5	4.00	2.000	2.000	24.00
10	2:03	2:08	5	4.00	2.000	2.000	24.00
11	2:08	2:13	5	4.00	2.063	1.938	23.25
12	2:13	2:18	5	4.00	2.063	1.937	23.24
13	2:18	2:23	5	4.00	2.125	1.875	22.50
14	2:23	2:28	5	4.00	2.250	1.750	21.00
15	2:28	2:33	5	4.00	2.250	1.750	21.00
16	2:33	2:38	5	4.00	2.250	1.750	21.00
17	2:38	2:43	5	4.00	2.250	1.750	21.00
18	2:43	2:48	5	4.00	2.250	1.750	21.00
19	2:48	2:53	5	4.00	2.250	1.750	21.00
20	2:53	2:58	5	4.00	2.250	1.750	21.00
21	2:58	3:03	5	4.00	2.250	1.750	21.00
22	3:03	3:08	5	4.00	2.250	1.750	21.00
23	3:08	3:13	5	4.00	2.250	1.750	21.00
24	3:13	3:18	5	4.00	2.250	1.750	21.00
					Field Infiltration Rate:		**21.0**

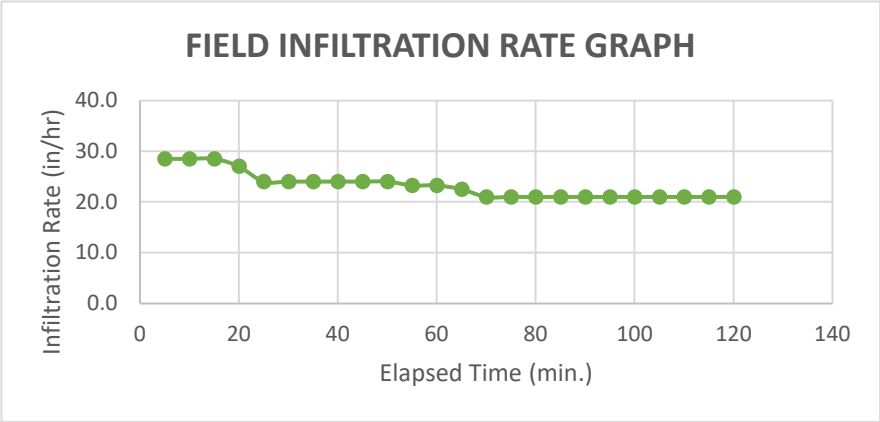
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

Notes:

Diameter Inner Ring, Di: 6 in
Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 36





Single Ring Infiltration Log

INF - 37

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/21/2024 Completed 5/21/2024	Testing Depth / Elev.	5 ft / 56.77 ft
Test Performed By	N. Fisher	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	8:56	9:56	60	4.00	0.0000	4.0000	--
P2							
1	9:56	10:11	15	4.00	2.000	2.000	8.00
2	10:11	10:26	15	4.00	2.125	1.875	7.50
3	10:26	10:41	15	4.00	2.125	1.875	7.50
4	10:41	10:56	15	4.00	2.250	1.750	7.00
5	10:56	11:11	15	4.00	2.250	1.750	7.00
6	11:11	11:26	15	4.00	2.250	1.750	7.00
7	11:26	11:41	15	4.00	2.250	1.750	7.00
8	11:41	11:56	15	4.00	2.250	1.750	7.00
					Field Infiltration Rate:		**7.0**

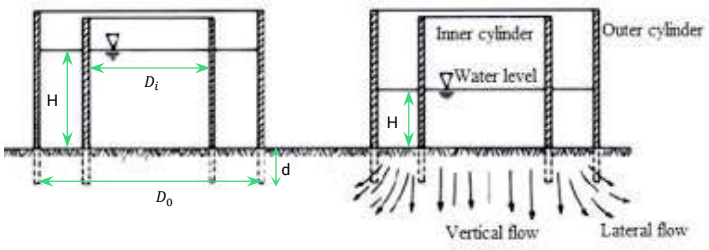
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

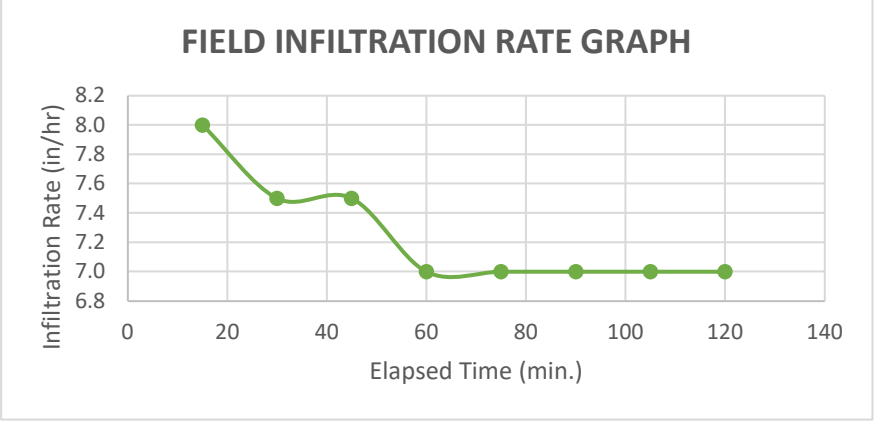
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 37





Single Ring Infiltration Log

INF - 38

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/21/2024 Completed 5/21/2024	Testing Depth / Elev.	5 ft / 57.90 ft
Test Performed By	N. Fisher	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	8:52	9:52	60	4.00	0.0000	4.0000	--
P2							
1	9:52	10:07	15	4.00	2.625	1.375	5.50
2	10:07	10:22	15	4.00	2.875	1.125	4.50
3	10:22	10:37	15	4.00	2.875	1.125	4.50
4	10:37	10:52	15	4.00	2.875	1.125	4.50
5	10:52	11:07	15	4.00	3.000	1.000	4.00
6	11:07	11:22	15	4.00	3.000	1.000	4.00
7	11:22	11:37	15	4.00	3.000	1.000	4.00
8	11:37	11:52	15	4.00	3.000	1.000	4.00
					Field Infiltration Rate:		**4.0**

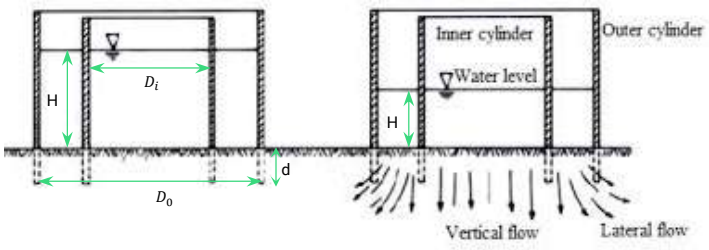
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

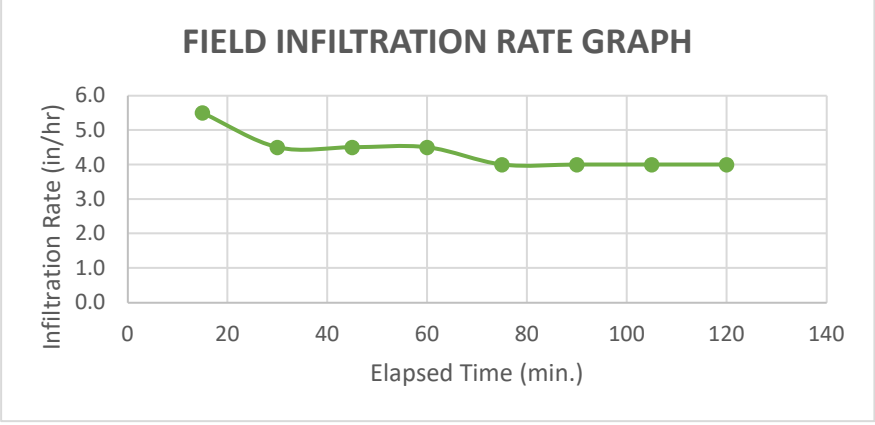
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 38





Single Ring Infiltration Log

INF - 39

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/21/2024 Completed 5/22/2024	Testing Depth / Elev.	5 ft / 56.28 ft
Test Performed By	N. Fisher	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	8:48	9:48	60	3.50	0.0000	3.5000	--
P2							
1	9:48	10:03	15	3.50	3.000	0.500	2.00
2	10:03	10:18	15	3.50	3.000	0.500	2.00
3	10:18	10:33	15	3.50	3.000	0.500	2.00
4	10:33	10:48	15	3.50	3.000	0.500	2.00
5	10:48	11:03	15	3.50	3.000	0.500	2.00
6	11:03	11:18	15	3.50	3.000	0.500	2.00
7	11:18	11:33	15	3.50	3.000	0.500	2.00
8	11:33	11:48	15	3.50	3.000	0.500	2.00
					Field Infiltration Rate:		**2.0**

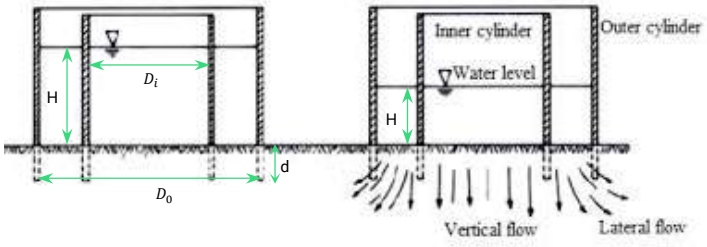
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

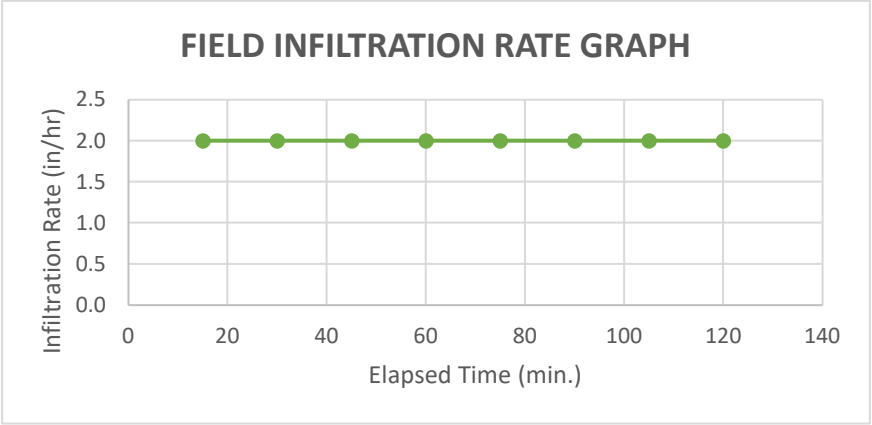
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 39





Single Ring Infiltration Log

INF - 40

Client	Landmark Science & Engineering	Project Name	ASD Summit Campus
Project Number	LDMSE24001	Project Location	Middletown, DE
Date Started	5/21/2024 Completed 5/22/2024	Testing Depth / Elev.	4 ft / 56.8 ft
Test Performed By	N. Fisher	Water Depth /Elev.	Not Encountered
Excavator / Operator	Gene Blemings	Equipment	New Holland EH 50.B

							Rate (in/hr)
Trial #	**Start time**	**End Time**	**DT (min)**	**H1 (in.)**	**H2 (in.)**	**DH (in.)**	
P1	8:45	9:45	60	5.00	3.2500	1.7500	--
P2							
1	9:45	10:00	15	5.00	4.750	0.250	1.00
2	10:00	10:15	15	5.00	4.750	0.250	1.00
3	10:15	10:30	15	5.00	4.875	0.125	0.50
4	10:30	10:45	15	5.00	4.875	0.125	0.50
5	10:45	11:00	15	5.00	4.875	0.125	0.50
6	11:00	11:15	15	5.00	4.875	0.125	0.50
7	11:15	11:30	15	5.00	4.875	0.125	0.50
8	11:30	11:45	15	5.00	4.875	0.125	0.50
					Field Infiltration Rate:		**0.5**

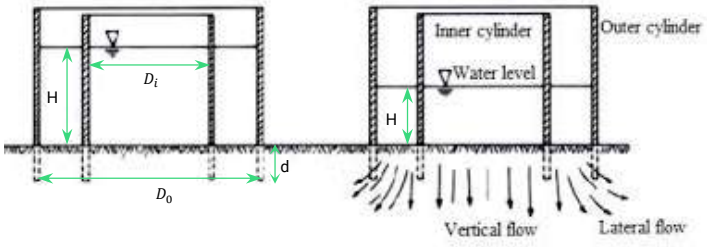
* Pre soak rates are not included in the calculated average. The field verified infiltration rate shall be the final steady state reading of the test performed

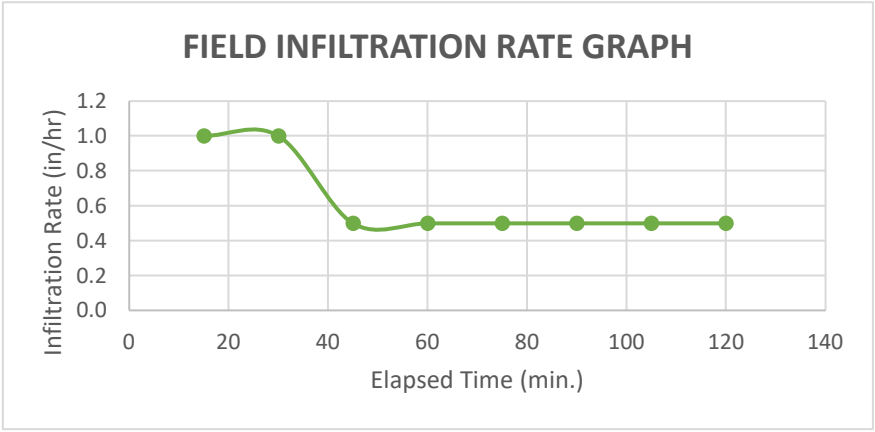
Notes:

Diameter Inner Ring, Di: 6 in

Seating Depth of Rings, d: 3 in

Corresponds to Test Pit Log 40





DNREC Division of Watershed Stewardship
89 Kings Highway
Dover, DE 19901
(302) 739-9921

Soil Investigation Report Submittal Checklist

DATE RECEIVED: 7/5/2024 **PROJECT NUMBER:** LDMSE24001

PROJECT NAME: Appoquinimink School District Summit Campus – Infiltration Testing

The items contained on this checklist are necessary to properly evaluate and determine the completeness of any Soil Investigation Report submitted under subsection 12.1 of the Delaware Sediment and Stormwater Regulations. Complete all items. It is understood not all items will be applicable to all projects and as such marking an item "N/A" is acceptable.

I. ✓ **General Soil Investigation Reports.** The following information, as applicable, should be submitted for all projects.

1) ✓ The signature, seal and date of a professional engineer or professional geologist experienced in soils licensed in the State of Delaware.

2) ✓ General description of the project, project elements, and project background.

3) ✓ Project site surface conditions and current use.

4) ✓ Regional and site geology. An initial screening of readily available data to determine feasibility of infiltration practices, if applicable, including:

a) ✓ Site topography

b) ✓ Soil characteristics as defined in the USDA NRCS Web Soil Survey

c) ✓ Depth to groundwater and seasonal high water table

d) ✓ Historical groundwater level data from the nearest Delaware Geological Survey (DGS) monitoring well or wells

5) ✓ Minimum number of borings or test pits conducted in accordance with the following:

a) ____ Surface area BMPs:

i) ____ Two (2) borings or pits for the first 8,000 square feet

ii) ___ Three (3) borings or pits for up to 16,000 square feet

iii) ____ Four (4) borings or pits for up to 25,000 square feet

iv) ___ One (1) additional boring or pit for each additional 25,000 square feet beyond the first 25,000 square feet

v) ____ Boring or pit locations distributed within the facility and sufficient to determine soil variability

b) ✓ Linear BMPS:

i) ____ Two (2) borings or pits up to 500 linear feet, and

ii) ✓ One (1) additional boring or pit per additional 500 linear feet of trench

iii) ✓ Boring or pit locations distributed and sufficient to determine soil variability

Soil Investigation Report Submittal Checklist

6) ✓ Borings or test pits advanced to the depth of the limiting layer or a minimum of three (3) feet below bottom of the proposed facility, whichever is encountered first.

7) ✓ Borehole or test pit logs including the following information:

a) ✓ Project name

b) ✓ Name of individual collecting the field data

c) ✓ Date field data was collected

d) ✓ Type of boring or test pit excavation method and equipment used

e) ✓ Air temperature and precipitation, including significant precipitation prior to investigation

f) ✓ Elevation of ground at boring location based on site benchmark

g) ✓ Visual description of soil profile layers, and depths below grade encountered

h) ✓ Sample numbers

i) ✓ Depths to any indications of instability such as cave in, sloughing, flowing sands, or obstructions

j) ✓ Blow counts if Standard Penetration Test (SPT) borings are performed

k) ✓ Depth of seasonal high water table indicators such as mottling

l) ✓ Depth of encountered free water during and after excavation

m) N/A Depth to bedrock if encountered

n) ✓ General observations

o) ✓ Testing standards

8) ✓ Depth and type of field testing performed. A summary of the laboratory testing conducted, if applicable.

9) ✓ Project soil and rock conditions including a description of the soil and rock units encountered, and how the units tie into the site geology.

10) ✓ Description of groundwater conditions, including the identification of any of the following:

a) N/A Confined aquifers

b) N/A Artesian pressures

c) ✓ Perched water tables

d) ✓ Potential seasonal variations, if known

e) ✓ Any influences on the ground water levels observed

f) ✓ Direction and gradient of groundwater, if known

11) N/A Discussion of rock structure, if applicable, including but not limited to:

a) ____ The results of any field structure mapping using photographs as needed,

b) ____ Joint condition

c) ____ Rock strength

d) ____ Potential for seepage.

12) N/A Summary of geological hazards identified and their impact on the project design, if any. Description of the location and extent of the geological hazard.

13) N/A For analysis of unstable slopes including existing settlement areas, cuts, and fills, include background regarding the analysis approach, assessment of failure mechanisms, and determination of design parameters. Include a description of any back-analyses conducted, the results of those analyses, comparison of those results to any laboratory test data obtained, and the conclusions made regarding the parameters to be used for final design.

14) ✓ Geotechnical recommendations for structural earthwork including:

a) N/A Embankment design recommendations, as applicable, including but not limited to the following:

i)____ Slope required for stability

ii) ___ Need and extent of removal of any unsuitable materials beneath the proposed fills

iii)____ Any other measures that need to be taken to provide a stable embankment

iv) ___ Embankment settlement magnitude and rate

b) N/A Cut design recommendations, as applicable, including but not limited to the following:

i)____ Slope required for stability

ii) ___ Seepage and piping control

iii)____ Erosion control measures

iv) ___ Any special measures required to provide a stable slope

c) ✓ Determination of adequacy of excavated material for use as structural fill or spoil

d) N/A Data for structural designs of BMP outlet works

15) N/A Long-term or construction monitoring needs, if applicable.

a) ____ Recommendation for types of instrumentation needed to evaluate long-term performance or to control construction

b) ____ Specify the reading schedule required

c) ____ Specify how the data should be used to control construction or to evaluate long-term performance

d) ____ Specify the zone of influence for each instrument.

16) ✓ Address issues of construction staging, shoring needs and potential installation difficulties, temporary slopes, potential foundation installation problems, earthwork constructability issues, and dewatering, as applicable.

17) ✓ Appendices to support geotechnical recommendations.

Soil Investigation Report Submittal Checklist

II.__✓__ **Infiltration Test Reports.** The following information, as applicable, should be submitted for all stormwater management BMPs that rely upon infiltration.

18)__✓__ Description of approved infiltration testing method.

a) __✓__ Field Permeability Testing conducted in accordance with ASTM-D5126 "Comparison of Field Methods for Determining Hydraulic Conductivity in the Vadose Zone".

b) __✓__ Single Ring or Double Ring Infiltrometer test method

c) N/A Cased Borehole Permeameter test method

i)____ Department or Delegated Agency approval granted prior to conducting the test

ii) ___ Minimum four (4) inch diameter casing used

d) __✓__ Any deviation from infiltration testing procedures approved by the Department or Delegated Agency noted in the report.

19)__✓__ Summary table of location of test, depth of test, elevation of test if available and field verified infiltration rate.

20)__✓__ The minimum number of field measured infiltration tests are based on the proposed facility's dimensions as follows:

a) ____ For an infiltration trench with less than 10,000 square feet of impervious drainage area:

i)____ One (1) test up to 500 linear feet, and

ii) ___ One (1) additional test per 250 linear feet of trench, and

iii)____ Sufficient to determine variability.

b) ____ For an infiltration trench with greater than 10,000 square feet of impervious drainage area:

i)____ One (1) test up to 250 linear feet, and

ii) ___ One (1) additional test per 250 linear feet of trench, and

iii)____ Sufficient to determine variability.

c) ____ For an infiltration trench used with roadway perforated pipe layouts:

i)____ One (1) test up to 500 linear feet, and

ii) ___ One (1) additional test per 500 linear feet of trench, and

iii)____ Sufficient to determine variability.

d) ____ For an infiltrating bioretention system:

i)____ One (1) test for the first 8,000 square feet

ii) ___ Two (2) tests for up to 16,000 square feet

iii)____ Three (3) tests for up to 25,000 square feet

iv) ___ One (1) additional test for each additional 25,000 square feet beyond the first 25,000 square feet

v)____ Test locations distributed within the facility and sufficient to determine variability.

e) ____ For a surface infiltration basin:

i)____ One (1) test for the first 8,000 square feet

ii) ___ Two (2) tests for up to 16,000 square feet

iii)____ Three (3) tests for up to 25,000 square feet

iv) ___ One (1) additional test for each additional 25,000 square feet beyond the first 25,000 square feet.

v)____ Test locations distributed within the facility and sufficient to determine variability.

f) ✓ For a subsurface infiltrating practice:

i)____ One (1) test per infiltration area

ii) ___ One (1) additional test for every 8,000 square feet of infiltration area

iii) ✓ Test locations distributed within the facility and Sufficient to determine variability

21) ✓ Infiltration test log, including:

a) ____ Name and license number of individual performing test. Individuals in responsible charge of infiltration testing possesses a Class D On-Site License issued by DNREC Division of Water Groundwater Discharges Section or be licensed in the State of Delaware as a Professional Engineer or Professional Geologist.

b) ✓ Date test was performed

c) ✓ Type of test method

d) ✓ Air temperature and precipitation

e) ✓ Depth of test below ground surface and elevation. Separation to a limiting layer such as bedrock or groundwater of at least two (2) feet maintained.

f) ✓ Diameters of boring and casing

g) ✓ Depth of casing penetration

h) ✓ Time and depth from reference point for each time increment.

i) ✓ A saturation period of one hour or a drop of 12 inches or 30.5 centimeters achieved. Saturation period not used in determining field verified infiltration rate.

ii) ✓ After the saturation period, a minimum of two (2) test periods completed or until at least two (2) consecutive test periods are consistent and achieve a stabilized infiltration rate. Each test period has a maximum reading interval of 15 minutes and meets one (1) of the following criteria:

(1) ✓ A minimum of one hour as determined by the sum of the interval times

(2)____ A drop of at least 12 inches in 15 minutes or less for a minimum of 30 minutes as determined by the sum of the interval times

iii)_✓_ Stabilized infiltration rate met as defined as one of the following:

(1)_✓_ A difference of 0.25 inches or less of drop between the highest and lowest reading of four (4) consecutive readings for infiltration rates greater than two (2.0) inches per hour

(2)_✓_ A difference of 0.125 inches or less of drop between the highest and lowest reading of four (4) consecutive readings for infiltration rates equal to or less than two (2.0) inches per hour.

iv)_✓_ When using the constant head test method, water level inside the casing maintained at a constant level or refilled to the starting level after each reading throughout the test period at no more than 15 minute intervals.

v)____ When using the falling head test method each test period starts with the same initial head.

22)_✓_ Infiltration rate graph for each test charting the field verified infiltration rate versus elapsed time of test. Append to each graph a table of the testing results. The field verified infiltration rate is the final steady state reading of the test performed.

23)_✓_ Geotechnical recommendations for each stormwater management facility, including the following:

a) _✓_ Recommended design infiltration rate based on the following:

i)_✓_ Apply a minimum factor of safety of 2.0 to field results from Single Ring or Double Ring Infiltrometer testing

ii)____ Apply a minimum factor of safety of 2.5 to field results from Cased Borehole Permeameter testing.

iii)_✓_ Provide an elevation range over which the recommended design rates are applicable.

iv)_✓_ The maximum design infiltration rate is less than or equal to 15 inches per hour.

b) N/A Impact of infiltration on adjacent facilities

c) N/A Effect of infiltration on slope stability

d) N/A If the facility is located on a slope, stability of slopes within the facility

e) _✓_ Foundation bearing resistance

f) N/A If steady state conditions for a given test are not achieved, provide an explanation as to why steady state could not be achieved and the professional's opinion regarding the use of the results for design purposes. If steady state is not achieved for a given test and a reasonable professional opinion is not provided, the Department or Delegated Agency may require additional testing.

Soil Investigation Report Submittal Checklist

III. N/A **Geotechnical Reports for Embankments.** The following information, as applicable, should be submitted for all stormwater management BMPs containing an embankment.

24)____ The signature, seal and date of a professional engineer licensed in the State of Delaware.

25)____ Subsurface Exploration

a) ____ Explorations every 200 feet on center along the length of the embankment.

b) ____ Unless bedrock is encountered at a shallower depth, explorations at a depth twice the proposed height from bottom of pond to top of embankment.

c) ____ If bedrock is encountered, a minimum five (5) foot rock core performed. If organic, plastic, or soils with an actual or estimated N-value less than four (4) are encountered, extended exploration to a depth of four (4) times the proposed embankment height.

d) ____ If there is a potential for a significant groundwater gradient beneath an embankment or surface water levels are significantly higher on one side of the embankment than the other, the effect of reduced soil strength caused by water seepage has been evaluated.

e) ____ Seepage effects considered when an embankment is placed on or near the top of a slope that has known or potential seepage through it.

26)____ Summary of design analyses, which provide the project description and basis of the design recommendations.

27)____ Summary of stability analyses, which provide the results of the stability analyses performed for the given embankment dimensions.

28)____ Summary of settlement analyses, including design assumptions and settlement results for above-grade embankments.

29)____ Design recommendations for embankment construction identifying the following actions:

a) ____ Construction procedures for placement of material in embankment widening areas

b) ____ Embankment cut-off and core trench materials for above-grade embankments

c) ____ Special notes for excavation of unsuitable material, with specific backfill requirements

d) ____ Specific measures required prior to placing embankment material

e) ____ Installation of appropriate erosion control and vegetative cover

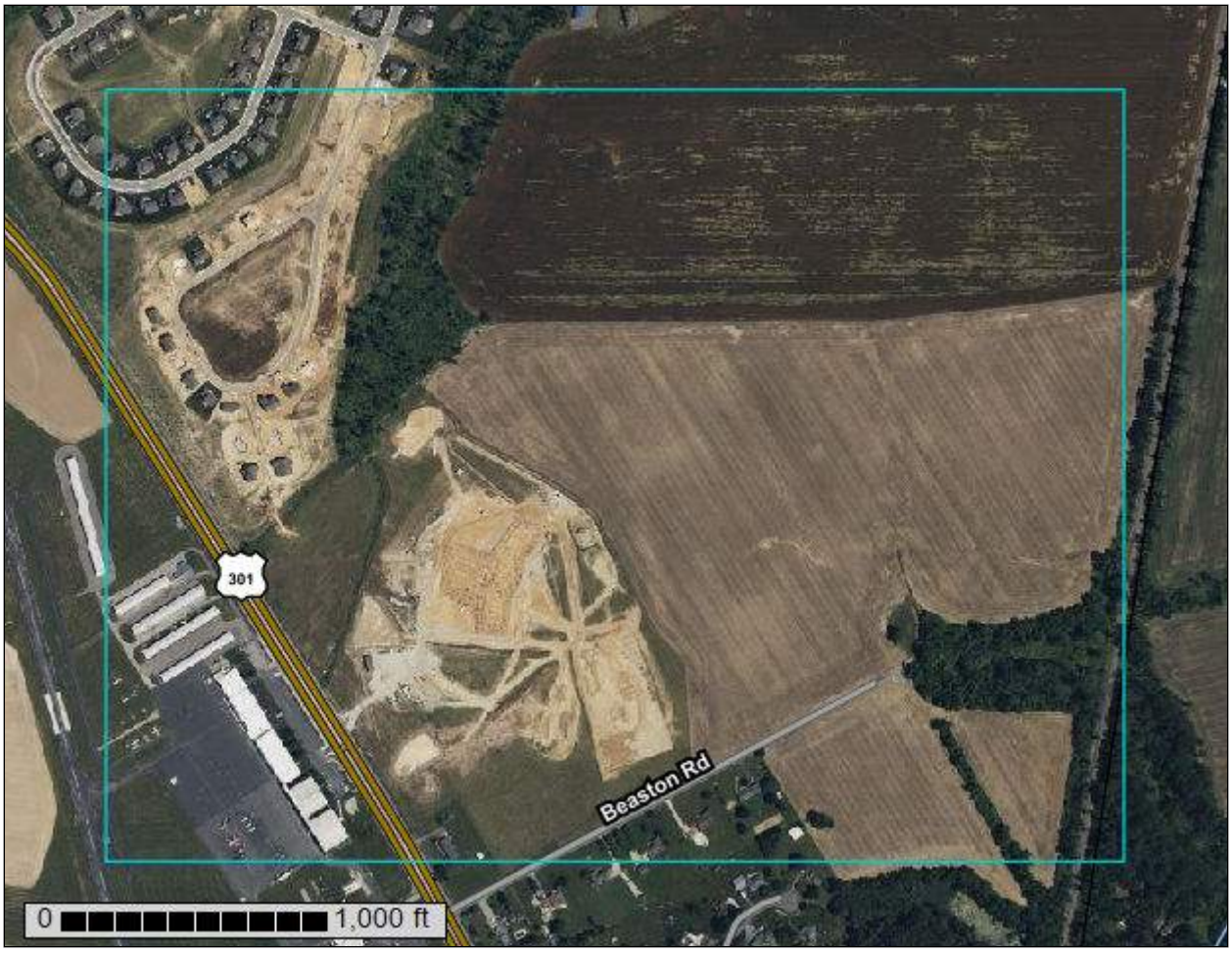
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for New Castle County, Delaware



June 20, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:7,470 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 100 200 400 600

Feet: 0 350 700 1400 2100

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: New Castle County, Delaware
Survey Area Data: Version 18, Sep 12, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 5, 2022—Jul 4, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
LO	Longmarsh and Indiantown soils, frequently flooded	3.7	1.4%
MkA	Matapeake silt loam, 0 to 2 percent slopes	2.2	0.8%
OtcA	Othello silt loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	23.6	9.3%
RdA	Reybold-Queponco complex, 0 to 2 percent slopes	46.0	18.0%
ReB	Reybold silt loam, 2 to 5 percent slopes	122.4	48.0%
ReC	Reybold silt loam, 5 to 10 percent slopes	10.5	4.1%
SacB	Sassafras sandy loam, 2 to 5 percent slopes, Mid-Atlantic Coastal Plain	5.7	2.2%
SacC	Sassafras sandy loam, 5 to 10 percent slopes, Mid-Atlantic Coastal Plain	6.8	2.7%
SaD	Sassafras sandy loam, 10 to 15 percent slopes	4.8	1.9%
WdcA	Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	1.9	0.7%
WocA	Woodstown loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain	27.5	10.8%
Totals for Area of Interest		**255.1**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made

up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

New Castle County, Delaware

LO—Longmarsh and Indiantown soils, frequently flooded

Map Unit Setting

National map unit symbol: 2p7dm
Elevation: 0 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Longmarsh and similar soils: 43 percent
Indiantown and similar soils: 37 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Longmarsh

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 19 inches: mucky loam
Cg1 - 19 to 34 inches: sandy loam
Cg2 - 34 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 5.95 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: R149AY060DE - Wet Alluvial Floodplain
Hydric soil rating: Yes

Description of Indiantown

Setting

Landform: Flood plains

Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

Oe - 0 to 2 inches: moderately decomposed plant material
A - 2 to 25 inches: mucky silt loam
Cg - 25 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: Frequent
Frequency of ponding: Frequent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 11.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: B/D
Ecological site: R149AY060DE - Wet Alluvial Floodplain
Hydric soil rating: Yes

Minor Components

Zekiah

Percent of map unit: 10 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R149AY060DE - Wet Alluvial Floodplain
Hydric soil rating: Yes

Manahawkin

Percent of map unit: 5 percent
Landform: Flood plains, swamps
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153DY110NJ - Mucky Swamp
Hydric soil rating: Yes

Klej

Percent of map unit: 5 percent
Landform: Flats
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153DY150NJ - Moist Sandy Upland
Hydric soil rating: No

MkA—Matapeake silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2p7gt
Elevation: 10 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Matapeake and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Matapeake

Setting

Landform: Flats
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Silty eolian deposits over fluviomarine sediments

Typical profile

Ap - 0 to 5 inches: silt loam
E - 5 to 11 inches: silt loam
Bt - 11 to 34 inches: silt loam
2BC - 34 to 38 inches: sandy loam
2C - 38 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.0 inches)

Interpretive groups

Land capability classification (irrigated): 1
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: C
Ecological site: F153CY030MD - Well Drained Loess Upland
Hydric soil rating: No

Minor Components

Nassawango
Percent of map unit: 10 percent
Landform: Terraces, flats
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153CY030MD - Well Drained Loess Upland
Hydric soil rating: No

Butlertown
Percent of map unit: 5 percent
Landform: Flats, broad interstream divides, interfluves
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Mattapex
Percent of map unit: 5 percent
Landform: Depressions, swales, flats
Landform position (three-dimensional): Dip
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

OtcA—Othello silt loams, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting
National map unit symbol: 2thwn
Elevation: 0 to 100 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 46 to 68 degrees F
Frost-free period: 210 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Othello, drained, and similar soils: 48 percent
Othello, undrained, and similar soils: 28 percent
Minor components: 24 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Othello, Drained

Setting
Landform: Swales, depressions, flats

Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Silty eolian deposits over fluviomarine deposits

Typical profile

Ap - 0 to 9 inches: silt loam
Btg - 9 to 29 inches: silt loam
2BCg - 29 to 34 inches: sandy loam
2Cg - 34 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 10 to 20 inches
Frequency of flooding: None
Frequency of ponding: Rare
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Description of Othello, Undrained

Setting

Landform: Drainageways, swales, depressions, flats
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Parent material: Silty eolian deposits over fluviomarine deposits

Typical profile

Oe - 0 to 2 inches: peat
A - 2 to 4 inches: silt loam
Eg - 4 to 10 inches: silt loam
Btg - 10 to 29 inches: silt loam
2BCg - 29 to 35 inches: sandy loam
2Cg - 35 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 0 to 10 inches
Frequency of flooding: None

Frequency of ponding: Occasional
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C/D
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Minor Components

Mattapex

Percent of map unit: 7 percent
Landform: Broad interstream divides, swales, depressions, flats
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Crosiadore

Percent of map unit: 7 percent
Landform: Depressions, fluviomarine terraces, flats
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Tread, dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Kentuck, undrained

Percent of map unit: 5 percent
Landform: Swales, depressions, flats
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Fallsington, undrained

Percent of map unit: 5 percent
Landform: Drainageways, swales, depressions, flats
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

RdA—Reybold-Queponco complex, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2p7g5
Elevation: 10 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 59 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Reybold and similar soils: 45 percent
Queponco and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reybold

Setting

Landform: Interfluves, flats
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: High silt loamy eolian deposits over fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: silt loam
Bt - 10 to 30 inches: silt loam
2BC - 30 to 39 inches: gravelly coarse sandy loam
2C - 39 to 80 inches: gravelly coarse sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Description of Queponco

Setting

Landform: Swales, flats
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: High silt loamy eolian deposits over fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: silt loam
Bt1 - 10 to 17 inches: silt loam
2Bt2 - 17 to 31 inches: loam
2CB - 31 to 36 inches: sandy loam
2C - 36 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 40 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: C
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Minor Components

Unicorn

Percent of map unit: 10 percent
Landform: Swales, flats
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Matapeake

Percent of map unit: 5 percent
Landform: Rises
Ecological site: F153CY030MD - Well Drained Loess Upland
Hydric soil rating: No

ReB—Reybold silt loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2p7g7
Elevation: 10 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 59 degrees F
Frost-free period: 180 to 220 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Reybold and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reybold

Setting

Landform: Interfluves, flats
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: High silt loamy eolian deposits over fluviomarine deposits

Typical profile

Ap - 0 to 10 inches: silt loam
Bt - 10 to 30 inches: silt loam
2BC - 30 to 39 inches: gravelly coarse sandy loam
2C - 39 to 80 inches: gravelly coarse sandy loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Minor Components

Sassafras
Percent of map unit: 10 percent
Landform: Knolls, flats
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Unicorn
Percent of map unit: 5 percent
Landform: Swales, flats
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Queponco
Percent of map unit: 5 percent
Landform: Swales, flats
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Matapeake
Percent of map unit: 5 percent
Landform: Flats
Ecological site: F153CY030MD - Well Drained Loess Upland
Hydric soil rating: No

ReC—Reybold silt loam, 5 to 10 percent slopes

Map Unit Setting
National map unit symbol: 2p7g8
Elevation: 10 to 120 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 59 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Reybold and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Reybold

Setting
Landform: Interfluves, flats
Down-slope shape: Linear
Across-slope shape: Convex, linear
Parent material: High silt loamy eolian deposits over fluviomarine deposits

Typical profile
Ap - 0 to 10 inches: silt loam

Bt - 10 to 30 inches: silt loam
2BC - 30 to 39 inches: gravelly coarse sandy loam
2C - 39 to 80 inches: gravelly coarse sandy loam

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Minor Components

Sassafras

Percent of map unit: 10 percent
Landform: Knolls, flats
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Unicorn

Percent of map unit: 5 percent
Landform: Swales, flats
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Matapeake

Percent of map unit: 5 percent
Landform: Flats
Ecological site: F153CY030MD - Well Drained Loess Upland
Hydric soil rating: No

Queponco

Percent of map unit: 5 percent
Landform: Swales, flats
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

SacB—Sassafras sandy loam, 2 to 5 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thxf
Elevation: 0 to 100 feet
Mean annual precipitation: 42 to 46 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 210 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Sassafras and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sassafras

Setting

Landform: Fluviomarine terraces, flats
Landform position (three-dimensional): Riser, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 12 inches: sandy loam
Bt1 - 12 to 18 inches: sandy loam
Bt2 - 18 to 28 inches: sandy clay loam
BC - 28 to 40 inches: loamy sand
C1 - 40 to 58 inches: sand
C2 - 58 to 80 inches: sand

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 2e
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Minor Components

Ingleside

Percent of map unit: 10 percent
Landform: Flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Downer

Percent of map unit: 5 percent
Landform: Flats, low hills, knolls
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Woodstown

Percent of map unit: 5 percent
Landform: Flats, depressions, broad interstream divides, fluviomarine terraces
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

SacC—Sassafras sandy loam, 5 to 10 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thxt
Elevation: 0 to 100 feet
Mean annual precipitation: 42 to 46 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 210 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Sassafras and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sassafras

Setting

Landform: Fluviomarine terraces, flats
Landform position (three-dimensional): Riser, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 9 inches: sandy loam
Bt1 - 9 to 18 inches: sandy loam
Bt2 - 18 to 28 inches: sandy clay loam
BC - 28 to 40 inches: loamy sand
C1 - 40 to 58 inches: sand
C2 - 58 to 80 inches: sand

Properties and qualities

Slope: 5 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 7.1 inches)

Interpretive groups

Land capability classification (irrigated): 3e
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: B
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Minor Components

Ingleside

Percent of map unit: 10 percent
Landform: Flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Downer

Percent of map unit: 5 percent
Landform: Flats, low hills, knolls
Landform position (two-dimensional): Shoulder, summit
Landform position (three-dimensional): Interfluve, rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Woodstown

Percent of map unit: 5 percent
Landform: Flats, depressions, broad interstream divides, fluviomarine terraces
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

SaD—Sassafras sandy loam, 10 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2p7fd
Elevation: 0 to 330 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days
Farmland classification: Not prime farmland

Map Unit Composition

Sassafras and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sassafras

Setting

Landform: Fluviomarine terraces, knolls, low hills, hillslopes
Landform position (three-dimensional): Riser, dip
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex

Typical profile

Ap - 0 to 9 inches: sandy loam
E - 9 to 15 inches: sandy loam
Bt - 15 to 30 inches: loam
BC - 30 to 37 inches: sandy loam
C - 37 to 80 inches: loamy sand

Properties and qualities

Slope: 10 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

Minor Components

Downer

Percent of map unit: 10 percent
Landform: Fluviomarine terraces, knolls, flats
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Evesboro

Percent of map unit: 5 percent
Landform: Flats, dunes, fluviomarine terraces, knolls
Down-slope shape: Linear, convex
Across-slope shape: Linear, convex
Ecological site: F153DY170NJ - Sandy, Excessively Drained Upland
Hydric soil rating: No

Ingleside

Percent of map unit: 5 percent
Landform: Depressions, flats, fluviomarine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F153DY160NJ - Well Drained Coarse-Loamy Upland
Hydric soil rating: No

Zekiah

Percent of map unit: 5 percent
Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R149AY060DE - Wet Alluvial Floodplain
Hydric soil rating: Yes

WdcA—Woodstown sandy loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thvt
Elevation: 0 to 90 feet
Mean annual precipitation: 42 to 48 inches
Mean annual air temperature: 52 to 58 degrees F
Frost-free period: 180 to 220 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Woodstown and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodstown

Setting

Landform: Flats, broad interstream divides, depressions, fluviomarine terraces
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 7 inches: sandy loam
E - 7 to 11 inches: sandy loam
Bt - 11 to 29 inches: sandy loam
BCg - 29 to 45 inches: fine sandy loam
Cg - 45 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Minor Components

Hammonton

Percent of map unit: 6 percent
Landform: Broad interstream divides, flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Fallsington

Percent of map unit: 6 percent

Landform: Flats, swales, depressions, drainageways
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Mattapex

Percent of map unit: 4 percent
Landform: Broad interstream divides, swales, depressions, flats
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Talf, dip
Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Hambrook

Percent of map unit: 4 percent
Landform: Flats, fluviomarine terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

WocA—Woodstown loam, 0 to 2 percent slopes, Mid-Atlantic Coastal Plain

Map Unit Setting

National map unit symbol: 2thx4
Elevation: 0 to 90 feet
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 55 to 59 degrees F
Frost-free period: 210 to 240 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Woodstown and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Woodstown

Setting

Landform: Flats, broad interstream divides, depressions, fluviomarine terraces
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Tread, talf, dip

Down-slope shape: Linear, concave
Across-slope shape: Linear, concave
Parent material: Loamy fluviomarine deposits

Typical profile

Ap - 0 to 7 inches: loam
E - 7 to 11 inches: sandy loam
Bt - 11 to 29 inches: sandy loam
BCg - 29 to 45 inches: fine sandy loam
Cg - 45 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 20 to 40 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: C
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Minor Components

Fallsington

Percent of map unit: 6 percent
Landform: Swales, depressions, flats, drainageways
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Dip, talf
Down-slope shape: Concave, linear
Across-slope shape: Linear, concave
Ecological site: F149AY090NJ - Coastal Plain Hardwood Swamp
Hydric soil rating: Yes

Hammonton

Percent of map unit: 6 percent
Landform: Broad interstream divides, flats
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F149AY130NJ - Moist Loamy Upland
Hydric soil rating: No

Mattapex

Percent of map unit: 4 percent
Landform: Depressions, flats, broad interstream divides, swales
Landform position (two-dimensional): Footslope, summit
Landform position (three-dimensional): Dip, talf

Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Ecological site: F153CY020MD - Moist Loess Upland
Hydric soil rating: No

Hambrook

Percent of map unit: 4 percent
Landform: Flats, fluviomarine terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread, talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F149AY170MD - Well Drained Fine-Loamy Upland
Hydric soil rating: No

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July 25, 2024

LDMSE24001

Mr. Ted C. Williams, PE, FACEC
President
Landmark Science & Engineering
200 Continental Drive, Suite 400
Newark, DE 19713

RE: Geotechnical Engineering Services
Appoquinimink School District Summit Campus – Phases B to F
Middletown, Delaware

Dear Mr. Williams:

We are pleased to submit our geotechnical engineering report for the proposed middle/high school located east of Summit Bridge Road within the Appoquinimink School District Summit Campus located in Middletown, Delaware. Work was initiated in general accordance with the scope of work presented in our proposal dated May 2, 2024 and your notice to proceed dated May 7, 2024.

We trust that the information presented in this report is what you require at this time and we thank you for the opportunity to assist you with this project. If you have any questions, or if you need any further assistance with this project, please contact this office at your earliest convenience.

Respectfully yours,

PENNONI ASSOCIATES INC.

Austin R. Spencer, PE
Staff Geotechnical Engineer II

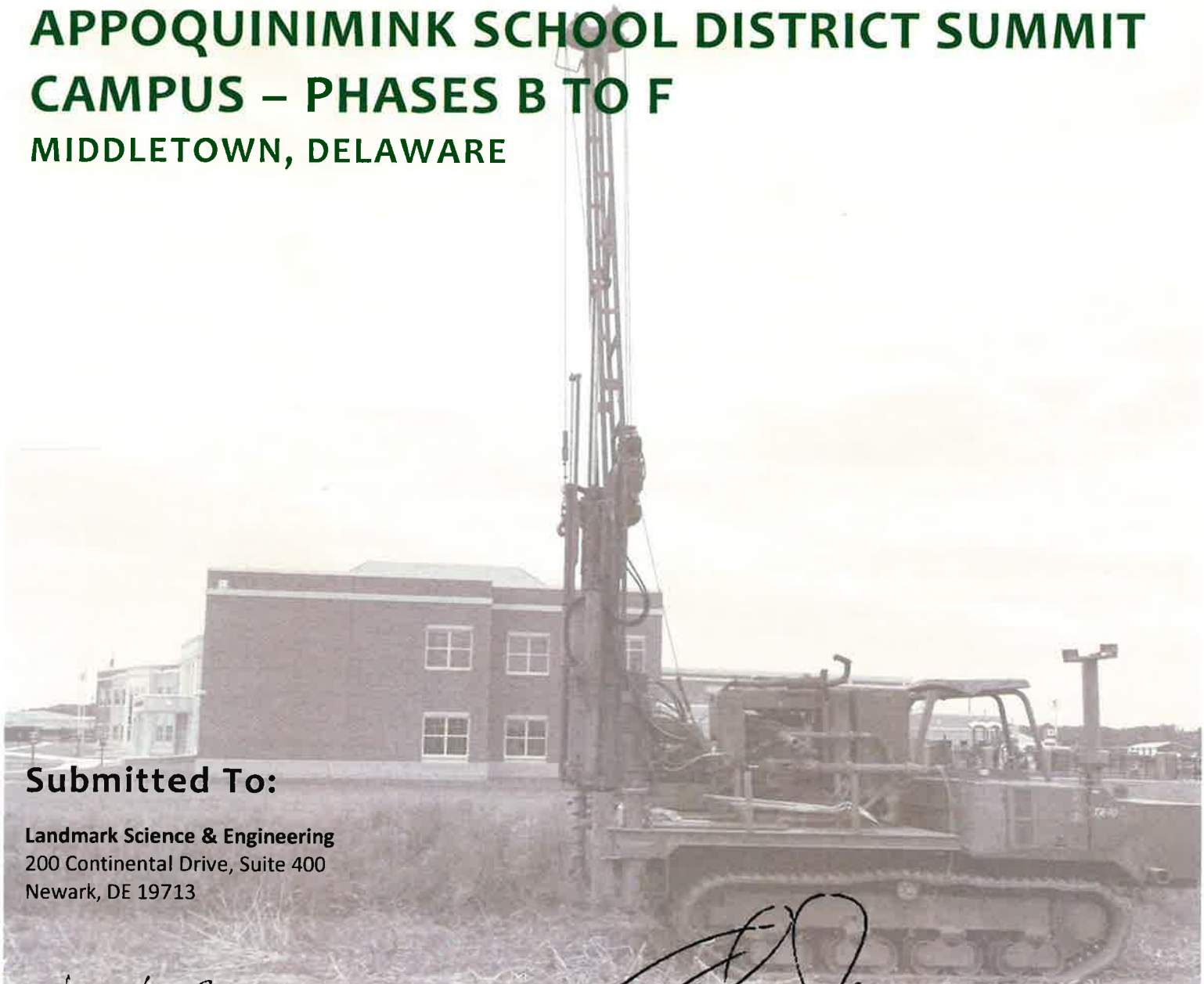
Theodore A. Thomson, Jr., Ph.D., PE, LEED AP
Associate Vice President / Geotechnical Division Manager

Attachments: Geotechnical Engineering Services Report

GEOTECHNICAL ENGINEERING SERVICES

APPOQUINIMINK SCHOOL DISTRICT SUMMIT CAMPUS – PHASES B TO F

MIDDLETOWN, DELAWARE



Submitted To:

Landmark Science & Engineering
200 Continental Drive, Suite 400
Newark, DE 19713

Austin R. Spencer, PE
Staff Geotechnical Engineer II

Theodore A. Thomson, Jr., Ph.D., PE, LEED AP
Associate Vice President / Geotechnical Division Manager

July 25, 2024
LDMSE24001

THEODORE A. THOMSON JR. LICENSE No. 12928 DELAWARE PROFESSIONAL ENGINEER
7/24/24

Pennoni
PARTNERS FOR WHAT'S POSSIB

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1. EXECUTIVE SUMMARY

Pennoni has completed our geotechnical evaluation for Phases B through F of the Appoquinimink School Districts (ASD) Summit Campus located in Middletown, Delaware. The results of our study are summarized below. The executive summary should be used in conjunction with the body of the report as it details our recommendations below.

Proposed Construction and Site Conditions		Section(s)
Proposed Construction	We understand that construction consists of an approximate two story, 385,473 square foot (SF) middle and high school, one story, 10,800 SF field house, athletic fields, and stormwater management (SWM) facilities located in proposed parking areas surrounding the proposed buildings.	2.1
Field Work	- 25 SPT borings advanced to depths ranging from approximately 20 to 50 feet below the existing ground surface; - 50 CPT soundings advanced to depths ranging from approximately 20 to 30 feet below the existing ground surface; and - 40 test pits excavated to depths ranging from 5 to 10 feet below the existing ground surface within proposed SWM facilities. Concurrently with test pit excavations 39 single ring infiltration tests were performed at depths ranging from 3 to 5 feet below ground surface. (Test pits and infiltration testing summarized under a separate cover)	3.1.1 3.1.2 3.1.3
Surface Soils	Topsoil ranging in thickness from 6 to 15 inches encountered in all borings / test pits	4.2
Subsoils	Stratum A – CLAY: silty CLAY, trace to and fine to medium sand (very soft to firm); Stratum B – SAND: fine to medium to coarse SAND, trace to and clay/silt, trace to little fine to coarse gravel (very loose to medium dense); Stratum C – GRAVEL: fine to coarse GRAVEL, little to and fine to medium to coarse sand, trace to little silt (medium dense to dense) TO SAND: fine to medium to coarse SAND, some to and fine to coarse gravel, little silt (loose to dense); Stratum D – SAND: fine to medium to coarse SAND, trace to and silt, trace to little fine to coarse gravel (very loose to dense)	4.2
Cuts/Fills	Site Grading – Based on the proposed finished floor elevation (65.30 feet, NAVD88) for the proposed middle/high school and existing grading it appears that cuts and fills on the order of 1 to 4 feet will be required. Based on the proposed finished floor elevation (59.00 feet, NAVD88) for the proposed fieldhouse and existing grading it appears that cuts on the order of 2 to 3 feet will be required.	2.1

Recommendations		Section(s)
Building Foundations	Shallow spread foundations bearing in stiff Stratum A, medium dense Stratum B, or newly compacted structural fill can be designed with for a maximum net allowable bearing capacity of 3,000 psf.	5.1
Settlement	Maximum settlement for the proposed middle/high school is estimated to be 1.5 inches within the northwestern portion of the structure. Settlement induced by fill placement is estimated to be approximately 0.75 within the southern portion of the footprint with total settlement of 1.0 inches due to structural loading across the remaining footprint. Differential settlement is not anticipated to exceed 0.50 inches between similarly founded foundations.	5.1.1

Recommendations (Cont.)		Section(s)
Frost Depth	32 inches below adjacent exposed grades or otherwise protected against frost action as specified by the New Castle County Building Code.	5.1
Ground Floor Slab	Provided the subgrade is properly prepared, constructing the ground floor slab on grade is considered feasible. A modulus of subgrade reaction of 150 pci can be used in slab design.	5.2
Seismic Site Class	A Site Class D as classified in general accordance with Table 20.3-1 of ASCE 7 and referenced in Section 1613.3 of the 2015 International Building Code.	5.3
Pavement Design	See Section 5.4.1 for recommended pavement sections. Materials and construction for new pavement should be in accordance with Delaware Department of Transportation Standard Specifications for Road and Bridge Construction.	5.4
Infiltration Results	A summary of the test pit excavations and infiltration testing is provided under a separate cover titled "Appoquinimink School District Summit Campus," prepared by Pennoni Associates Inc., dated July 5, 2024.	3.1.3
Lift Thickness and Compaction Requirements	Granular Soil – 10 to 12 in. thick layers loose measure; Foundations and floor slab 98% (standard proctor) or 95% (modified proctor) depending on compaction equipment used.	5.5
Groundwater (GW)	Groundwater was encountered in all borings at depths ranging from approximately 10.2 to 18.0 feet (Elev. 45.8 to 52.3 feet, NAVD88) below existing grades. The observations made in the borings suggests that free-standing groundwater is not anticipated in excavations for the proposed at-grade facility and associated SWM facilities.	4.3, 5.6
Lateral Earth Pressure Parameters	The soil parameters provided in Section 5.7 can be used to estimate earth pressures for the design of retaining walls or below grade structures (Elevator pits) for near surface soils.	5.7

2. INTRODUCTION

2.1. PROJECT DESCRIPTION

Based on our review of the documents referenced below, it our understanding that the project consists of the construction of an approximate two story 385,473 square foot (SF) middle and high school, one story 10,800 SF fieldhouse, athletic fields, and stormwater management (SWM) facilities located in proposed parking areas surrounding the proposed buildings. The proposed middle/ high school and fieldhouse have a finished floor elevation (FFE) of approximately 65.30 and 59.00 feet (NAVD88), respectively. At the time of this report the anticipated building loading was unknown; we have assumed, building loading to consists of maximum column loads of 300 kips with maximum continuous footing loads on the order of 4 to 6 kips per foot. Based on the proposed FFE for the proposed middle/high school and existing grading it appears that cuts and fills on the order of 1 to 4 feet will be required, respectively. Based on the FFE for the proposed fieldhouse and existing grading it appears that cuts on the order of 2 to 3 feet will be required.

The site plan referenced below shows proposed parking spaces to the north and east of the middle/ high school, north, south and west of the proposed field house, and northeast of the proposed football field. A total of 1,081 parking spaces are proposed with 40 bus parking spaces proposed north and east of the middle/ high school. Stormwater management (SWM) facilities consisting of subsurface basins are proposed throughout the parking areas and south of the existing roundabout. Landmark Science & Engineering provided inverts of the facilities to be a maximum of 5 feet below existing grades. The SWM facilities and infiltration testing results are summarized under a separate cover referenced below.

2.2. INFORMATION REVIEWED

To assist with the development of this report, we reviewed the following:

- A Drawing No. CR-01 titled “Appoquinimink Summit Campus – St. Georges Hundred – New Castle County – Delaware,” prepared by Landmark Science & Engineering, dated April 21, 2021;
- An untitled RFP titled “P8582 – Appoquinimink School District,” dated March 28, 2024;
- An undated Drawing titled “Boring Exhibit for Summit Campus – Phase 2,” prepared by Landmark Science & Engineering;
- Survey and stake information plan titled “2024-05-13 Survey bores,” prepared by Landmark Science & Engineering, provided on May 13, 2024; and
- Infiltration Testing Summary Report titled “Appoquinimink School District Summit Campus,” prepared by Pennoni Associates Inc., dated July 5, 2024.

2.3. EXISTING SITE CONDITIONS

The site appears to consist of the Crystal Run Elementary School, from Phase A of the project, as well as an existing agricultural field. The site is bound by residential properties to the north and south, agricultural field to the east, and Route 896 to the west. Based on the provided topography the project site generally slopes downward from northwest to southeast with elevations ranging from approximately 66 to 55 feet (NAVD88). Existing utilities were noted to consist of an overhead electric line running west to east parallel with Beaston Road. An artesian water main was noted to run west to east along the northern perimeter of the site.

2.4. OBJECTIVES

The objectives of this geotechnical study were to determine subsurface conditions at the project site, evaluate these conditions with respect to the proposed construction, and present our conclusions and recommendations regarding:

- foundation design of the proposed structures, including discussion of alternate solutions, if necessary;
- design frost depth;
- discussion of potential for consolidation and/or differential settlements of substrata encountered;
- groundwater conditions and their influence on design and construction;
- subgrade preparation;
- pavement design recommendations;
- removal or treatment of objectionable material;
- use and treatment of in-situ materials for controlled fill; and
- quality assurance and field-testing and observations during construction.

3. FIELD AND LABORATORY WORK

3.1. FIELD WORK

3.1.1. STANDARD PENETRATION TEST BORINGS

Twenty-five Standard Penetration Test (SPT, ASTM D1586) borings labeled “B-1” through “B-25” were performed at the project site between May 14 through May 23, 2024, at locations shown on the Field Exploration Location Sketch provided in Appendix A.

Borings “B-1” through “B-22” were performed within the general footprint of the proposed middle/high school to depths ranging from approximately 20 to 50 feet below existing grades. Boring “B-23” was performed within the footprint of the proposed fieldhouse and Borings “B-24” and “B-25” were performed within the footprint of the proposed football stadium bleachers. Borings “B-23” to “B-25” were performed to depths of approximately 20 feet below existing grades. Continuous sampling was performed to a depth of 10 feet below the existing ground surface and then in five feet intervals to termination depth.

Test borings were performed CGC Geoservices using a track mounted auger rig with 3¼ inch hollow stem augers and an automatic hammer. The test borings were backfilled with the excavated soil cuttings and bentonite chips with excess soil mounded over the hole. It should be noted that settlement and softening of the replaced soil often takes place leading to depressions or holes at the ground surface. Our T. Thomson, PE directed the field work and A. Spencer, PE, and A. Sposato, observed the test drilling. Test boring logs and subsurface stratigraphy profiles are provided in Appendix B.

3.1.2. CONE PENETRATION TEST SOUNDINGS

Fifty Cone Penetration Test (CPT, ASTM D5778) soundings labeled “C-1” through “C-50” were performed at the project site between May 13 through May 16, 2024, at locations shown on the Field Exploration Location Sketch provided in Appendix A.

Soundings "C-1" through "C-47" were performed within the general footprint of the proposed middle/high school to depths ranging from approximately 20 to 30 feet below existing grades. Soundings "C-48" was performed within the footprint of the proposed fieldhouse and Soundings "C-49" and "C-50" were performed within the footprint of the proposed football stadium bleachers. Soundings "C-48" to "C-50" were performed to depths of approximately 20 feet below existing grades. Soundings were performed by SGI using a Geoprobe. Our A. Spencer, PE directed the field work. The Sounding Logs are provided in Appendix B.

3.1.3. TEST PITS / INFILTRATION TESTING

Forty test pit excavations labeled "TP-1" through "TP-40" and 39 infiltration tests labeled "INF-1" through "INF-40" were performed at the project site between May 13, 2024, to May 23, 2024 at locations shown on the Field Exploration Location Sketch provided in Appendix A. Test pits were performed to depths ranging from approximately 5 to 10 feet below existing grades. Test pit and infiltration testing locations were determined and provided by Landmark Science & Engineering. Landmark Science & Engineering provided the proposed inverts for the SWM facilities to be a maximum of 5 feet below the existing ground surface; therefore, the test pit excavations were performed to a minimum of 8 feet below existing ground surface in general accordance with the Delaware Administrative Code Title 7, Section 5101, Sub-Section 12.0, with in exception of Test Pit "TP-33" where groundwater was encountered at 3 feet below existing grade. Following the conclusion of the test pit excavation an adjacent pit was excavated to the proposed invert elevations for infiltration testing. Pennoni performed in-situ infiltration testing consisting of 39 single sing infiltration tests in general accordance with testing as described in the Delaware Administrative Code Title 7, Section 5101, Sub-Section 12.0. Concurrent with the test pit excavations, bulk samples were collected of the near surface material for laboratory testing consisting of California Bearing Ratio to be utilized in the pavement design summarized below.

A summary of the test pit excavations and infiltration testing is provided under a separate cover titled "Appoquinimink School District Summit Campus," prepared by Pennoni Associates Inc., dated July 5, 2024.

3.2. LABORATORY WORK

Following conclusion of the SPT drilling and test pit excavations, the soil samples were delivered to our laboratory for visual classification and testing. The total geotechnical laboratory program consisted of the following:

- California Bearing Ratio (CBR) (ASTM D 1883) 3 tests
- Modified Proctor (ASTM D 1557) 3 tests
- Moisture Content (ASTM D 2216) 92 tests
- Sieve Analysis (ASTM D 6913) 92 tests
- Atterberg Limits (ASTM D 4318) 7 tests

Samples for testing were selected by Pennoni's geotechnical engineer. Results of the laboratory testing for the borings and CBRs are provided in Appendix C of this report. Results of the laboratory testing for the test pits are summarized under a separate cover titled "Appoquinimink School District Summit Campus," prepared by Pennoni Associates Inc., dated July 5, 2024.

4. SUBSURFACE CHARACTERISTICS

4.1. GEOLOGY

According to the Physiographic Province of Delaware created by USGS, the project site is located within the Coastal Plain. The Coastal Plain is characterized by gently rolling hills and valleys. It is underlain by a southeastwardly thickening sequence of sediments that consists of sand and gravel aquifers interlayered with silt and clay confining units.

According to the Geologic Map (GM13) of New Castle County (Ramsey, K.W., 2005) the project site is located within the Columbia Formation. The Columbia Formation is described as yellow to red to brown, fine to coarse, feldspathic quartz sand with varying amounts of gravel. Typically, cross-bedded with cross-sets ranging from a few inches to over three feet in thickness. Scattered beds of tan to red to gray clayey silt is common. In places, the upper 5 to 25 feet consists of a gray to red to brown silt to very fine sand overlying medium to coarse sand. Near base of unit, clasts of cobbles to small boulders are found in gravel beds ranging from a few inches to three feet thick. Gravel fraction consists primarily of quartz with lesser amounts of chert. Clasts of sandstone, siltstone, and shale from the Valley and Ridge Province, and pegmatite, micaceous schist, and amphibolite from the Piedmont are present. The Columbia fills an eroded surface and ranges from less than 10 feet thick to over 100 feet thick.

According to USDA Web Soil Survey mapping, the project site consists of mainly Reybold silt loam (ReB), Reybold-Queponco Complex (RdA), Woodstown loam (WocA), and Sassafras sandy loam (SacC). Reybold silt loam is generally described as silt loam underlain by gravelly coarse sandy loam with linear down slope shape. Reybold silt loam is classified as hydrologic soil group B with moderately high to high infiltration rates of approximately 0.20 to 2.00 inches per hour. The depth to water table and restrictive features both exceed 80 inches. Reybold-Queponco Complex is generally described as silt loam underlain by gravelly coarse sandy loam with linear down slope shapes. Reybold-Queponco Complex is classified as hydrologic soil group B with moderately high to high infiltration rates of approximately 0.20 to 2.00 inches per hour. The depth to water table and restrictive features both exceed 80 inches. Woodstown loam is generally described as loam to sandy loam to fine sandy loam underlain by loamy sand with linear to concave down slope shapes. Woodstown sandy loam is classified as hydrologic soil group C with moderately high to high infiltration rates of approximately 0.57 to 1.98 inches per hour. Depth to water table is noted as 20 to 40 inches with depth to restrictive feature exceeding 80 inches. Sassafras sandy loam is generally described as sandy loam to sandy clay loam to loamy sand underlain by sand with linear down slope shape. Sassafras sandy loam is classified as hydrologic soil group B with moderately high to high infiltration rates of approximately 0.20 to 2.00 inches per hour. The depth to water table and restrictive features both exceed 80 inches. A soils report from the USDA is provided in Appendix D.

4.2. SUBSURFACE STRATIGRAPHY

Subsurface stratigraphy encountered within the SPT borings and CPT soundings generally consists of a surficial layer of topsoil underlain by very soft to firm clay. The clay layer was generally underlain by a very loose to medium dense sand layer with varying amounts of silt and gravel. This sand layer was generally underlain by a loose to dense gravel layer with cobbles to boulders encountered in the test pit excavations. The gravel layer was underlain by a loose to medium dense sand layer with varying amounts of silt. The friction ratio (R_f) of the CPT soundings generally averaged below 2.0% with some layers between 2.0 to 5.0%. Per Tabe 1. Soil Classification Based on friction ratio (Sanglerat, 1972) these ratios would classify as sands or gravels and clay sand mixture, respectively. The interpreted CPT soil profiles

generally agreed with the stratigraphy encountered in the SPT borings. For descriptive purposes, the soil layers can be classified as follows:

Stratum	Approximate Thickness (ft)	Description	USCS Classification
T	0.5 – 1.25	Topsoil	--
A[1]	1.0 – 4.2	Brown to tan to gray CLAY, trace to and fine to medium sand, trace root fragments (damp, very soft to medium stiff)	CL
B[2]	3.0 – 18.0+	Brown to tan to black to orange to white fine to medium to coarse SAND, trace to and clay/silt, trace to little fine to coarse gravel (damp to wet, very loose to medium dense)	SP-SM to SM/SC
C[3]	2.0 – 10.0+	Brown to black to white fine to coarse GRAVEL, little to and fine to medium to coarse sand, trace to little silt (moist to wet, medium dense to dense) OR Tan to brown to purple fine to medium to coarse SAND, some to and fine to coarse gravel, little silt, trace fine gravel sized rock fragments (moist to wet, loose to dense)	GP to GM SP-SM to SM
D[4]	2.0 – 32.0+	Brown to orange to red to maroon to black to gray fine to medium to coarse SAND, trace to and silt, trace to little fine to coarse gravel (moist to wet, very loose to dense)	SP to SP-SM

Notes:
[1] Stratum A was not encountered in Borings "B-4," "B-6," and "B-22";
[2] Stratum B was not fully penetrated in Borings "B-7," "B-10" "B-11," "B-12," "B-14," and "B-17";
[3] Stratum C was not encountered in Borings "B-6," "B-7," "B-8," "B-9," "B-10," "B-11," "B-12," "B-14," "B-17," "B-18," "B-20," and "B-22". Stratum C was not fully penetrated in Boring "B-3"; and
[4] Stratum D was not encountered in Borings "B-3," "B-10," "B-11," "B-12," "B-14," and "B-17". Stratum D was not fully penetrated.

See attached Subsurface Stratigraphy Profiles provided in Appendix B, showing varying soil profiles across the project site.

4.3. GROUNDWATER

Observations for apparent groundwater were made in the borings during sampling and shortly after completion of drilling. Groundwater was encountered in all borings at depths ranging from approximately 10.2 to 18.0 feet (Elev. 45.8 to 52.3 feet, NAVD88) below existing grades. Groundwater depths were estimated from the CPT data to range from approximately 7 to 12 feet (Elev. 50.48 to 56.36, NAVD88) below existing ground surface. These observations are for the times indicated and may not be indicative of seasonal or daily variations in the ground water levels. Seasonal variations on the order of several feet should be anticipated.

According to the Delaware Geologic Information Resource (DGIR) depth to water table is noted to be approximately 12 feet (Elev. 49.42 feet, NAVD88) during wet conditions, and approximately 16 feet (Elev. 45.42 feet, NAVD88) during dry conditions.

See attached Subsurface Stratigraphy Cross Sections provided in Appendix B, showing varying soil profiles and groundwater elevations across the project site. Groundwater generally appears to slope downward from northwest to southeast towards Beaston Road.

5. ANALYSES AND RECOMMENDATIONS

5.1. FOUNDATIONS

Factors effecting foundation construction and behavior for this project consist of subsurface soils with variable consistencies, fill heights, and anticipated structural loading. **As structural loading was not available at the time of this report, we have assumed maximum column loads of 300 kips. Should this actual column loads be higher than this, Pennoni should be afforded the opportunity to revise our settlement estimates.** The following are recommendations for foundation systems based on our evaluation of these factors and our experience. Based on the proposed FFE for the proposed middle/high school and fieldhouse (Elev. 65.3 and 59 feet NAVD88, respectively) and existing grading it appears that cuts and fills on the order of 1 to 4 feet will be required at the middle/high school and cuts on the order of 2 to 3 feet will be required at the fieldhouse.

Based on our understanding of the project and data obtained during the field exploration, it is our opinion that the proposed construction can be founded on traditional shallow foundation systems (e.g., strip and/or spread footings). It is our opinion that shallow foundations bearing in the stiff Stratum A clay, medium dense Stratum B Sand, or newly placed structural fill can be sized for a maximum net, allowable bearing capacity of 3,000 psf (see Settlement subsection below).

Due to the variable density /consistency of the subsurface stratigraphy that may be encountered at bearing elevation (soft Stratum A clay or loose Stratum B sand), the foundation subgrades may require densification in place prior to footing/foundation construction and/or localized undercuts to reach the bearing conditions suitable to achieve the allowable bearing capacity. Foundations should be constructed in accordance with the recommendations contained in the Earthwork section below. Foundation subgrades should be checked by a representative of the Geotechnical Engineer to confirm conditions suitable for support of the design.

Continuous and isolated footings should be at least 2 feet wide and 3 feet square, respectively, to prevent localized shear failure in the soil. The subgrades of all foundations exposed to freezing temperatures during construction and/or the life of the structure should be established at least 32 inches below adjacent exposed grades, or otherwise protected against frost action. Foundation subgrades should be checked by a representative of the Geotechnical Engineer to confirm conditions suitable for support of the design bearing pressure. Where an area is questionable, it should be further explored and/or remedied by removal and replacement of unsuitable material.

5.1.1. MIDDLE/HIGH SCHOOL BUILDING SETTLEMENT

Settlement is a significant consideration in the selection of a foundation system. Settlement is a function of the building loads, subsurface soil consistency, and amount of cut/fill required. As indicated above, **we have assumed maximum column loads of 300 kips. Should this actual column loads be higher than this, Pennoni should be afforded the opportunity to revise our settlement estimates.** Based on the subsurface conditions encountered, the proposed grading (fills on the order of 4 feet in the southern portion of the footprint), and allowable foundation bearing pressure as noted above.

We estimate maximum total settlement for the proposed construction on the order of 1.5 inches. This maximum settlement is estimated to occur in the northwestern portion of the middle high school (i.e., area in the proximity of testing boring, B-1). Maximum settlement induced by fill placement is estimated to be approximately 0.75 inches and located within the southern portion of the footprint (i.e., area in the proximity of testing boring, B-19). Differential settlement is not anticipated to exceed 0.50 inches between similarly founded foundations.

In order to reduce the potential for detrimental post construction settlement, we recommend that fill be placed as far in advance as possible prior to construction of the settlement sensitive portions of the building. We estimate that fill placement a minimum of 1 month in advance of construction of the building will result in post construction building settlement on the order of 1 inch.

5.1.2. FIELDHOUSE BUILDING SETTLEMENT

Based on the subsurface conditions encountered, the proposed grading (cuts on the order of 2 to 3 feet), and allowable foundation bearing pressure as noted above, we estimate total settlement for the proposed construction on the order of less than 1 inch. Differential settlement is not anticipated to exceed 0.50 inches between similarly founded foundations.

5.2. GROUND FLOOR SLAB

Similar to foundation considerations, the performance of the slab on grade will also be influenced by the slab loading, volume of cuts and fills, and subgrade soil consistency. The proposed subgrades are anticipated to primarily consist of the Stratum A clay, Stratum B sand, or newly placed structural fill. Provided the subgrades are prepared as discussed in the Earthwork section below, the concrete slabs on grade can be designed using a modulus of vertical subgrade reaction (k_v) of 150 pci. We recommend that the slabs be designed as “fully floating” (not connected to the structural elements of the building) in order to reduce potential cracking due to differential settlement between the building’s structural elements and slab on grade. A 4 to 6-inch-thick free-draining granular base course should be placed beneath the slabs to provide a uniform bearing surface and to aid in the proper curing of the concrete.

5.3. SEISMIC SITE CLASSIFICATION

The SPT borings and CPT soundings disclosed subsurface conditions generally described according to the Table 20.3-1 of ASCE 7 and referenced in Section 1613.3 of the 2018 International Building Code (IBC) as having a soil-profile corresponding to Site Class D – a stiff soil profile. Site Class determination is based on the properties in the upper 100 feet of the ground surface. The borings performed herein were

advanced to a maximum depth of 50 feet and CPT soundings were advanced to a maximum depth of 30 feet. Values beyond 30 and 50 feet were estimated based on our local experience in this area. Based on Figures 1613.3.1(1) and 1613.3.1(2) of the 2015 International Building Code, parameters Ss and S1 for the site can be assumed to be 0.164 g and 0.045 g, respectively.

5.3.1. LIQUEFACTION POTENTIAL

Liquefaction occurs in loose, saturated, cohesionless soils (sands and silts) when a sudden loss of stiffness and/or strength is experienced from earthquake actions. Several screening criteria are used to assess the potential for liquefaction:

- depth of the soil below the ground surface
- fines content of cohesionless soils
- saturation of the subsoils
- proximity of site to known major earthquakes, faults, or sources; and
- Standard Penetration resistance.

The SPT borings and CPT soundings revealed the subsoils generally consisting of a very loose to loose cohesionless layer between approximately 15 to 45 feet. The laboratory testing results indicate the granular deposits within this depth generally have 5 to 16% passing the #200 sieve with moisture contents ranging from 29.6 to 41.3%.

To evaluate the potential for soil liquefaction, the procedure outlined by the technical report NCEER-97-0022 (1997) and The Guide to Cone Penetration Testing for Geotechnical Engineering 6th Edition (Robertson, 2014) was used. This evaluation presents an empirical relationship between the earthquake demand, represented by the Cyclic Stress Ratio (CSR), and the soil resistance to dynamic loading, represented by the Cyclic Resistance Ratio (CRR). The CSR is correlated to the design earthquake event, as well as the in-situ soil stresses, whereas the CRR is correlated to the CPT normalized clean sand equivalent cone resistance ($Q_{tn, cs}$) estimated from the CPT data obtained in the field.

Our analysis parameters included a 7.5 magnitude earthquake, a 1.0 minimum factor of safety, and a PGA of 0.09g. Based on the resulting factor of safety of 6, liquefaction does not need to be considered in the foundation design.

5.4. PAVEMENT DESIGN RECOMMENDATIONS

Based on the soils observed within the subsurface investigation and associated laboratory testing results, a California Bearing Ratio (CBR) of 7 can be utilized for the proposed site pavements. Due to the variable density of the Stratum B soils that may be encountered at bearing elevations where pavements are proposed outside of areas receiving new fill, the pavement subgrades may require stabilization in accordance with our Earthwork section below.

5.4.1. PAVEMENT DESIGN

Pennoni utilized the “AASHTO Guide for Design of Pavement Structures,” developed by the American Association of State Highway and Transportation Officials, dated 1993 and Chapter 9 of the DelDOT Road Design Manual dated July 2011, to determine a recommended paving section

for the proposed site pavements. Pennoni considered traffic loading consisting primarily of passenger vehicles and busses with daily delivery van/trucks and semi-tractor trailers over a 25-year design life period. A minimum recommended pavement section for the site pavements is as follows:

- 1 ¼ inches of Type C Asphalt Pavement;
- 2 ¼ inches of Type B Asphalt Pavement; and
- 6 inches of Graded Aggregate Base Coarse (GABC).

In areas where higher volume of truck traffic will be present (e.g., bus lanes, delivery areas, trash pick up, etc.), we recommend the following pavement section:

- 1 ½ inches of Type C Asphalt Pavement;
- 2 ¾ inches of Type B Asphalt Pavement; and
- 8 inches of Graded Aggregate Base Coarse (GABC).

Materials and construction for new pavement should be in accordance with Delaware Department of Transportation Standard Specifications for Road and Bridge Construction.

5.5. EARTHWORK

Prior to placing any new fill, and before the construction of the proposed foundations, any construction debris, vegetation, and associated topsoil must be removed from within the areas of proposed construction. These materials can remain in proposed landscaped areas provided that future plans do not include building in those areas.

Exposed subgrades should be thoroughly proofrolled using a minimum 10-ton vibratory roller operated in static mode or a fully loaded dump truck in an attempt to identify unstable (soft, yielding, etc.) surface areas. During proofrolling any unstable area found should be stabilized by excavating and replacing those soils with suitable soil (adequately compacted, see below), by lowering the moisture content of the subgrade soils and compacting them, or by other methods (placing a geotextile and stone layer, etc.). To reduce the potential for damage to the subgrade, we recommend that construction traffic over the subgrade be kept to a minimum. Also, site pavements and concrete for foundations and/or slabs on grade should be placed as soon as possible following the subgrade preparation.

Our experience indicates that the on-site, near surface soils of Strata A/B/C can be reused for the construction, provided all organics and debris larger than 3 inches in its greatest dimension be removed prior to reuse and provided there are no additional environmental concerns with the material. Stratum A soils were observed to contain a significant amount of fine-grained material (silts/clays). These types of soils are sensitive to moisture and may therefore require wetting or drying prior to compaction. Drying "wet" soil is difficult during wet periods and during lower temperatures. Therefore, provisions for importing structural fill should be included in the contract documents. If necessary, granular fill should consist of well-graded material with a maximum particle size less than 3 inches, not more than 20 percent passing the No. 200 sieve and have a plasticity index (PI) not greater than 8 percent.

Fills should be placed in layers not exceeding 10 to 12 inch loose measure. This criterion might be adjusted by the geotechnical engineer in the field depending on the conditions present at the time of construction, on the compaction equipment used, and on the fill materials selected. Fills for support of foundations/floor slabs/pavements should be compacted to at least 98 percent of the laboratory

determined dry density, ASTM D-698, when small, hand-operated compaction equipment is used, and to at least 95 percent of the laboratory determined maximum dry density, ASTM D-1557, when self-propelled, heavy-duty construction equipment is used. Fills should extend a minimum of 5 feet beyond the exterior edge of a loaded area and have side slopes not steeper than 2 horizontal to 1 vertical.

Specifications should indicate that the percentage of maximum dry density attained in the field is not the only criteria to be used for assessing fill compaction. Observation of the behavior of the fill under the loads of construction equipment should also be used. If the test results indicate that the percentage of compaction is being achieved, but the soil mass is moving under the equipment, placement of additional fill should not be continued until the movement is stabilized. Otherwise, settlement of the fill may occur.

5.6. GROUND WATER AND SURFACE WATER MANAGEMENT

The groundwater observations made in the borings suggests that free-standing groundwater is not anticipated in excavations for the proposed structures shallow foundations. In the event that wet conditions and/or seepage are encountered due to perched water, sumps and pumps should be adequate to maintain stable conditions during foundation construction. The foundation excavations should not be used as a detention basin or sump. During construction, surface runoff should be prevented from entering the excavations by creating soil berms or diversion swales along the perimeter if the excavation is expected to be open for a long period of time. Where ponding does occur, the water should be pumped immediately and grades should then be established to prevent further ponding.

5.7. LATERAL EARTH PRESSURE PARAMETERS

The soil parameters provided in the table below can be used to estimate earth pressures for the design of retaining walls or below grade structures (Elevator pits) for near surface soils. If the top of the structure is restrained from movement, thereby preventing the mobilization of active soil pressures, the structure should be designed using the at-rest pressure coefficient, K_o.

The earth pressure coefficients are based on the assumption of vertical walls, horizontal backfill, no surcharges, no wall friction, and a safety factor of 1.0. To alleviate hydrostatic stress behind the retaining walls (if applicable), we recommend drainage boards extending down to a drainage tile be installed along the back and base of the wall, respectively, and installing drains (weep holes) through the face of the wall.

Design Parameter	***Stratum A***	***Stratum B***	***Stratum C***	***Newly Compacted Granular Fill***
Total Unit Weight (pcf)	105	115	120	125
Angle of Internal Friction, ϕ	0	30	32	34
Cohesion, c (psf)	750	0	0	0
Active Earth Pressure Coefficient, K_a	1.0	0.33	0.31	0.28
Passive Earth Pressure Coefficient, K_p	1.0	3.0	3.25	3.54
At-rest Earth Pressure Coefficient, K_o	1.0	0.50	0.47	0.44

Excavations during subgrade preparation and foundation construction should be in accordance with Occupational Safety and Health Administration (OSHA) regulations. If site restrictions prevent excavations from being adequately sloped, the use of temporary shoring should be expected.

If the contractor is responsible for the design of temporary or permanent retaining structures, then the contract documents should clearly require that the design be performed by a competent registered engineer and that the responsibility for satisfactory earth support is solely the contractor's. Also, the contract documents should require the contractor to notify the engineer immediately if differing of unforeseen subsurface conditions are encountered during construction.

5.8. EXISTING AND PROPOSED UTILITIES

Several existing utilities were delineated adjacent to the project site. These include (but may not be limited to): an overhead electric line running west to east parallel with Beaston Road. An artesian water main was noted to run west to east along the northern perimeter of the site. We recommend that load bearing elements of the proposed construction not bear over existing utilities in order to reduce the potential for damage.

6. RECOMMENDATIONS FOR FURTHER GEOTECHNICAL SERVICES

Our experience on numerous construction projects is that the interests of the project team are best served by retaining the Geotechnical Engineer to provide construction observations during earthwork and foundation construction operations. To determine if soils, other materials, and ground water conditions encountered during construction are similar to those encountered in the borings, and that they have comparable engineering properties or influences on the design of the structure, we recommend that Pennoni should provide field observation services during excavation; preparation of foundation subgrades; and installation/construction of foundations. Pennoni's Geotechnical Technology should review specifications for earthwork and foundation design/construction when they are prepared.

7. LIMITATIONS

This work has been done in accordance with our authorized scope of work and in accordance with generally accepted professional practice in the fields of geotechnical and foundation engineering. This warranty is in lieu of all other warranties either expressed or implied. Our conclusions and recommendations are based on the data revealed by this exploration. We are not responsible for any conclusions or opinions drawn from the data included herein, other than those specifically stated, nor are the recommendations presented in this report intended for direct use as construction specifications. This report is intended for use with regard to the specific project described herein; any changes in loads, structures, or locations should be brought to our attention so that we may determine how they may affect our conclusions. An attempt has been made to provide for normal contingencies, but the possibility remains that unexpected conditions may be encountered during construction. If this should occur, or if additional or contradictory data are revealed in the future, we should be notified so that modifications to this report can be made, if necessary. If we do not review relevant construction documents and witness the relevant construction operations, then we cannot be responsible for any problems that may result from misinterpretation or misunderstanding of this report or failure to comply with our recommendations.

Appendix E provides additional information related to this report.

APPENDICES

APPENDIX A – Location Sketches

SITE LOCATION SKETCH

Site Location Sketch adapted from a Google Earth Image Dated April 12, 2023

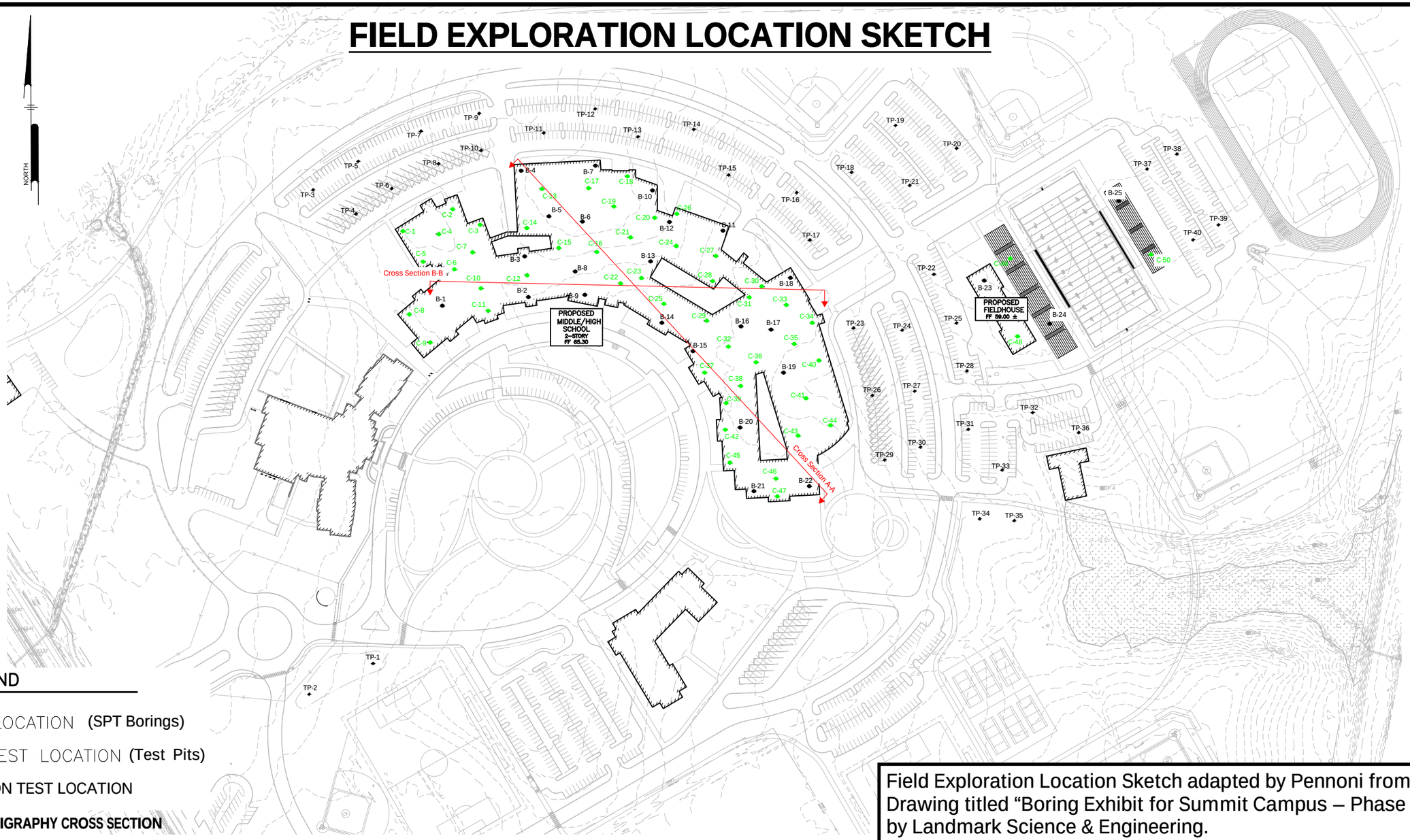
Pennoni Associates, Inc.
121 Continental Drive, Suite 207
Newark, DE 19713

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATES; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES, AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

DRAWN BY:	SCALE:	DATE:
ARS	As Shown	7/25/2025
CHECKED BY:	FIGURE No.	
TAT	SK-1	
PROJECT No.		
LDMSE24001		

ASD Summit Campus – Middletown, DE

FIELD EXPLORATION LOCATION SKETCH



LEGEND

- SOIL BORING LOCATION (SPT Borings)
- INFILTRATION TEST LOCATION (Test Pits)
- CONE PENETRATION TEST LOCATION
- SUBSURFACE STRATIGRAPHY CROSS SECTION

Field Exploration Location Sketch adapted by Pennoni from an undated Drawing titled “Boring Exhibit for Summit Campus – Phase 2,” prepared by Landmark Science & Engineering.

Pennoni Associates, Inc.
121 Continental Drive, Suite 207
Newark, DE 19713

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DRAWN BY:	SCALE:	DATE:
AS	NTS	7/24/2024
CHECKED BY: TAT	FIGURE No. TL-1	
PROJECT No: LDMSE24001		

Appoquinimink School District Summit Campus - Phases B to F

APPENDIX B – Field Data

TEST BORING LOG

TEST BORING B-1

PAGE 1 OF 1

NORTHING 555817.0924

EASTING 572052.1435

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 64.0' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 51.0'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 11.3' / Elev 52.7'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0					T	Depth 0.8 — 9" TOPSOIL — Elev. 63.2	
	S-1	18	2-3-2-2		A	2.0 — Brown CLAY and fine to medium to coarse SAND, trace fine gravel	
	S-2	10	1-3-2-2			Brown silty CLAY, trace fine sand	
5	S-3	20	1-2-6-8			5.0 — Elev. 59.0	
	S-4	20	4-7-7-6		B	6.0 — Brown to tan fine to medium SAND, little silt Brown to tan to black fine to medium SAND, little silt	Moist
10	S-5	20	7-5-4-5			8.0 — Brown to tan fine SAND, little to some silt	Wet
						13.0 — Elev. 51.0	
15	S-6	12	5-7-10-9		C	Brown to black coarse to fine GRAVEL and medium to fine to coarse SAND, trace silt	Wet on spoon
						18.0 — Elev. 46.0	
20	S-7	12	5-6-4-7		D	20.0 — Brown to orange fine to medium to coarse SAND, little to some silt — Elev. 44.0	Iron staining

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-2

PAGE 1 OF 1

NORTHING 555836.2566

EASTING 572243.4844

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 63.7' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 50.7'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 12.8' / Elev 50.9'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	15	1-2-1-3		T / A	0.8 — 9" TOPSOIL (62.9); 2.0 — Brown CLAY, trace fine to medium sand (61.7)	
	S-2	20	4-4-5-5		B	Brown fine to medium to coarse SAND, little silt (4.0)	
5	S-3	20	1-5-7-7		B	Brown fine to medium to coarse SAND, trace silt (6.0)	Moist
	S-4	20	6-6-5-5		B	Brown to black fine to medium SAND, little silt (9.0 / 54.7)	
10	S-5	12	3-2-3-10		C	Brown to black fine to coarse GRAVEL, some medium to fine to coarse sand, little silt (13.0)	Wet Rock caught in spoon
15	S-6	18	5-6-4-4		C	Brown to black fine to coarse GRAVEL and medium to fine to coarse SAND, little silt (18.0 / 45.7)	Saturated
20	S-7	4	3-3-3-3		D	Brown fine to medium SAND, little silt (23.0)	
25	S-8	20	2-2-1-1		D	Brown to orange fine to medium SAND, trace silt	Water introduced to borehole
30	S-9	20	2-2-2-4		D	(33.0)	
35	S-10	8	6-9-8-8		D	Brown to orange fine to medium SAND, little silt, trace coarse gravel (35.0 / 28.7)	
						Borehole terminated at 35.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-3

PAGE 1 OF 1

NORTHING 555926.9542

EASTING 572235.3634

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 64.6' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 51.6'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 13.0' / Elev 51.6'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	18	1-1-2-3		T	1.0 — 12" TOPSOIL — 63.6	
					A	2.0 — Brown CLAY, trace fine to medium sand — 62.6	
	S-2	22	5-7-7-7		B	4.0 — Brown fine to medium to coarse SAND, some clay, trace fine gravel	Moist
5	S-3	20	2-5-5-6			Brown fine to medium SAND, little silt	
	S-4	20	5-4-5-5			8.0 — Tan to brown fine to medium SAND, some silt	
	S-5	20	4-4-4-4				
10						13.0 — 51.6	
	S-6	18	5-13-12-4		C	Tan to brown to purple medium to fine to coarse SAND and fine to coarse GRAVEL, little silt	Wet on spoon
15							
	S-7	0	6-7-5-4			20.0 — 44.6	
20						Borehole terminated at 20.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-4

PAGE 1 OF 1

NORTHING 556117.6221

EASTING 572227.3385

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 65.7' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 18.0' / Elev 47.7'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 17.9' / Elev 47.8'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0					T	Depth 0.8 — 9" TOPSOIL — Elev. 65.0	
	S-1	20	1-1-2-2		B	2.0 — Brown fine to medium SAND and CLAY	
	S-2	16	4-6-5-5			Brown to tan fine to medium SAND, some silty clay	Moist
5	S-3	13	2-3-5-5			4.0 — Brown to tan fine to medium SAND, little silt	
	S-4	20	6-5-5-5			8.0 — Tan to orange fine to medium SAND, trace to little silt	
10	S-5	20	4-3-3-3				Micaceous
						13.0 — 52.7	
15	S-6	10	9-16-12-13		C	Tan to brown to purple fine to medium to coarse SAND, little silt, trace fine gravel sized rock fragments	
						18.0 — 47.7	
20	S-7	8	6-3-3-2		D	Brown fine to medium SAND, little silt	Wet on spoon Saturated
						23.0 — Brown to red fine to medium SAND, trace silt	
25	S-8	12	5-5-4-4			25.0 — 40.7	
						Borehole terminated at 25.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-5

NORTHING 556016.3183

EASTING 572289.3617

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 66.0' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.0' / Elev 52.0'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 14.0' / Elev 52.0'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0					T	Depth 1.0 — 12" TOPSOIL — Elev. 65.0	
	S-1	21	1-1-1-2		A	2.0 — Brown CLAY, trace fine sand — 64.0	
	S-2	20	5-5-6-4		B	Brown fine to medium SAND, little silt	
5	S-3	24	1-7-8-8				Moist
	S-4	24	6-5-8-6			6.0 — Brown to tan fine to medium to coarse SAND, little silt, trace fine gravel	
10	S-5	24	6-7-5-5				
						13.0 — 53.0	
15	S-6	12	9-9-7-8		C	Brown medium to fine to coarse SAND, some fine to coarse gravel, little silt	Saturated Rock caught in spoon
						18.0 — 48.0	
20	S-7	18	2-3-4-5		D	20.0 — Brown to maroon fine to medium to coarse SAND, little to some silt — 46.0	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-6

NORTHING 556004.5264

EASTING 572363.8827

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 66.3' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.0' / Elev 52.3'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 14.8' / Elev 51.5'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	6	2-2-2-3		T	0.5 / 65.8 — 6" TOPSOIL	
	S-2	0	10-11-13-12			Brown to tan medium to fine to coarse SAND, little silt, trace fine gravel	Rock caught in spoon
5	S-3	24	1-5-5-5				
	S-4	24	5-3-4-4			6.0 — Brown to tan to black fine to medium SAND, trace to little silt	Moist
10	S-5	20	4-6-5-7		B		
	C					13.0 — Brown to white medium to fine to coarse SAND, little fine gravel, trace silt	Wet on spoon
15 ▽▼	S-6	20	2-3-5-15			18.0 / 48.3	
20	S-7	2	16-19-12-8		D	Brown fine to medium SAND, little silt — 20.0 / 46.3	Saturated

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-7

PAGE 1 OF 1

NORTHING 556128.9233

EASTING 572392.7629

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 66.1' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.0' / Elev 52.1'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 15.3' / Elev 50.8'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	17	1-1-1-3		T	0.8 10" TOPSOIL 65.2	
					A	2.0 Brown CLAY, little fine to medium sand 64.1	
	S-2	18	4-5-7-5			Brown fine to medium SAND, little silt 4.0	
5	S-3	16	2-5-5-4			Brown to orange fine to medium to coarse SAND, little silt	
	S-4	22	5-5-5-3		B	8.0	
10	S-5	16	2-3-2-2			Brown to tan fine SAND, little silt 13.0 53.1	Moist
15	S-6	13	6-6-4-5			Brown to red fine to medium SAND, little silt	Iron staining Wet on spoon Saturated
20	S-7	24	3-2-3-3			18.0 Brown to red fine to medium SAND, little silt	Water introduced to borehole
25	S-8	24	1-2-1-2		D		
30	S-9	24	1-2-1-2			28.0 Brown to red fine to medium SAND, some silt 30.0 36.1	
						Borehole terminated at 30.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-8

PAGE 1 OF 1

NORTHING 555893.5694

EASTING 572347.7514

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 64.0' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.0' / Elev 50.0'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 13.0' / Elev 51.0'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	20	WOH-1-1-3		T	0.8 — 9" TOPSOIL — 63.3	
					A	2.0 — Brown CLAY, little silt — 62.0	
	S-2	20	3-3-3-3			Brown fine to medium SAND, little silt	
						4.0	
5	S-3	16	1-3-5-4			Brown to tan medium to fine to coarse SAND, little silt, trace fine gravel	Moist
						6.0	
	S-4	20	5-4-5-5		B	Brown to tan fine to medium to coarse SAND, trace silt	
						8.0	
10	S-5	20	5-4-5-5			Brown to tan to black fine to medium to coarse SAND, little silt	
						13.0 — 51.0	
15	S-6	2	29-27-18-12			Brown to black fine to medium SAND, little silt	Saturated
						18.0	
20	S-7	24	4-3-2-3			Brown to black fine to medium SAND, little silt	Water introduced to borehole
					D	23.0	
25	S-8	20	3-1-1-1			Brown to black to maroon fine to medium SAND, trace silt	
						30.0 — 34.0	
30	S-9	20	2-3-3-6			Borehole terminated at 30.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-9

NORTHING 555841.3951

EASTING 572369.2784

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/14/24 **COMPLETED** 5/14/24

GROUND ELEVATION 63.4' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 50.4'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 15.3' / Elev 48.2'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0					T	0.8 — 10" TOPSOIL — 62.6	
	S-1	20	WOH-2-2-2		A	2.0 — Brown CLAY, some fine sand — 61.4	
	S-2	16	3-4-7-9		B	4.0 — Brown fine to medium to coarse SAND, little silt, trace fine gravel	
5	S-3	16	1-7-8-7			Brown to tan fine to medium SAND, trace silt	
	S-4	20	4-7-6-4			6.0 — Brown to tan fine to medium to coarse SAND, little to some silt — 8.0	
10	S-5	20	2-6-10-9			Brown to black coarse to medium to fine SAND, little silt	Wet on spoon
						13.0 — 50.4	
15	S-6	5	3-6-6-7		D	Brown to black fine to medium SAND, little silt	Saturated
20	S-7	9	3-6-5-5			20.0 — 43.4	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-10

PAGE 1 OF 1

NORTHING 556073.8615

EASTING 572519.8548

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 65.2' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.1' / Elev 51.1'

DRILLER / HELPER Jason / Nelson / Cecil

AT END OF DRILLING Not Encountered

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-1-1-2		T	0.8 — 10" TOPSOIL — 64.4	Damp
	S-2	14	3-5-8-8		A	Brown CLAY, trace fine sand — 3.0 — 62.2	
5	S-3	20	2-6-6-8			Brown to tan fine to medium to coarse SAND, some silt, trace fine gravel	
	S-4	20	7-7-6-5			8.0	Moist
10	S-5	18	3-3-3-4			Brown to tan to black fine to medium to coarse SAND, trace silt, trace coarse gravel	
					B	13.0	
15 ▽	S-6	16	2-4-3-3			Brown to tan fine to medium SAND, trace silt	Wet
20	S-7	14	2-1-2-2			20.0 — 45.2	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-11

PAGE 1 OF 1

NORTHING 555984.1554

EASTING 572676.7633

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 62.6' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 16.8' / Elev 45.8'

DRILLER / HELPER Jason / Nelson / Cecil

AT END OF DRILLING Not Encountered

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-2-1-2		T	0.7 — 8" TOPSOIL — 61.9	Damp
					A	2.0 — Brown CLAY, trace fine sand — 60.6	
	S-2	20	3-6-6-6			Brown fine to medium SAND, trace silt	
						4.0	
5	S-3	18	2-6-6-6			Brown to tan fine to medium SAND, little silt	
						6.0	
	S-4	18	8-5-4-4			Brown fine to medium SAND, some silt	
	S-5	16	4-3-7-25				Wet
10							
					B		
						13.0	
	S-6	10	6-3-4-4			Brown to tan fine to medium SAND, little silt	
15							
▽						18.0	
	S-7	12	2-1-2-2			Brown to tan fine to medium SAND, little silt	
20						20.0 — 42.6	
						Borehole terminated at 20.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-12

NORTHING 556003.6791

EASTING 572557.4667

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 64.5' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.3' / Elev 51.3'

DRILLER / HELPER Jason / Nelson / Cecil

AT END OF DRILLING Not Encountered

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	14	1-1-1-2		T	0.6 — 7" TOPSOIL — 63.9 2.0 — Brown fine to medium SAND and CLAY	Damp
	S-2	18	2-2-3-5			Brown to tan fine to medium SAND, trace silt 4.0	
5	S-3	10	3-6-4-5			Brown to tan fine to medium SAND, trace silt, trace coarse gravel	
	S-4	16	5-7-7-6			8.0	
10	S-5	16	6-5-4-10		B	Brown to tan fine to medium SAND, trace silt, trace coarse gravel	Moist
						13.0	
15	S-6	18	3-3-4-5			Brown to tan fine to medium SAND, trace silt	Wet
						18.0	
20	S-7	12	3-3-4-5			Brown to tan fine to medium to coarse SAND, little silt 20.0 — 44.5	
						Borehole terminated at 20.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-13

NORTHING 555915.7315

EASTING 572515.6701

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/21/24 **COMPLETED** 5/21/24

GROUND ELEVATION 63.7' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 50.7'

DRILLER / HELPER Jason / Nelson / Cecil

AT END OF DRILLING Not Measured

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-1-1-1		T	1.0 / 62.7 — 12" TOPSOIL	Damp
					A	2.0 / 61.7 — Brown CLAY, little fine sand	
	S-2	14	2-2-3-2		B	Brown to tan medium to fine to coarse SAND, trace silt	
5	S-3	16	2-5-8-7				
	S-4	16	6-5-4-2			6.0 — Tan fine to medium SAND, trace silt	
10	S-5	12	8-11-11-10			8.0 — Brown to tan fine to medium to coarse SAND, trace silt	Moist
						13.0 / 50.7	
15	S-6	13	2-3-3-5		C	Brown fine to medium to coarse SAND and fine to coarse GRAVEL, trace silt	Wet
						18.0 / 45.7	
20	S-7	14	2-3-2-2		D	Brown to tan fine to medium SAND, little silt	
						23.0 — Brown to tan fine to medium SAND, little silt, trace fine gravel	
25	S-8	14	1-2-3-5				Water introduced to borehole
						28.0 — Brown to tan to gray fine to medium to coarse SAND, trace silt	
30	S-9	16	1-1-4-5				
						33.0 — Brown fine to medium SAND, little silt	
35	S-10	20	2-1-2-2				

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

(Continued Next Page)

TEST BORING LOG

CLIENT Landmark Science & Engineering **PROJECT NAME** Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001 **PROJECT LOCATION** Middletown, DE

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
						Depth 38.0 — Elev.	
40	S-11	16	2-3-4-6			Brown to tan fine to medium SAND, little silt	
						43.0	
45	S-12	12	1-1-3-7		D	Brown fine to medium to coarse SAND, trace fine gravel, trace silt	
						48.0	
50	S-13	16	2-4-5-11			Gray fine to medium SAND and SILT	
						50.0 — 13.7	
						Borehole terminated at 50.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-14

PAGE 1 OF 1

NORTHING 555779.0855

EASTING 572540.4752

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 62.3' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.0' / Elev 48.3'

DRILLER / HELPER Jason / Nelson / Cecil

AT END OF DRILLING Not Measured

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	14	1-2-1-2		T	0.7 — 8" TOPSOIL — 61.6	Damp
					A	2.0 — Tan CLAY, trace fine sand — 60.3	
	S-2	26	5-9-7-8			Brown to tan fine to medium SAND, some clay	
						4.0	
5	S-3	16	2-6-7-7			Brown fine to medium SAND, little silt	
	S-4	22	6-5-5-8				Moist
						8.0	
10	S-5	14	10-9-8-6			Brown to tan medium to fine to coarse SAND, little fine gravel, little silt	
					B		
						13.0	
	S-6	16	4-4-3-3			Brown fine SAND, some silt	Wet
15							
						18.0	
	S-7	18	3-2-2-3			Brown to tan fine to medium SAND, little silt	
20						20.0 — 42.3	Water introduced to borehole

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-15

PAGE 1 OF 1

NORTHING 555715.9594

EASTING 572609.695

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 62.2' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.0' / Elev 48.2'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 14.6' / Elev 47.6'

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	18	1-2-2-2		T / A	0.8 / 61.4: 10" TOPSOIL 2.0 / 60.2: Tan CLAY, some fine to medium to coarse sand	Damp
	S-2	16	4-5-6-6		B	Brown to gray fine to medium SAND, some clay	
5	S-3	18	3-5-7-9		B	4.0: Brown to tan fine to medium to coarse SAND, little silt	
	S-4	19	8-7-9-13		B	6.0: Brown fine to medium to coarse SAND, trace fine to coarse gravel, trace silt 8.0 / 54.2	Moist
10	S-5	14	7-11-10-11		C	Brown medium to fine to coarse SAND, some fine to coarse gravel, little silt	
					C	13.0 / 49.2	
15 ▼	S-6	10	4-7-7-8		D	Brown fine to medium SAND, little silt, trace fine to coarse gravel	Wet
					D	18.0: Brown fine to medium SAND, some silt	
20	S-7	12	3-2-1-2		D	20.0 / 42.2	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-16

NORTHING 555771.3312

EASTING 572716.7135

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 61.6' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 48.6'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 14.0' / Elev 47.6'

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	14	1-2-1-3		T	0.8 — 10" TOPSOIL — 60.8	Moist
					A	2.0 — Brown CLAY, little fine sand — 59.6	
	S-2	18	2-3-4-8			Brown fine to medium SAND and CLAY	
						4.0	
5	S-3	18	2-6-8-8		B	Brown to tan fine to medium SAND, little silt	
	S-4	23	8-8-9-7			8.0 — 53.6	
10	S-5	16	5-21-15-18		C	Brown to tan fine to medium to coarse SAND and fine to coarse GRAVEL, trace silt	
						13.0 — 48.6	
15	S-6	16	5-4-4-5		D	Brown to tan fine to medium SAND, trace silt	Wet
20	S-7	18	3-1-2-2			20.0 — 41.6	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-17

PAGE 1 OF 1

NORTHING 555764.0366

EASTING 572783.4374

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 61.2' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 48.2'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 14.2' / Elev 47.1'

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-2-2-2		T	0.8 — 9" TOPSOIL — 60.5	Damp
					A	2.0 — Brown CLAY, trace fine sand — 59.2	
	S-2	22	4-6-8-12			Brown fine to medium SAND, some clay	
						4.0	
5	S-3	18	1-10-9-10			Brown to tan fine to medium to coarse SAND, trace silt, trace fine gravel	
						6.0	
	S-4	22	8-6-7-6			Brown fine SAND, little silt	
						8.0	
10	S-5	18	4-6-17-20			Brown fine to medium to coarse SAND, some coarse to fine gravel, little silt	Moist
					B		
						13.0	
15	S-6	23	4-5-4-5			Brown to tan fine to medium SAND, some silt	Wet
						18.0	
20	S-7	17	3-2-1-3			Brown to tan fine to medium to coarse SAND, some silt — 20.0 — 41.2	
						Borehole terminated at 20.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-18

PAGE 1 OF 1

NORTHING 555879.1145

EASTING 572826.5883

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 61.1' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 11.2' / Elev 49.9'

DRILLER / HELPER Jason / Nelson / Cecil

AT END OF DRILLING Not Encountered

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-1-2-2		T	0.8 — 10" TOPSOIL — 60.3	Damp
					A	2.0 — Brown CLAY, trace fine sand, trace root fragments — 59.1	
	S-2	23	3-4-5-6		B	Brown fine to medium SAND, little silty clay	
5	S-3	20	1-5-8-9			4.0 — Brown to tan fine to medium SAND, little silt — 6.0 — 55.1	
	S-4	18	4-5-4-3		D	Tan fine SAND, some silt	
	S-5	18	3-4-6-8			8.0 — Tan to brown fine to medium SAND, little silt	Moist
10							
						13.0	
	S-6	16	3-3-3-3			Tan to brown fine to medium to coarse SAND, little silt	Wet
15							
						18.0	
	S-7	12	3-3-2-2			Tan to brown fine to medium SAND, little silt, trace coarse gravel	
20						20.0 — 41.1	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-19

PAGE 1 OF 1

NORTHING 555668.2611

EASTING 572811.3577

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/22/24 **COMPLETED** 5/22/24

GROUND ELEVATION 60.6' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 10.2' / Elev 50.5'

DRILLER / HELPER Jason / Nelson / Cecil

AT END OF DRILLING Not Encountered

LOGGED BY A. Sposato **CHECKED BY** A. Spencer

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	14	1-2-2-4		T / A	0.5 / 60.1 — 6" TOPSOIL 2.0 / 58.6 — Brown to gray CLAY, trace fine to medium sand	Damp
	S-2	16	5-9-11-9		B	Brown fine to medium SAND, little silt 4.0 — Brown to tan fine to medium SAND, little silt	
5	S-3	18	2-6-5-4				
	S-4 ©	16	4-5-6-5			8.0 / 52.6	
	S-5	24	7-11-11-11		C	Brown medium to fine to coarse SAND and fine to coarse GRAVEL, little silt	Moist
10 ▽						13.0 — Brown fine to medium SAND, some fine to coarse gravel, trace silt	Wet
	S-6	2	3-3-2-3				
15						18.0 / 42.6	
	S-7	19	2-2-3-3		D	Brown fine to medium to coarse SAND, little silt	
20						20.0 / 40.6	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-20

NORTHING 555545.8735

EASTING 572714.5887

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/23/24 **COMPLETED** 5/23/24

GROUND ELEVATION 61.8' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 48.8'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 10.3' / Elev 51.5'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-1-2-1		T	1.0 — 12" TOPSOIL — 60.8	
	S-2	24	3-5-8-11		A	Brown to tan silty CLAY, trace fine to medium sand — 3.5 — 58.3	Moist
						4.0 — Brown fine to medium SAND, little to some silt	
5	S-3	24	2-7-5-4		B	Brown to tan fine to medium to coarse SAND, little silt, trace fine gravel — 6.0	
	S-4	24	4-4-5-11			Brown to tan to black fine SAND, some silt — 8.0 — 53.8	Moist Micaceous
	S-5	16	8-6-7-5			Brown to orange fine to medium SAND, little silt	Iron staining
10							
						13.0	
	S-6	16	3-2-4-4		D	Brown to orange fine to medium SAND, trace silt	Saturated
15							
	S-7	0	3-3-2-3			20.0 — 41.8	
20						Borehole terminated at 20.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-21

NORTHING 555404.3665

EASTING 572745.3137

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/23/24 **COMPLETED** 5/23/24

GROUND ELEVATION 62.3' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 49.3'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 12.8' / Elev 49.5'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-1-1-2		T / A	0.8 — 9" TOPSOIL — 61.5 2.0 — Brown to tan silty CLAY and fine to medium SAND — 60.3	
	S-2	24	4-3-4-5		B	Brown to tan fine to medium SAND, little silt 4.0	Moist
5	S-3	14	3-3-4-5		B	Brown to tan to black fine to medium SAND, little silt 6.0	
	S-4	18	4-3-5-11		B	Brown to orange fine to medium SAND, little to some silt 8.0 — 54.3	Moist
10	S-5	18	12-13-5-7		C	Brown fine to medium to coarse SAND, some fine to coarse gravel, little silt	Fine gravel seam @8' Wet on spoon
					C	13.0 — 49.3	
15	S-6	18	2-2-3-4		D	Brown to orange fine to medium SAND, little silt	Saturated
					D		
20	S-7	24	WOH-1-2-2		D	20.0 — 42.3	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-22

NORTHING 555415.6355

EASTING 572868.5336

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/23/04 **COMPLETED** 5/23/24

GROUND ELEVATION 62.3' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.0' / Elev 48.3'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 13.0' / Elev 49.3'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0					T	Depth 0.7 — 8" TOPSOIL — Elev. 61.6	
	S-1	18	1-1-1-3			2.0 — Brown fine to medium SAND and CLAY	
	S-2	18	2-3-3-2			Brown to orange fine to medium SAND, little silt	Moist
5	S-3	20	1-2-4-3			4.0 — Brown to orange fine to medium SAND, little to some silt	
	S-4	24	4-4-3-1		B	6.0 — Brown to orange fine SAND, some silt	Moist Micaceous
	S-5	24	2-2-2-5			8.0 — Brown to orange to black fine to medium SAND, little silt	
10							Wet on spoon
						13.0 — 49.3	
15	S-6	20	3-3-6-7		D	Brown to orange fine to medium SAND, little silt	Saturated
20	S-7	24	3-6-7-7			20.0 — 42.3	

Borehole terminated at 20.0 feet.

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-23

NORTHING 555873.1345

EASTING 573257.9807

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/23/24 **COMPLETED** 5/23/24

GROUND ELEVATION 61.6' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 14.0' / Elev 47.6'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 13.0' / Elev 48.6'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-1-2-3		T	0.8 — 9" TOPSOIL — 60.9	
					A	2.0 — Brown silty CLAY, trace fine to medium sand — 59.6	
	S-2	20	3-6-8-7		B	4.0 — Brown to orange fine to medium to coarse SAND, some silt, trace fine gravel	
5	S-3	21	1-4-4-4			Tan to orange fine SAND, little silt	
	S-4	24	4-9-13-12			7.0 — 54.6	
					C	9.0 — Brown to white fine to coarse GRAVEL, some fine to medium to coarse sand, little silt — 52.6	
10	S-5	12	14-8-5-5			Brown to orange fine to medium SAND, trace silt	Moist Iron staining
15	S-6	24	4-2-3-4		D		Wet on spoon Saturated
						18.0	
20	S-7	24	2-1-2-2			Brown to orange to gray fine to medium SAND, little silt — 20.0 — 41.6	
						Borehole terminated at 20.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-24

NORTHING 555777.2899

EASTING 573403.7288

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/23/24 **COMPLETED** 5/23/24

GROUND ELEVATION 61.3' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 15.0' / Elev 46.3'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 14.5' / Elev 46.8'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	16	1-1-2-2		T	0.8 — 9" TOPSOIL — 60.5	
	S-2	16	2-5-2-3		A	Brown silty CLAY, little fine to medium sand — 3.0 — 58.3	
5	S-3	24	1-5-8-11		B	4.0 — Brown fine to medium to coarse SAND, little silt Brown to black to white fine to medium to coarse SAND, little silt — 6.0 — 55.3	Moist
	S-4	18	13-15-15-17		C	Brown to white to black medium to fine to coarse SAND and fine to coarse GRAVEL, little silt — 8.0 — 53.3	
10	S-5	20	9-9-8-7		D	Brown to orange fine to medium SAND, little silt	Moist
15	S-6	12	3-4-3-4			13.0 Brown to orange to maroon fine to medium SAND, little silt	Wet on spoon Saturated
20	S-7	24	2-1-2-2			18.0 Brown to orange to gray fine to medium SAND, some silt — 20.0 — 41.3	
						Borehole terminated at 20.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

TEST BORING LOG

TEST BORING B-25

NORTHING 556050.0766

EASTING 573557.0556

CLIENT Landmark Science & Engineering

PROJECT NAME Appoquinimink School District Summit Campus

PROJECT NUMBER LDMSE24001

PROJECT LOCATION Middletown, DE

DATE STARTED 5/23/24 **COMPLETED** 5/23/24

GROUND ELEVATION 61.1' NAVD88 +/-

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD 3.25 Hollow Stem Auger

▽ **DURING DRILLING** 13.0' / Elev 48.1'

DRILLER / HELPER Jason / Nelson / Cecil

▼ **AT END OF DRILLING** 12.5' / Elev 48.6'

LOGGED BY A. Spencer **CHECKED BY** T. Thomson

AFTER DRILLING Not Measured

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth / Elev.	
	S-1	18	1-1-1-2		T	0.8 — 9" TOPSOIL — 60.4	
					A	2.0 — Brown silty CLAY — 59.1	
	S-2	18	4-4-10-10		B	Brown to white medium to fine to coarse SAND, little silt, trace fine gravel	
5	S-3	18	2-4-6-4			6.0 — 55.1	
	S-4	18	10-14-14-9		C	Brown to tan to white fine to medium to coarse SAND, some fine gravel, trace silt — 8.0 — 53.1	Moist
10	S-5	20	5-5-6-4			Brown to orange fine to medium SAND, little to some silt	Wet on spoon
						13.0	
15	S-6	24	2-2-2-3		D	Brown to orange fine to medium SAND, little silt	Saturated
						18.0	
20	S-7	24	2-1-2-1			Brown to orange to gray fine to medium SAND, little silt — 20.0 — 41.1	
						Borehole terminated at 20.0 feet.	

NOTES:

Northing, easting, and surface elevation provided by Landmark Science & Engineering

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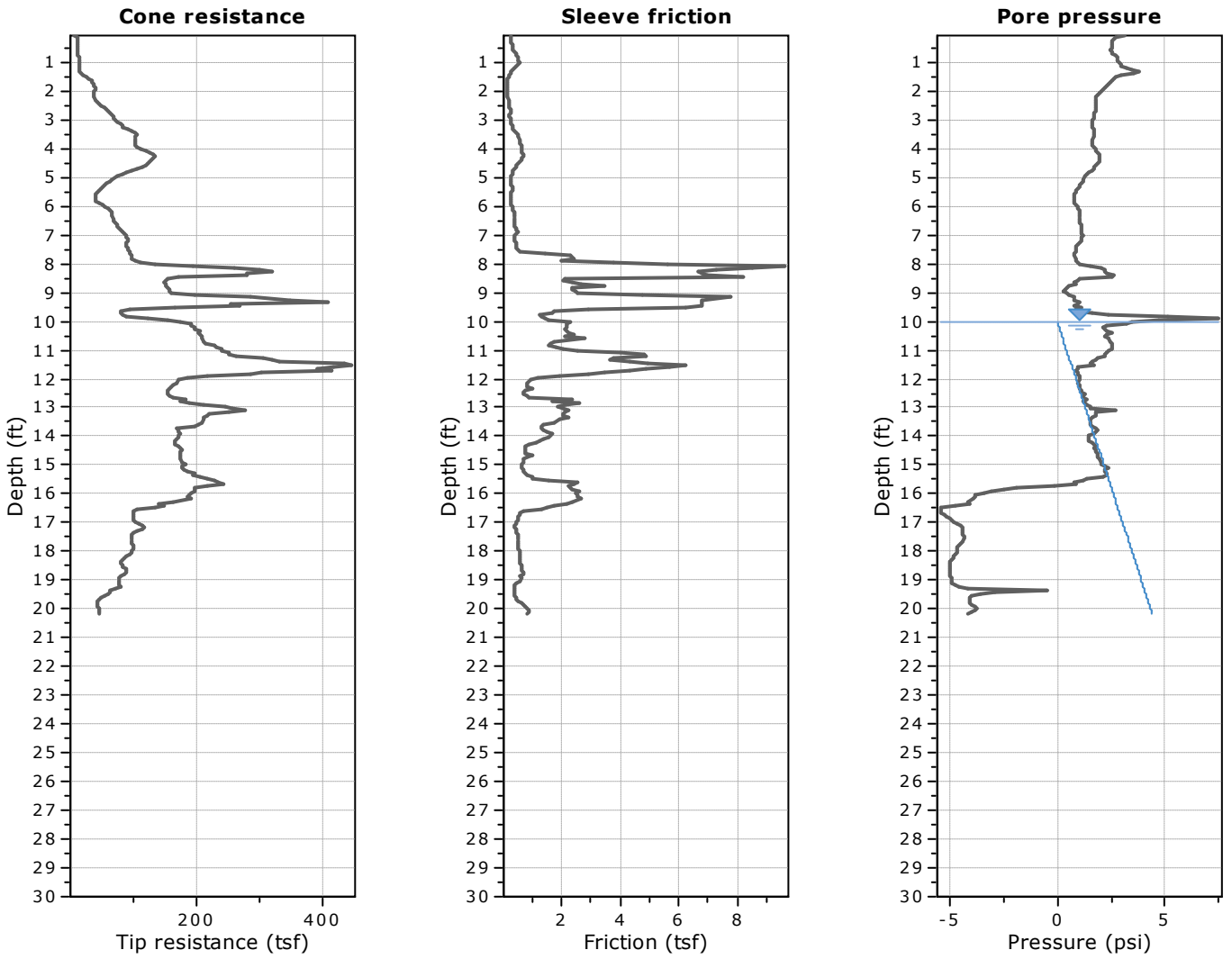
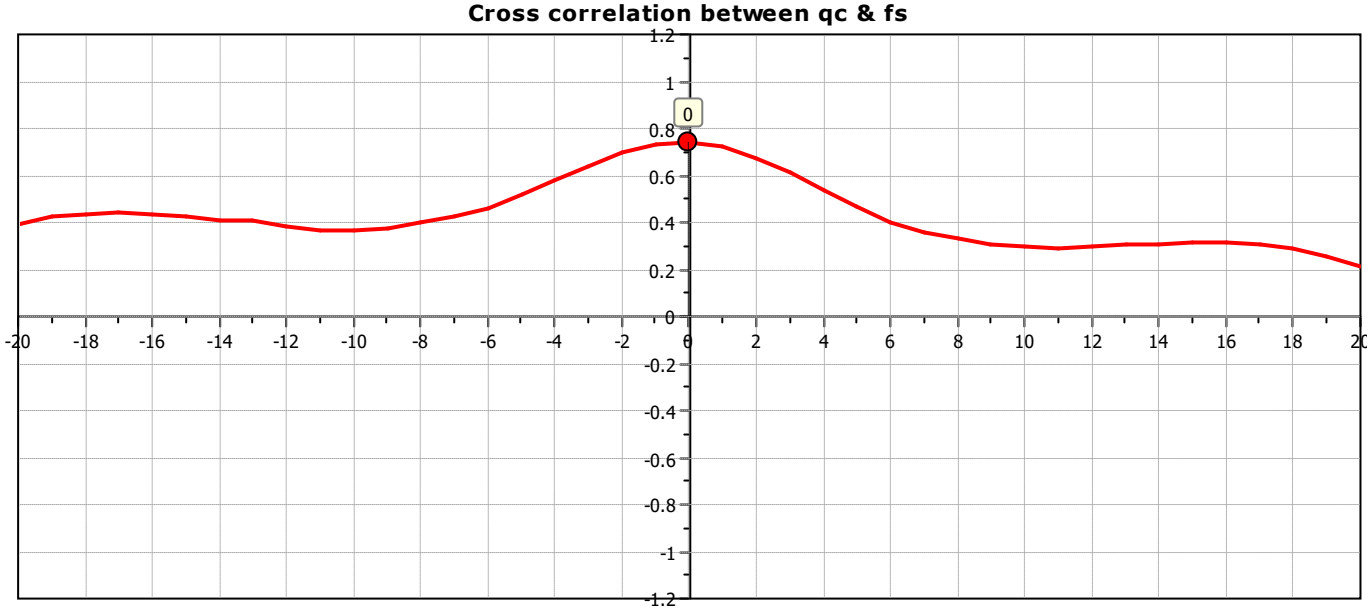
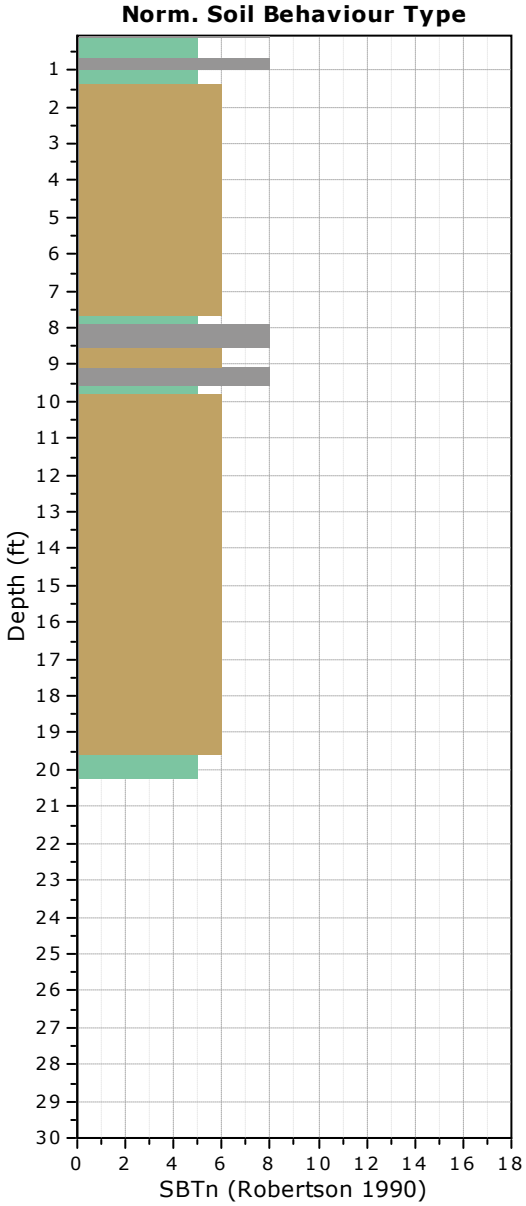
C-1
Total depth: 20.19 ft, Date: 5/13/2024
Surface Elevation: 64.69 ft
Coords: X:571964.33, Y:555982.75
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

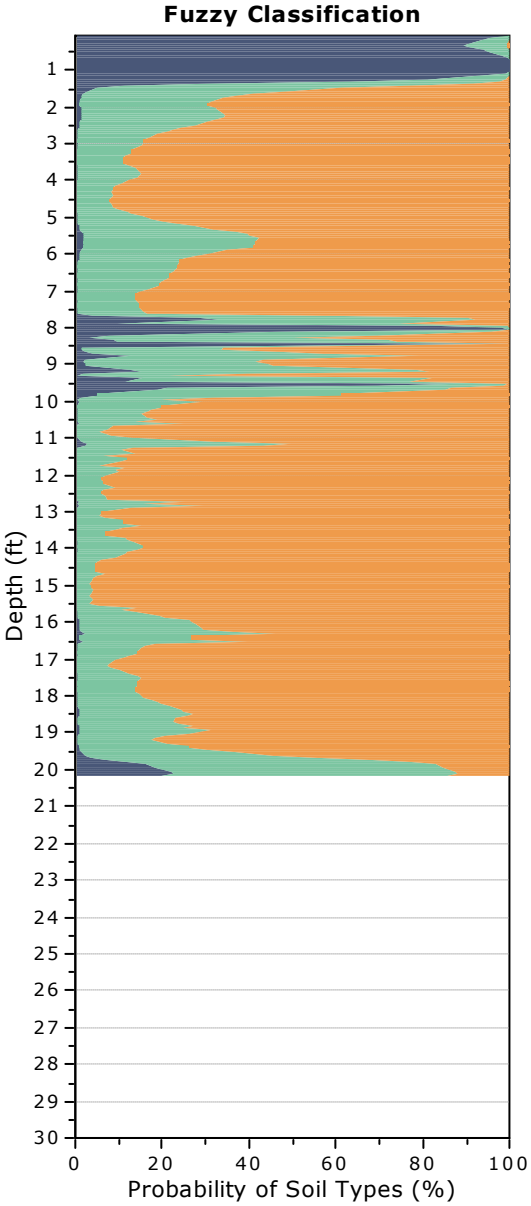
Project: ASD Summit Campus
Location: Middletown, Delaware



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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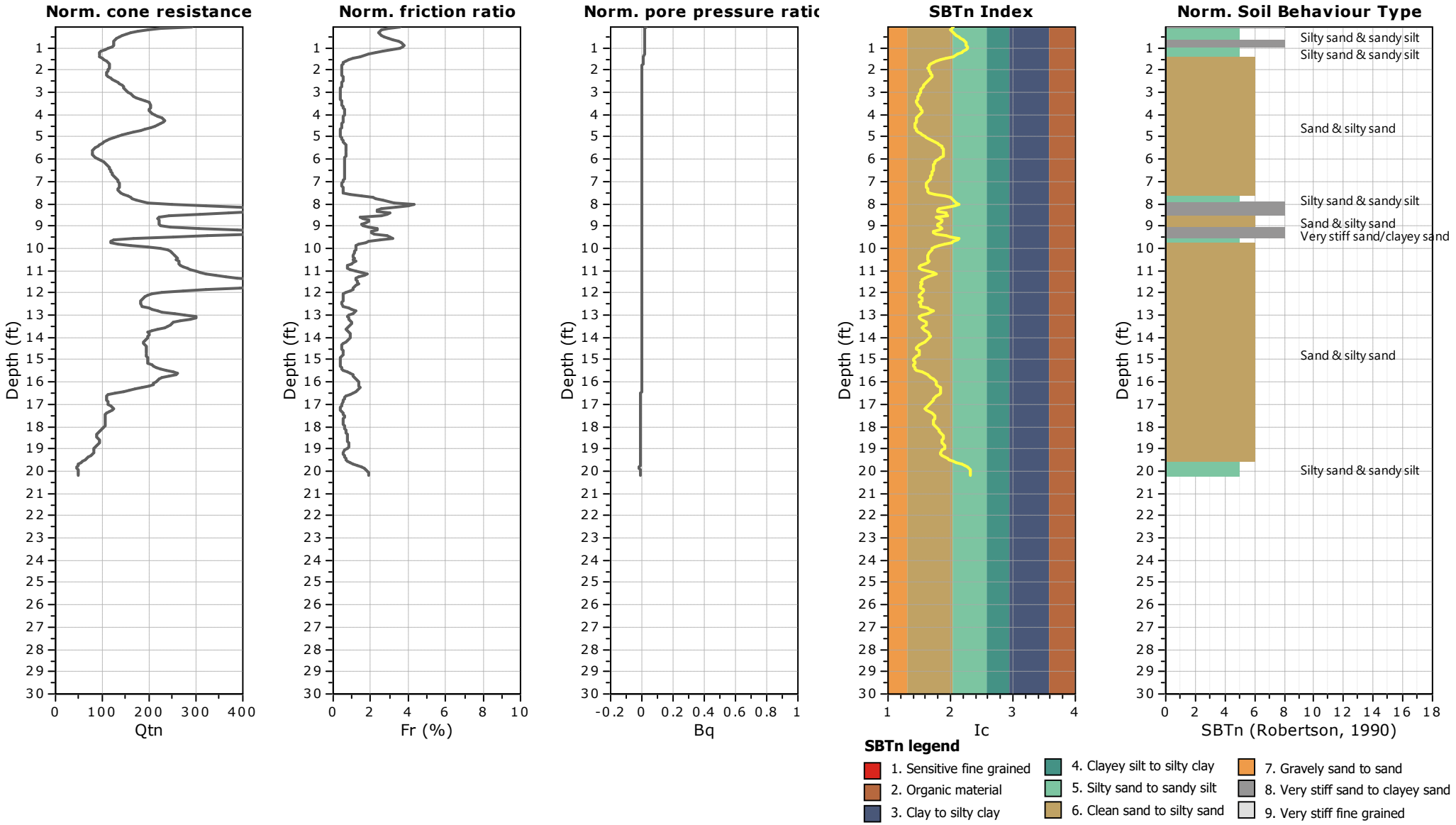
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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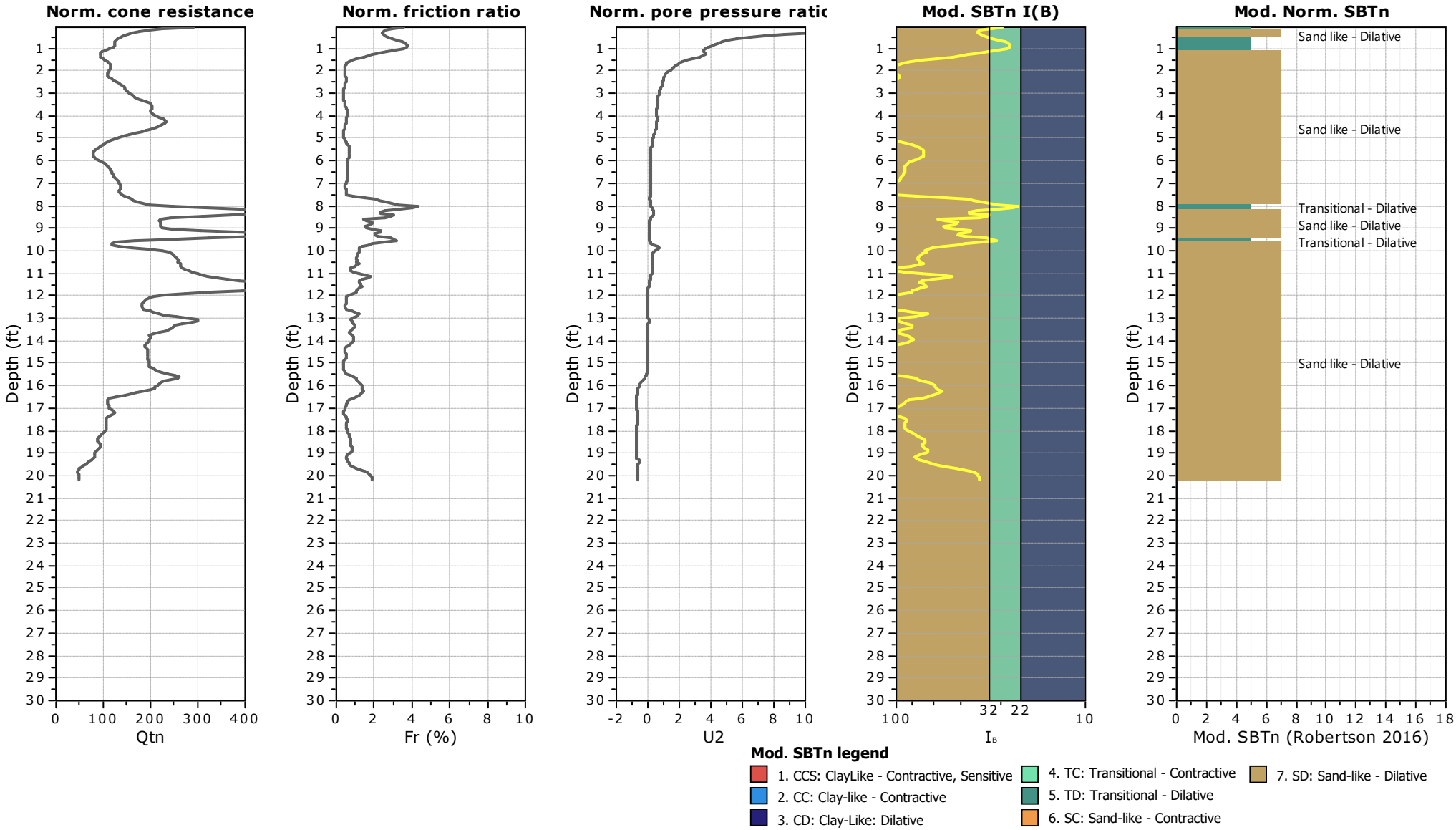
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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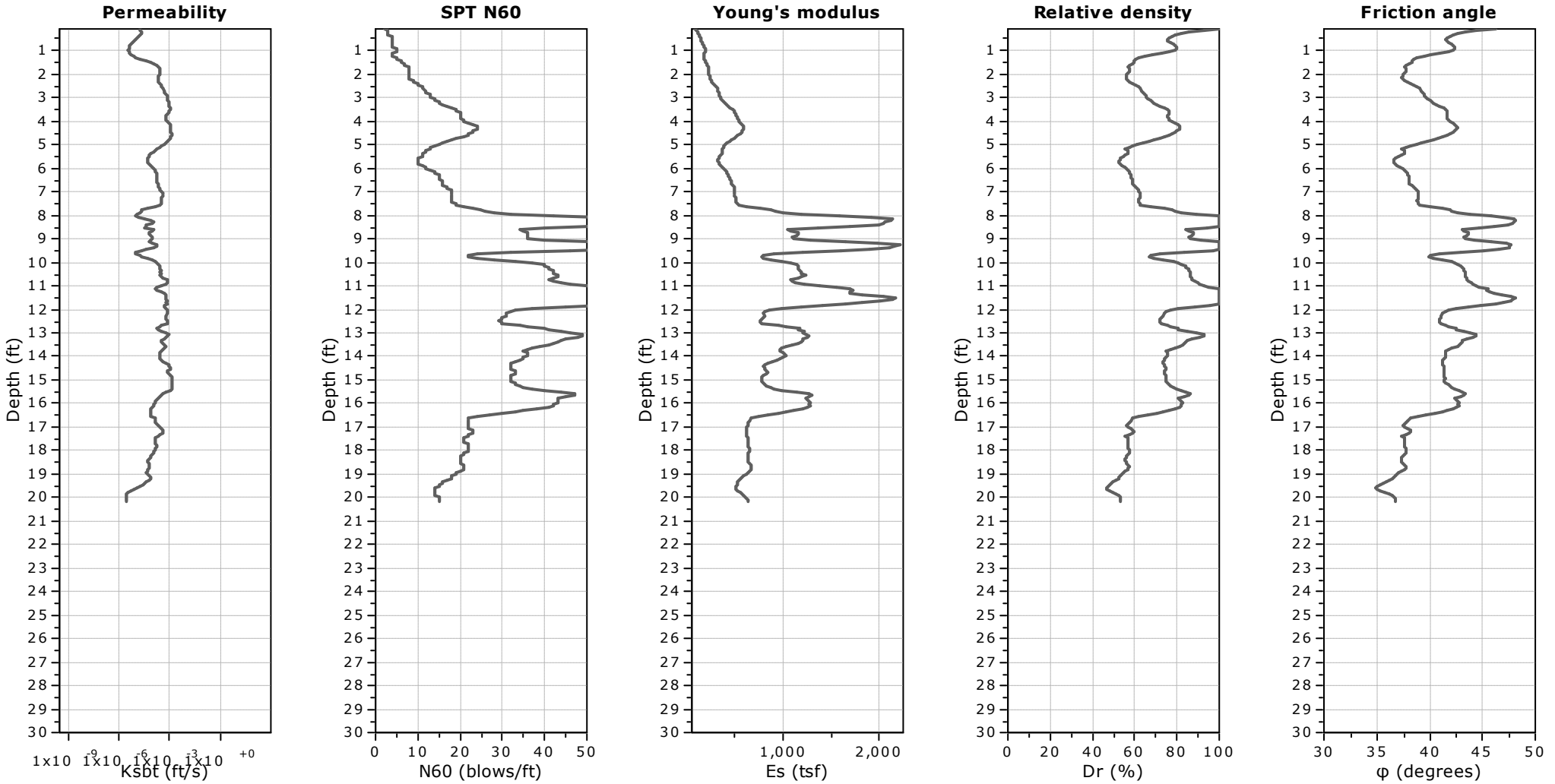
Location: **Middletown, Delaware**



Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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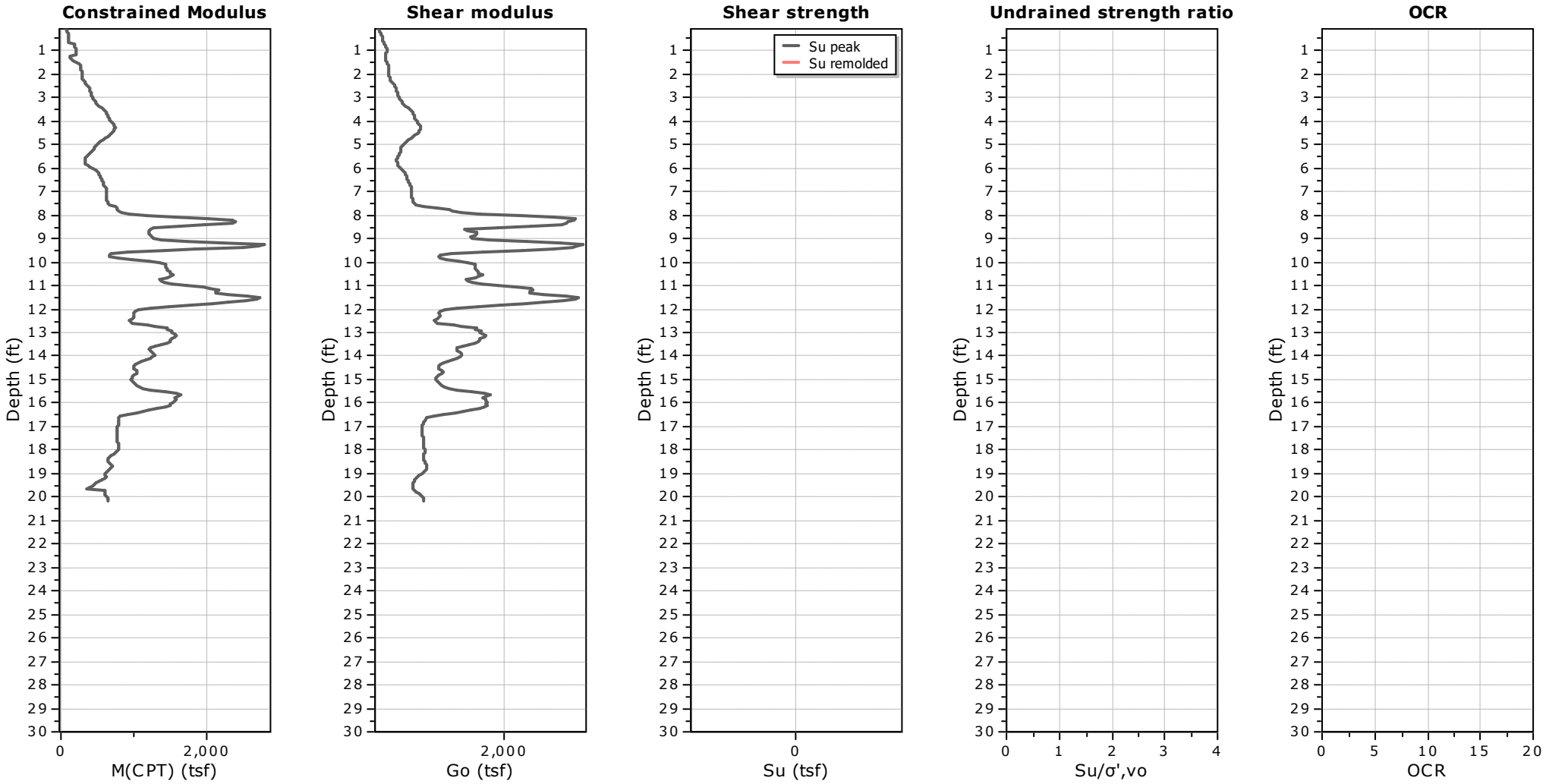
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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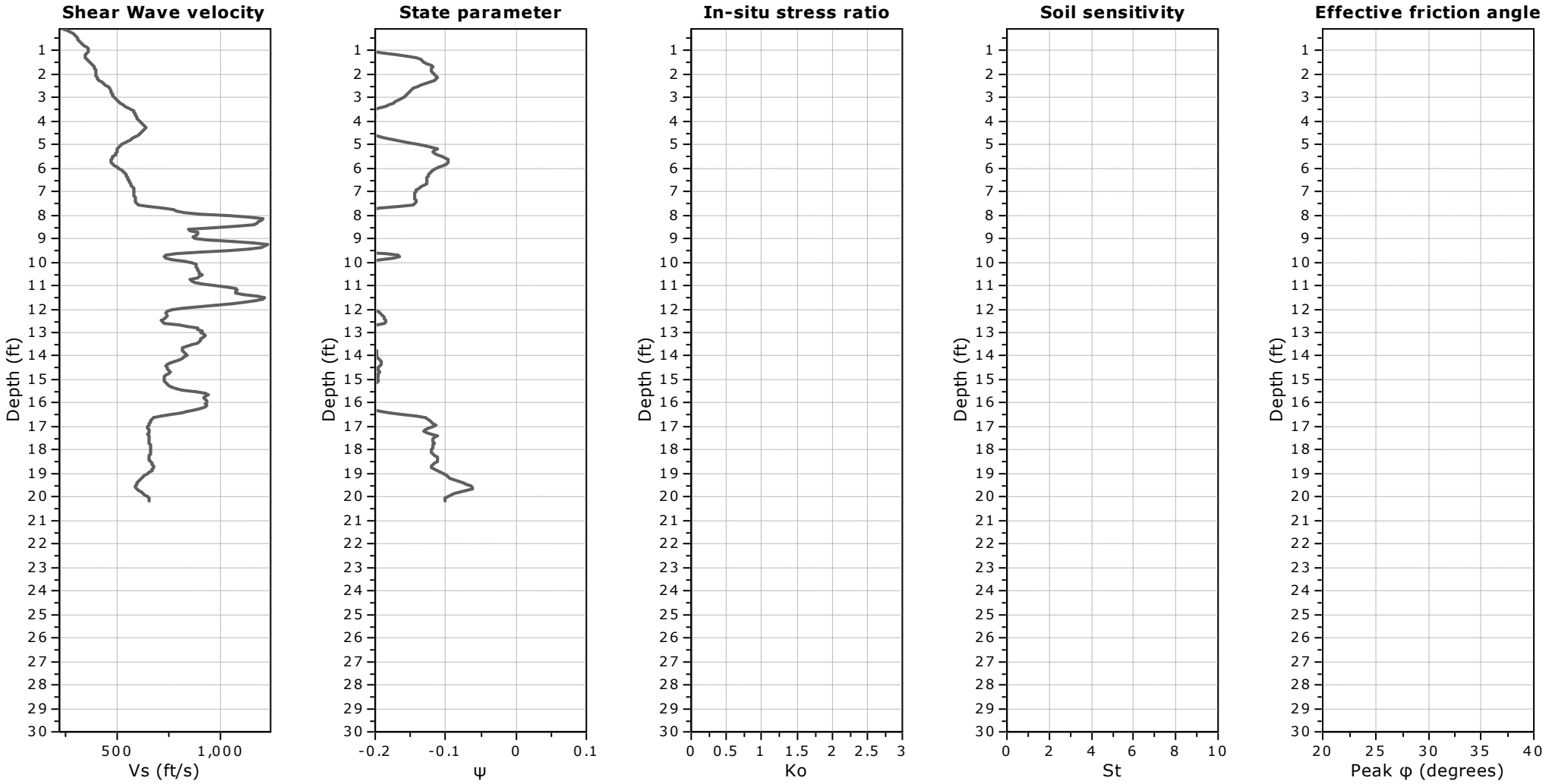

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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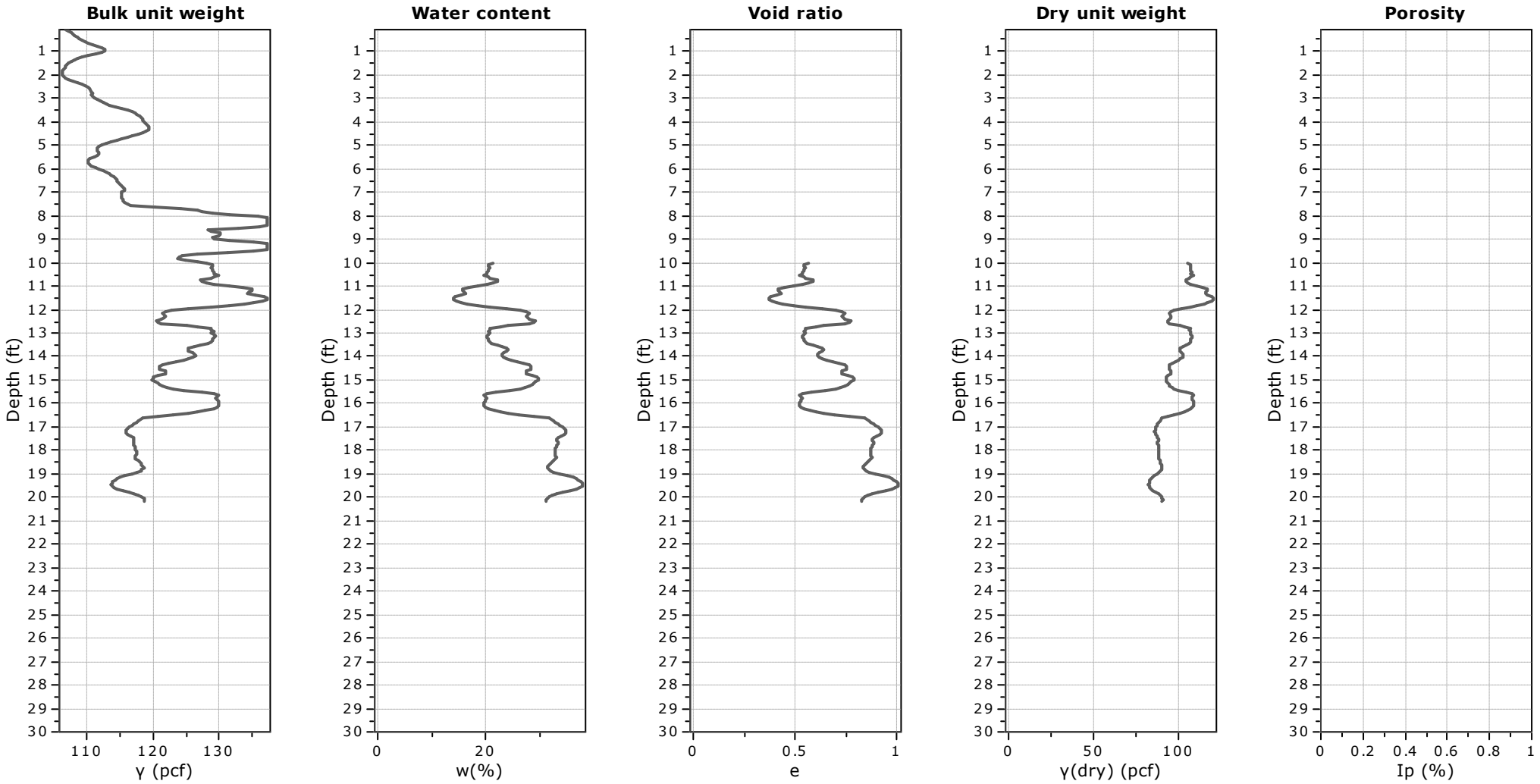
Project: ASD Summit Campus
Location: Middletown, Delaware



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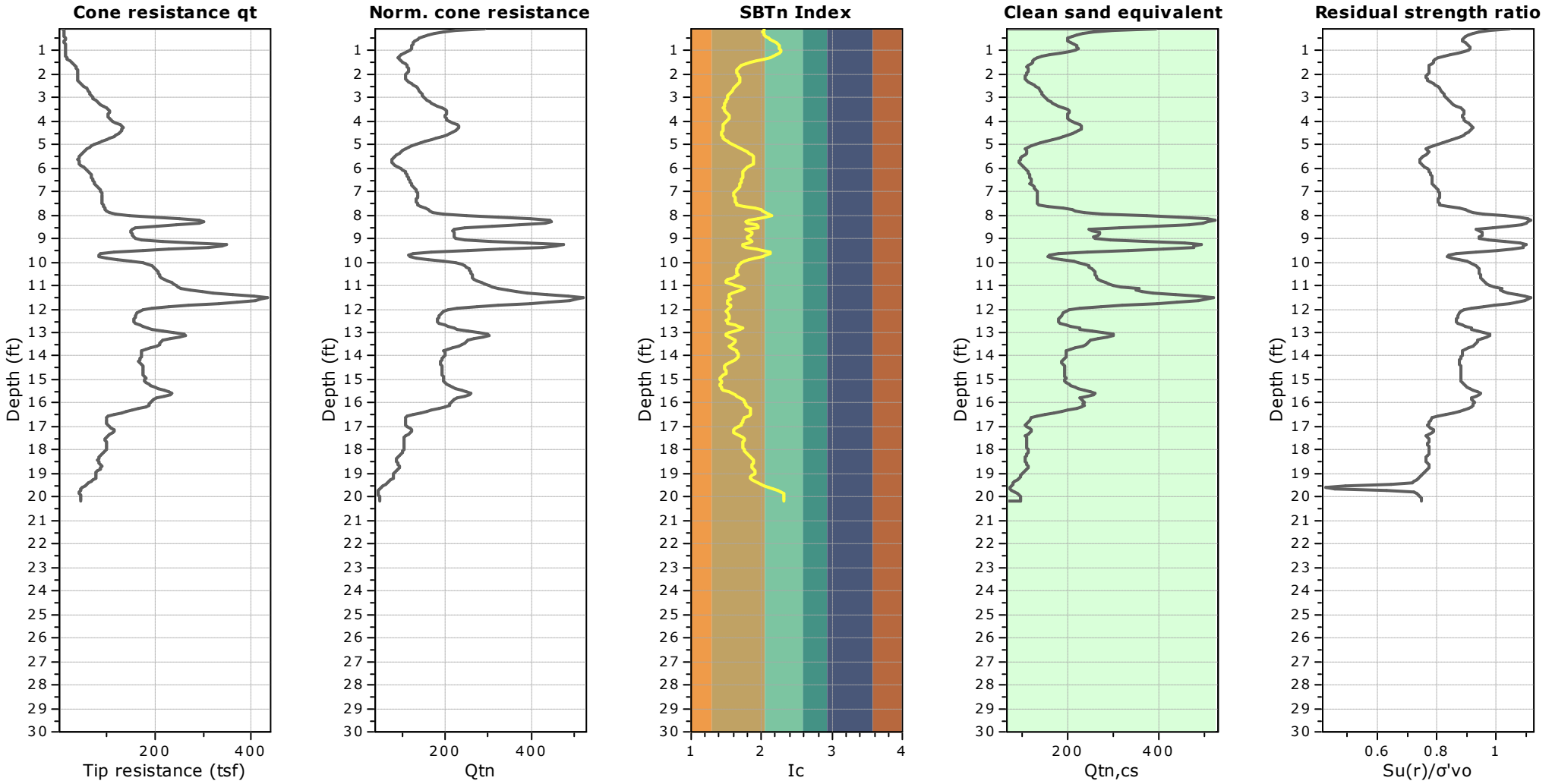
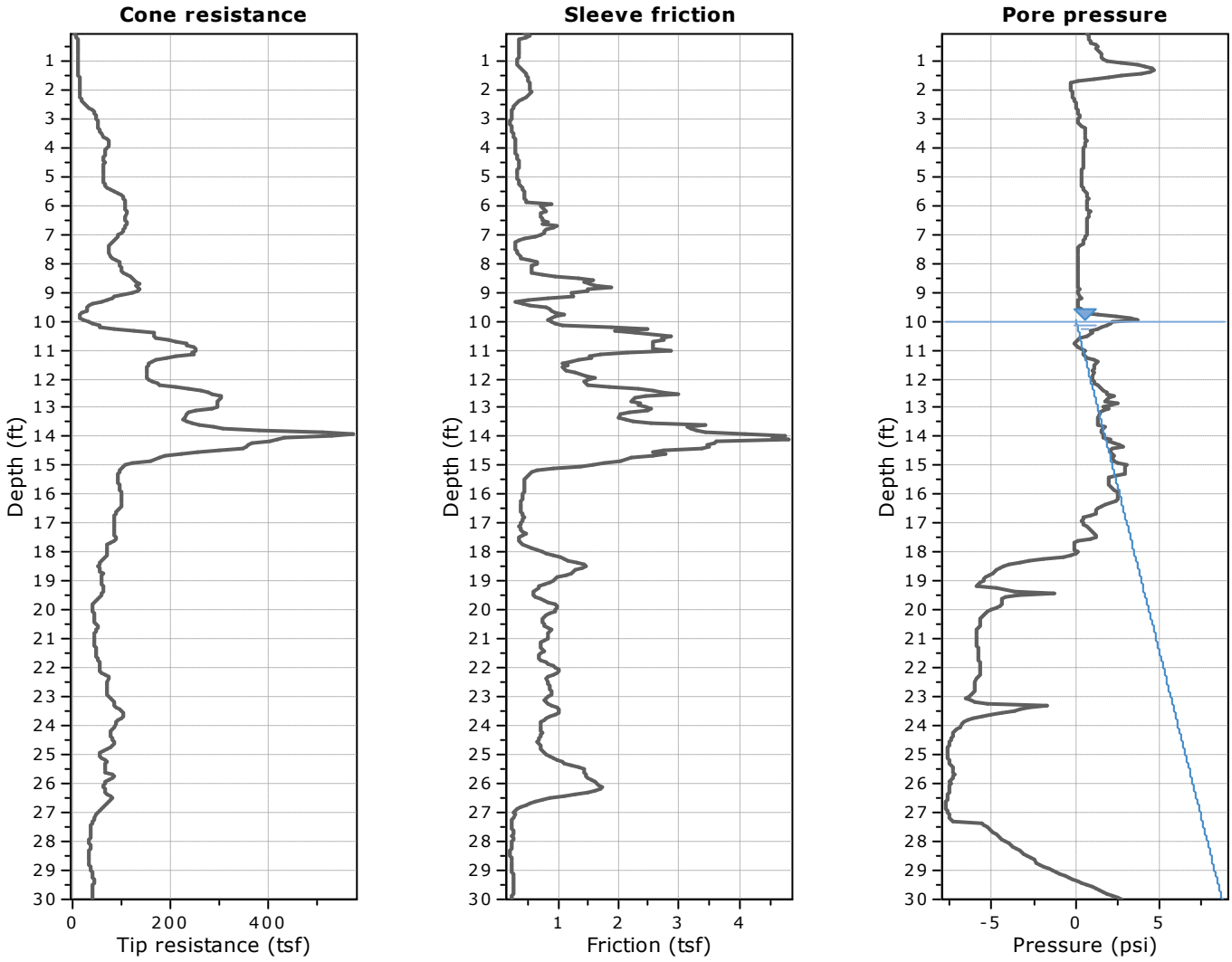
Location: **Middletown, Delaware**





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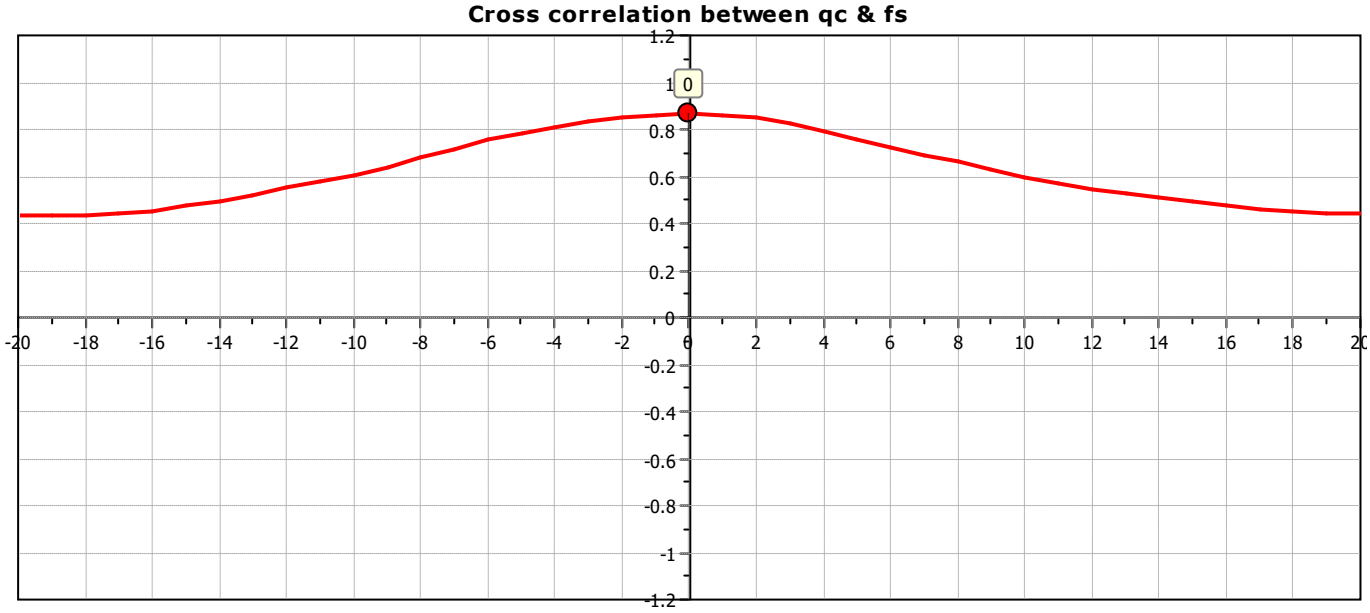

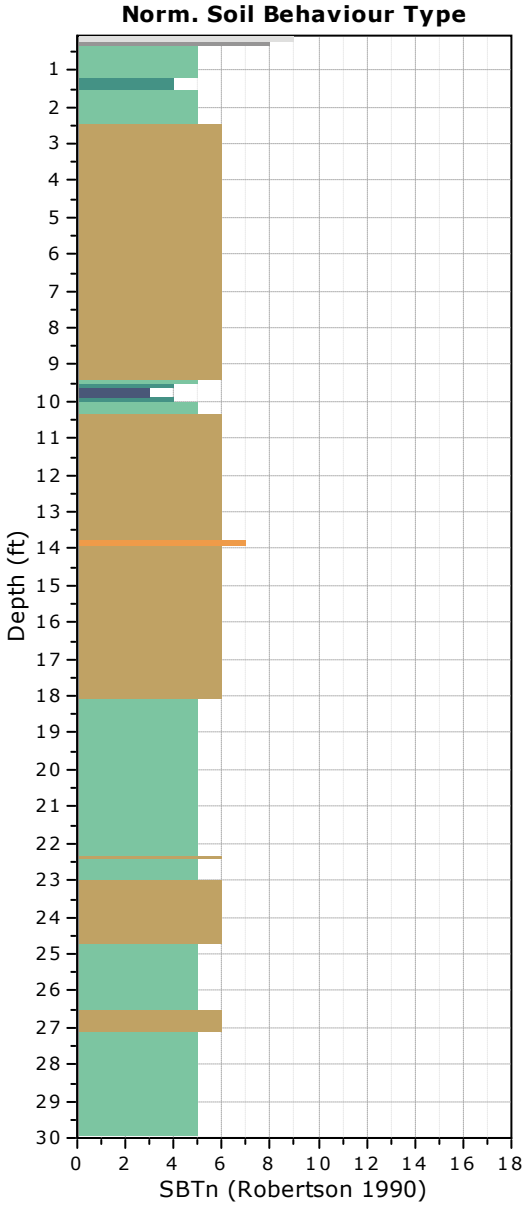

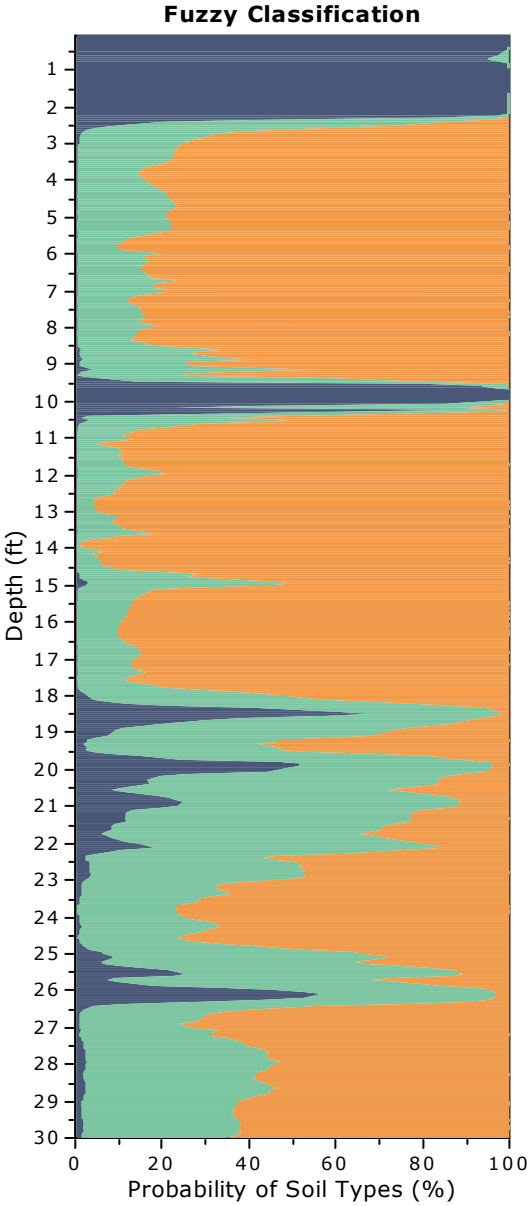

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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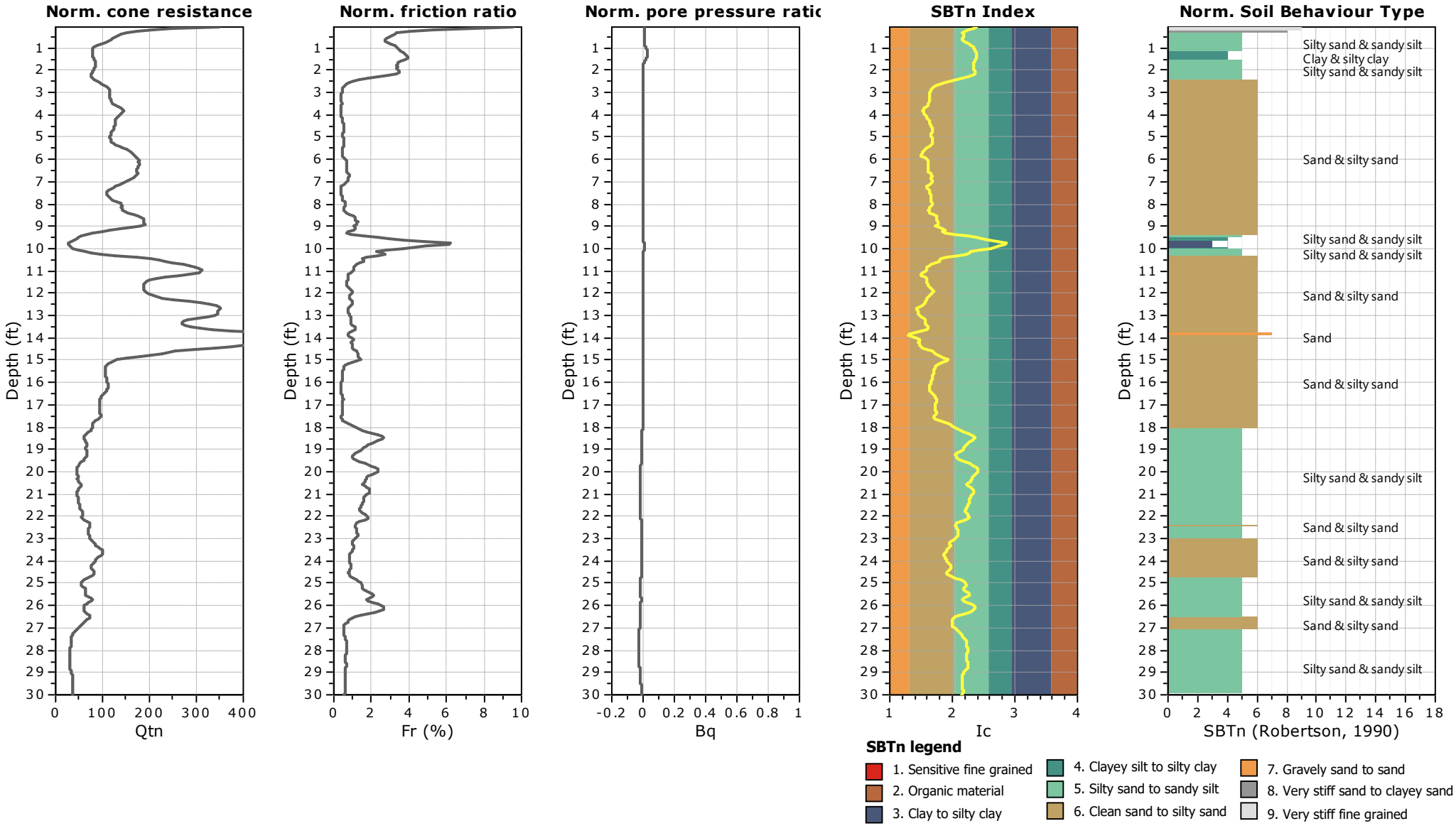
C-2
Total depth: 30.35 ft, Date: 5/13/2024
Surface Elevation: 64.18 ft
Coords: X:572075.39, Y:556031.84
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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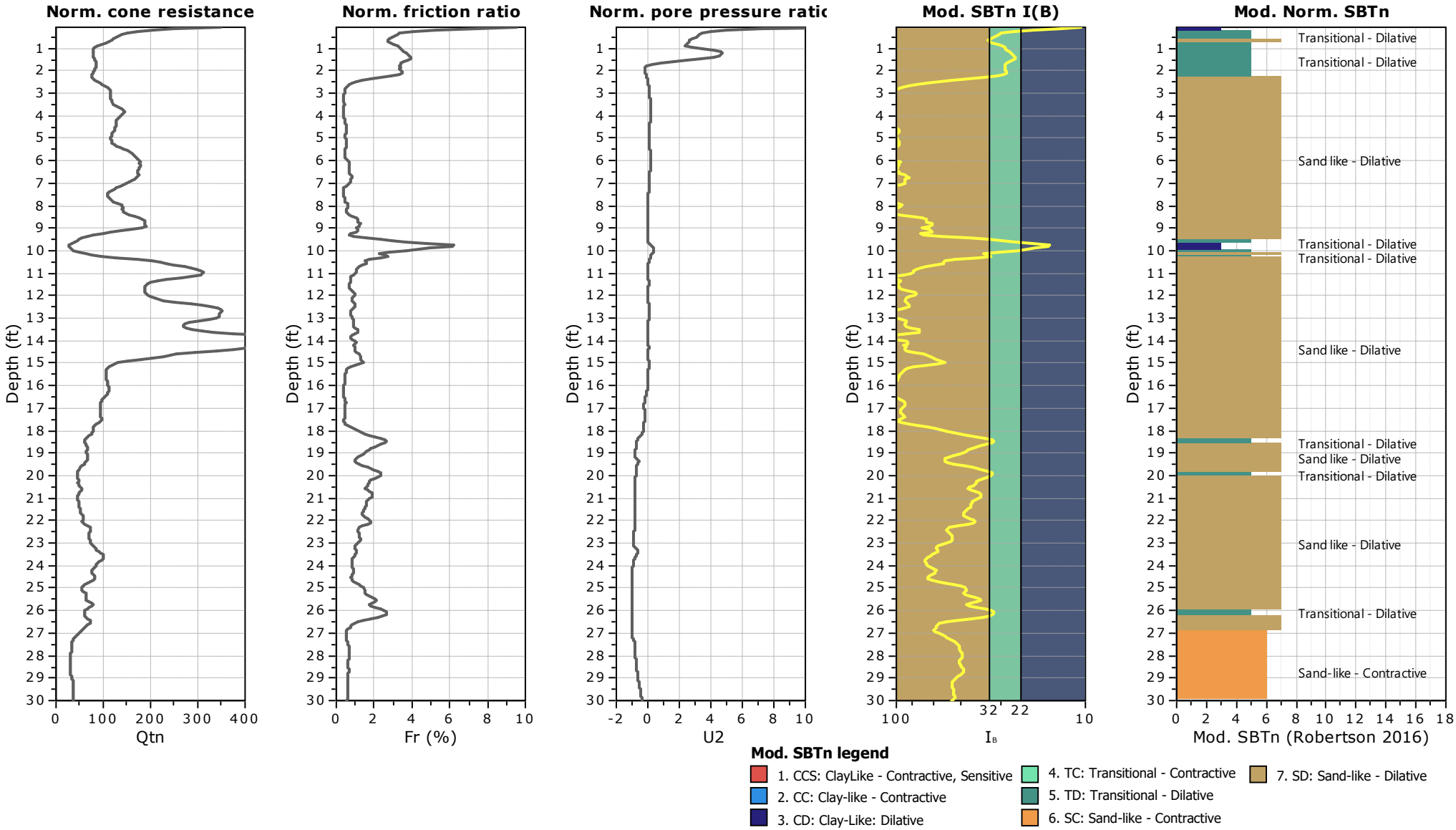
Location: **Middletown, Delaware**



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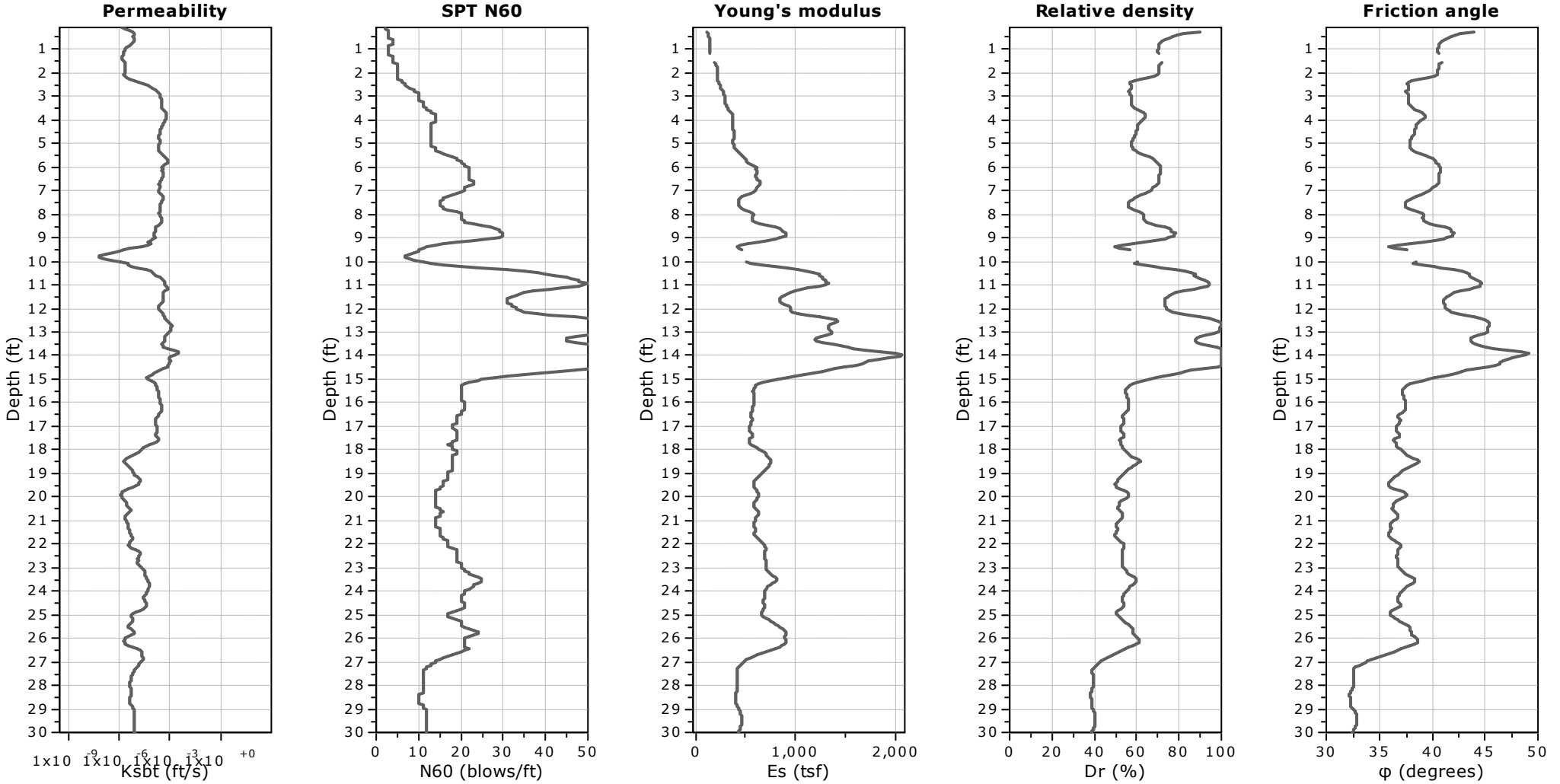
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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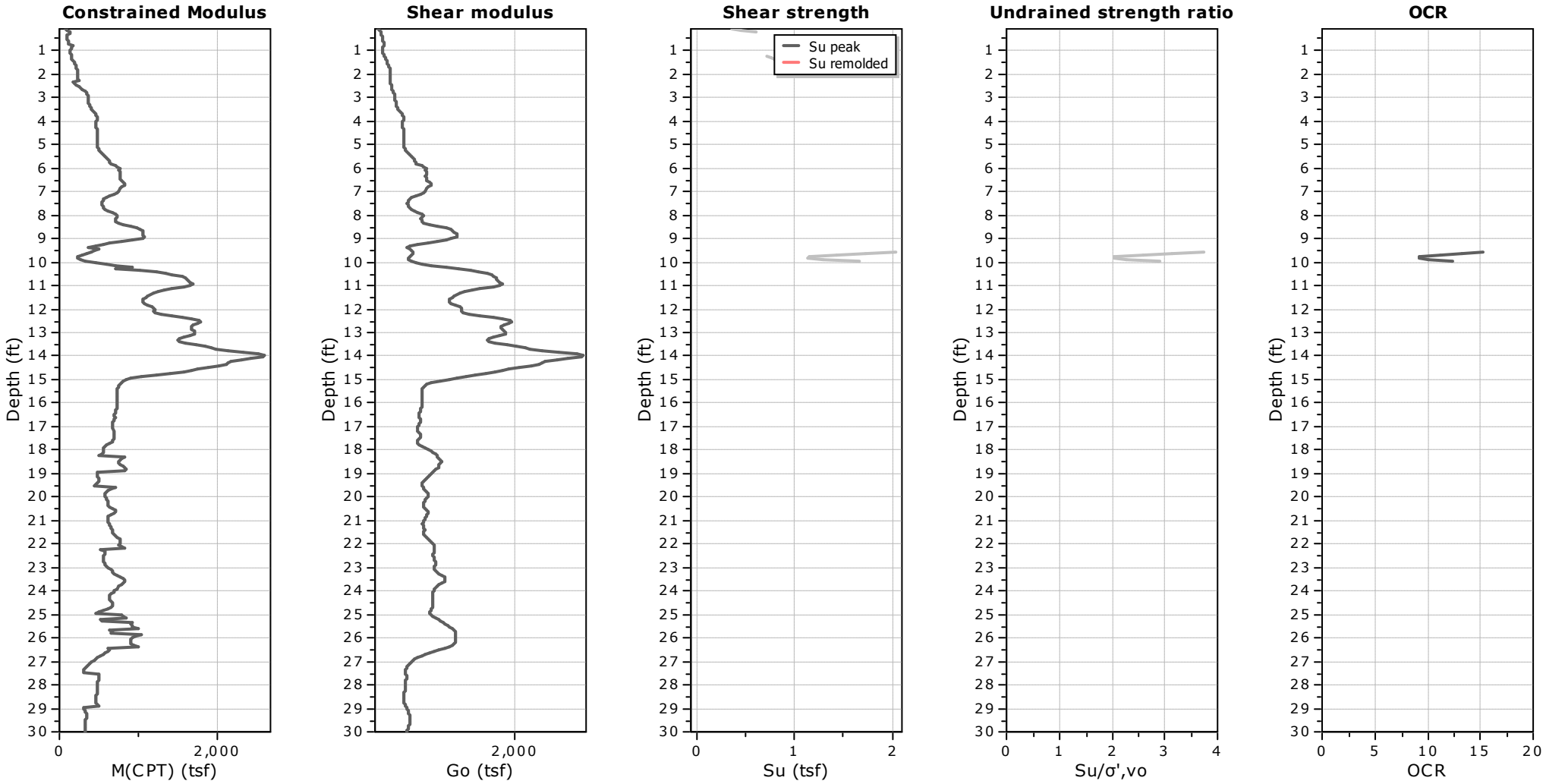
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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BUILD CONFIDENTLY
www.sgi-insitu.com

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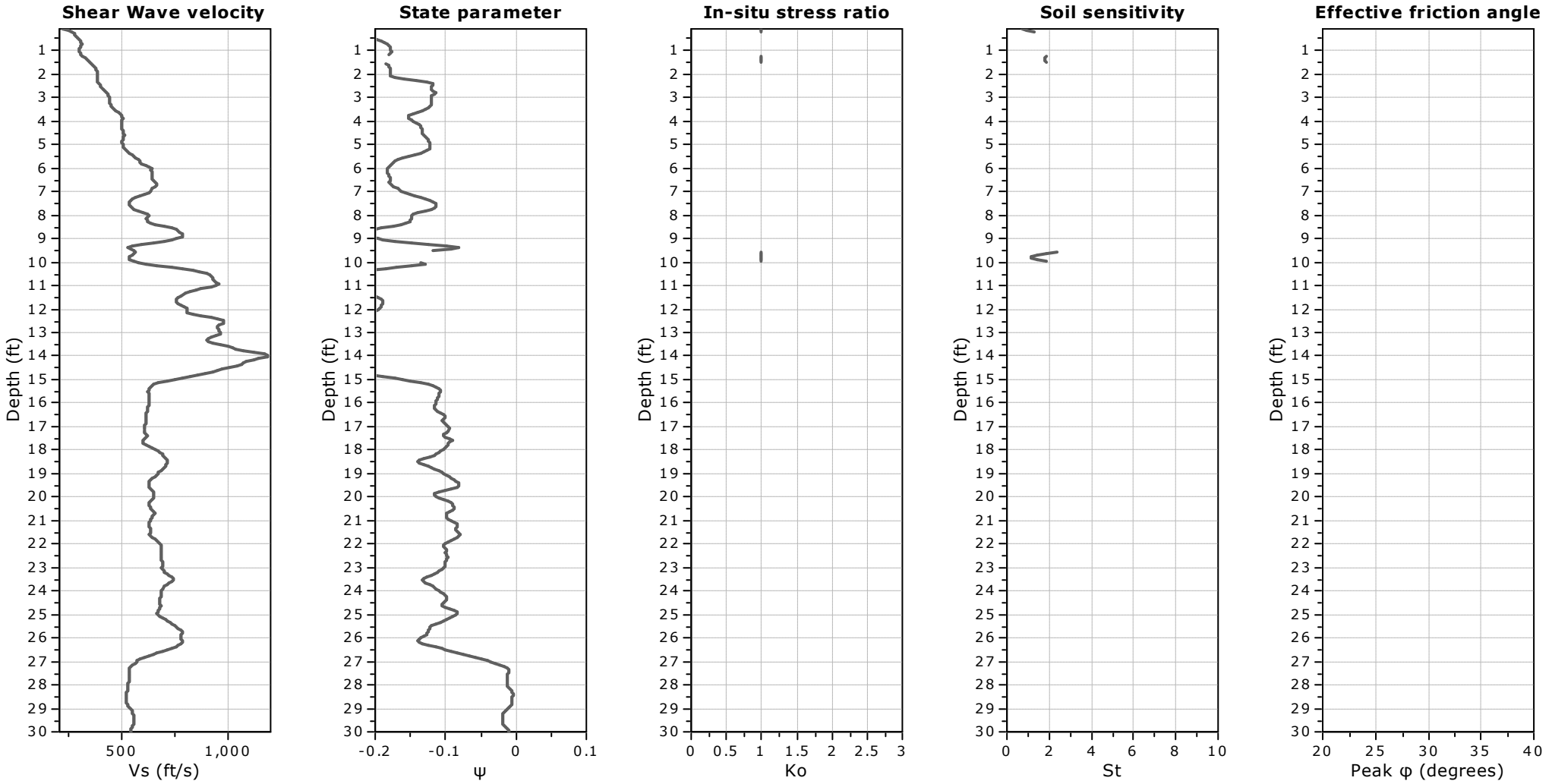
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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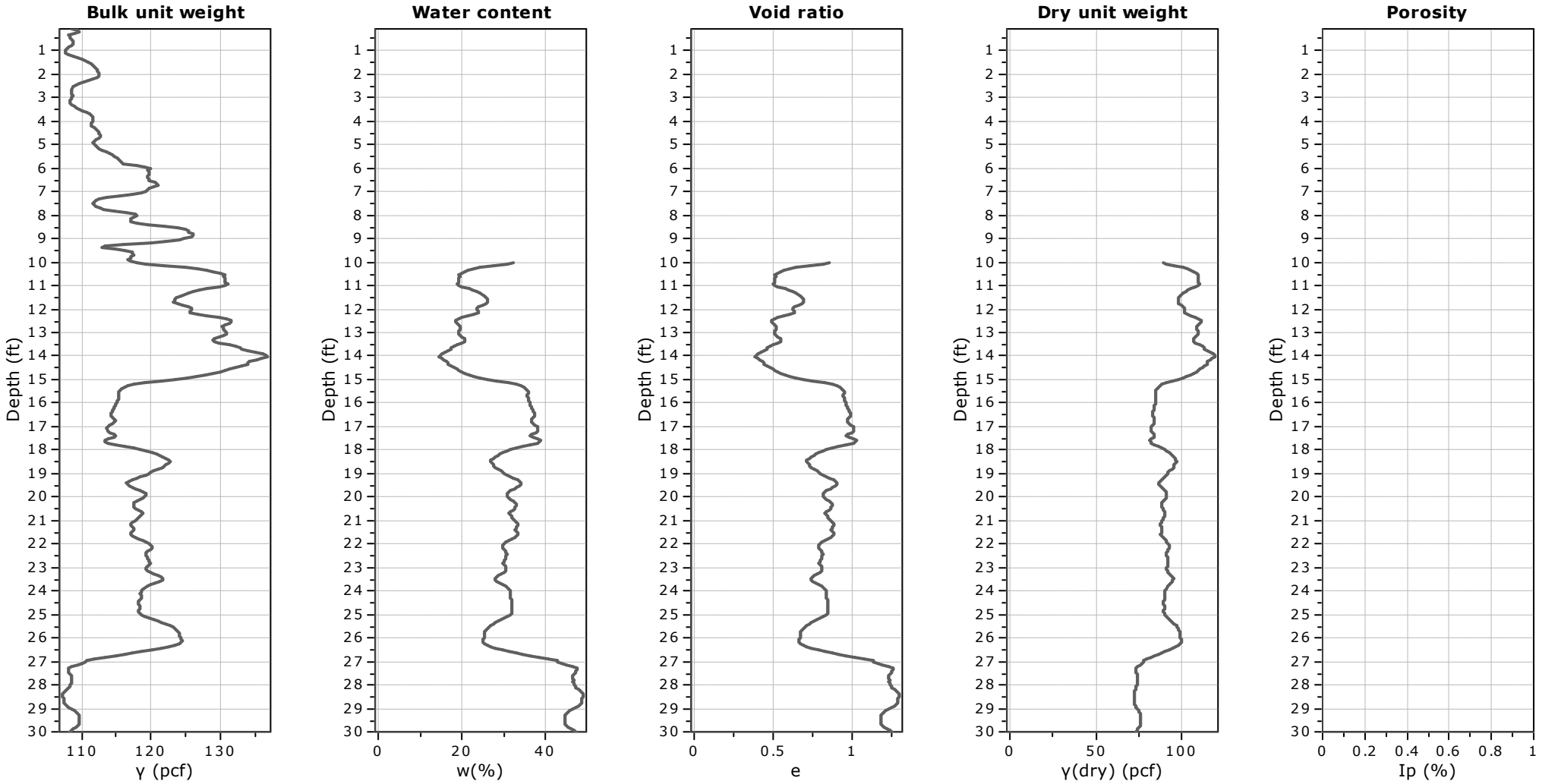
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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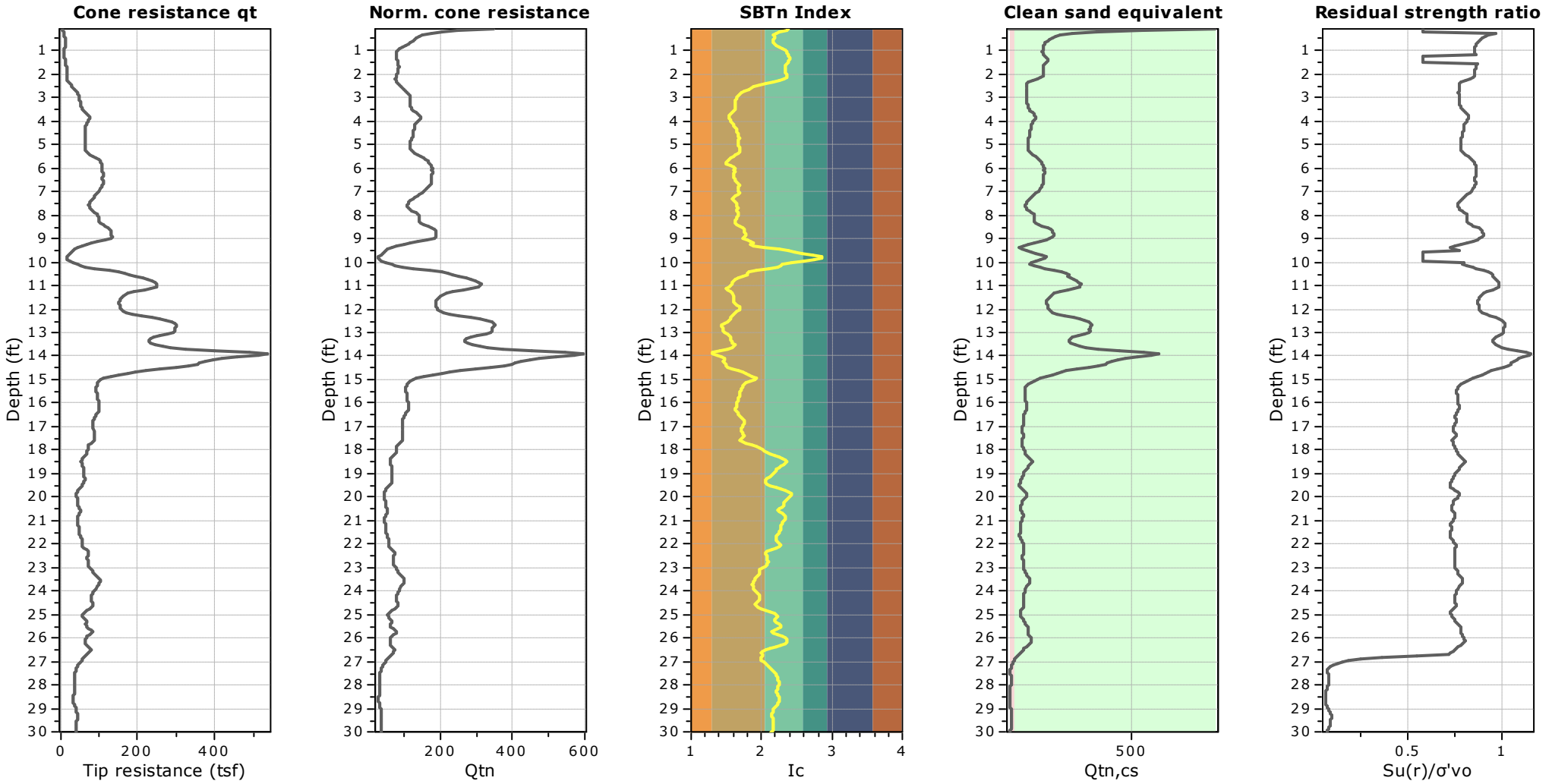
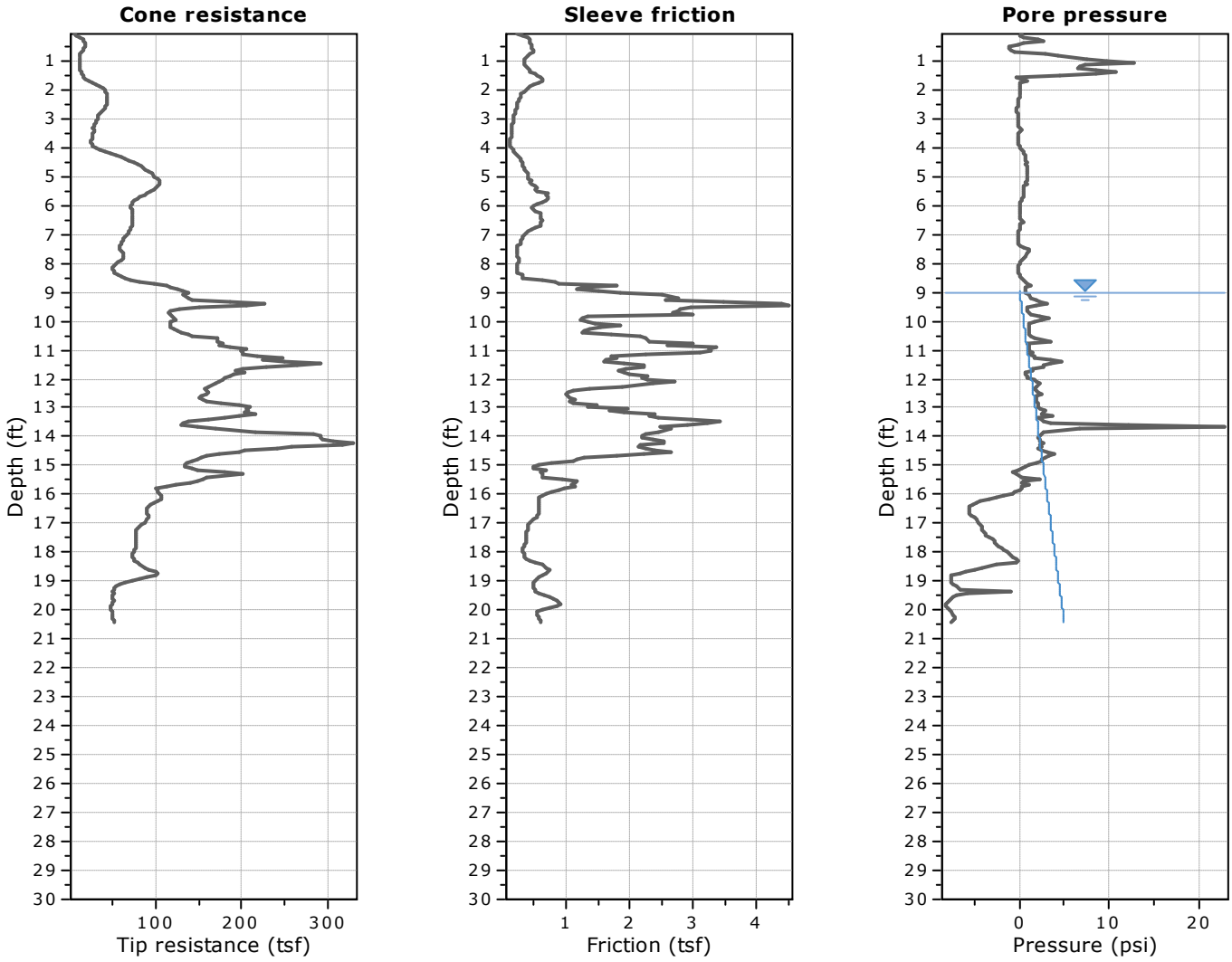
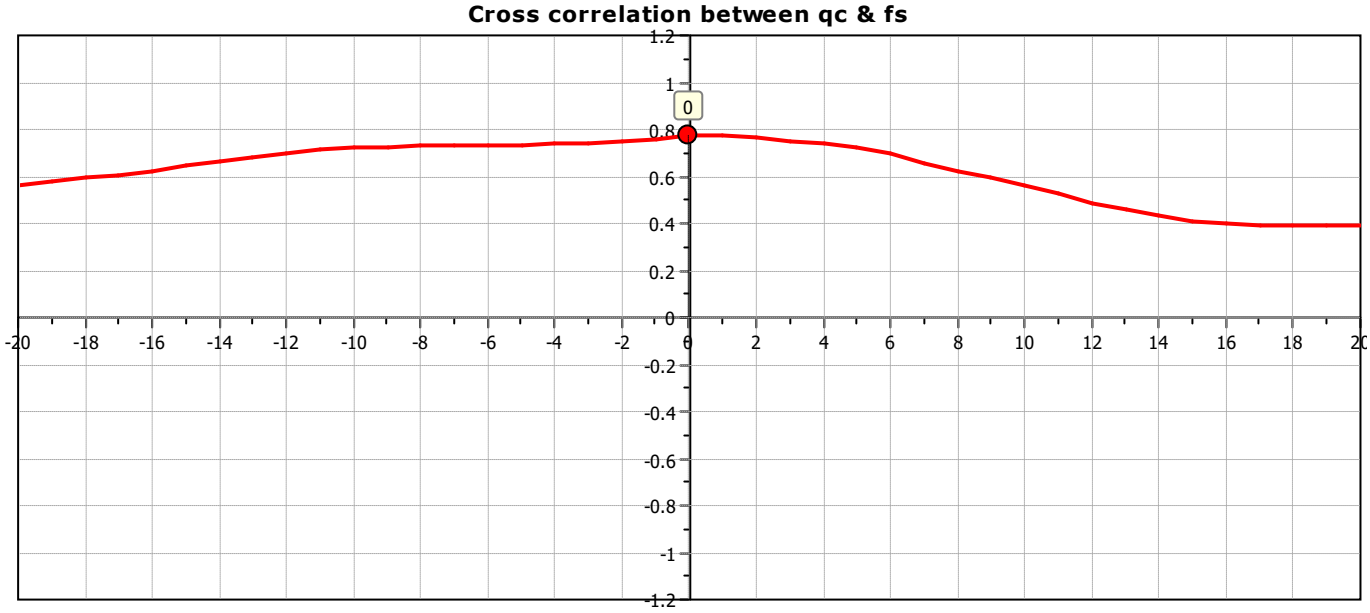
C-2
Total depth: 30.35 ft, Date: 5/13/2024
Surface Elevation: 64.18 ft
Coords: X:572075.39, Y:556031.84
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

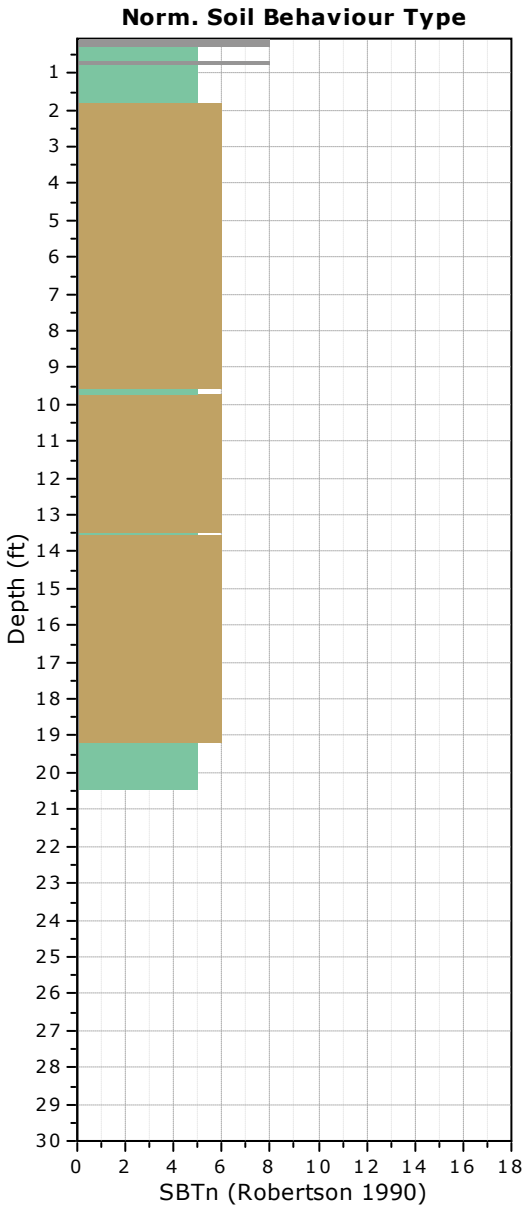
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**

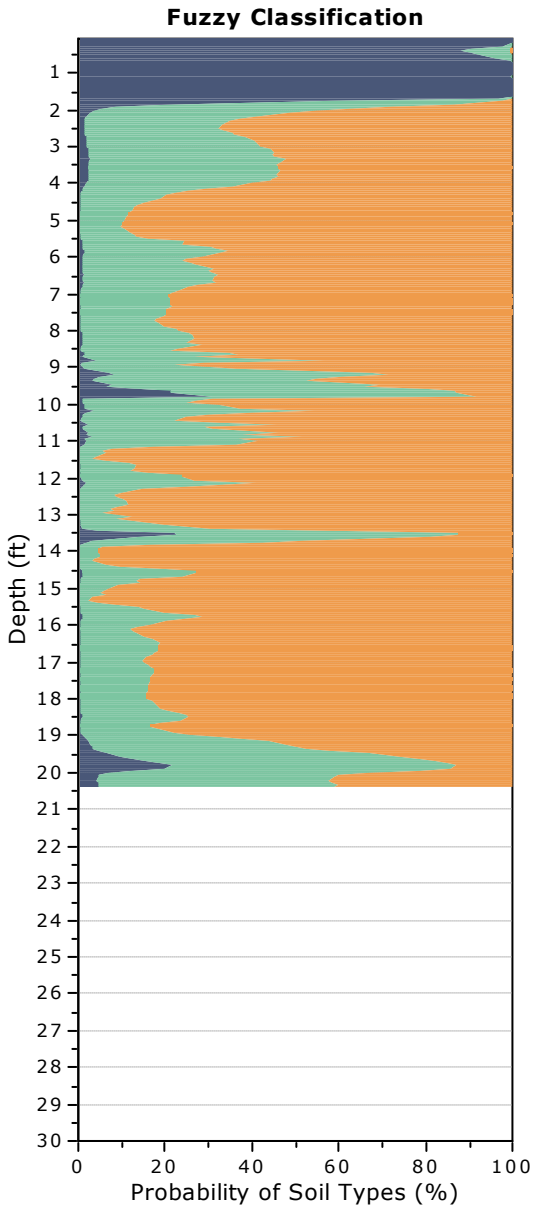




The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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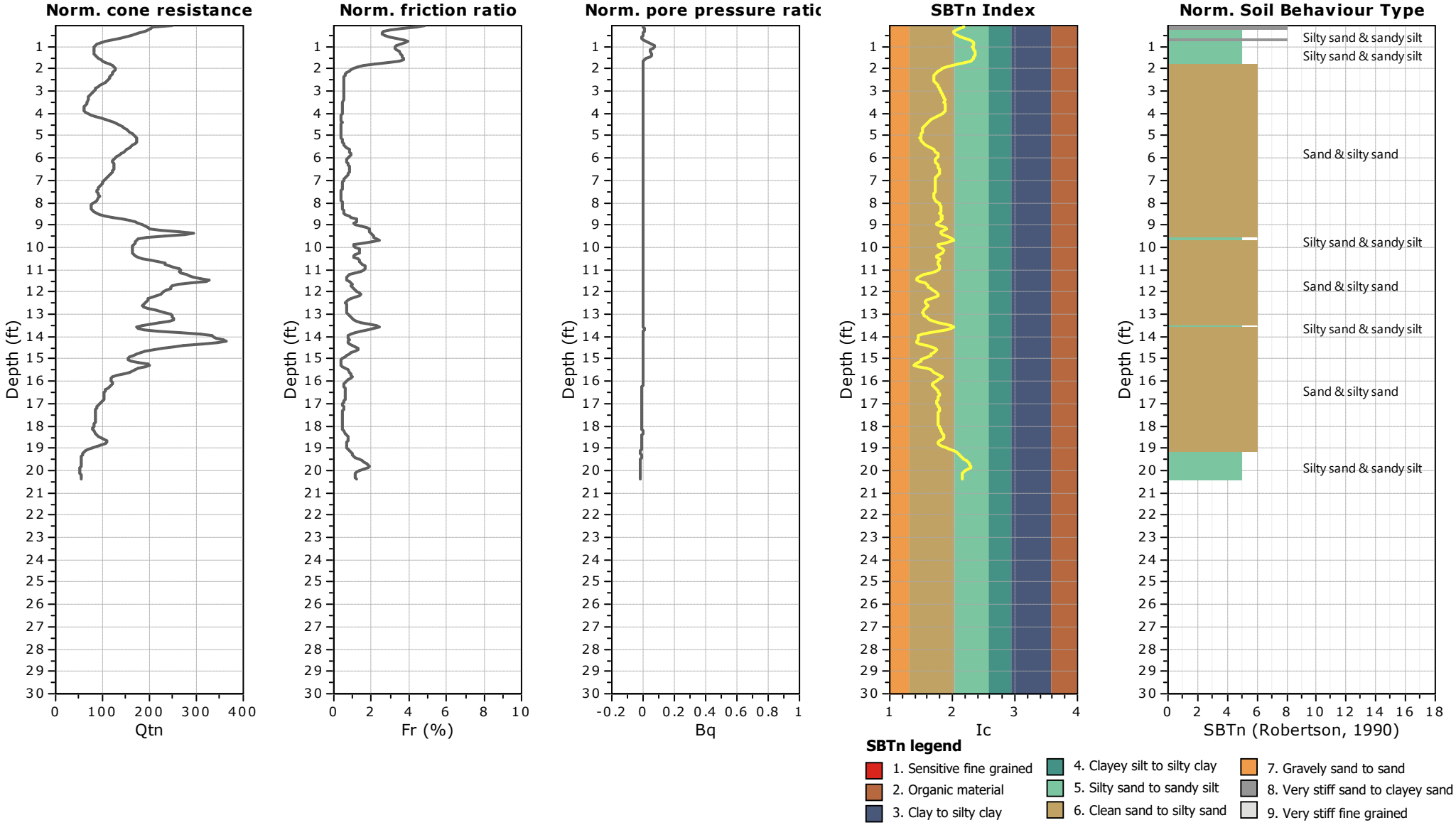
C-3
Total depth: 20.40 ft, Date: 5/13/2024
Surface Elevation: 64.20 ft
Coords: X:572136.62, Y:555997.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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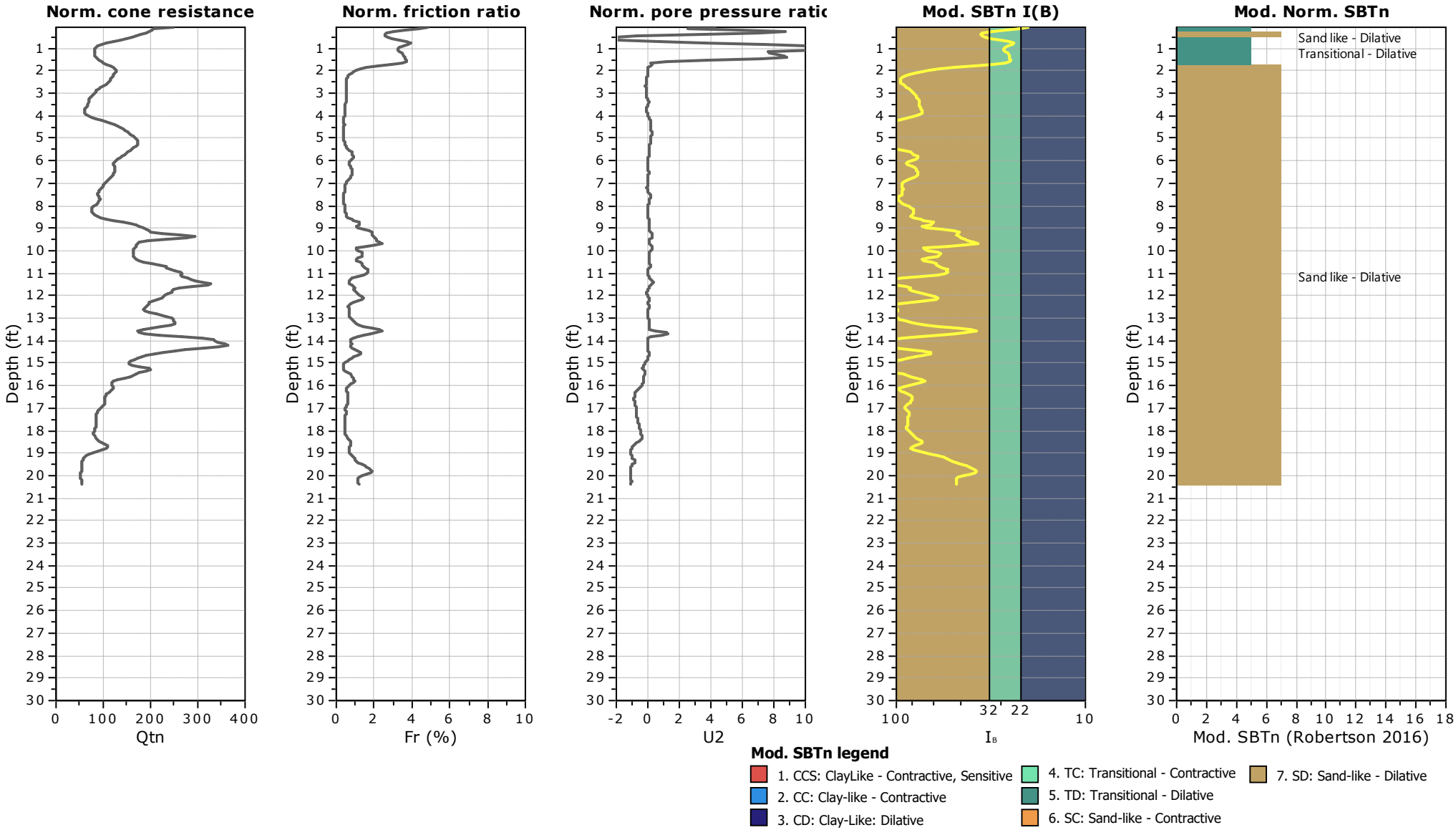
Surface Elevation: 64.20 ft
Coords: X:572136.62, Y:555997.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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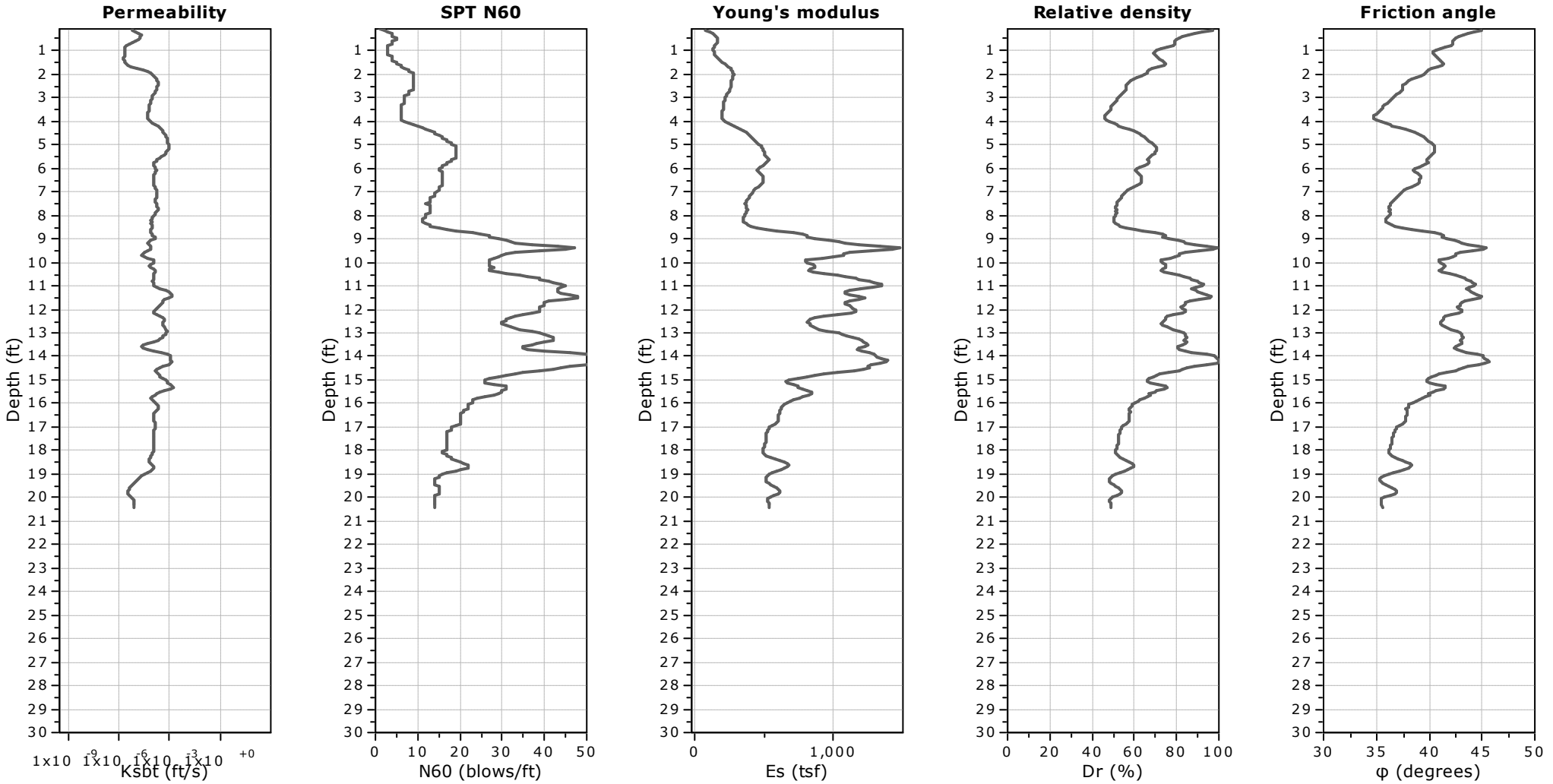

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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C-3
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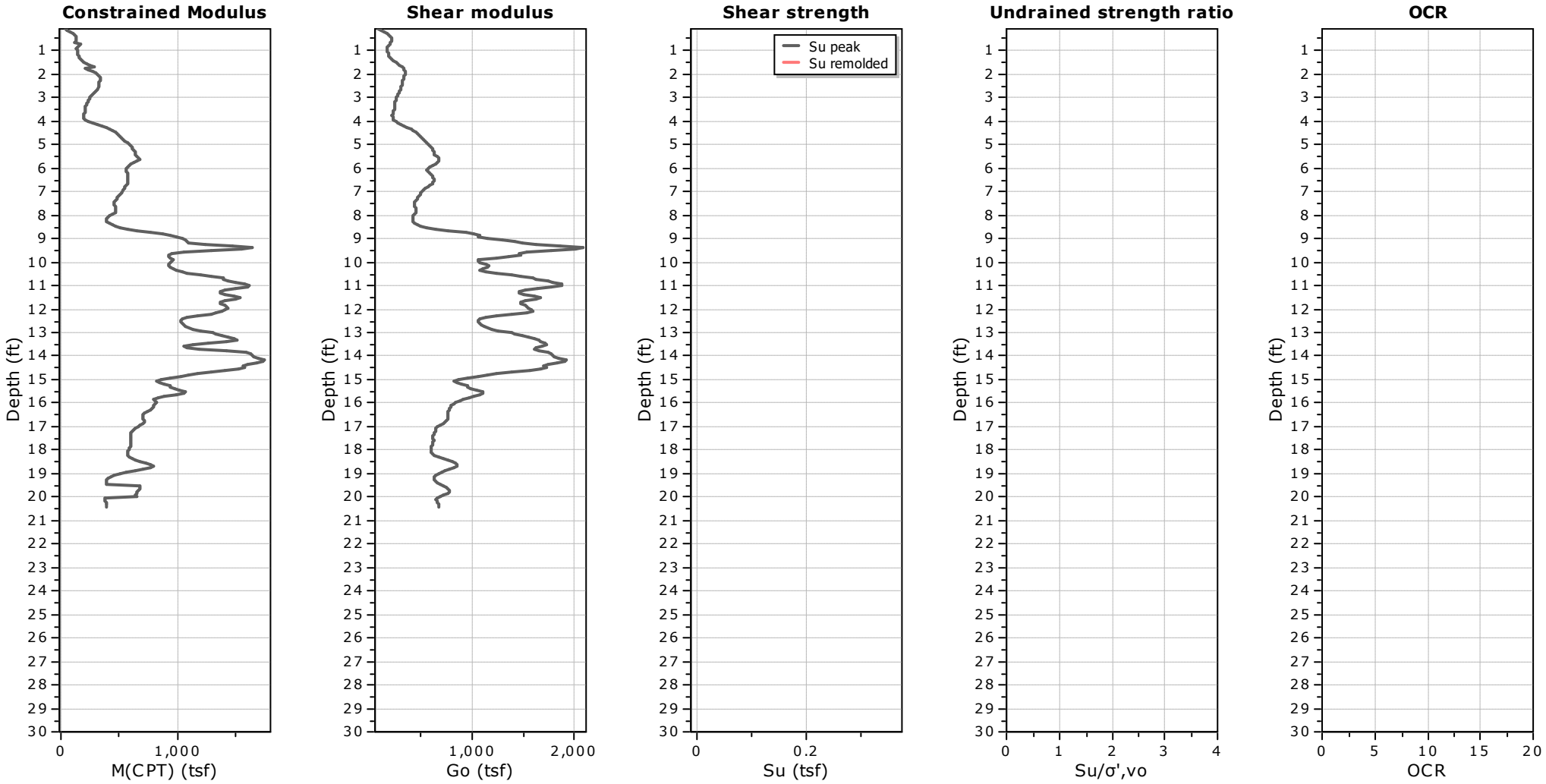
Surface Elevation: 64.20 ft
Coords: X:572136.62, Y:555997.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

Stable Ground In-Situ, LLC
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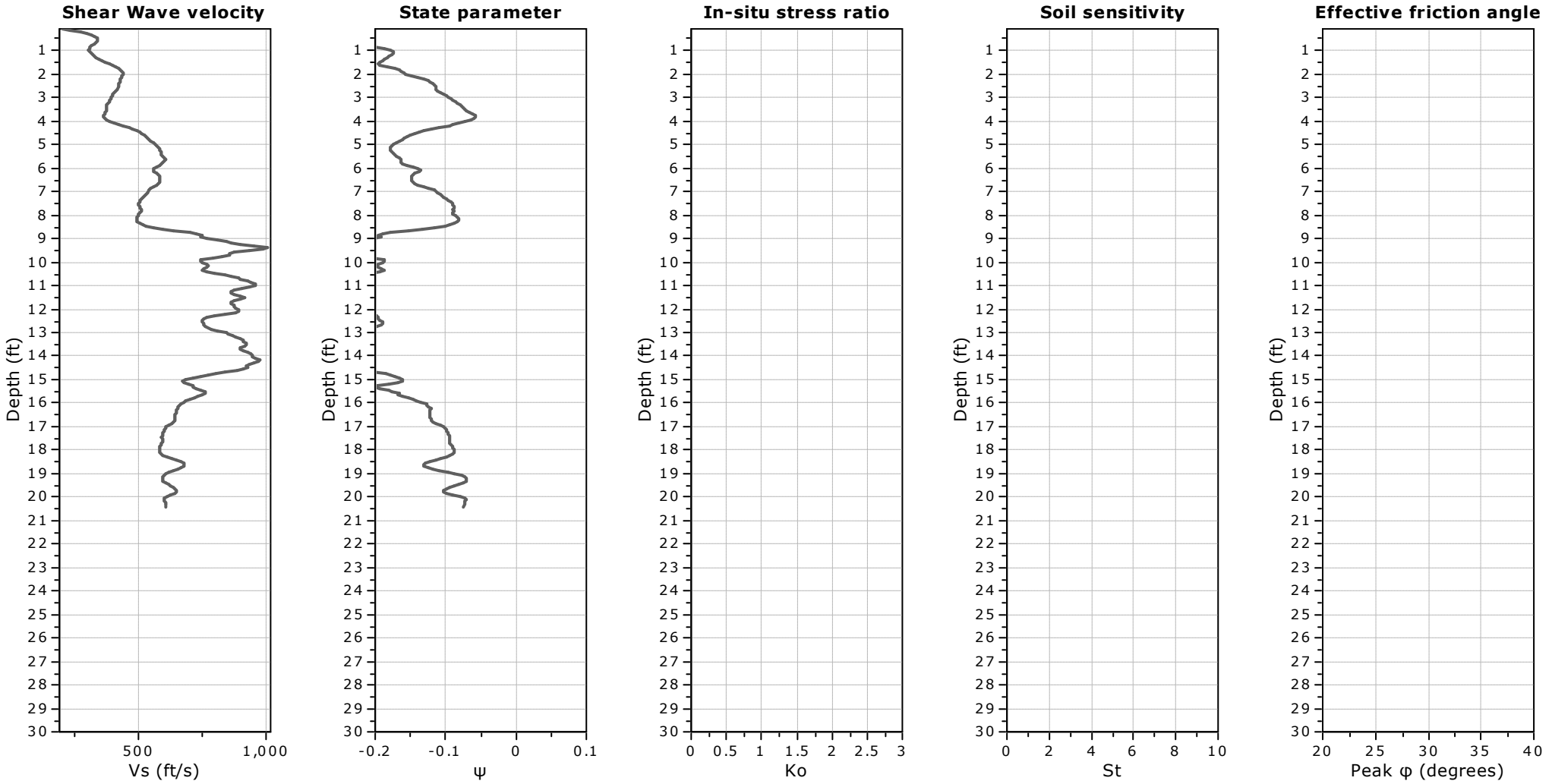
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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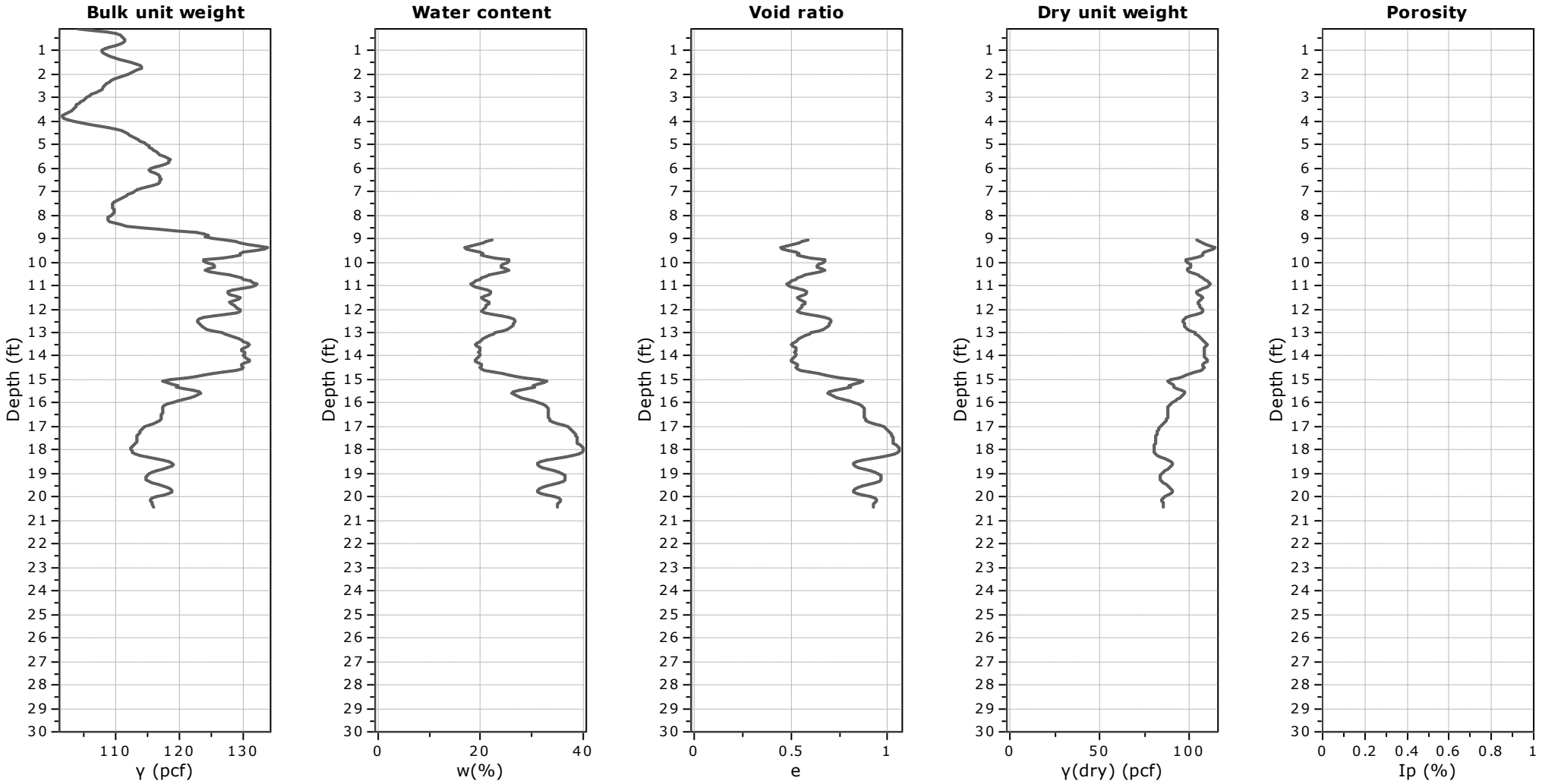

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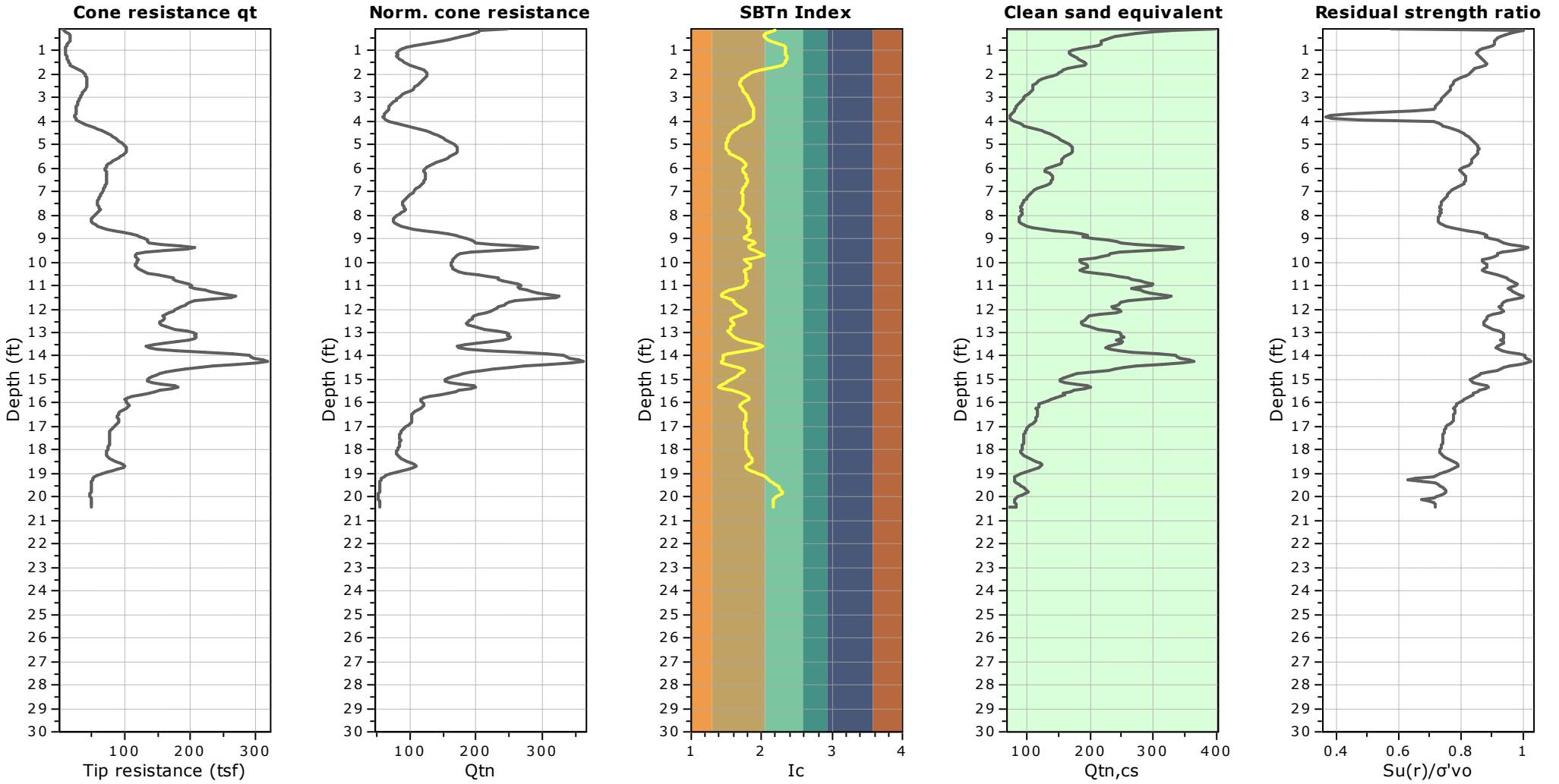

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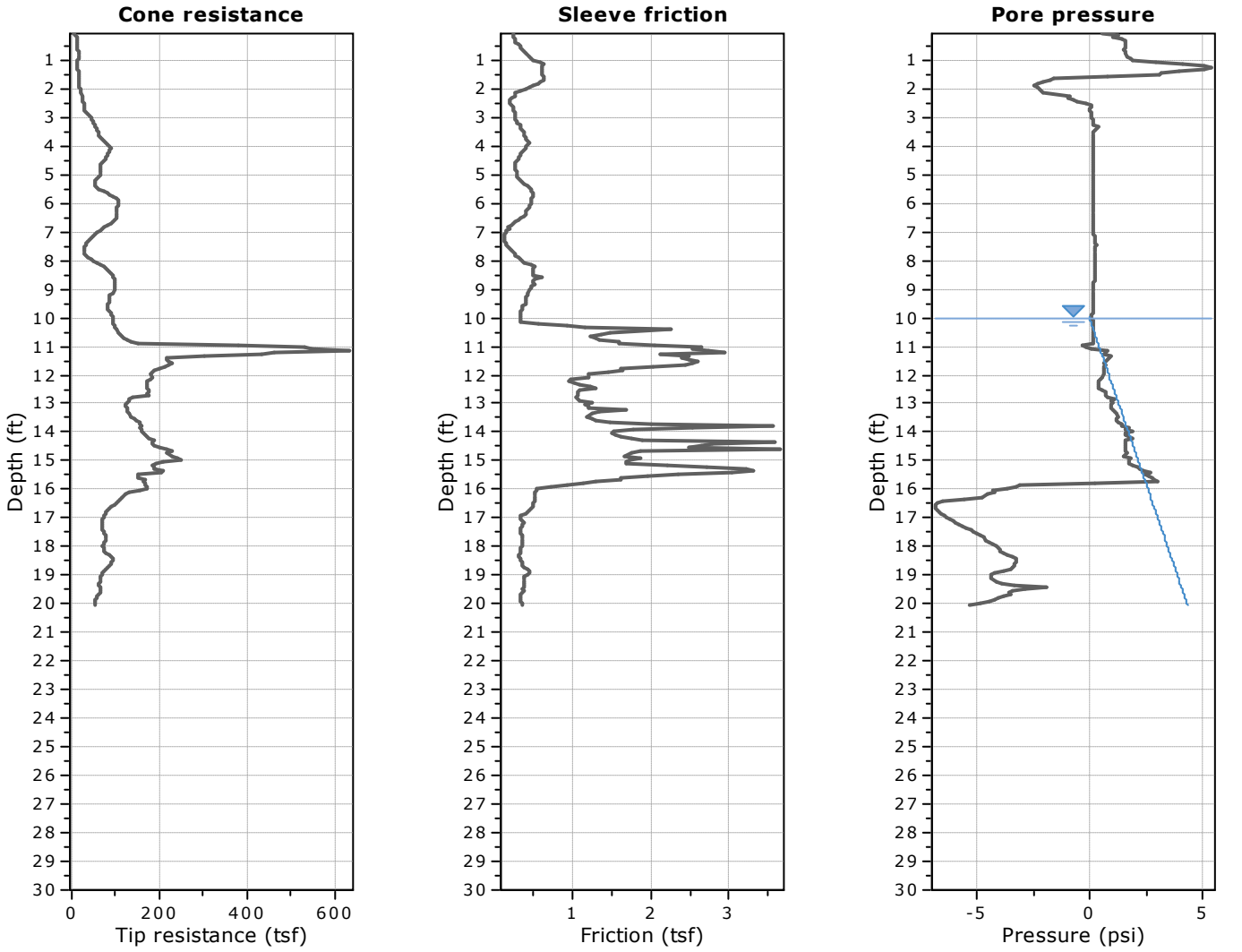
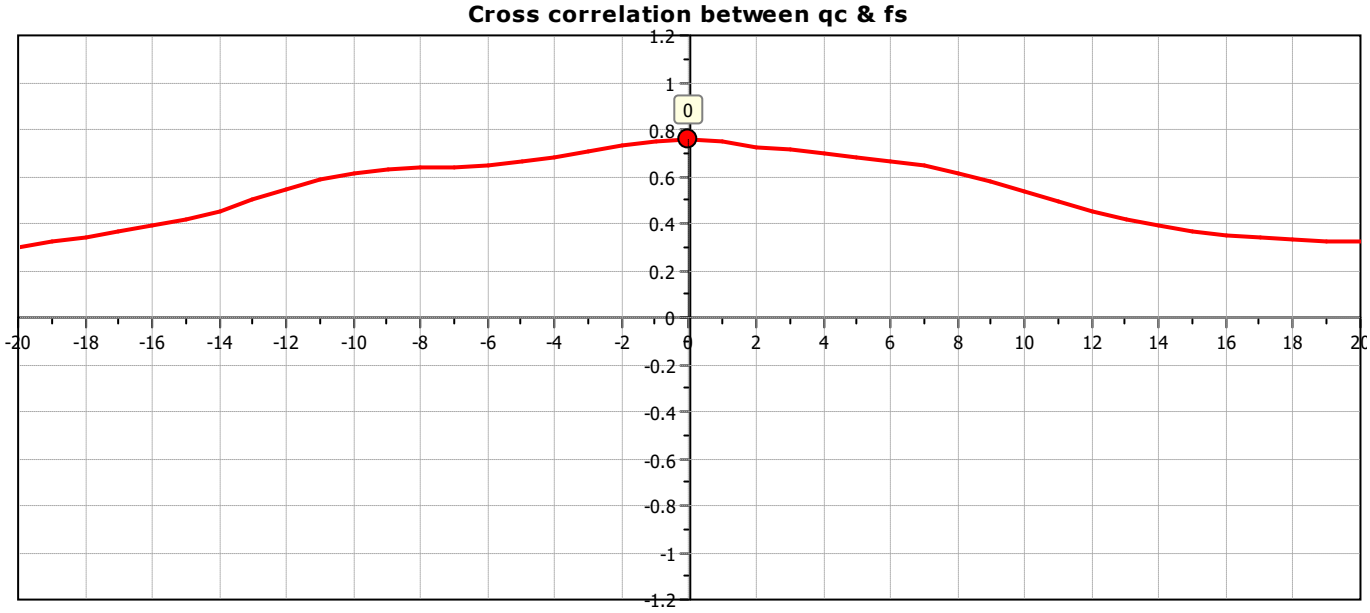
C-4

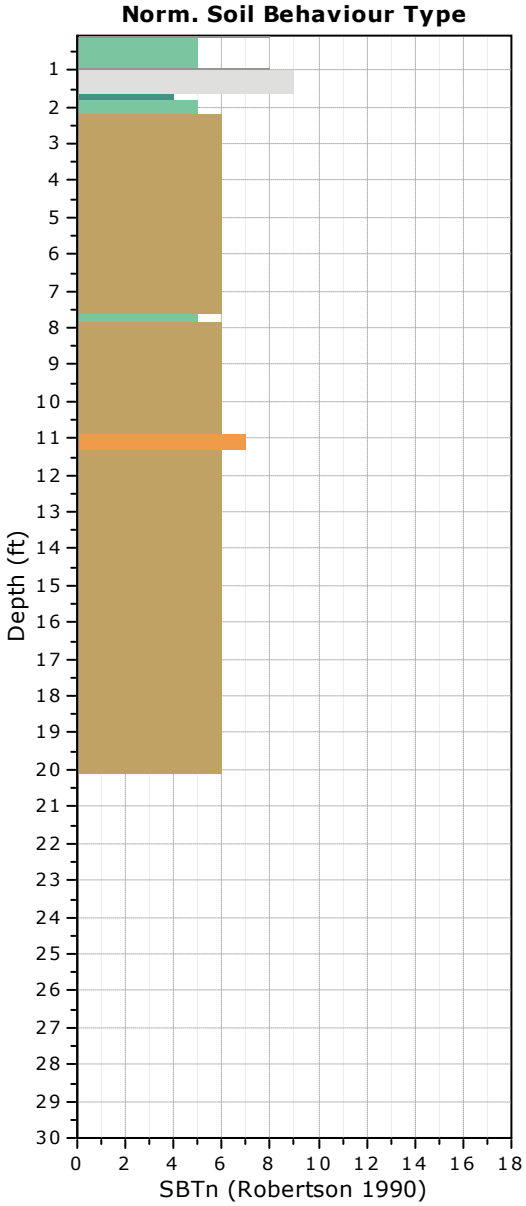
Total depth: 20.05 ft, Date: 5/13/2024
Surface Elevation: 65.24 ft
Coords: X:572043.89, Y:555976.94
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

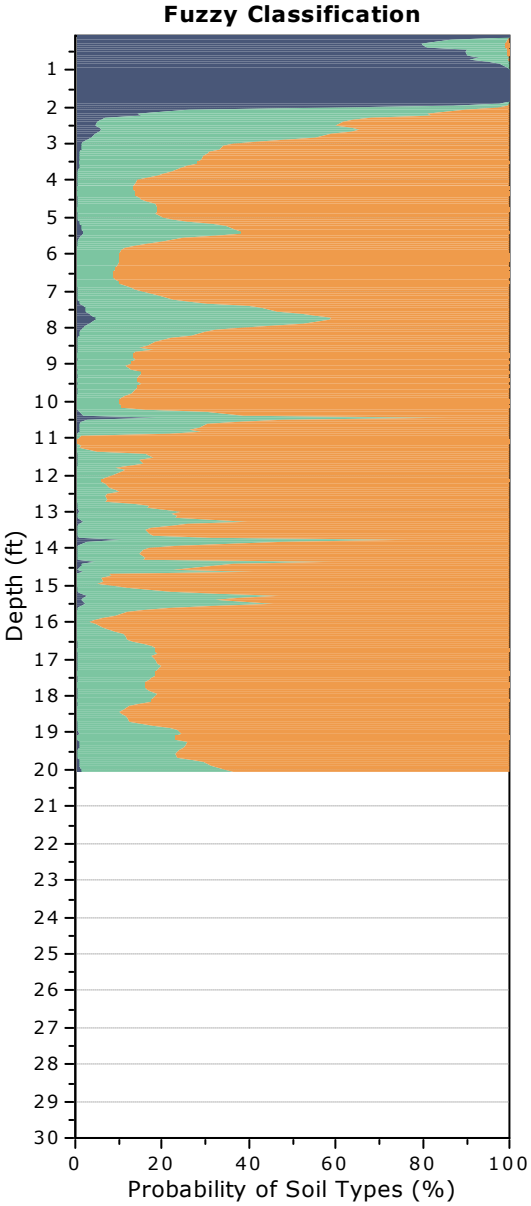
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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C-4

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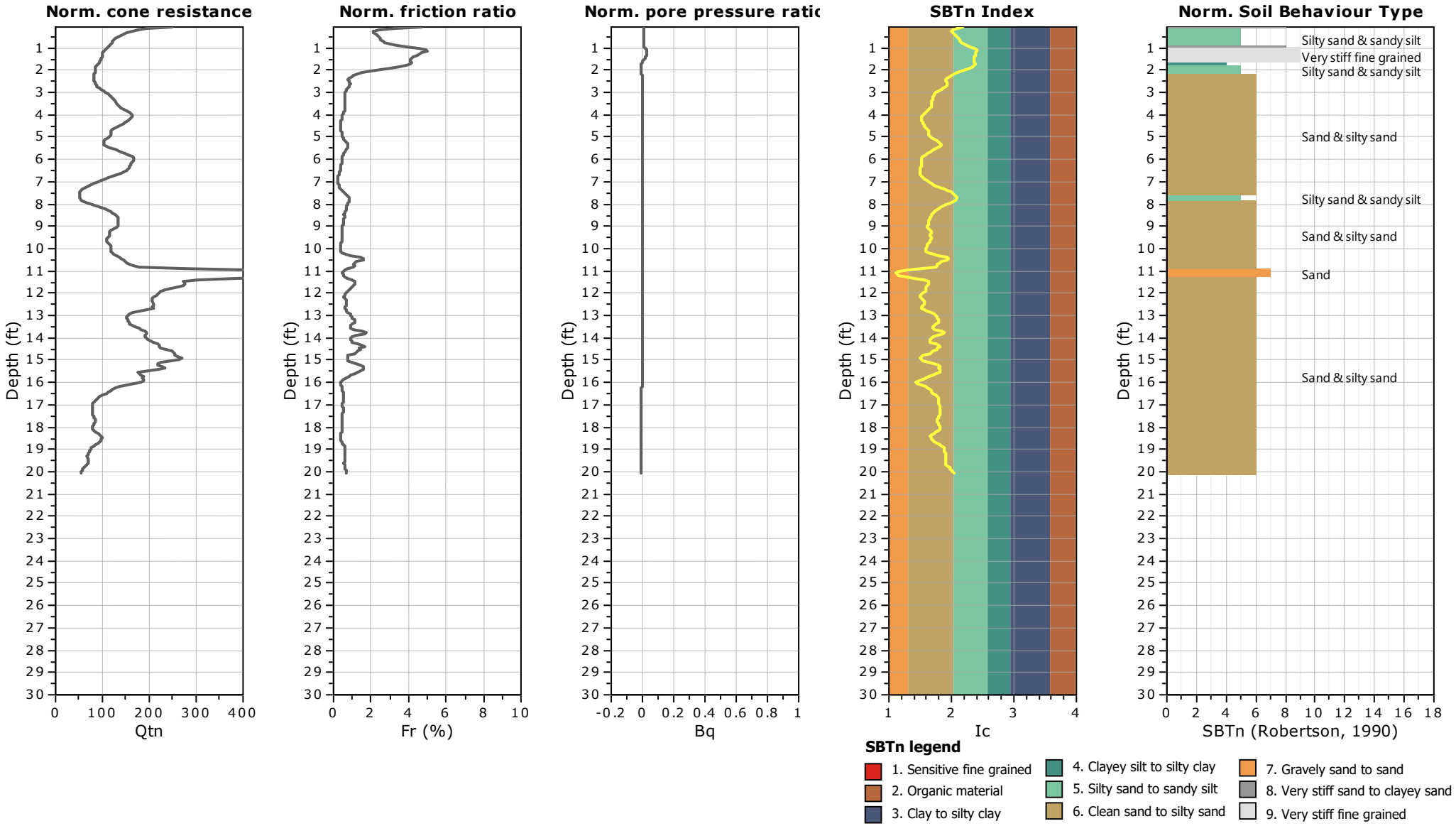
Coords: X:572043.89, Y:555976.94
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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C-4

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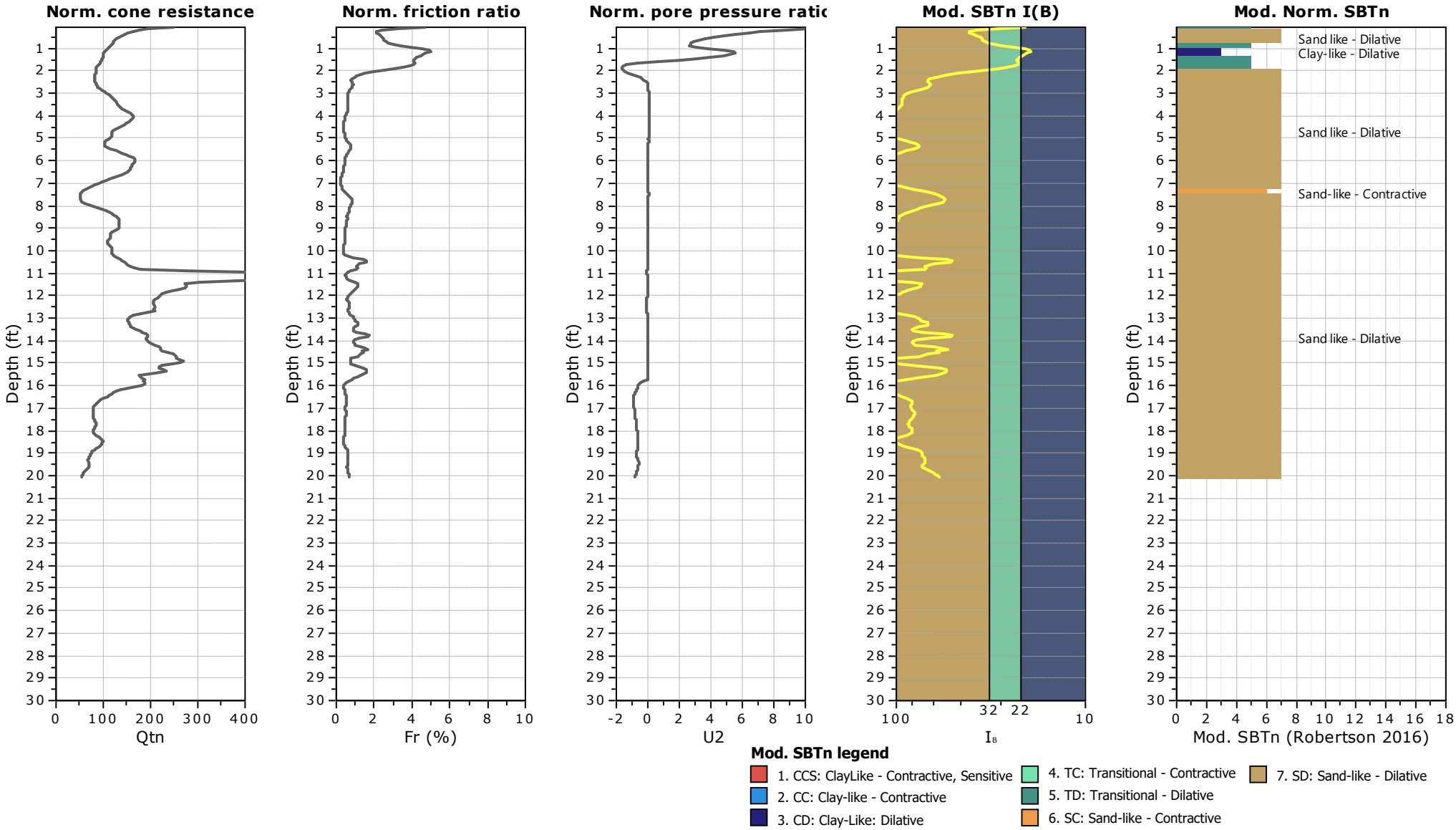
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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Project: **ASD Summit Campus**
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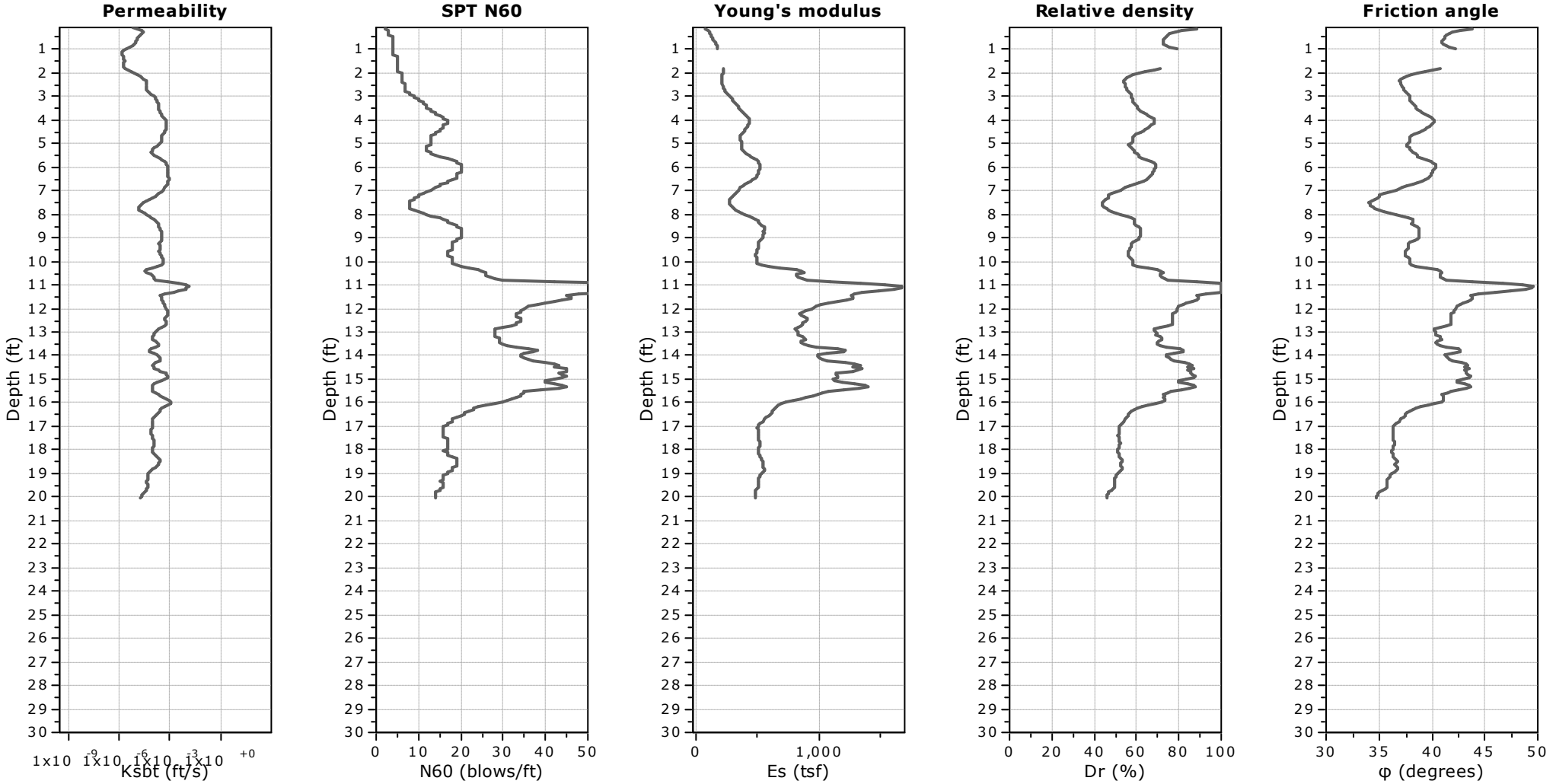

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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Project: **ASD Summit Campus**
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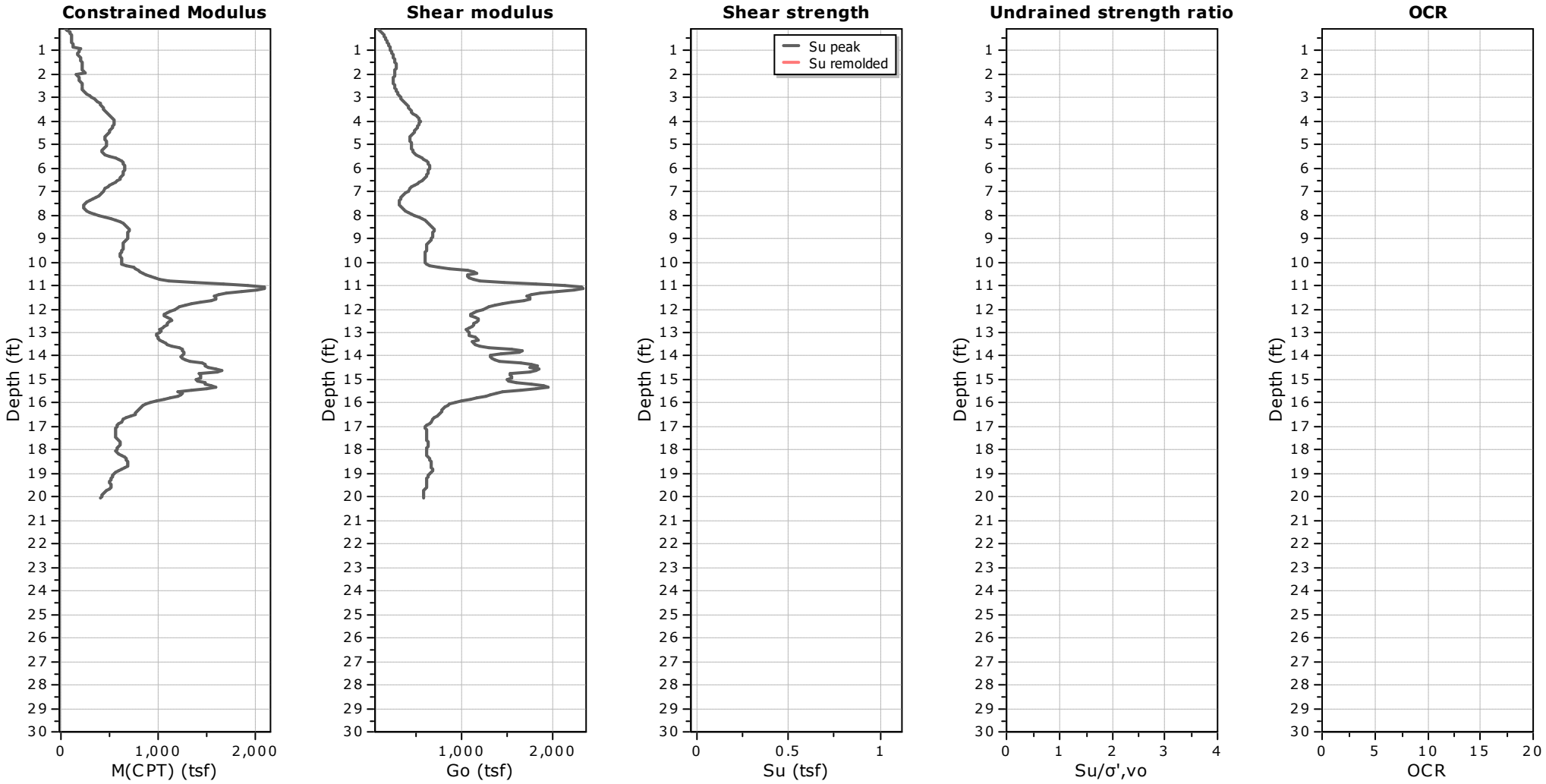

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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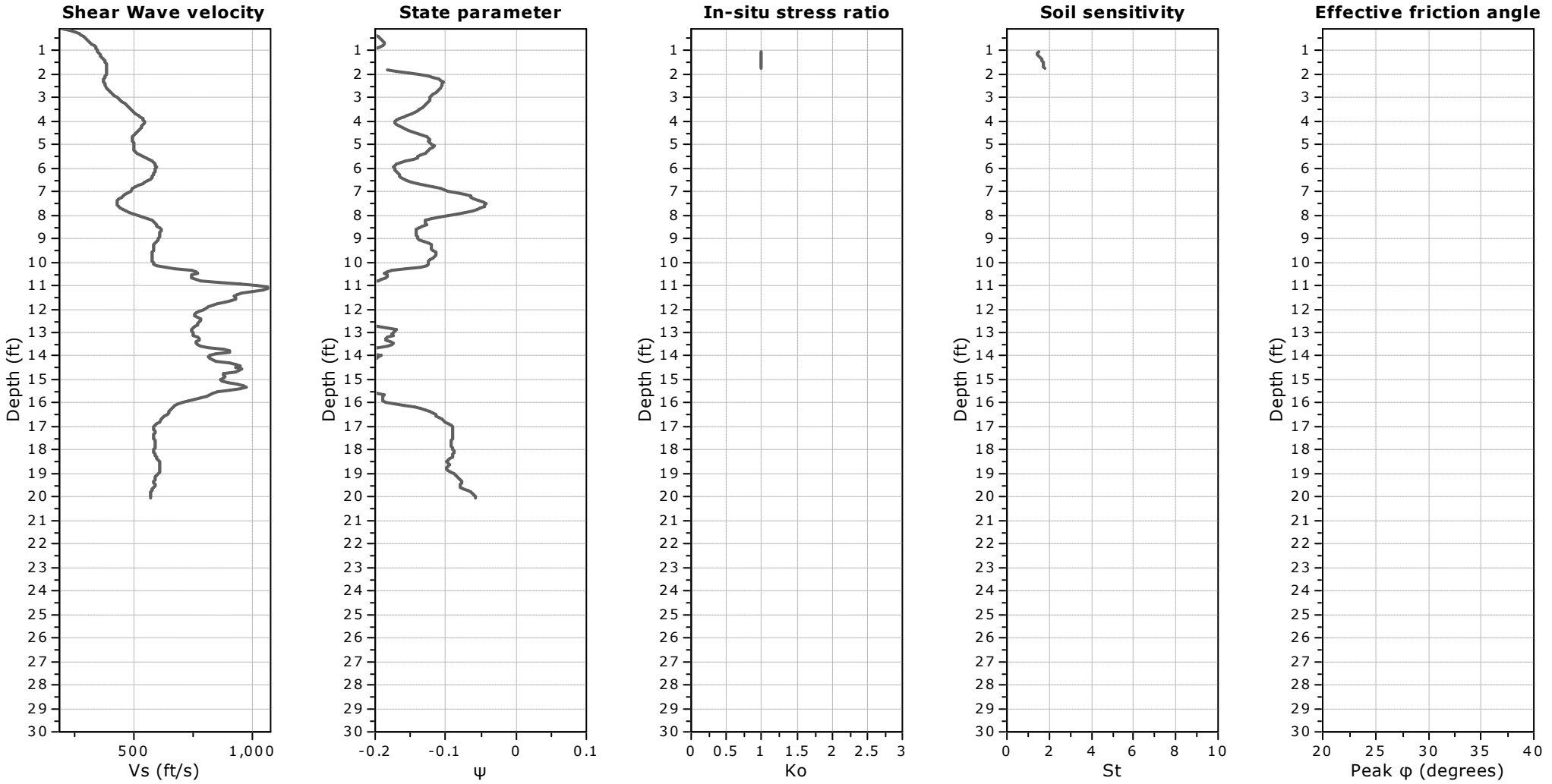
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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C-4

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Surface Elevation: 65.24 ft
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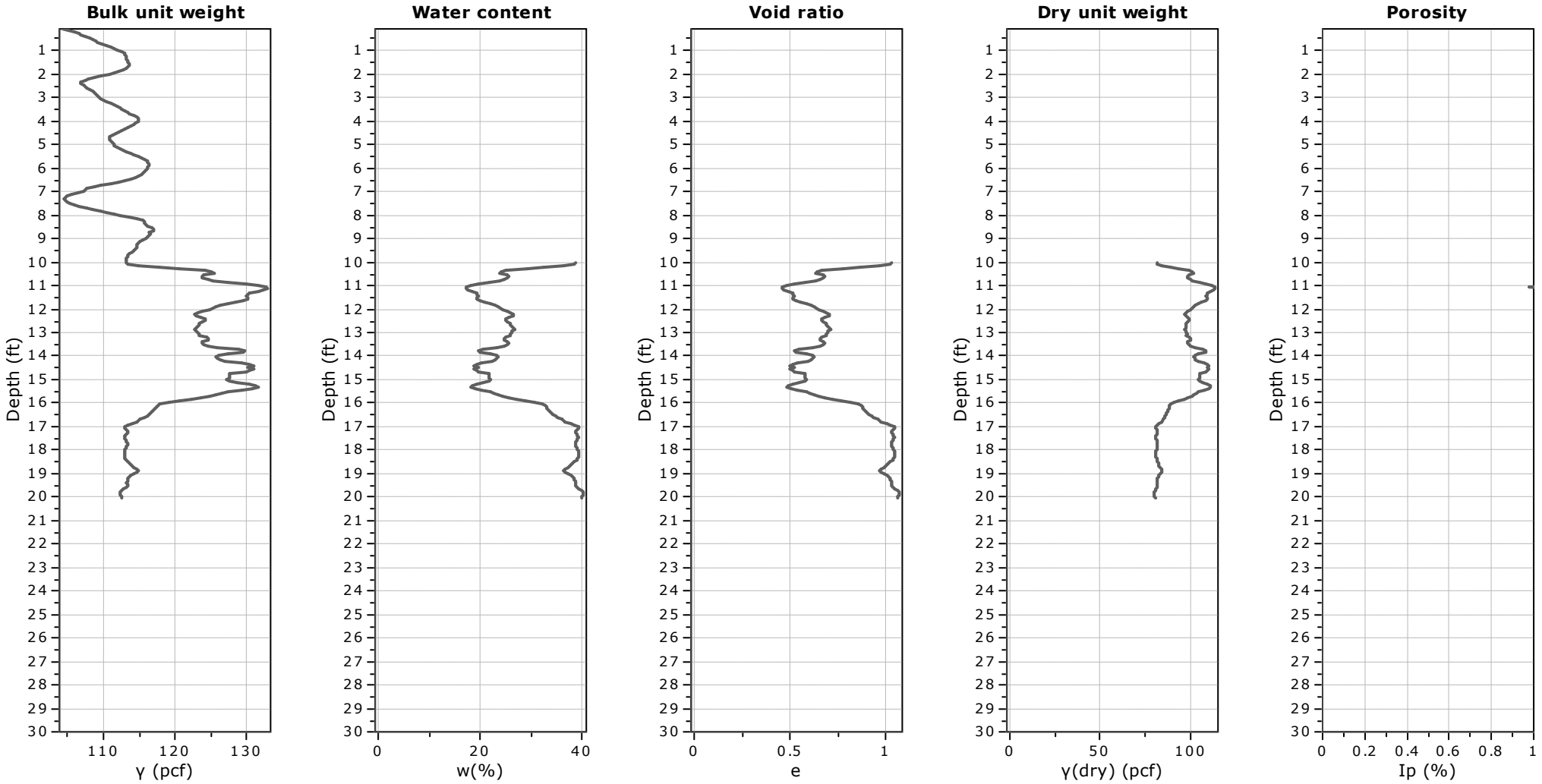
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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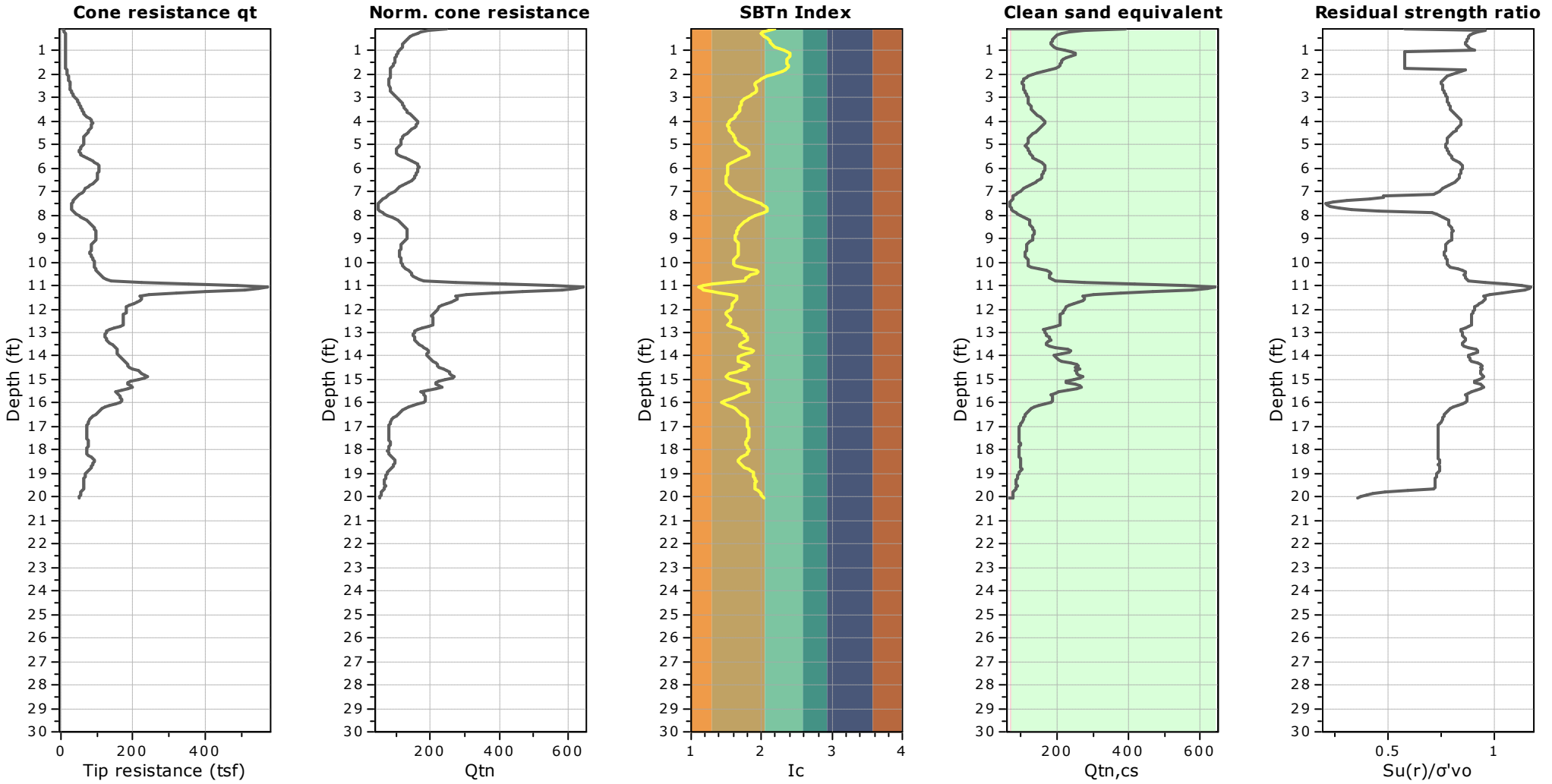
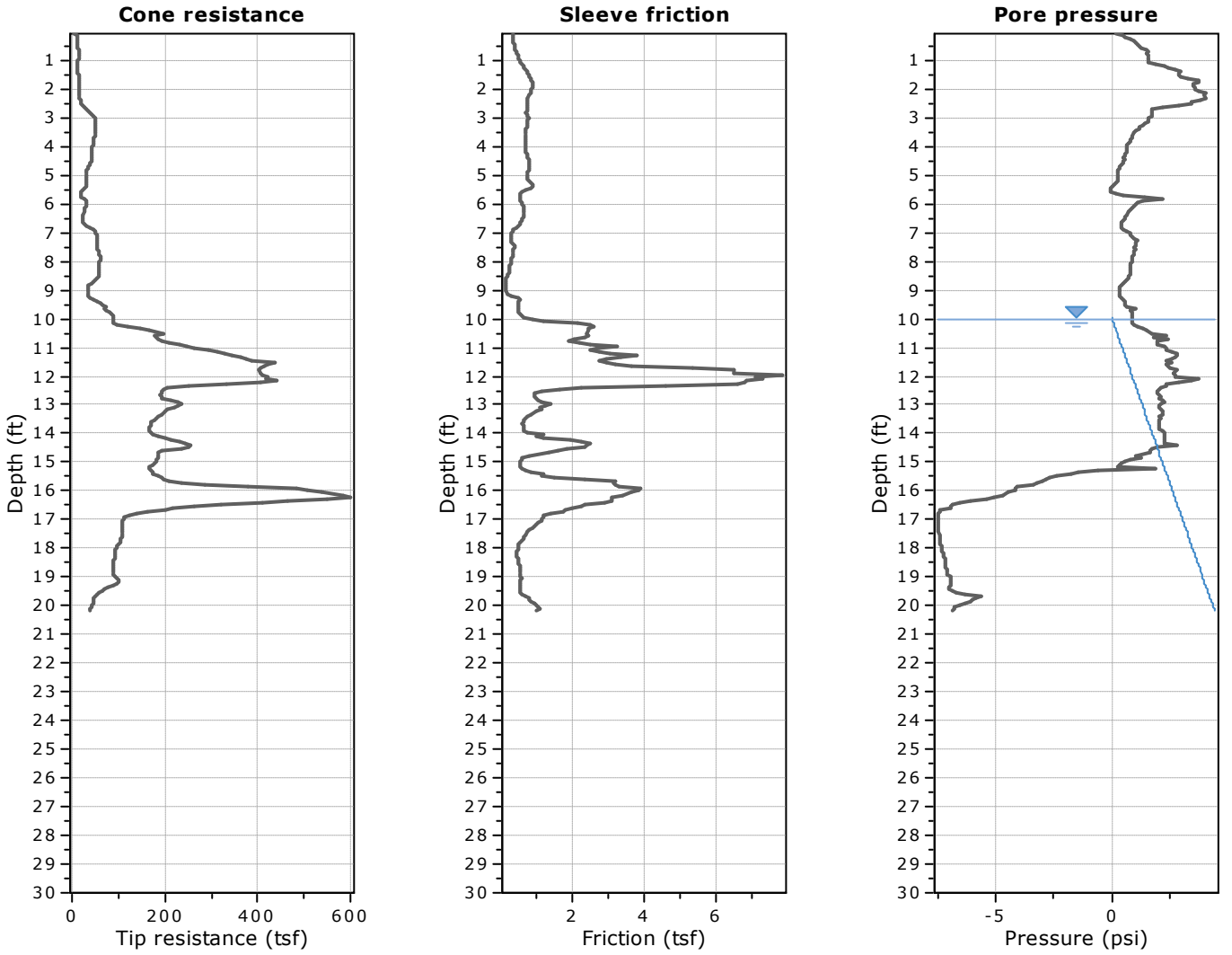
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**





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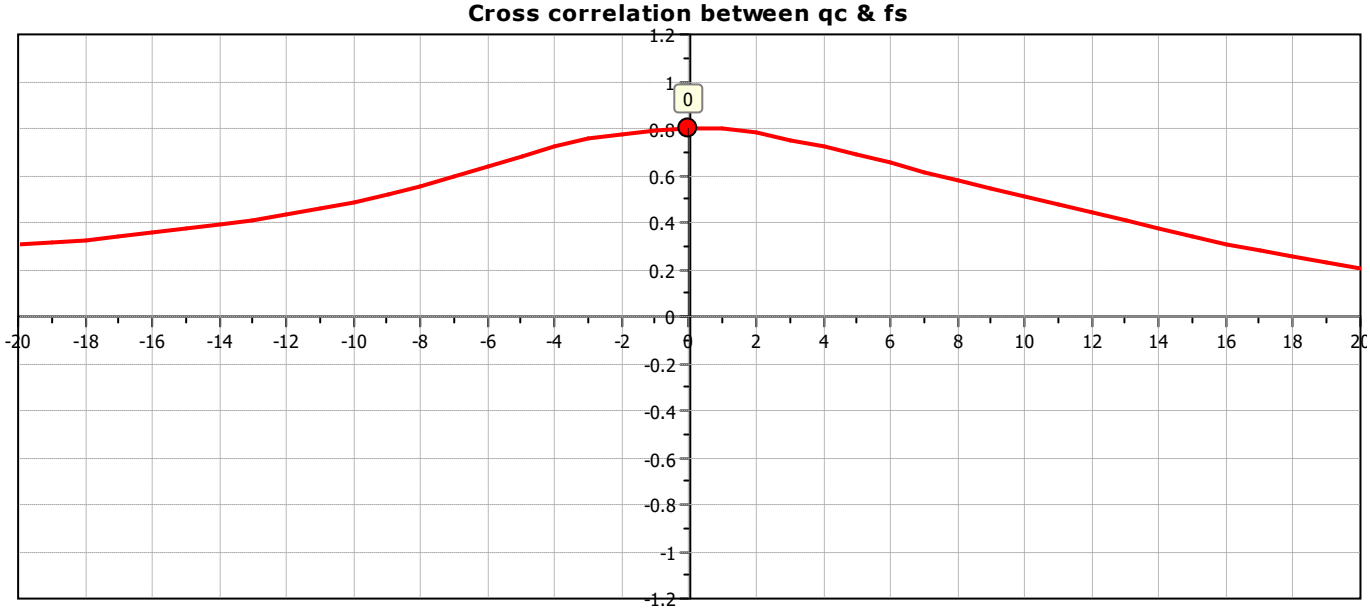

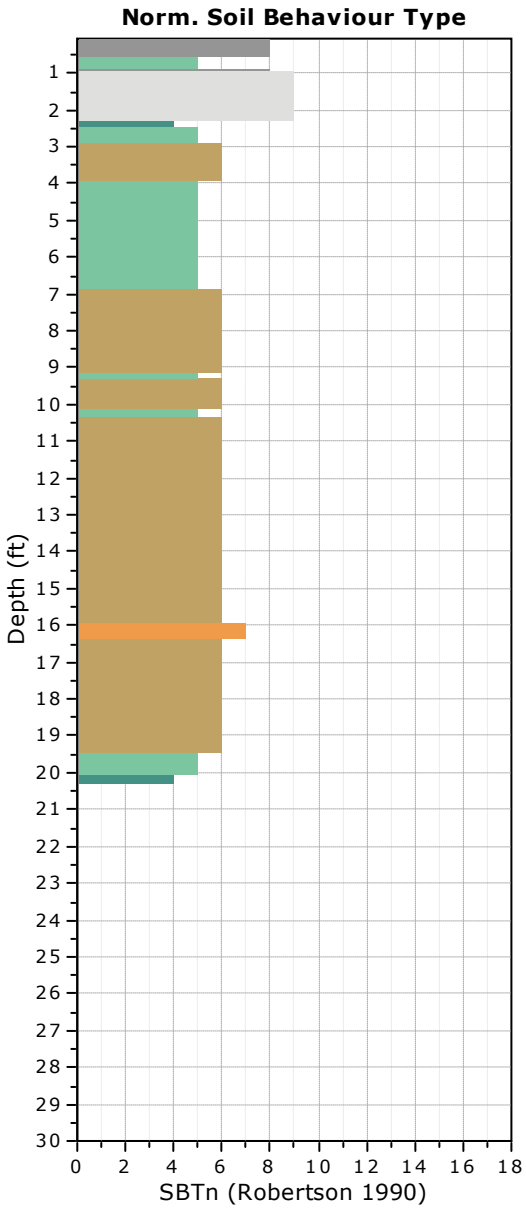

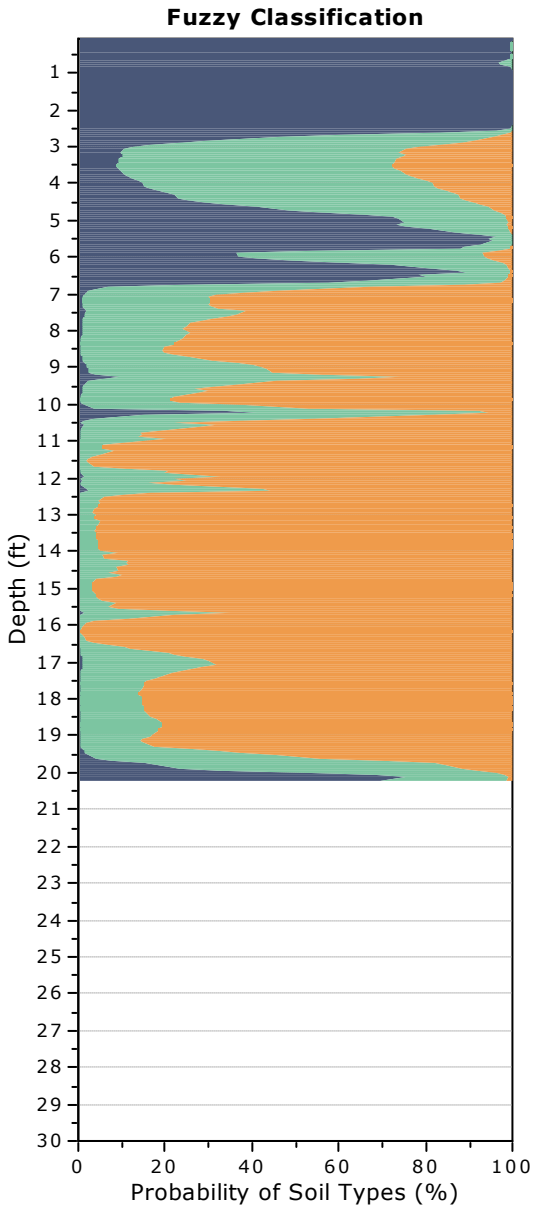

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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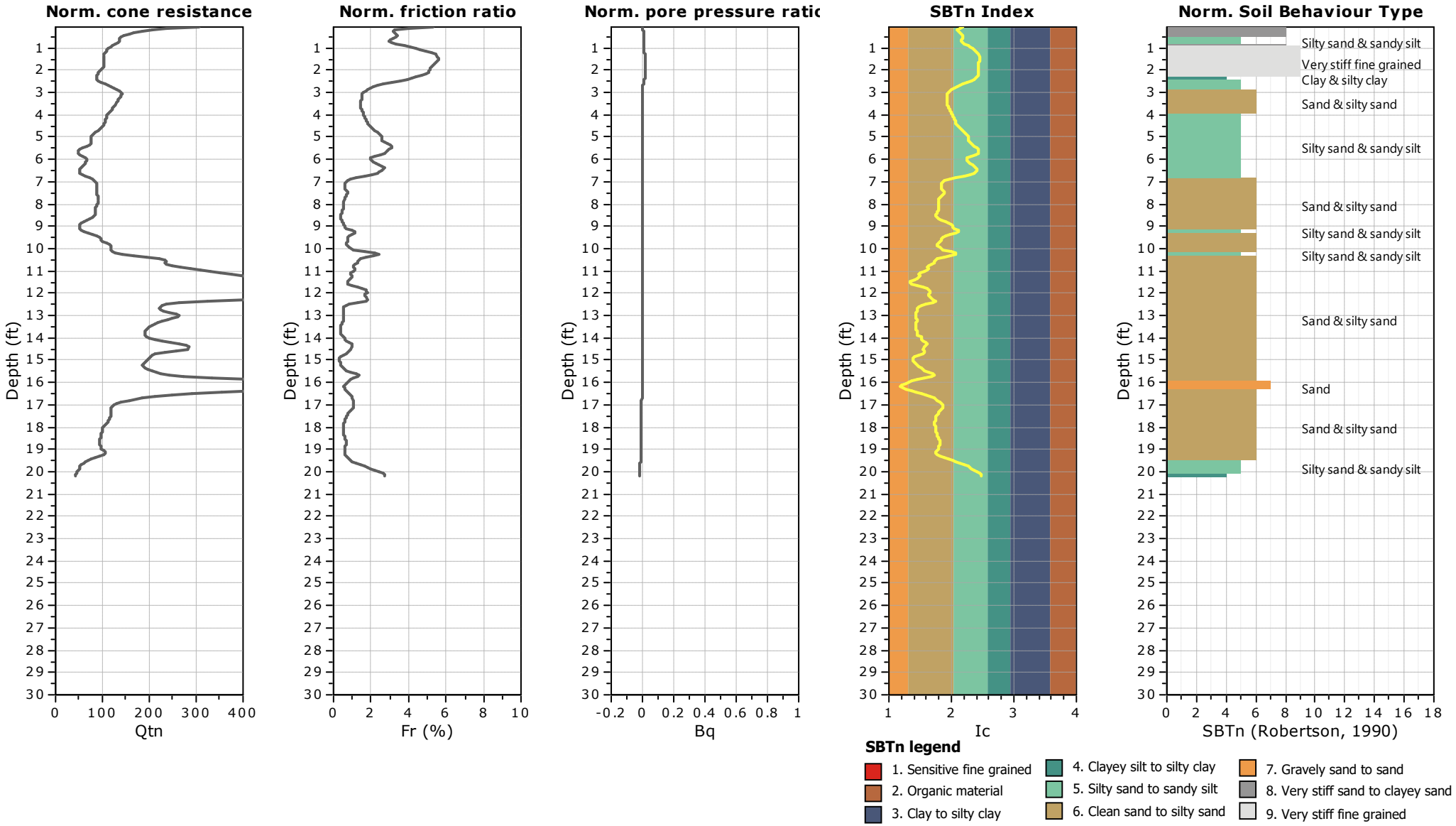
C-5
Total depth: 20.20 ft, Date: 5/13/2024
Surface Elevation: 64.40 ft
Coords: X:572009.87, Y:555914.62
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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C-5
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Surface Elevation: 64.40 ft
Coords: X:572009.87, Y:555914.62
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
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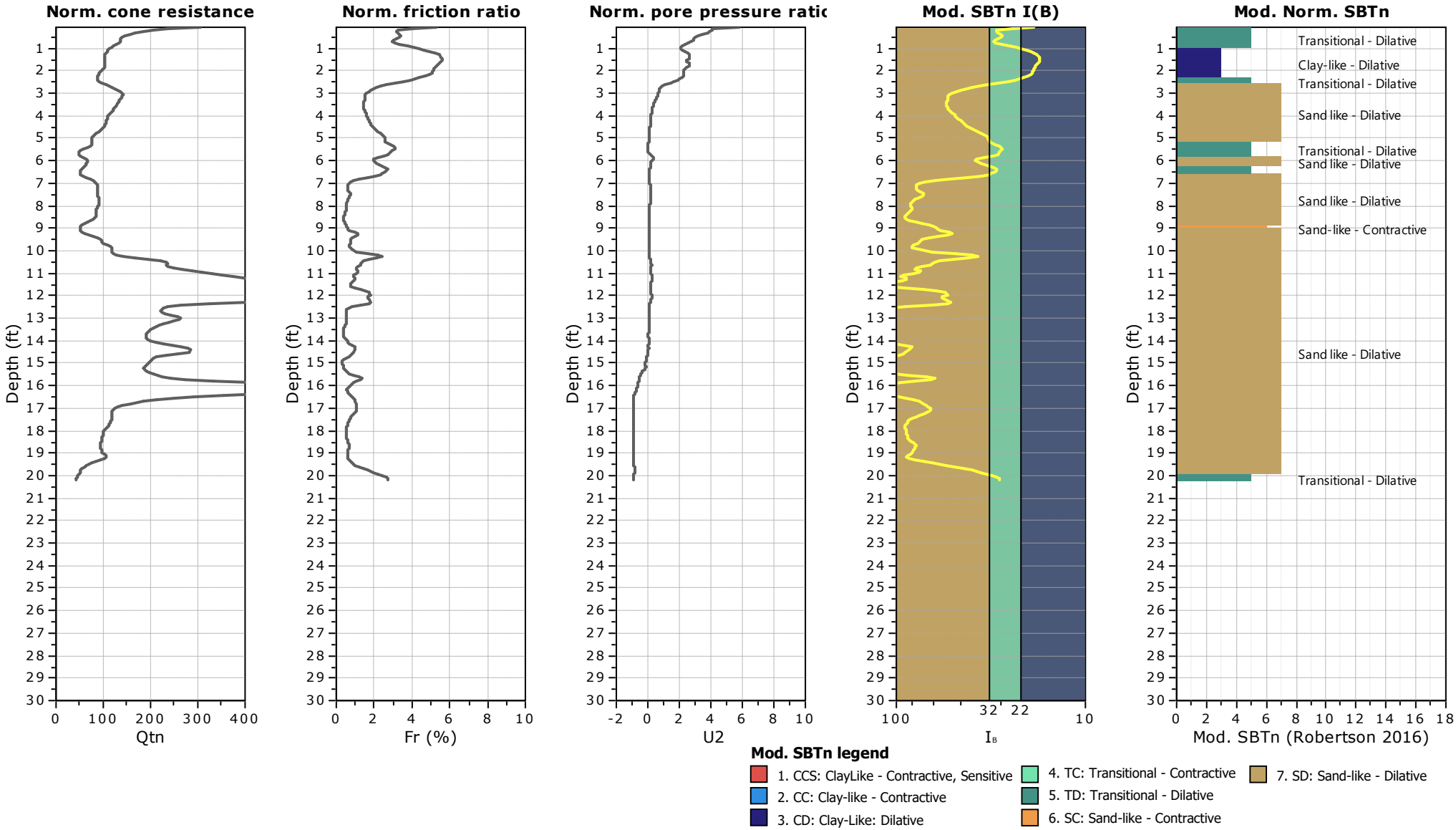

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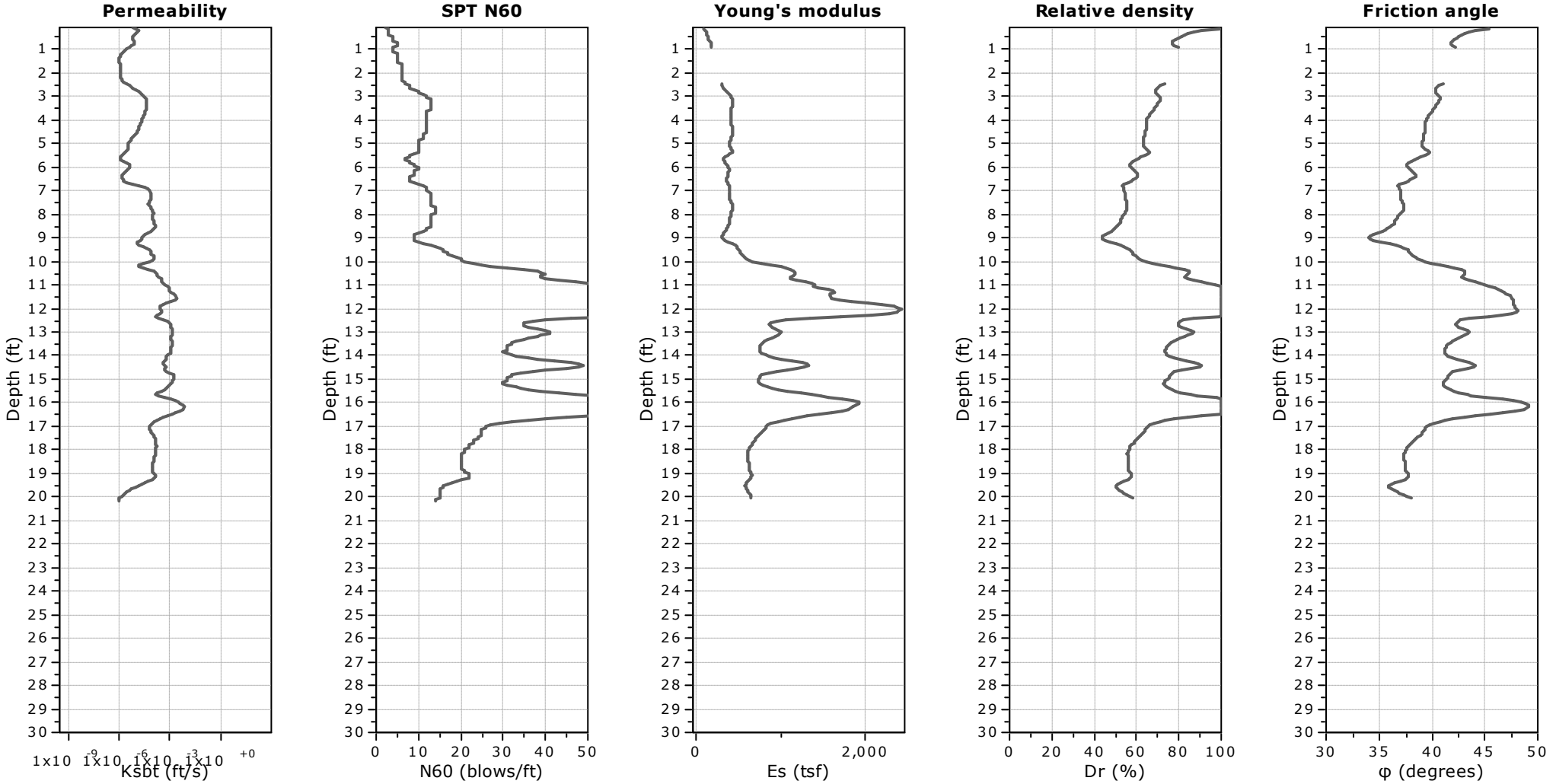
Location: **Middletown, Delaware**



Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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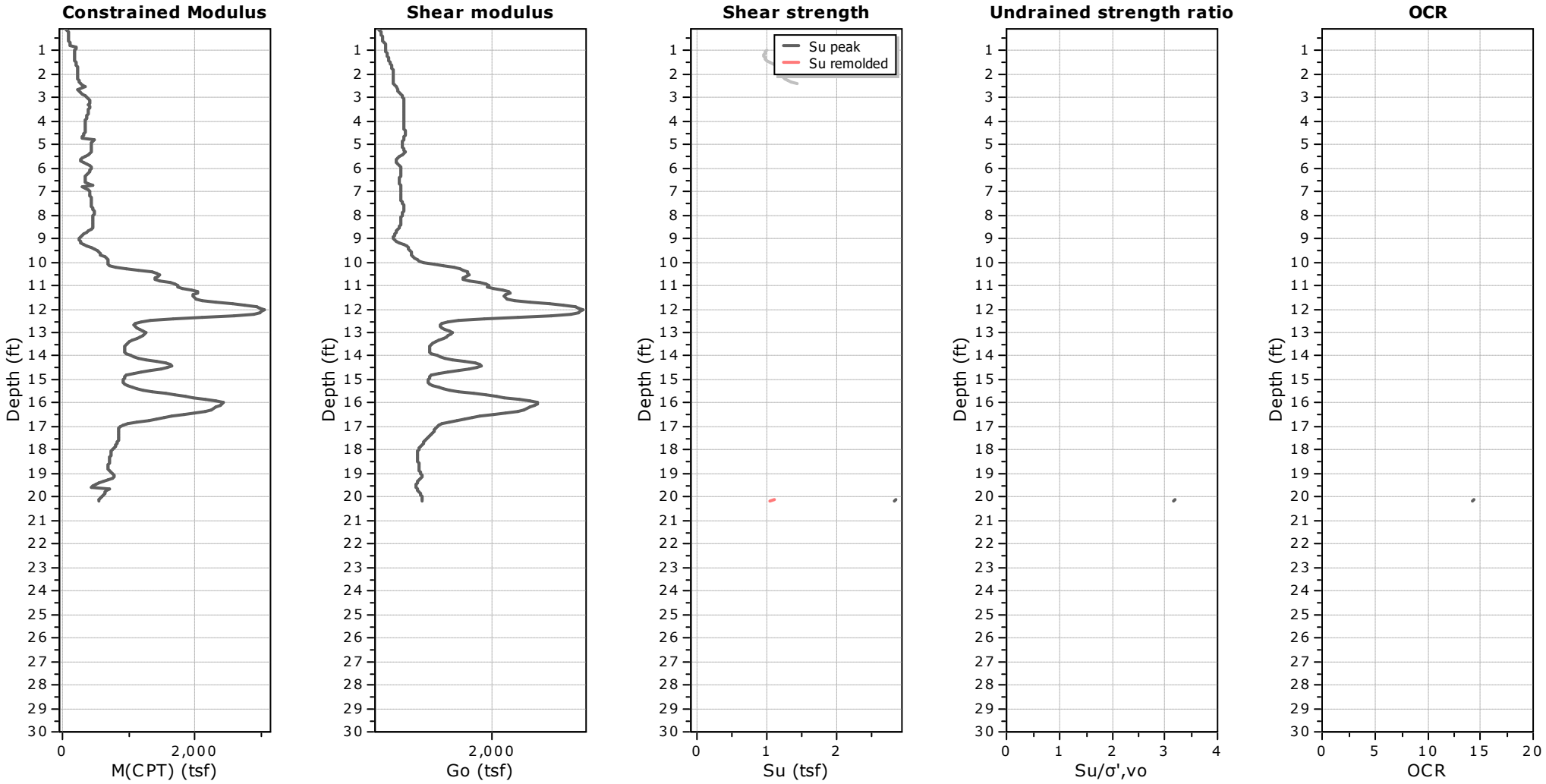
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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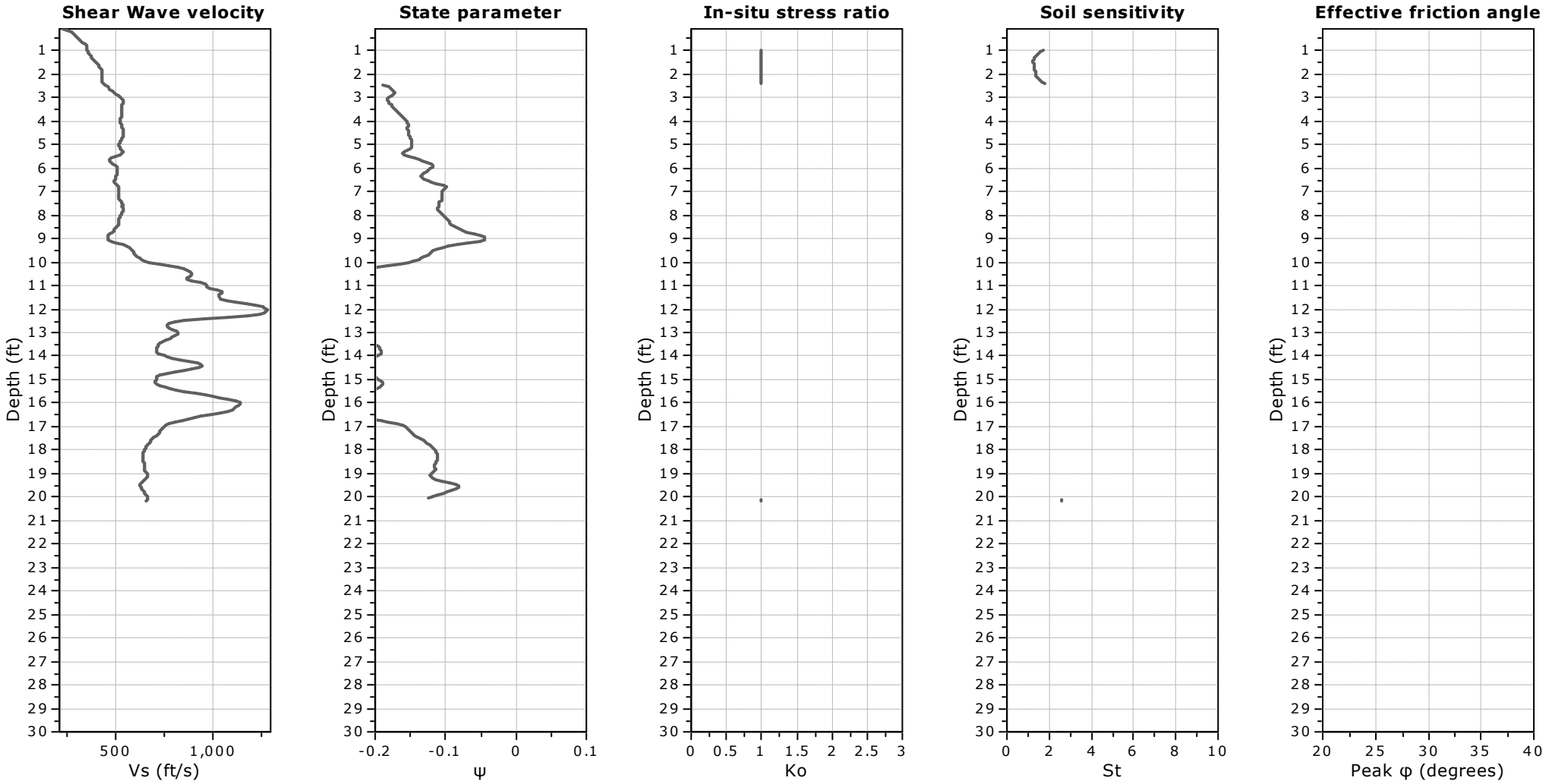
C-5
Total depth: 20.20 ft, Date: 5/13/2024
Surface Elevation: 64.40 ft
Coords: X:572009.87, Y:555914.62
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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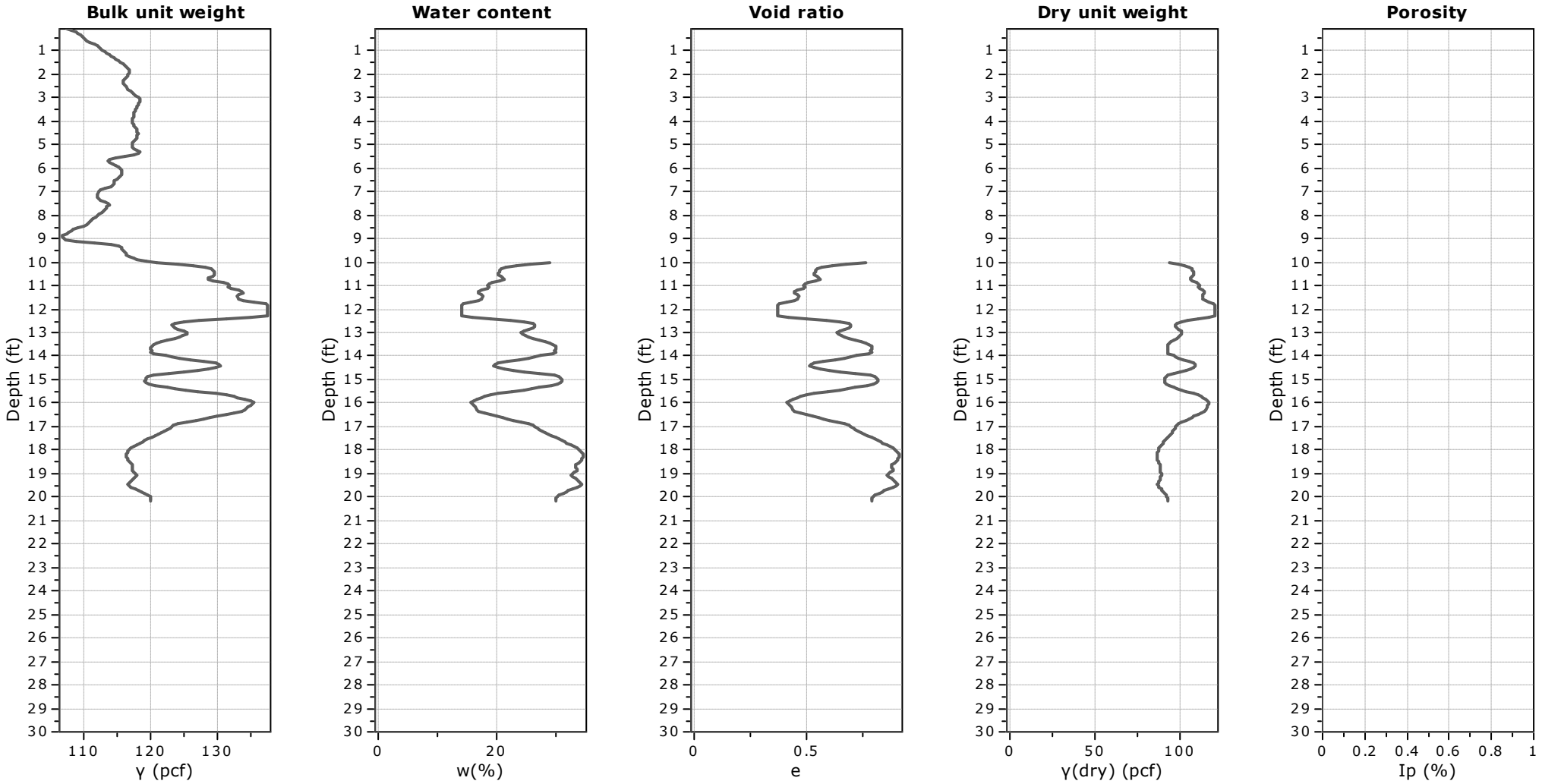
Location: **Middletown, Delaware**



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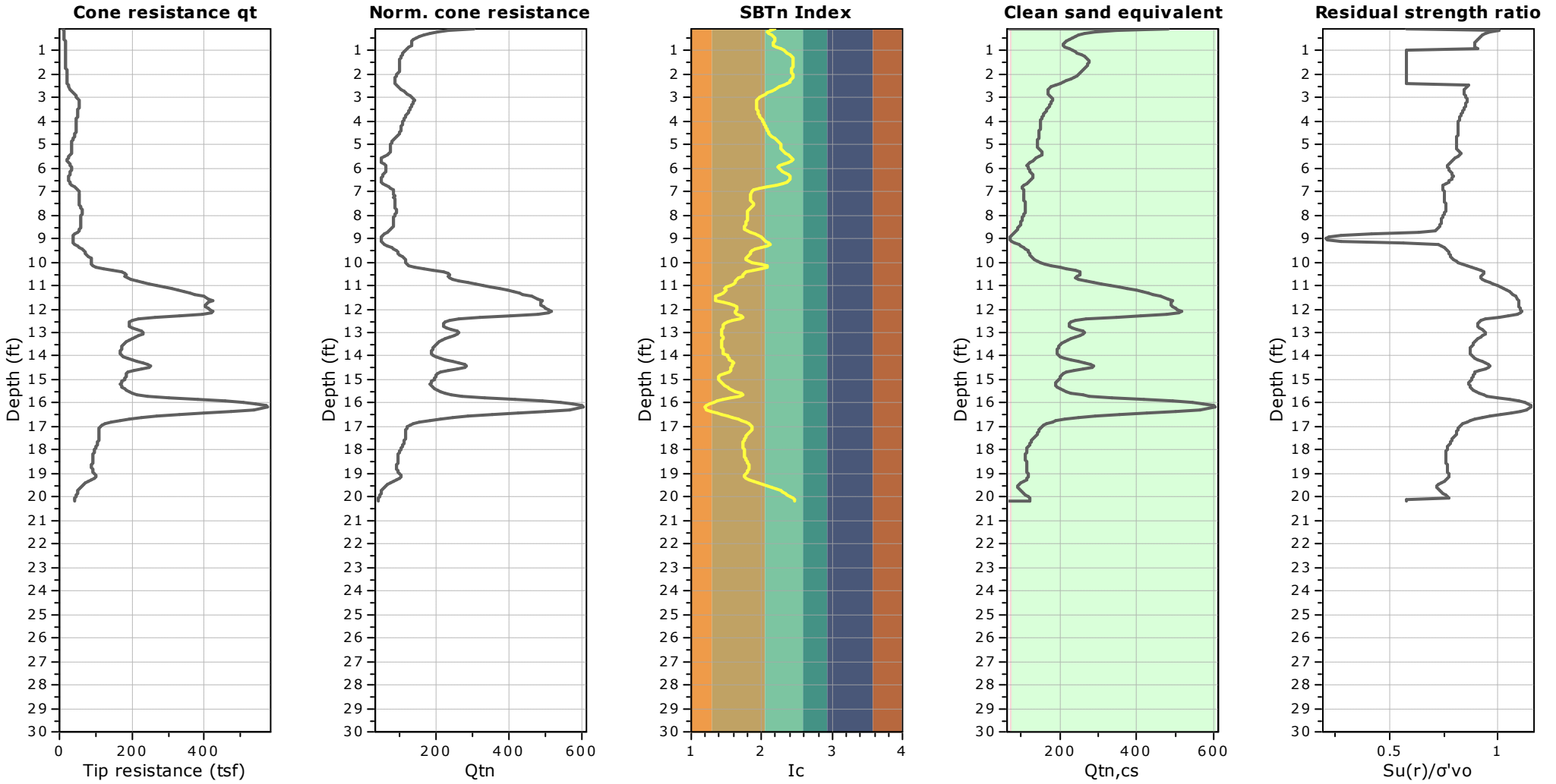

Stable Ground In-Situ, LLC
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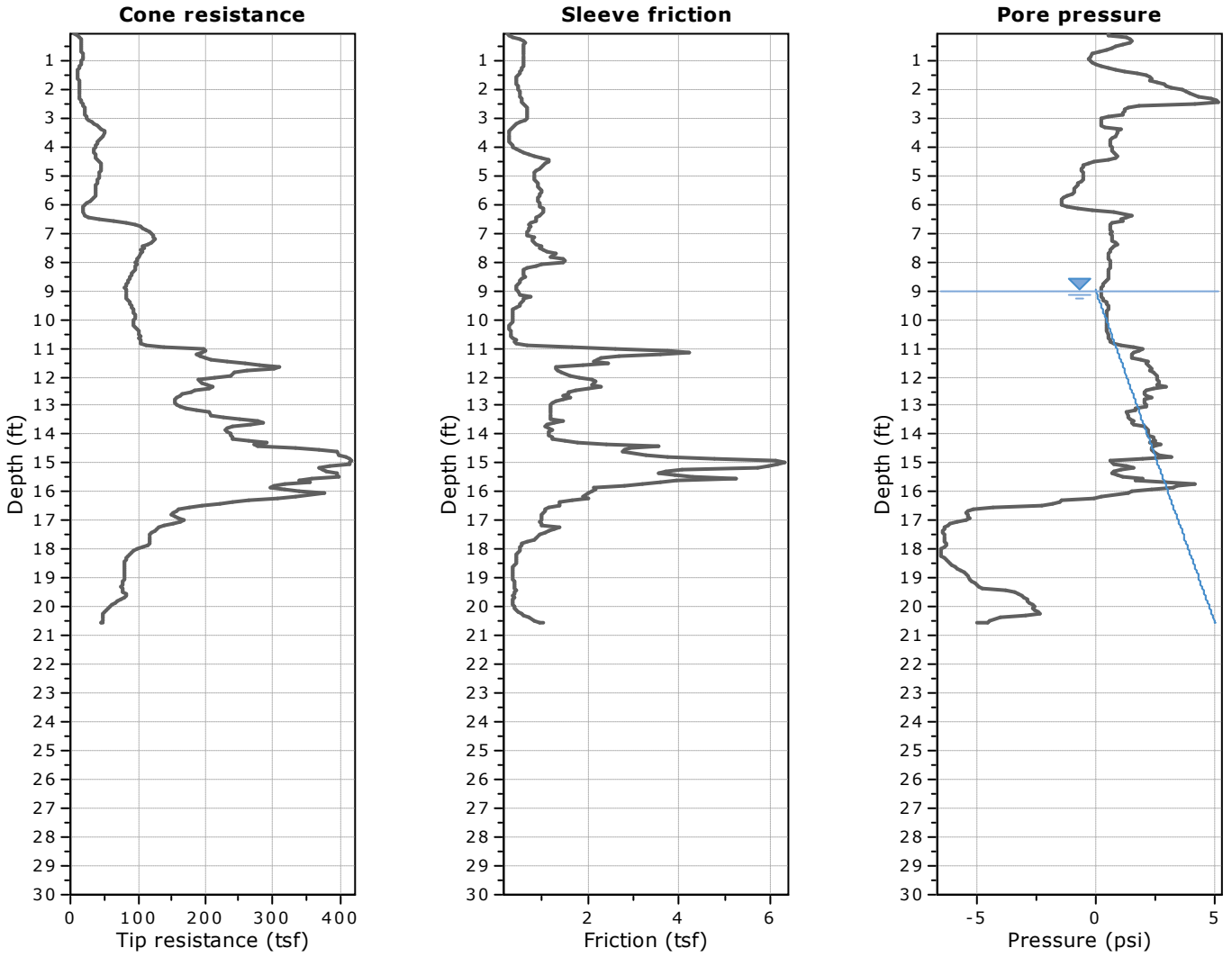
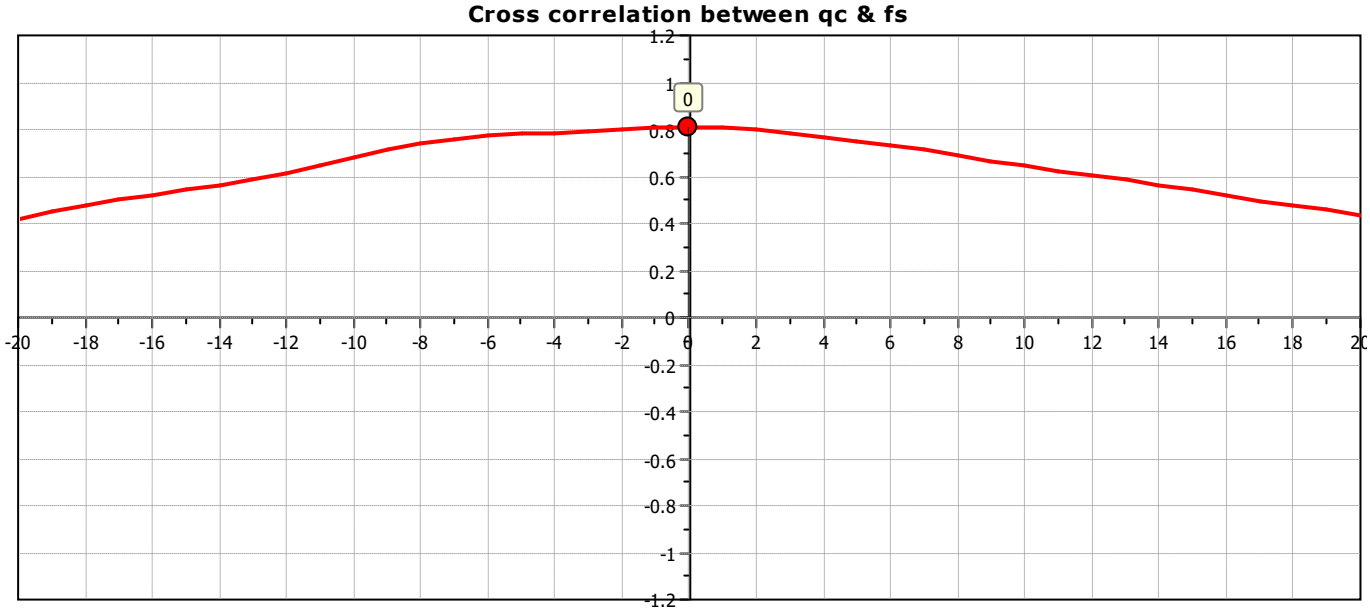
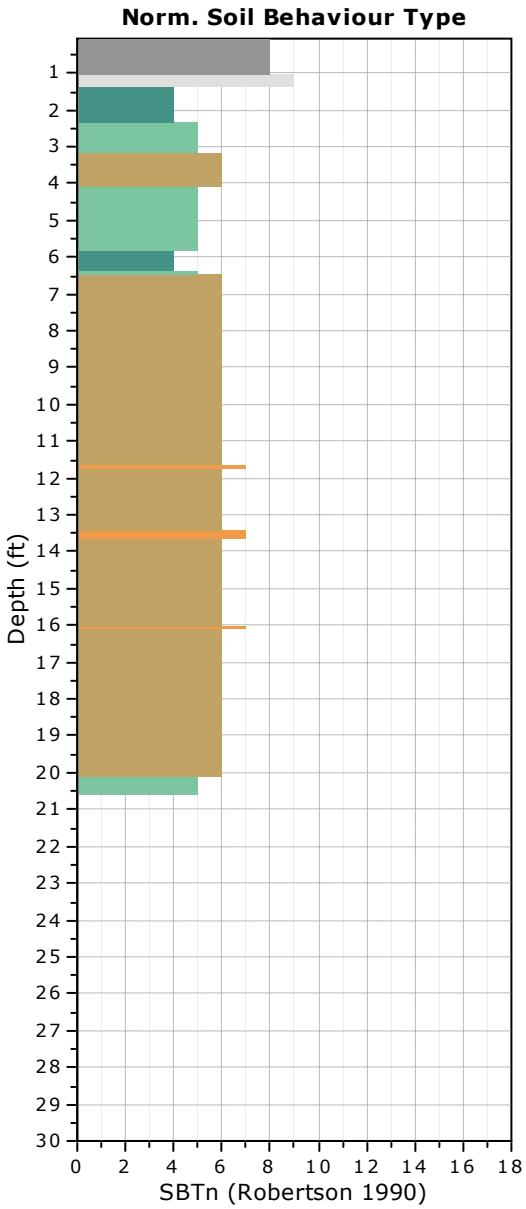
C-6
Total depth: 20.57 ft, Date: 5/13/2024
Surface Elevation: 64.54 ft
Coords: X:572079.45, Y:555898.33
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

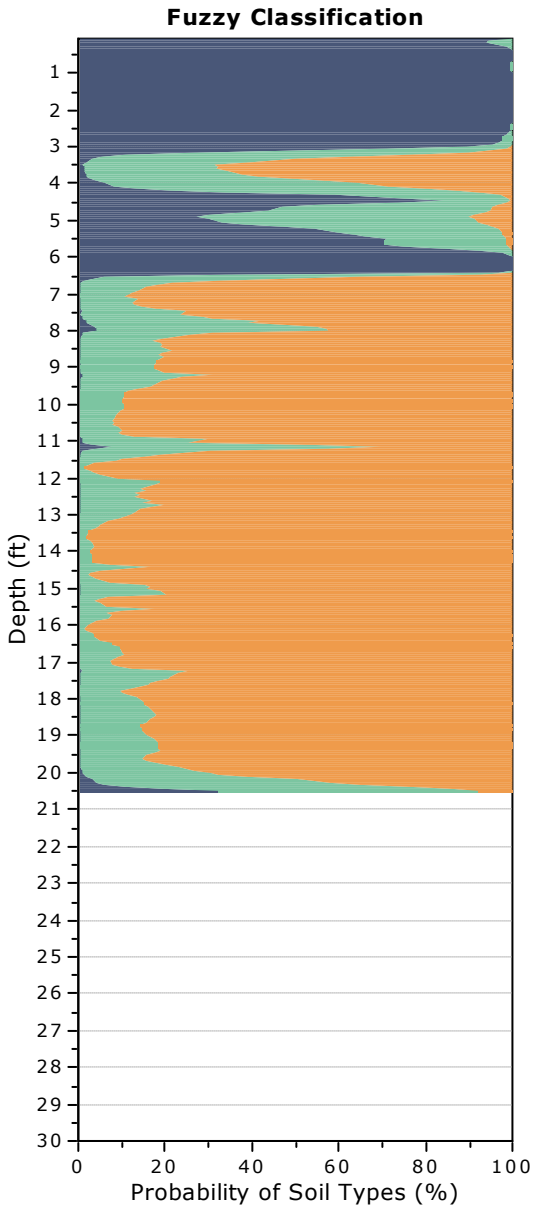
Project: ASD Summit Campus
Location: Middletown, Delaware



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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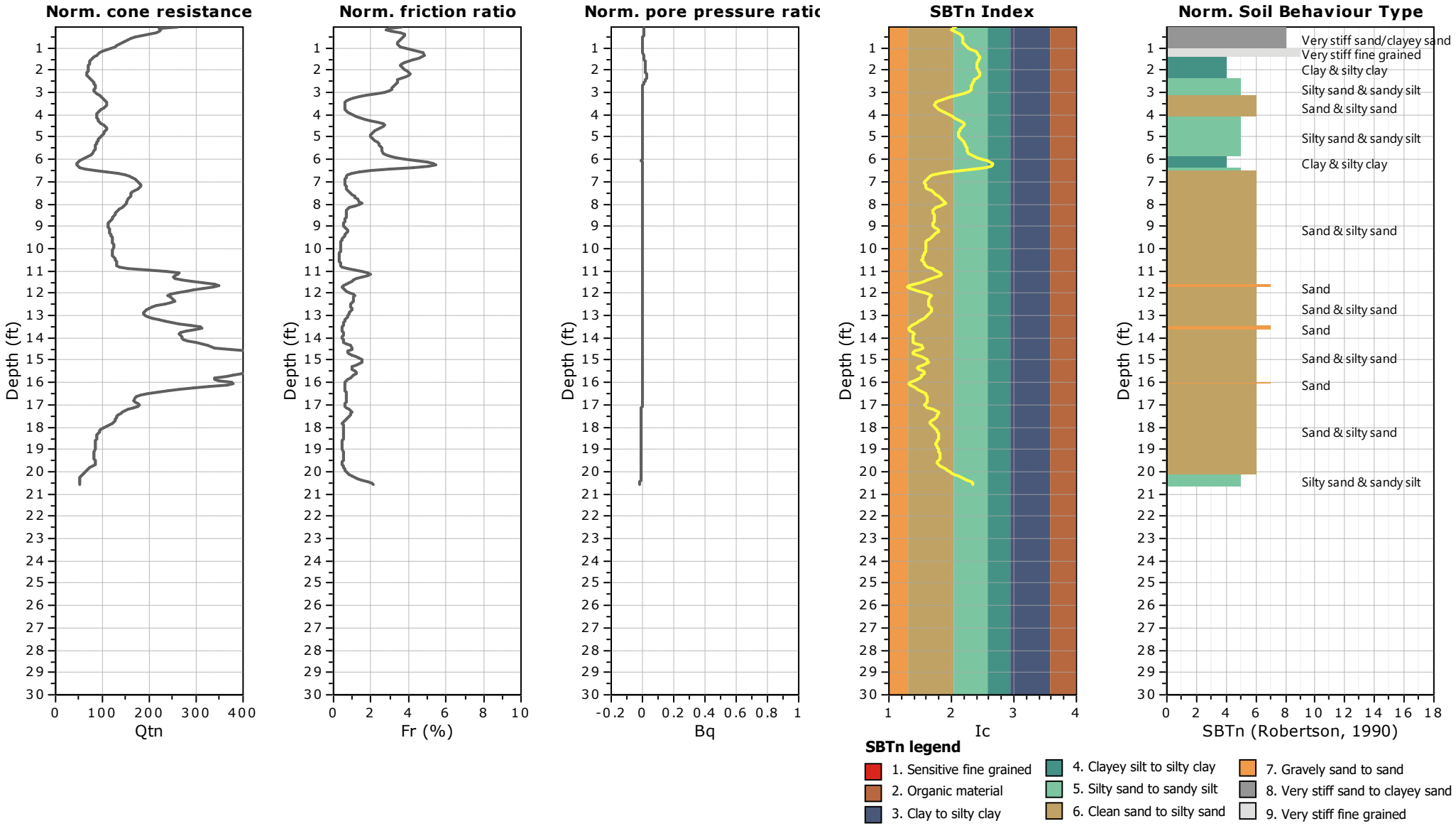
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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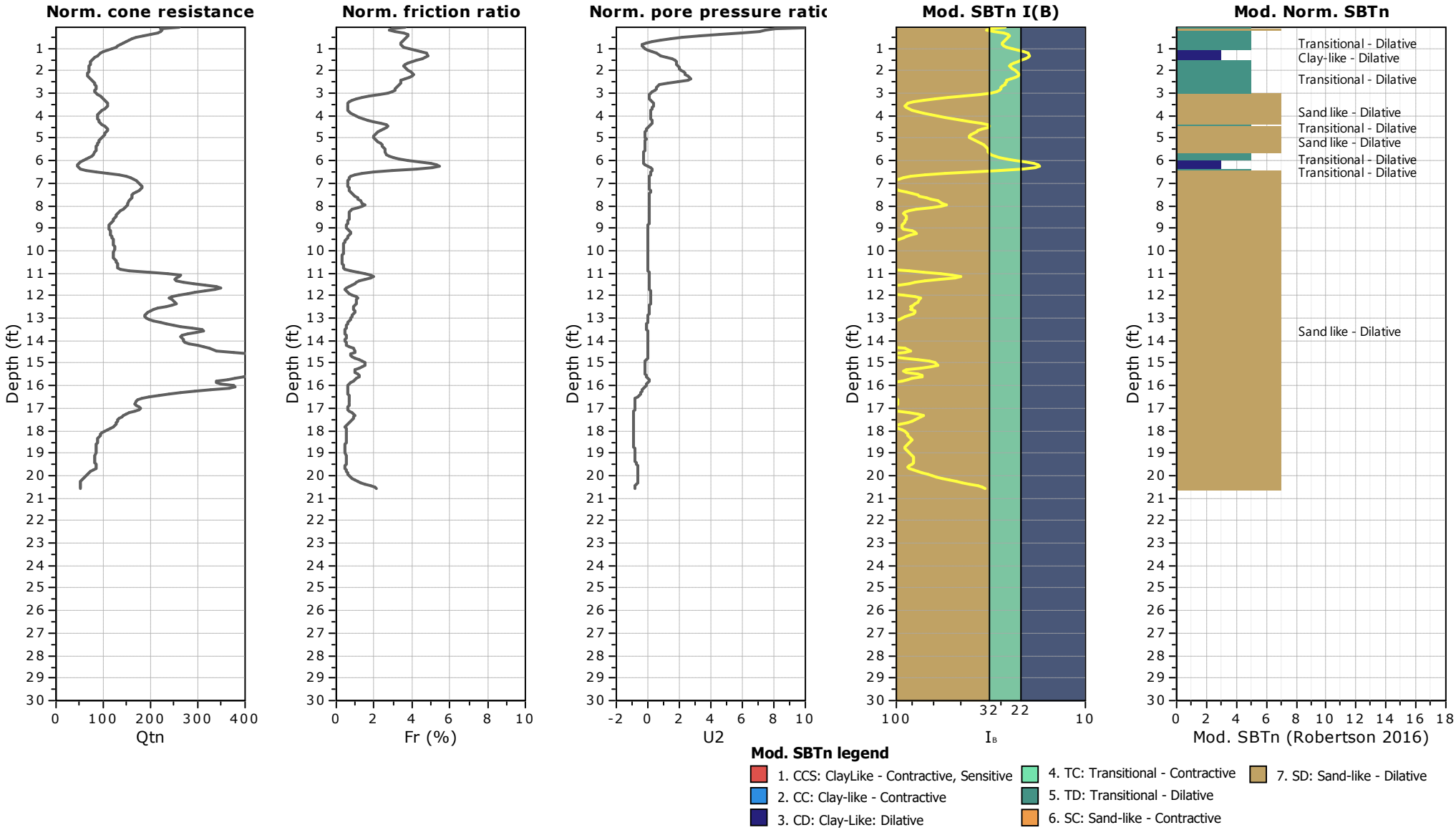
Location: **Middletown, Delaware**



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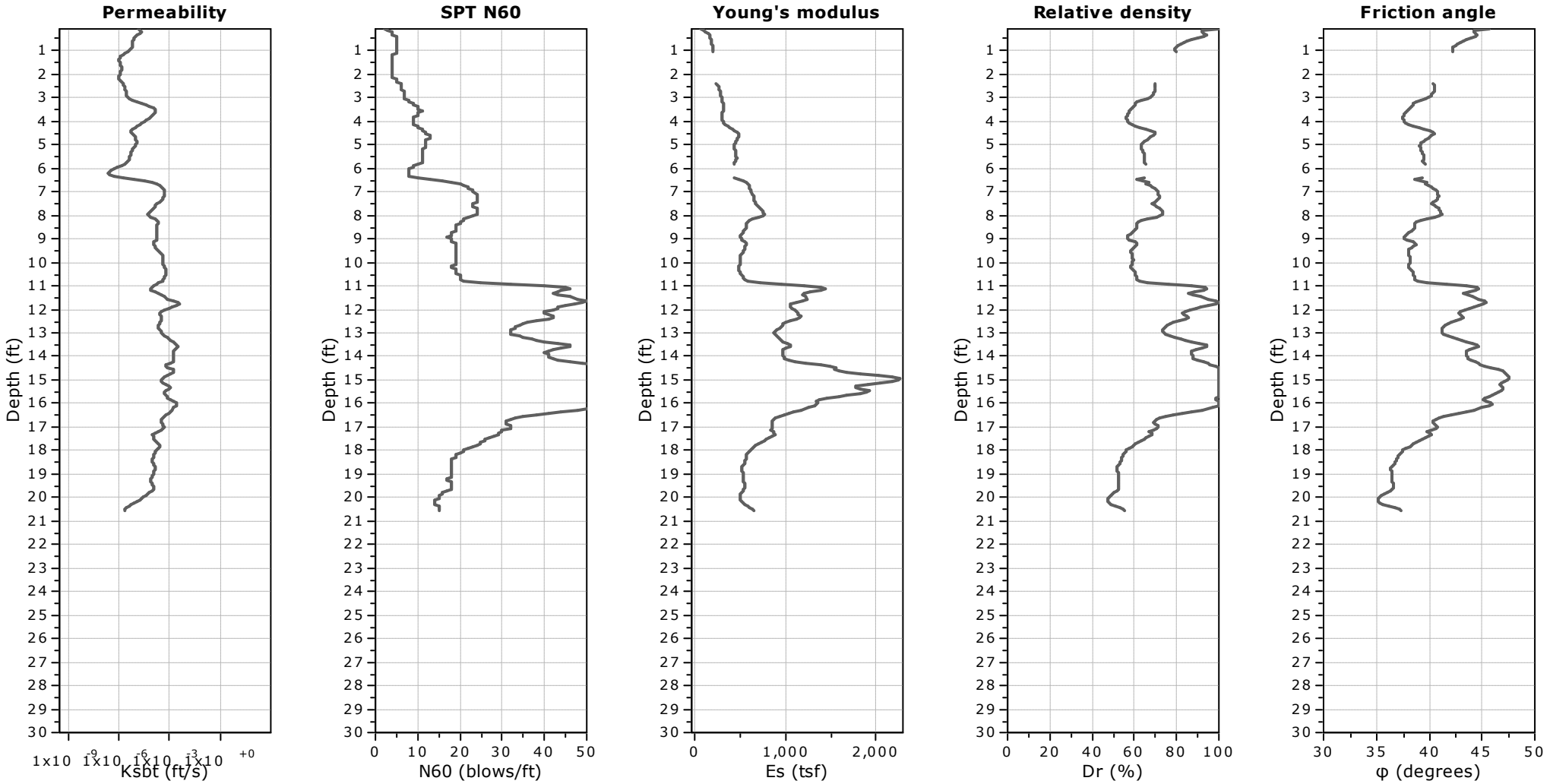

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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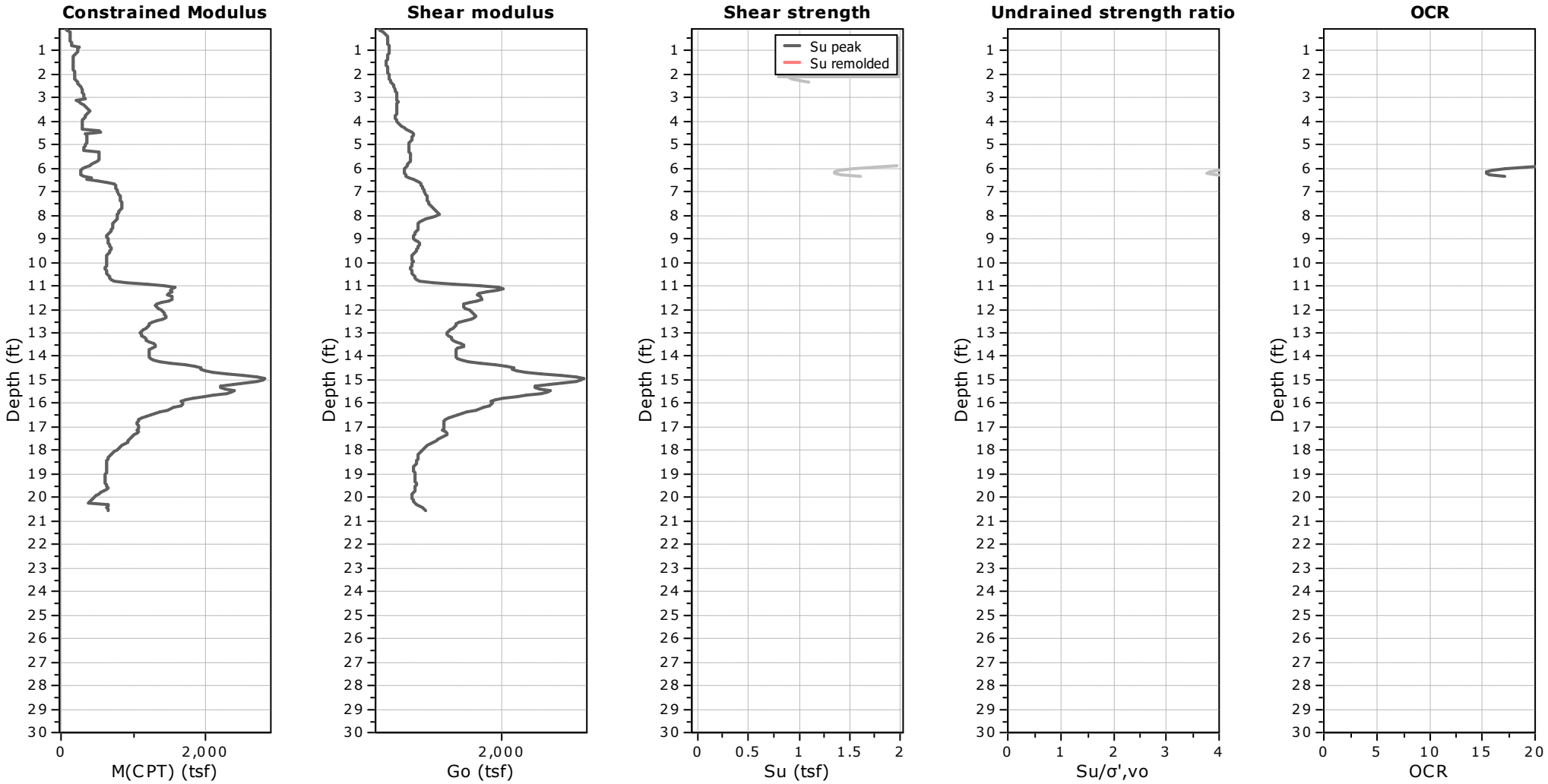

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
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Flat Dilatometer Test data

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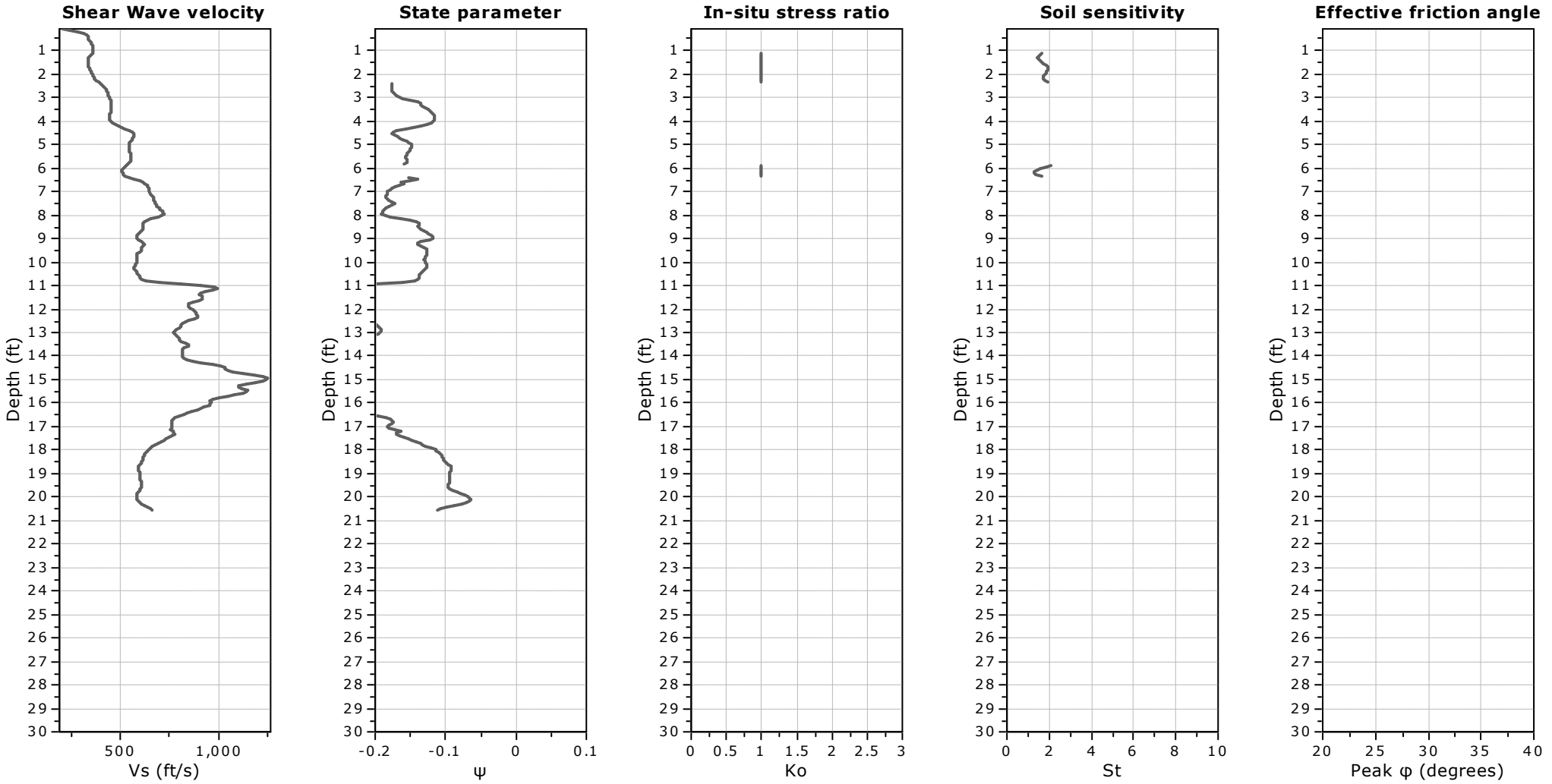

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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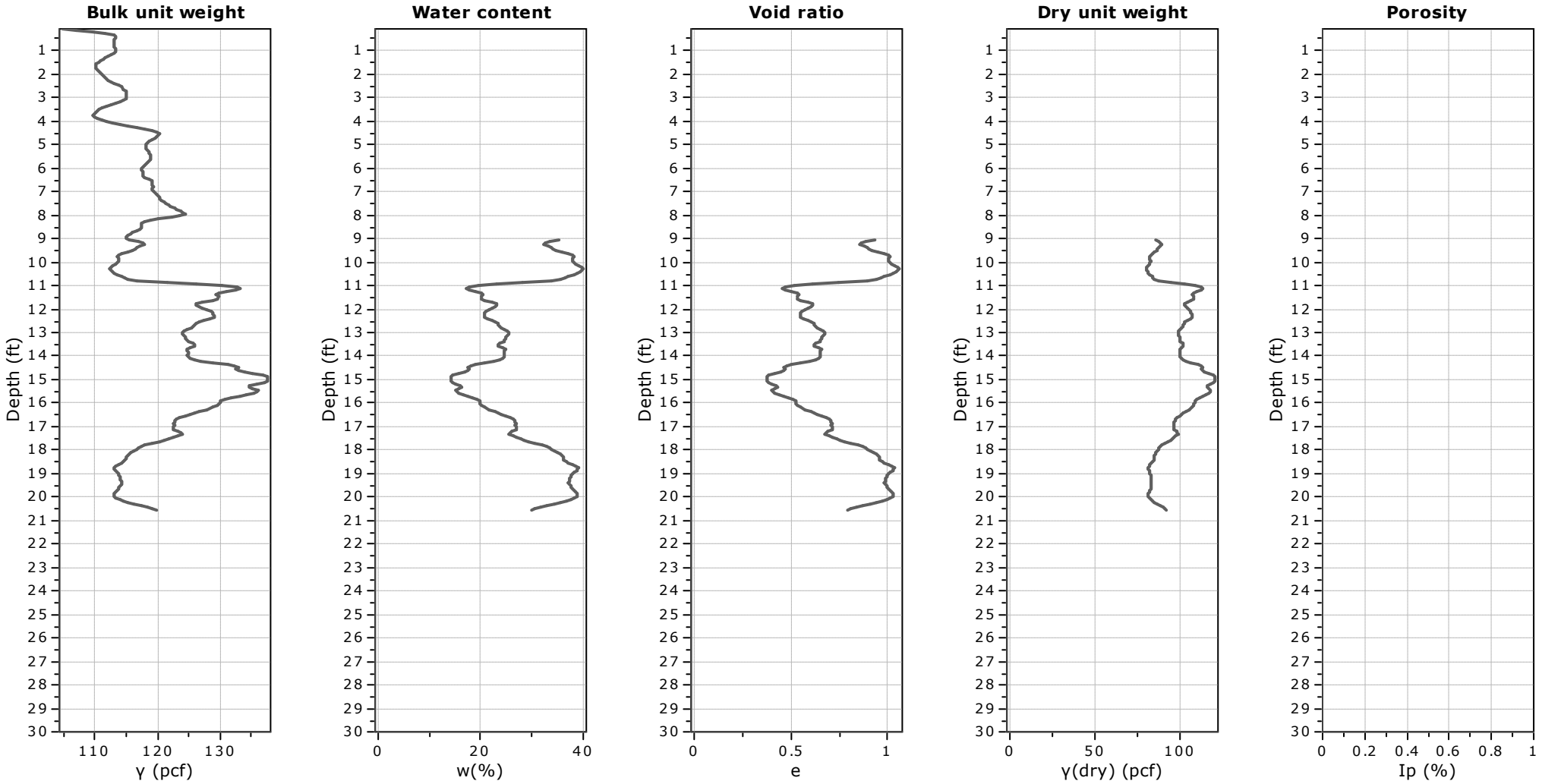

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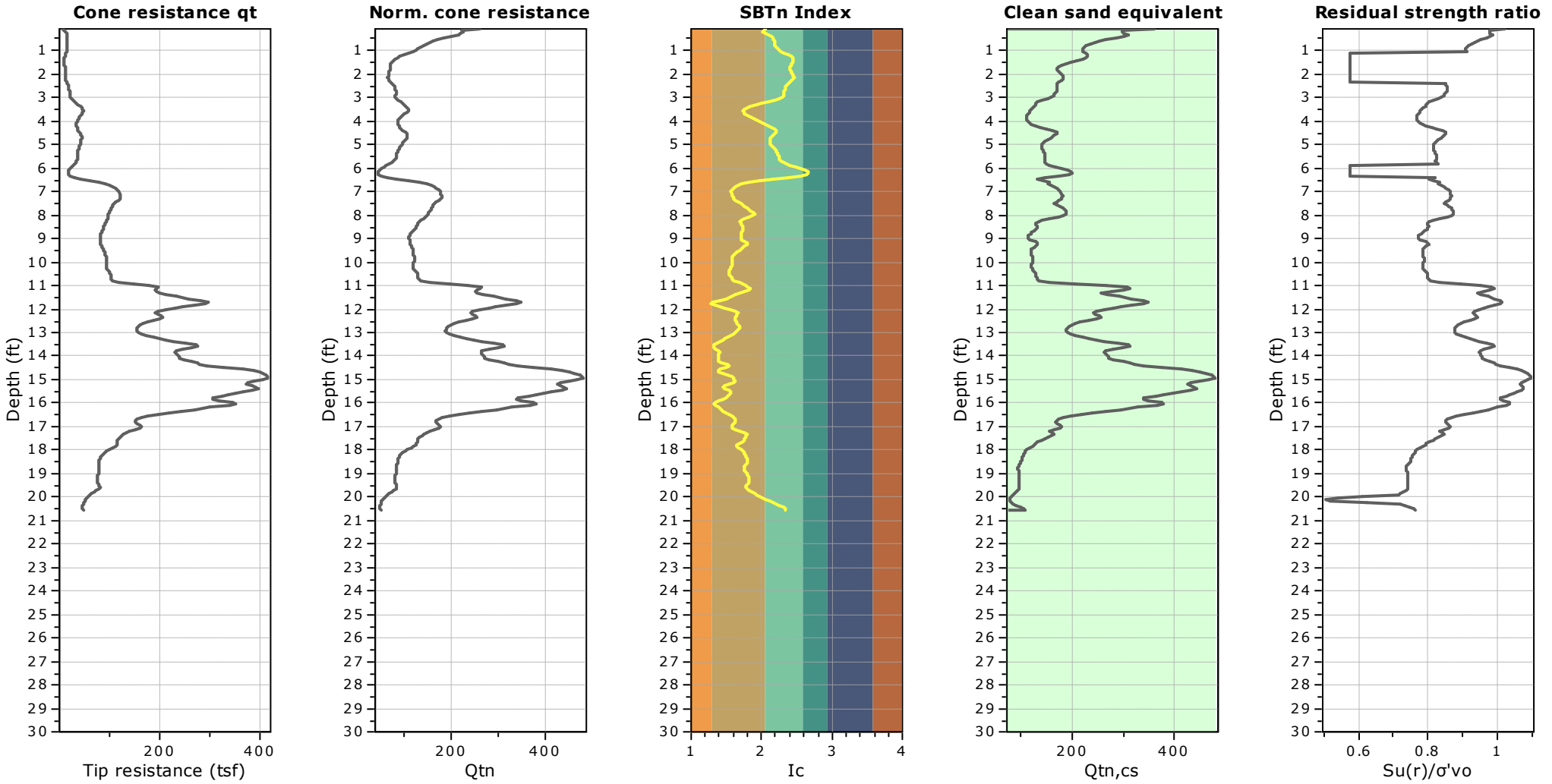

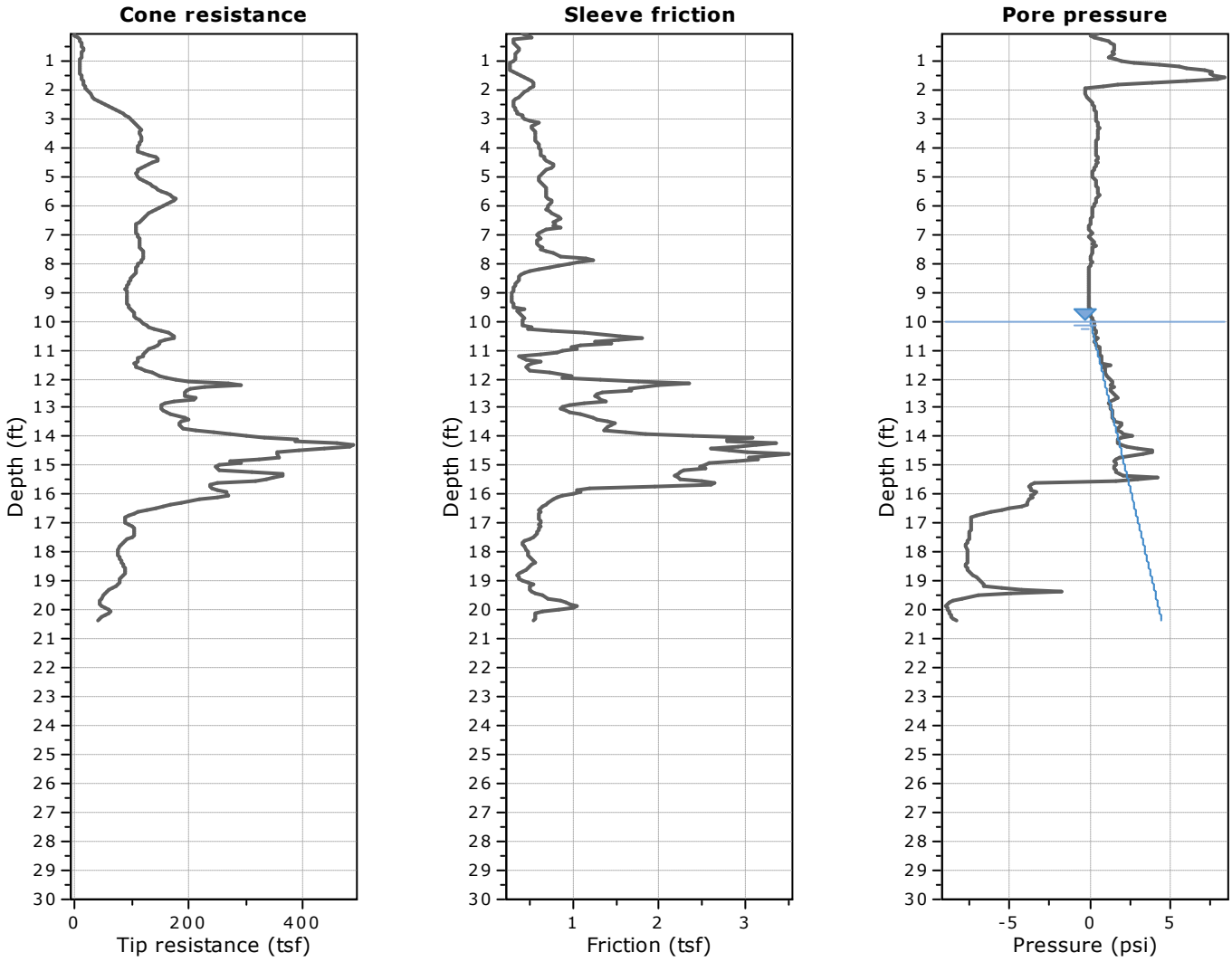

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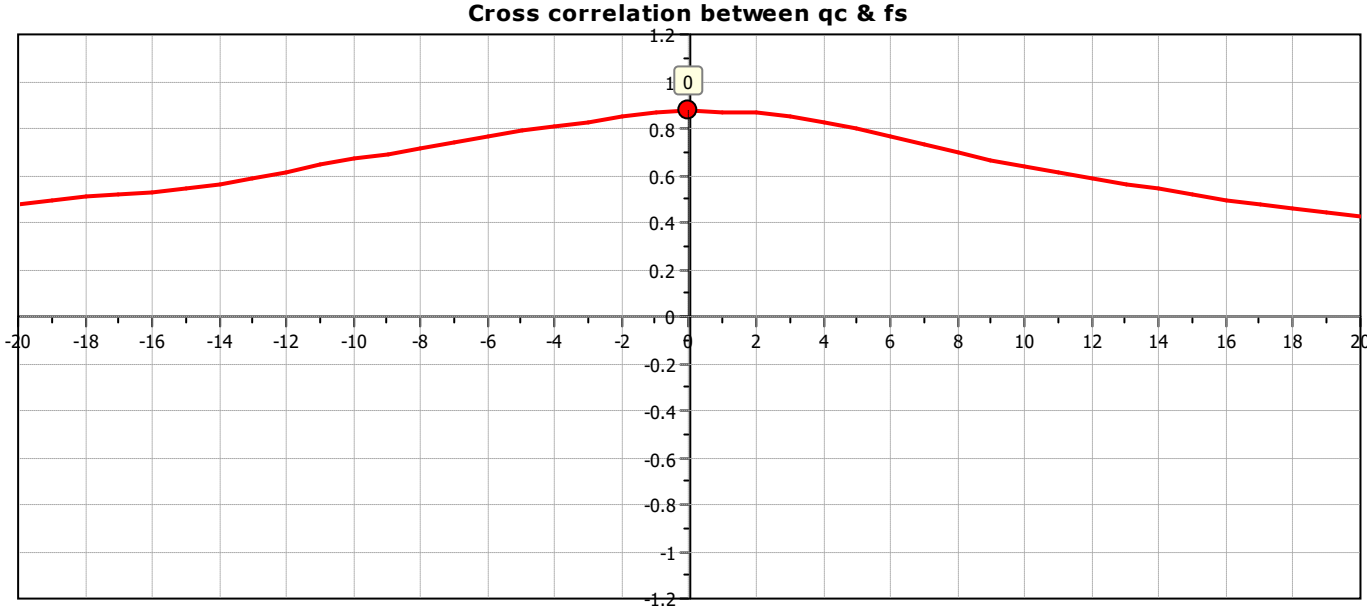

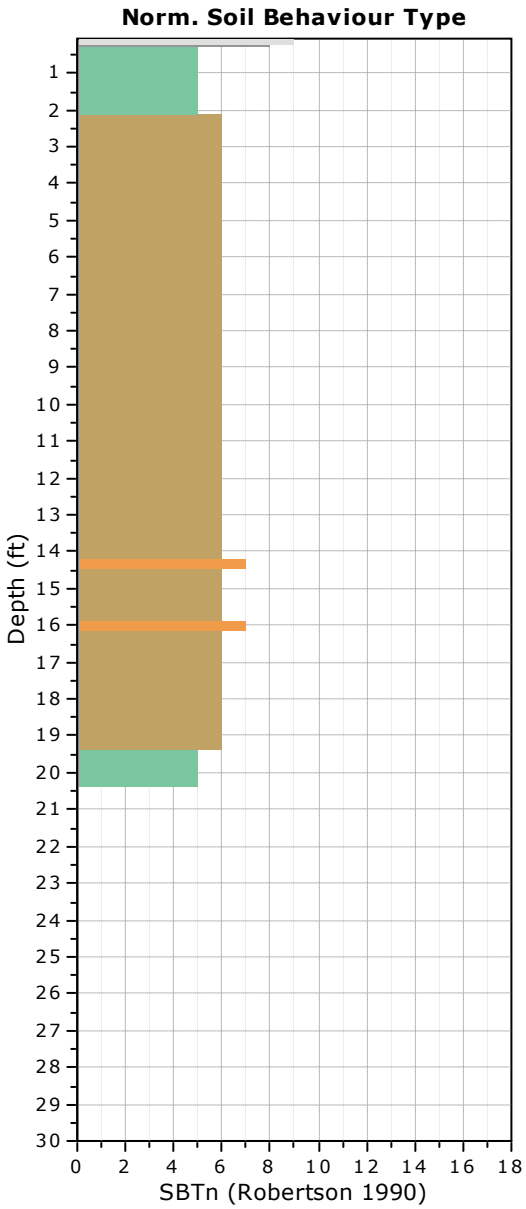

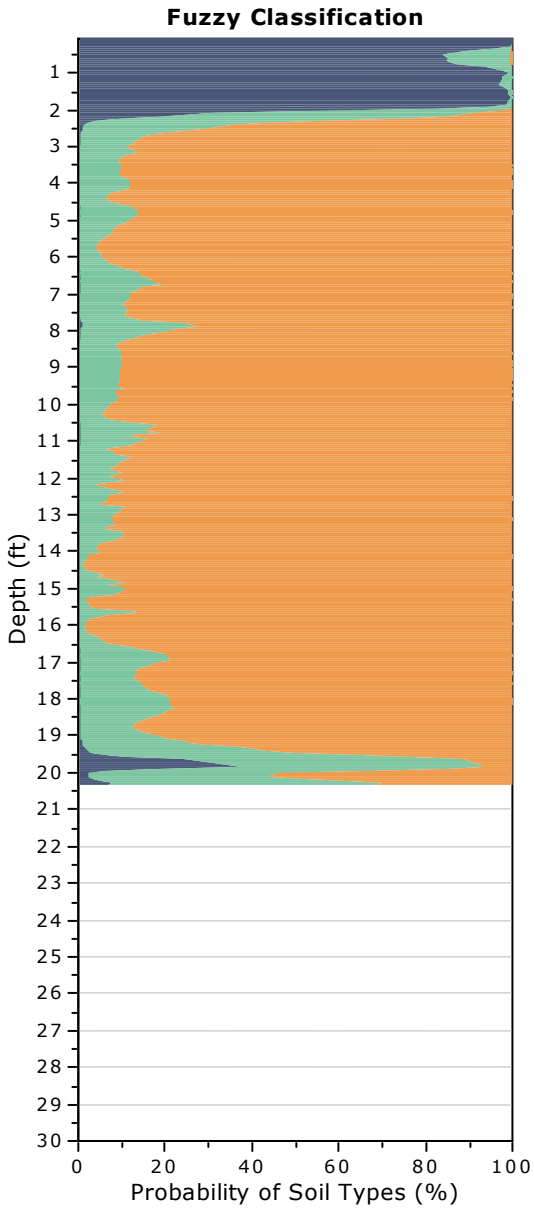

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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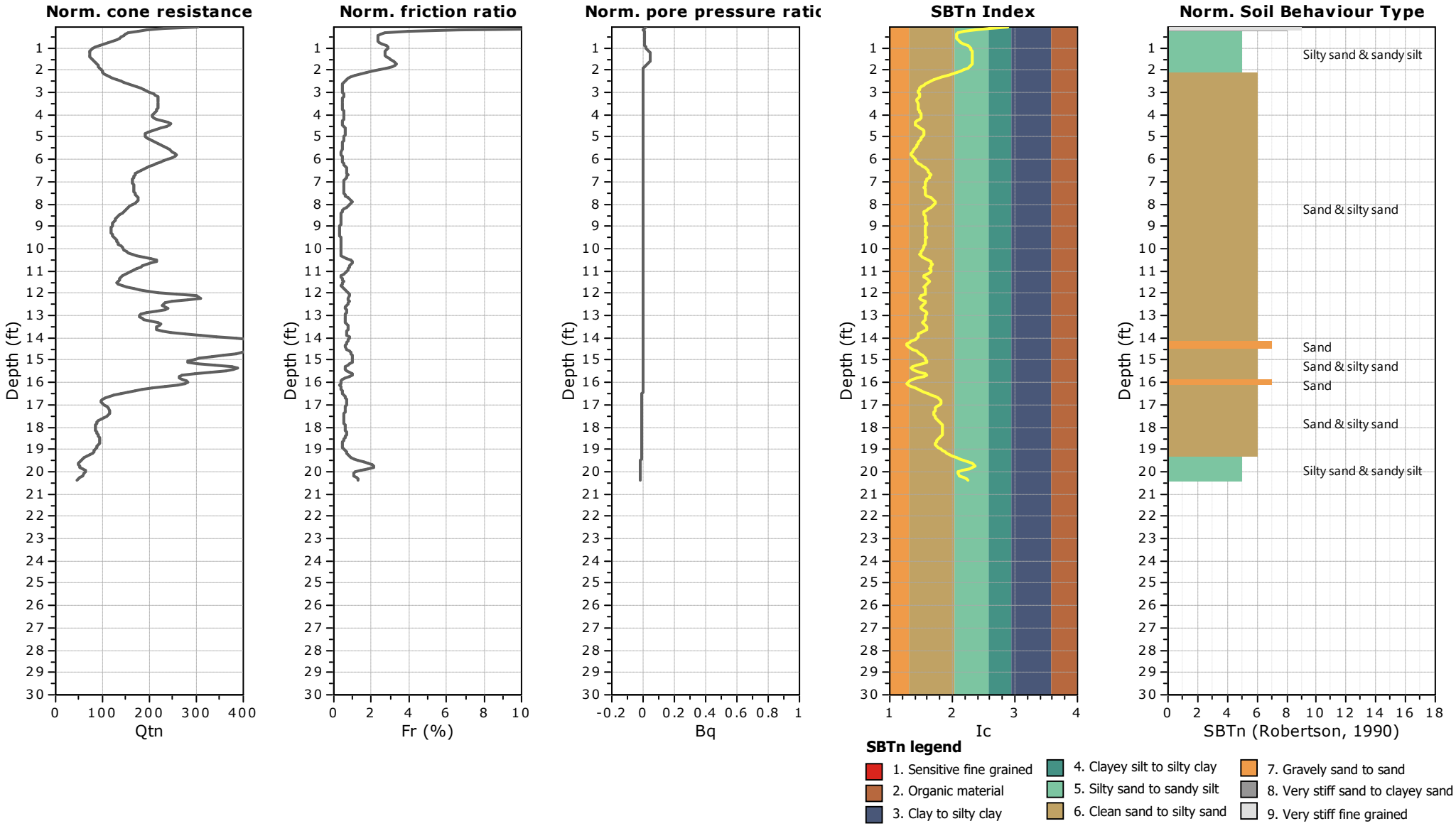
C-7
Total depth: 20.36 ft, Date: 5/13/2024
Surface Elevation: 64.37 ft
Coords: X:572119.23, Y:555936.17
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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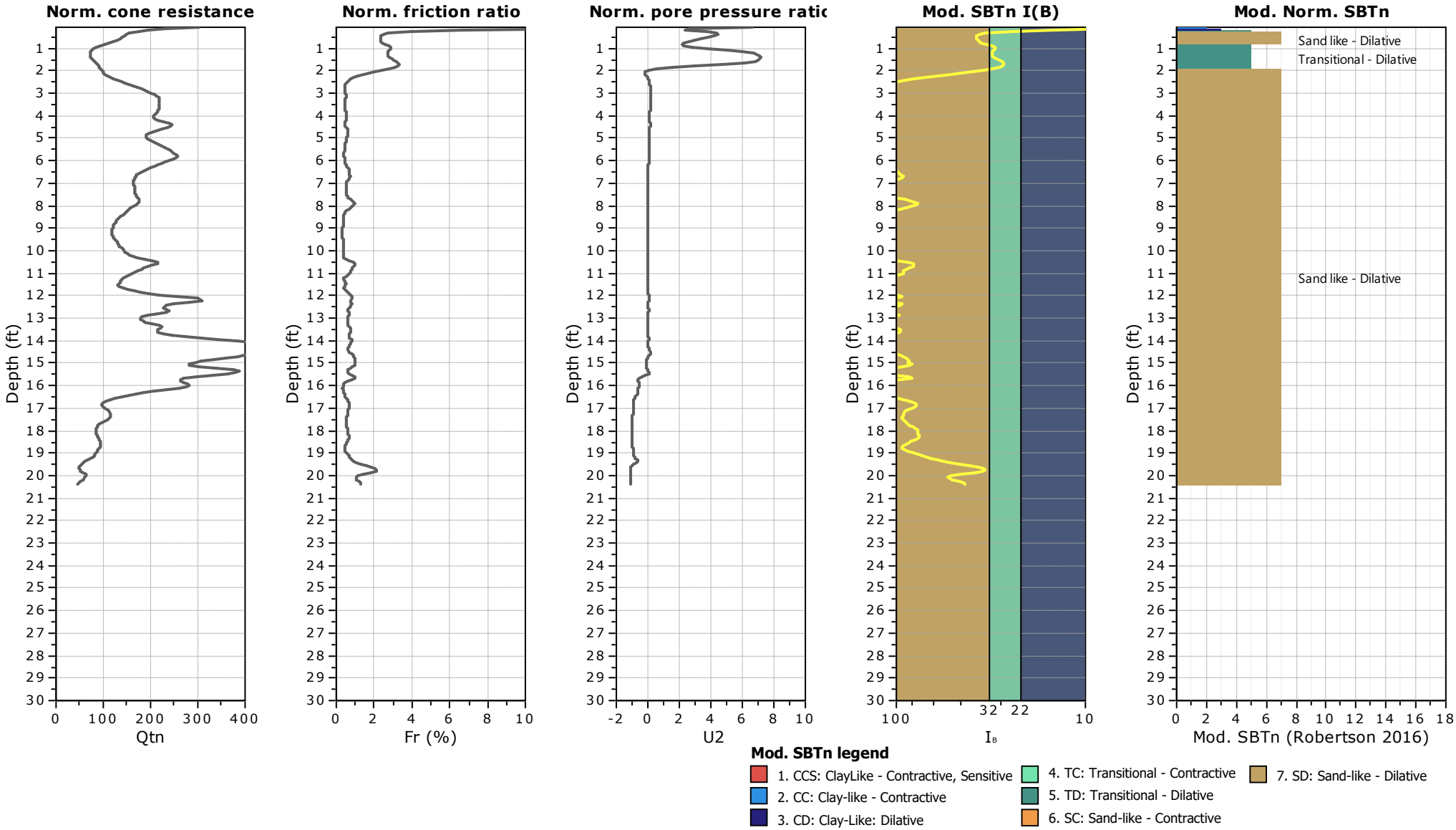

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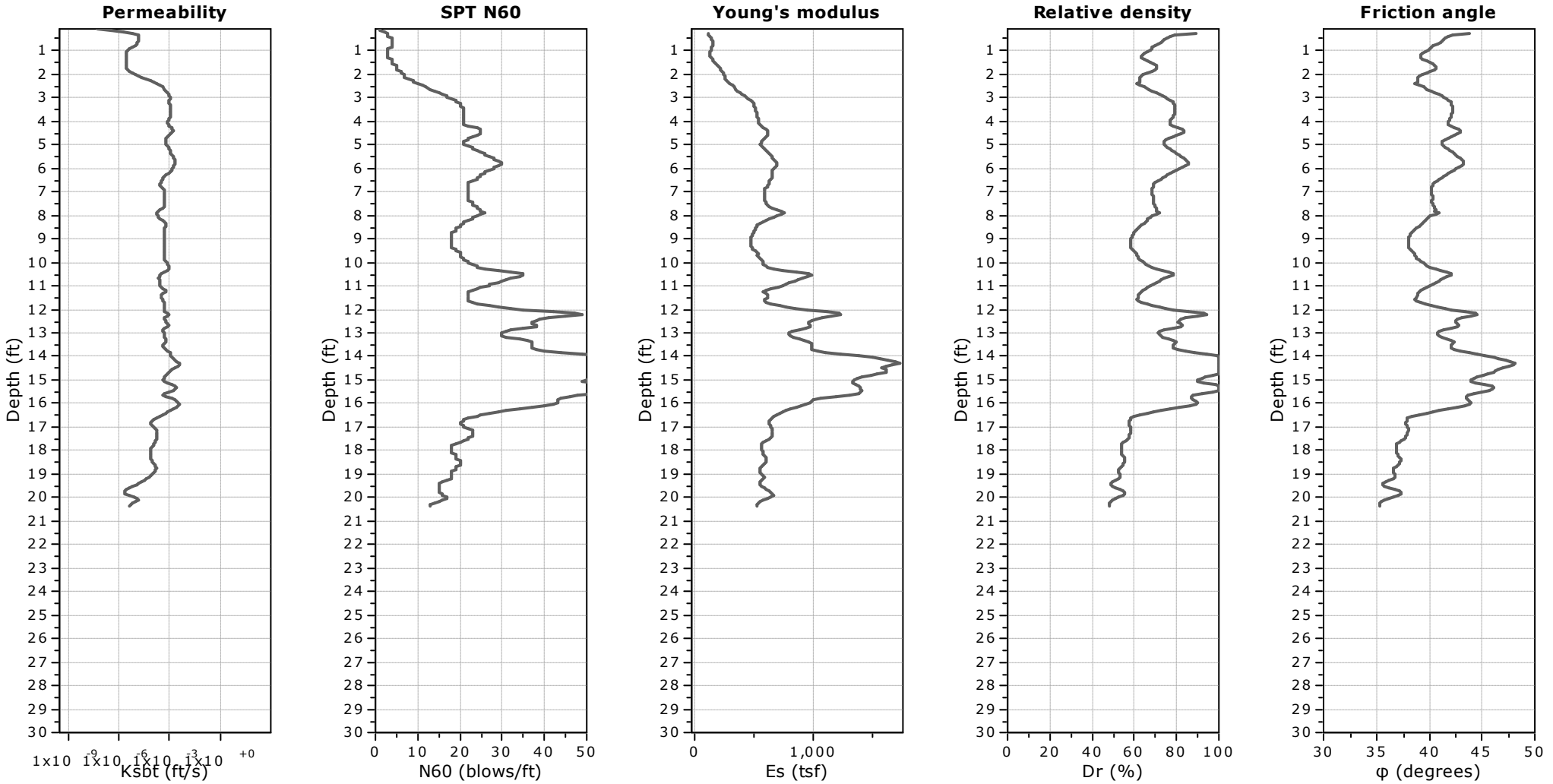

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
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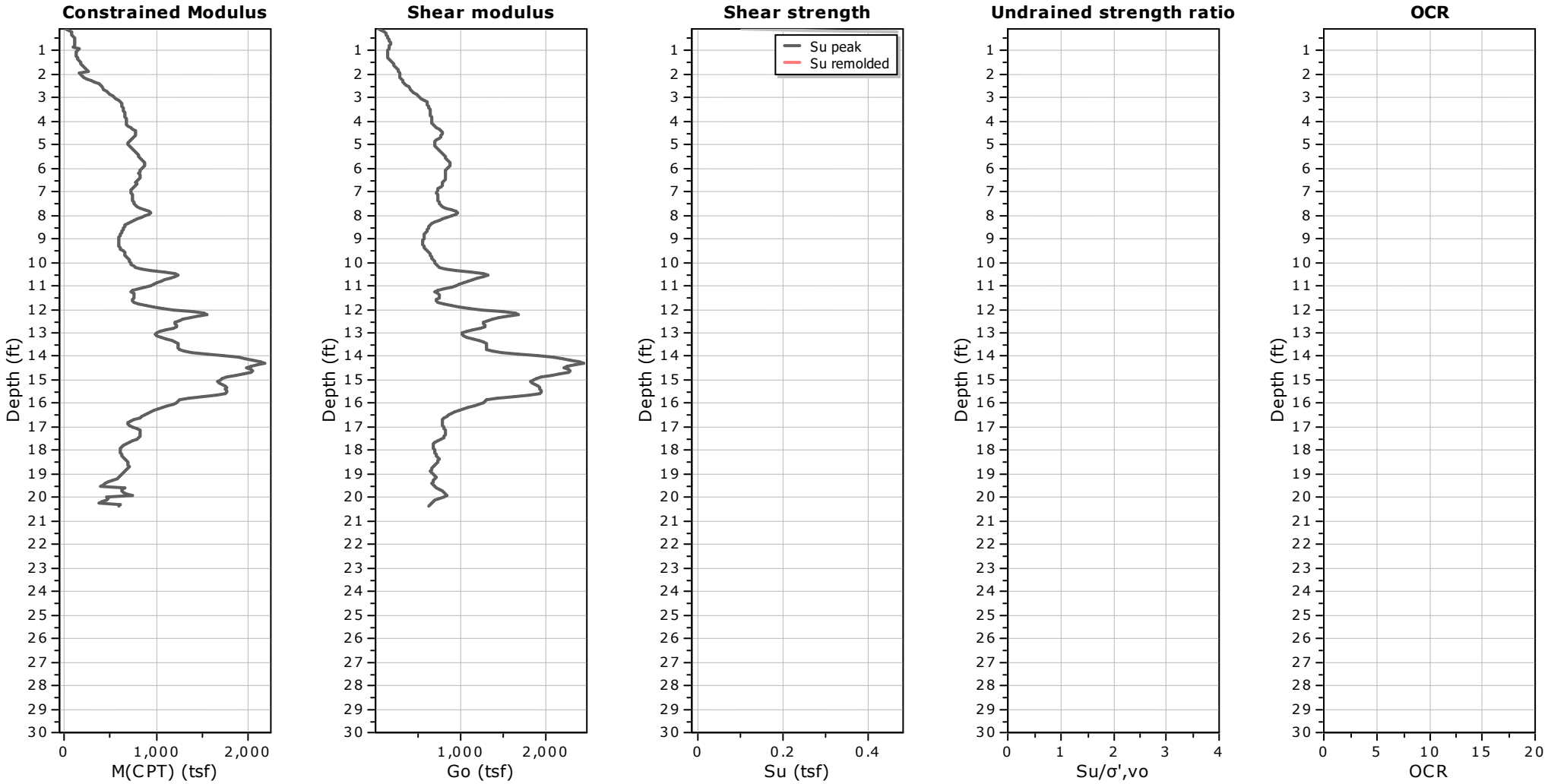

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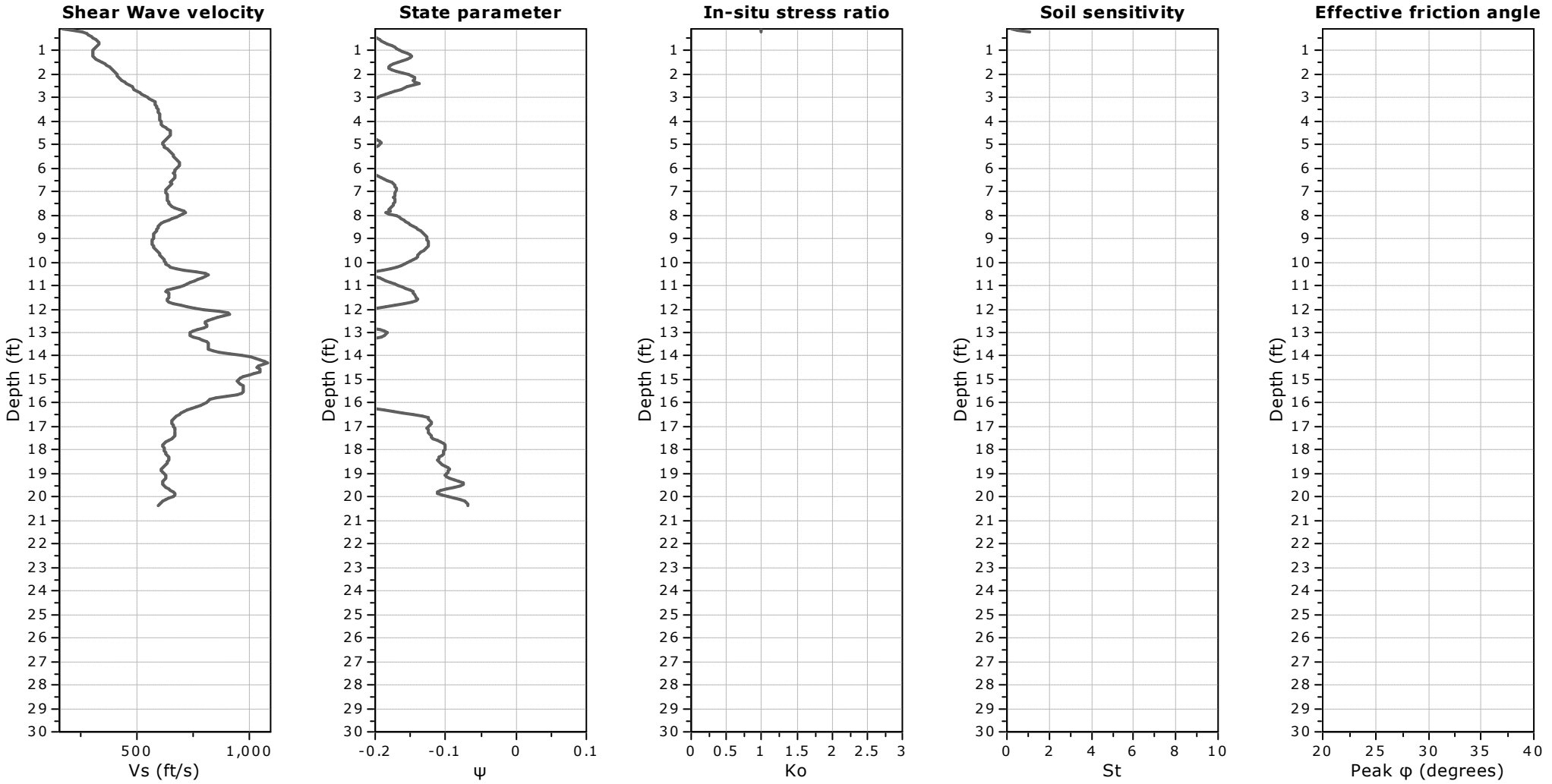

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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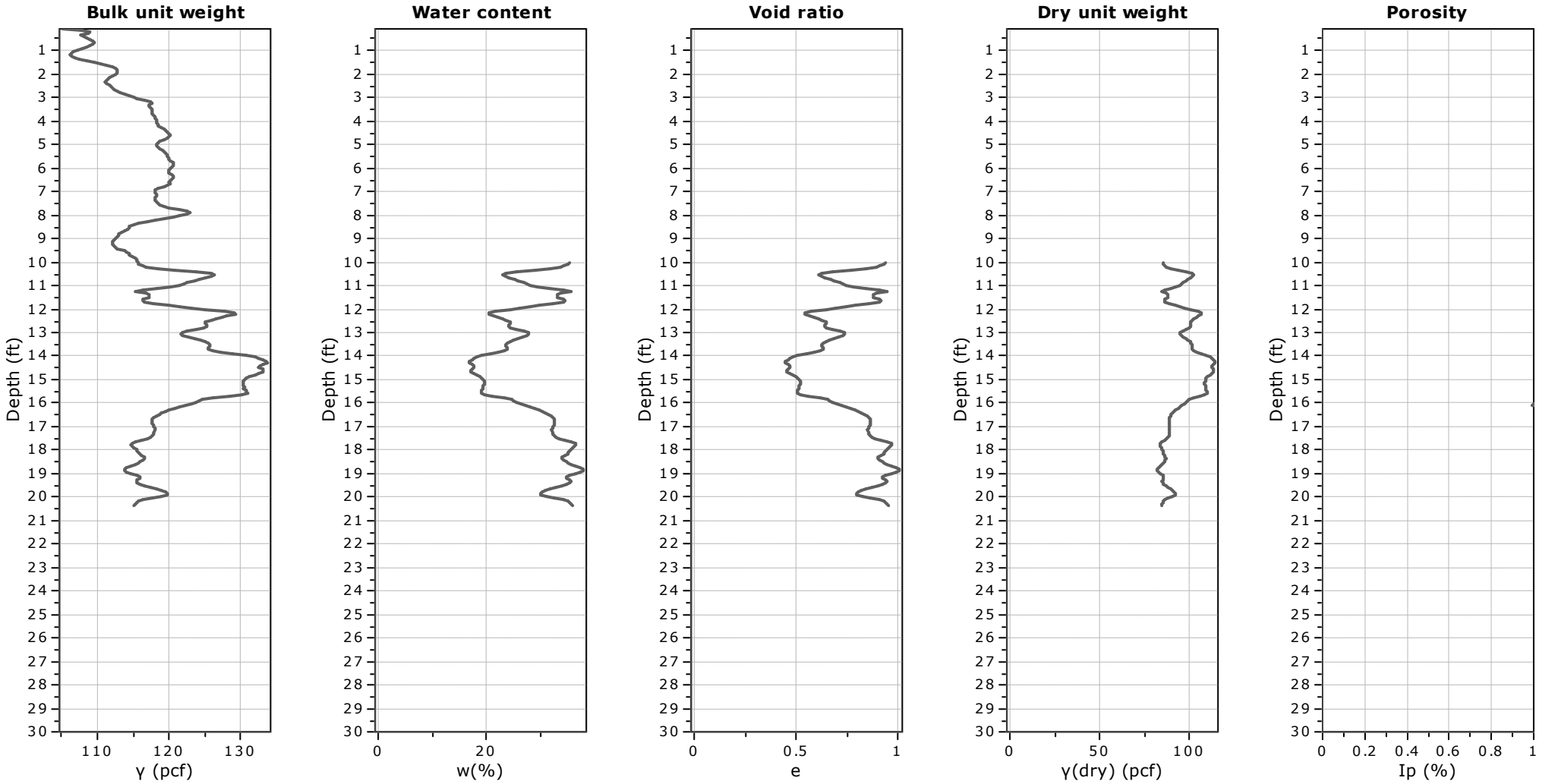

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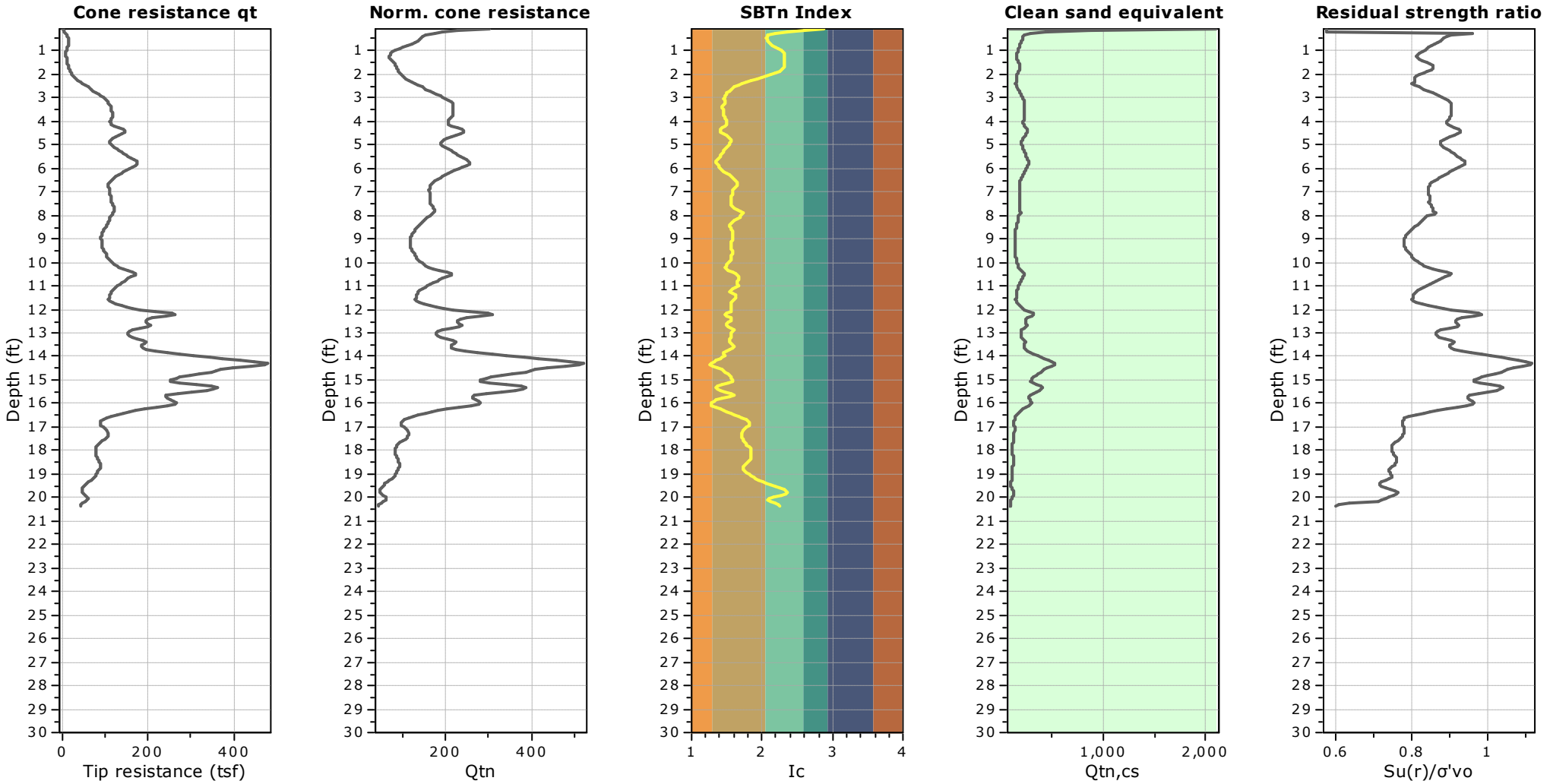

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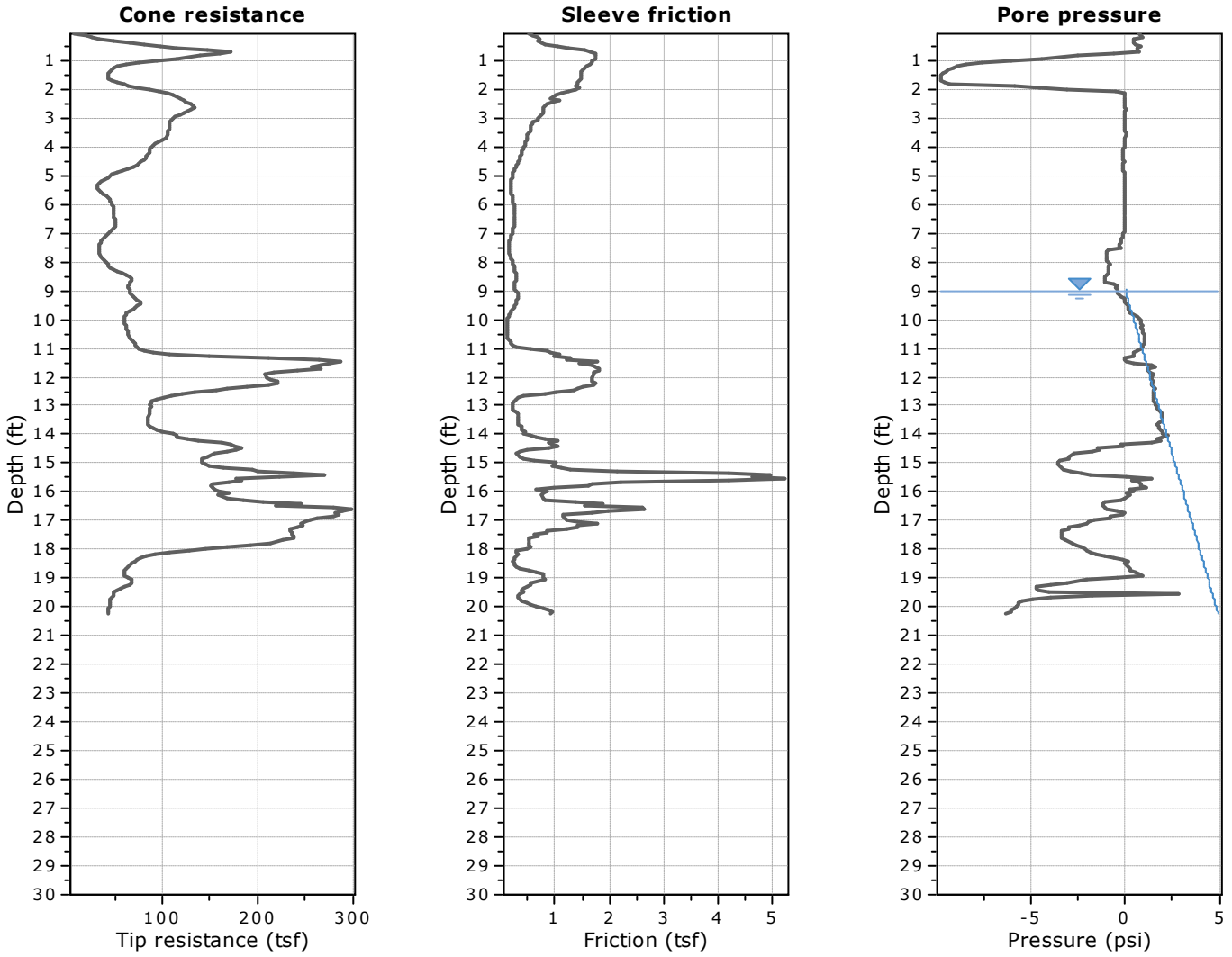
C-8
Total depth: 20.25 ft, Date: 5/13/2024
Surface Elevation: 63.48 ft
Coords: X:571978.60, Y:555797.43
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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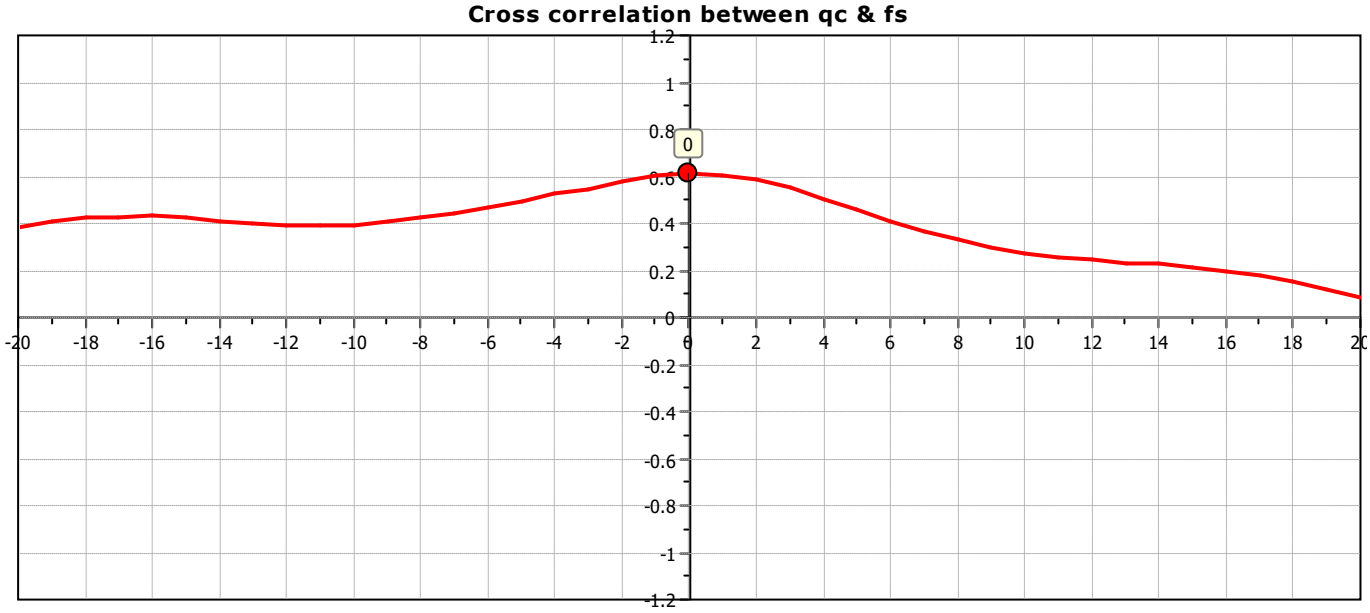

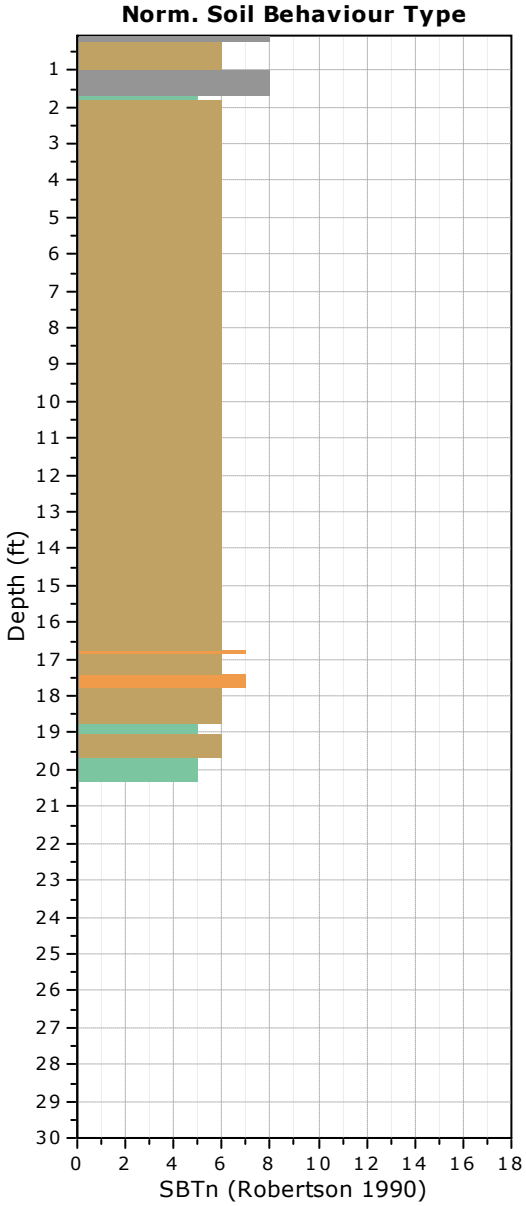

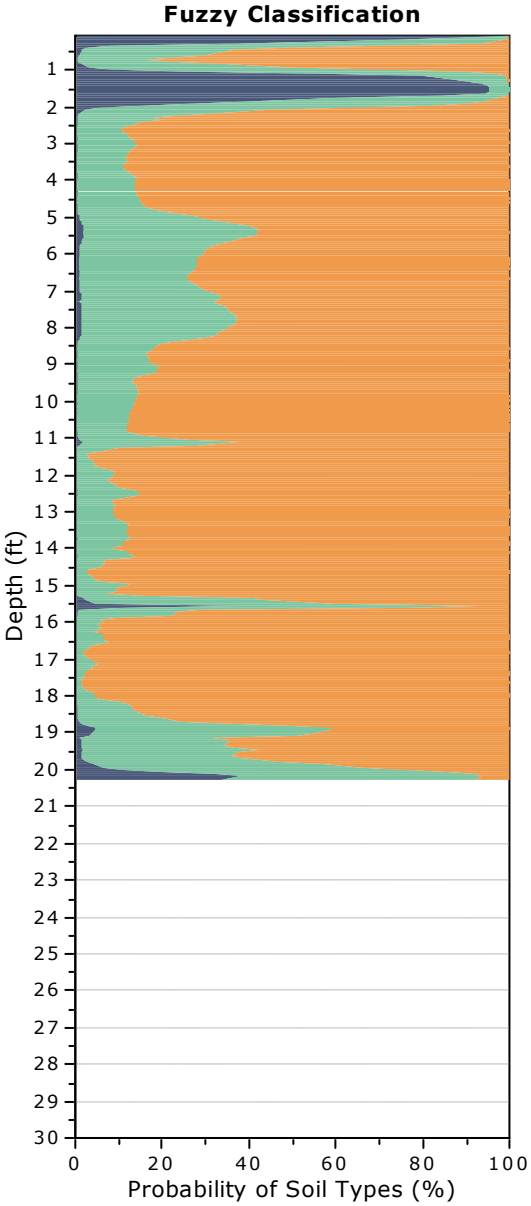

Fuzzy classifiaction legend

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Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

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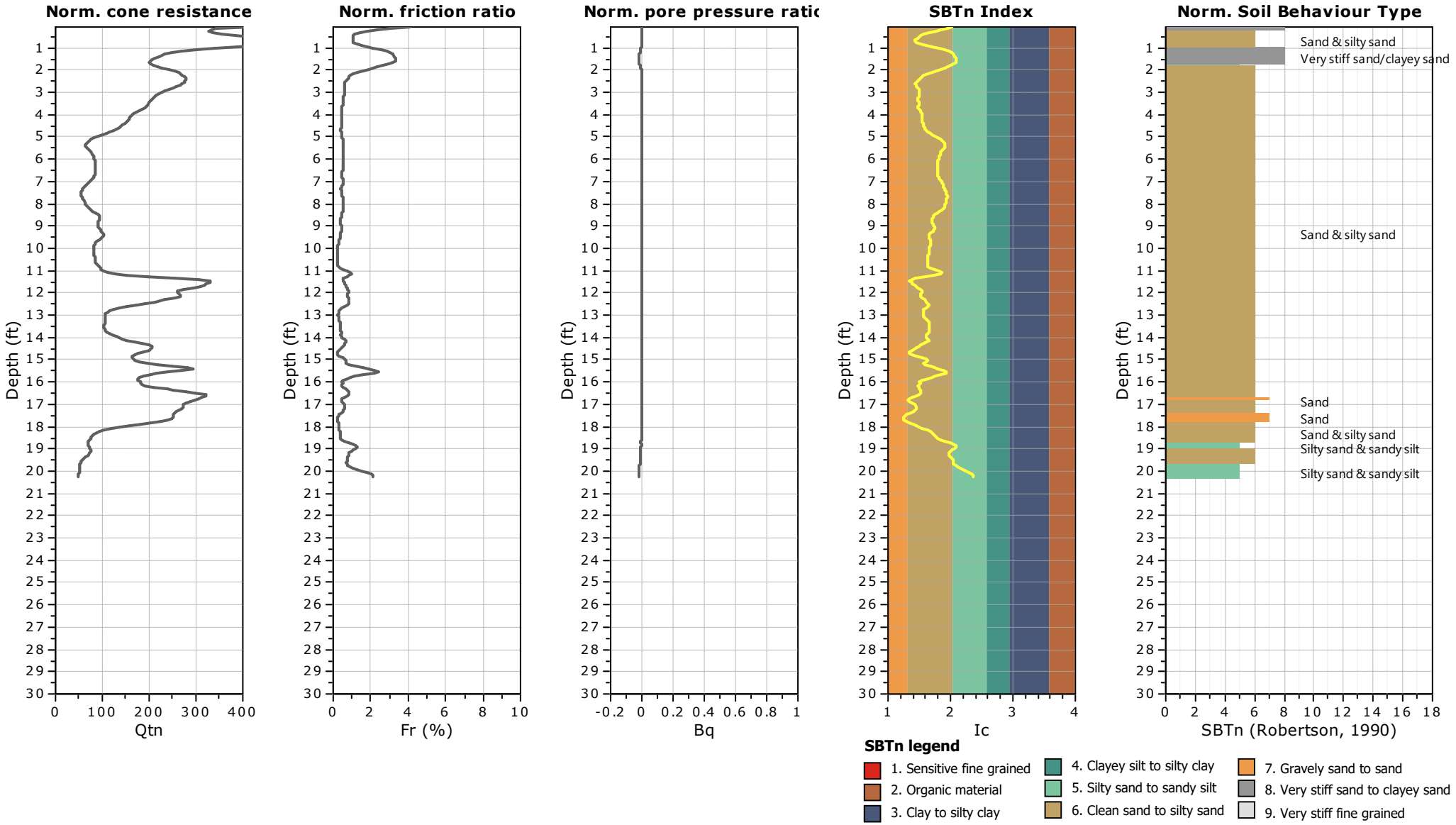

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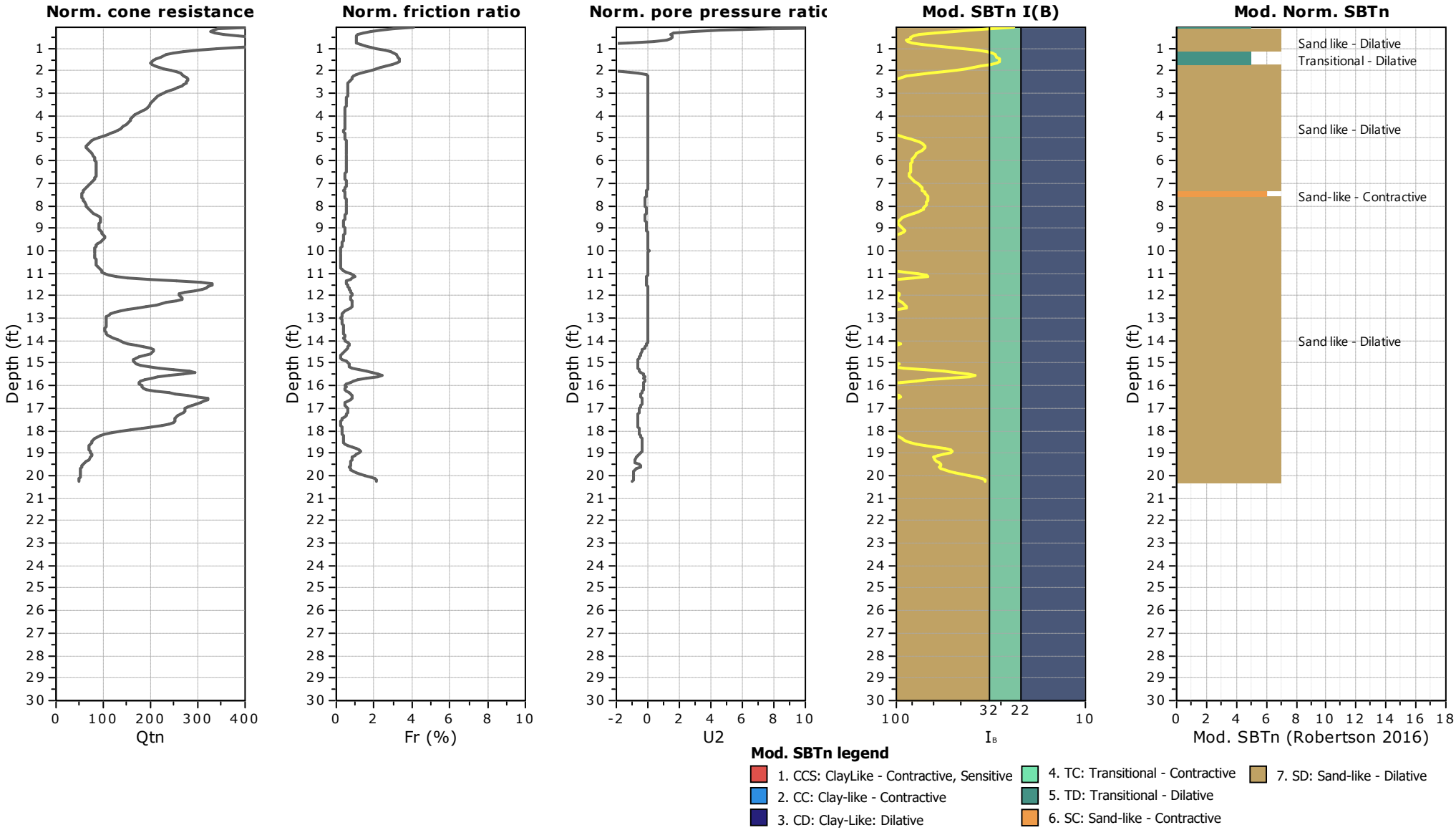
Coords: X:571978.60, Y:555797.43
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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C-8
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Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
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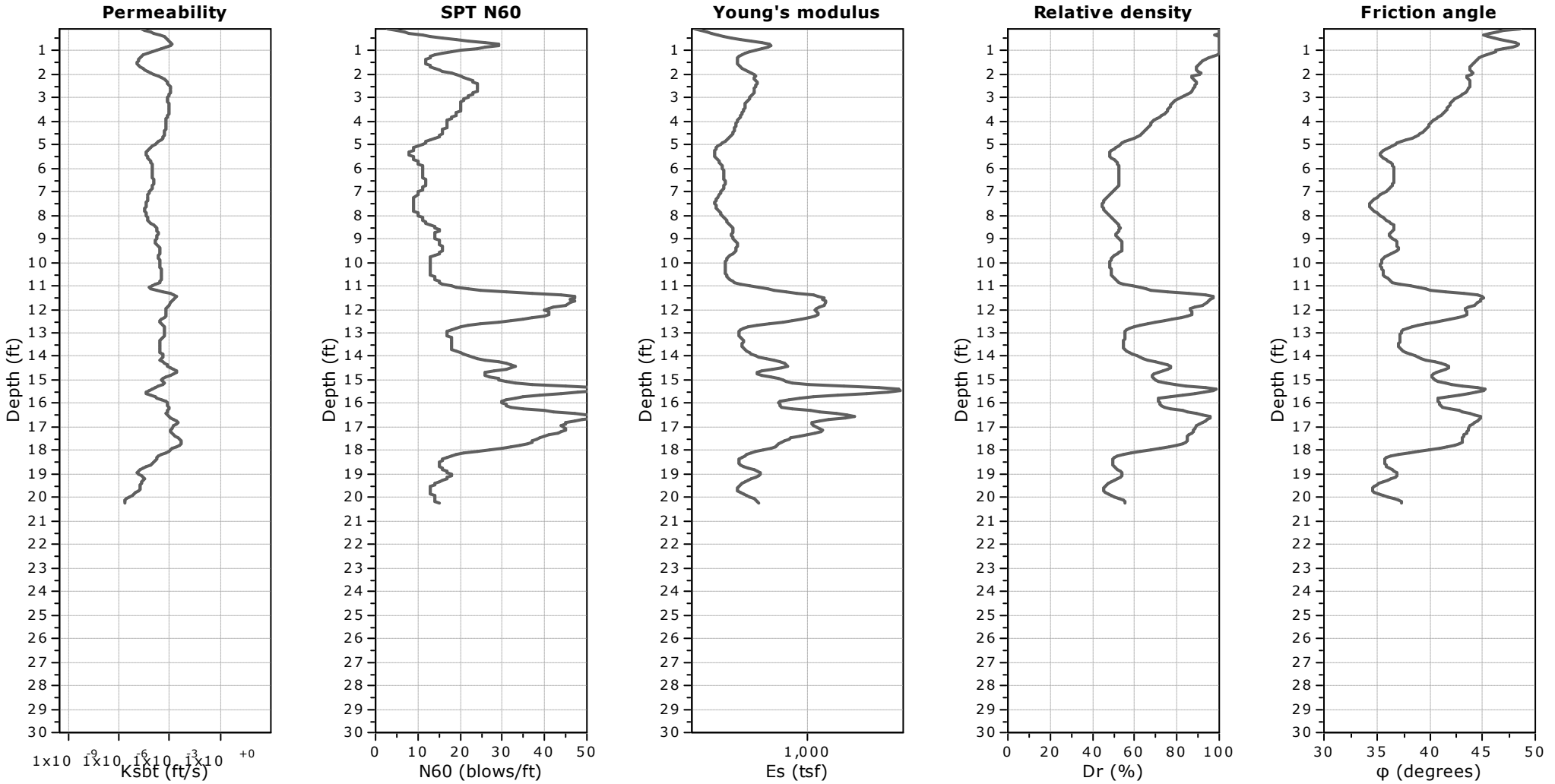

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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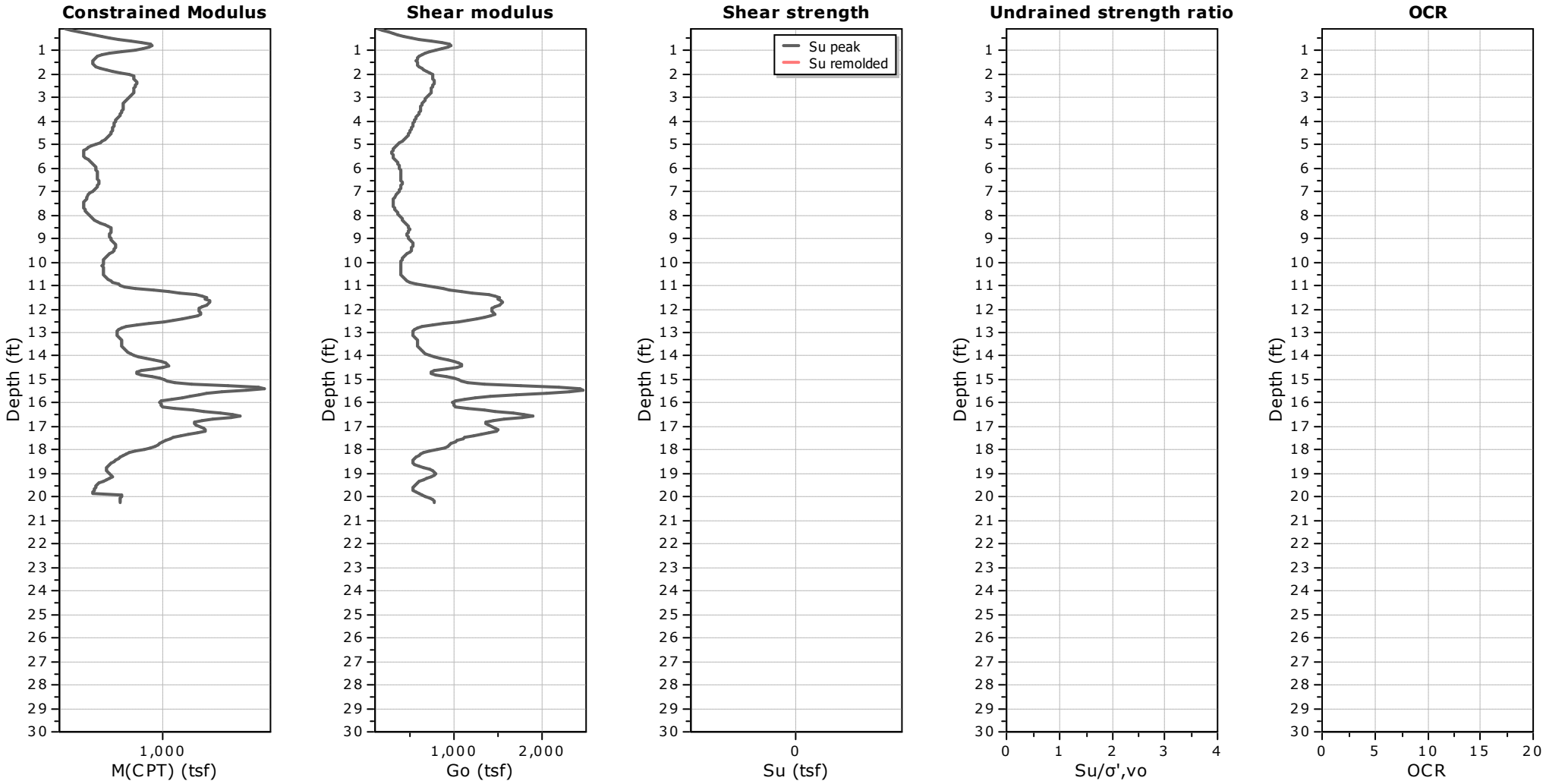

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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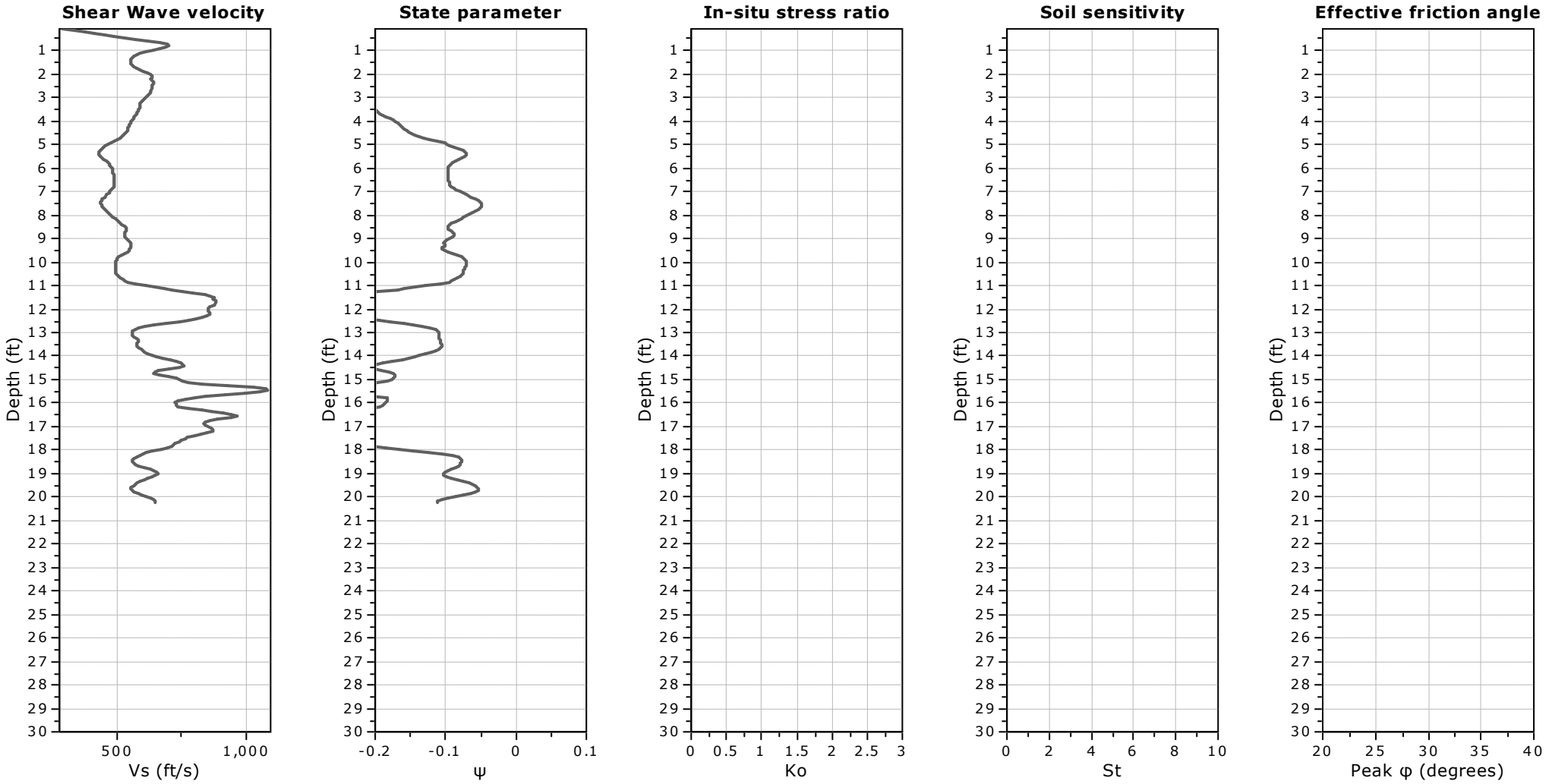

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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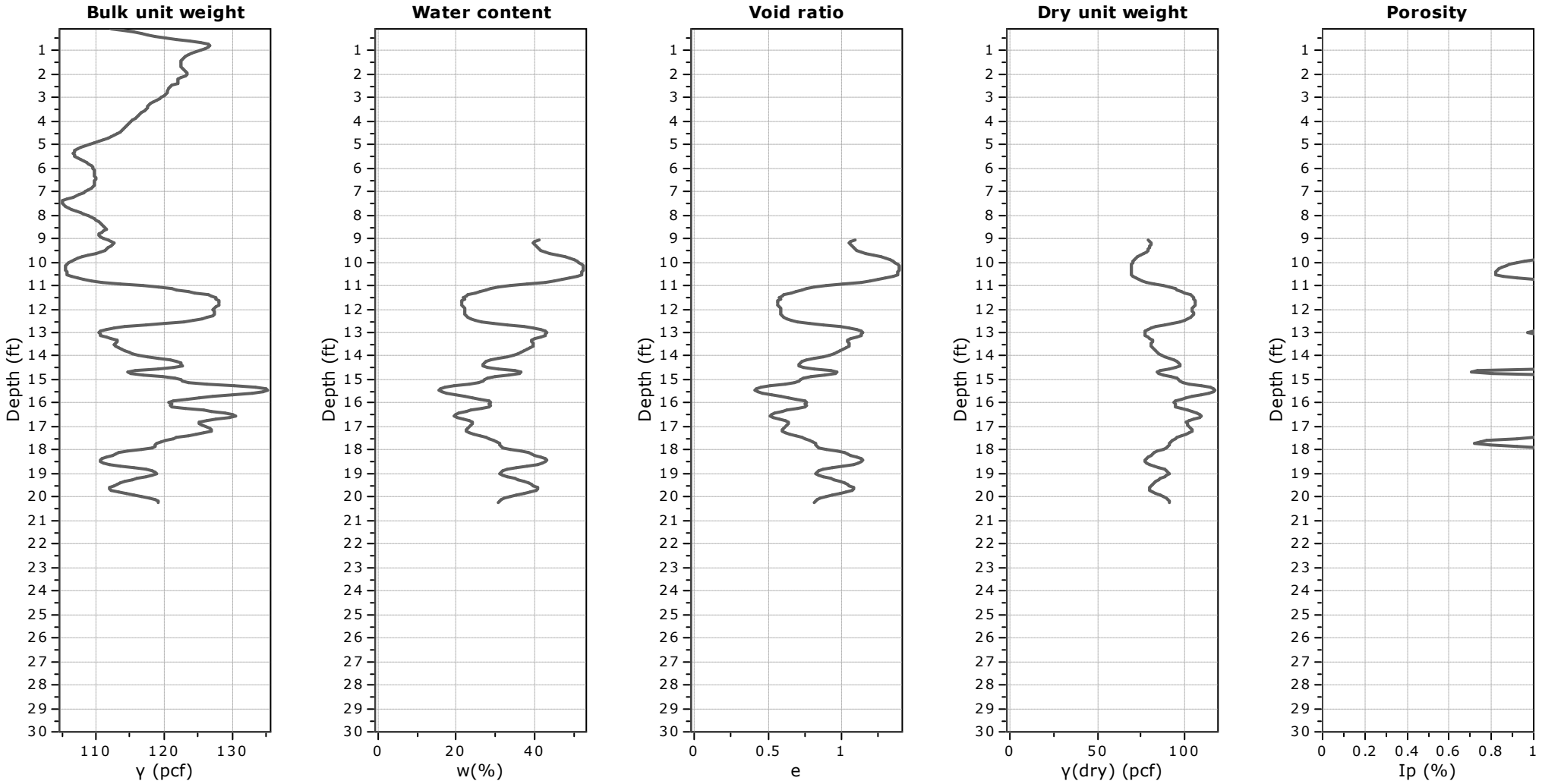

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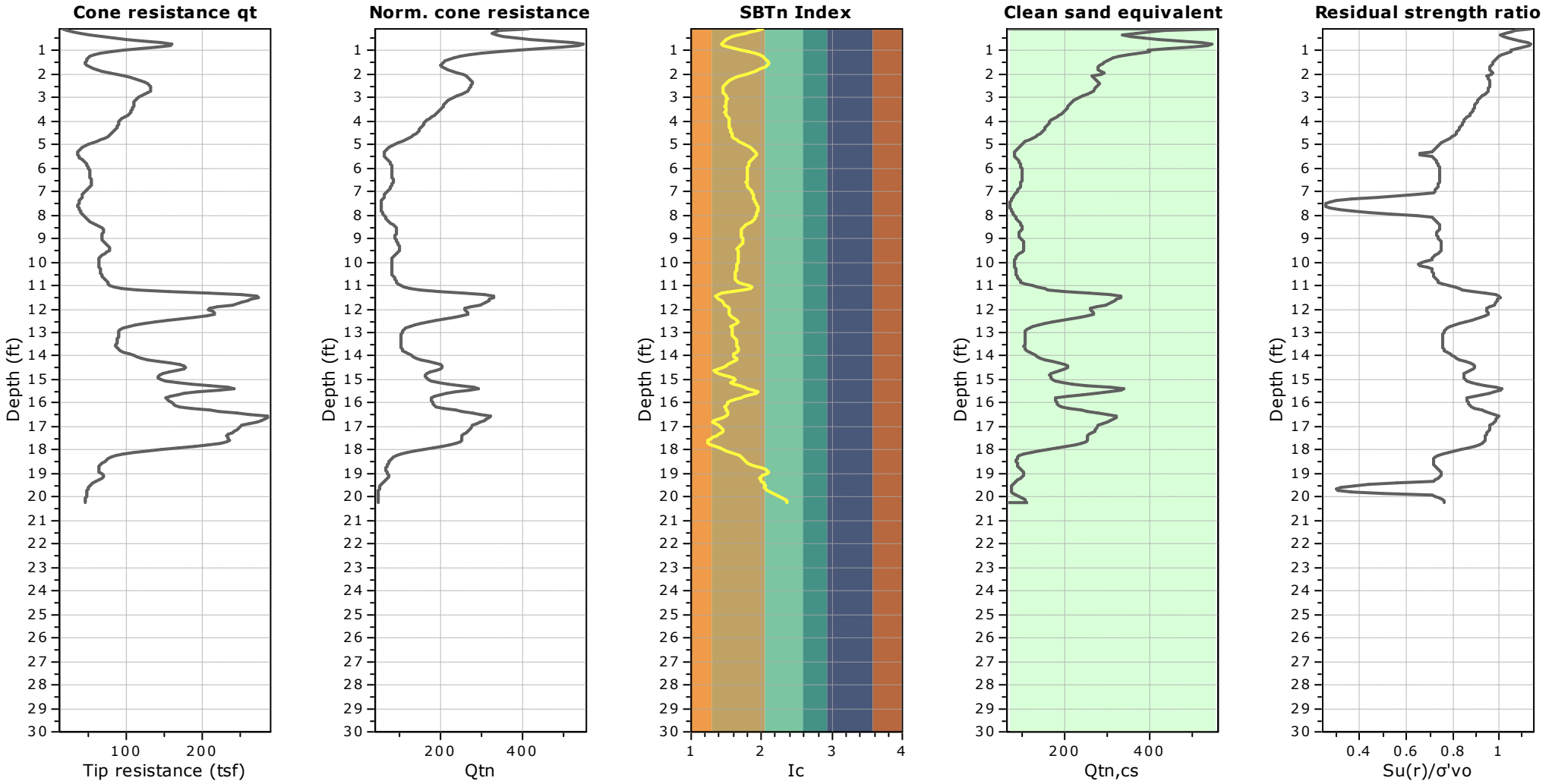

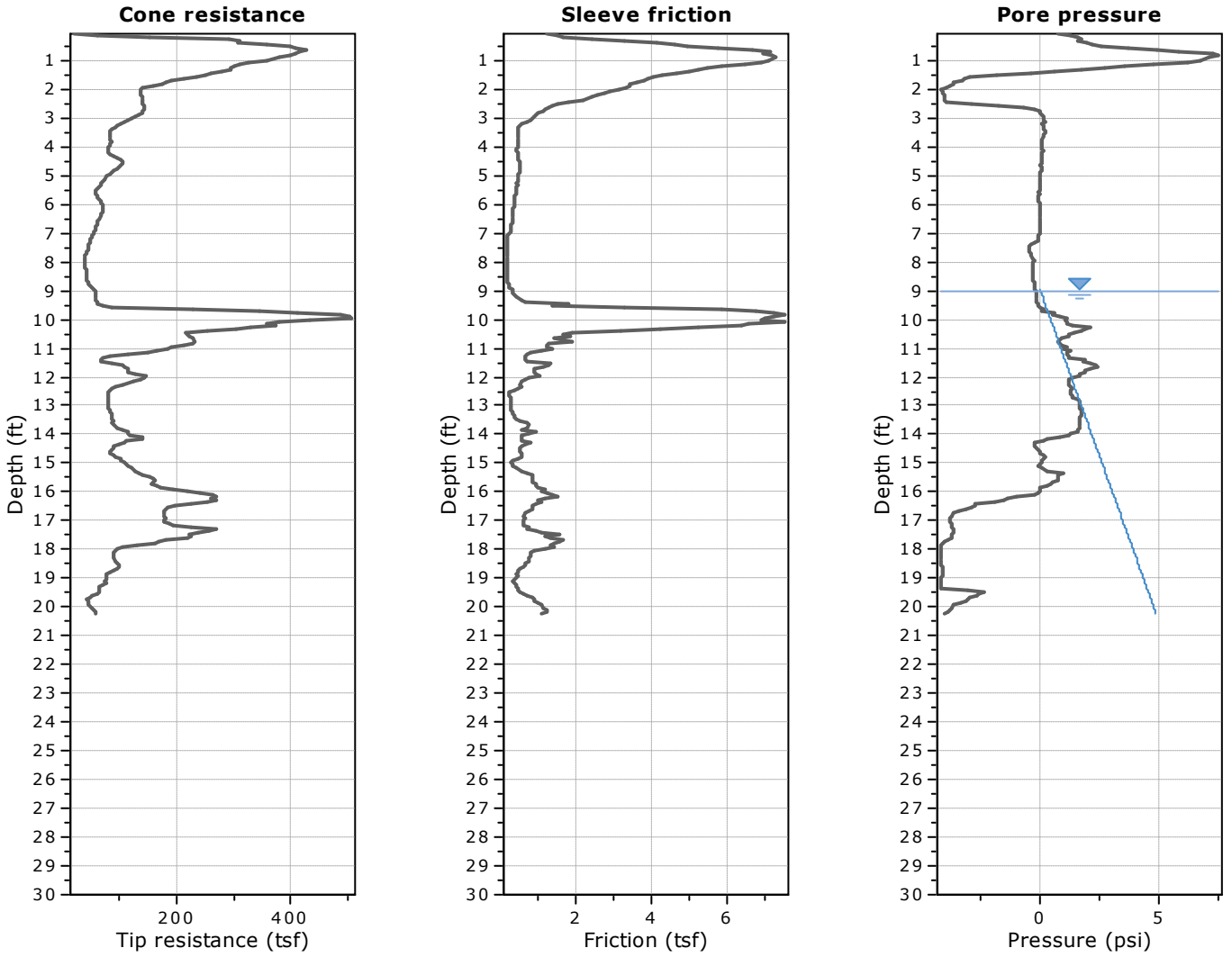

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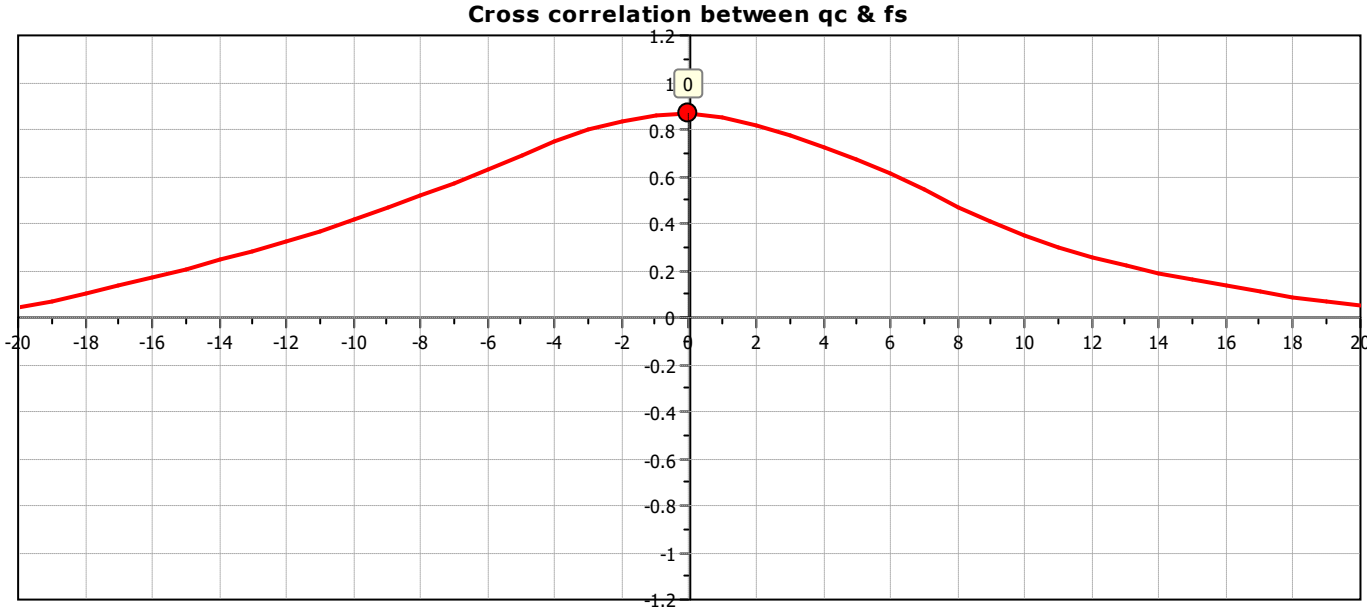

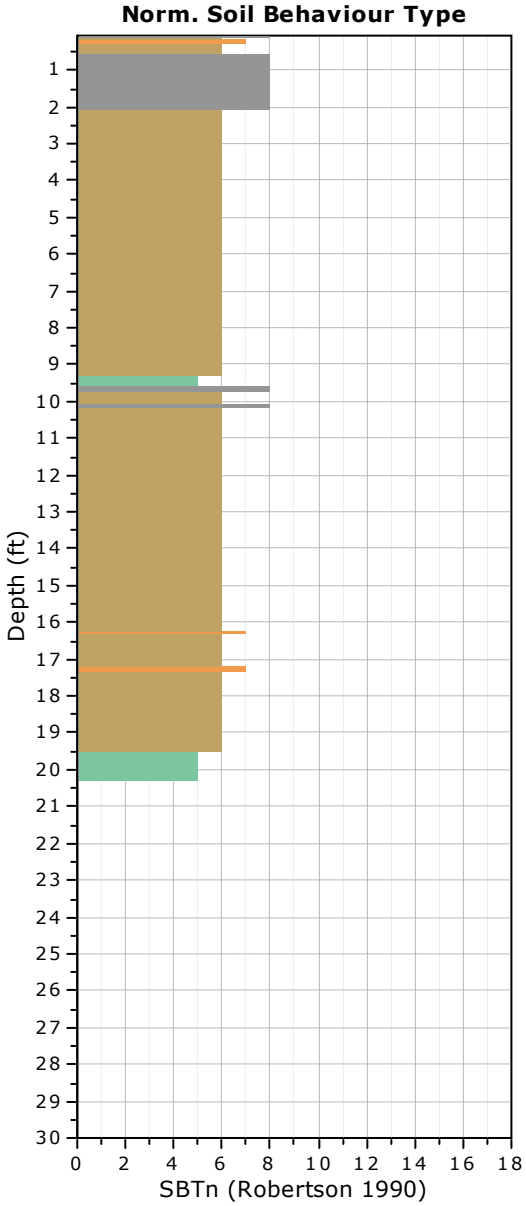

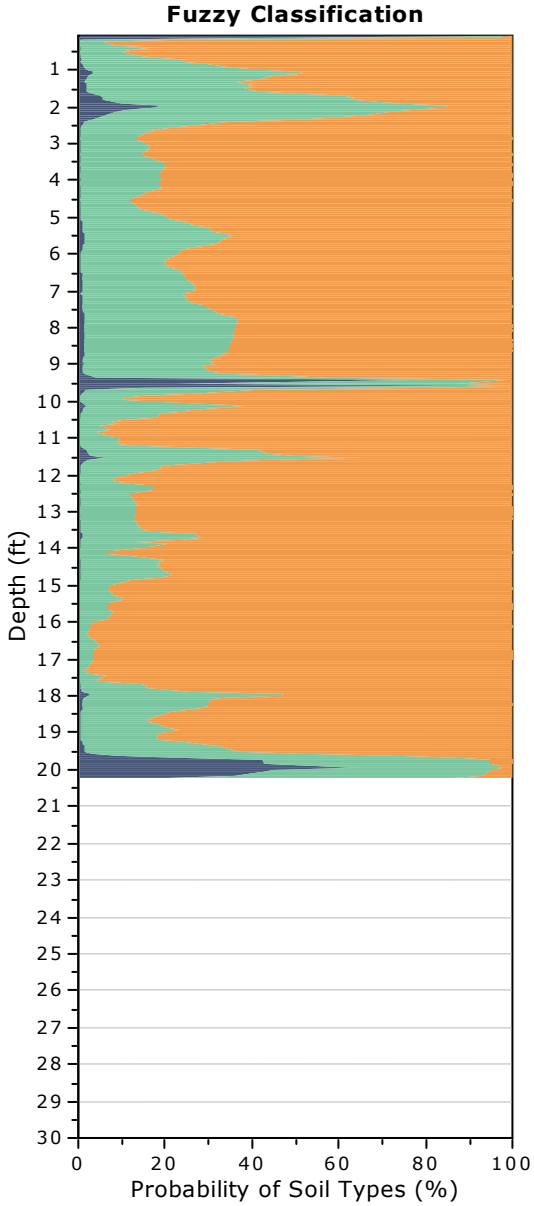

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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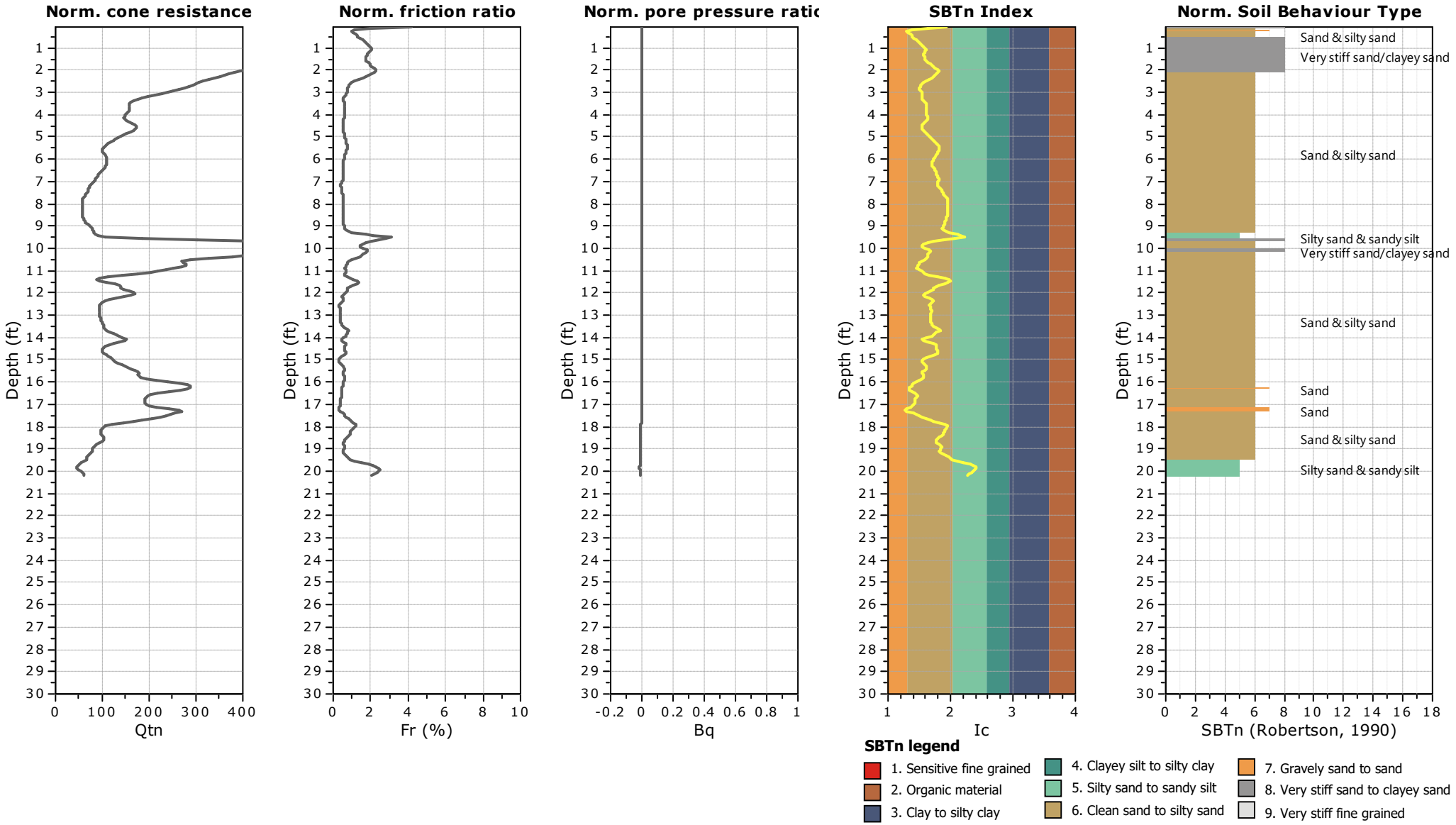
C-9
Total depth: 20.21 ft, Date: 5/13/2024
Surface Elevation: 63.71 ft
Coords: X:572024.50, Y:555735.32
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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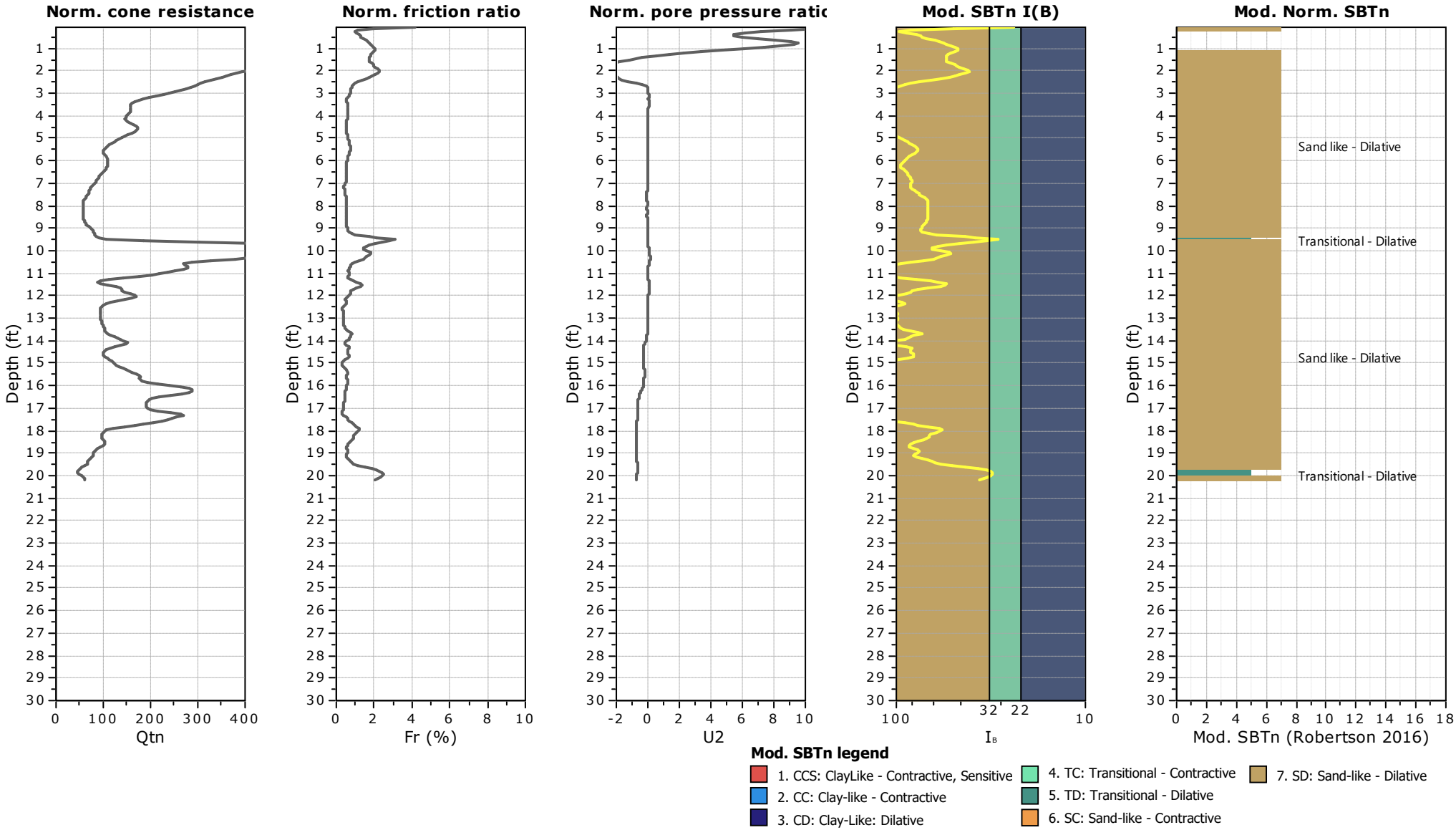

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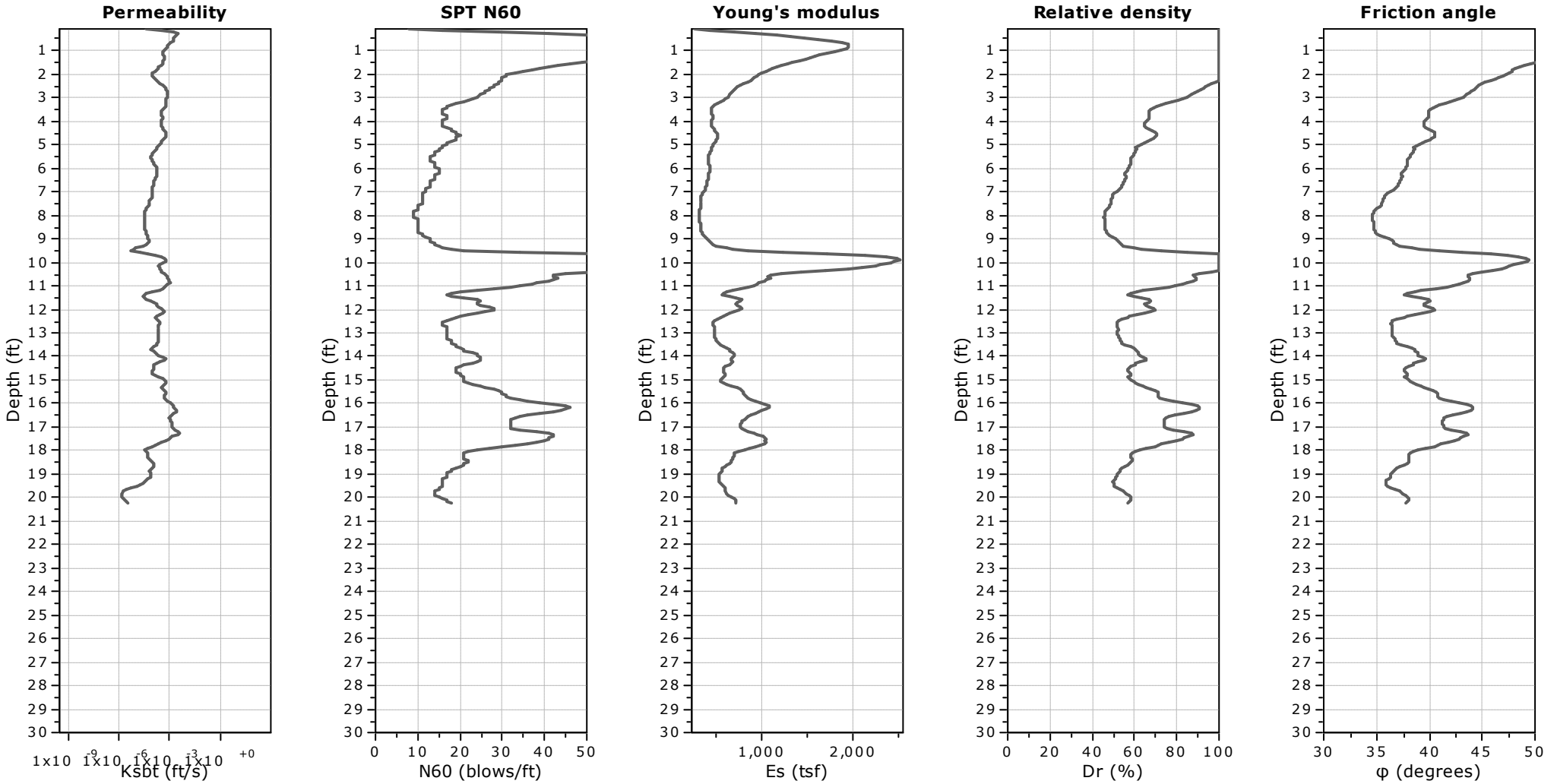

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
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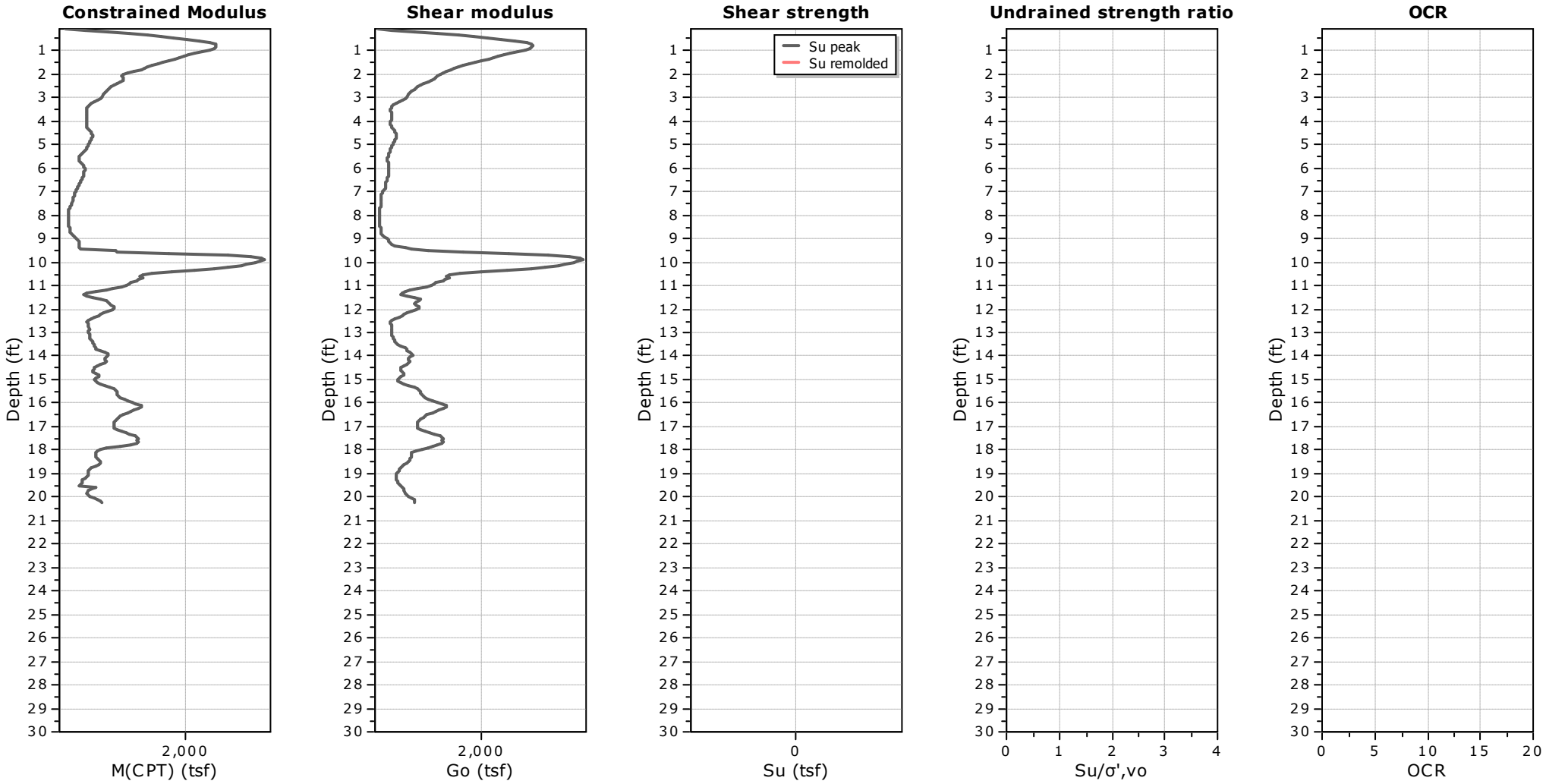

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
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Flat Dilatometer Test data

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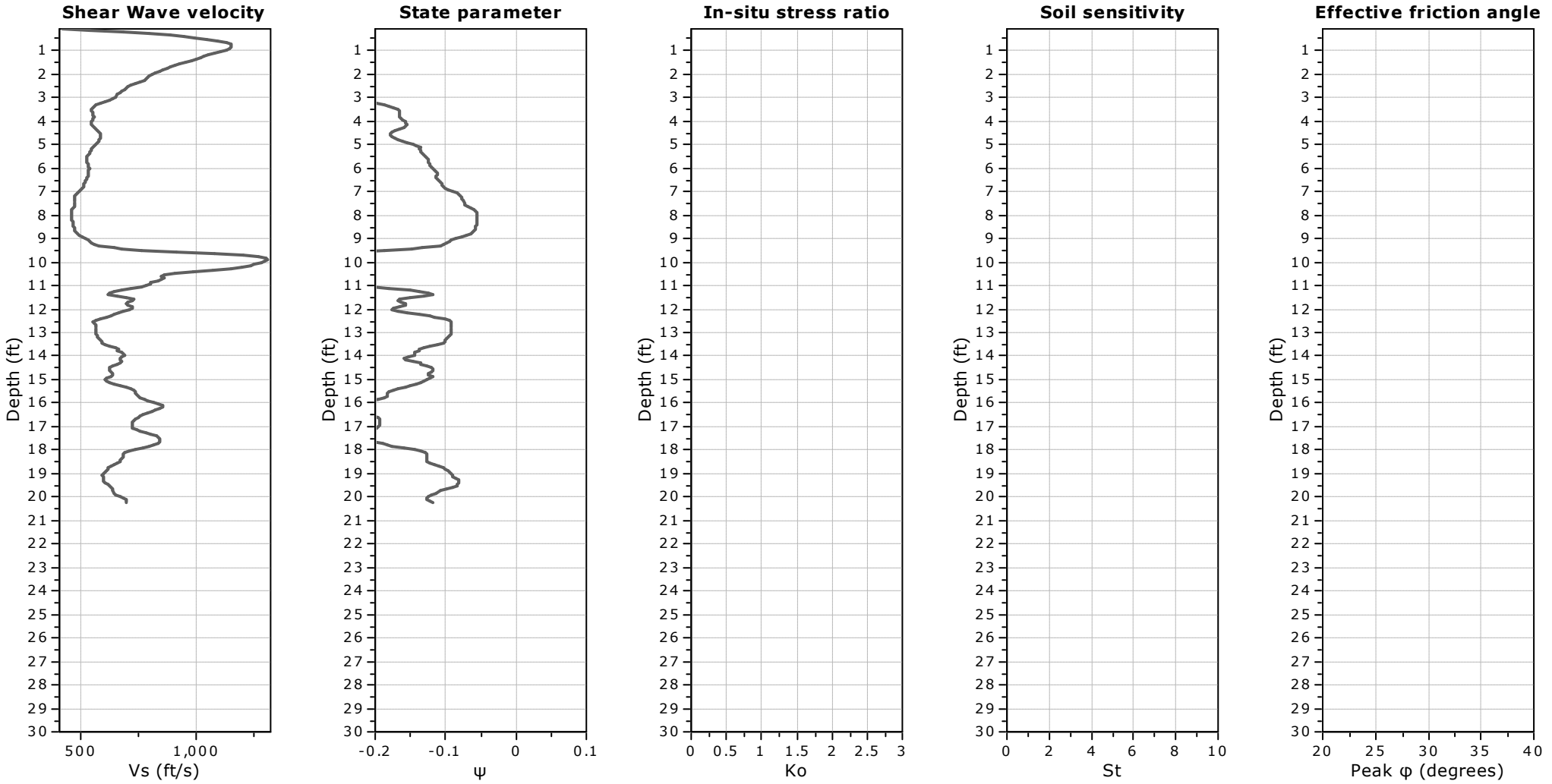

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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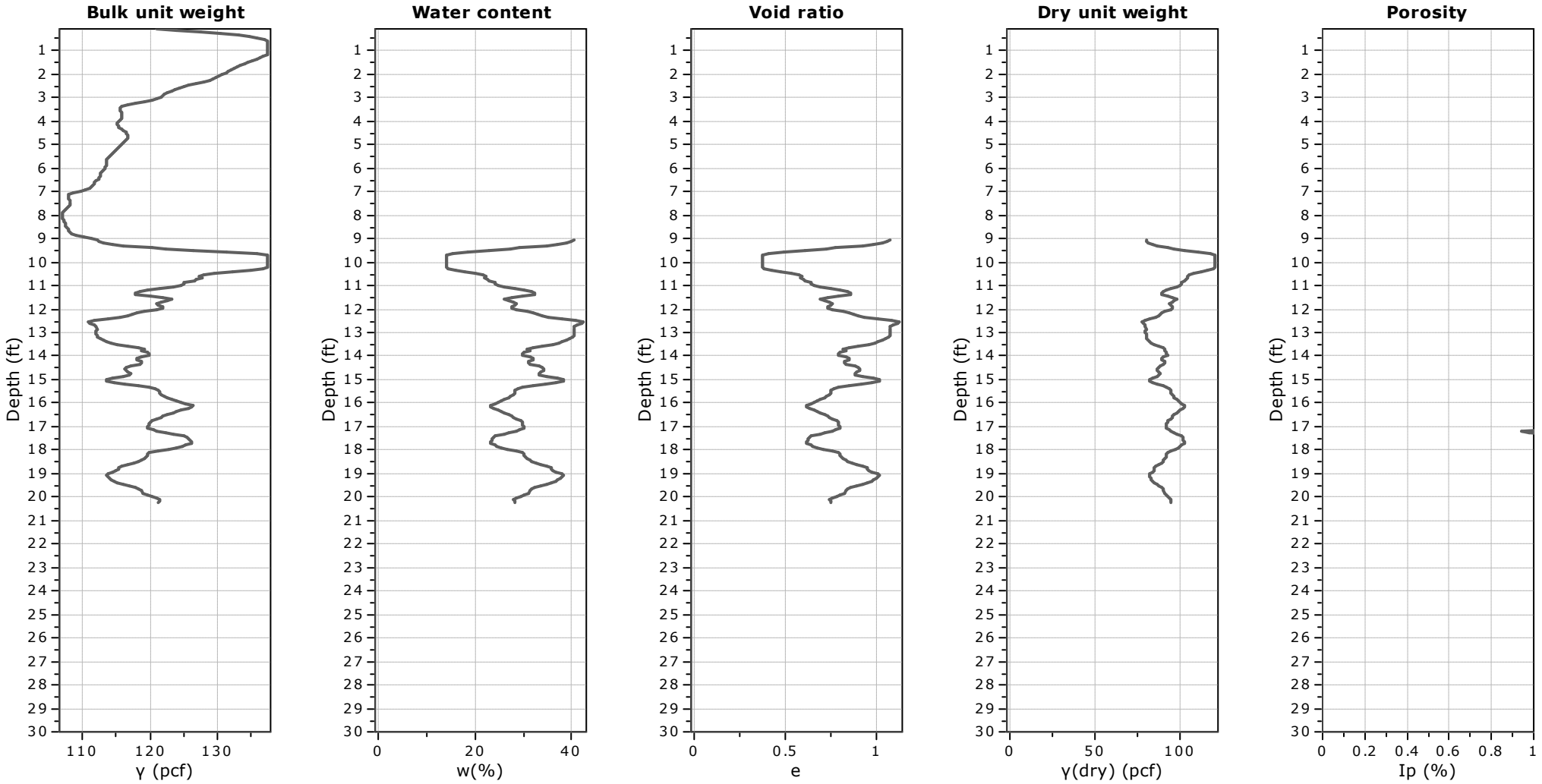

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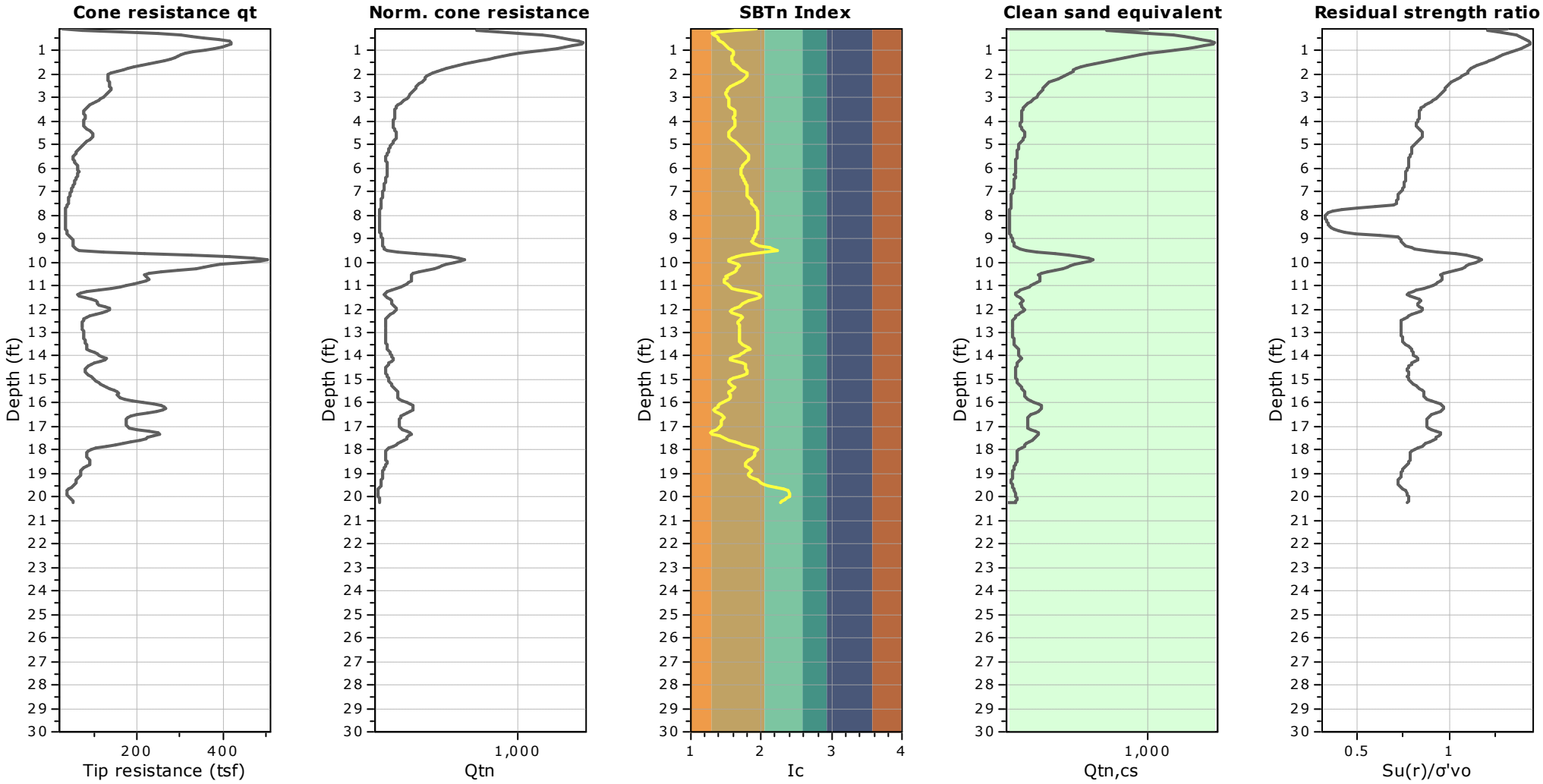

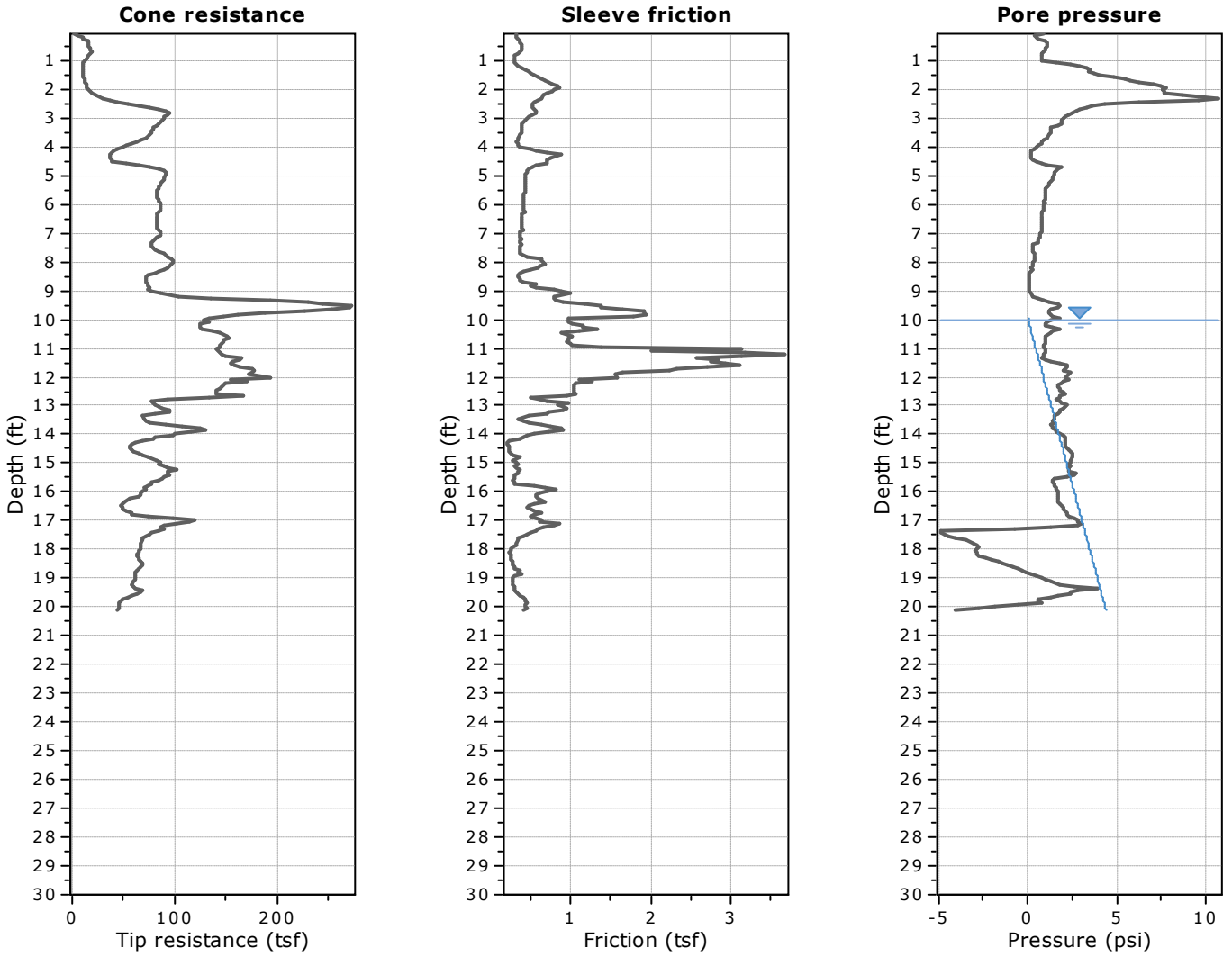

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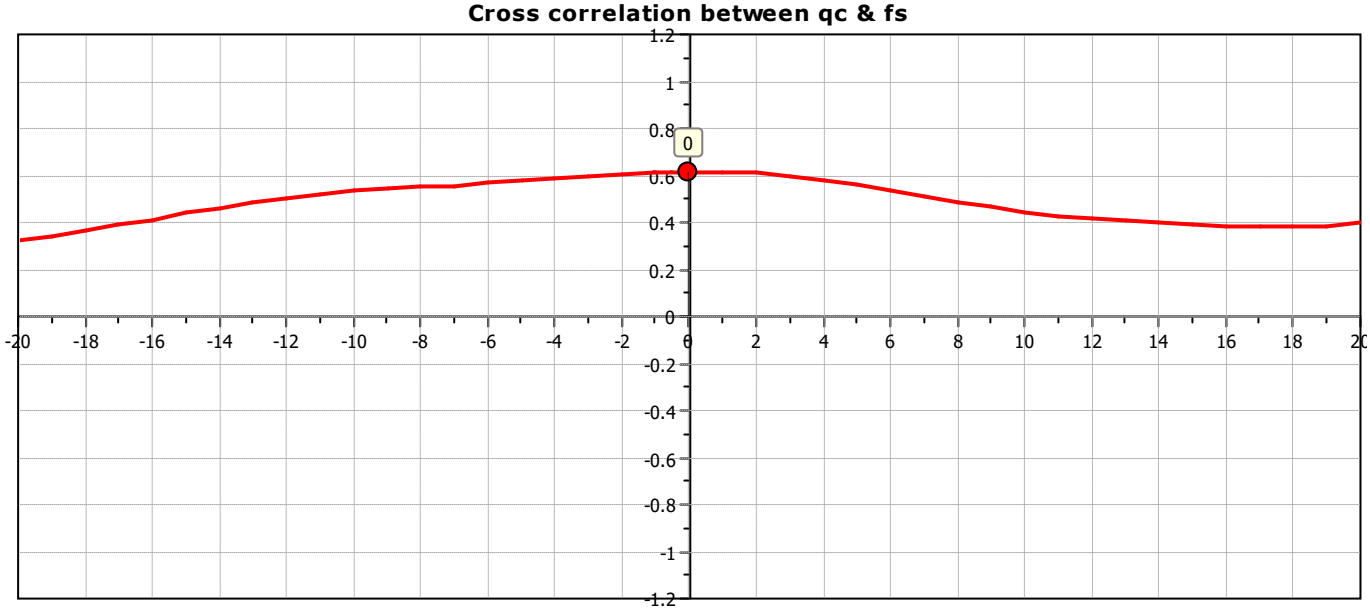

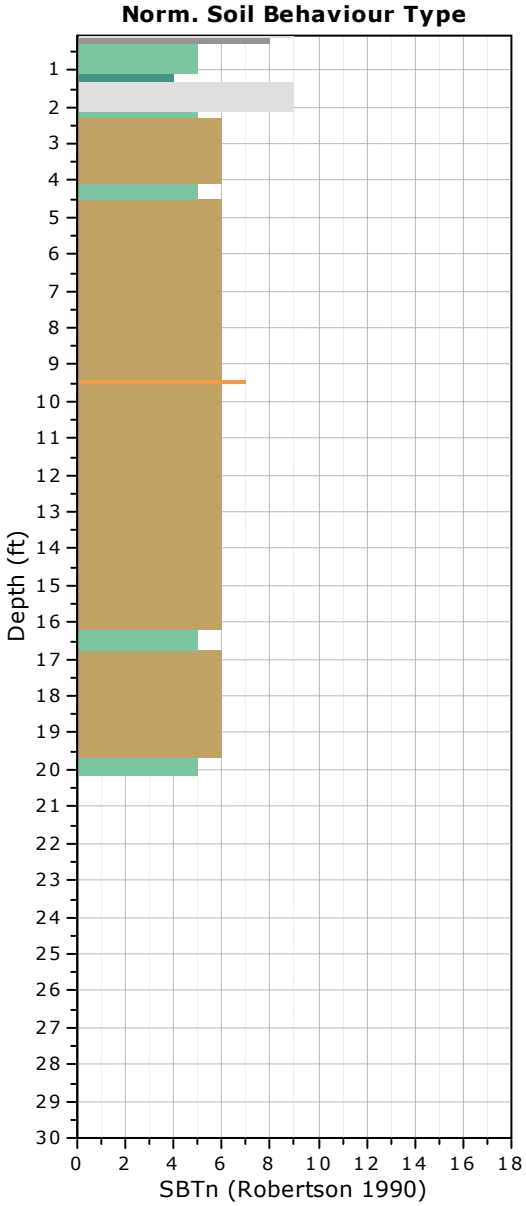

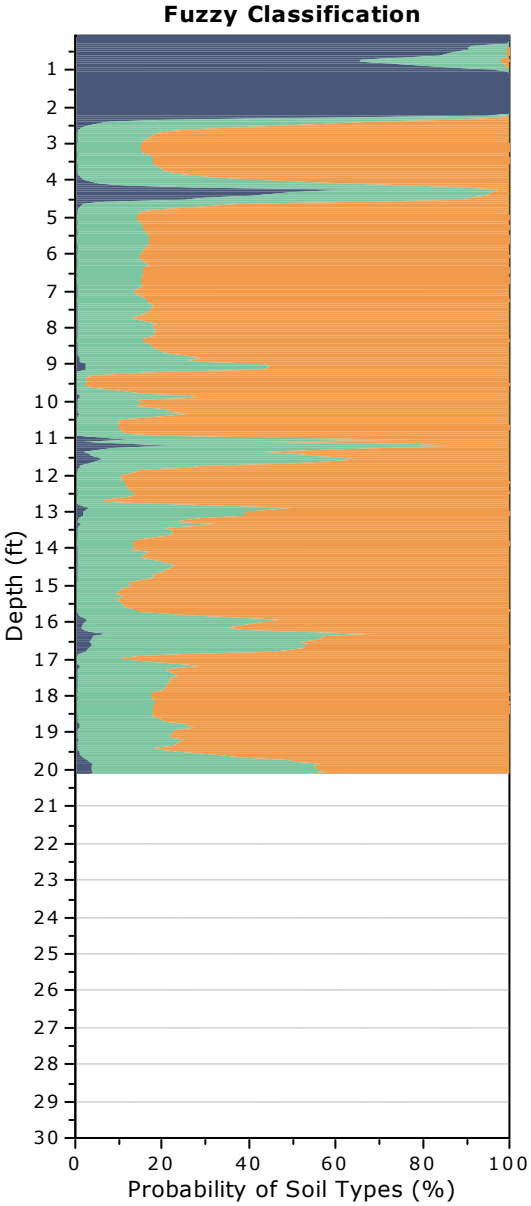

Fuzzy classifiaction legend

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- Highly probable mixture soil
- Highly probable sandy soil

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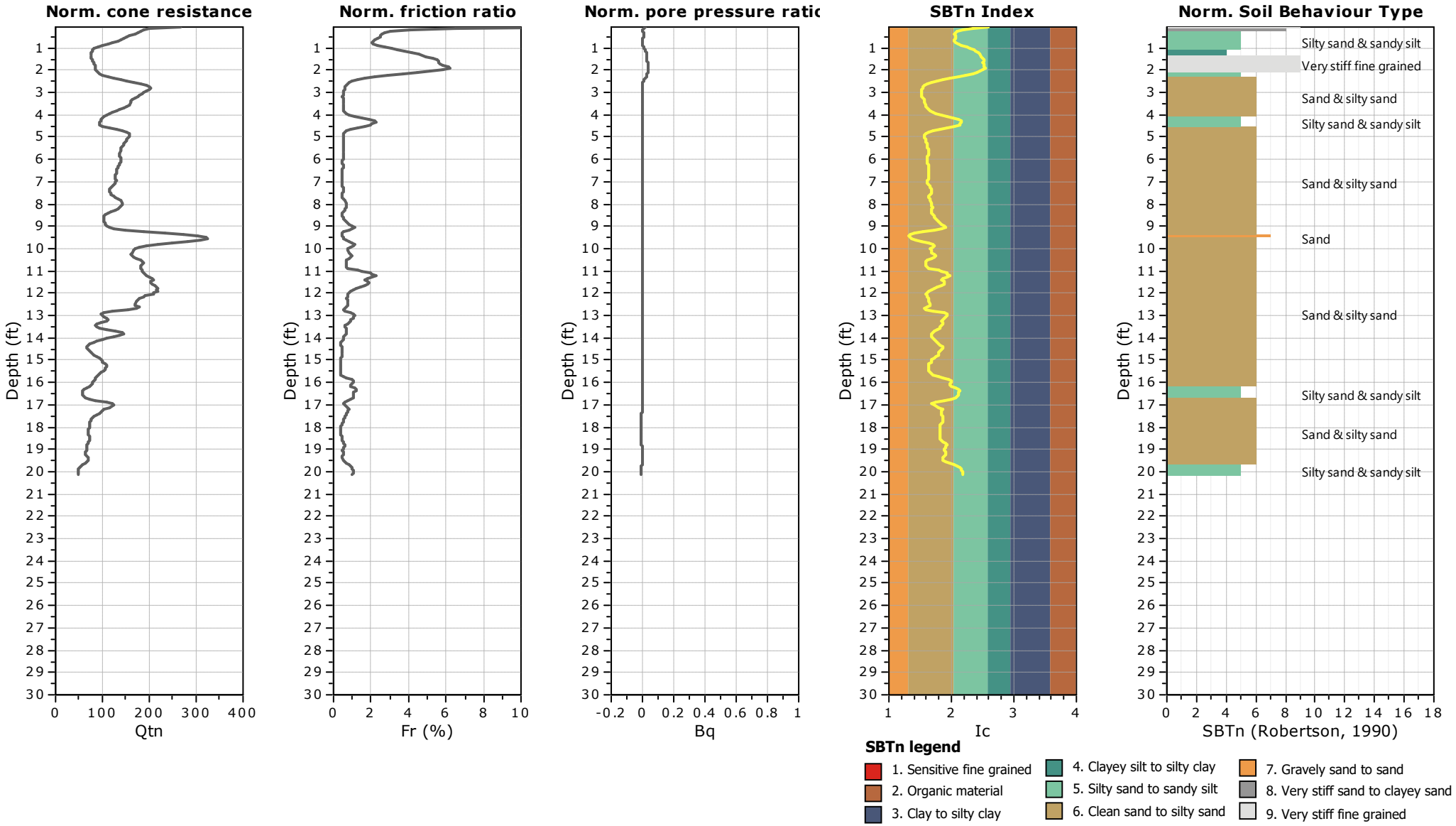
C-10
Total depth: 20.12 ft, Date: 5/13/2024
Surface Elevation: 64.49 ft
Coords: X:572138.55, Y:555855.71
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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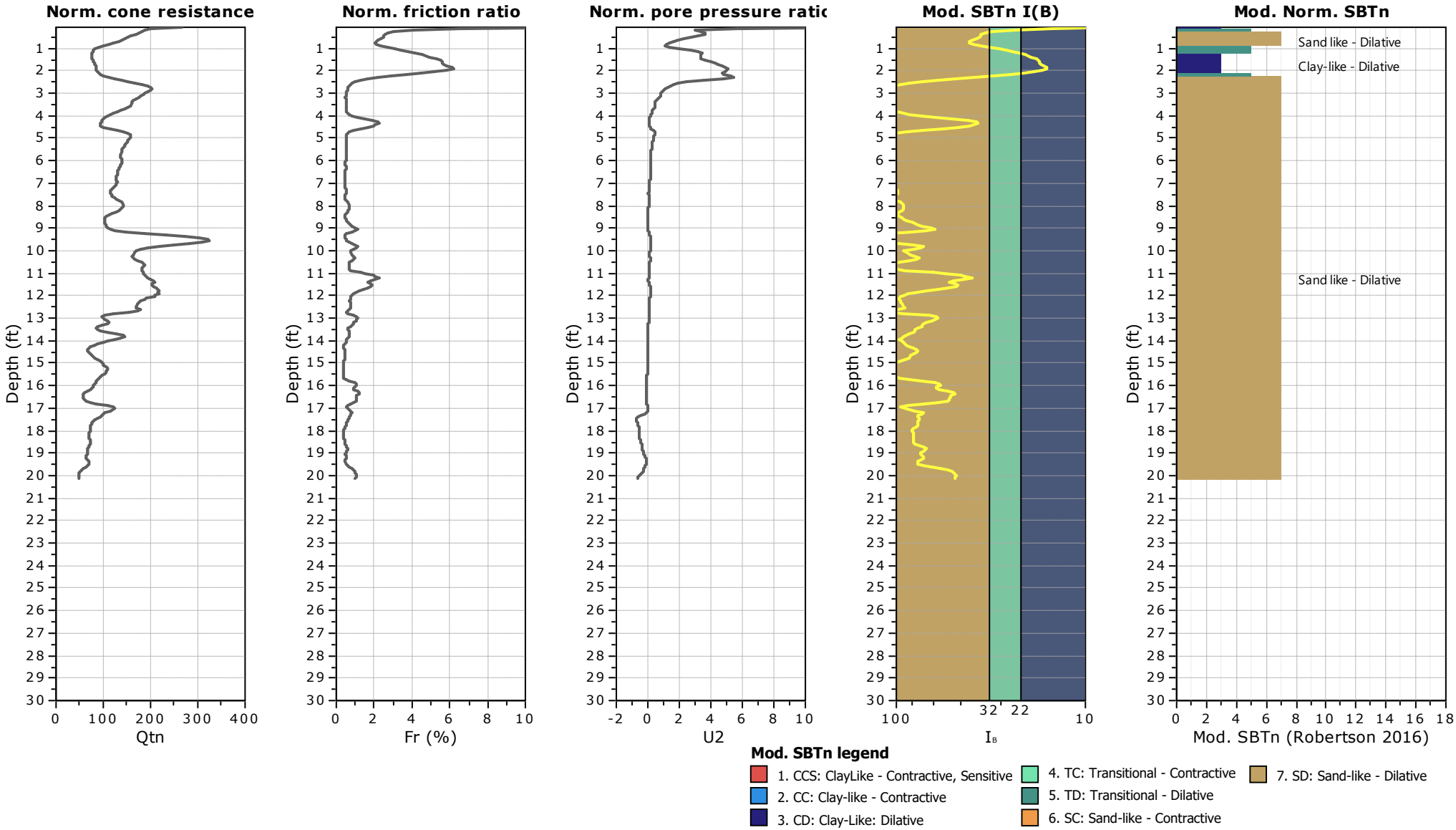

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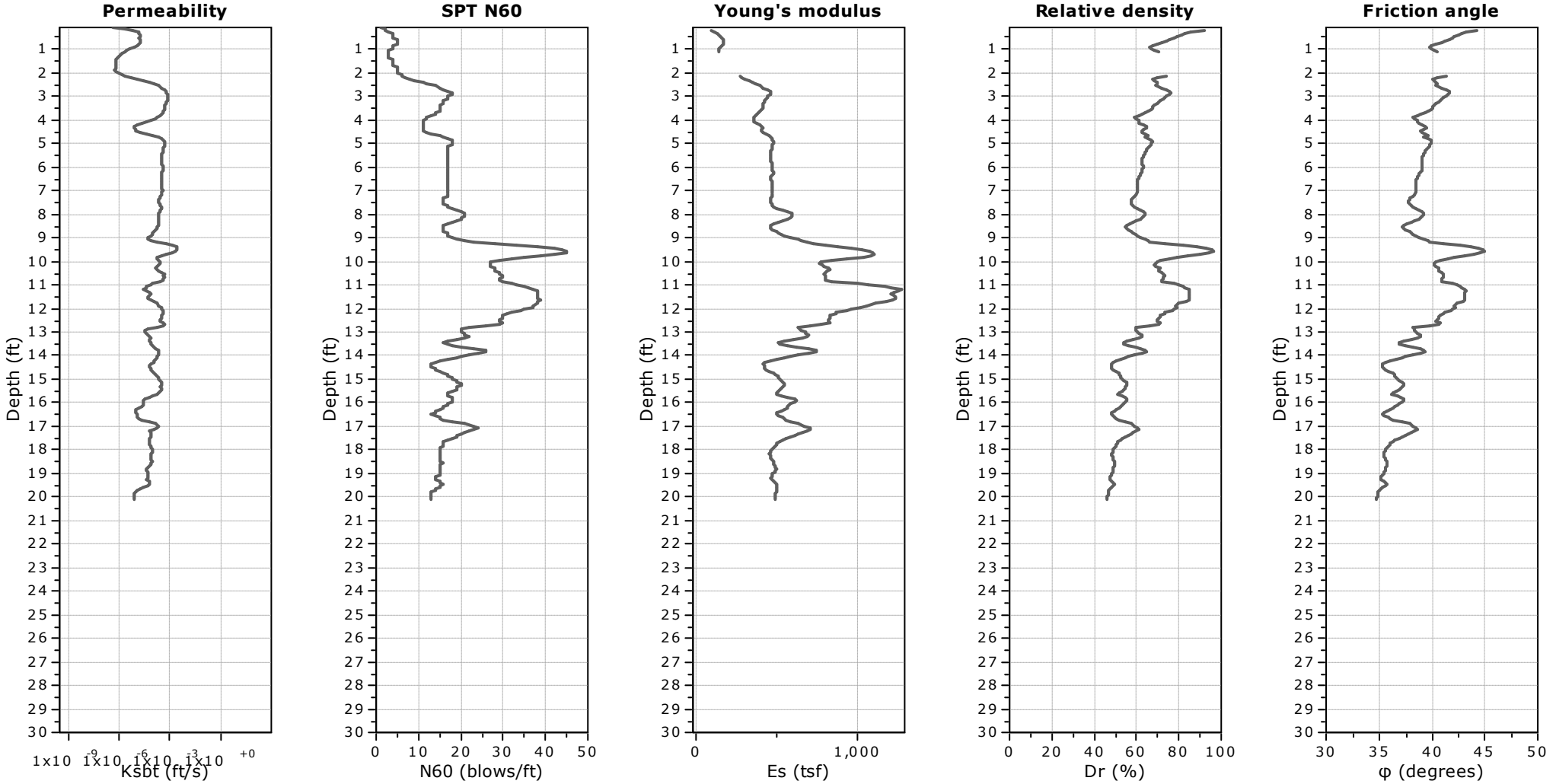

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
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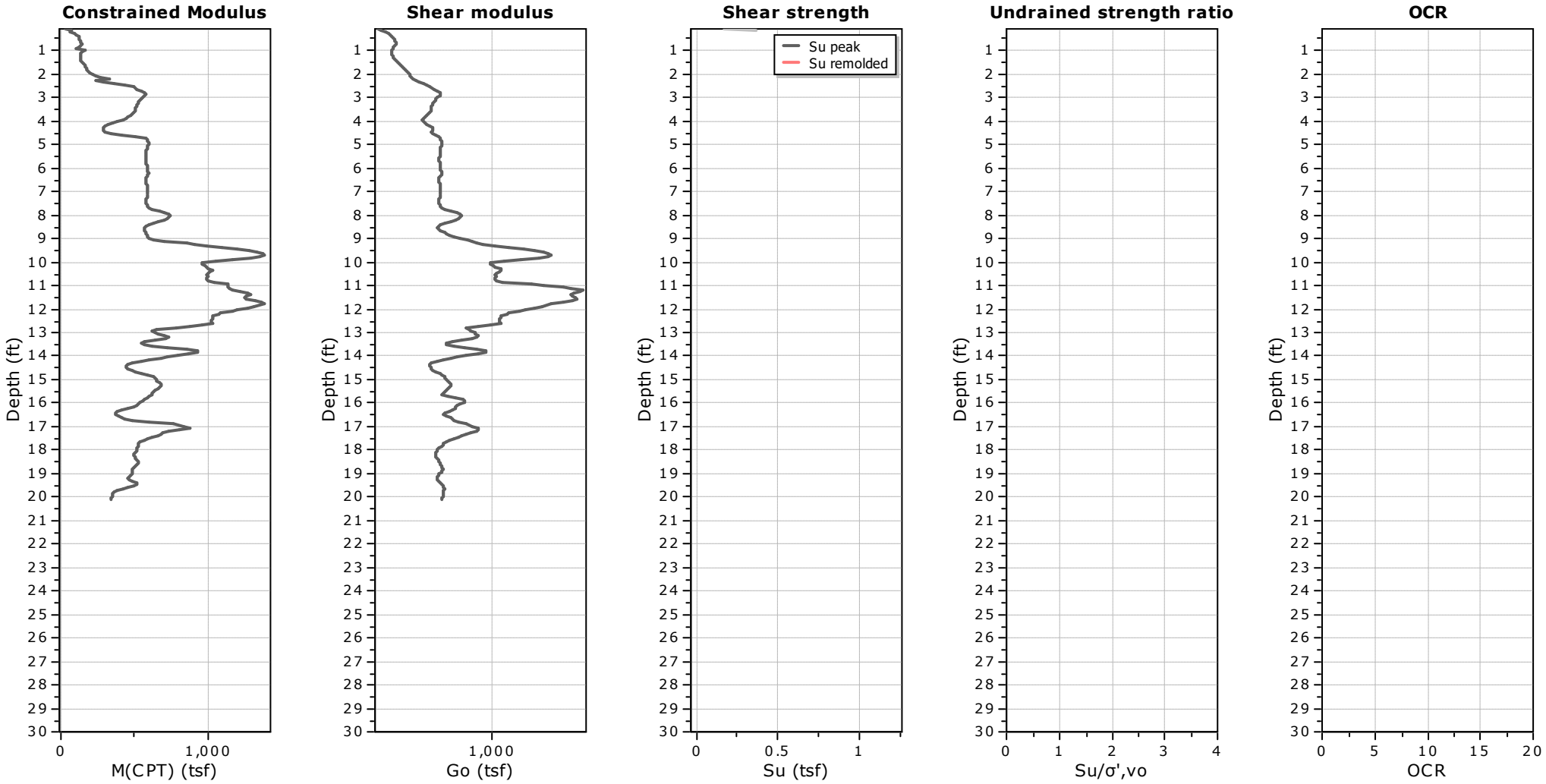

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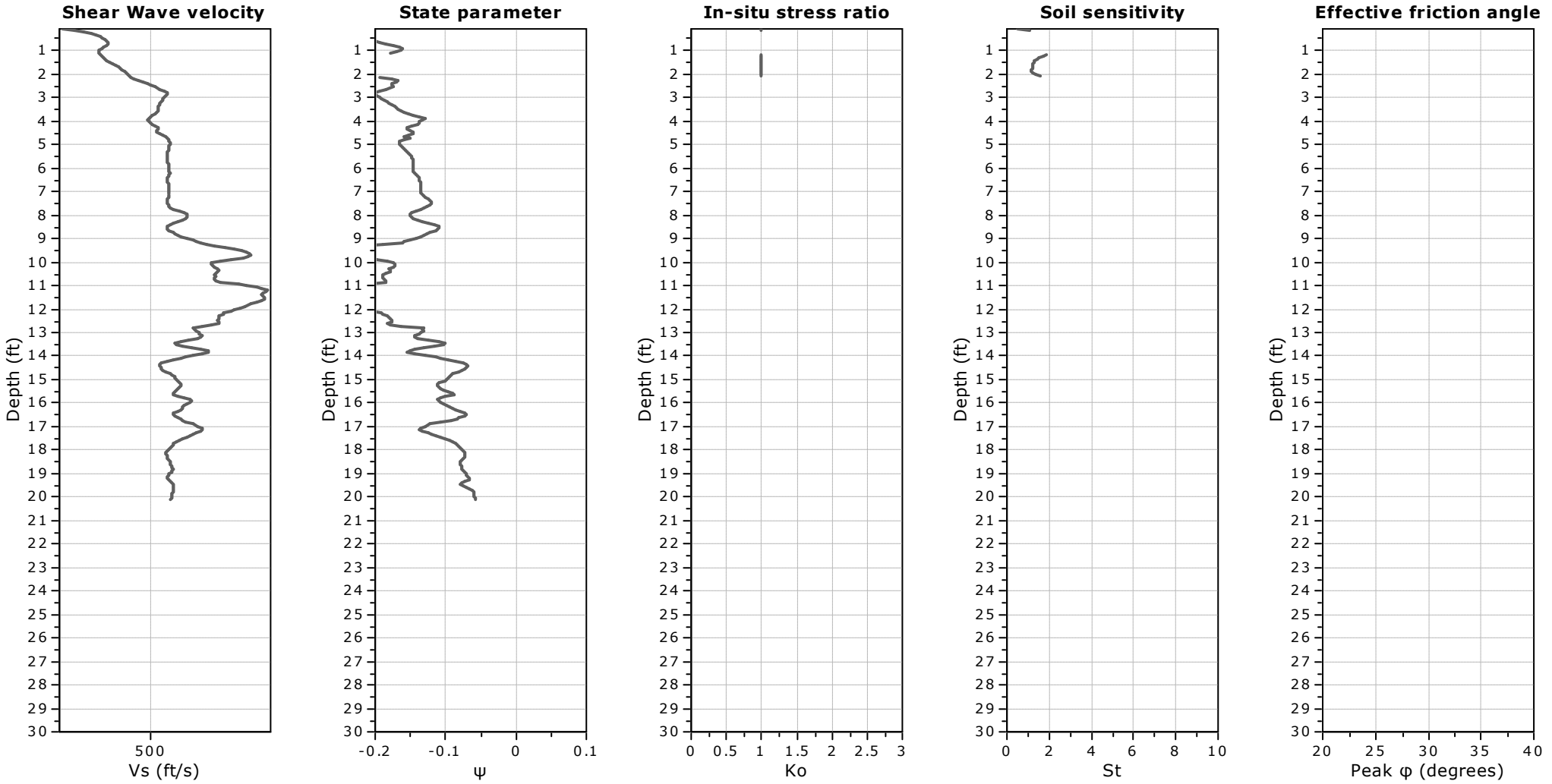

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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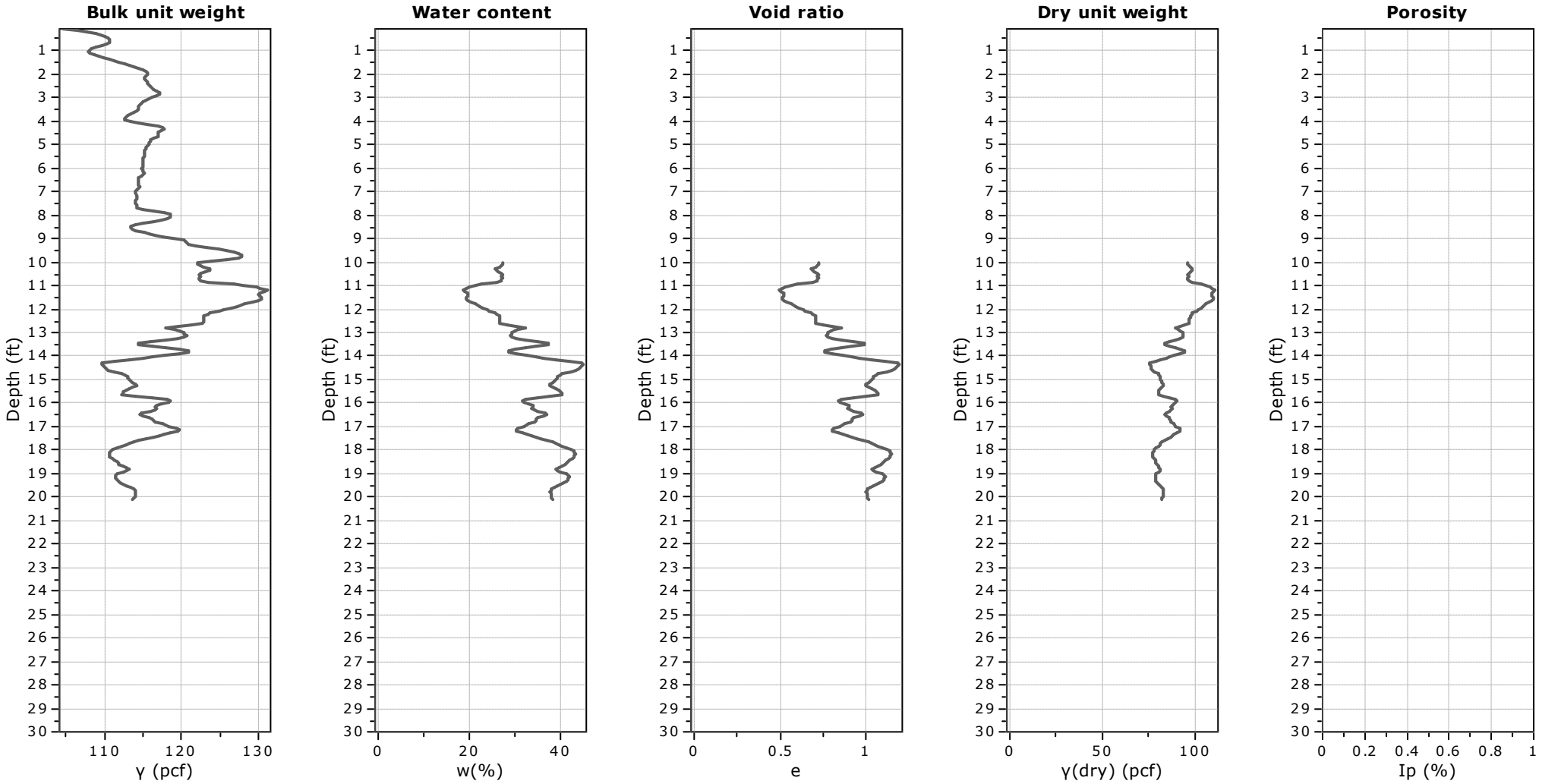

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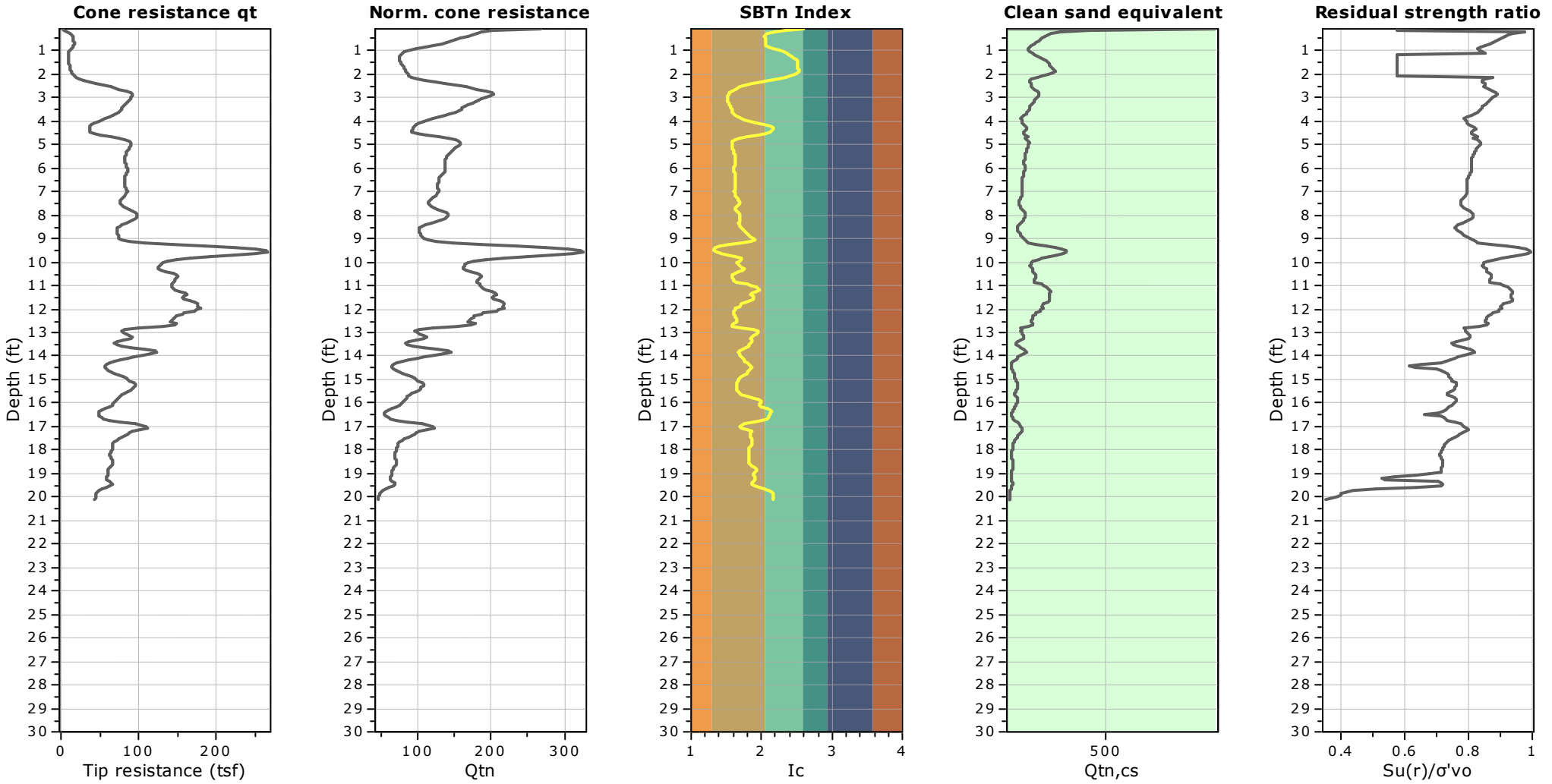

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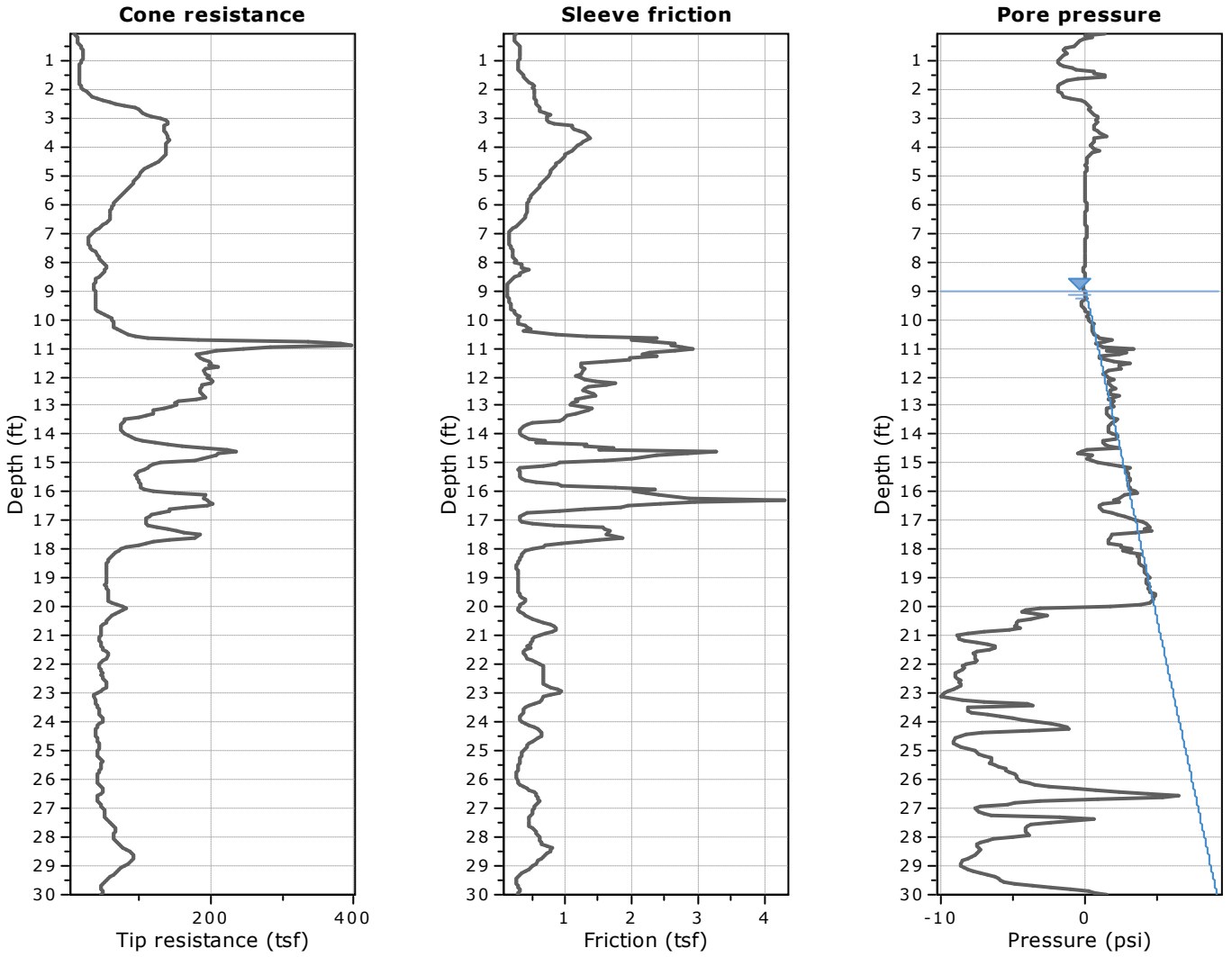
C-11
Total depth: 30.21 ft, Date: 5/13/2024
Surface Elevation: 64.66 ft
Coords: X:572153.91, Y:555805.74
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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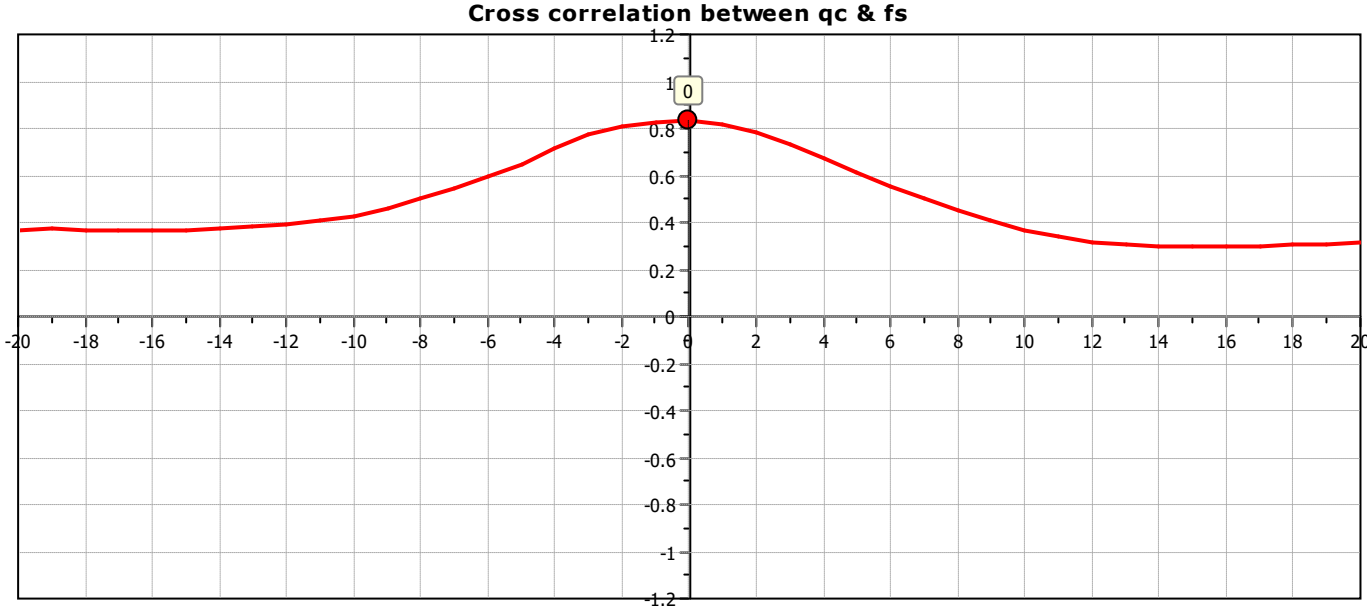

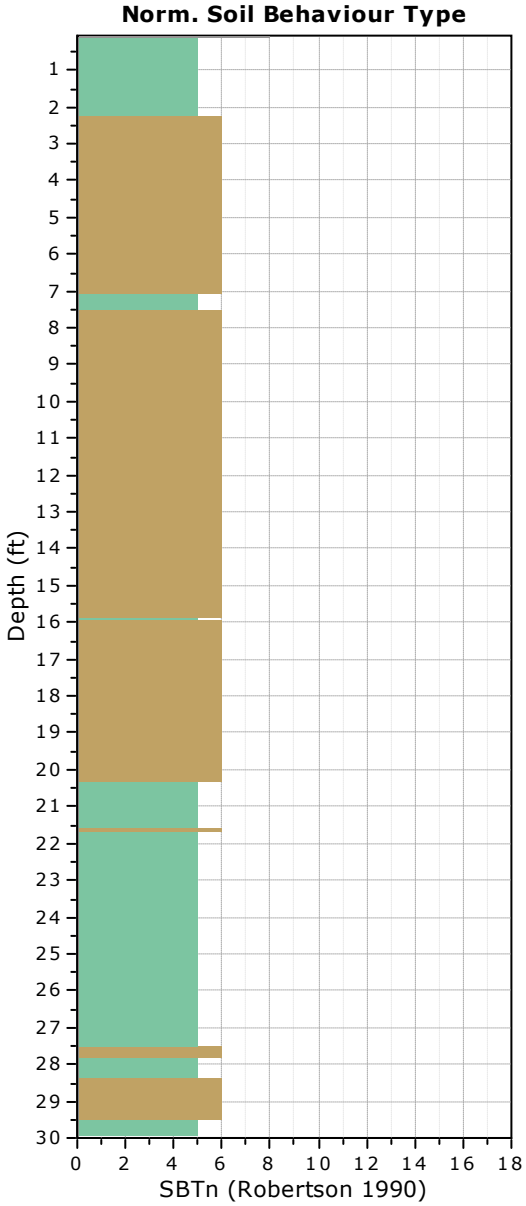

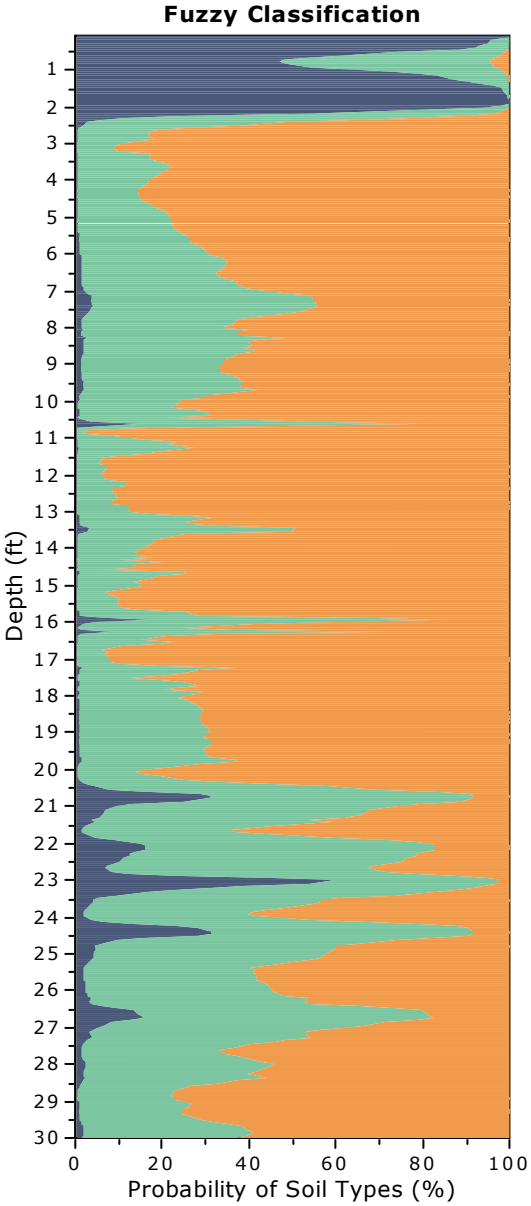

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

Stable Ground In-Situ, LLC
ENGINEERING INVESTIGATIONS AND CONSULTING
BUILD CONFIDENTLY
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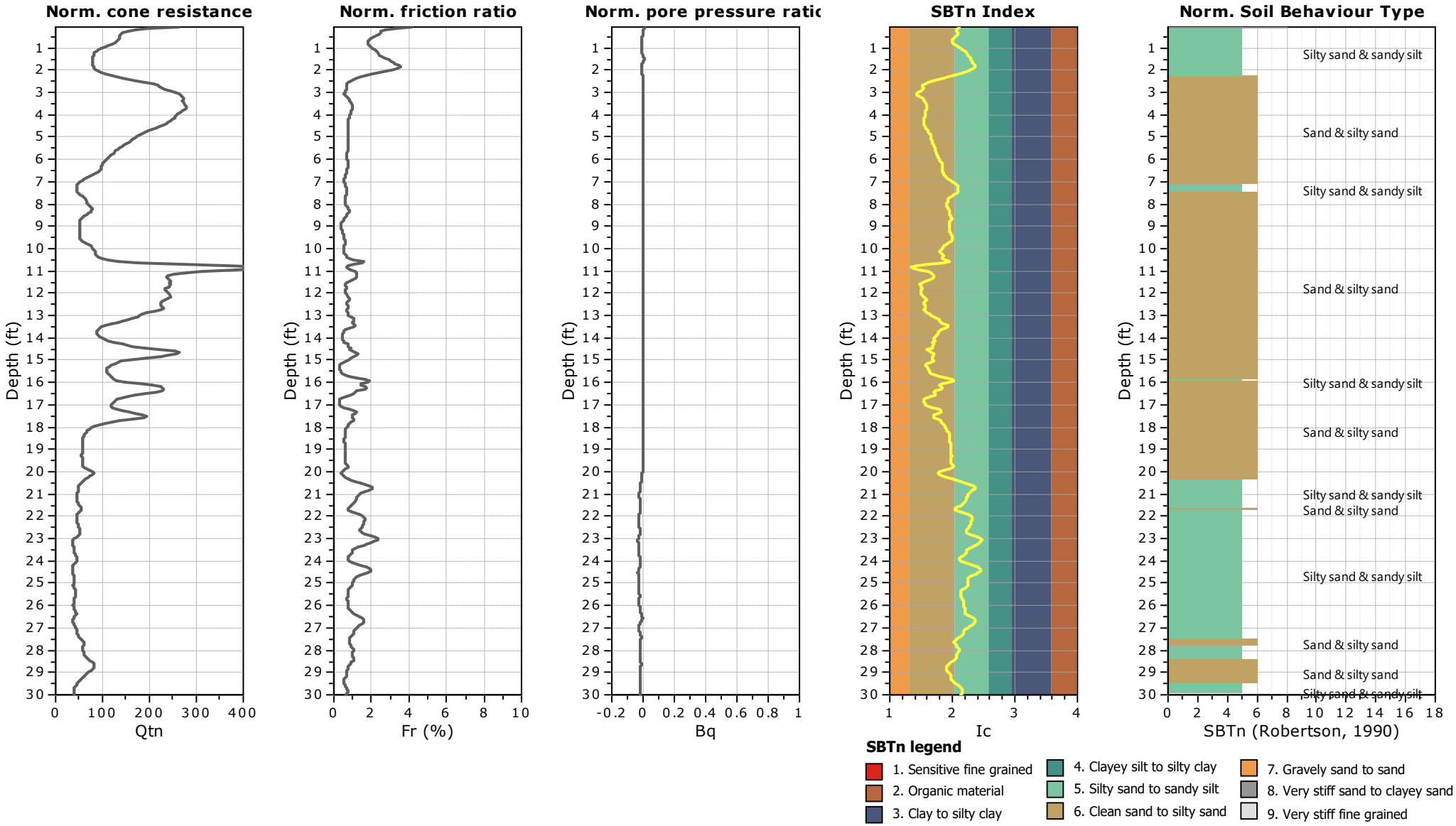
C-11
Total depth: 30.21 ft, Date: 5/13/2024
Surface Elevation: 64.66 ft
Coords: X:572153.91, Y:555805.74
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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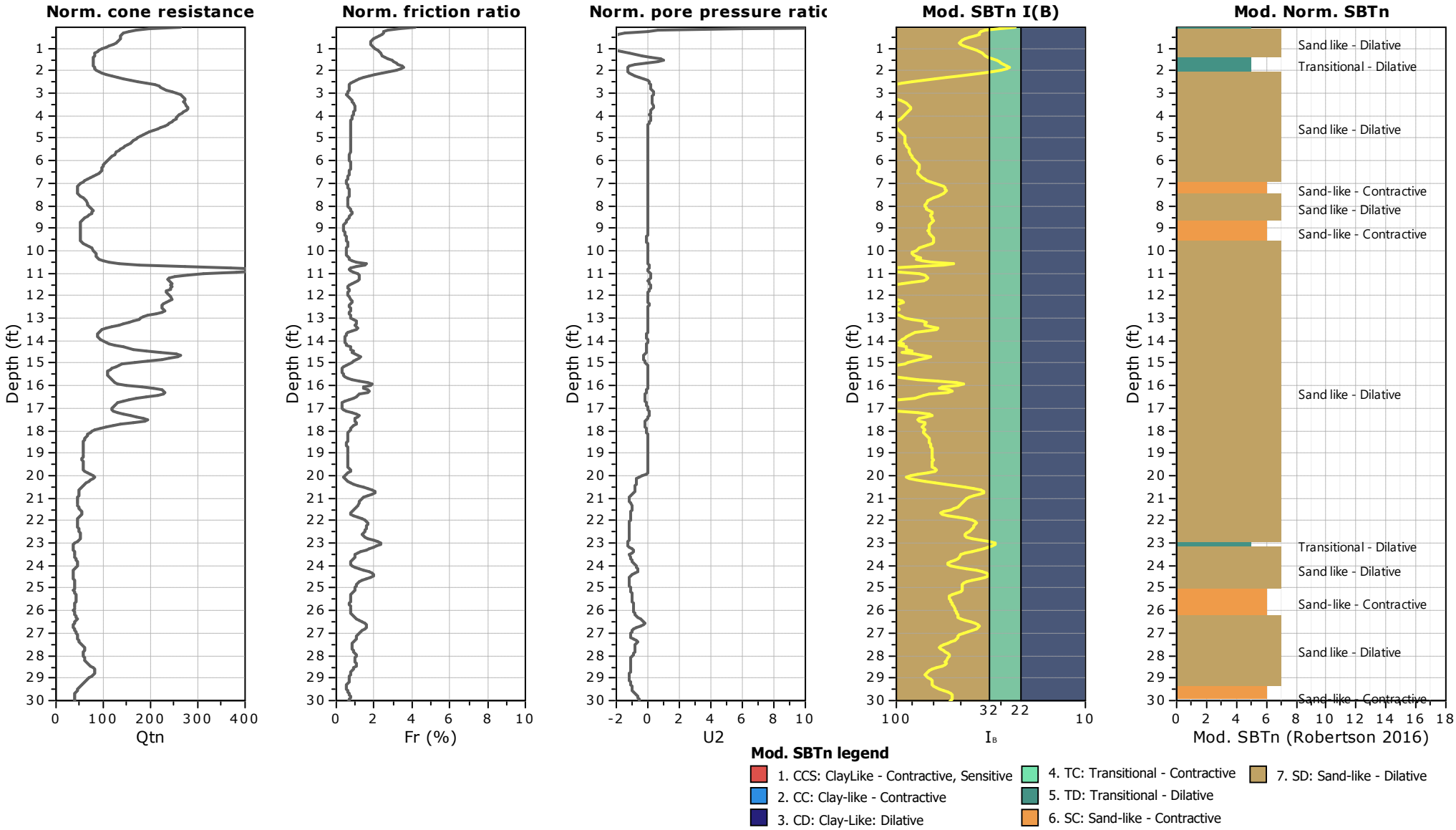

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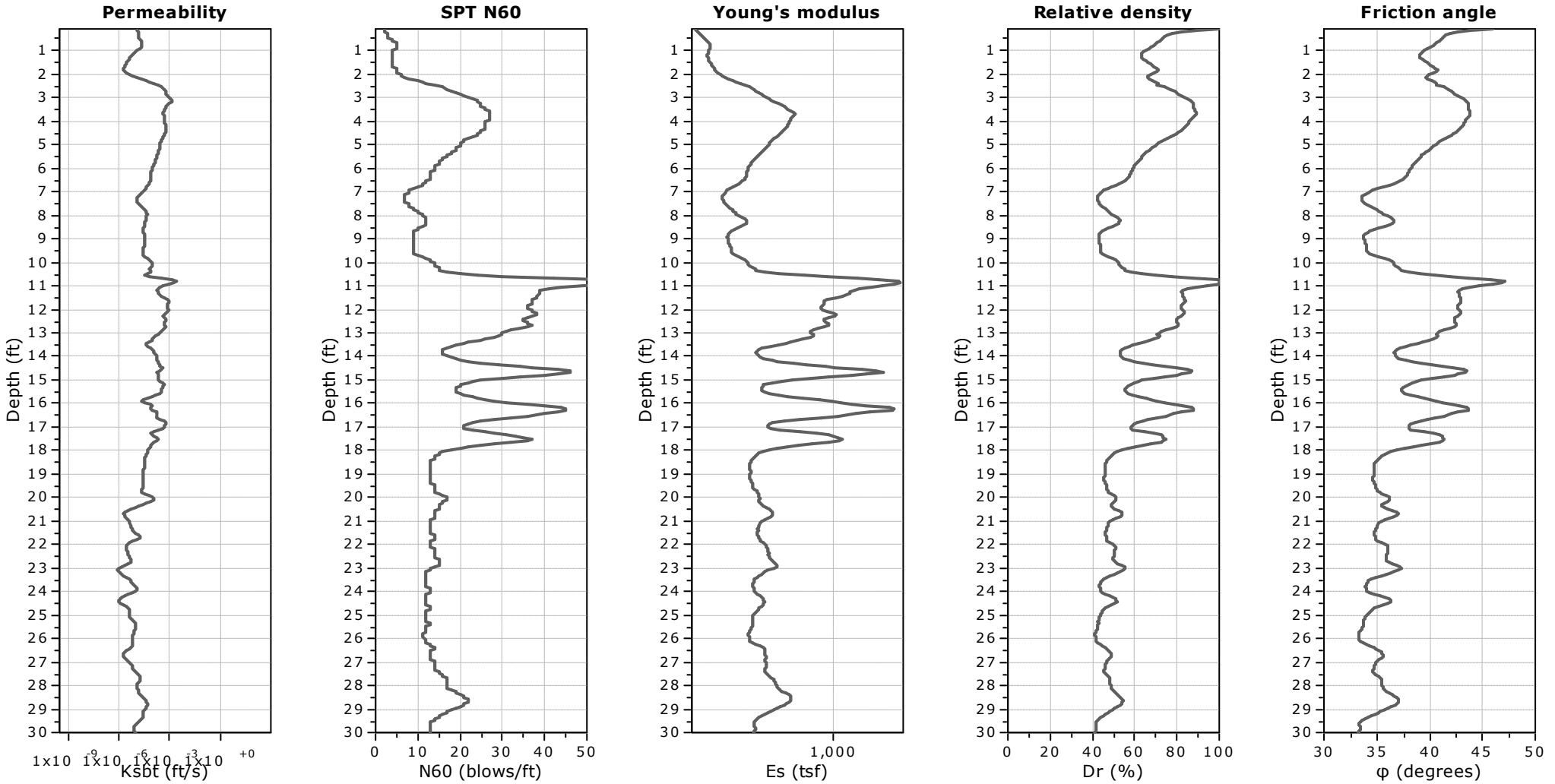

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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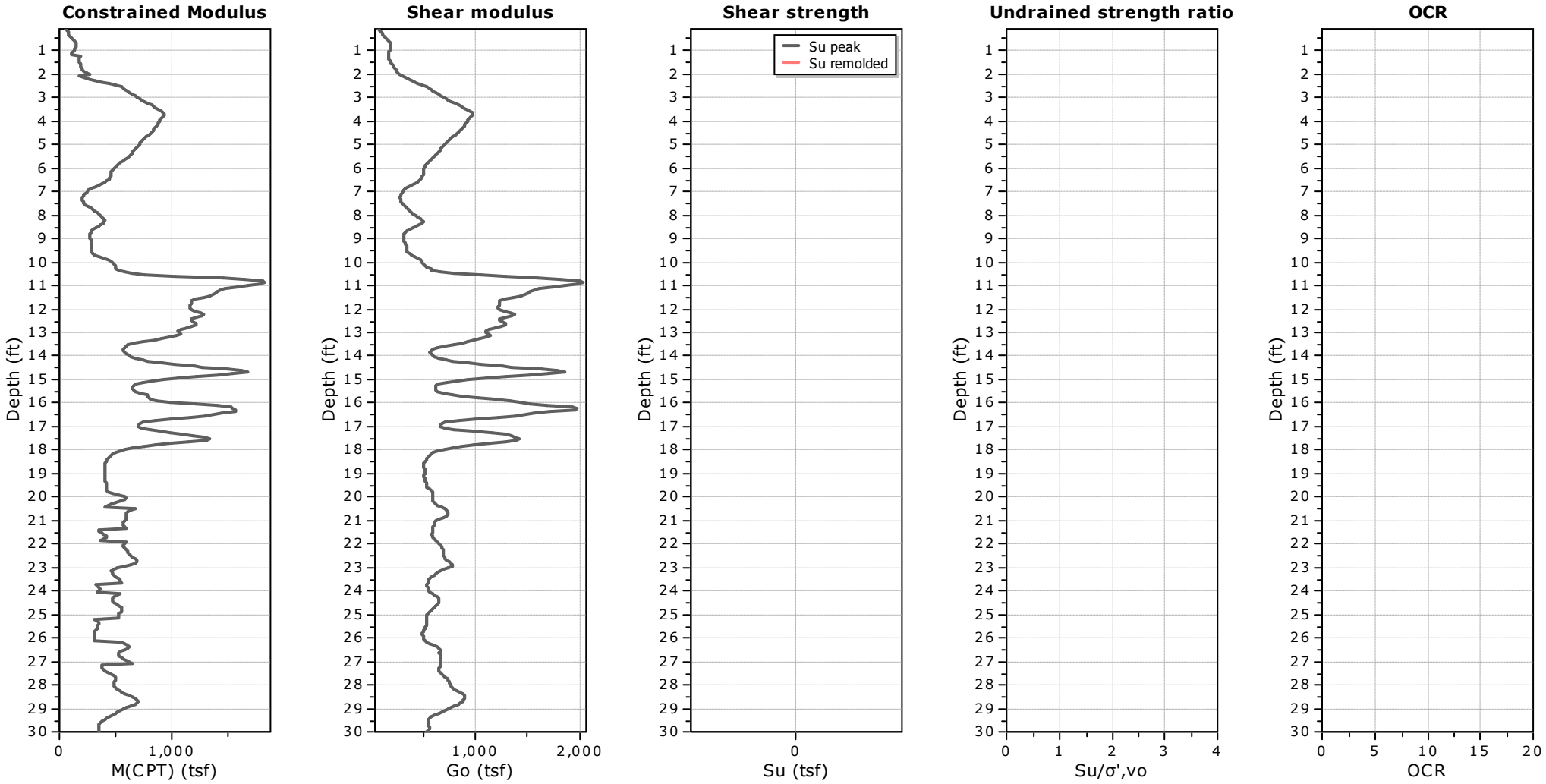

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
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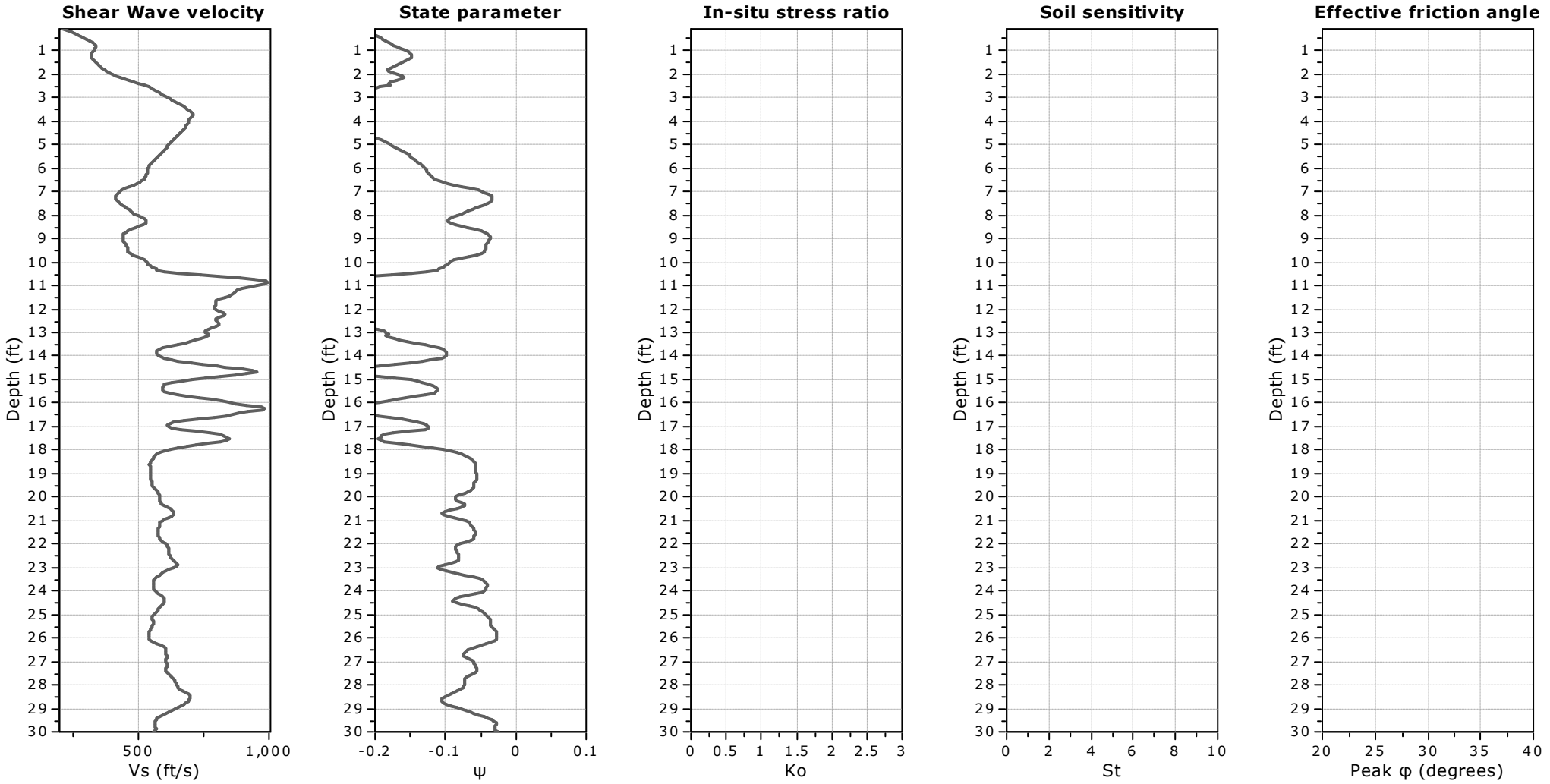

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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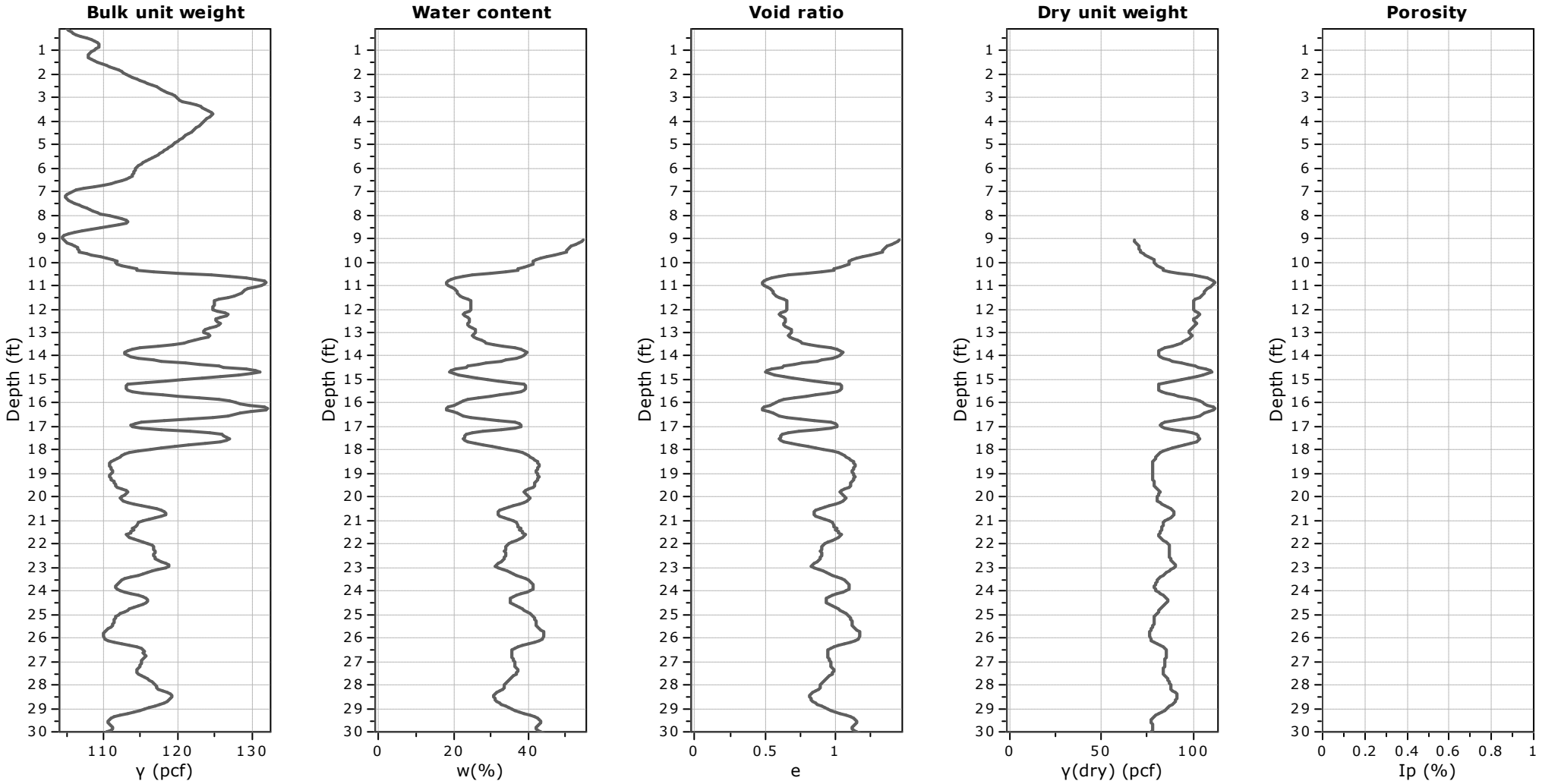

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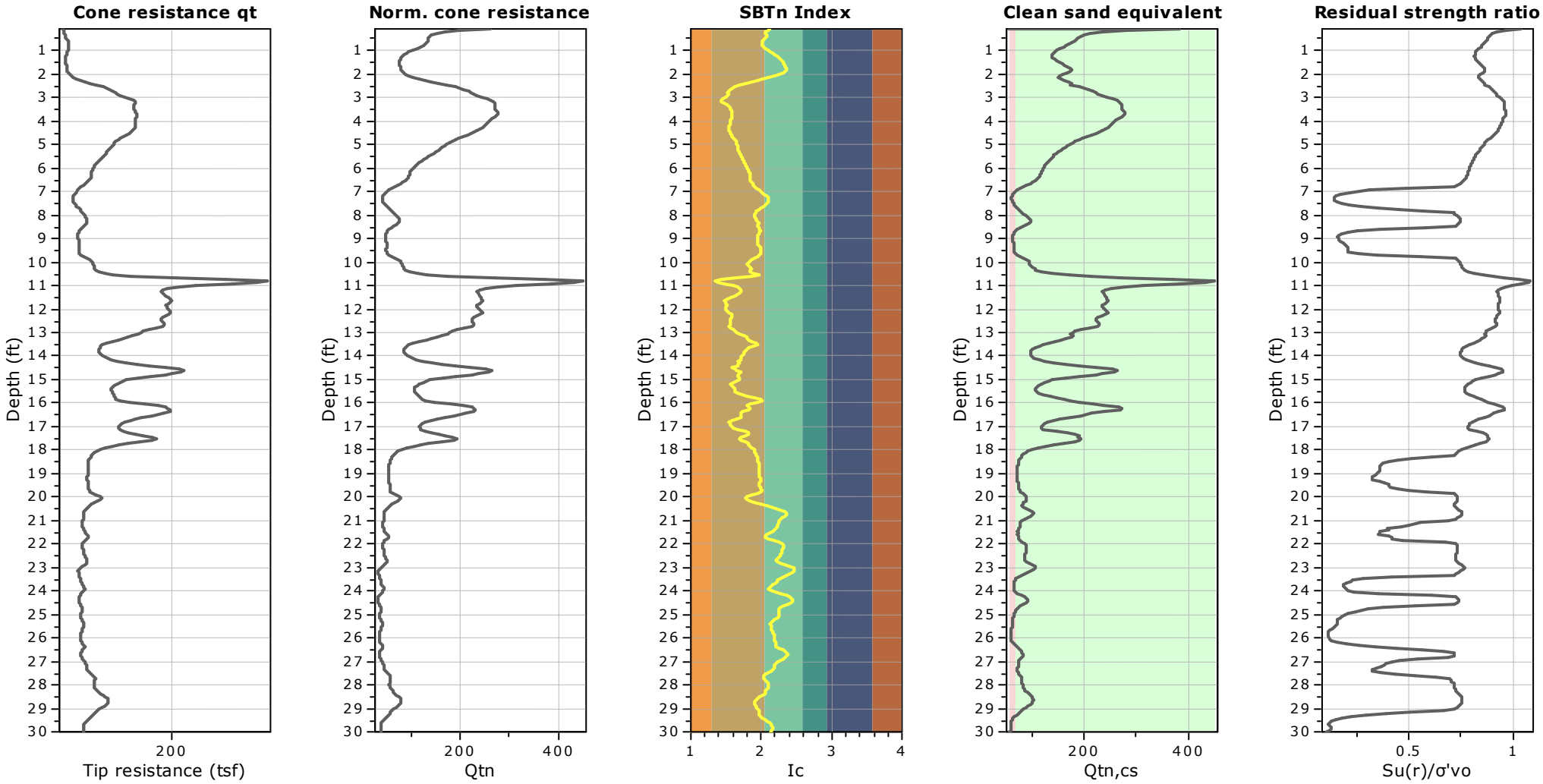

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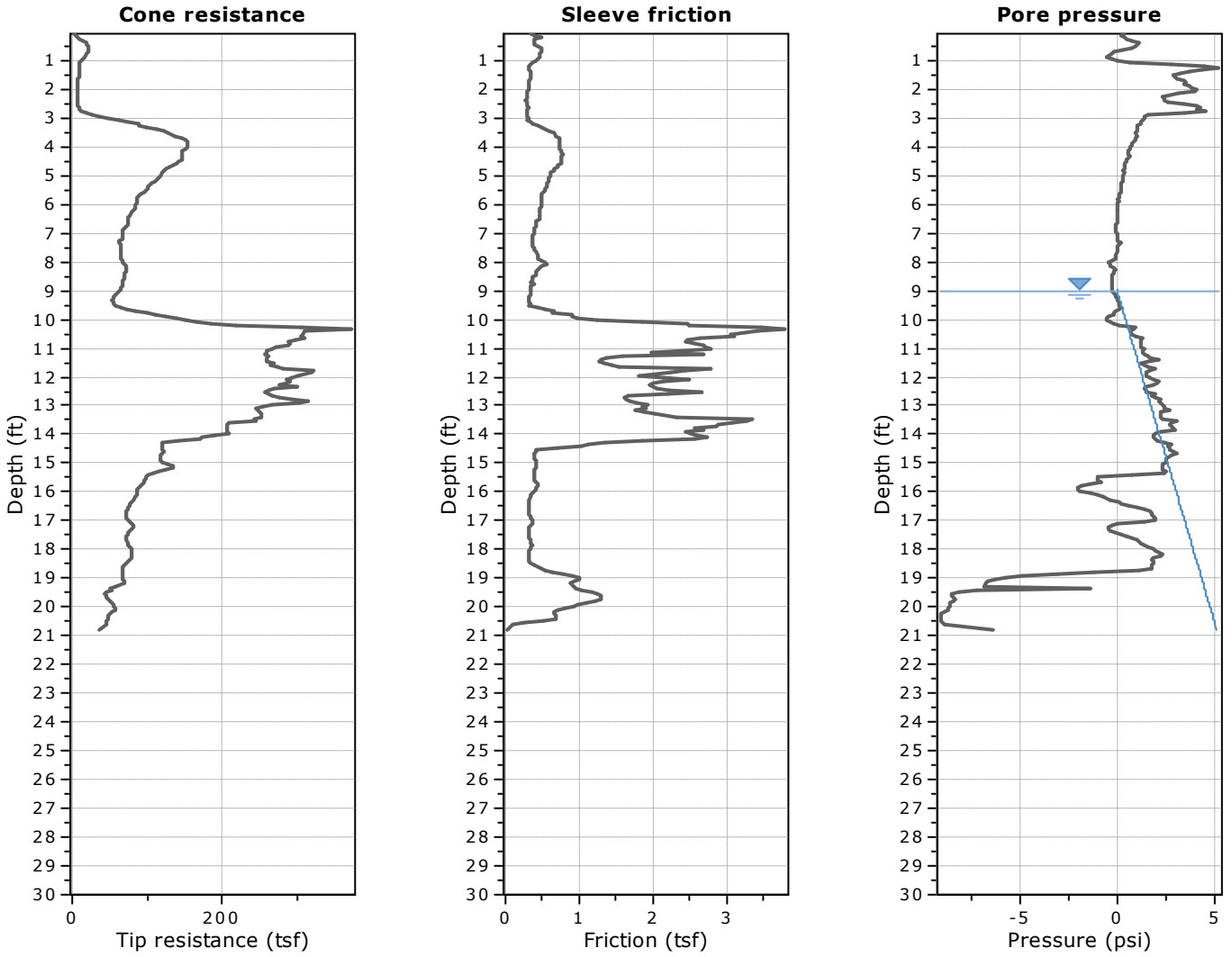
Coords: X:572240.61, Y:555885.06
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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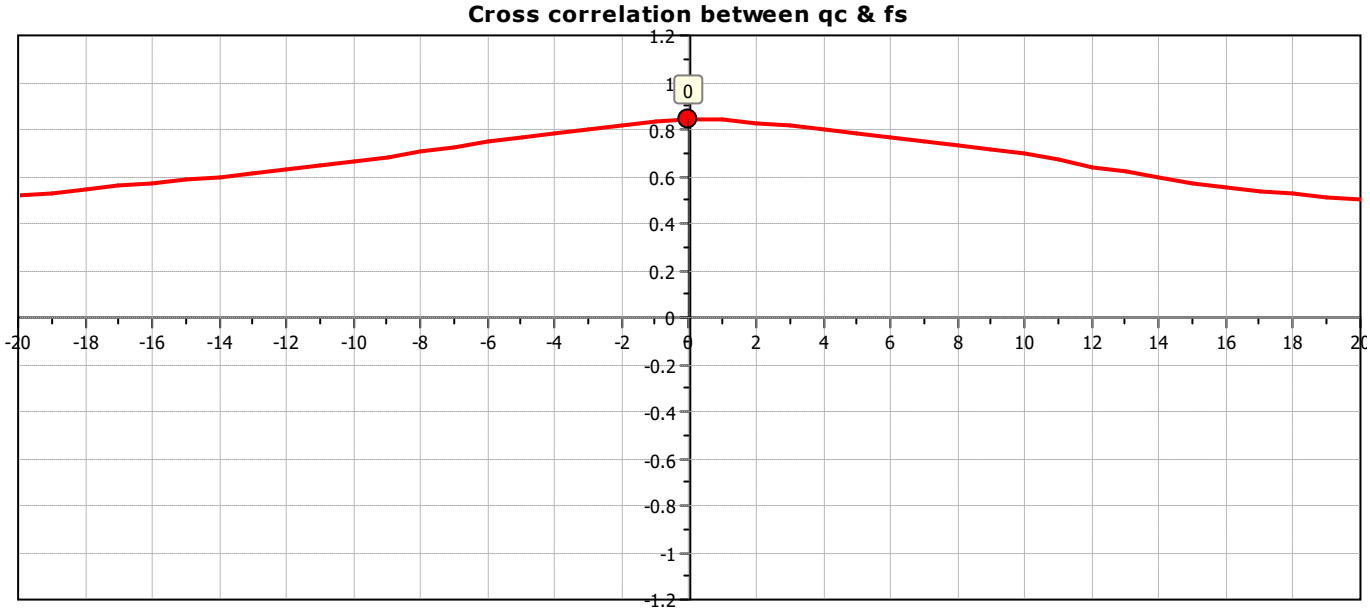

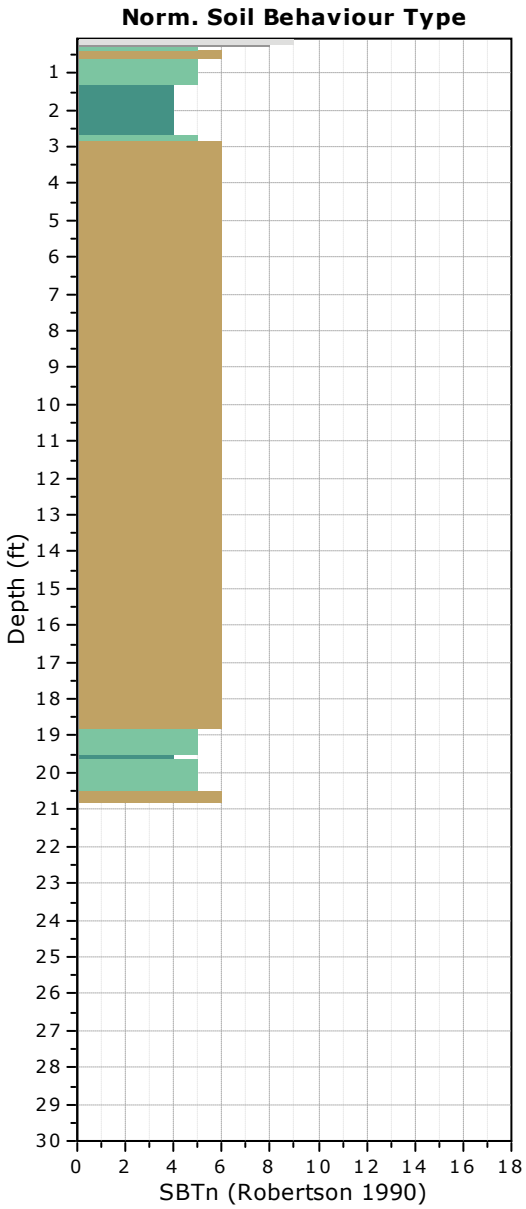

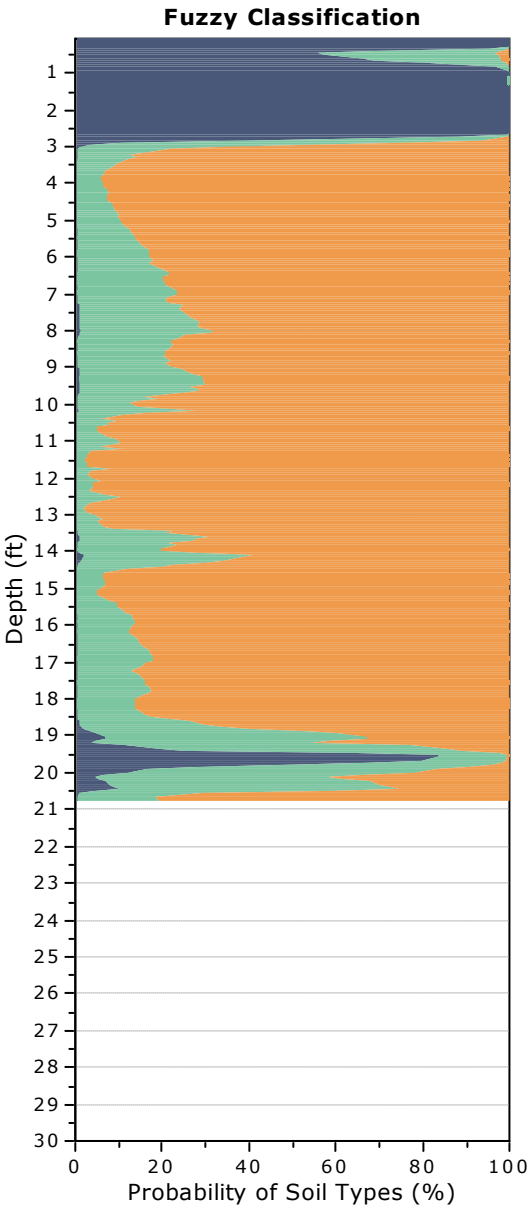

Fuzzy classifiaction legend

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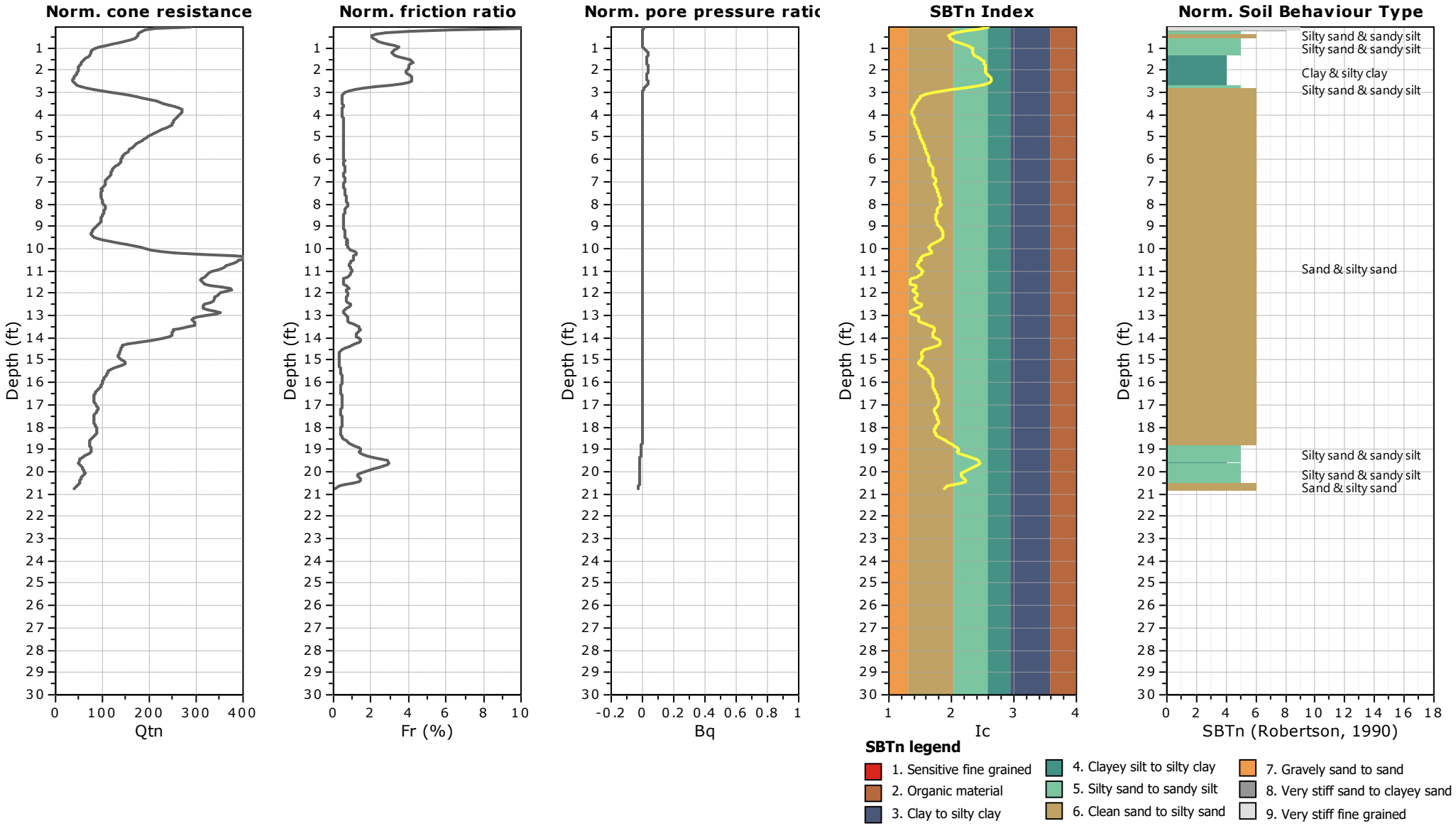

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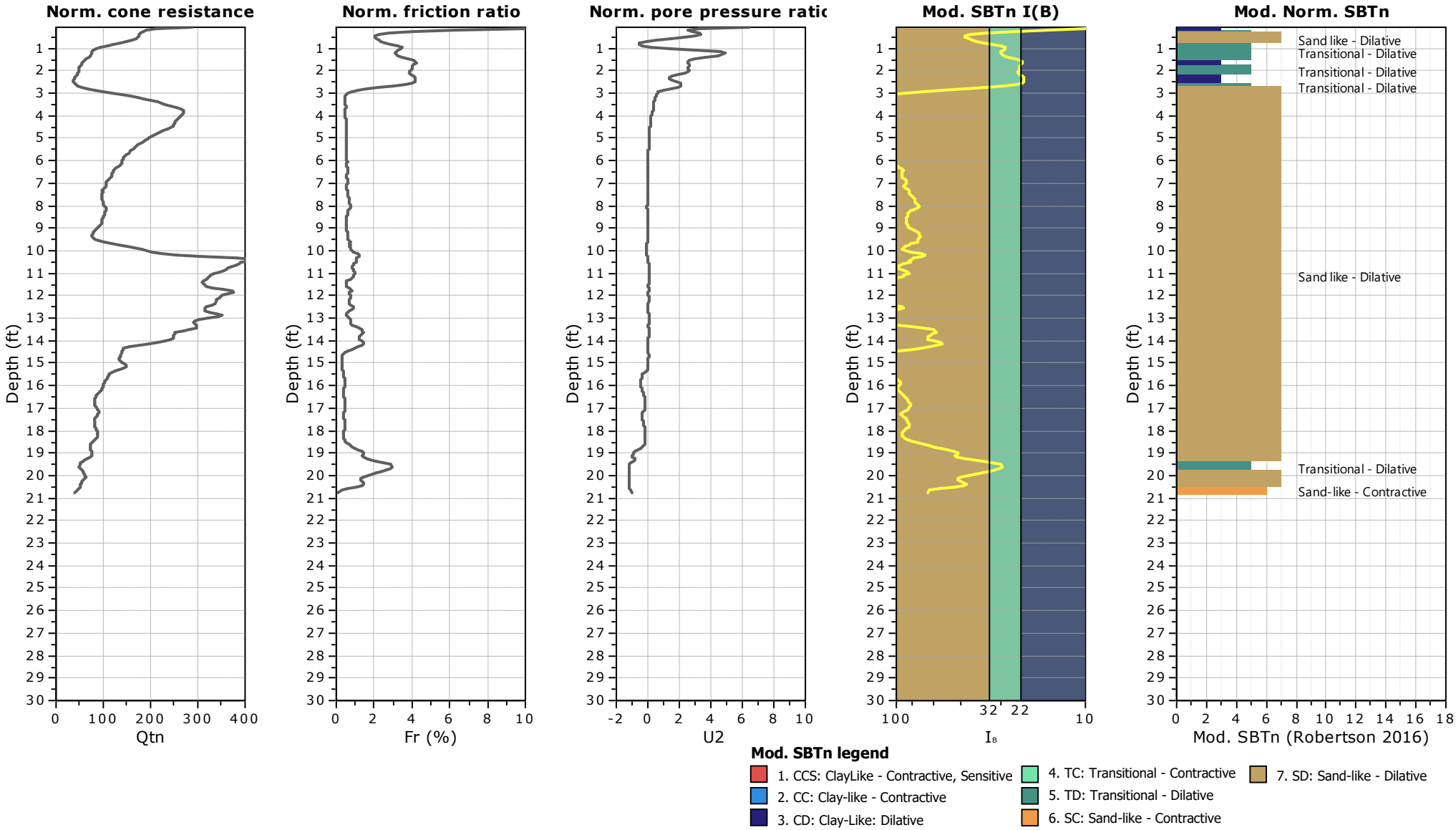

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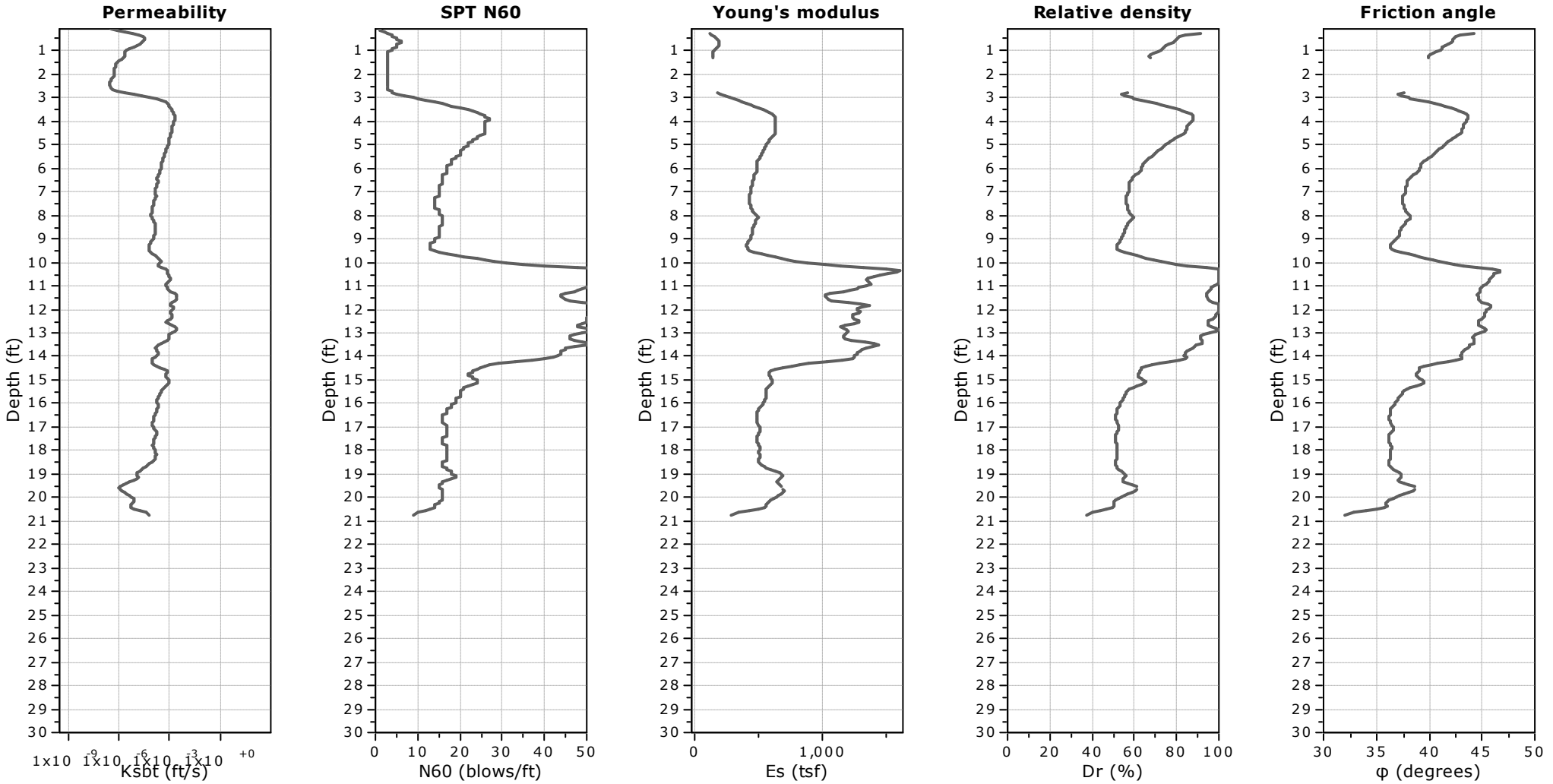

Calculation parameters

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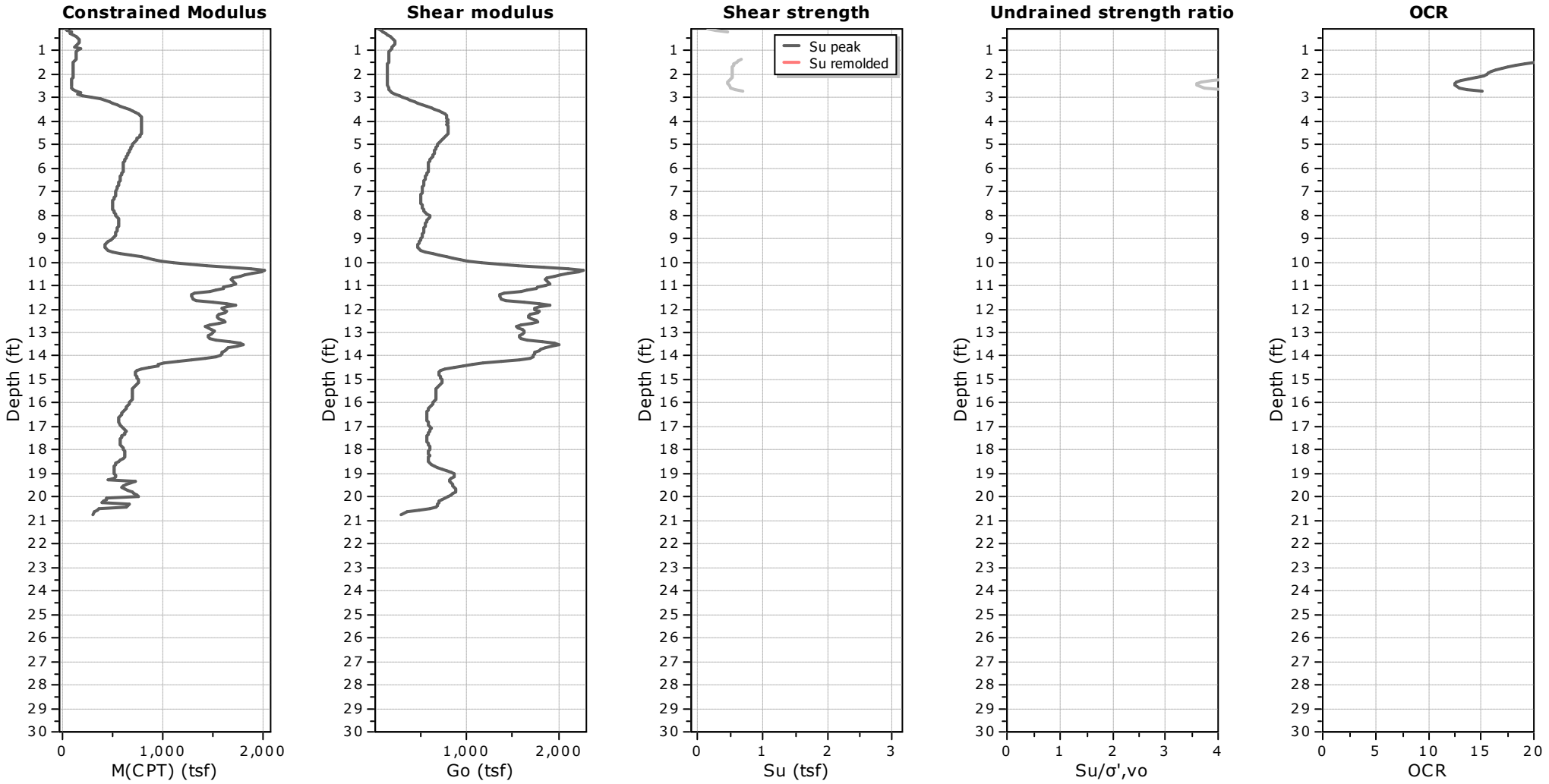

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Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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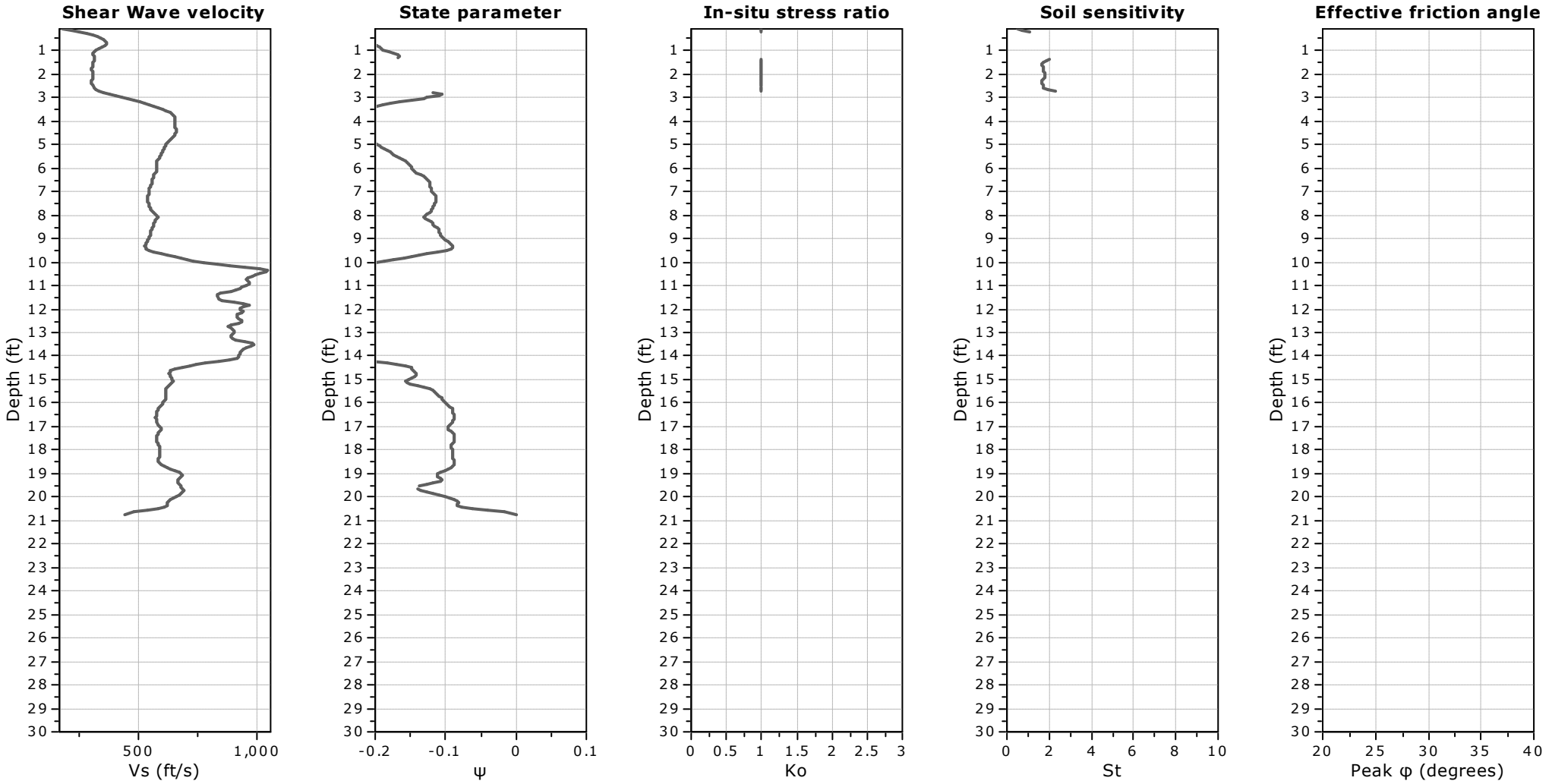

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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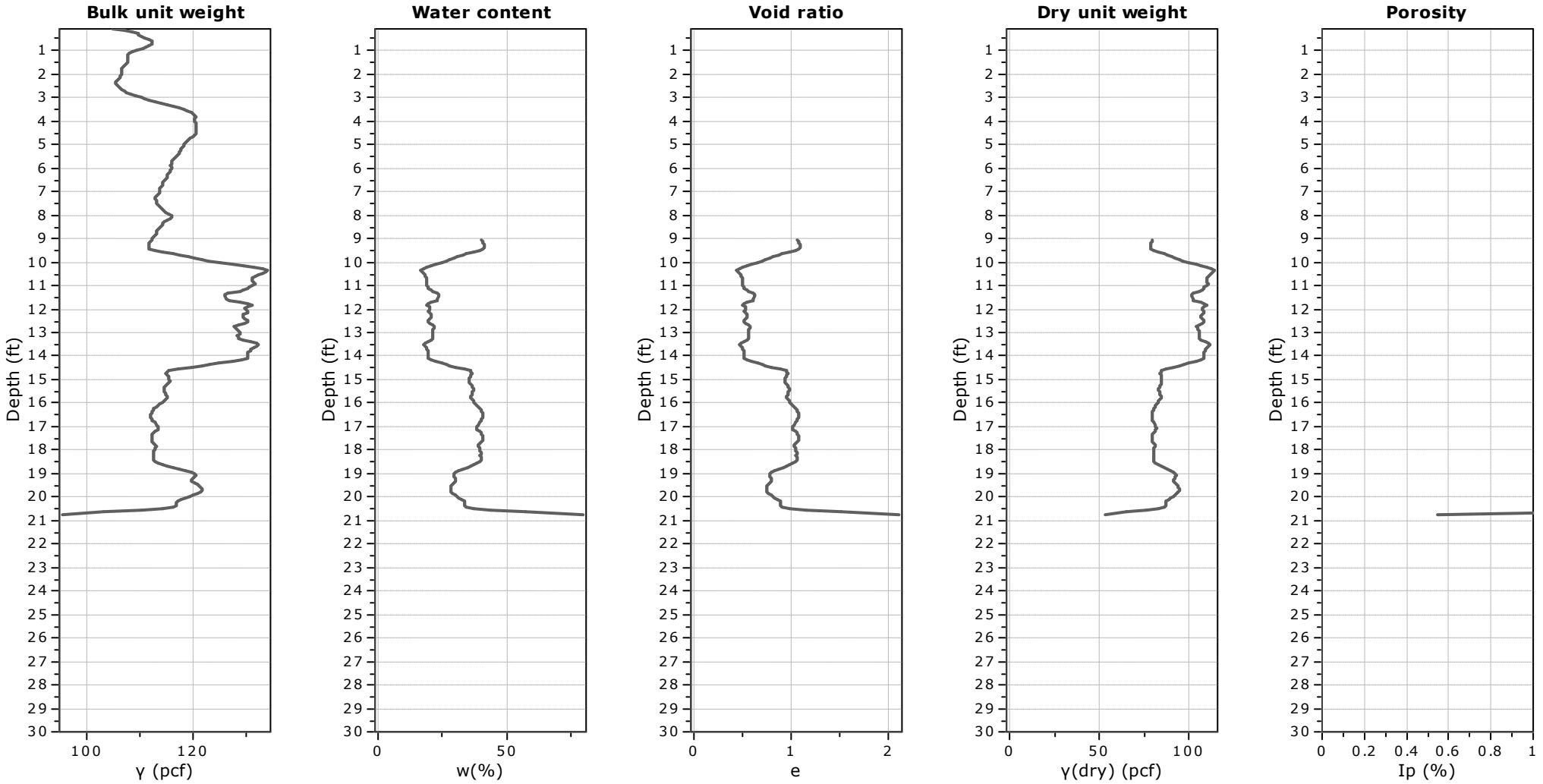

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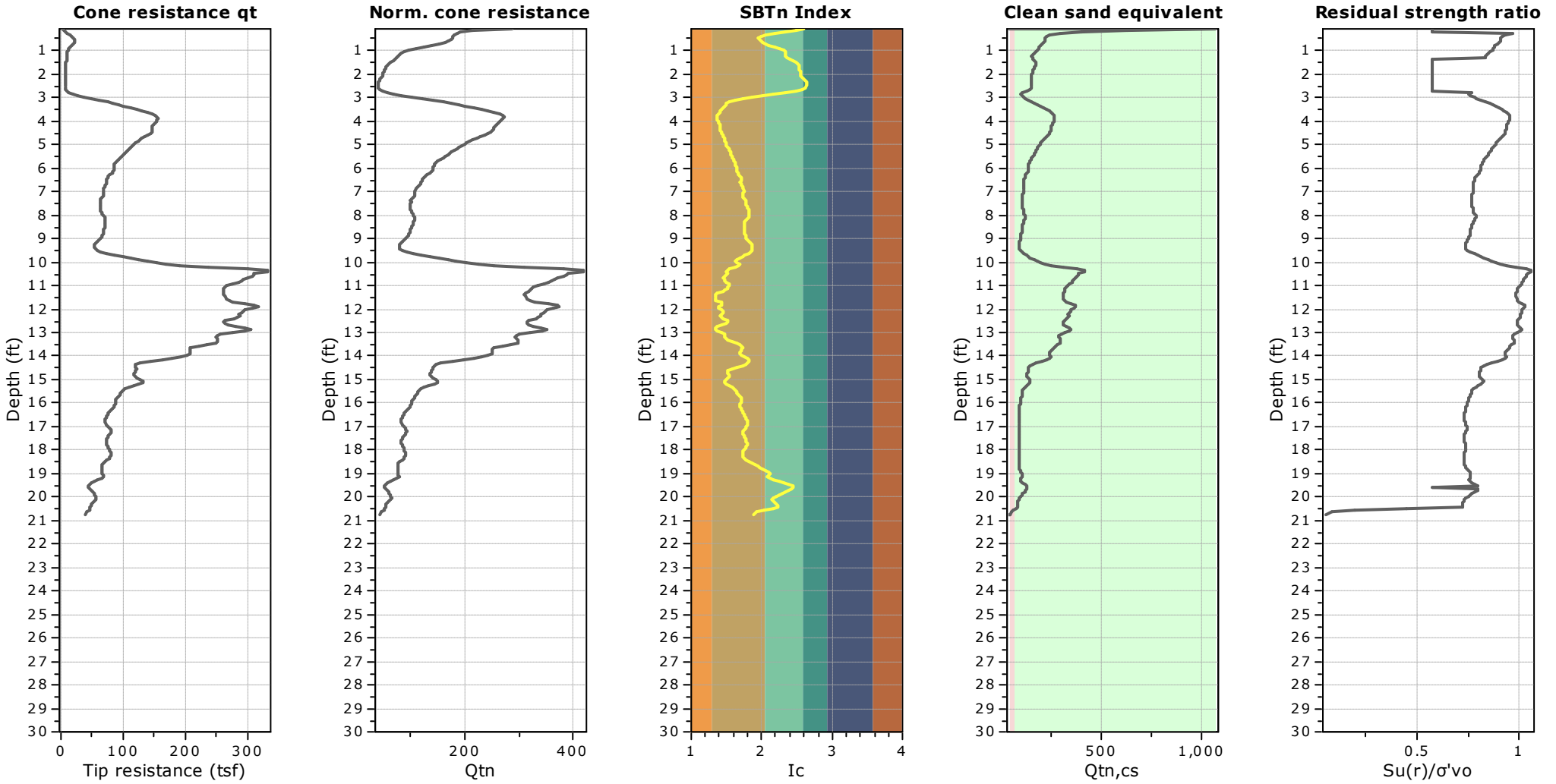

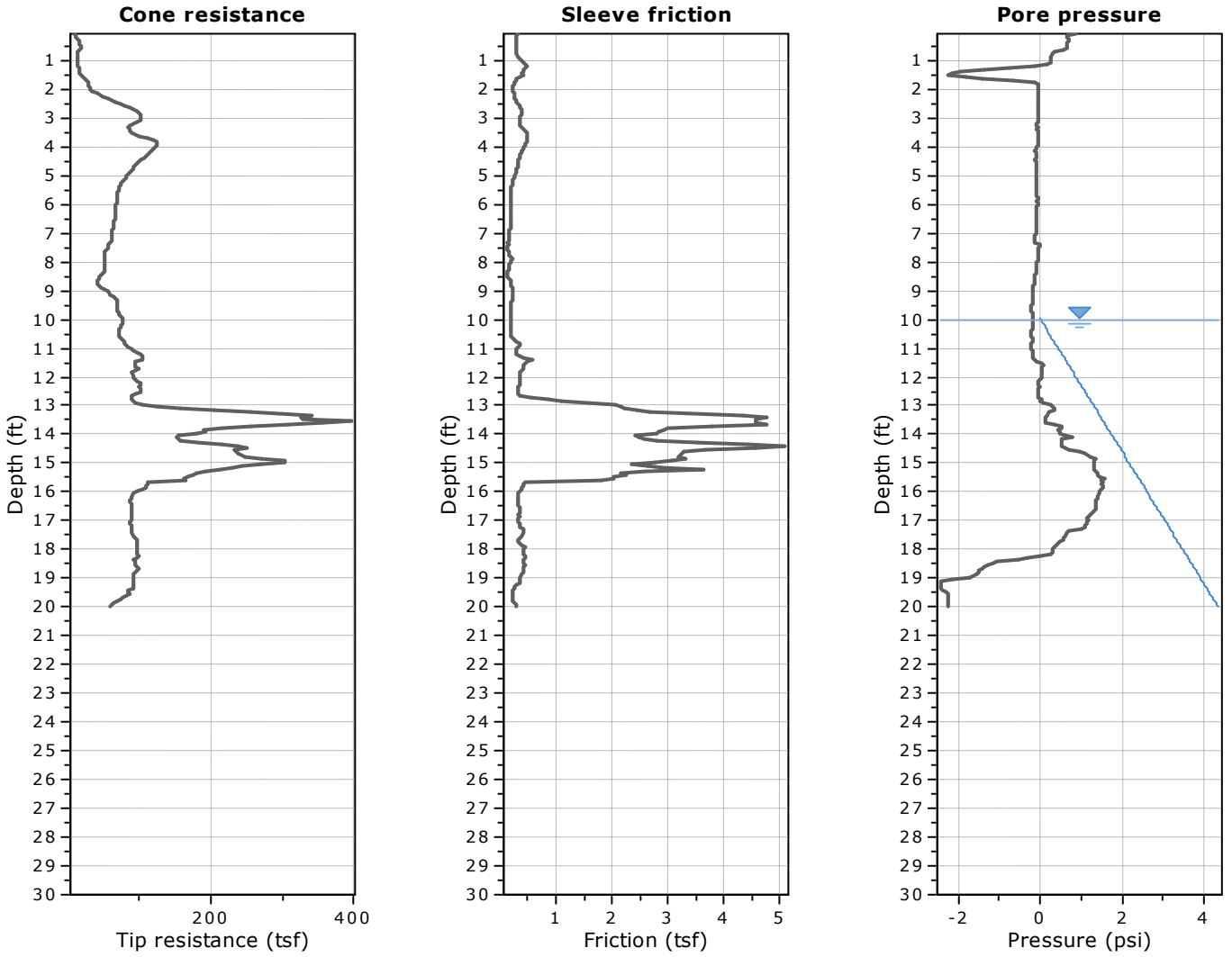

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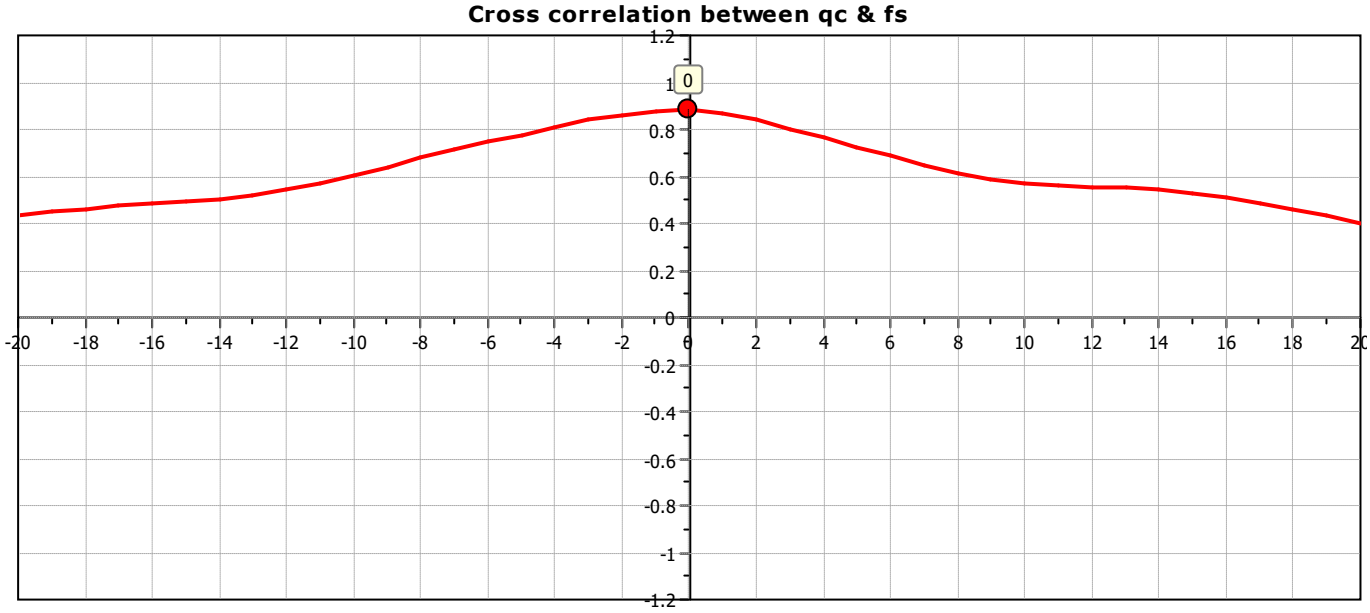

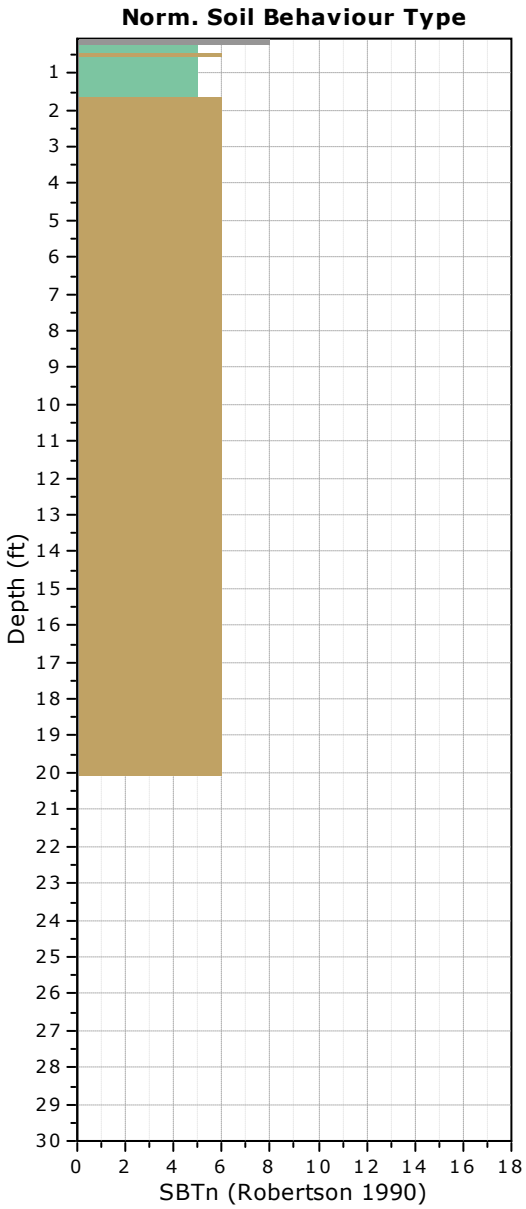

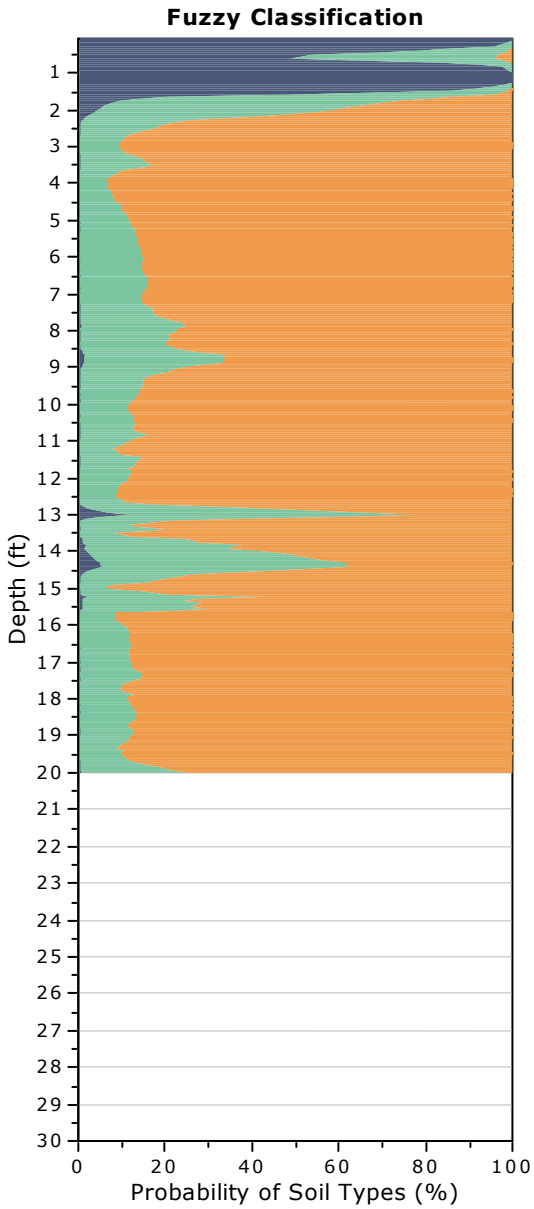

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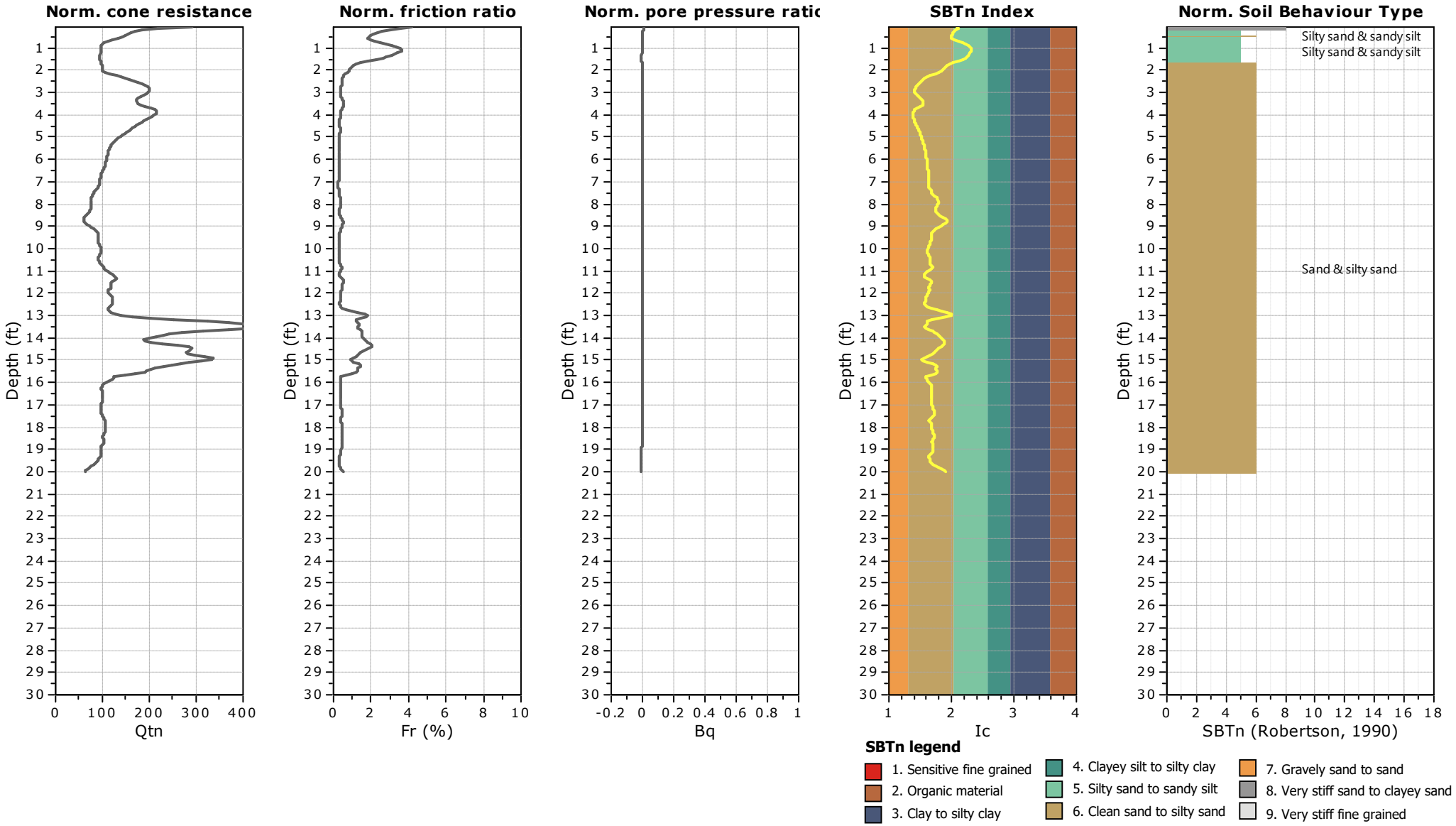

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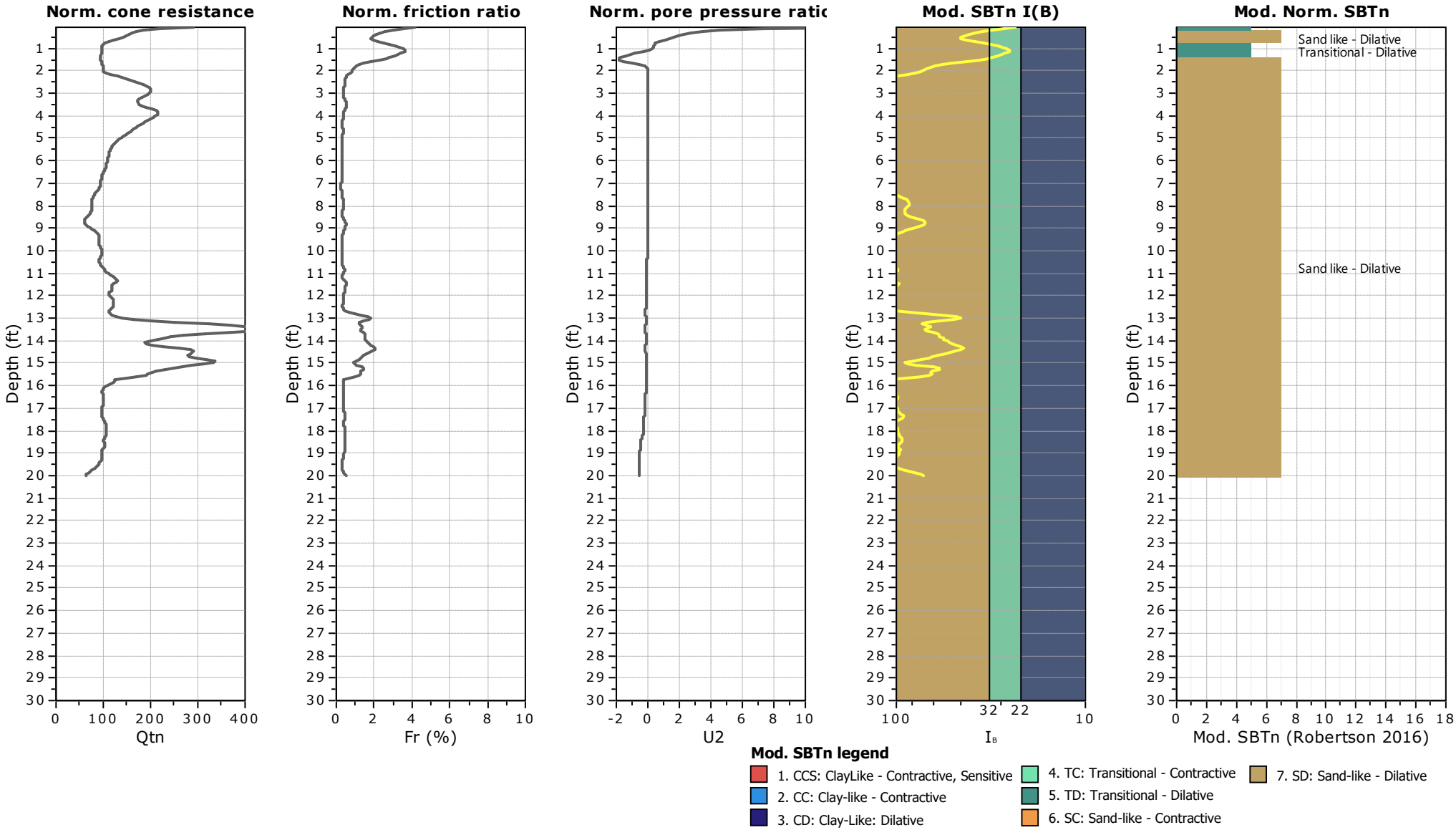

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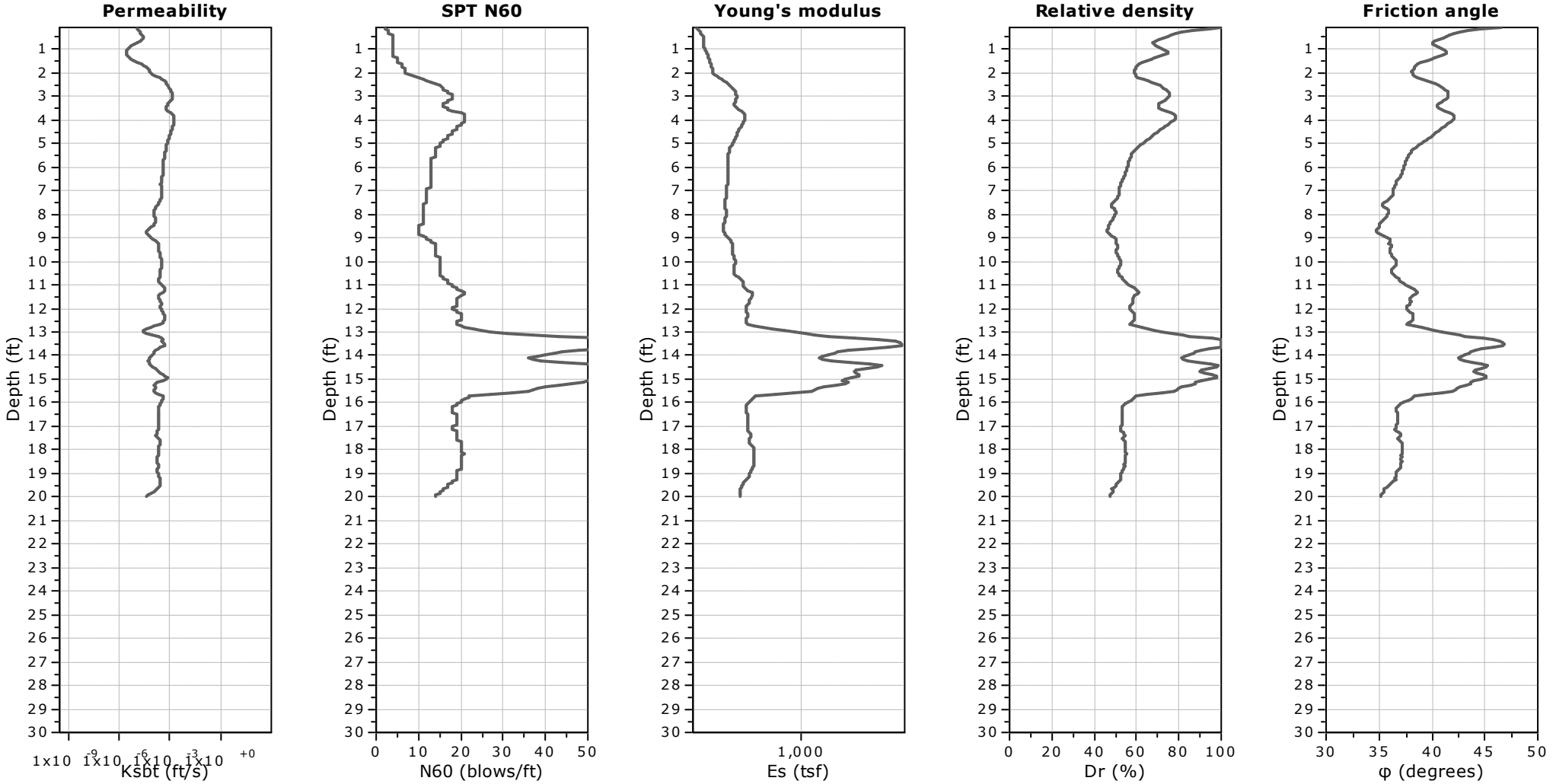

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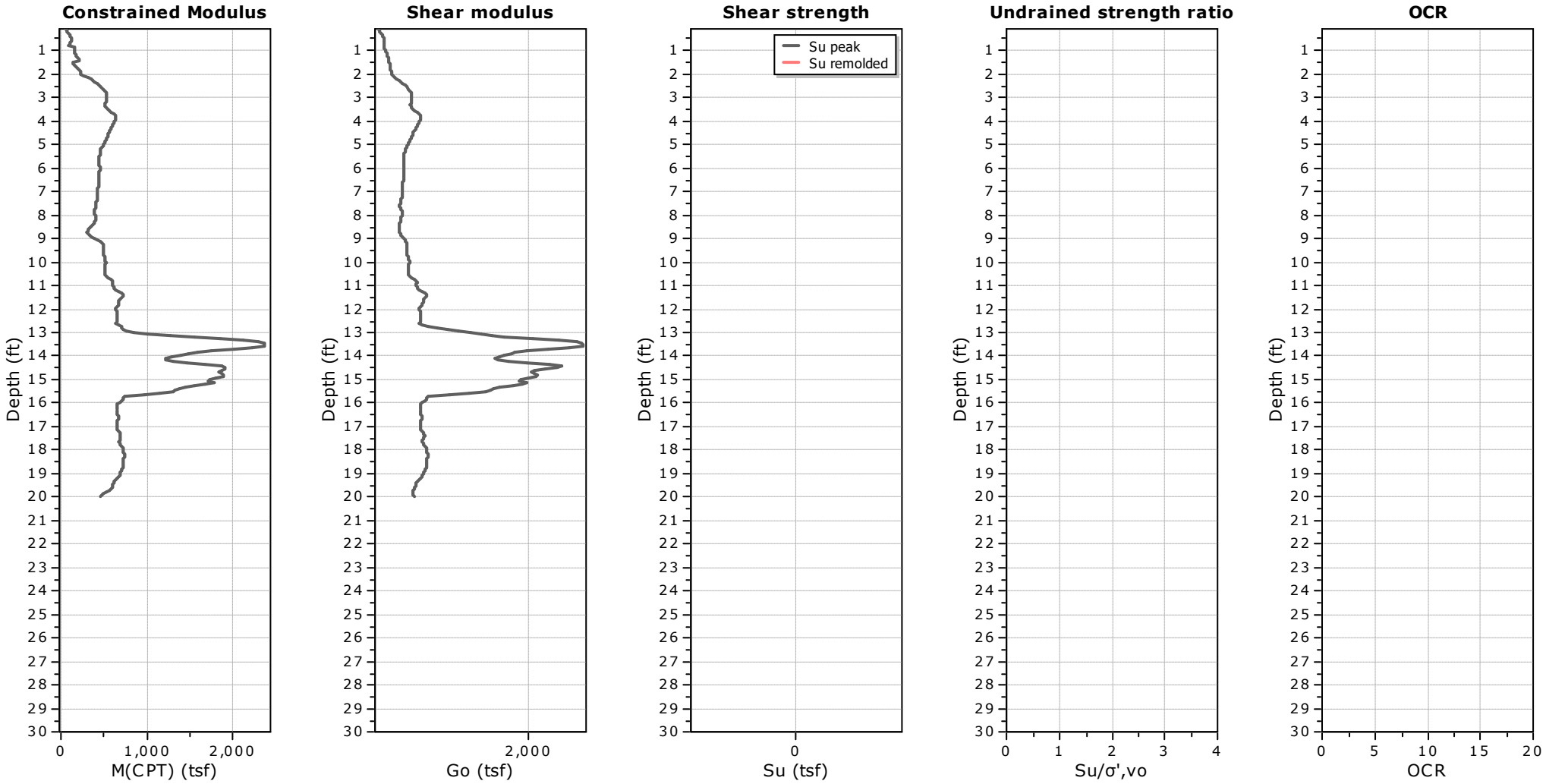

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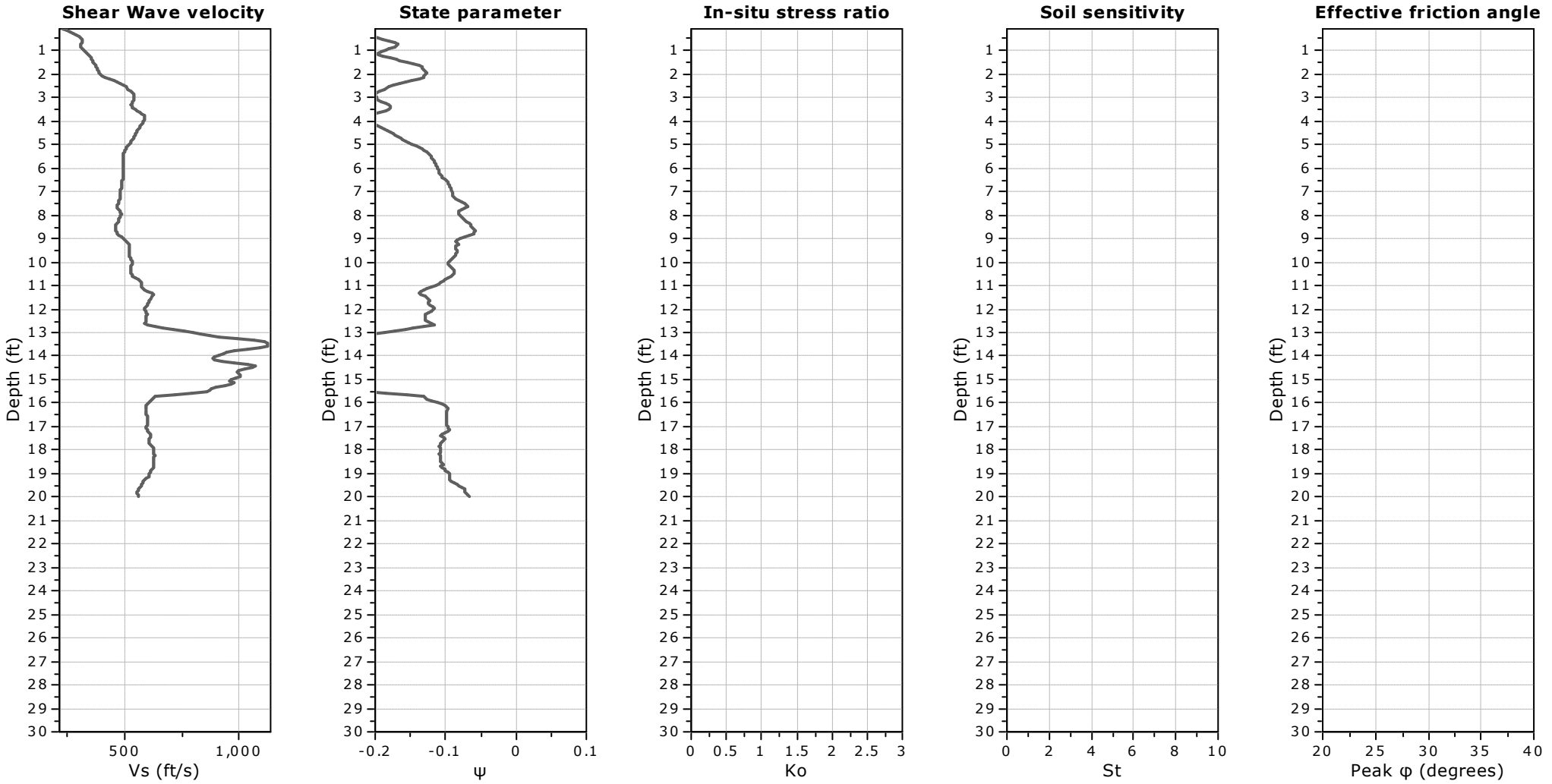

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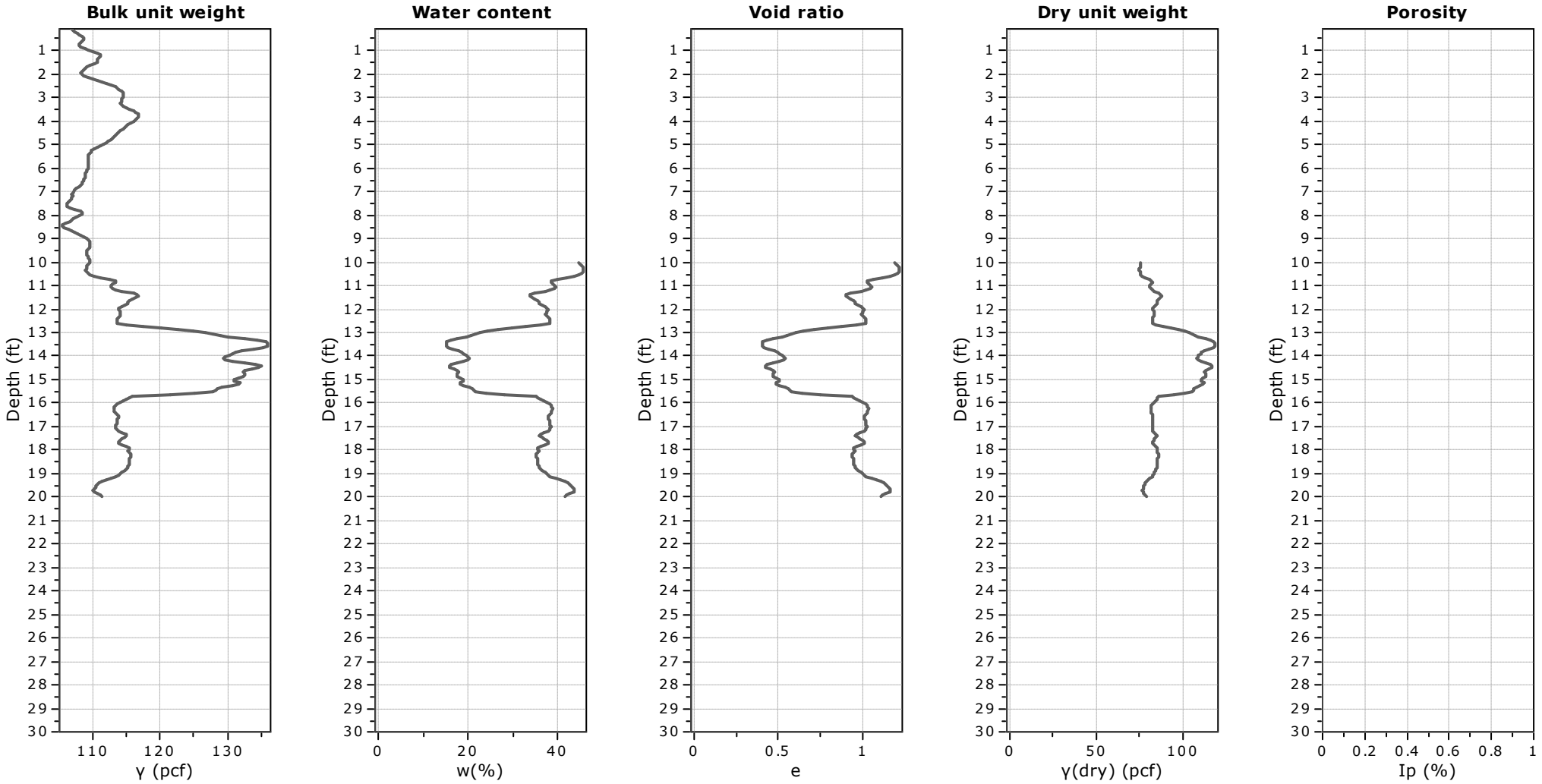

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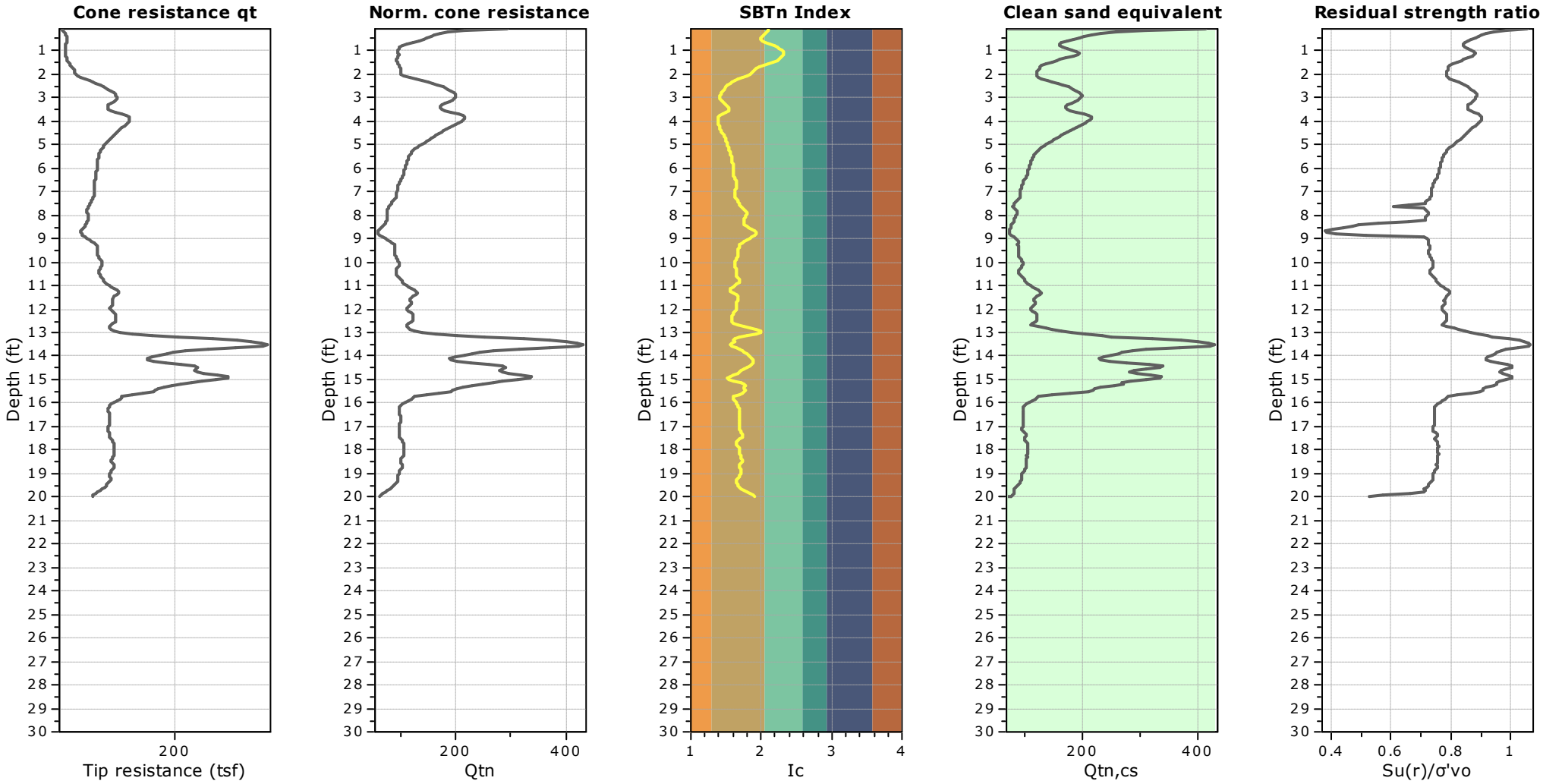
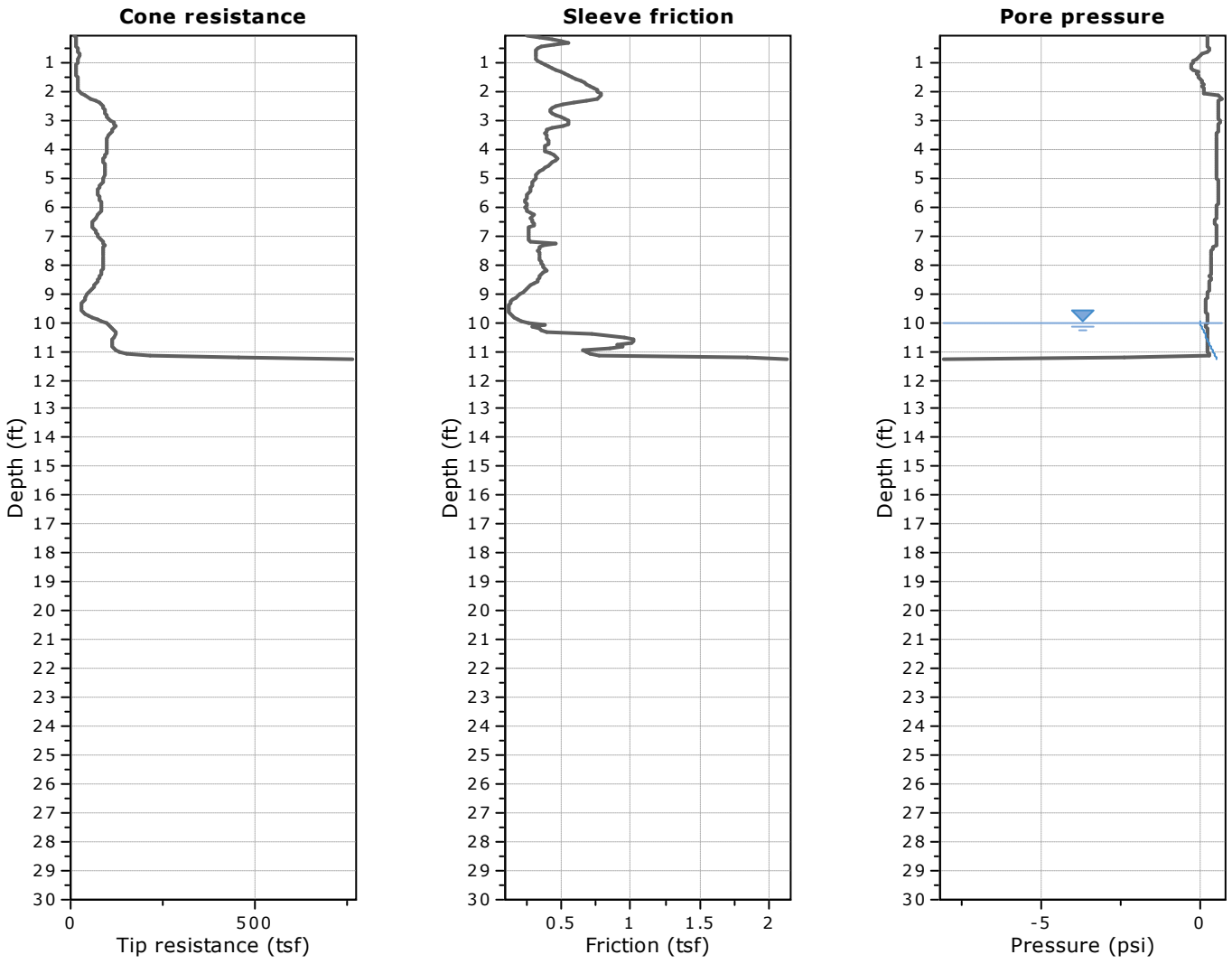
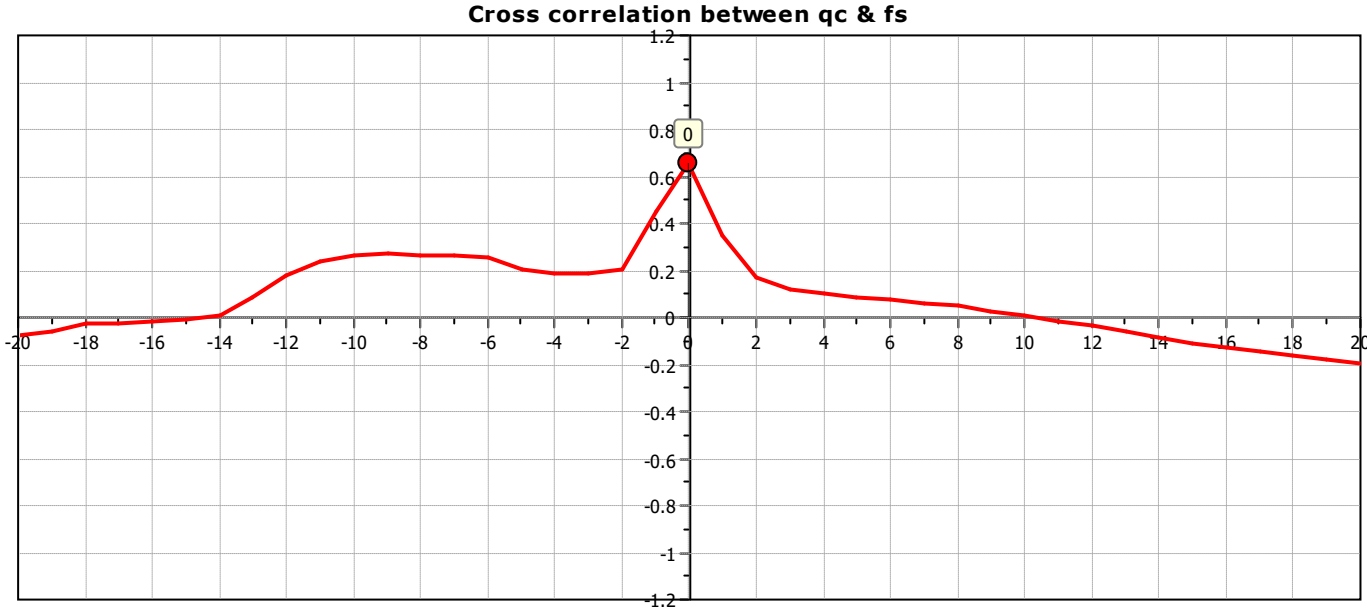
C-13
Total depth: 20.00 ft, Date: 5/14/2024
Surface Elevation: 66.36 ft
Coords: X:572273.90, Y:556077.41
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

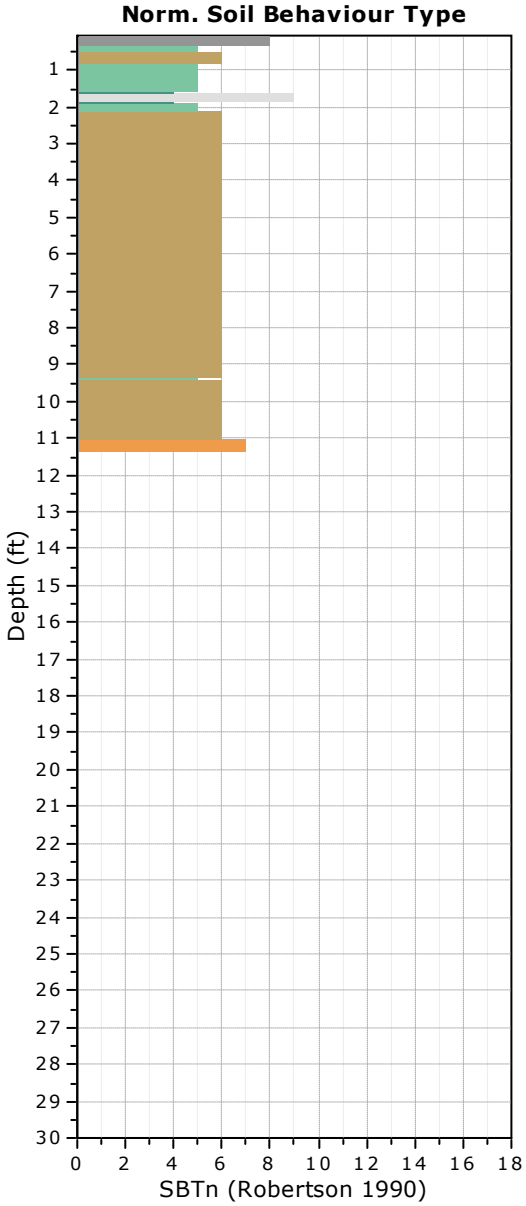
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**

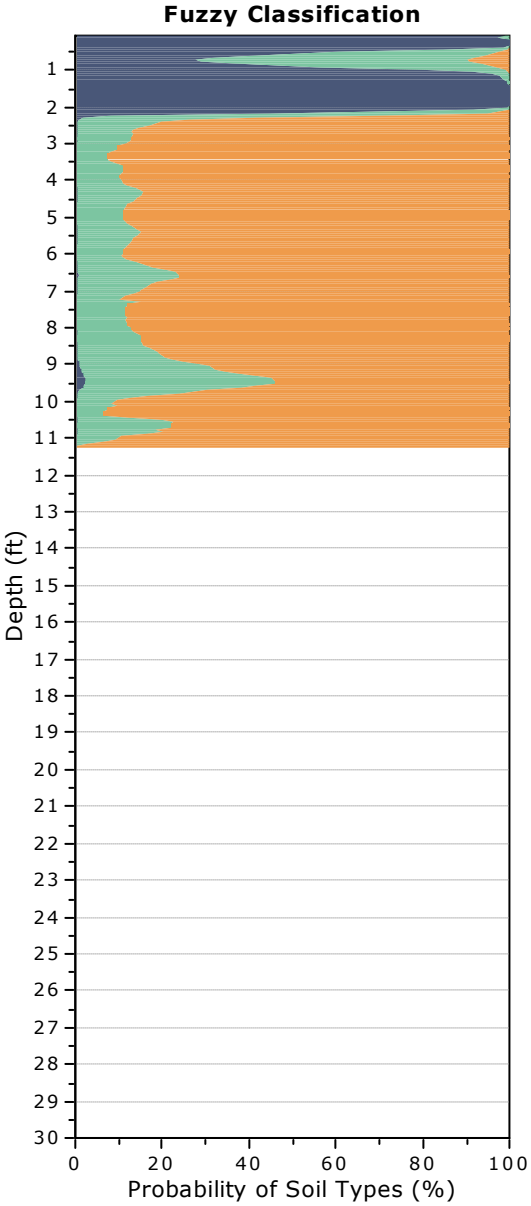




The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend
- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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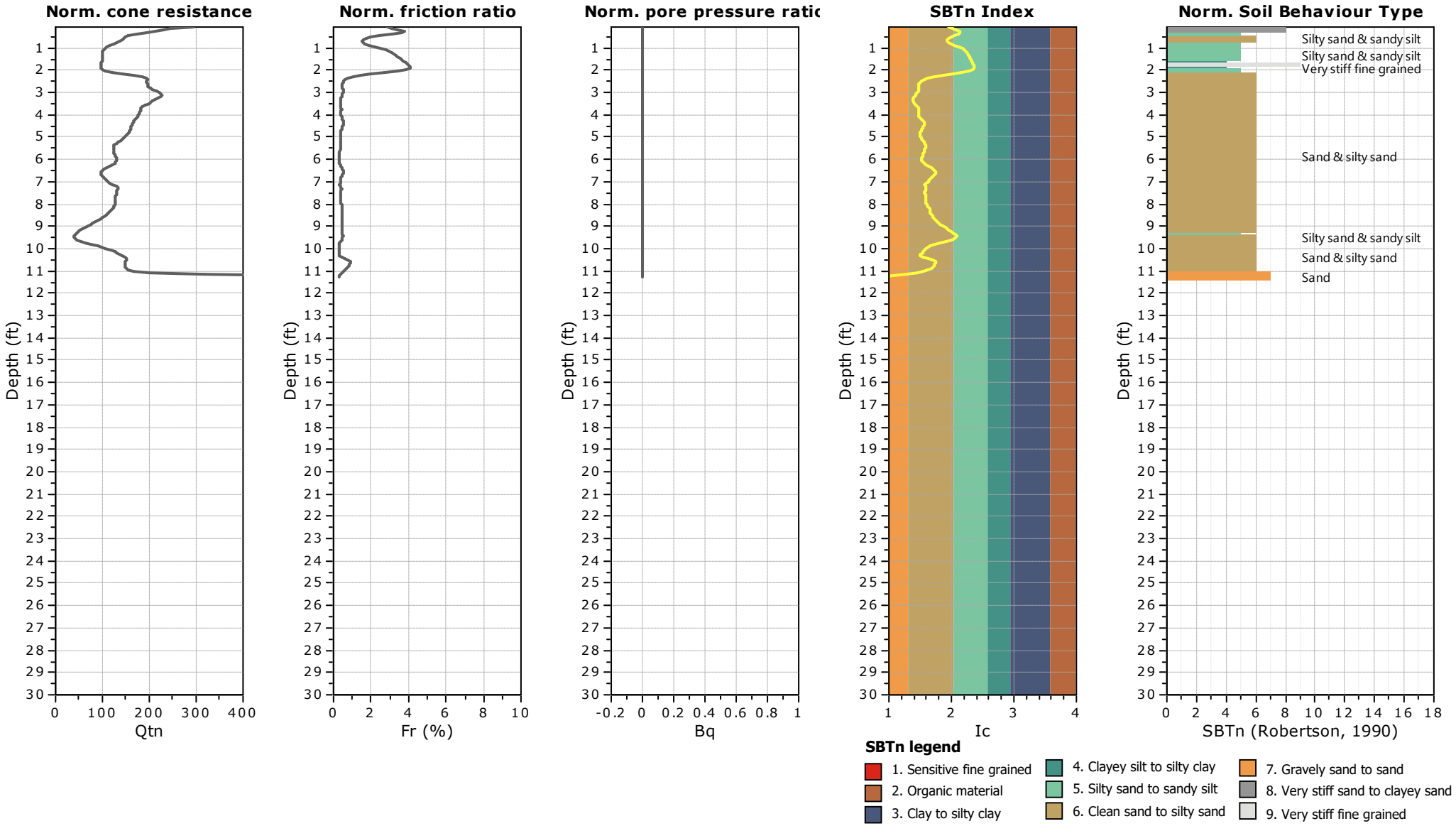
C-14
Total depth: 11.26 ft, Date: 5/14/2024
Surface Elevation: 65.32 ft
Coords: X:572239.40, Y:555990.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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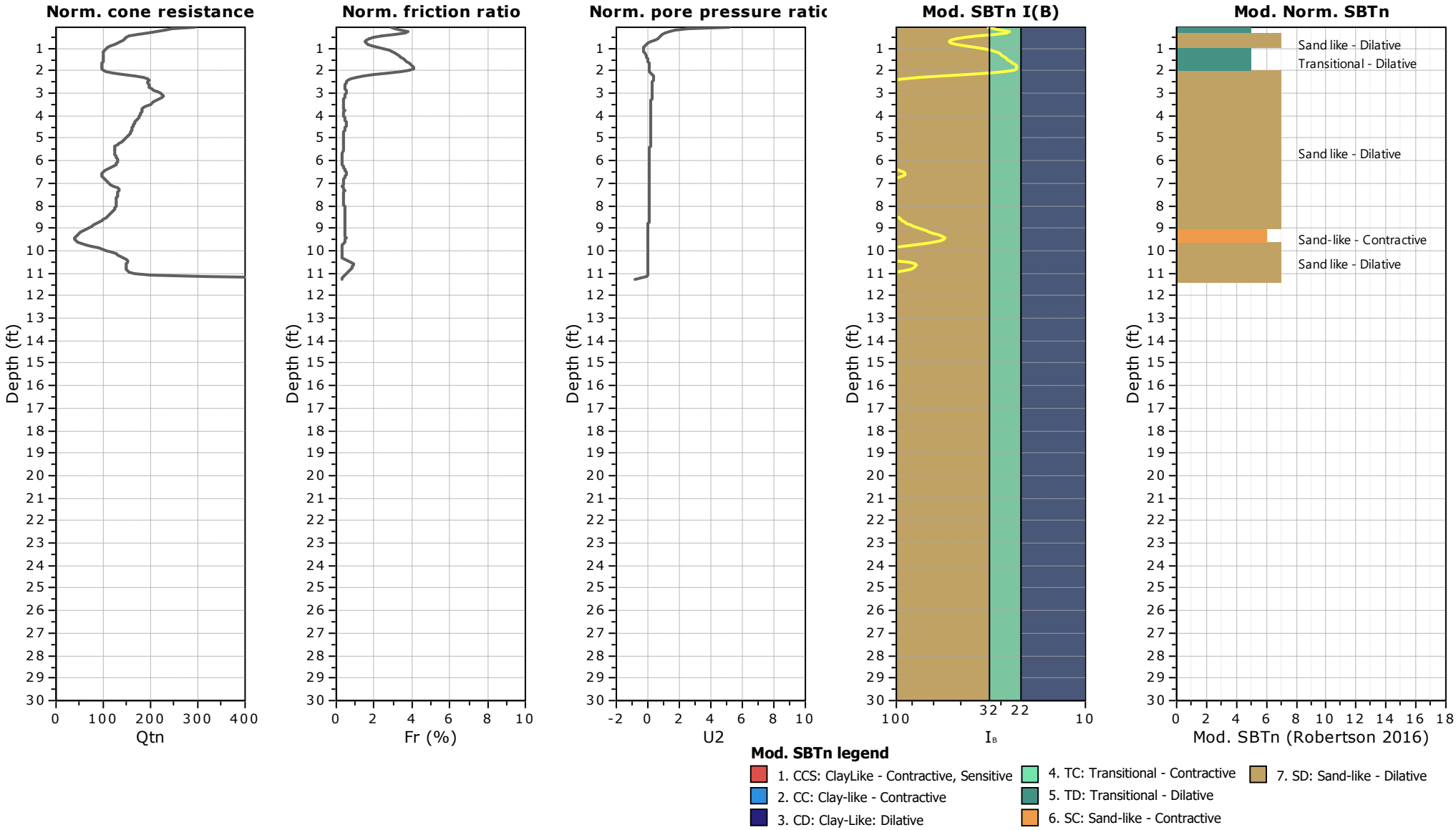
C-14
Total depth: 11.26 ft, Date: 5/14/2024
Surface Elevation: 65.32 ft
Coords: X:572239.40, Y:555990.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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C-14
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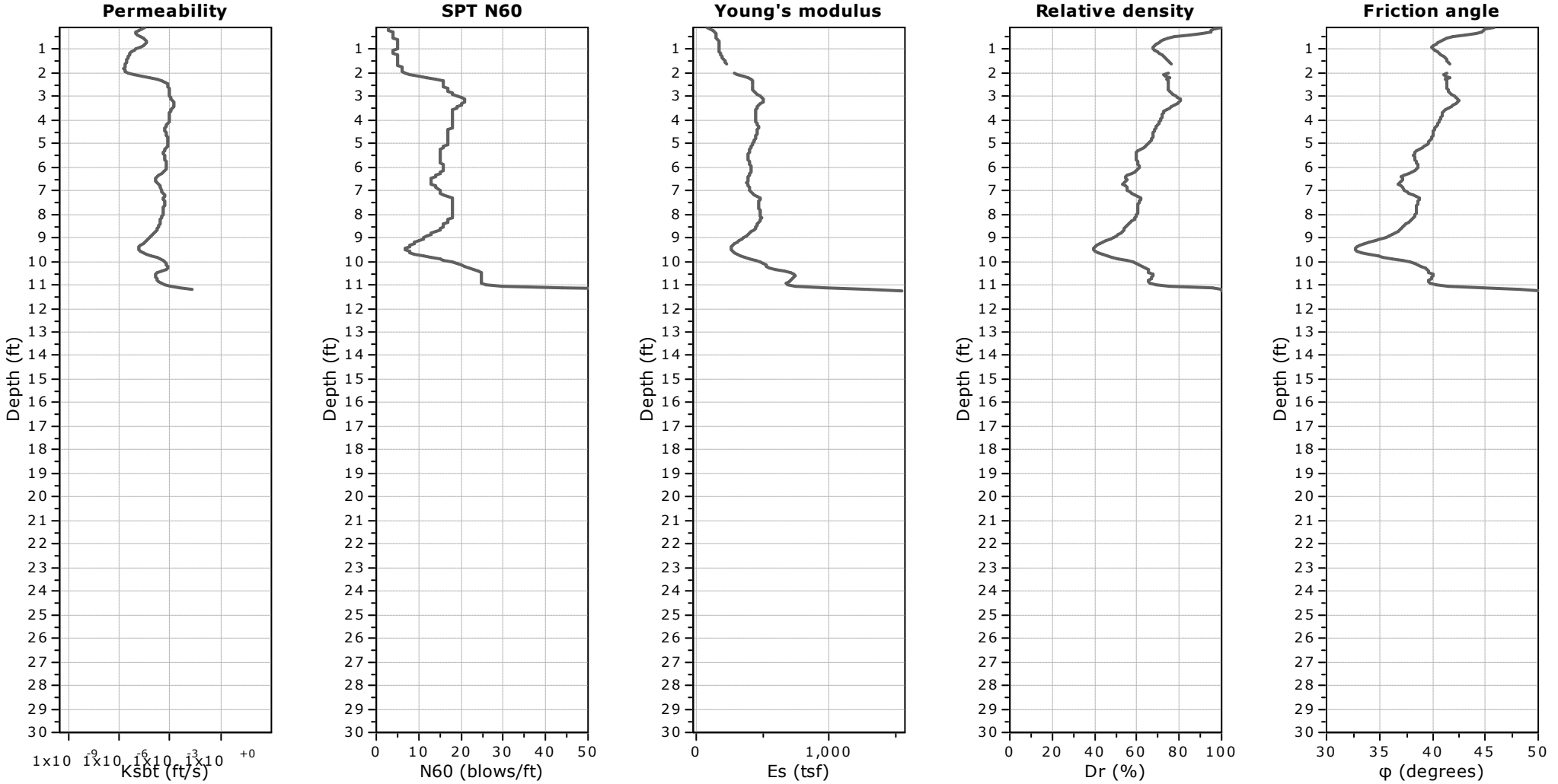
Surface Elevation: 65.32 ft
Coords: X:572239.40, Y:555990.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters
Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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C-14
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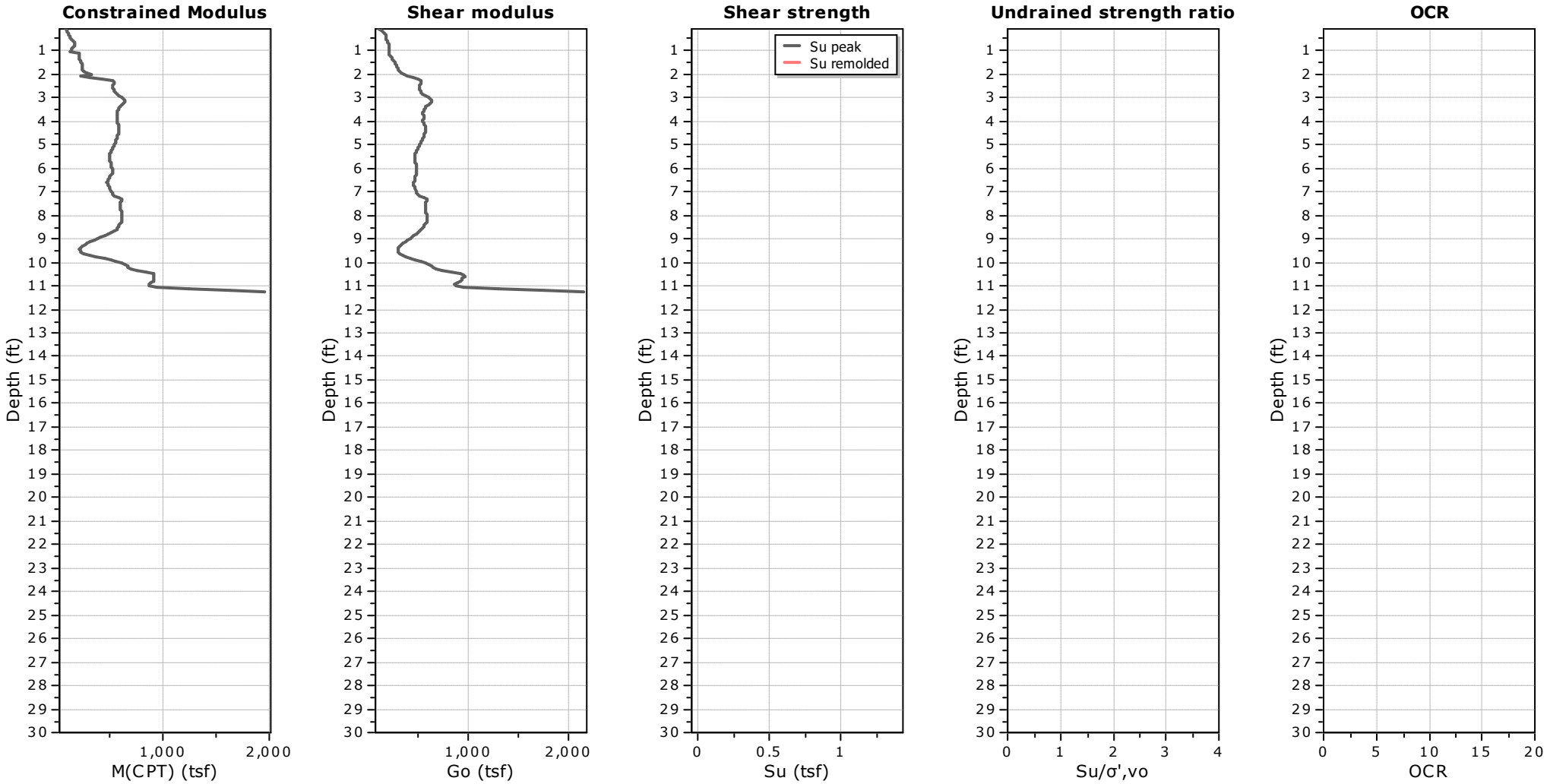
Coords: X:572239.40, Y:555990.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

Stable Ground In-Situ, LLC
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C-14
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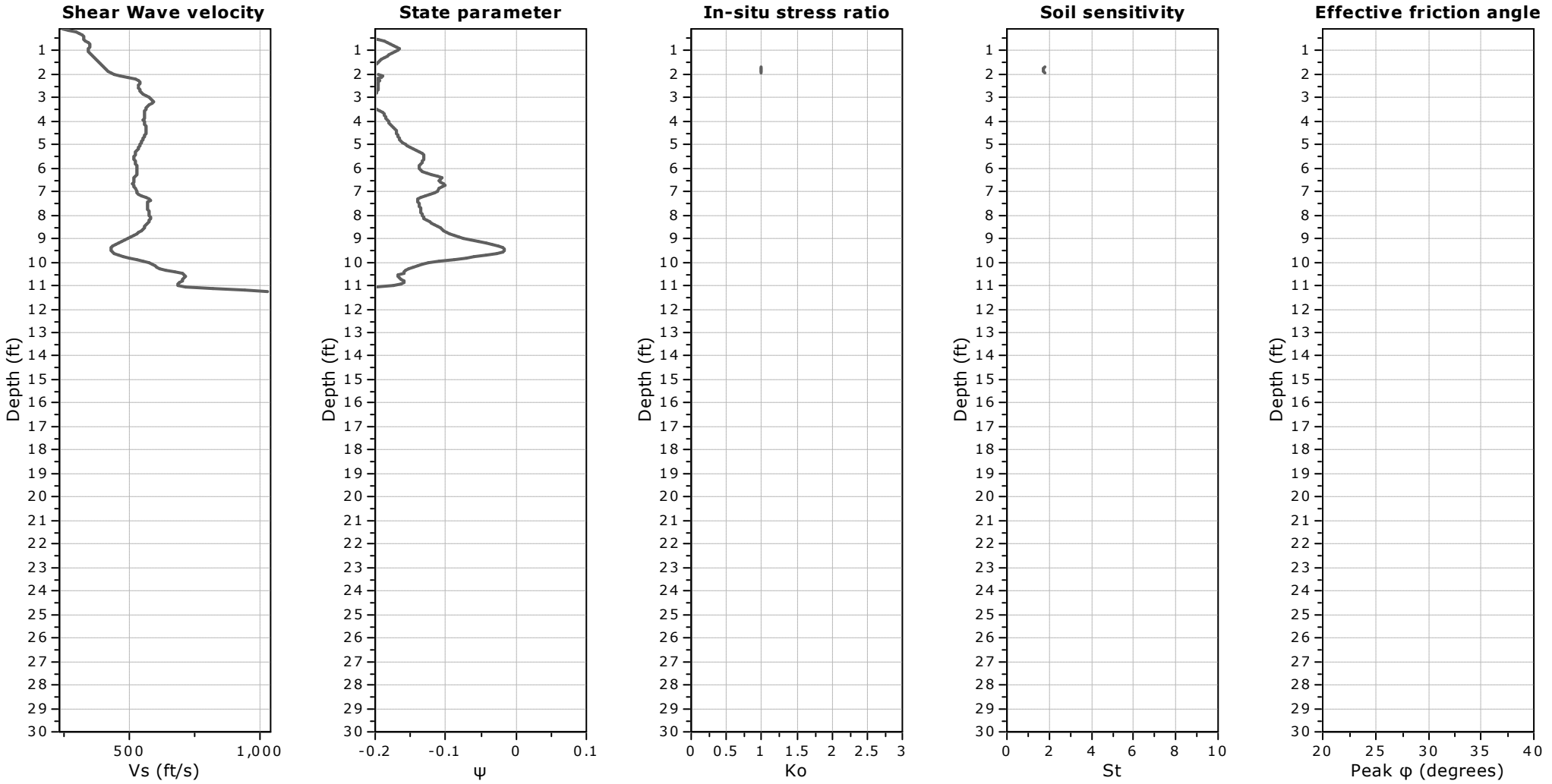
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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C-14
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Coords: X:572239.40, Y:555990.15
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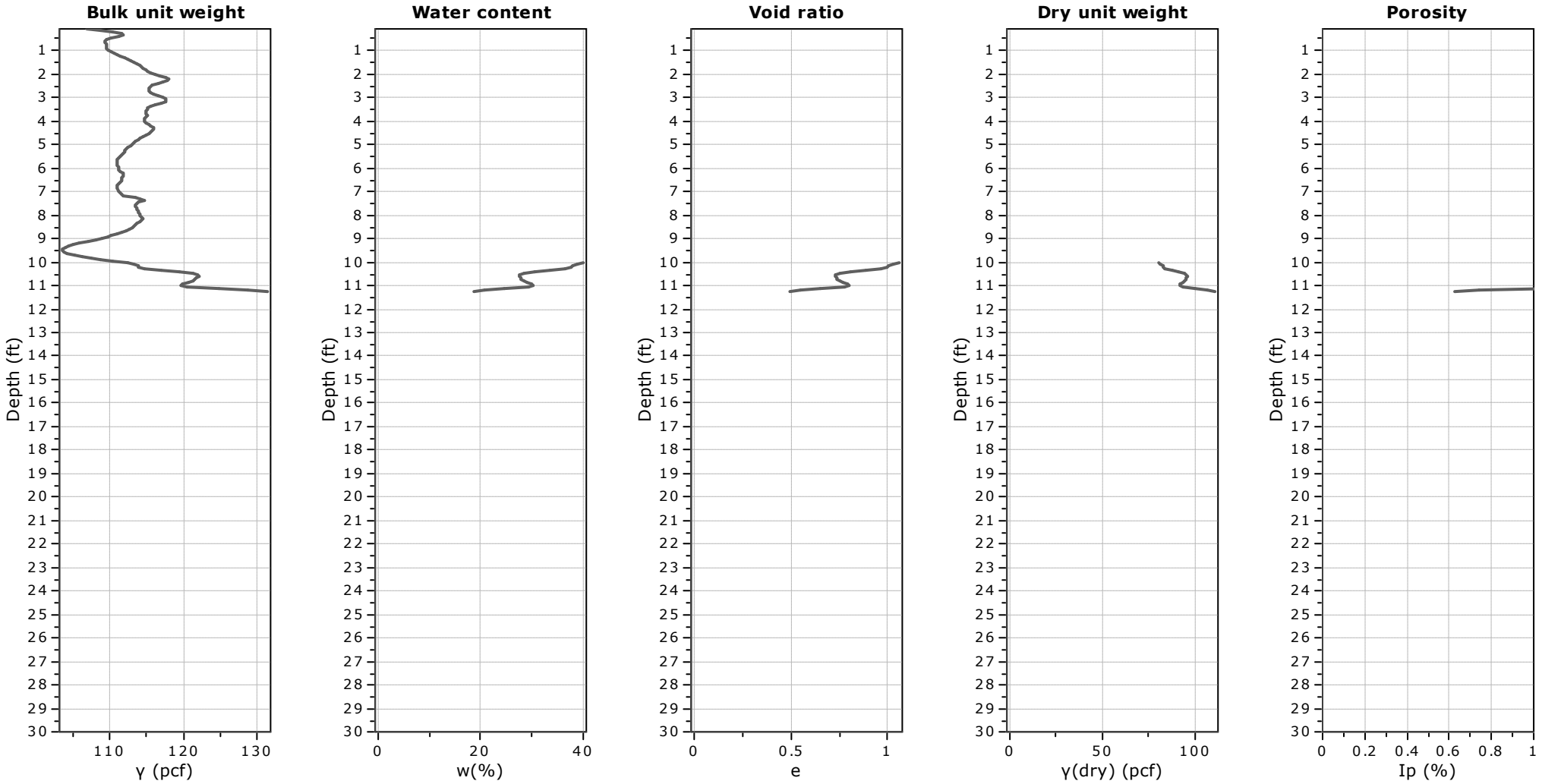
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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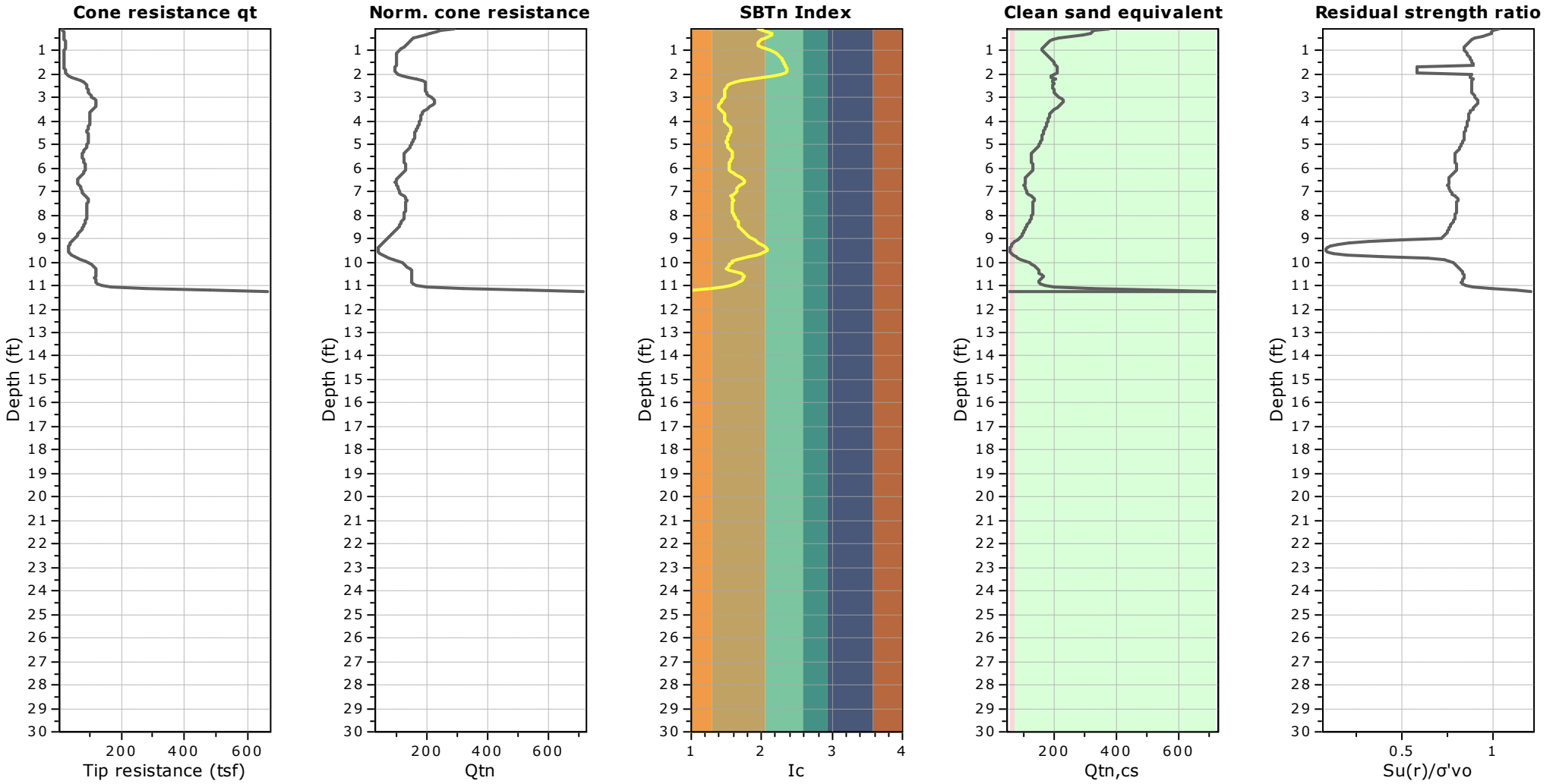
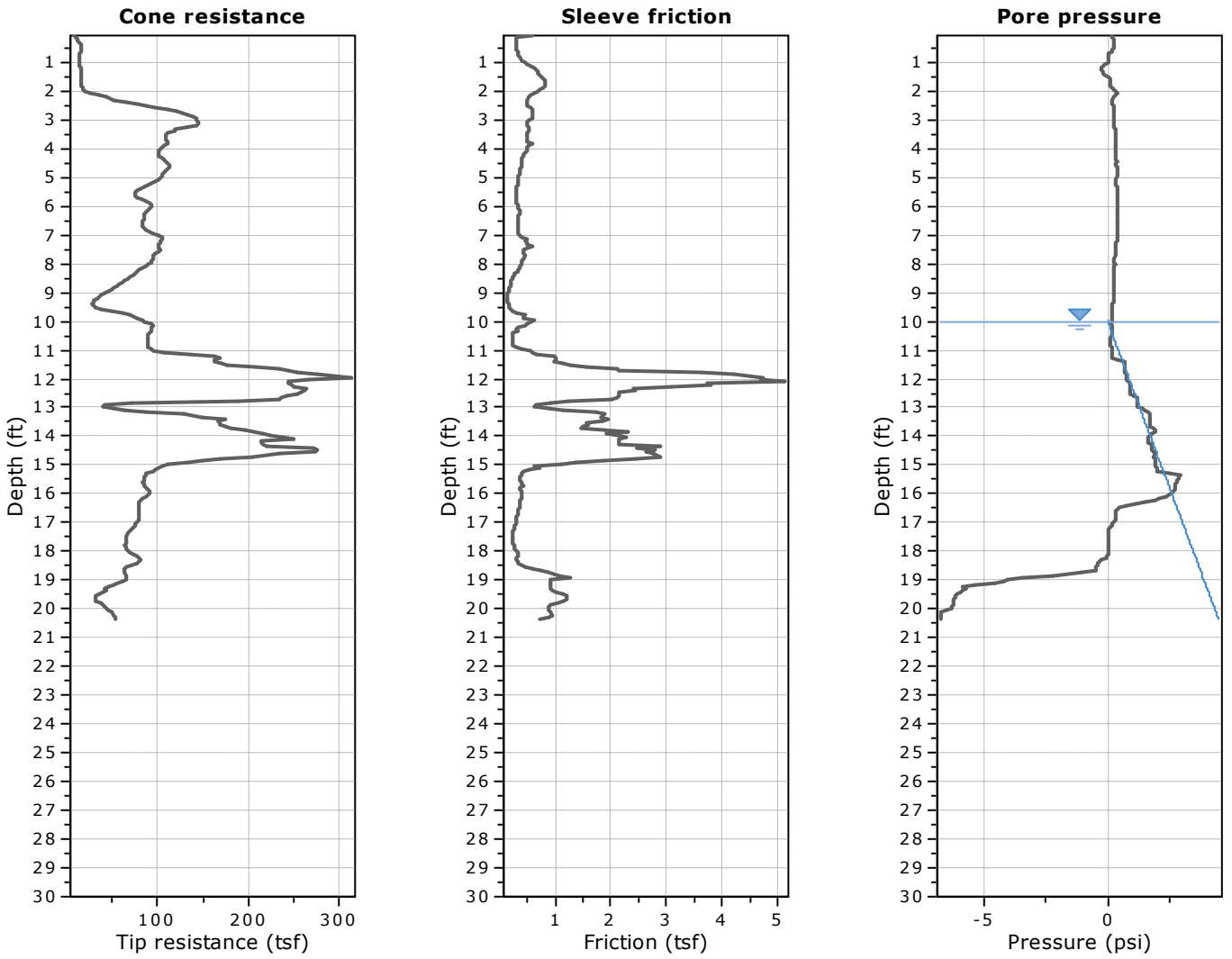
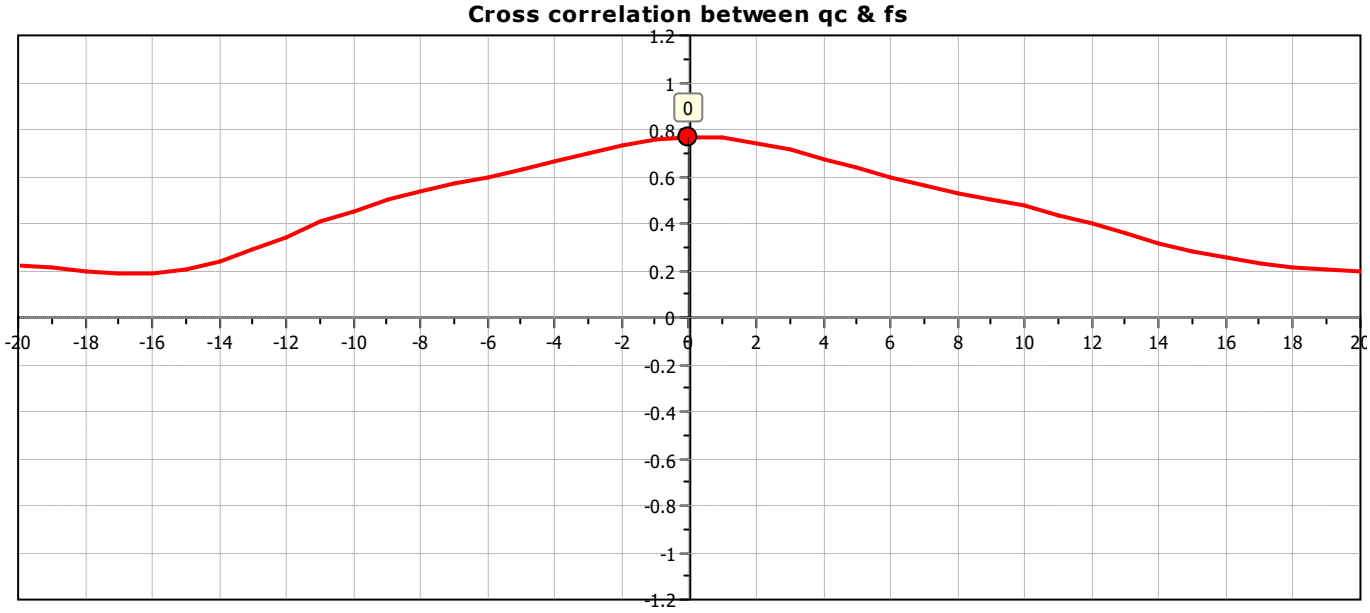
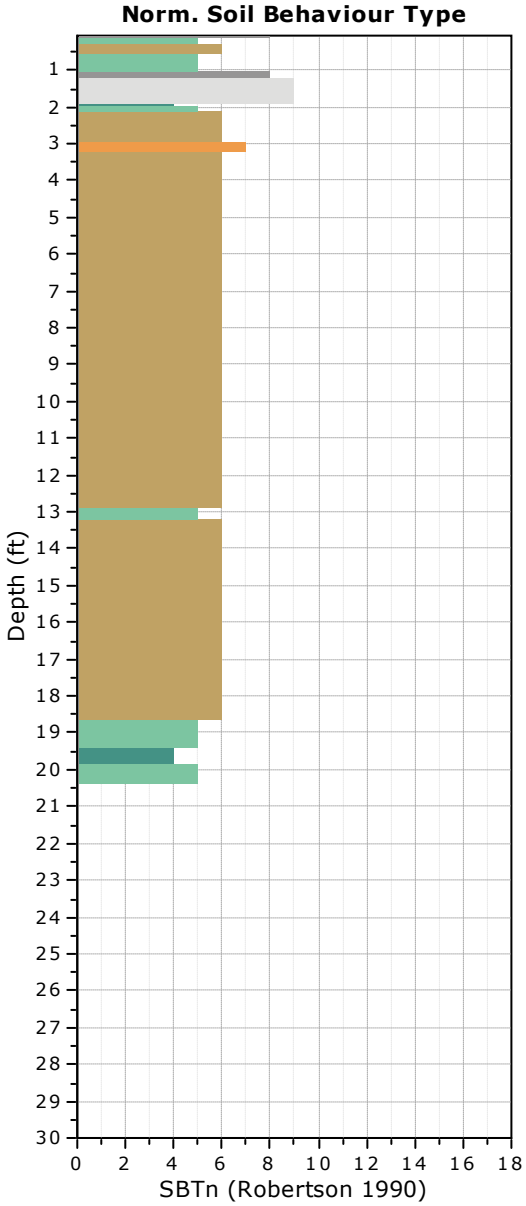
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**

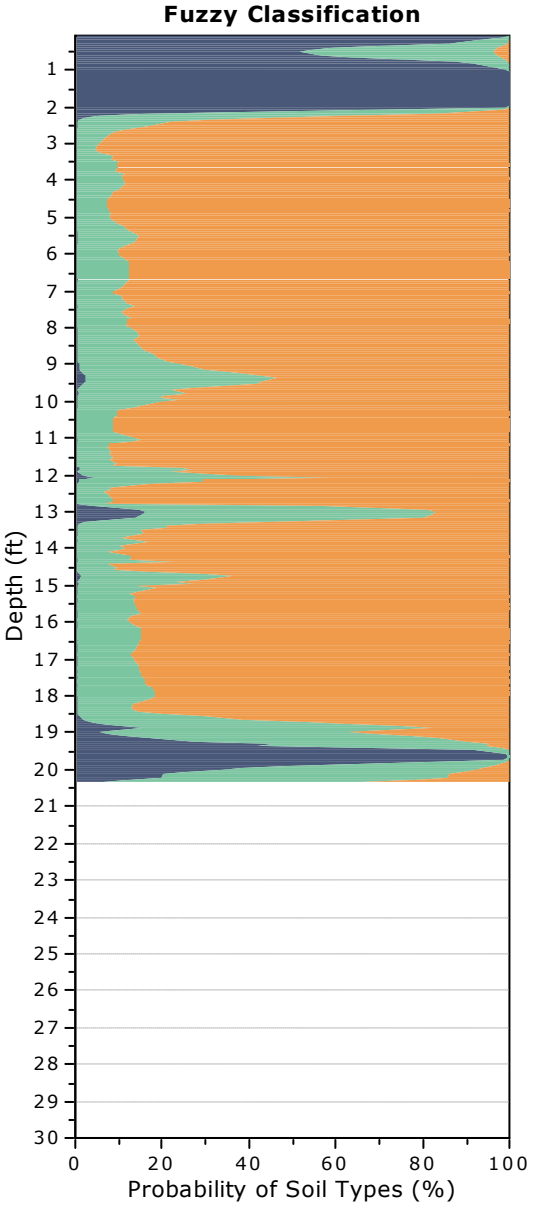




The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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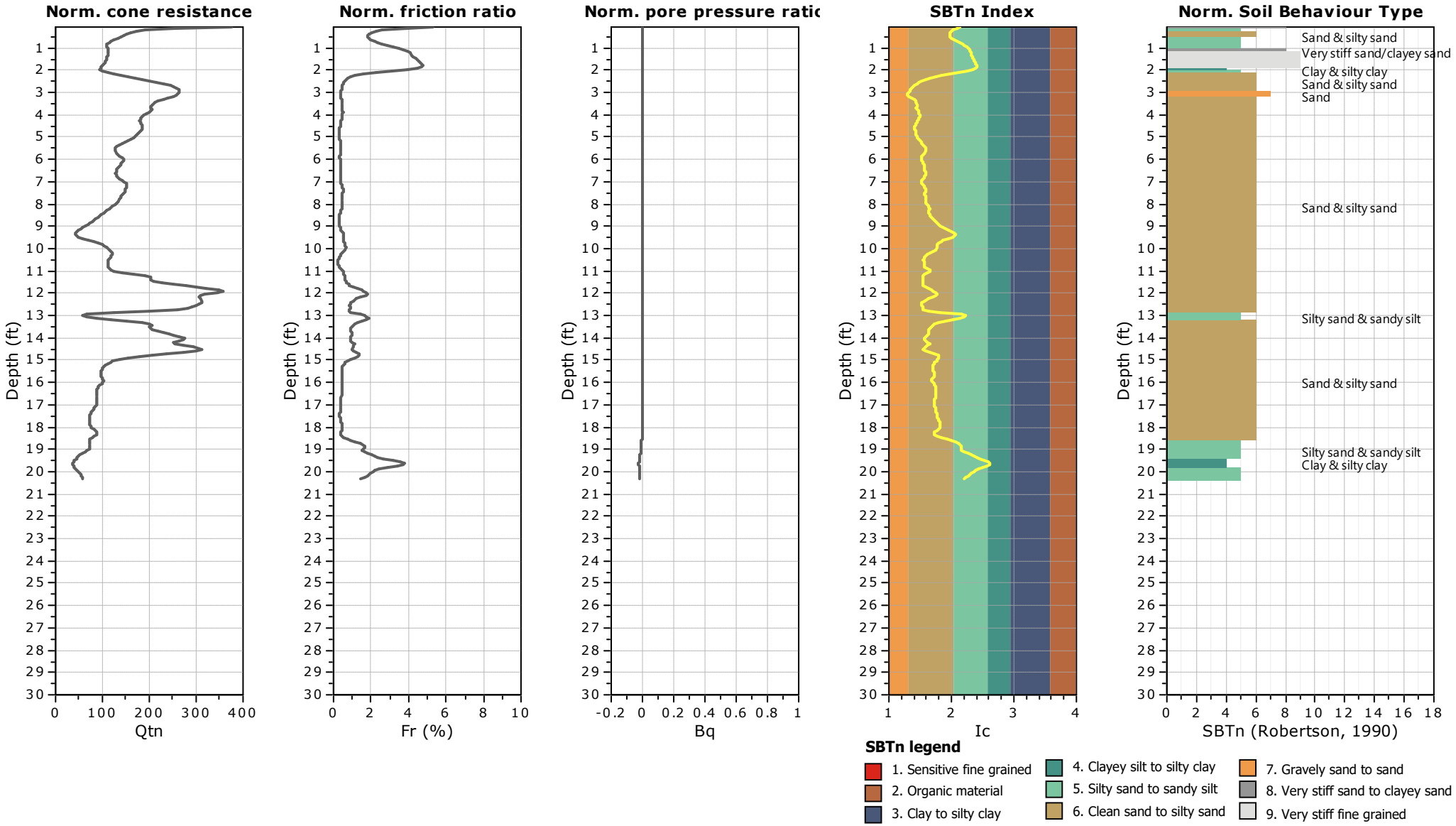
C-14A
Total depth: 20.33 ft, Date: 5/14/2024
Surface Elevation: 65.32 ft
Coords: X:572239.40, Y:555990.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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Project: **ASD Summit Campus**
Location: **Middletown, Delaware**

C-14A
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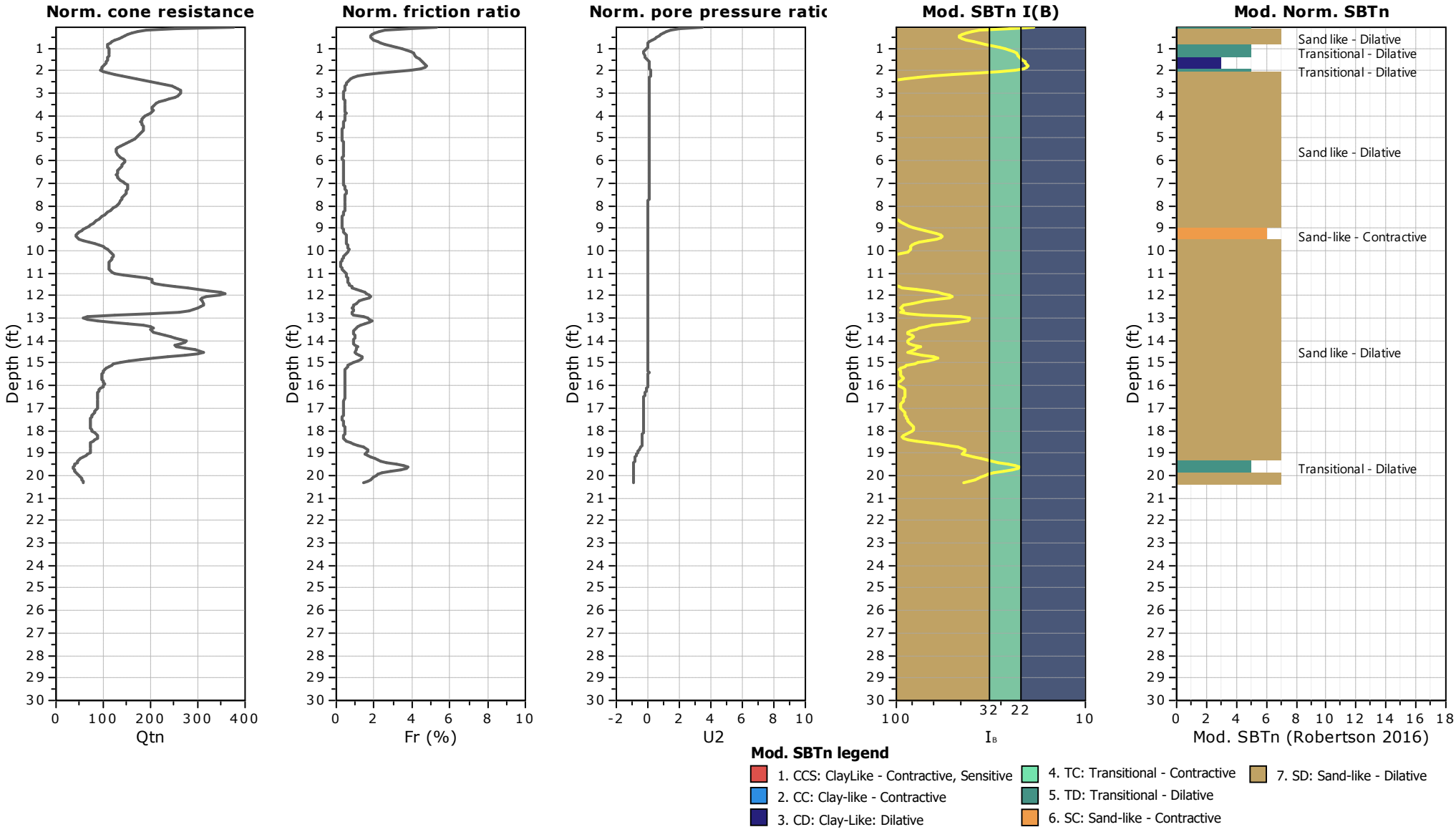
Surface Elevation: 65.32 ft
Coords: X:572239.40, Y:555990.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE



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C-14A
Total depth: 20.33 ft, Date: 5/14/2024
Surface Elevation: 65.32 ft
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Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
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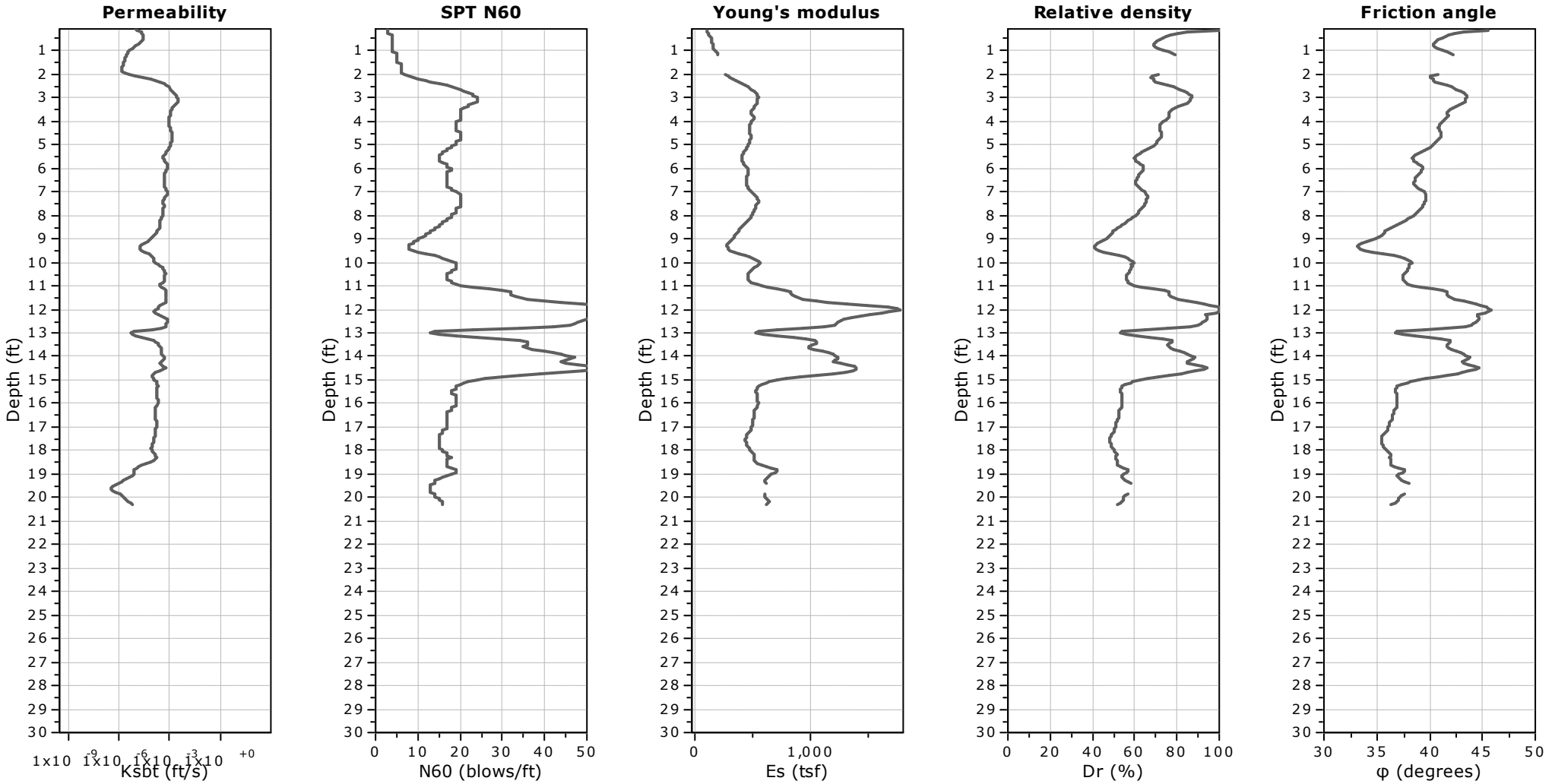

Calculation parameters
Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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C-14A
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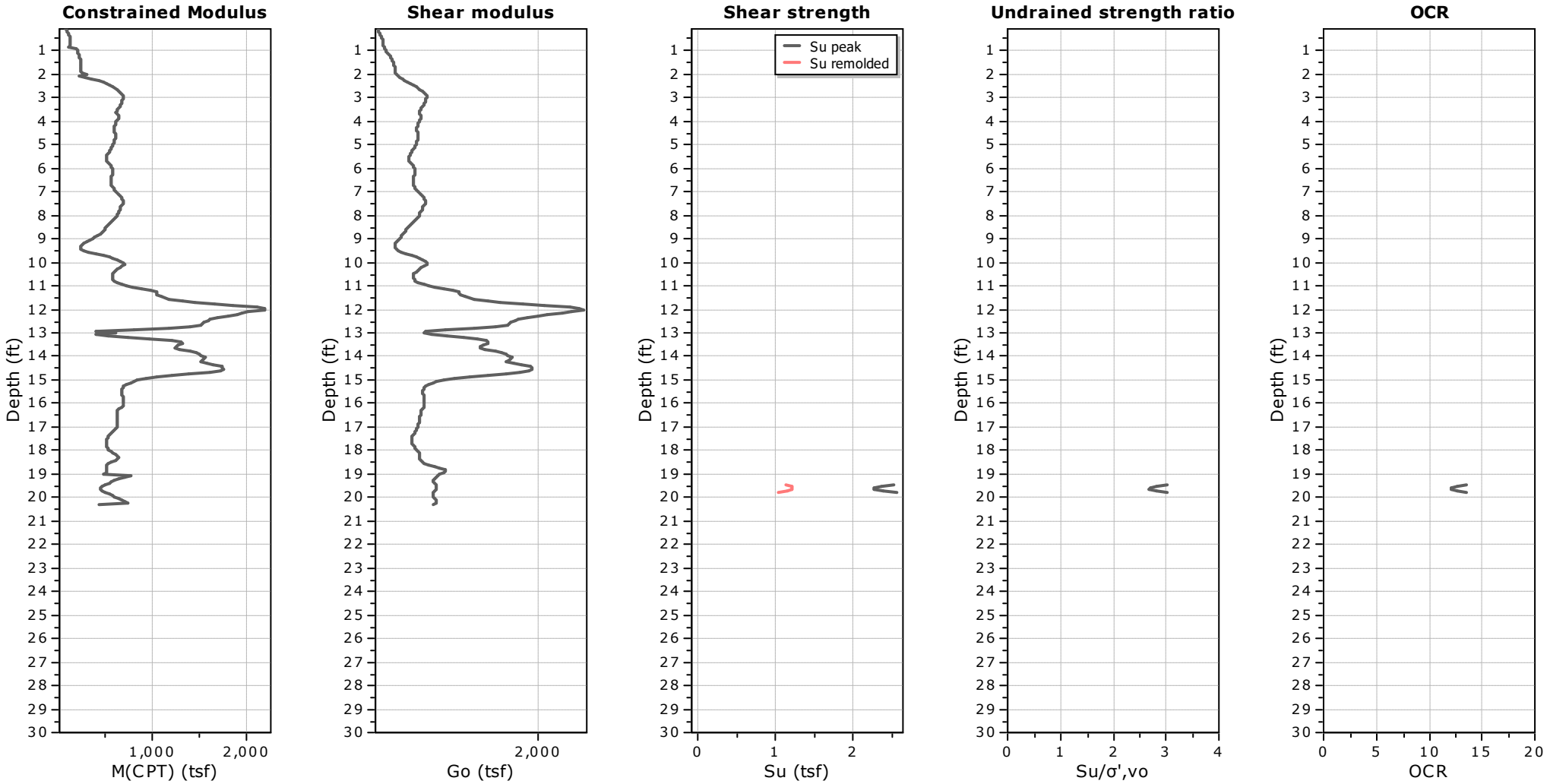
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
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Flat Dilatometer Test data

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C-14A
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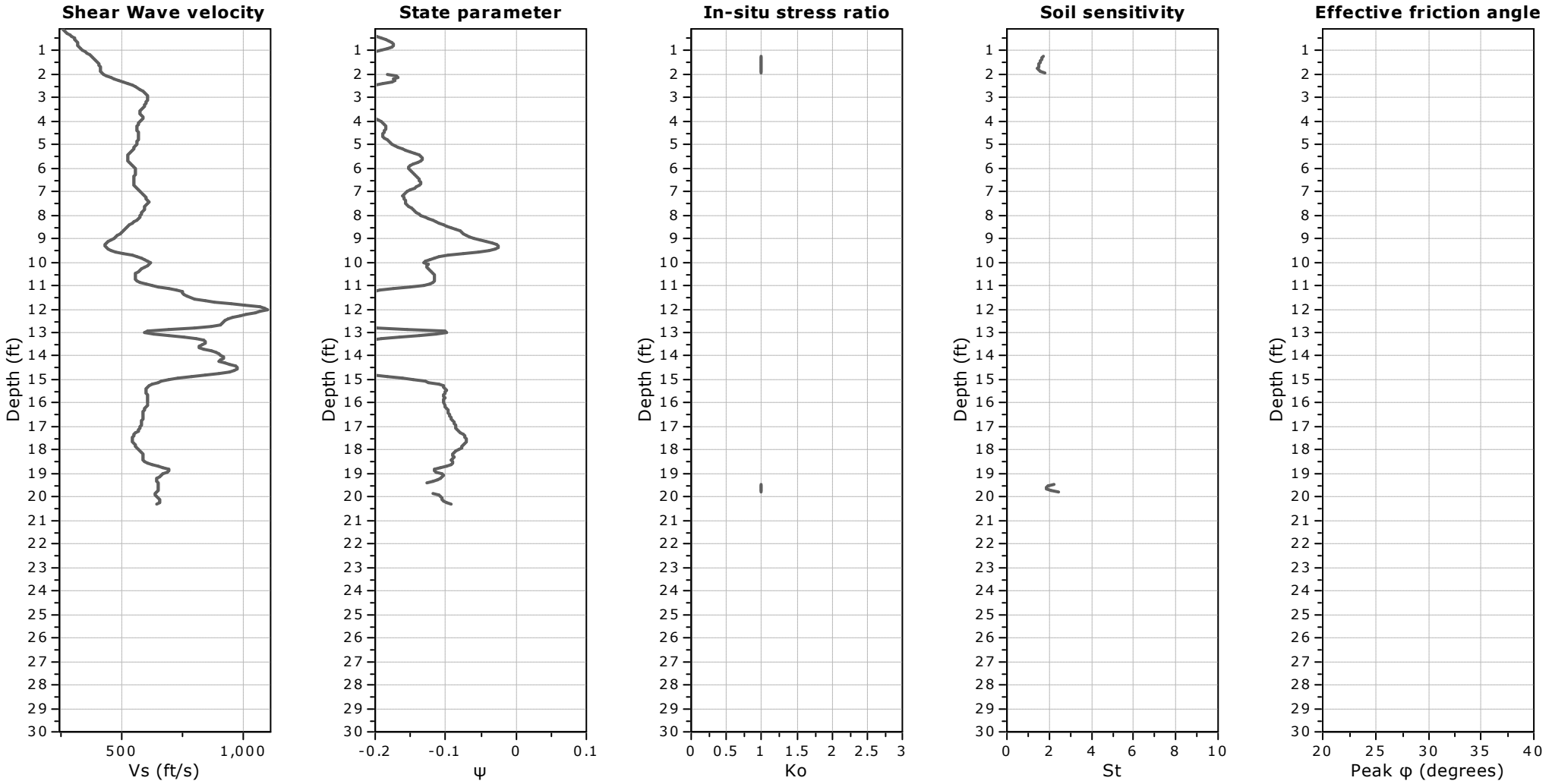
Coords: X:572239.40, Y:555990.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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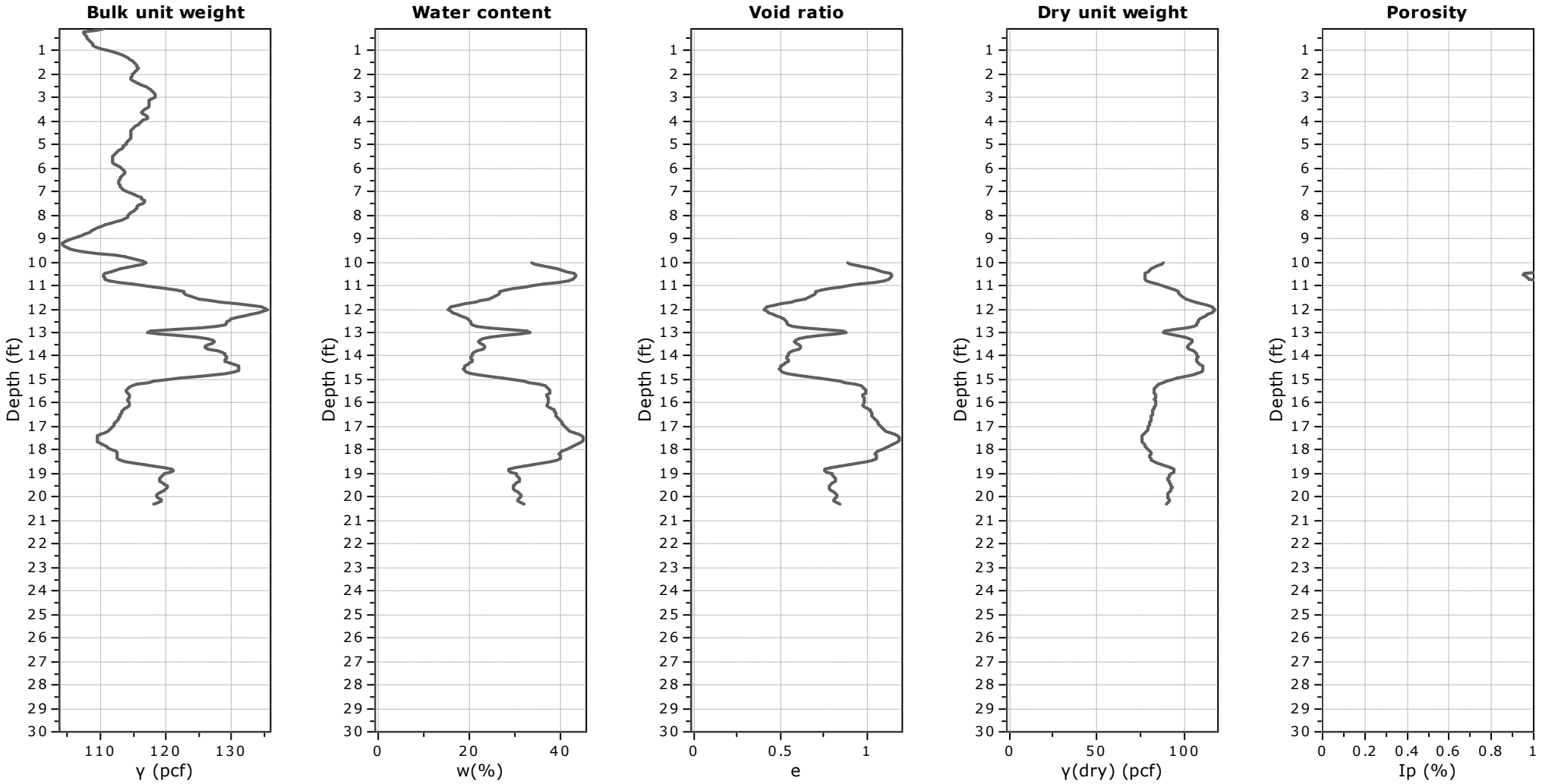
C-14A
Total depth: 20.33 ft, Date: 5/14/2024
Surface Elevation: 65.32 ft
Coords: X:572239.40, Y:555990.15
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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C-14A
Total depth: 20.33 ft, Date: 5/14/2024
Surface Elevation: 65.32 ft
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Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
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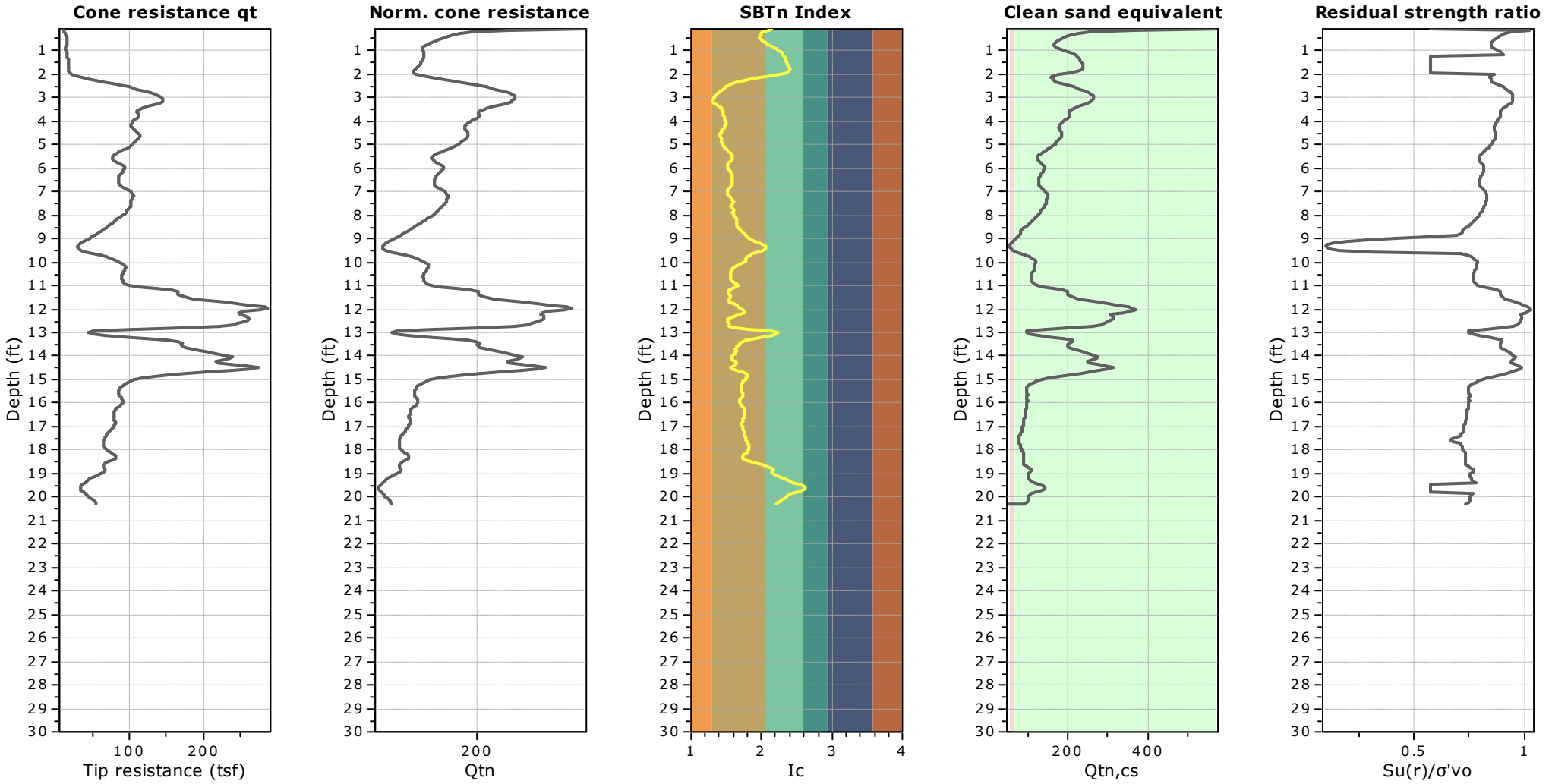

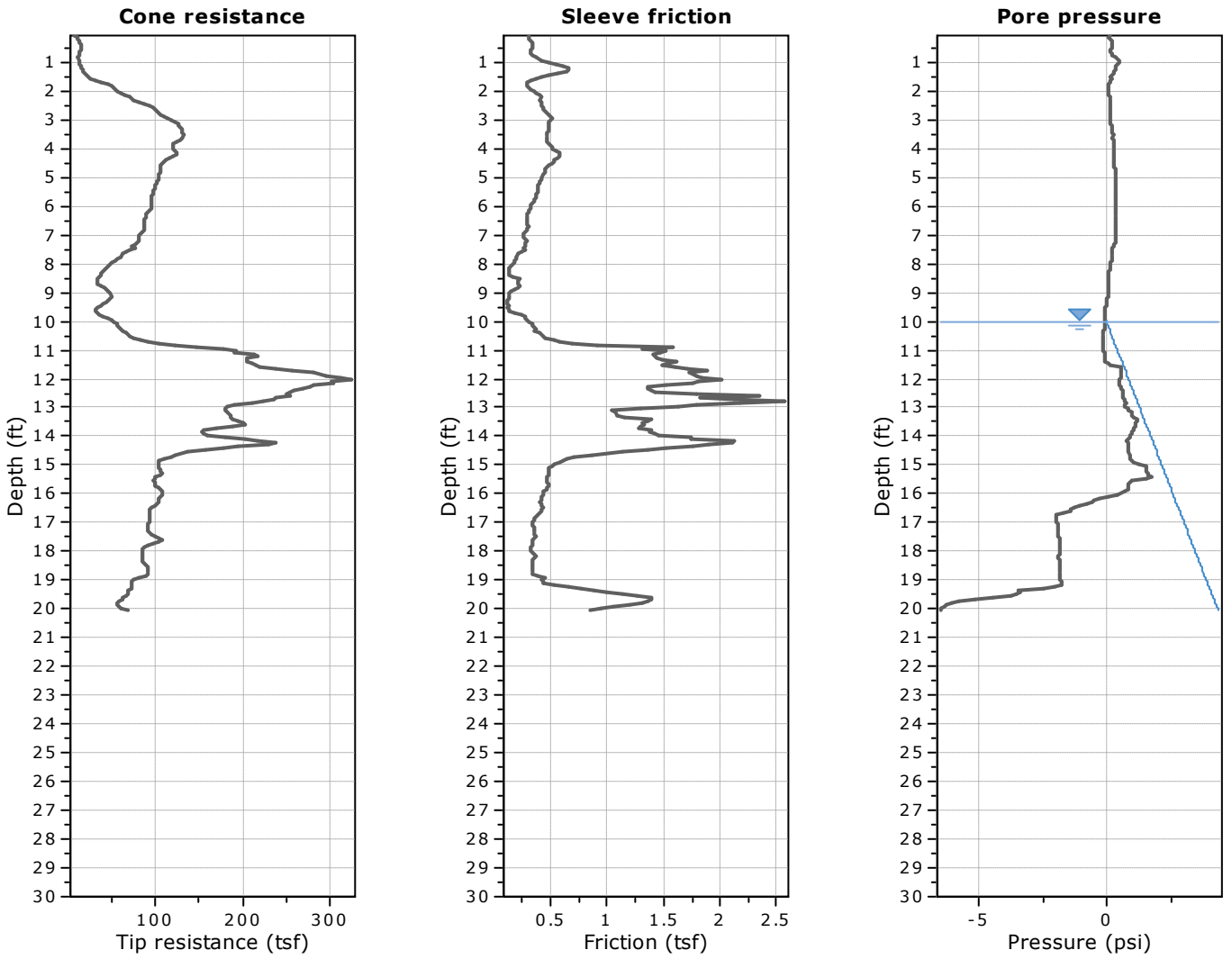

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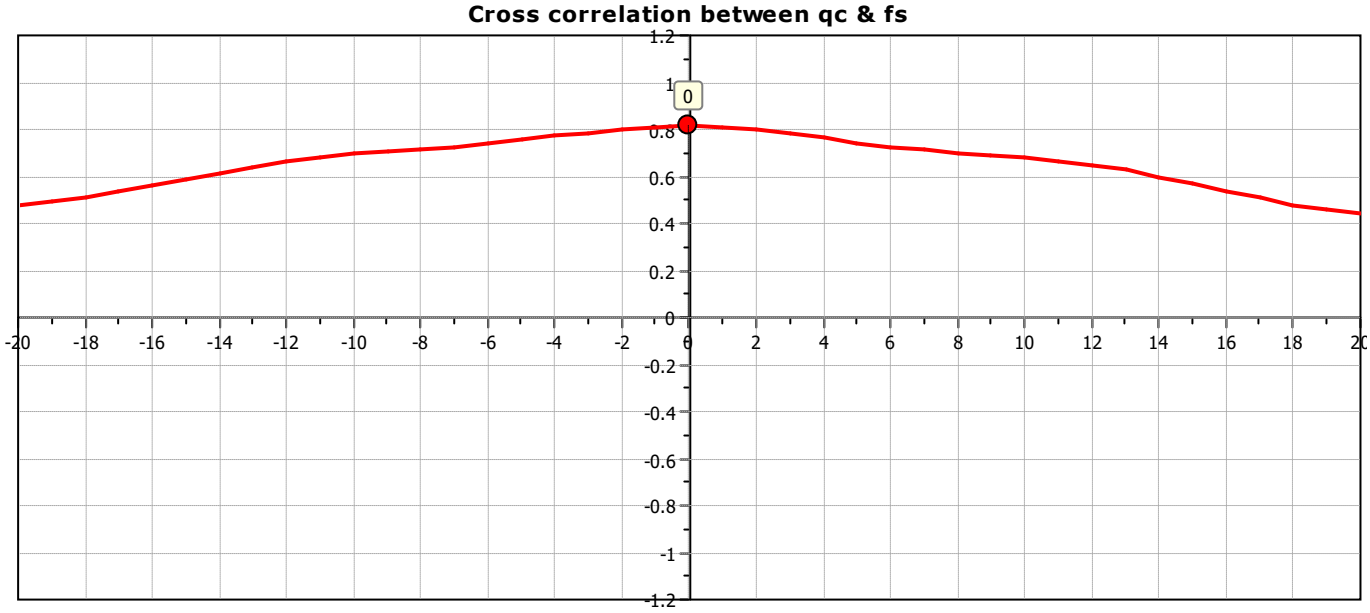

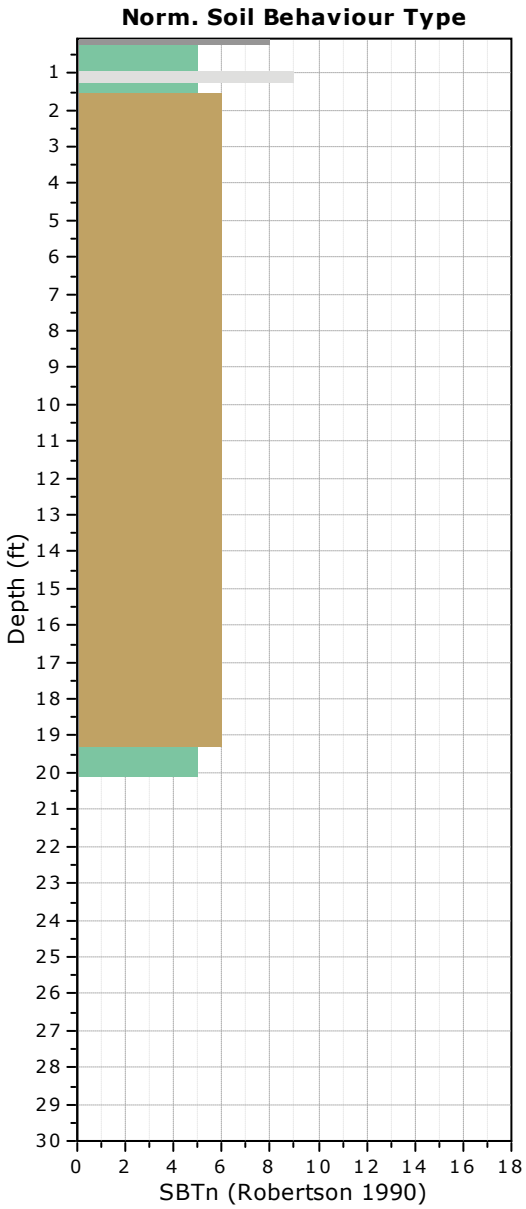

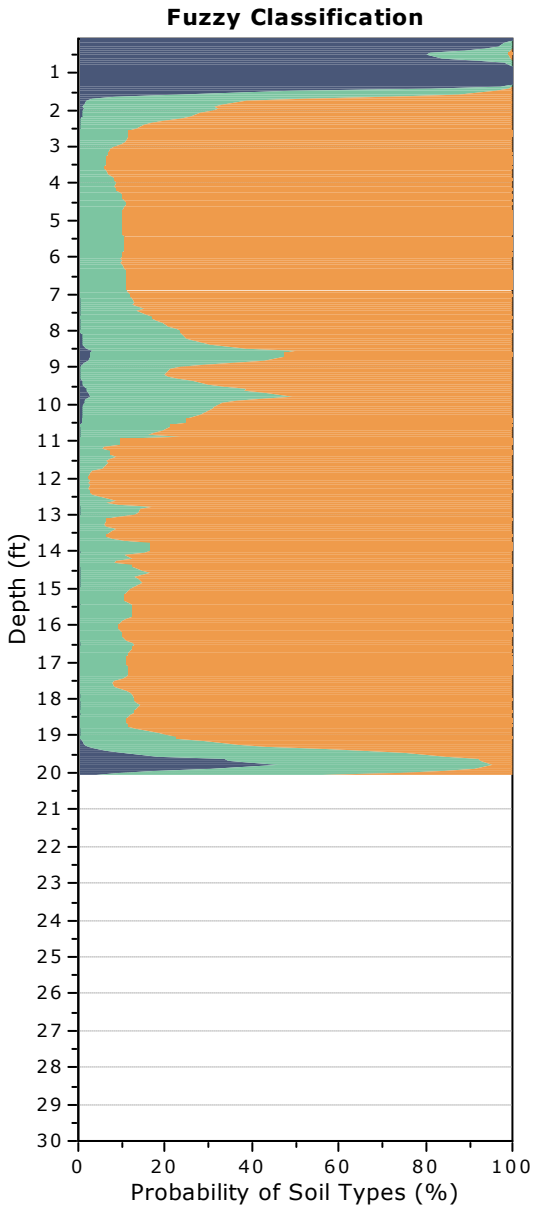

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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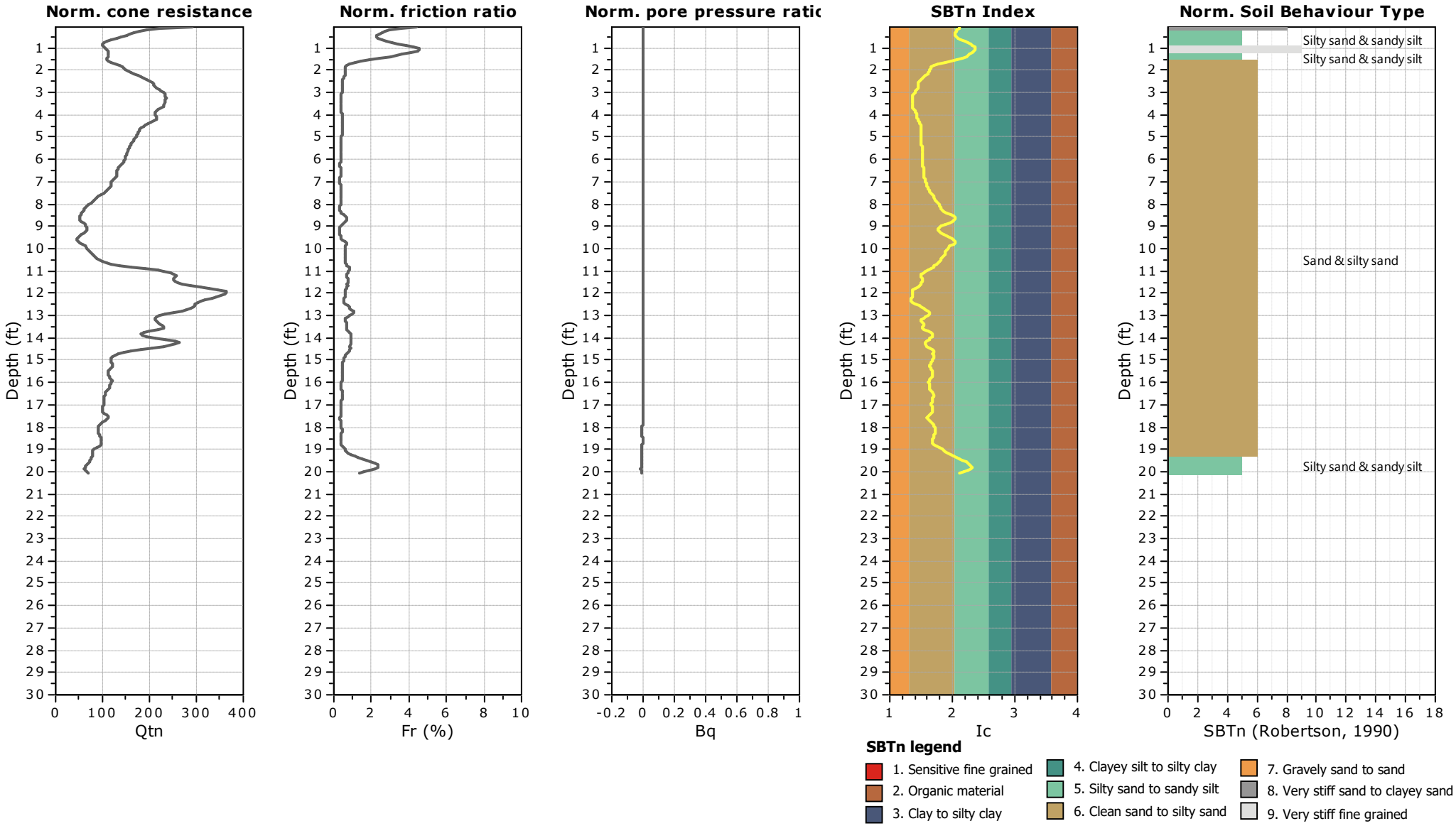
C-15
Total depth: 20.07 ft, Date: 5/14/2024
Surface Elevation: 65.23 ft
Coords: X:572310.83, Y:555945.30
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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C-15
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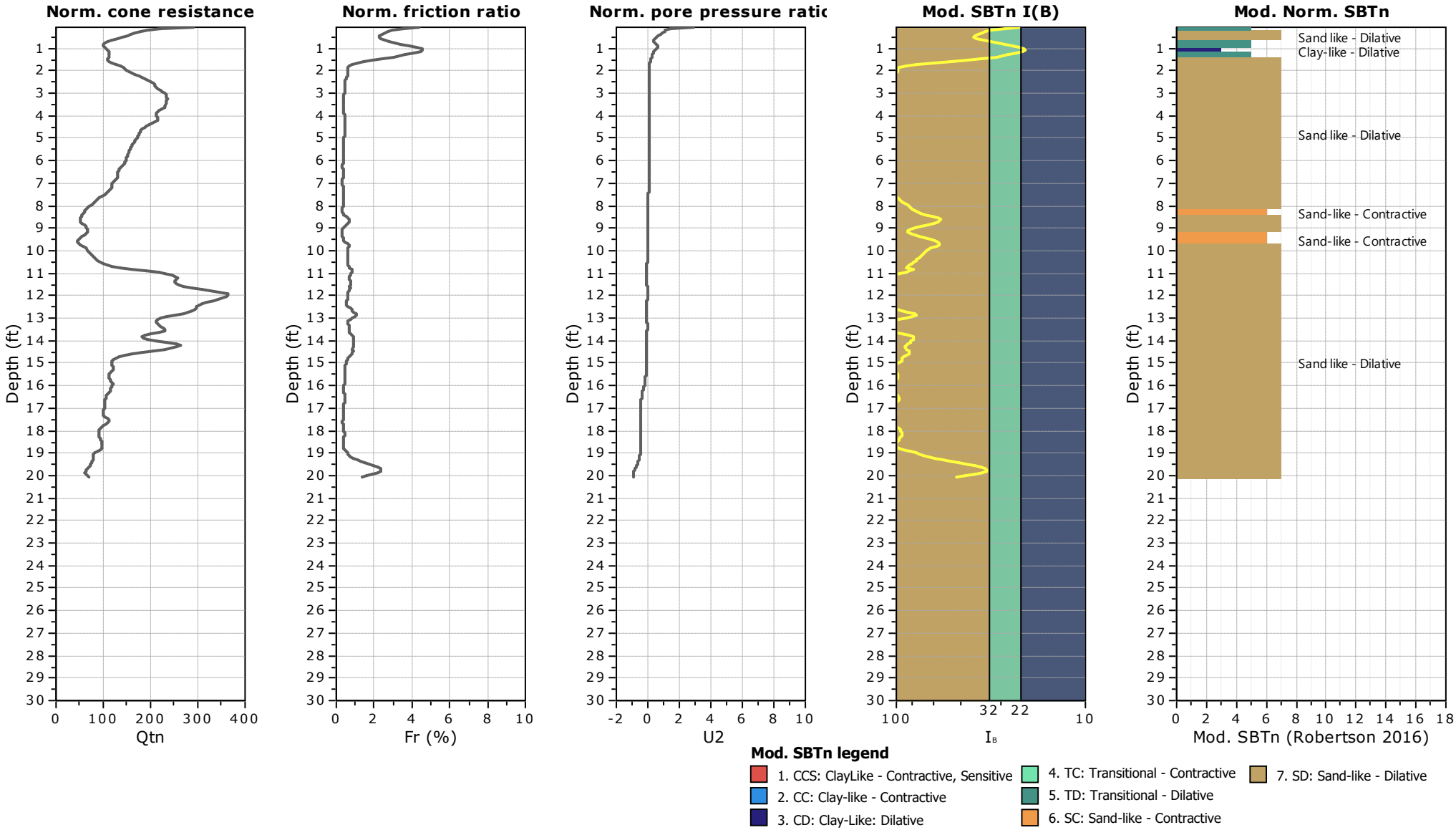
Surface Elevation: 65.23 ft
Coords: X:572310.83, Y:555945.30
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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C-15
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Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
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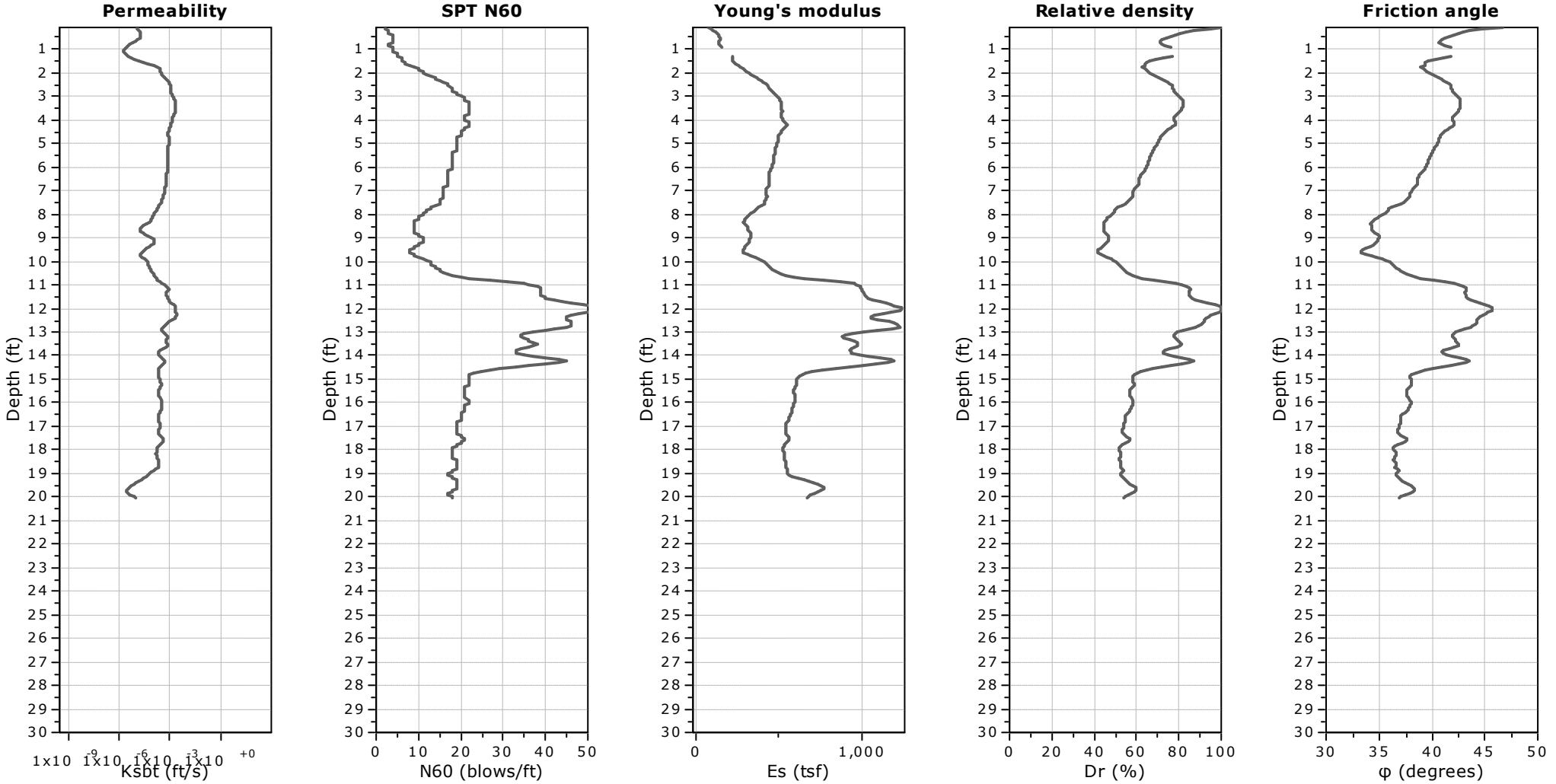

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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C-15
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Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
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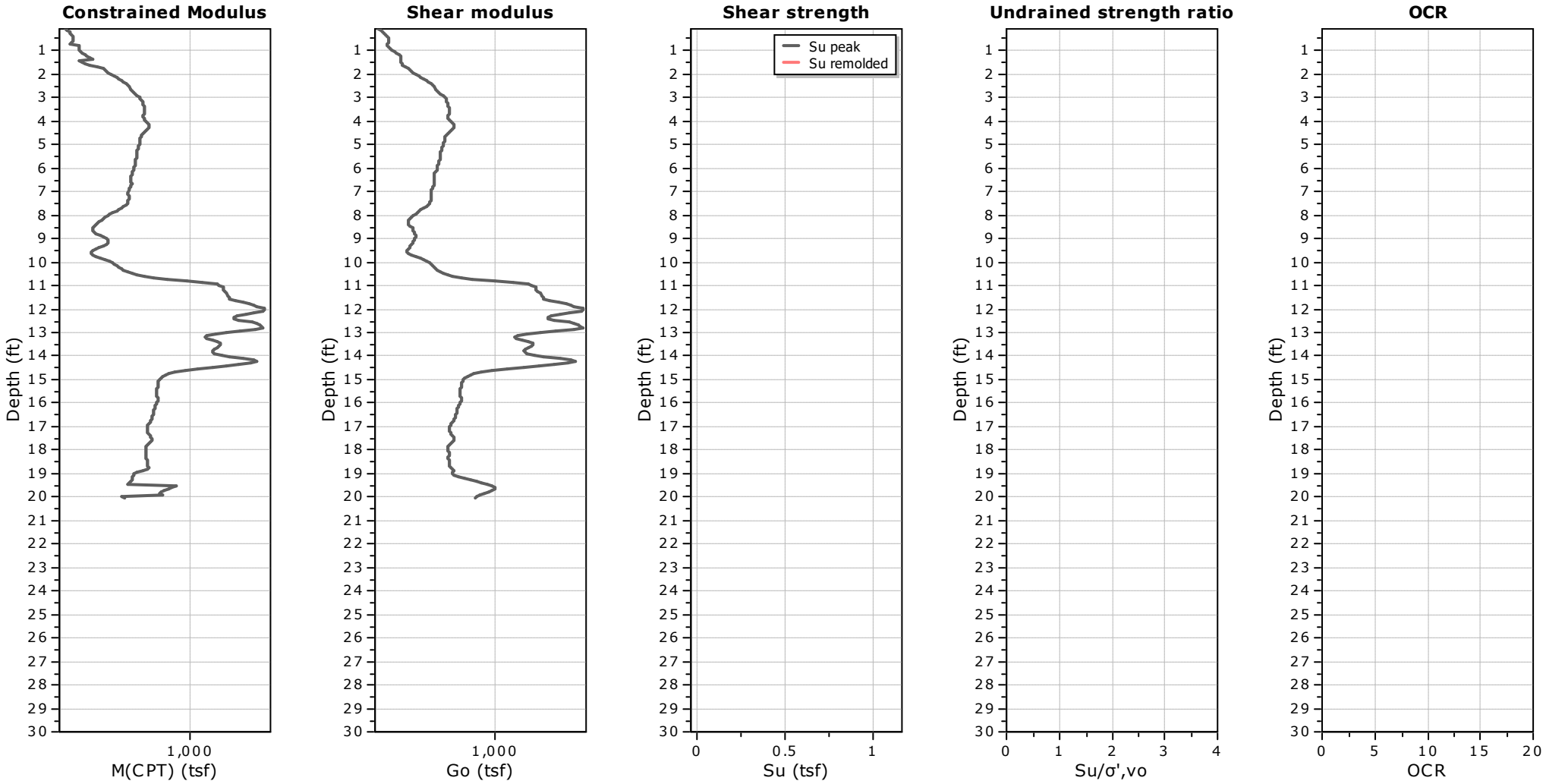

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
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Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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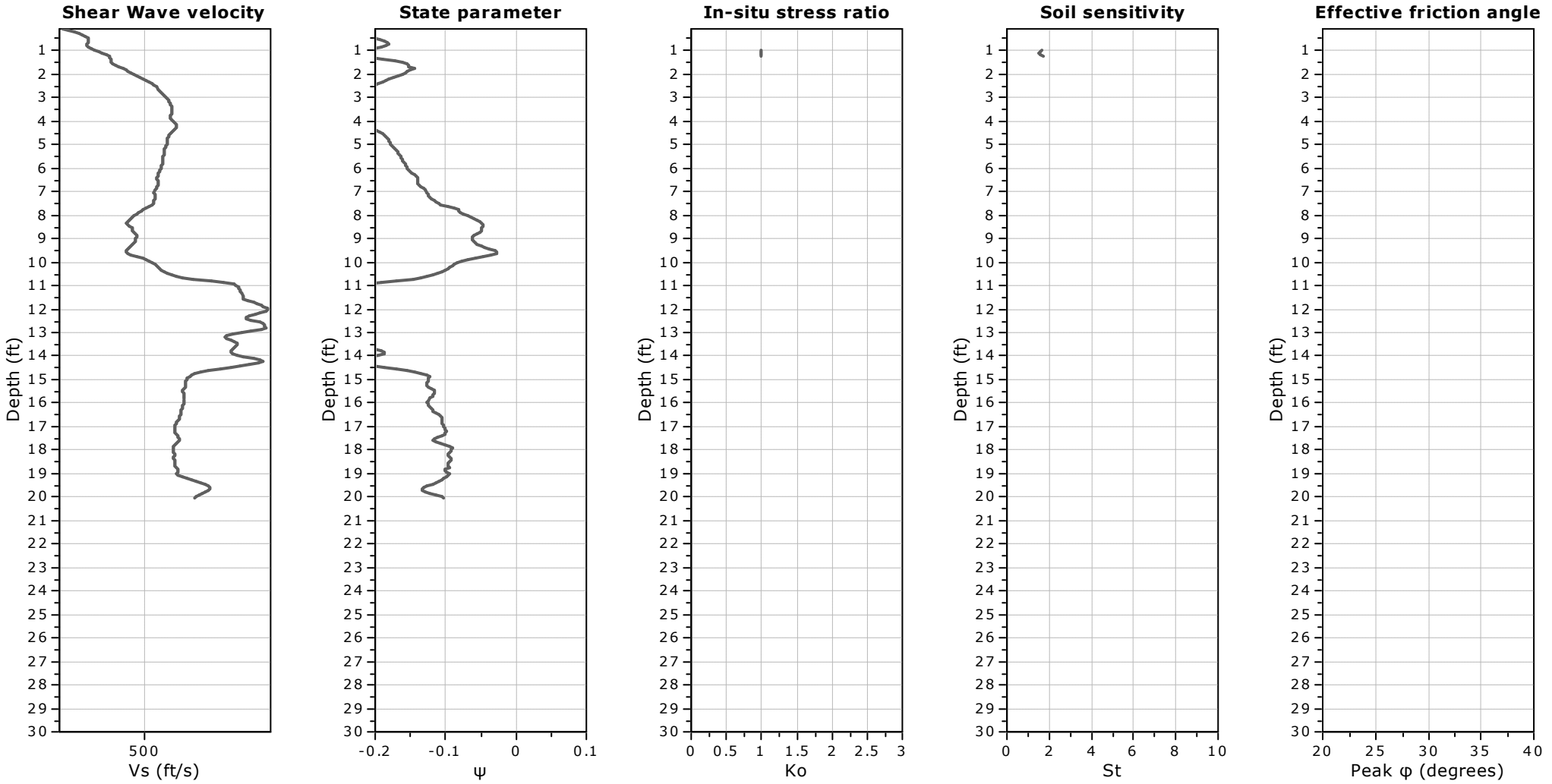
C-15
Total depth: 20.07 ft, Date: 5/14/2024
Surface Elevation: 65.23 ft
Coords: X:572310.83, Y:555945.30
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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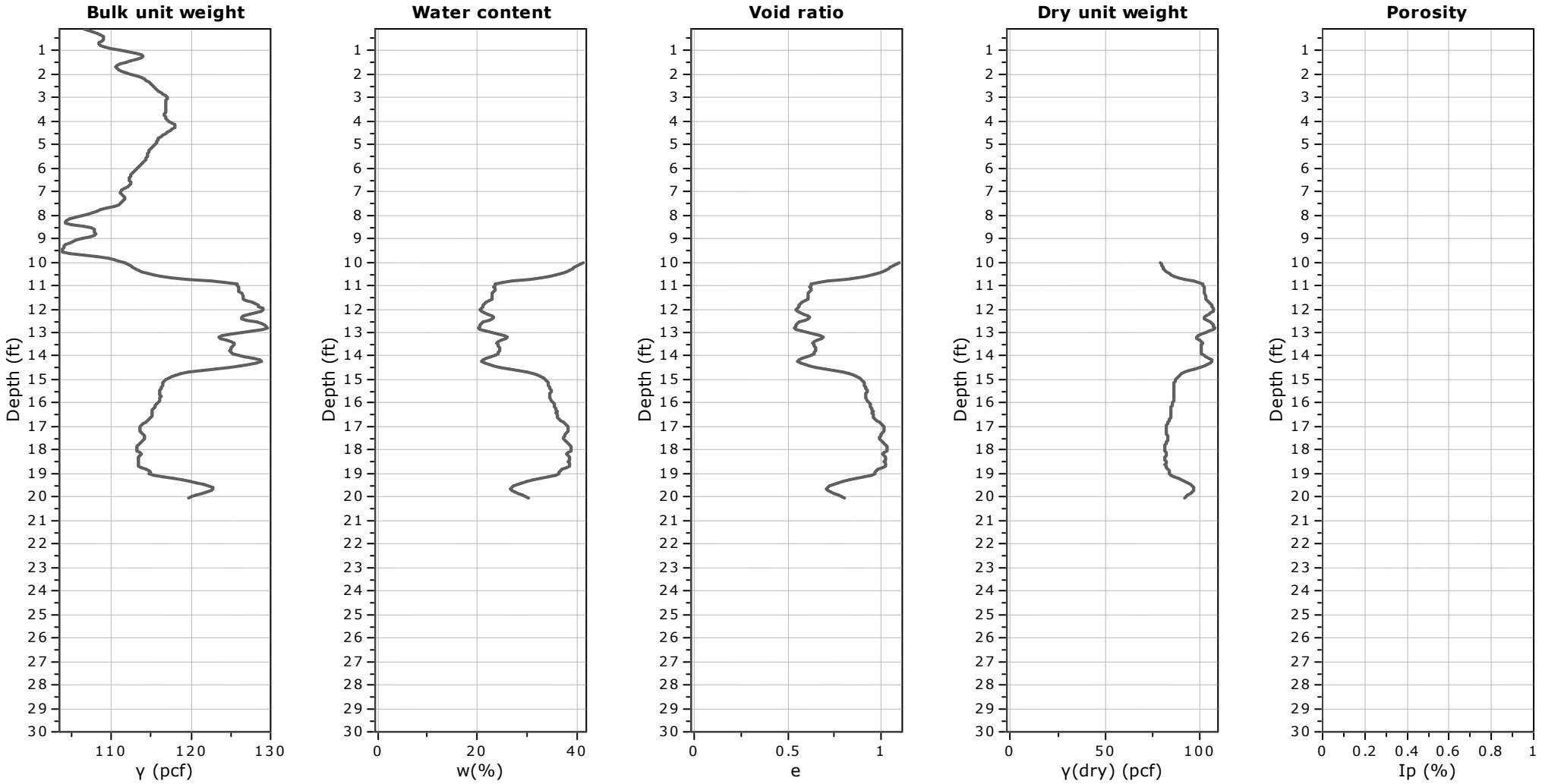

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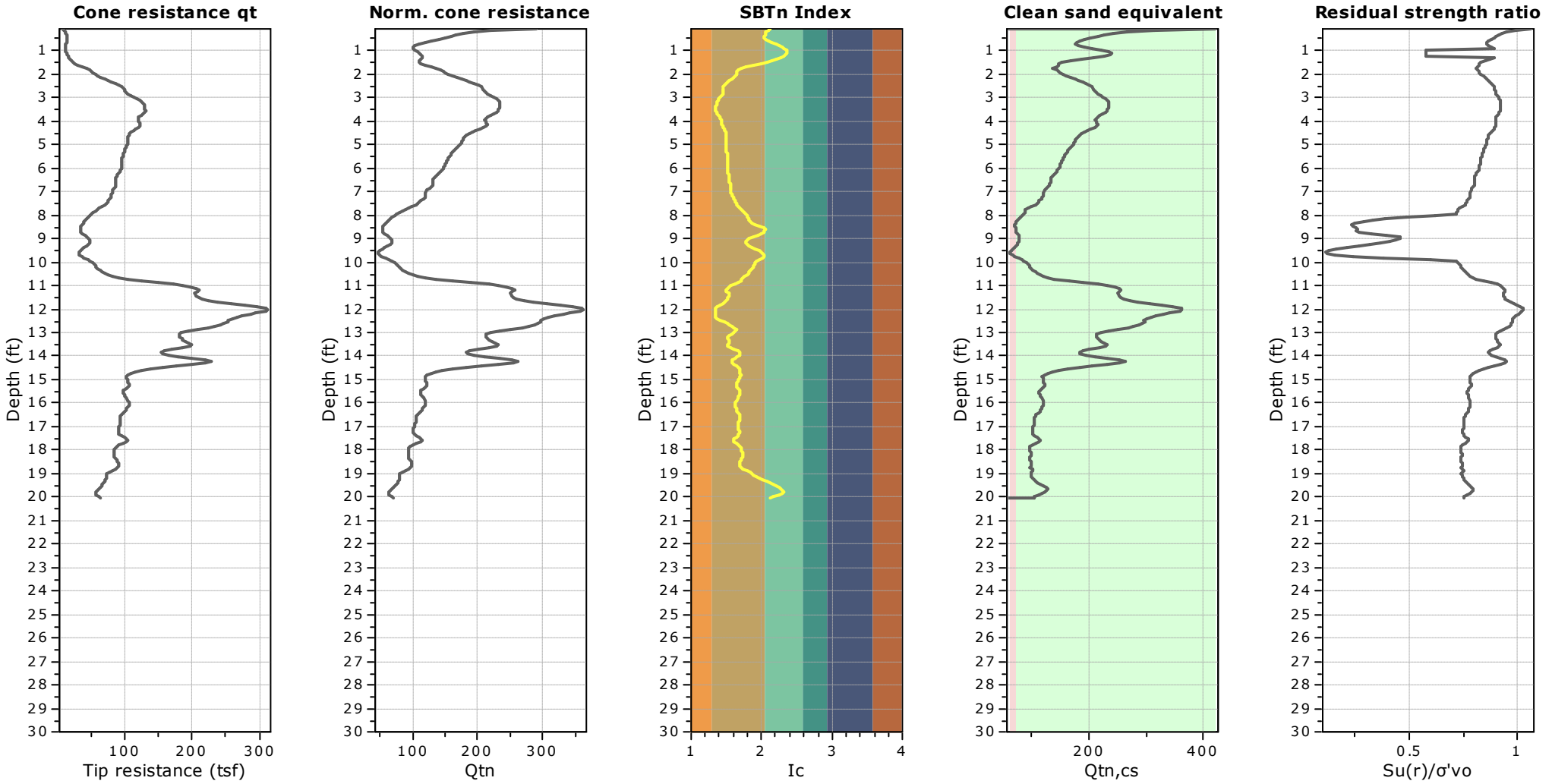

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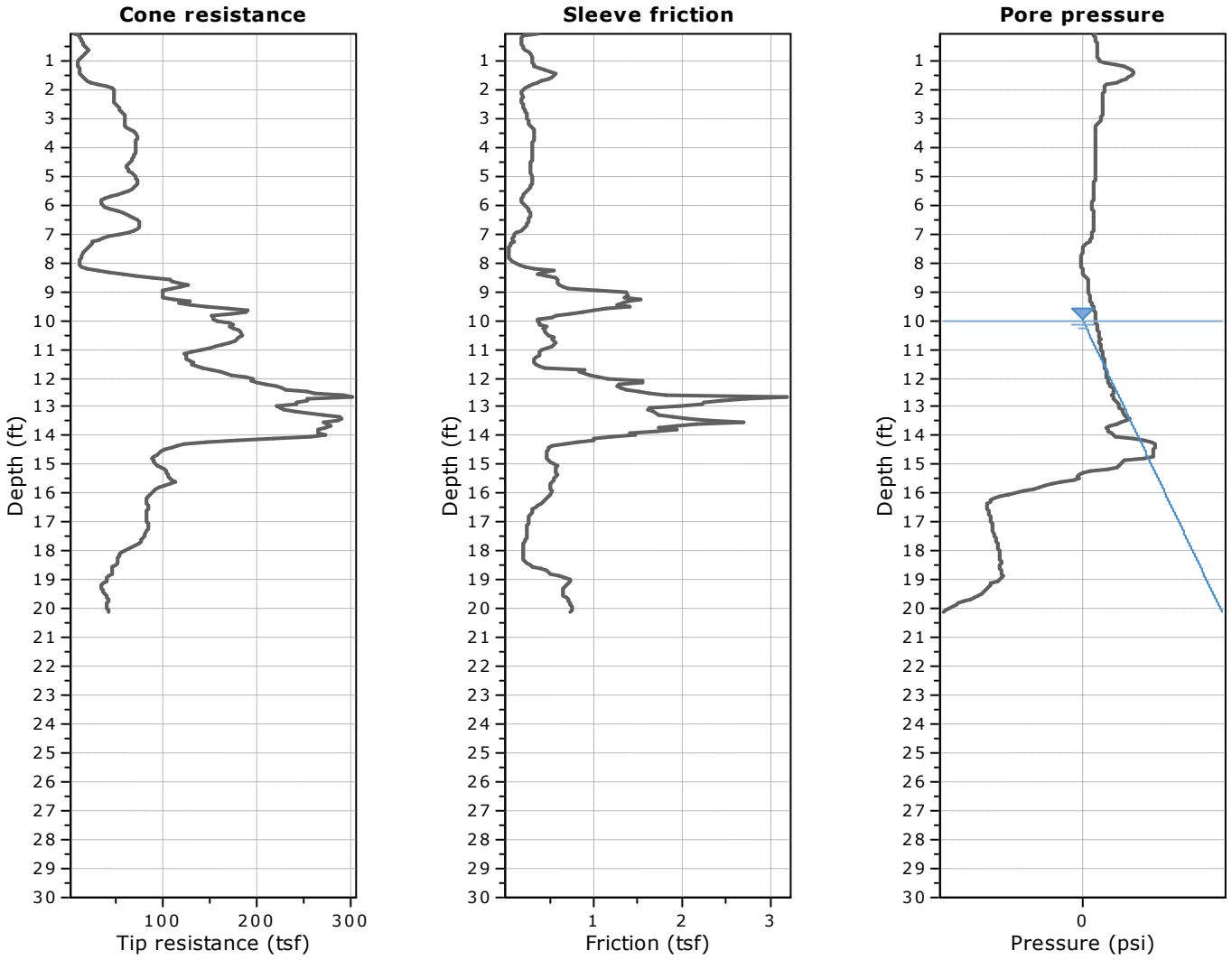
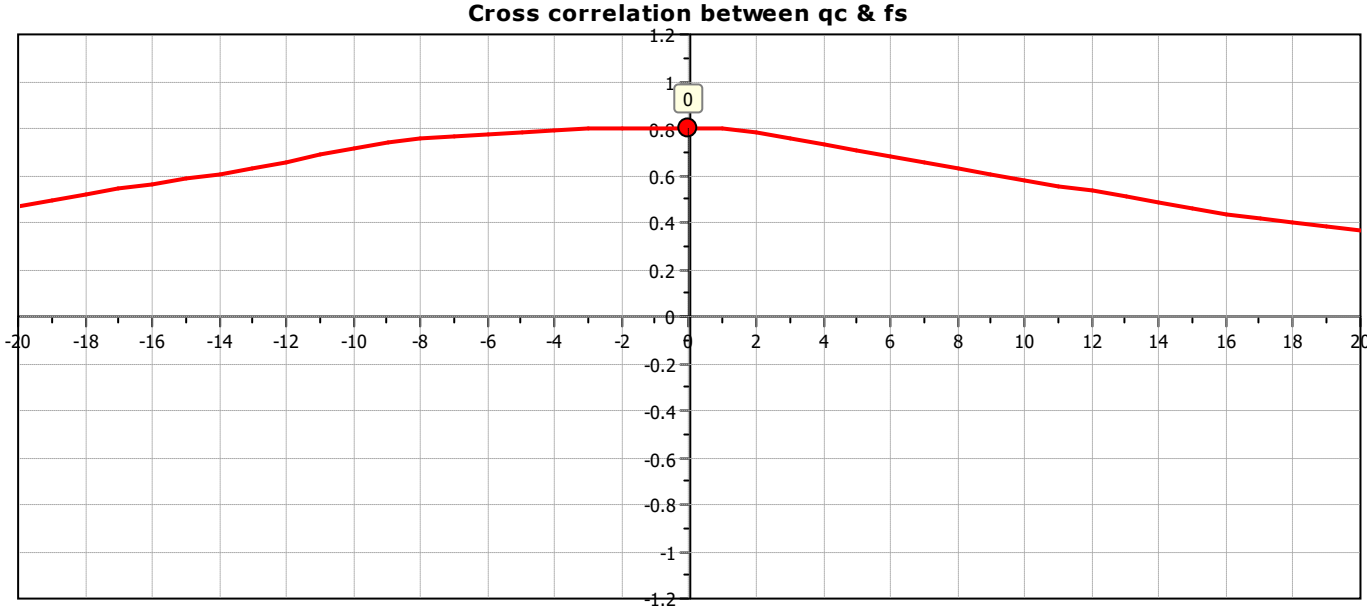
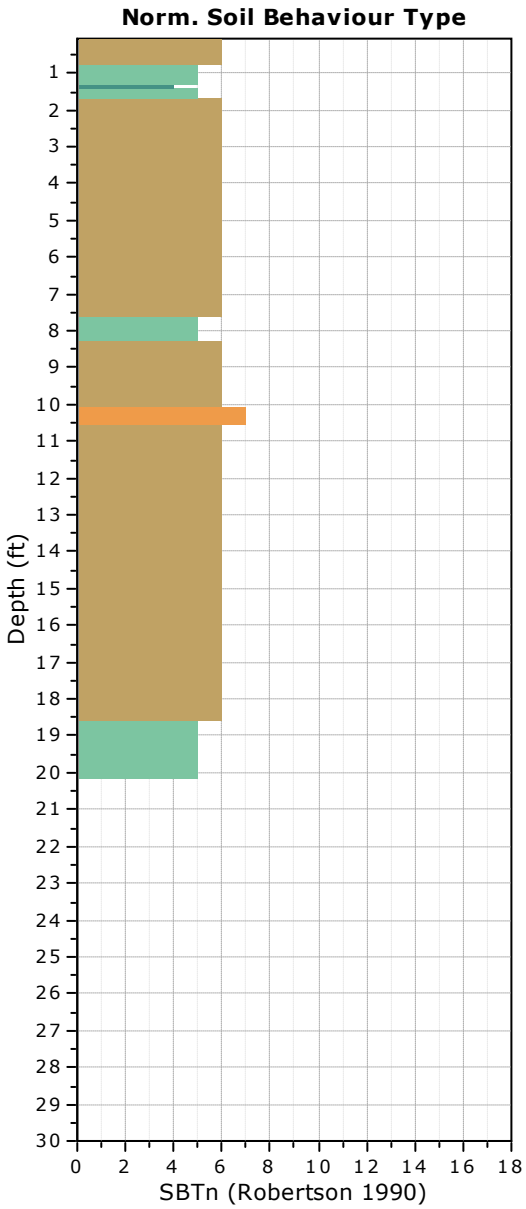
C-16
Total depth: 20.14 ft, Date: 5/14/2024
Surface Elevation: 64.60 ft
Coords: X:572395.39, Y:555937.26
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

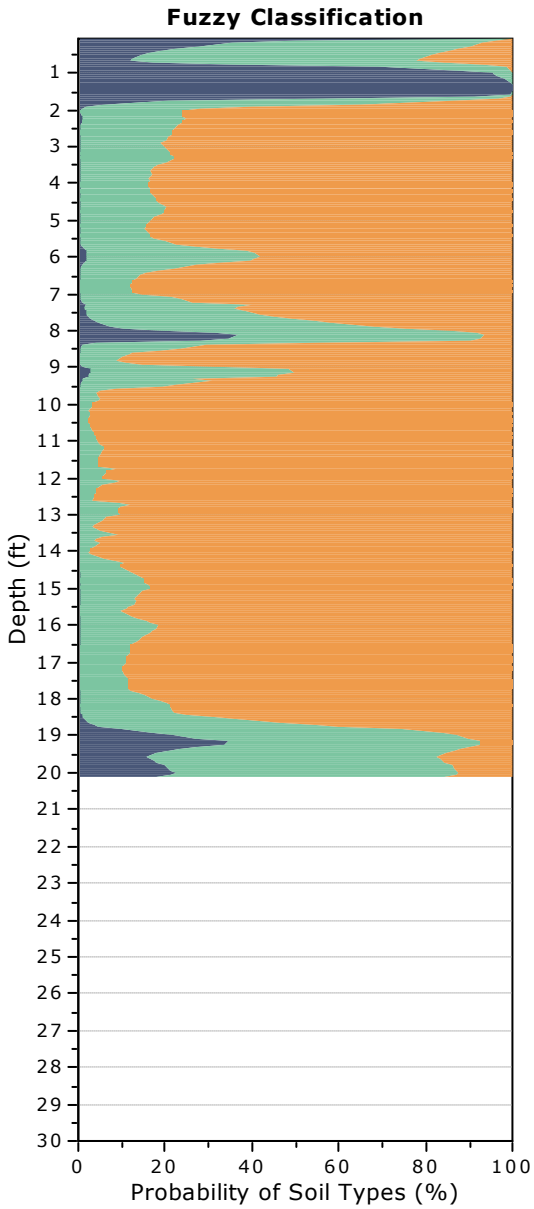
Project: ASD Summit Campus
Location: Middletown, Delaware



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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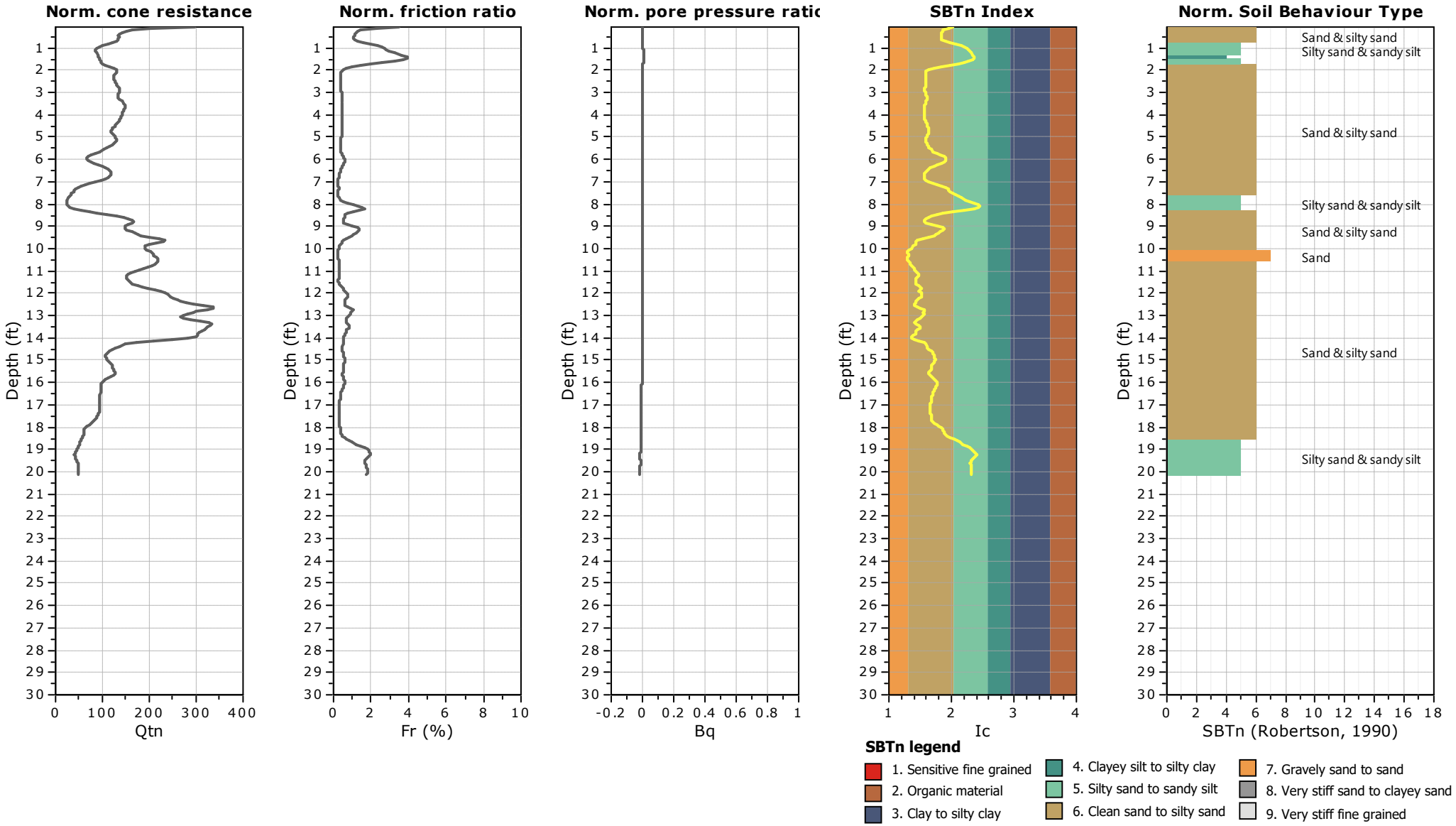

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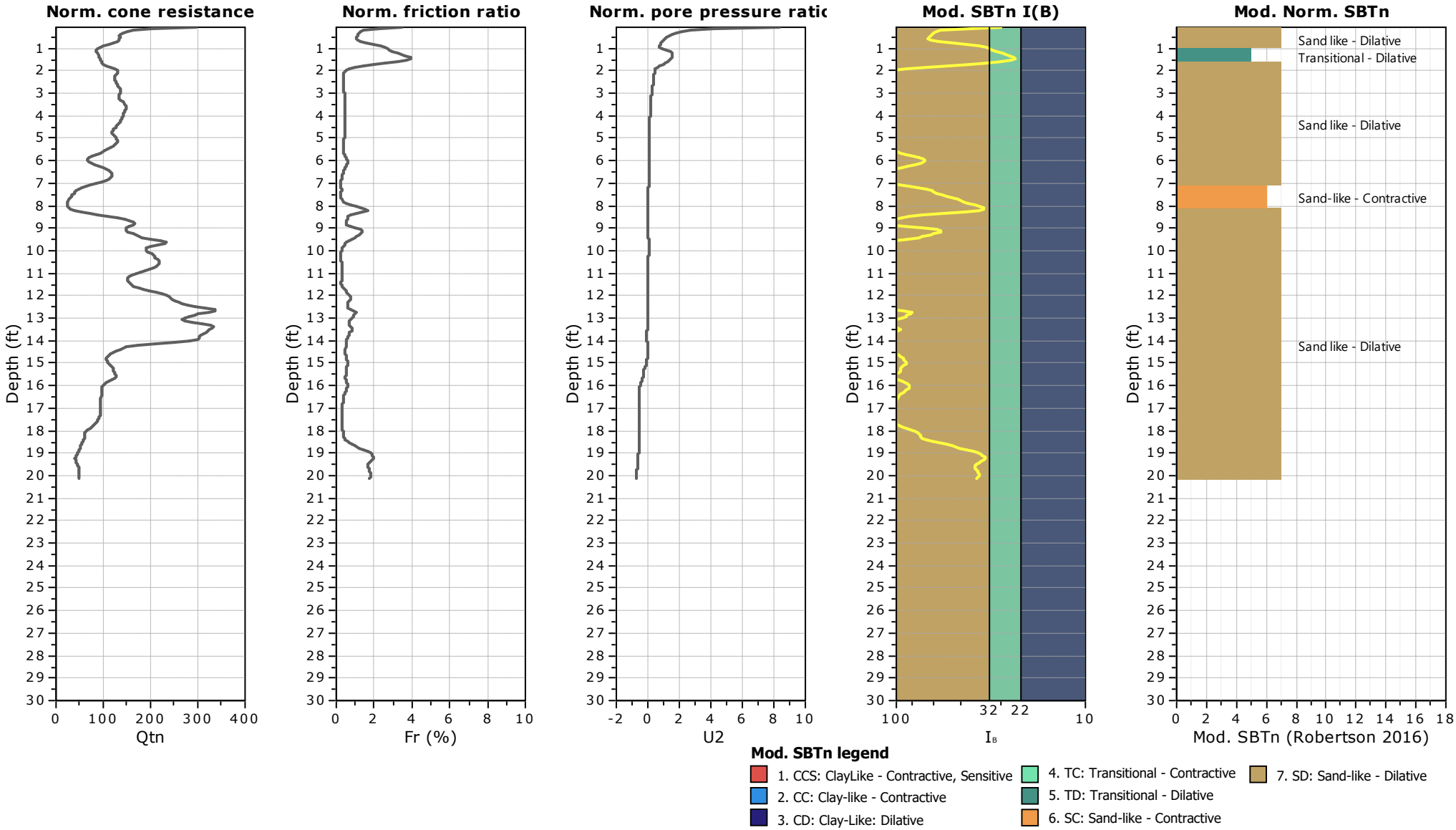

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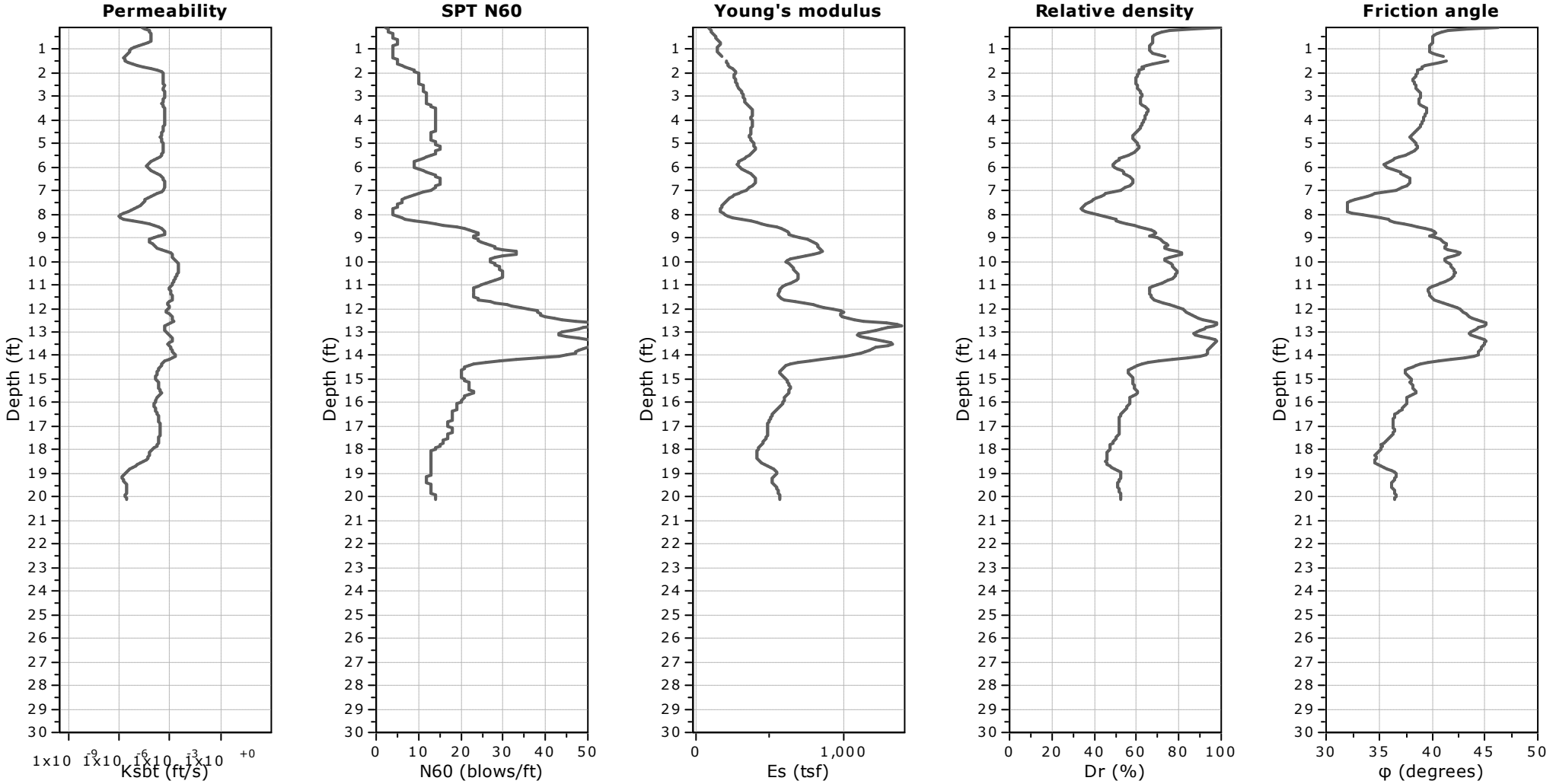

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
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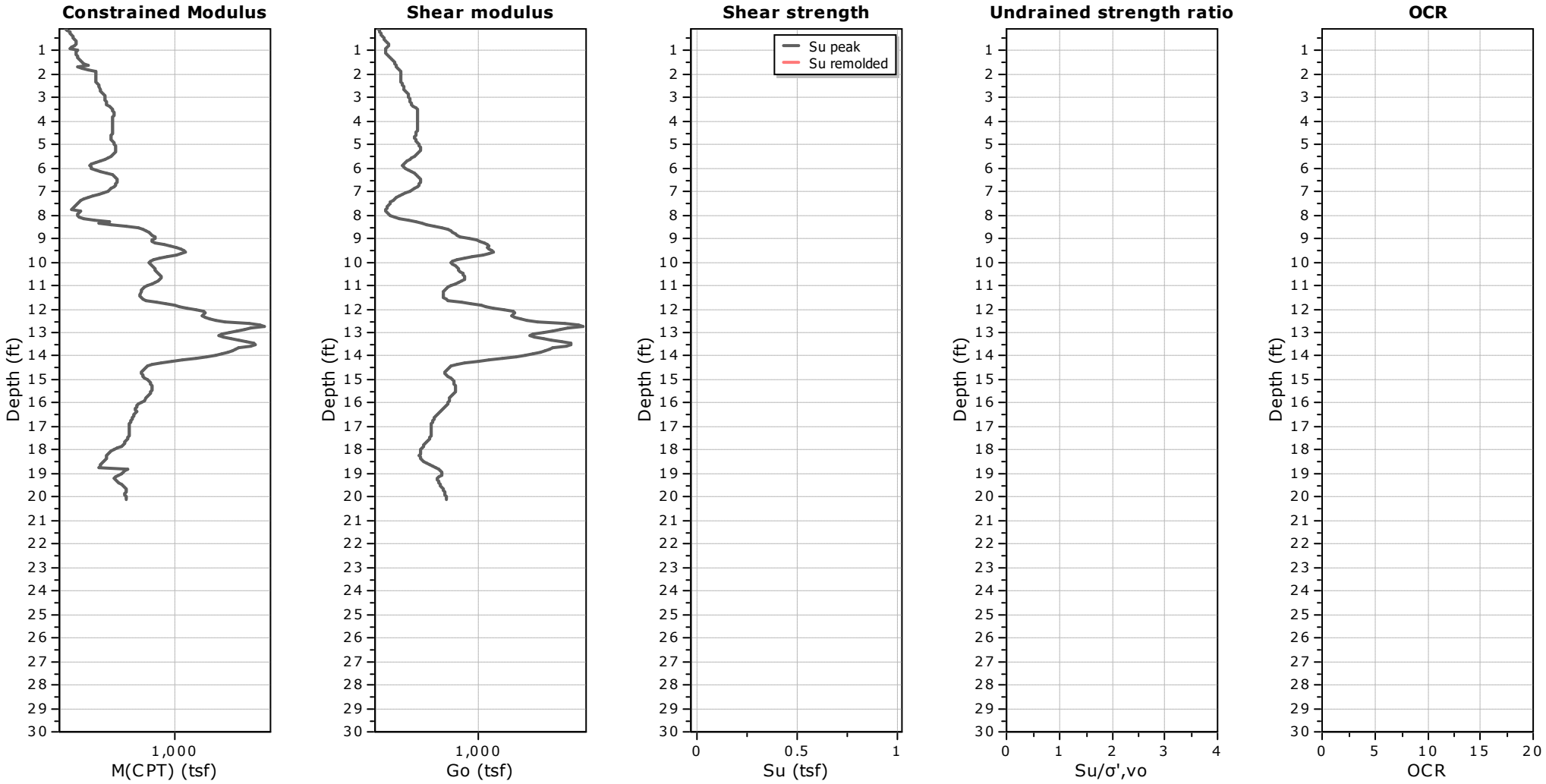

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
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Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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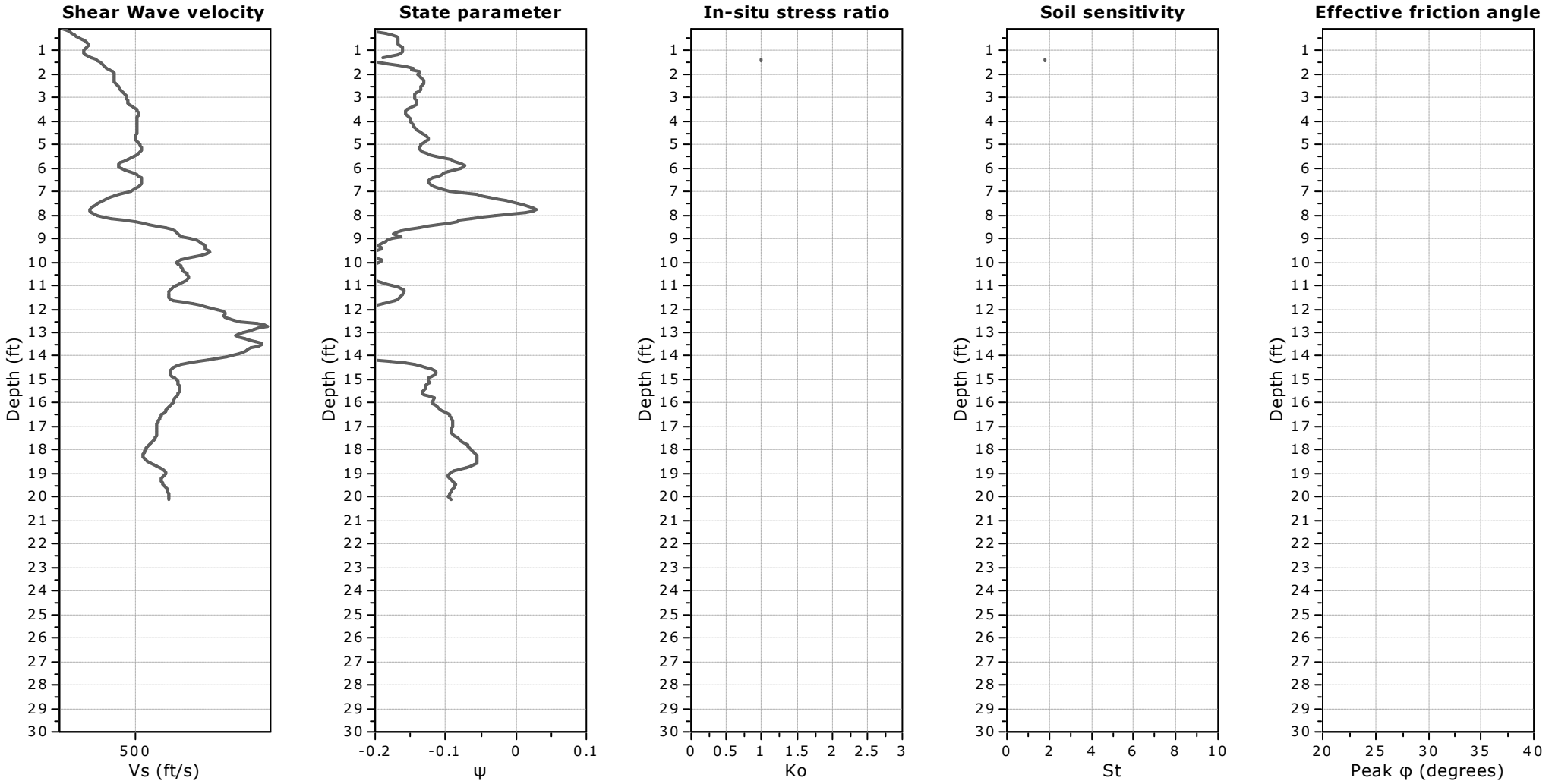

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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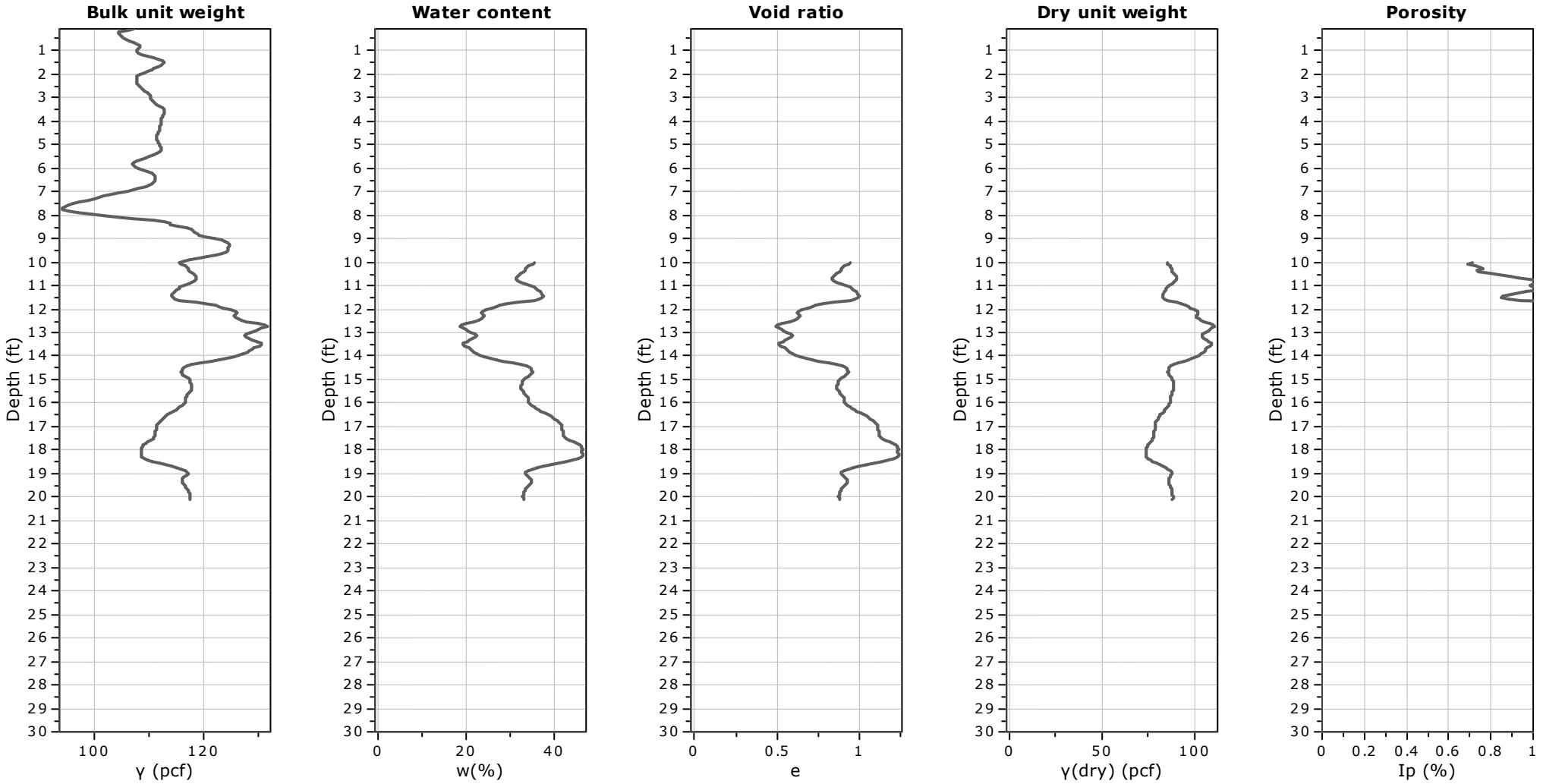

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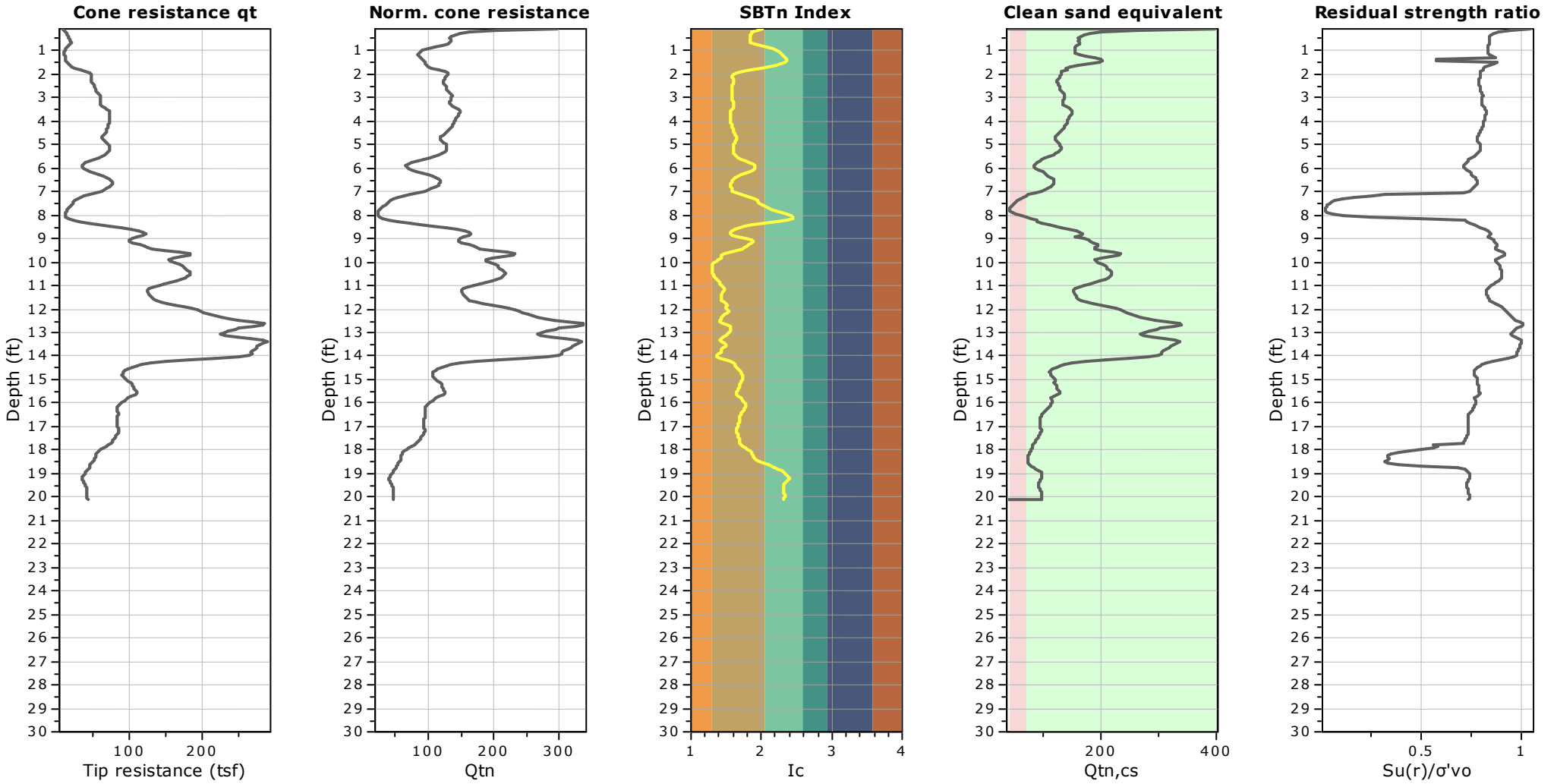

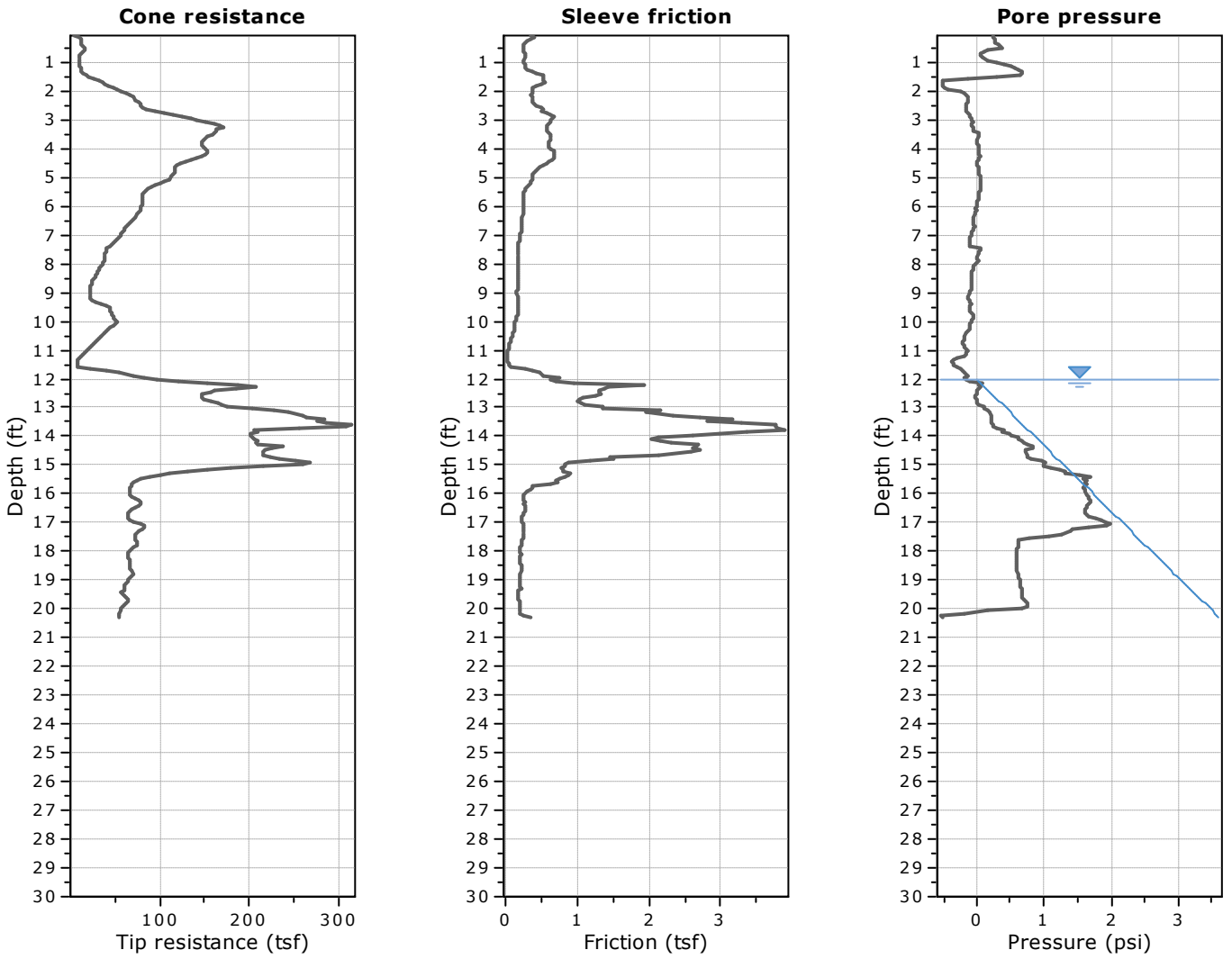

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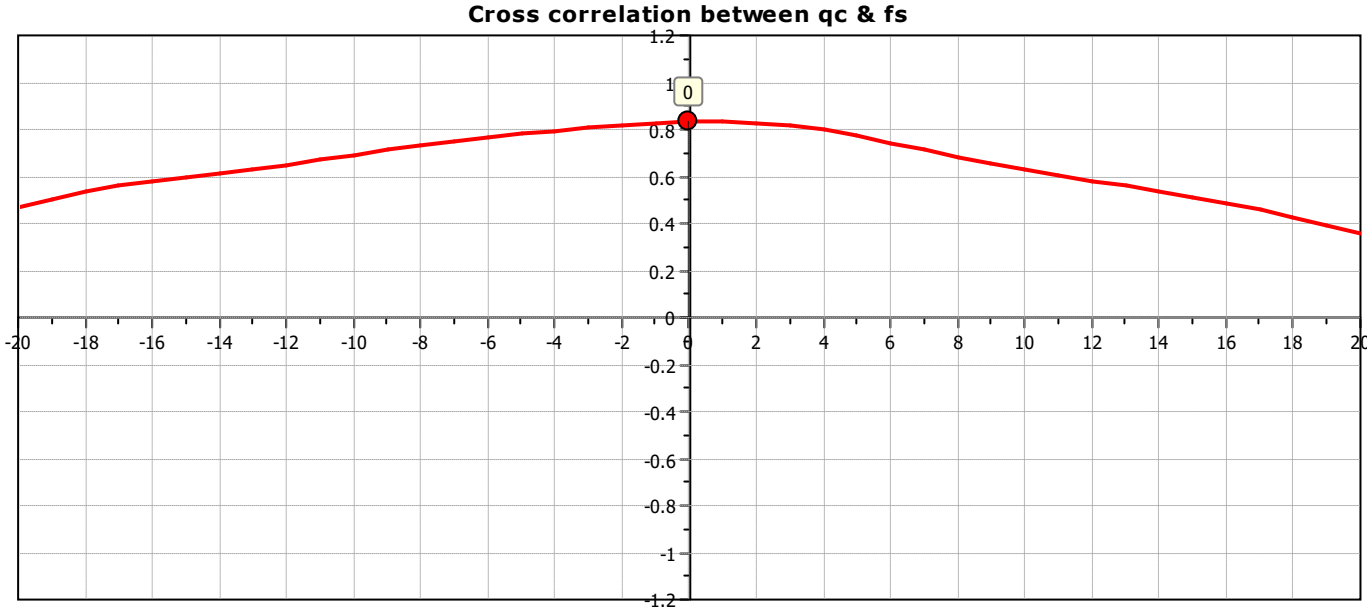

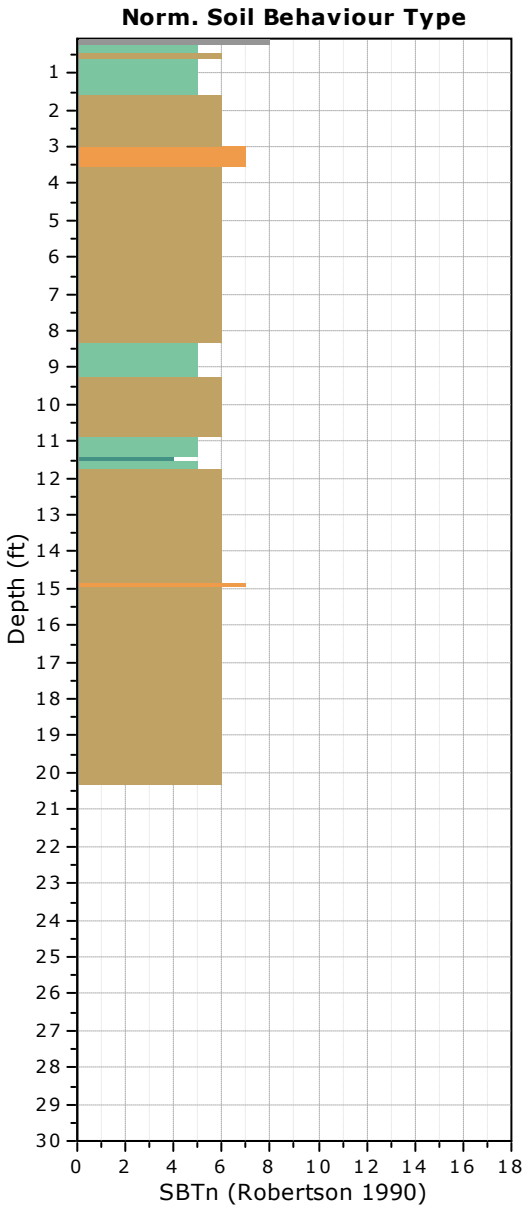

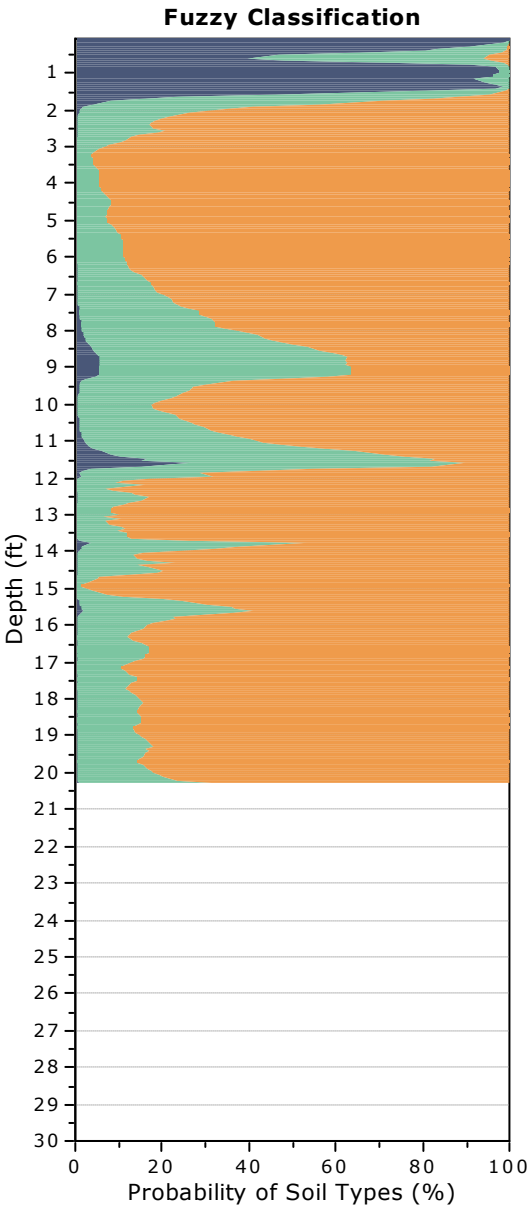

Fuzzy classifiaction legend

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Project: **ASD Summit Campus**
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C-17
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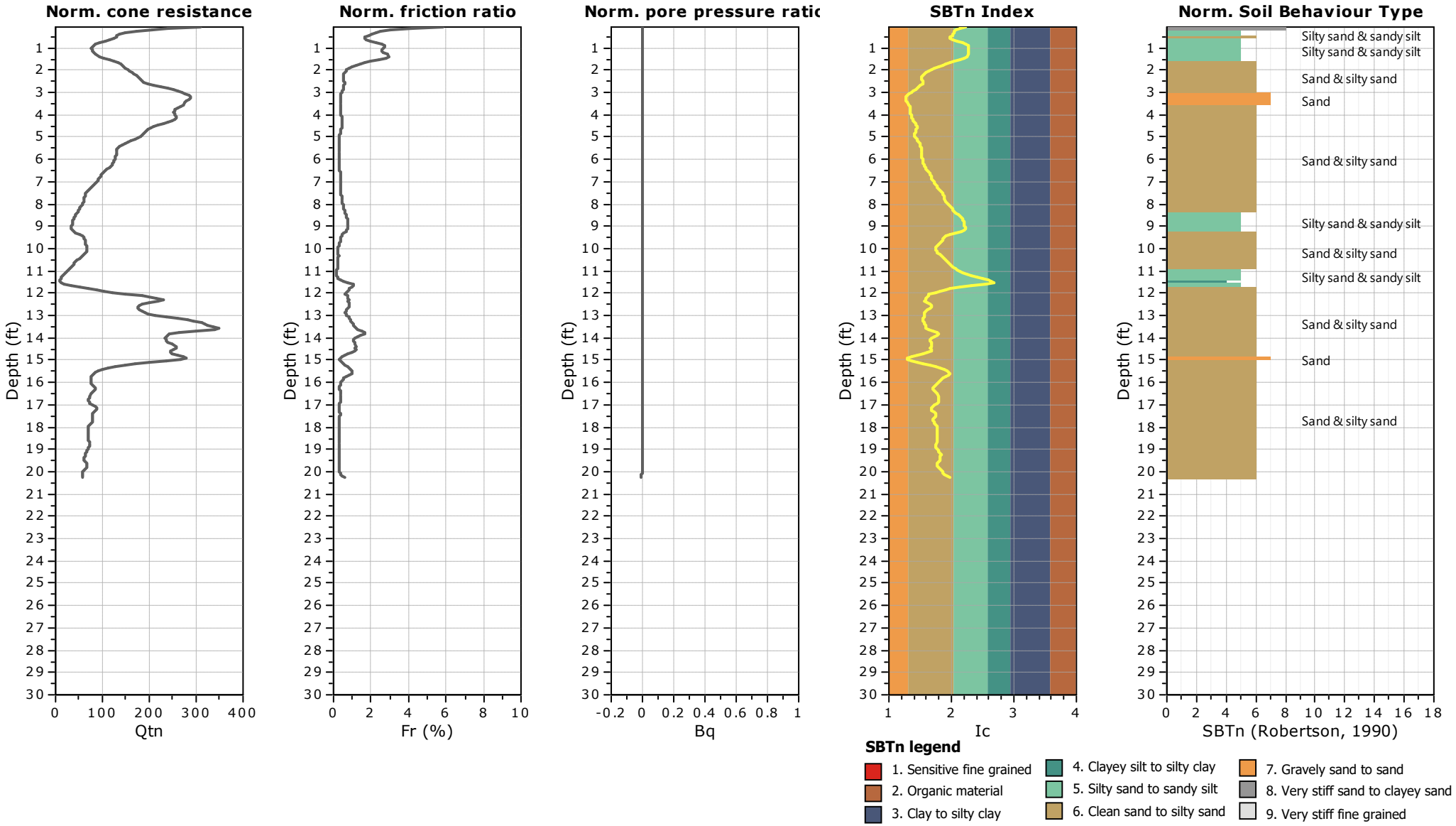

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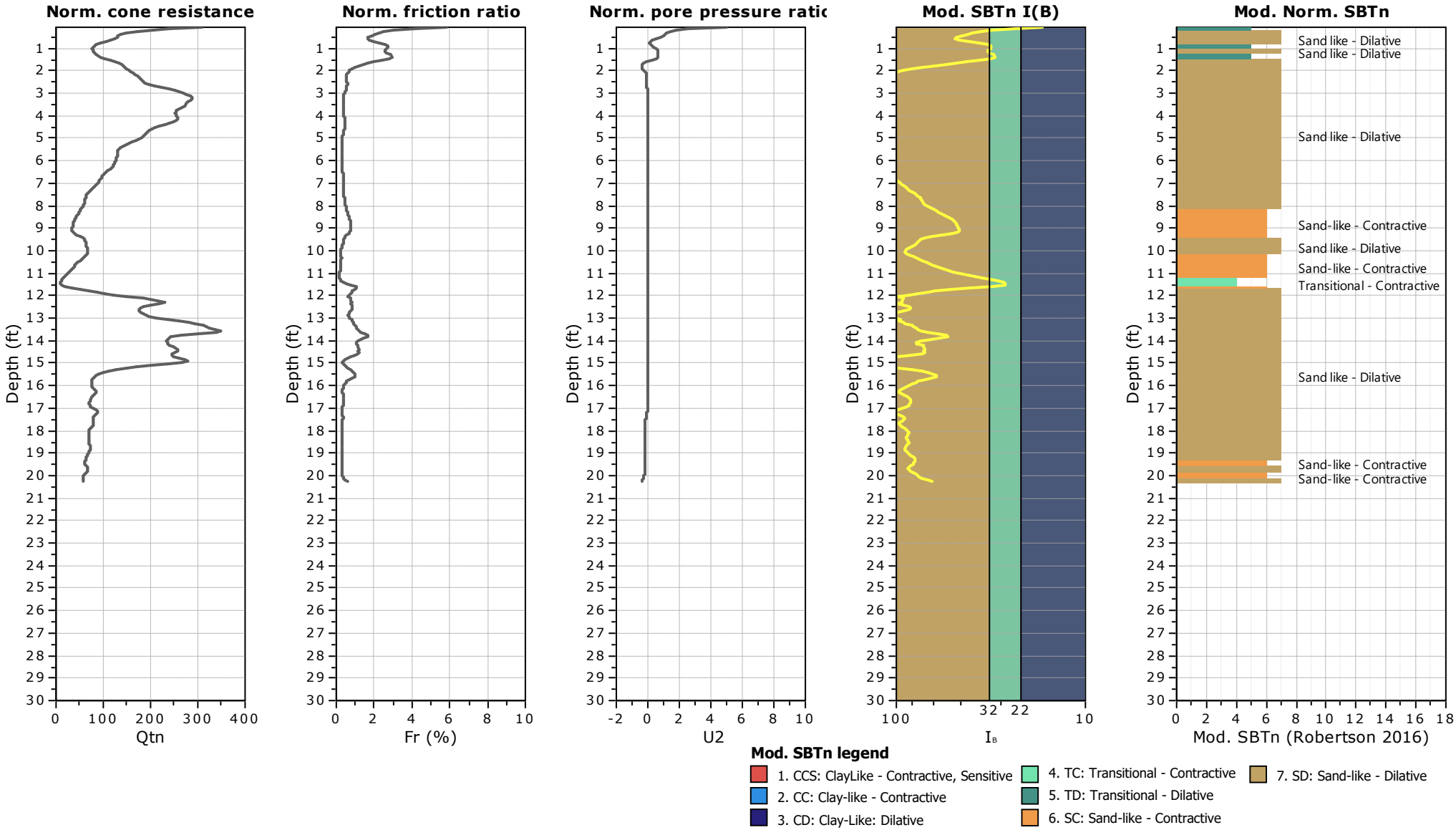

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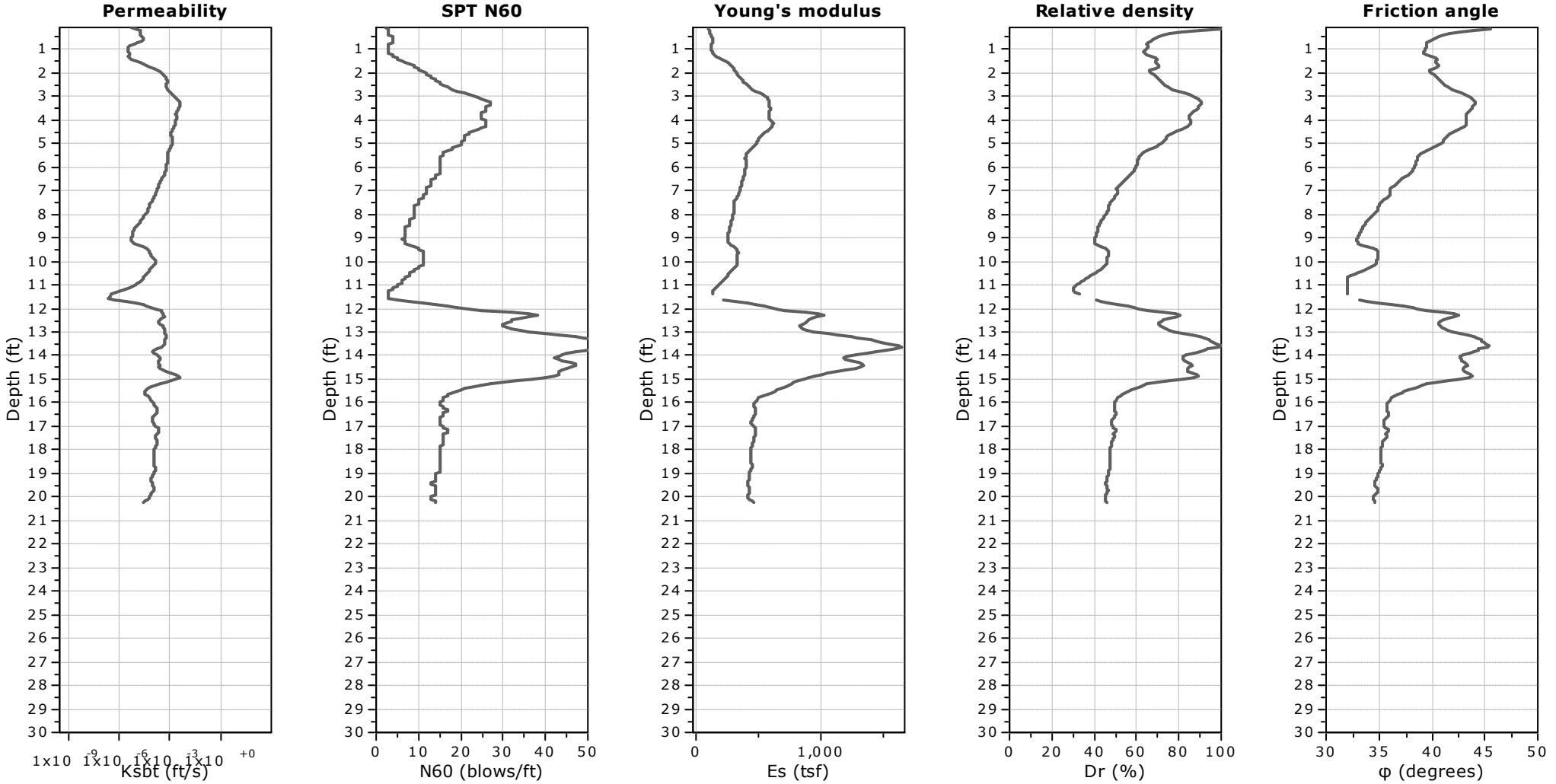

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
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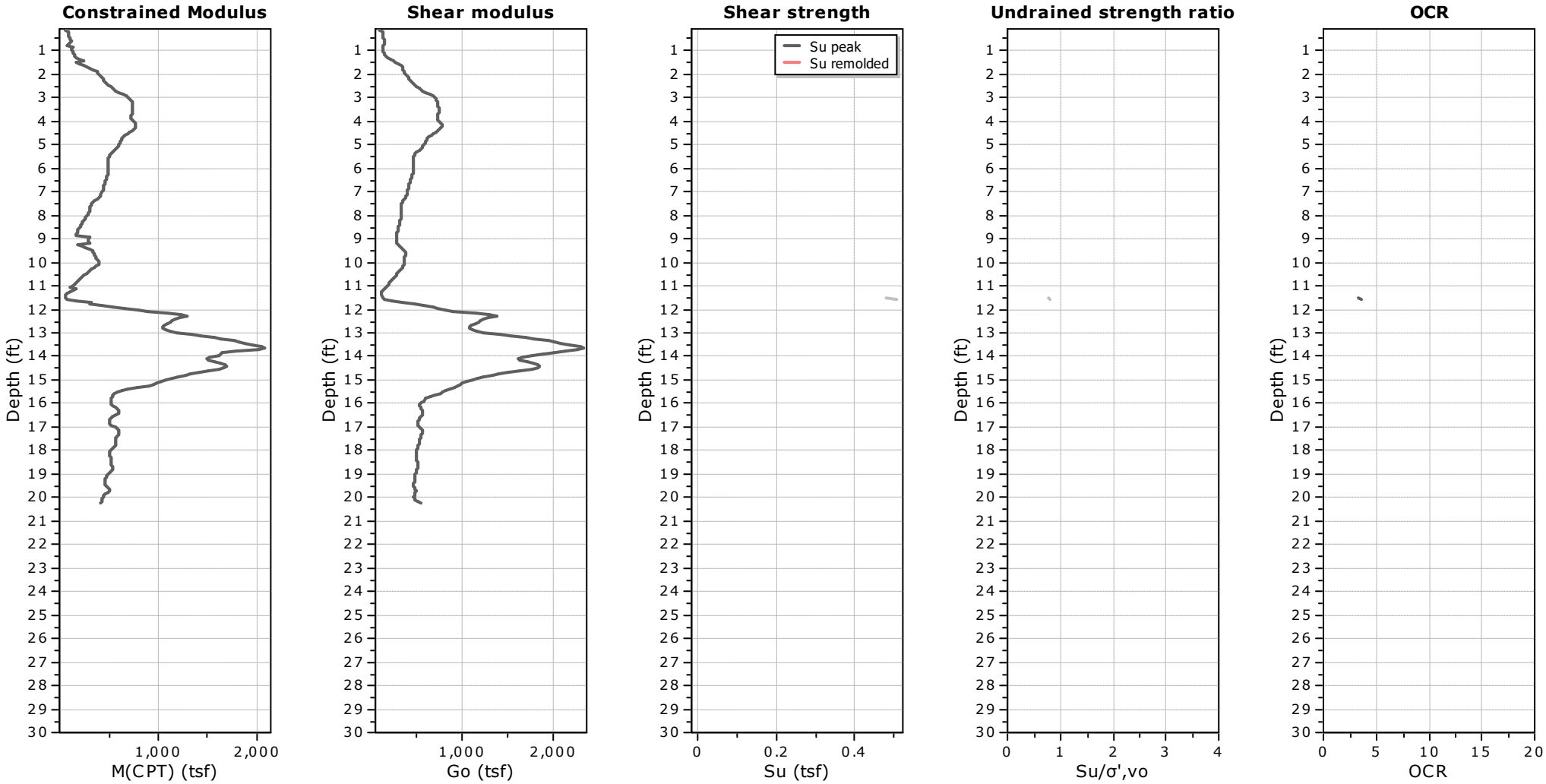

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
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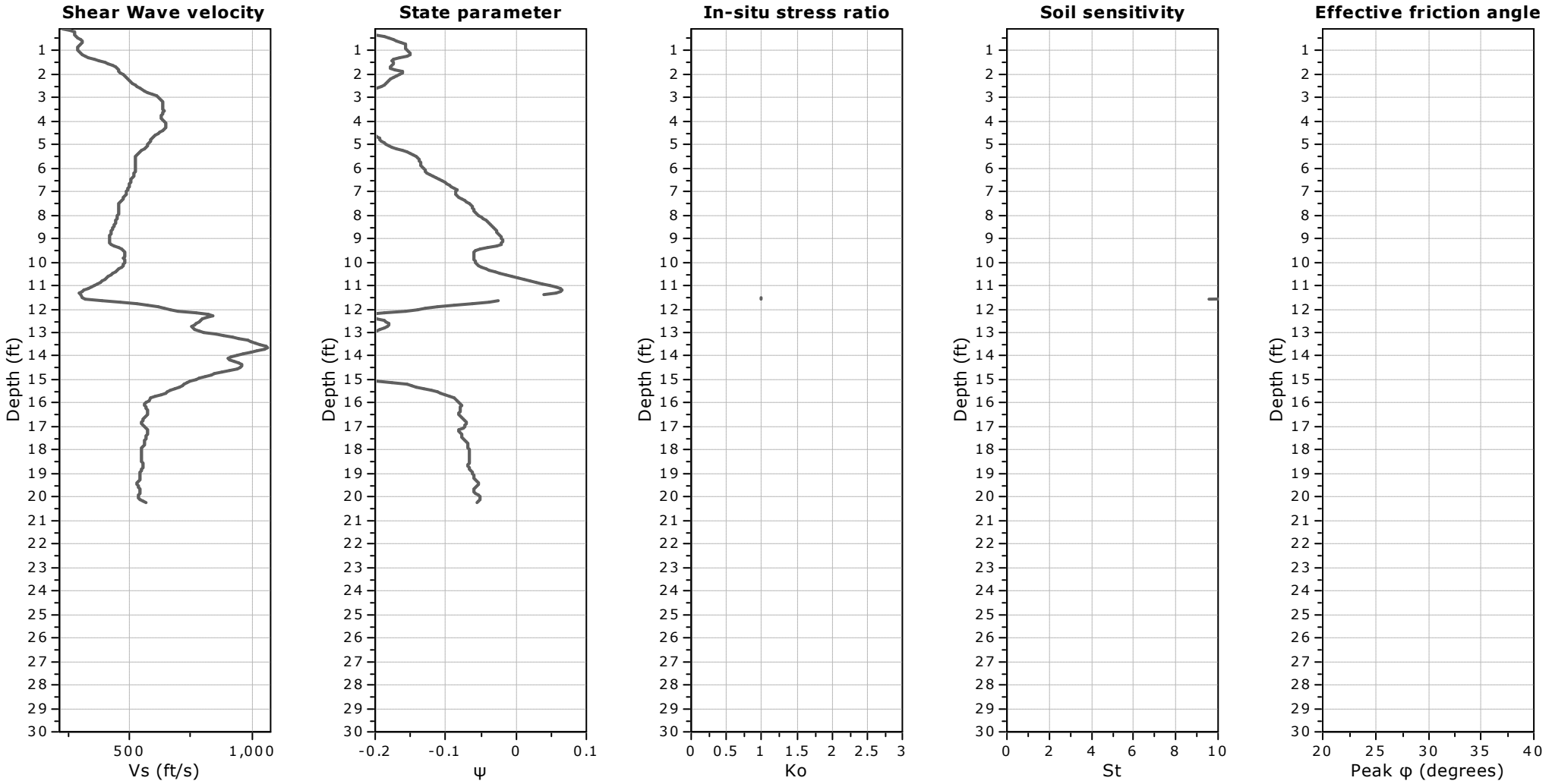

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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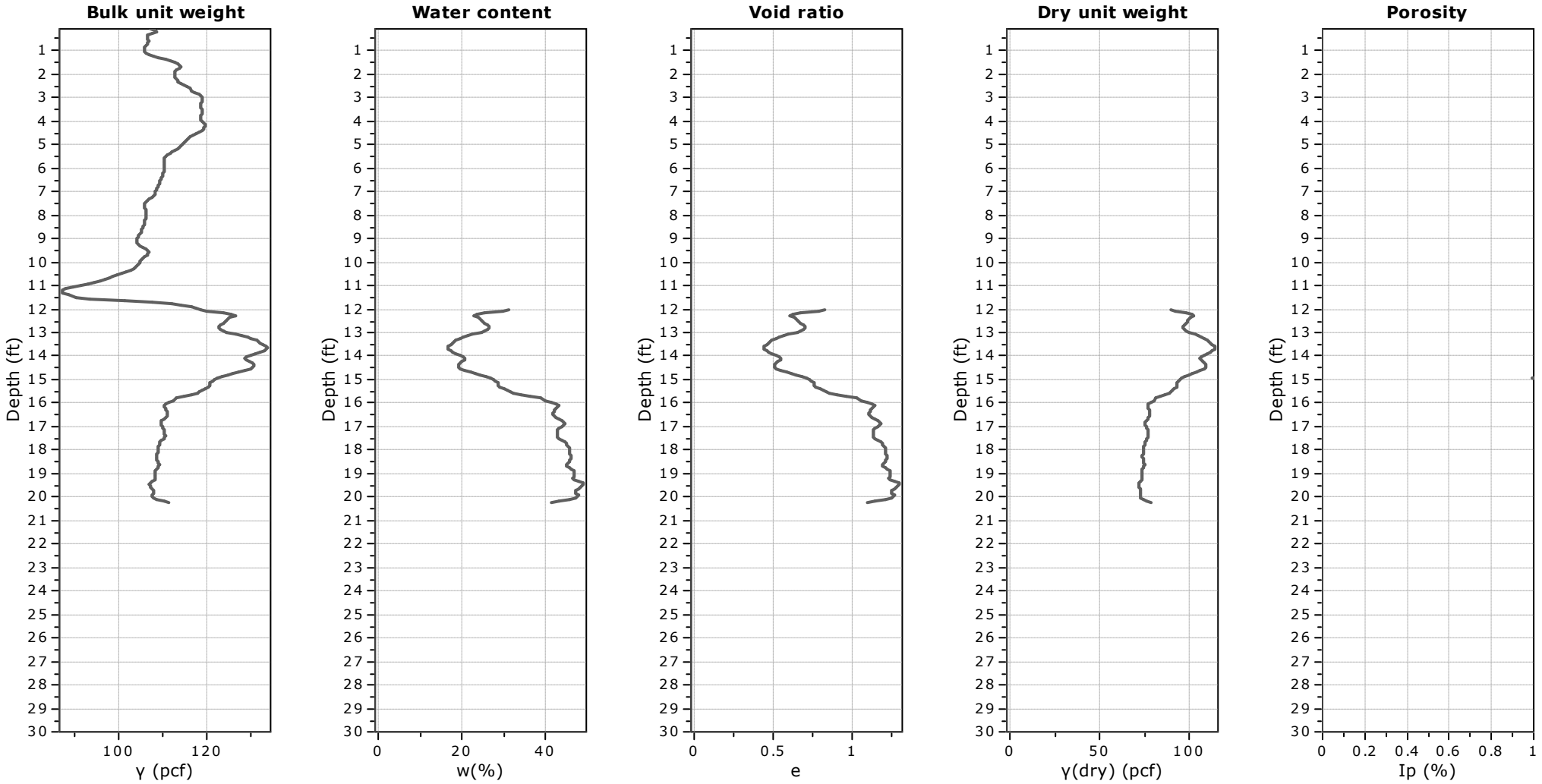

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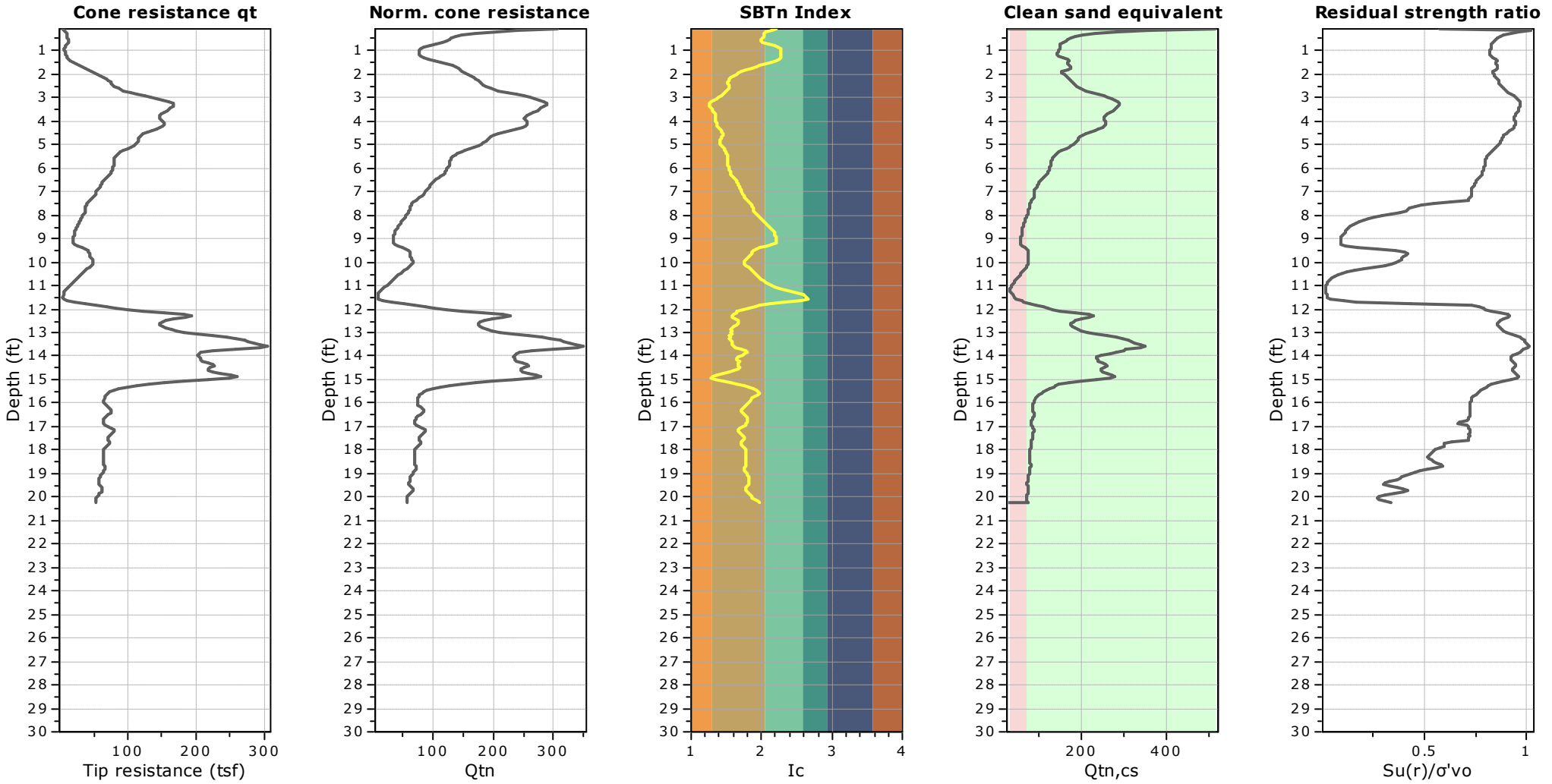

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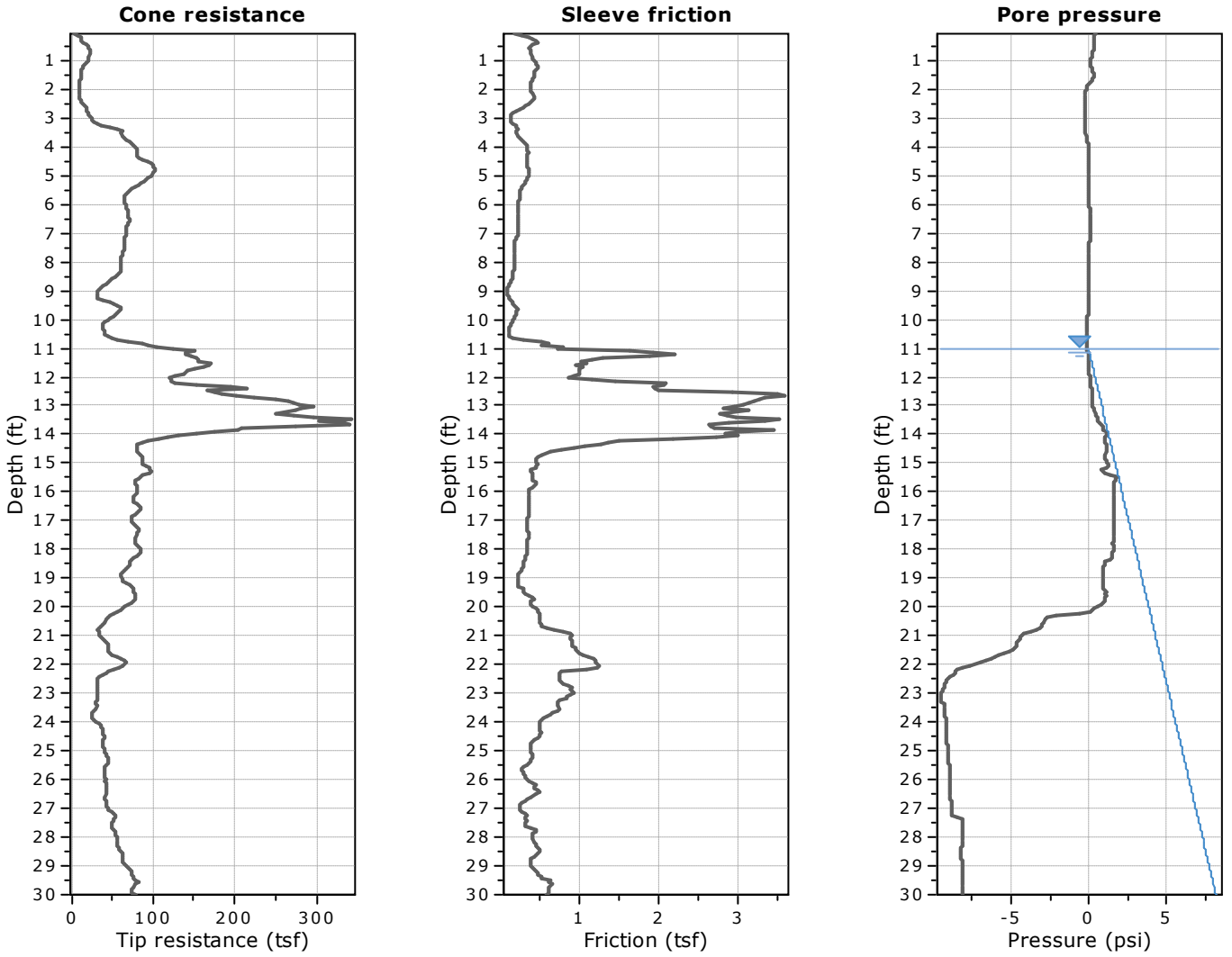
C-18
Total depth: 30.37 ft, Date: 5/14/2024
Surface Elevation: 65.96 ft
Coords: X:572463.67, Y:556105.49
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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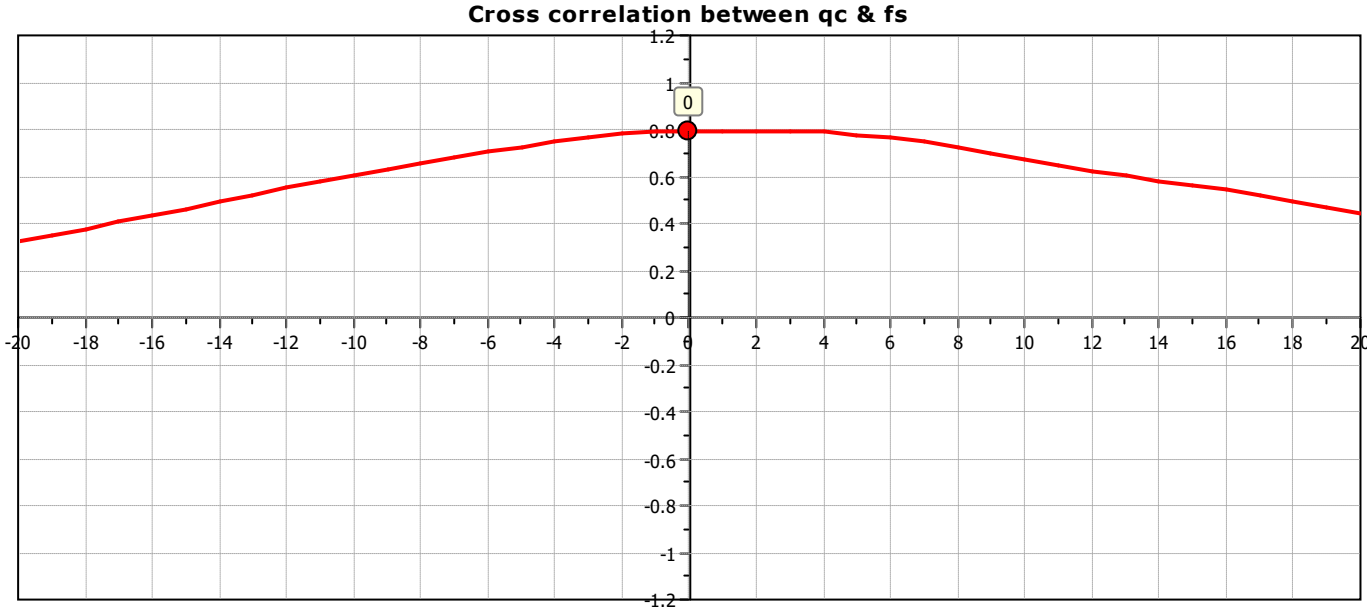

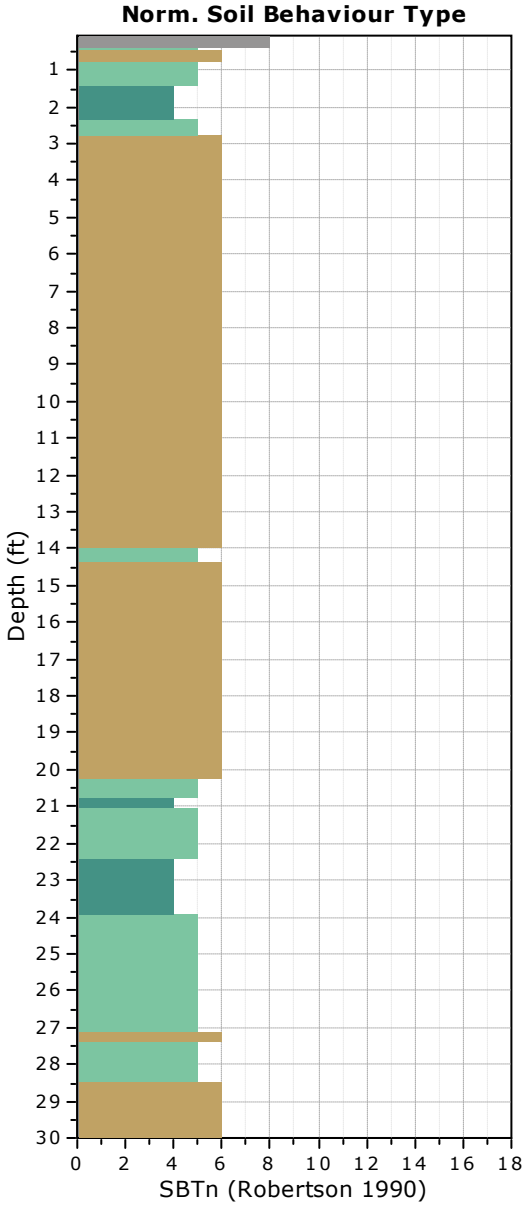

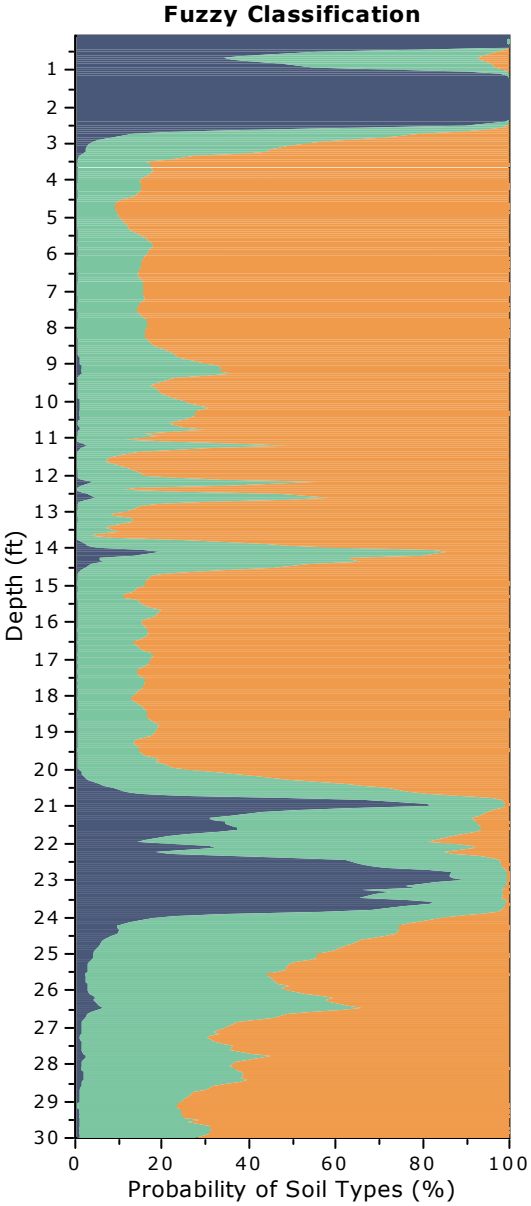

Fuzzy classifiaction legend

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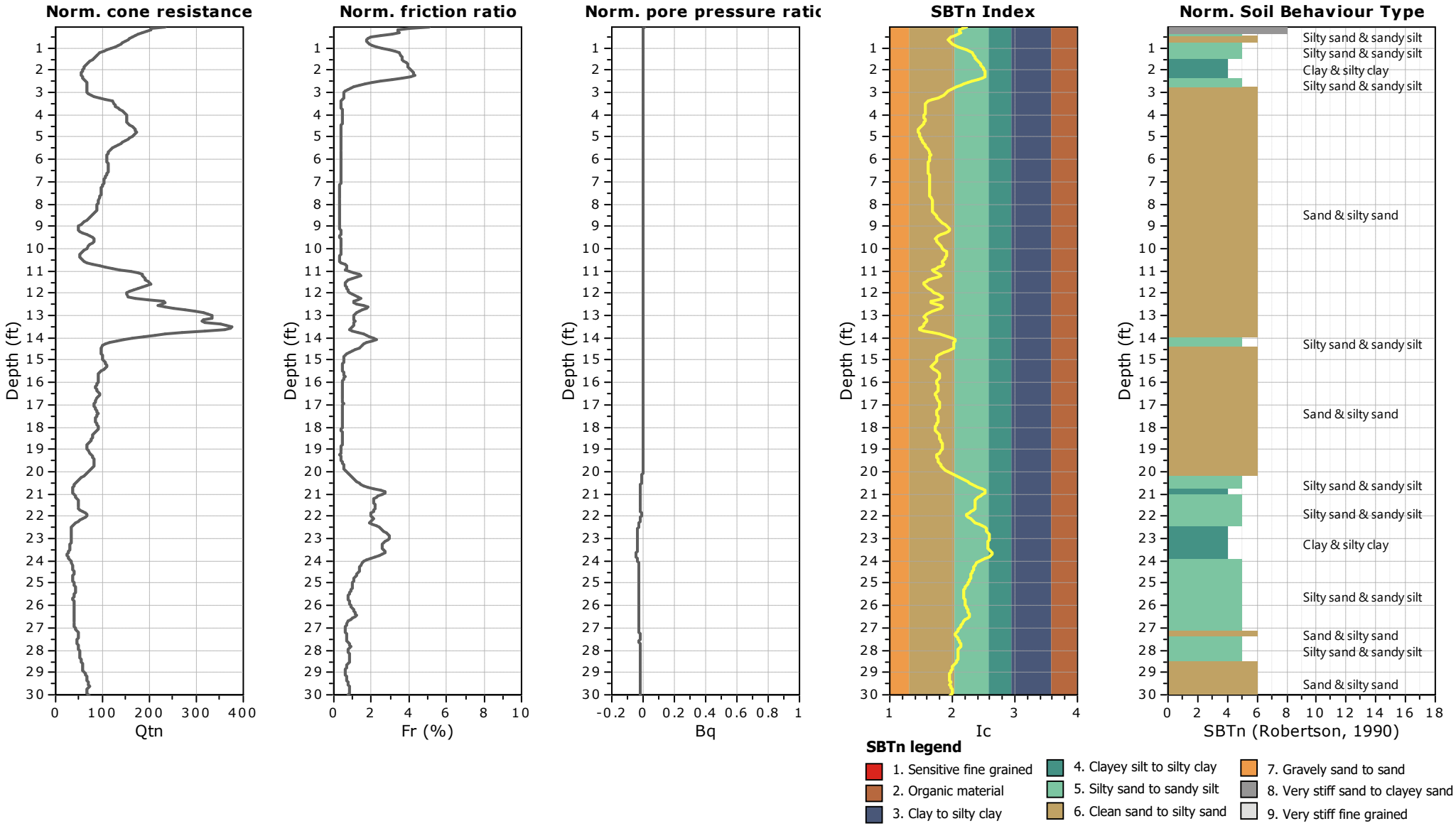

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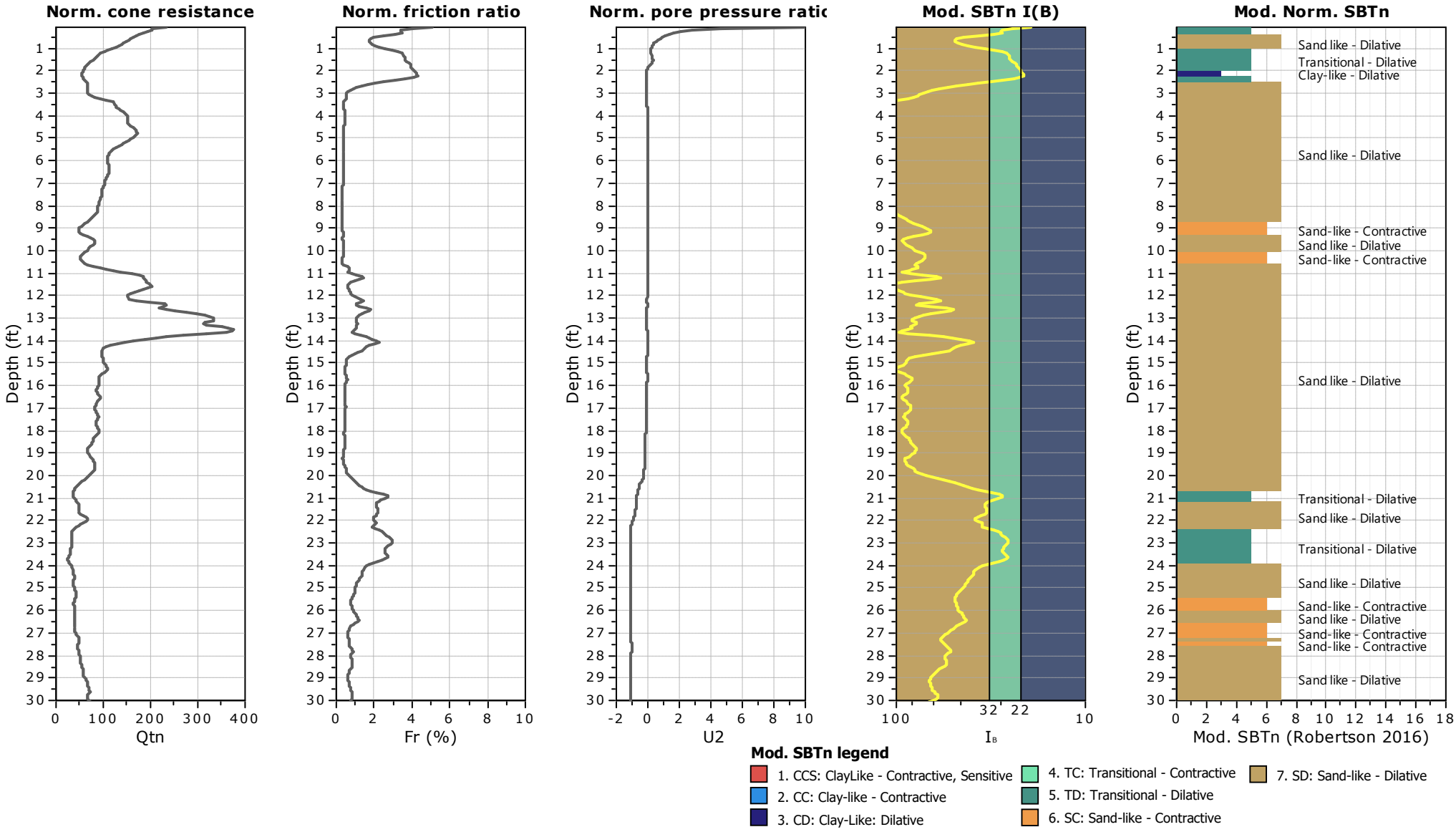

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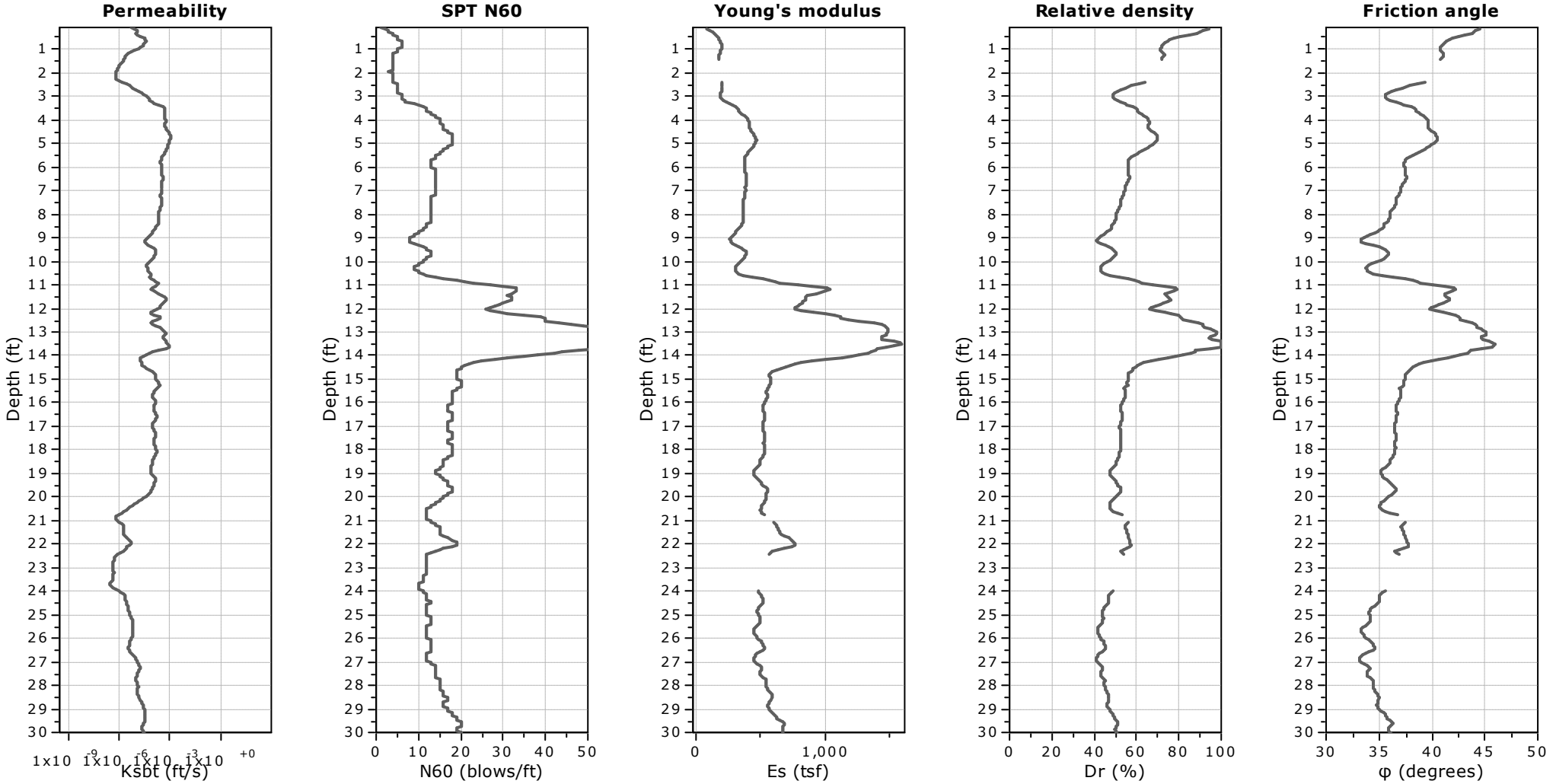
C-18
Total depth: 30.37 ft, Date: 5/14/2024
Surface Elevation: 65.96 ft
Coords: X:572463.67, Y:556105.49
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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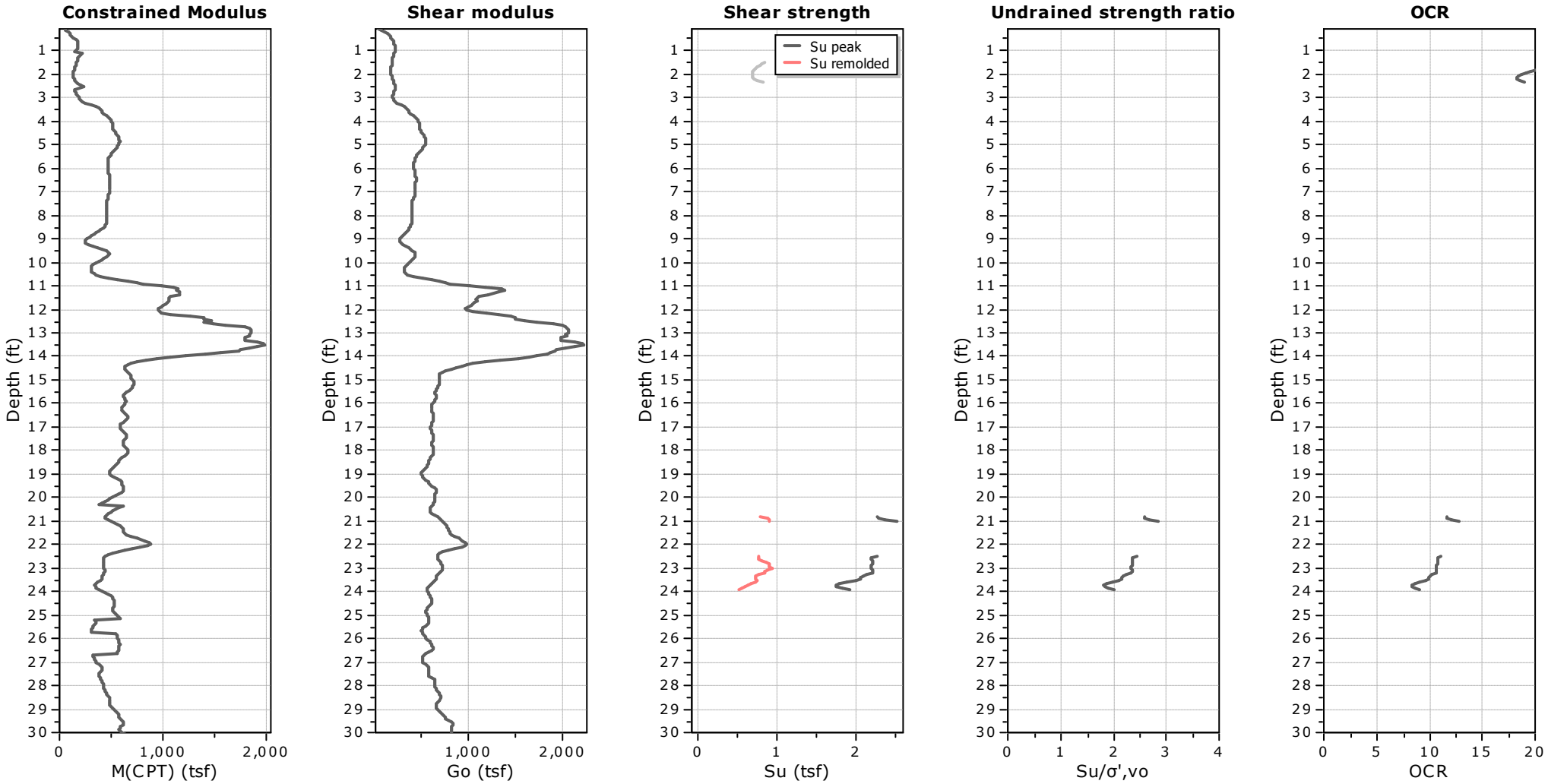

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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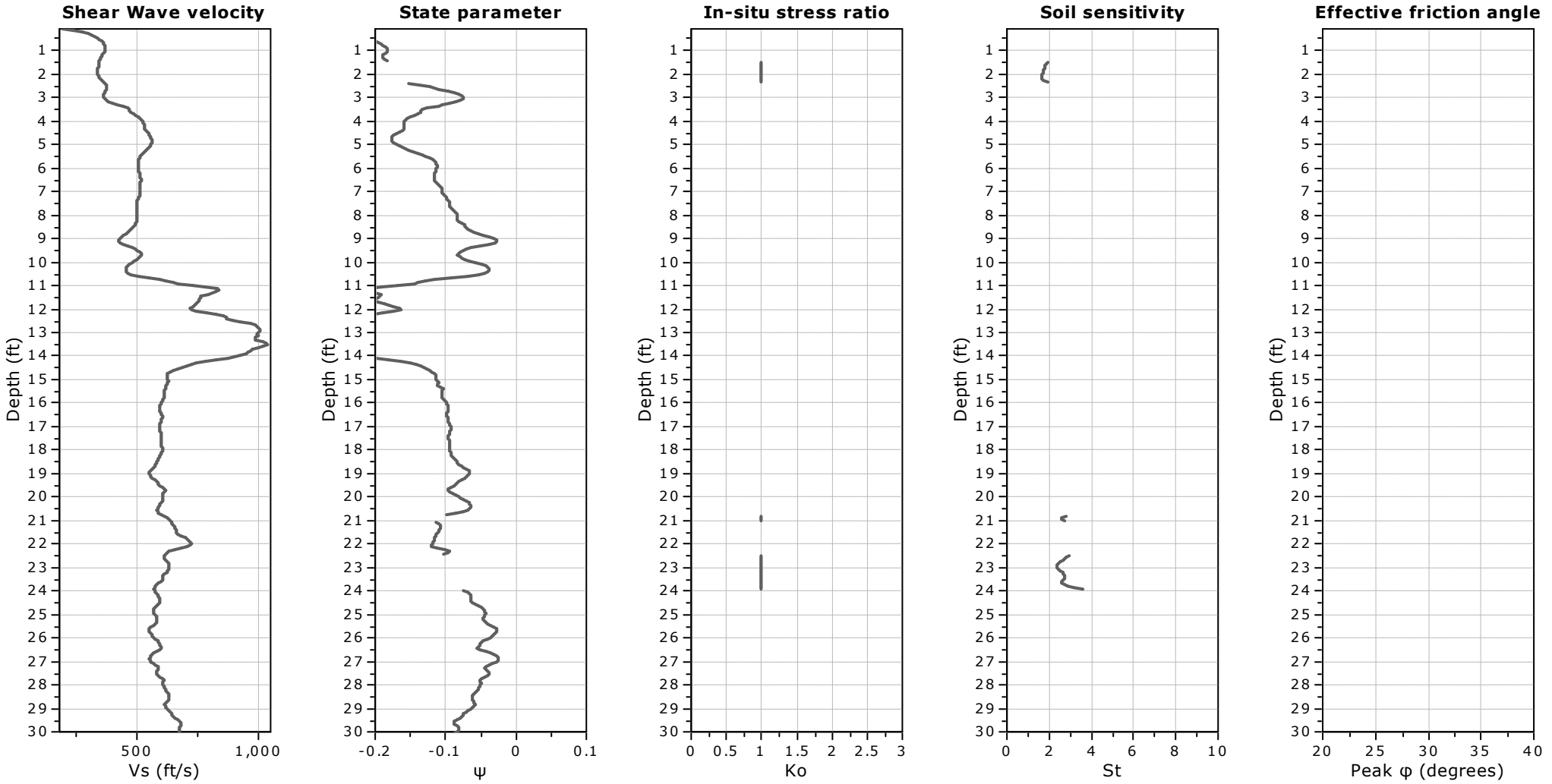

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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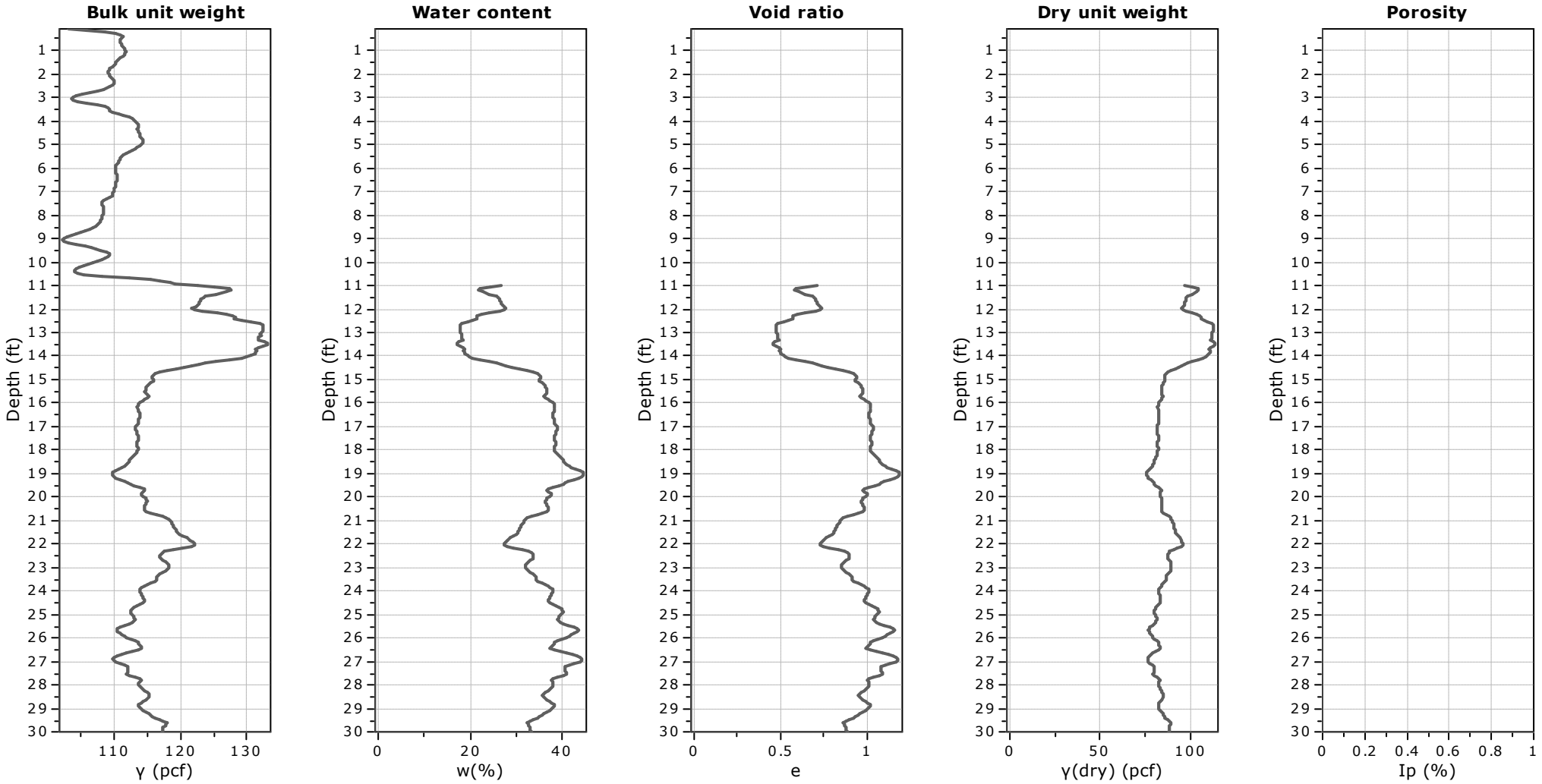

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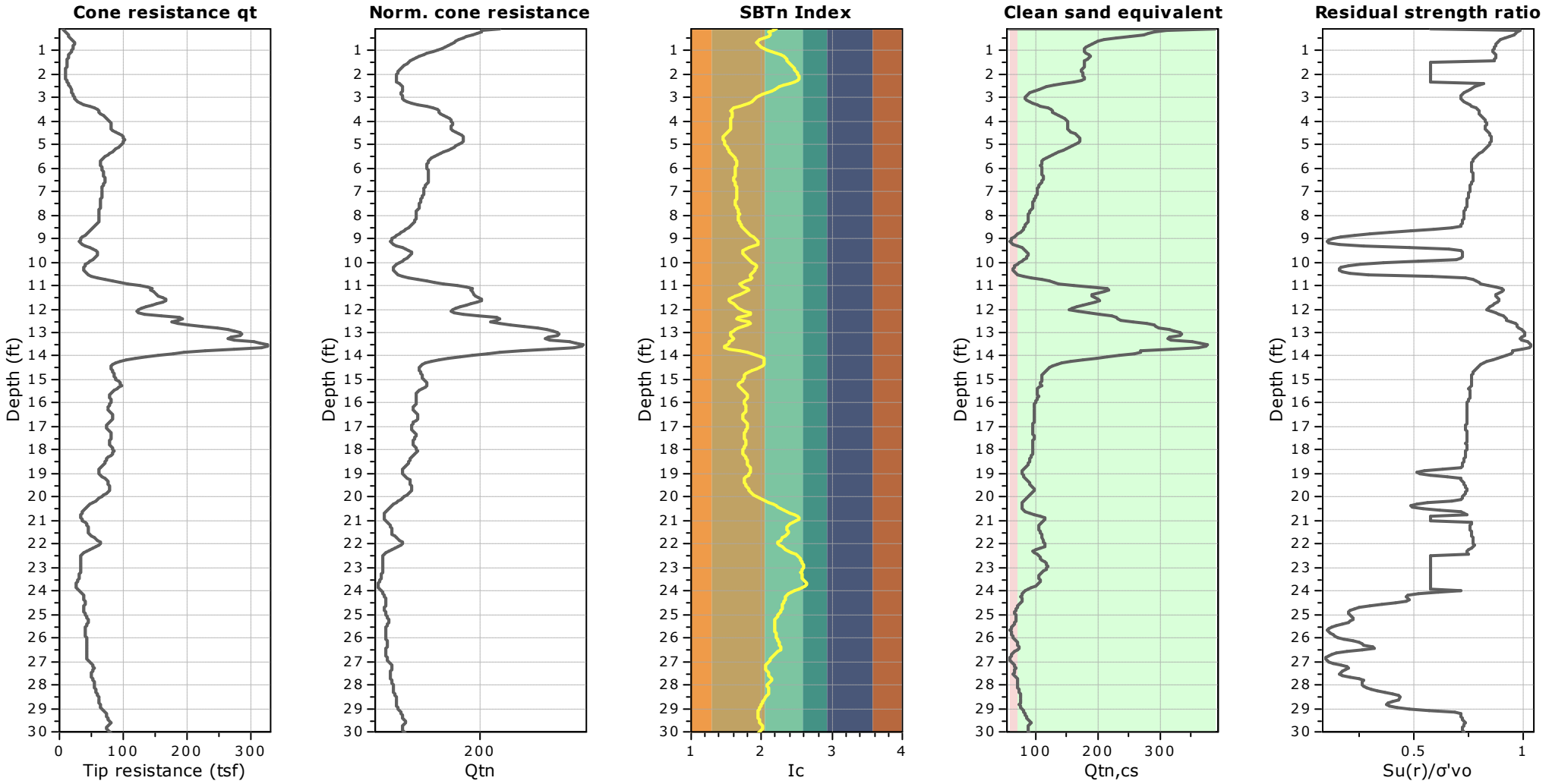

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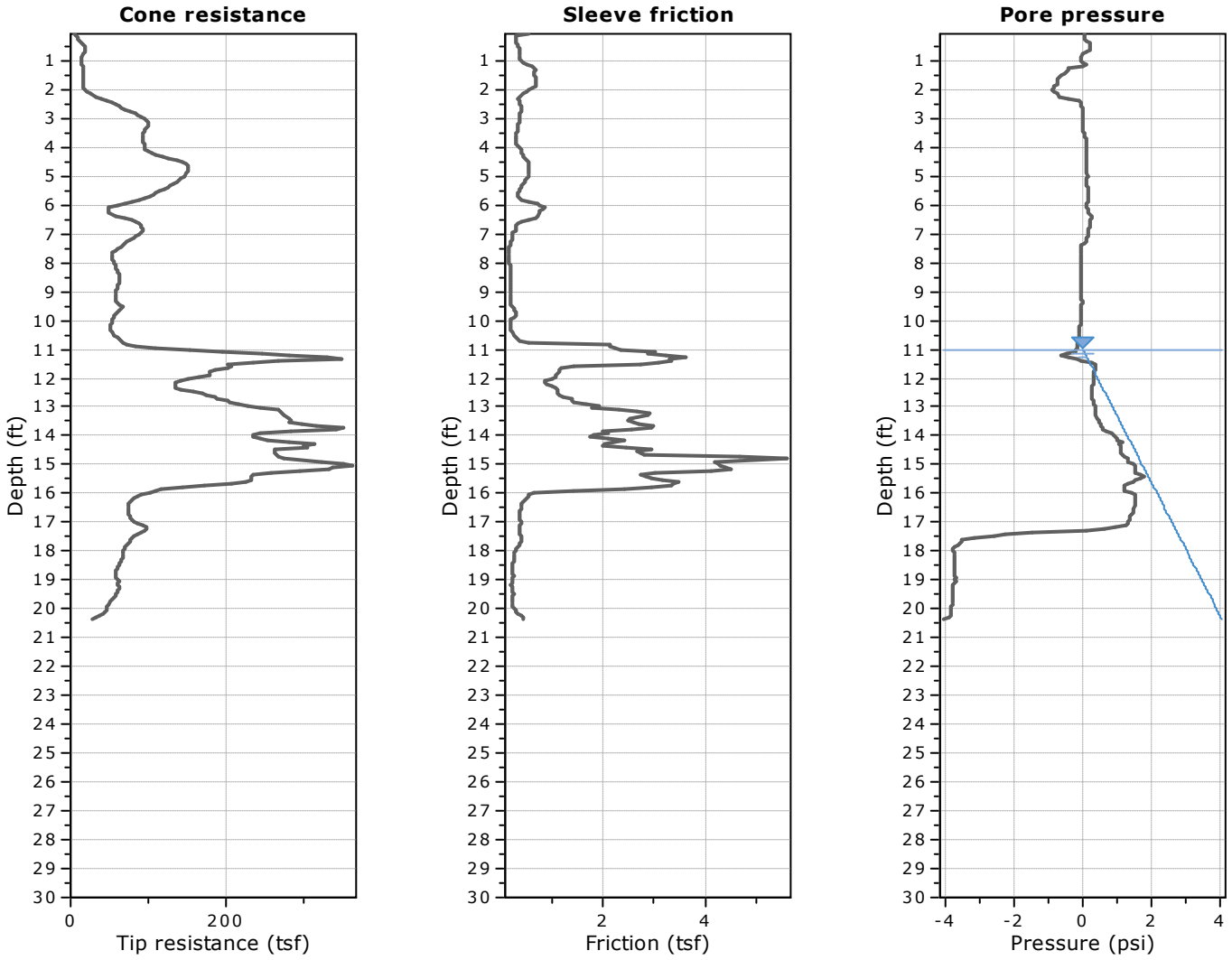
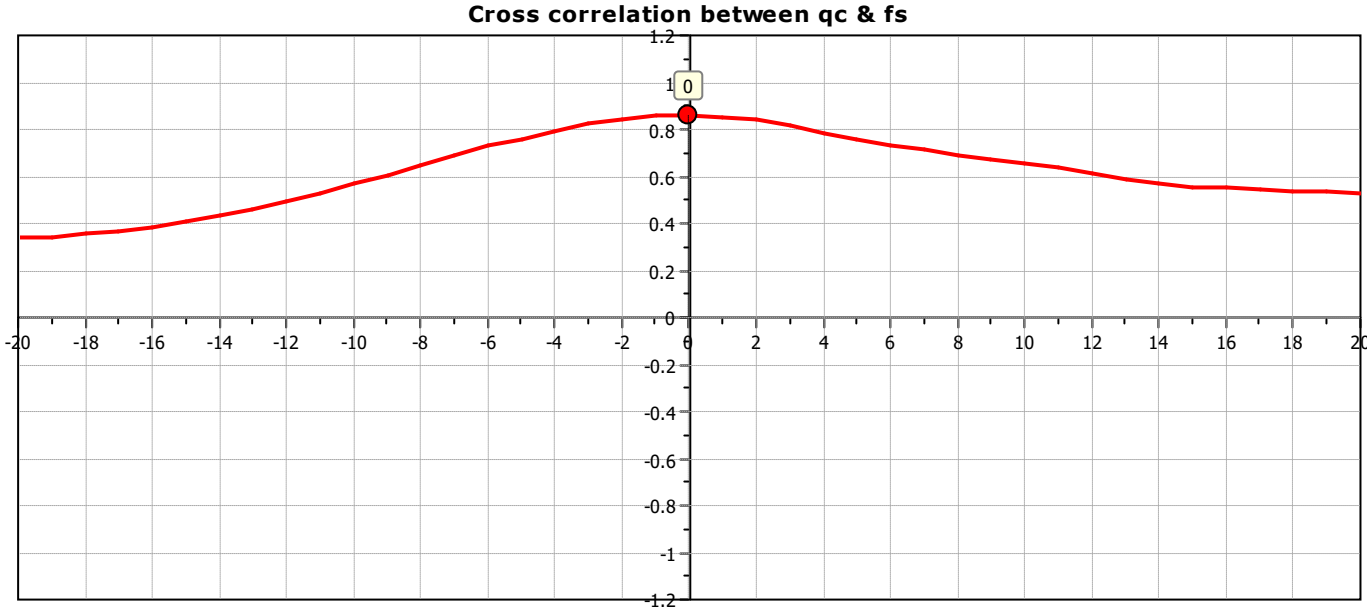
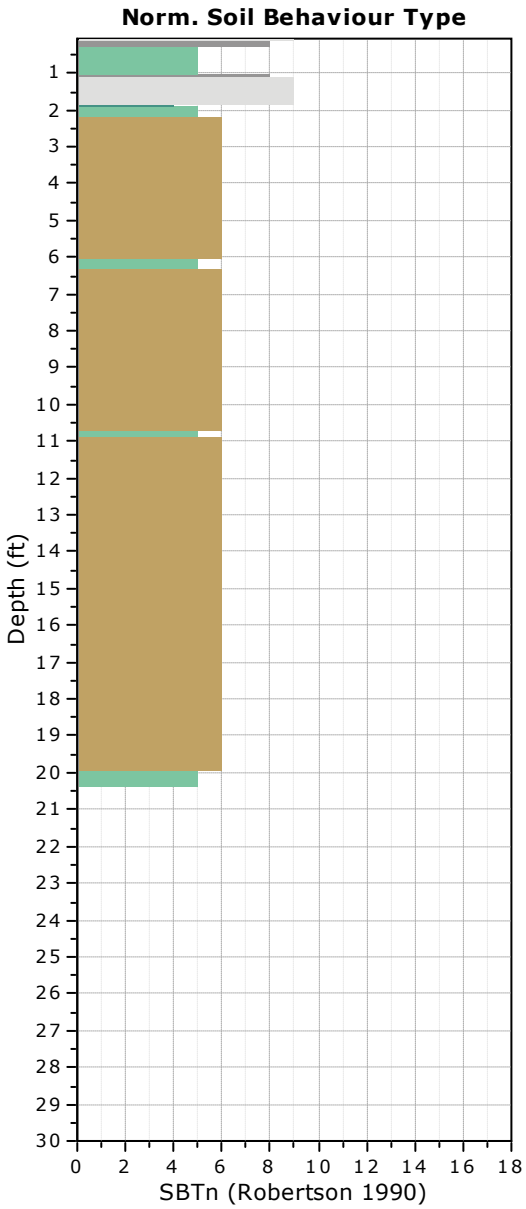
C-19
Total depth: 20.35 ft, Date: 5/14/2024
Surface Elevation: 66.11 ft
Coords: X:572434.04, Y:556037.87
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

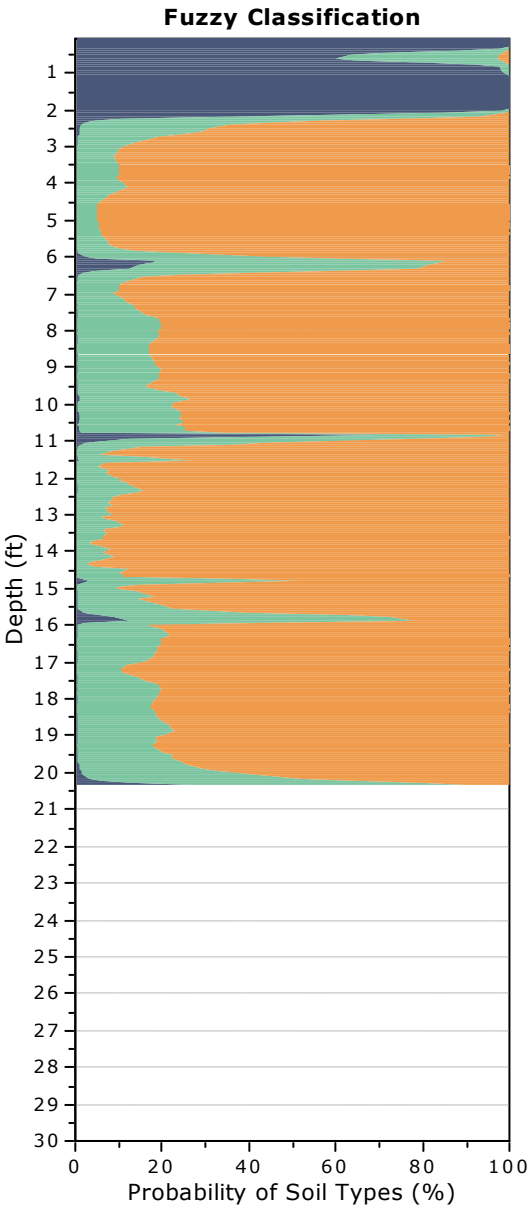
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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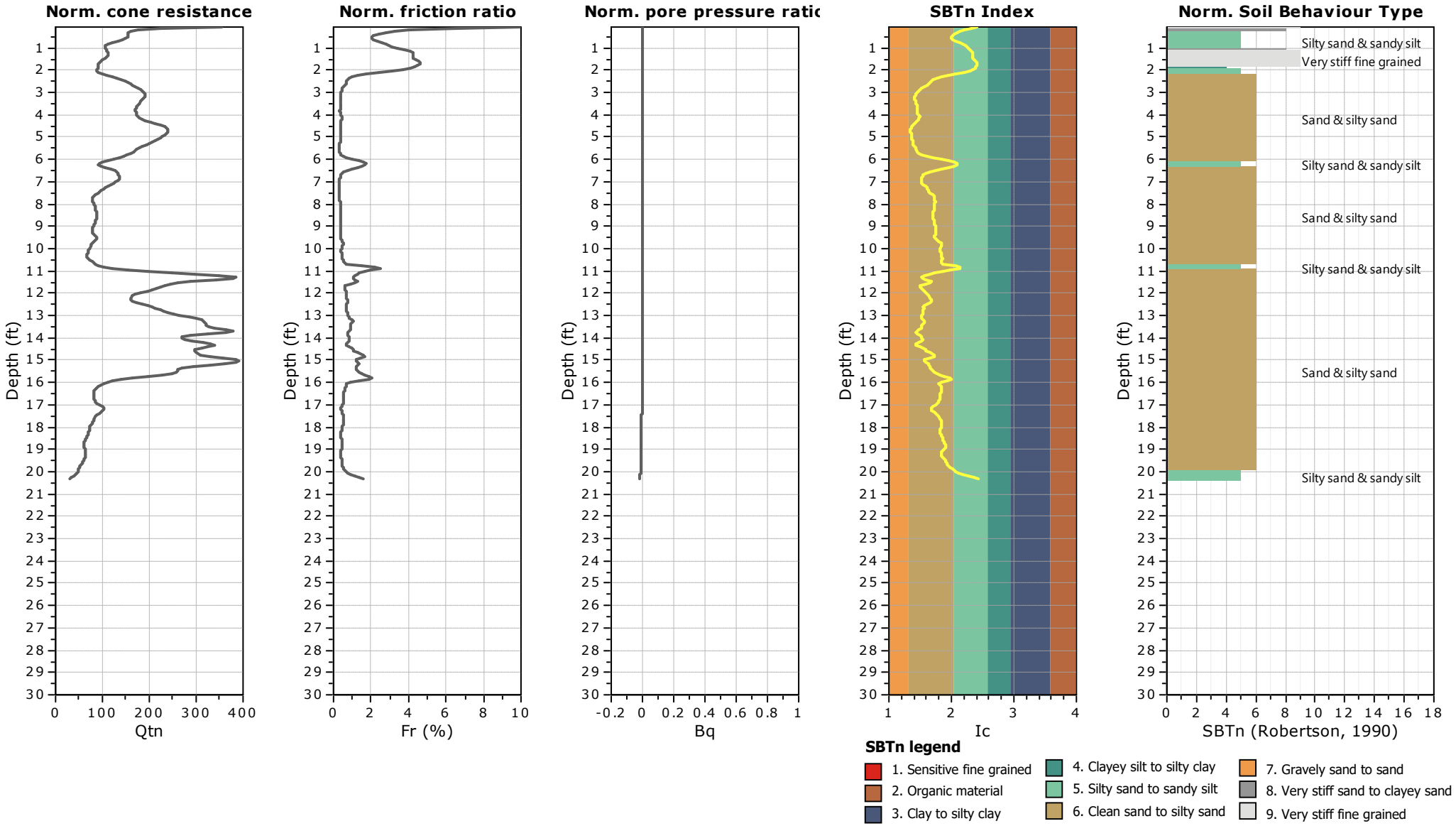

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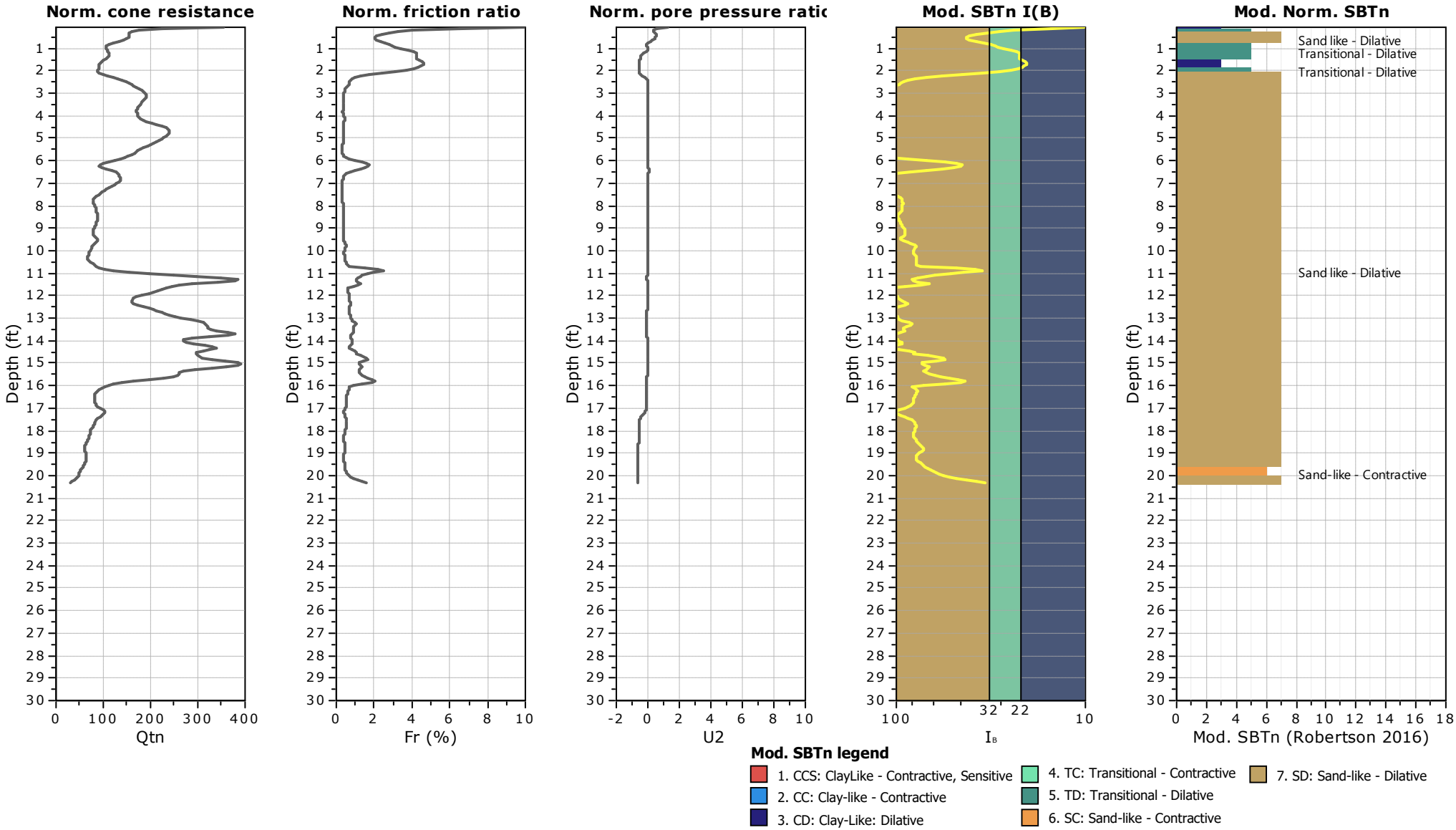

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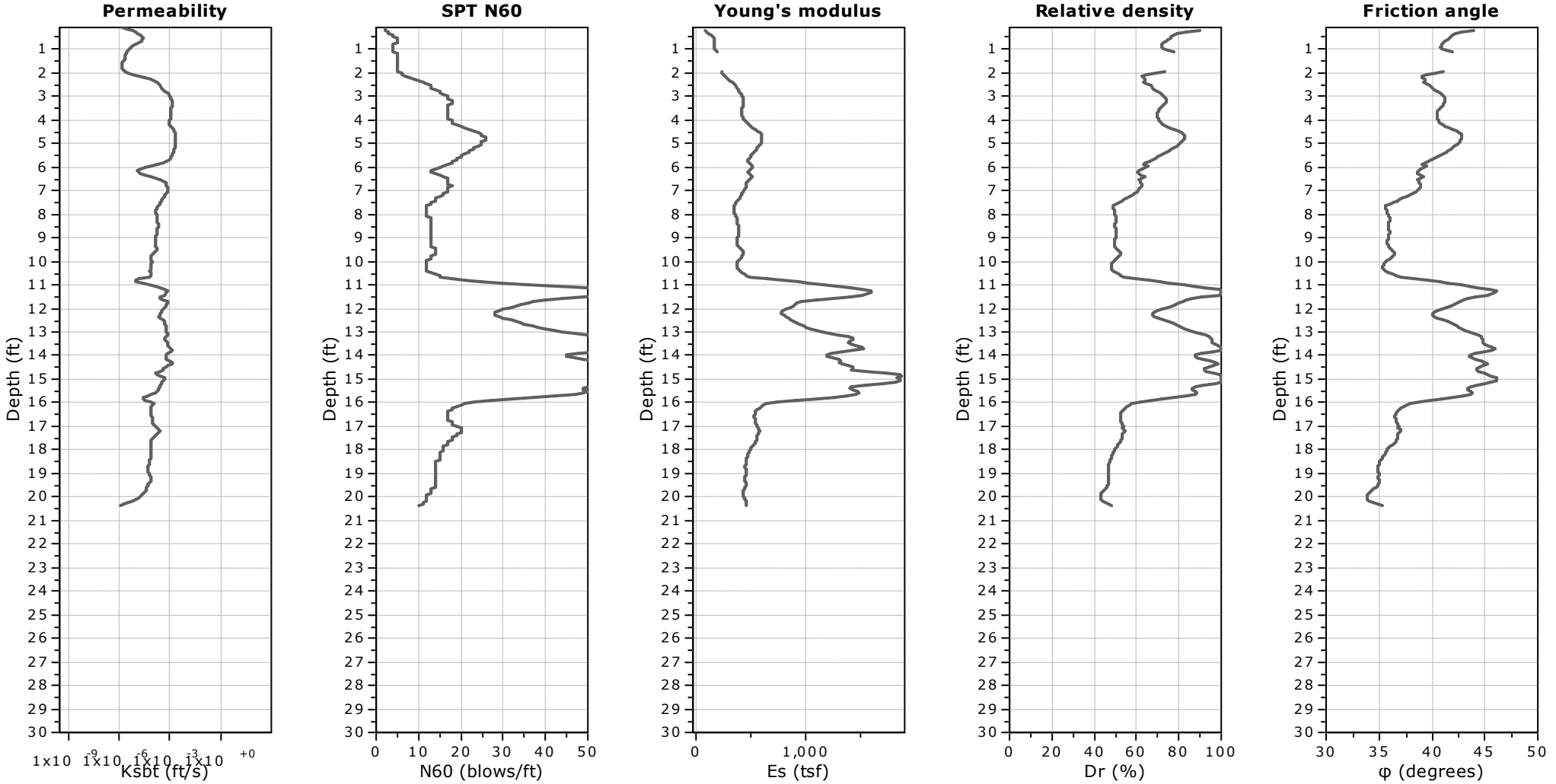

Calculation parameters
Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
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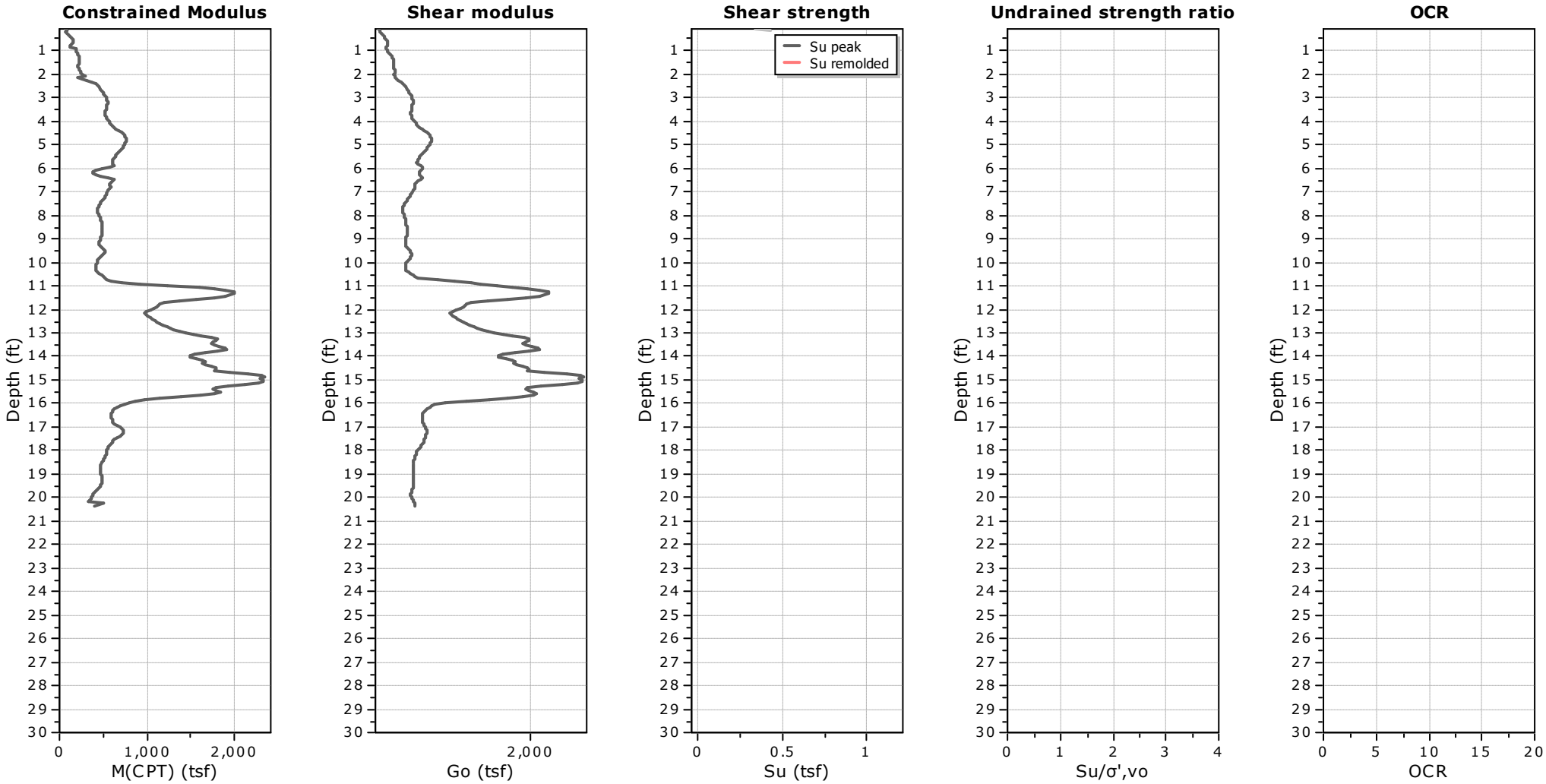

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
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Undrained shear strength cone factor for clays, N_{kt}: 14
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Flat Dilatometer Test data

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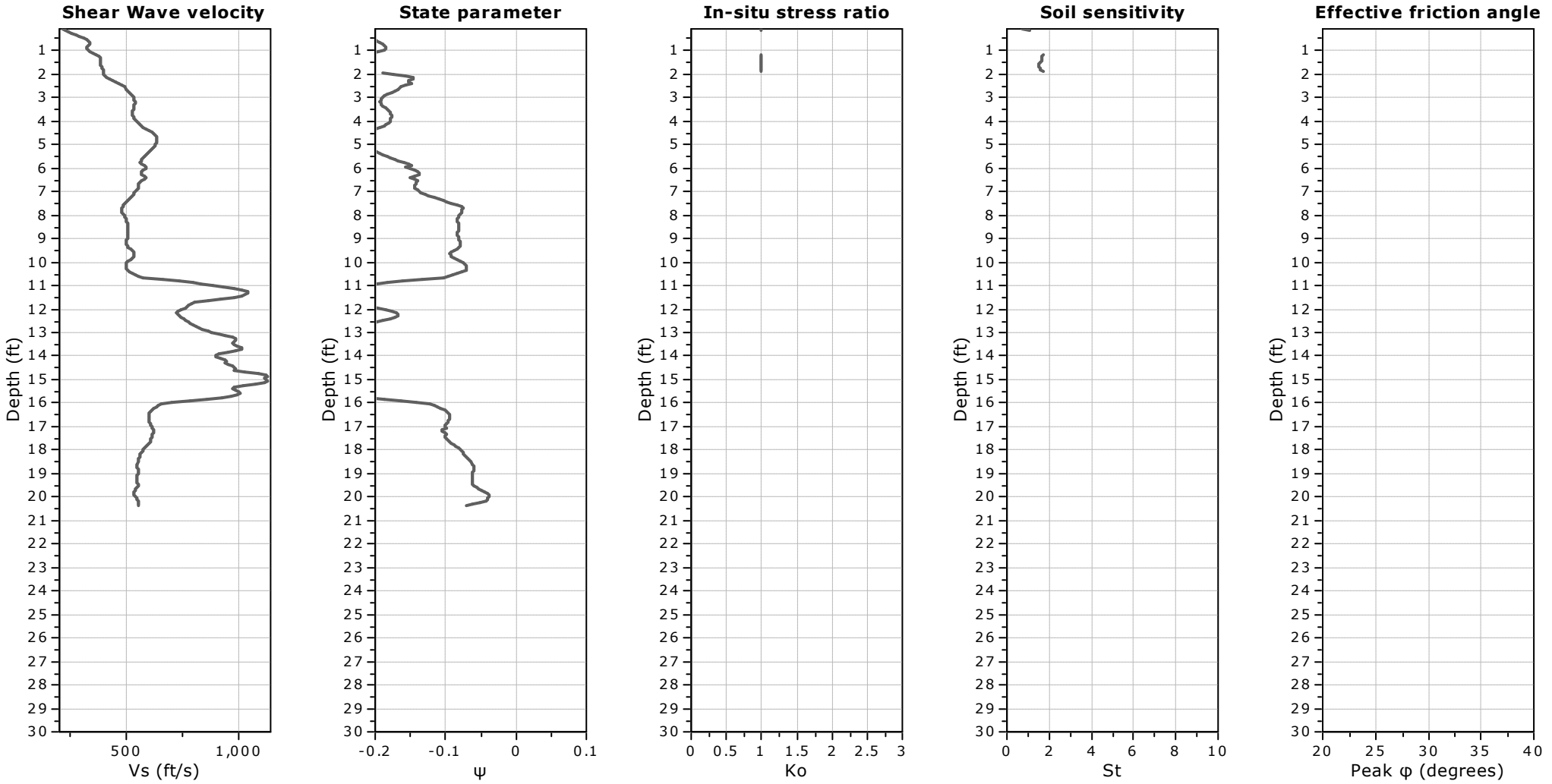

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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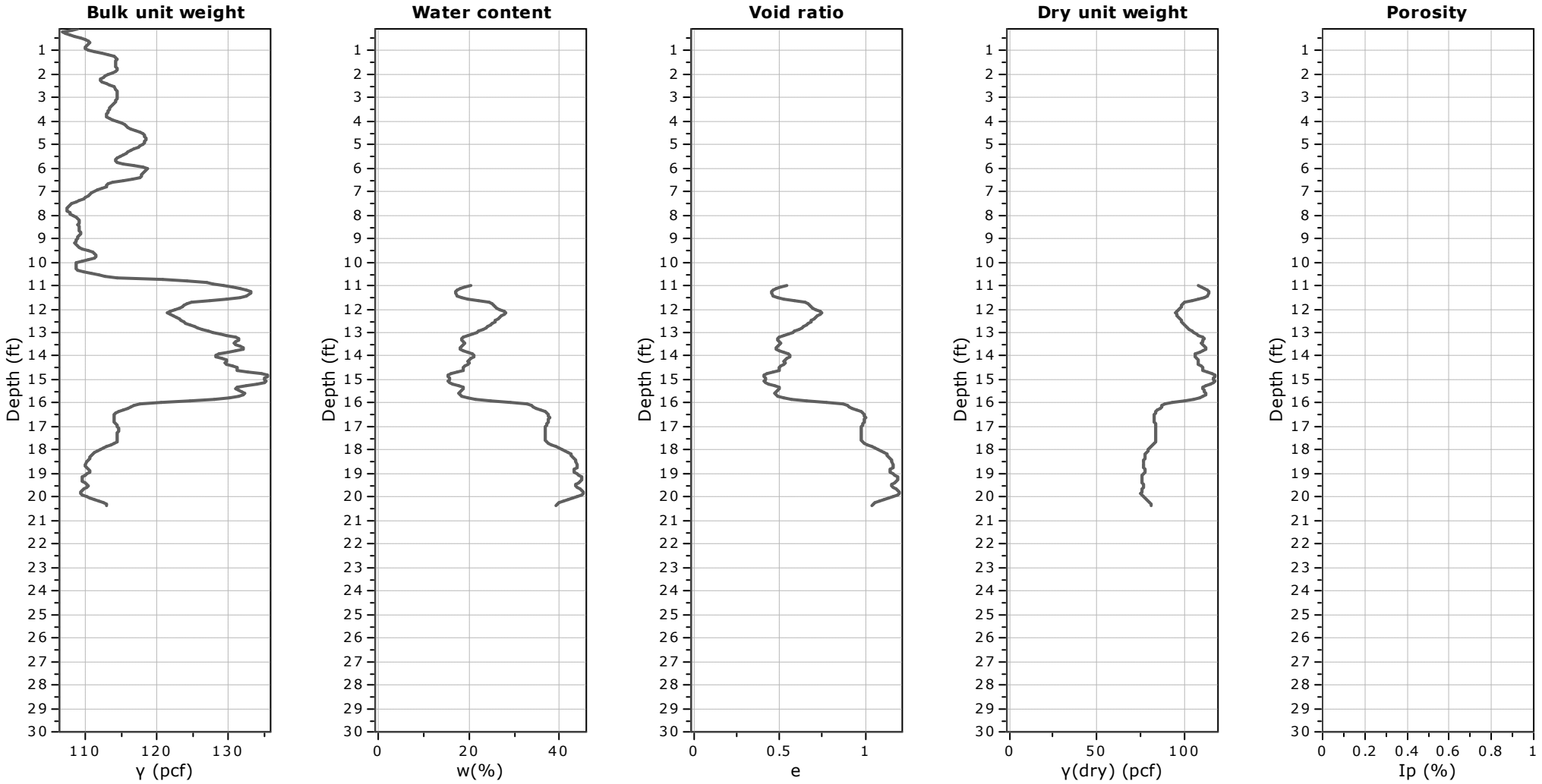

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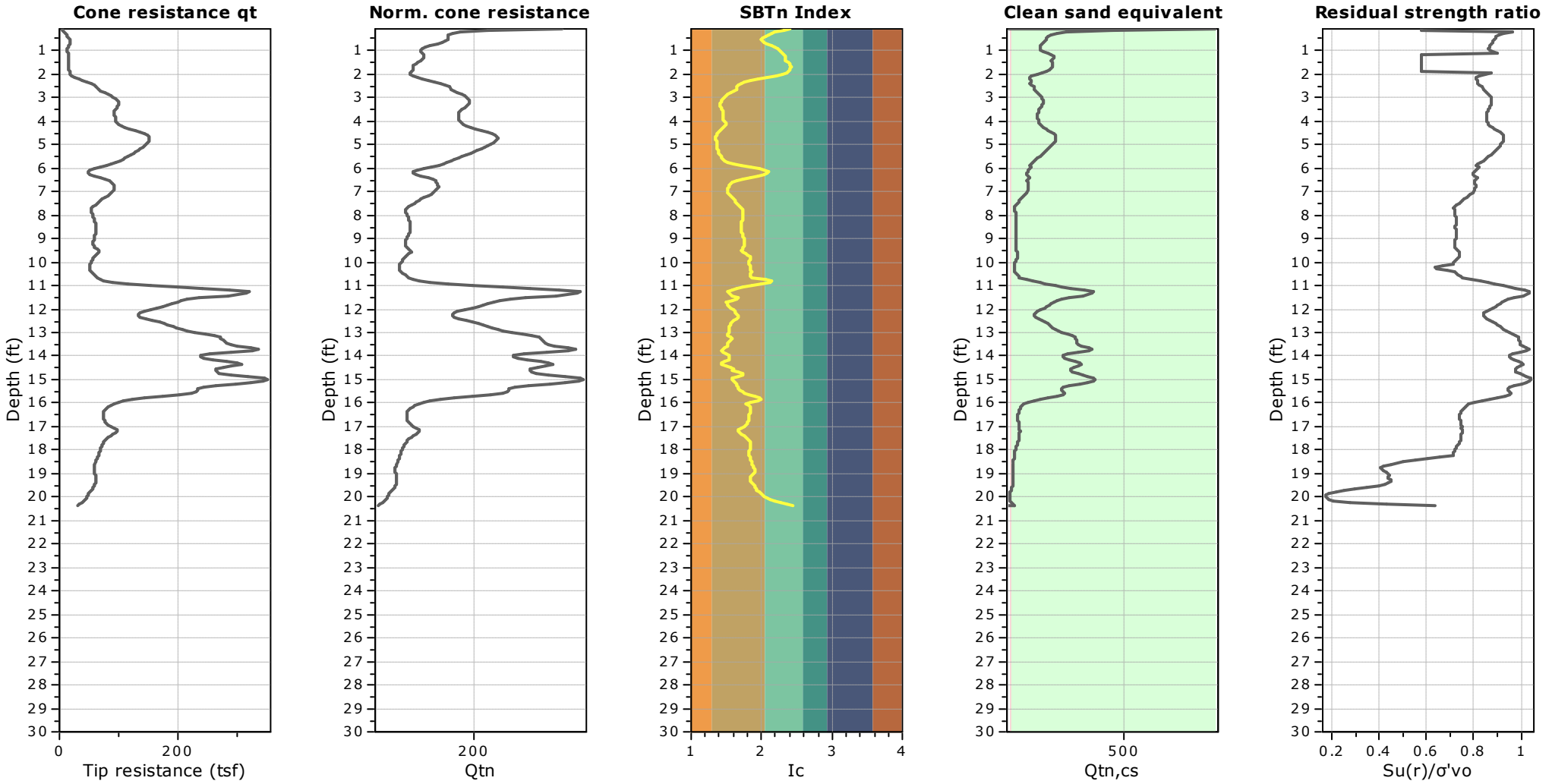

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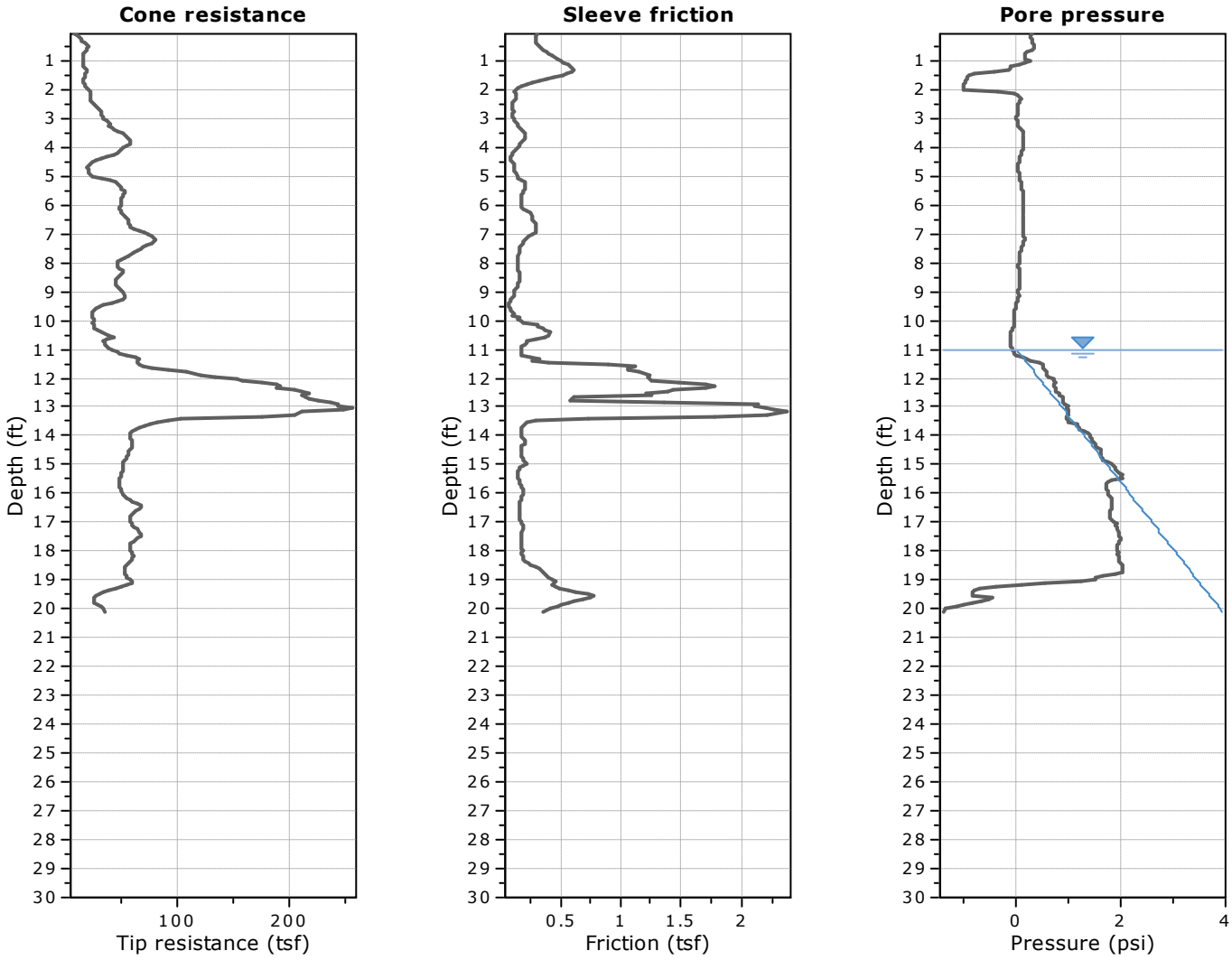
C-20
Total depth: 20.08 ft, Date: 5/14/2024
Surface Elevation: 65.26 ft
Coords: X:572524.84, Y:556012.66
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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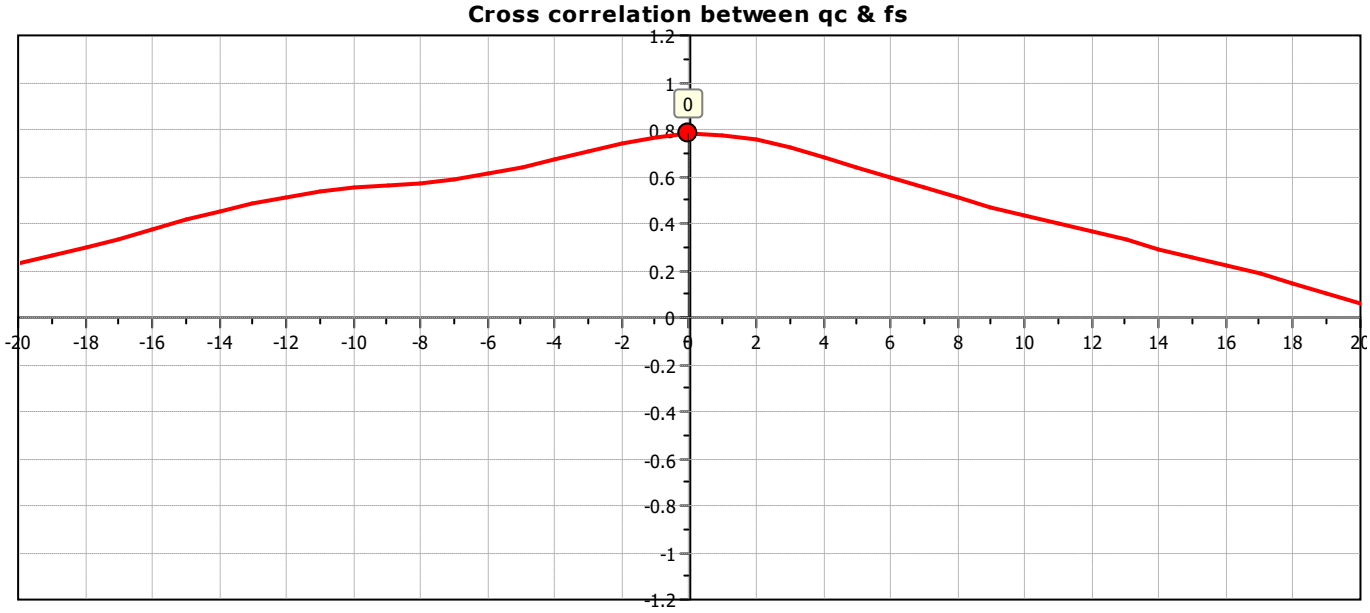

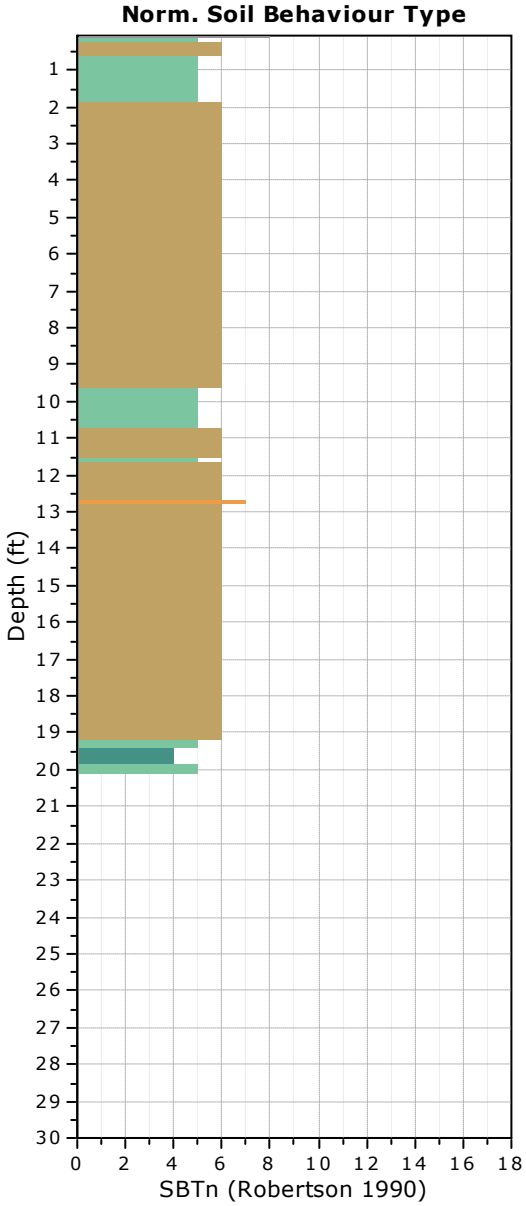

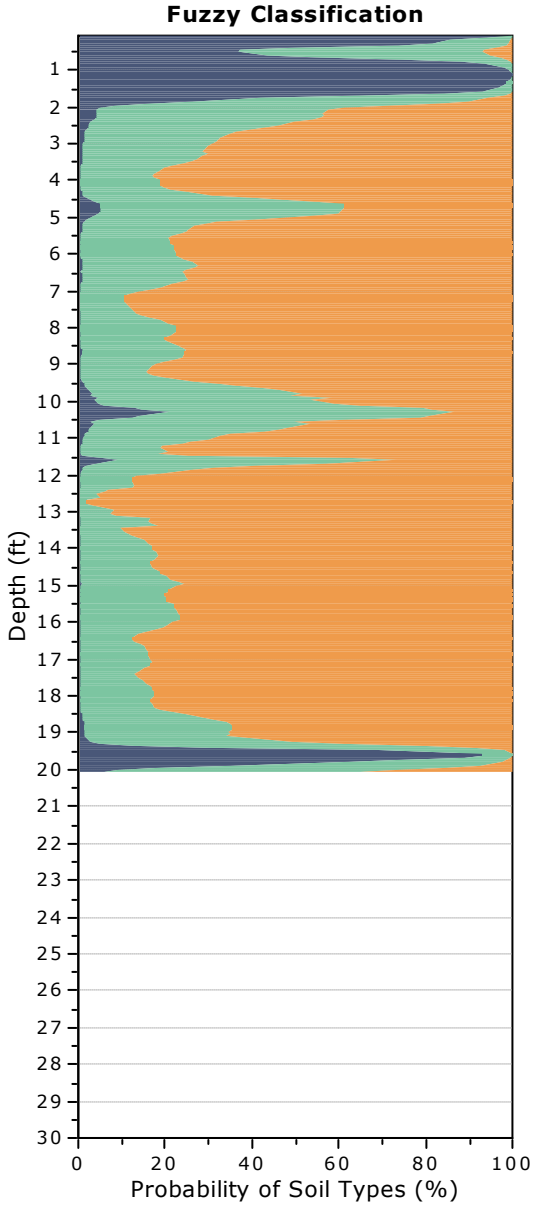

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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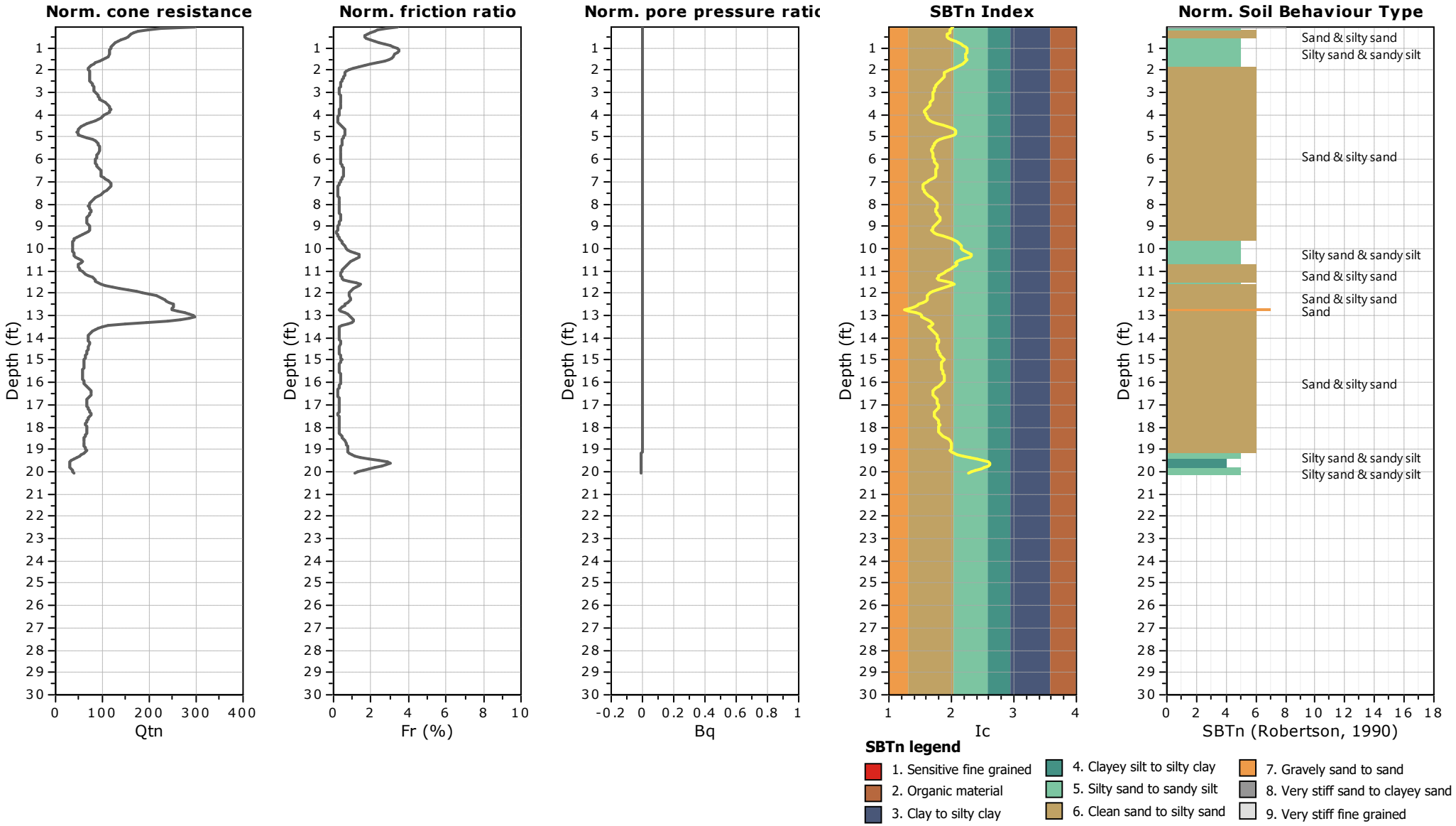

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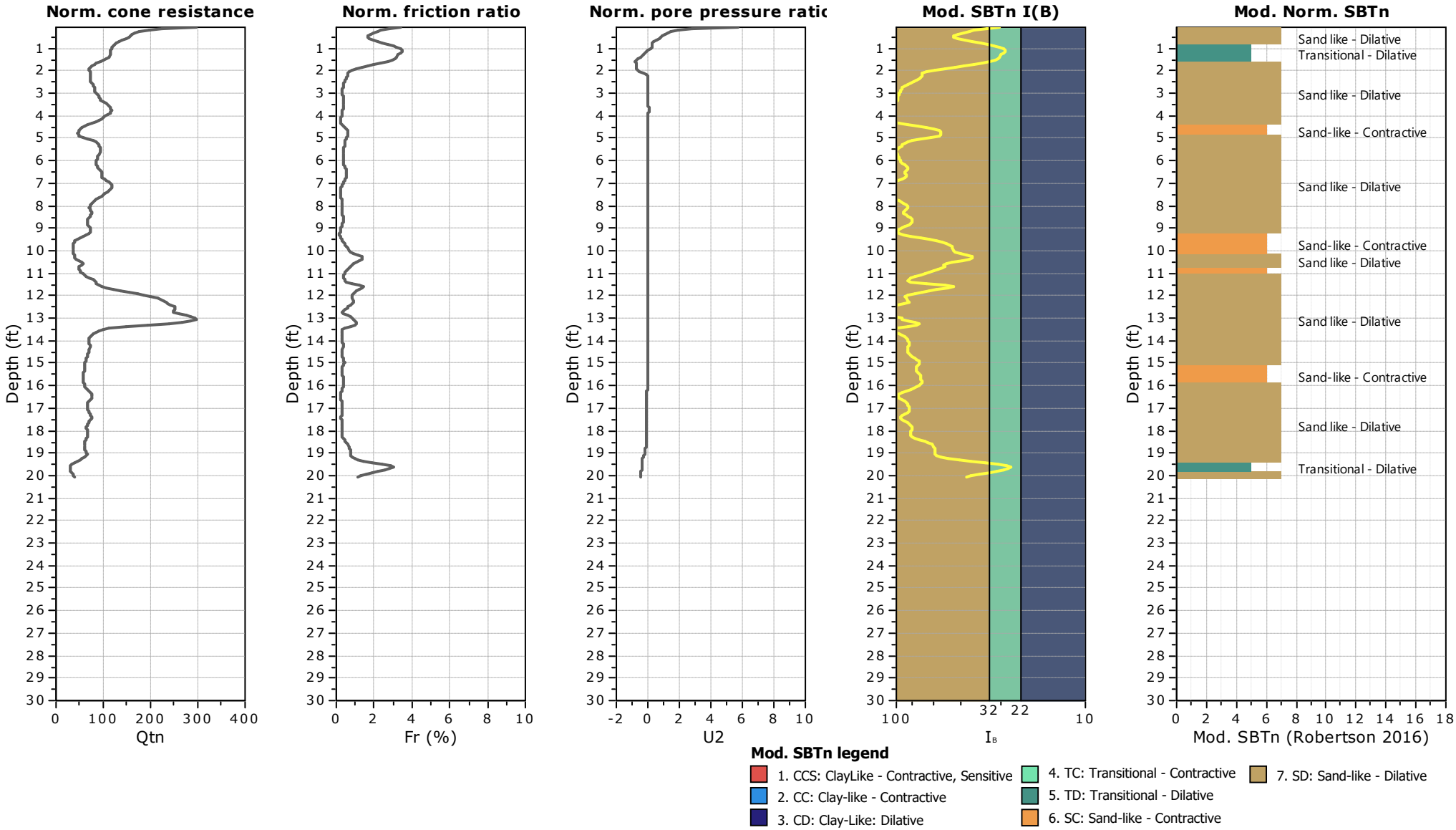

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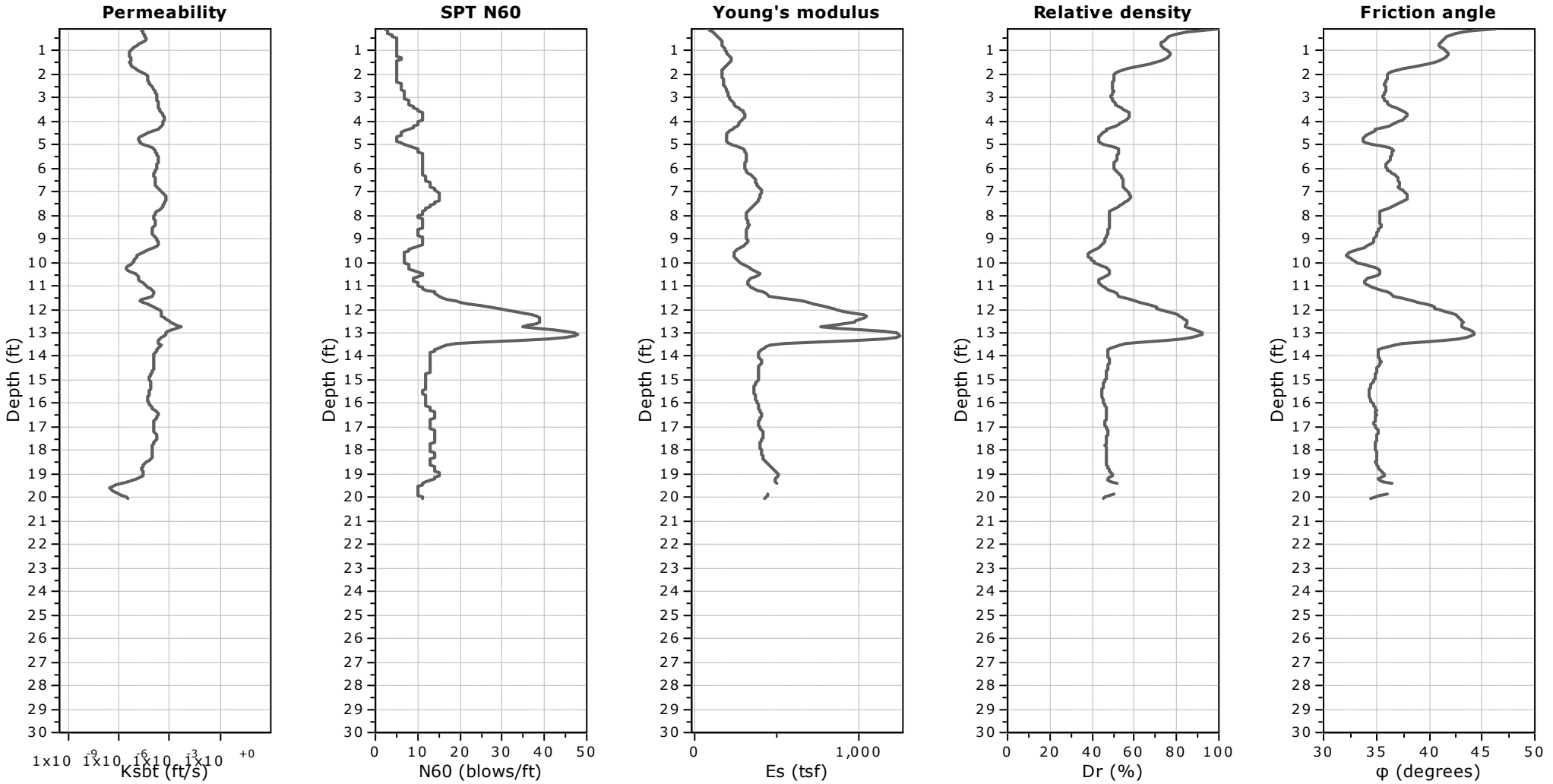

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SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
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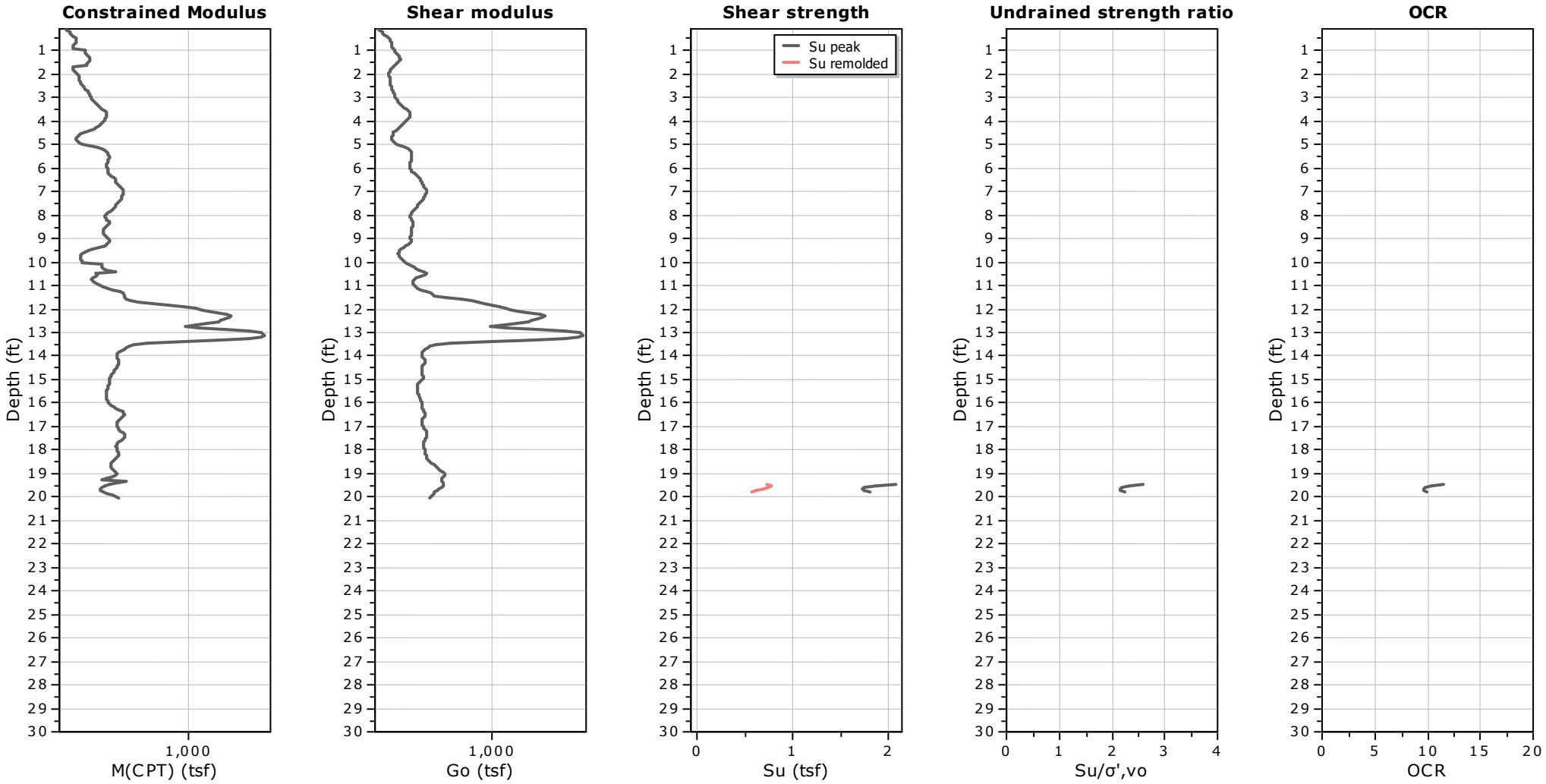

Calculation parameters

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Go: Based on variable *alpha* using I_c (Robertson, 2009)
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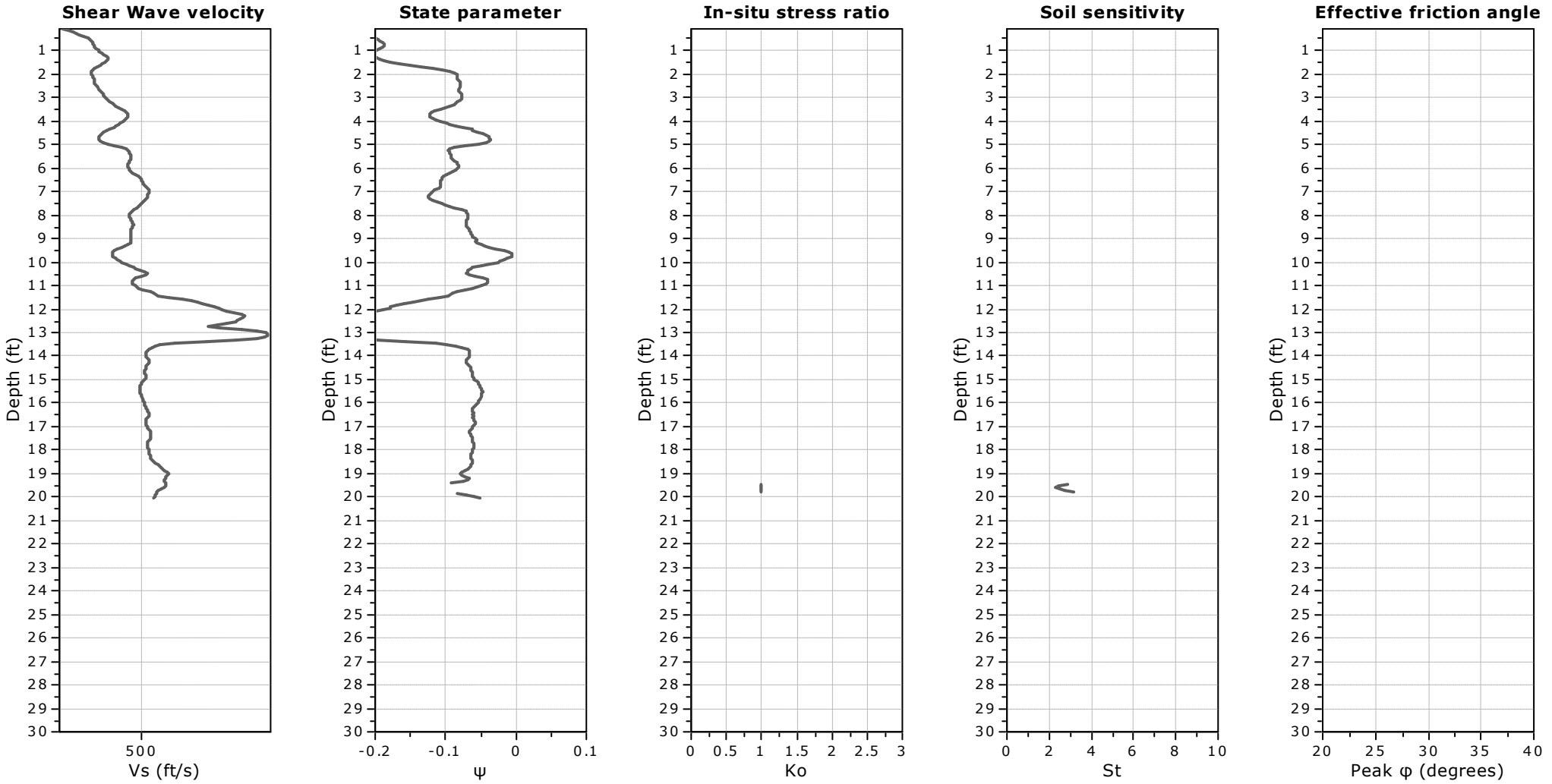

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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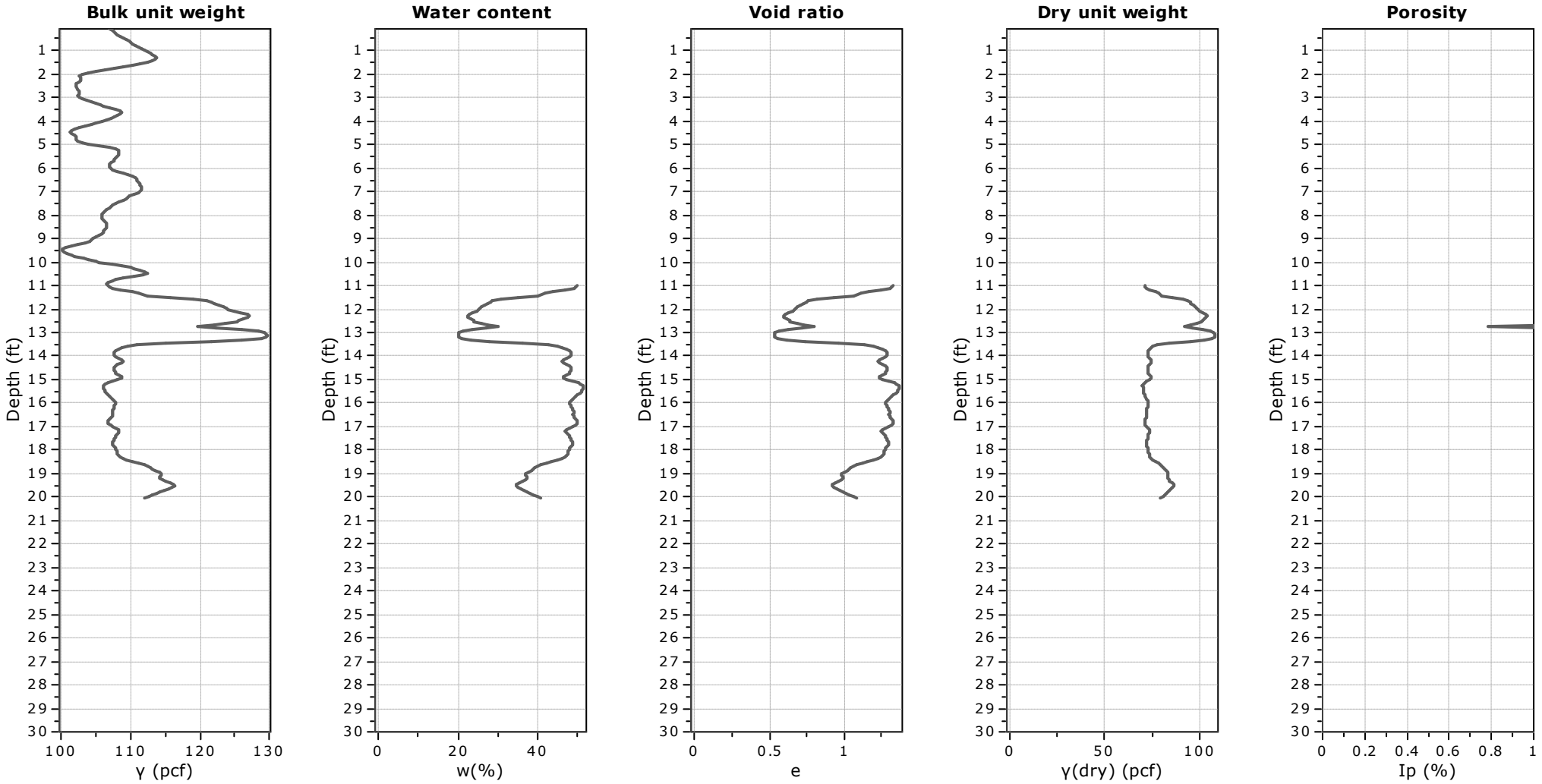

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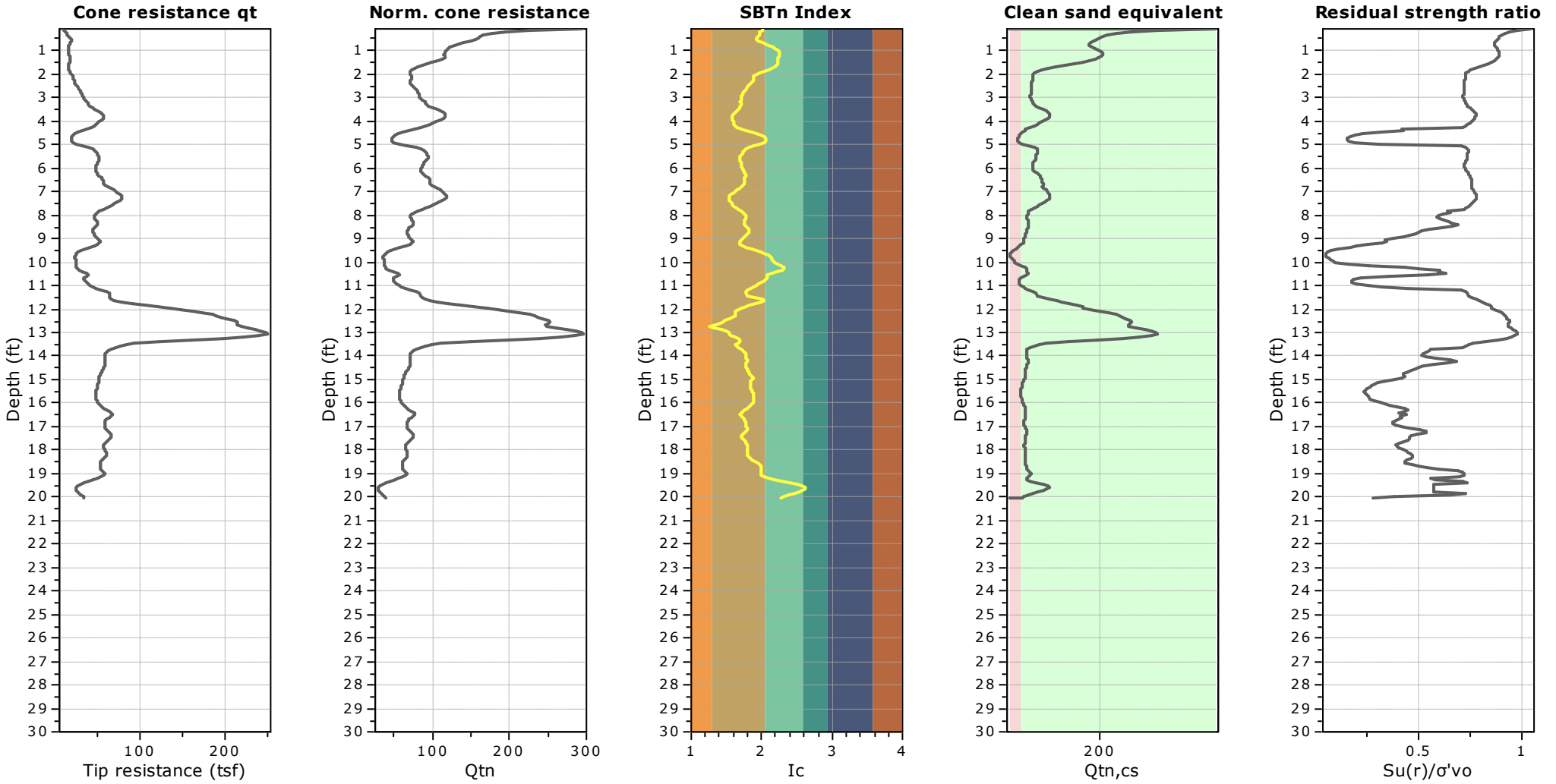

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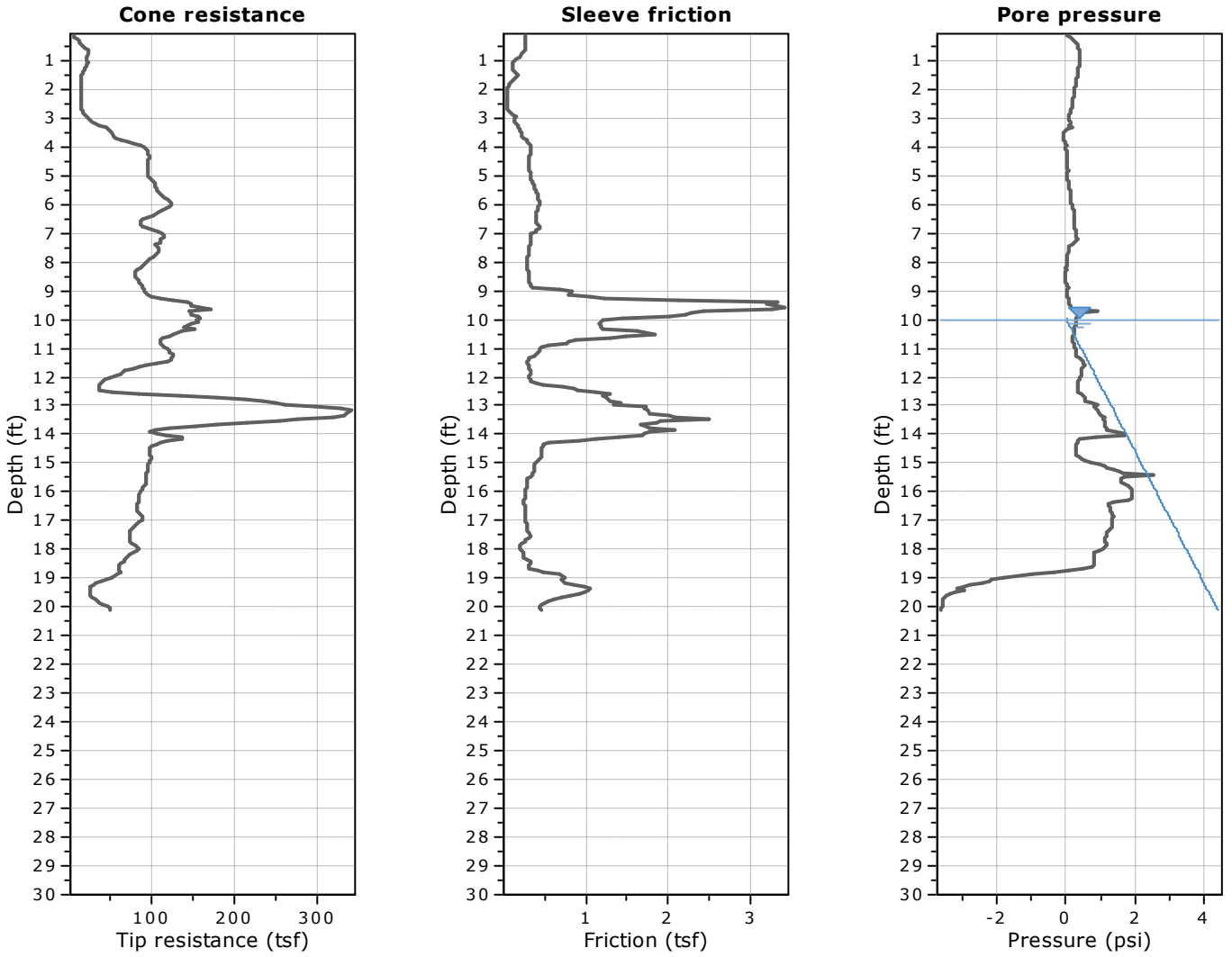
C-21
Total depth: 20.13 ft, Date: 5/14/2024
Surface Elevation: 65.32 ft
Coords: X:572470.70, Y:555968.74
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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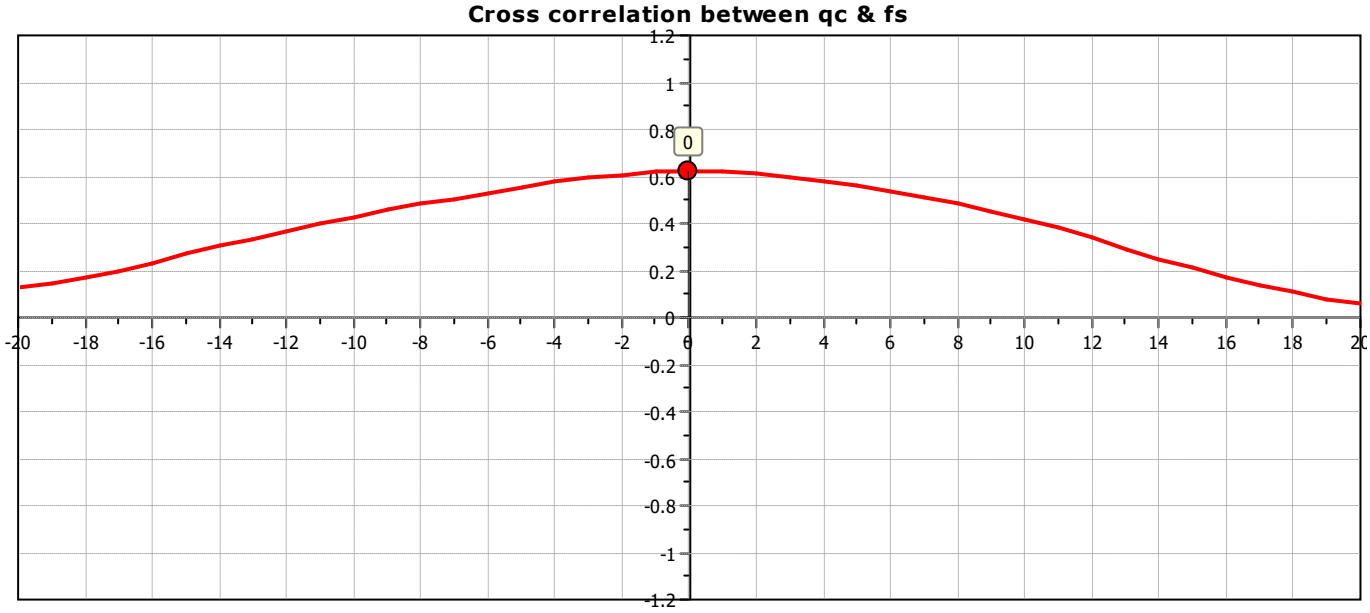

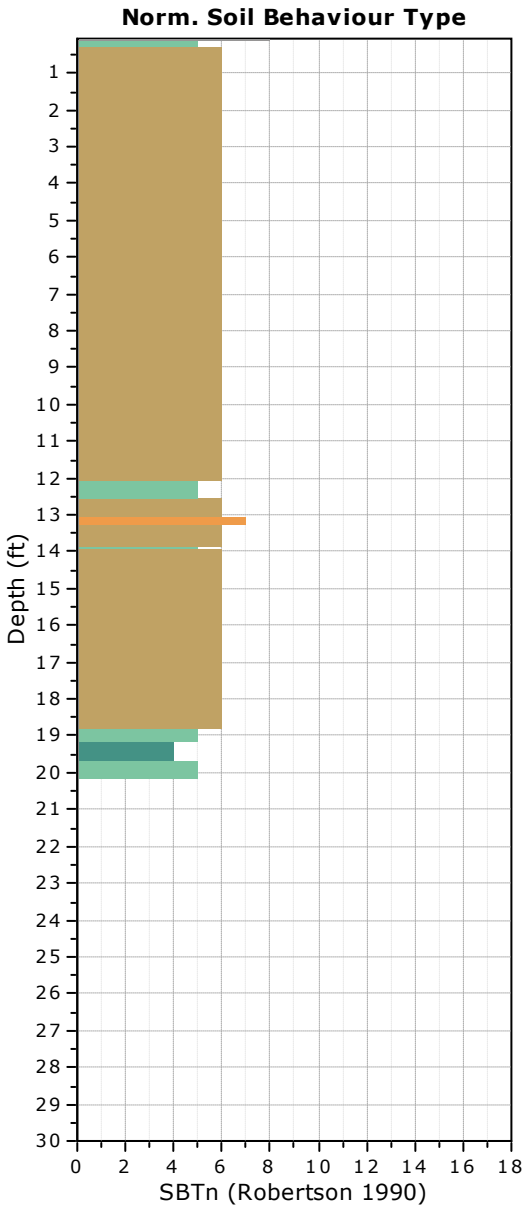

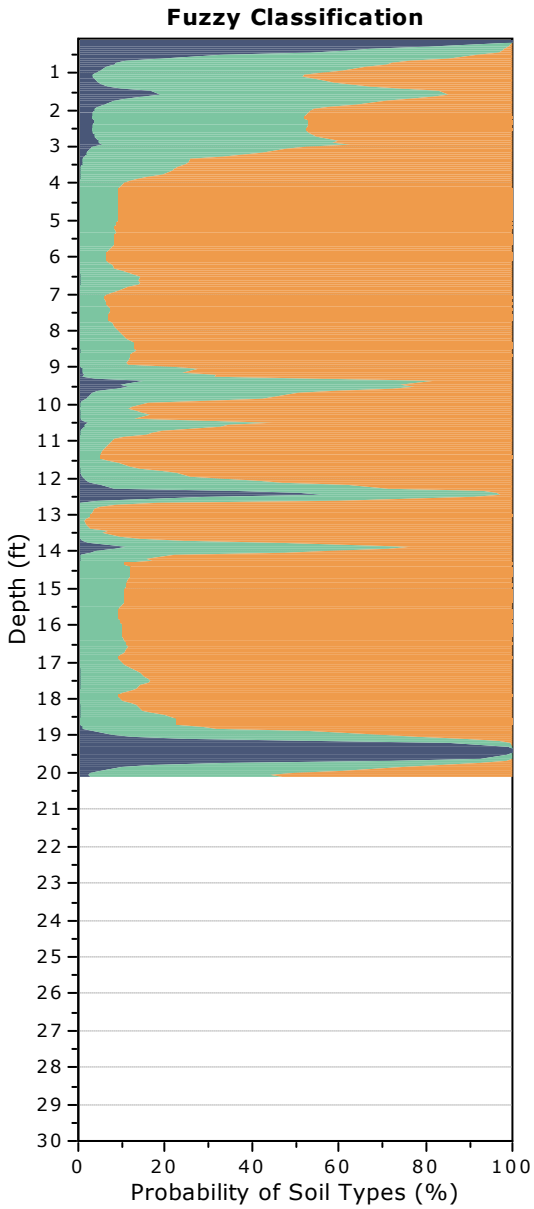

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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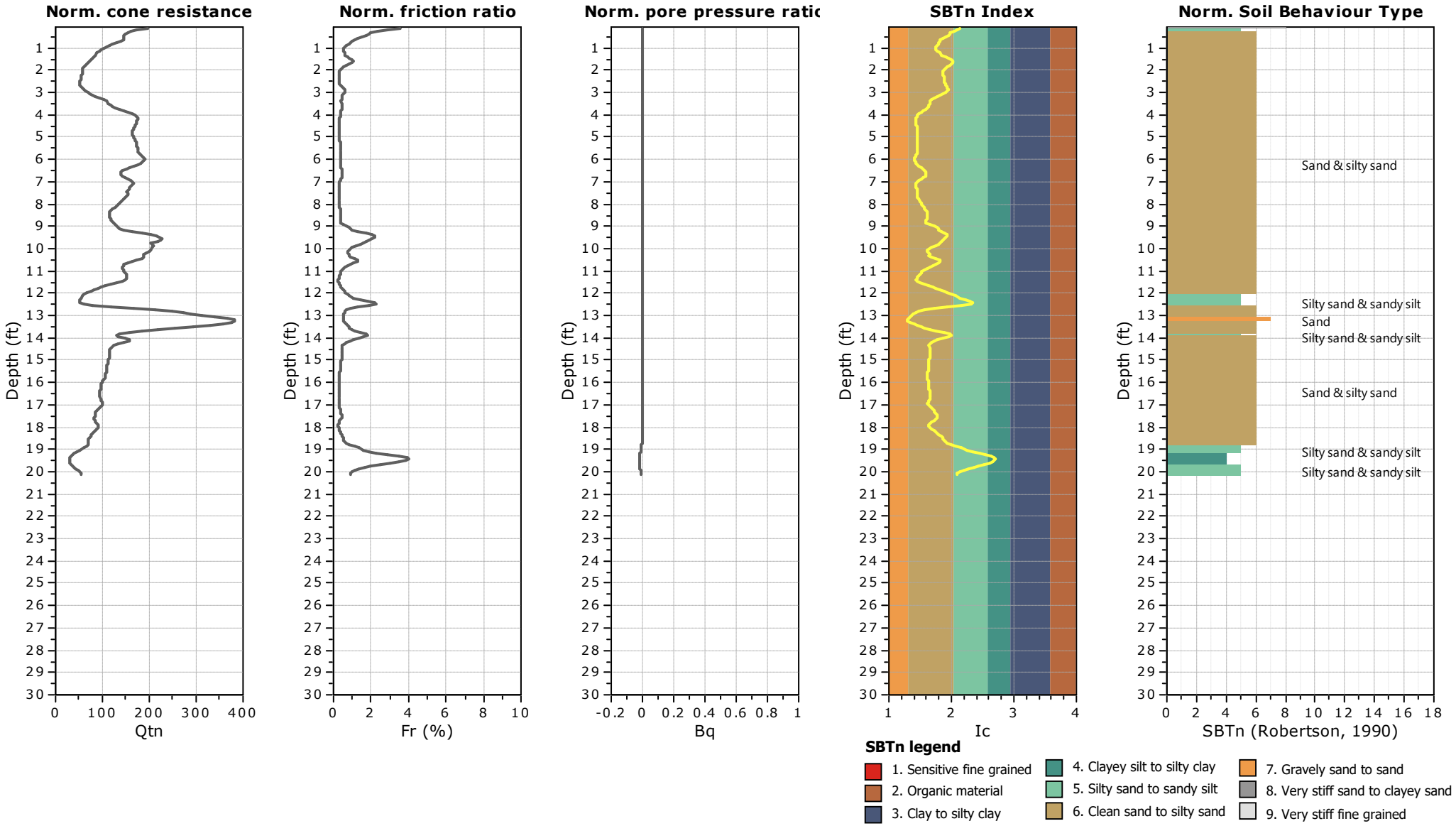
C-21
Total depth: 20.13 ft, Date: 5/14/2024
Surface Elevation: 65.32 ft
Coords: X:572470.70, Y:555968.74
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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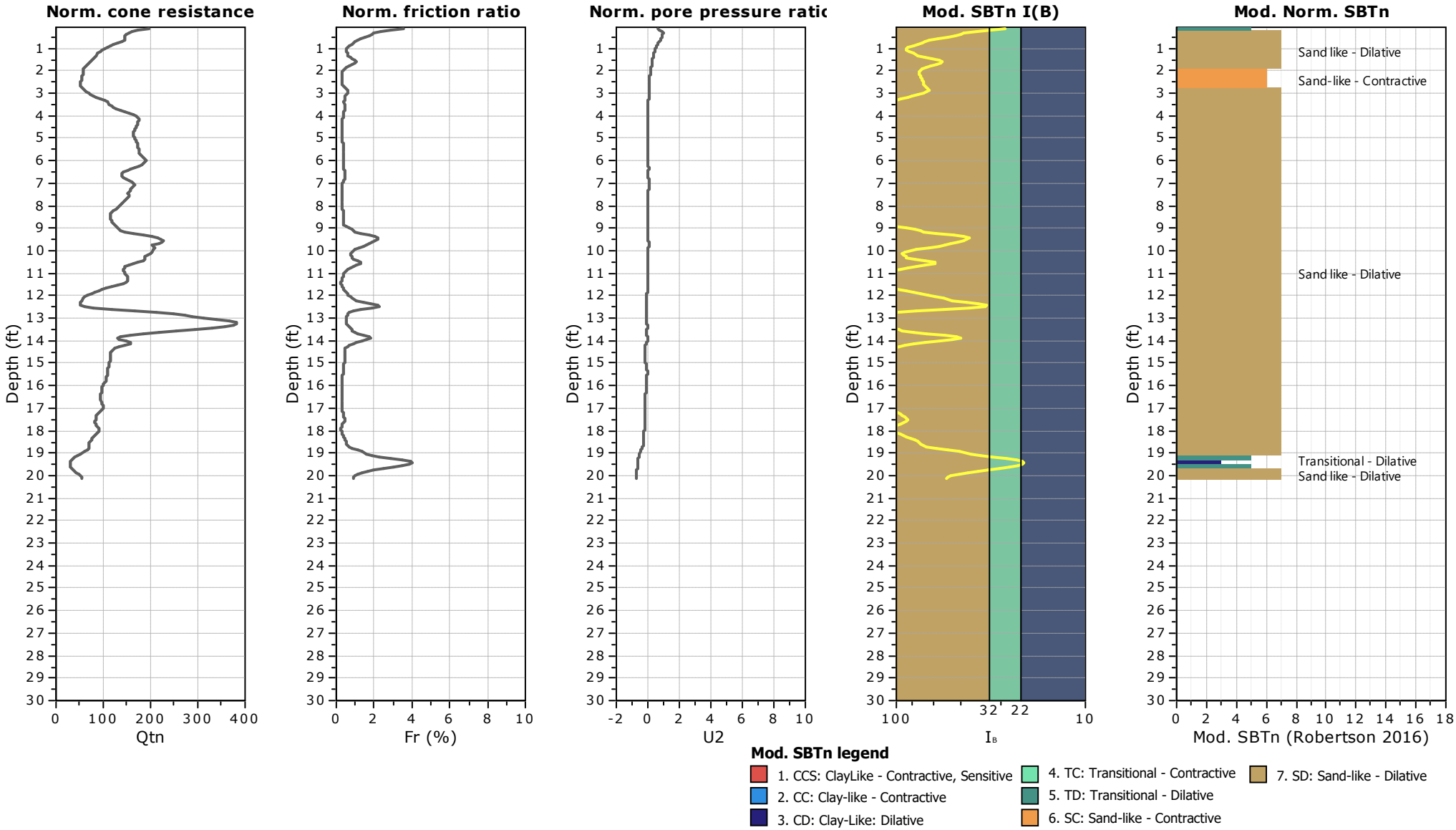

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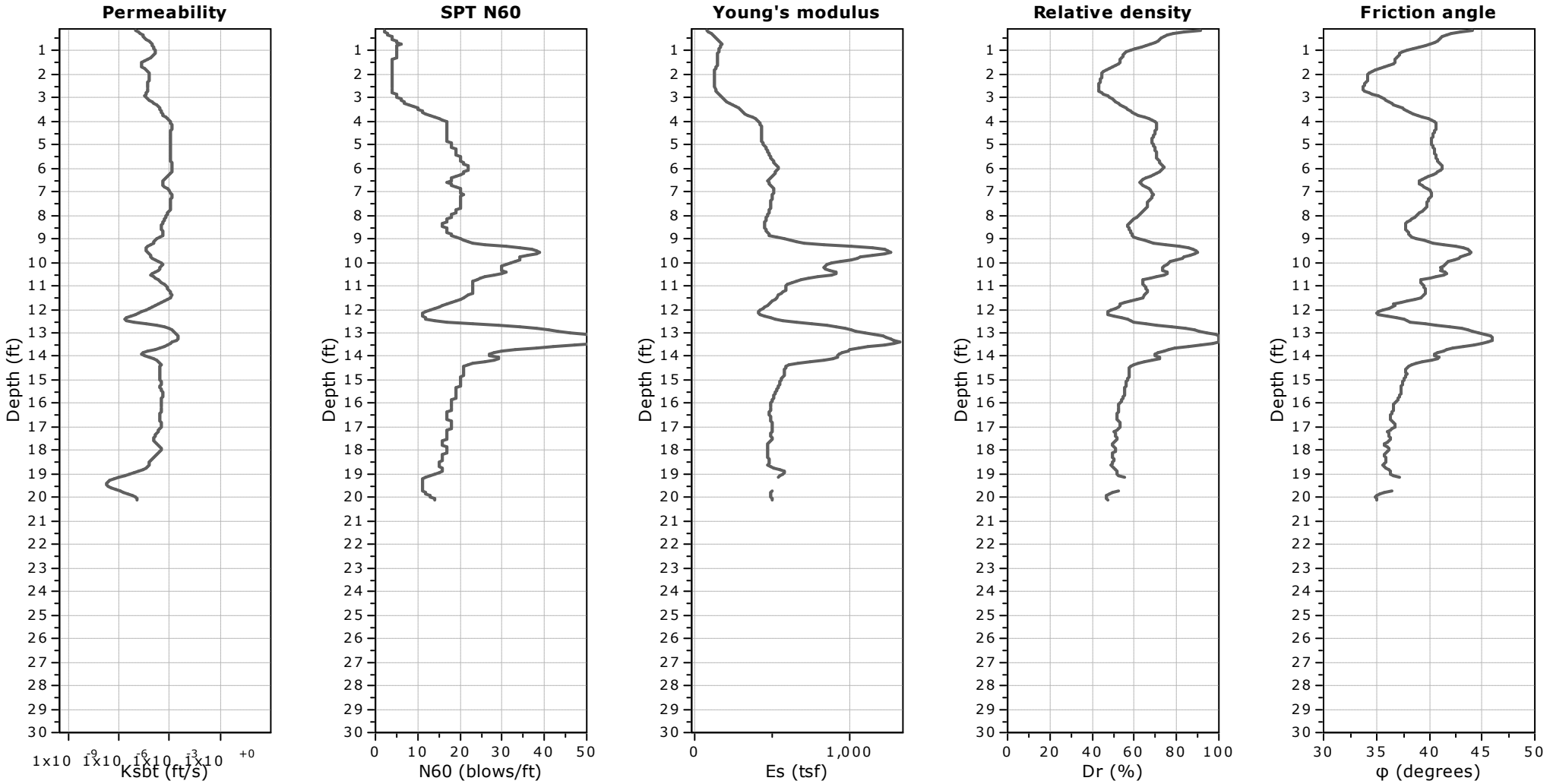

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
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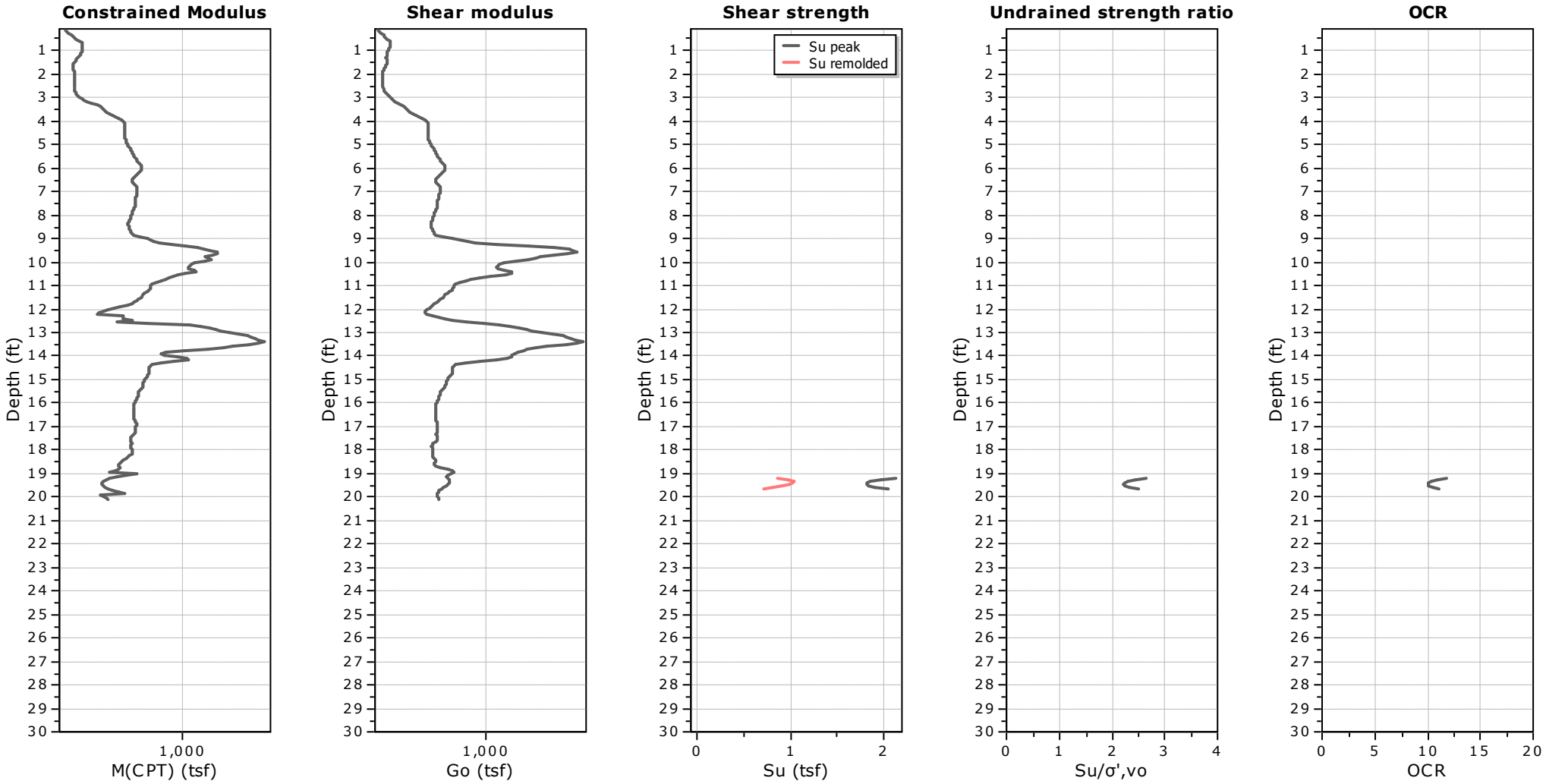

Calculation parameters

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Undrained shear strength cone factor for clays, N_{kt}: 14
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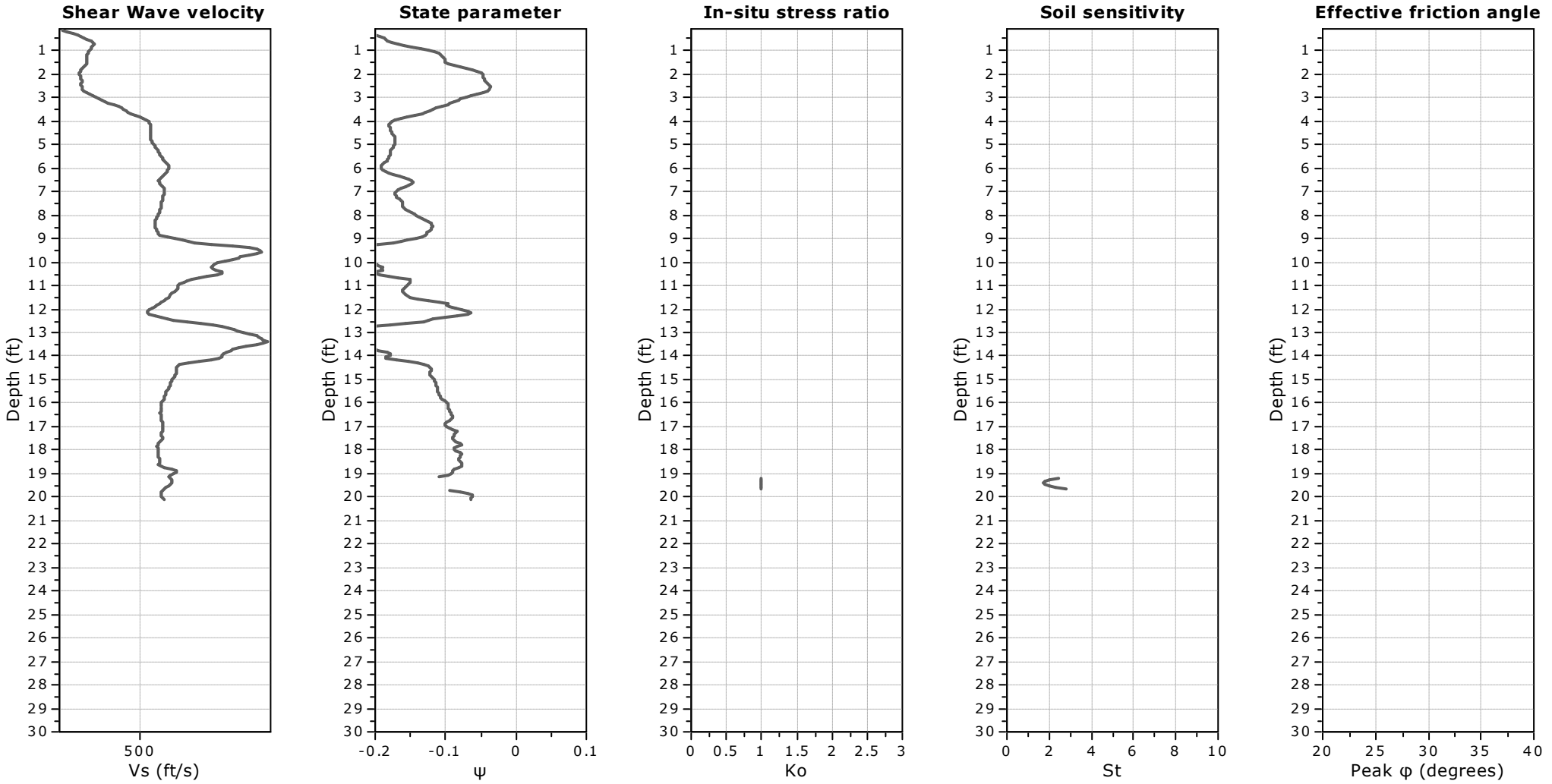

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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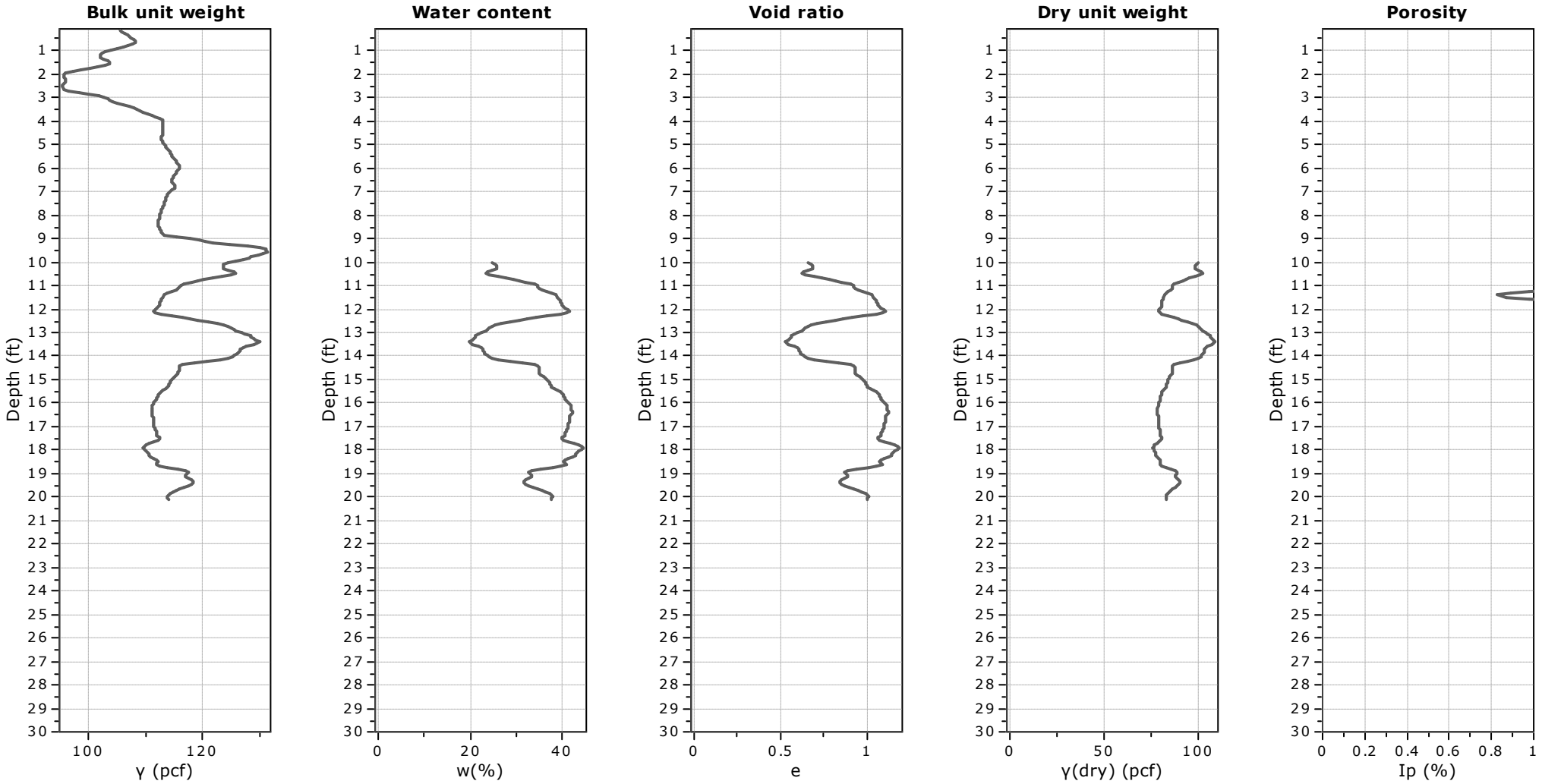

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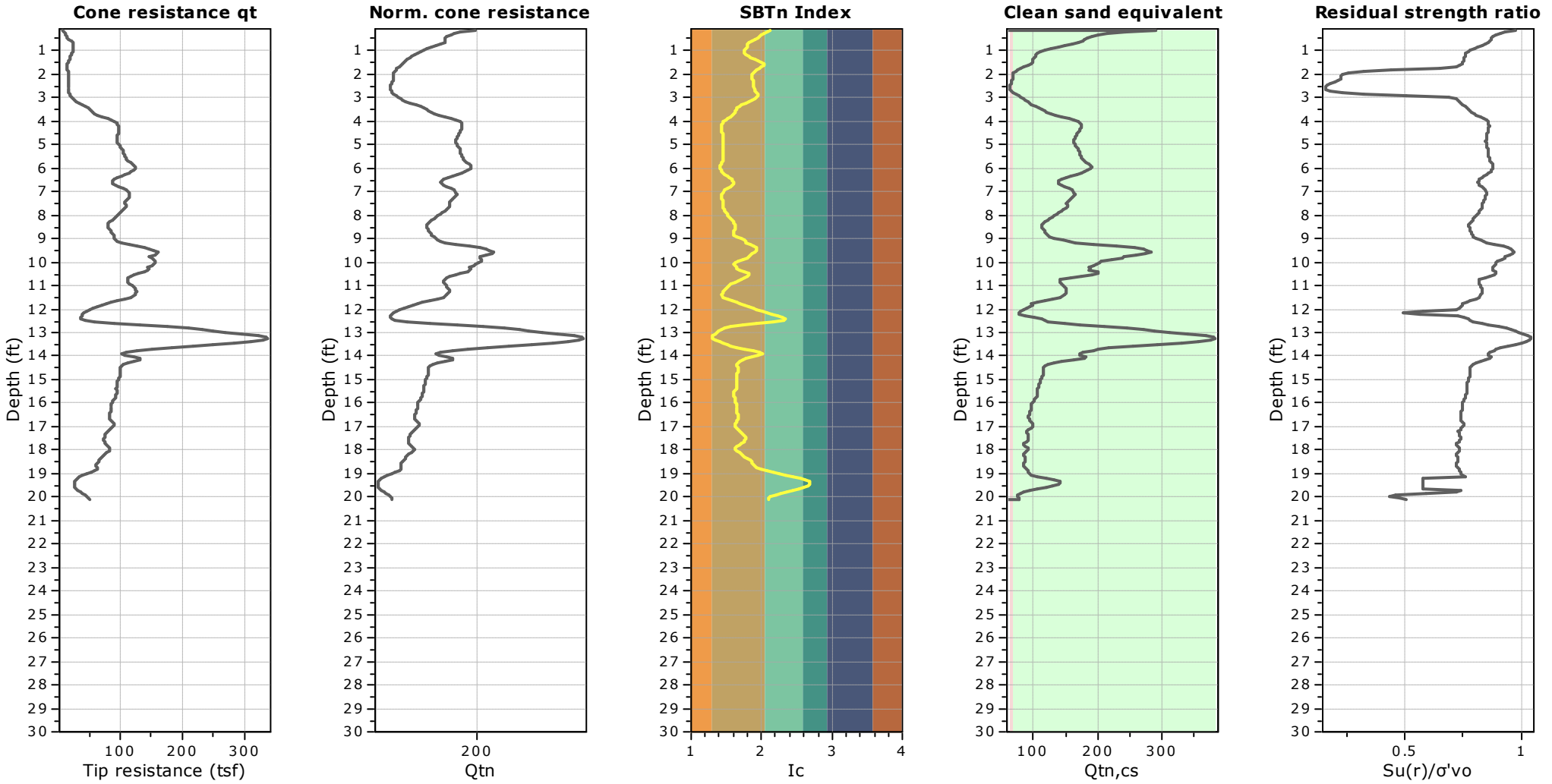

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C-22
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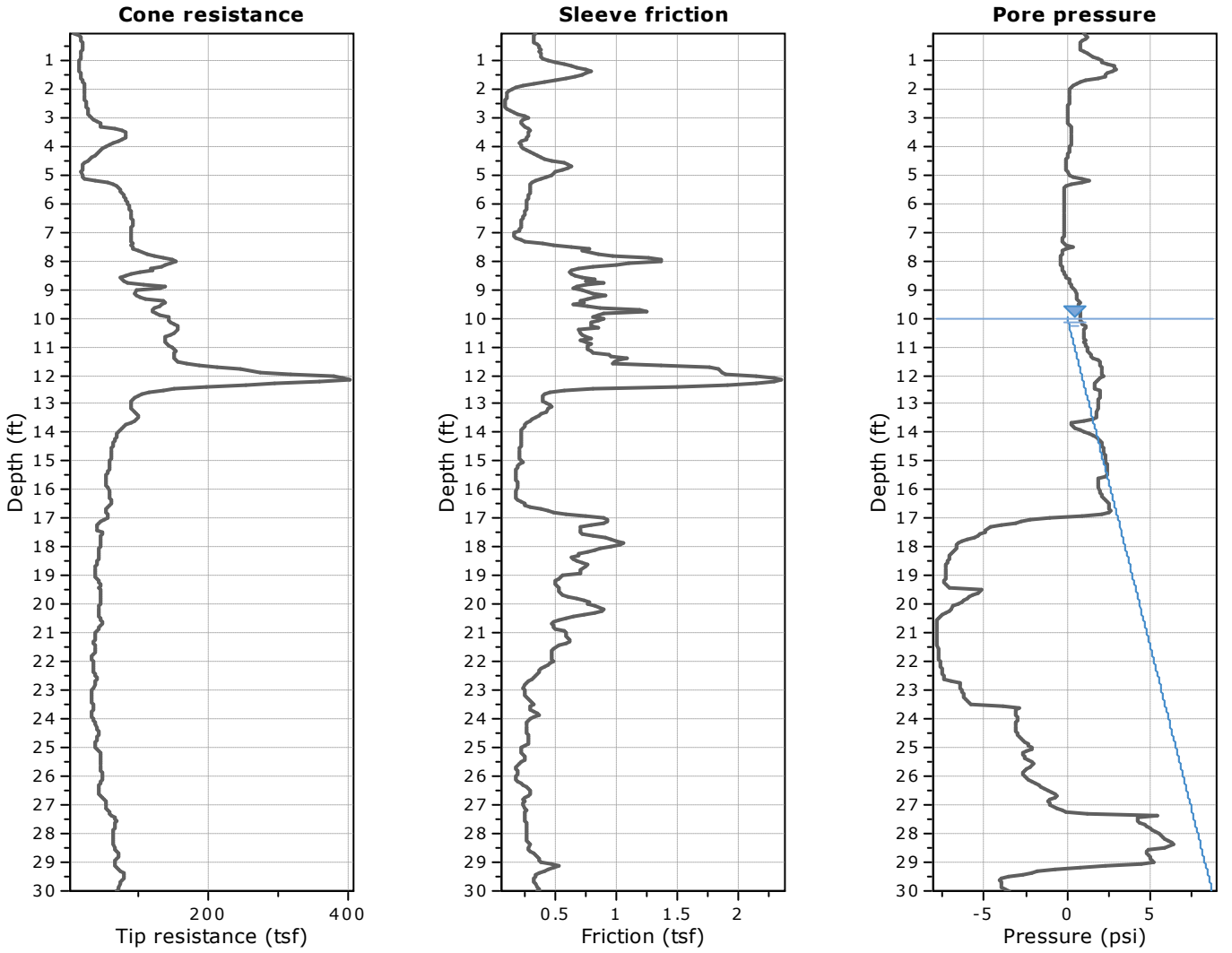
Surface Elevation: 63.04 ft
Coords: X:572448.29, Y:555866.91
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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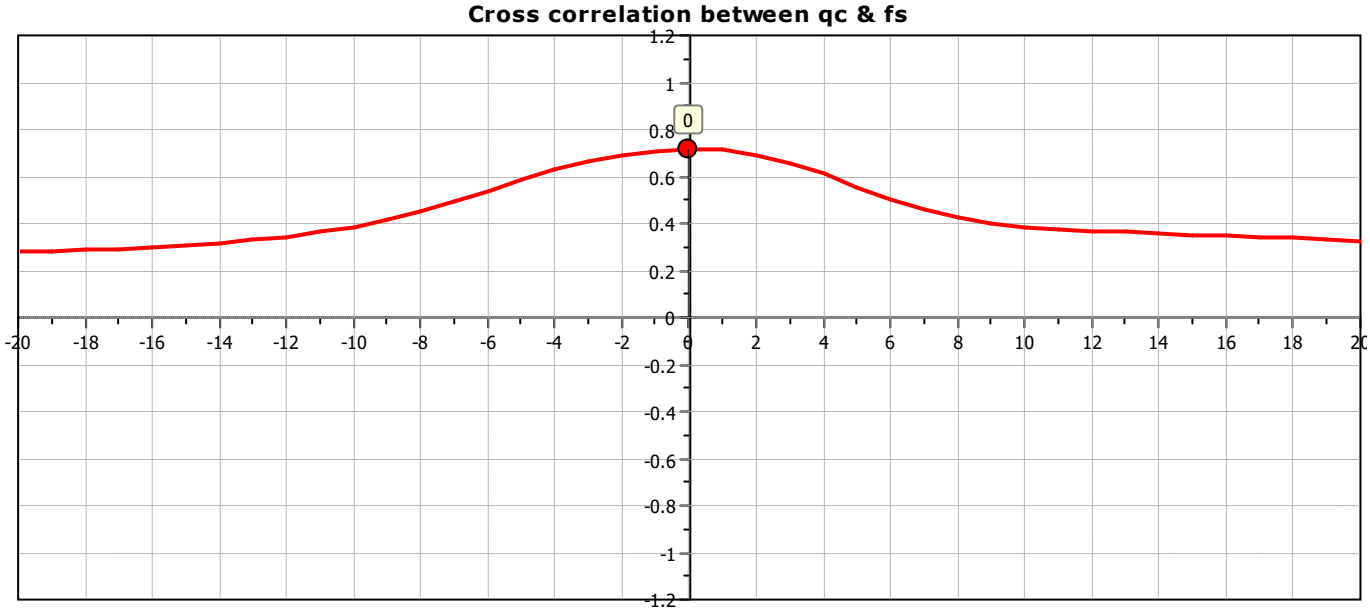

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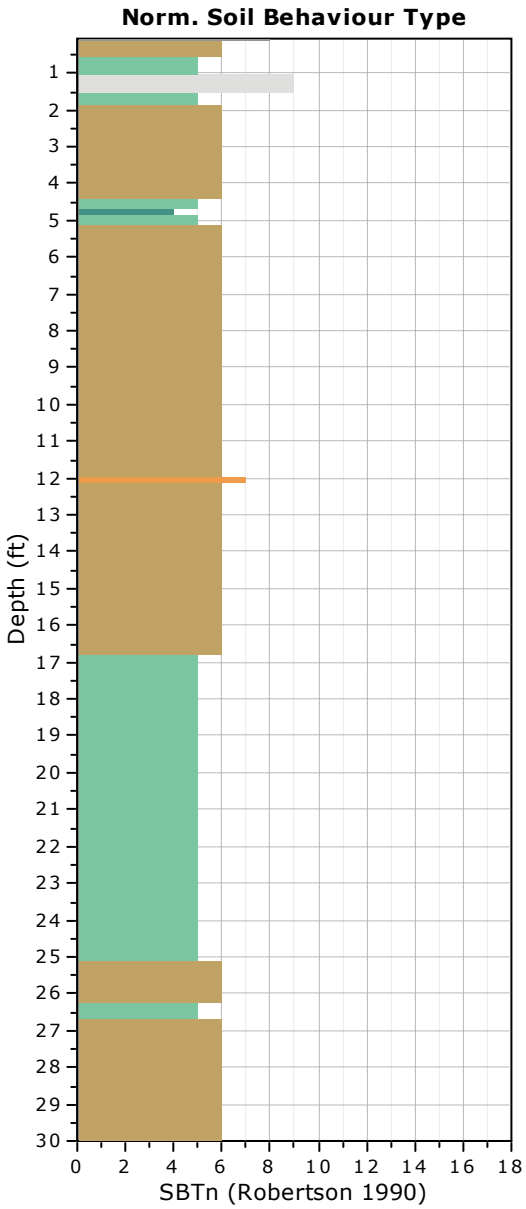

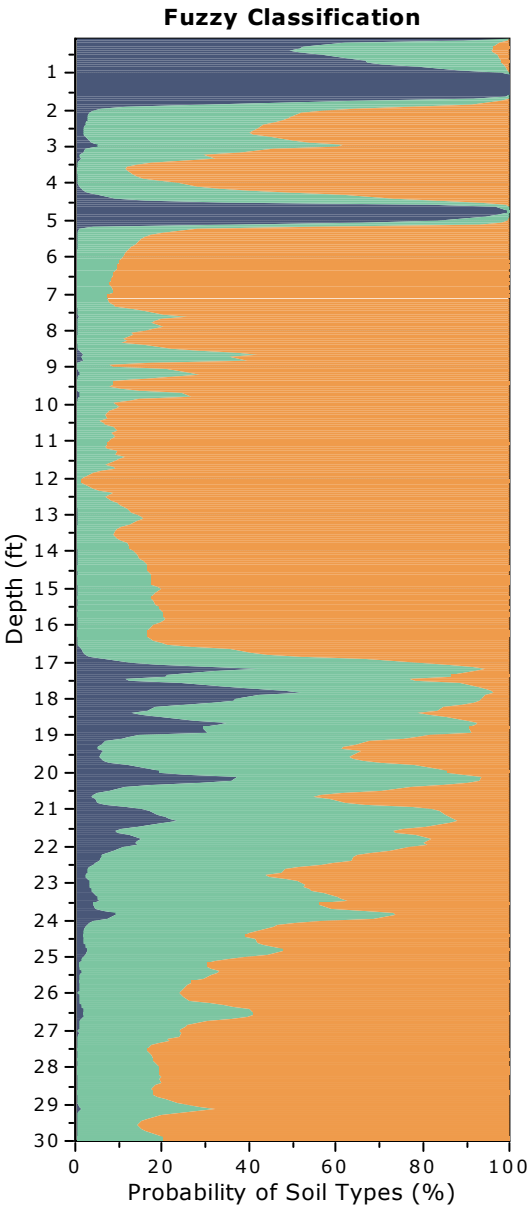

Fuzzy classifiaction legend
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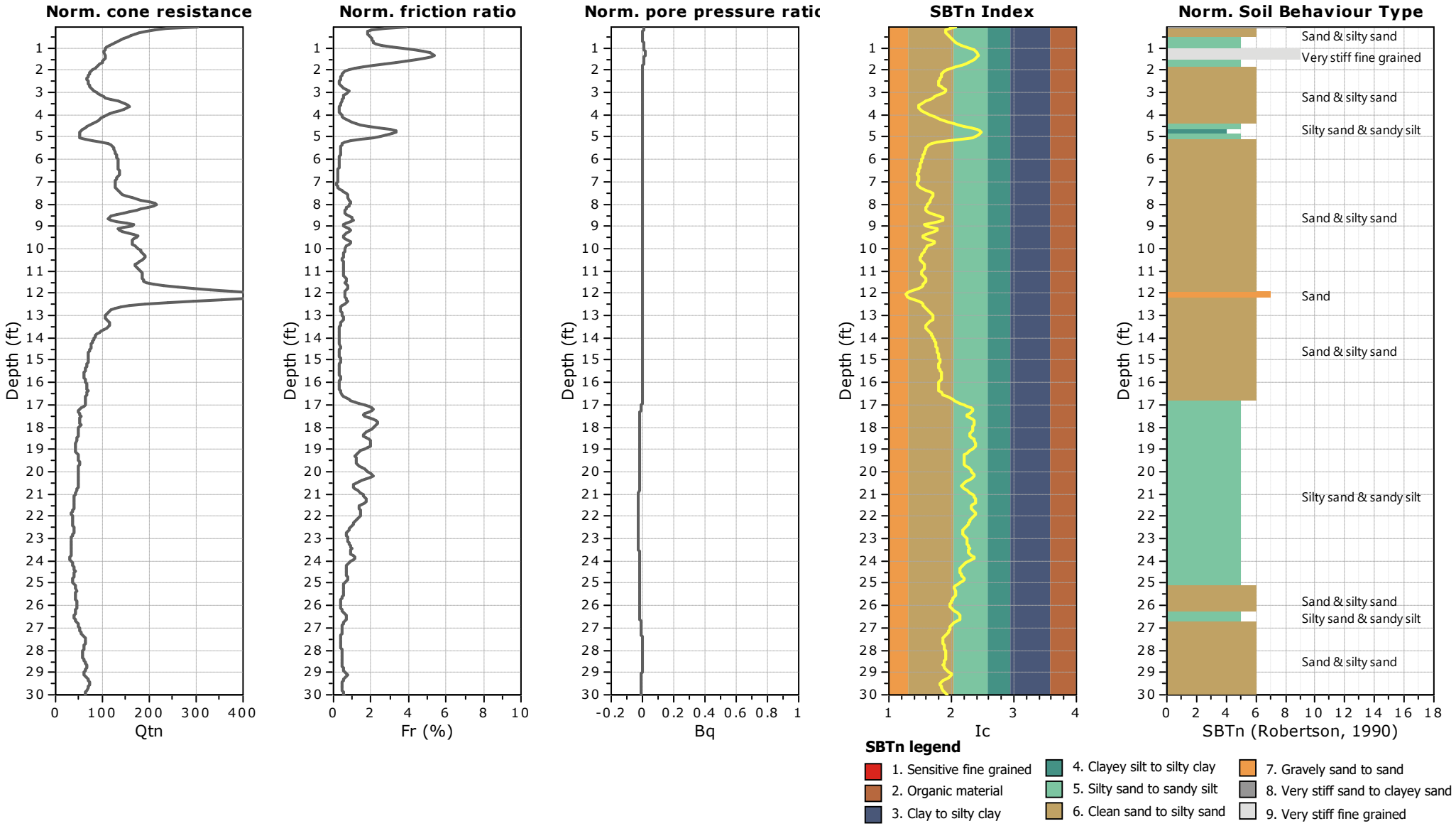

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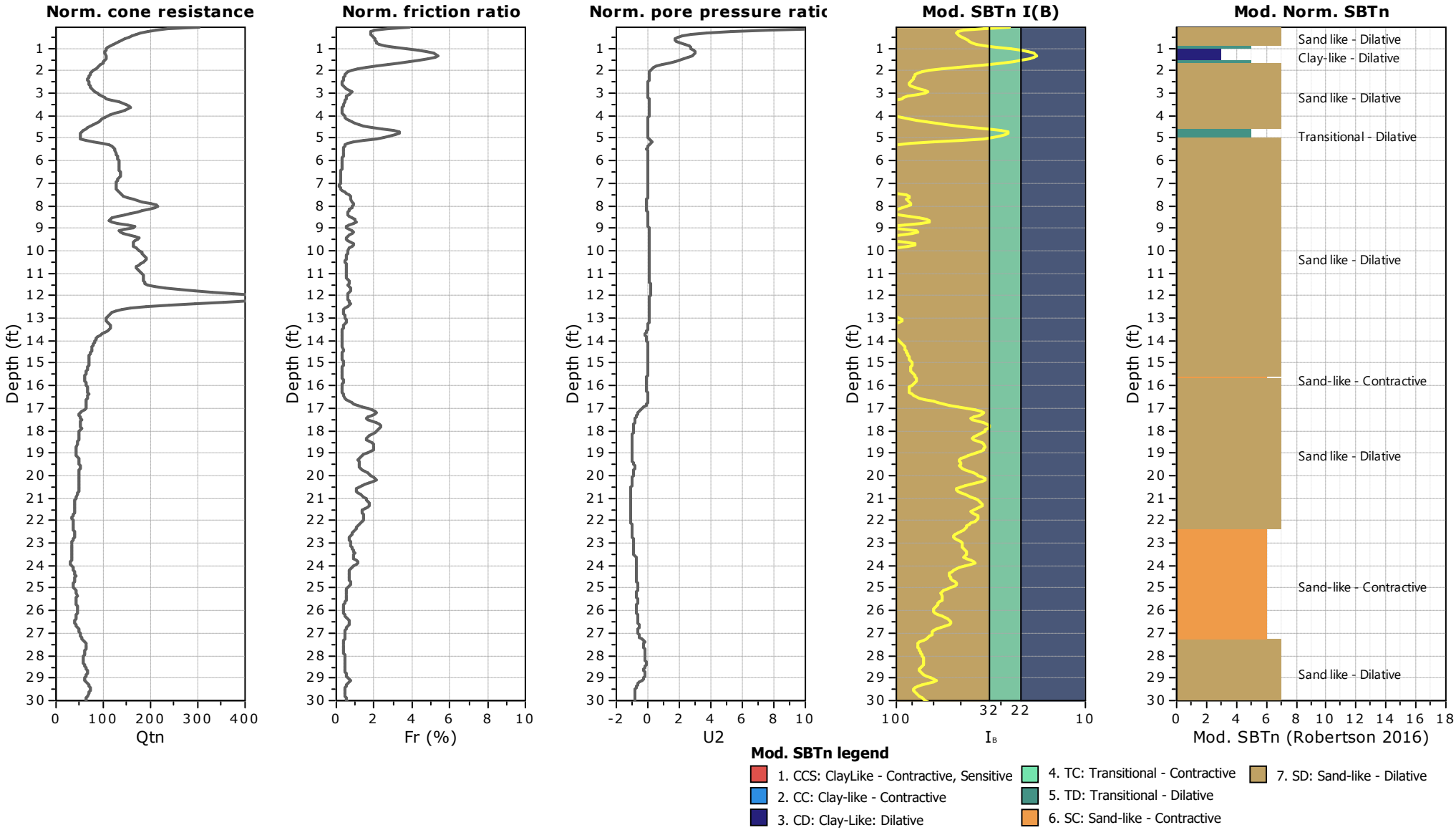

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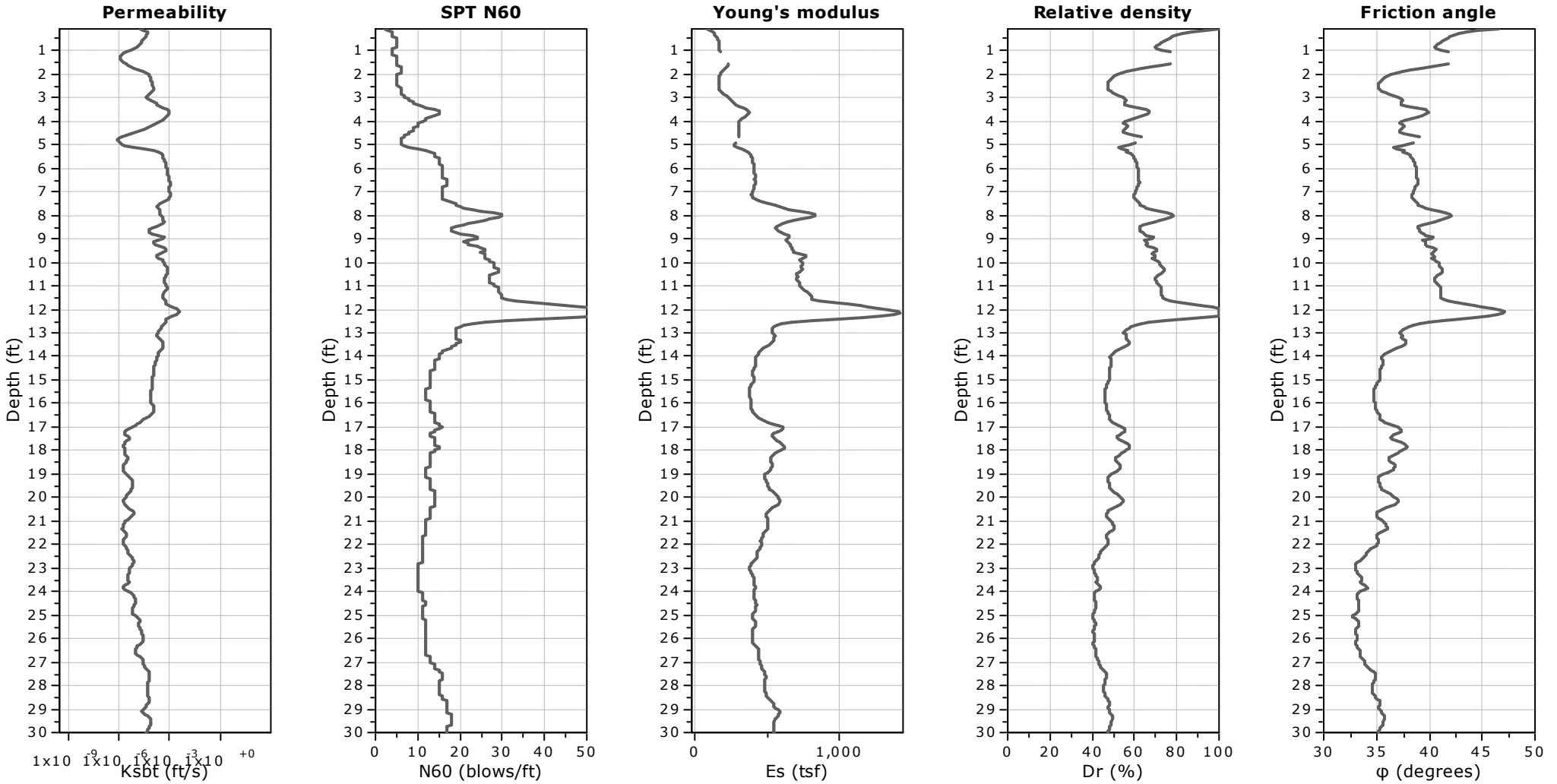

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
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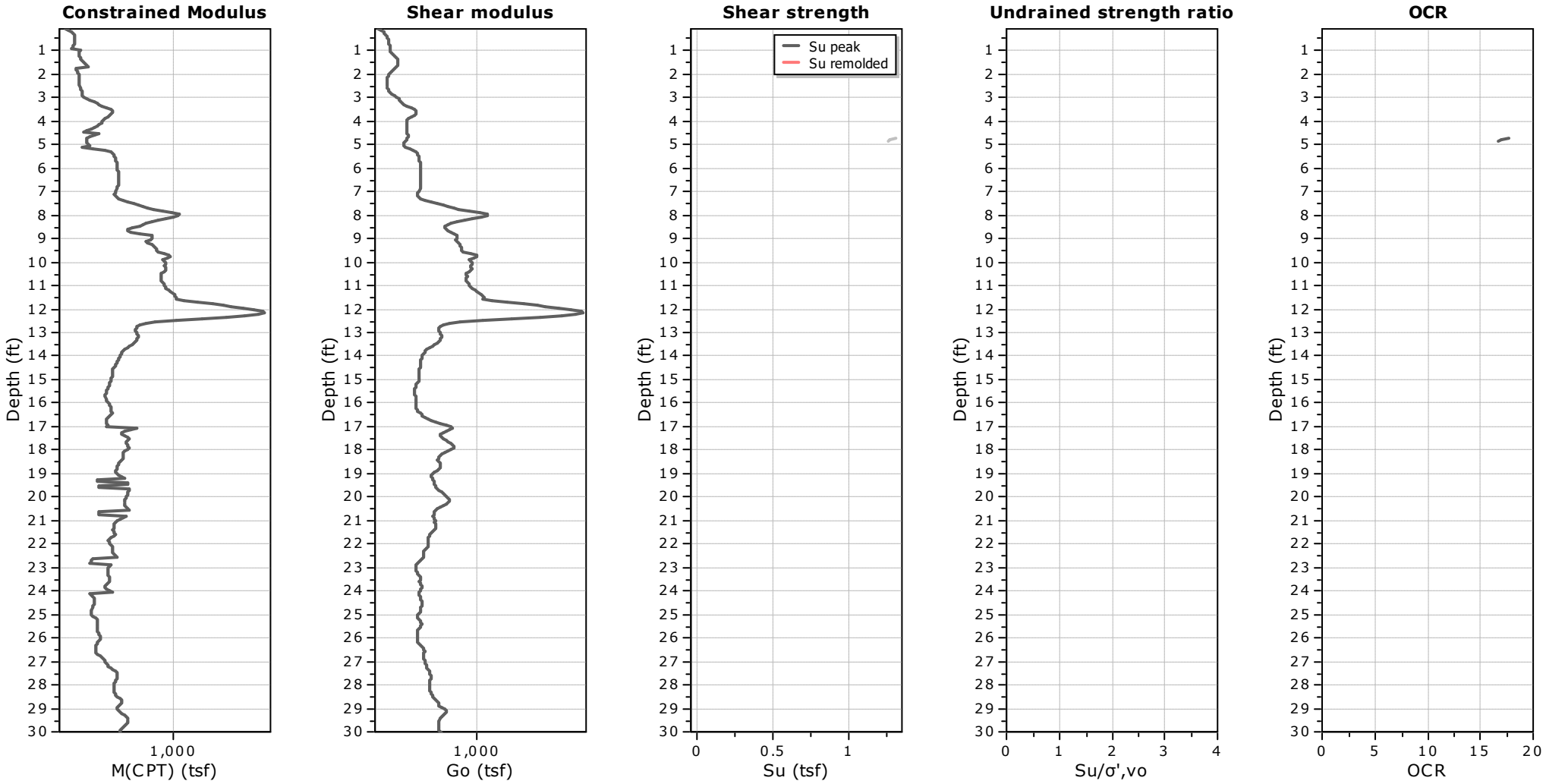

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
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Undrained shear strength cone factor for clays, N_{kt}: 14
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Flat Dilatometer Test data

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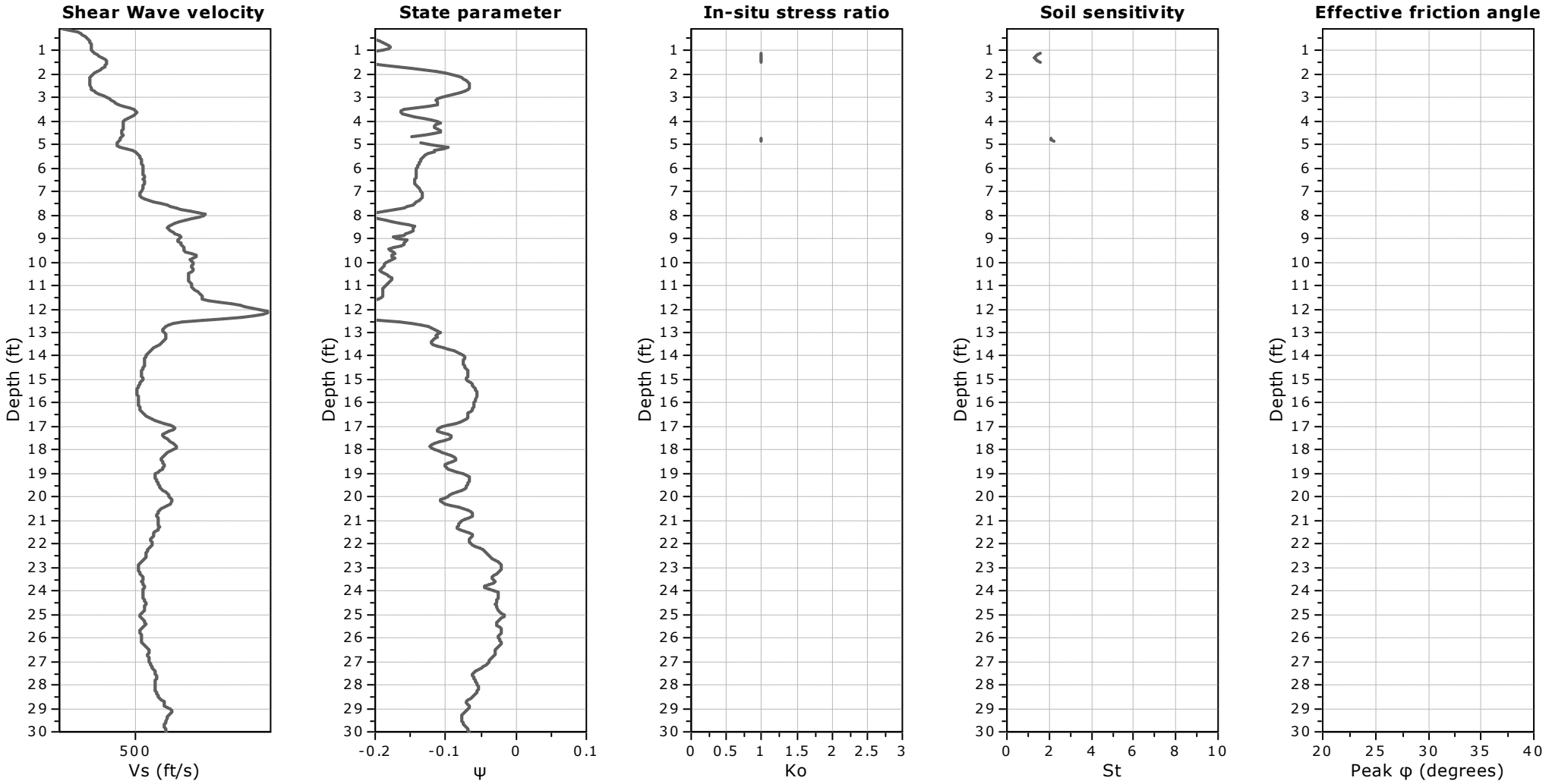

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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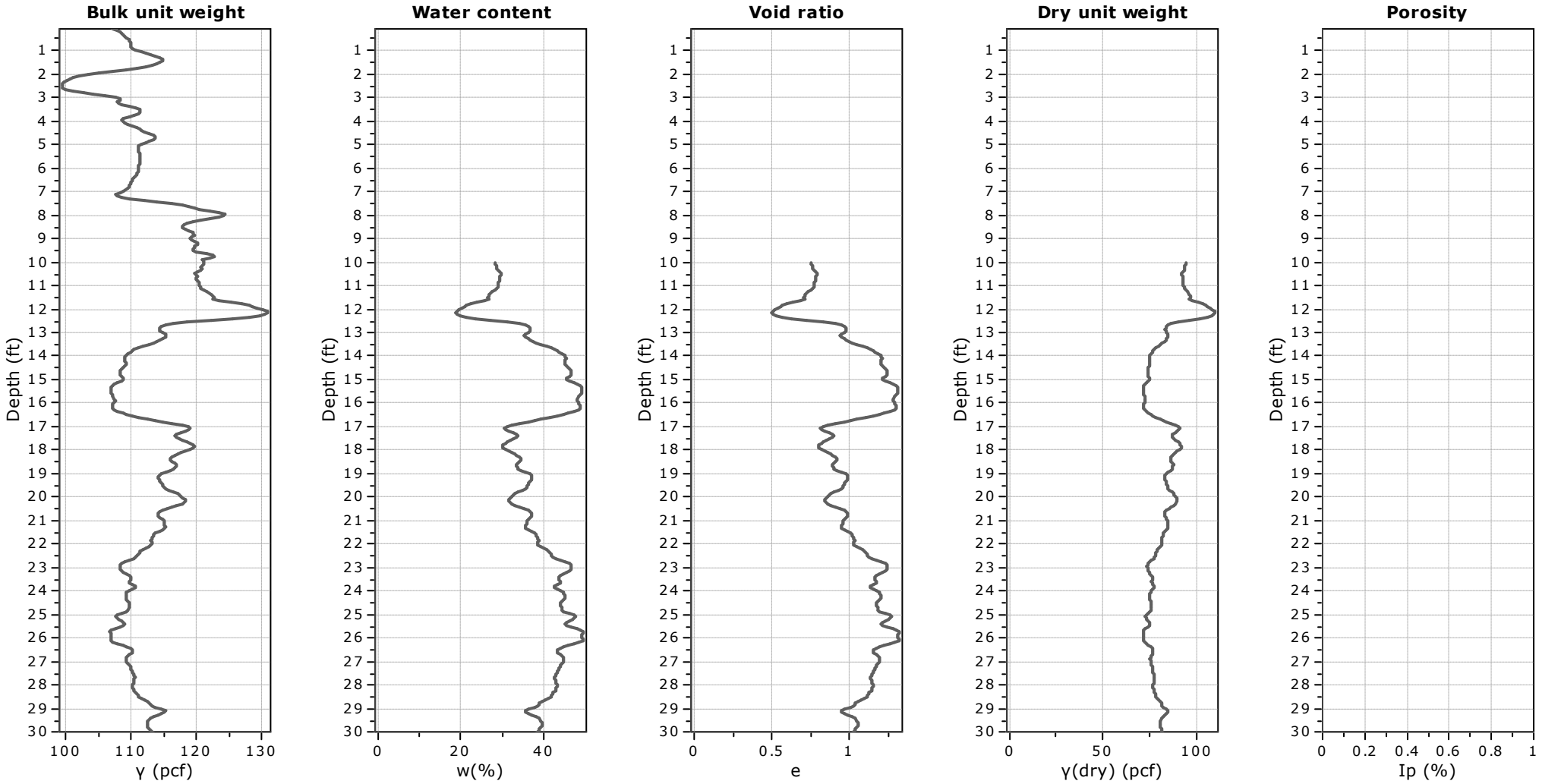

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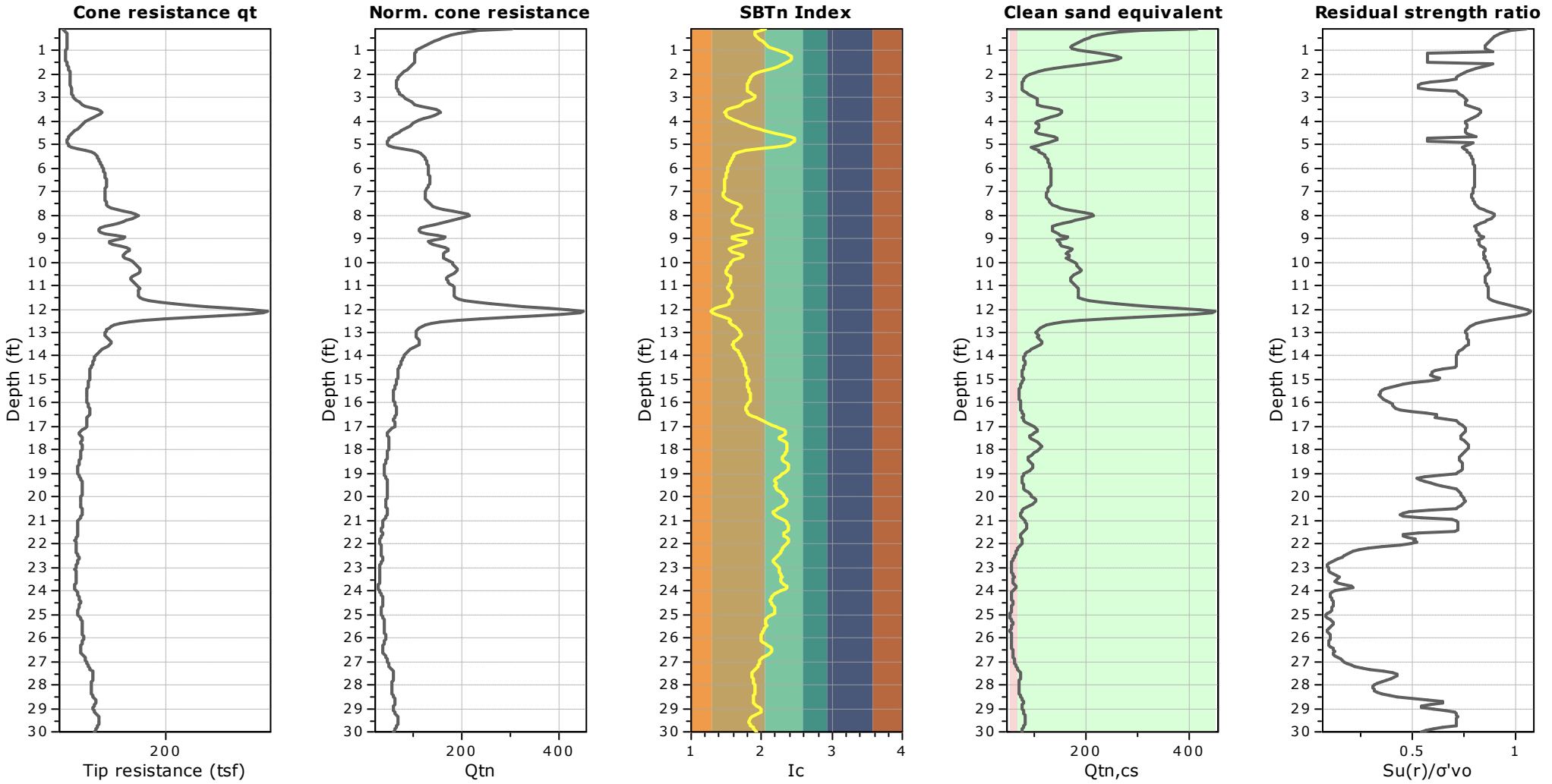

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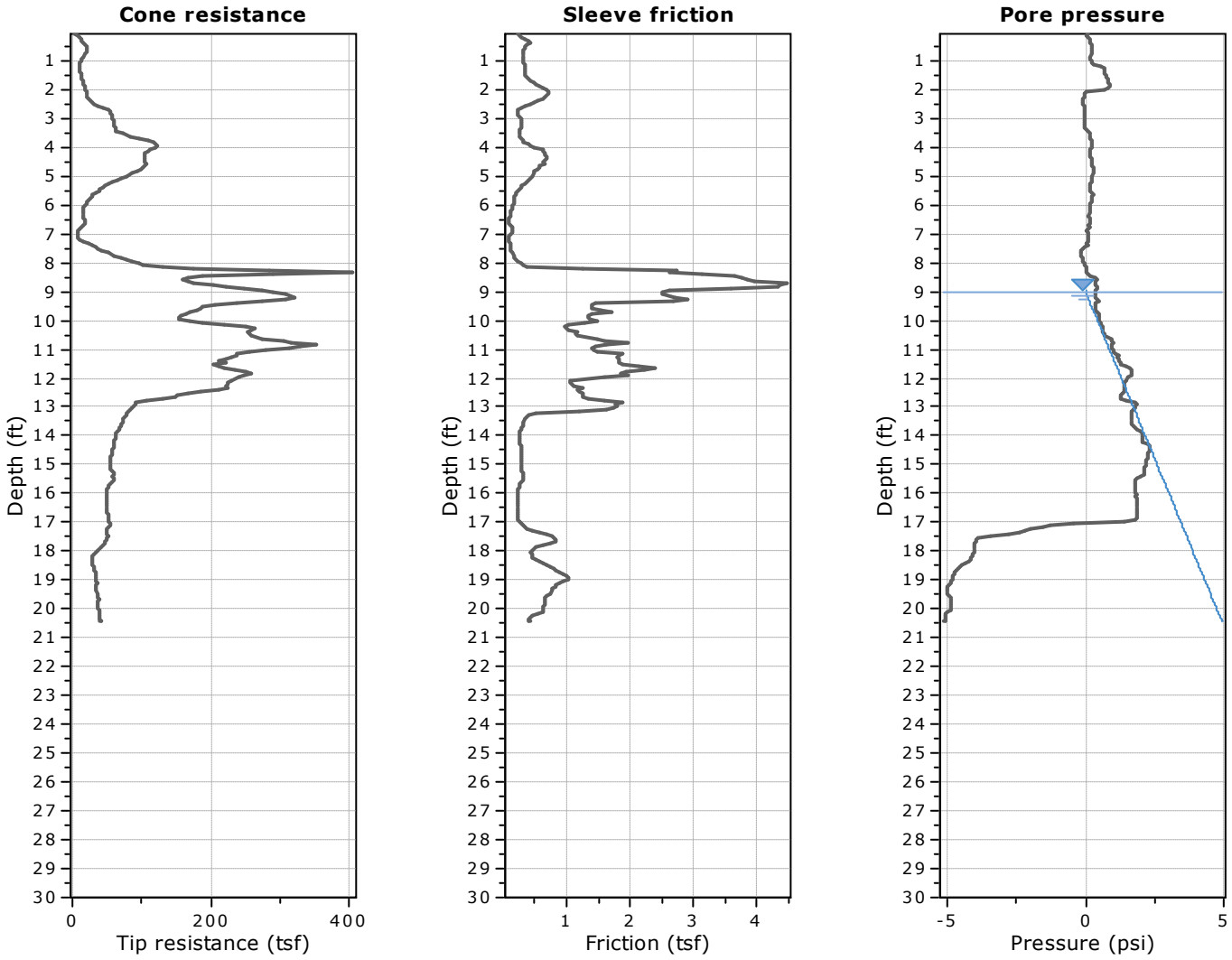
C-23
Total depth: 20.43 ft, Date: 5/14/2024
Surface Elevation: 63.26 ft
Coords: X:572495.24, Y:555878.48
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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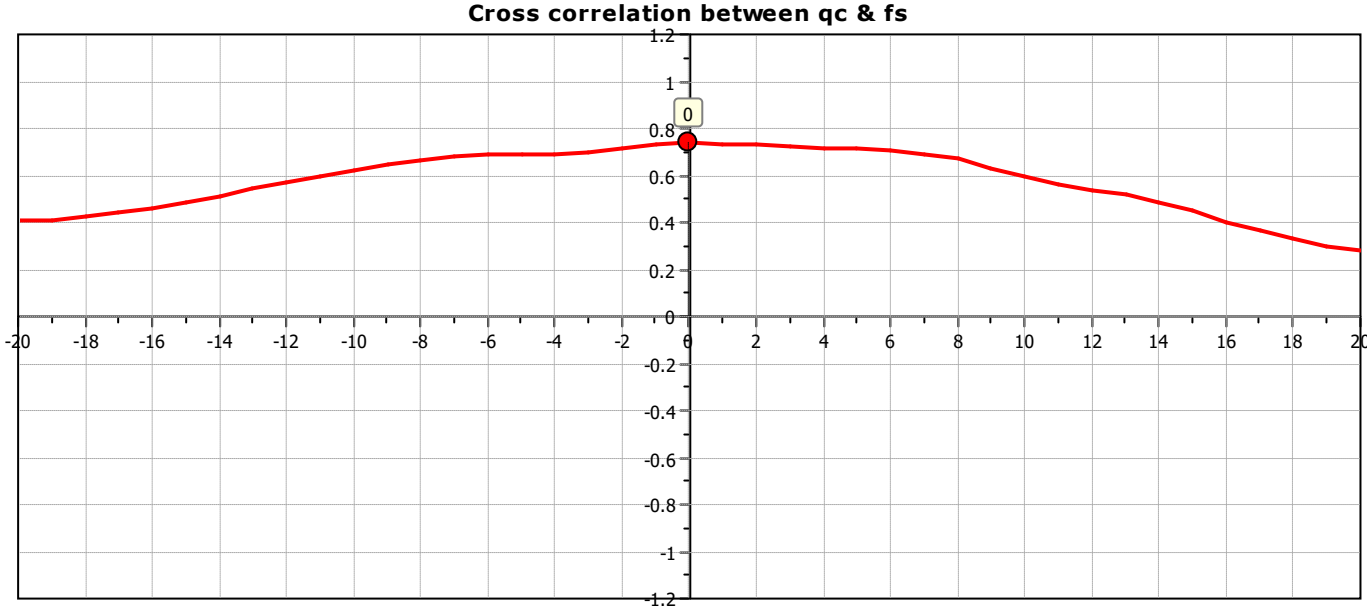

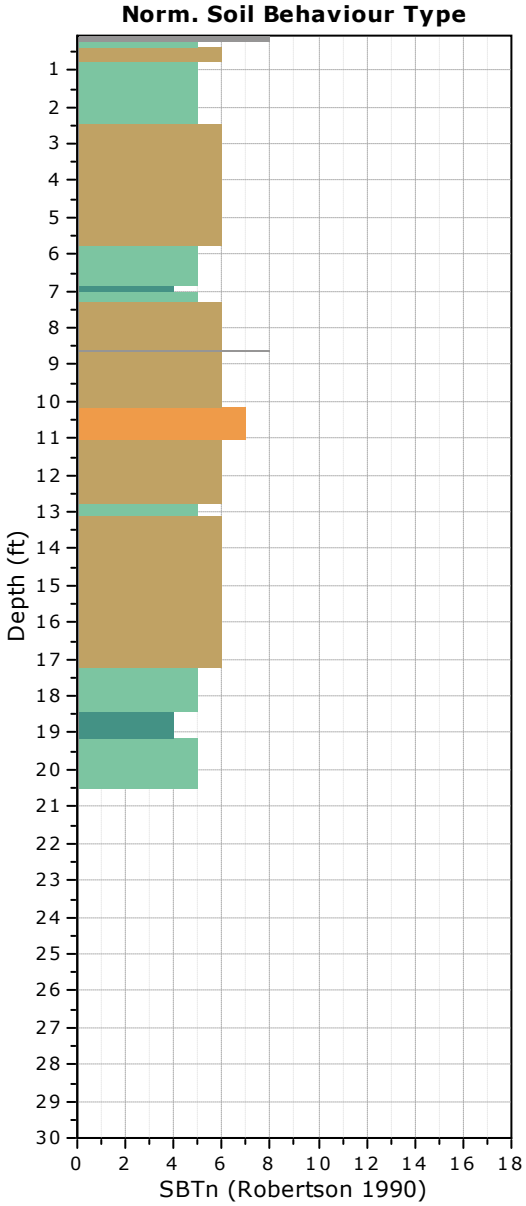

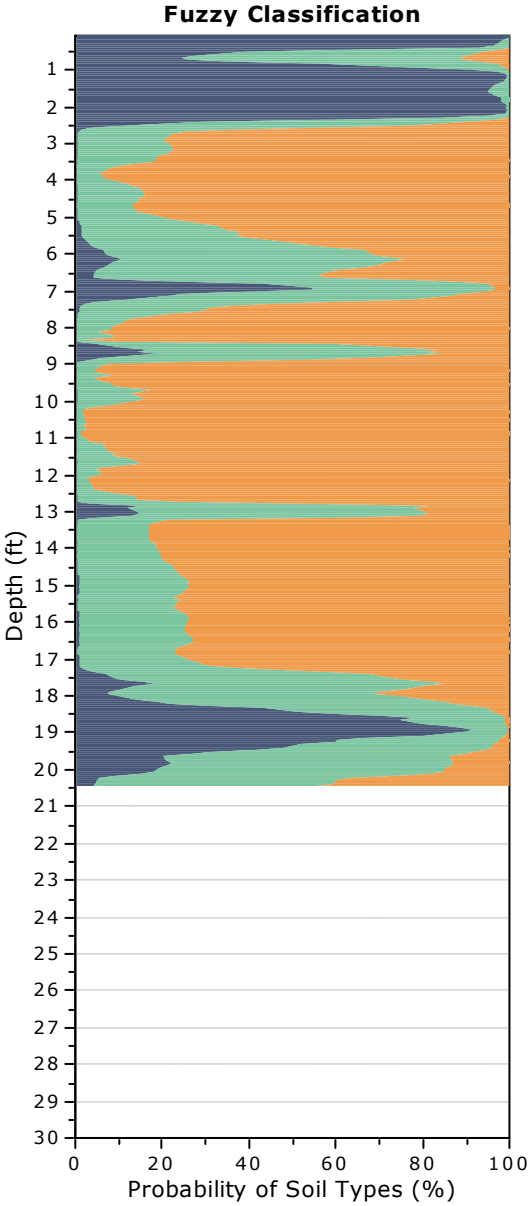

Fuzzy classifiaction legend

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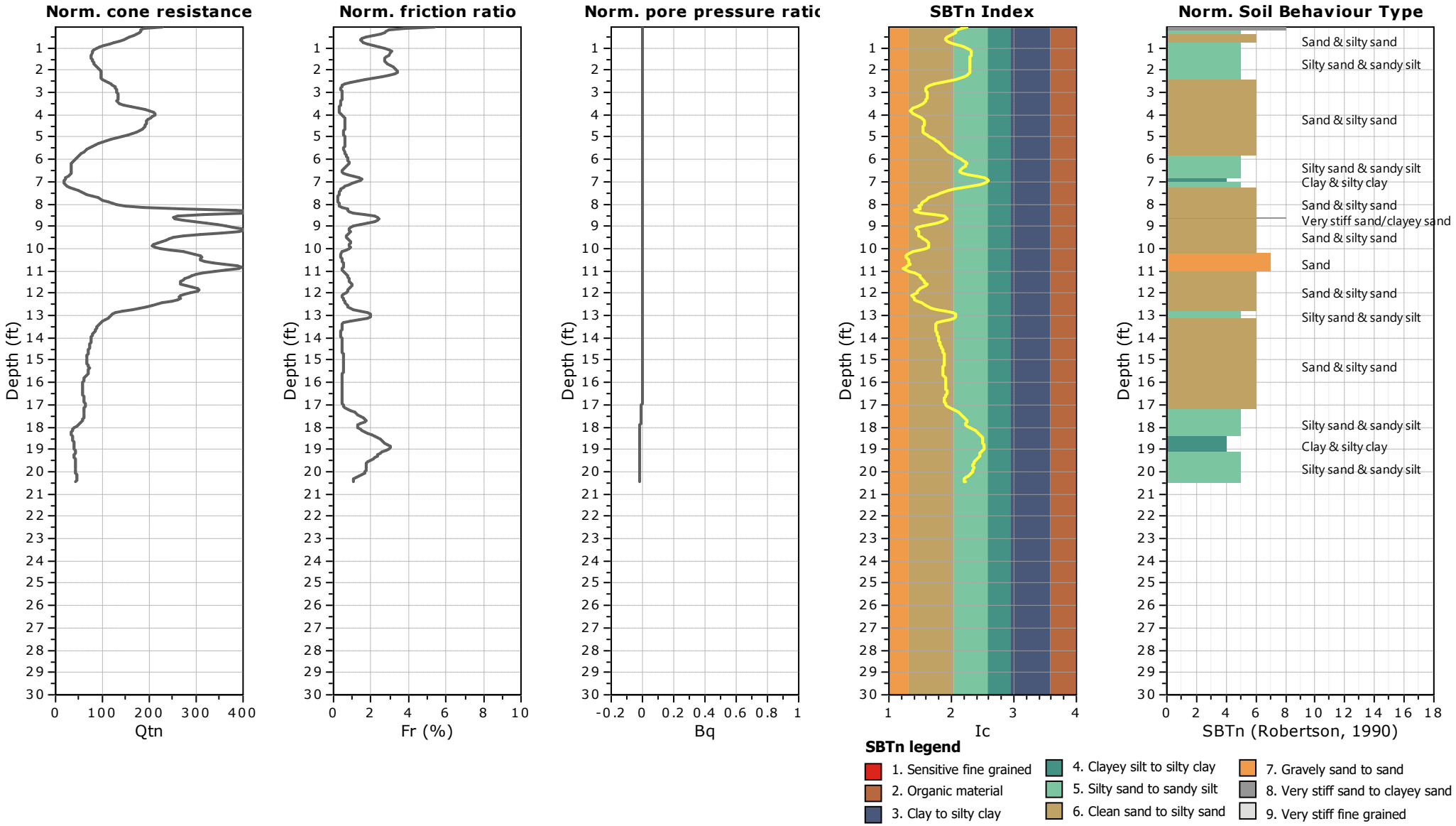

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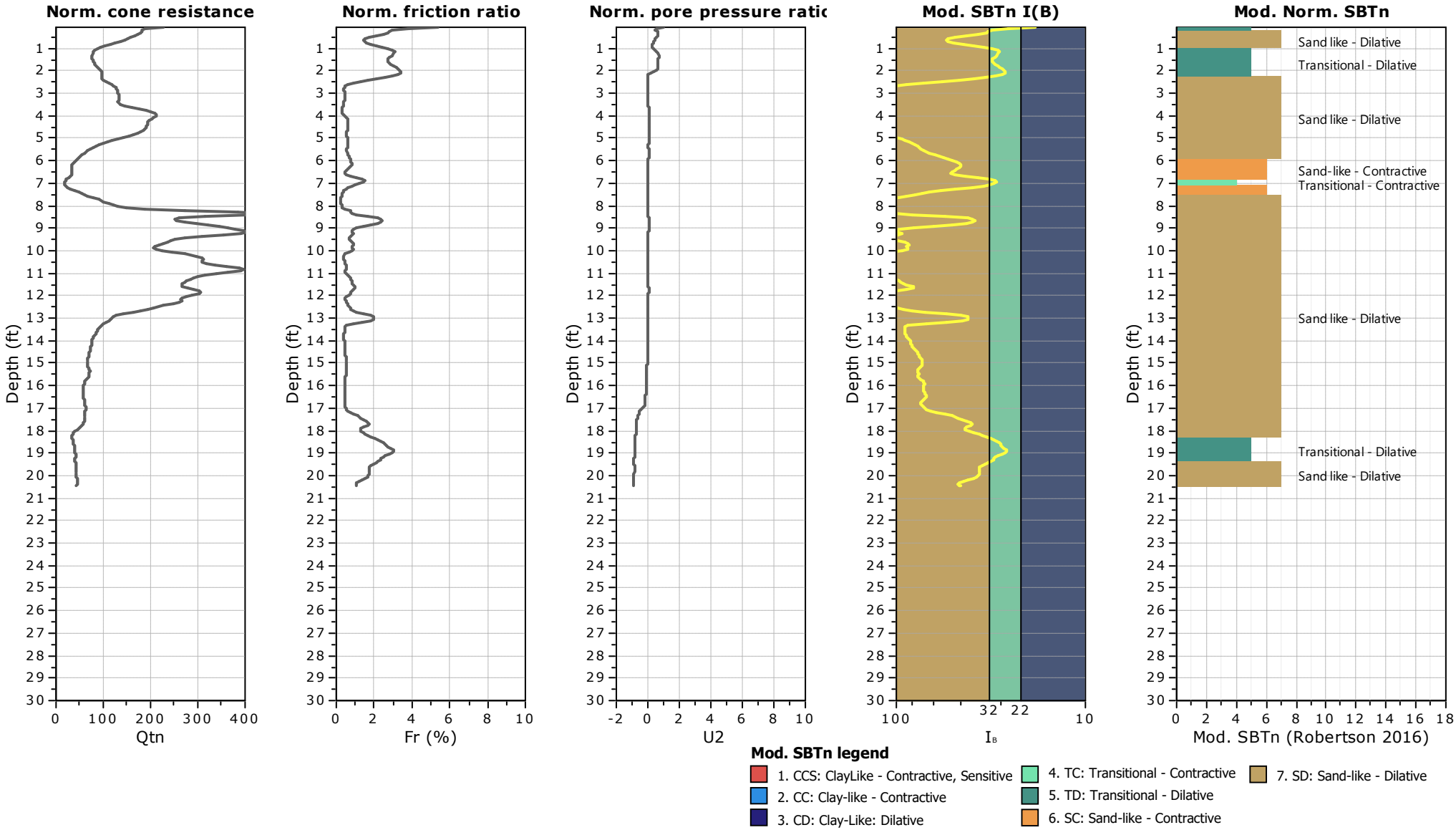

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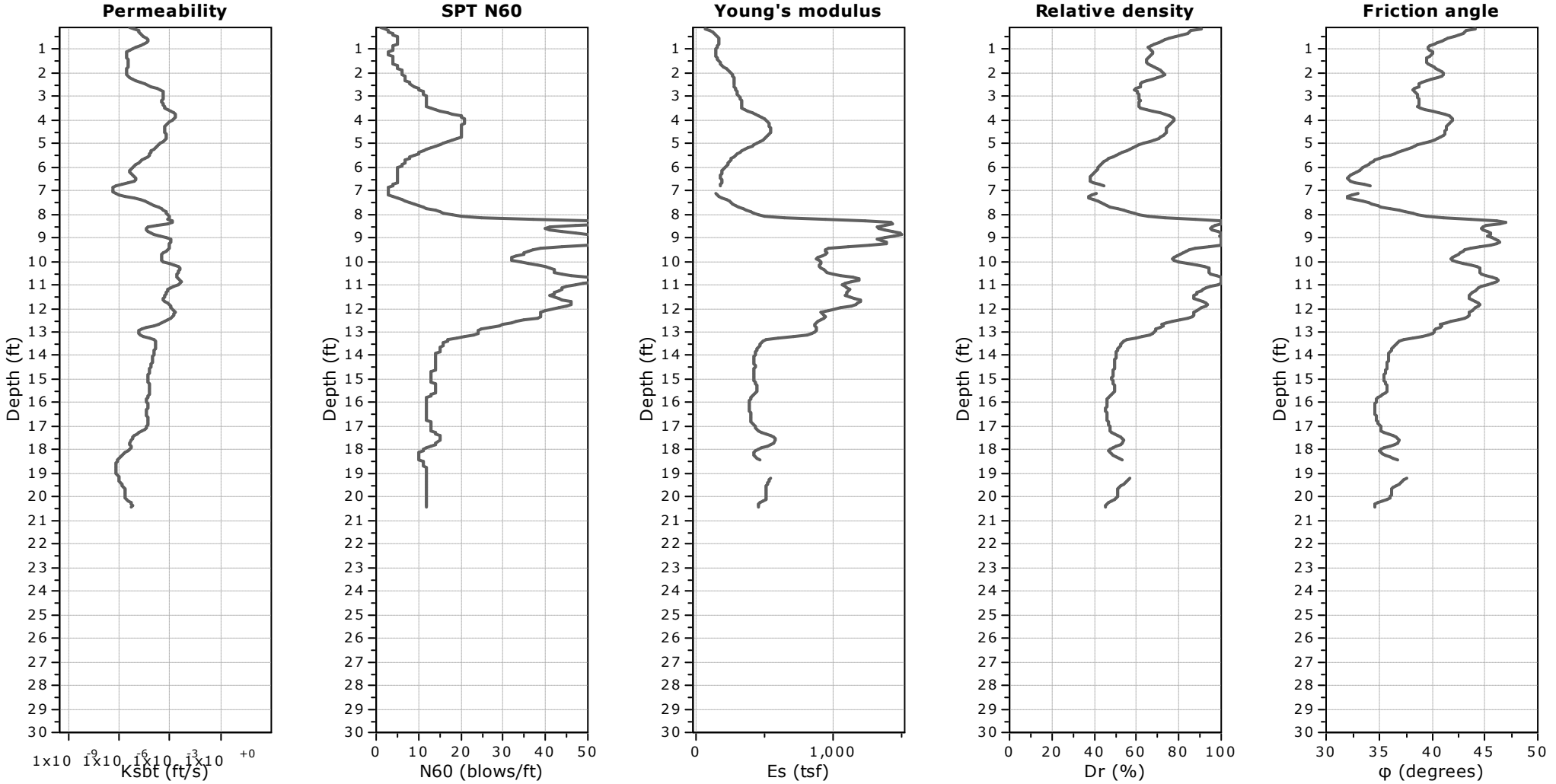

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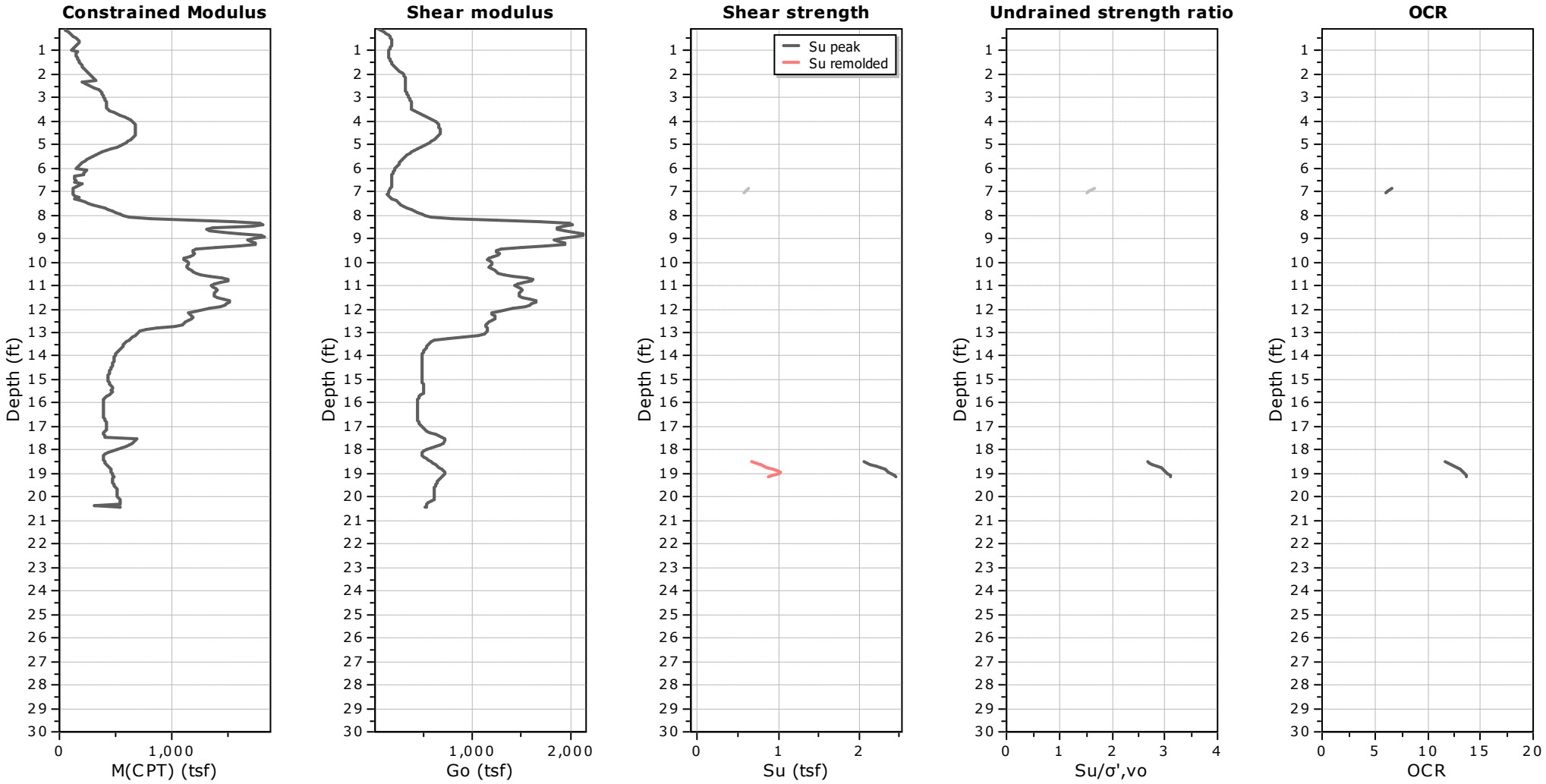

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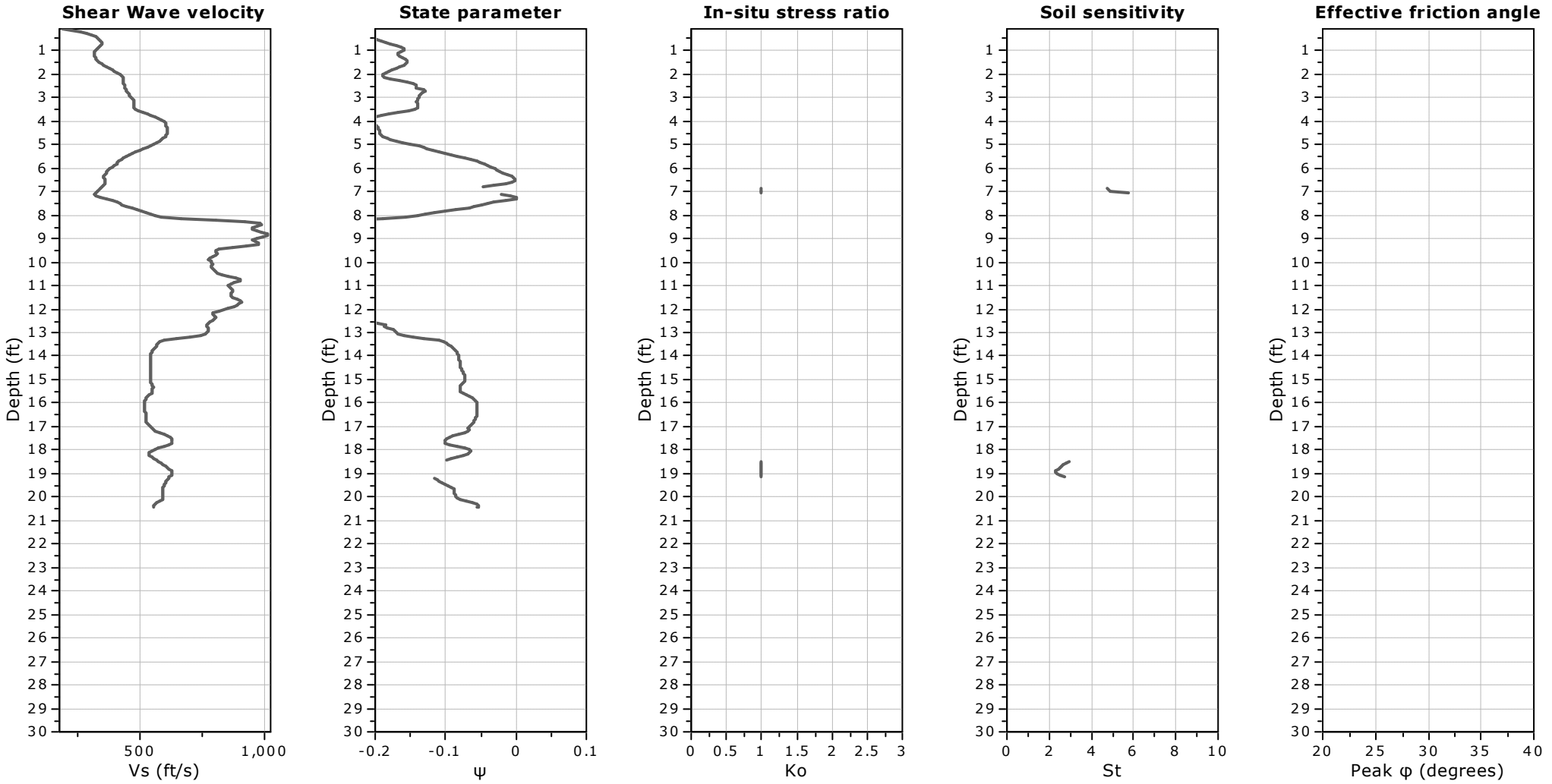

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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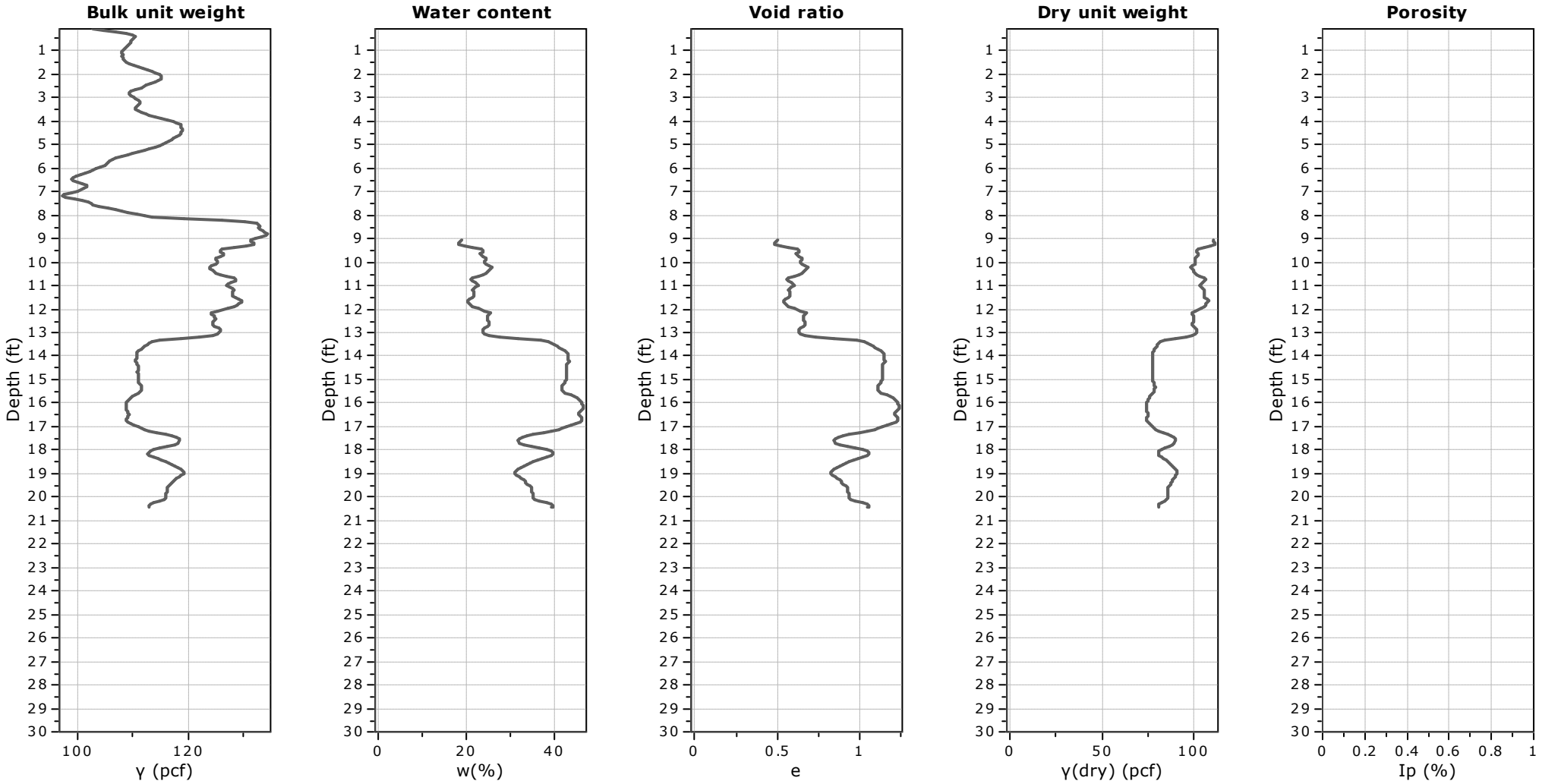
C-23
Total depth: 20.43 ft, Date: 5/14/2024
Surface Elevation: 63.26 ft
Coords: X:572495.24, Y:555878.48
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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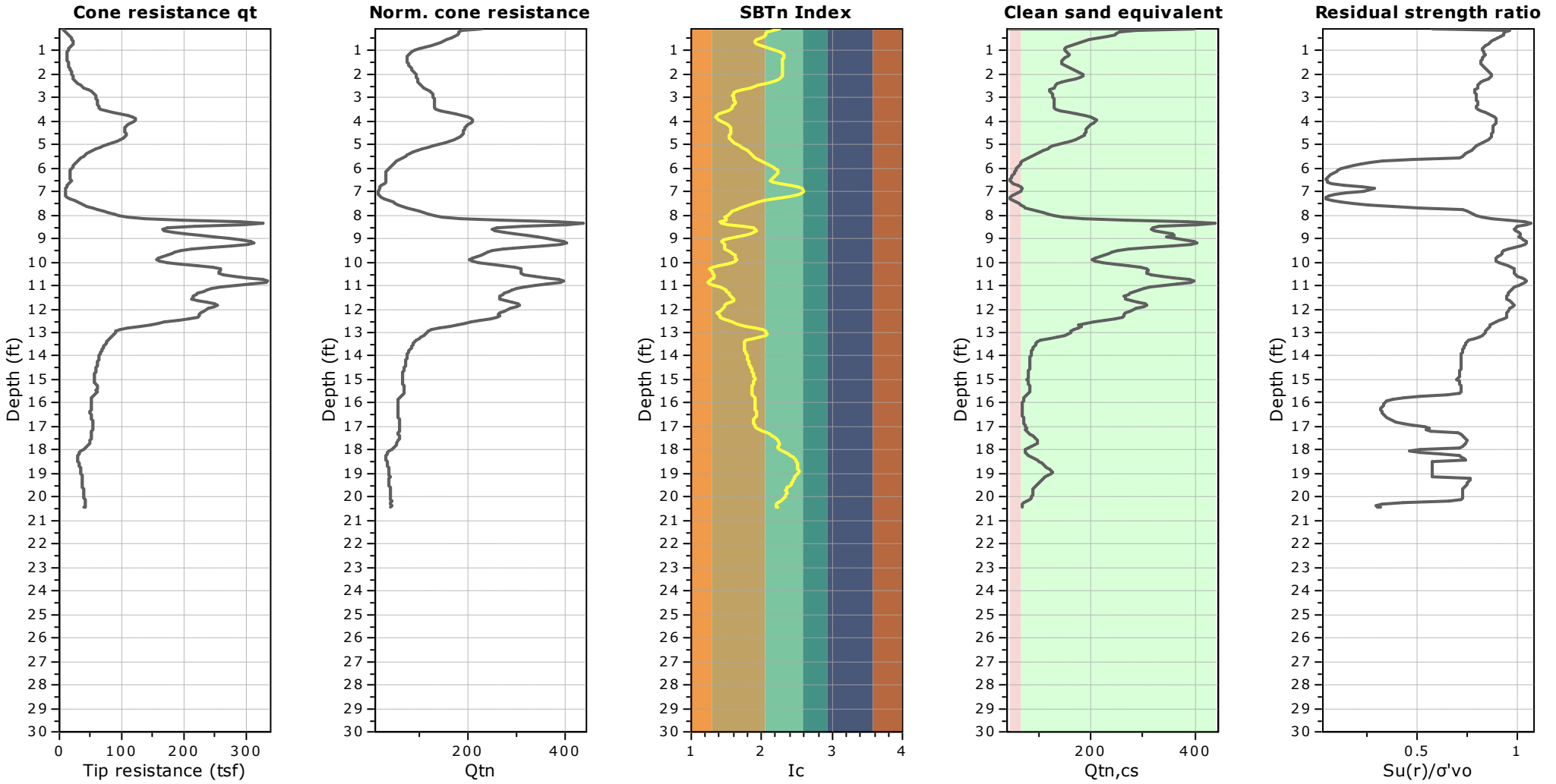

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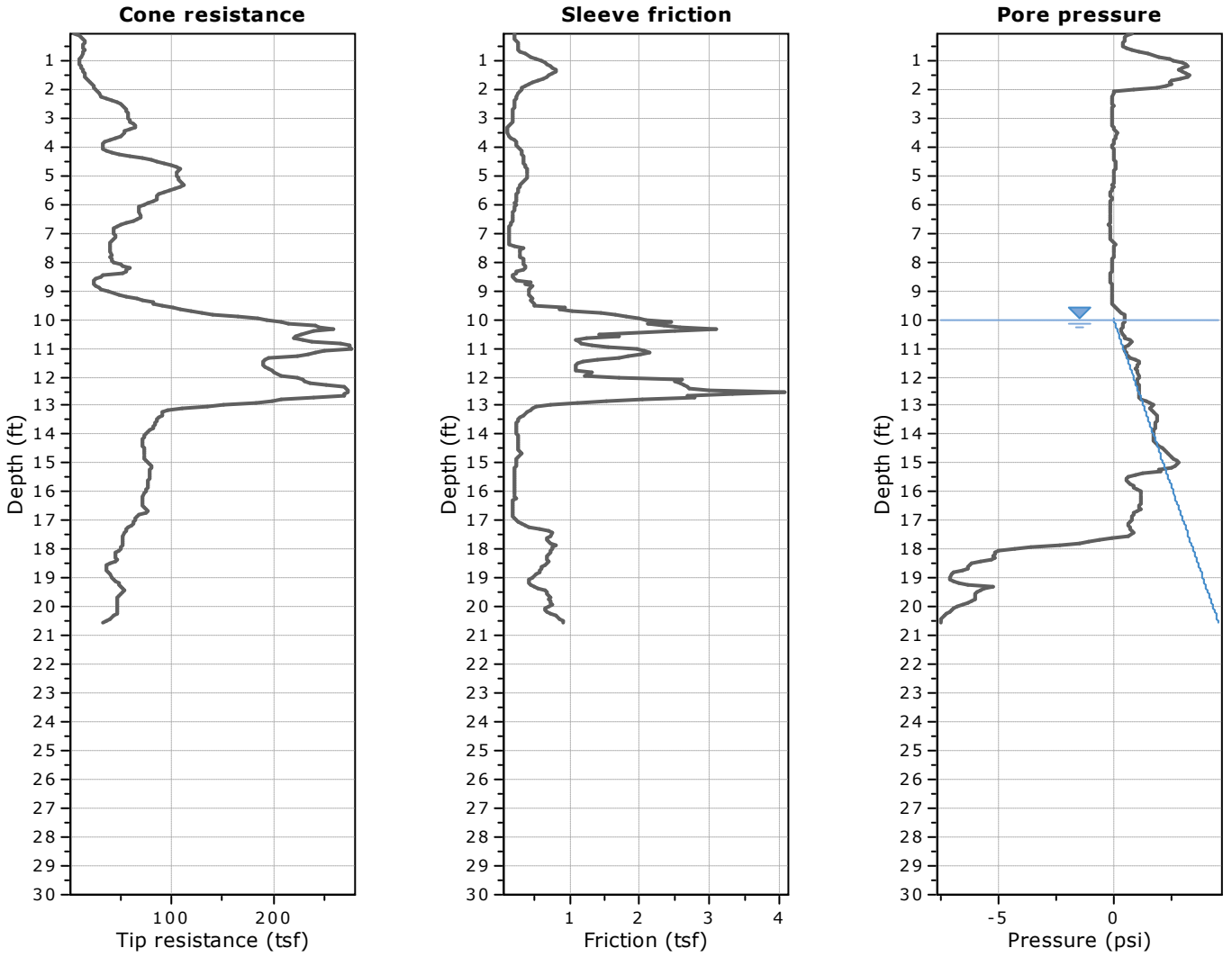
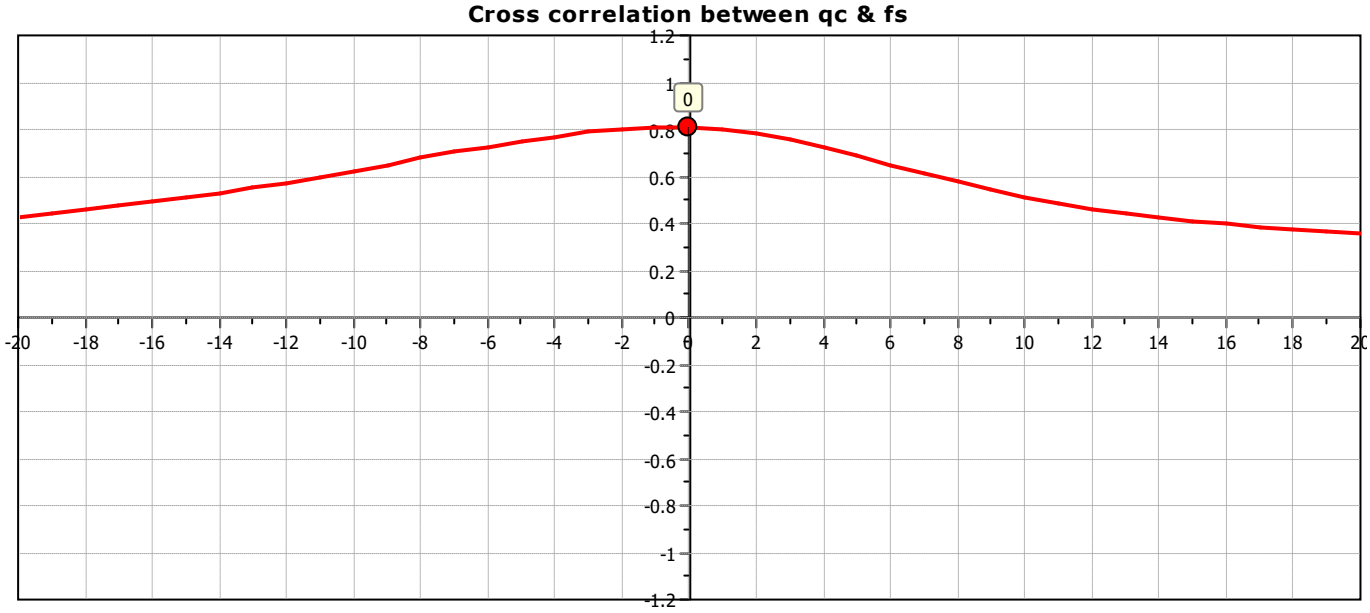
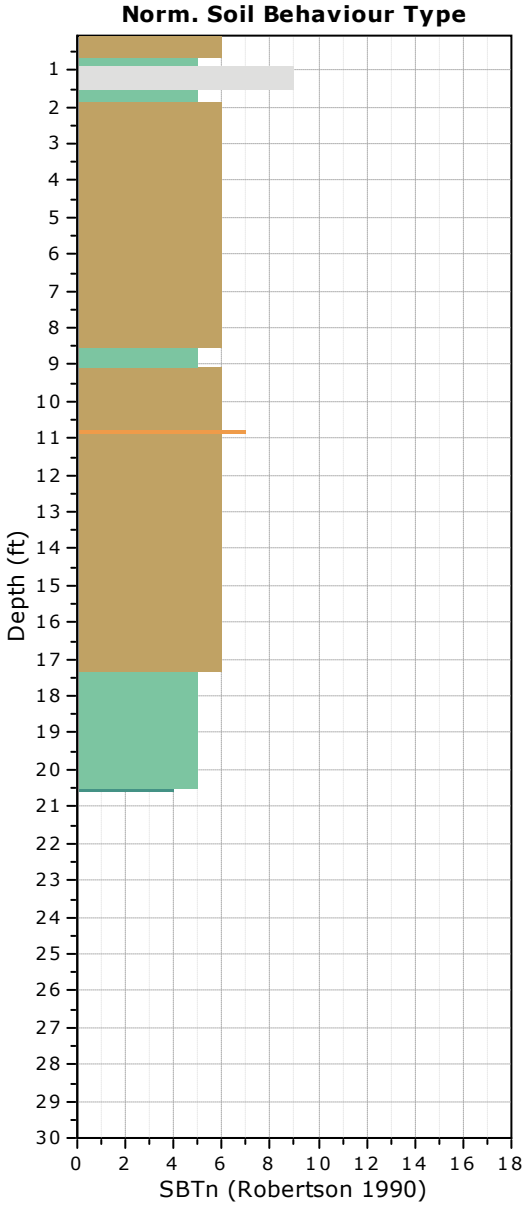
C-24
Total depth: 20.52 ft, Date: 5/13/2024
Surface Elevation: 63.83 ft
Coords: X:572571.88, Y:555949.70
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

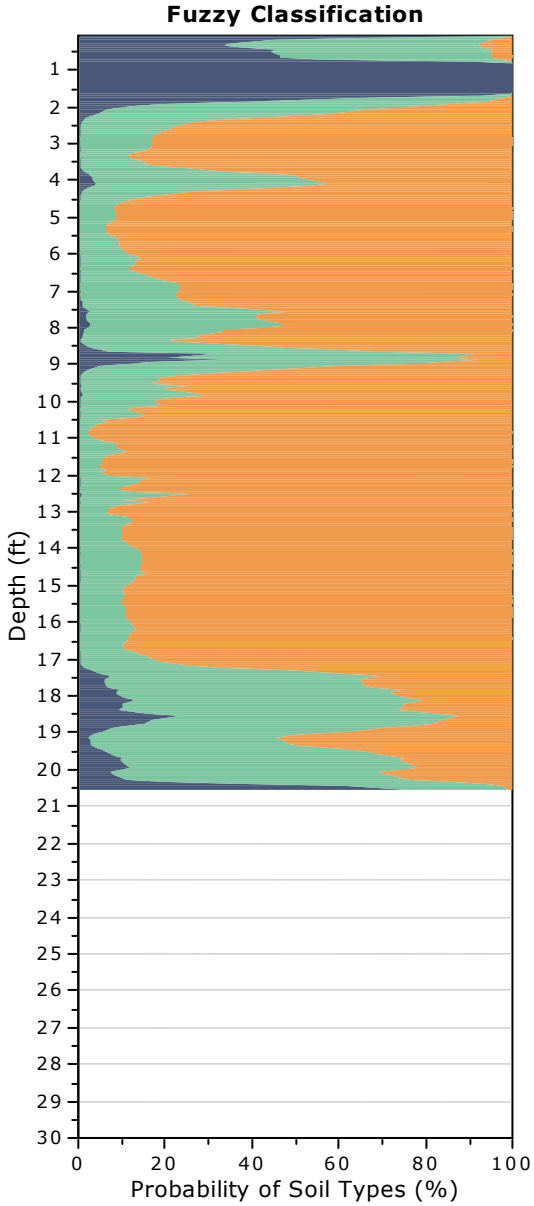
Project: ASD Summit Campus
Location: Middletown, Delaware



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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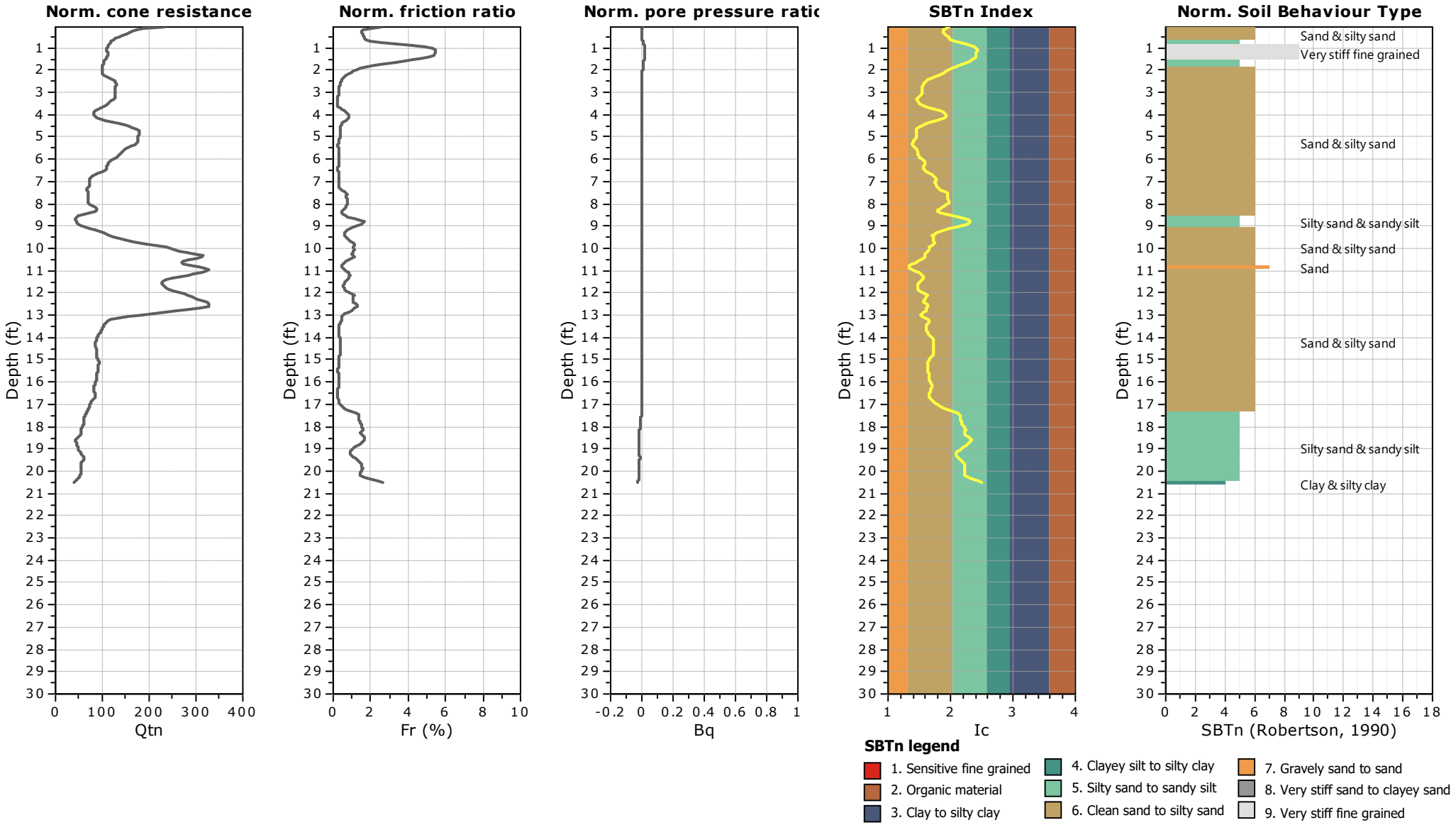

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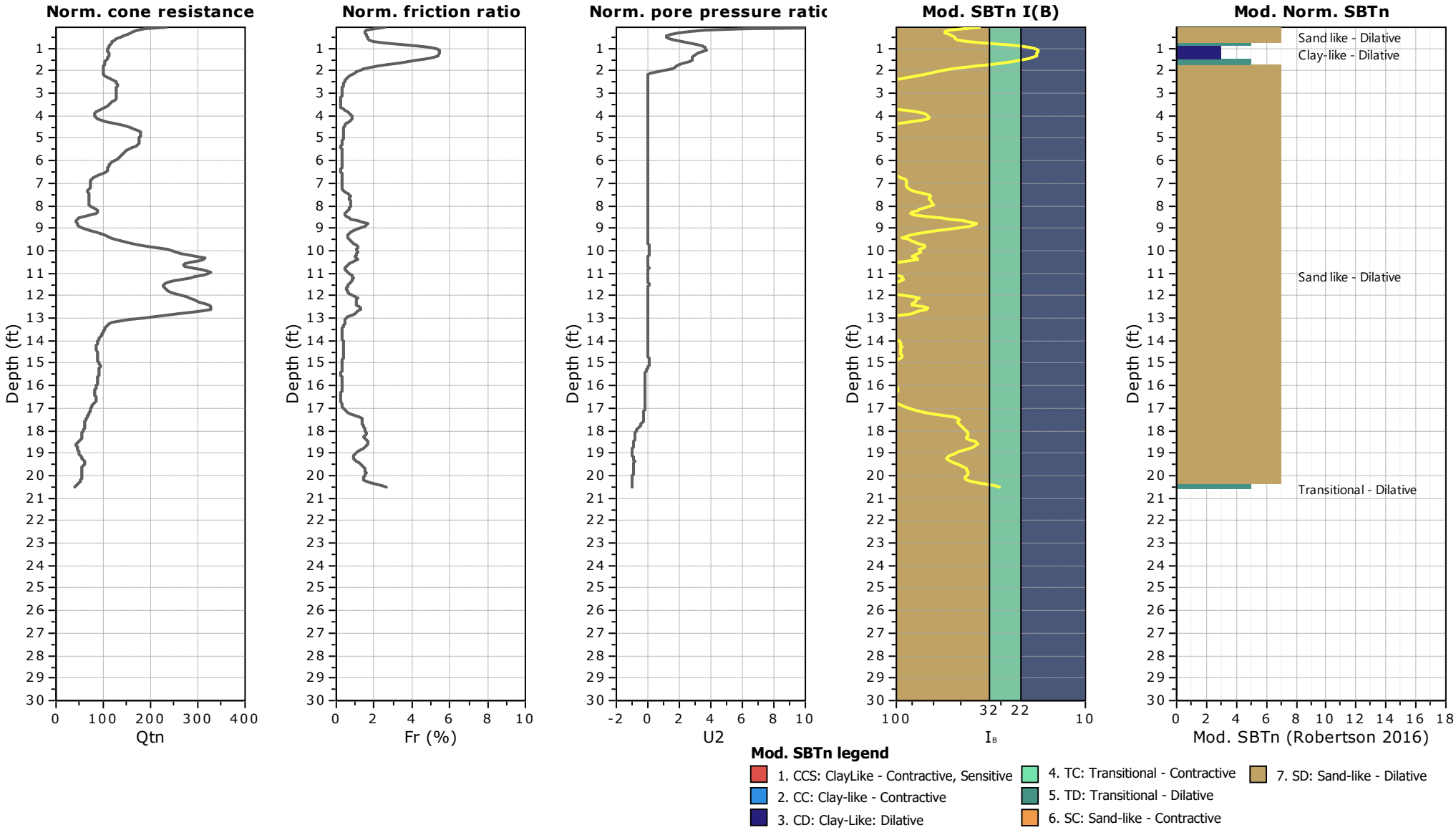

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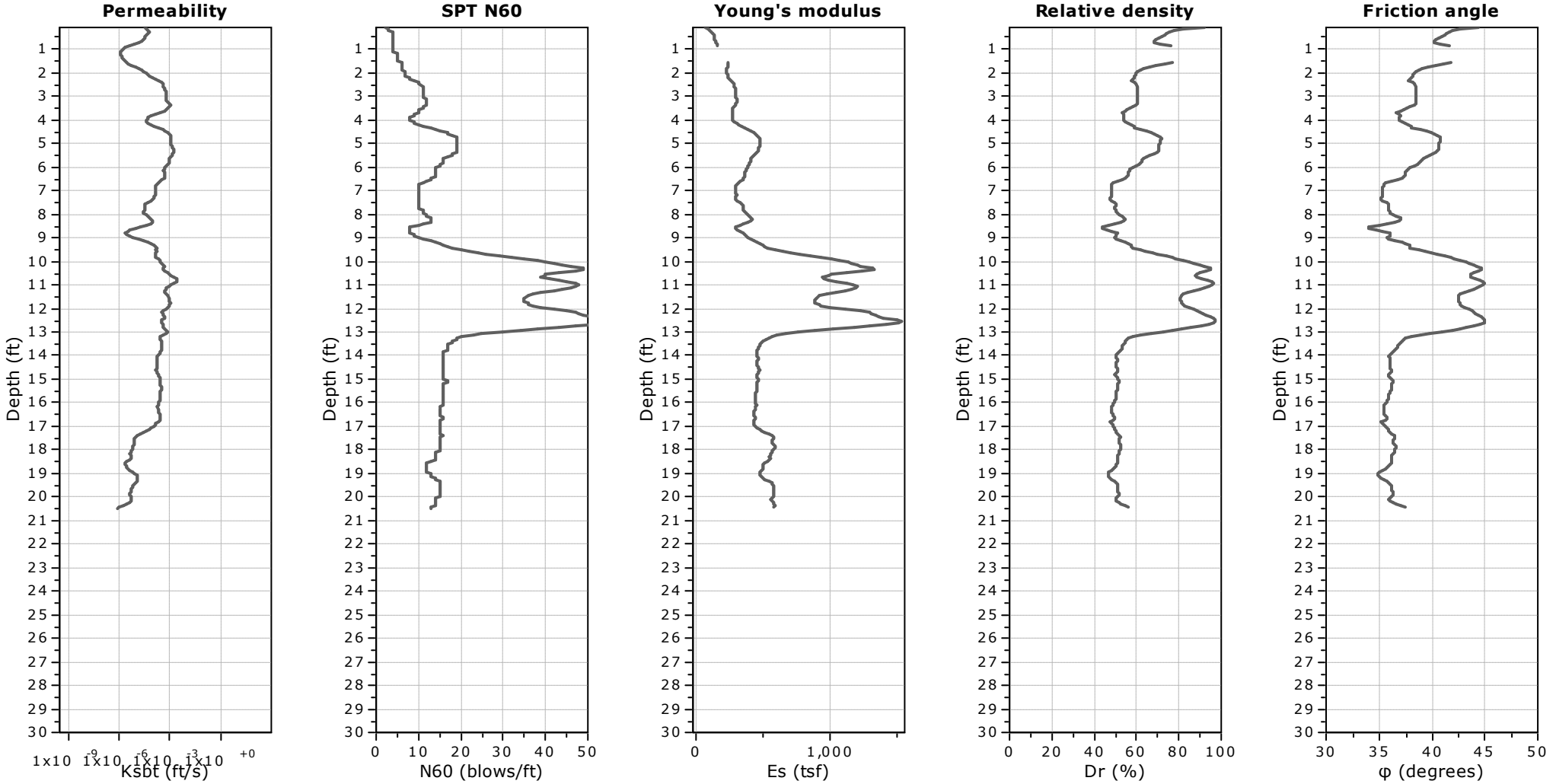

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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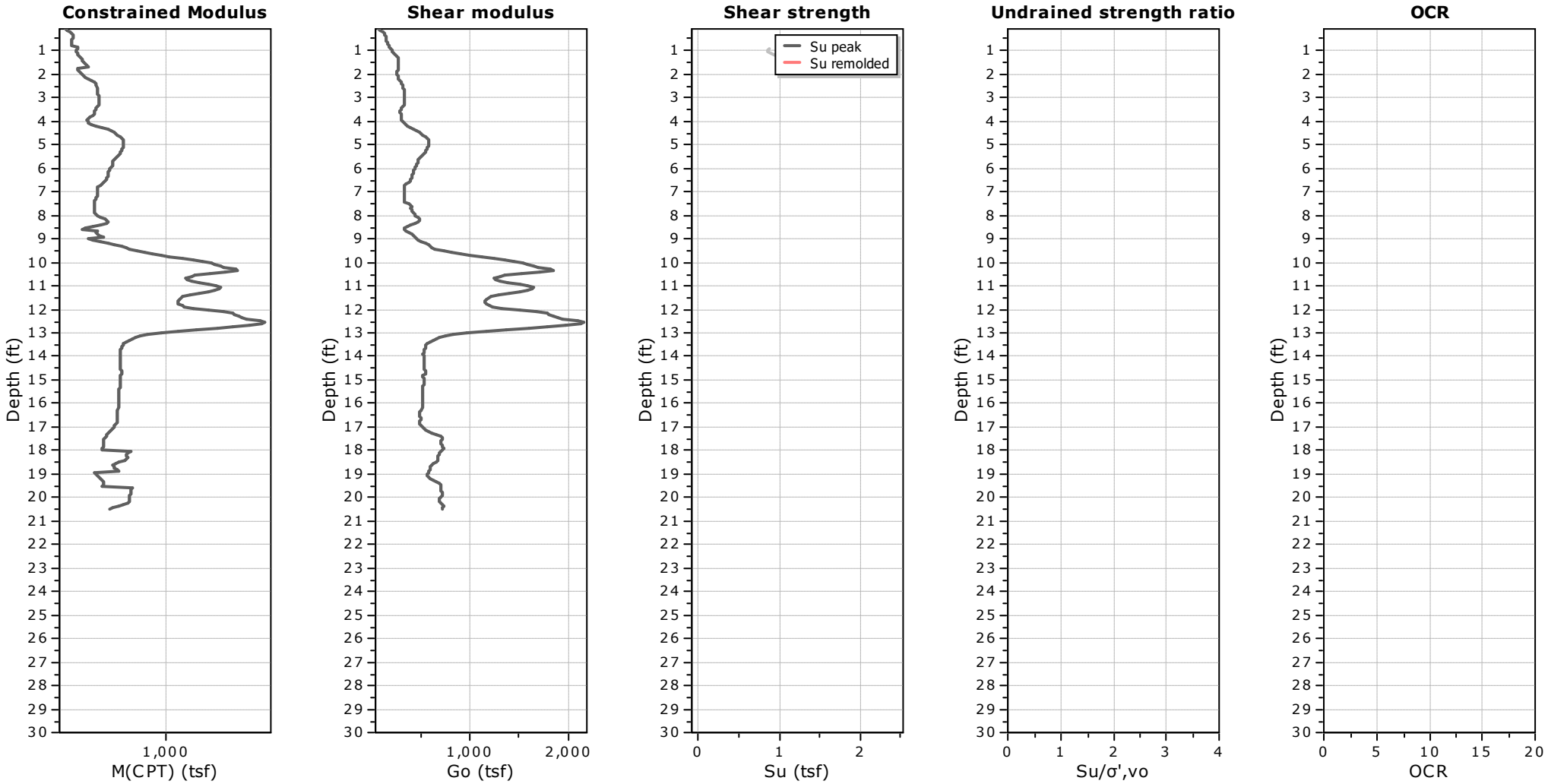

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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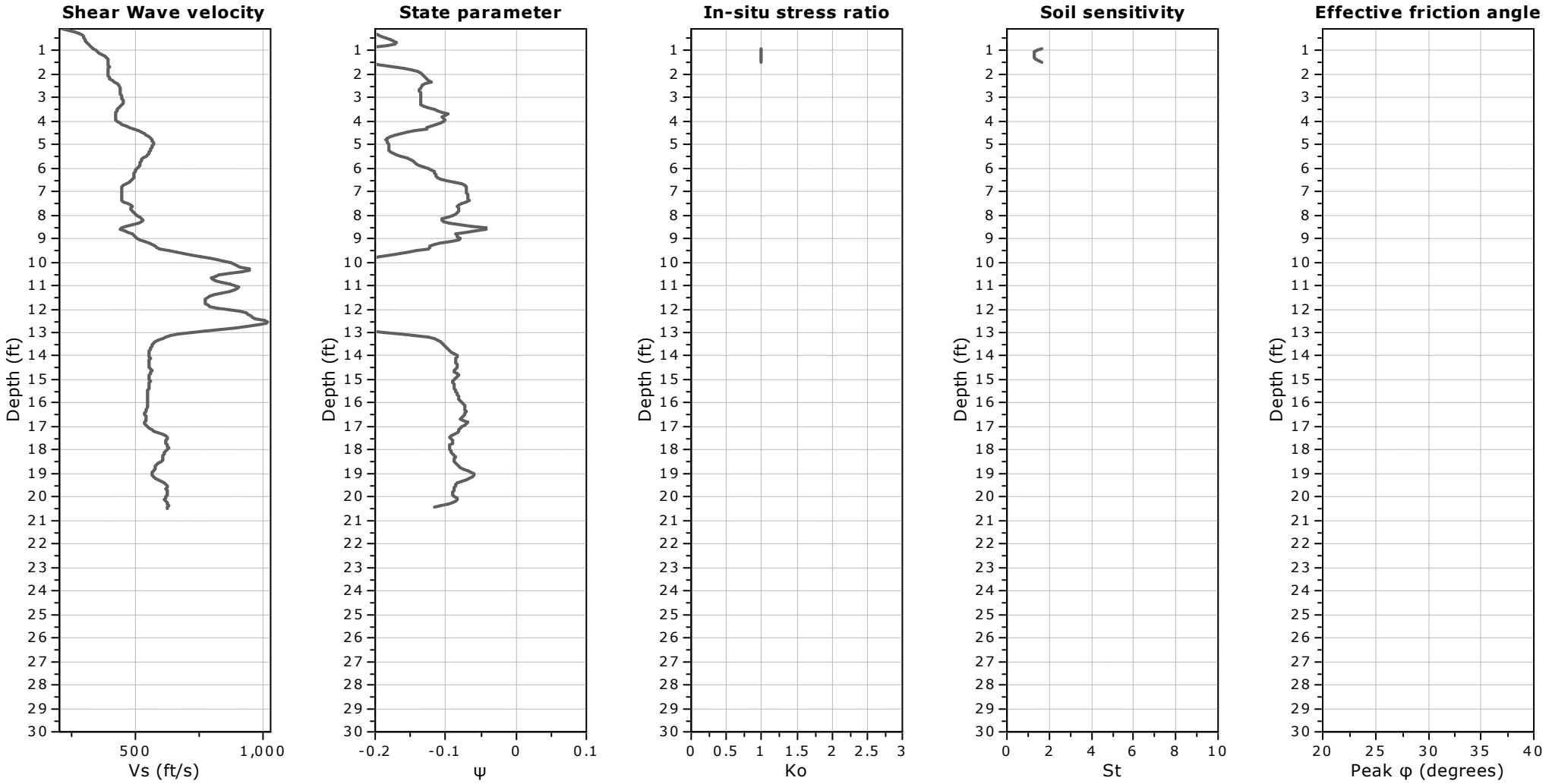

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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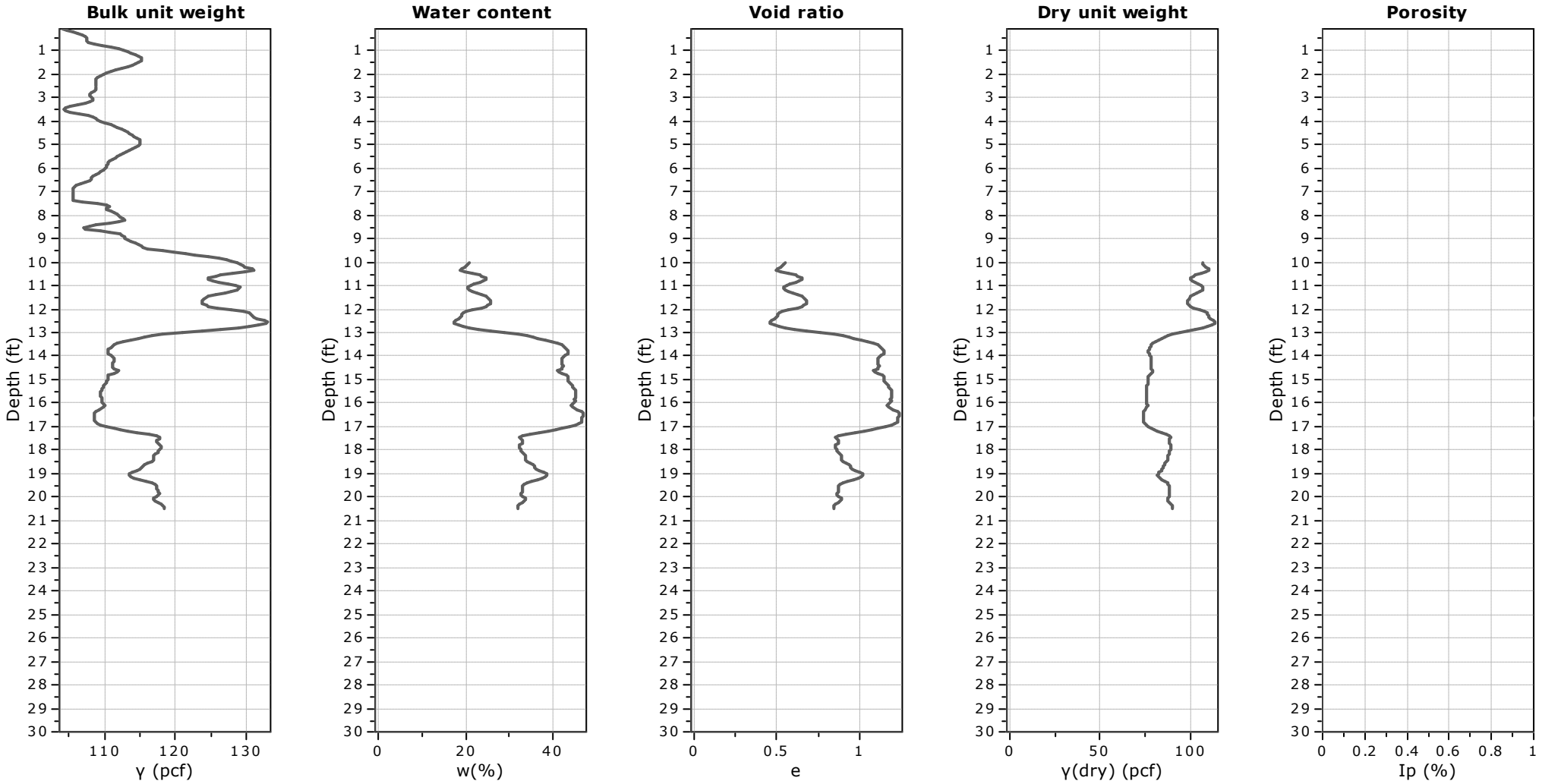

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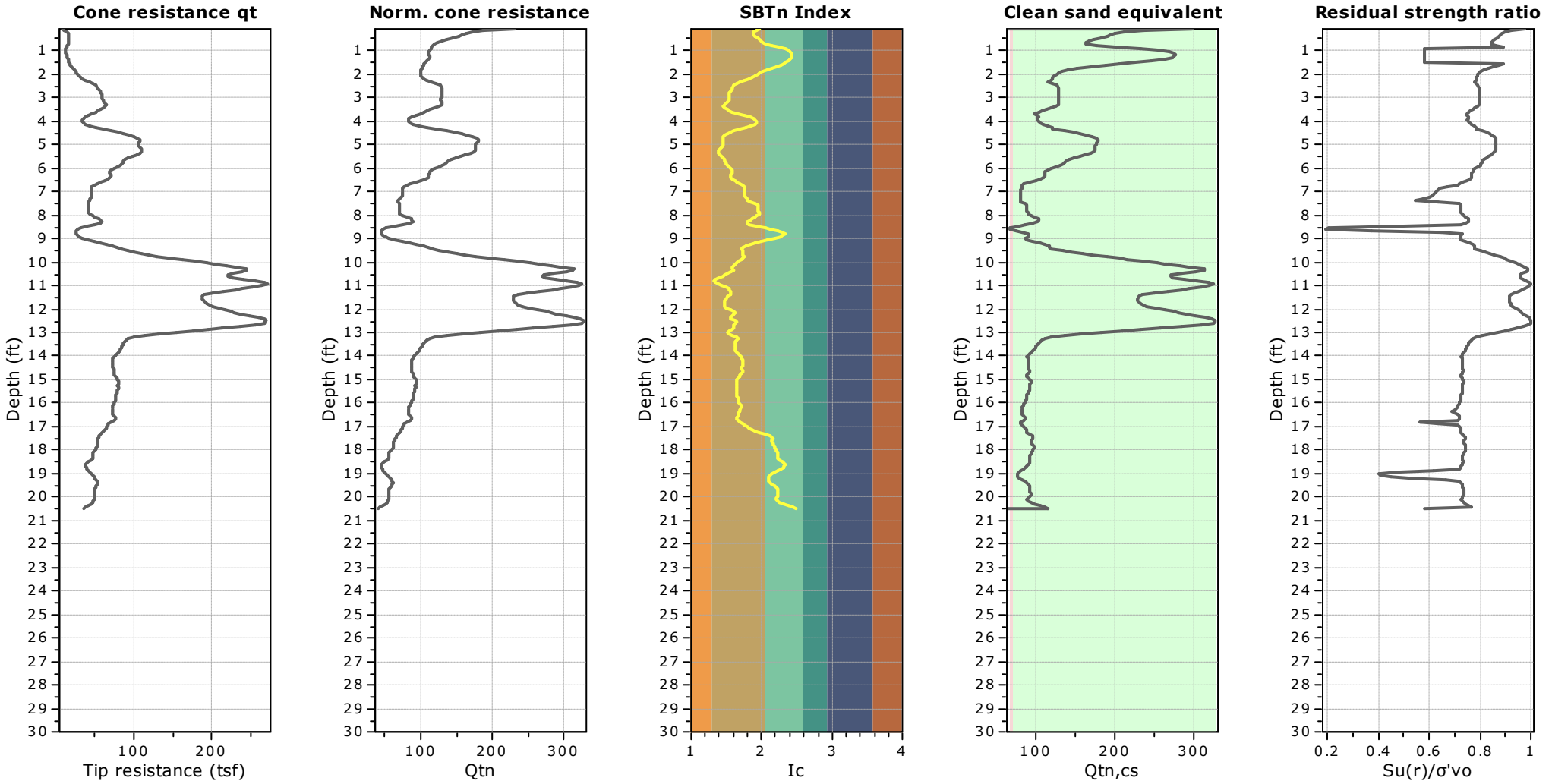

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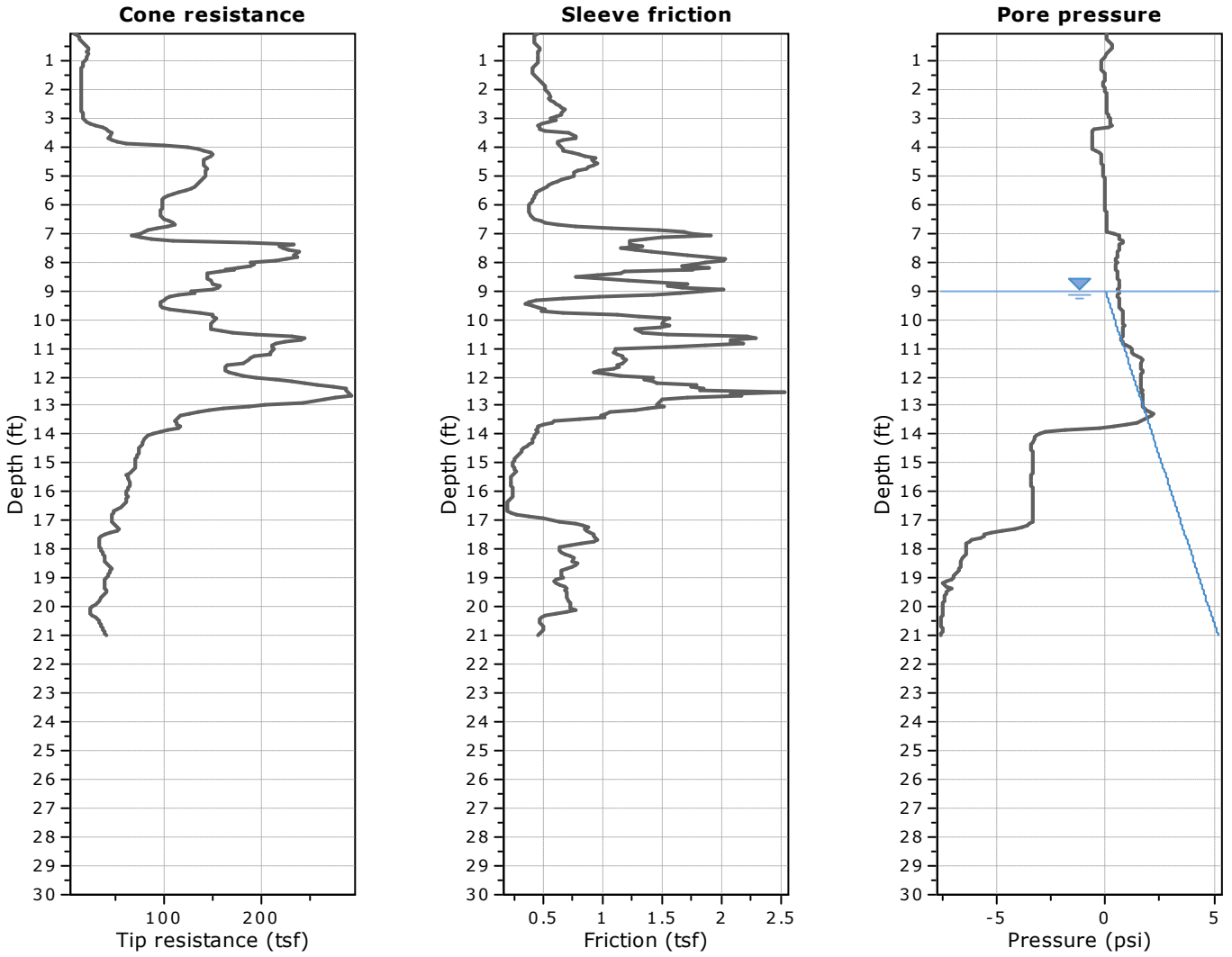
C-25
Total depth: 21.01 ft, Date: 5/14/2024
Surface Elevation: 62.55 ft
Coords: X:572545.04, Y:555821.47
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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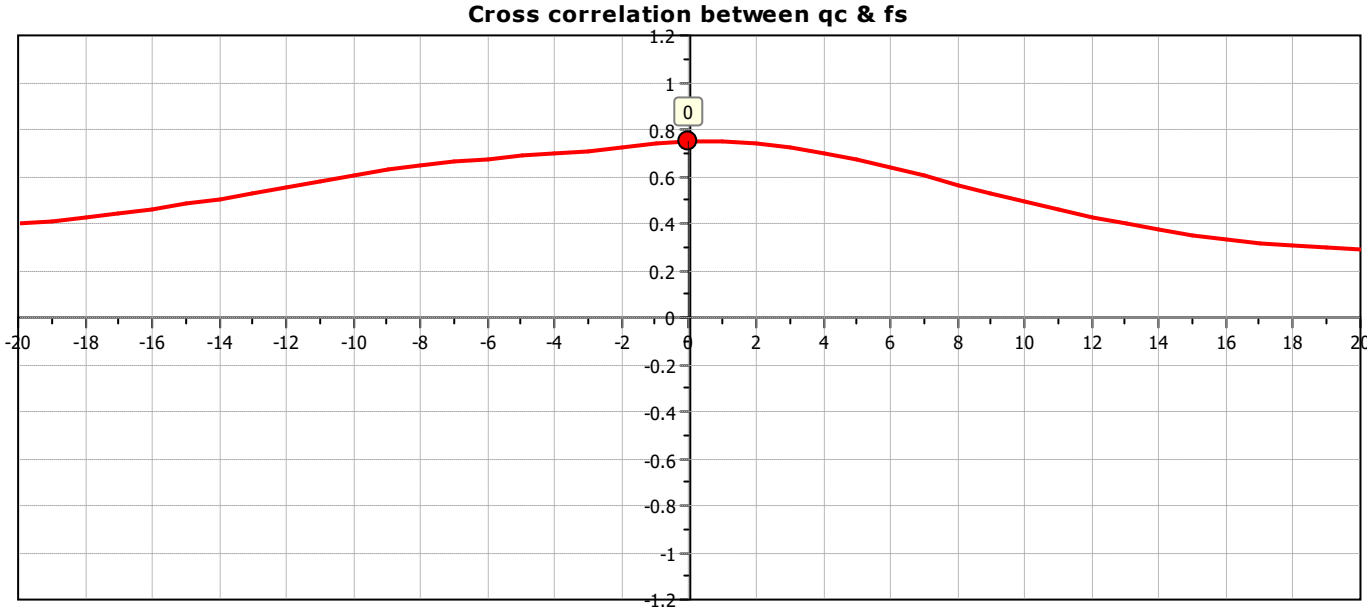

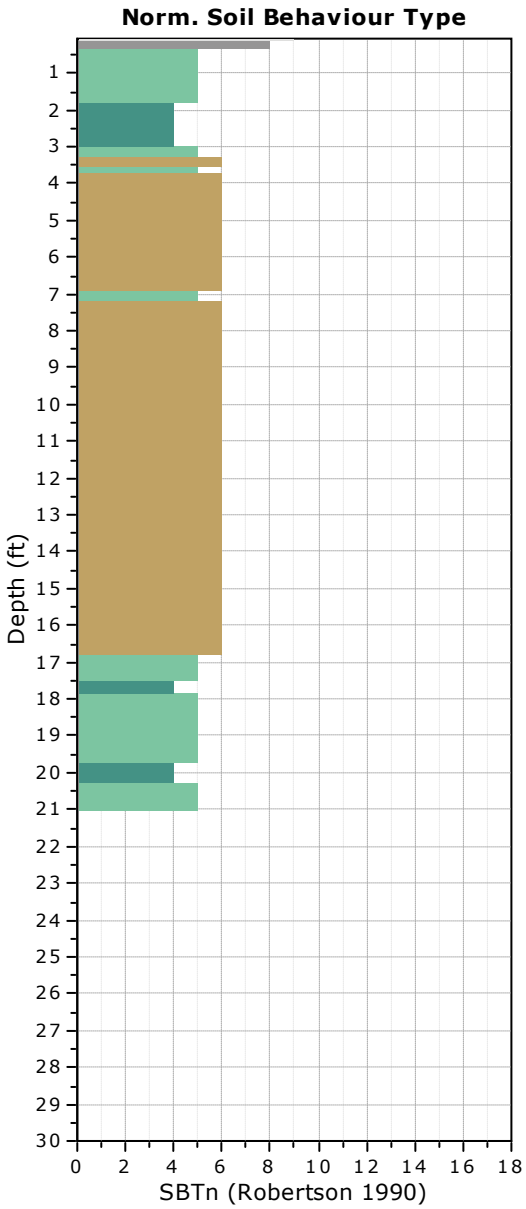

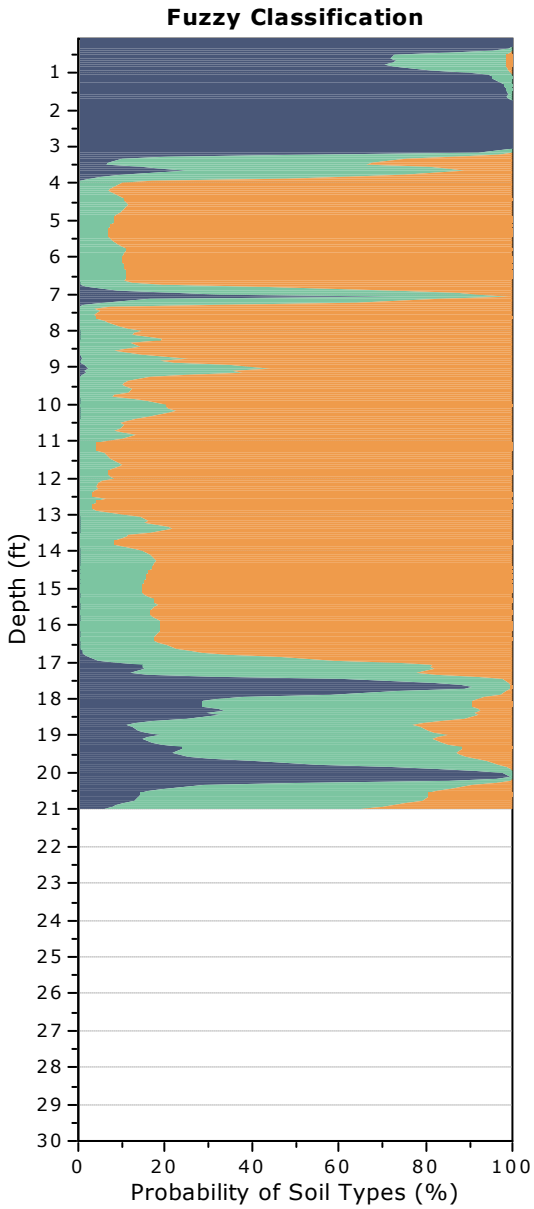

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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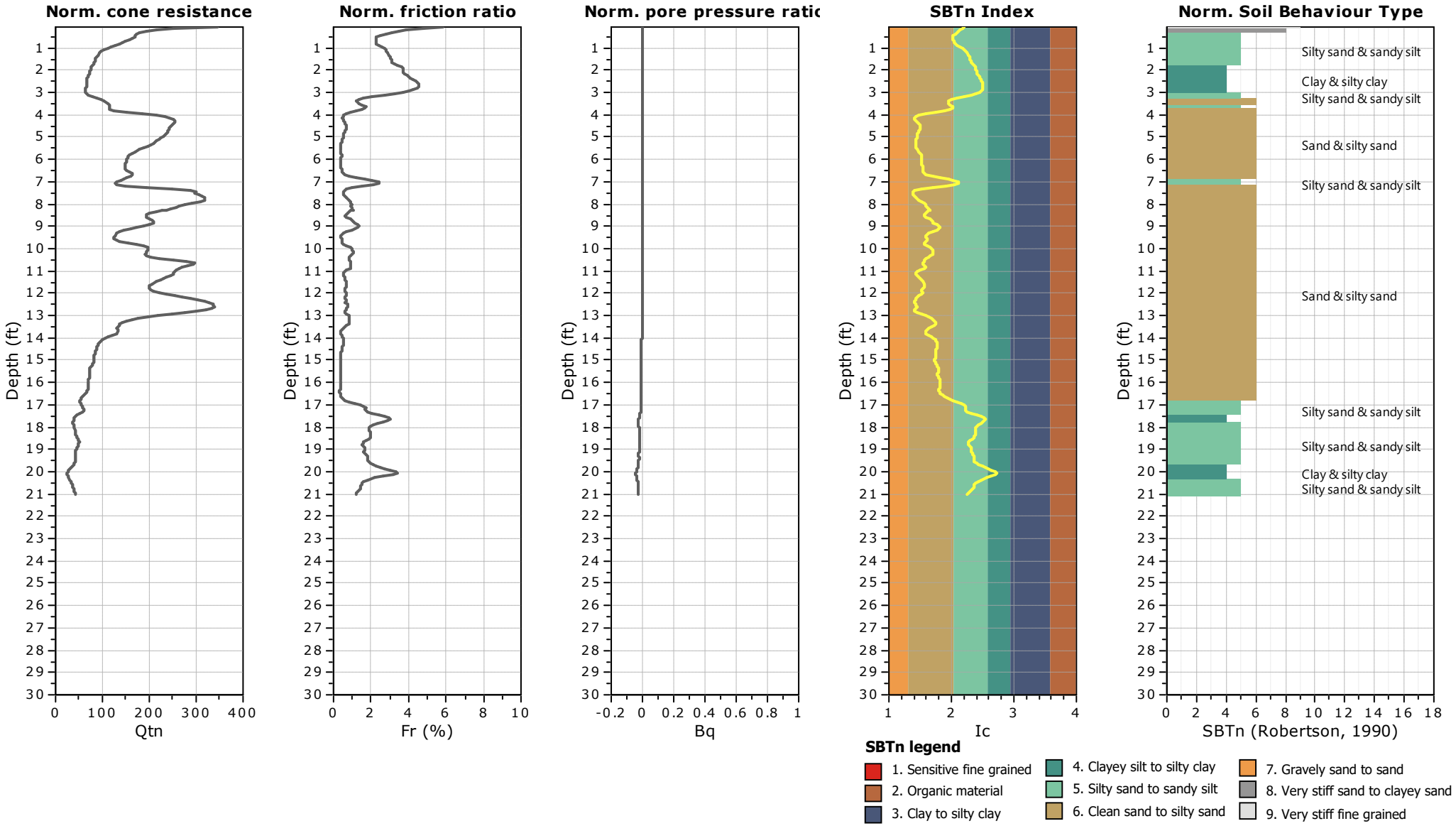

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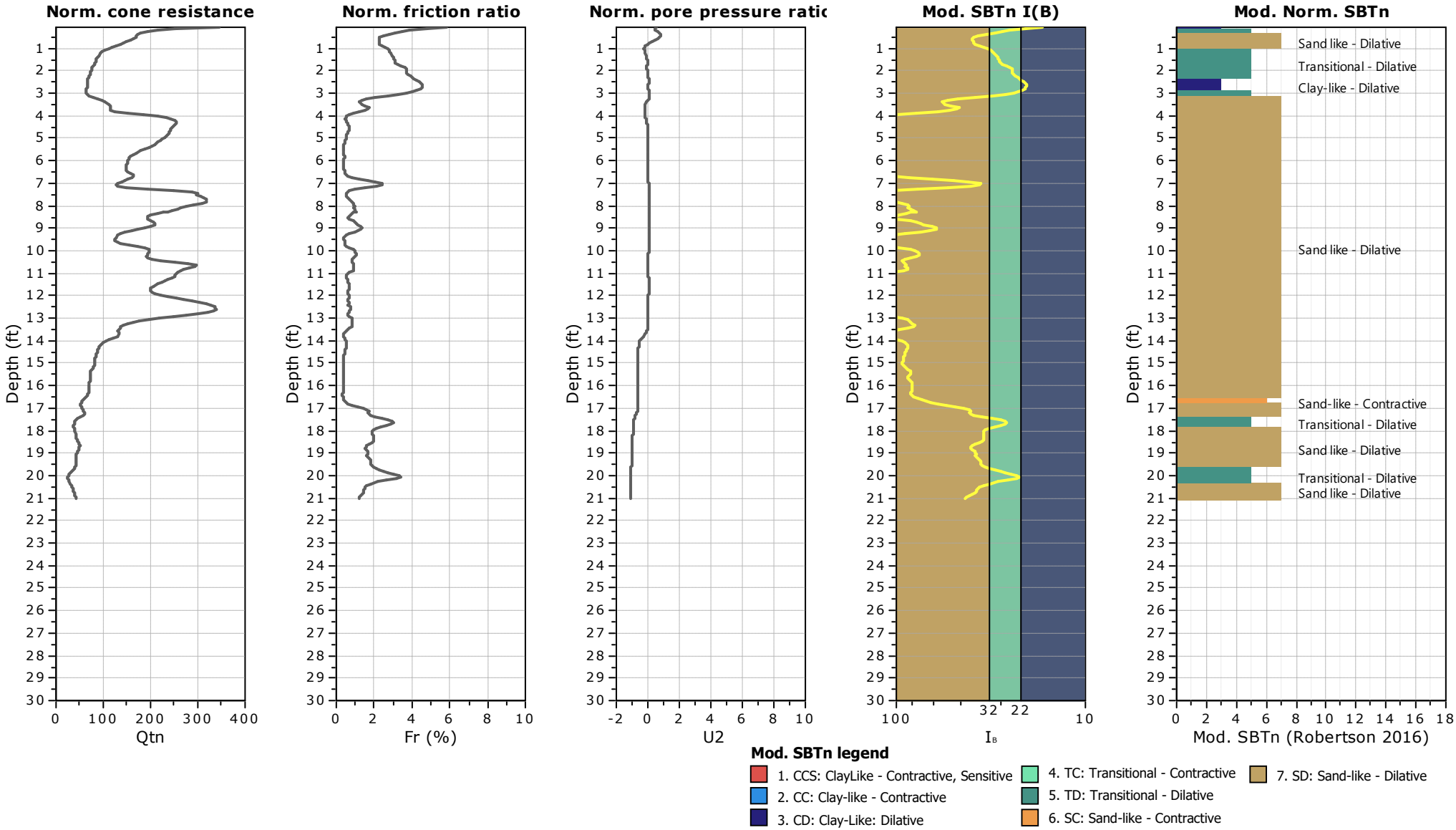

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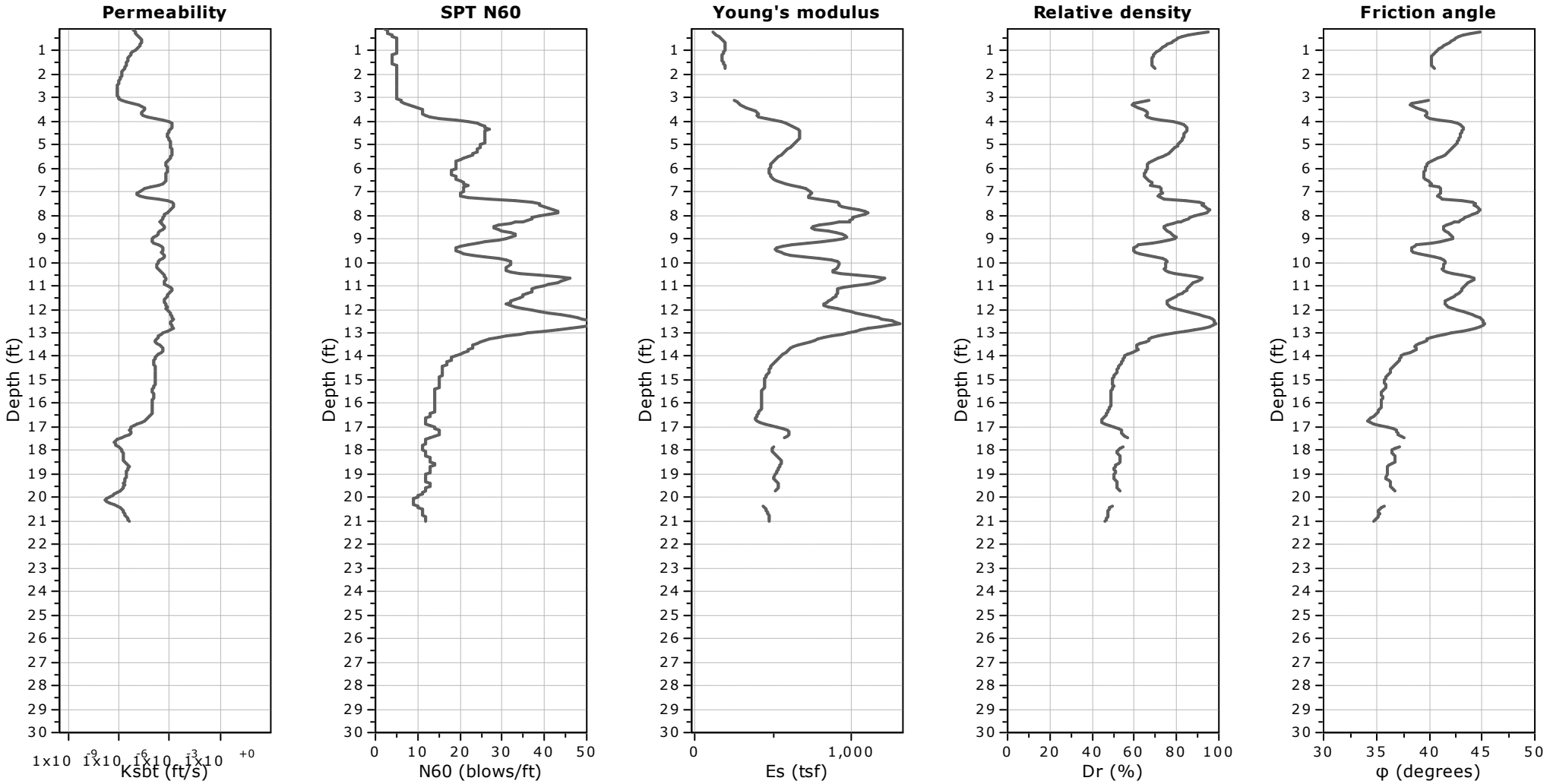

Calculation parameters

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SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
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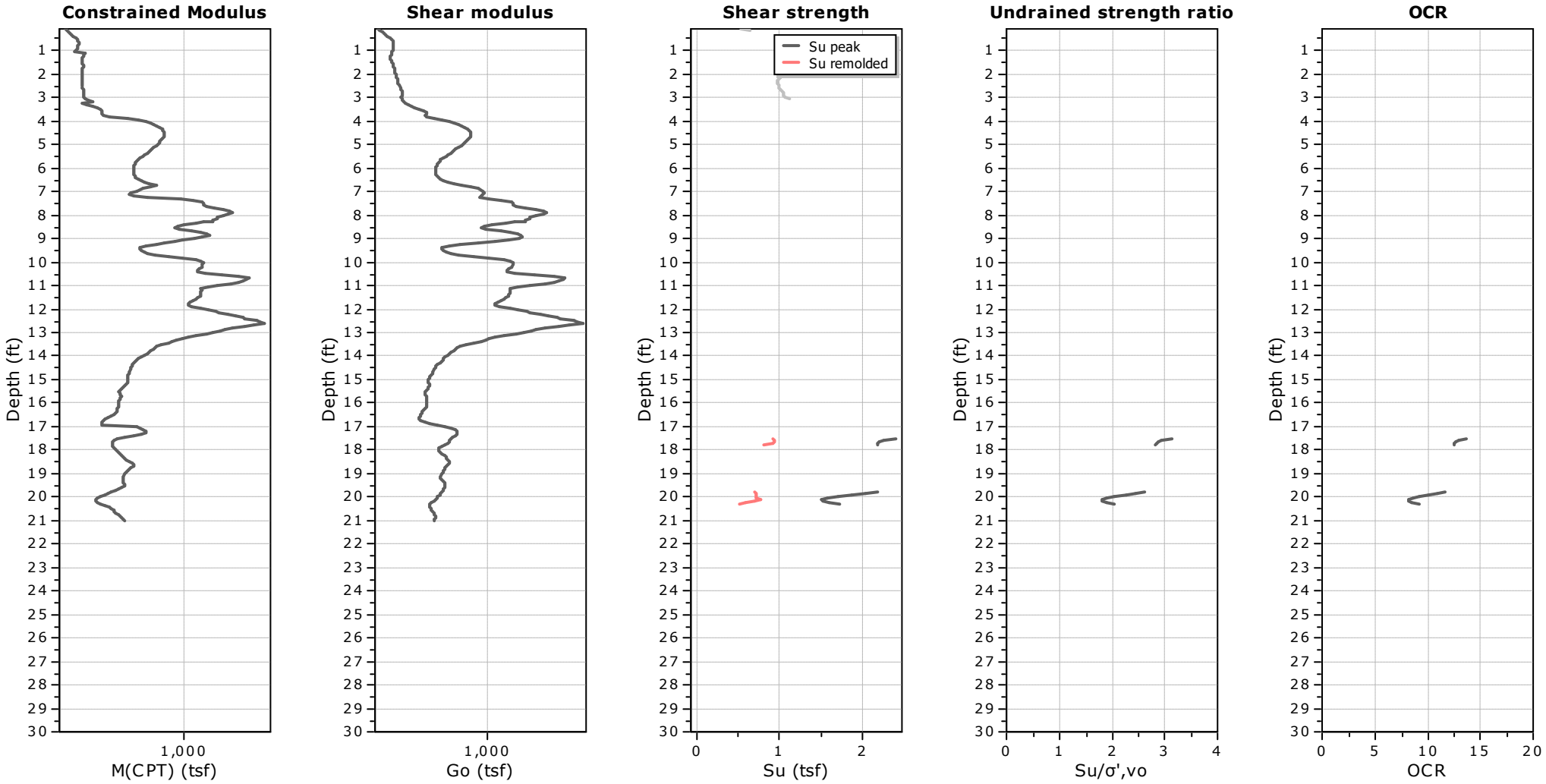

Calculation parameters

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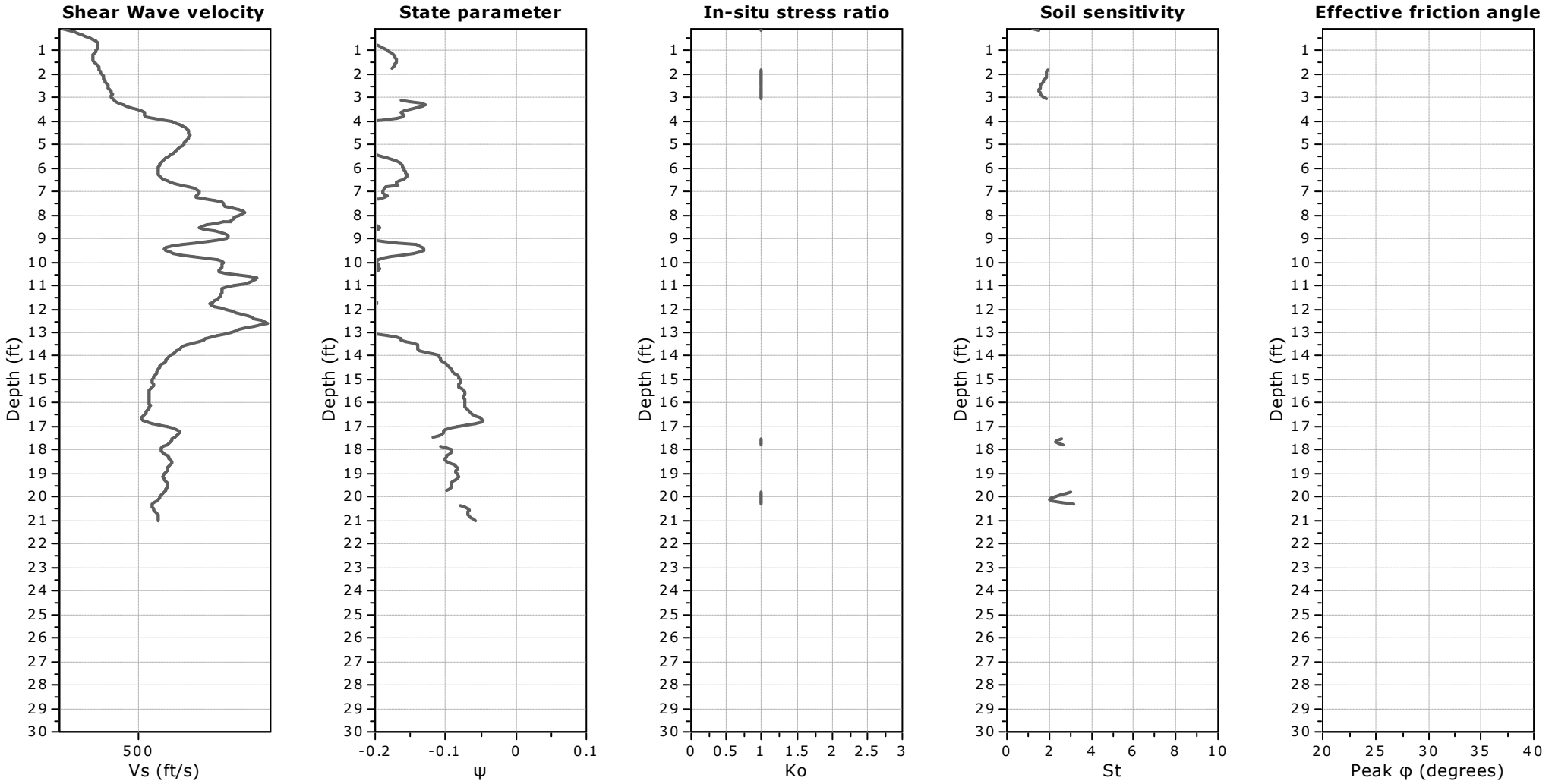

Calculation parameters

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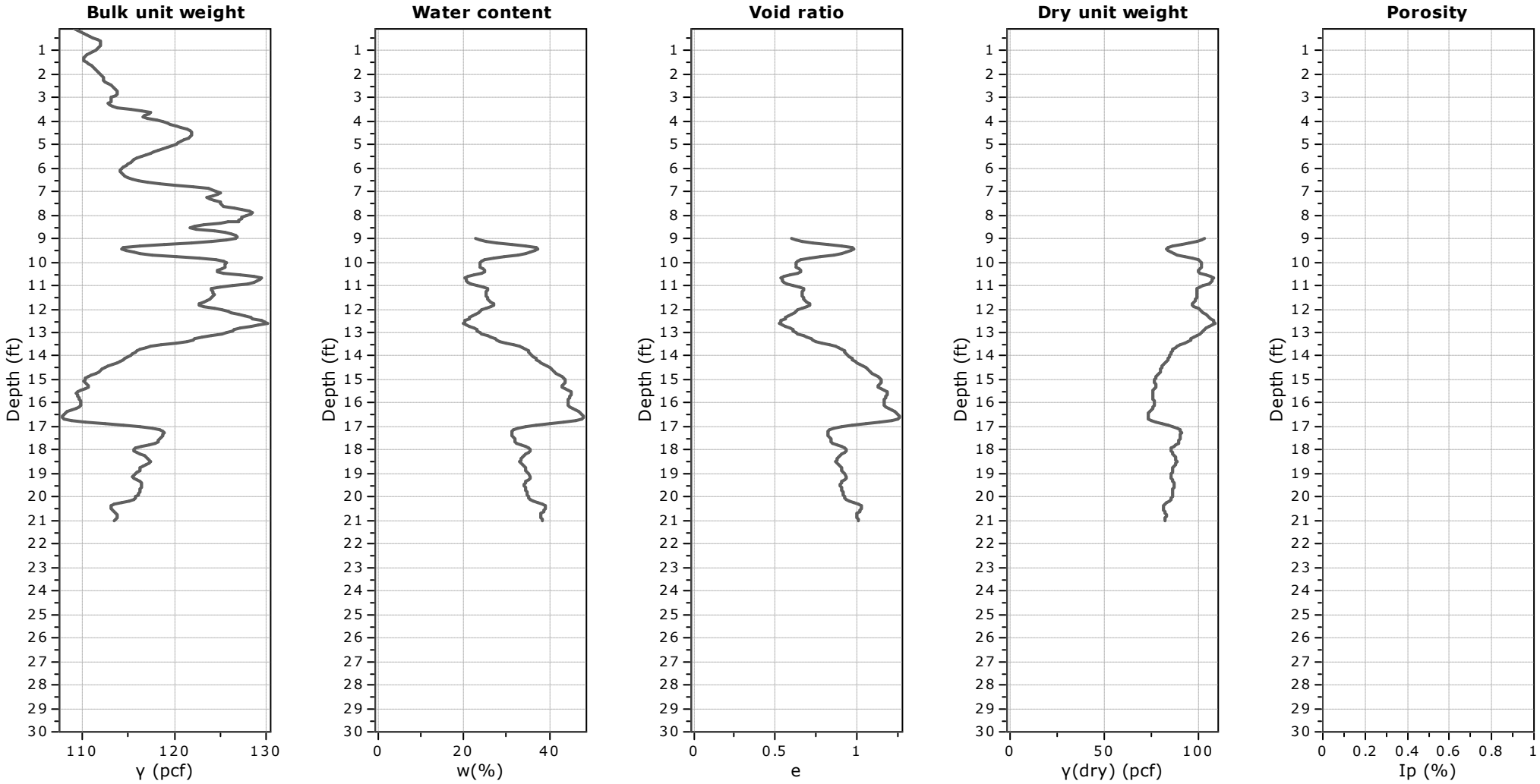

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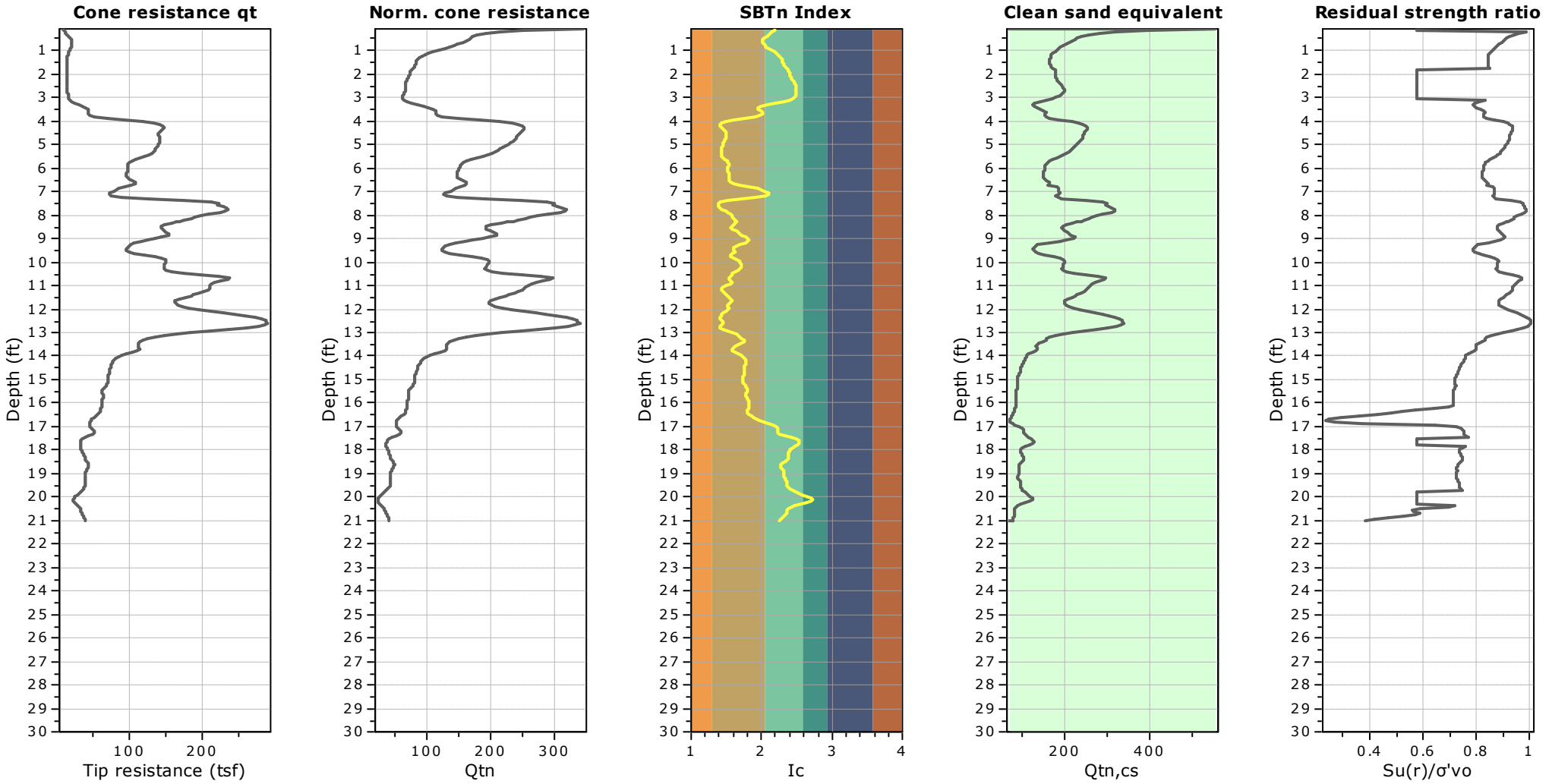

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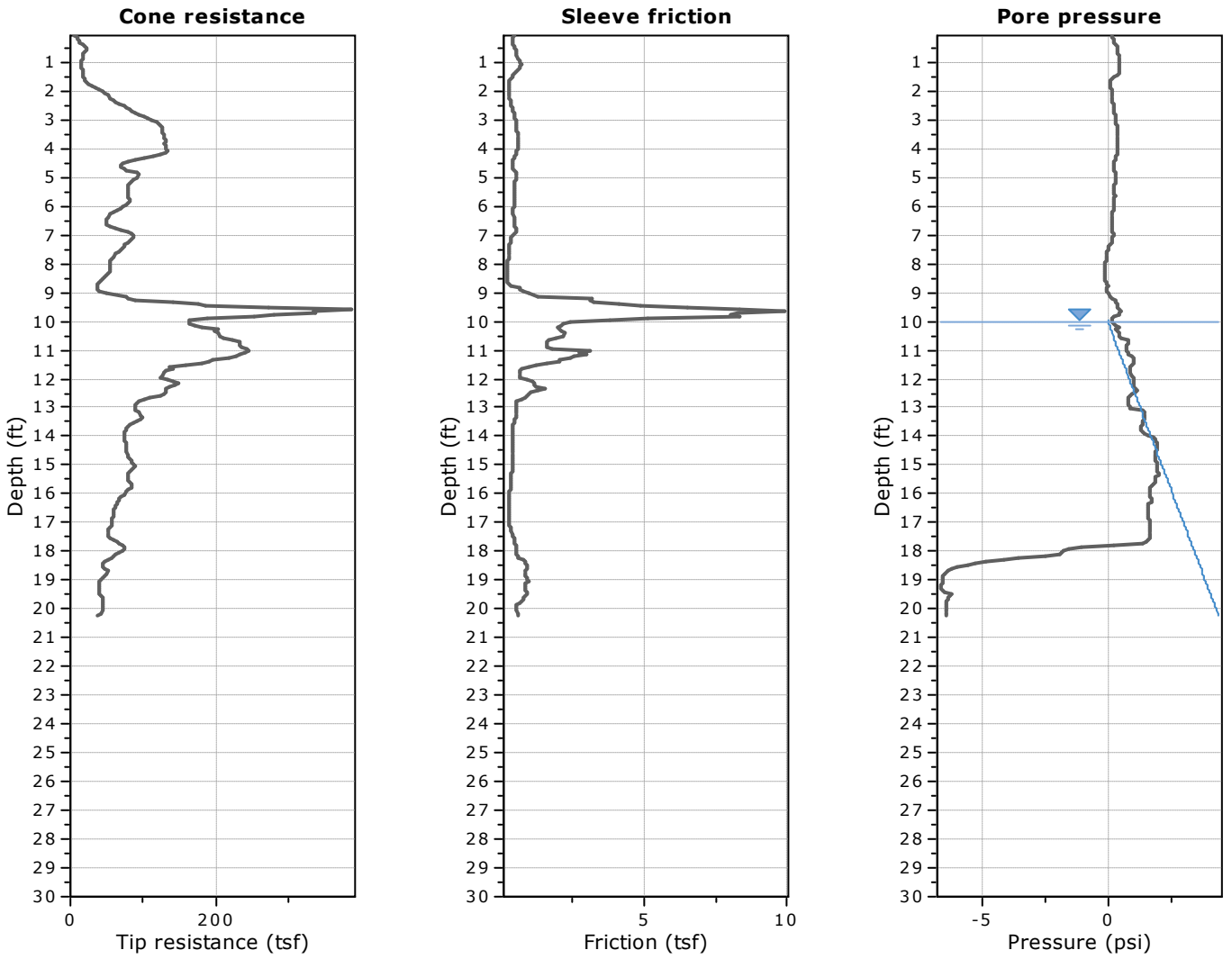
C-26
Total depth: 20.20 ft, Date: 5/14/2024
Surface Elevation: 64.27 ft
Coords: X:572573.67, Y:556022.08
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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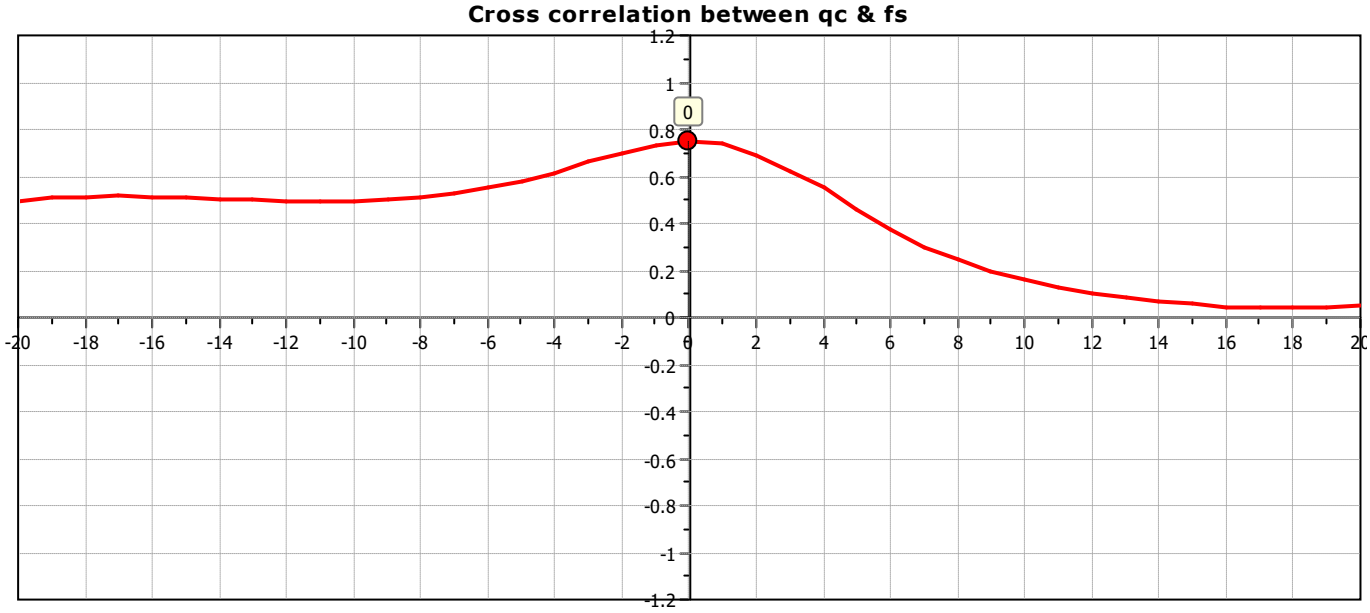

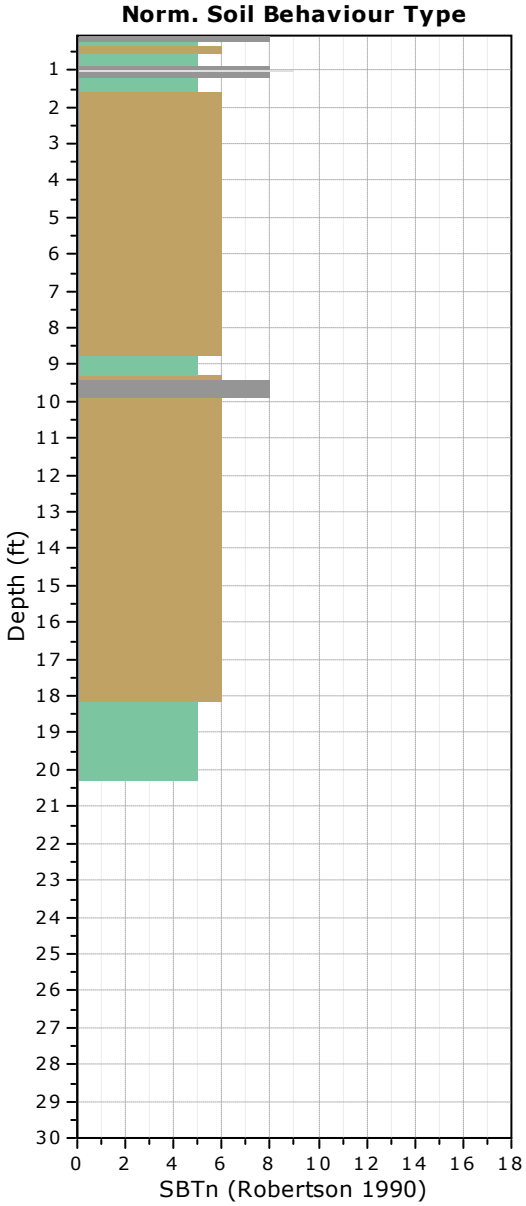

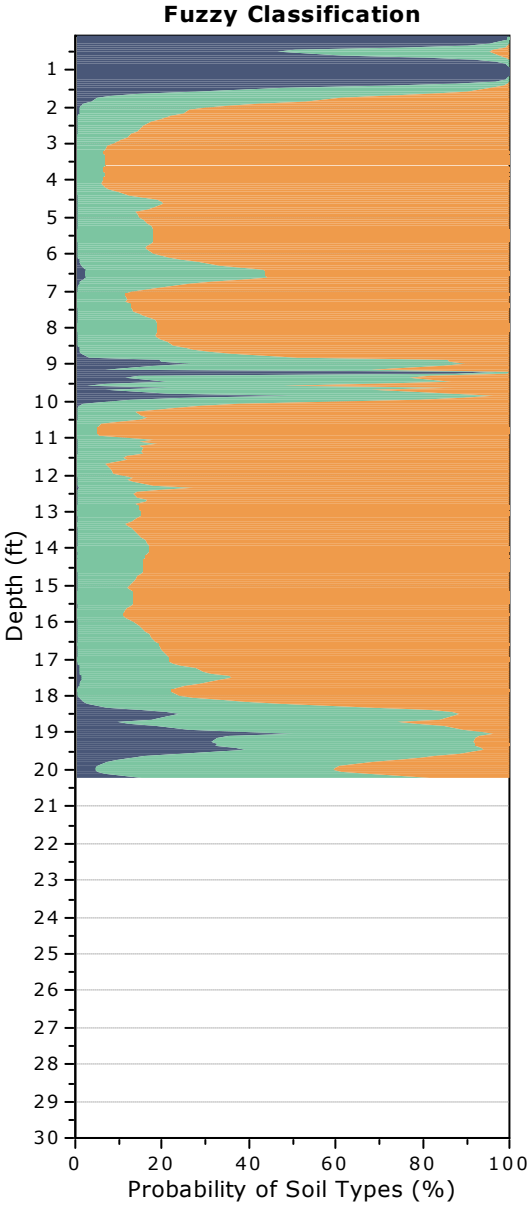

Fuzzy classifiaction legend

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- Highly probable mixture soil
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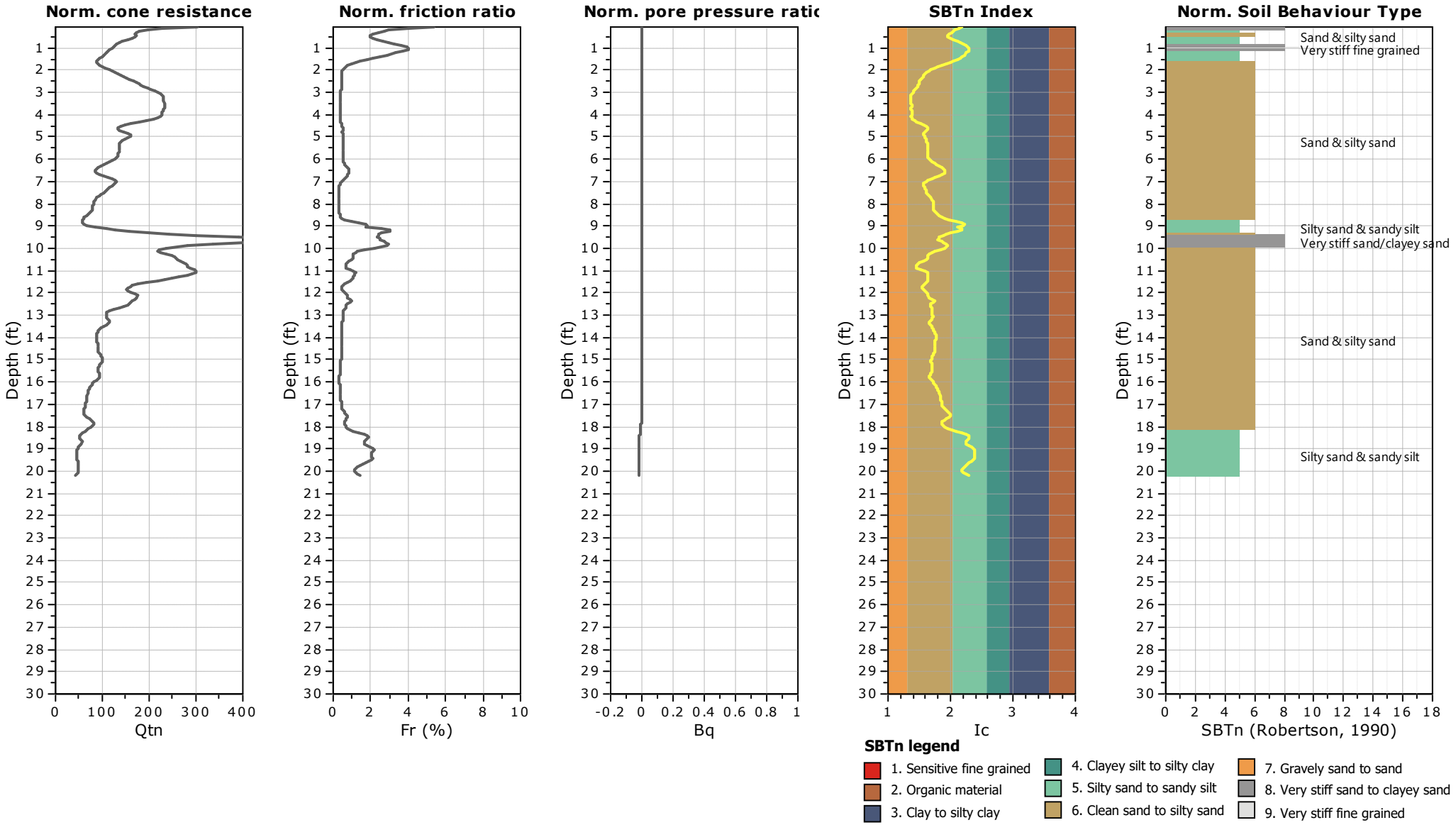

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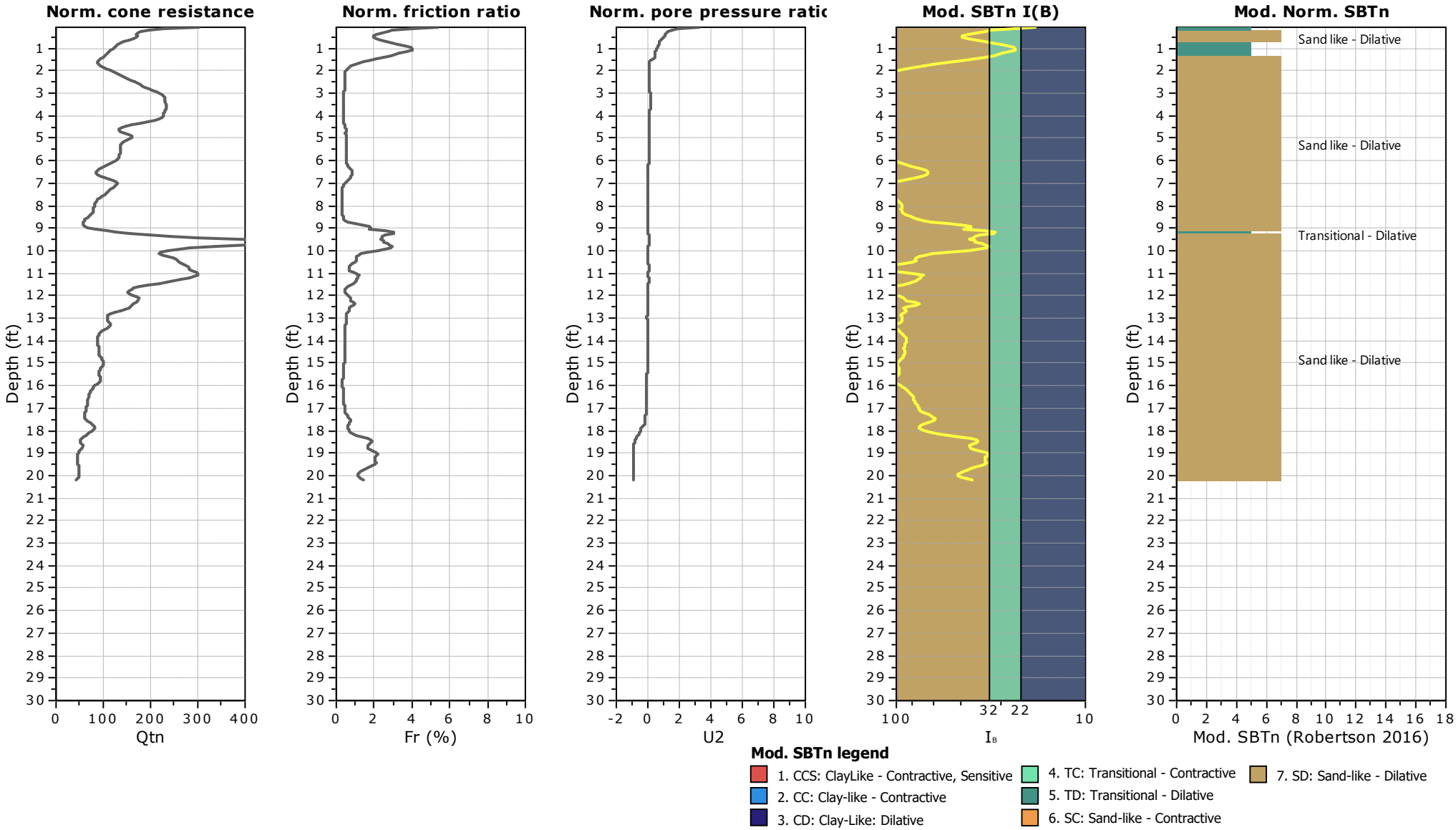

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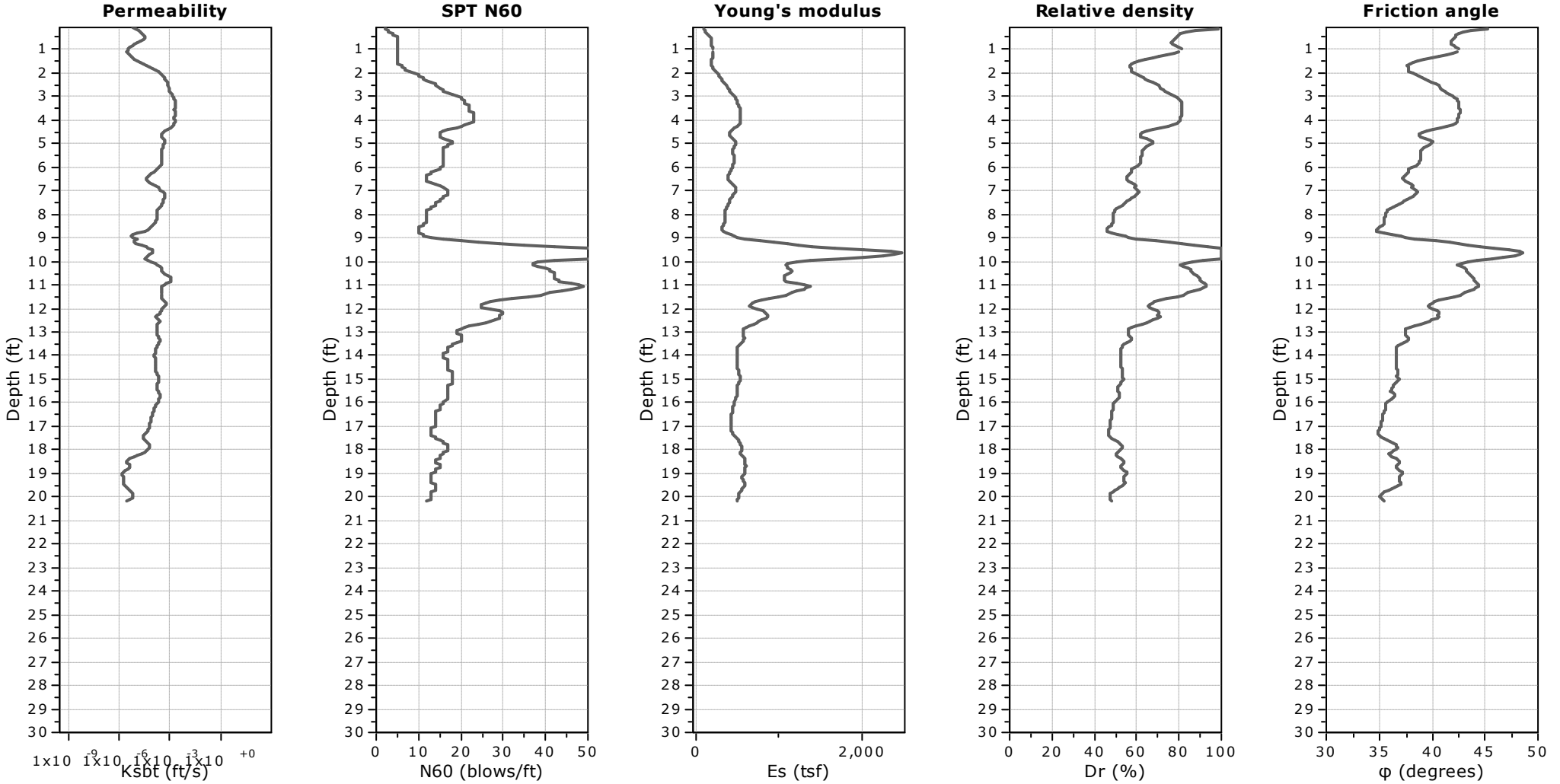
C-26
Total depth: 20.20 ft, Date: 5/14/2024
Surface Elevation: 64.27 ft
Coords: X:572573.67, Y:556022.08
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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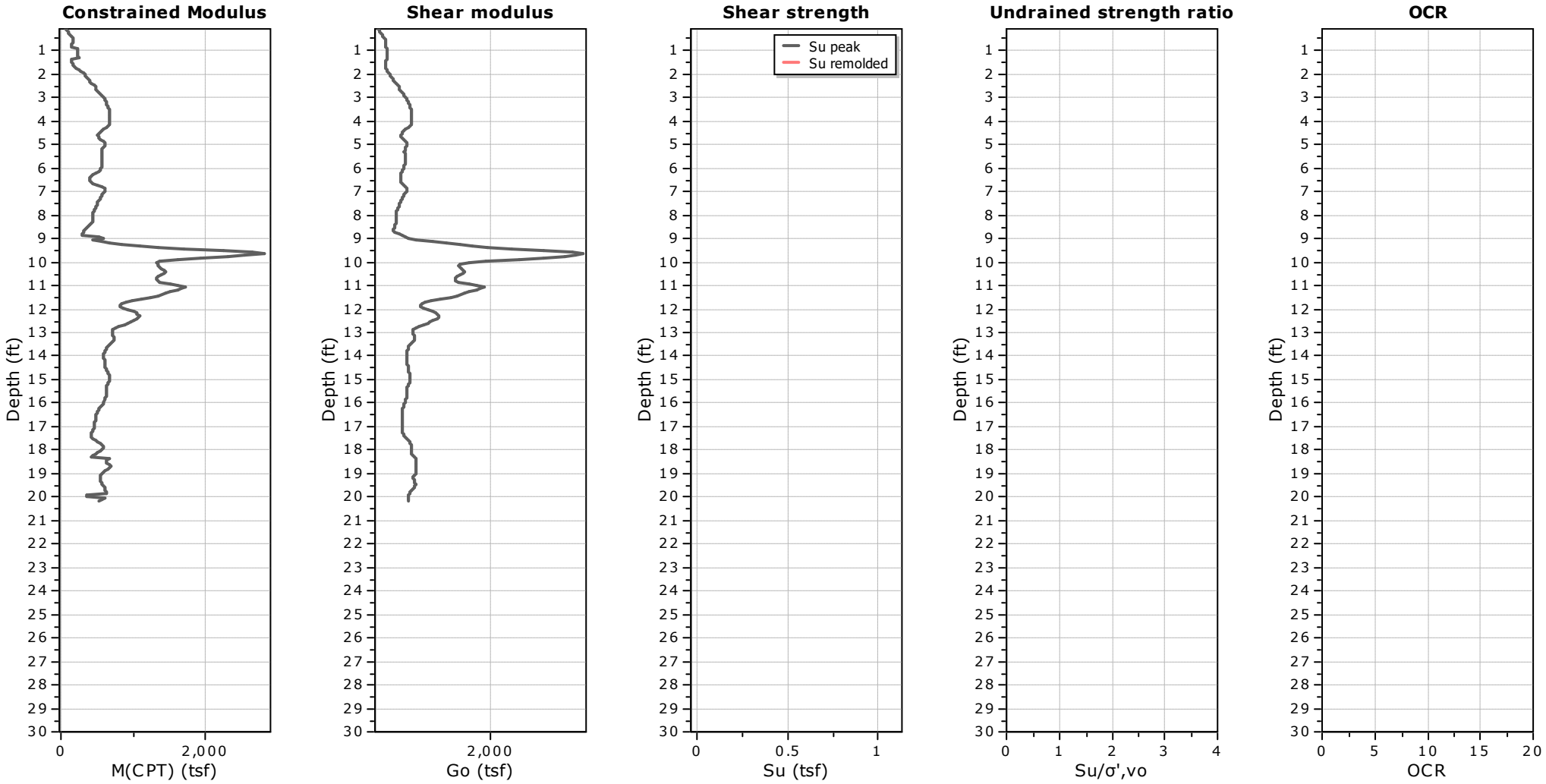

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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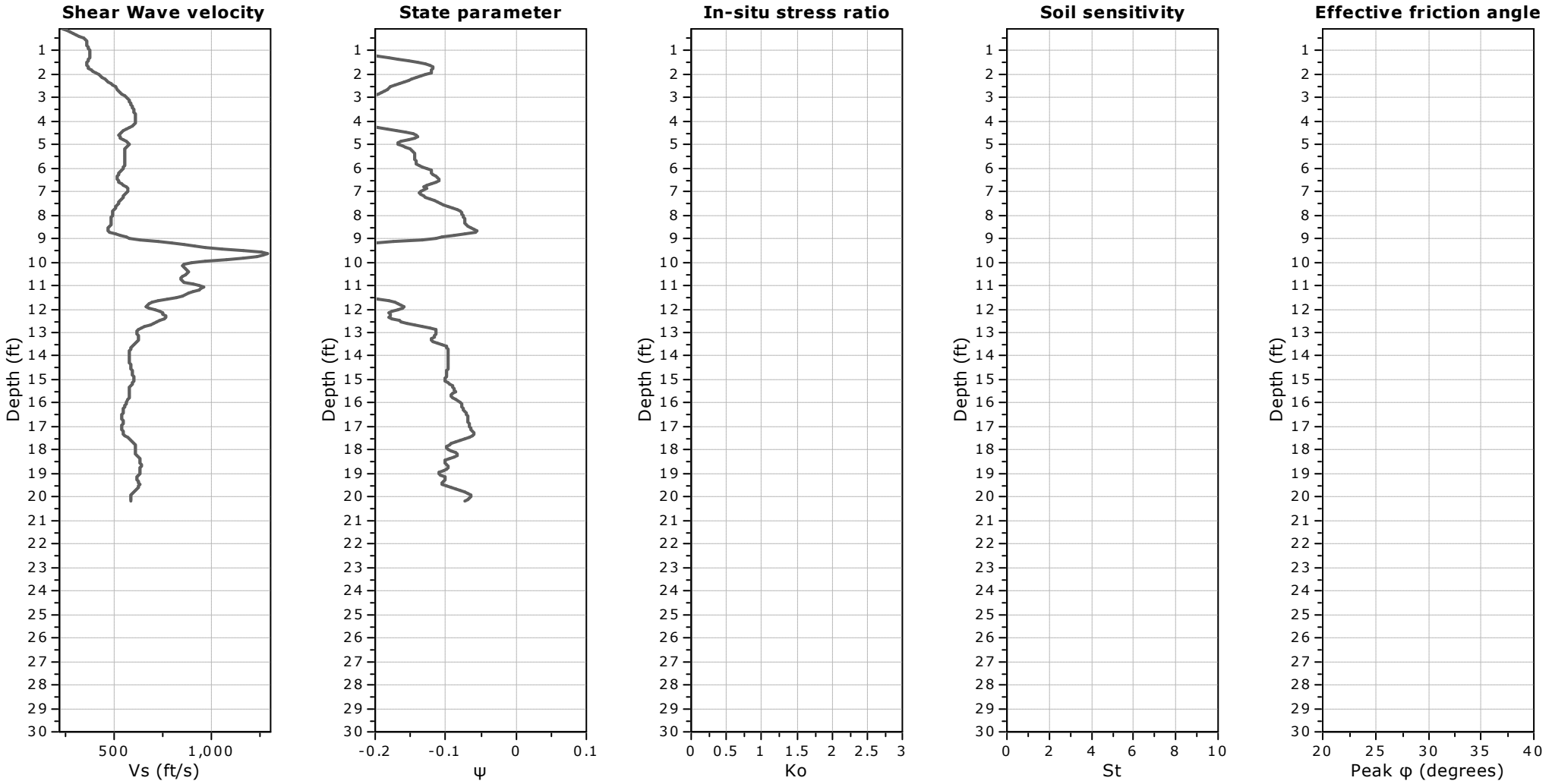

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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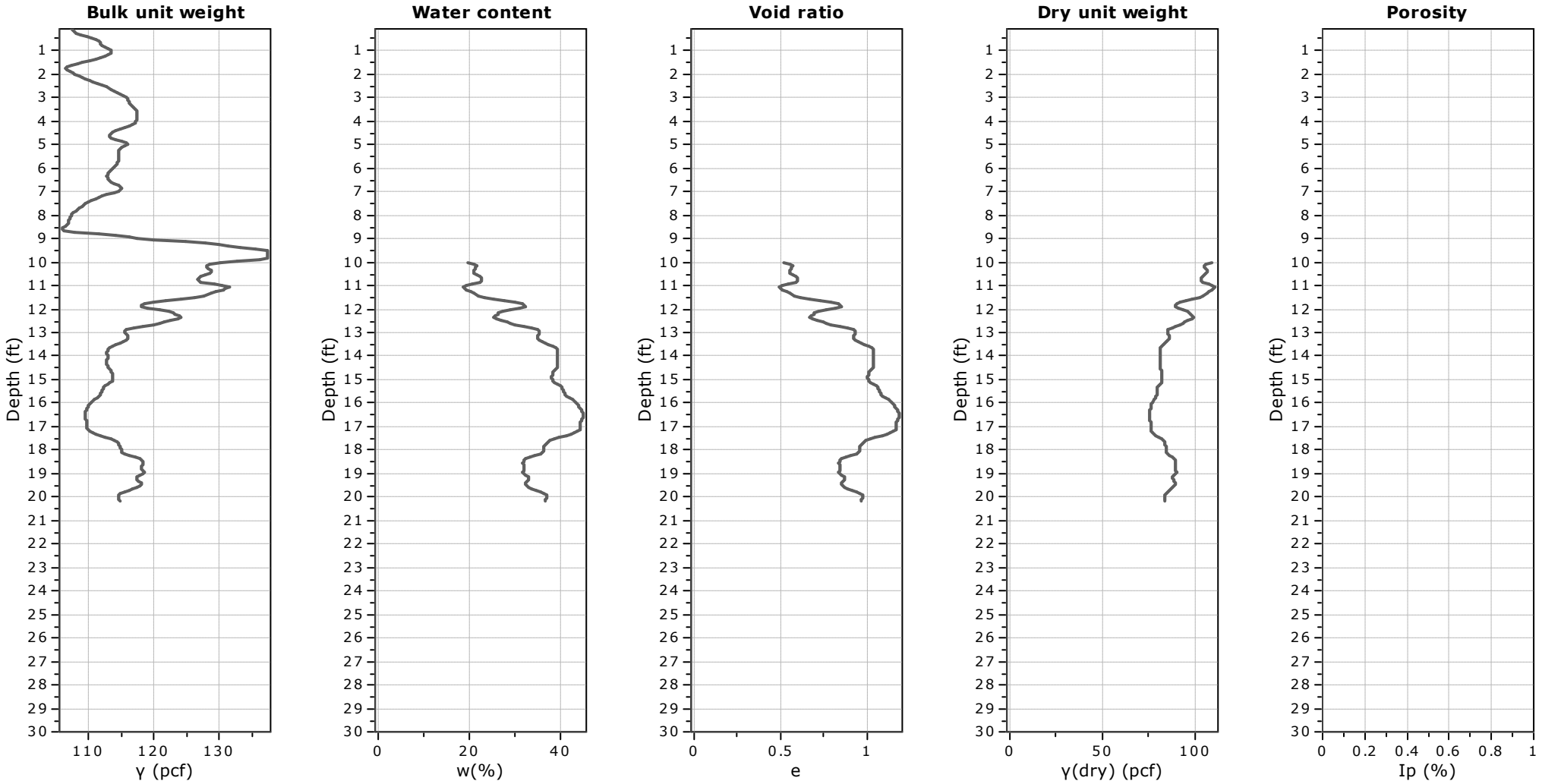

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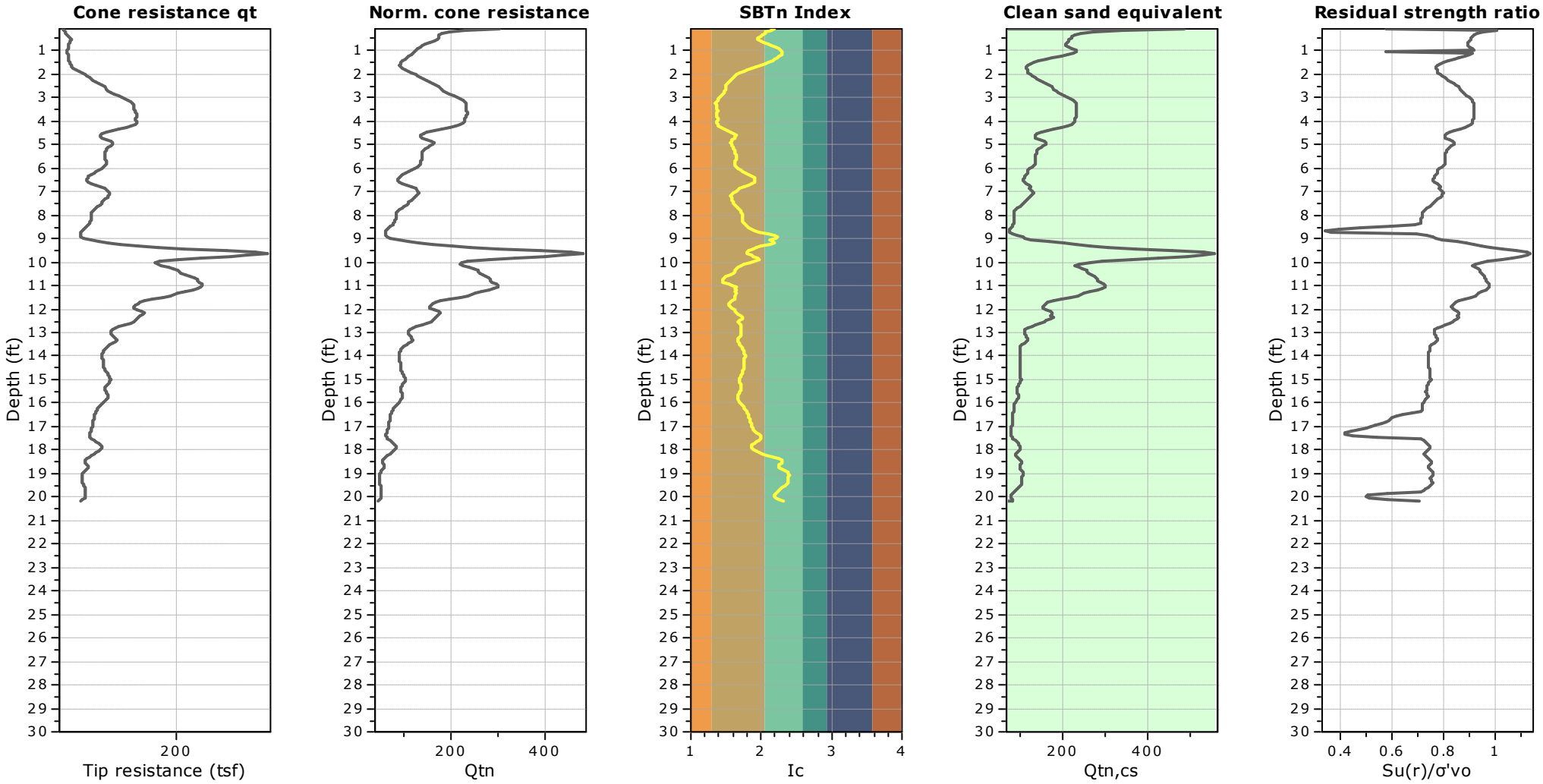

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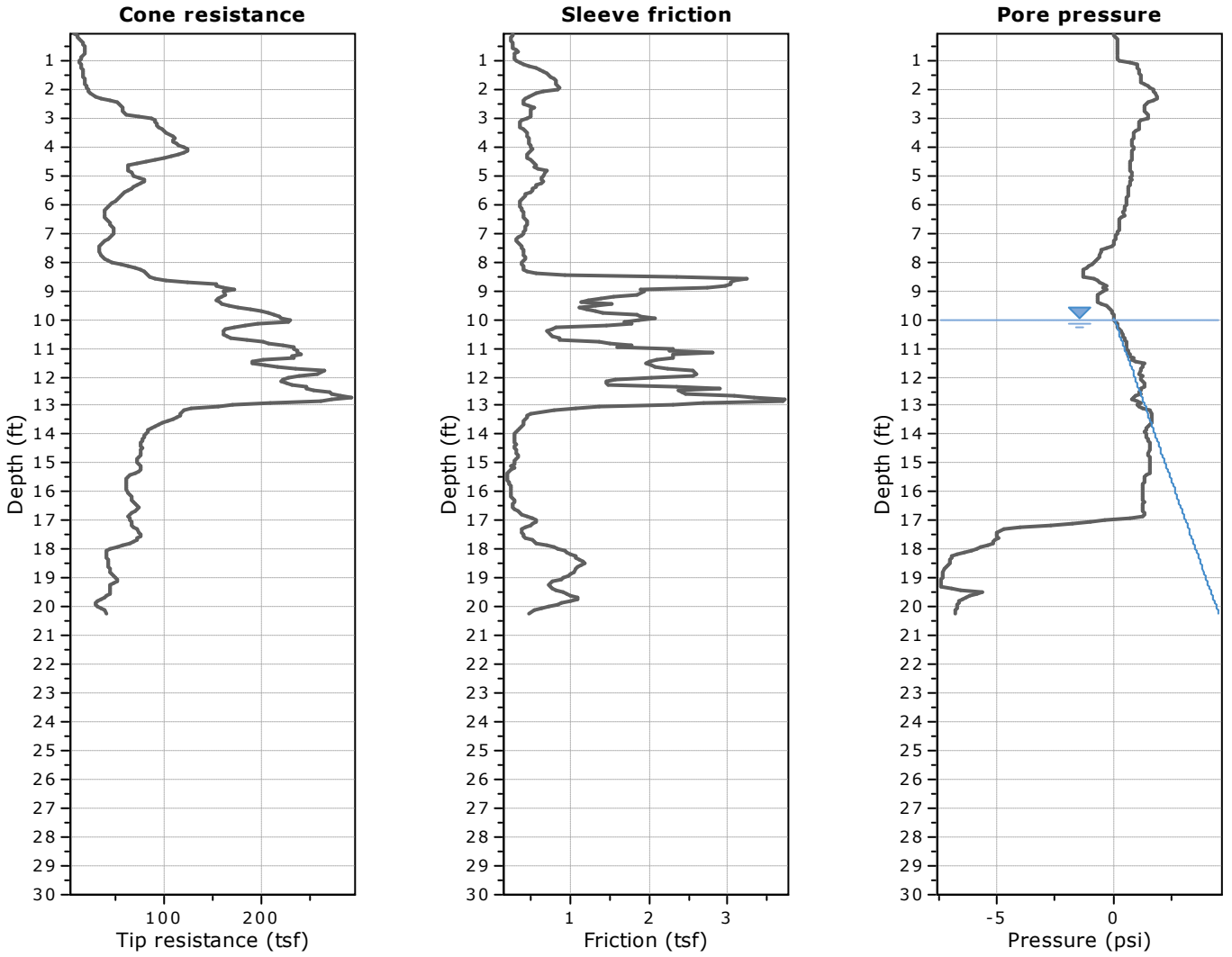
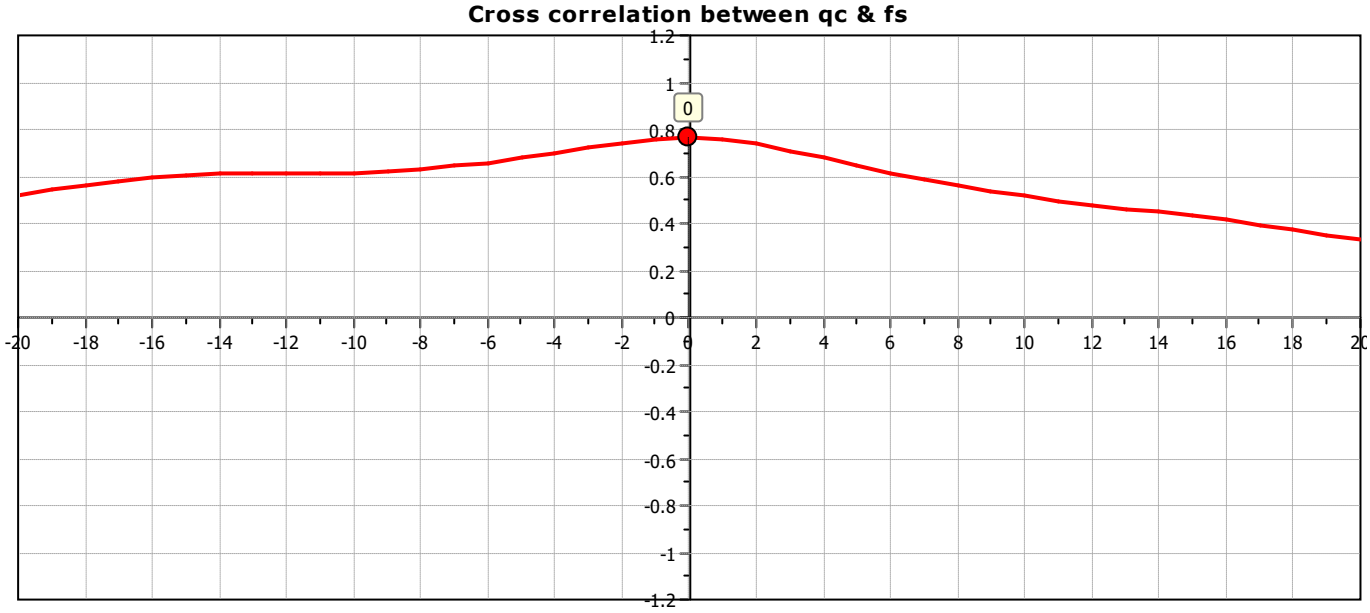
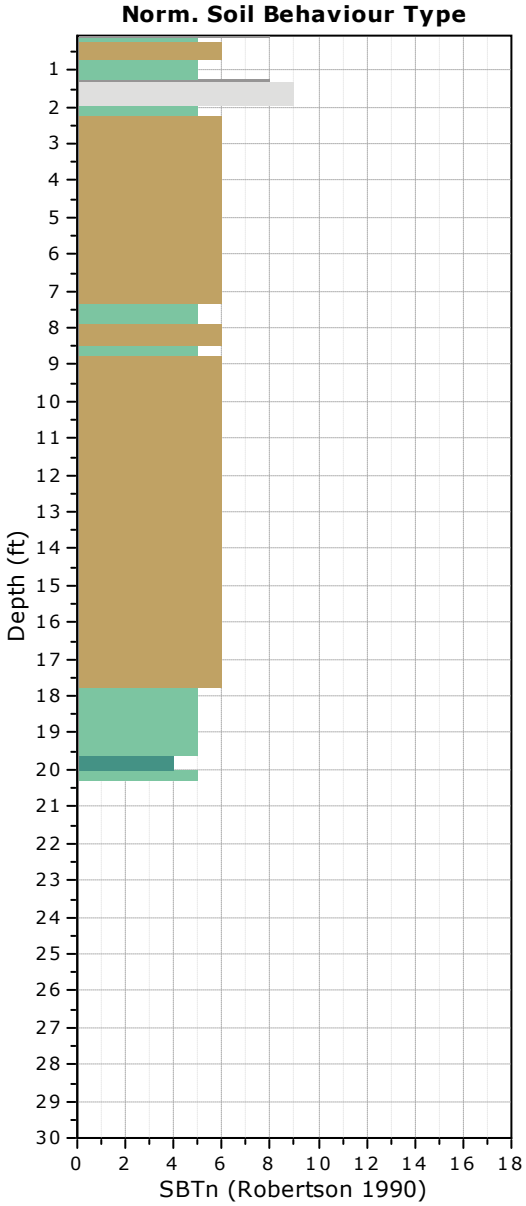
C-27
Total depth: 20.20 ft, Date: 5/14/2024
Surface Elevation: 62.44 ft
Coords: X:572660.37, Y:555928.27
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

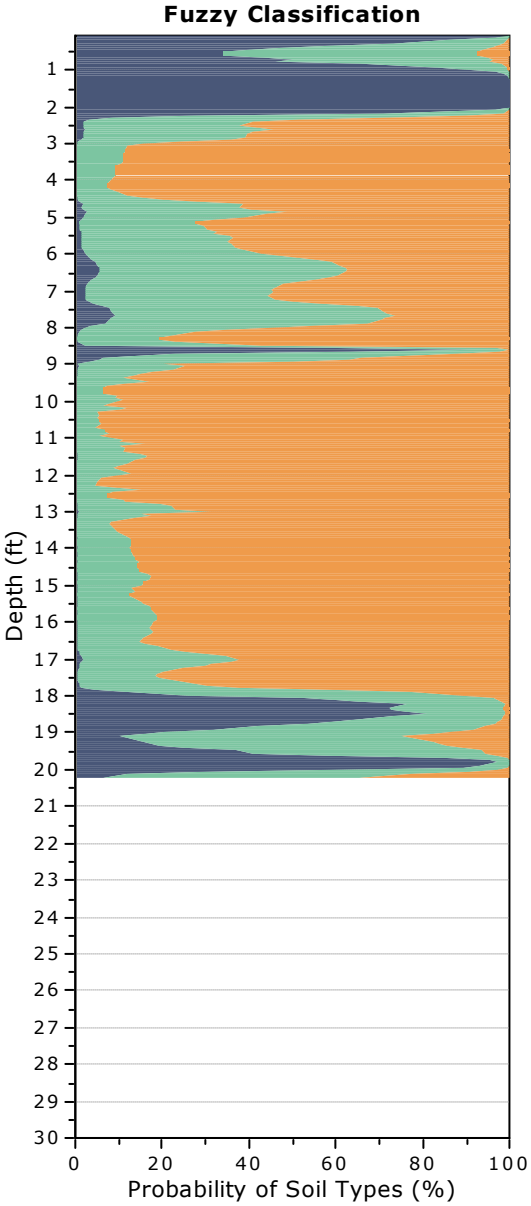
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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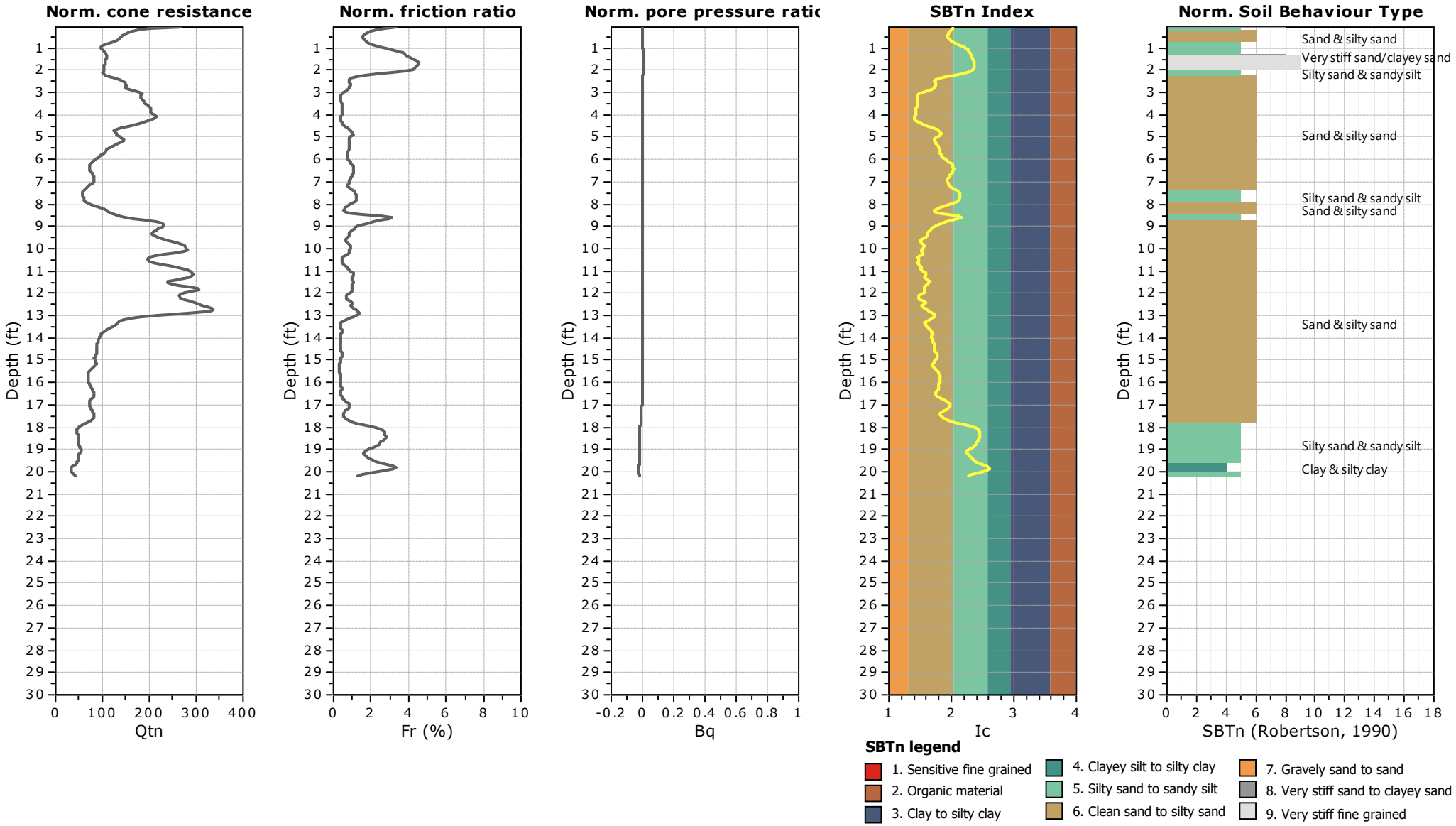
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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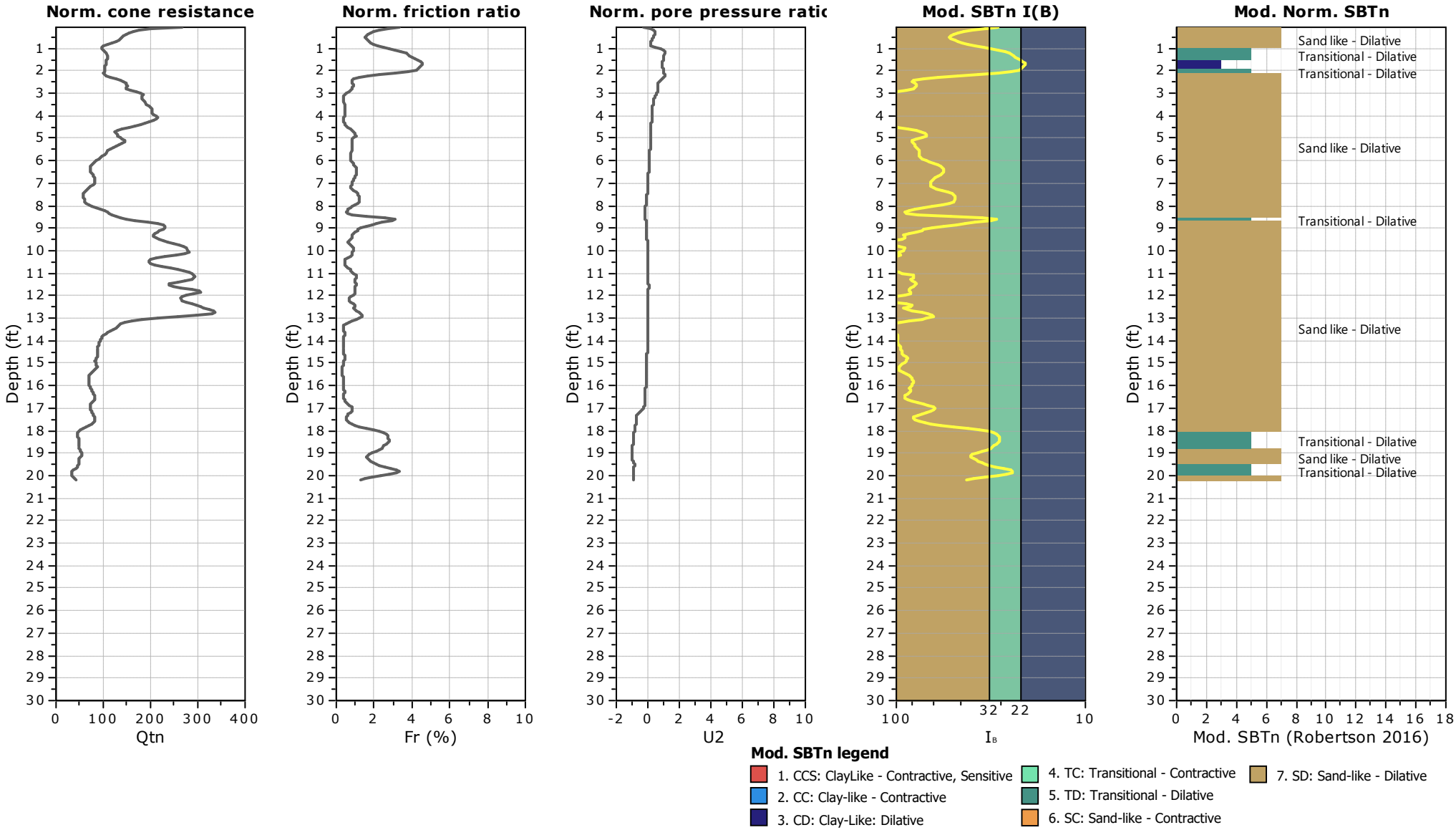

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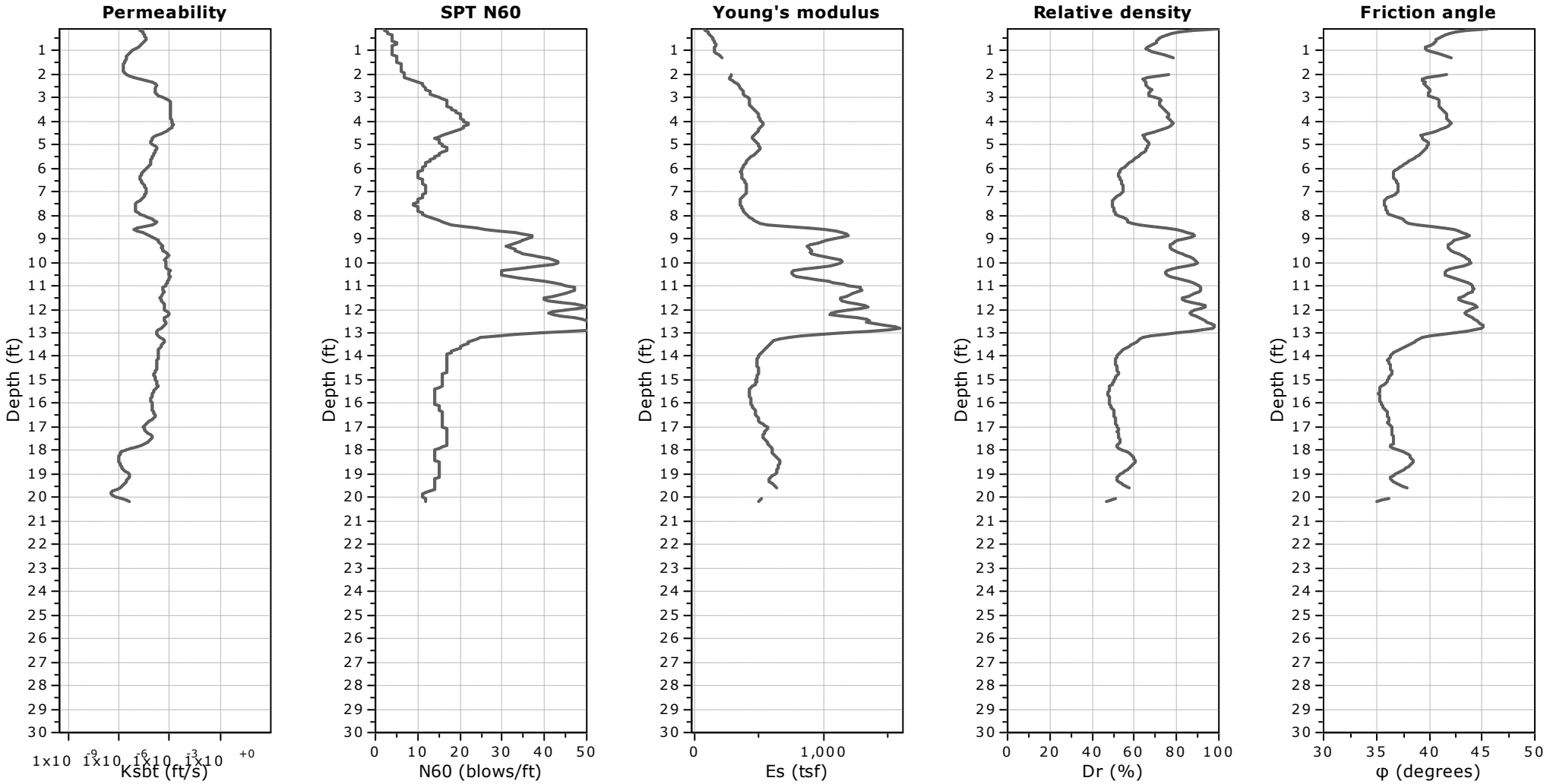

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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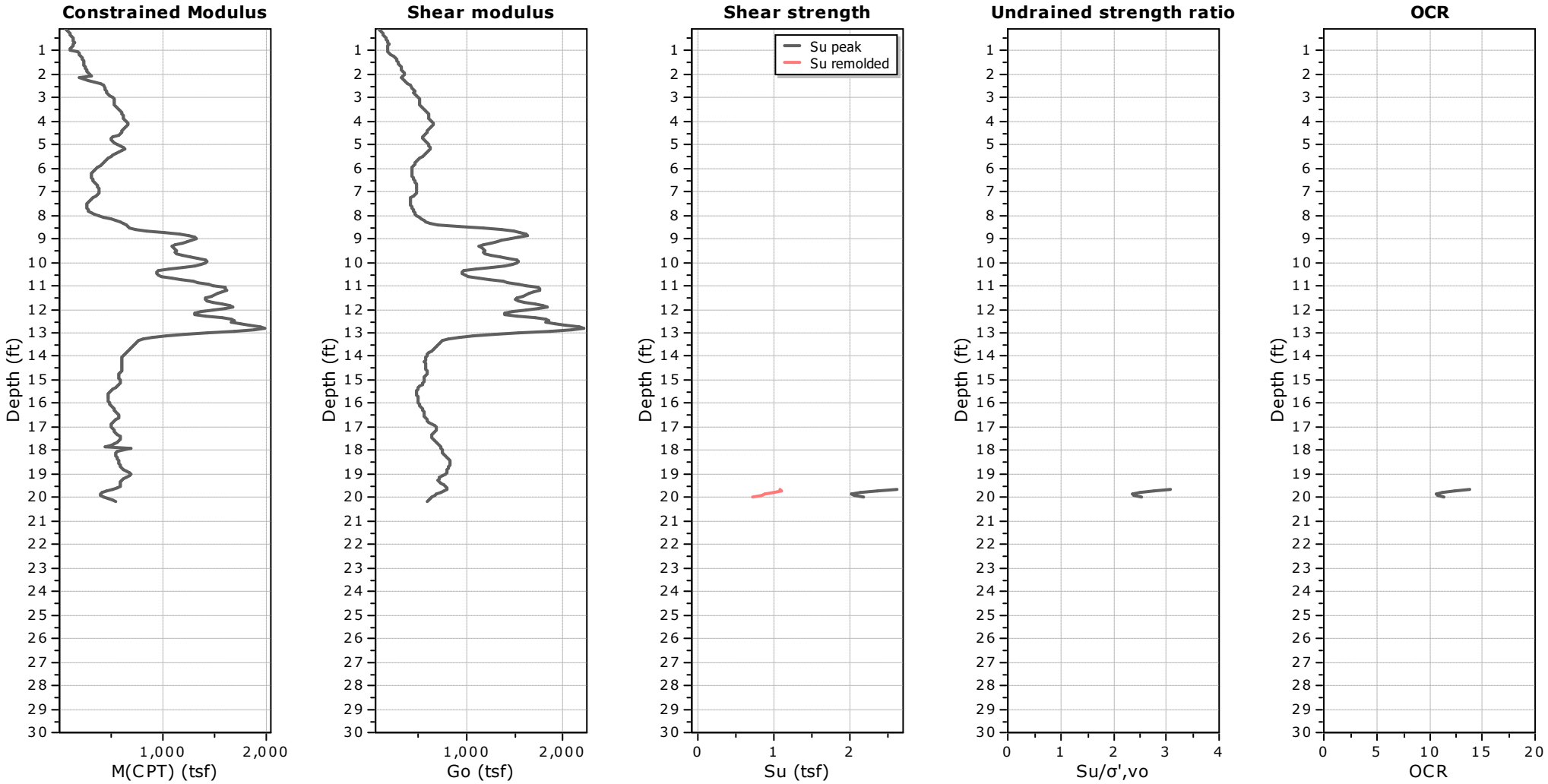

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
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Flat Dilatometer Test data

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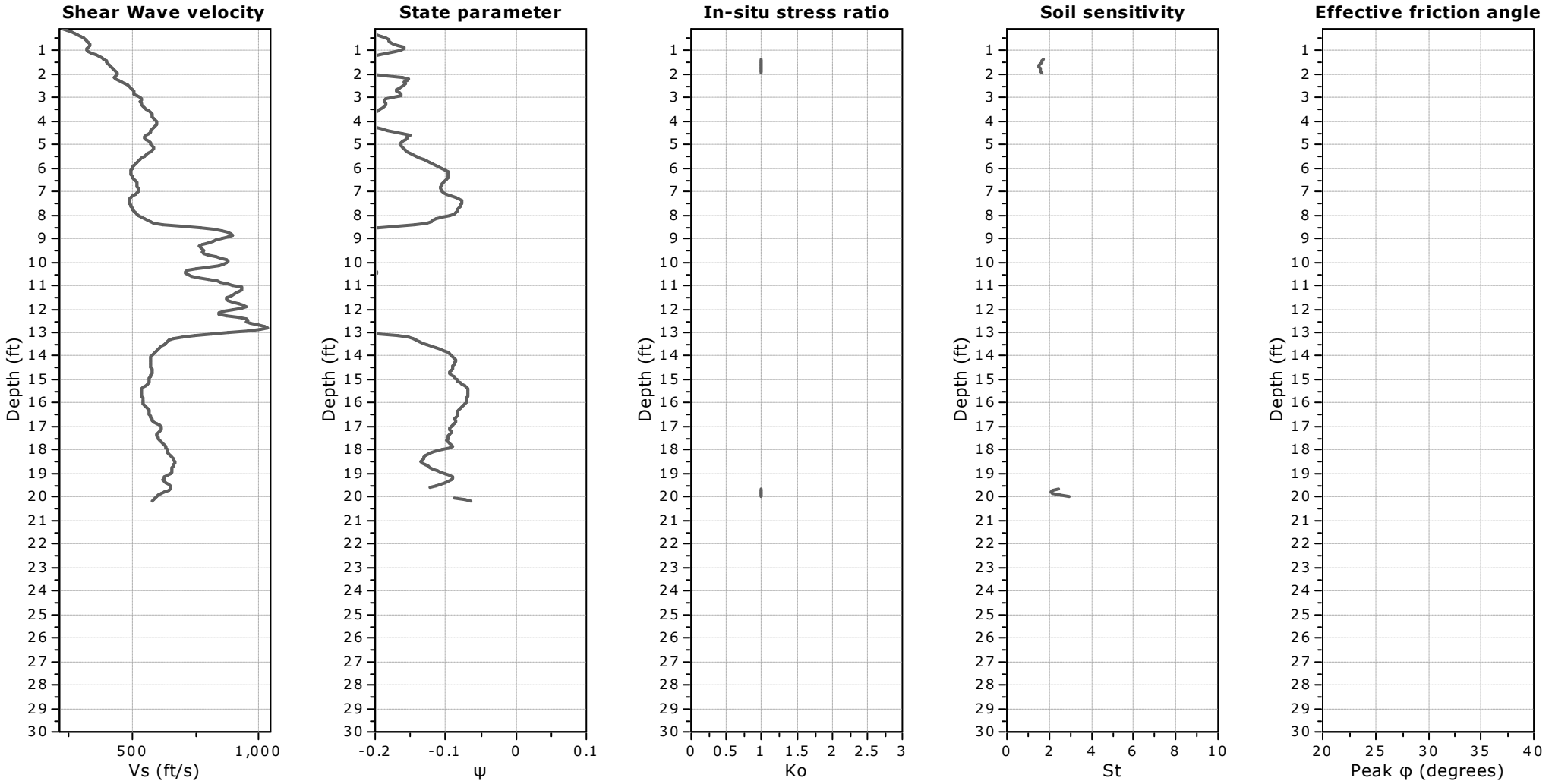

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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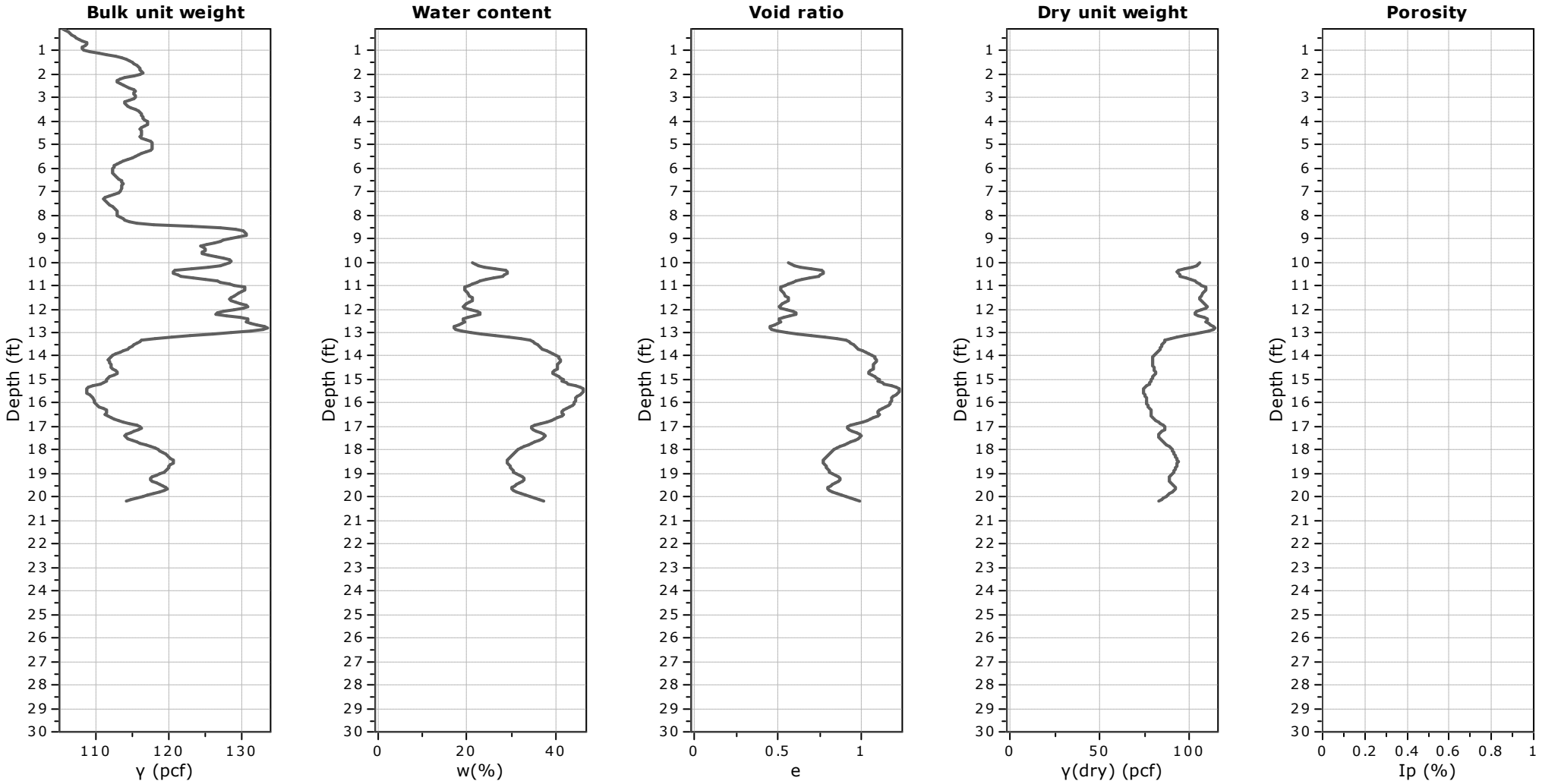

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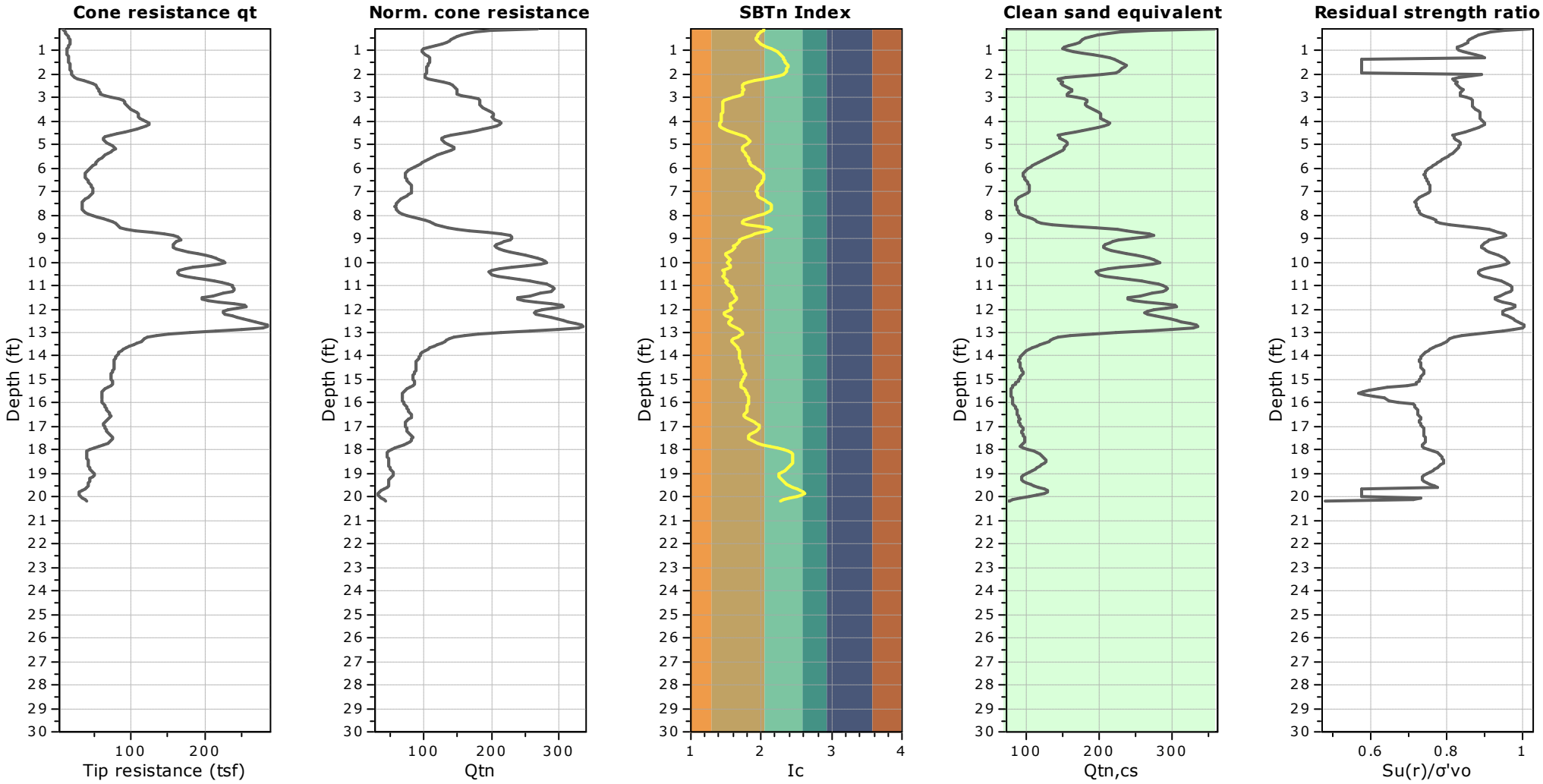

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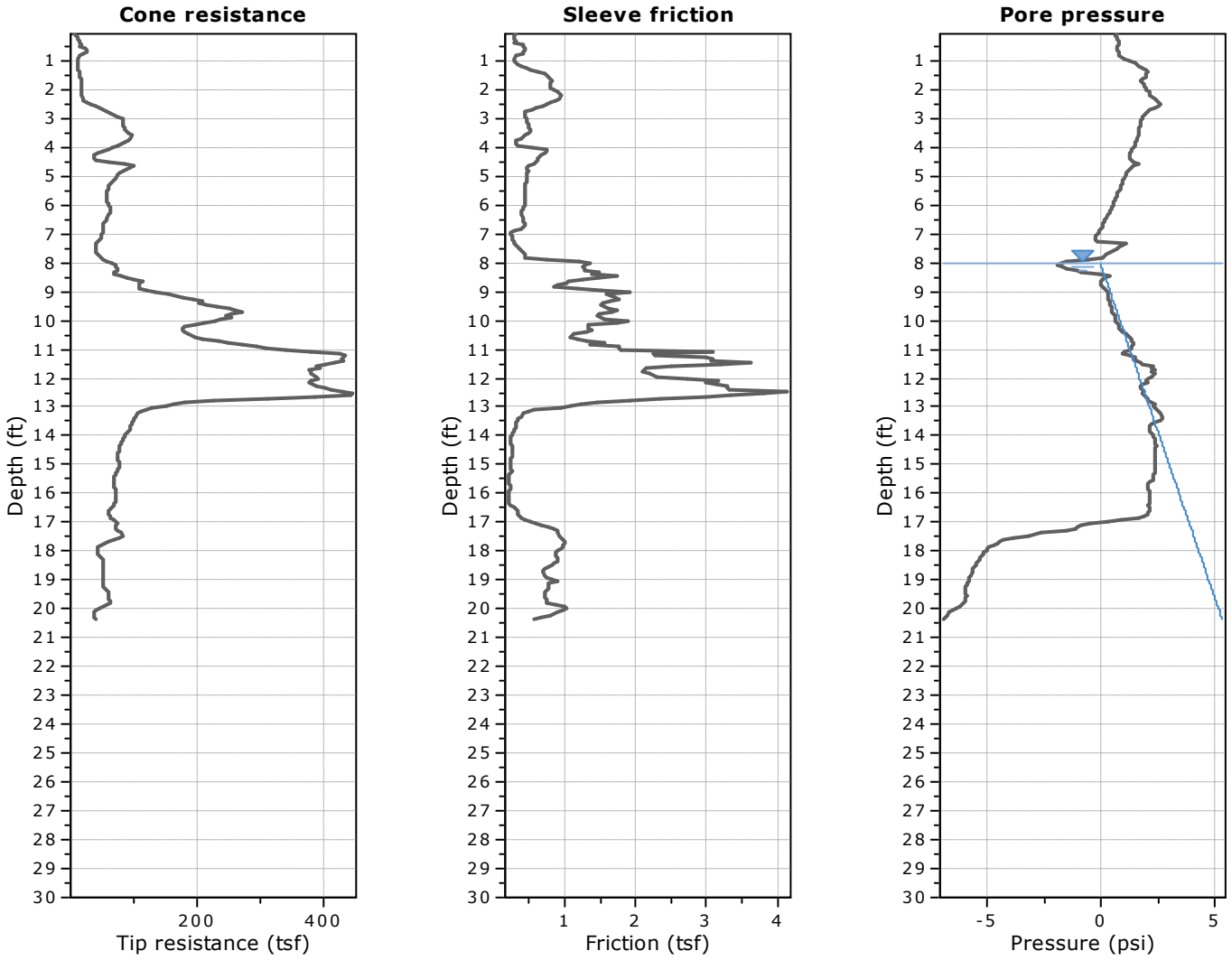
C-28
Total depth: 20.33 ft, Date: 5/13/2024
Surface Elevation: 62.31 ft
Coords: X:572653.14, Y:555871.85
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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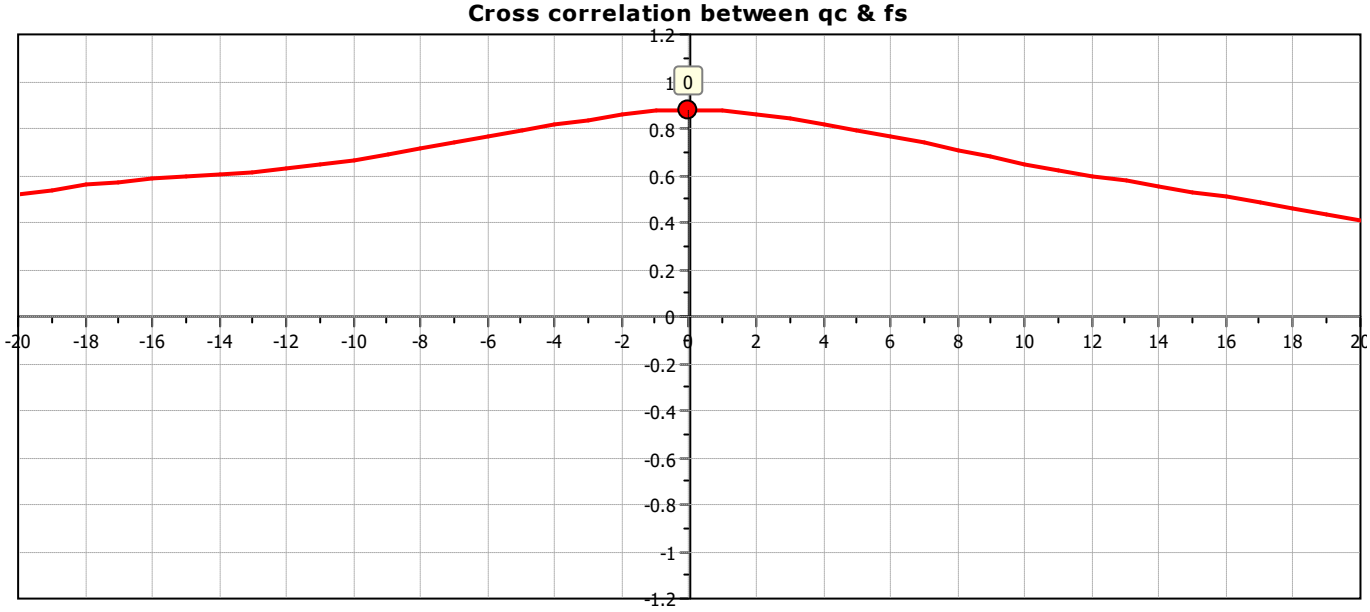

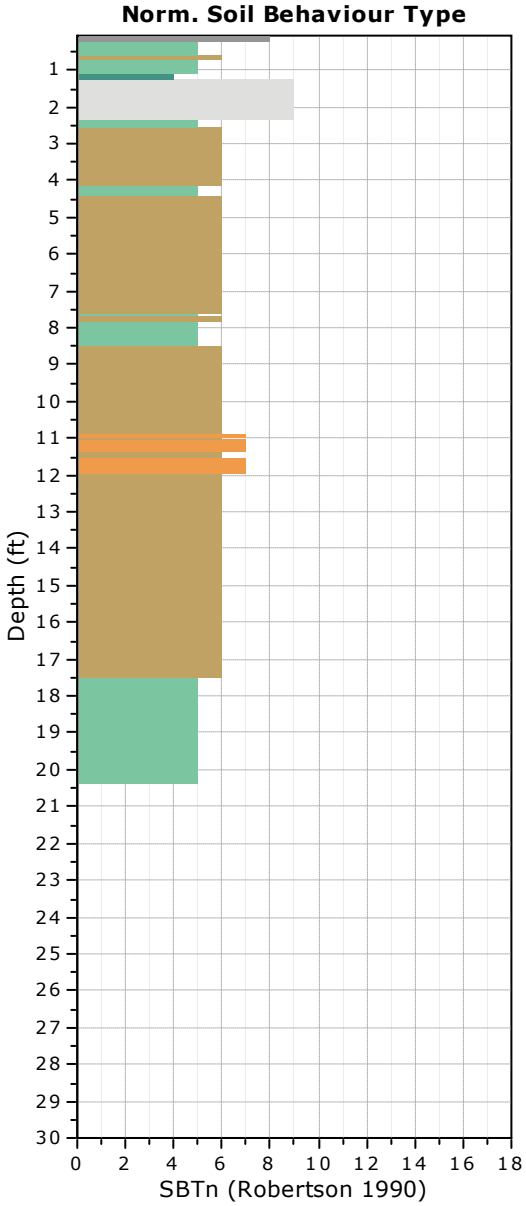

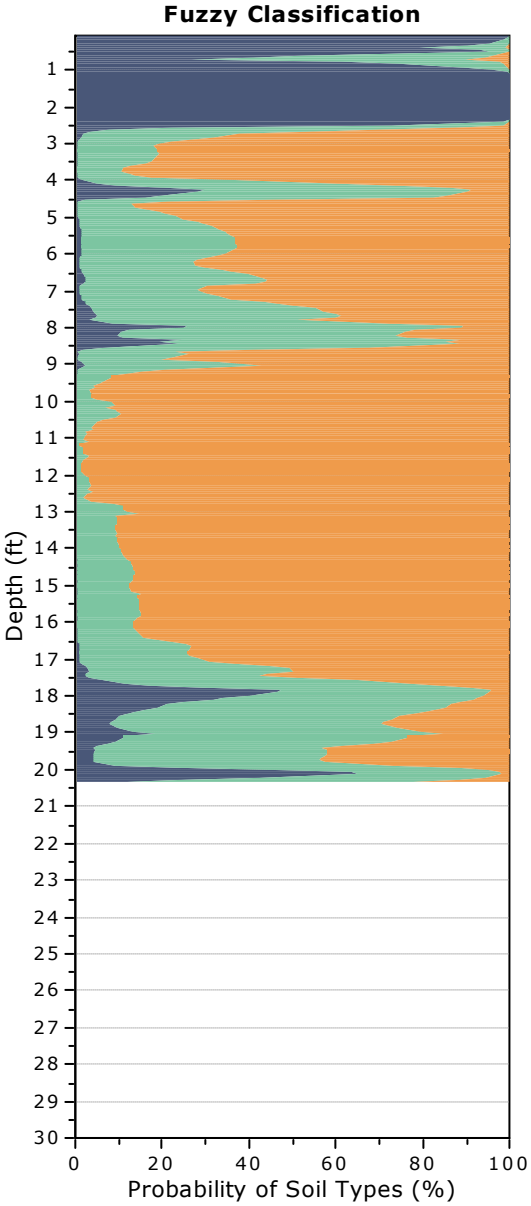

Fuzzy classifiaction legend

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- Highly probable mixture soil
- Highly probable sandy soil

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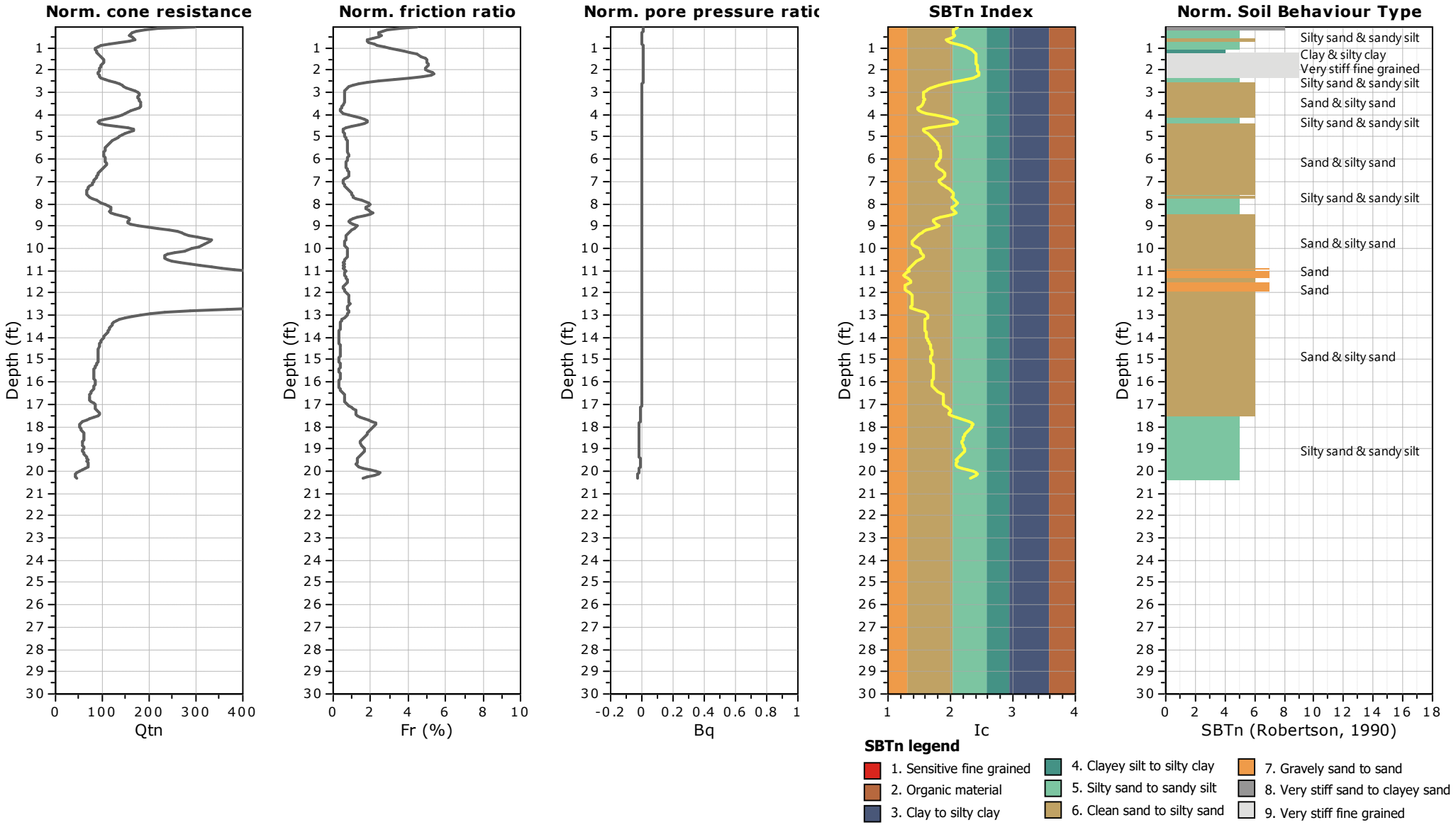

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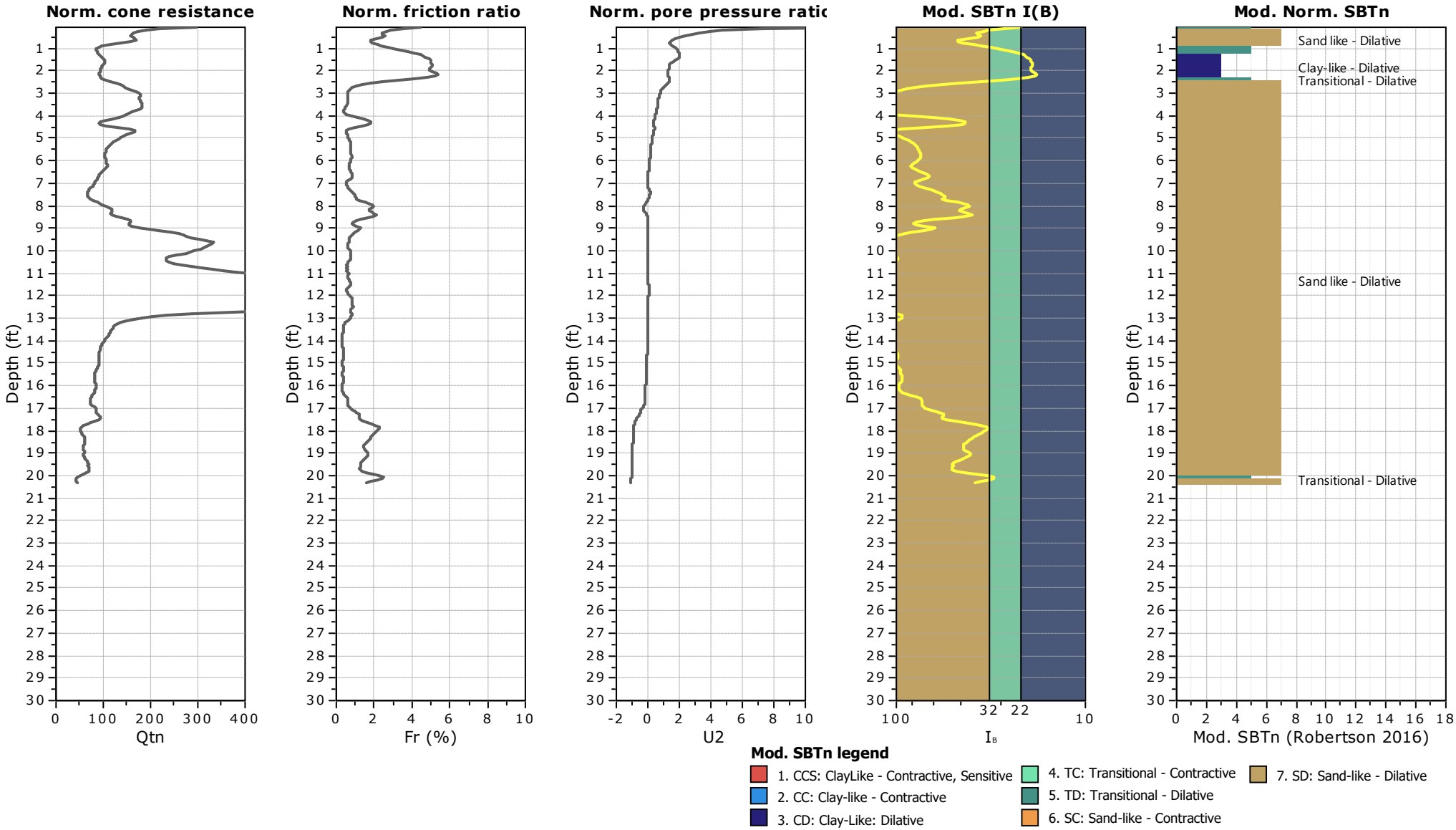

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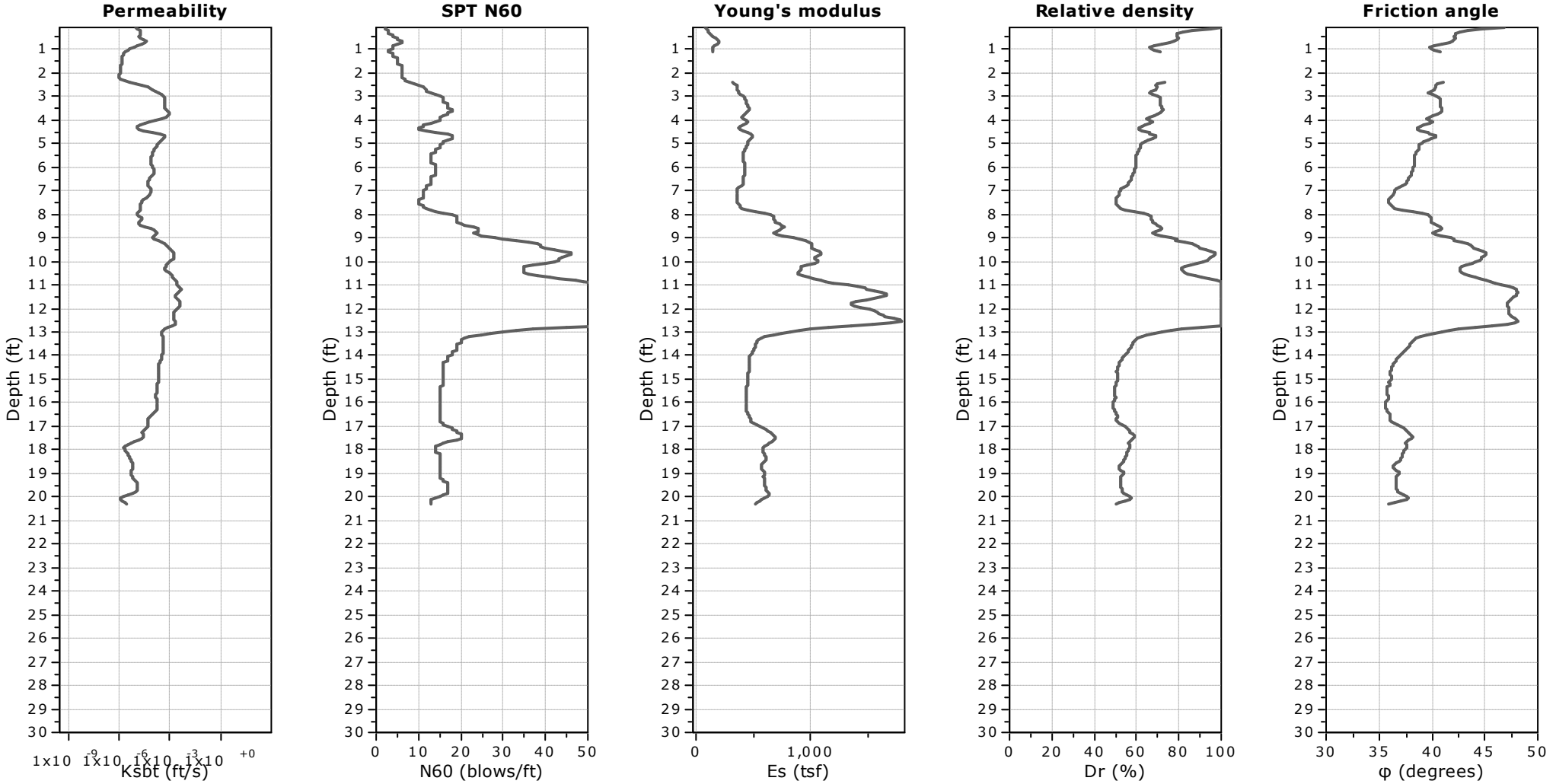

Calculation parameters

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SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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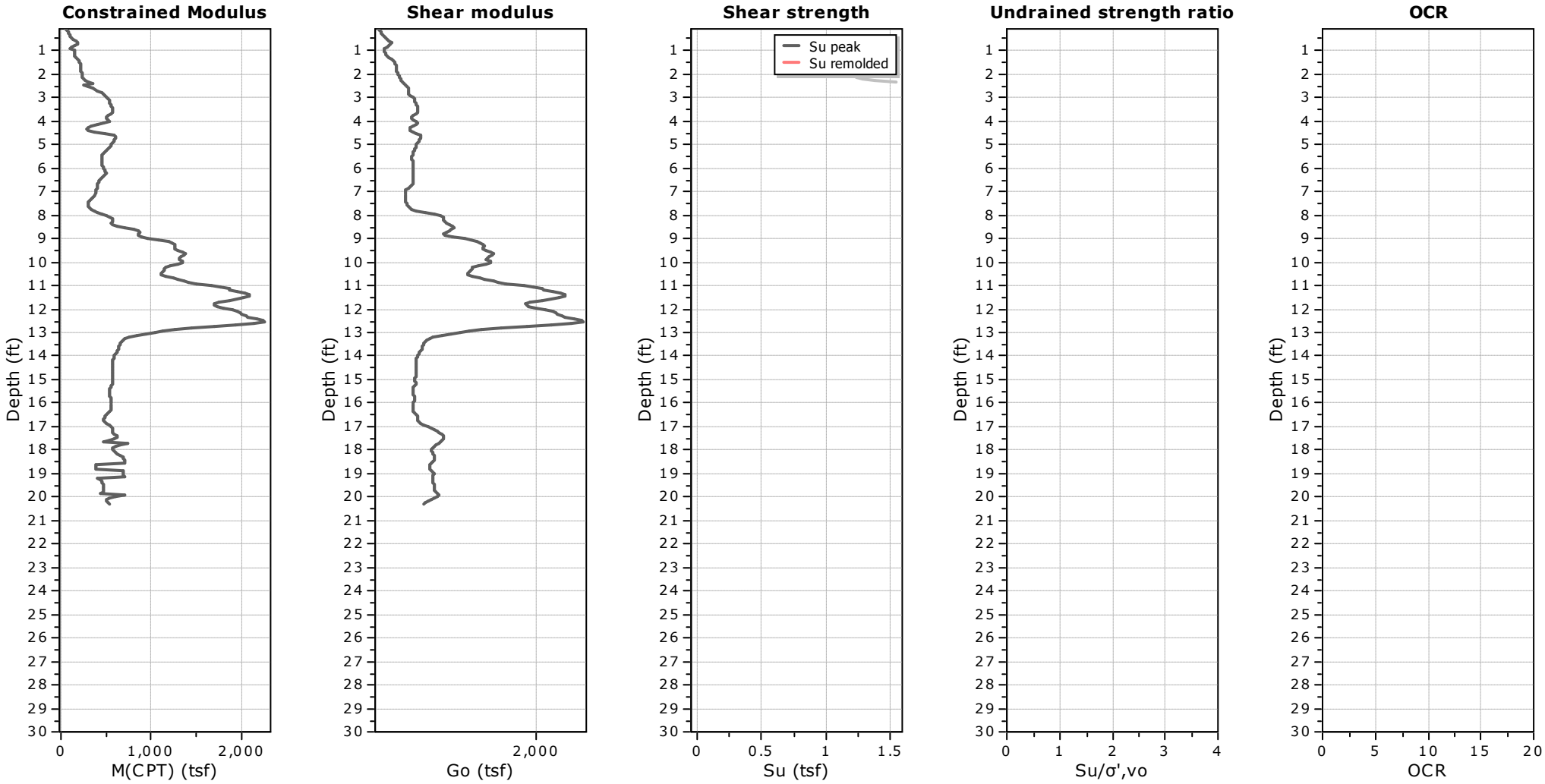

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
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Undrained shear strength cone factor for clays, N_{kt}: 14
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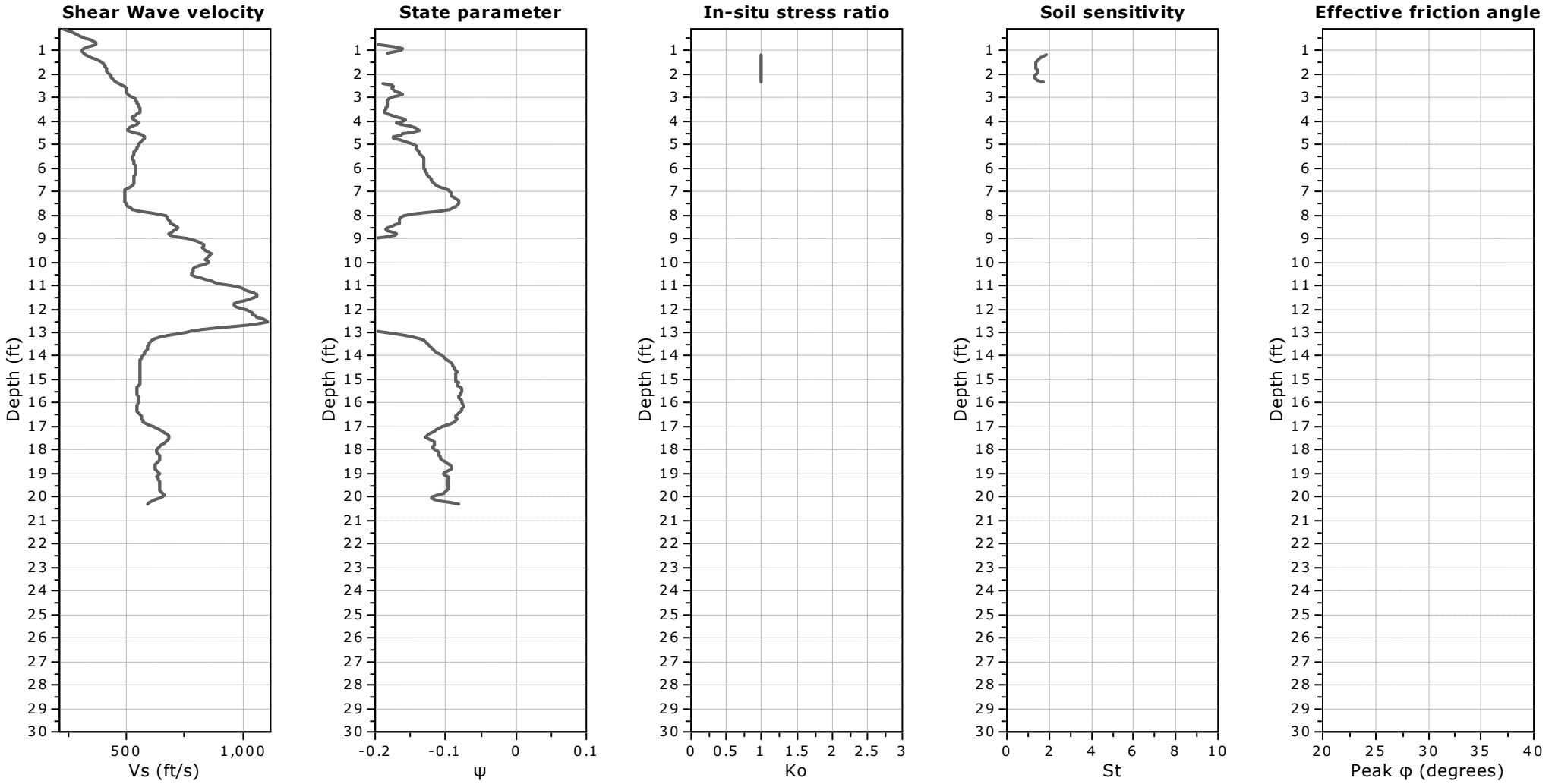

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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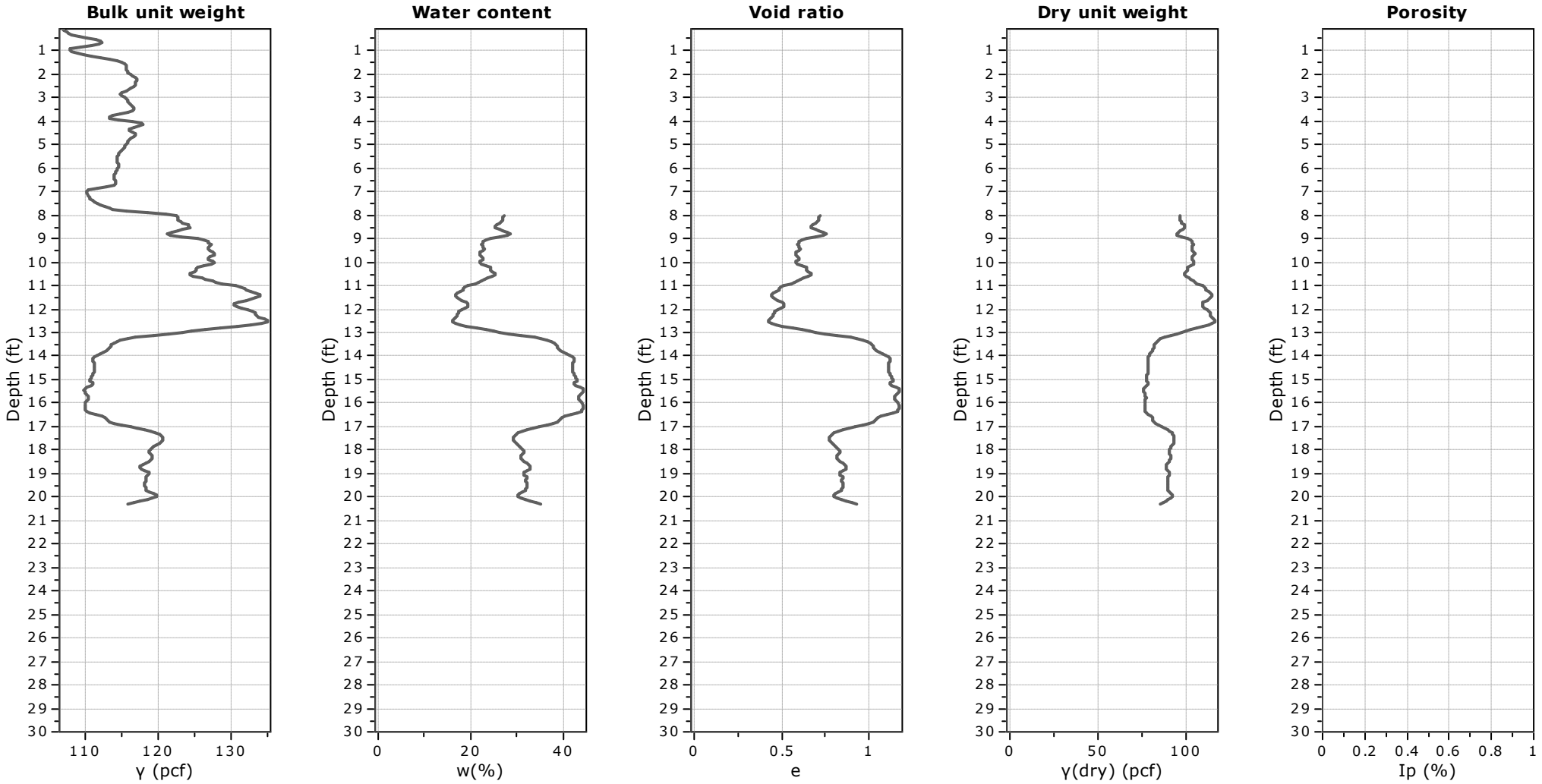

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Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

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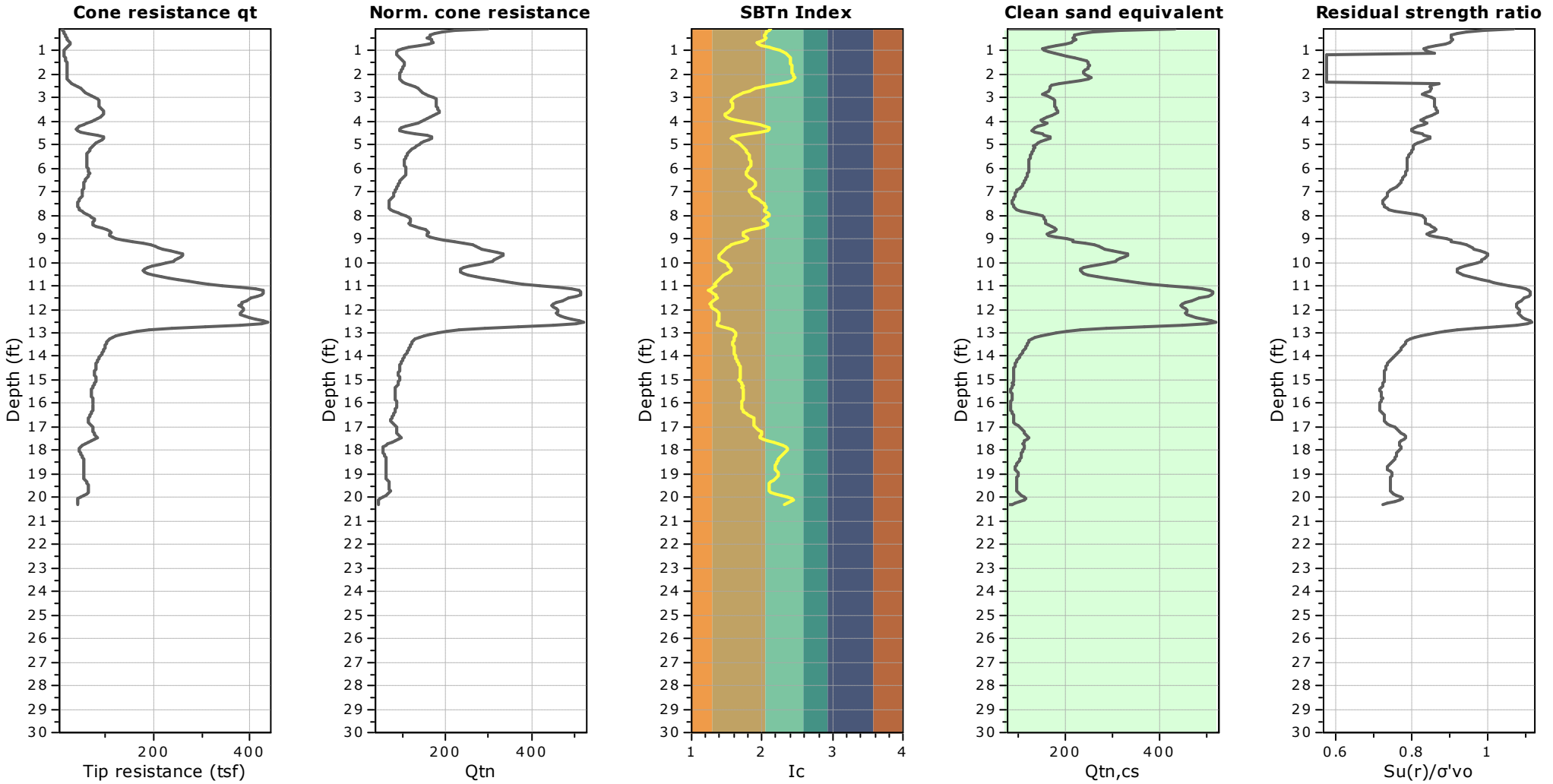

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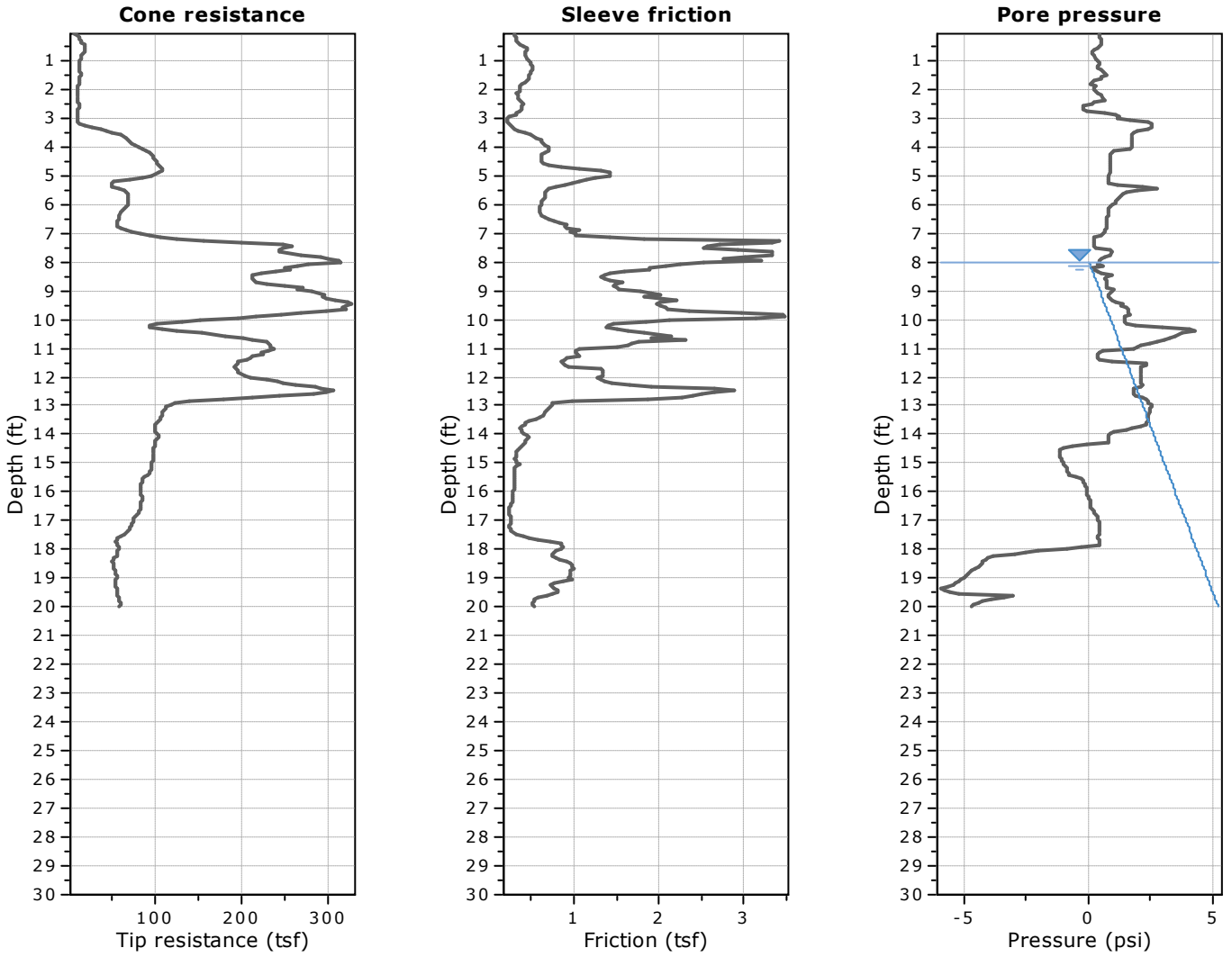
C-29
Total depth: 20.00 ft, Date: 5/14/2024
Surface Elevation: 62.07 ft
Coords: X:572639.92, Y:555783.52
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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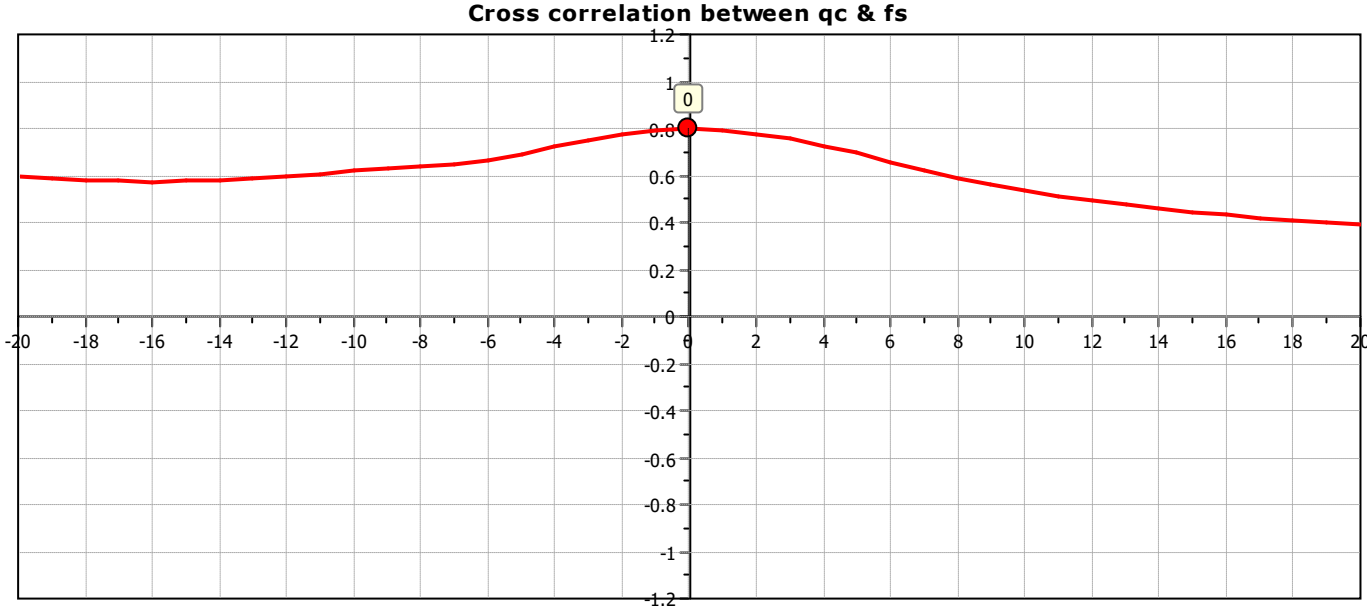

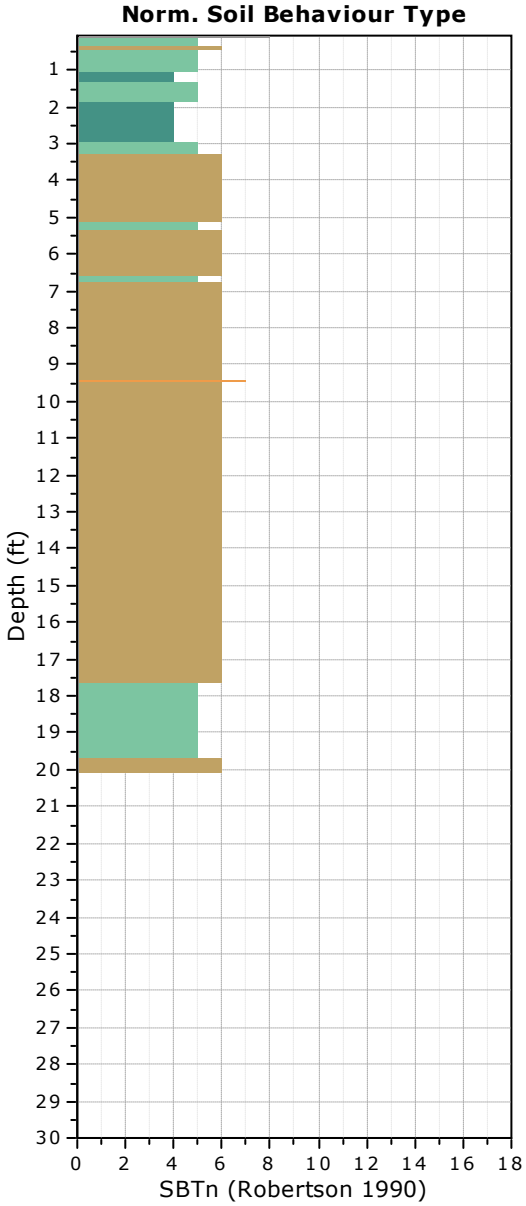

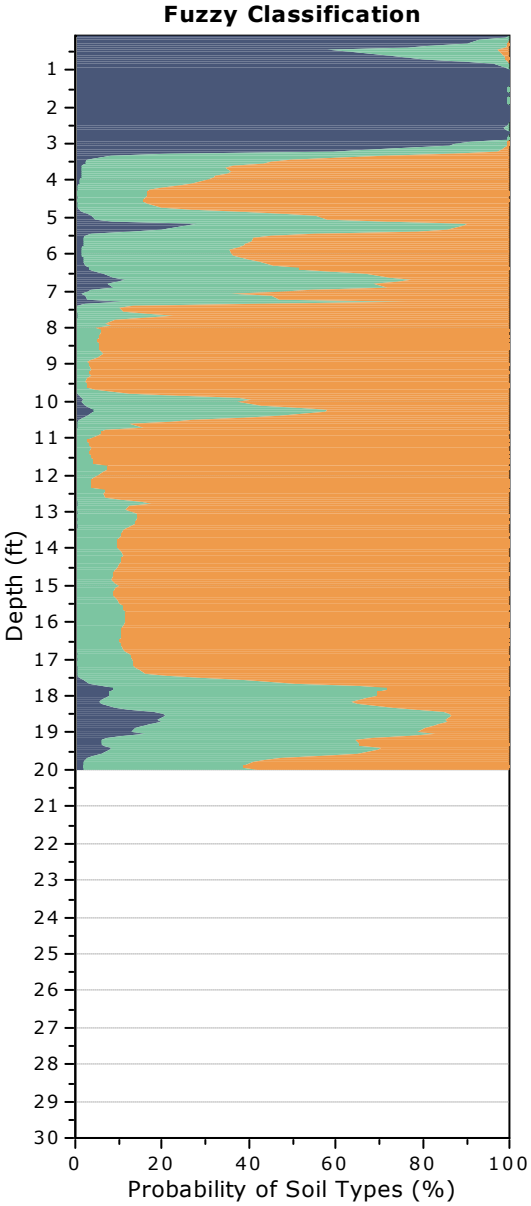

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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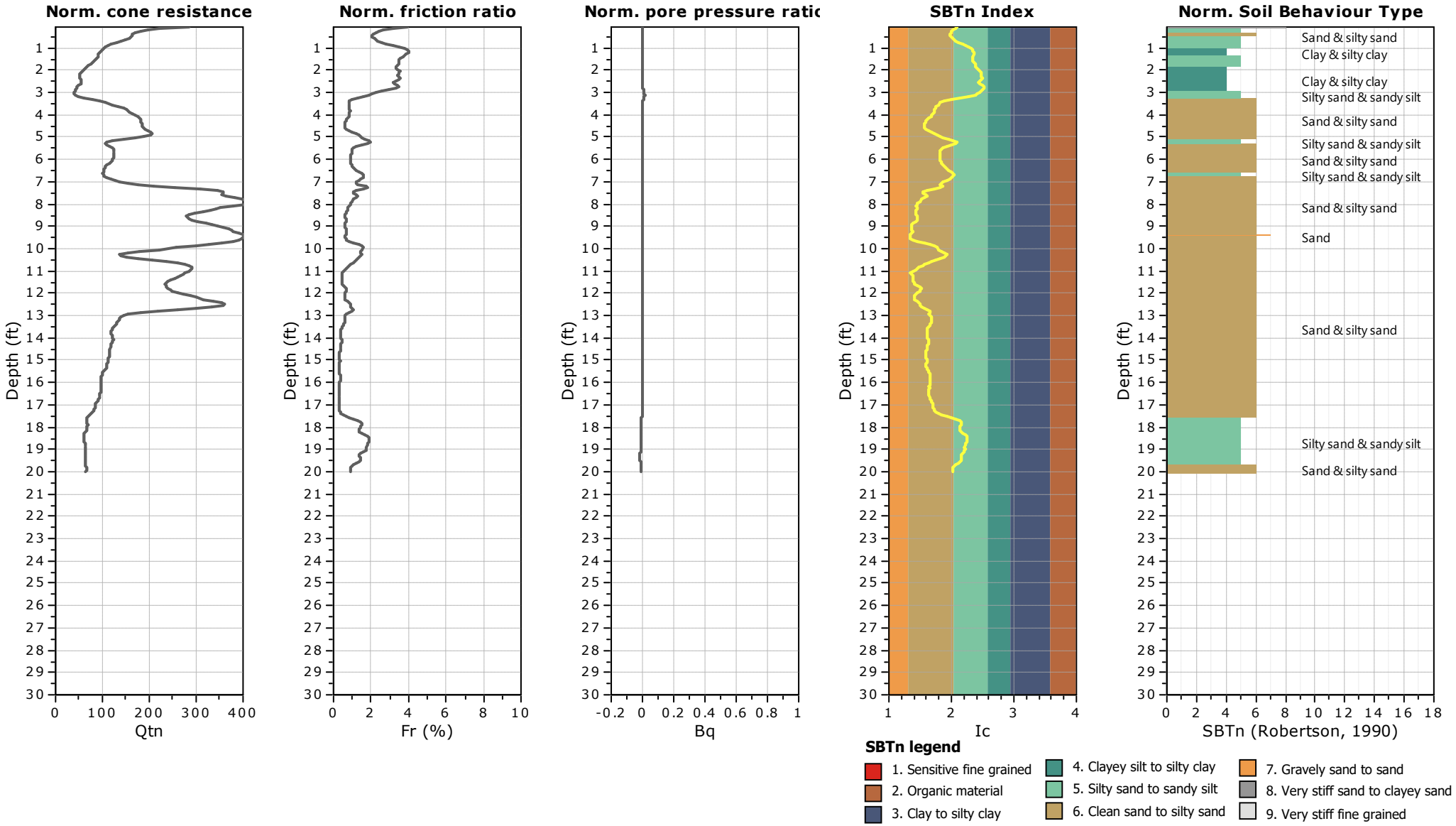
C-29
Total depth: 20.00 ft, Date: 5/14/2024
Surface Elevation: 62.07 ft
Coords: X:572639.92, Y:555783.52
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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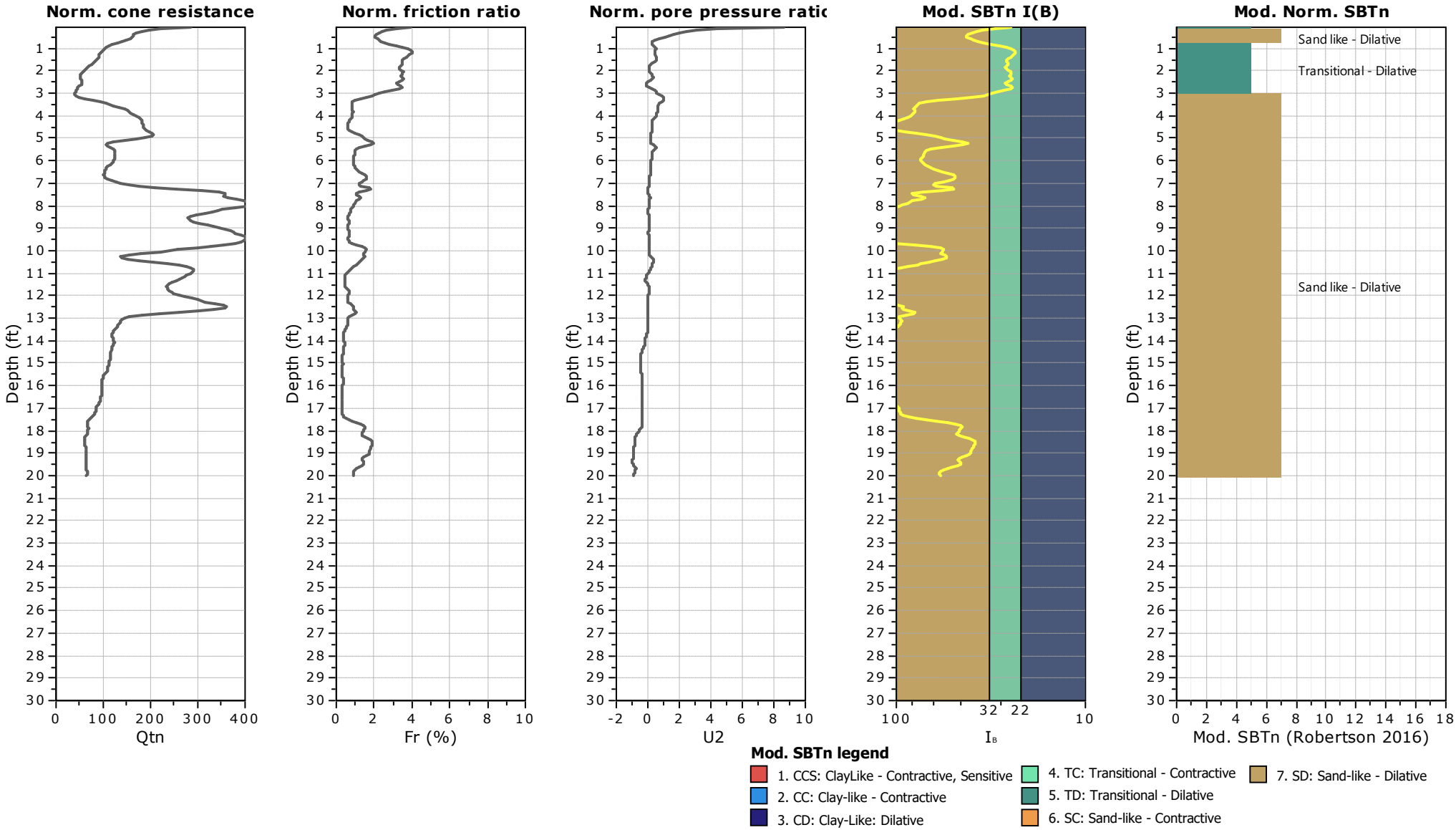

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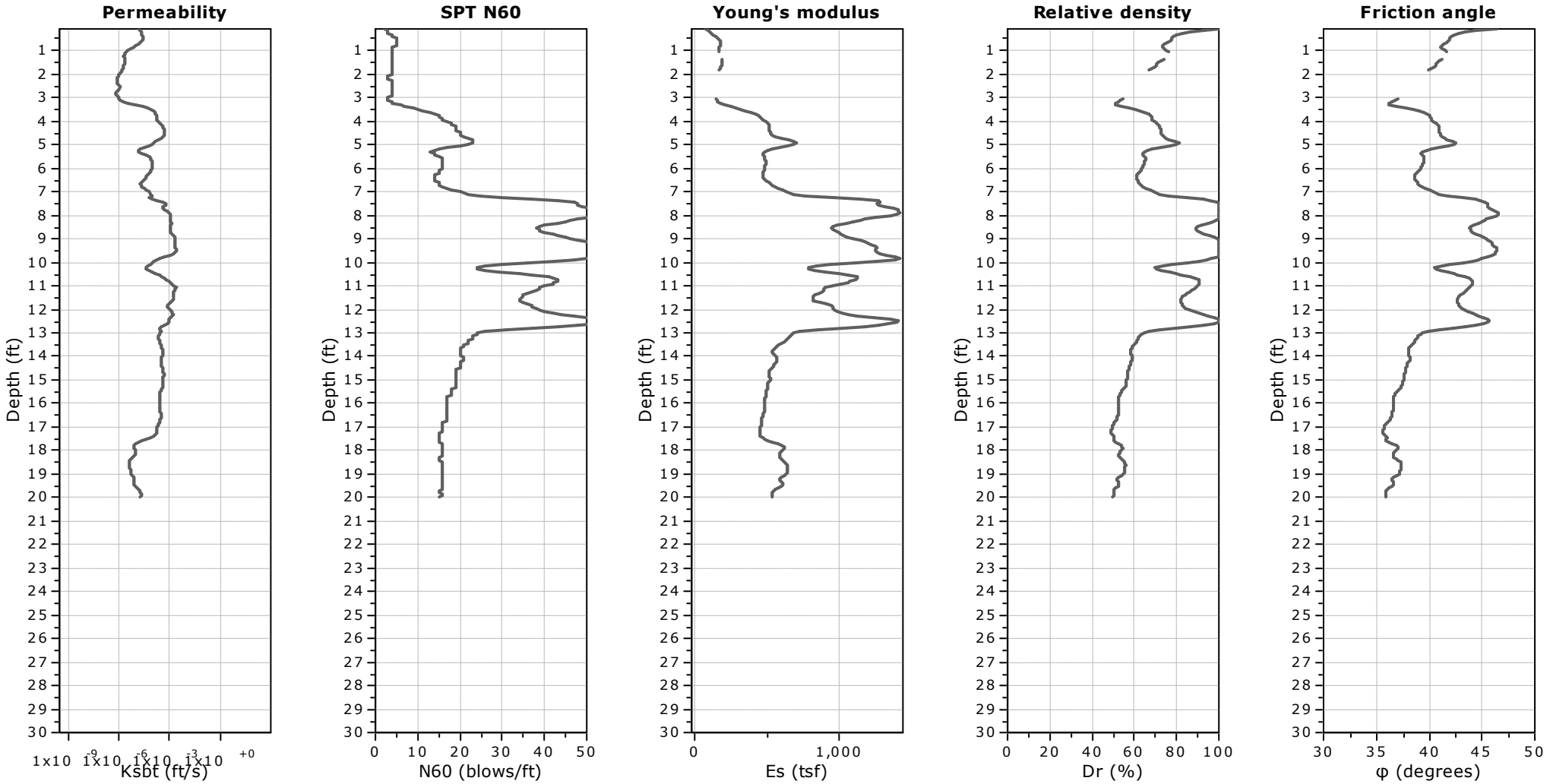

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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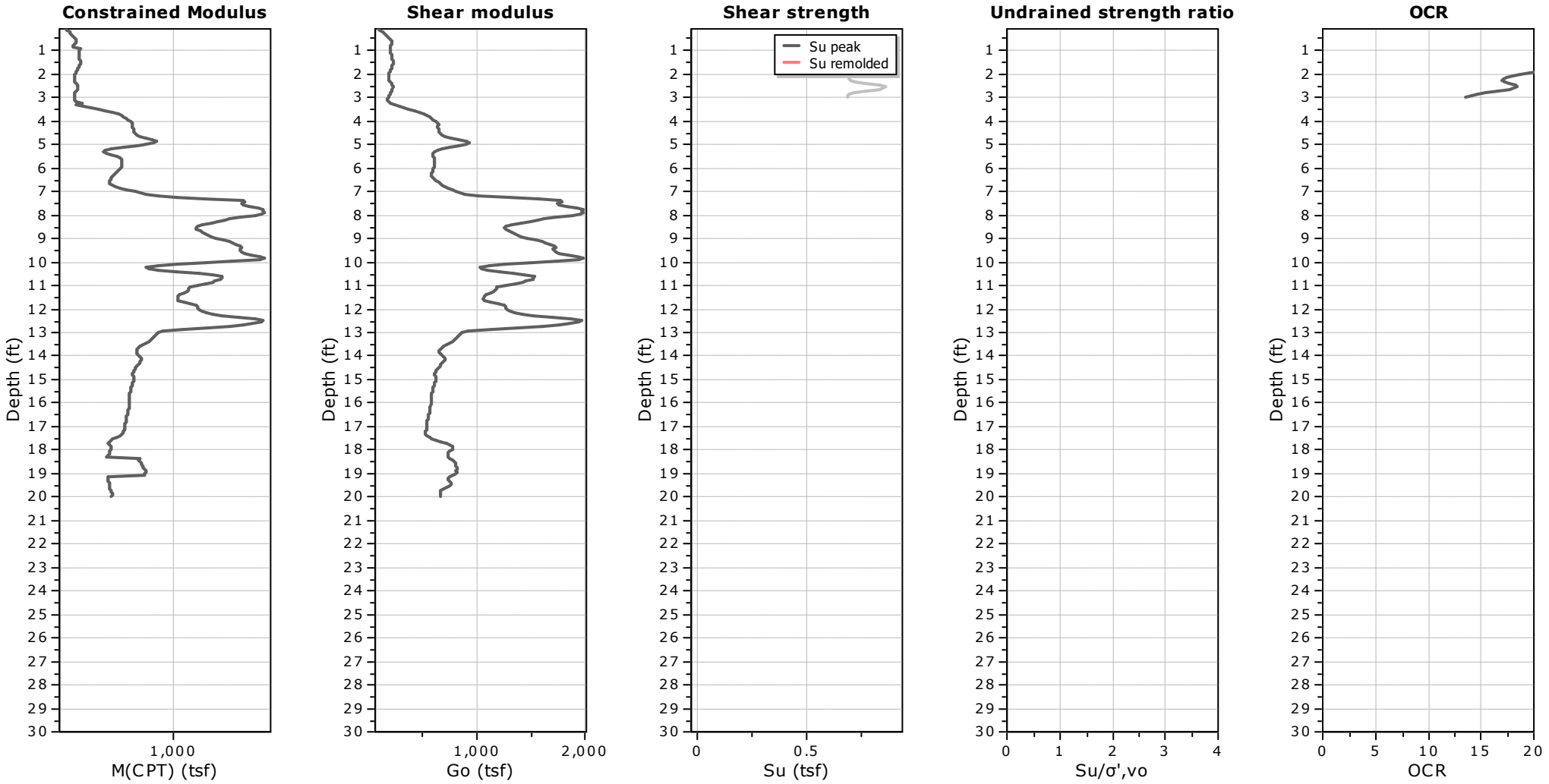

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
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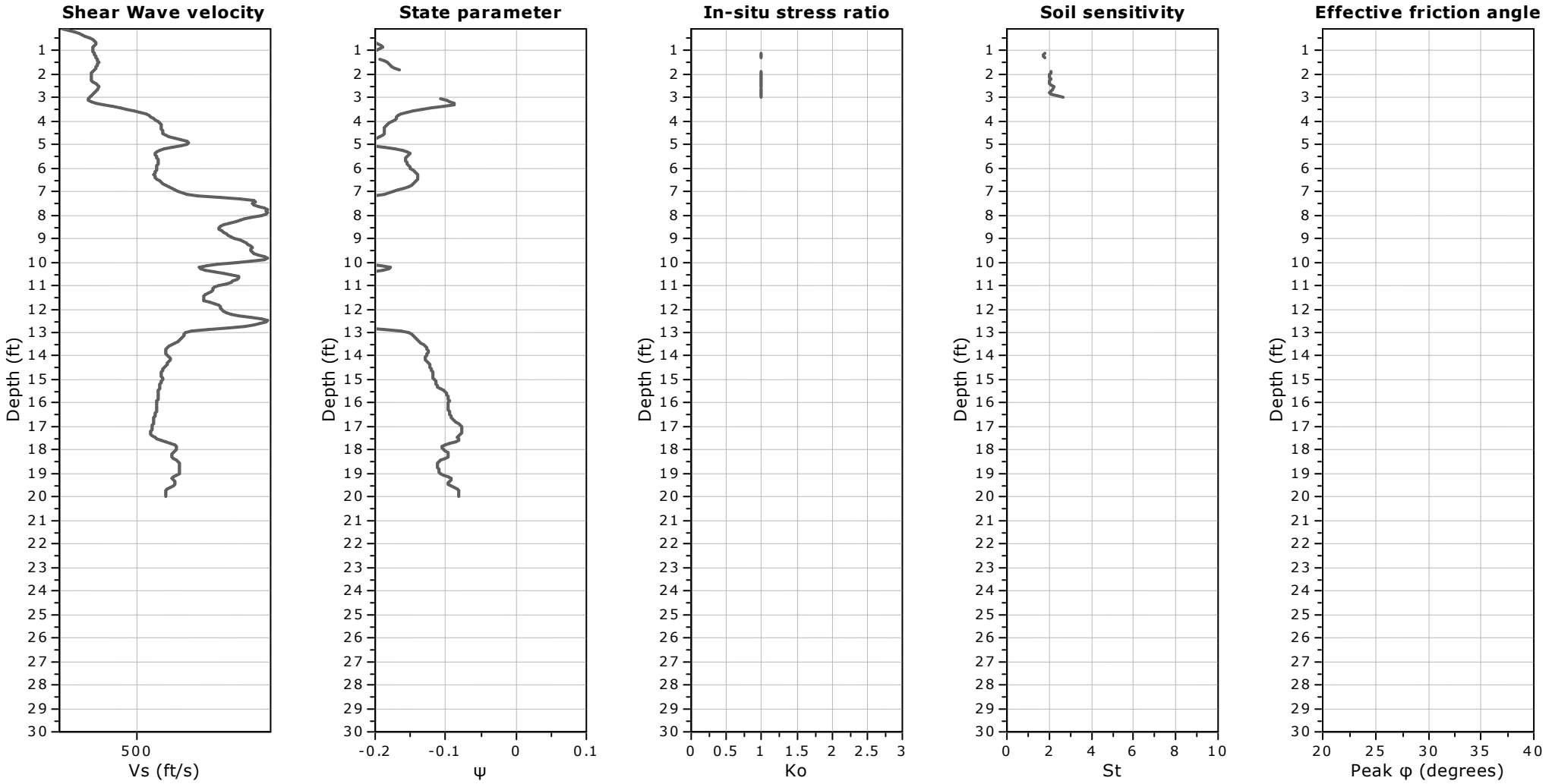

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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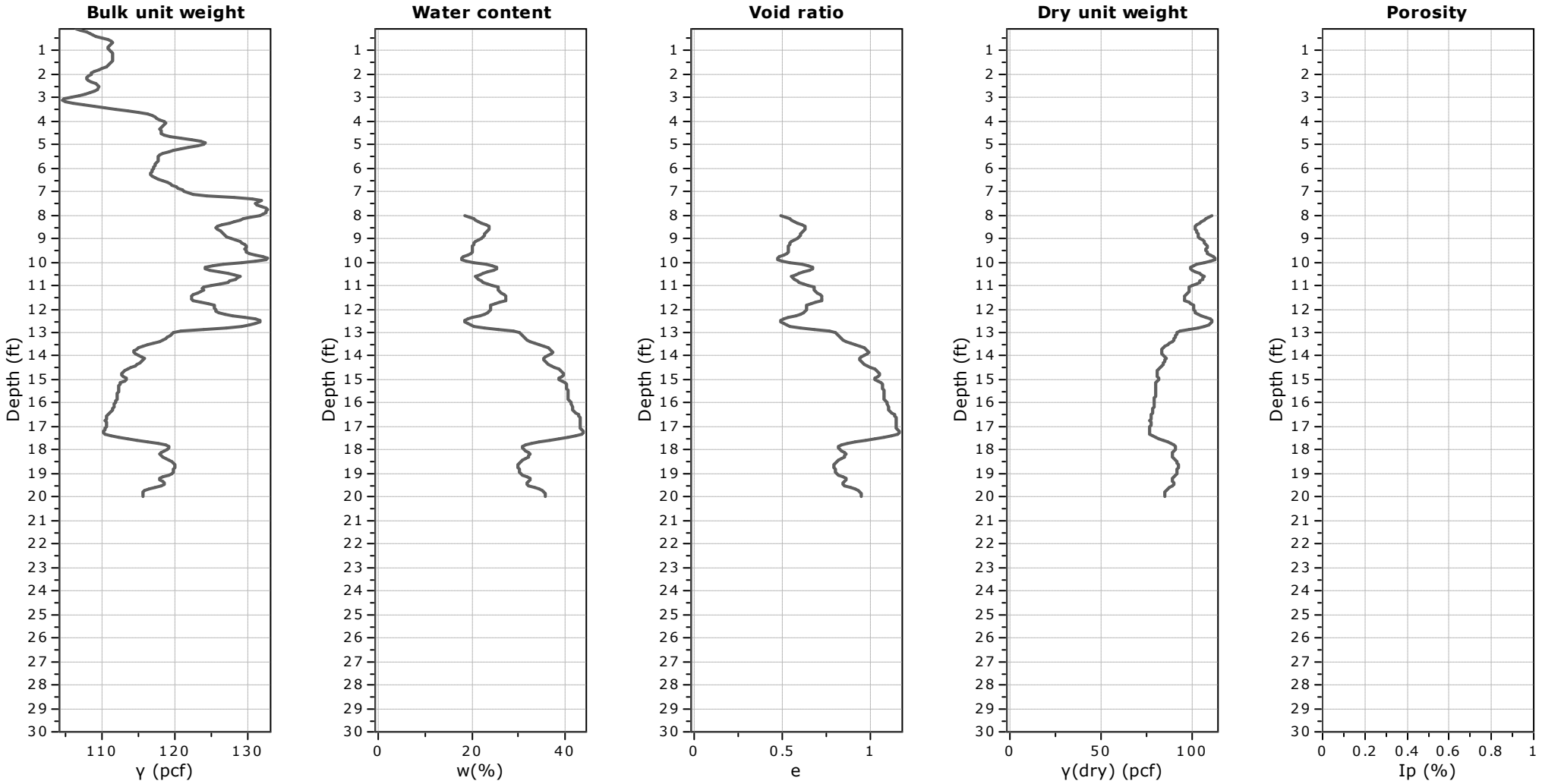

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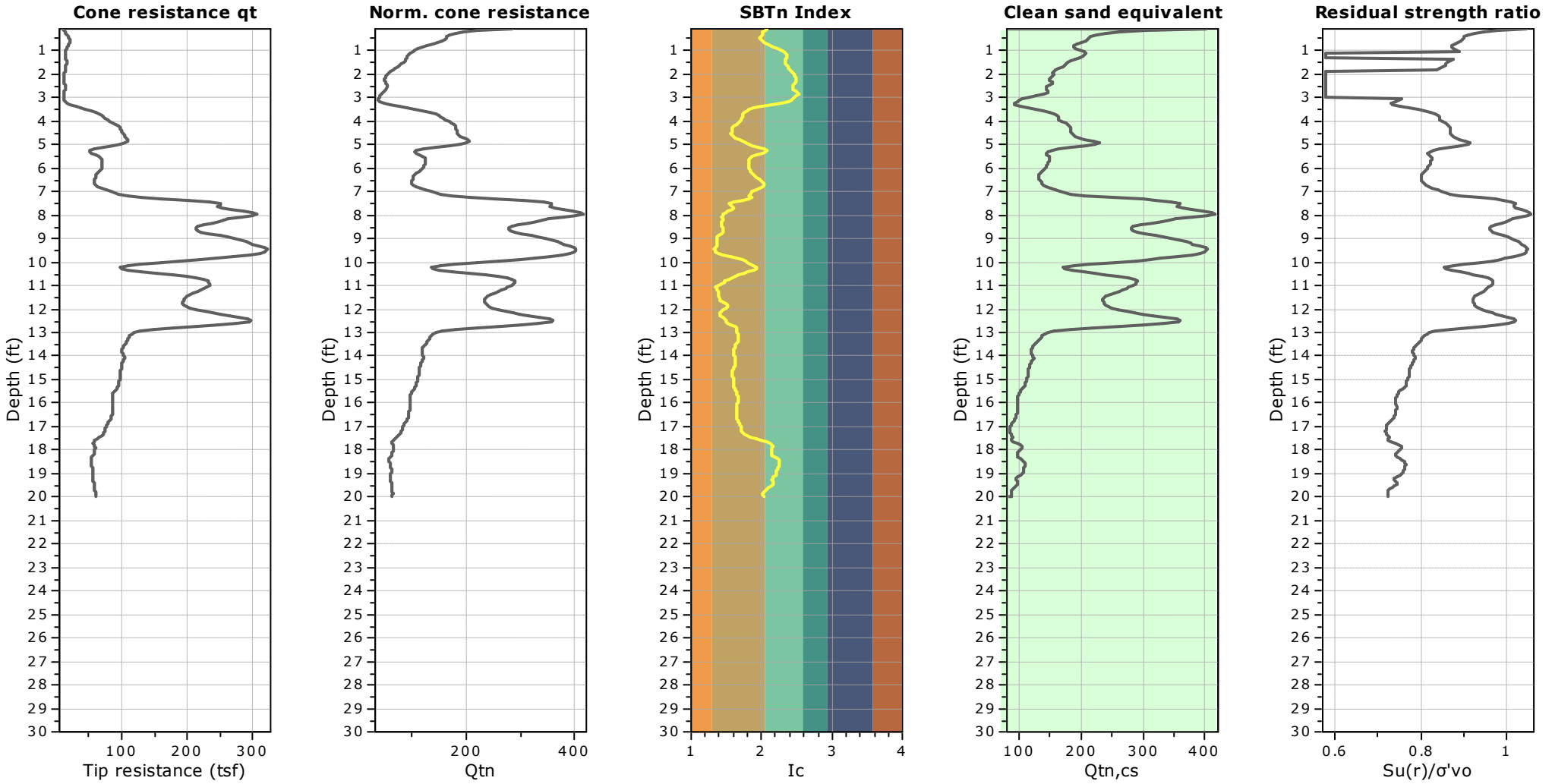

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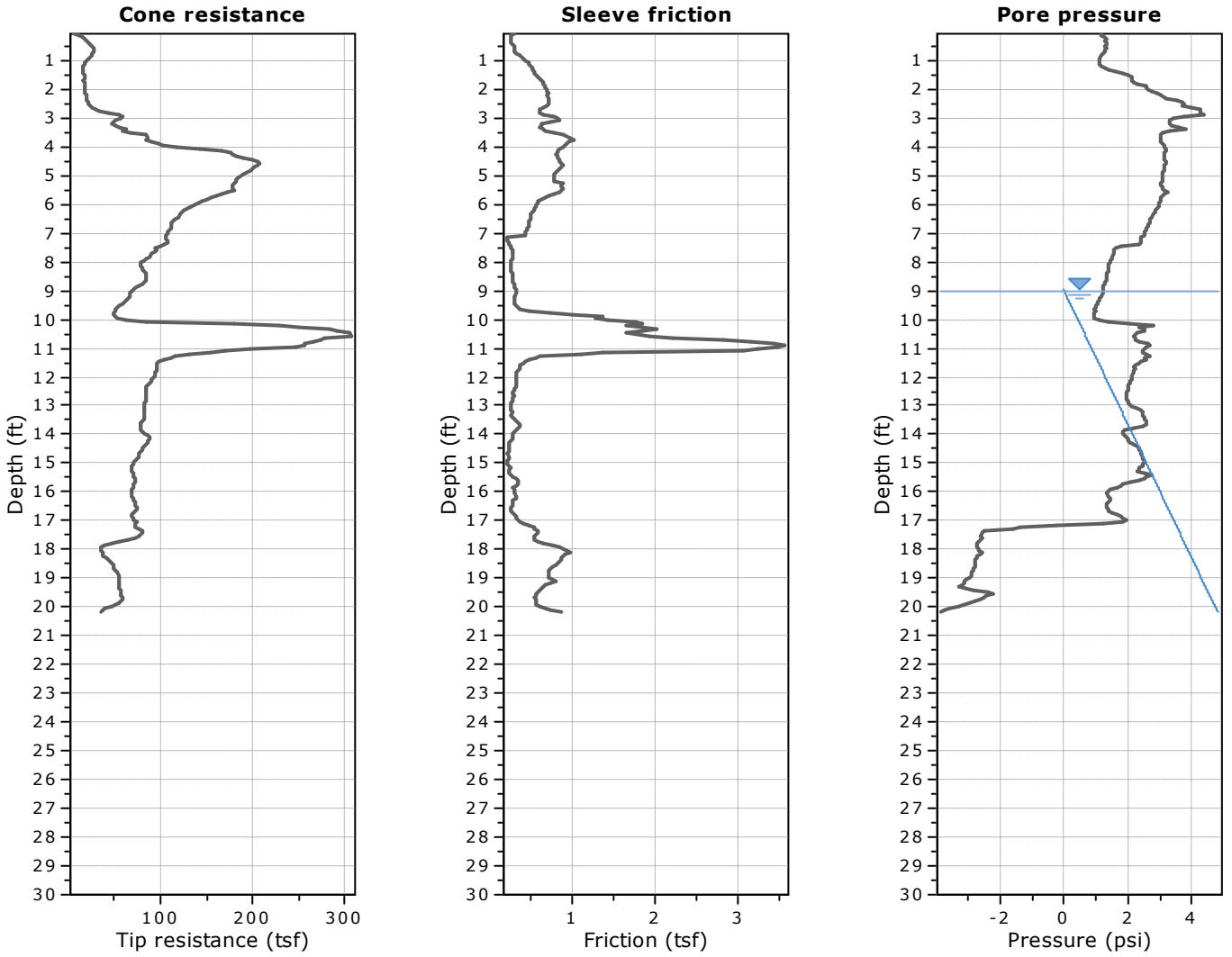
C-30
Total depth: 20.20 ft, Date: 5/14/2024
Surface Elevation: 61.66 ft
Coords: X:572763.15, Y:555860.02
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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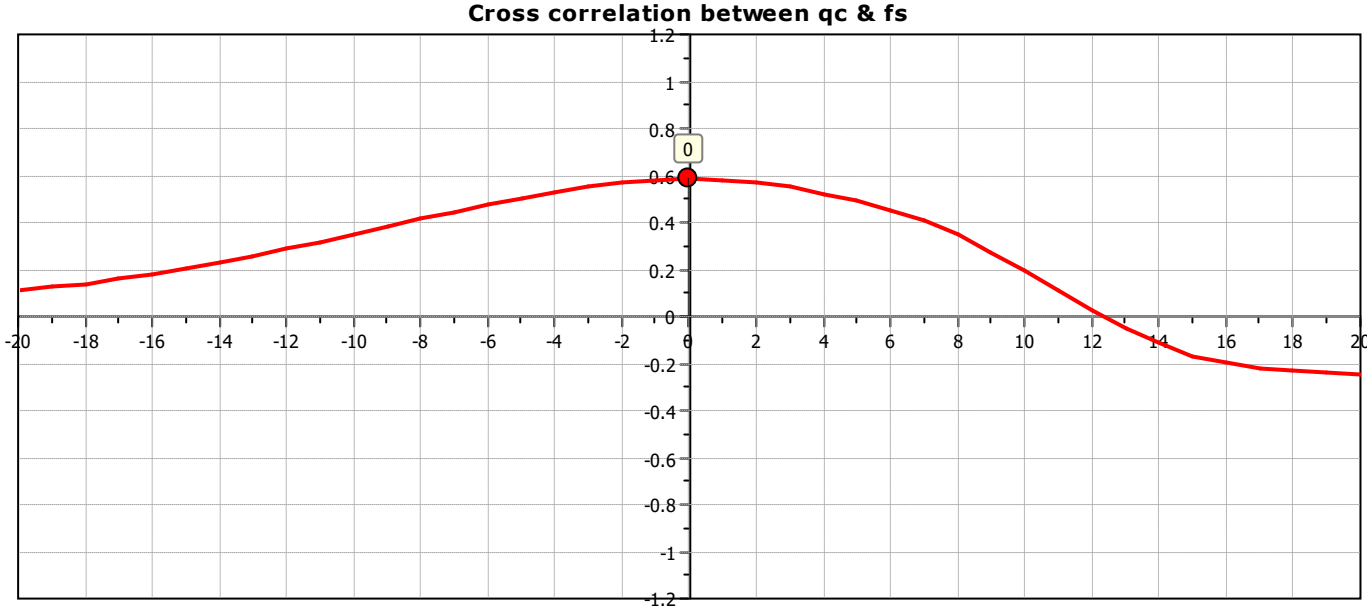

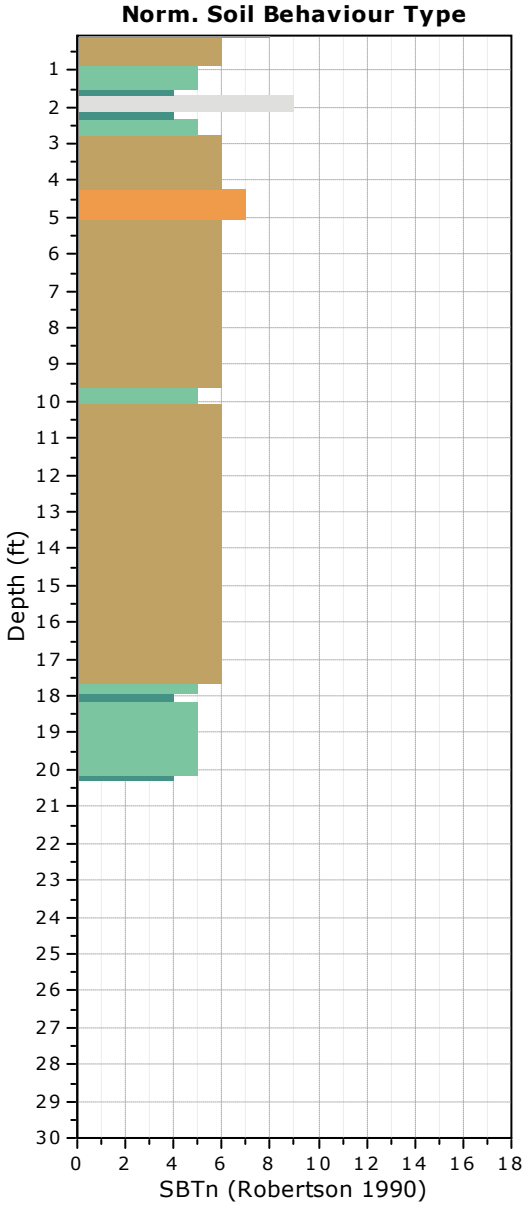

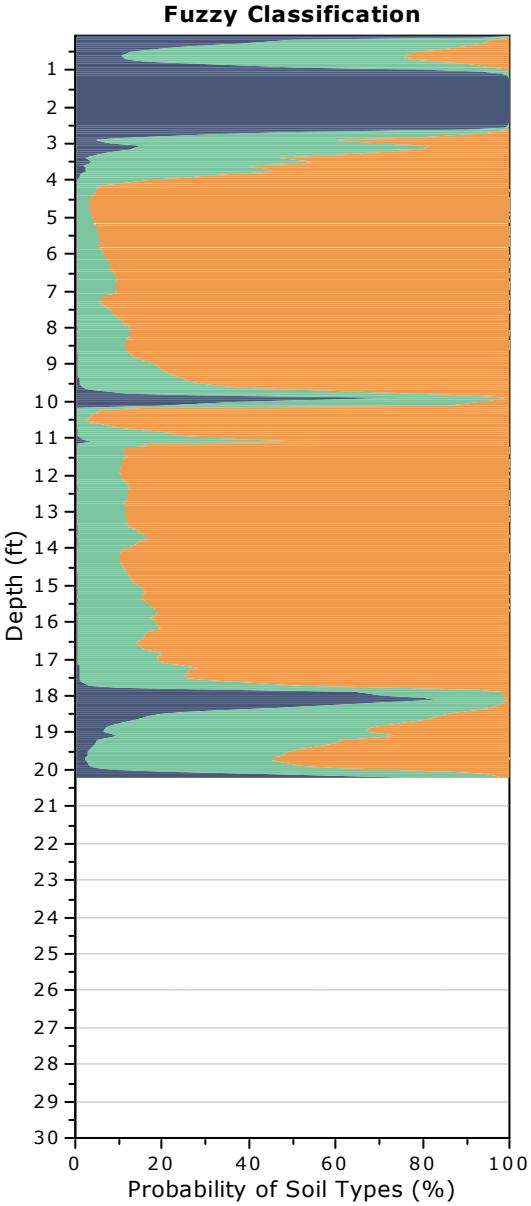

Fuzzy classifiaction legend

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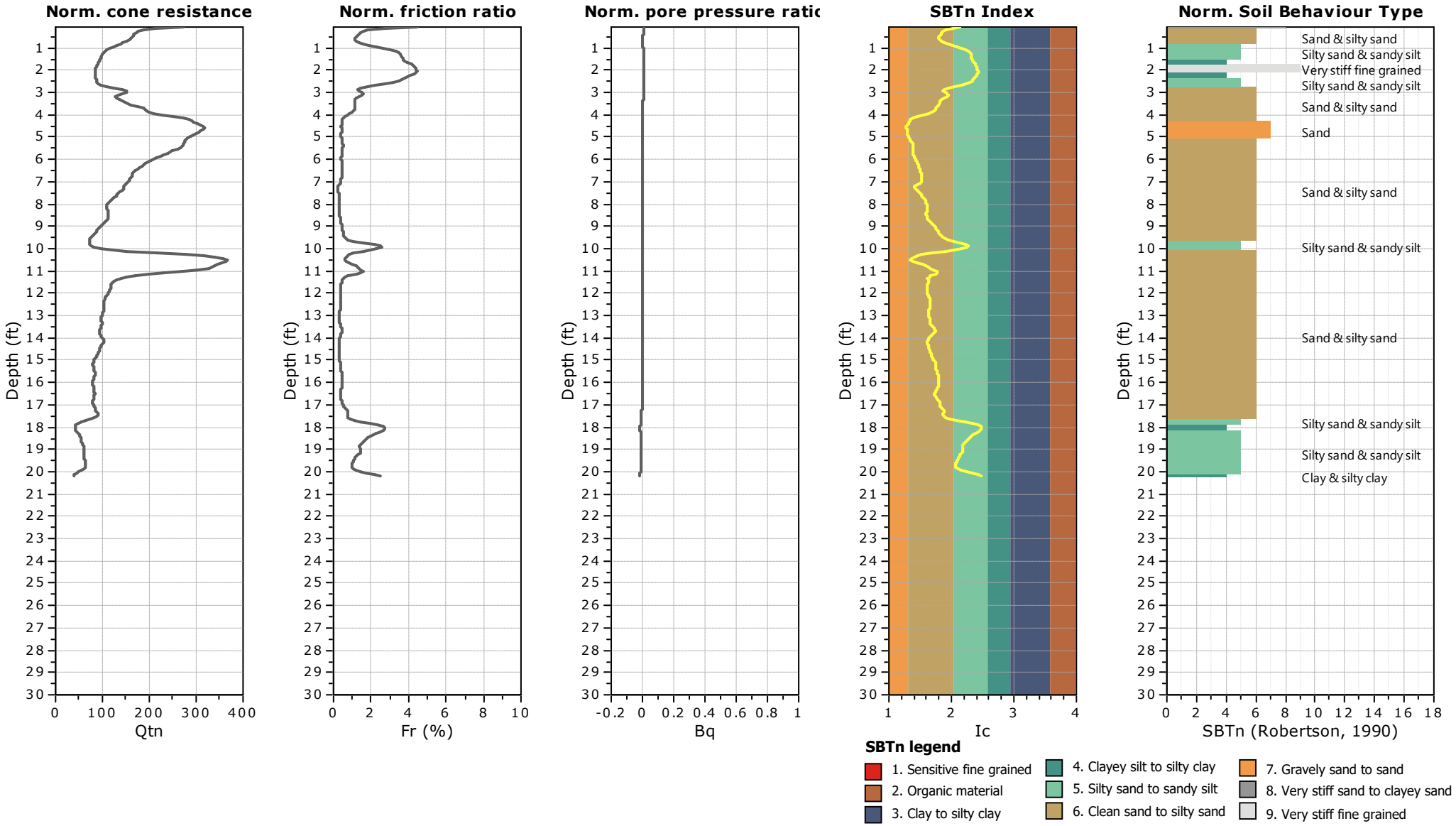

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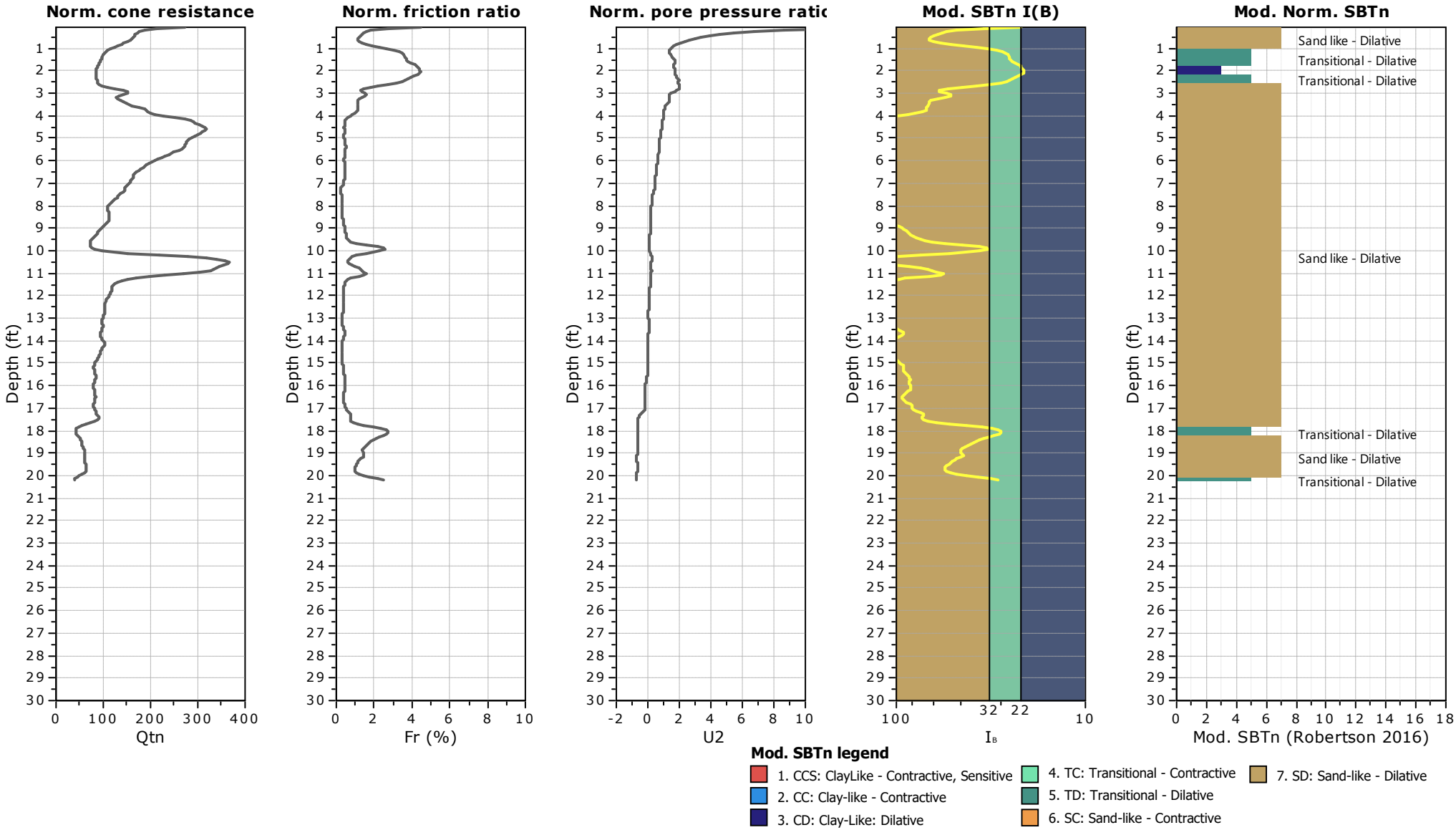

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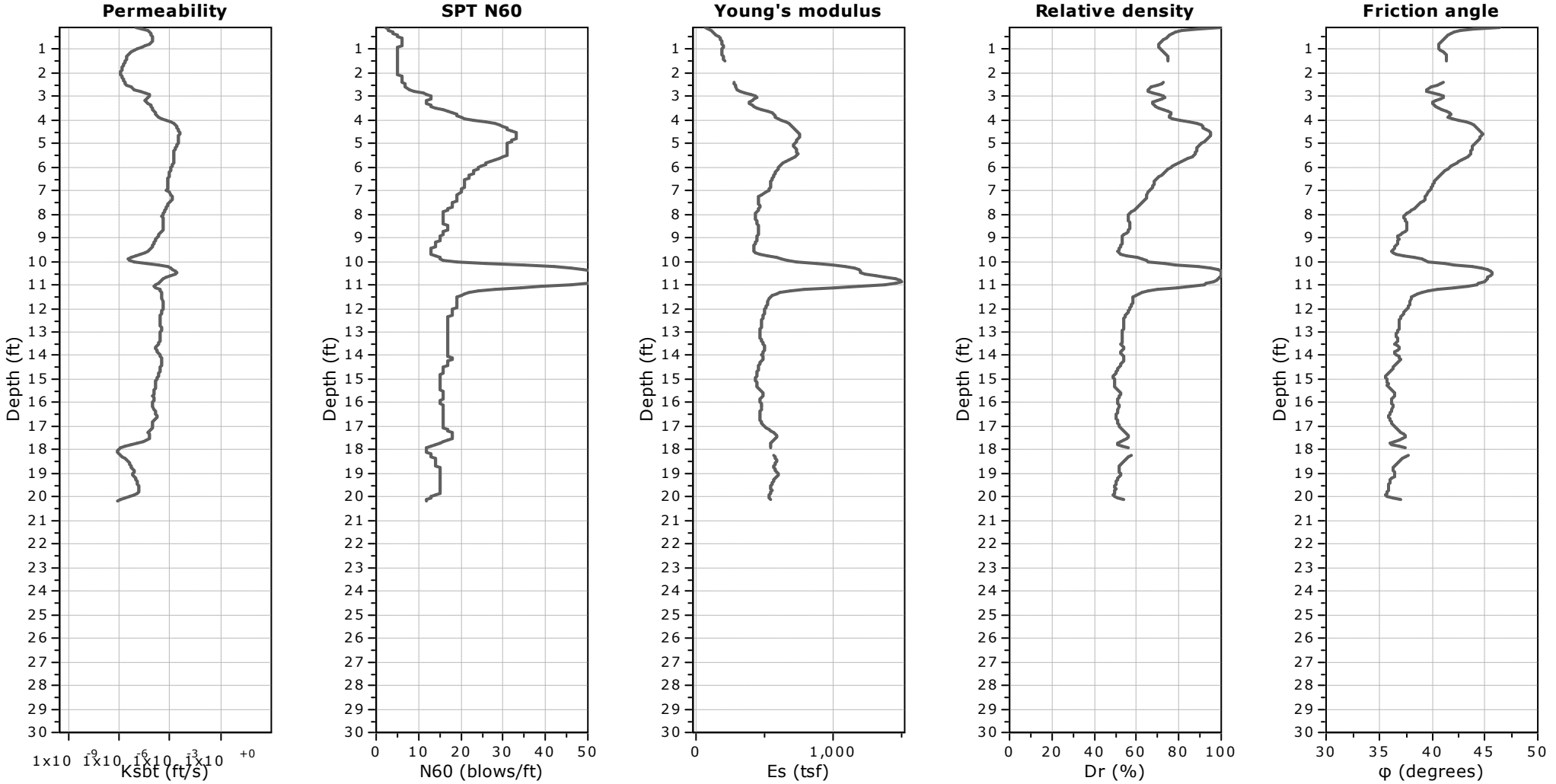

Calculation parameters

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SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
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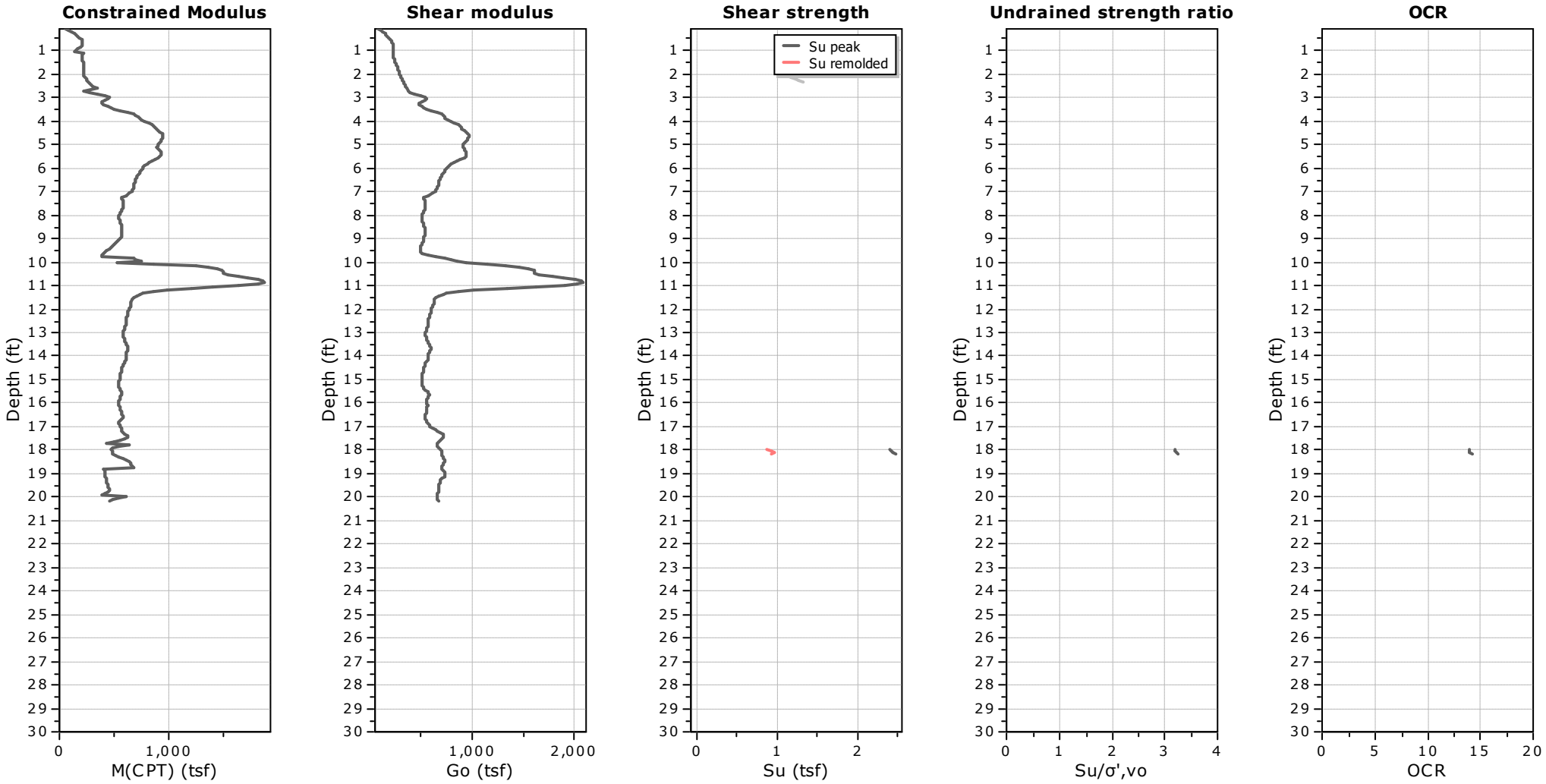

Calculation parameters

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Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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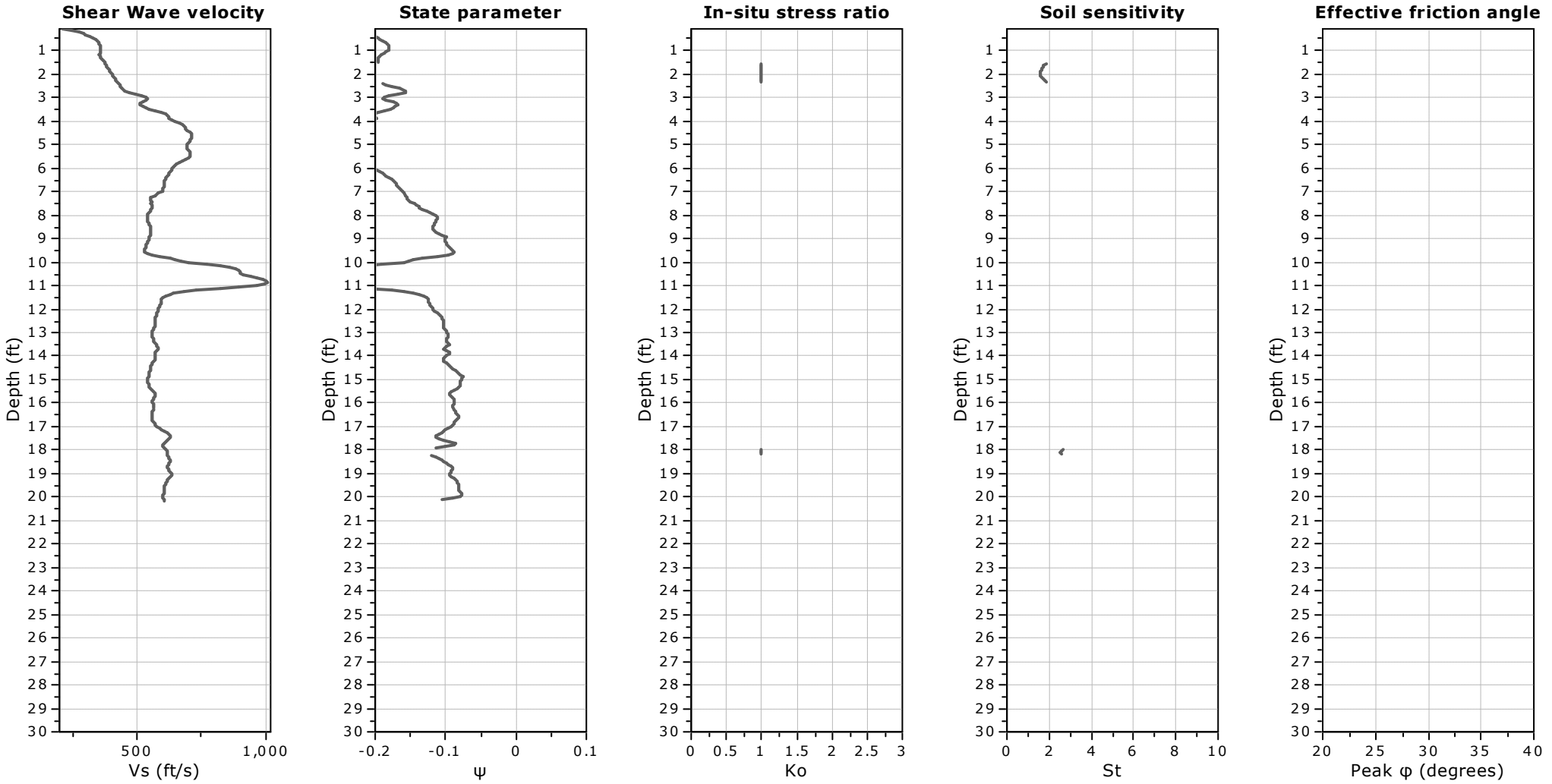

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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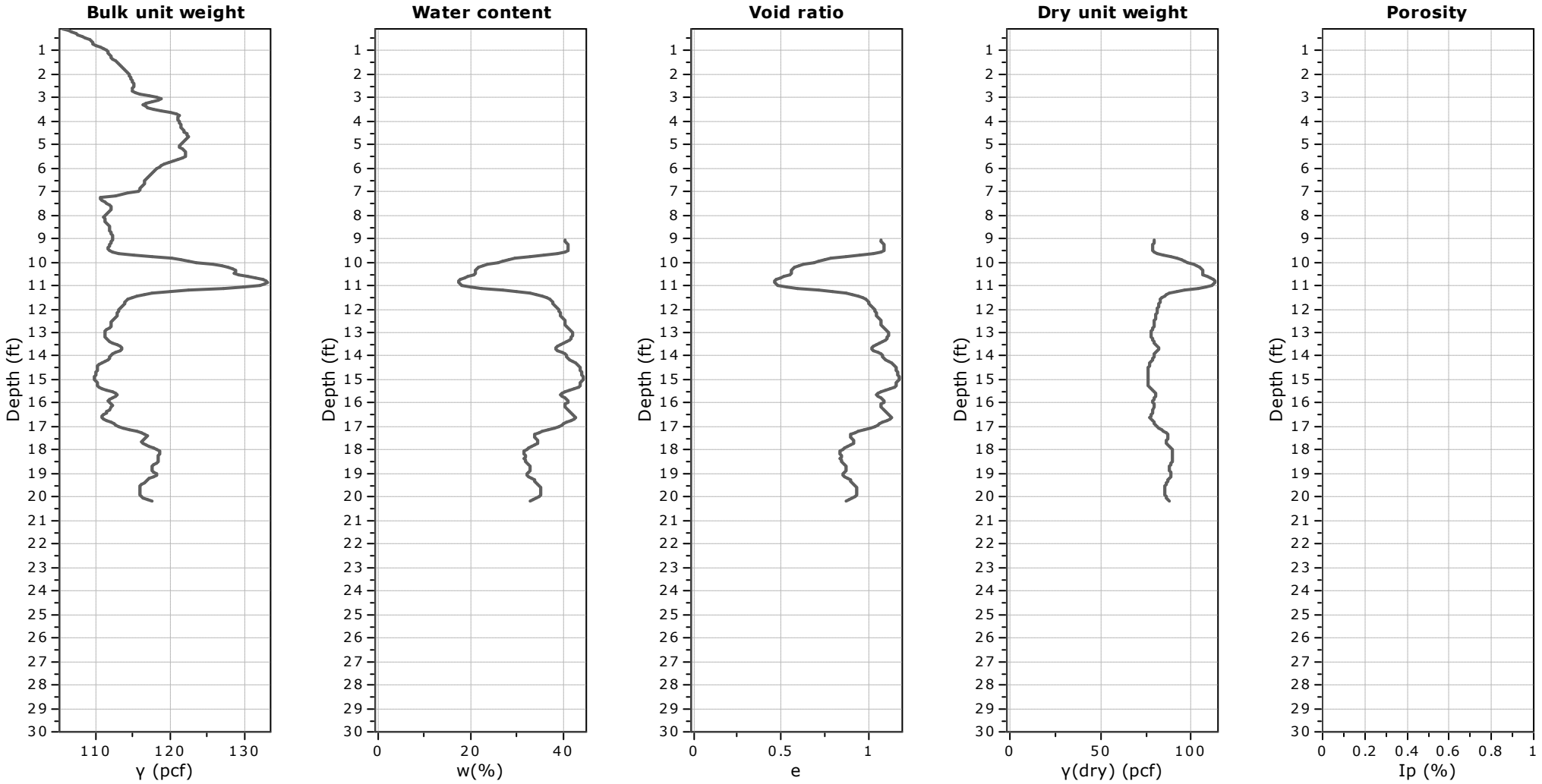

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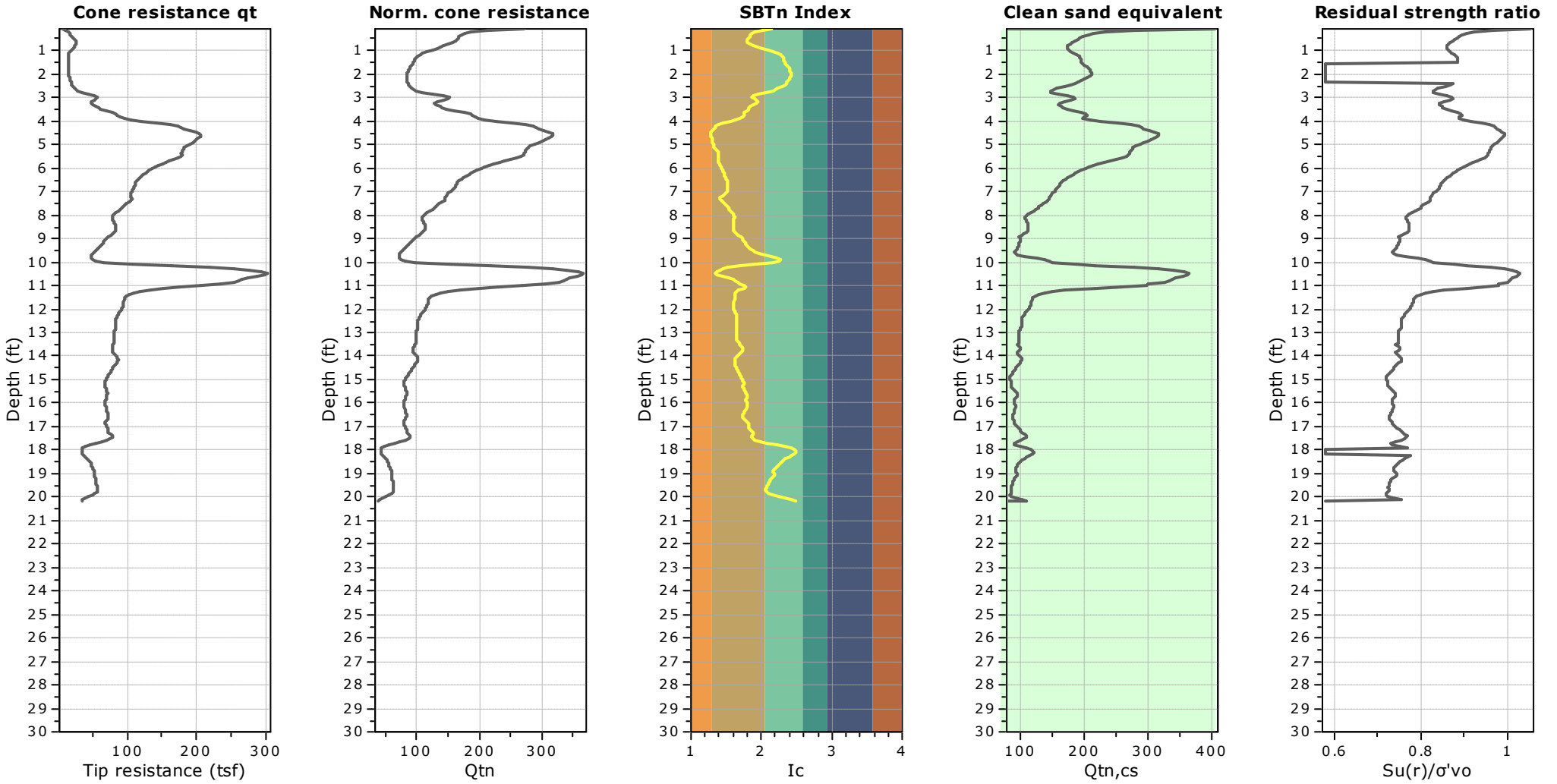

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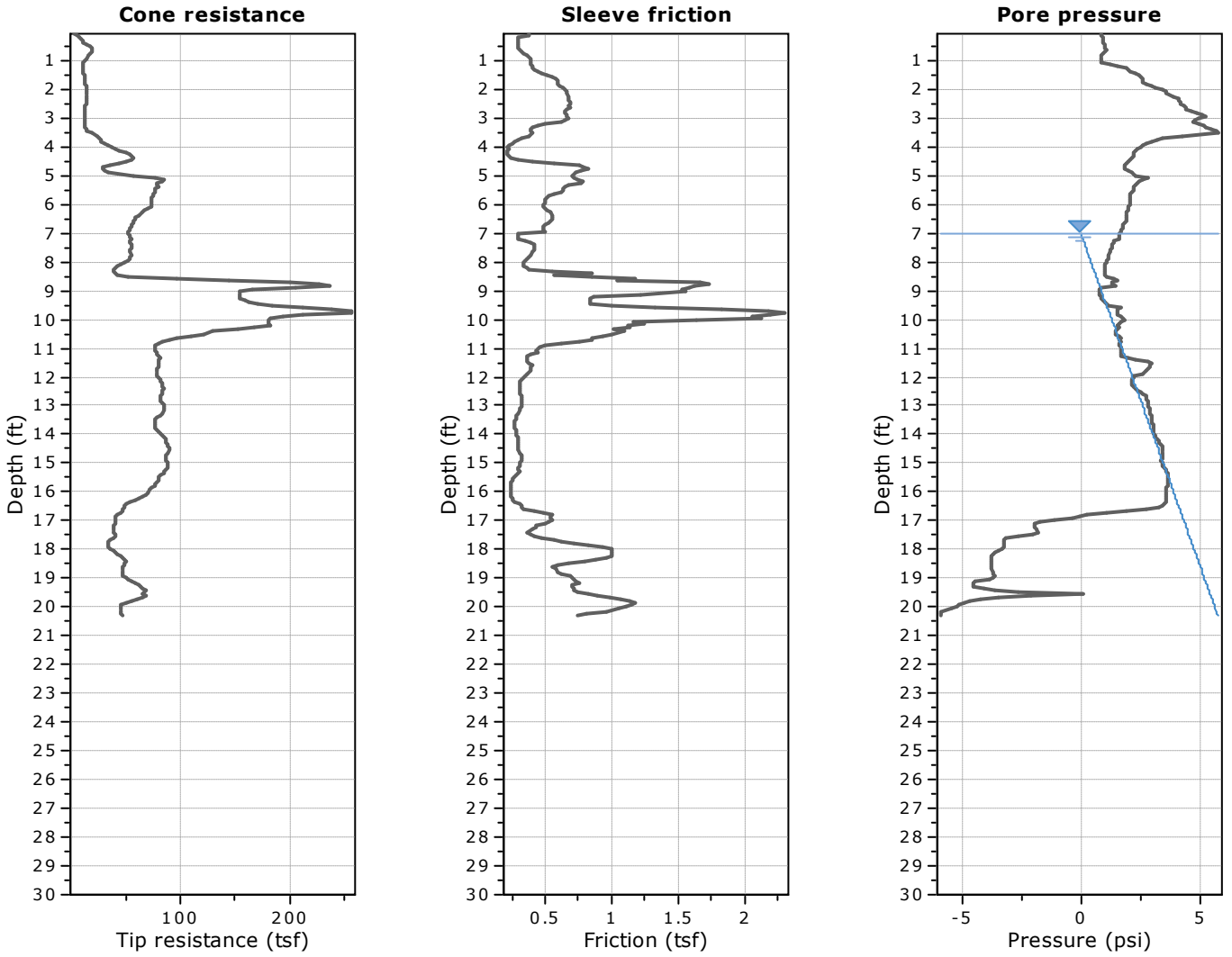
C-31
Total depth: 20.27 ft, Date: 5/14/2024
Surface Elevation: 61.56 ft
Coords: X:572734.99, Y:555836.01
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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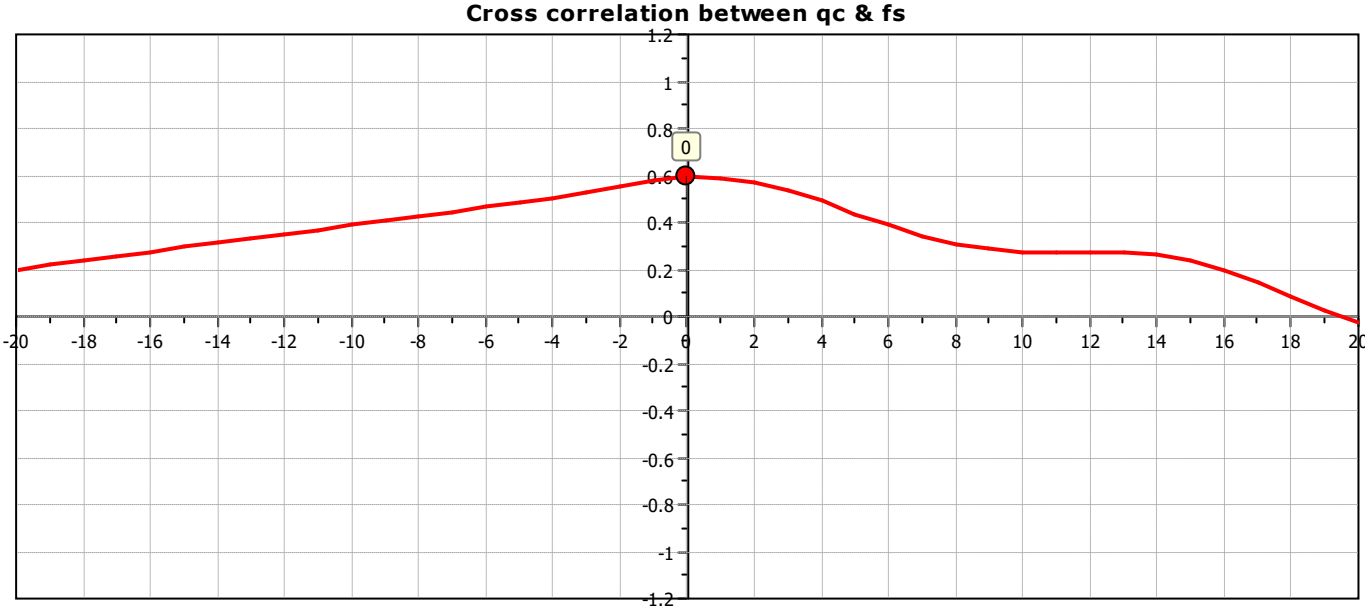

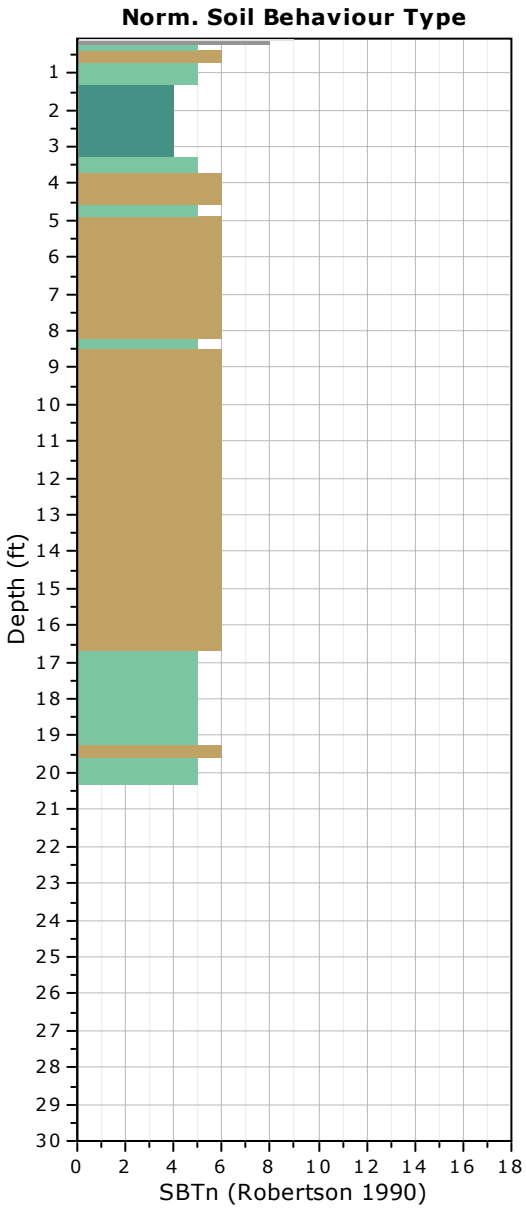

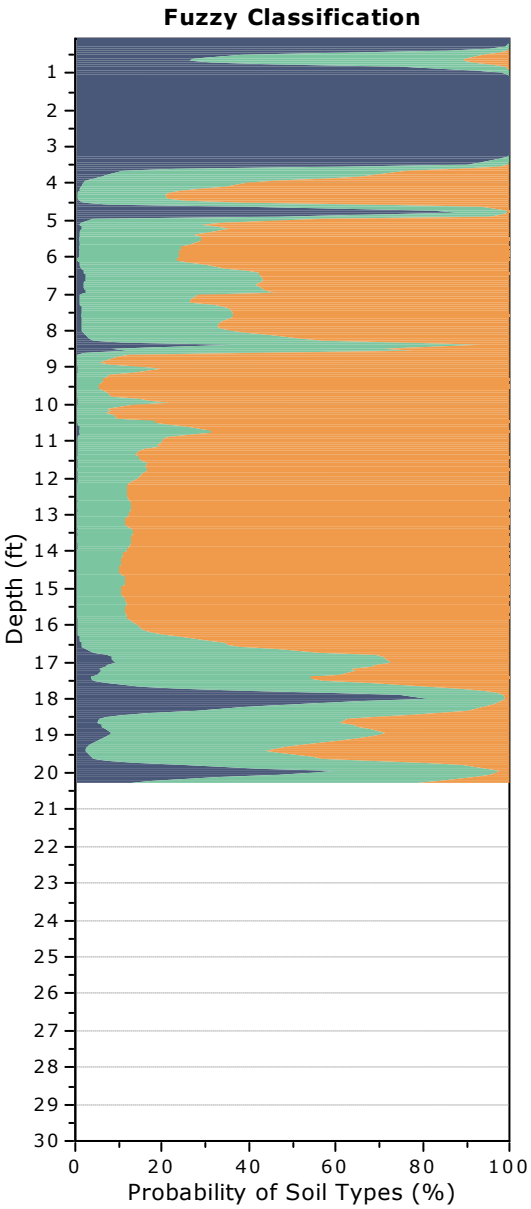

Fuzzy classifiaction legend

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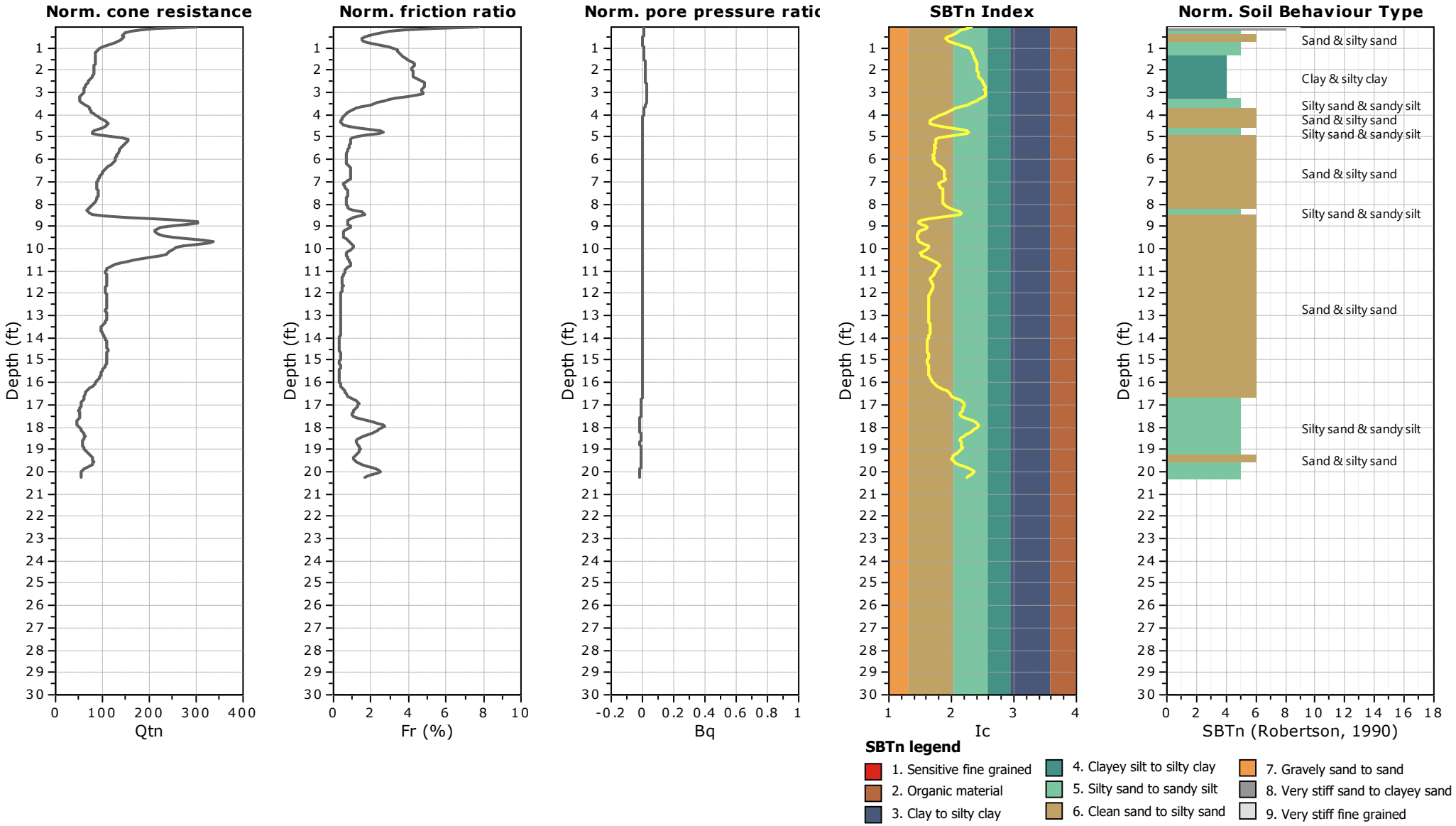

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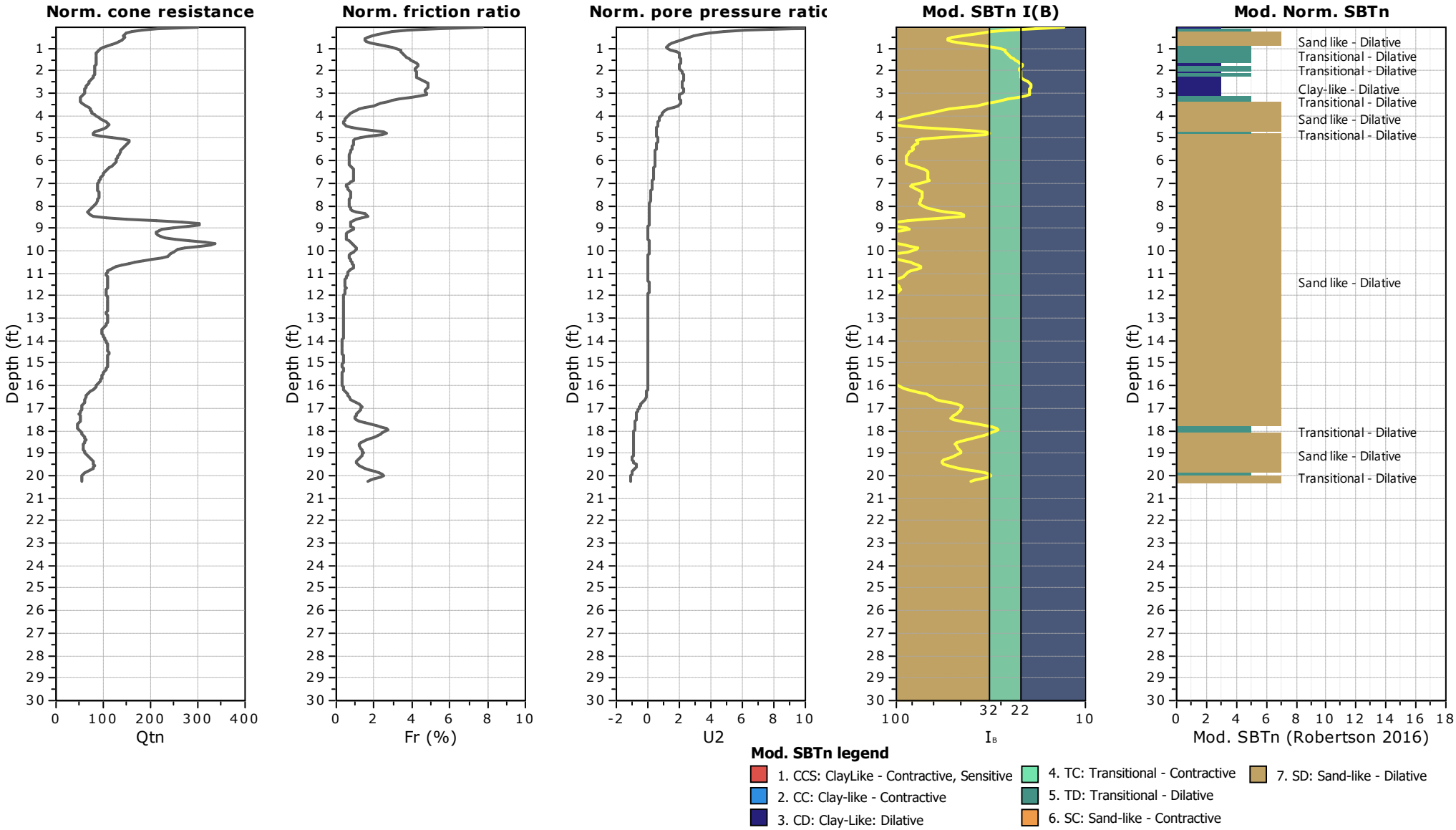

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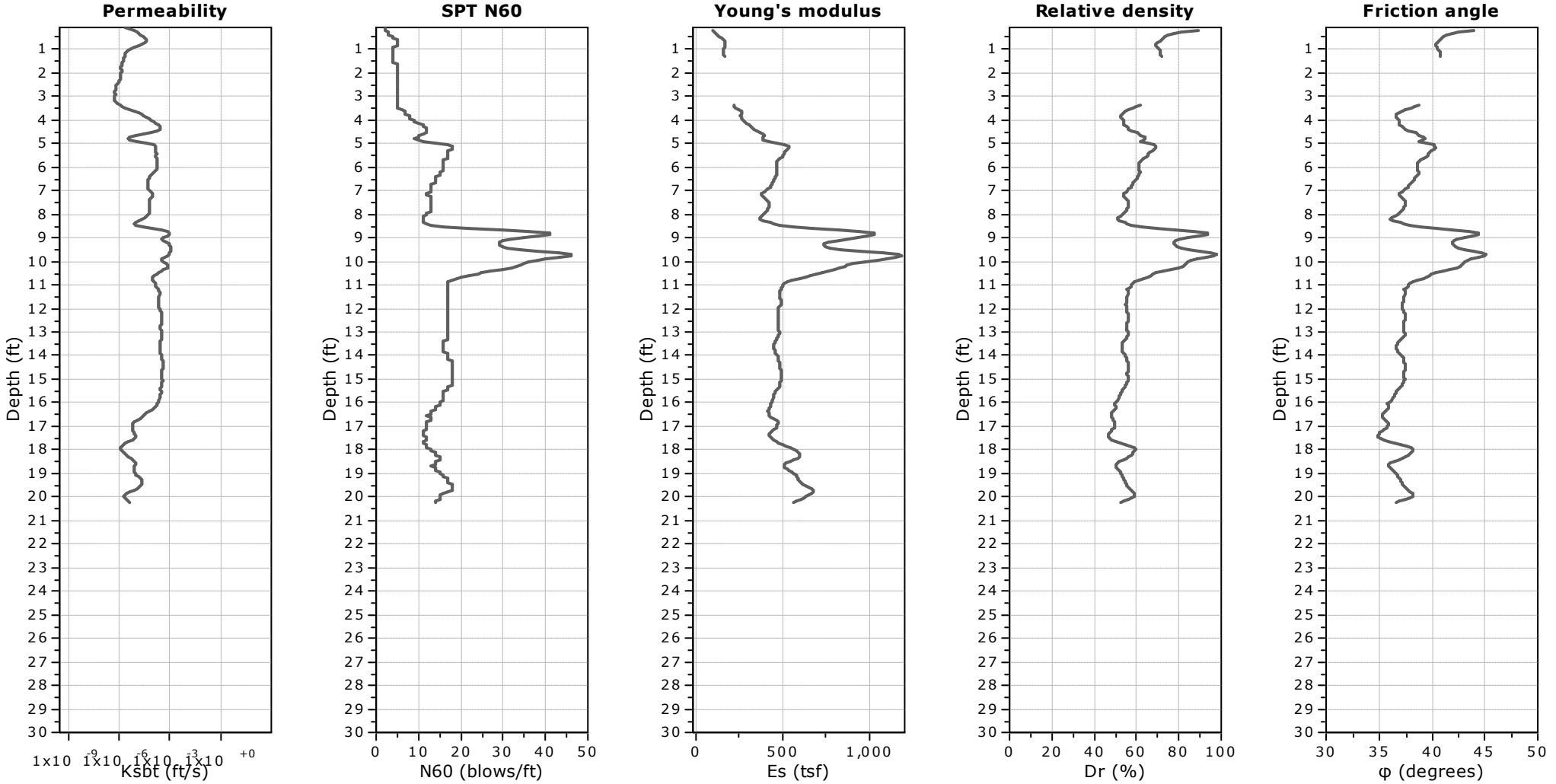

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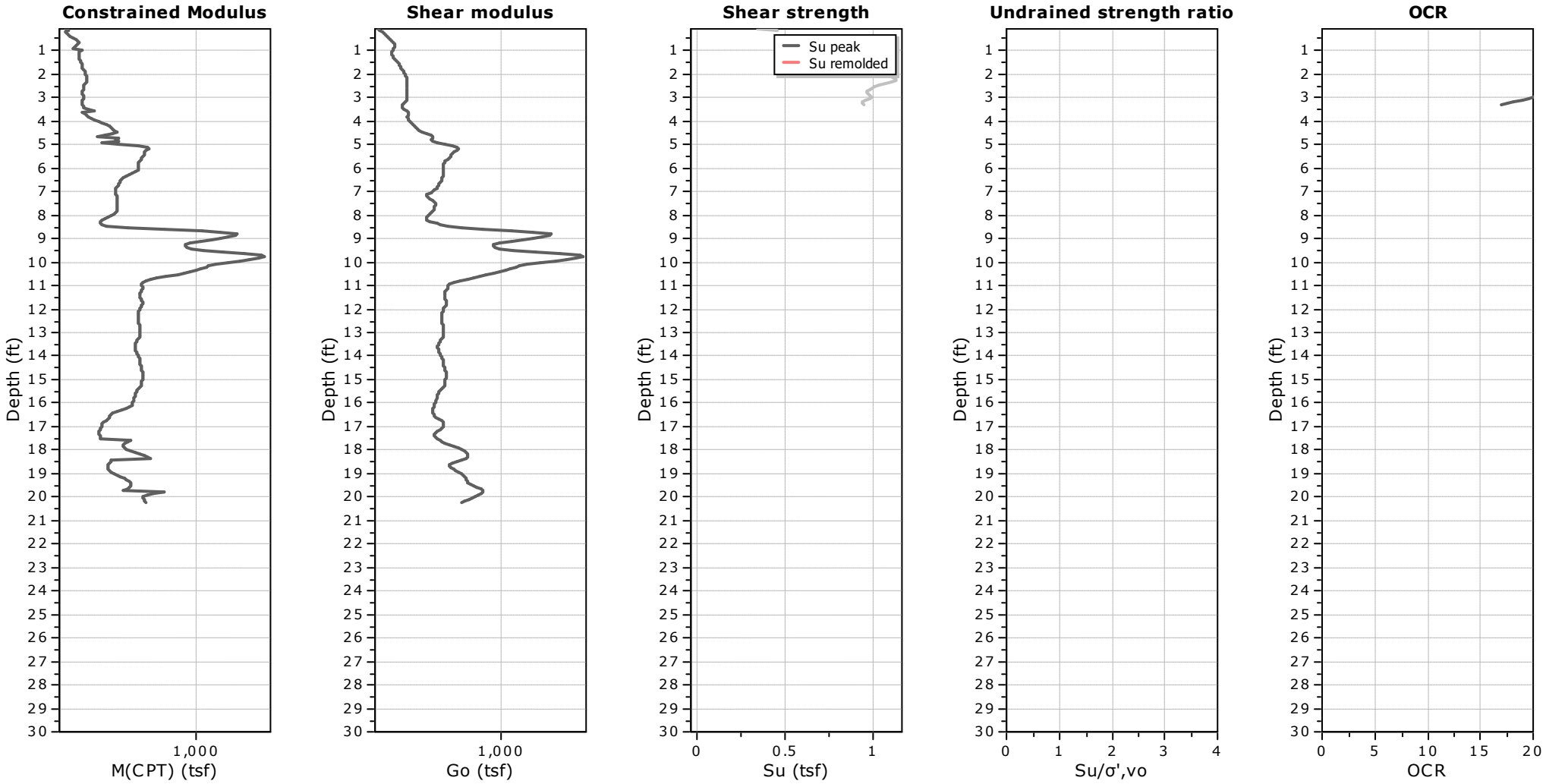

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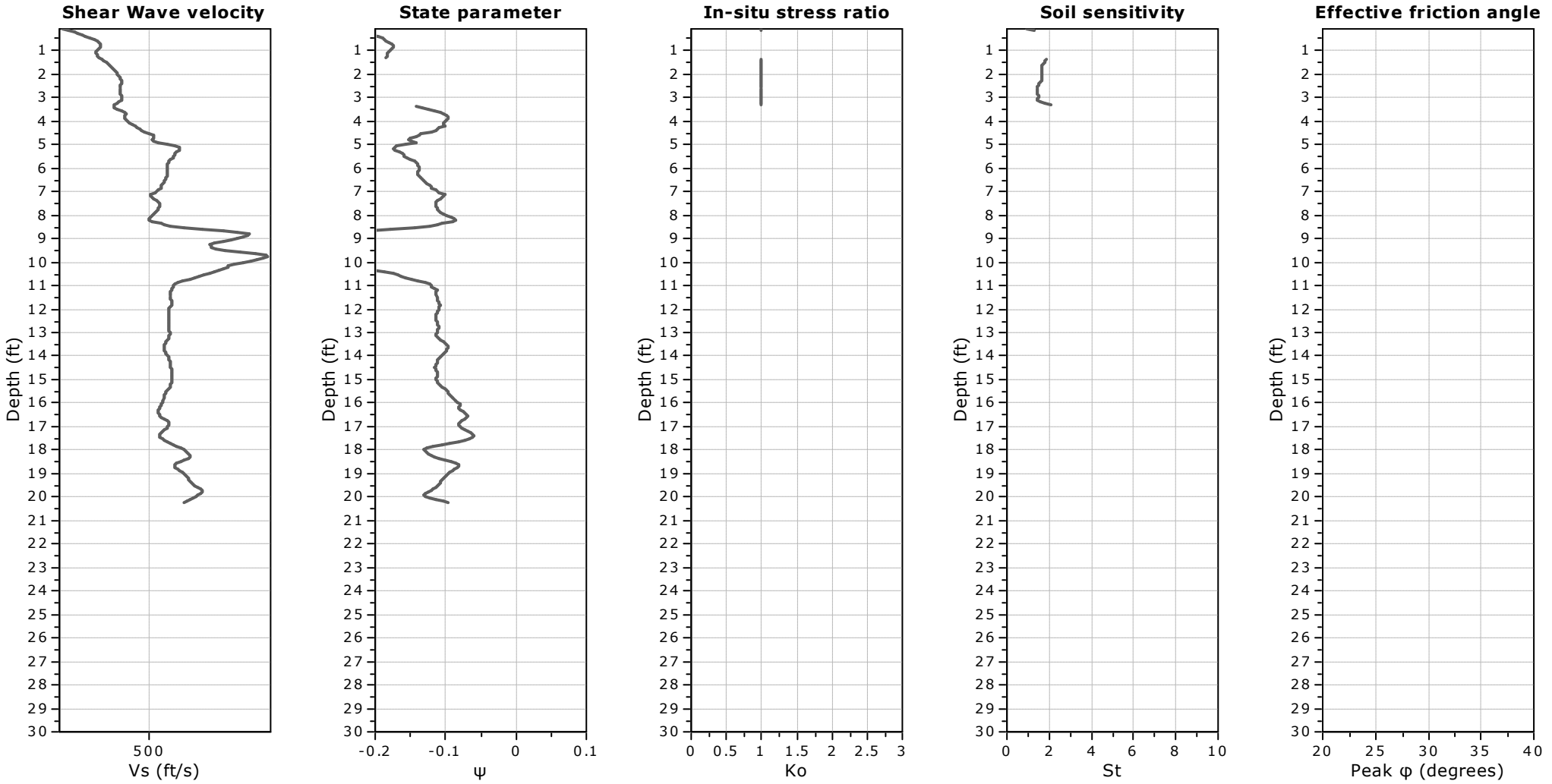

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Soil Sensitivity factor, N_S: 7.00

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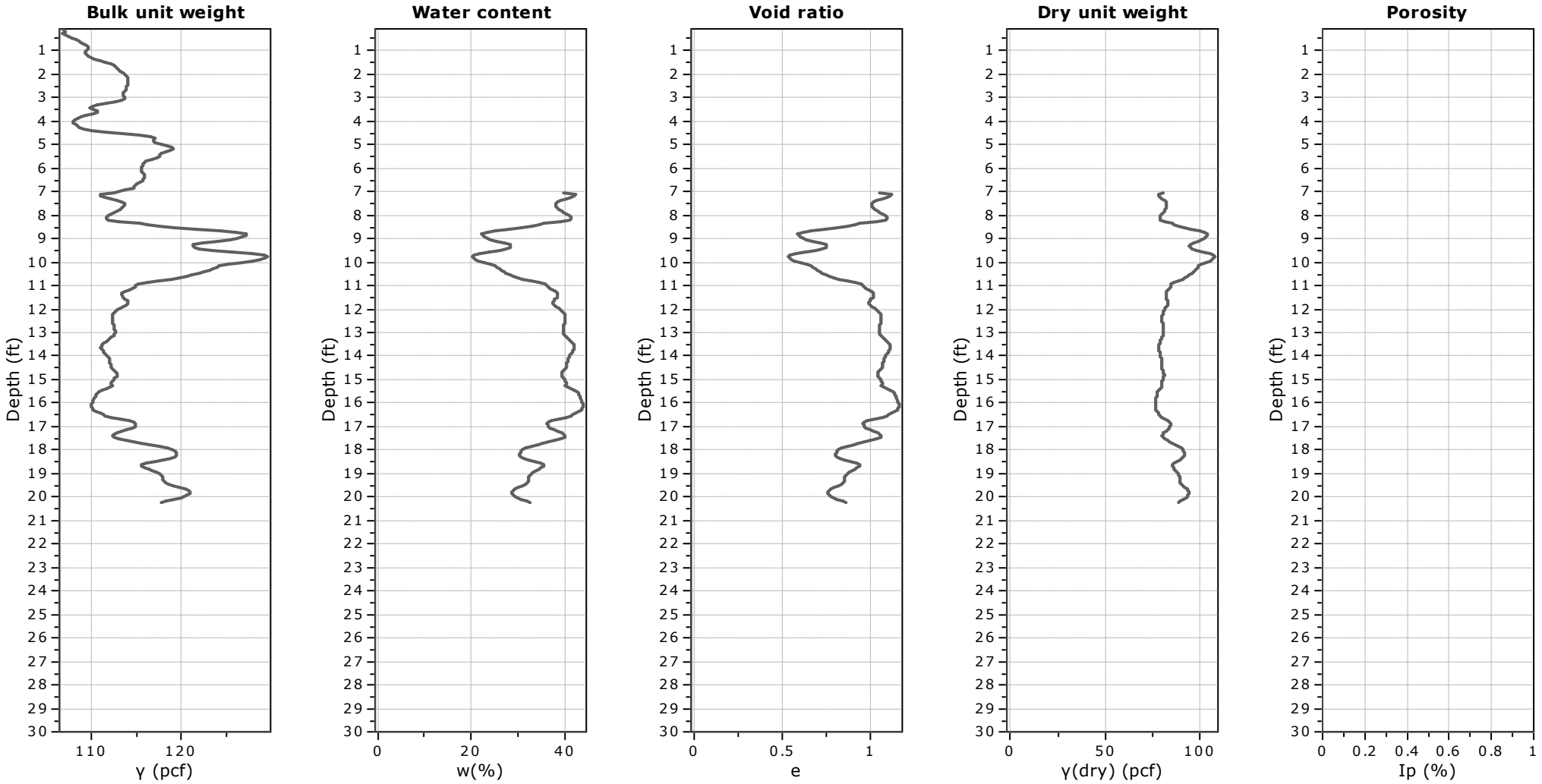
C-31
Total depth: 20.27 ft, Date: 5/14/2024
Surface Elevation: 61.56 ft
Coords: X:572734.99, Y:555836.01
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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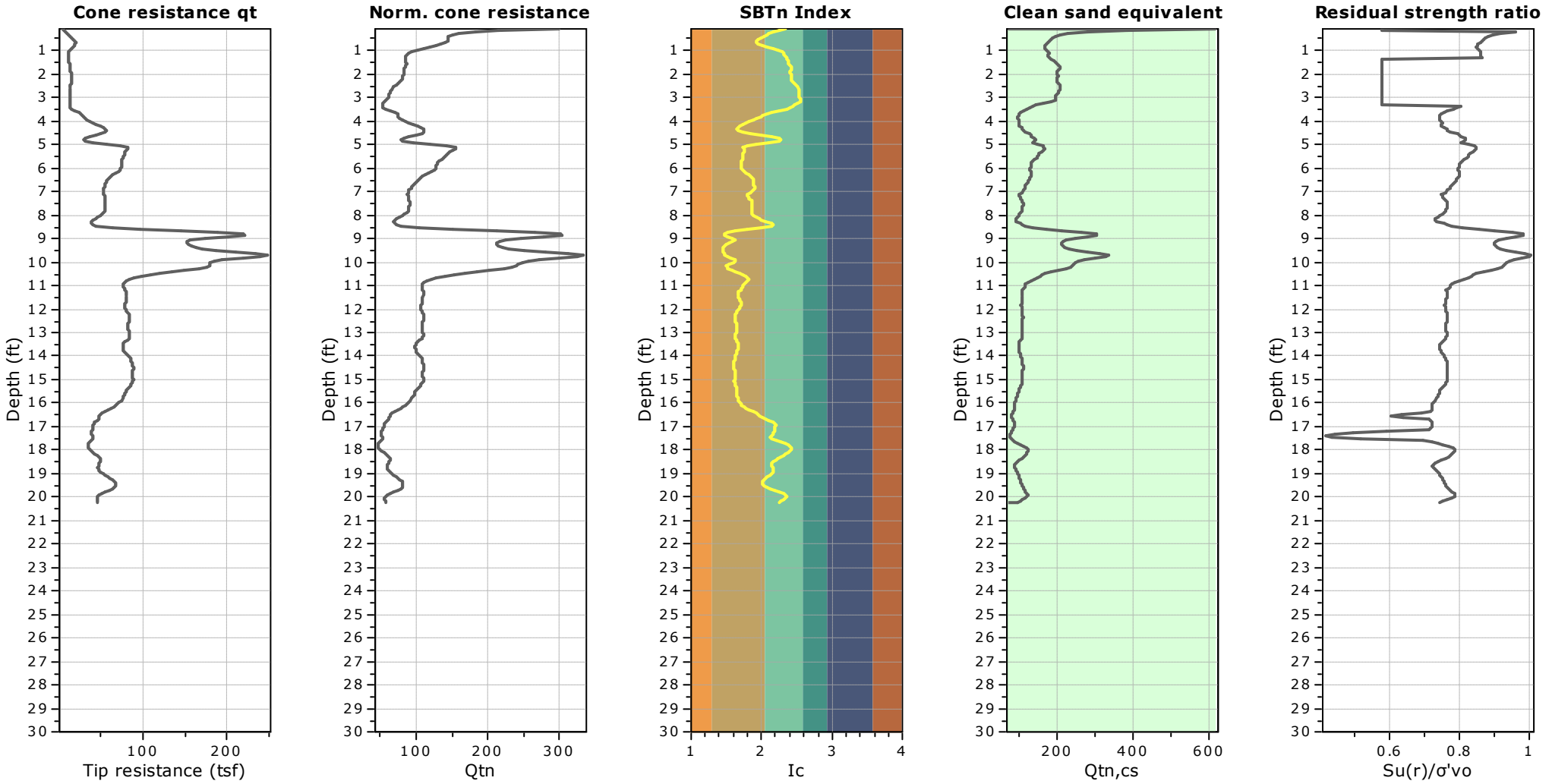

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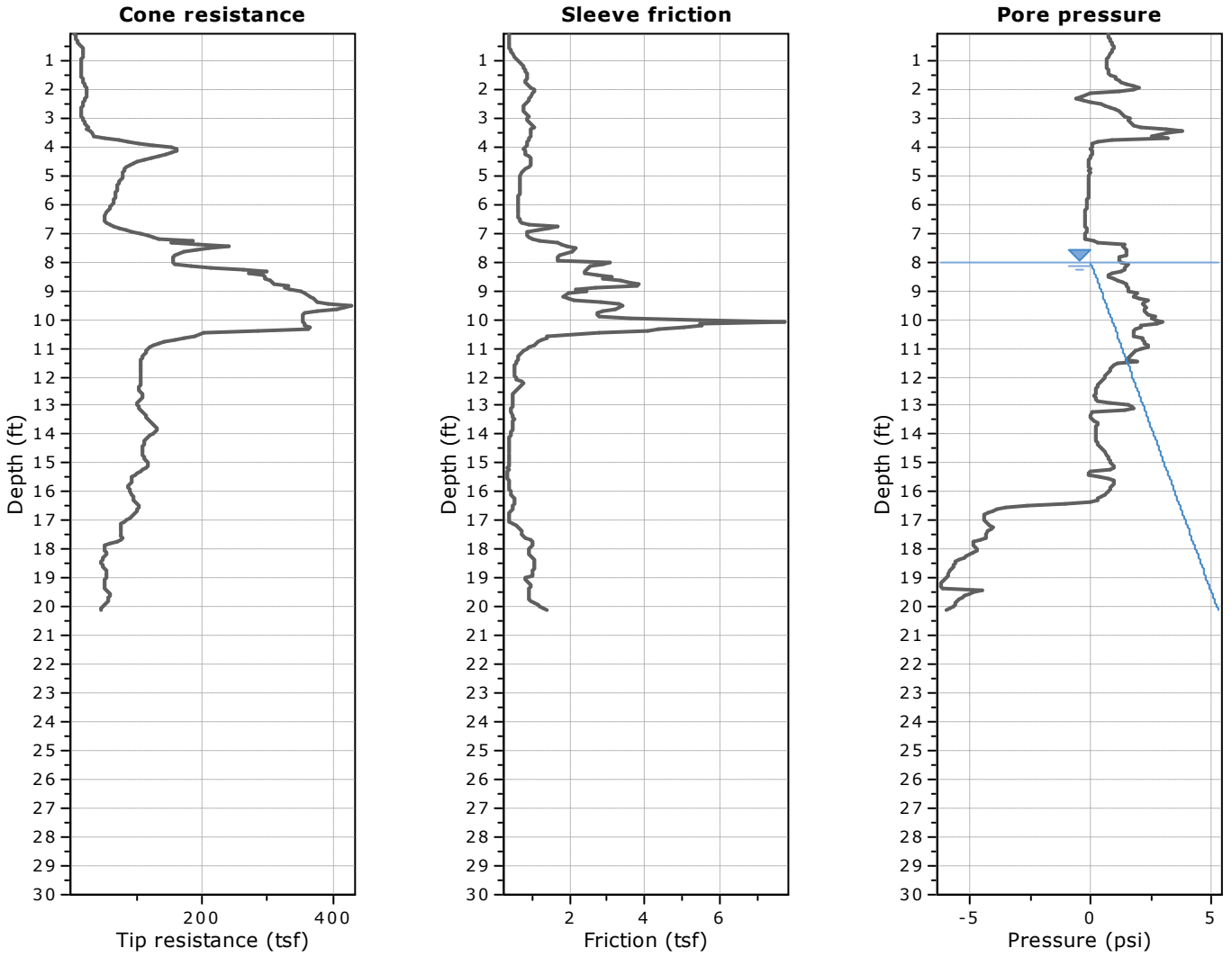
C-32
Total depth: 20.14 ft, Date: 5/14/2024
Surface Elevation: 61.82 ft
Coords: X:572688.59, Y:555726.12
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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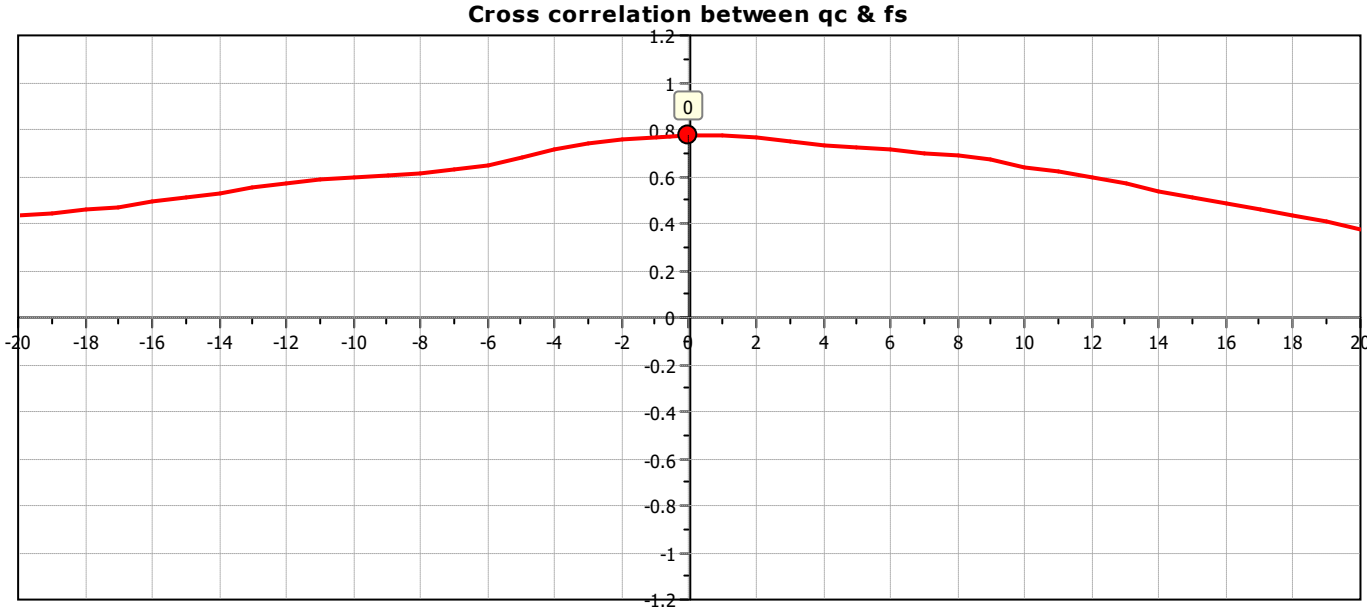

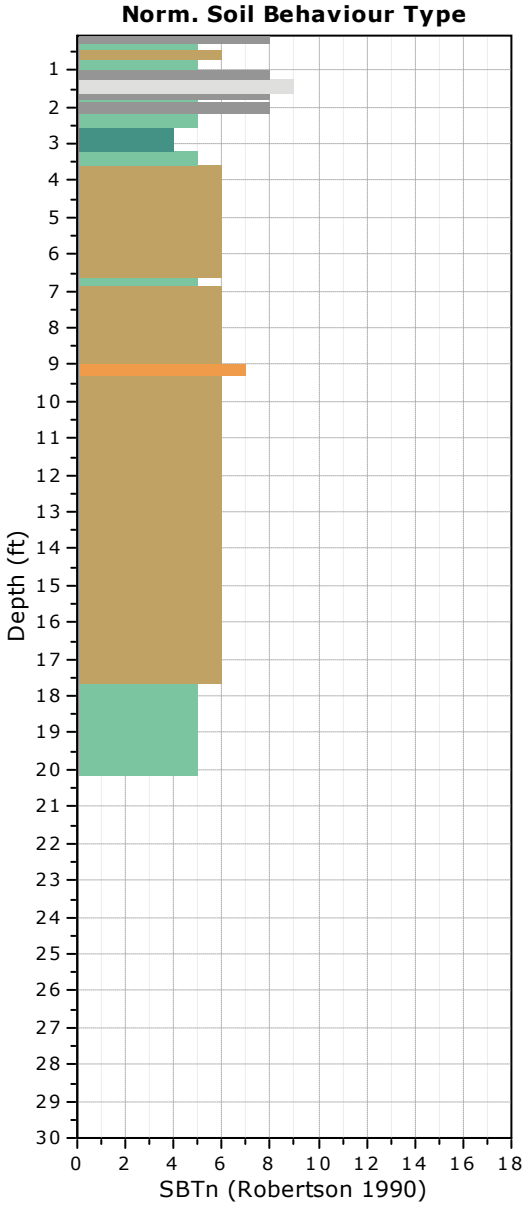

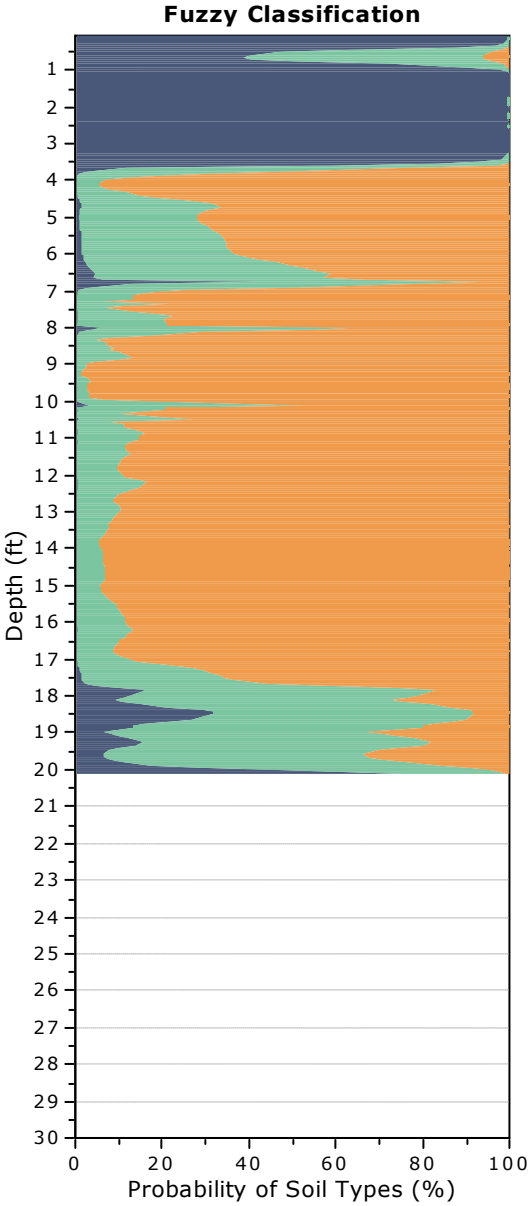

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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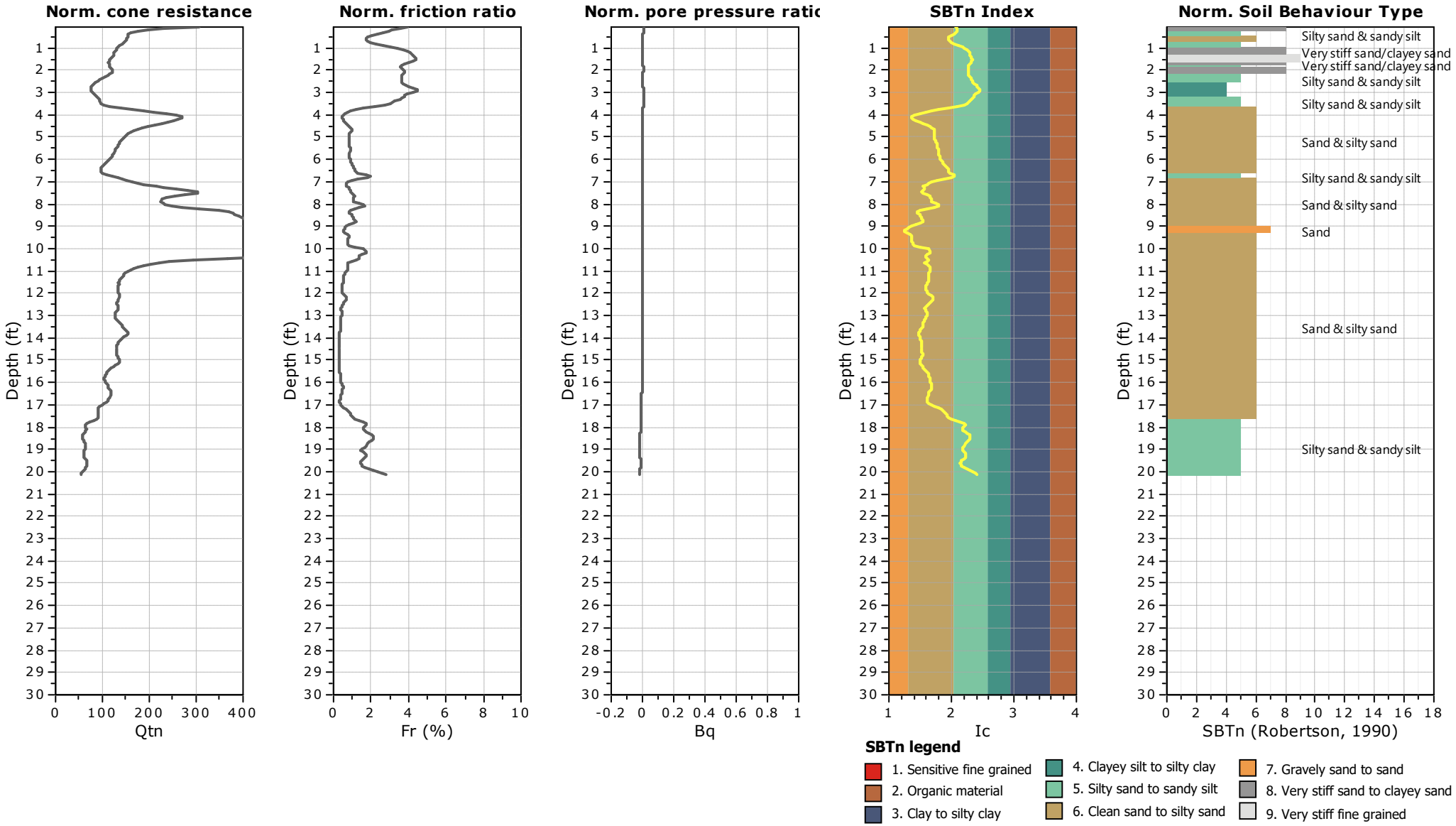

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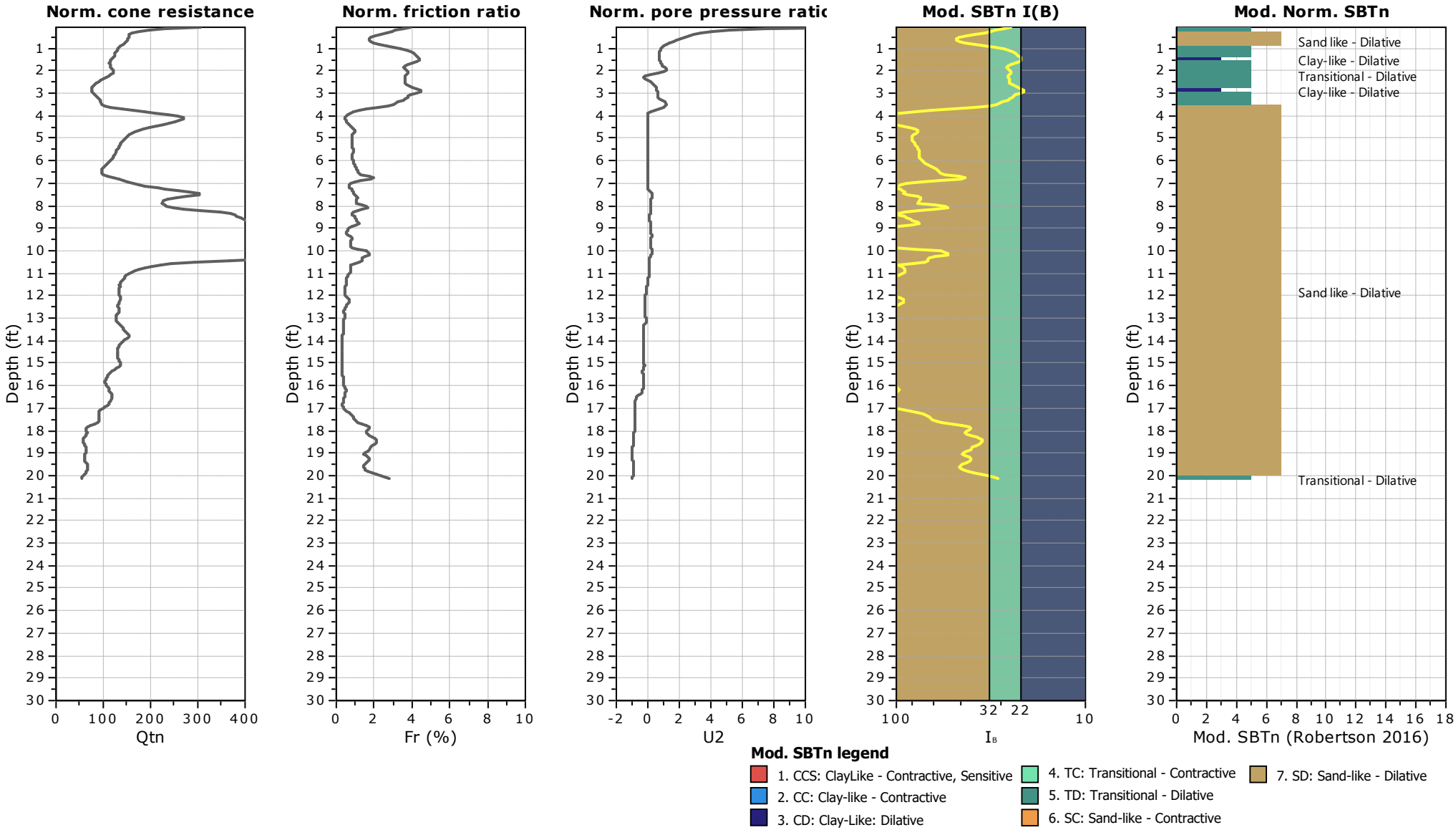

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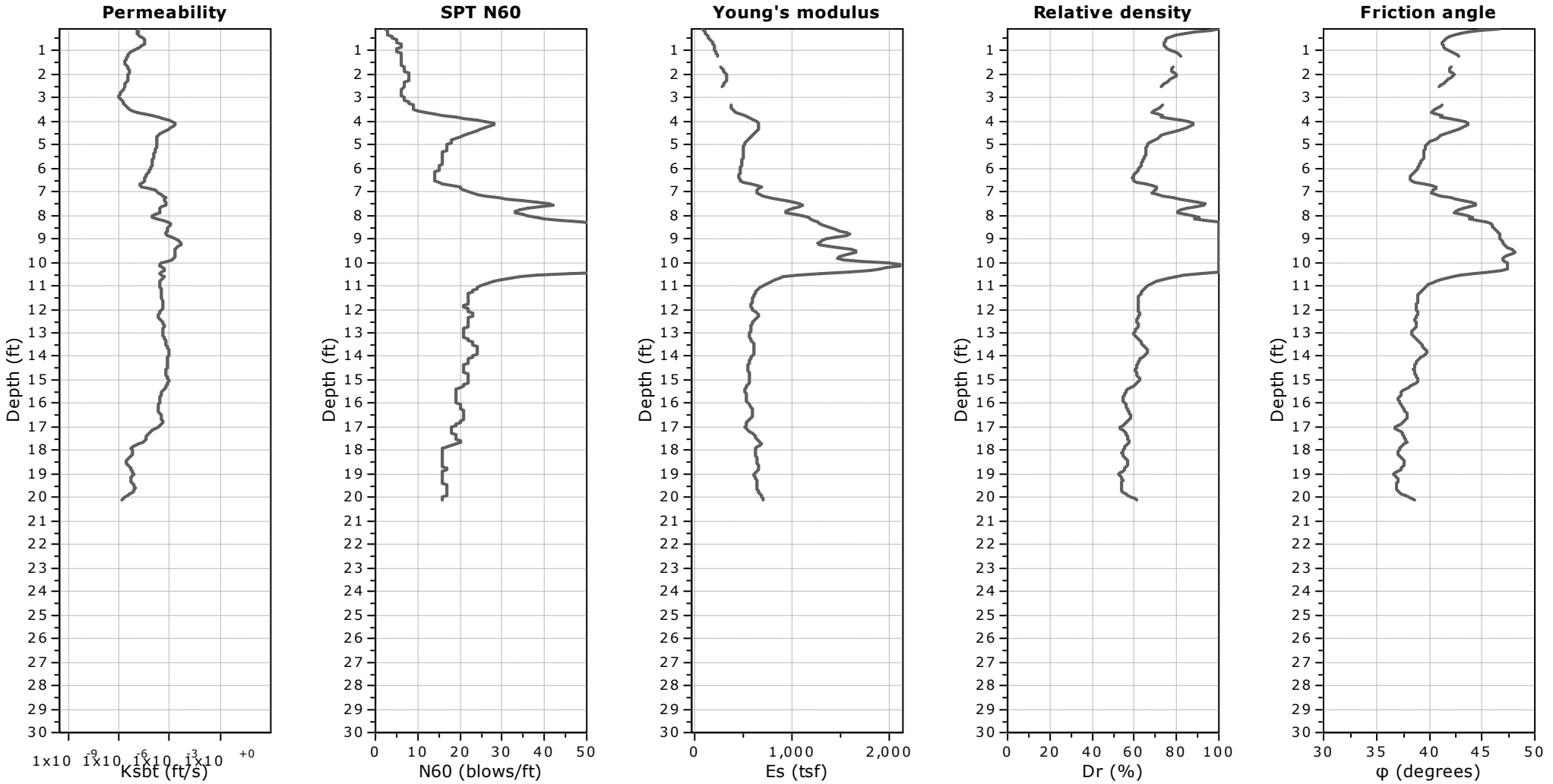

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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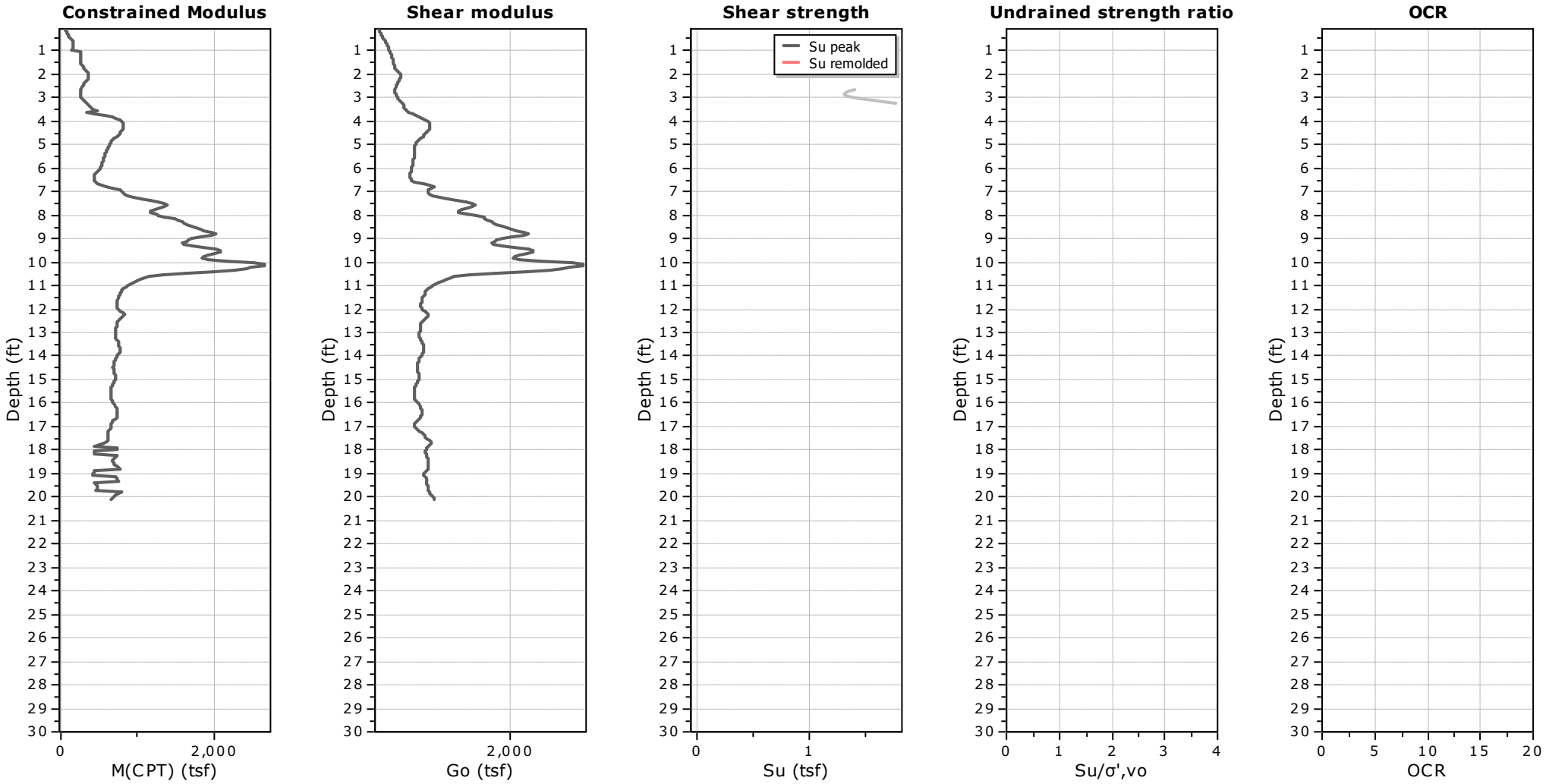

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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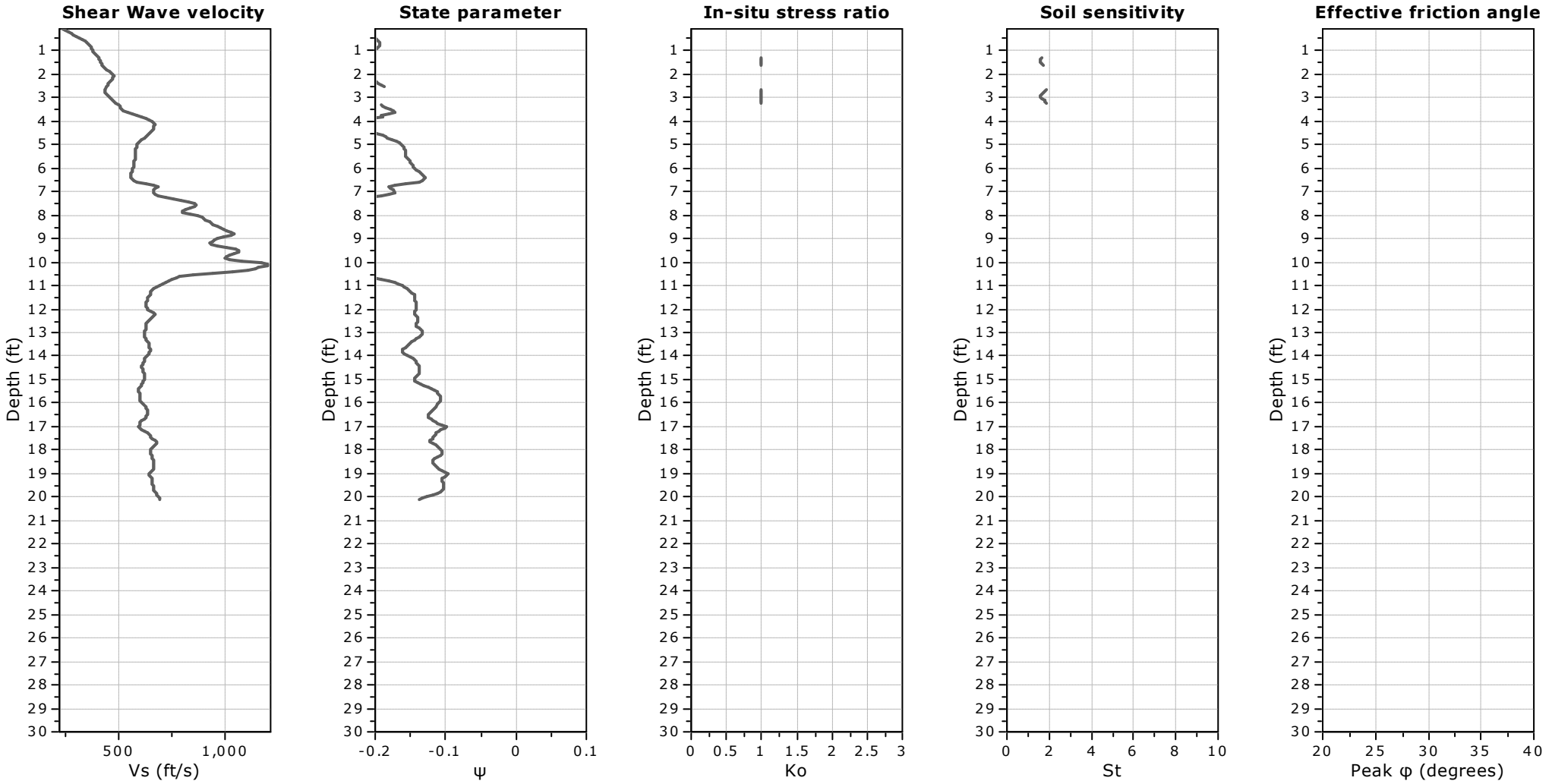

Calculation parameters

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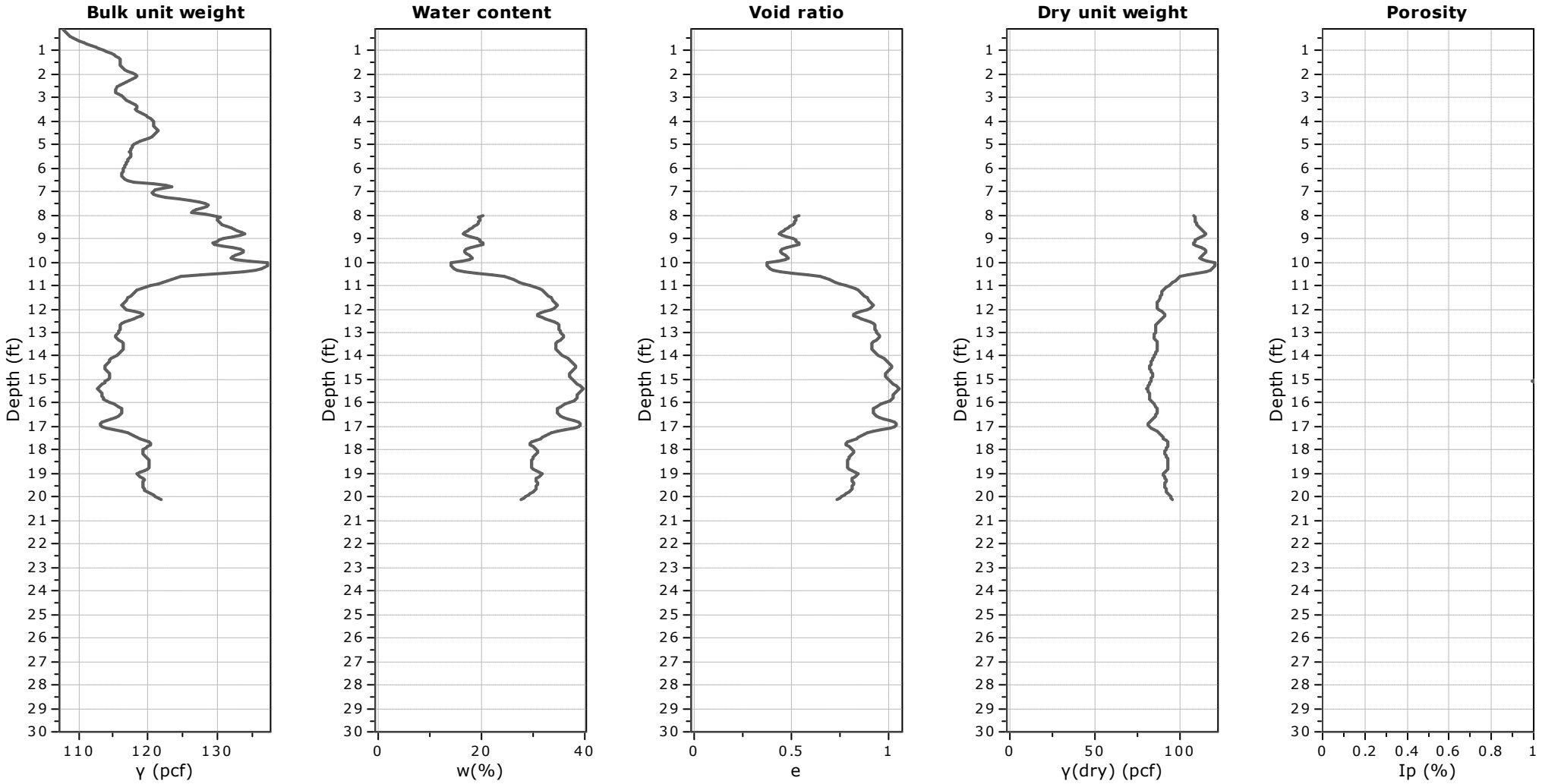

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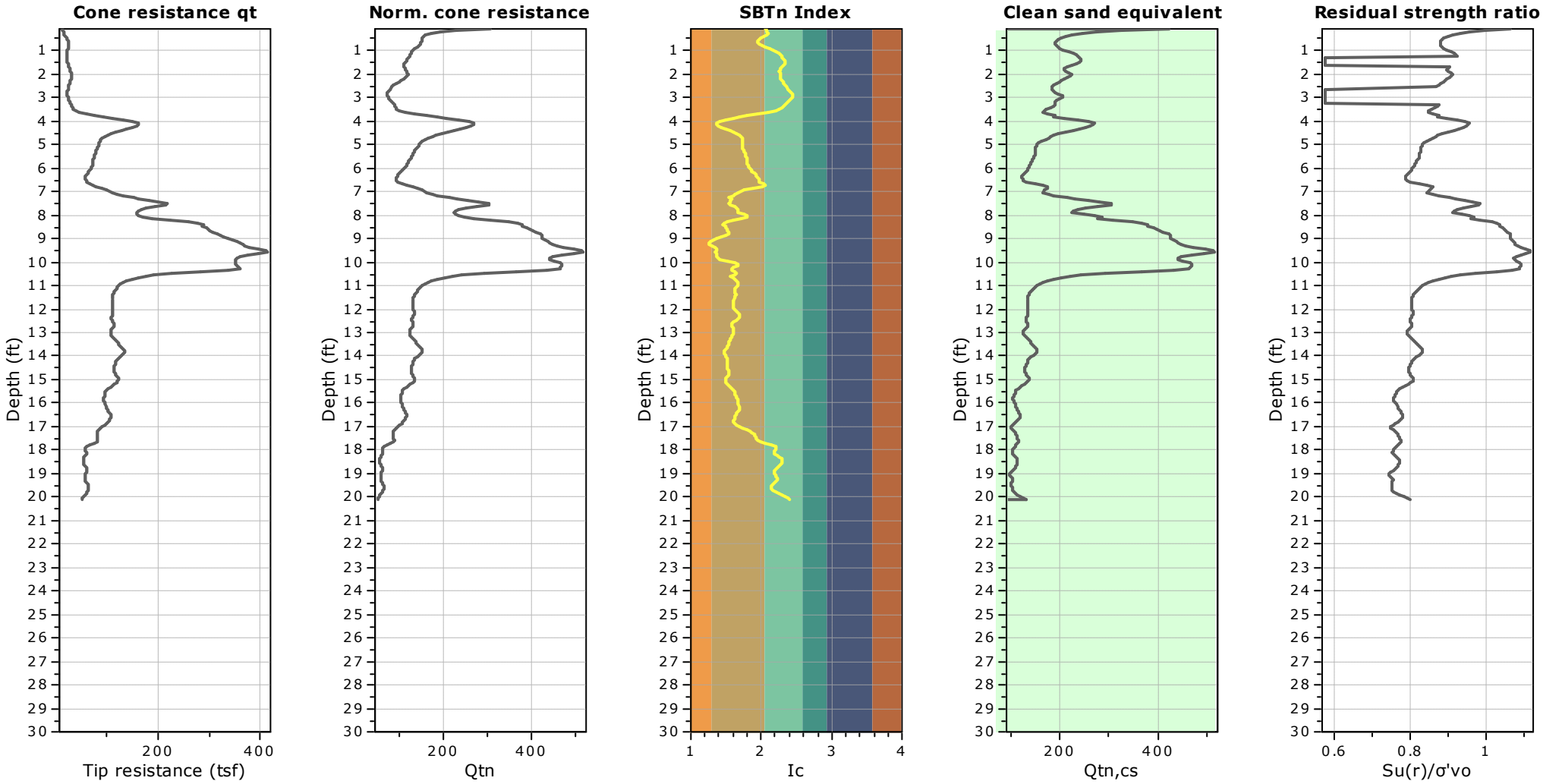

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C-33
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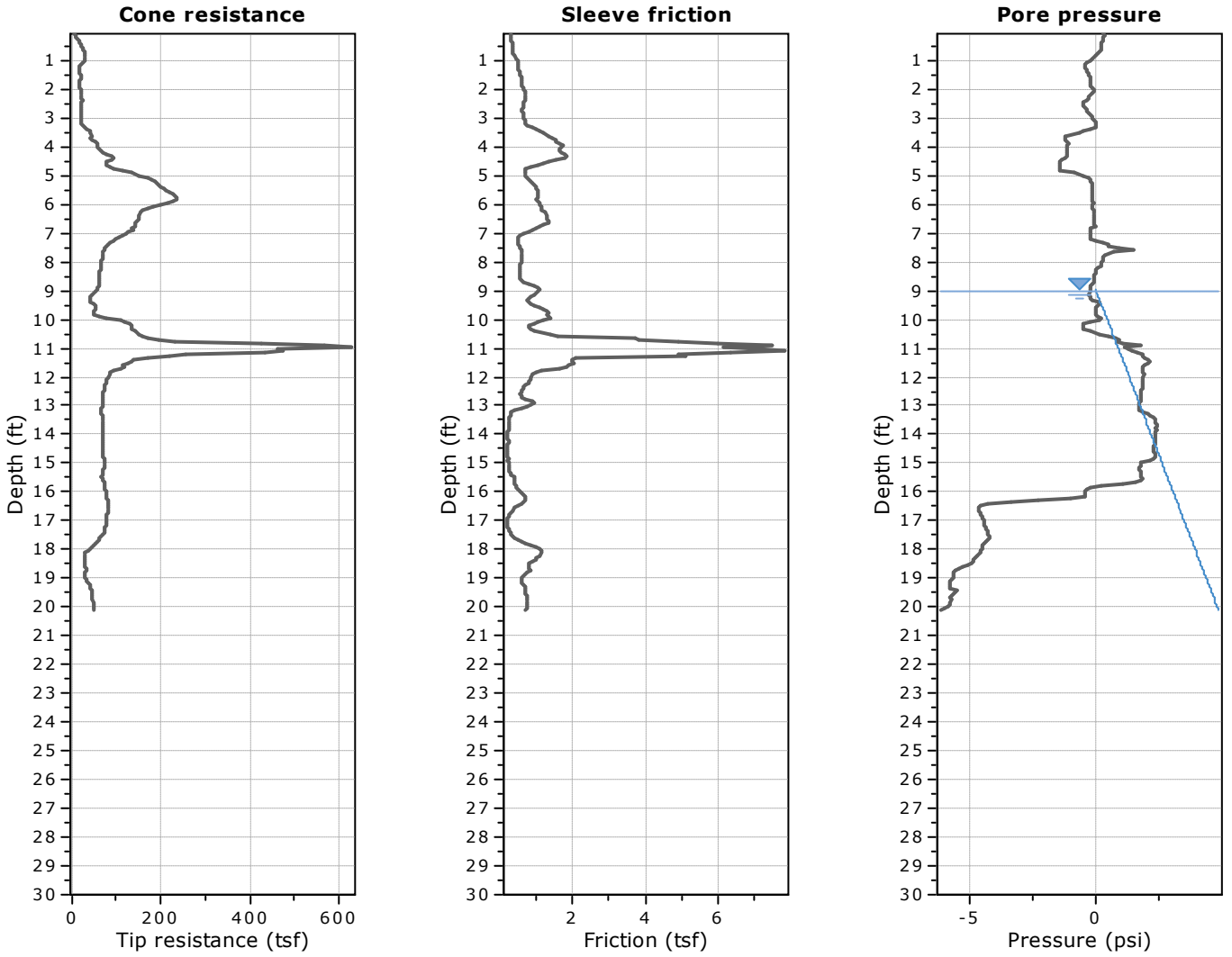
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: ASD Summit Campus
Location: Middletown, Delaware



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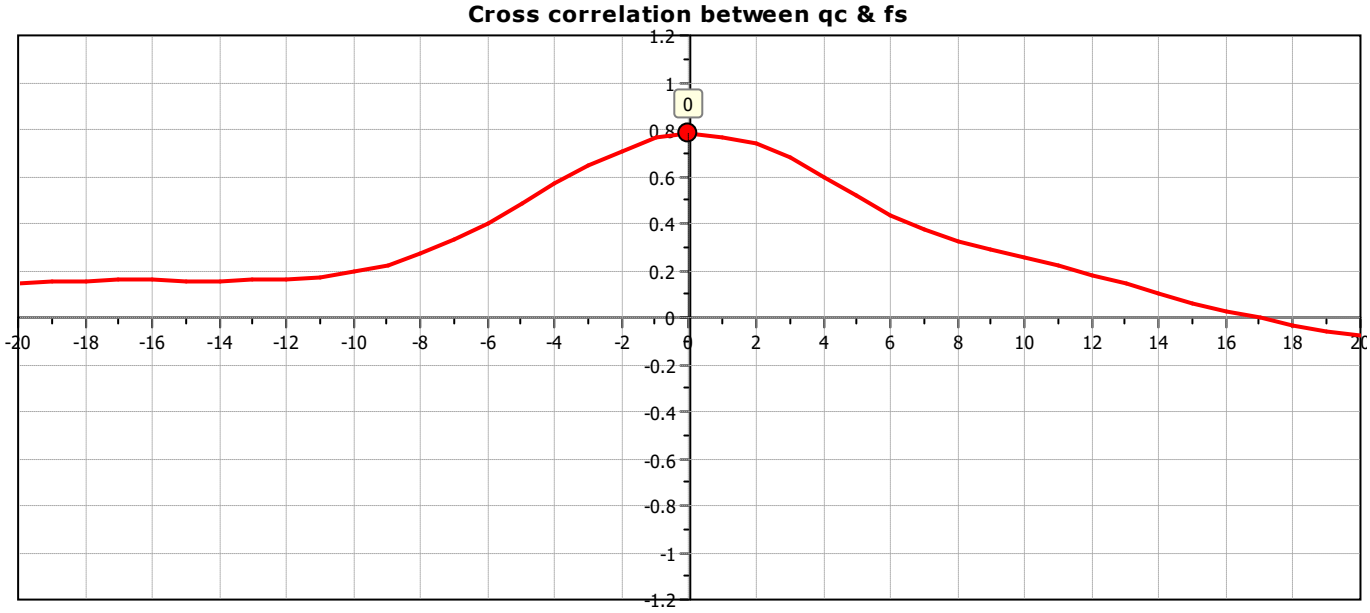

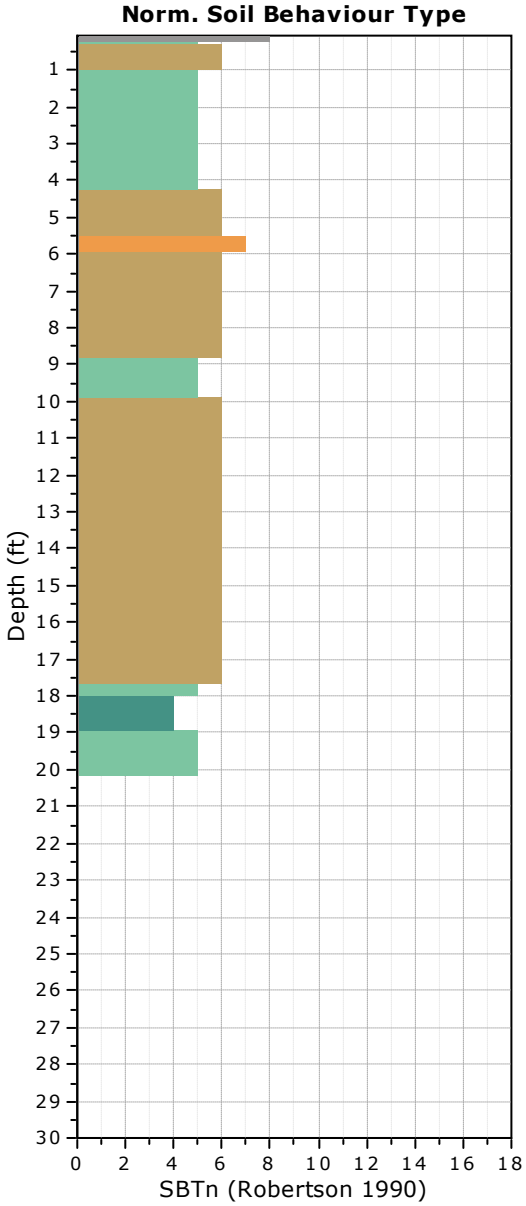

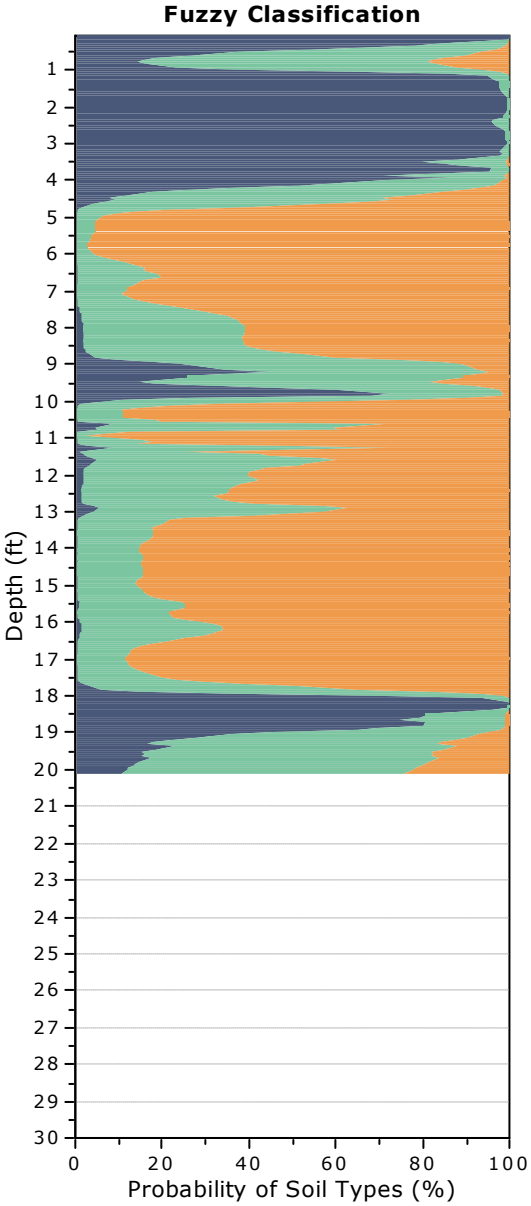

Fuzzy classifiaction legend

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- Highly probable mixture soil
- Highly probable sandy soil

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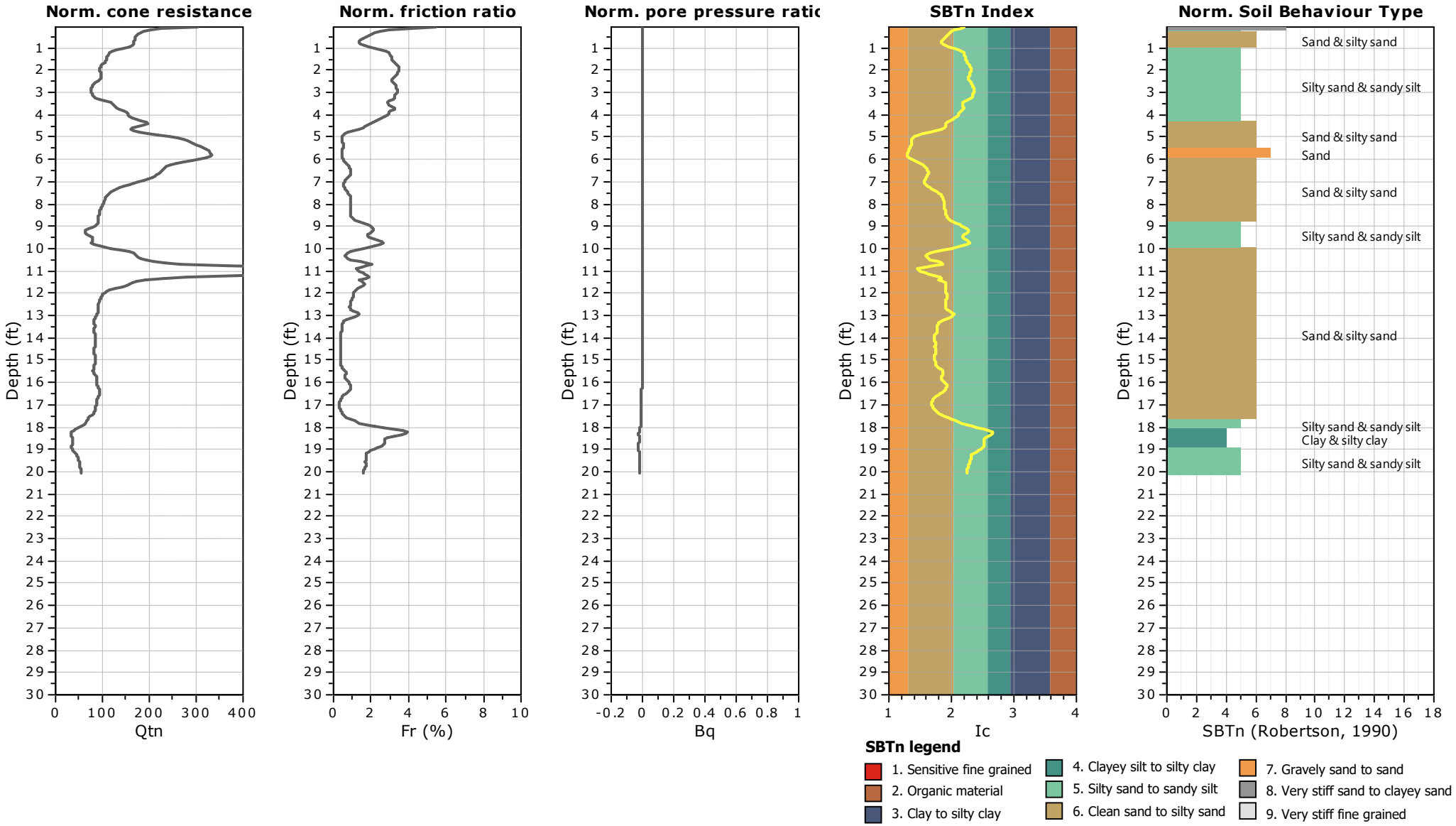

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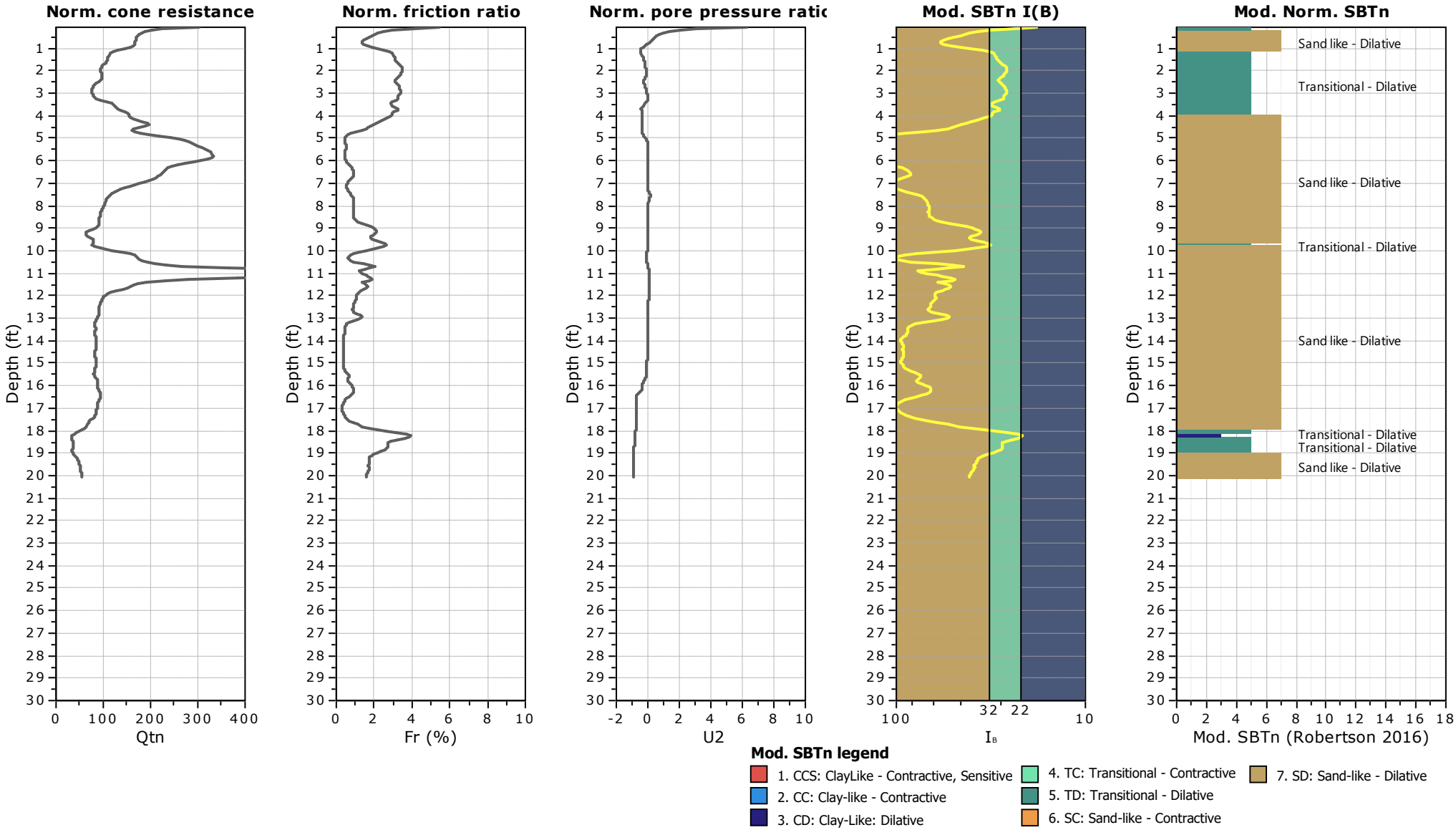

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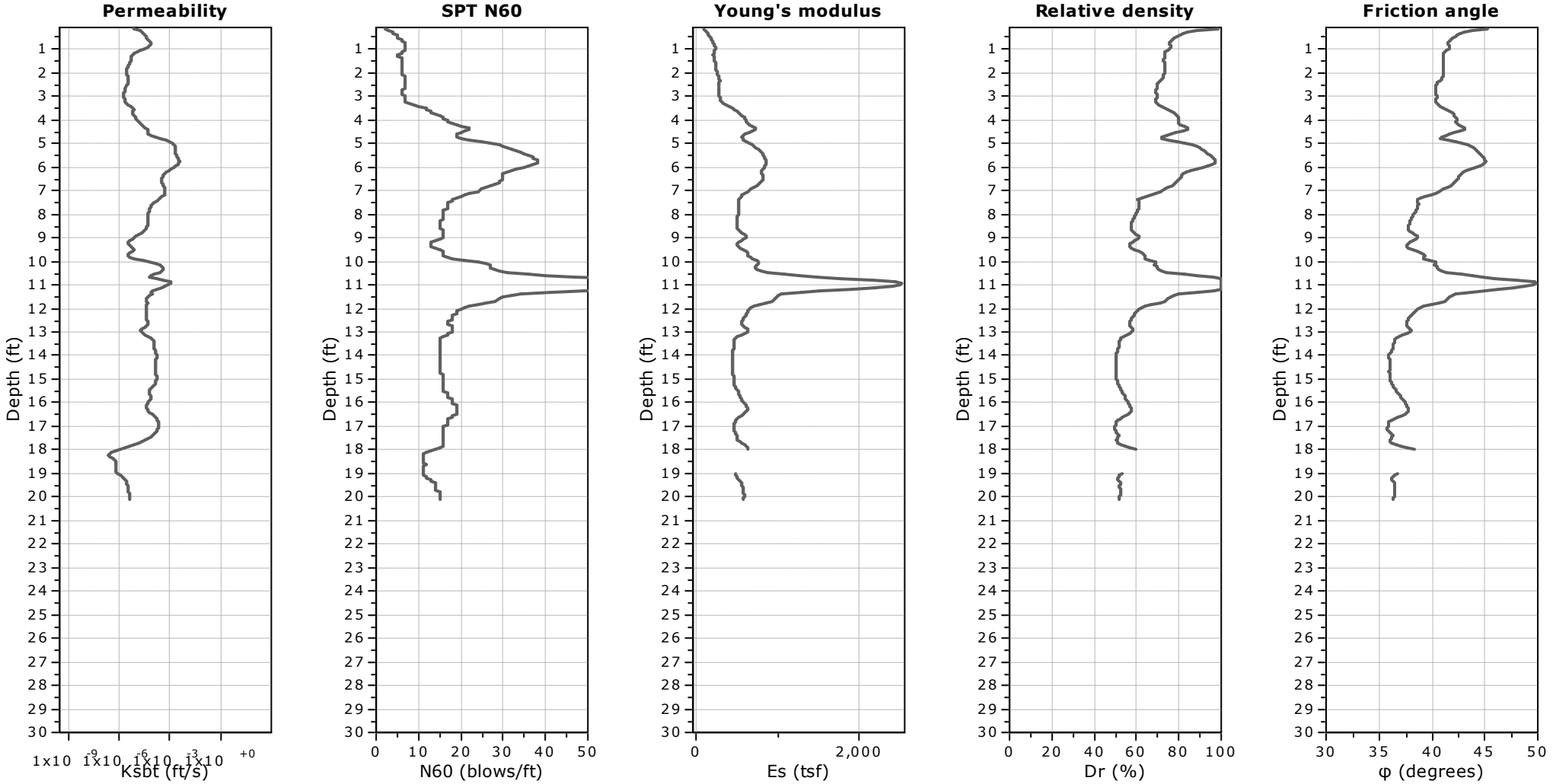

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
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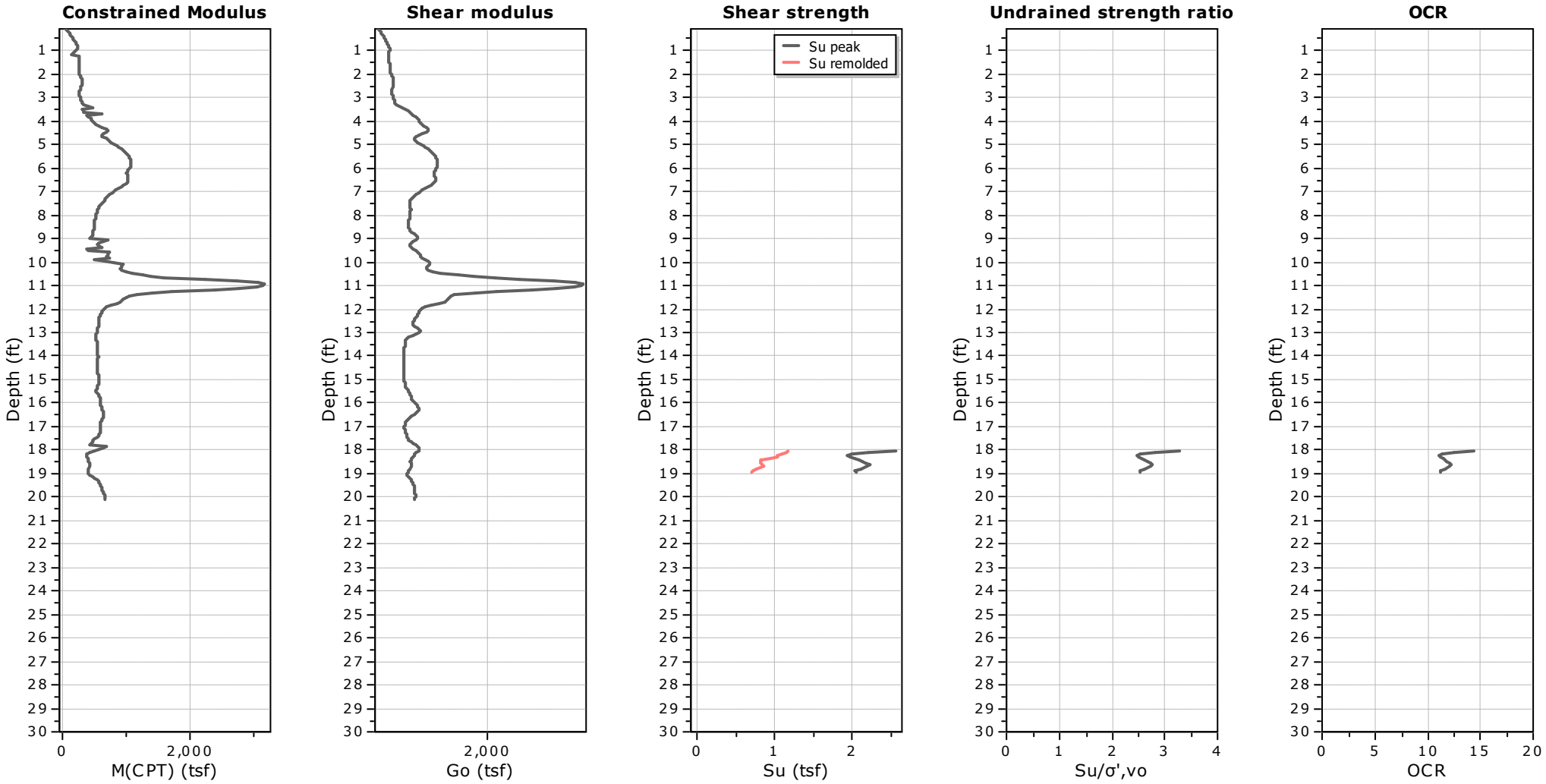

Calculation parameters

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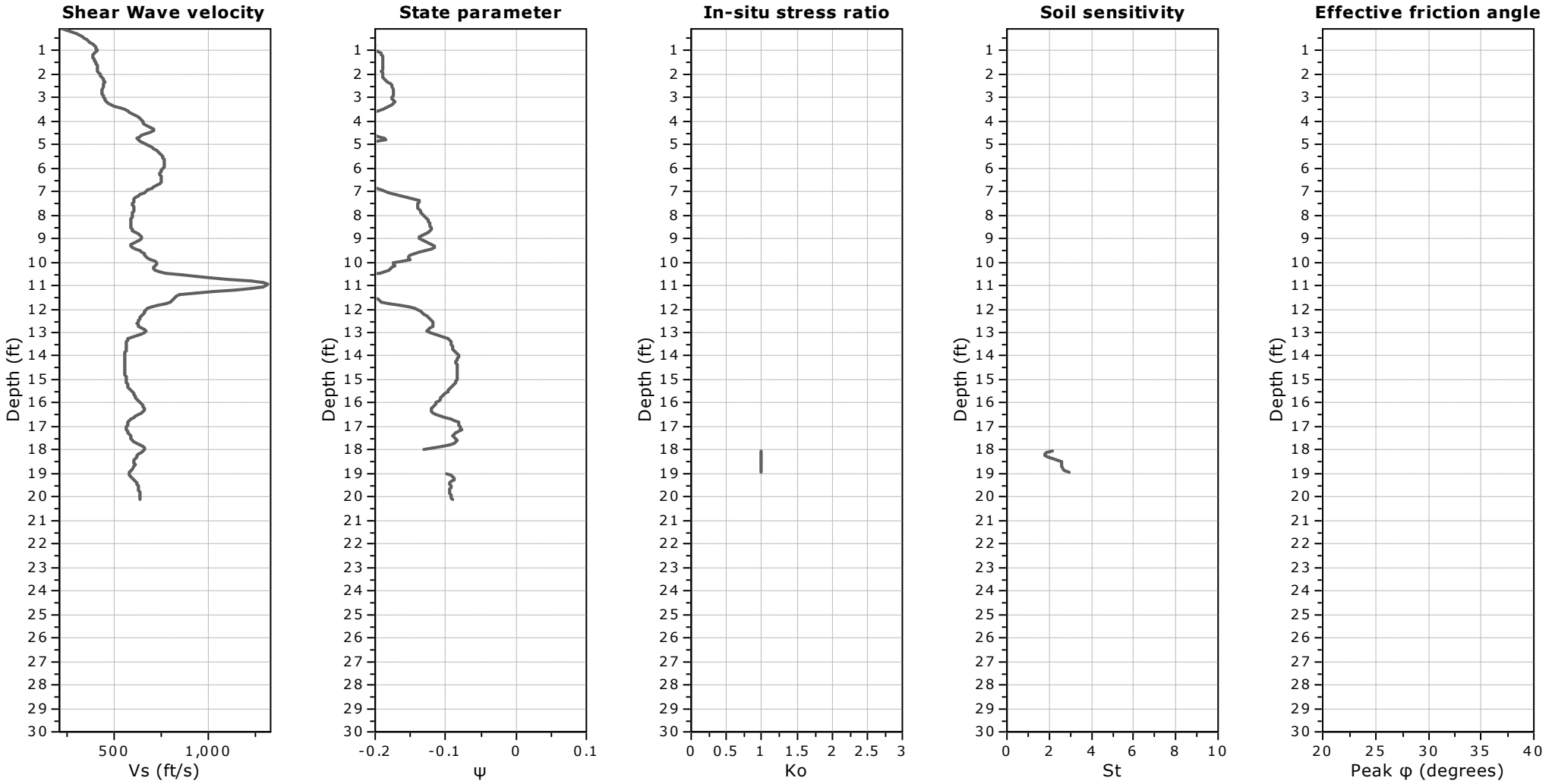

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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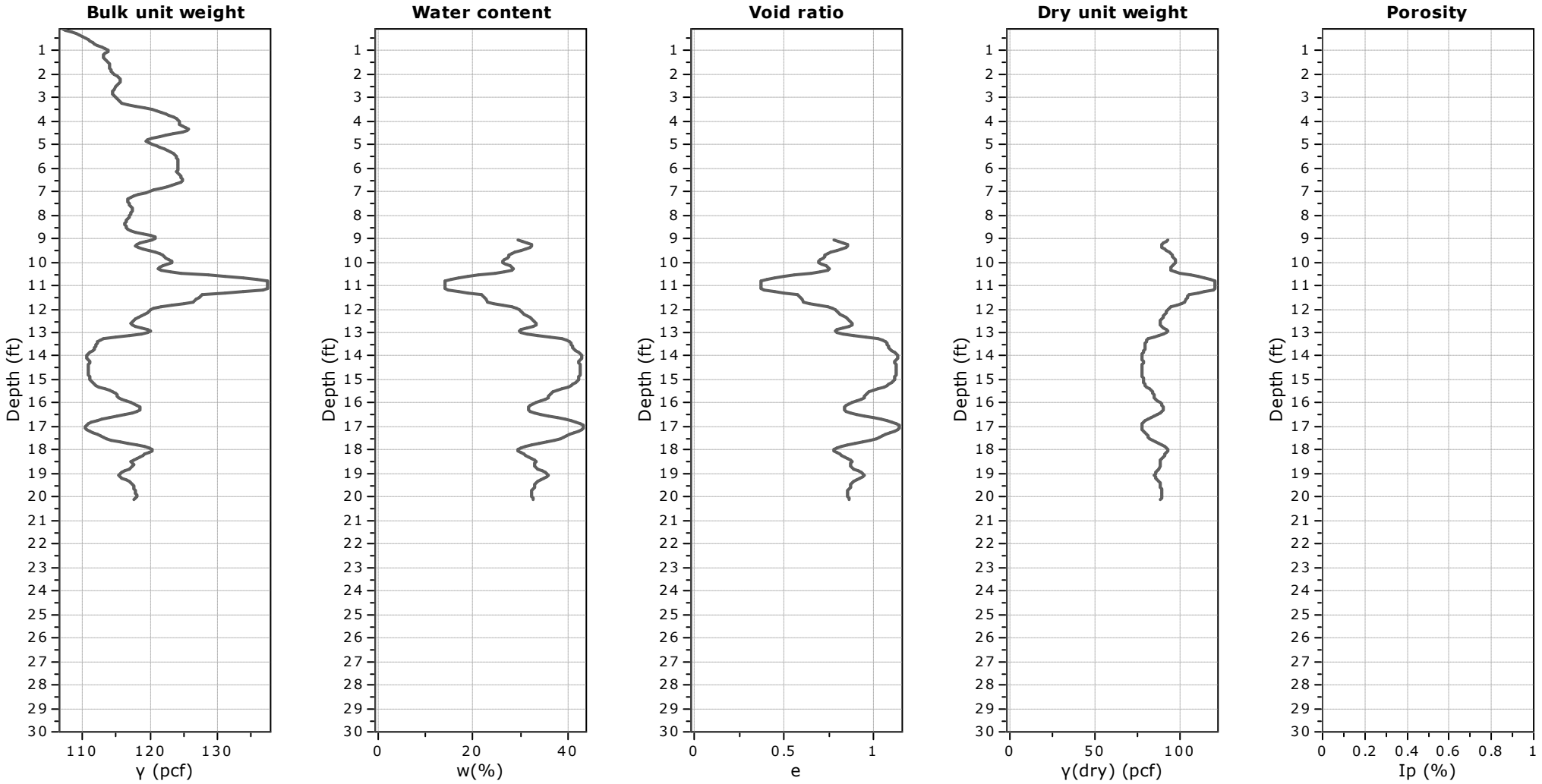

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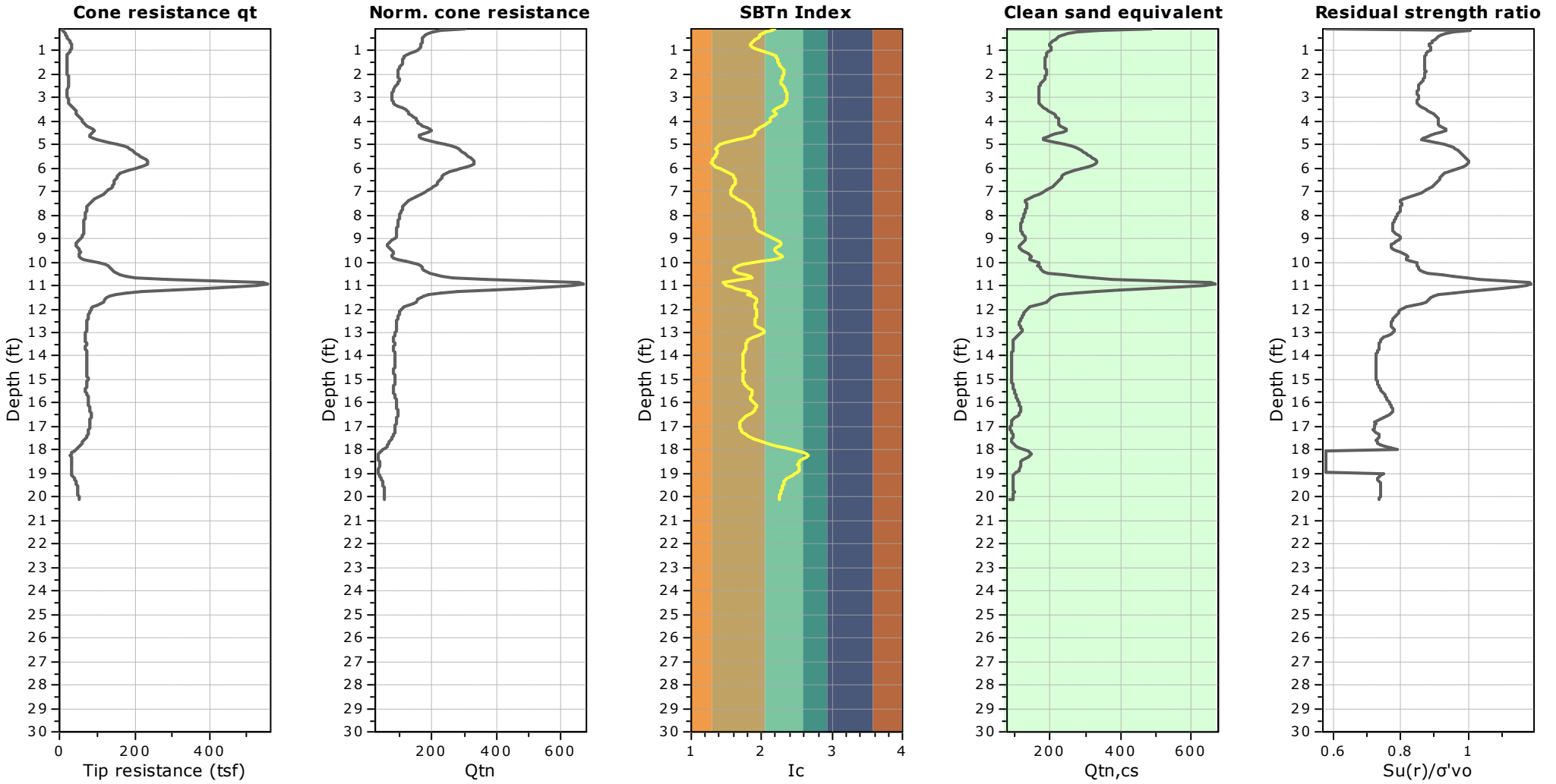

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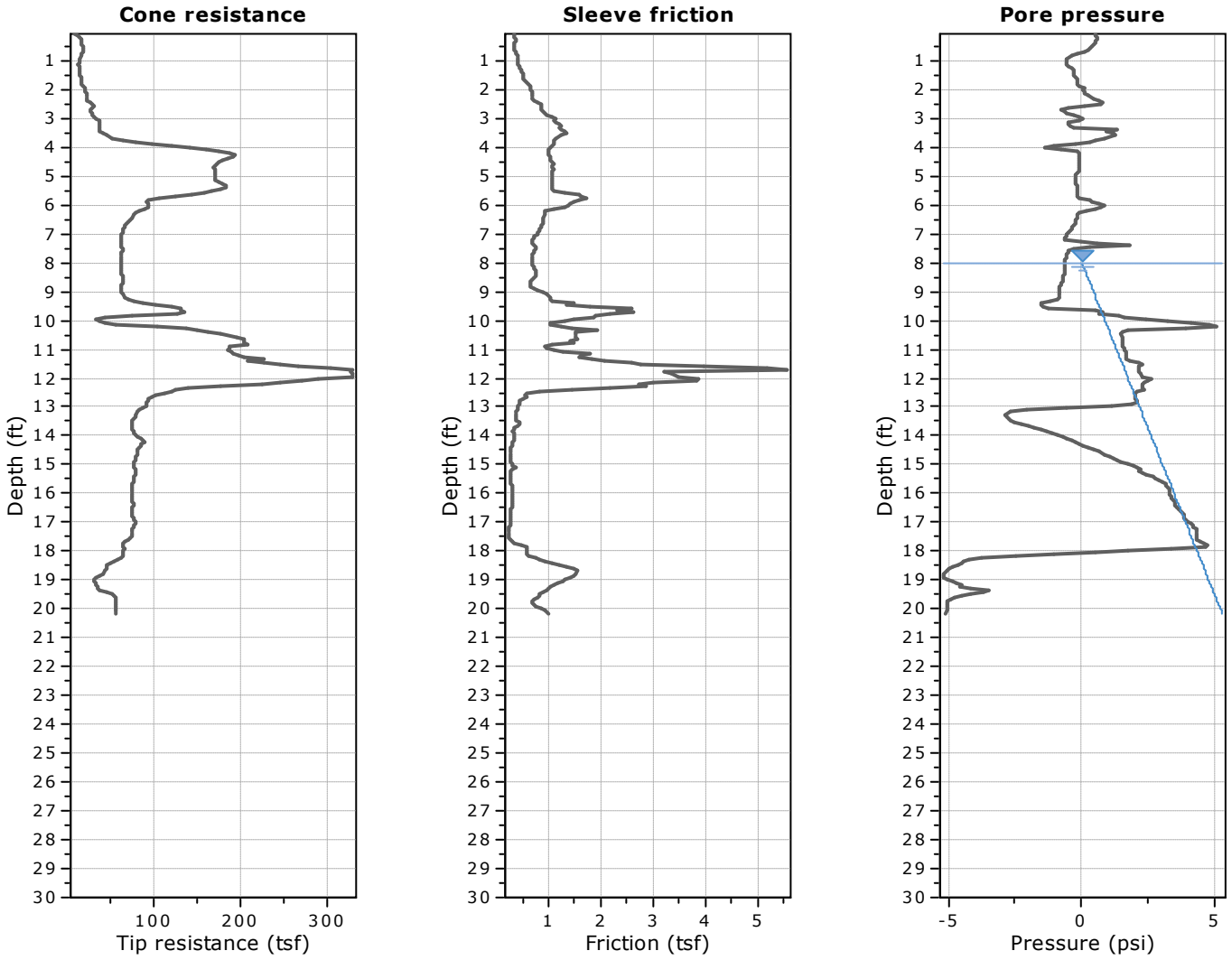
C-34
Total depth: 20.14 ft, Date: 5/16/2024
Surface Elevation: 60.98 ft
Coords: X:572875.48, Y:555779.43
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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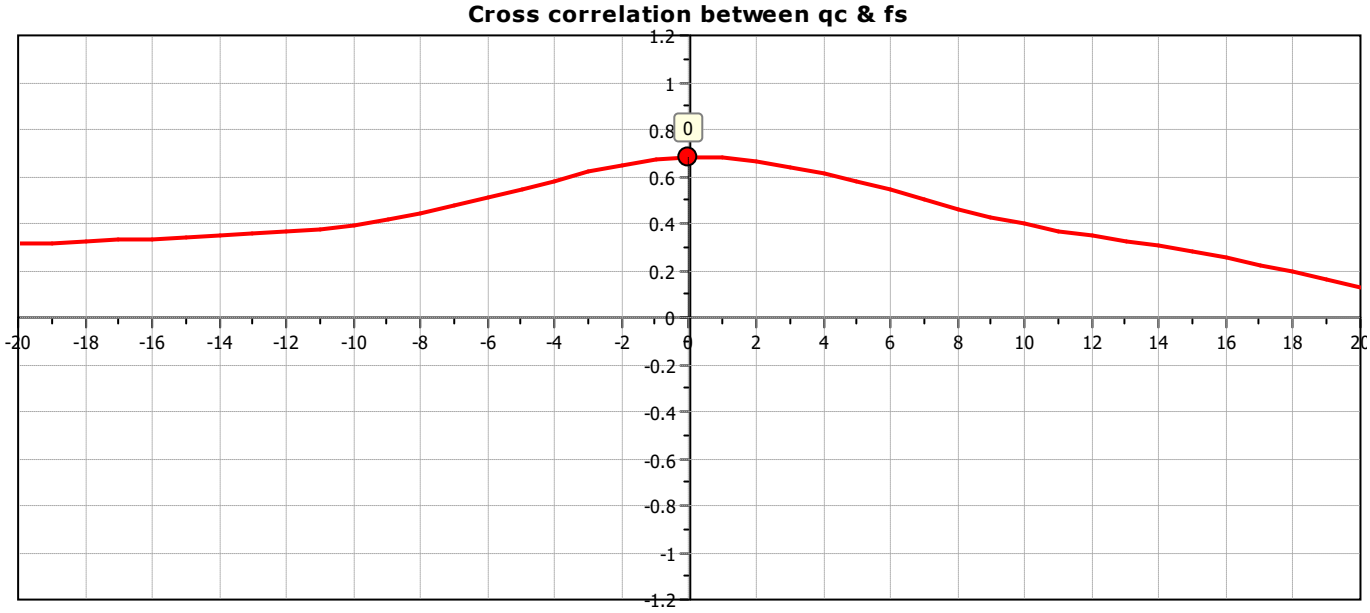

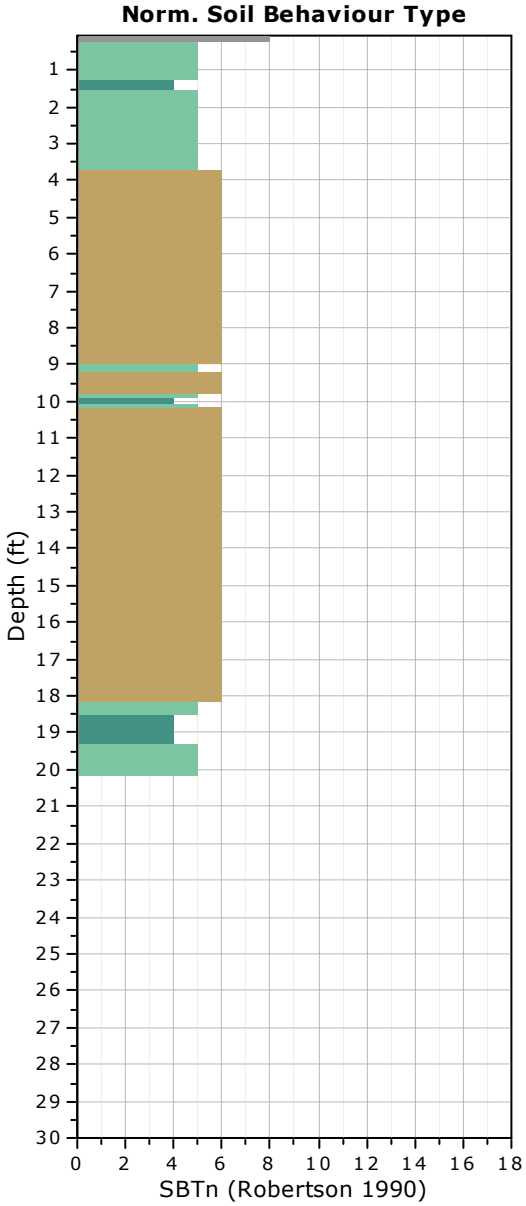

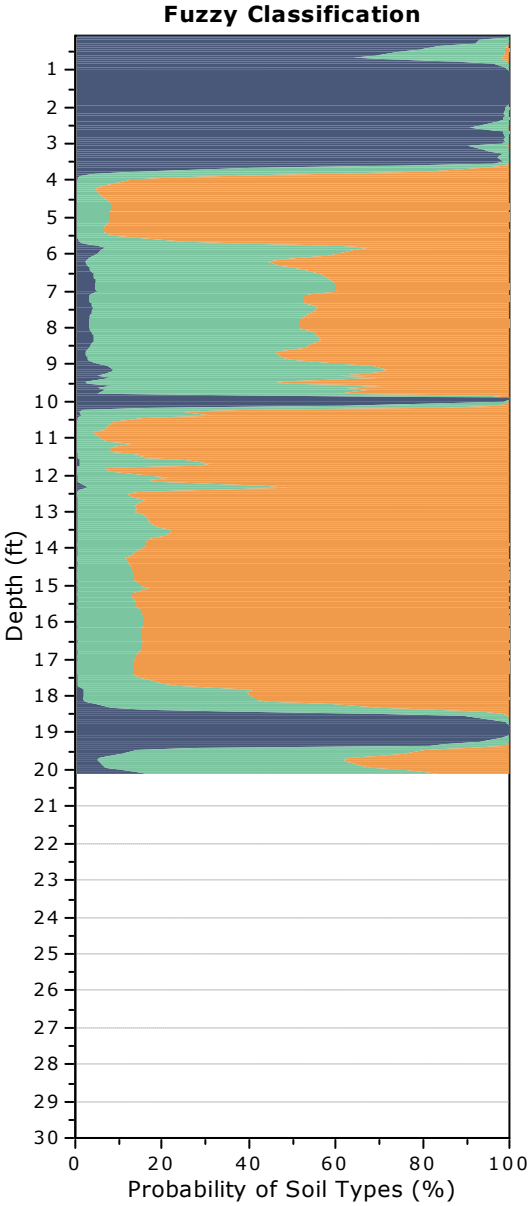

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
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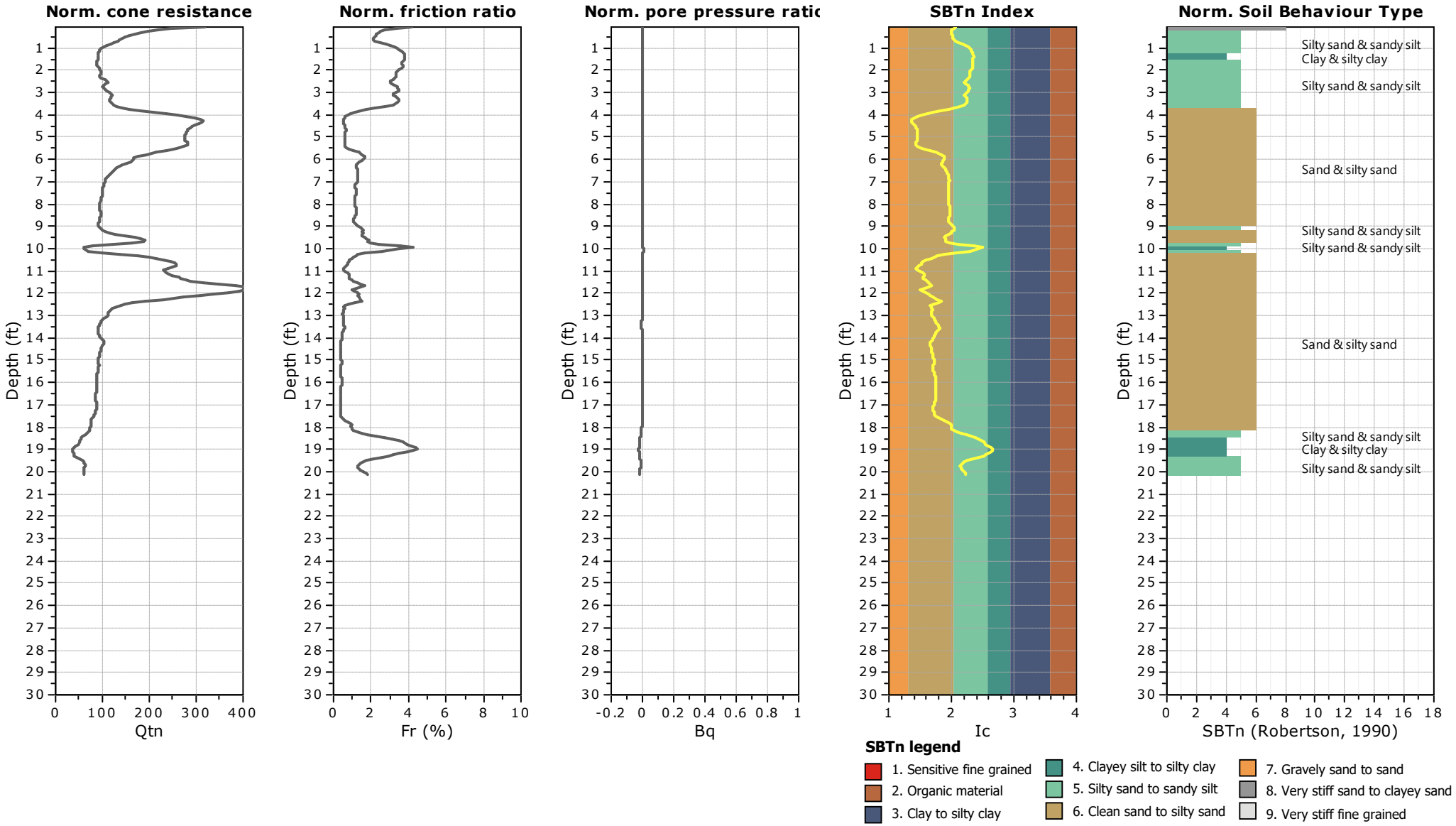

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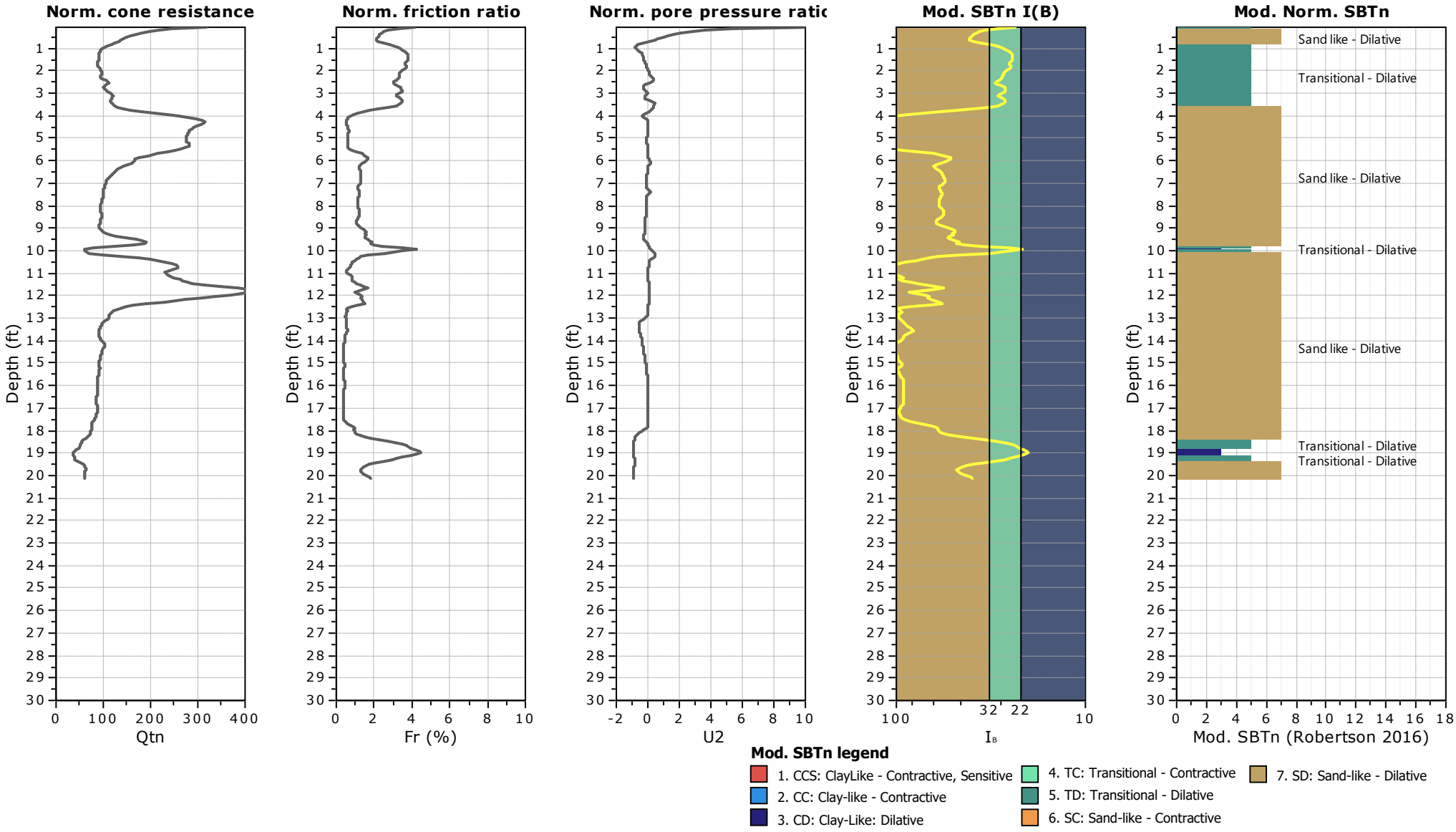

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Project: **ASD Summit Campus**
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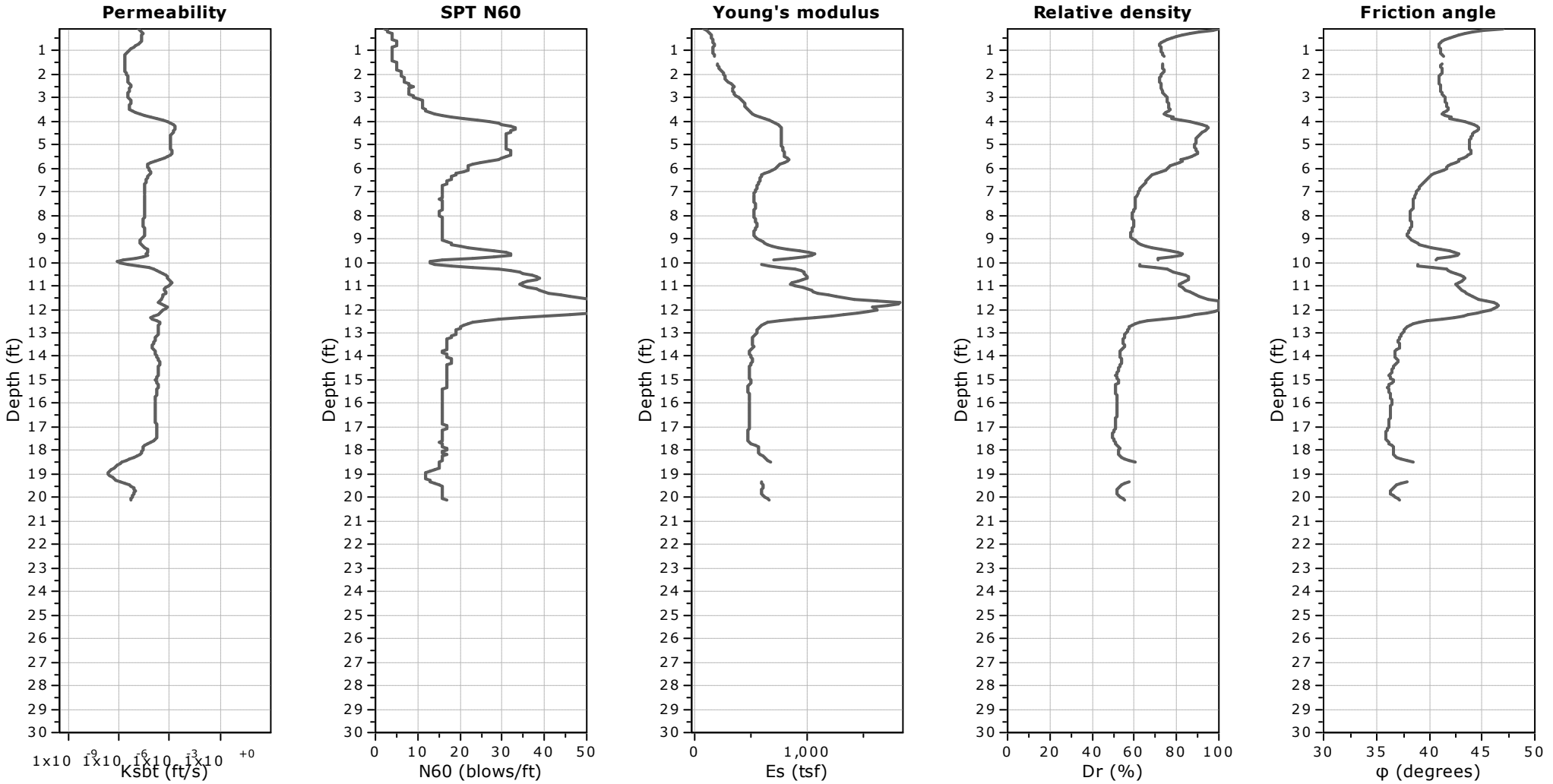

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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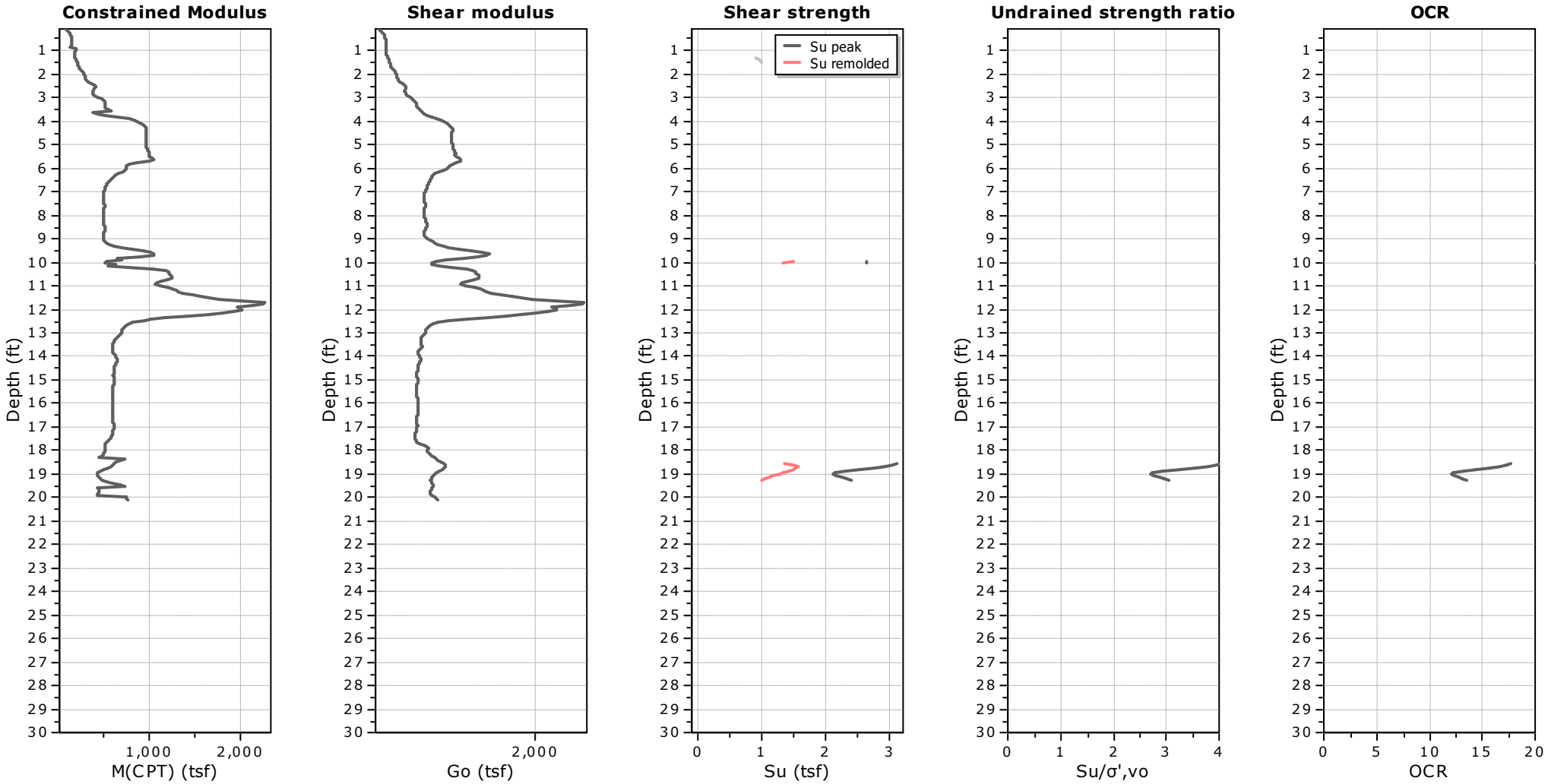
C-34
Total depth: 20.14 ft, Date: 5/16/2024
Surface Elevation: 60.98 ft
Coords: X:572875.48, Y:555779.43
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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Project: **ASD Summit Campus**
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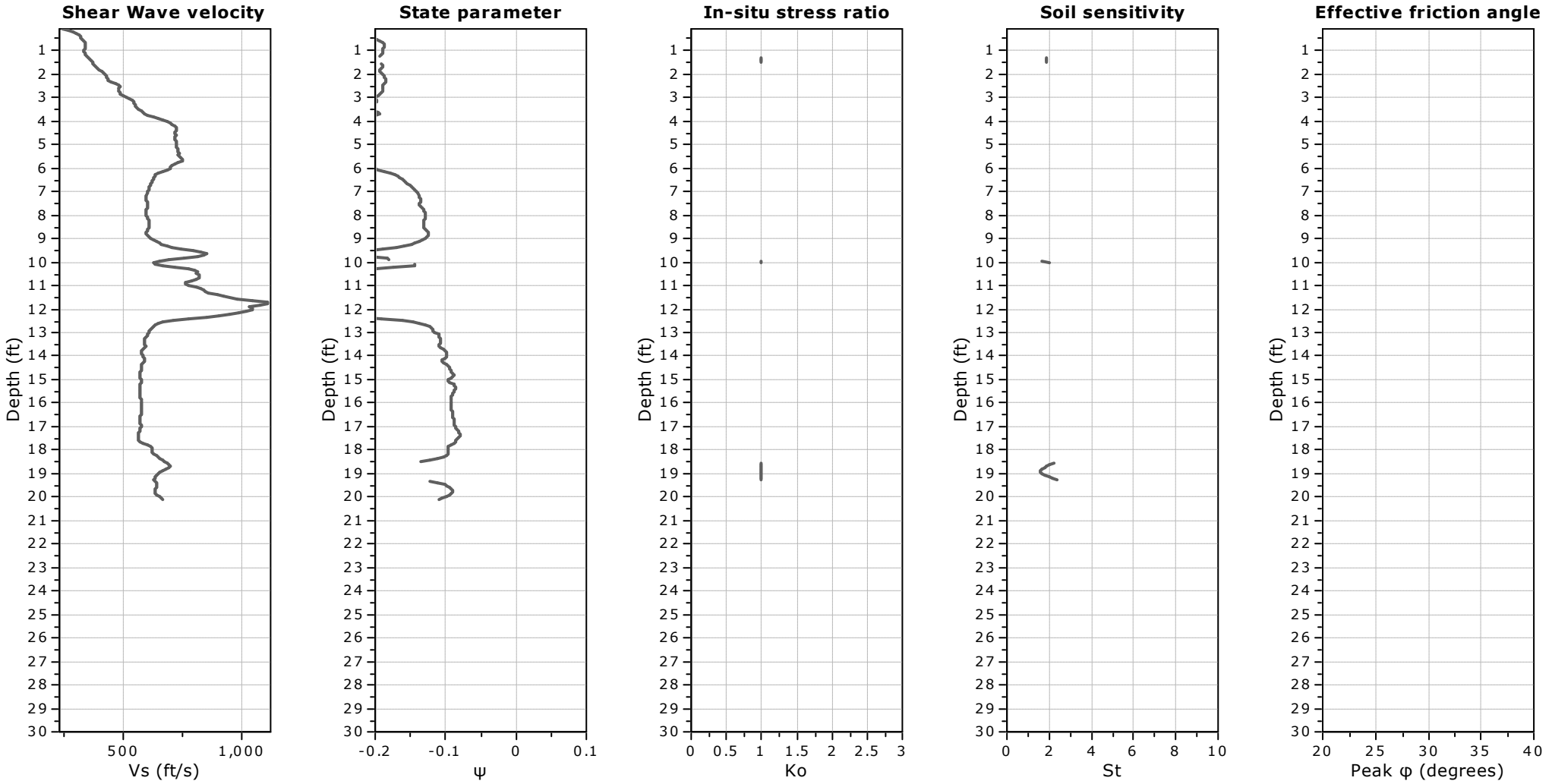

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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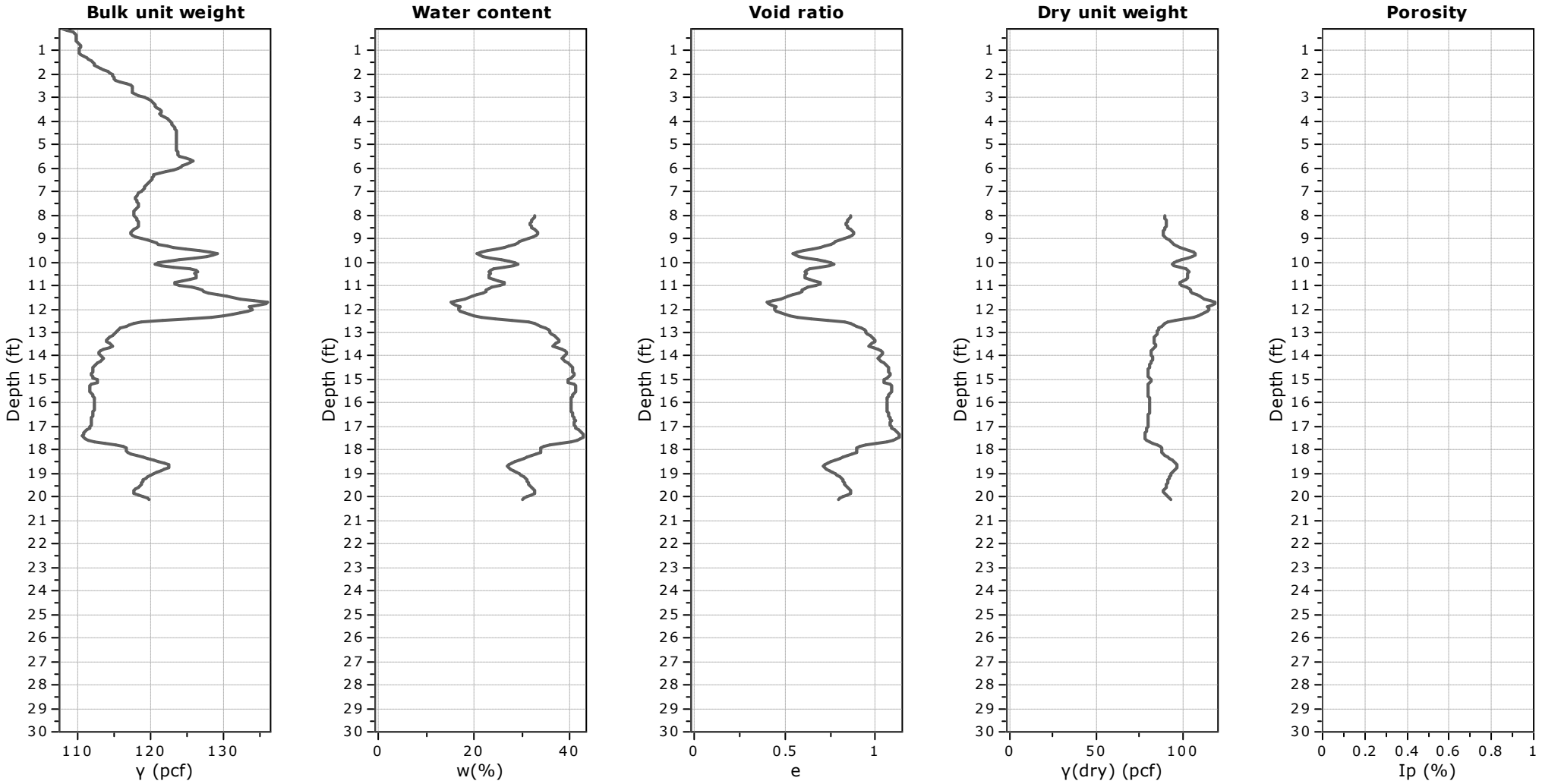

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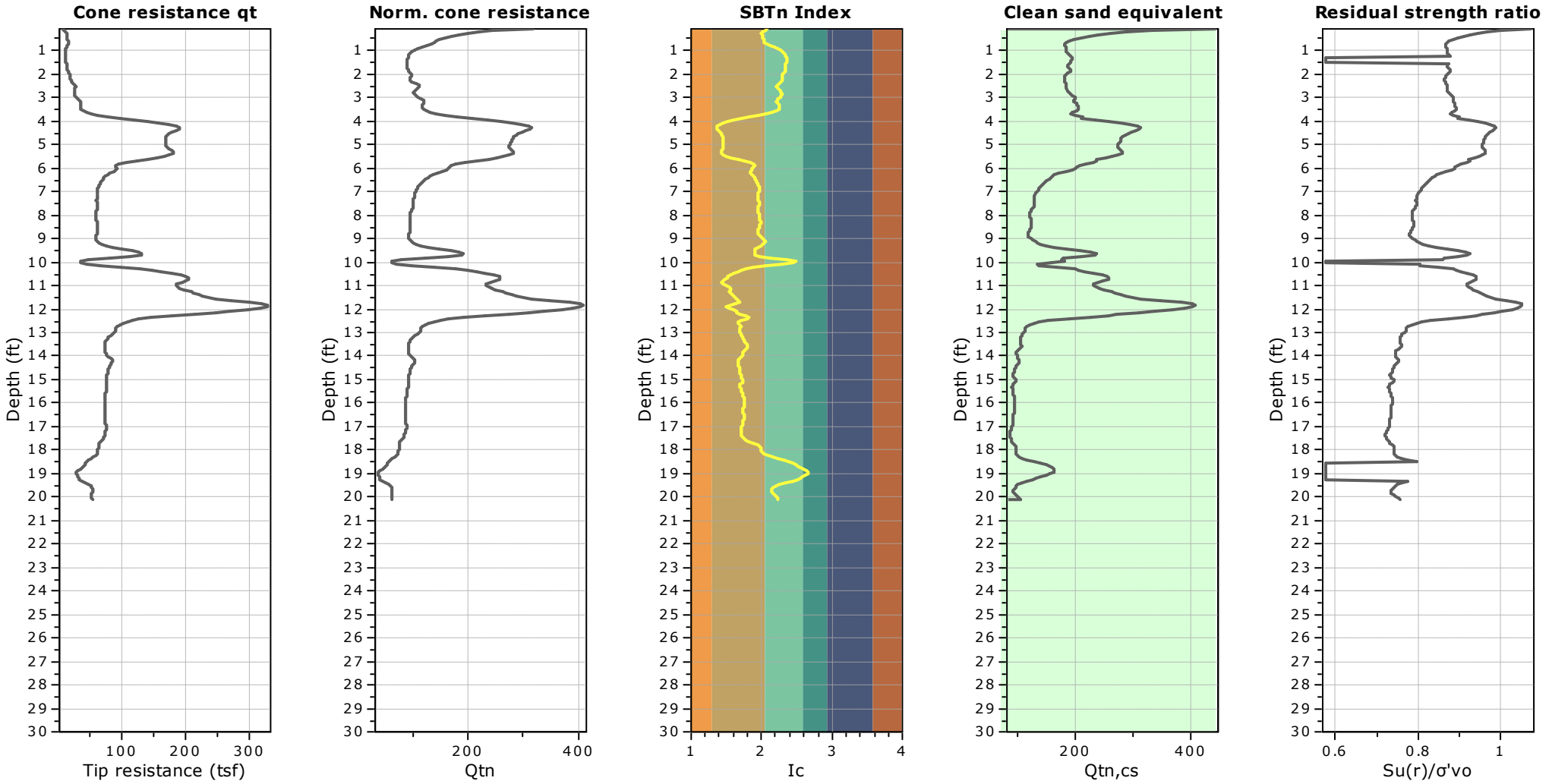

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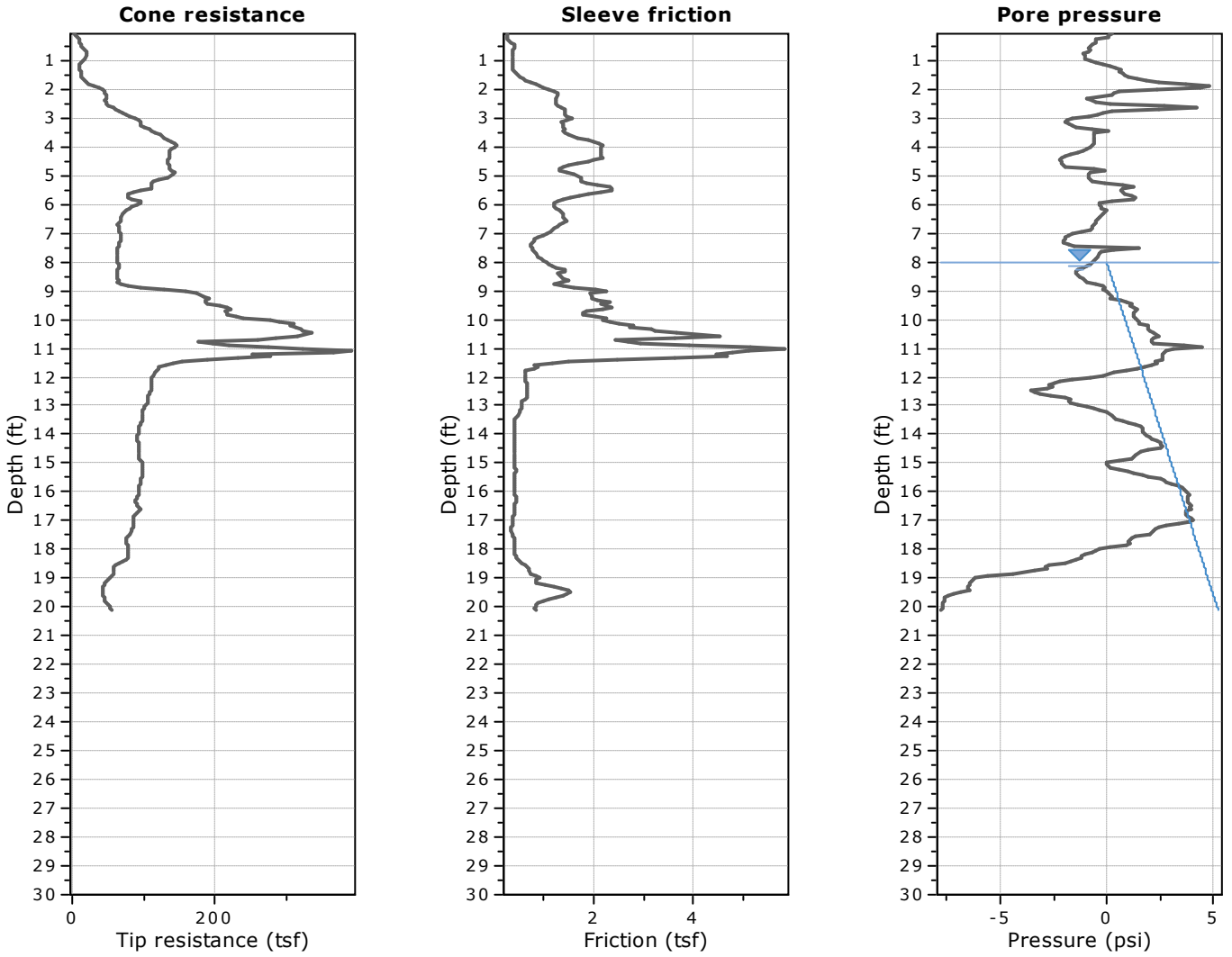
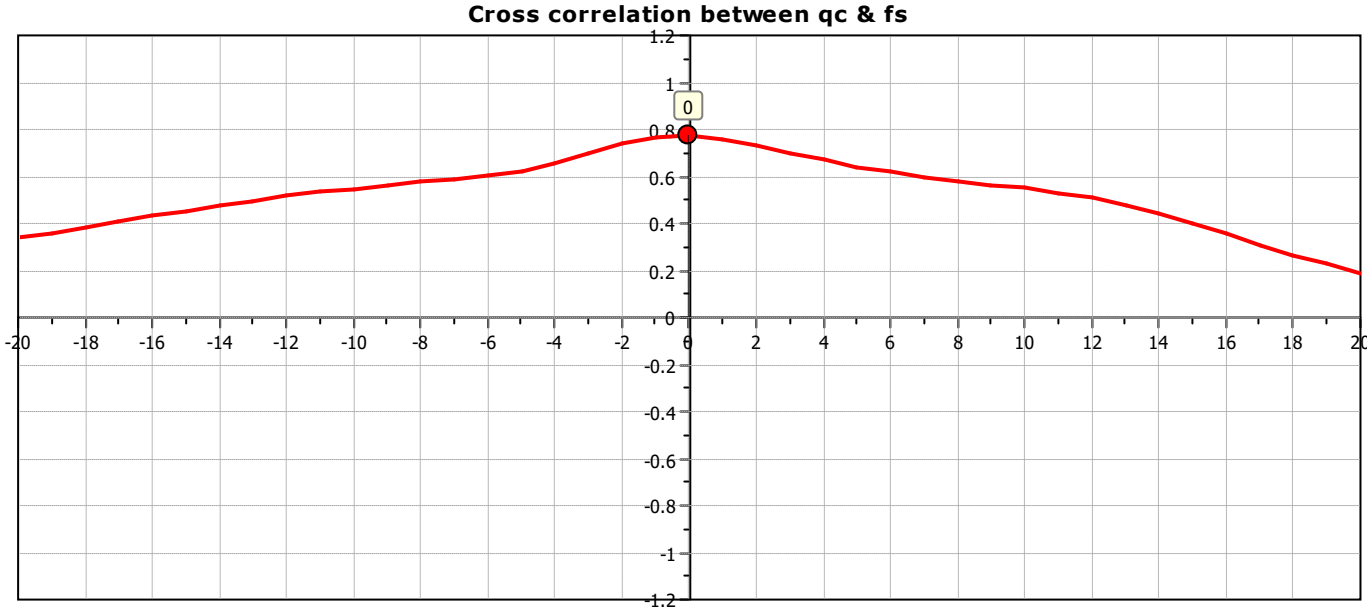
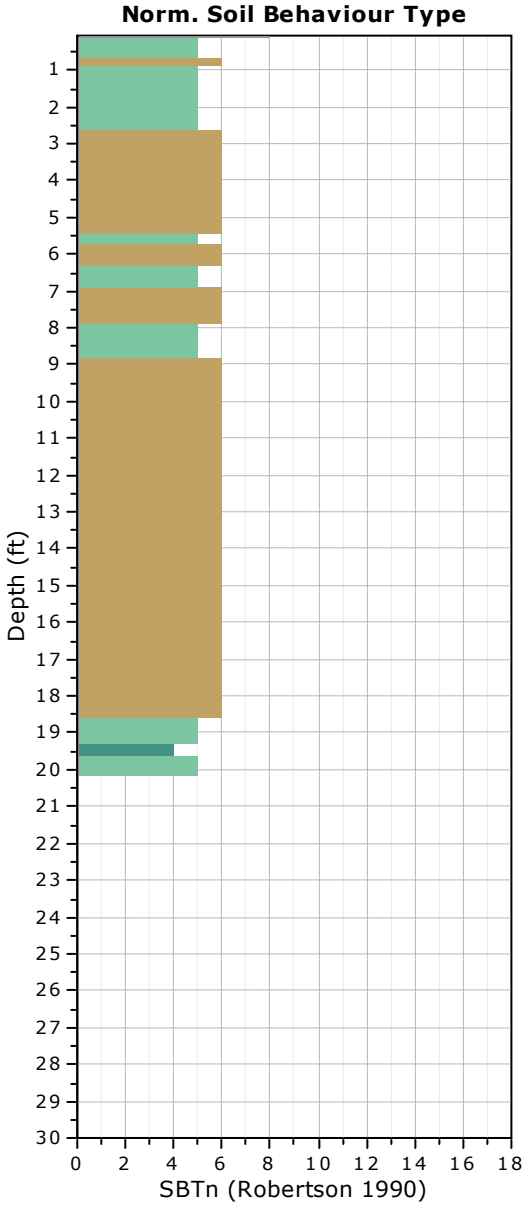
C-35
Total depth: 20.14 ft, Date: 5/16/2024
Surface Elevation: 61.02 ft
Coords: X:572835.11, Y:555732.02
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

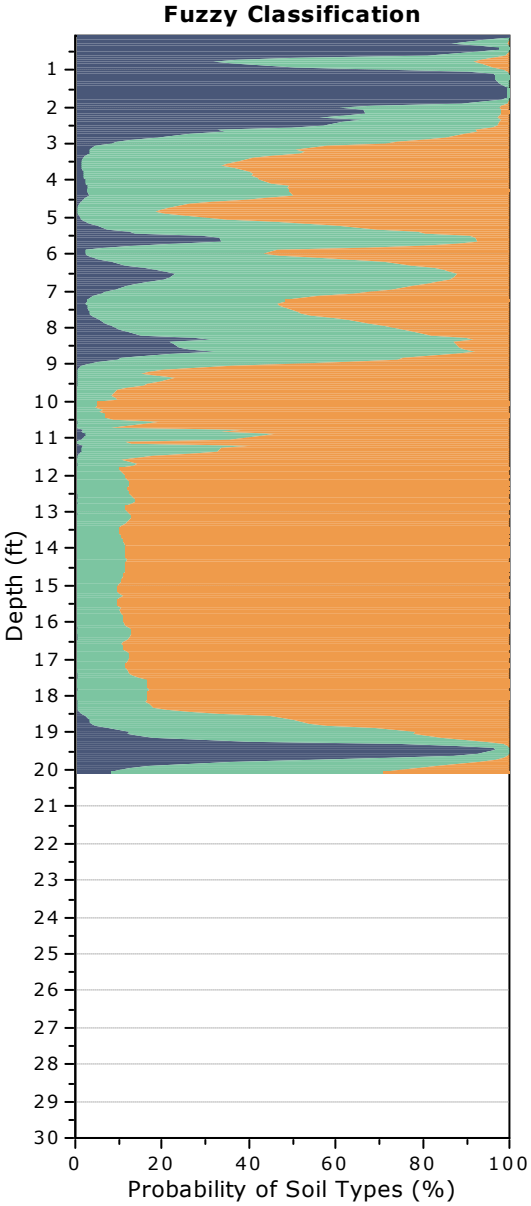
Project: ASD Summit Campus
Location: Middletown, Delaware



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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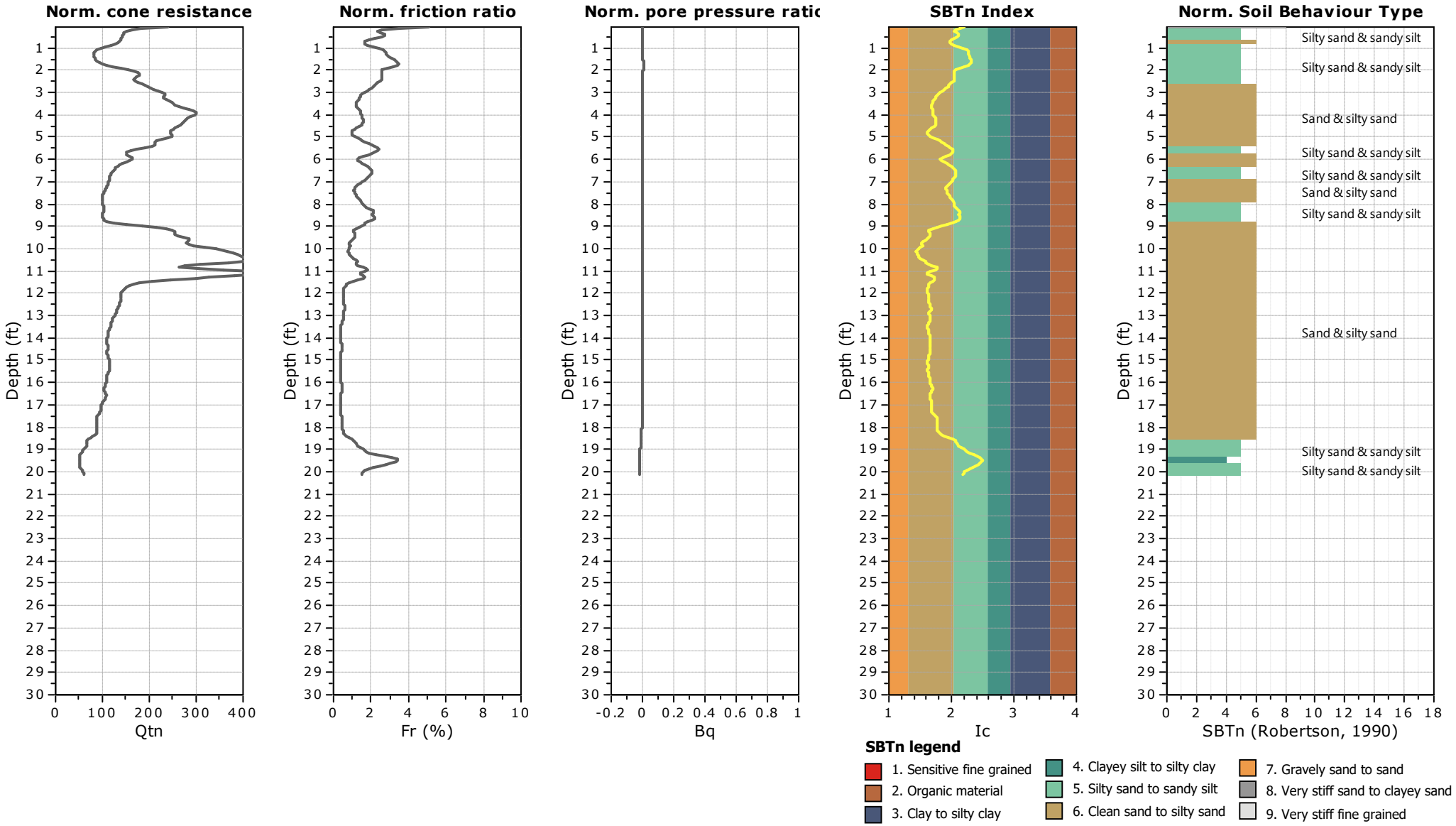

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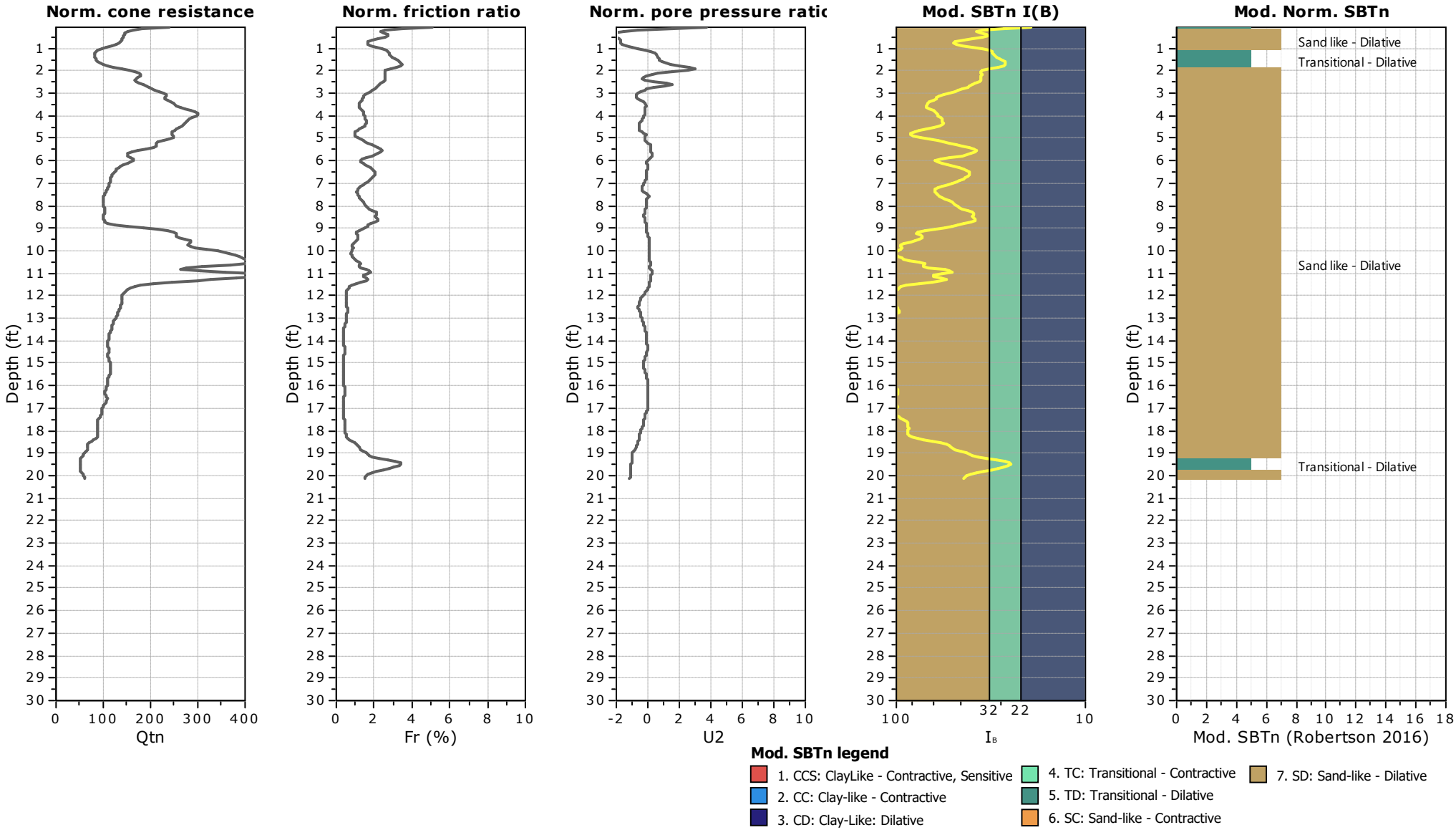

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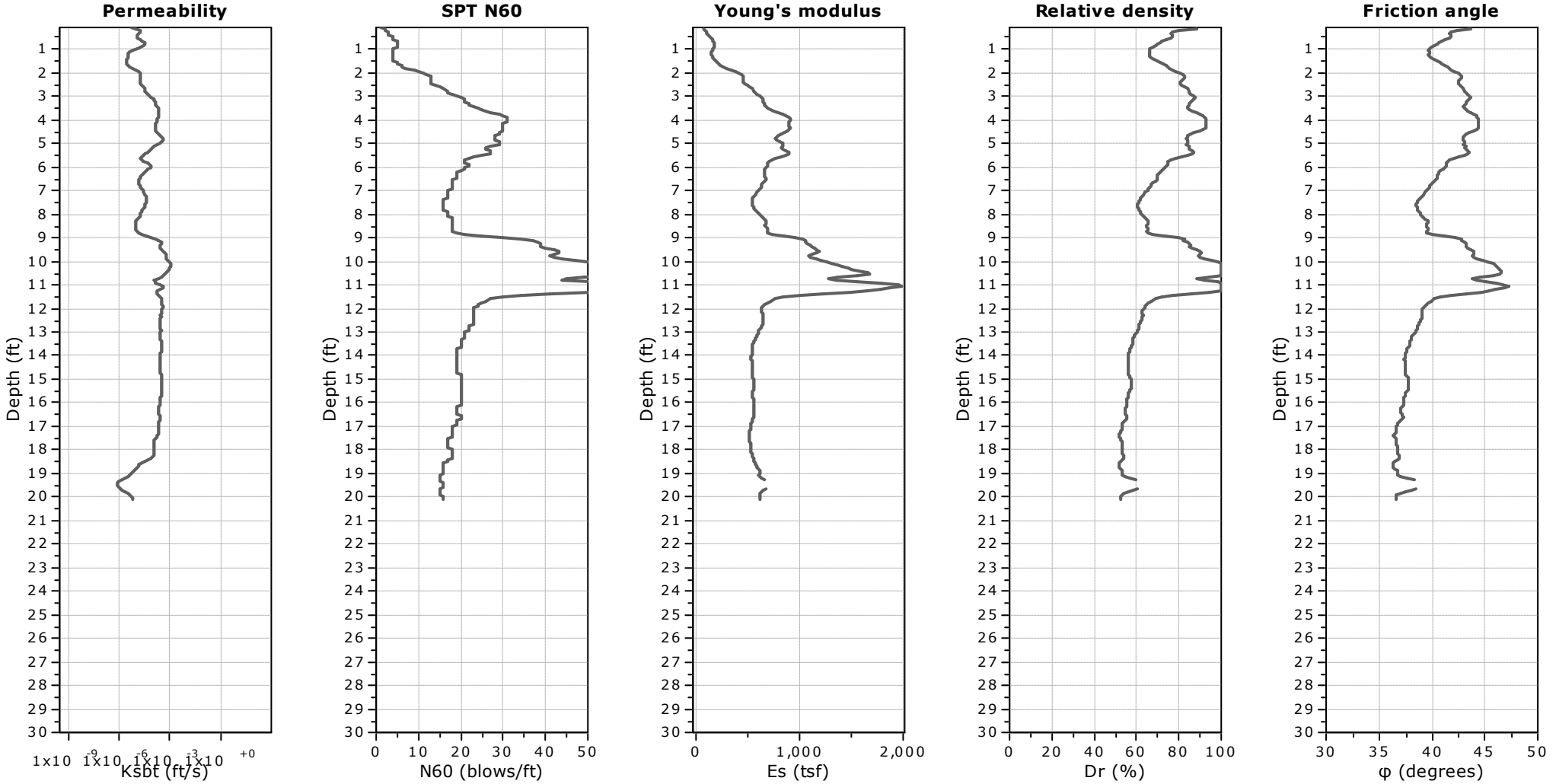

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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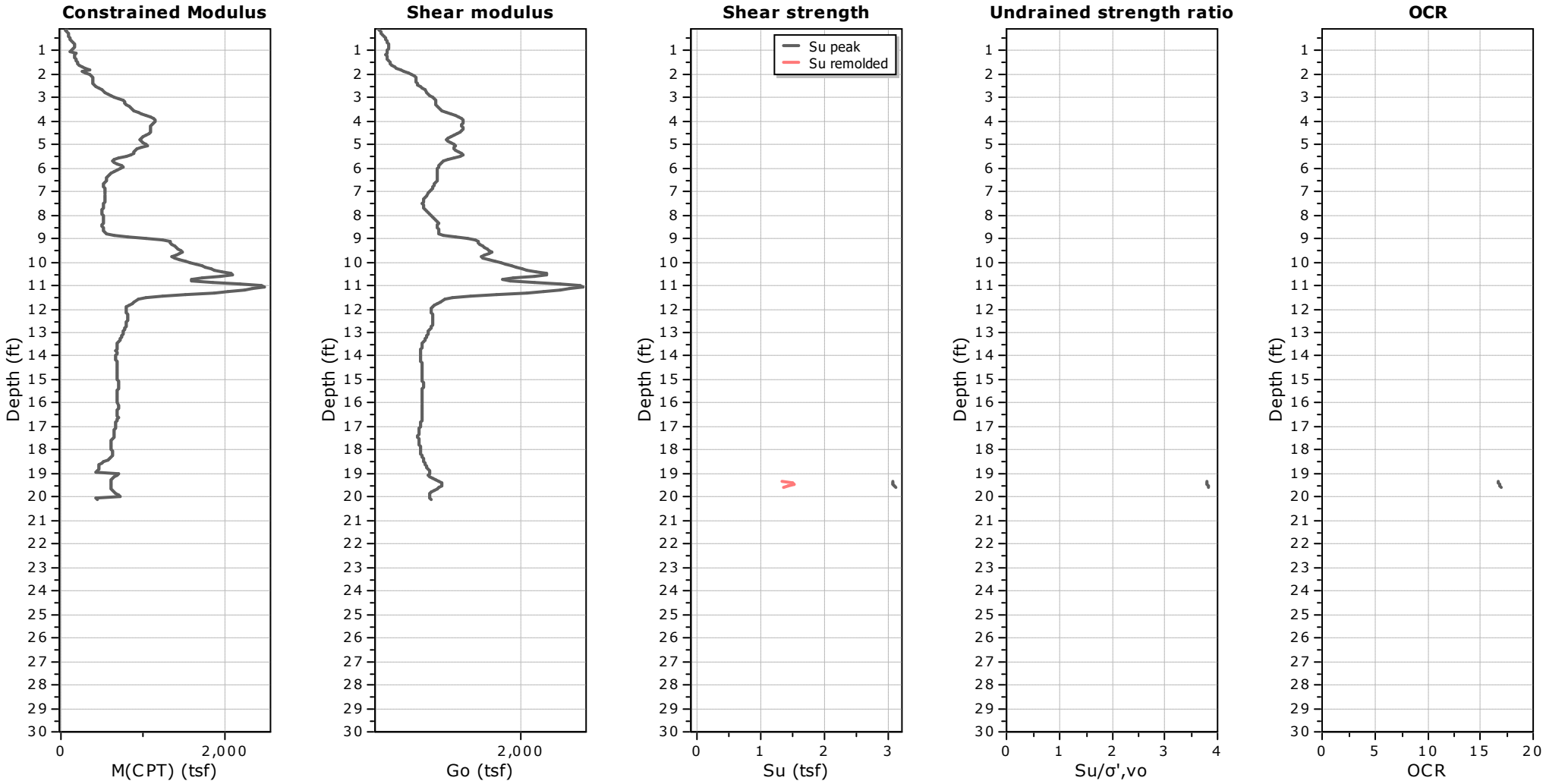

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
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Undrained shear strength cone factor for clays, N_{kt}: 14
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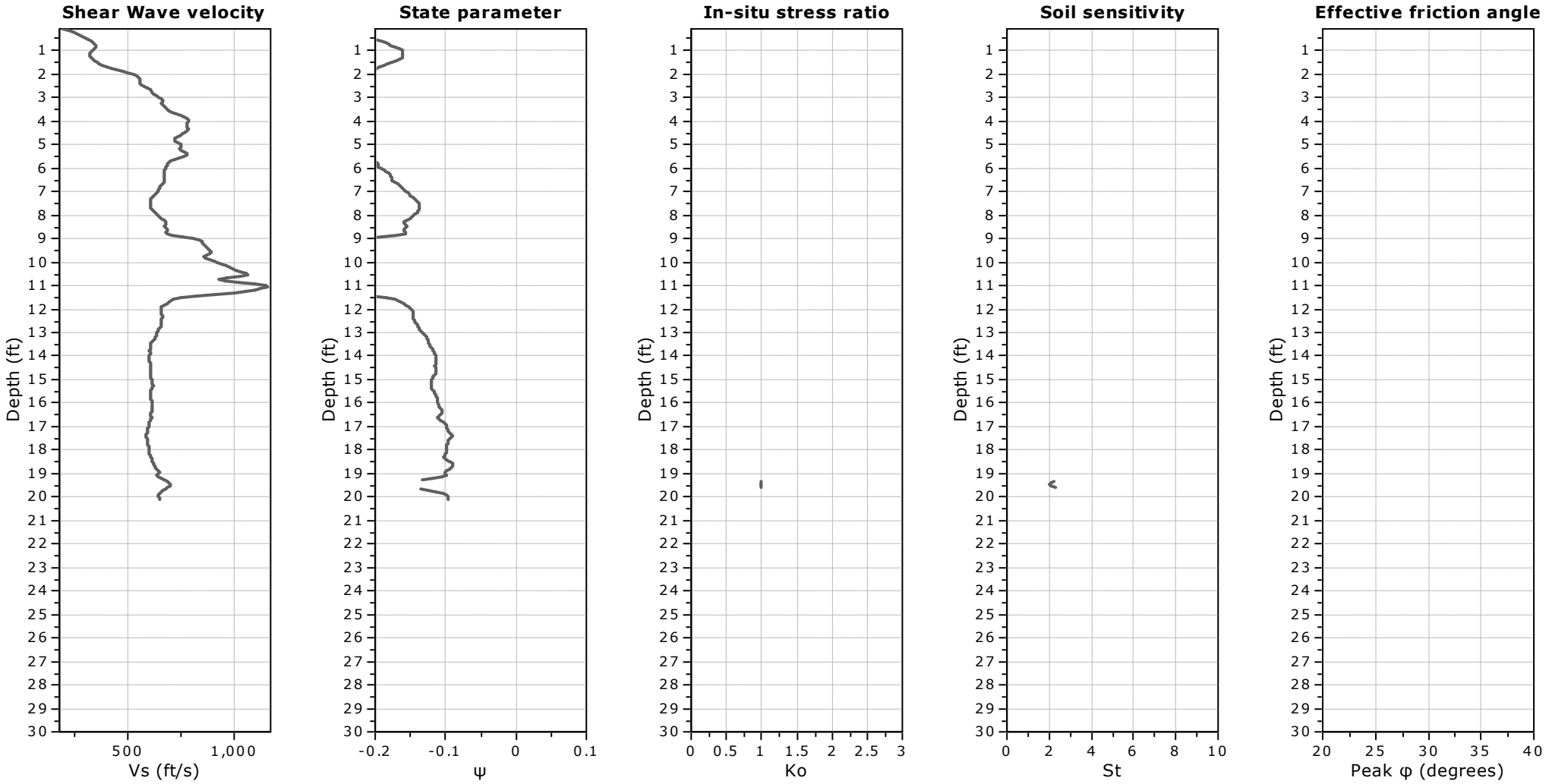

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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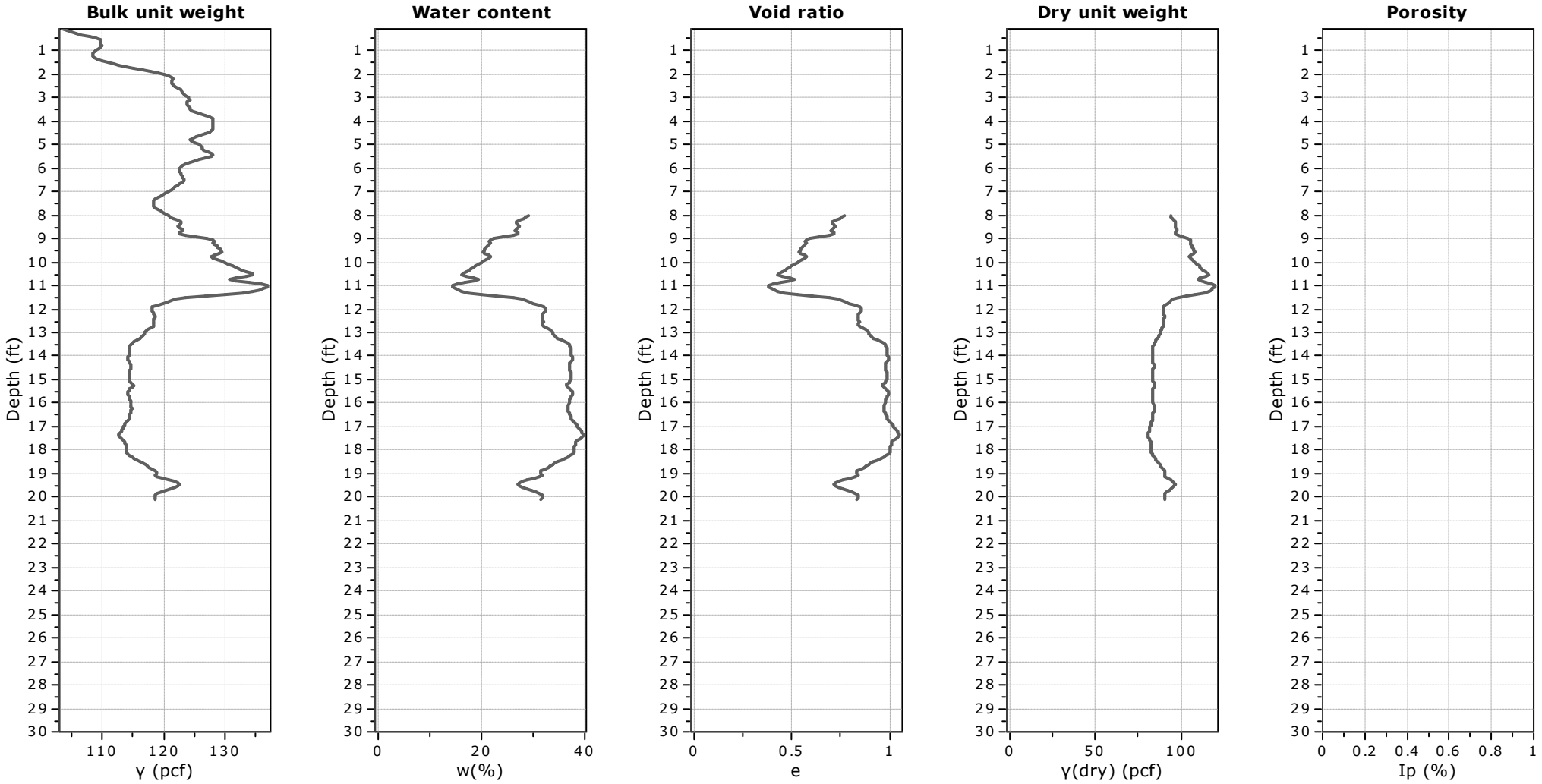

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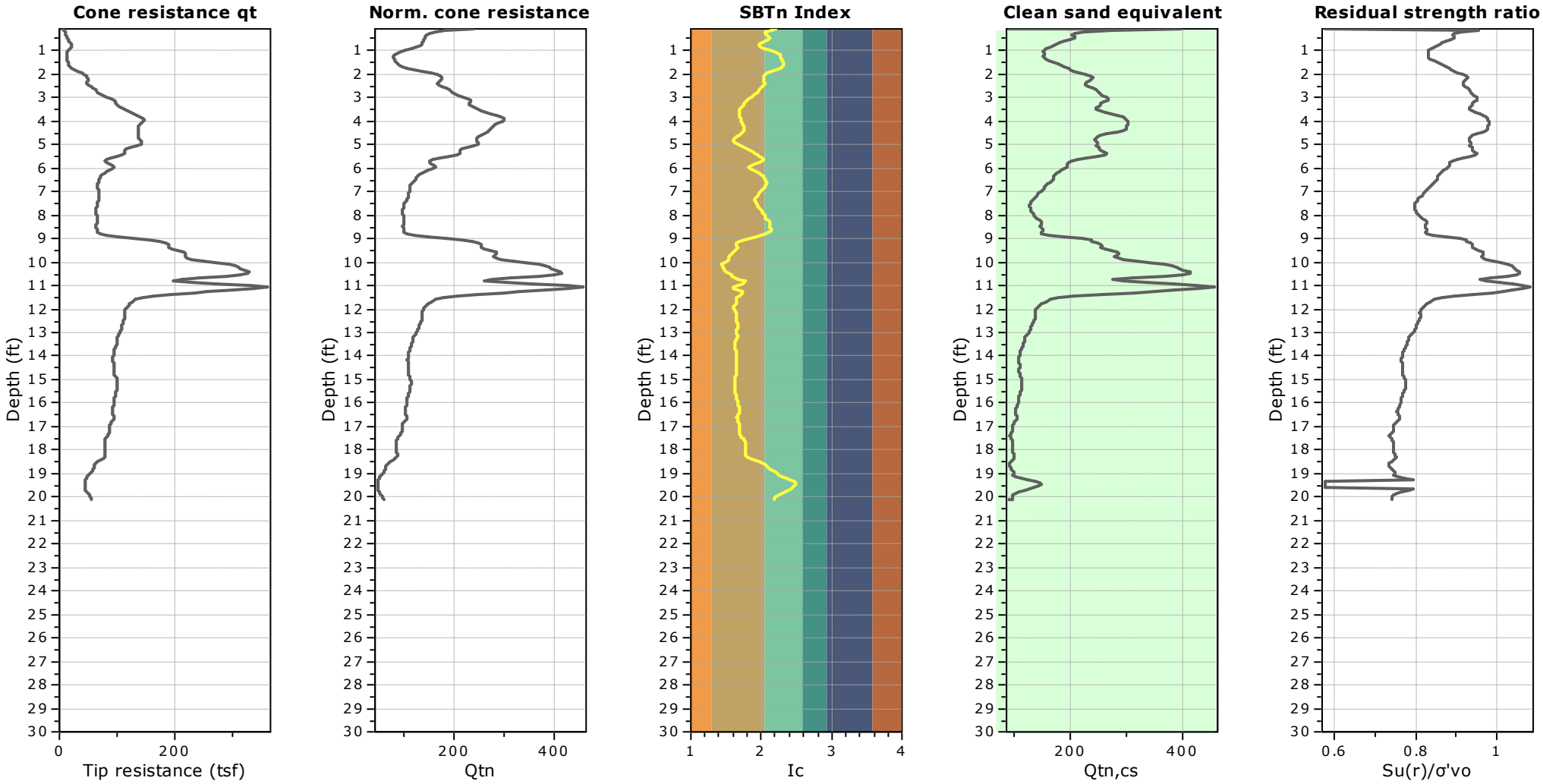

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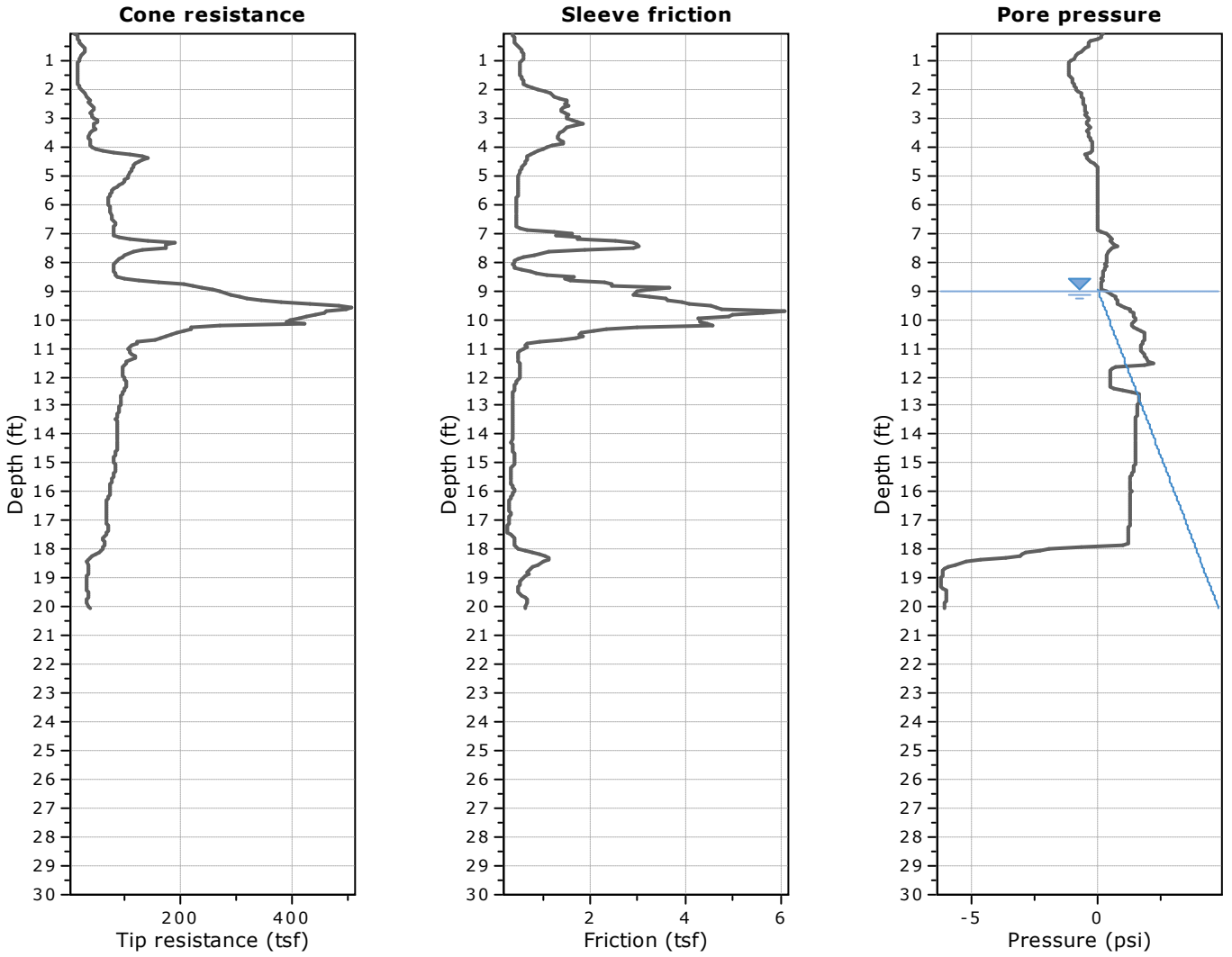
C-36
Total depth: 20.02 ft, Date: 5/14/2024
Surface Elevation: 61.37 ft
Coords: X:572750.10, Y:555691.74
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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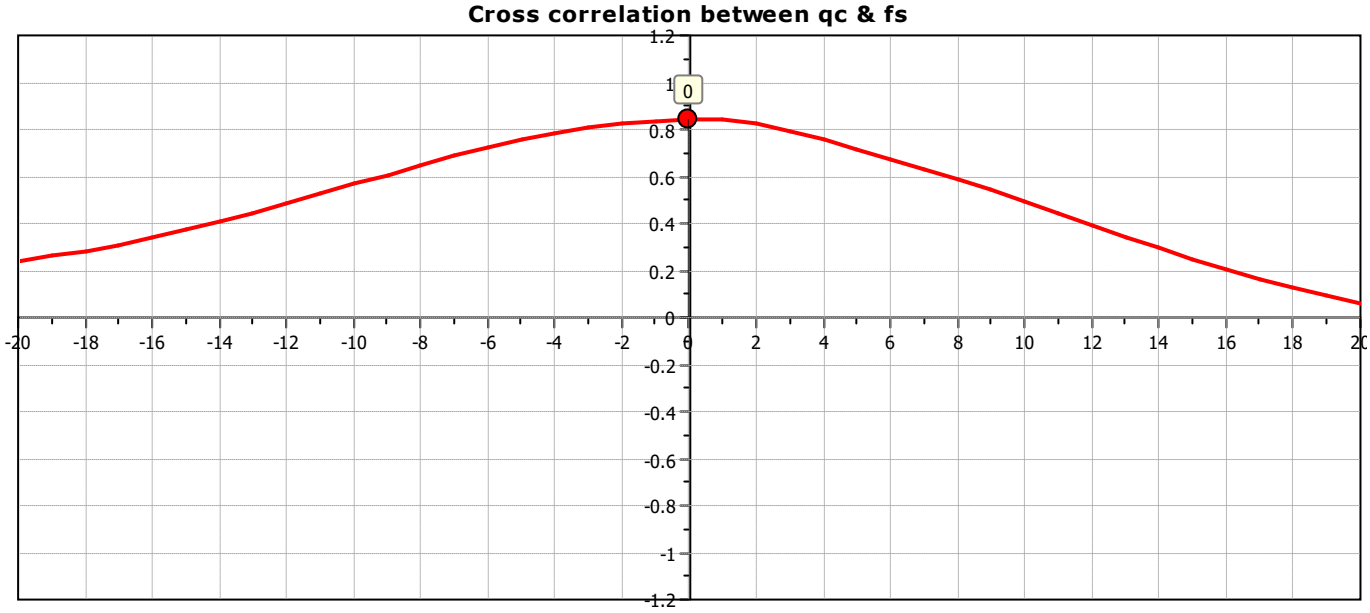

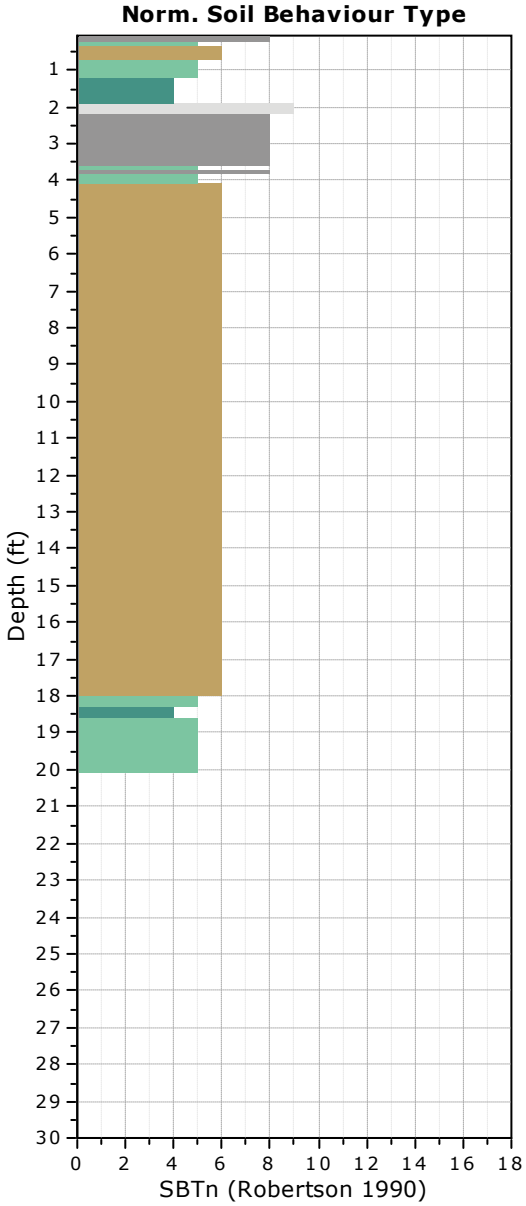

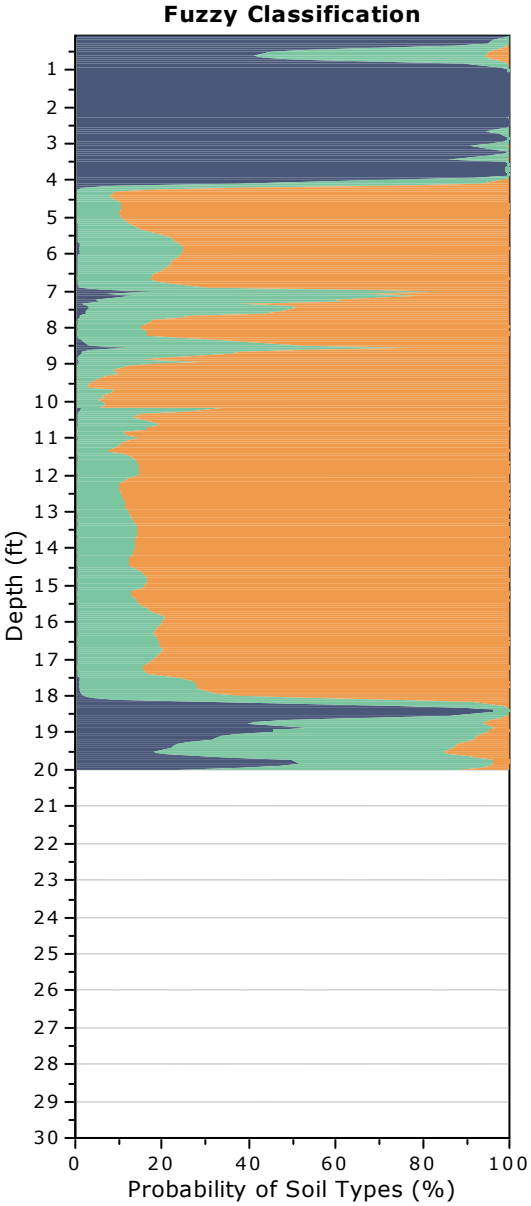

Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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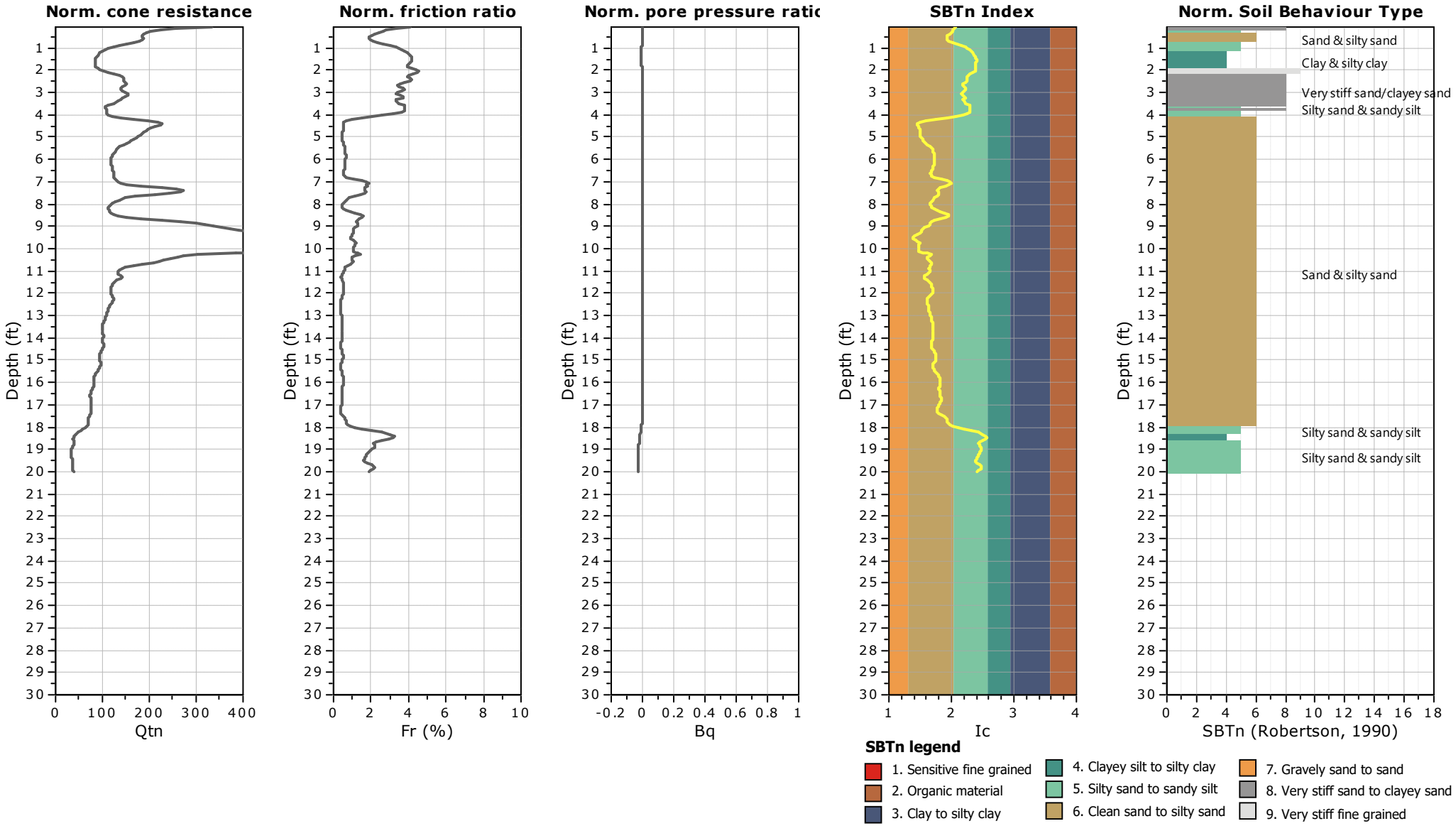

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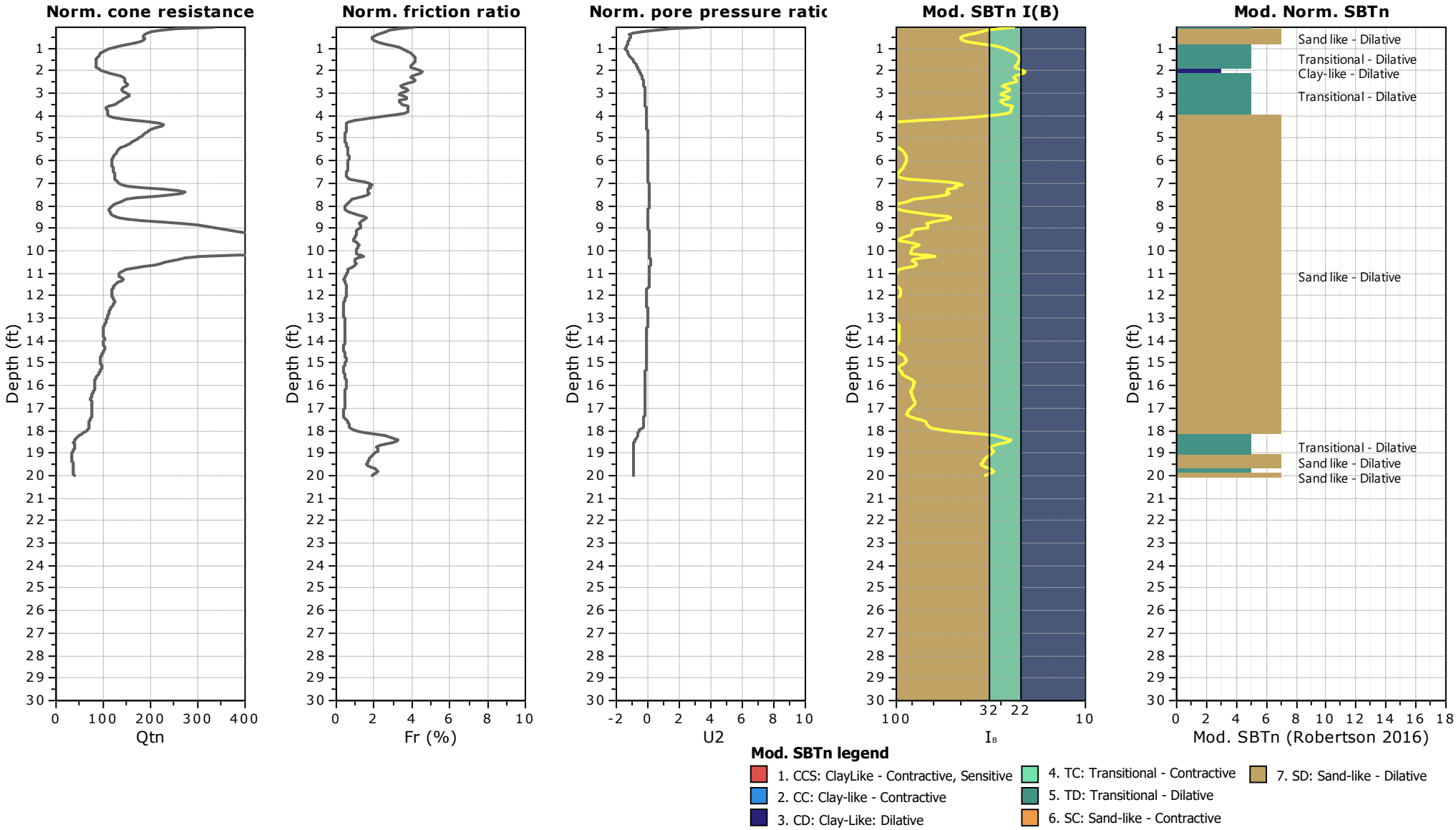

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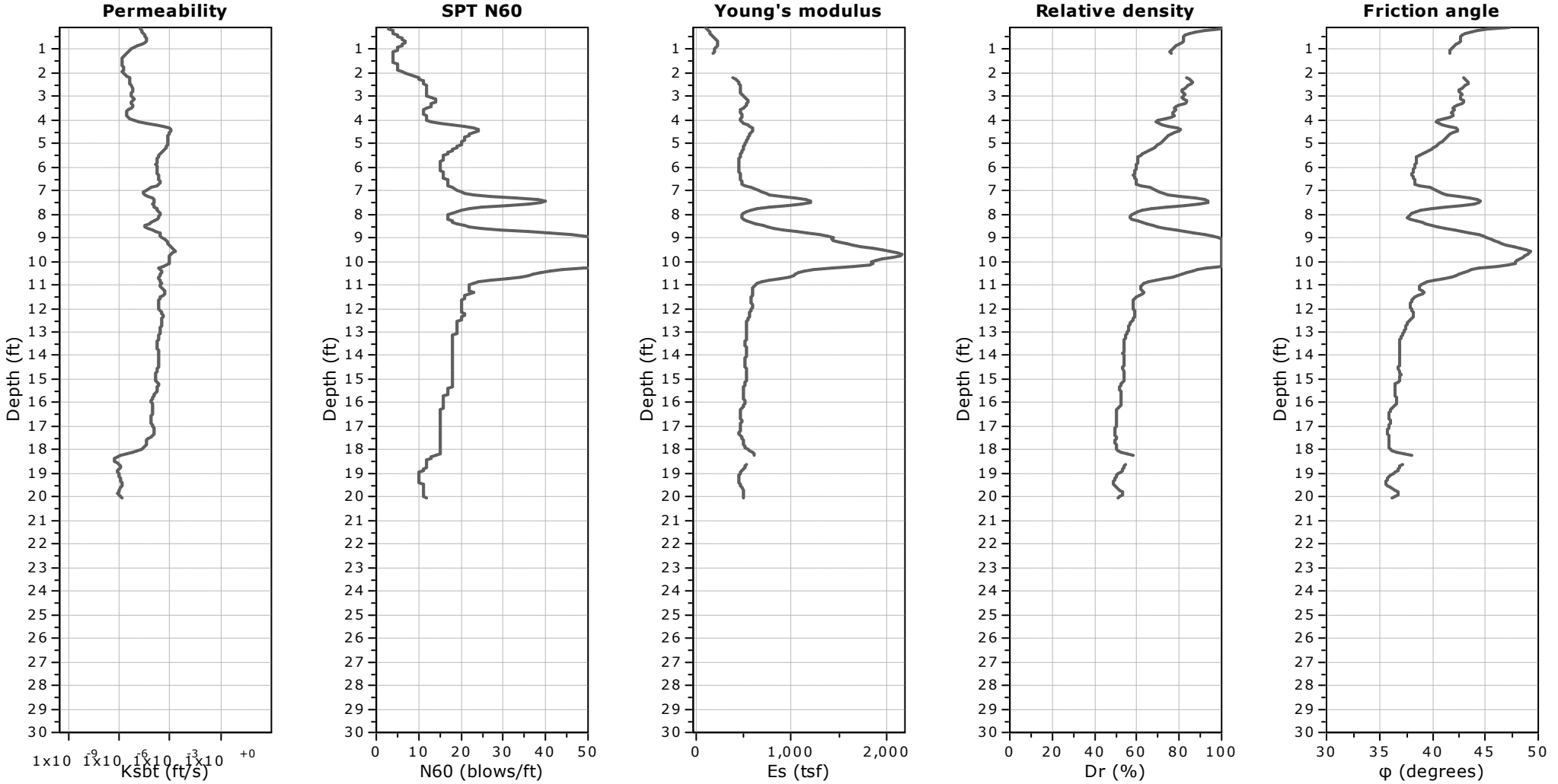

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
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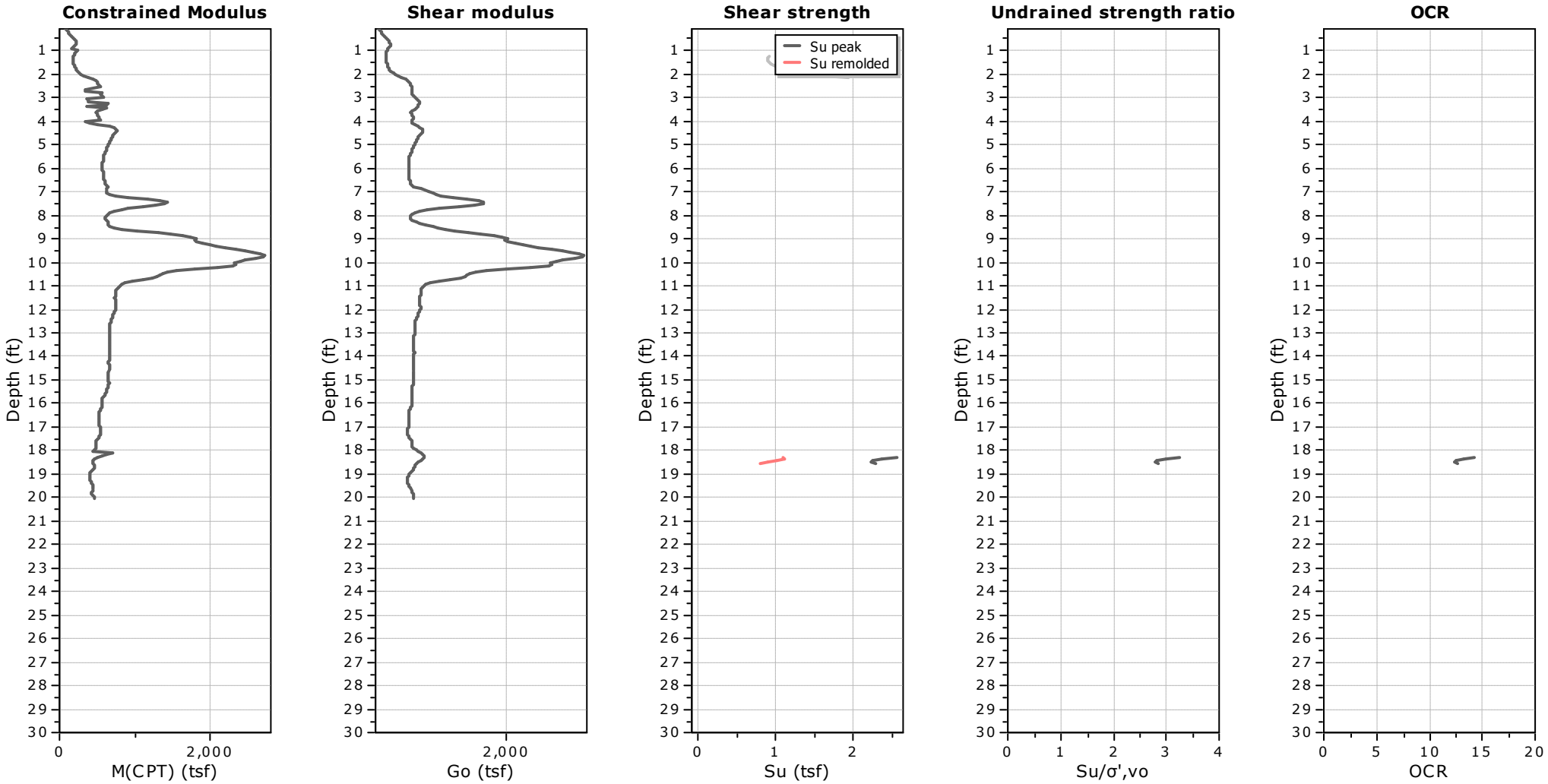

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
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Undrained shear strength cone factor for clays, N_{kt}: 14
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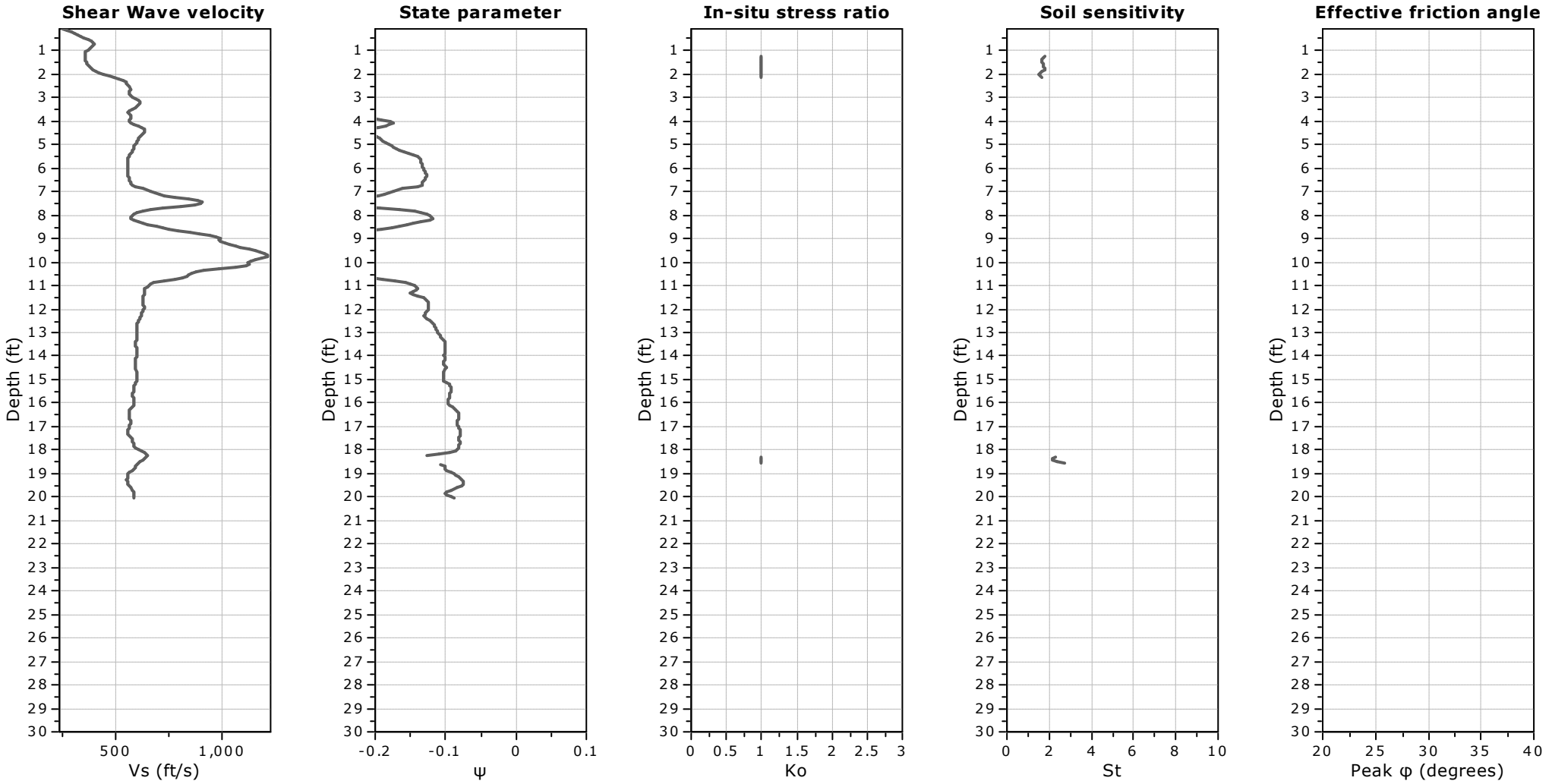

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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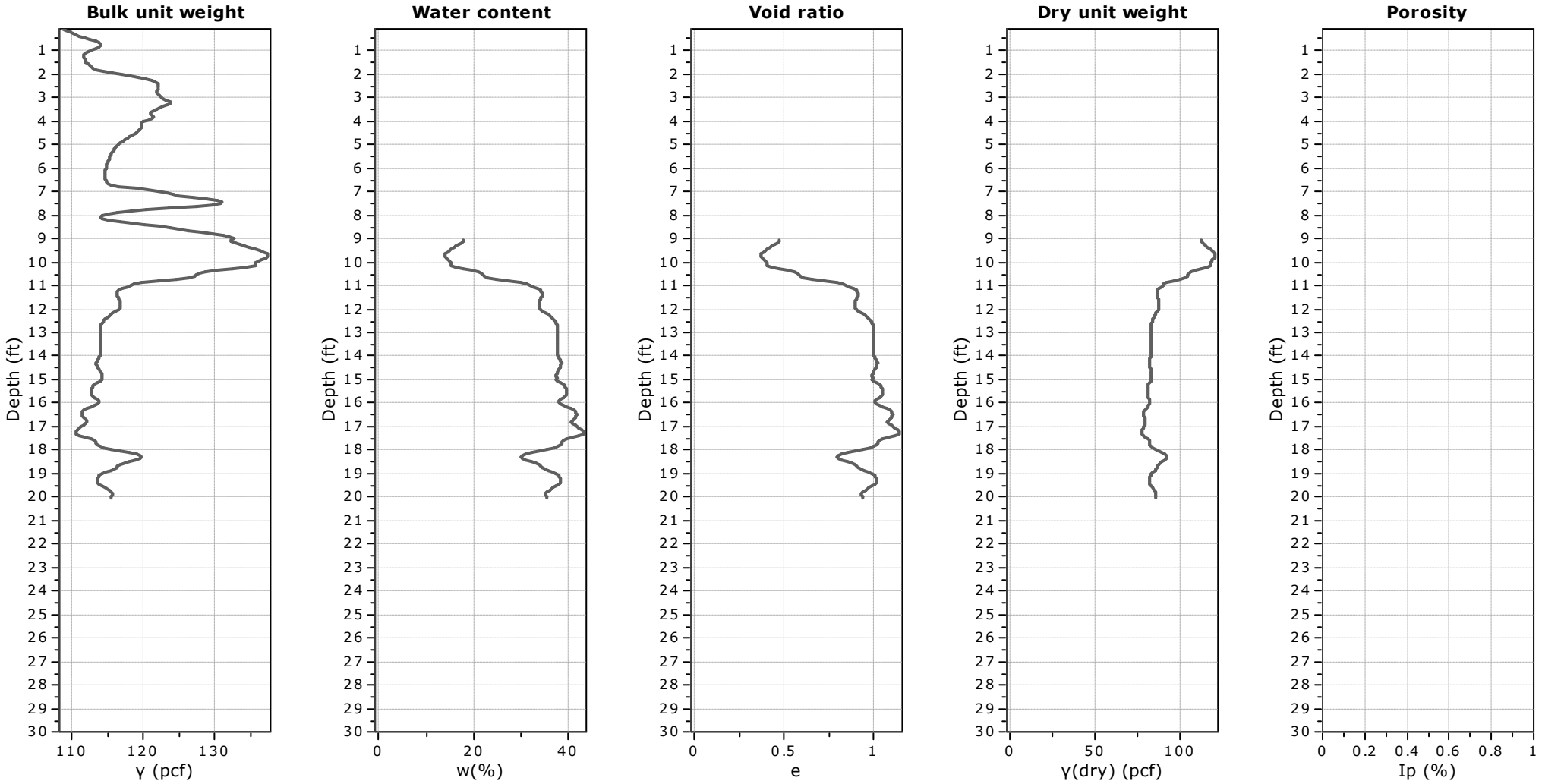

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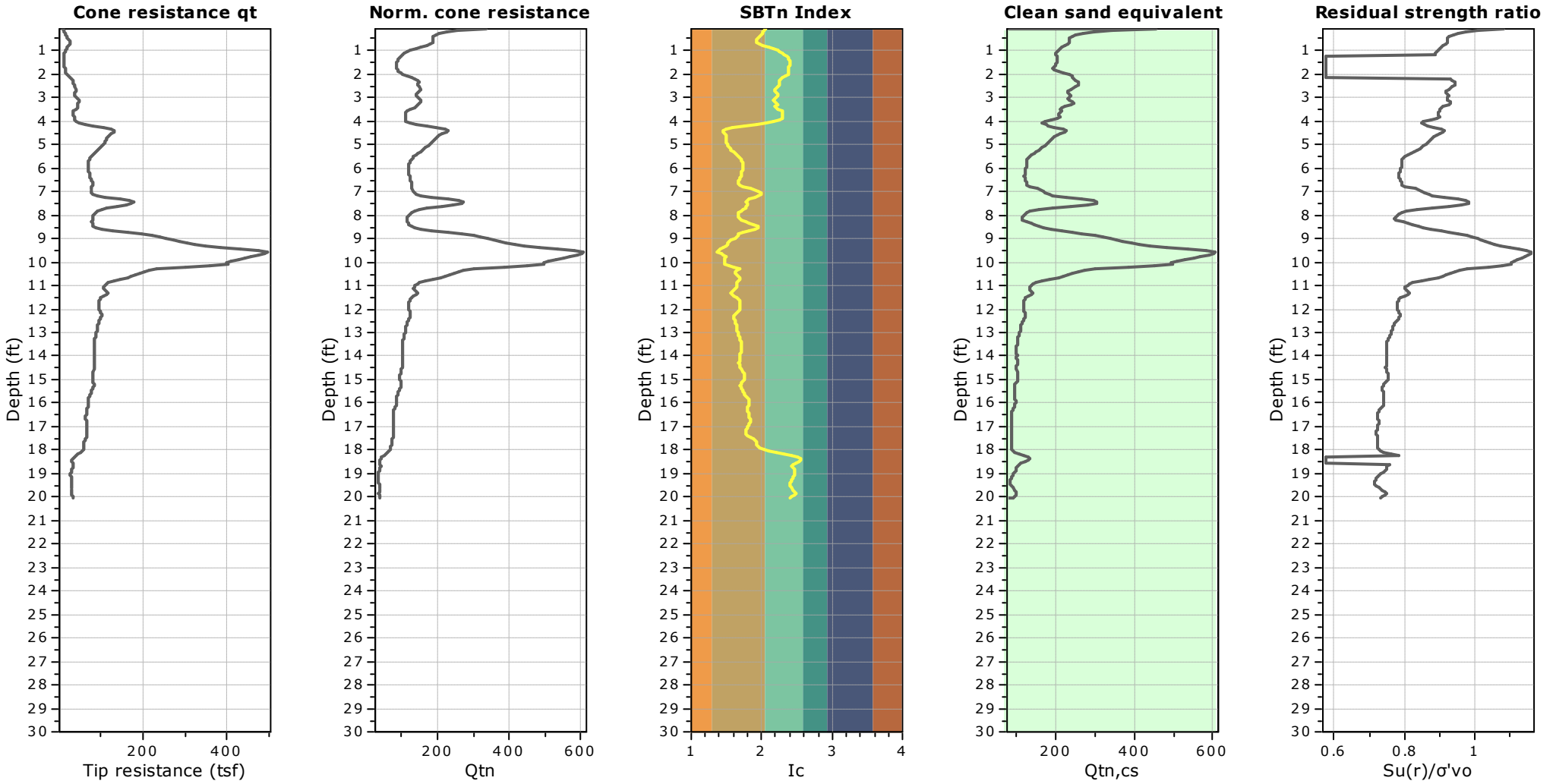

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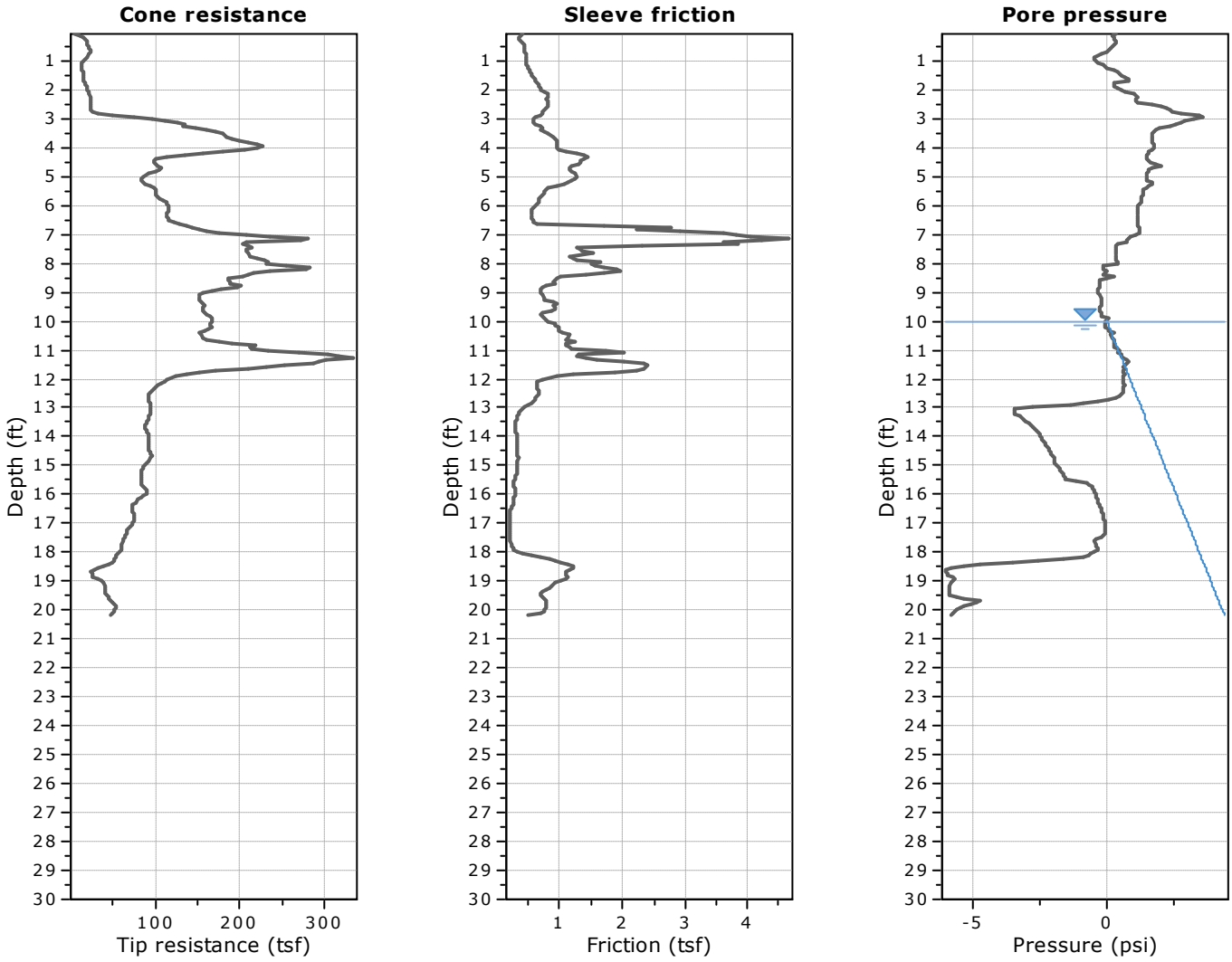
C-37
Total depth: 20.19 ft, Date: 5/14/2024
Surface Elevation: 62.13 ft
Coords: X:572636.31, Y:555668.04
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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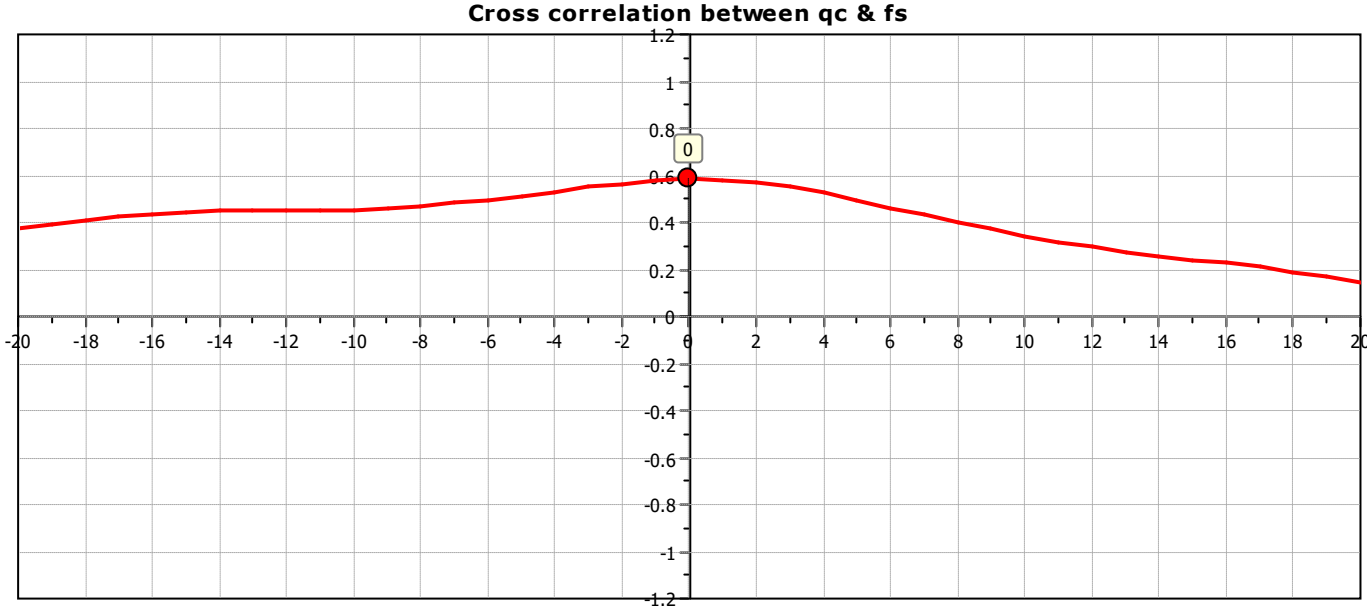

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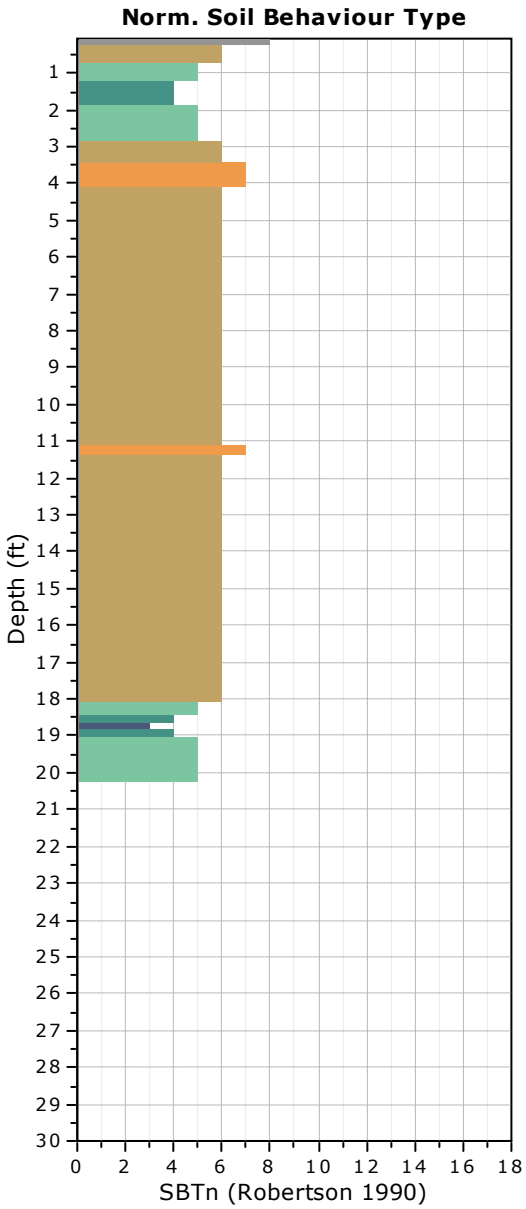

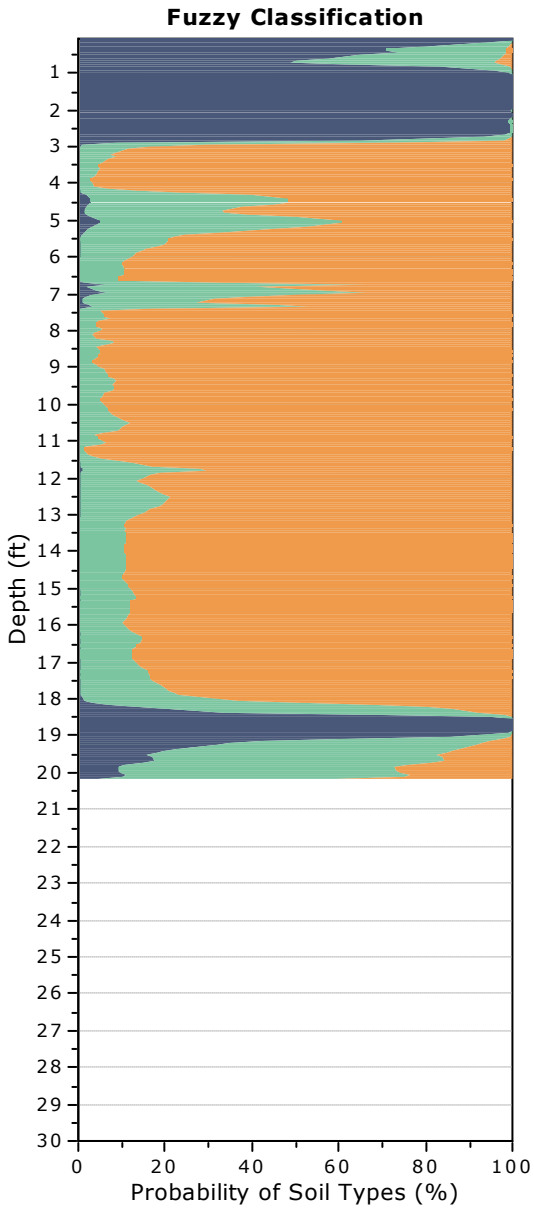

Fuzzy classifiaction legend
- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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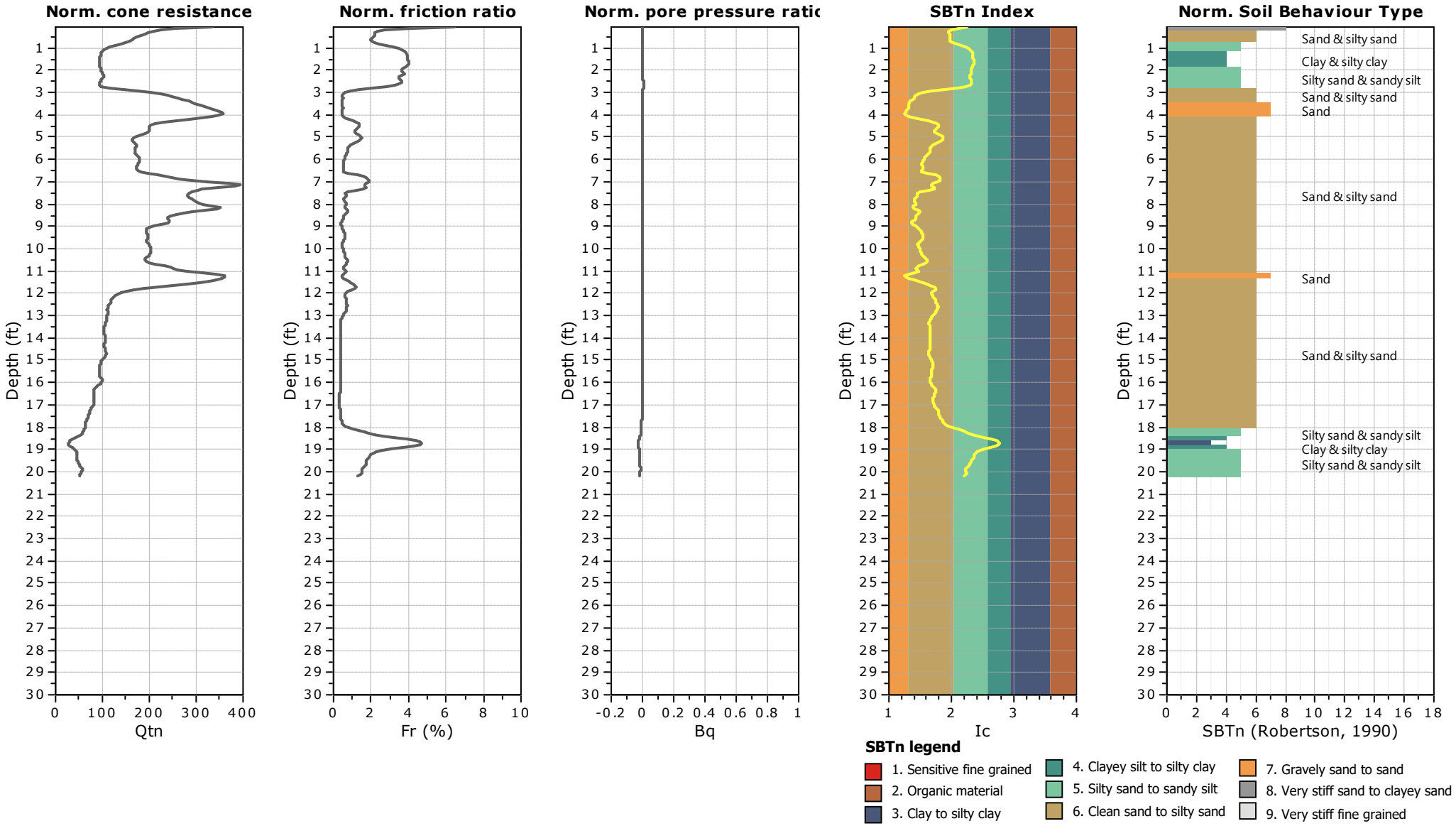
C-37
Total depth: 20.19 ft, Date: 5/14/2024
Surface Elevation: 62.13 ft
Coords: X:572636.31, Y:555668.04
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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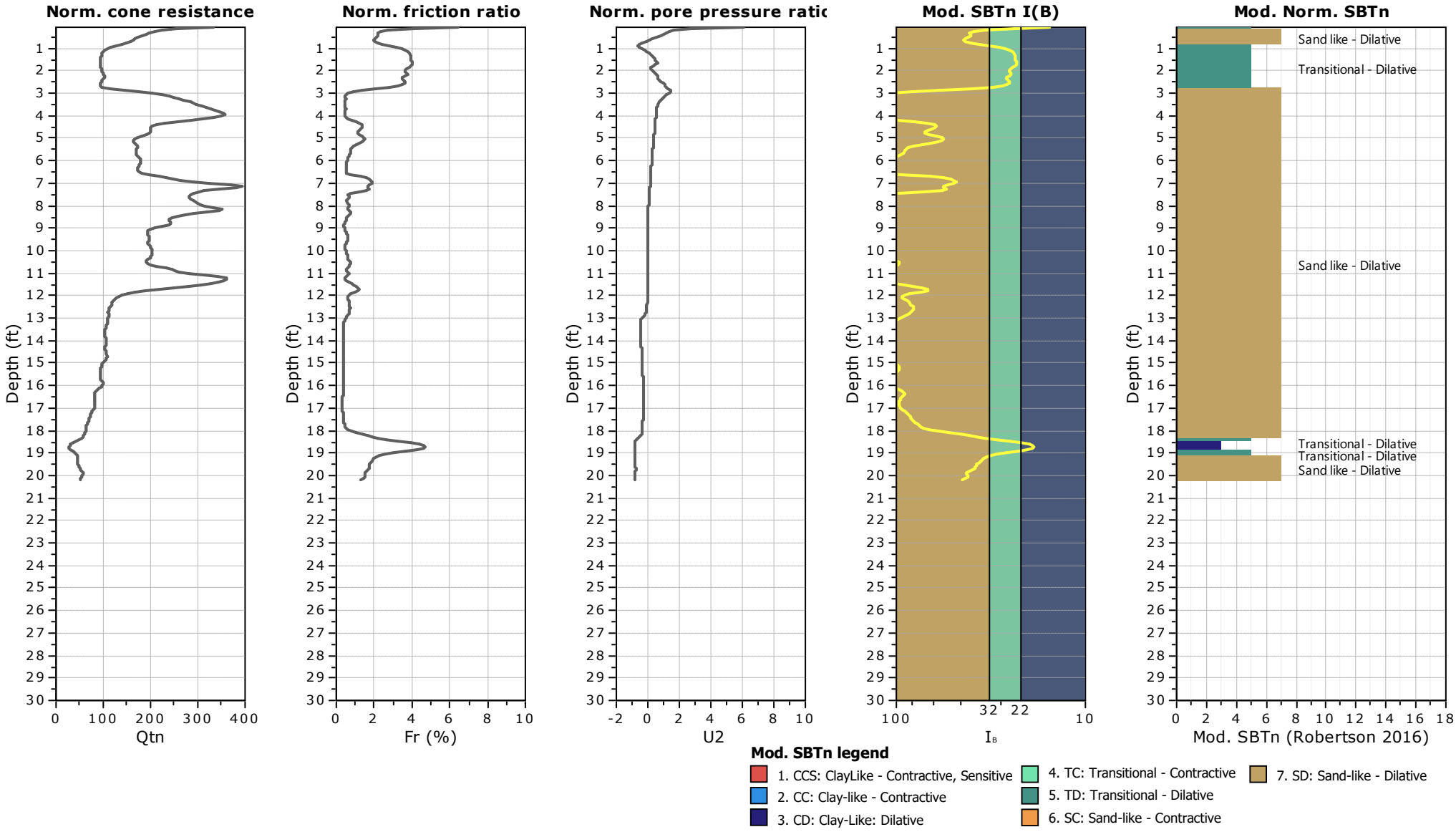

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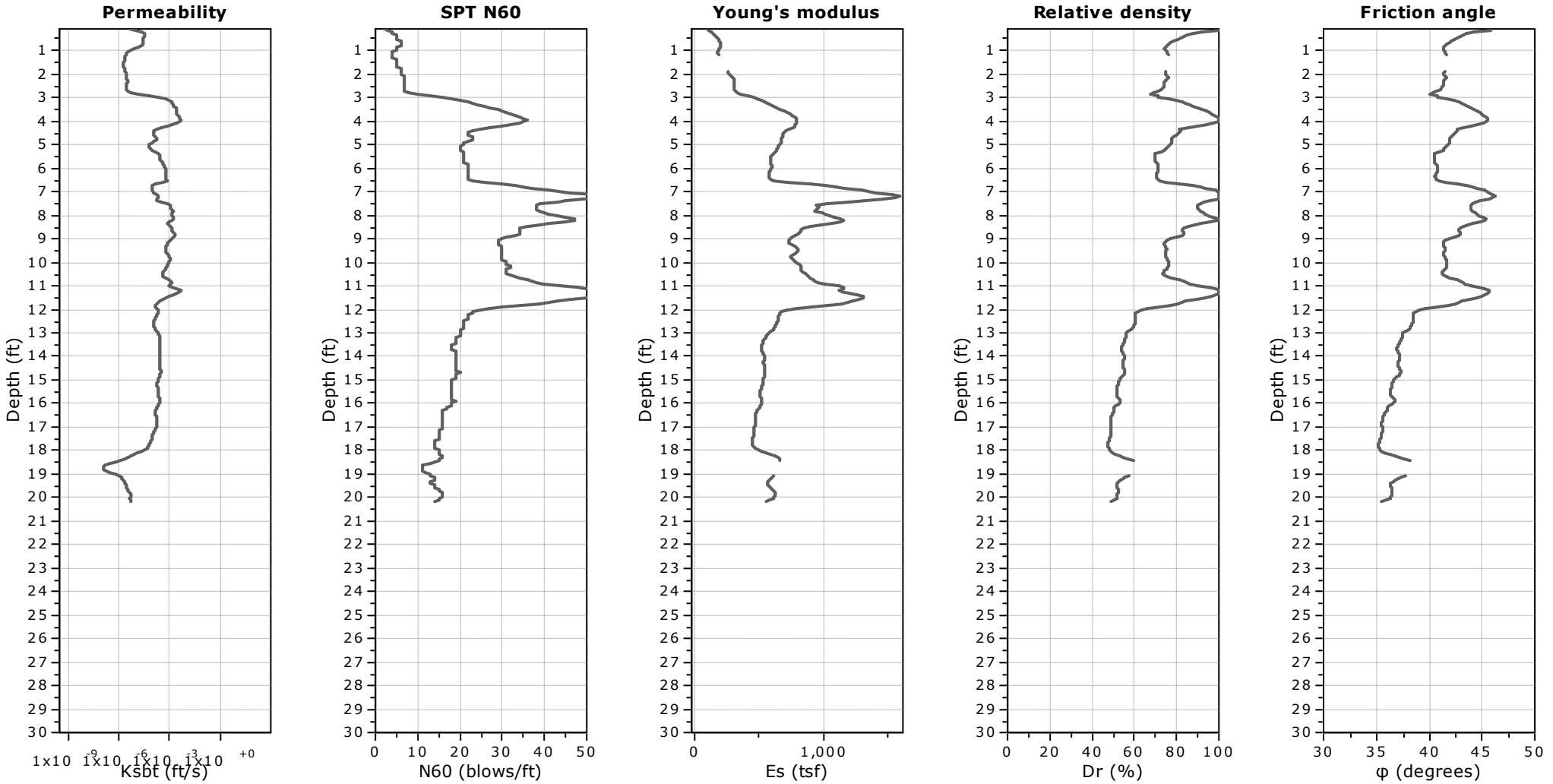

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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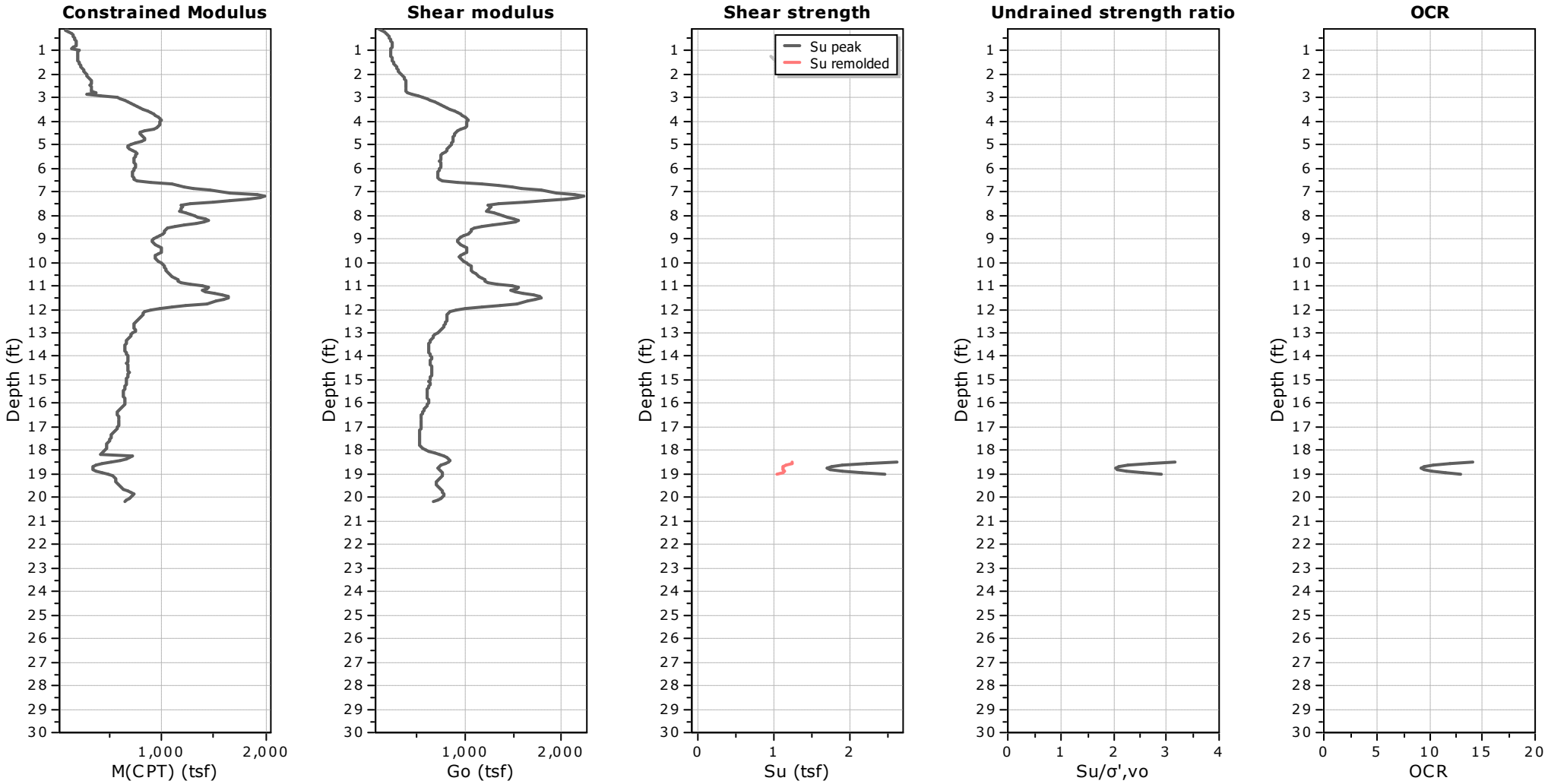

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
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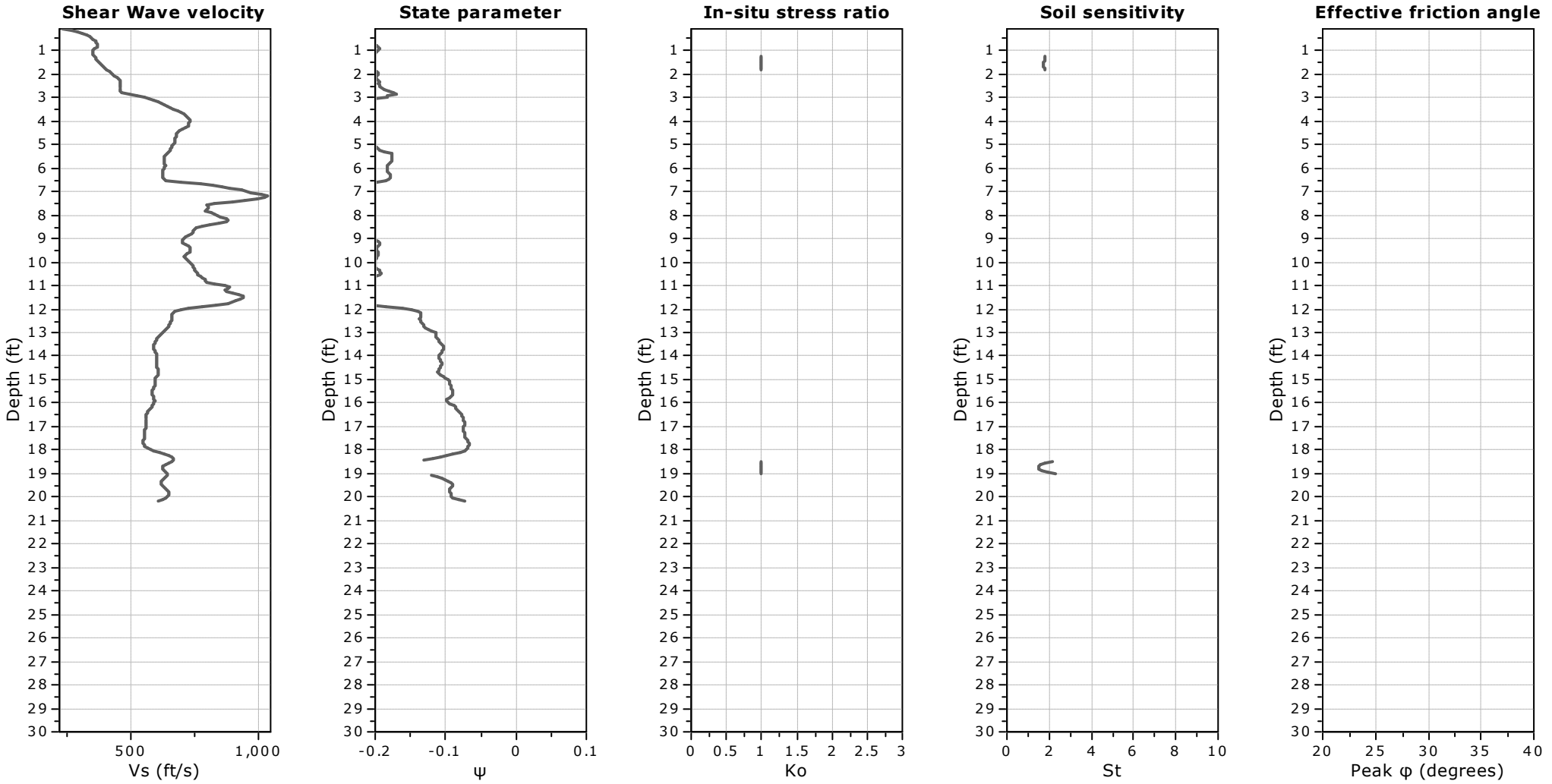

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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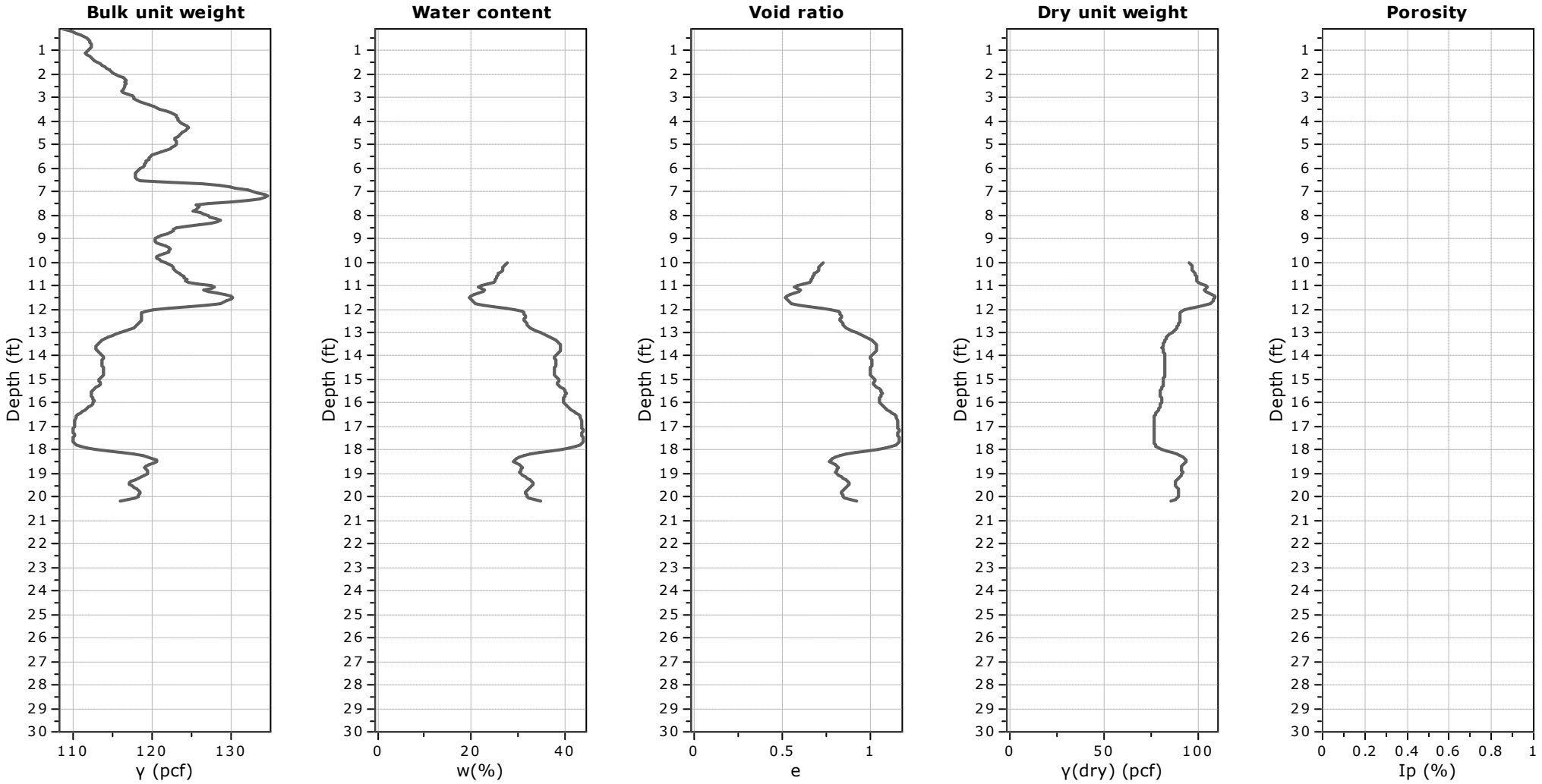

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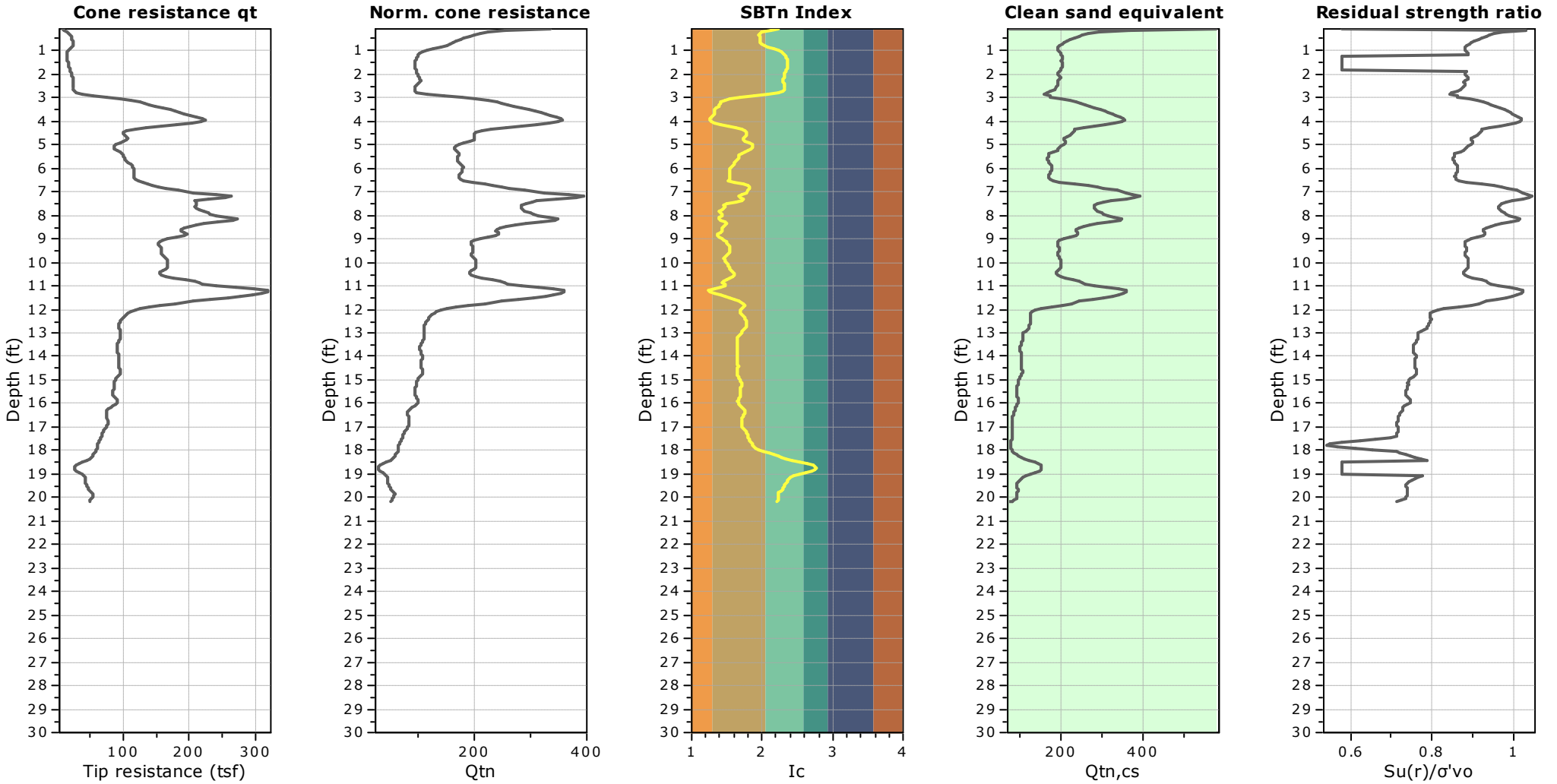

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C-38
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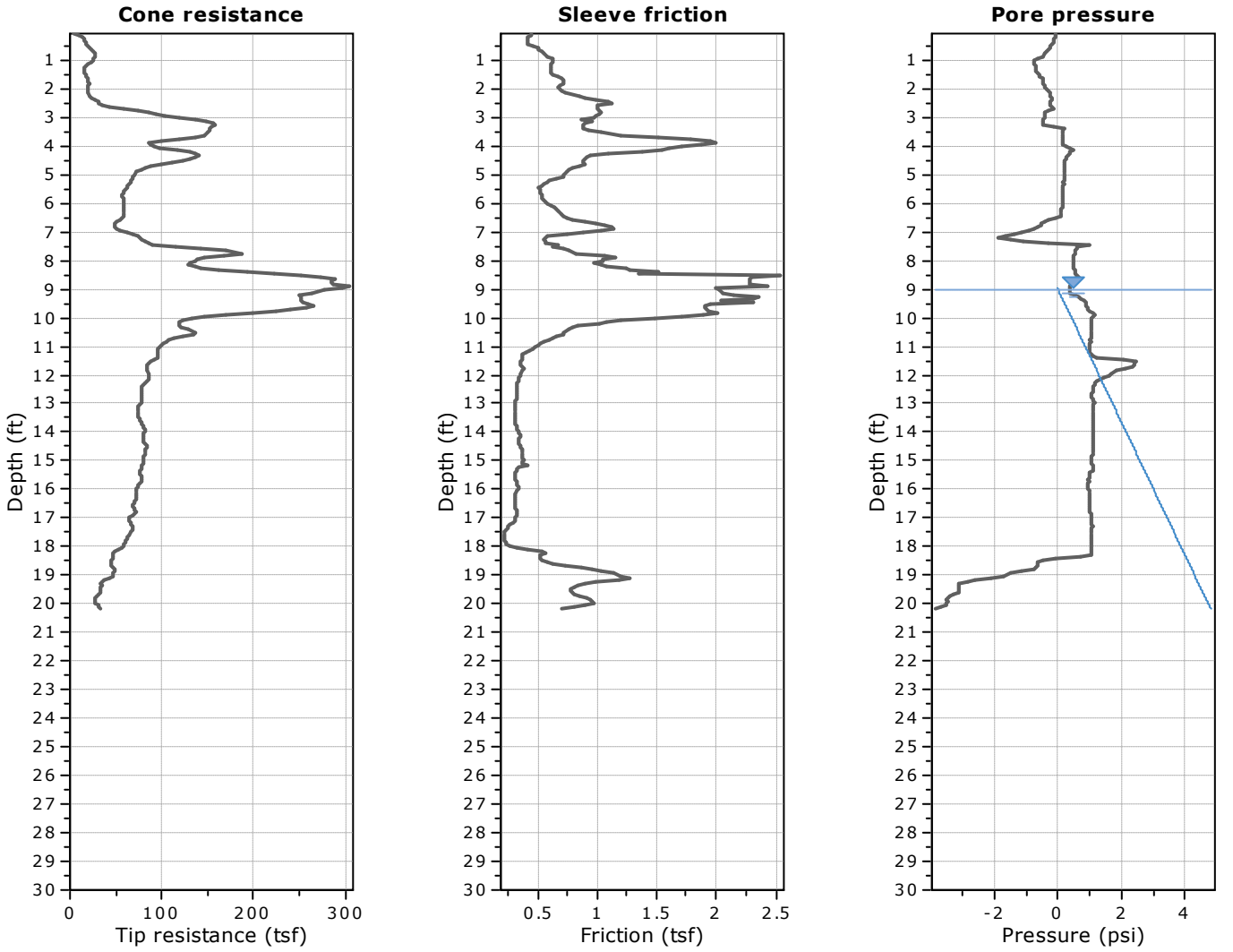
Surface Elevation: 61.56 ft
Coords: X:572715.55, Y:555638.73
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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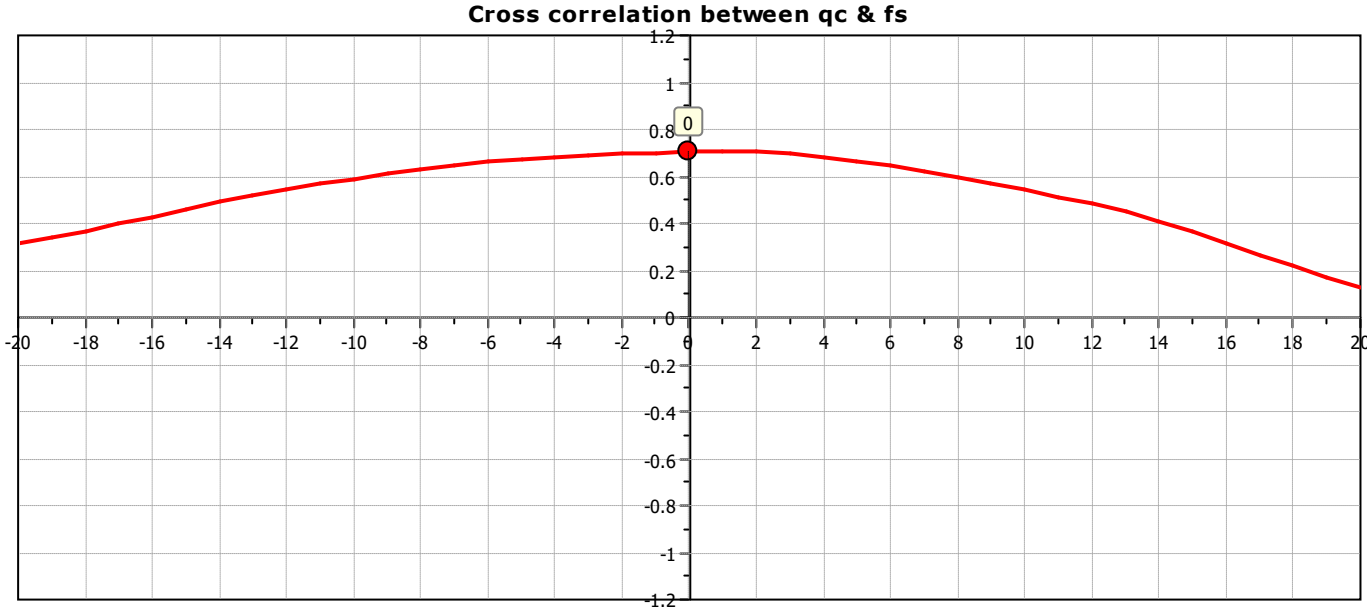

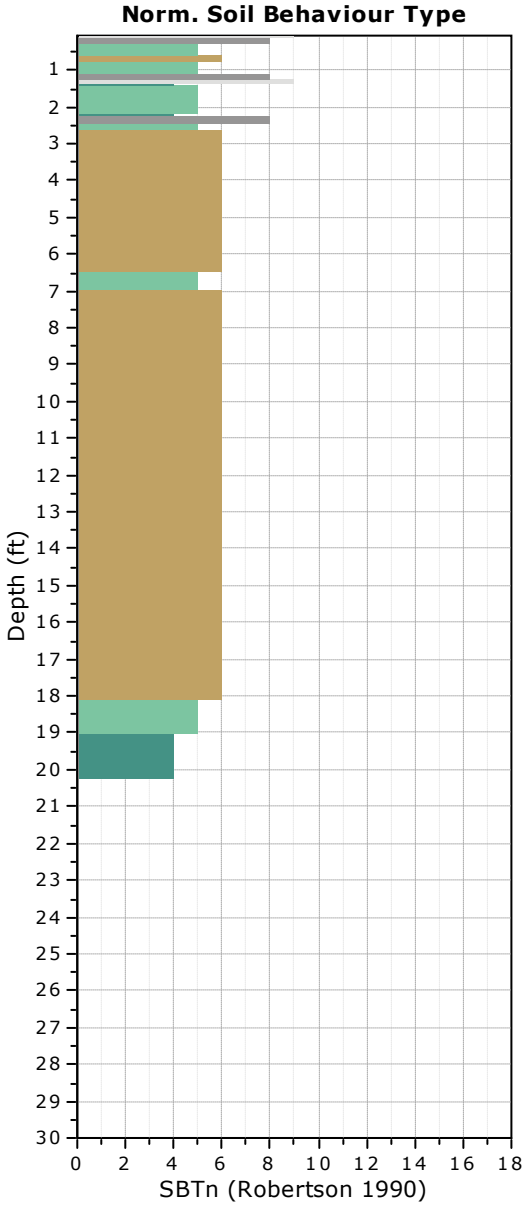

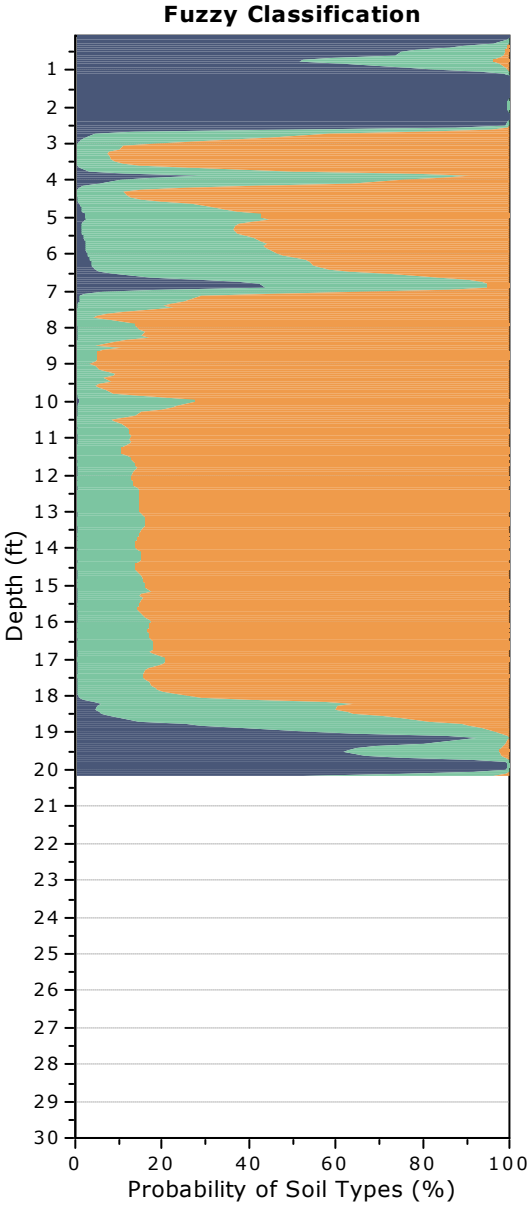

Fuzzy classifiaction legend

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- Highly probable mixture soil
- Highly probable sandy soil

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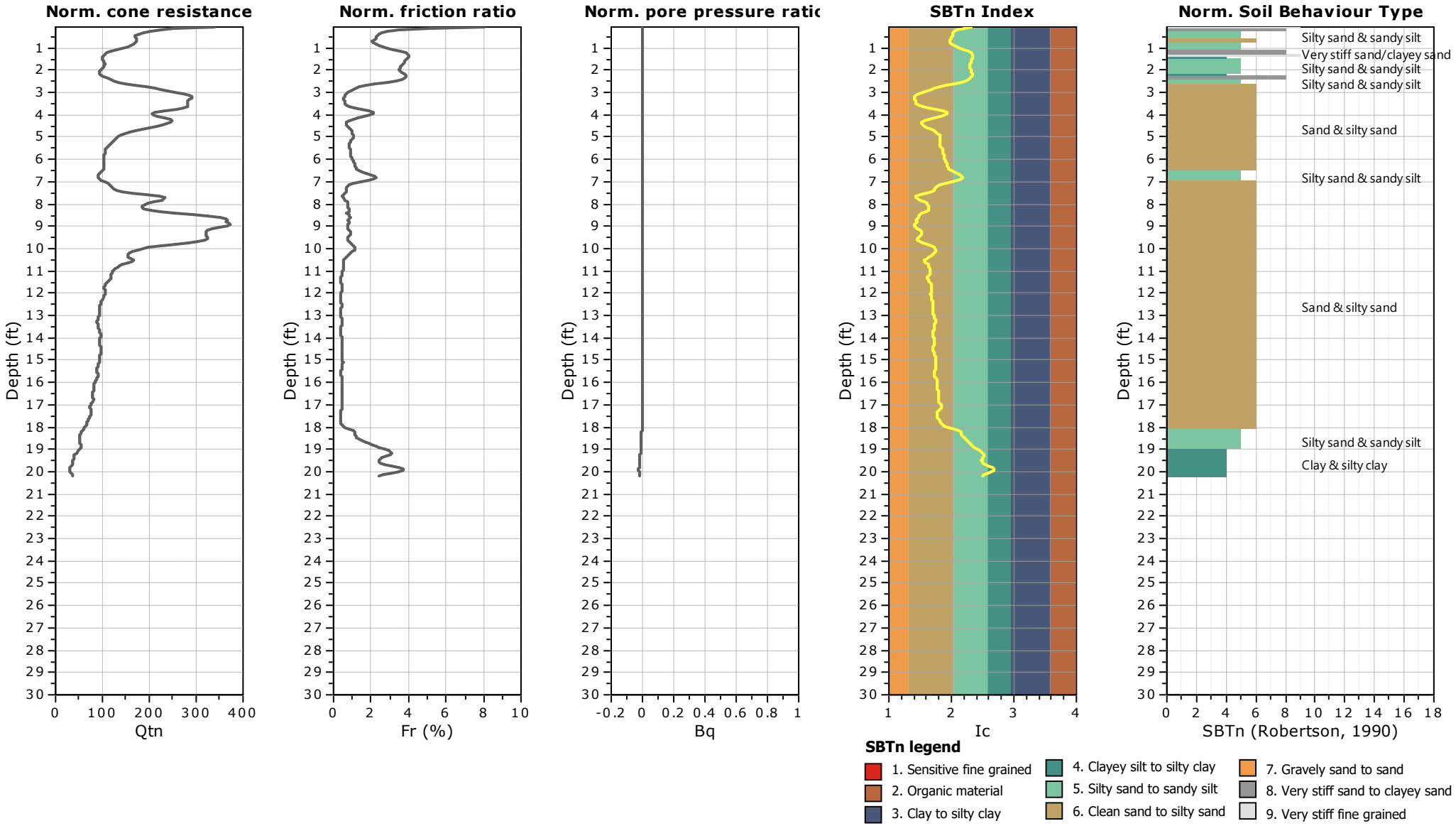
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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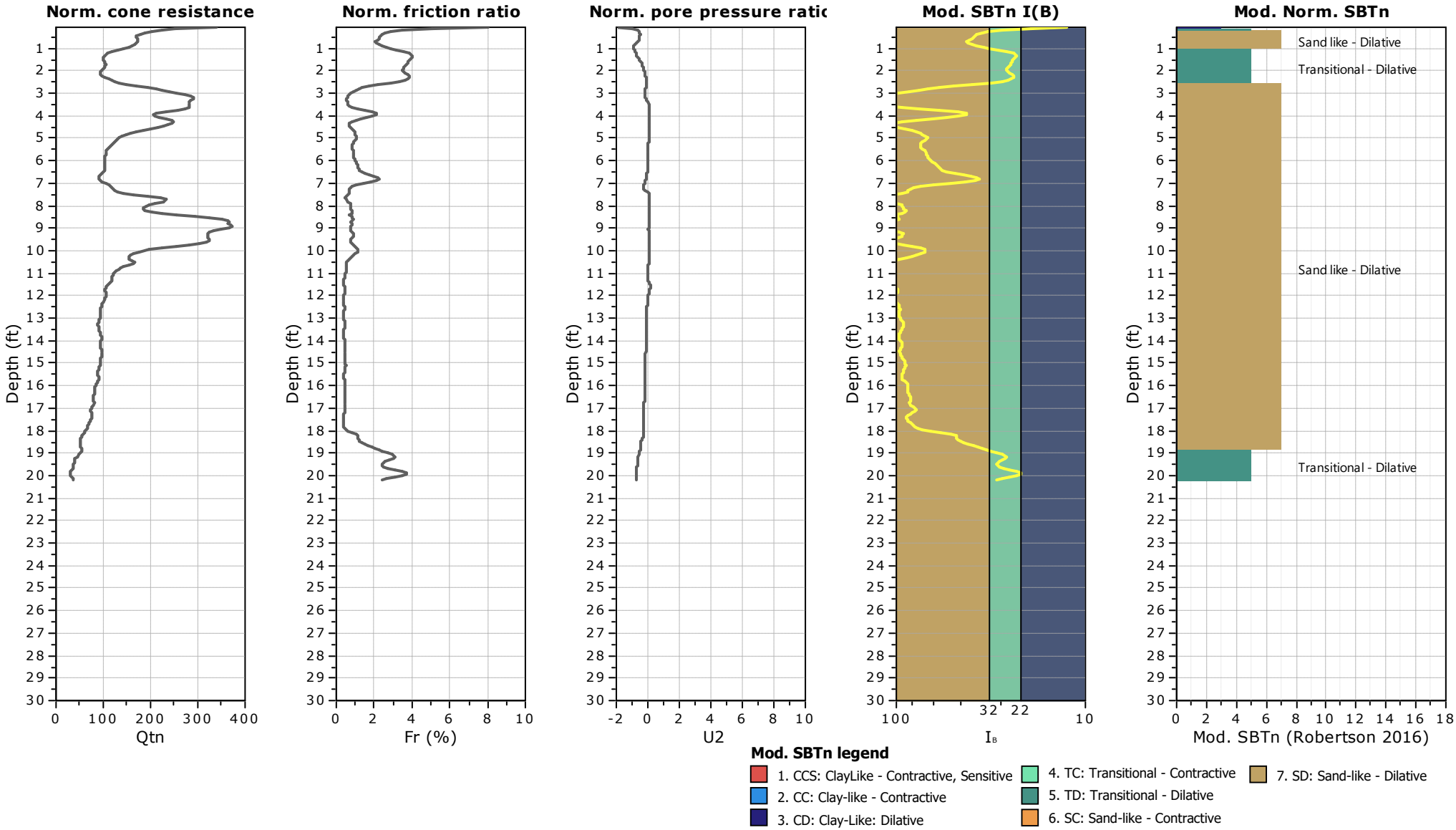

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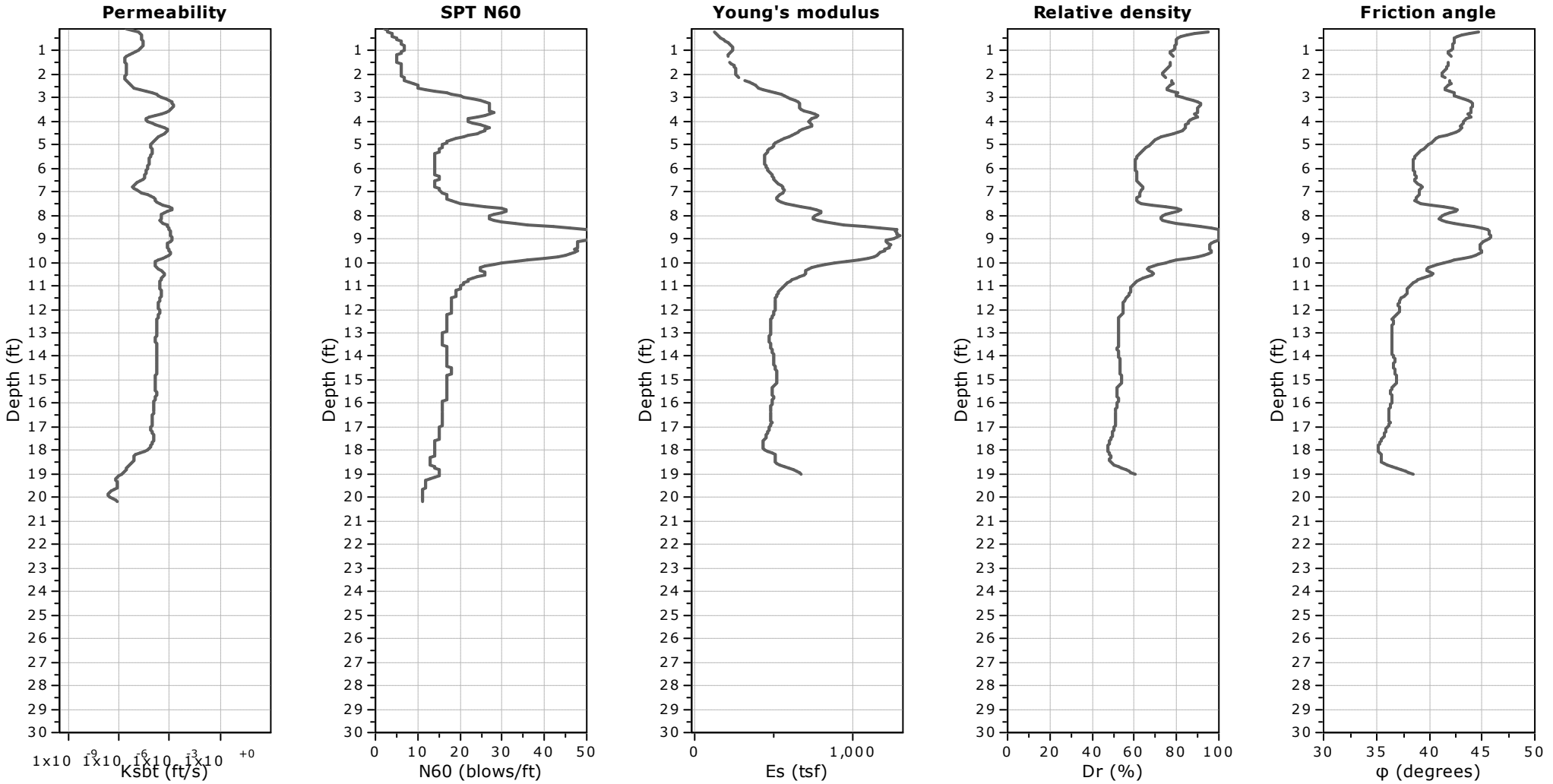

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
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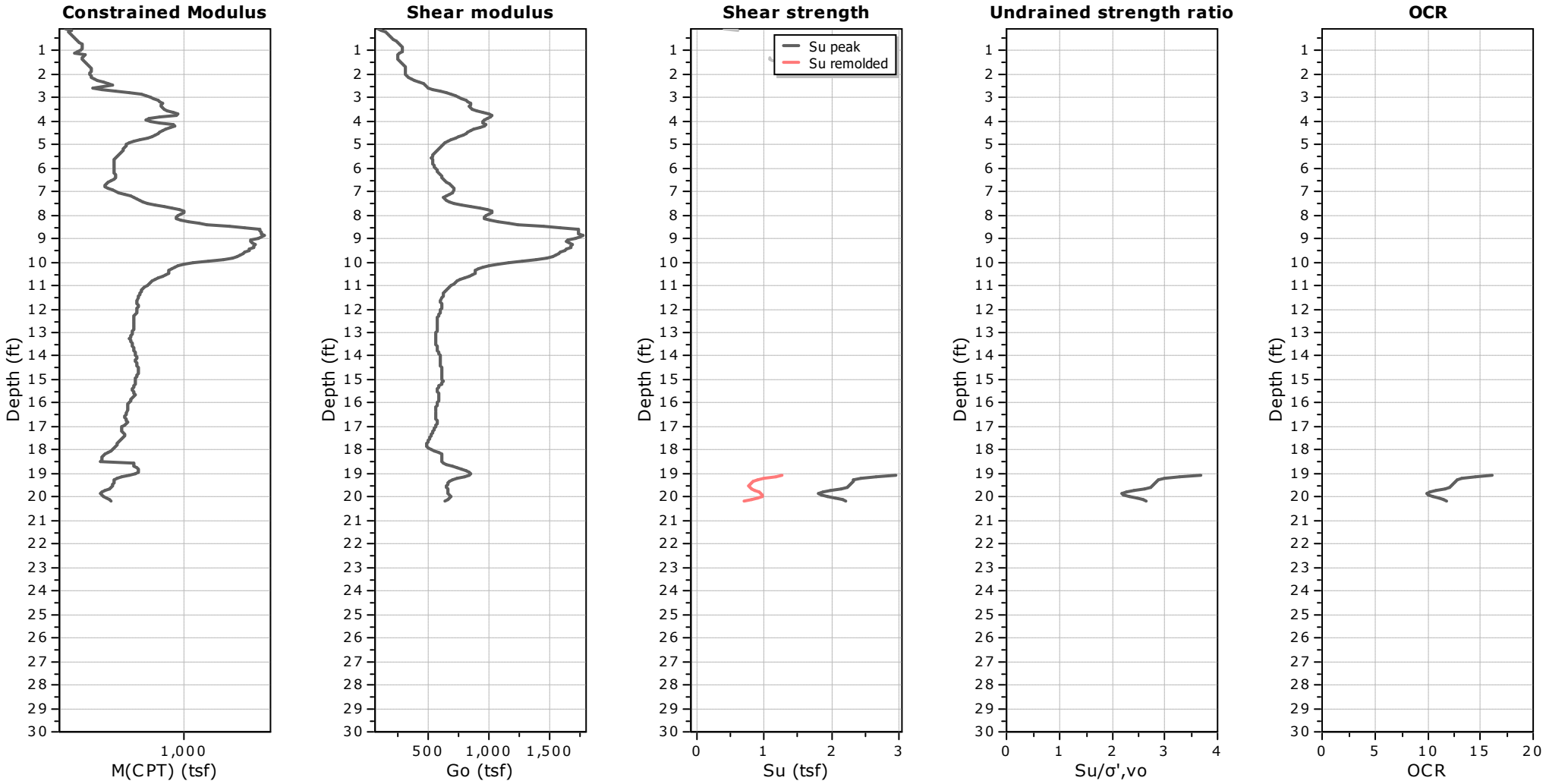

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
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Flat Dilatometer Test data

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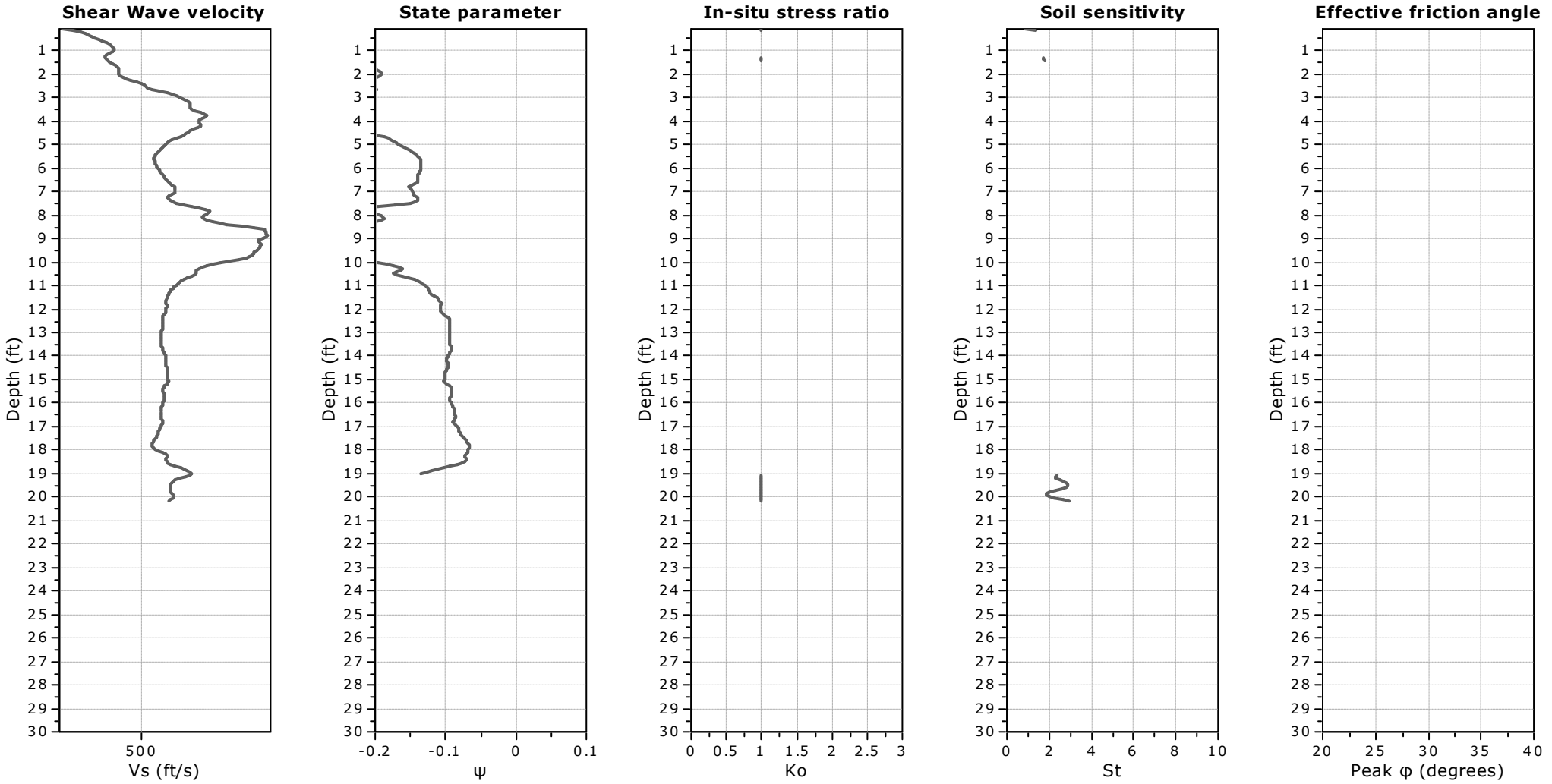

Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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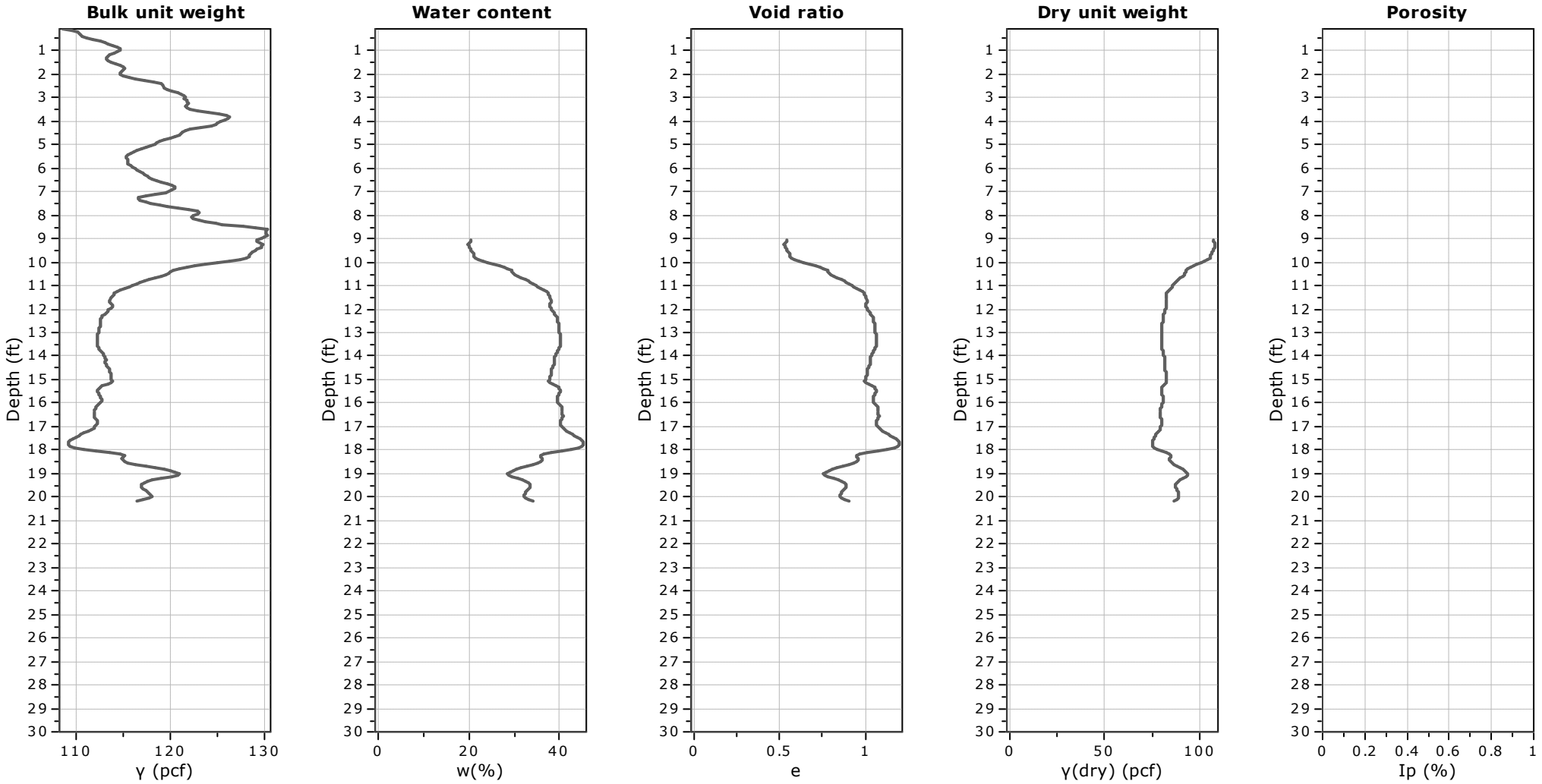

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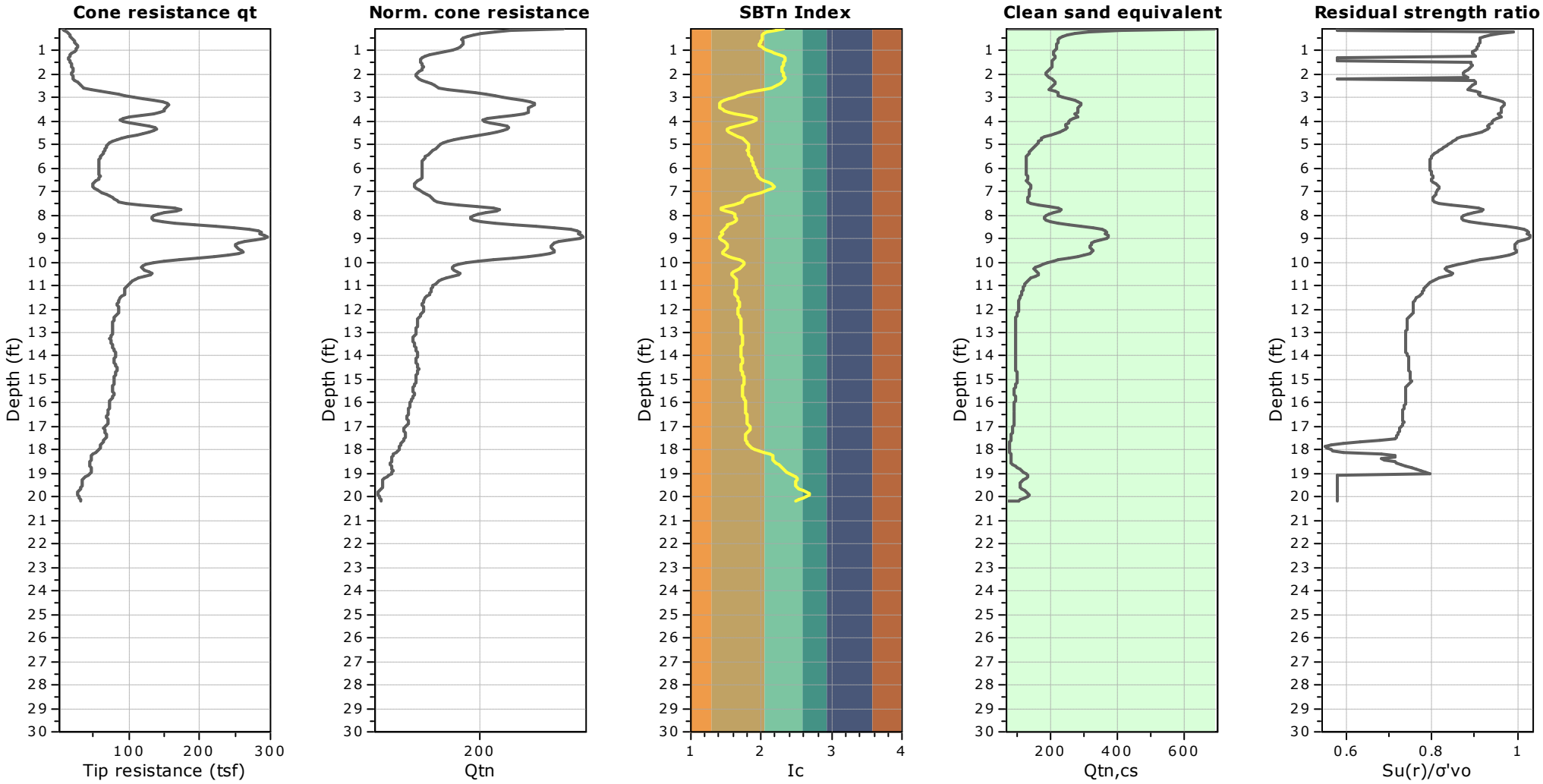

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C-39
Total depth: 30.23 ft, Date: 5/14/2024
Surface Elevation: 61.86 ft
Coords: X:572684.18, Y:555600.85
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
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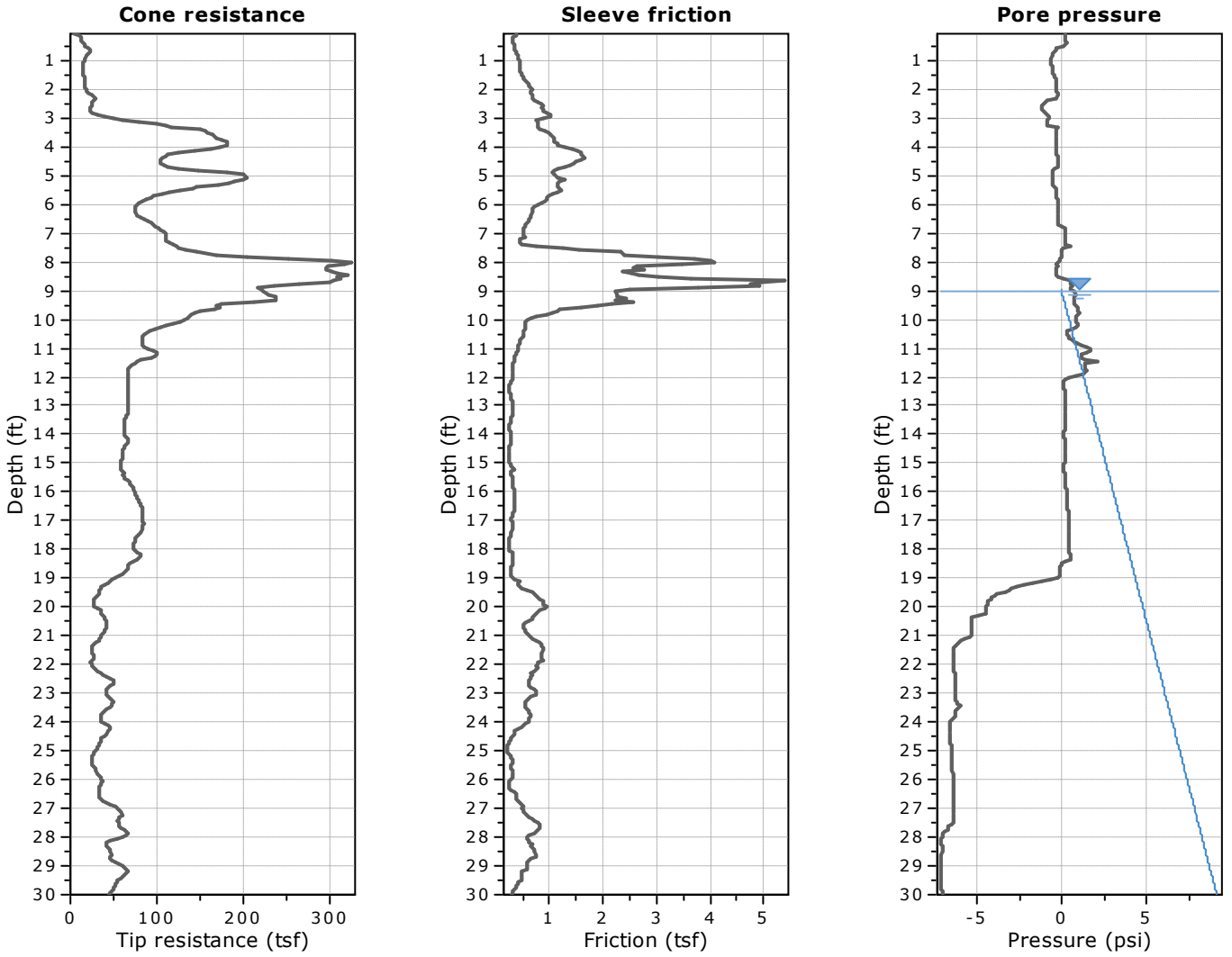

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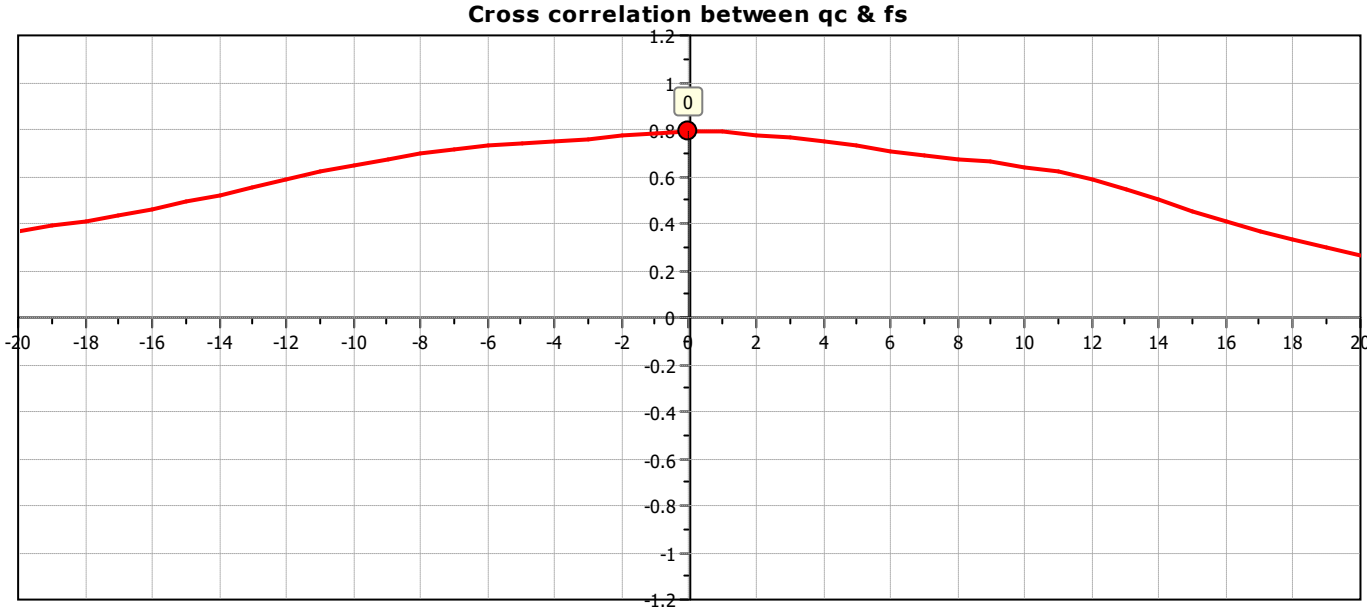

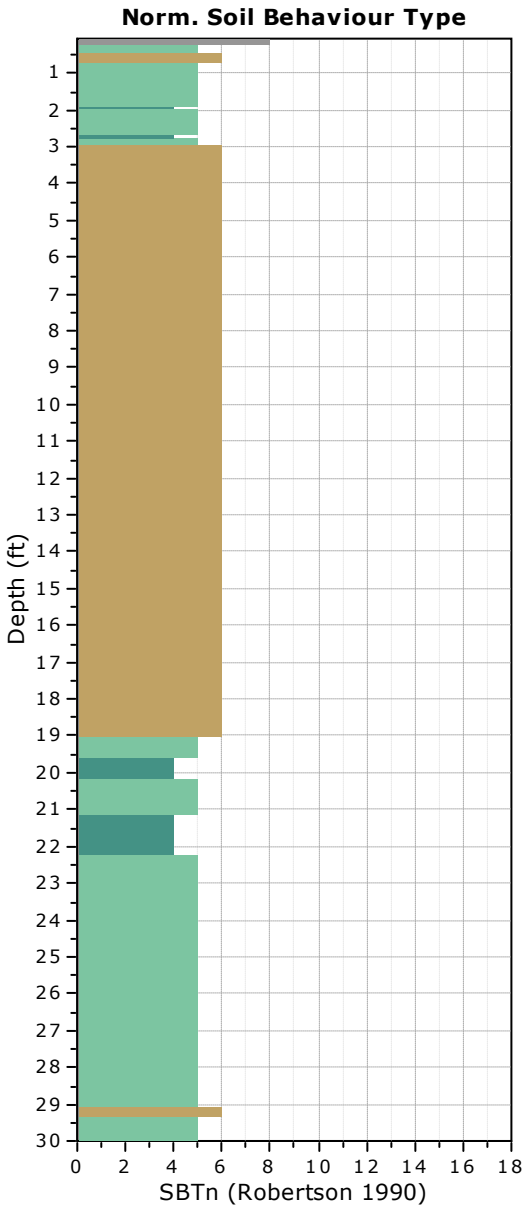

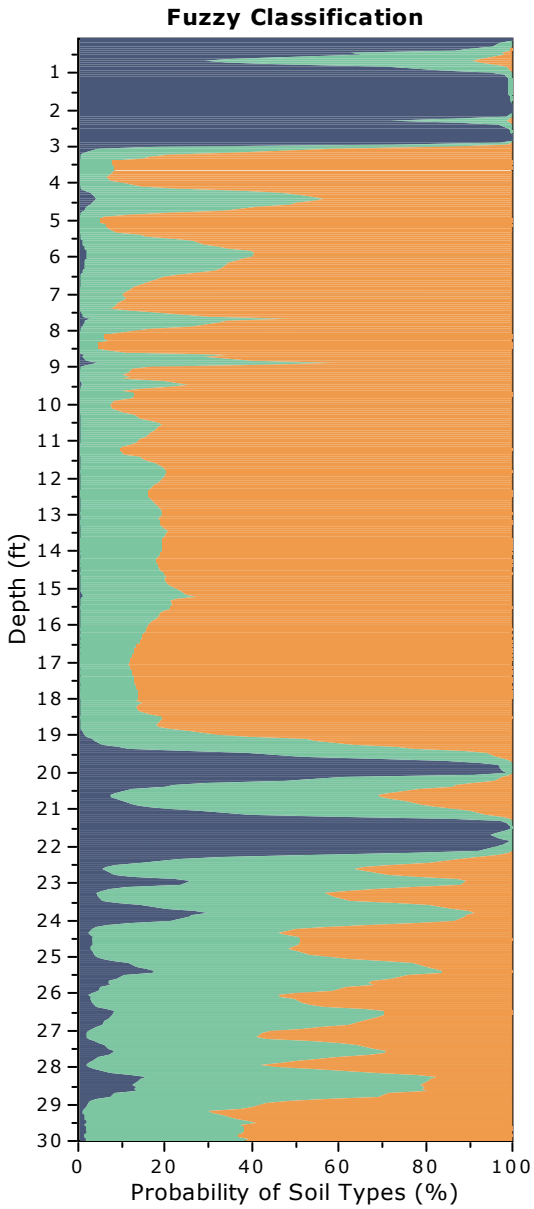

Fuzzy classifiaction legend

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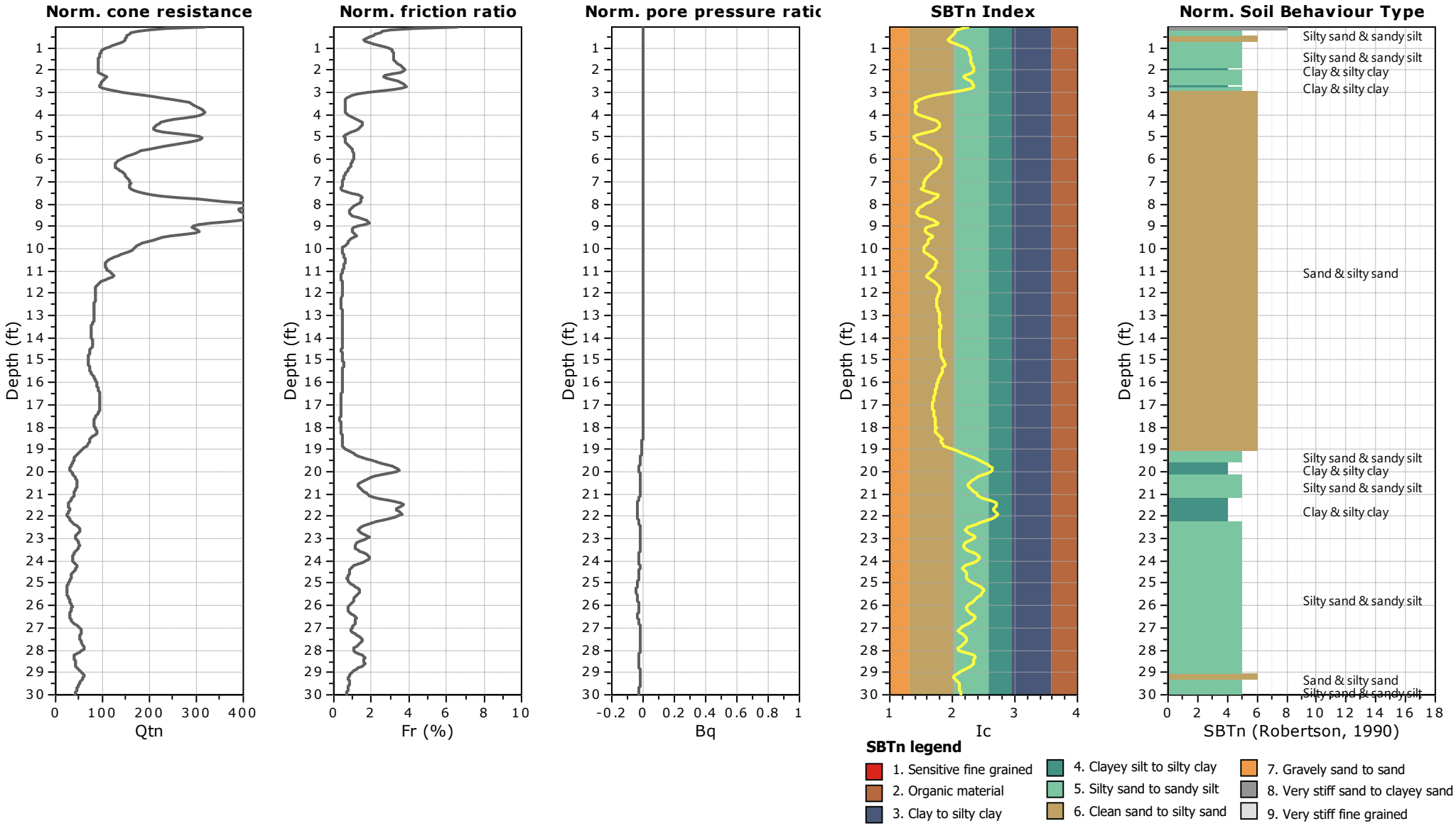

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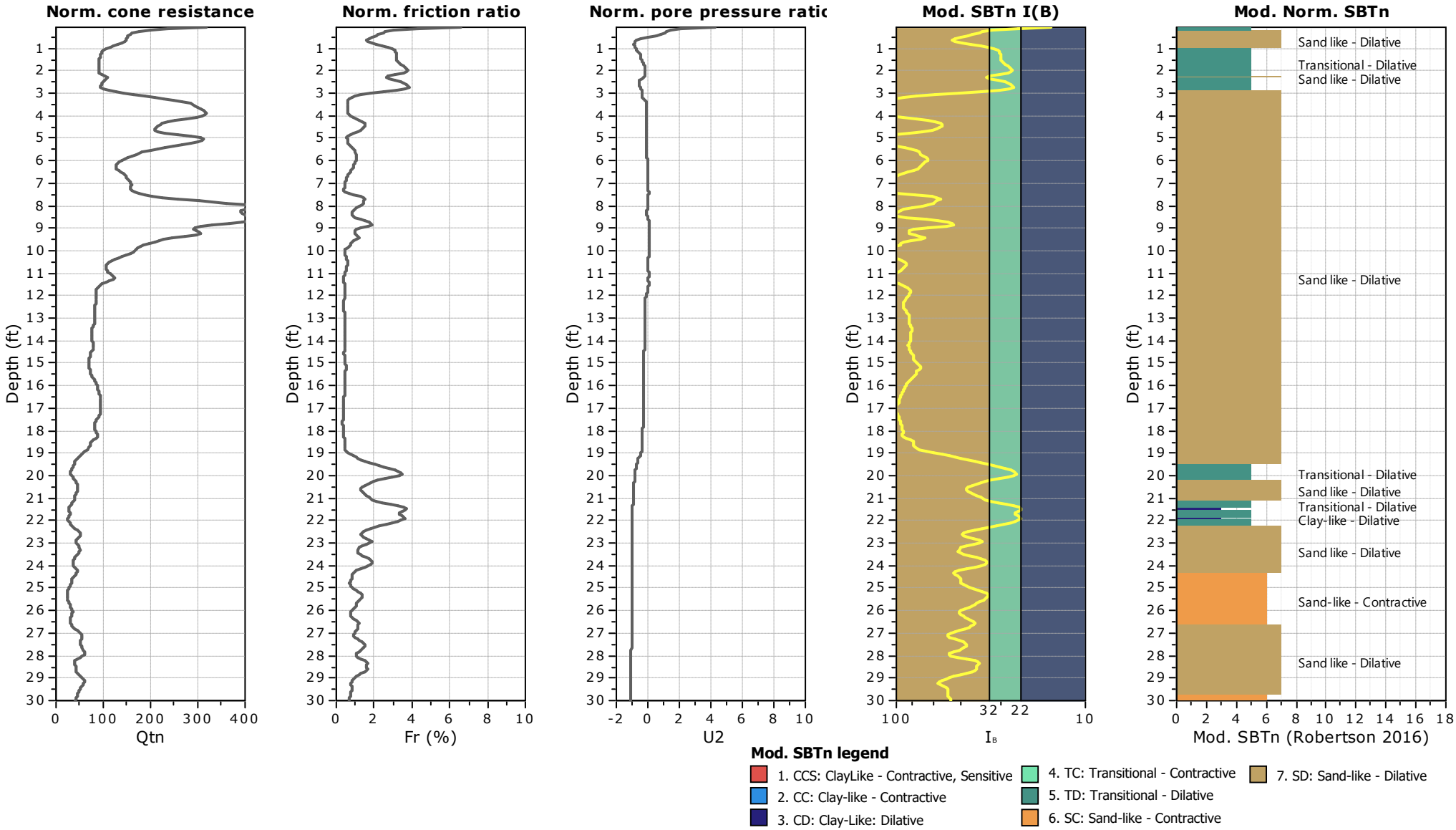

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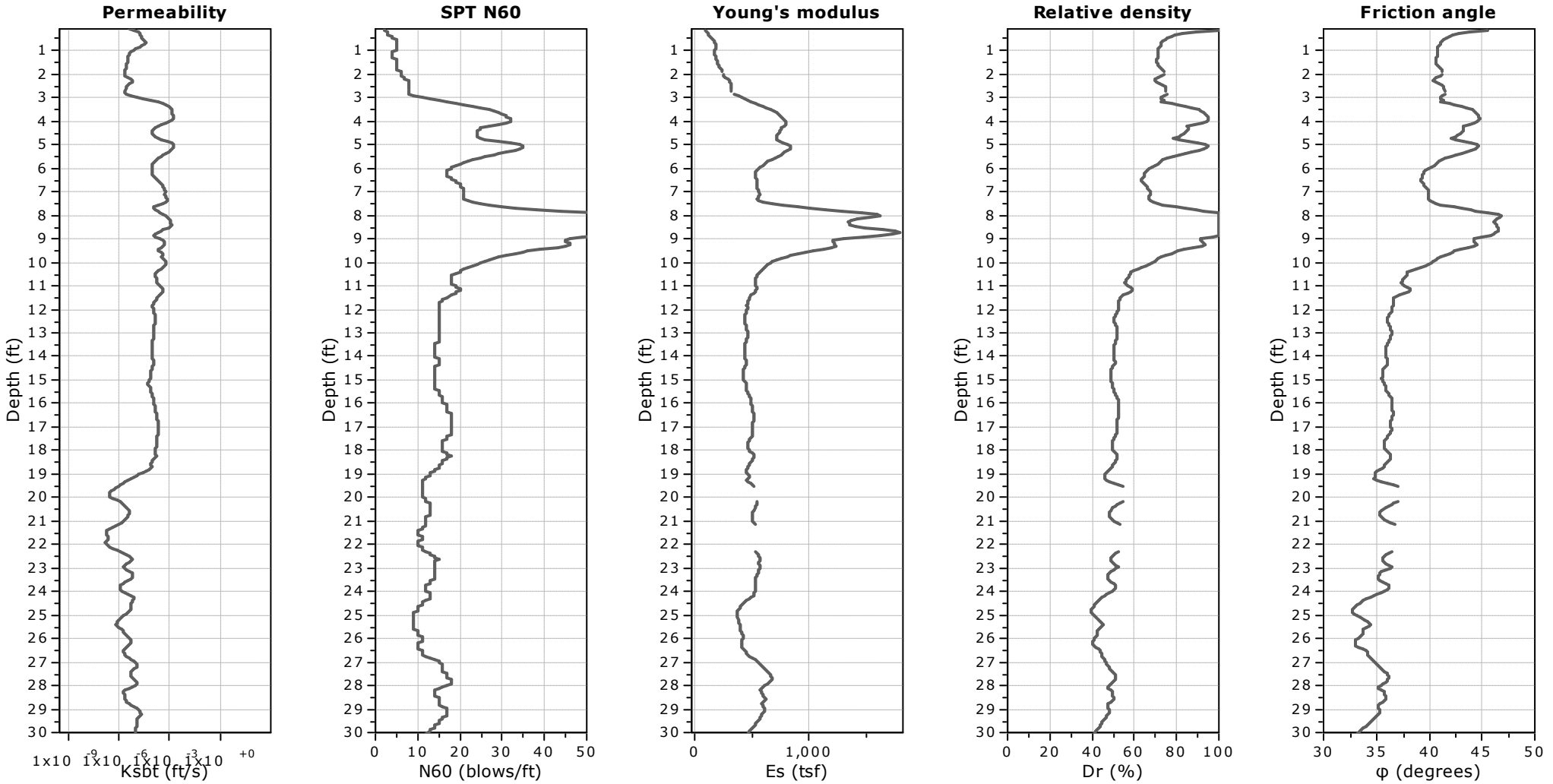

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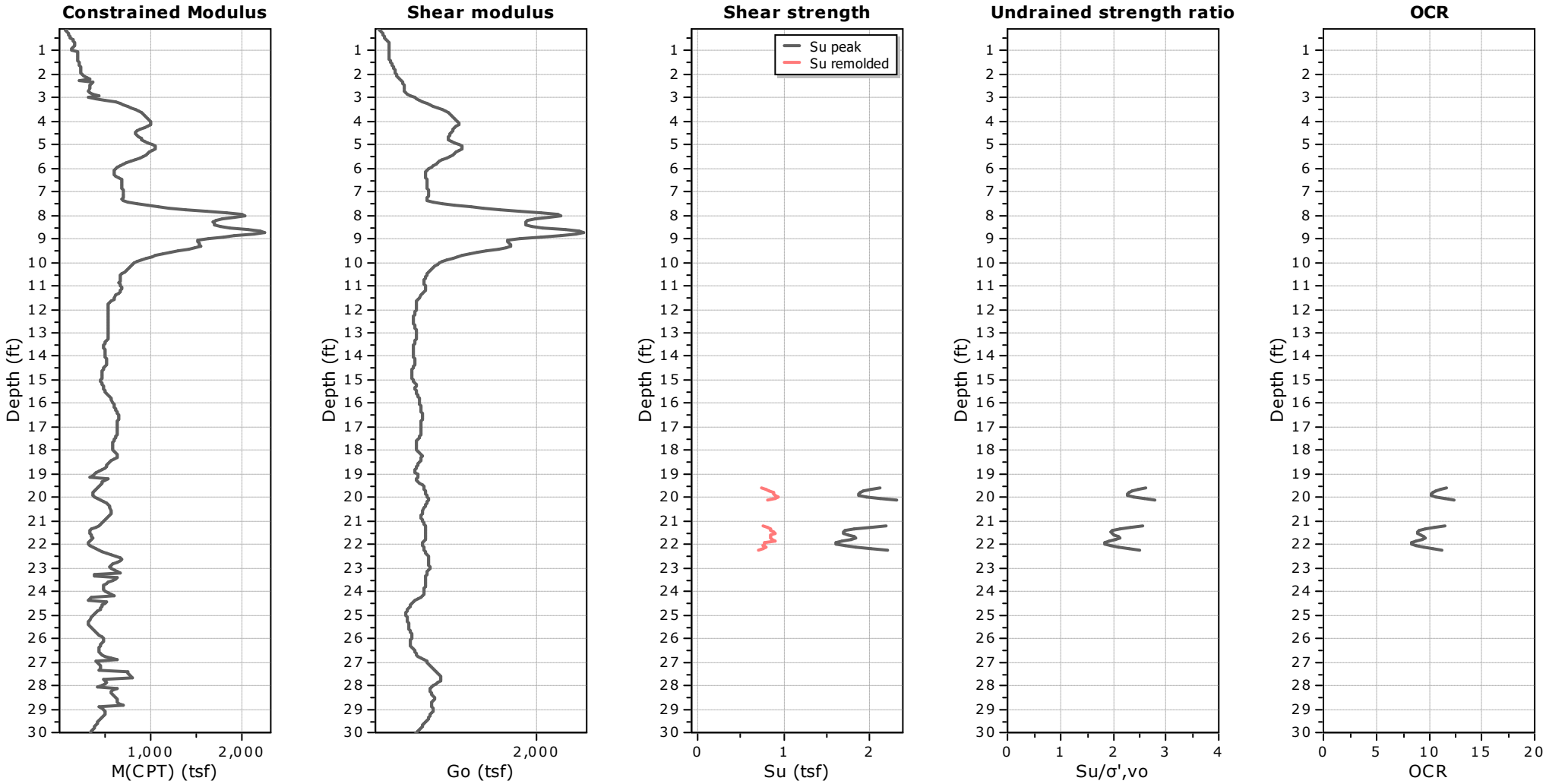

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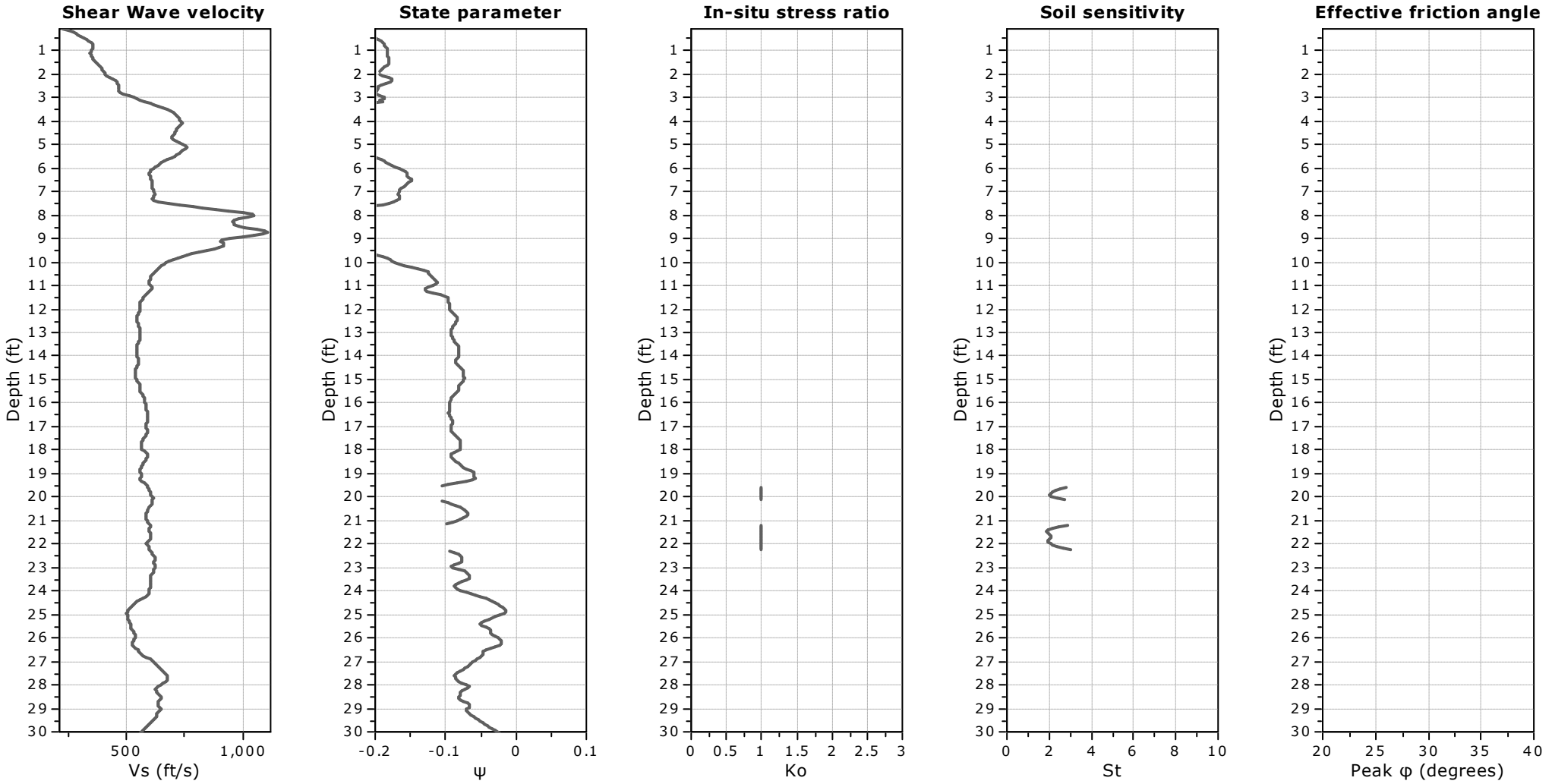

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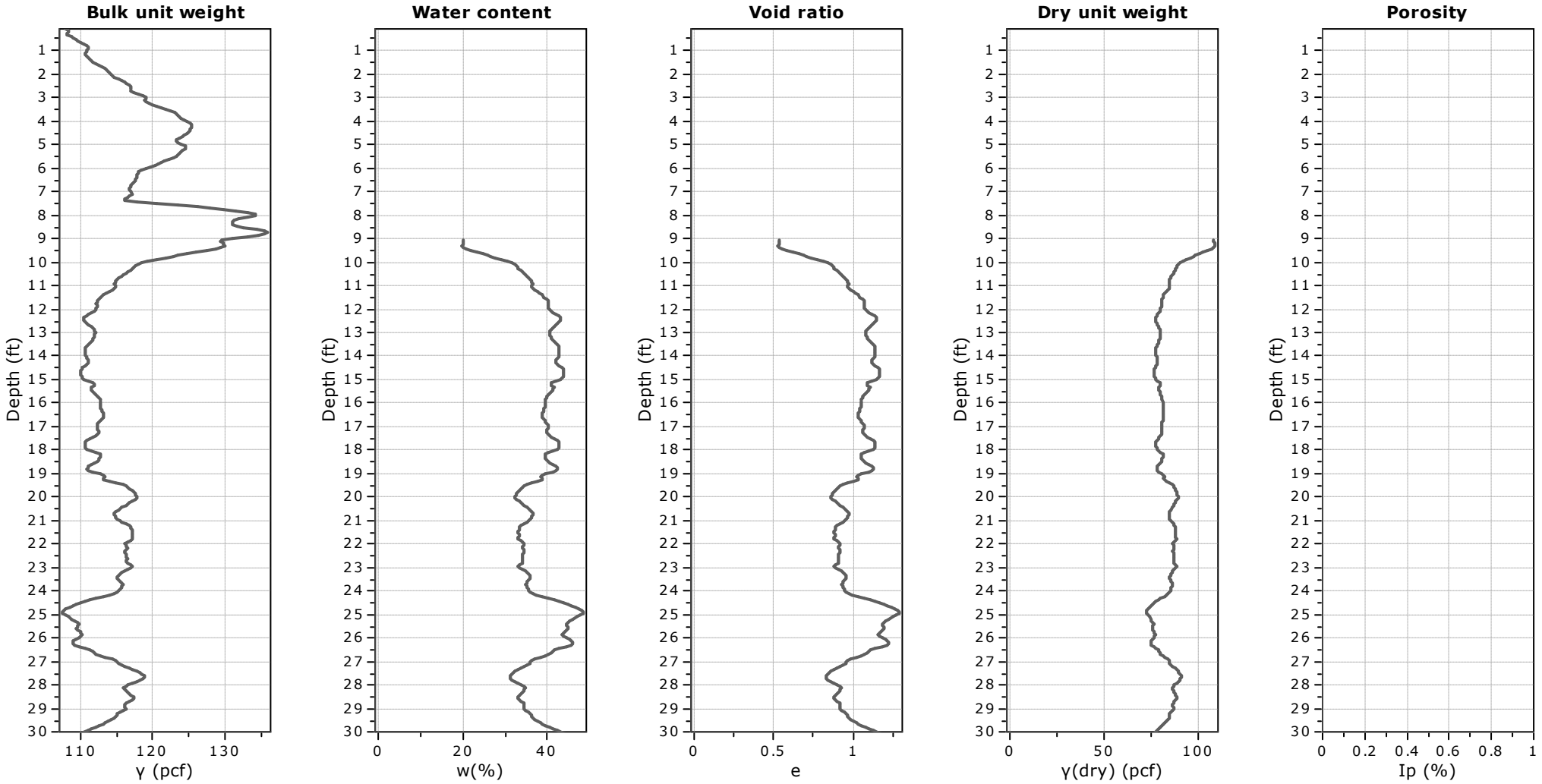

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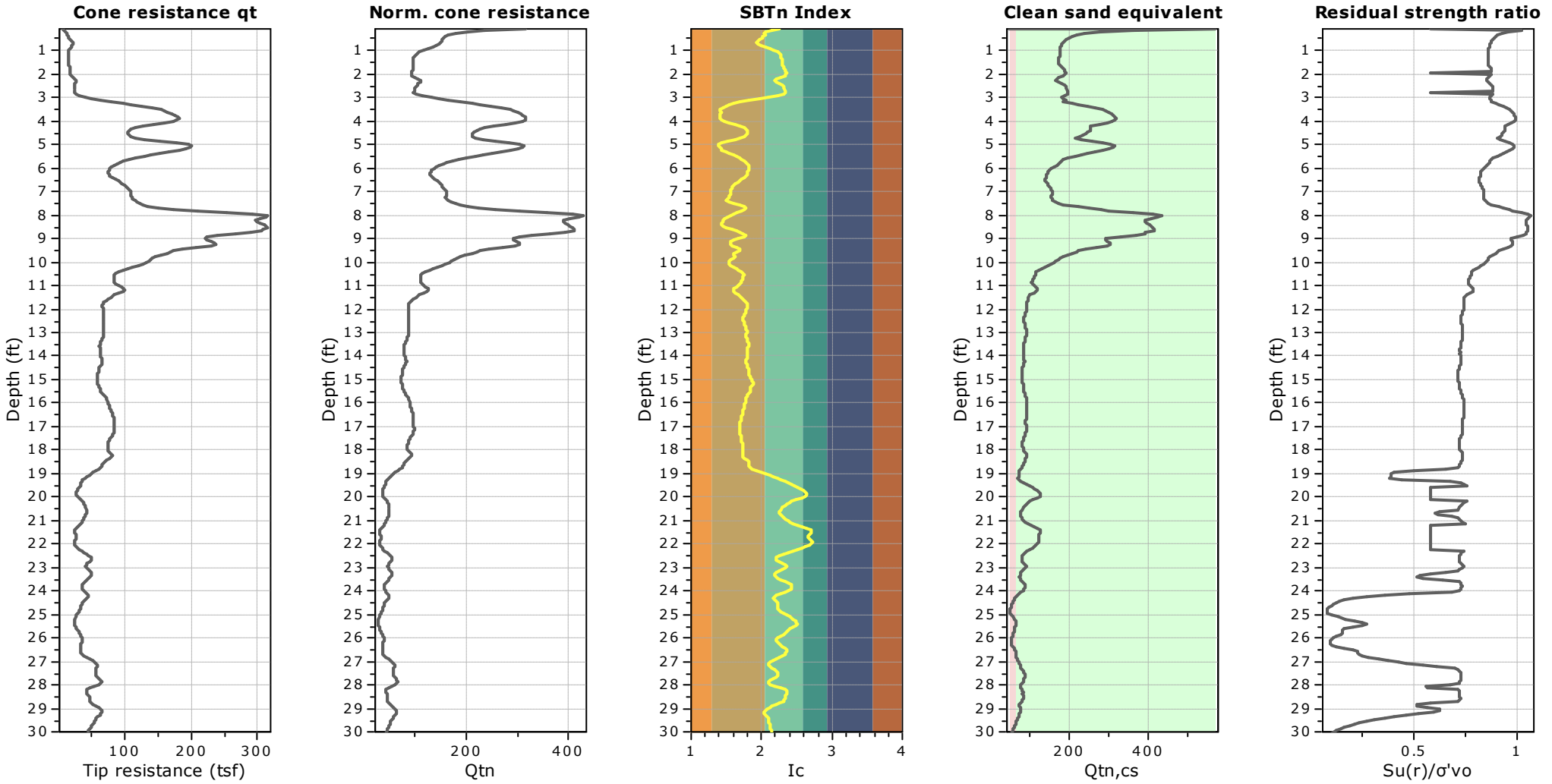
C-39
Total depth: 30.23 ft, Date: 5/14/2024
Surface Elevation: 61.86 ft
Coords: X:572684.18, Y:555600.85
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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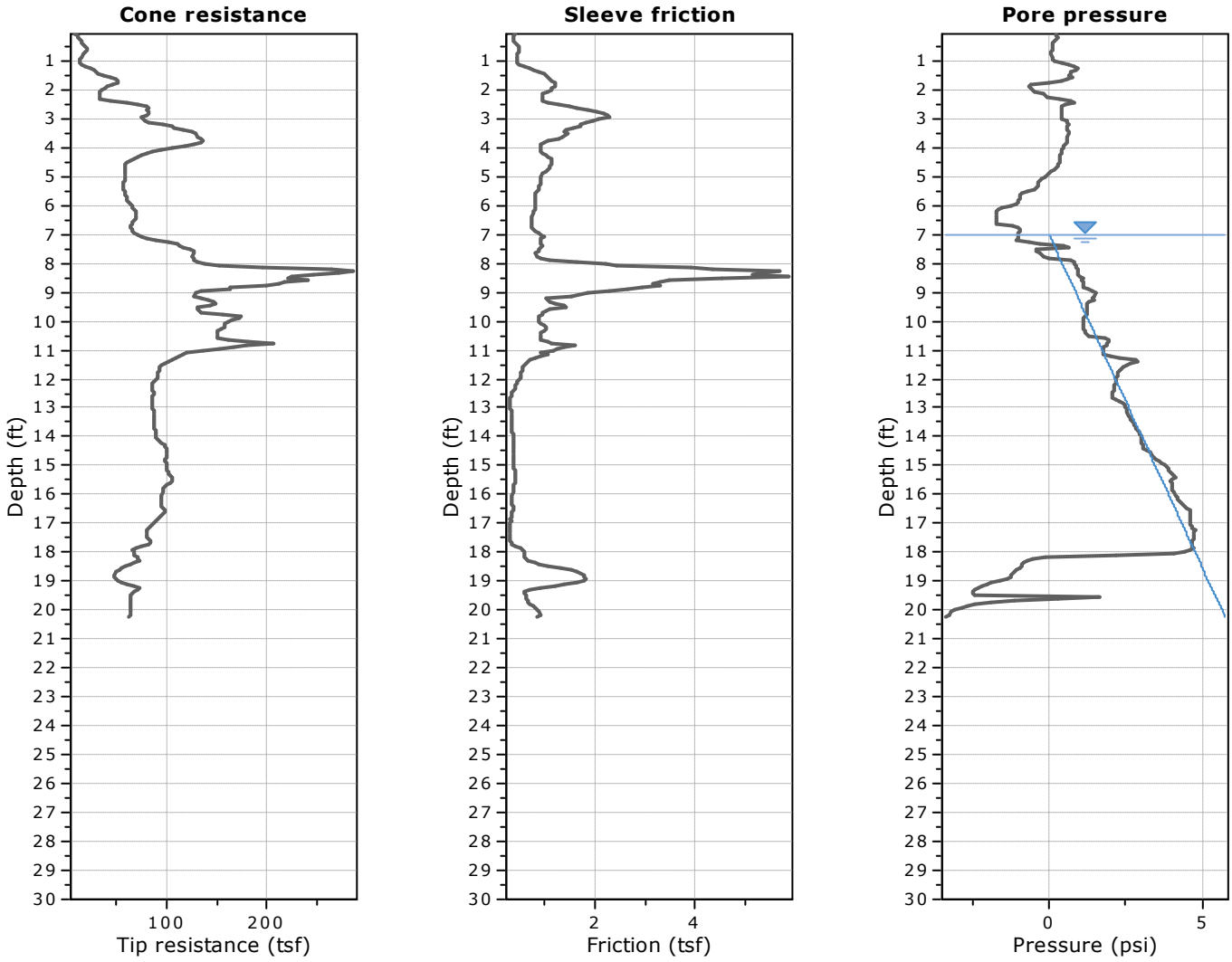
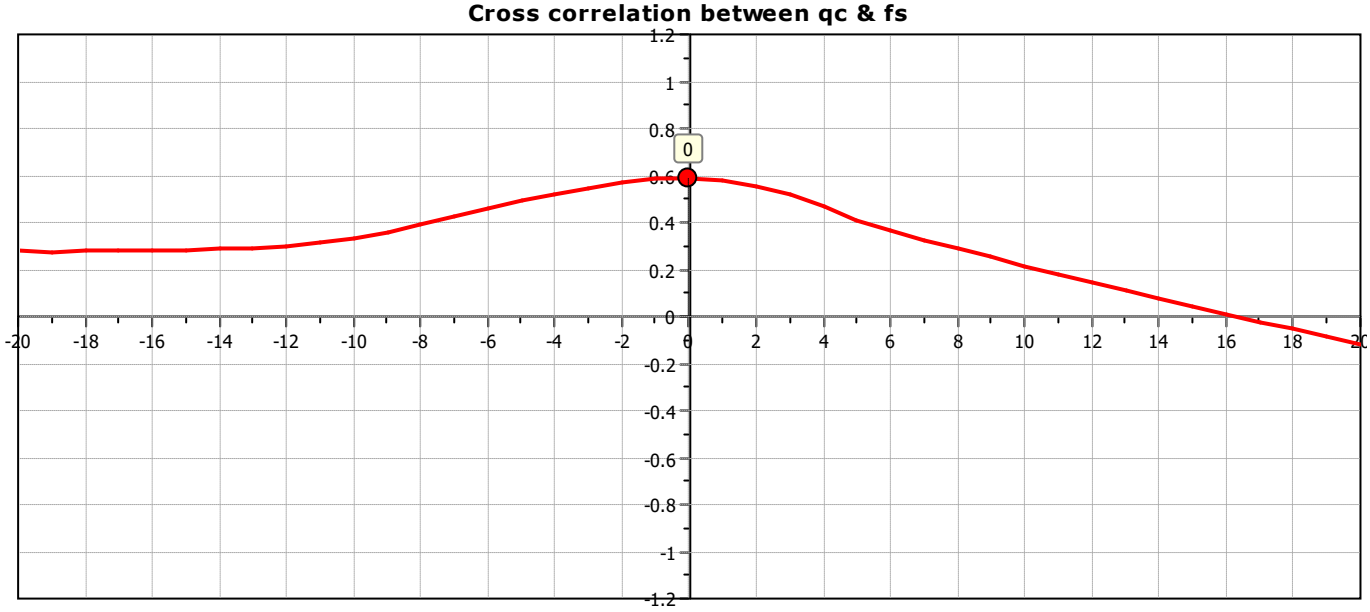
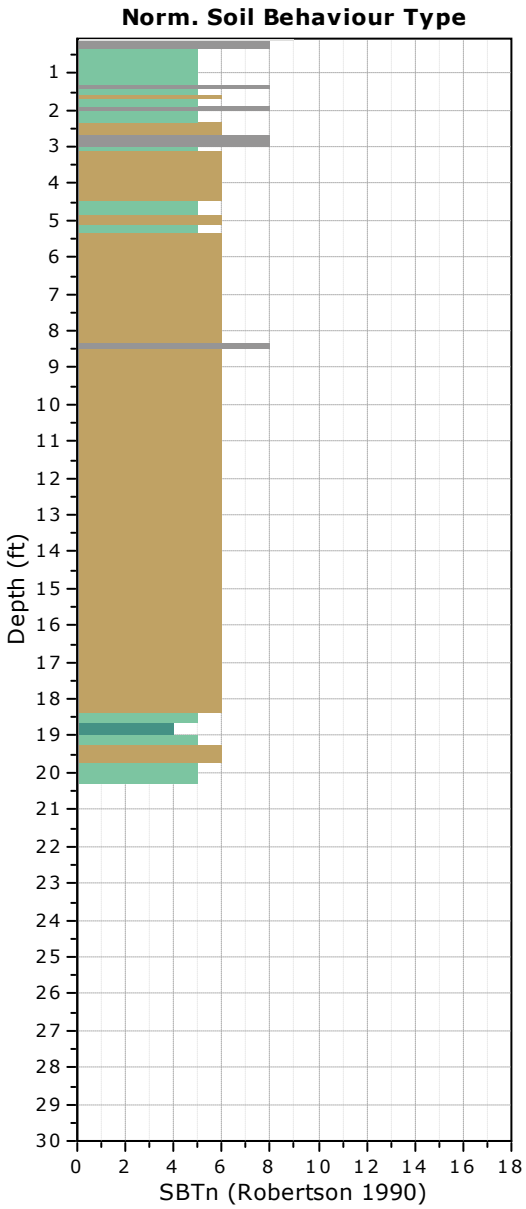
C-40
Total depth: 20.21 ft, Date: 5/16/2024
Surface Elevation: 60.32 ft
Coords: X:572889.77, Y:555695.69
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

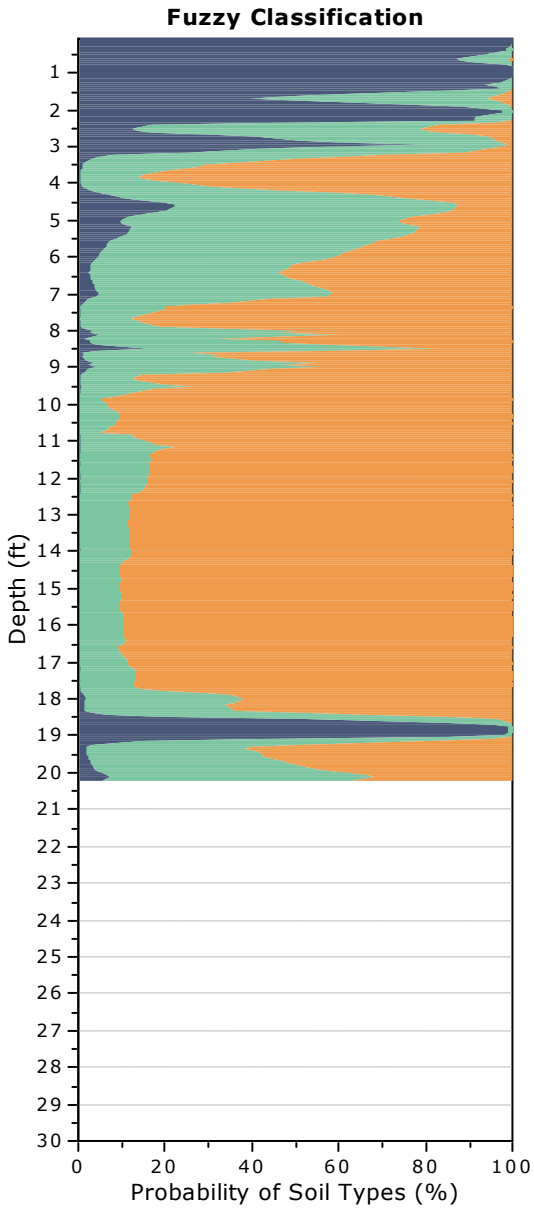
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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C-40
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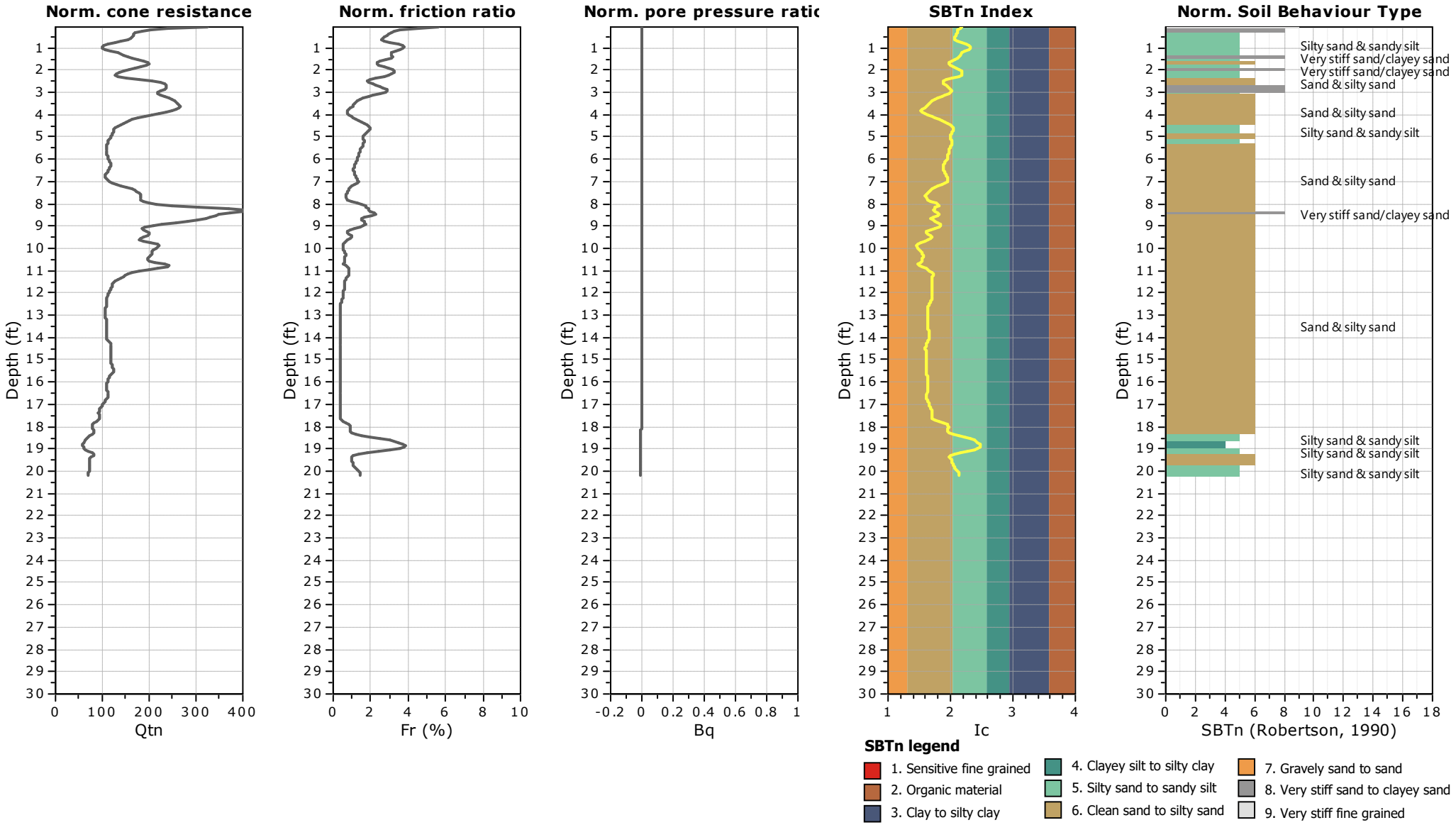
Surface Elevation: 60.32 ft
Coords: X:572889.77, Y:555695.69
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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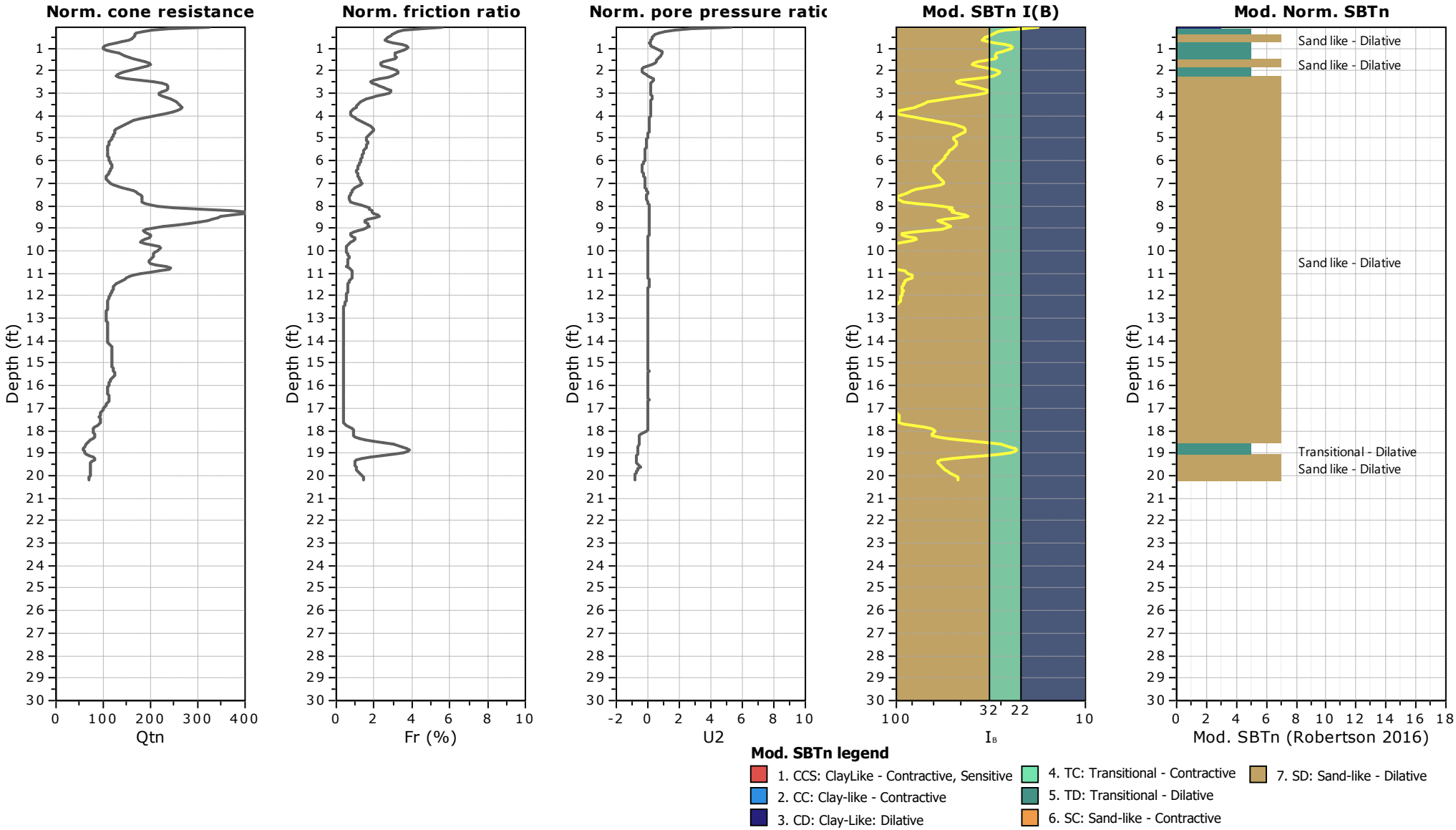
C-40
Total depth: 20.21 ft, Date: 5/16/2024
Surface Elevation: 60.32 ft
Coords: X:572889.77, Y:555695.69
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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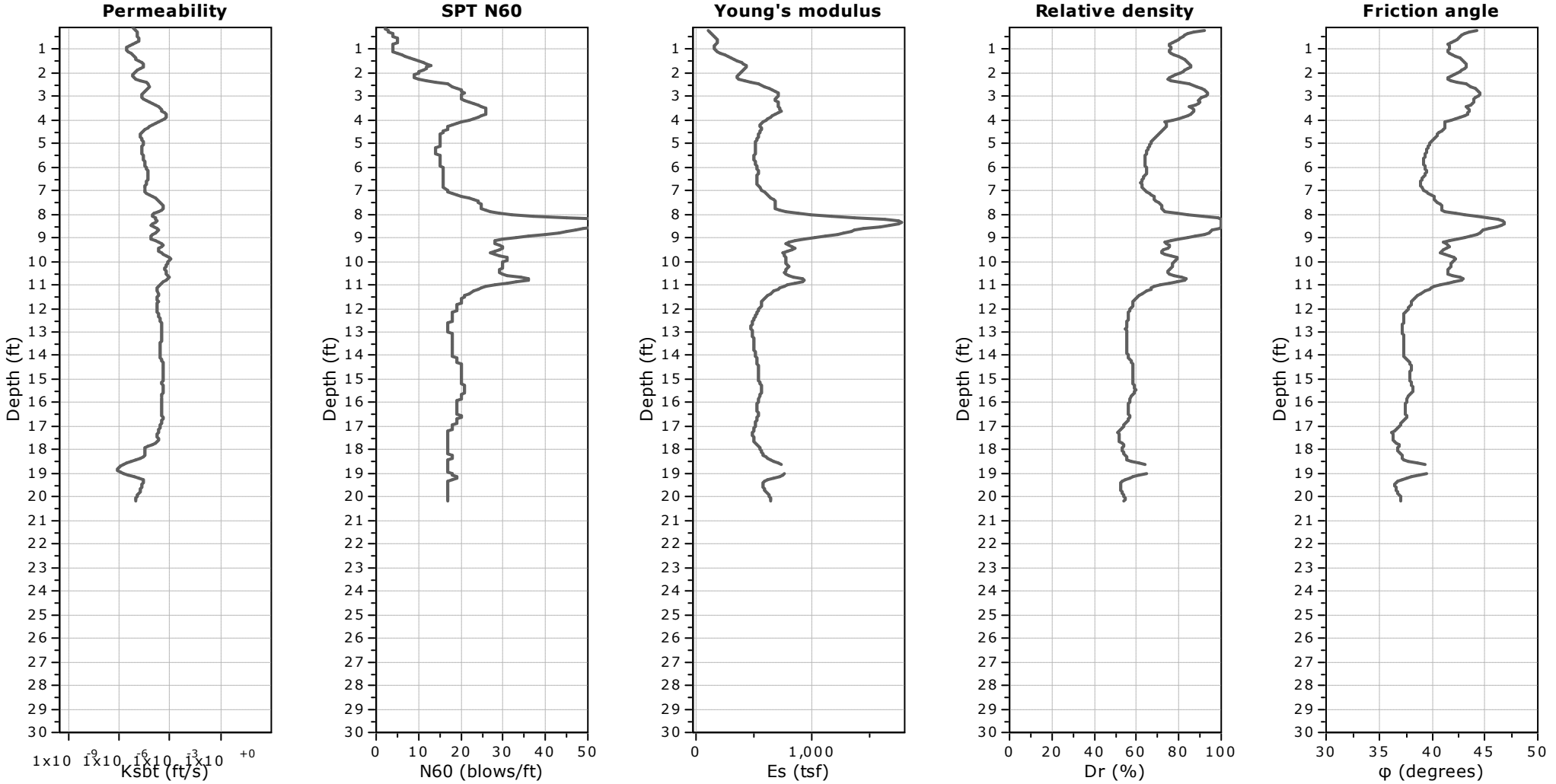
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters
Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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Cone Type: Geoprobe
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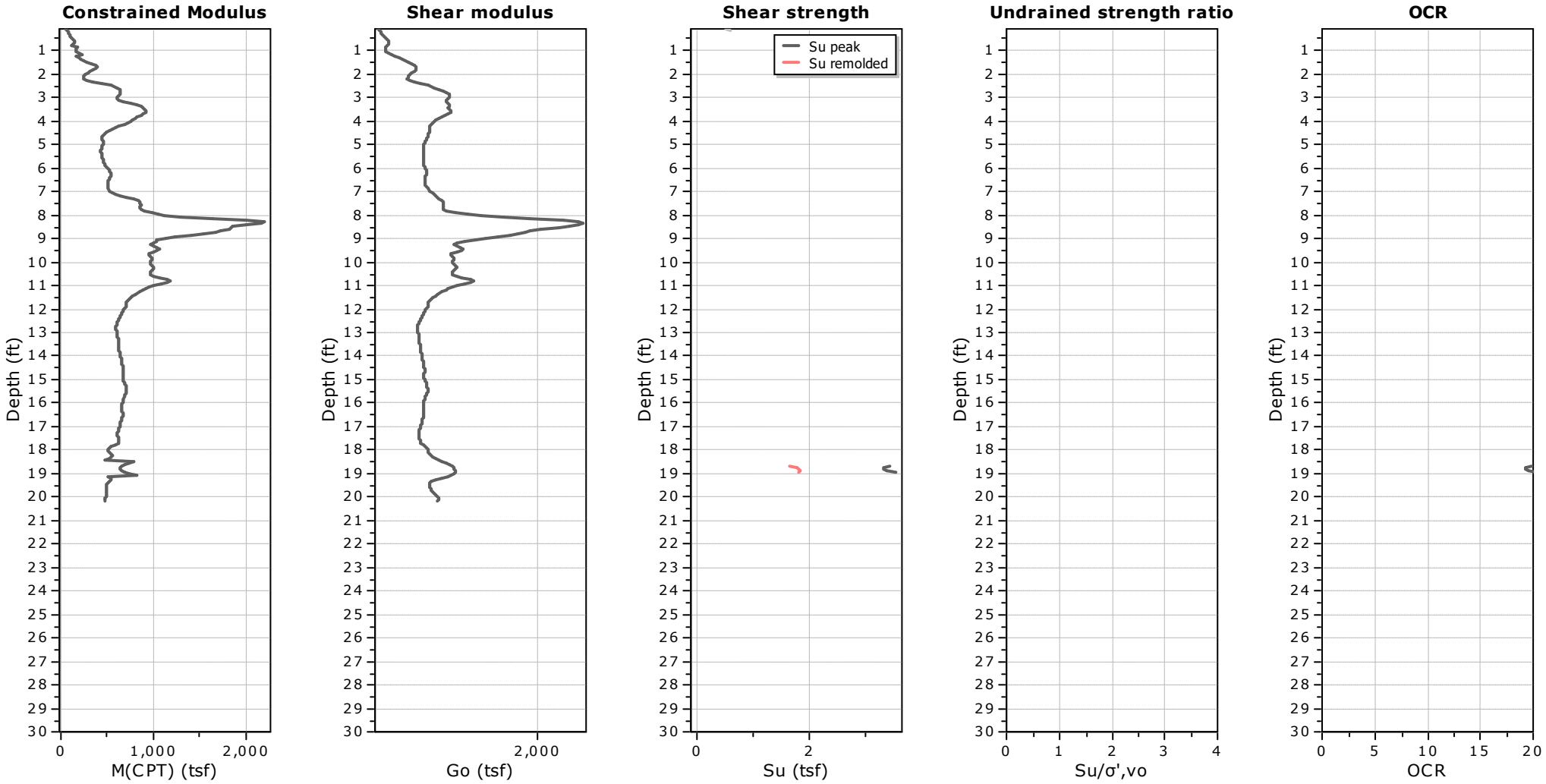

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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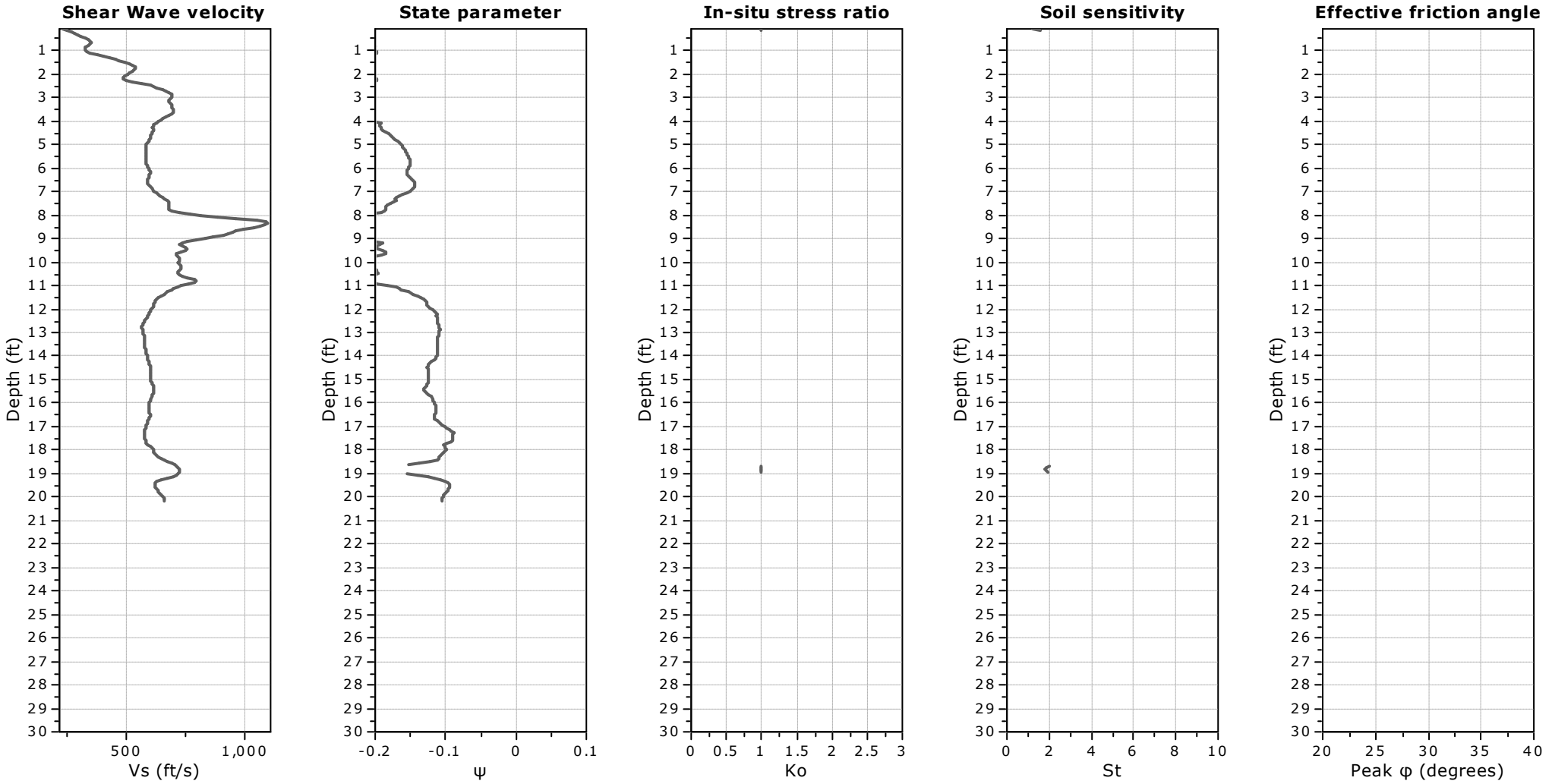
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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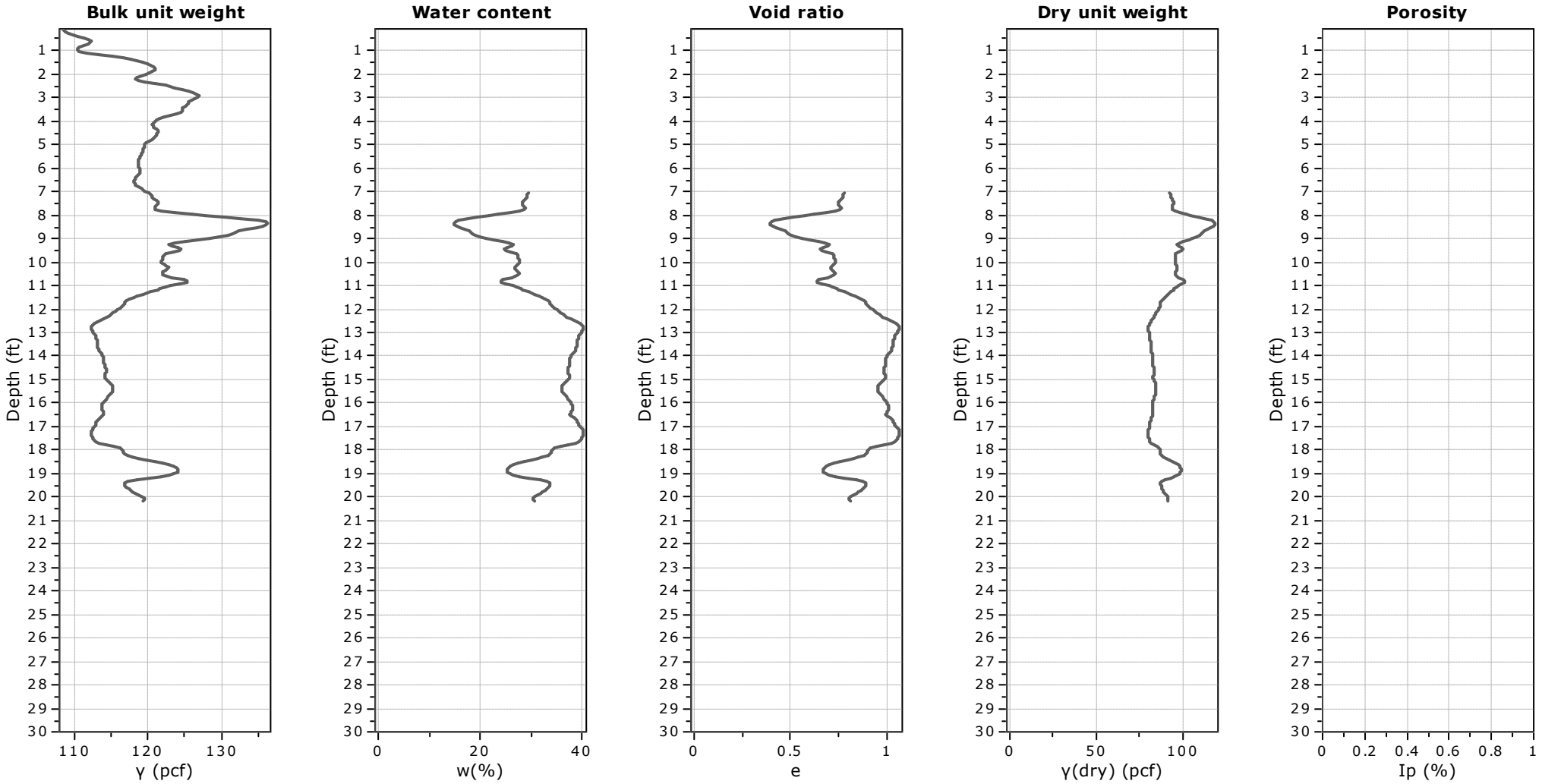

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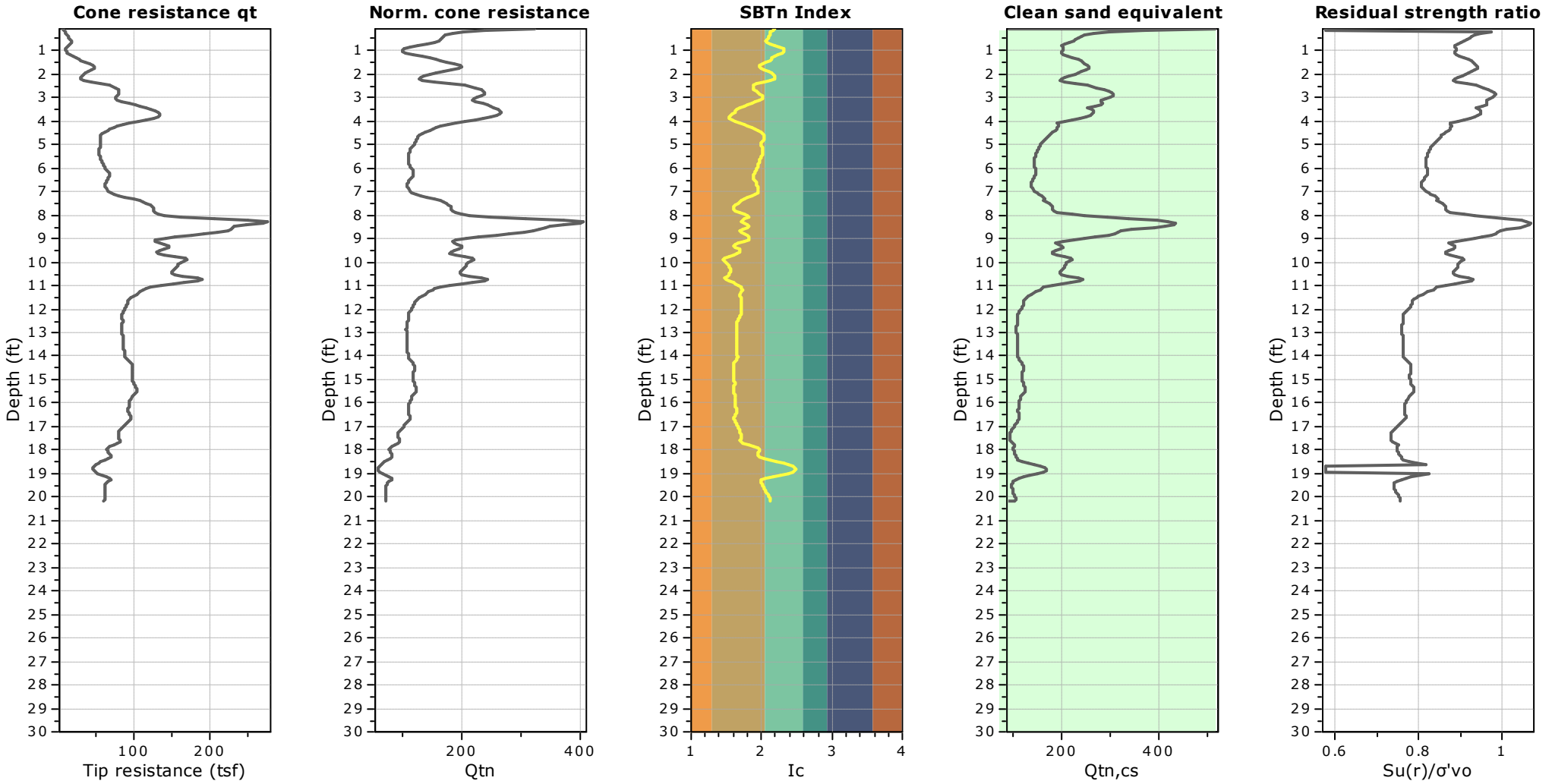

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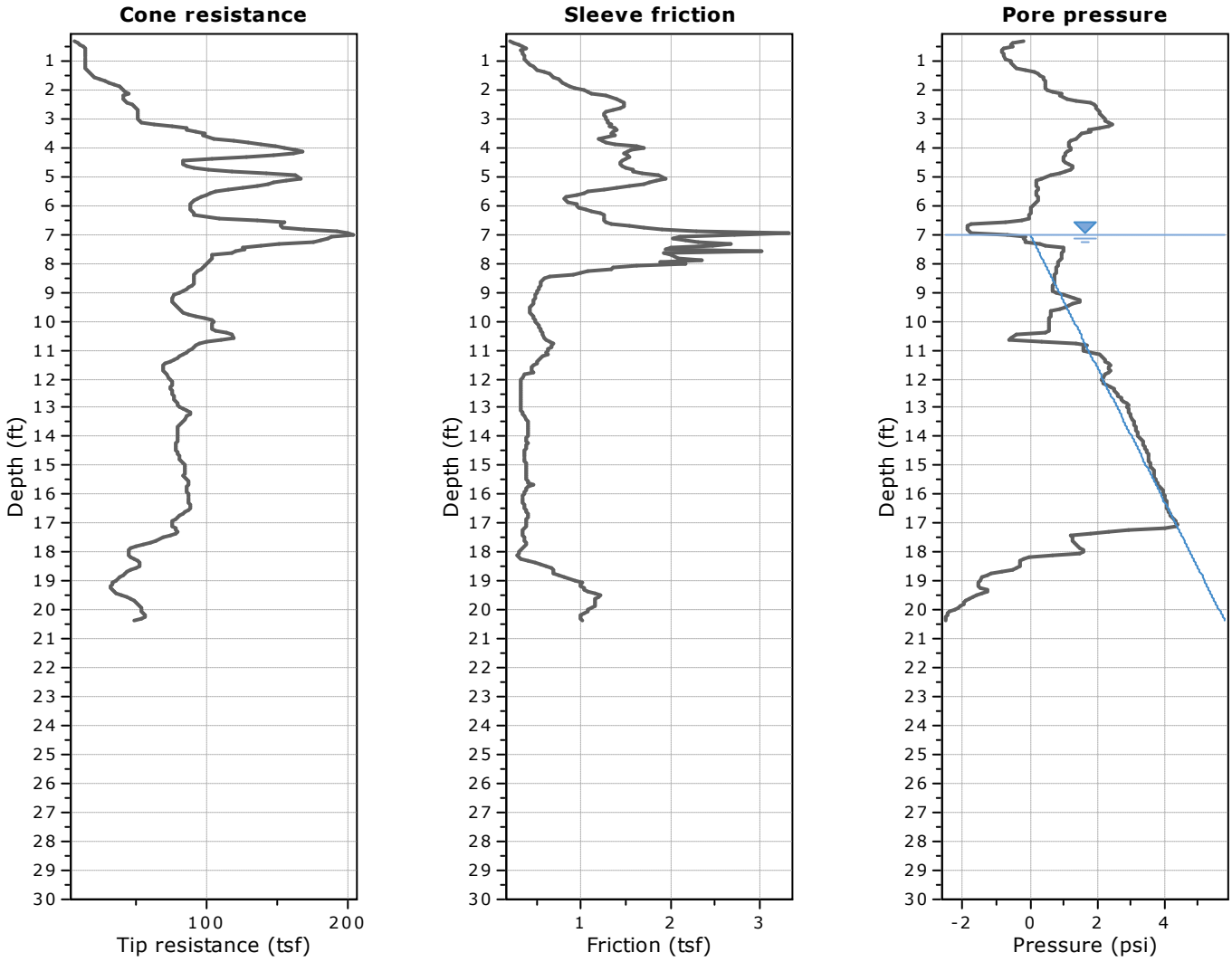
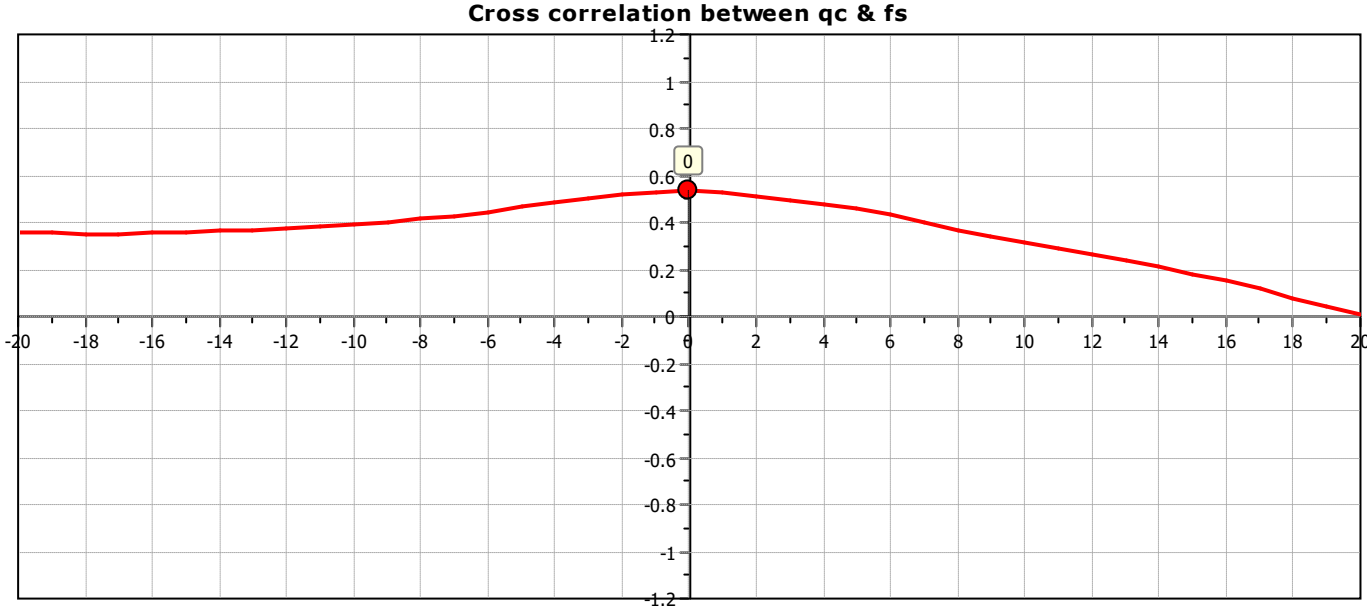
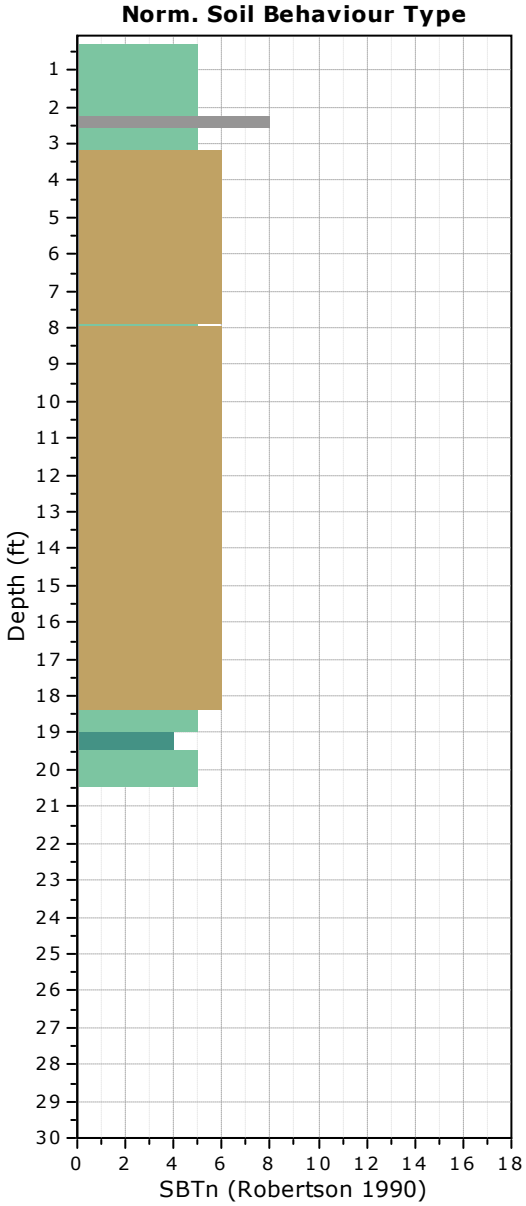
C-41
Total depth: 20.37 ft, Date: 5/16/2024
Surface Elevation: 59.92 ft
Coords: X:572861.31, Y:555611.31
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

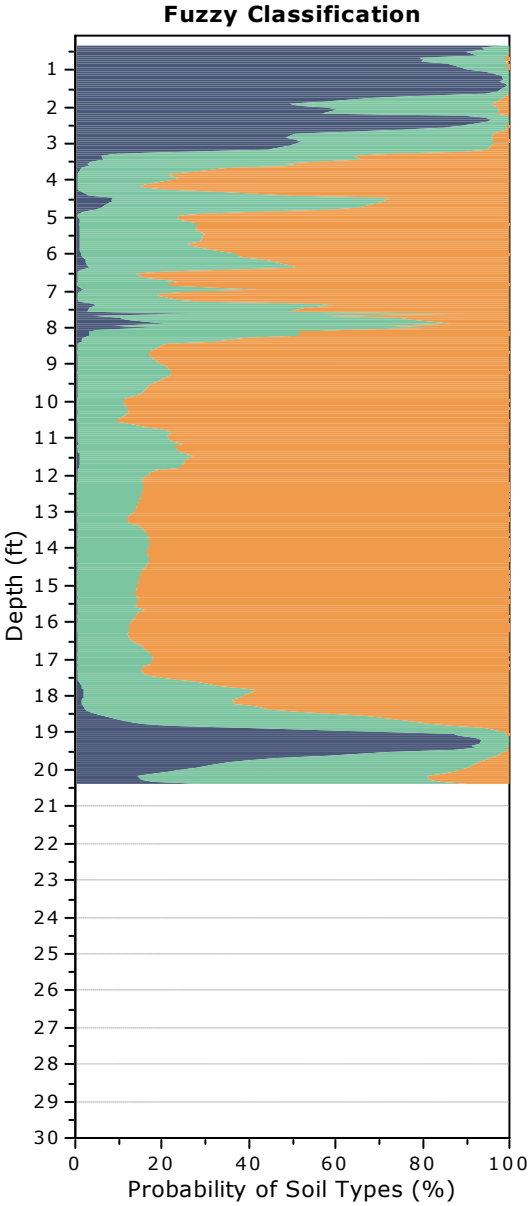
Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



The plot below presents the cross correlation coeficient between the raw qc and fs values (as measured on the field). X axes presents the lag distance (one lag is the distance between two sucessive CPT measurements).







Fuzzy classifiaction legend

- Highly probable clayey soil
- Highly probable mixture soil
- Highly probable sandy soil

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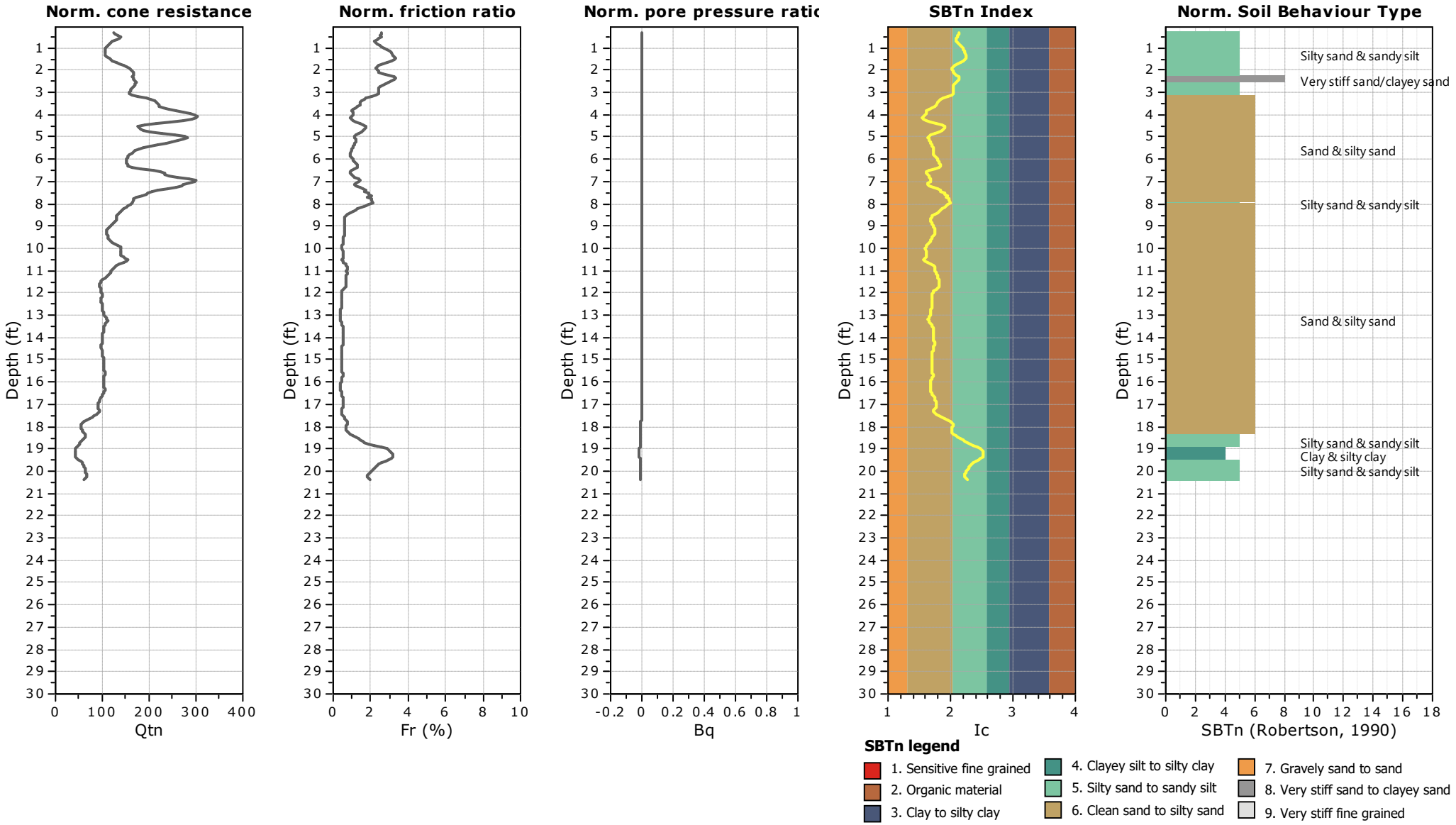
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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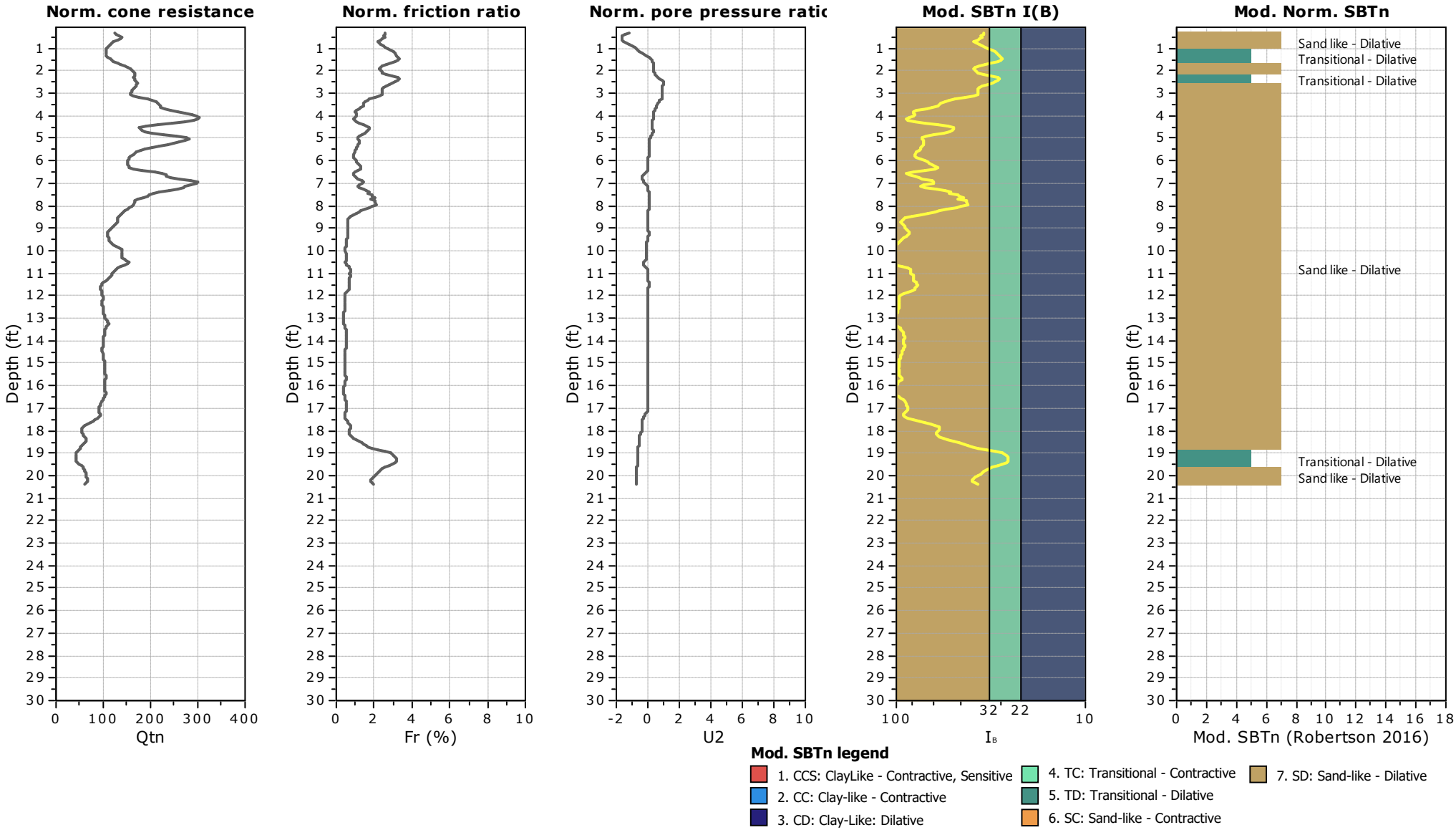

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Surface Elevation: 59.92 ft
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Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
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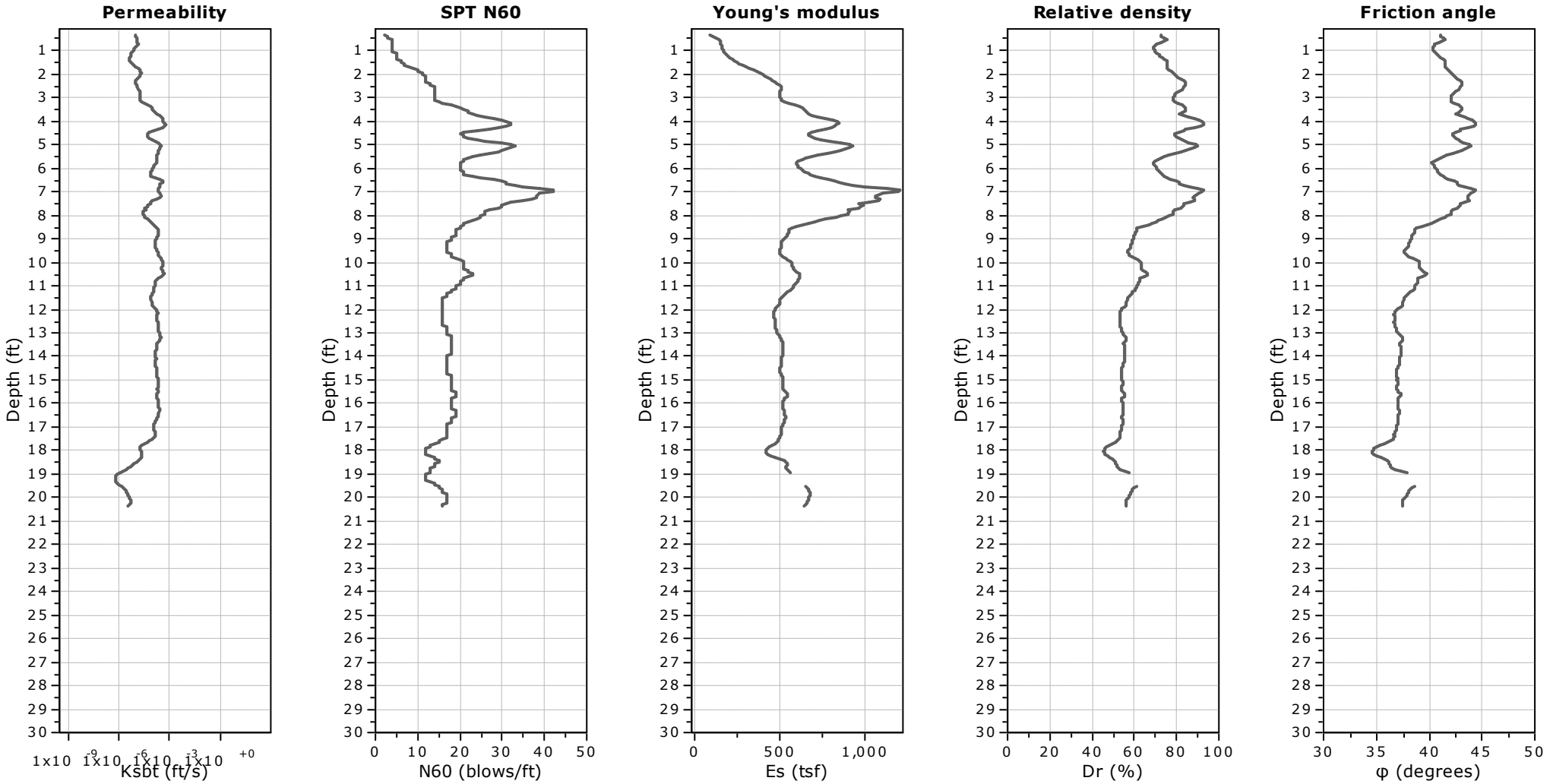

Calculation parameters

Permeability: Based on SBT_n
SPT N_{60}: Based on I_c and q_t
Young's modulus: Based on variable alpha using I_c (Robertson, 2009)
Relative density constant, C_{Dr}: 350.0
Phi: Based on Kulhawy & Mayne (1990)

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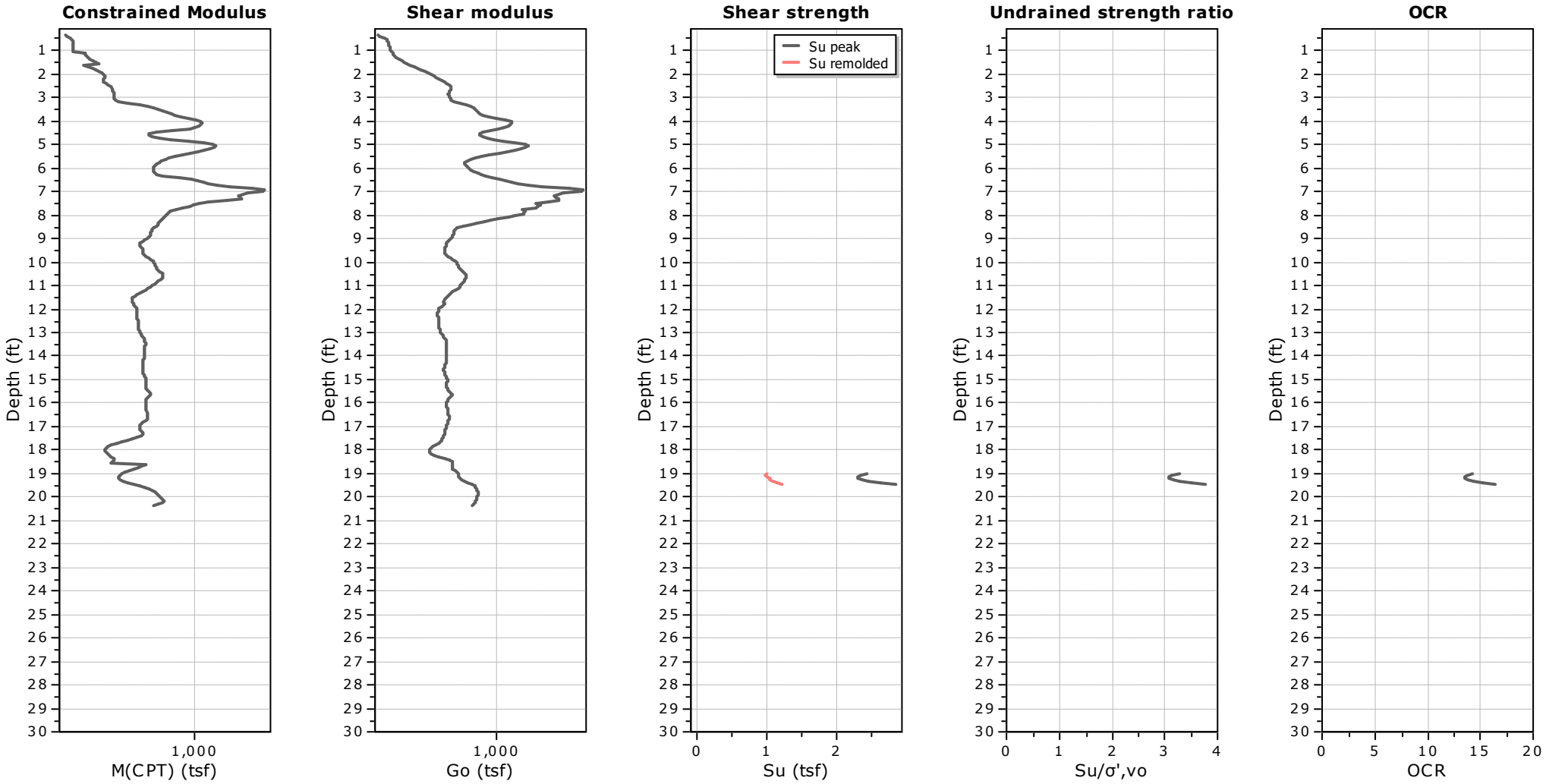

Calculation parameters

Constrained modulus: Based on variable *alpha* using I_c and Q_{tn} (Robertson, 2009)
Go: Based on variable *alpha* using I_c (Robertson, 2009)
Undrained shear strength cone factor for clays, N_{kt}: 14
OCR factor for clays, N_{kt}: 0.33
Flat Dilatometer Test data

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C-41
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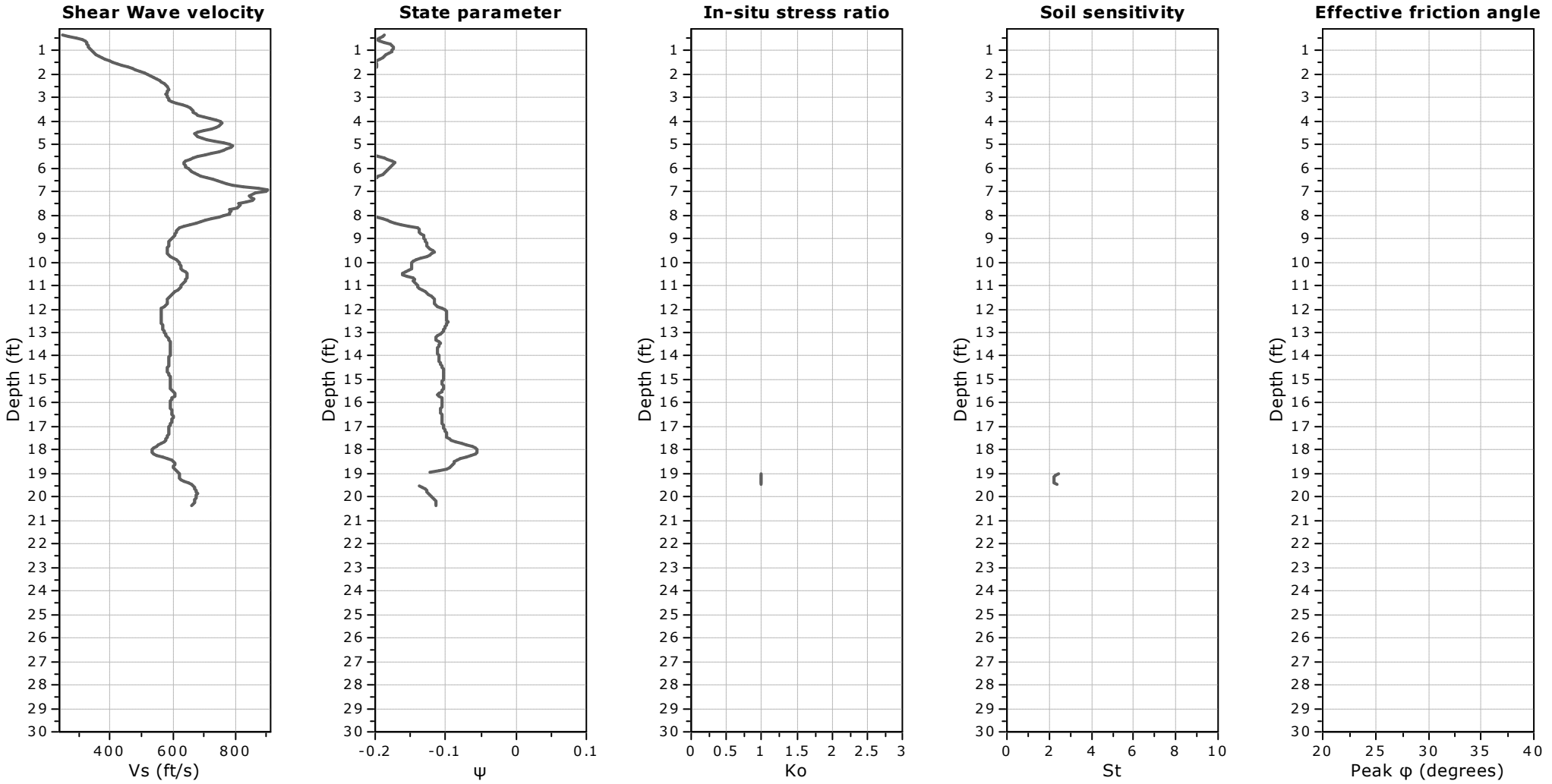
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



Calculation parameters

Soil Sensitivity factor, N_S: 7.00

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Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

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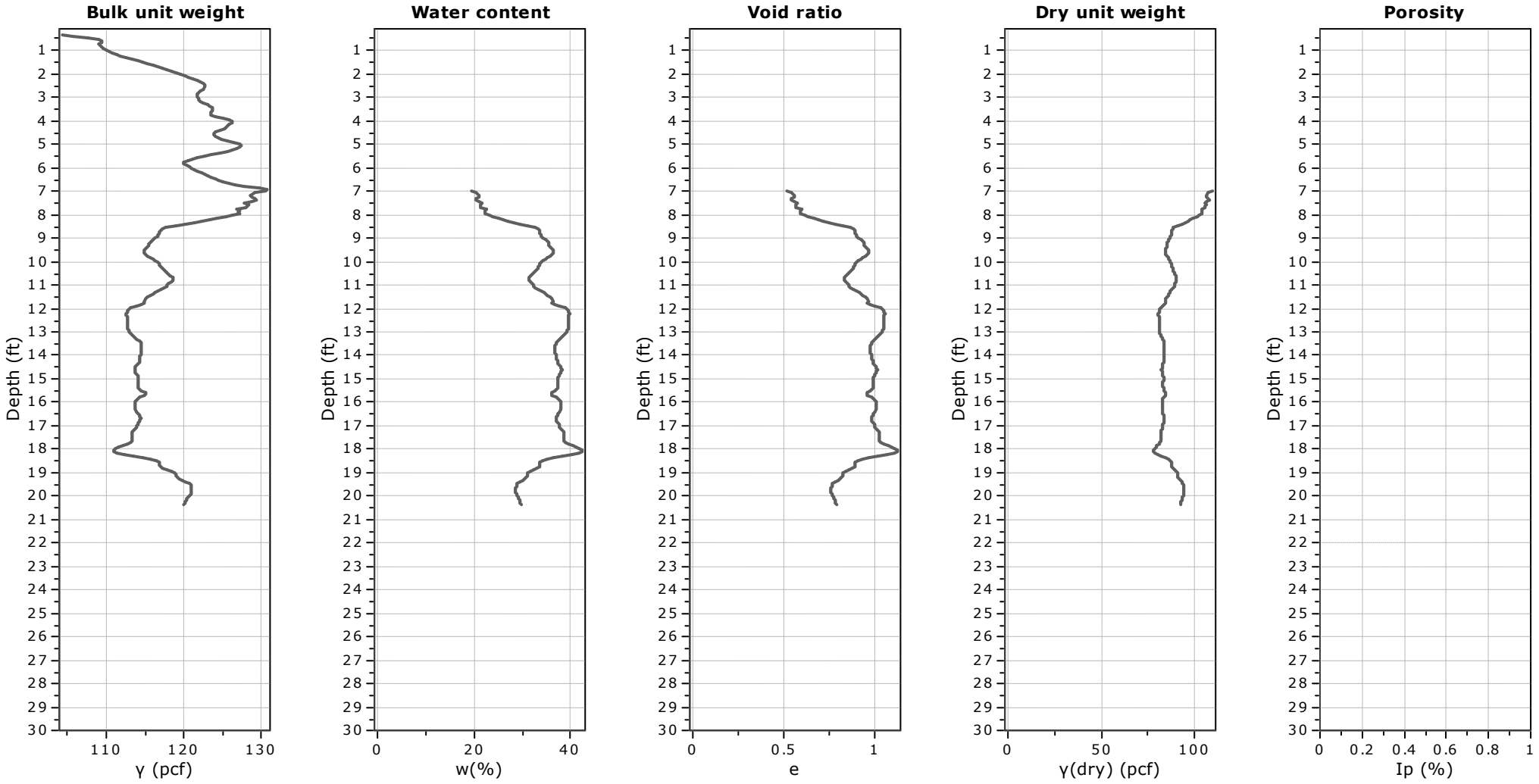
Location: **Middletown, Delaware**



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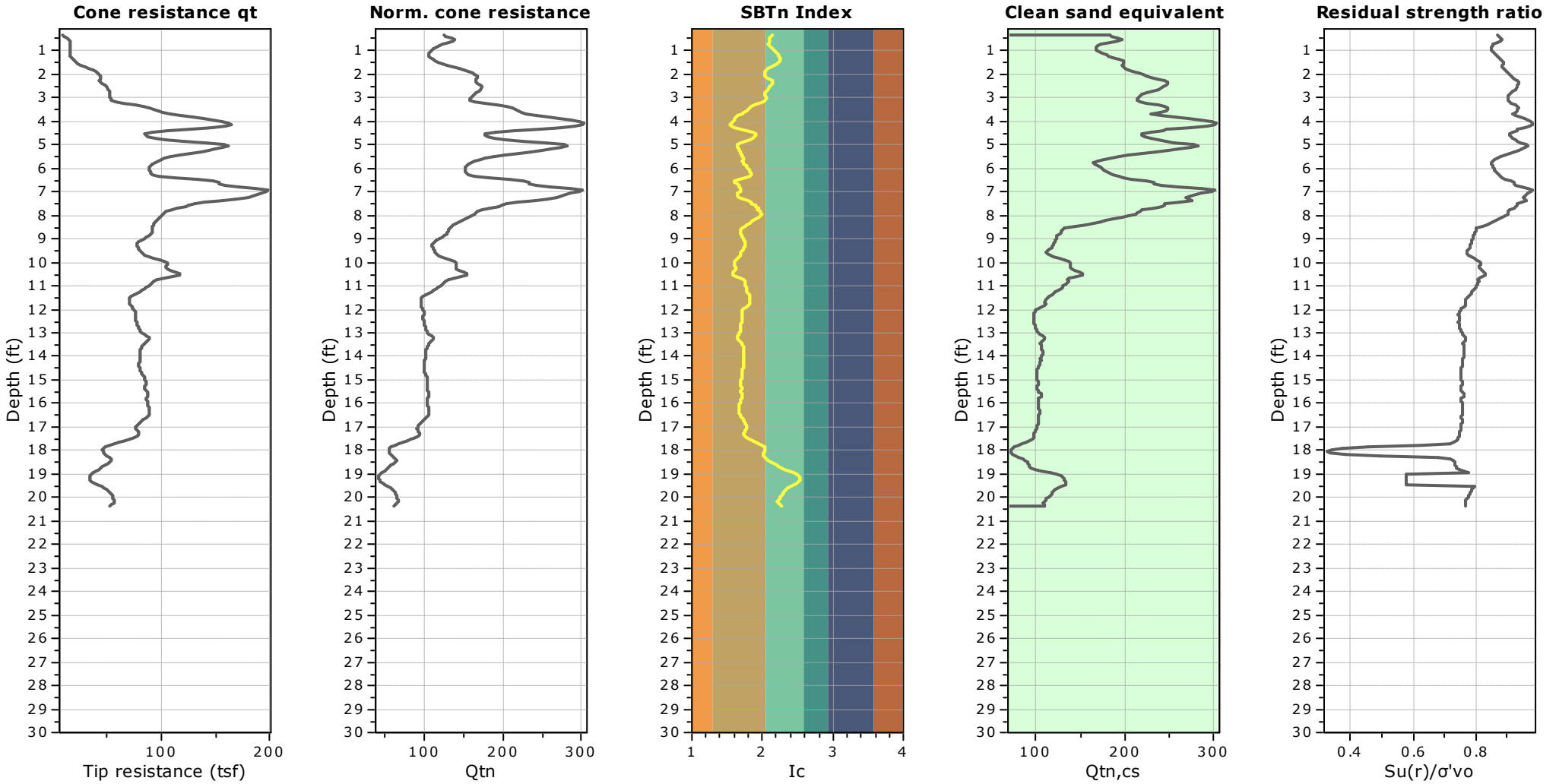

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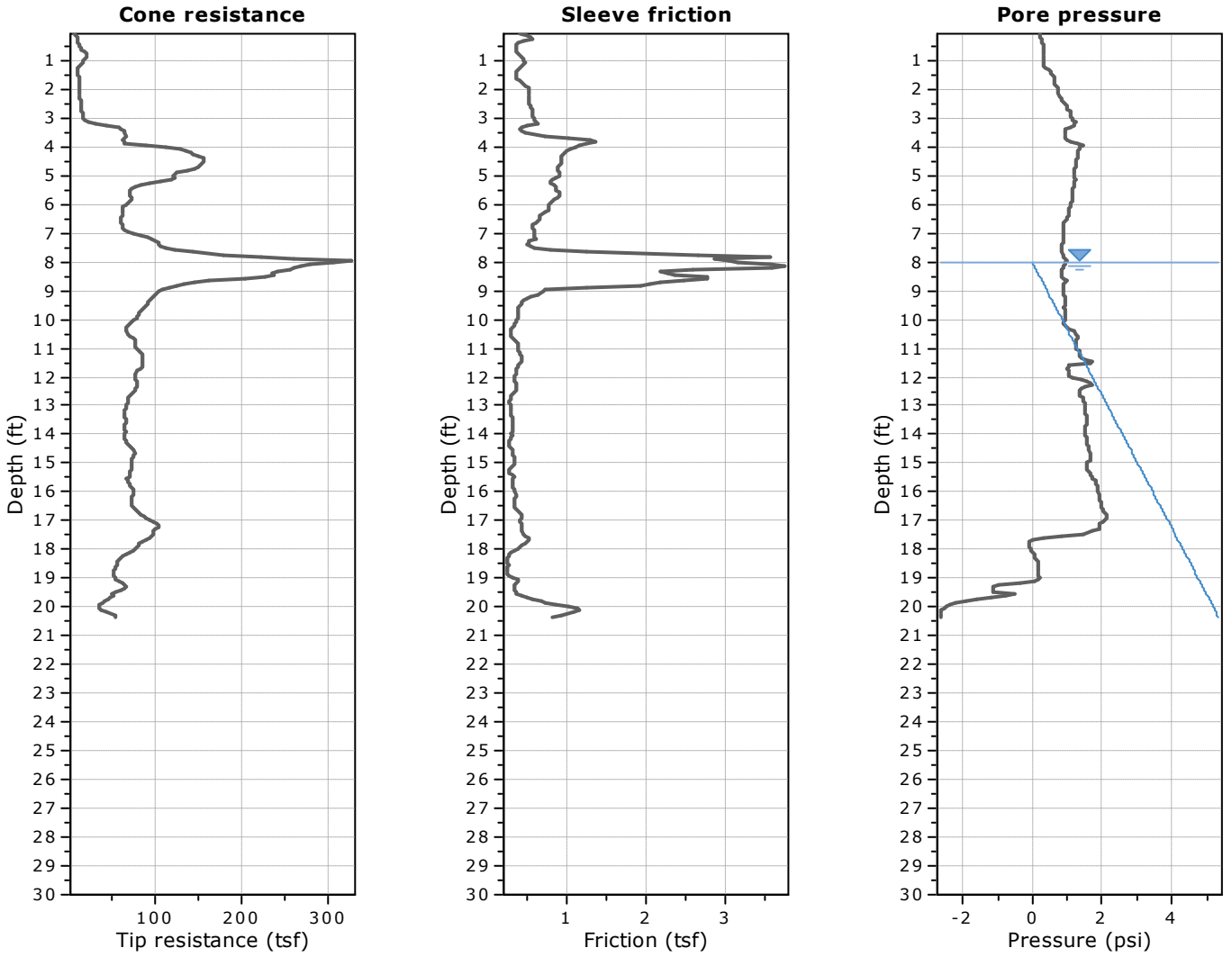
C-42
Total depth: 20.33 ft, Date: 5/16/2024
Surface Elevation: 62.07 ft
Coords: X:572681.78, Y:555540.97
Cone Type: Geoprobe
Cone Operator: R. Ward, PE, F. Garcia, PE D.GE

Project: **ASD Summit Campus**
Location: **Middletown, Delaware**



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