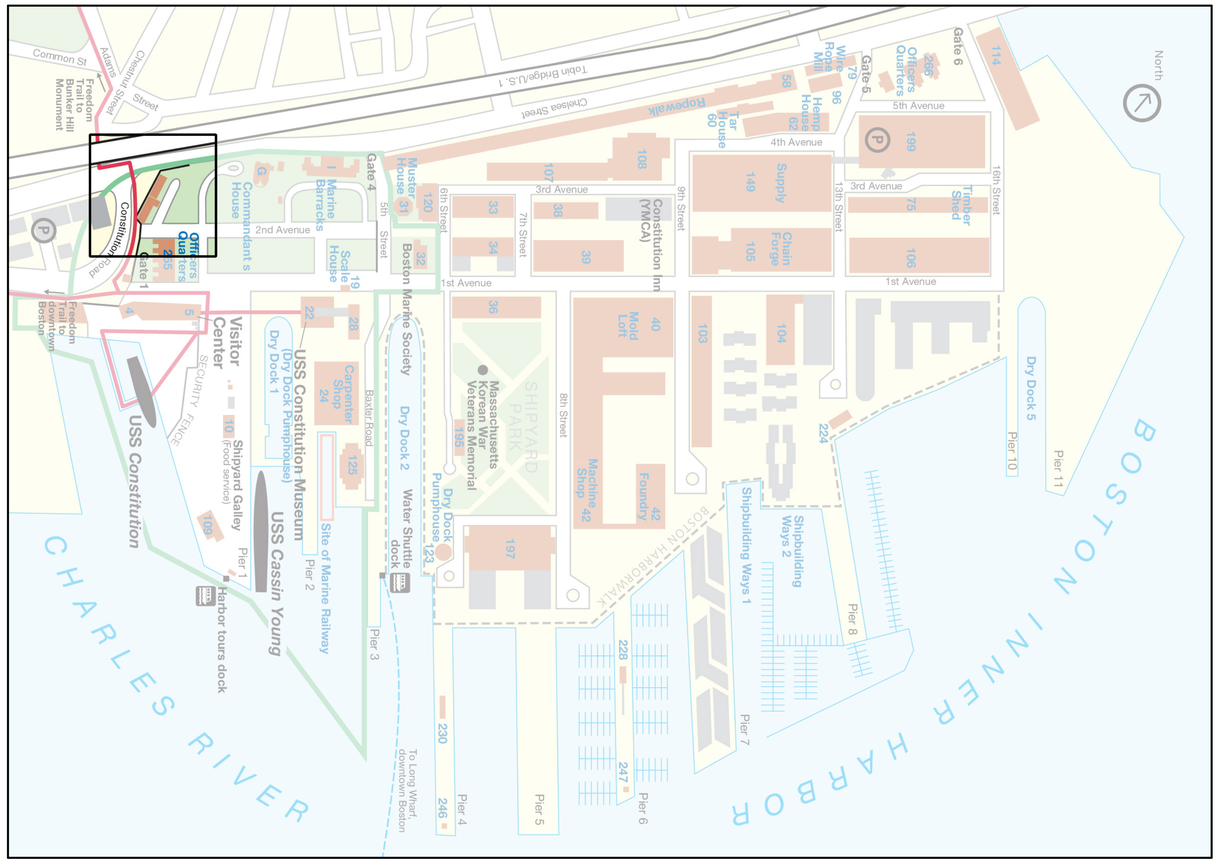
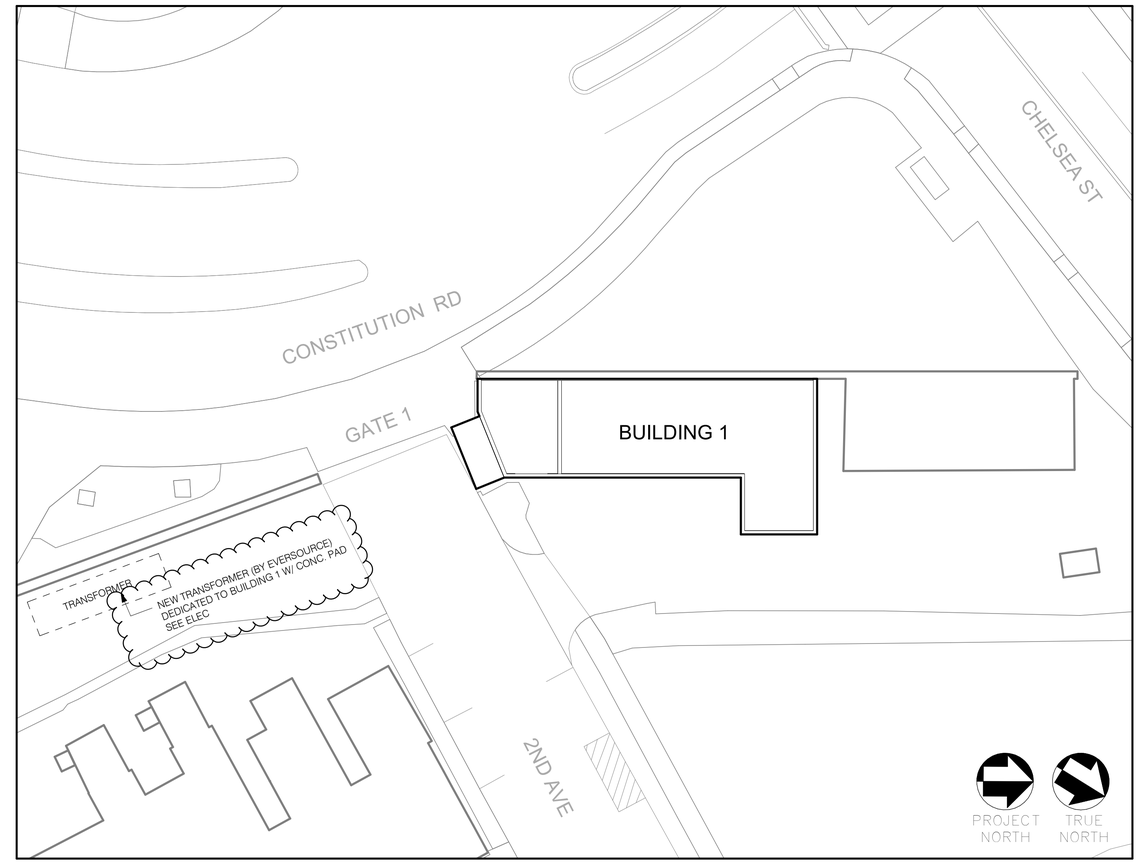




DRAWING LIST

A0.0	COVER
D1.1	FIRST FLOOR DEMOLITION PLAN
D1.2	HAZARDOUS MATERIALS REMOVAL
D1.3	HAZARDOUS MATERIALS REMOVAL
A1.0	FIRST FLOOR PLAN & RCP
A1.1	ROOF PLAN
A2.0	ELEVATIONS
A5.1	ROOF DETAILS
A6.0	DOOR DETAILS & SCHEDULE
E001	SYMBOL LIST
E002	SYMBOL LIST SHEET 2
E100	SITE PLAN
E101	GROUND LEVEL POWER PLAN
E200	ONE LINE POWER RISER
M0.1	Unnamed
M1.0	Unnamed
P001	PLUMBING LEGEND, NOTESM AND SCHEDULES
P102	ROOF PLUMBING CONSTRUCTION PLAN

PROJECT TEAM

OWNER
National Park Service - Charlestown Navy Yard
21 Second Ave
Charlestown, MA 02129
tel: 617-242-5601

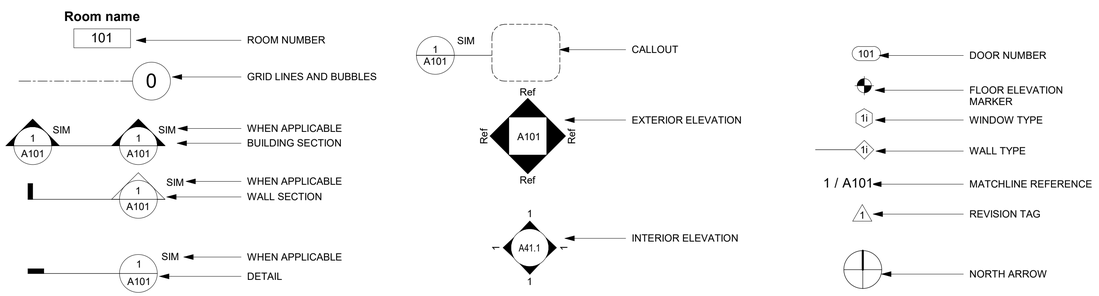
ARCHITECT
Schwartz/Silver Architects, Inc.
75 Kneeland Street
Boston, Massachusetts 02111
tel: 617-542-6650
fax: 617-951-0779
web site: www.schwartzsilver.com

MEP/FP
Cosentini Associates
101 Federal Street – Suite 600
Boston, MA 02110
tel: 617-748-7800
web site: www.cosentini.com

ASPESTOS INSPECTOR
Environmental Health & Engineering, Inc.
180 Wells Ave, Suite 200
Newton, MA 02459
tel: 781-247-4300
web site: www.eheinc.com

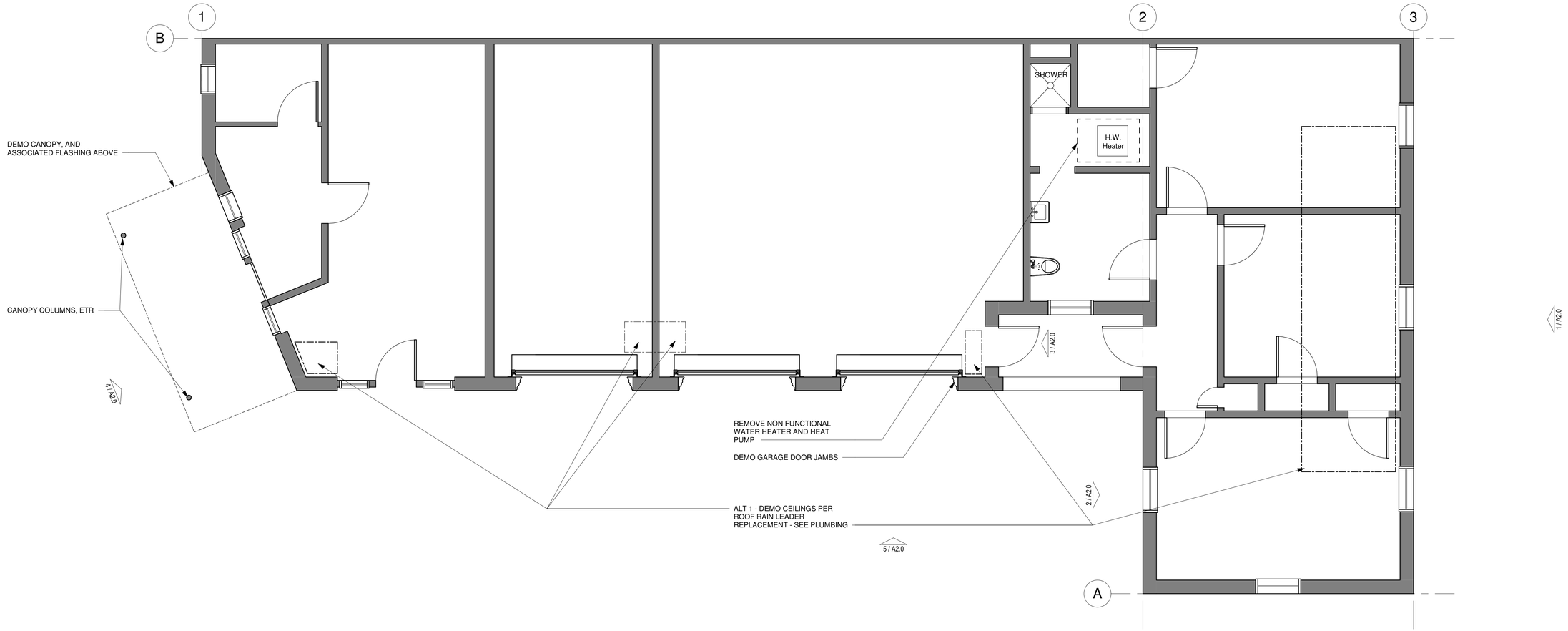
COST ESTIMATING
Rider Levett Bucknall
24 School Street, Suite 802
Boston, MA 02108
tel: 617-737-9339
web site: www.rlb.com/americas

GRAPHIC LEGEND



A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: EL CADD: EL TECH. REVIEW: DATE: 3/25/25	SUB SHEET NO. A0.0	TITLE OF SHEET COVER EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 193869
PKG. NO. 154176
SHEET ___ OF ___

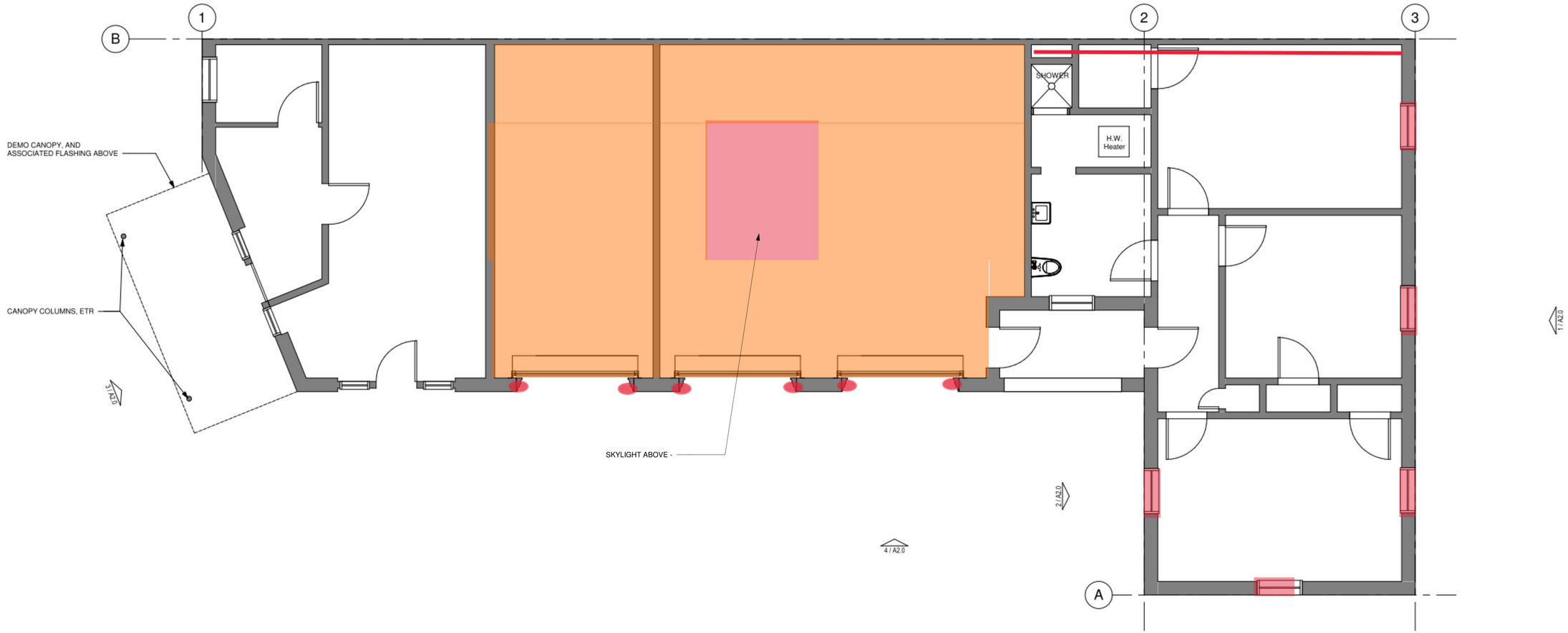


SCALE OF FEET

PROJECT NORTH

TRUE NORTH

A/E FIRM	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA	EL	D1.1	FIRST FLOOR DEMOLITION PLAN	457 193869
SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	CADD: EL		EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD	PKG. NO. 154176
	TECH. REVIEW:			SHEET 02 OF 18
	DATE: 3/25/25			



ACM Thermal Systems Insulation

ACM Window Glazing Compound

ACM Frame Caulking

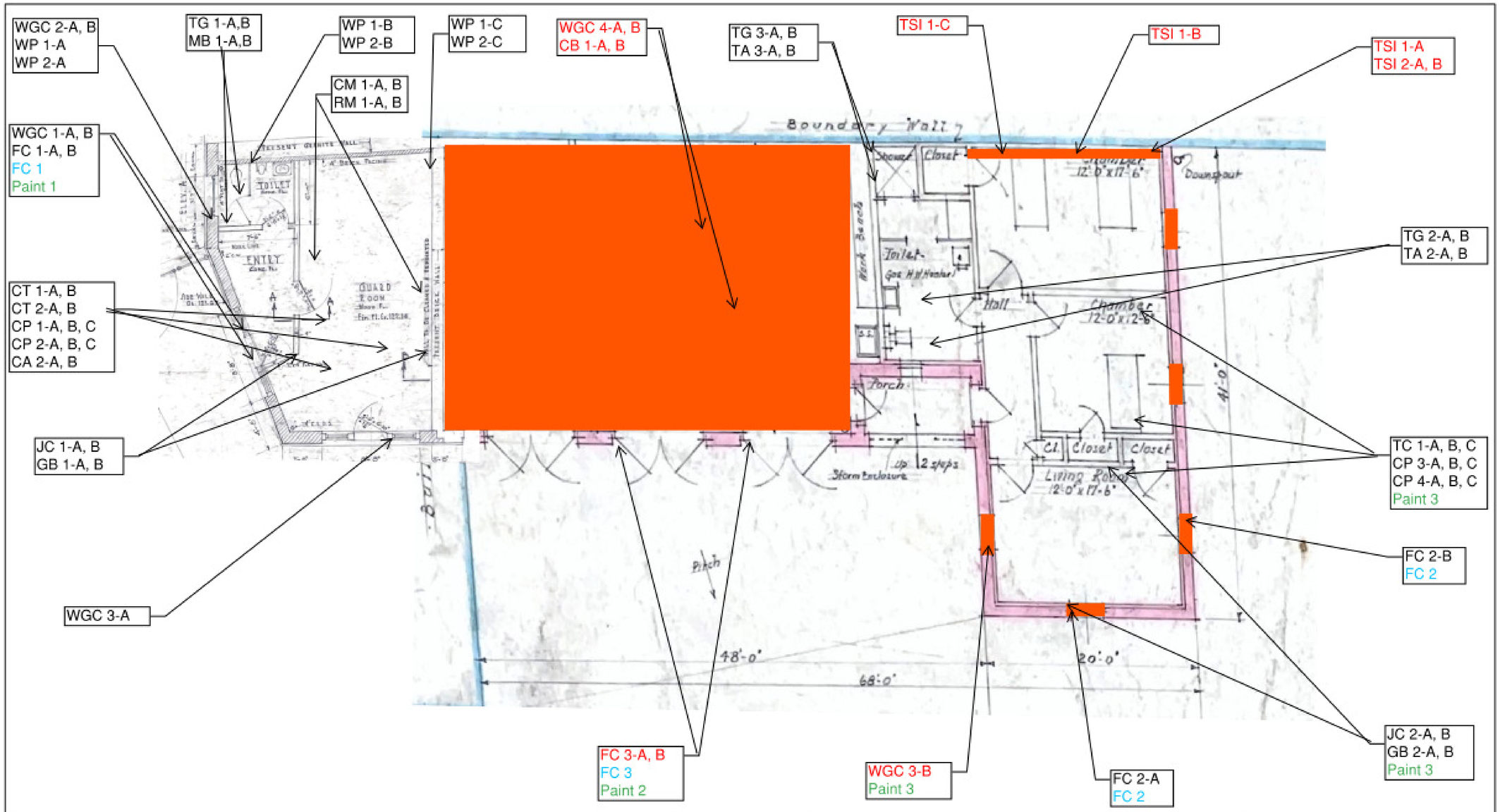
ACM Cement Board Ceiling

SCALE OF FEET

PROJECT NORTH

TRUE NORTH

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: Designer CADD: Author TECH. REVIEW: DATE: 3/25/25	SUB SHEET NO. D1.2	TITLE OF SHEET HAZARDOUS MATERIALS REMOVAL EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD	DRAWING NO. 457 193869 PKG. NO. 154176 SHEET 03 OF 18



LEGEND			
YYYYYY	Sample location, no asbestos detected		Asbestos Containing Materials approximate extent
YYYYYY	Sample location, asbestos detected	YYYYYY	Paint composite location
YYYYYY	PCB material sample location		

NOTES

Not to scale

TITLE:	Sample Locations and ACM Extent
CLIENT:	SchwartzSilver Architects Inc.
LOCATION:	Building 1, 21 Second Ave. Charlestown Navy Yard
FIGURE ID:	E.1
DATE:	5/29/2024
CREATED:	ASB
PROJECT:	26741
	Page 1 of 1

180 Wells Ave., Ste. 200
Newton, MA 02459
Tel 800-825-5343
www.ehsinc.com

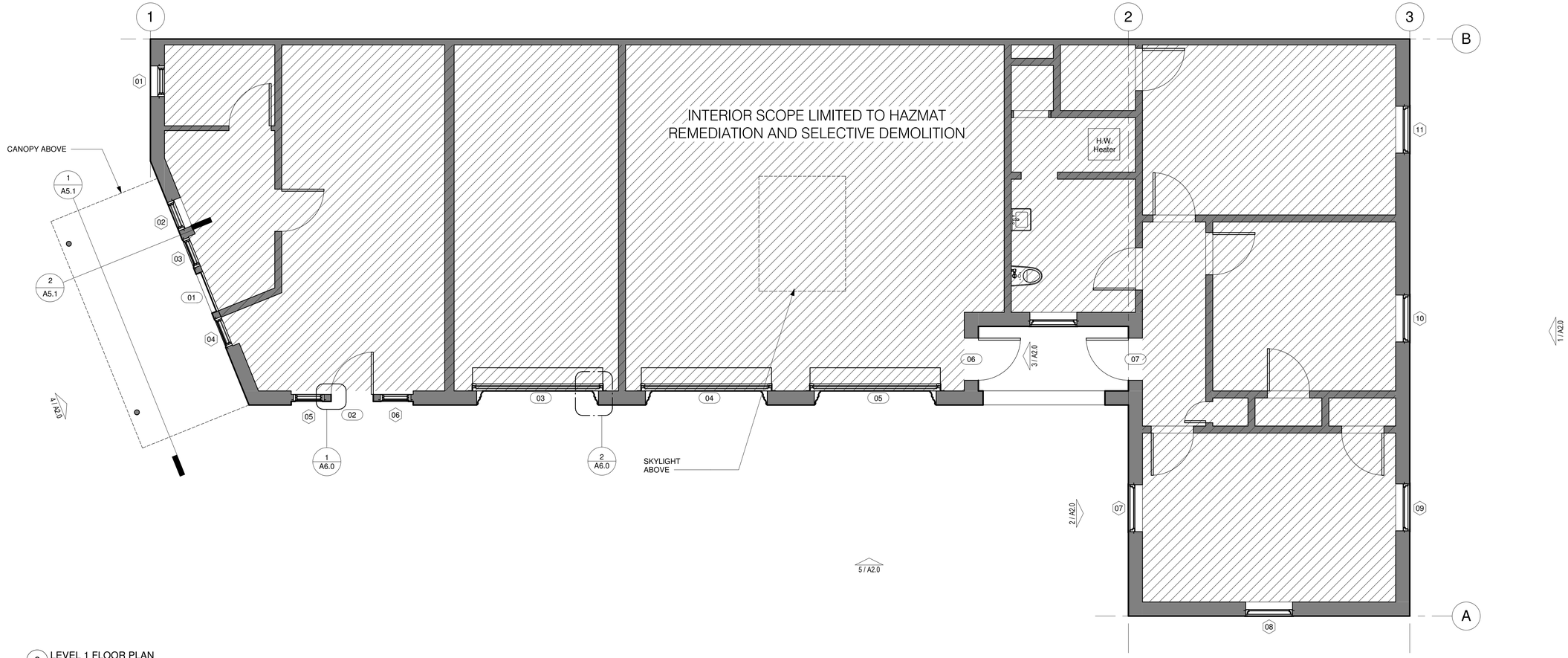
SCALE OF FEET

PROJECT NORTH

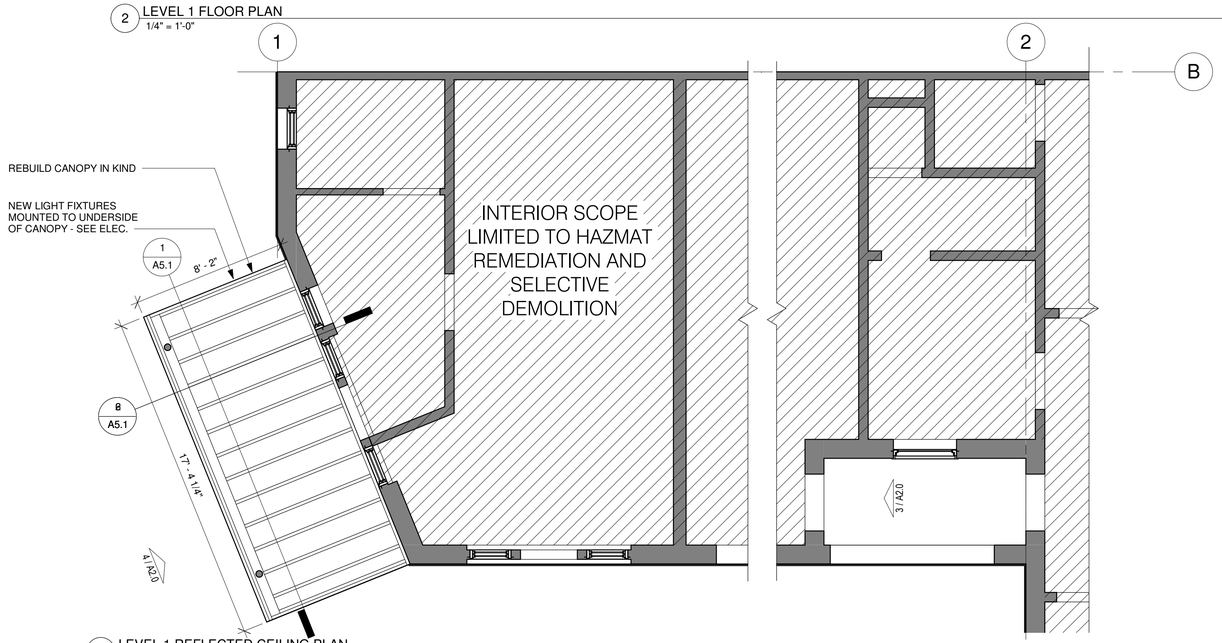
TRUE NORTH

SEE HAZMAT REPORT, SPEC APPENDIX

A/E FIRM	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA	Designer	D1.3	HAZARDOUS MATERIALS REMOVAL	457 193869
SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	CADD: Author		EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD	PKG. NO. 154176
	TECH. REVIEW:			SHEET 04 OF 18
	DATE: 3/25/25			



2 LEVEL 1 FLOOR PLAN
1/4" = 1'-0"



1 LEVEL 1 REFLECTED CEILING PLAN
1/4" = 1'-0"

SCALE OF FEET 4 8 12

PROJECT NORTH

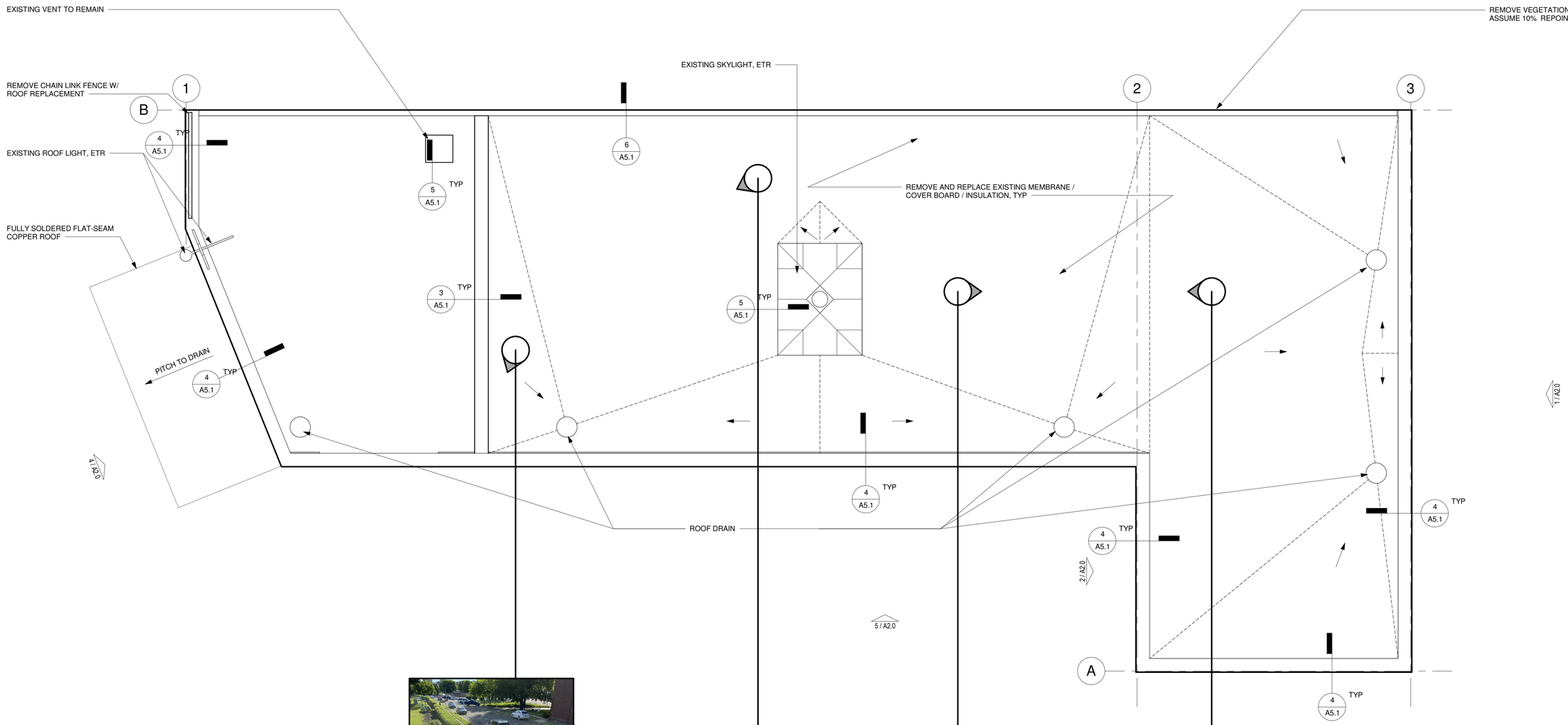
TRUE NORTH

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: EL CADD: EL TECH. REVIEW: DATE: 3/25/25	SUB SHEET NO. A1.0	TITLE OF SHEET FIRST FLOOR PLAN & RCP EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 193869

PKG. NO. 154176

SHEET 05 OF 18



GENERAL NOTE

CONTRACTOR TO RECONFIRM ROOF PITCHES TO DRAINS

SCALE OF FEET 4 8 12

PROJECT NORTH

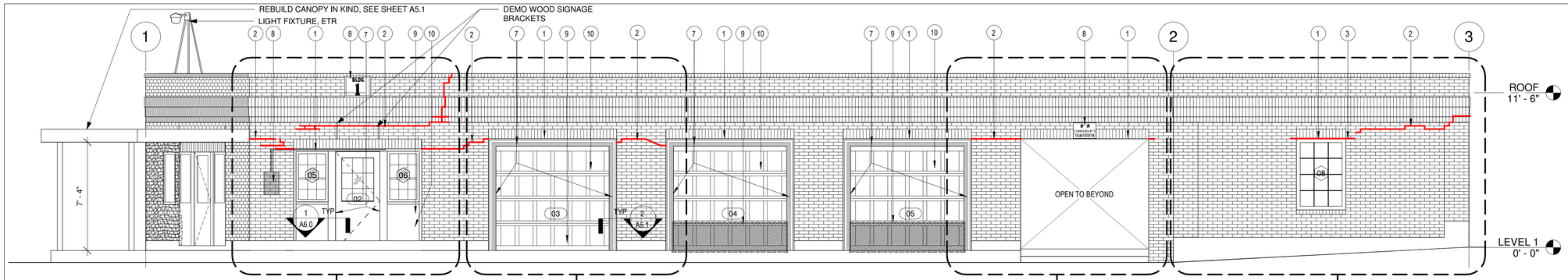
TRUE NORTH

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: EL CADD: EL TECH. REVIEW: DATE: 3/25/25	SUB SHEET NO. A1.1	TITLE OF SHEET ROOF PLAN EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 193869

PKG. NO. 154176

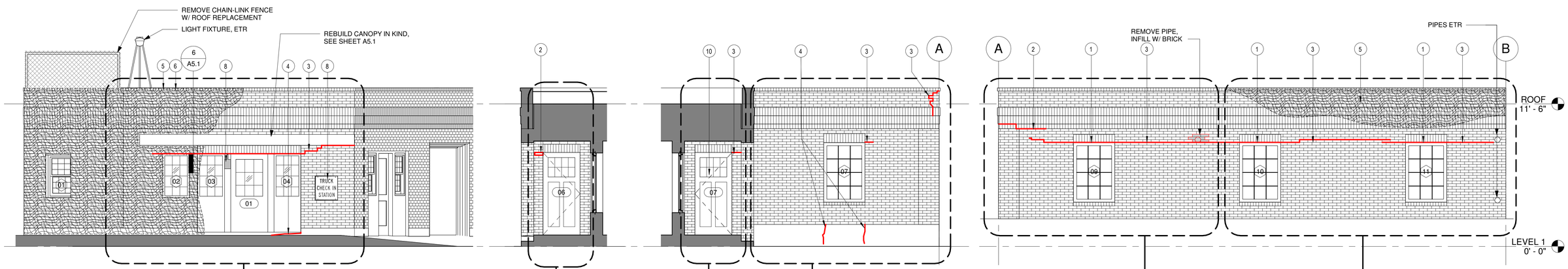
SHEET 06 OF 18



5 ELEVATION - EAST
1/4" = 1'-0"

KEYNOTE LEGEND

1. REPLACE JACKED LINTEL IN KIND
2. REMOVE AND REPLACE DAMAGED BRICK
3. REPOINT BRICK MORTAR
4. REPAIR CRACK IN EXISTING CONCRETE
5. REMOVE ORGANICS / CLEAN BRICK MASONRY
6. ASSUME 10% OF MORTAR REPOINTING CONCEALED BY IVY
7. REPLACE PAINTED WOOD JAMBS / HEADS / TRIM TO MATCH EXISTING
8. EXISTING TO REMAIN & PROTECTED
9. REPAIR TO MATCH EXISTING
10. REPAINT TO MATCH EXISTING



4 ELEVATION - SOUTH-A
1/4" = 1'-0"

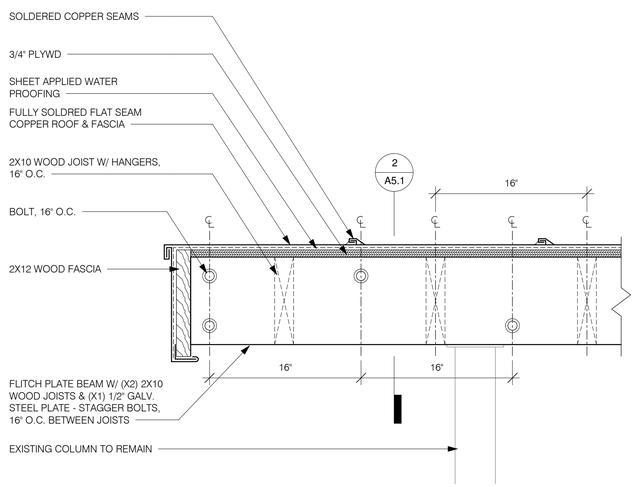
3 ELEVATION NORTH-B
1/4" = 1'-0"

2 ELEVATION SOUTH-B
1/4" = 1'-0"

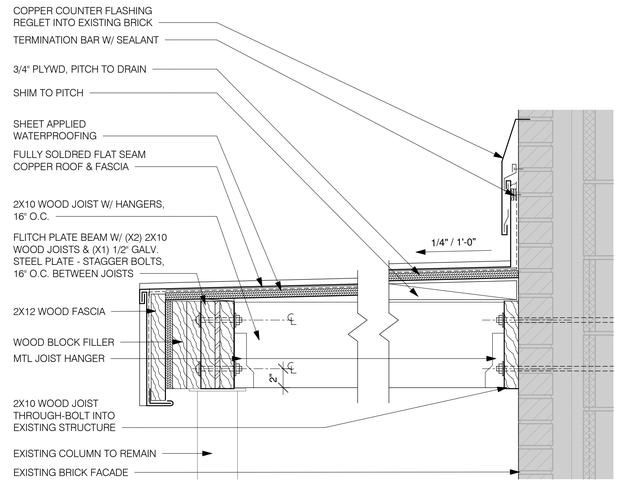
1 ELEVATION NORTH-A
1/4" = 1'-0"

SCALE OF FEET

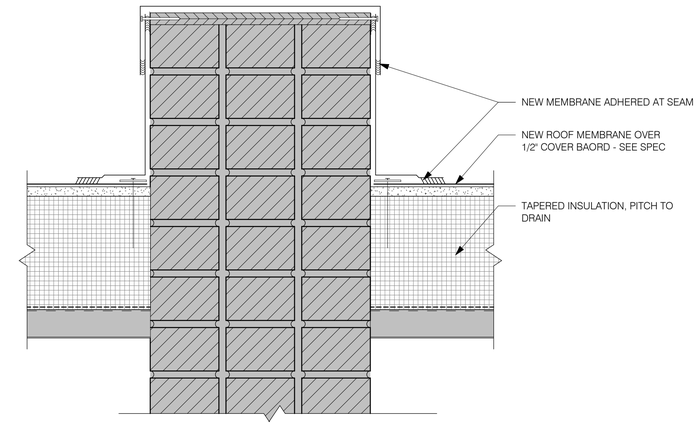
A/E FIRM	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA	EL	A2.0	ELEVATIONS	457 193869
SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	CADD: EL		EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD	PKG. NO. 154176
	TECH. REVIEW:			SHEET 07 OF 18
	DATE: 3/25/25			



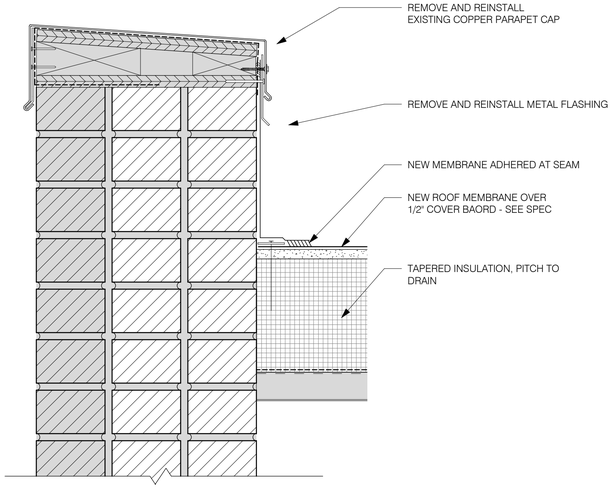
1 CANOPY SECTION 1
1 1/2" = 1'-0"



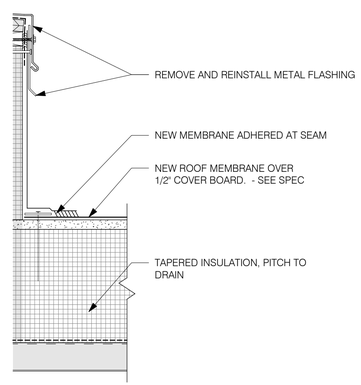
2 CANOPY SECTION 2
1 1/2" = 1'-0"



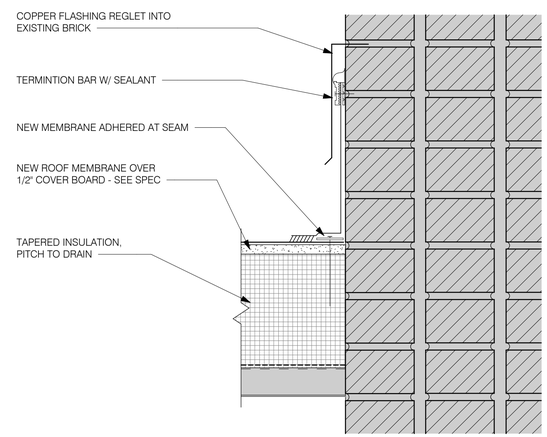
3 ROOF MEMBRANE REPLACEMENT @ INBOARD PARAPET
3" = 1'-0"



4 ROOF MEMBRANE REPLACEMENT @ OUTBOARD PARAPET
3" = 1'-0"



5 ROOF MEMBRANE REPLACEMENT FLASHING DTL, TYP
3" = 1'-0"



6 COPPER FLASHING @ ROOF PARTY WALL
3" = 1'-0"

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: EL CADD: EL TECH. REVIEW: DATE: 3/25/25	SUB SHEET NO. A5.1	TITLE OF SHEET ROOF DETAILS EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

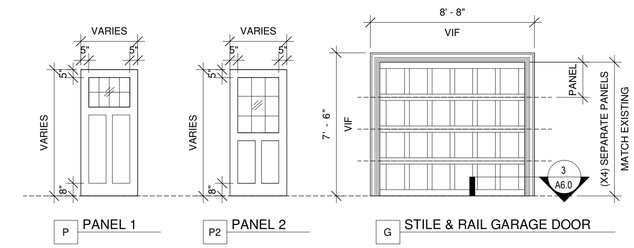
DRAWING NO. 457 193869
PKG. NO. 154176
SHEET 08 OF 18

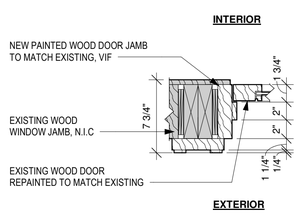
Window Schedule			
Mark	Width	Height	Comments
01	2' - 2 1/32"	3' - 5 3/16"	NIC
02	2' - 2 1/32"	3' - 5 3/16"	NIC
03	2' - 2 1/32"	3' - 5 3/16"	NIC
04	2' - 2 1/32"	3' - 5 3/16"	NIC
05	2' - 2 1/32"	3' - 5 3/16"	NIC
06	2' - 2 1/32"	3' - 5 3/16"	NIC
07	3' - 4"	4' - 9 3/4"	NIC
08	3' - 4"	4' - 9 3/4"	NIC
09	3' - 4"	4' - 9 3/4"	NIC
10	3' - 4"	4' - 9 3/4"	NIC
11	3' - 4"	4' - 9 3/4"	NIC

DOOR AND FRAME SCHEDULE

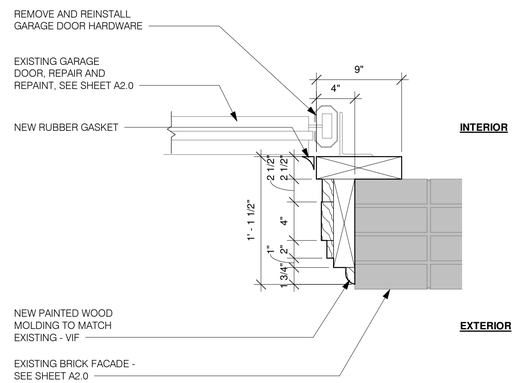
LOCATION	DOOR						PANEL		FRAME					
	OPENING				PANEL						DETAILS			
MARK	WIDTH	HEIGHT	R.O. WID	R.O. HGT	THICK	Door Panel Type	STYLE	MATL	TYPE	MATL	HEAD	JAMB	SILL	COMMENTS
LEVEL 1														
01	3' - 0"	6' - 8"	3' - 4"	6' - 10"	0' - 1 3/4"	P2	(none)	WD / GL	(F0)	WD	4/A5.1	4/A5.1	N/A	
02	3' - 0"	6' - 8"	3' - 4"	6' - 10"	0' - 1 3/4"	P2	(none)	WD / GL	(F0)	MTL	4/A5.1	4/A5.1	N/A	REPAIR JAMBS & HEAD TO MATCH EXISTING
03	8' - 8"	7' - 6"				G	(none)	WD		WD	3/A5.1	3/A5.1	N/A	REPAIR JAMBS & HEAD TO MATCH EXISTING
04	8' - 8"	7' - 6"				G	(none)	WD		WD	3/A5.1	3/A5.1	N/A	REPAIR JAMBS & HEAD TO MATCH EXISTING
05	8' - 8"	7' - 6"				G	(none)	WD		WD	3/A5.1	3/A5.1	N/A	REPAIR JAMBS & HEAD TO MATCH EXISTING
06	3' - 0"	6' - 8"	3' - 4"	6' - 10"	0' - 1 3/4"	P	(none)	WD / GL	(F0)	WD	ETR	ETR	N/A	
07	3' - 0"	6' - 8"	3' - 4"	6' - 10"	0' - 1 3/4"	P	(none)	WD / GL	(F0)	WD	ETR	ETR	N/A	

PANEL LEGEND

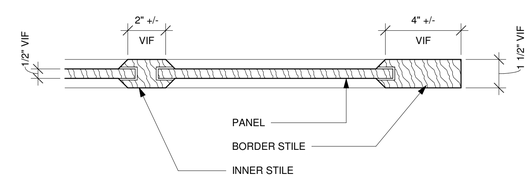




1 EXTERIOR DOOR JAMB / HEAD DETAIL
1 1/2" = 1'-0"



2 GARAGE DOOR JAMB / HEAD DETAIL - TYP
1 1/2" = 1'-0"



3 GARAGE DOOR STILE & RAIL PANEL TO MATCH EXISTING - TYP
3" = 1'-0"

A/E FIRM	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA	Designer	A6.0	DOOR DETAILS & SCHEDULE	457 193869
SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	CADD: Author		EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD	PKG. NO. 154176
	TECH. REVIEW:			SHEET 09 OF 18
	DATE: 3/25/25			

GENERAL NOTES

1. THE BASE BUILDING "CONTRACT DRAWINGS" AND "SPECIFICATIONS", INCLUDING ALL RESPECTIVE ADDENDA AND BULLETINS, SHALL FORM PART OF THIS WORK AND ALL WORK SHALL BE SUBJECT TO RESPECTIVE PROVISIONS THEREOF.

2. FOR EXACT LOCATION OF ALL ITEMS, SEE ARCHITECTURAL DRAWINGS.

3. DEFINITIONS:

"FURNISH" - PURCHASE AND DELIVER TO THE PROJECT SITE COMPLETE WITH EVERY NECESSARY APPURTENANCES AND SUPPORT, ALL AS PART OF THE ELECTRICAL WORK.

"INSTALL" - PERFORM EVERY OPERATION NECESSARY TO ESTABLISH SECURE MOUNTING AND CORRECT OPERATION AT THE PROPER LOCATION IN THE PROJECT, ALL AS PART OF THE ELECTRICAL WORK.

"PROVIDE" - "FURNISH" AND "INSTALL".

SITE PLAN

SITE DISTRIBUTION UNDERGROUND CONDUIT BANK FOR MAIN PRIMARY FEEDERS	SUBSCRIPT -P- INDICATES PRIMARY DISTRIBUTION. SUBSCRIPT -S- INDICATES SECONDARY DISTRIBUTION SUBSCRIPT -C/S- INDICATES COMMUNICATIONS, CONTROL AND/OR SIGNAL. UPPERCASE LETTERS INSCRIBED IN SYMBOL INDICATE TYPE REFERENCES TO FIXTURE LIST. APPENDAGES APPLIED TO THE BASIC SYMBOL ARE USED TO DENOTE THE ORIENTATION OF ARMS, REFLECTORS, AND THE LIKE
SITE DISTRIBUTION UNDERGROUND CONDUIT BANK FOR MAIN OR SUB-MAIN SECONDARY FEEDERS	
SITE DISTRIBUTION UNDERGROUND CONDUIT BANK FOR MAIN COMMUNICATIONS, CONTROL AND/OR SIGNAL WIRING	
HANDHOLE	
MANHOLE	
POLE OR STANCHION TYPE LIGHTING EQUIPMENT	

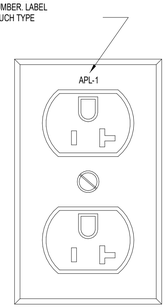
SYMBOL LIST

EACH SYMBOL DENOTING A "BUILDING STANDARD" ITEM SHALL BE INTERPRETED AS STANDING FOR ALL CIRCUITRY AND APPURTENANCES REQUIRED FOR THE
ITEM AS SET FORTH IN THE BASIC DOCUMENTS. FOR EXACT LOCATION OF ALL ITEMS, SEE THE ARCHITECTURAL DRAWINGS.

SYMBOL	DESCRIPTION	NOTES
75	"BUILDING STANDARD" FIRE PROTECTIVE ALARM SYSTEM COMBINATION LOUDSPEAKER ADA VISUAL STATION	SUBSCRIPT 75 INDICATES CANDELA RATING
75	"BUILDING STANDARD" FIRE PROTECTIVE ALARM SYSTEM COMBINATION HORN ADA VISUAL STATION	INSTALLATION SHALL BE IN CONFORMANCE WITH THE FIRE DEPARTMENT FOR ALL FIRE ALARM DEVICE INSTALLATION.
75	"BUILDING STANDARD" FIRE PROTECTIVE ALARM SYSTEM VISUAL STATION ONLY	
S	SMOKE DETECTOR	"d" INDICATES DUCT TYPE SMOKE DETECTOR "er" INDICATES ELEVATOR RECALL SMOKE DETECTOR
	L.E.D. REMOTE INDICATING LIGHT	
75	CEILING MOUNTED FIRE ALARM COMBINATION SPEAKER/STROBE	
	FIRE ALARM MANUAL PULL STATION	
W	WATER FLOW SWITCH	
T	TAMPER SWITCH	
P	AIR PRESSURE SWITCH	
MM CM FSD	MM- ADDRESSABLE MONITORING MODULE CM- ADDRESSABLE CONTROL MODULE. FSD- ADDRESSABLE FIRE SMOKE DAMPER PROVIDE CONTROL MODULE TO SHUT DAMPER UPON FIRE ALARM.	
FATC	"BUILDING STANDARD" FIRE ALARM TERMINAL CABINET	
RANN	"BUILDING STANDARD" FIRE ALARM REMOTE ANNUNCIATOR PANEL	
DH	DOOR HOLDER	
(*)	MOUNTING HEIGHT REFERENCE TO ARCHITECTURAL DRAWINGS.	

SYMBOL	DESCRIPTION	NOTES
B a b a A c D EM A EM	CEILING MOUNTED LIGHTING FIXTURES SHADED FIXTURE INDICATES EMERGENCY LIGHTING	UPPER CASE LETTER INSCRIBED IN OR ADJACENT TO SYMBOL INDICATES FIXTURE TYPE REFERENCES TO FIXTURE LIST ON DRAWINGS. SUBSCRIPT LOWER CASE LETTERS INDICATE SWITCH CONTROL ASSOCIATIONS. "EM" INDICATES FIXTURE TO BE SUPPLIED WITH EMERGENCY POWER
	UNIVERSAL MOUNTED EXIT SIGN	APPLICATION OF SHADED QUADRANTS AND ARROWS THUS: INDICATE LETTERED FACE AND DIRECTIONAL CHEVRONS AT SYMBOLS FOR WHICH SELECTION OF SUCH FEATURES IS REQUIRED.
	SELF CONTAINED BATTERY POWERED EMERGENCY LIGHT	DUAL-LITE CAT. NO. LZ SERIES OR APPROVED EQUAL
S a	LINE VOLTAGE SWITCH	SUBSCRIPT: a - DENOTES ON/OFF OF CONTROL ZONE 'a'. 3 - DENOTES THREE WAY SWITCH. P - DENOTES PILOT SWITCH
D a	LOW VOLTAGE SWITCH NOTE: WHEN SWITCH SHOWN IN ROOM WHERE LIGHTING IS CONNECTED TO THE LIGHTING CONTROL SYSTEM BASIS OF DESIGN, PROVIDE MANUFACTURER SWITCH WITH THE QUANTITY OF ZONES AS REQUIRED.	SUBSCRIPT: a - DENOTES ON/OFF OF CONTROL ZONE 'a'. a,b,c - INDICATES MULTIPLE SWITCHES WITHIN SAME KEYPAD. PROVIDE QUANTITY OF SWITCHES TO MATCH INDICATED QUANTITY OF ZONES. PROVIDE ADDITIONAL KEYPADS AS REQUIRED. SUPERSRIPT: D - DENOTES LOW VOLTAGE DIMMER SWITCH. S - DENOTES SCENCE CONTROL SWITCH. T - DENOTES TOUCH SCREEN CONTROLLER
	"BUILDING STANDARD" WALL DUPLEX RECEPTACLE 125V, 2P, 3W, 20A.	NEMA 5-20R
GFI	WALL DUPLEX RECEPTACLE 125V, 2P, 3W, 20A. GROUND FAULT INTERRUPTER	NEMA 5-20R GFI
IG	WALL DUPLEX RECEPTACLE 125V, 2P, 3W, 20A.	NEMA 5-20R "IG" INDICATES ISOLATED GROUND TYPE
	WALL DOUBLE DUPLEX RECEPTACLE 125V, 2P, 3W, 20A.	NEMA 5-20R
	INDICATES SPECIAL RECEPTACLE	REFER TO SCHEDULE FOR EXACT TYPE
	WALL HALF CONTROLLED DUPLEX RECEPTACLE 125V, 2P, 3W, 20A.	NEMA 5-20R

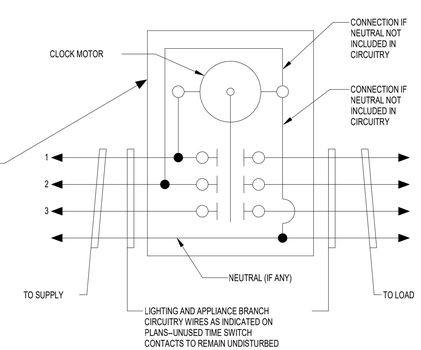
LABEL ALL RECEPTACLES WITH PANEL DESIGNATION AND CIRCUIT NUMBER. LABEL SHALL BE CLEAR MYLAR. P-TOUCH TYPE



TYPICAL RECEPTACLE LABEL REQUIREMENTS DETAIL

0-40 AMPS 3PST TIME SWITCH COMPLETE WITH ASTRONOMIC DIAL, OMITTING DEVICE AND SHEET METAL ENCLOSURE-- TORK CATALOG No. AS FOLLOWS:-

CIRCUITRY	VOLTS	CATALOG No.
2 WIRE	120	7300
3 WIRE	120/208	7300
4 WIRE	120/208	7300
2 WIRE	208	7302
3 WIRE	208	7302
2 WIRE	277	7302
3 WIRE	277/480	7302
4 WIRE	277/480	7302



LIGHTING AND APPLIANCE BRANCH CIRCUITRY TIME SWITCH CONTROL DIAGRAM

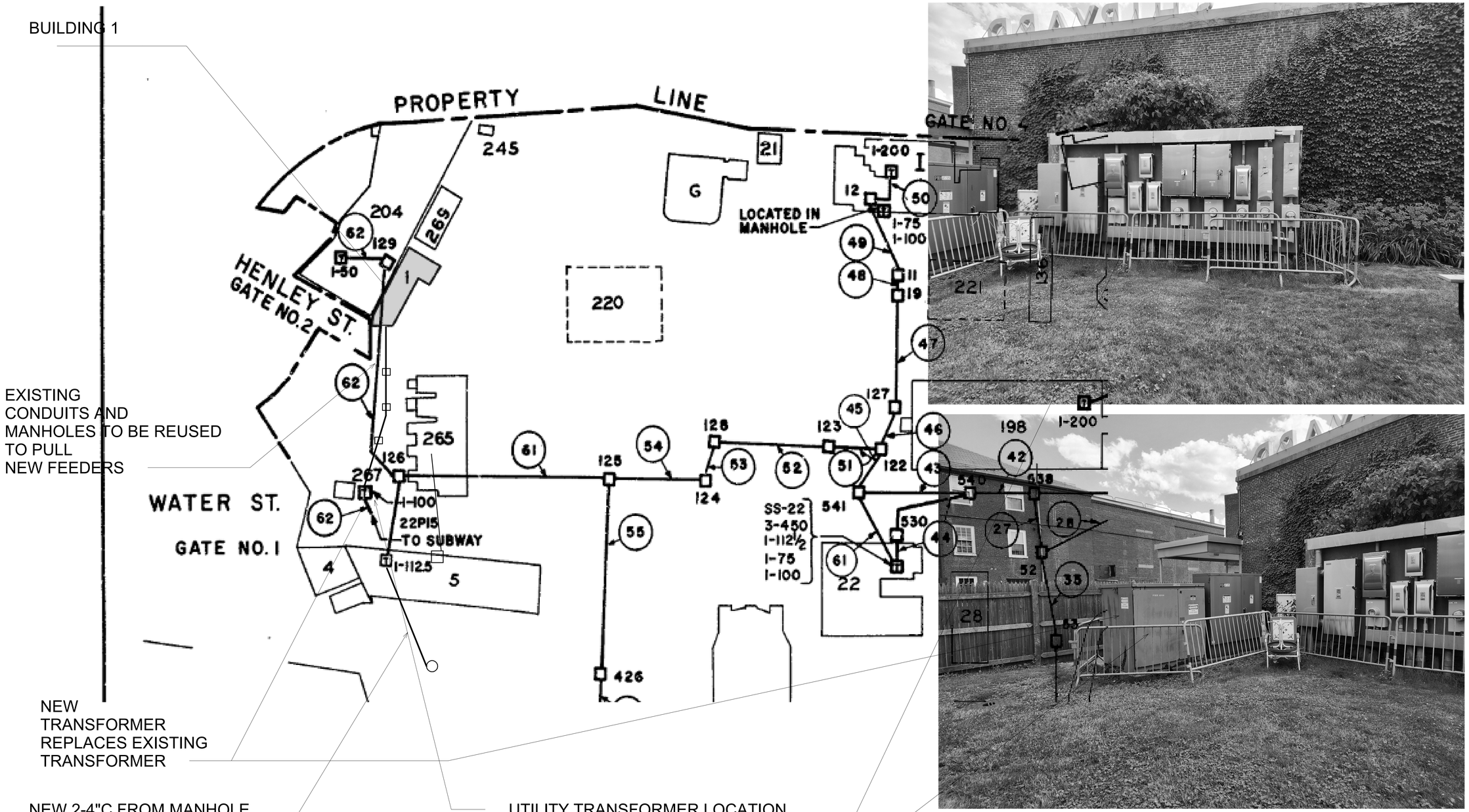
3 TYPICAL RECEPTACLE LABEL REQUIREMENTS
NTS

COMMONWEALTH OF MASSACHUSETTS
OSAJI ARAH
ELECTRICAL
No. 57882
PROFESSIONAL ENGINEER

SCALE OF FEET

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: J.Powers CADD: J.Powers TECH. REVIEW: DATE: 03/20/25	SUB SHEET NO. E001	TITLE OF SHEET SYMBOL LIST EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 193869
PKG. NO. 154176
SHEET 1 OF 5



SCALE OF FEET

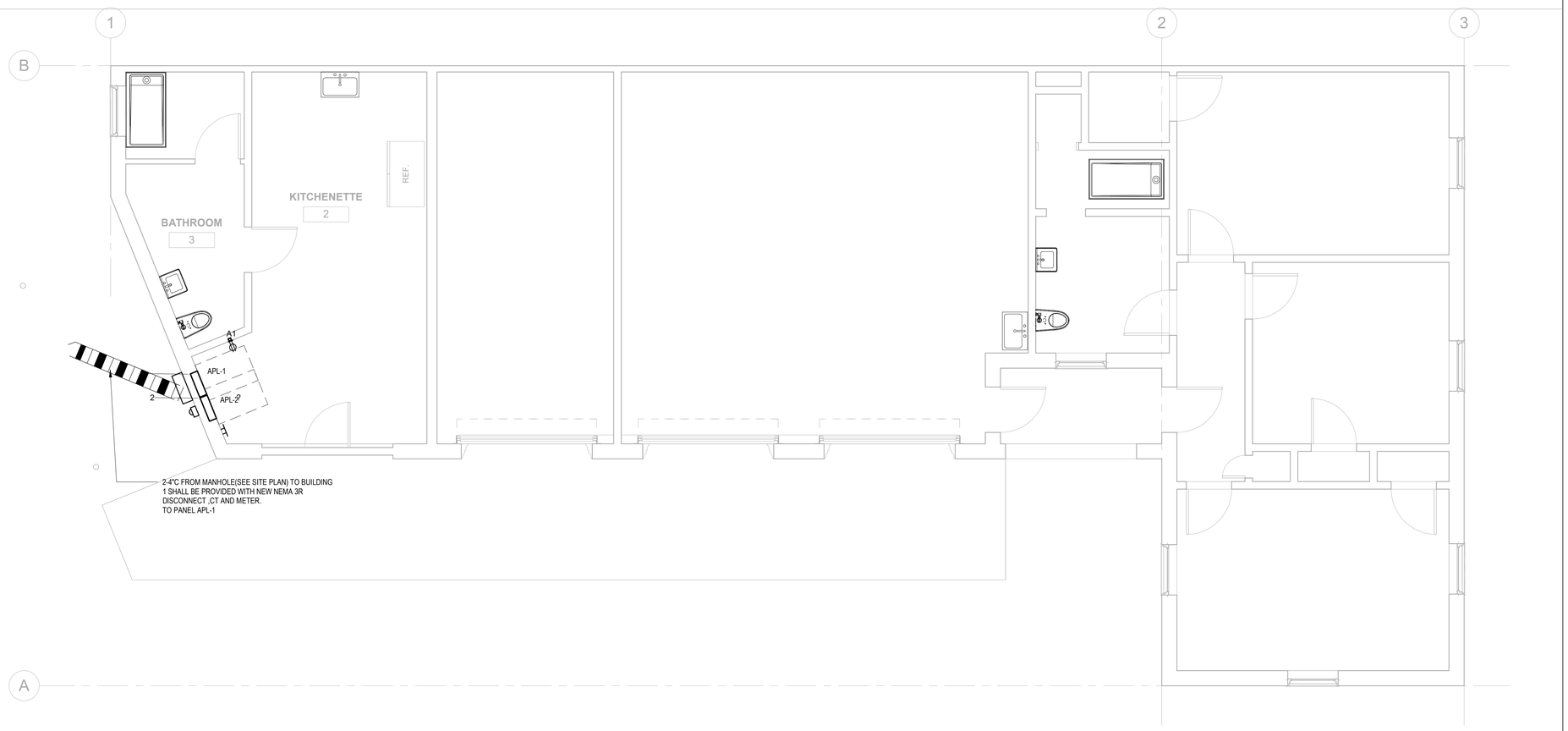
COMMONWEALTH OF MASSACHUSETTS
OSAJI ARAH
ELECTRICAL
No. 57882
PROFESSIONAL ENGINEER

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: J.Powers CADD: J.Powers TECH. REVIEW: DATE: 03/20/25	SUB SHEET NO. E100	TITLE OF SHEET SITE PLAN EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 193869
PKG. NO. 154176
SHEET 2 OF 5

GENERAL POWER NOTES

1. FOR GENERAL NOTES AND SYMBOL LIST, SEE DWG. **E-001**.
2. BEFORE BID SUBMISSION AND COMMENCING WORK, CONTRACTOR SHALL FIELD INSPECT SCOPE OF PROJECT, AND SUBMIT A REQUEST OF INFORMATION TO THE ENGINEER FOR ANY DISCREPANCIES OR INCOMPATIBILITIES FOUND BETWEEN DESIGN AND ACTUAL CONDITIONS.
3. ALL JUNCTION OR OUTLET BOXES SHALL BE INSTALLED SO AS TO ALLOW ACCESS TO COVER. PROVIDE ARCHITECT APPROVED ACCESS DOORS OR PLATES AS REQUIRED IN AREAS WHERE UNOBSTRUCTED ACCESS TO BOX OR OUTLET IS NOT POSSIBLE.
4. ALL BRANCH CIRCUIT WIRING SHALL BE ROUTED CONCEALED IN WALLS AND IN HUNG CEILING CAVITY, U.O.N.
5. EQUIPMENT LOCATIONS, WHERE SHOWN, ARE APPROXIMATE. FIELD VERIFY AND REFER TO ARCHITECTURAL DRAWINGS FOR MORE DETAILED DIMENSIONS AND OTHER CONSTRUCTION RELATED INFORMATION.
6. ALL CIRCUITS TO COMPUTERS, LASER PRINTERS, COPIERS, FAX MACHINES AND ANY OTHER LOADS OF NON-LINEAR NATURE OUTLETS SHALL HAVE SEPARATE NEUTRAL WIRES. STANDARD SHARED NEUTRAL HOMERUNS ARE NOT PERMITTED.
7. EXISTING CONDUIT RISER AND PANEL LOCATIONS (WHERE SHOWN) ARE FOR INFORMATIONAL / REFERENCE PURPOSES.
8. CIRCUIT ALL NEW OUTLETS PER CIRCUITING NOTES. ALL OUTLETS (NEW AND EXISTING) SHALL BE LABELED WITH ITS SOURCE PANEL AND CIRCUIT NUMBER. SEE DEMOLITION PLAN FOR CIRCUIT TRACING SCOPE. PROVIDE AS-BUILT DRAWINGS SHOWING FINAL CIRCUIT NUMBERS OF ALL DEVICES AT COMPLETION OF WORK.
9. SEE LATEST HVAC, FOR POWERED EQUIPMENT LOCATIONS AND QUANTITIES. THIS INCLUDES EXISTING EQUIPMENT TO BE REMOVED OR RELOCATED AND NEW EQUIPMENT TO BE INSTALLED. PROVIDE NEW FEEDERS, BREAKERS, AND LOCAL DISCONNECTS AS REQUIRED PER POWER PLAN, MECHANICAL EQUIPMENT CONNECTION SCHEDULE AND DETAILS. TYPICAL: CIRCUIT NO MORE THAN EIGHT (8) VAV BOXES ON A 120V, 20A BRANCH CIRCUIT.
10. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL DEVICES AND OUTLETS.
11. CIRCUIT NUMBERS ARE INDICATED FOR INTENT ONLY. THE ELECTRICAL CONTRACTOR SHALL ADJUST ACCORDINGLY IN THE FIELD TO BALANCE THE CIRCUITS EVENLY ON ALL PHASES.
12. CIRCUITS ARE DESIGNATED BY THE NUMBER SHOWN ADJACENT TO EACH RECEPTACLE. WIRING IS SHOWN ONLY UNDER SPECIAL CIRCUMSTANCES. PROVIDE CONDUITS, WIRES, AND BOXES REQUIRED TO ENERGIZE THE EQUIPMENT AS SHOWN.
13. 3/4" SHALL BE THE MINIMUM CONDUIT INSTALLED.
14. ALL VOICE AND DATA CABLING SHALL BE PROVIDED BY OTHERS. THIS ELECTRICAL CONTRACTOR IS ONLY RESPONSIBLE FOR PROVIDING CONDUIT AND BACKBOXES ASSOCIATED WITH VOICE AND DATA. REFER TO TELECOM DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. SUBMIT BID ACCORDINGLY.
15. ALL CORDS FEEDING EQUIPMENT FROM THE CEILING SHALL BE PROVIDED WITH STRAIN RELIEF.
16. POWER DOORS THAT REQUIRE 120V POWER FROM THE CLOSEST 120V CIRCUIT LOCATED WITHIN THE VICINITY OF THE NEW DOOR. REFER TO DOOR HARDWARE SCHEDULE ON ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.
17. LOCATE DISCONNECT SWITCH PROVIDED FOR EQUIPMENT IN AN ACCESSIBLE LOCATION TO THE EQUIPMENT. PROVIDE 3'-0 CLEAR IN FRONT FOR 208V EQUIPMENT..
18. PROVIDE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) PROTECTION IN BATHROOMS, KITCHENS, ROOFTOPS, OUTDOOR SPACES, LOADING DOCKS, INDOOR WET LOCATIONS, AND WHERE LOCATED WITHIN 6 FEET OF A SINK.
19. WHERE REQUIRED, INCREASE SWITCHBOARD/PANELBOARD FRAME AND LUGS SIZE TO ACCOMMODATE INCOMING FEEDER SIZES SHOWN ON DRAWINGS, OR PROVIDE BUS DETAILS TO LAND WIRING.



1 Grade POWER PLAN
1/4" = 1'-0"

SCALE OF FEET

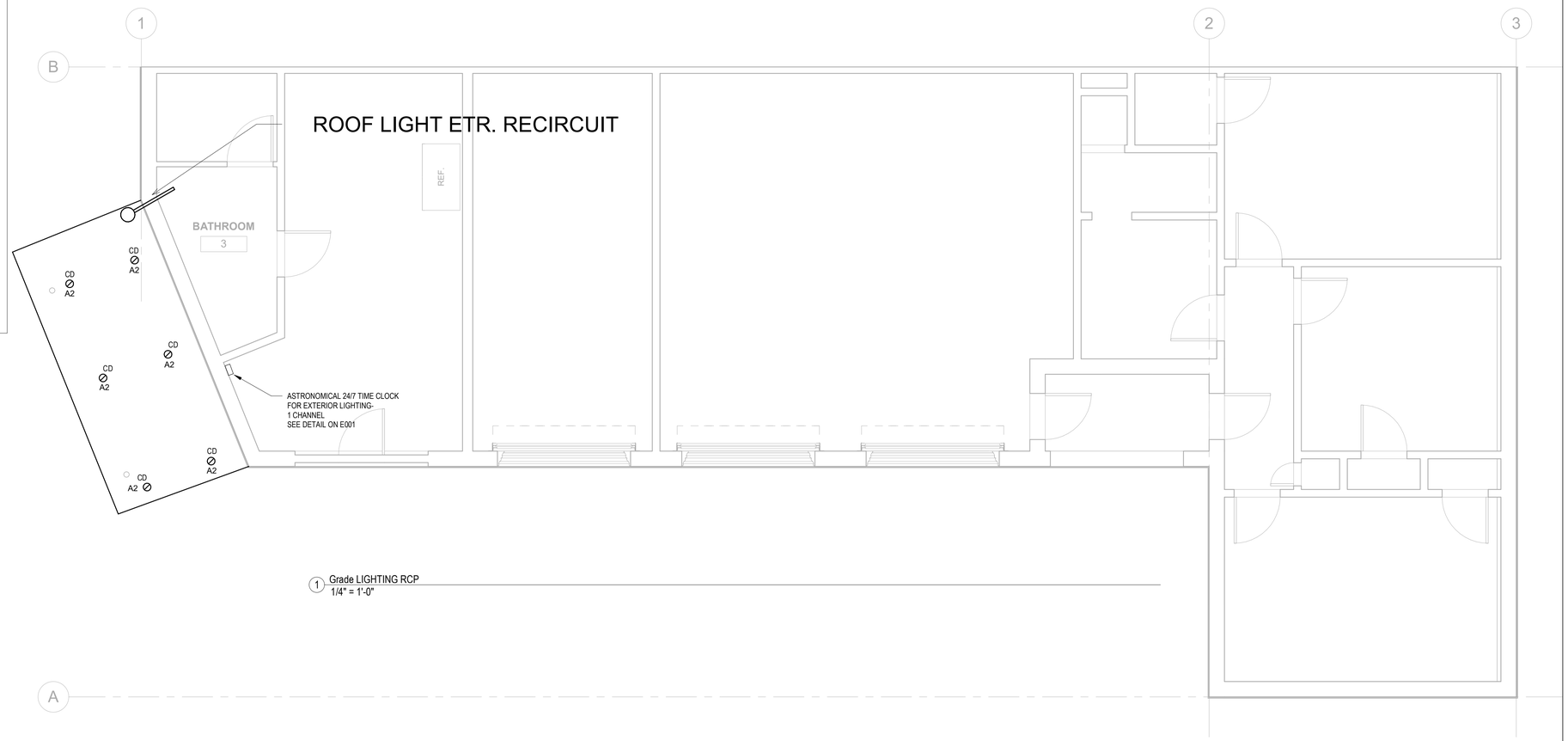
COMMONWEALTH OF MASSACHUSETTS
OSAJI ARAH
ELECTRICAL
No. 57882
PROFESSIONAL ENGINEER

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: J.Powers CADD: J.Powers TECH. REVIEW: DATE: 03/20/25	SUB SHEET NO. E101	TITLE OF SHEET GROUND LVL.POWER PLAN EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 / 193869
PKG. NO. 154176
SHEET 3 OF 5

GENERAL LIGHTING NOTES

1. REFER TO GENERAL PROJECT NOTES AND SYMBOLS LIST / LEGEND FOR MORE INFORMATION.
2. BEFORE BID SUBMISSION AND COMMENCING WORK, CONTRACTOR SHALL FIELD INSPECT SCOPE OF PROJECT, AND SUBMIT A REQUEST OF INFORMATION TO THE ENGINEER FOR ANY DISCREPANCIES OR INCOMPATIBILITIES FOUND BETWEEN DESIGN AND ACTUAL CONDITIONS.
3. ALL JUNCTION OR OUTLET BOXES SHALL BE INSTALLED SO AS TO ALLOW ACCESS TO COVER. PROVIDE ARCHITECT APPROVED ACCESS DOORS OR PLATES AS REQUIRED IN AREAS WHERE UNOBSTRUCTED ACCESS TO BOX OR OUTLET IS NOT POSSIBLE.
4. ALL BRANCH CIRCUIT WIRING SHALL BE ROUTED CONCEALED IN WALLS AND IN HUNG CEILING CAVITY, U.O.N. FINAL CONNECTIONS TO LIGHTING FIXTURES SHALL BE MADE WITH WIRING HAVING 90°C RATED INSULATION.
5. COORDINATE LIGHTING FIXTURE TYPE, CATALOG NUMBERS, FIXTURE MOUNTING, TRIMS, FINISHES, CORRELATED COLOR TEMPERATURE (CCT), COLOR RENDERING INDEX (CRI), QUANTITIES AND EXACT MOUNTING LOCATIONS / HEIGHTS WITH THE ARCHITECT.
6. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL WALL-MOUNTED LIGHTING CONTROL DEVICES.
7. PRIOR TO ORDERING LIGHTING FIXTURES, COORDINATE WITH ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. IF DISCREPANCIES EXIST BETWEEN ARCHITECTURAL AND ENGINEERING INFORMATION, OBTAIN CLARIFICATION PRIOR TO PROCEEDING.
8. MULTIPLE WALL-MOUNTED LIGHTING CONTROL DEVICES SHOWN IN SAME LOCATION SHALL BE GANGED TOGETHER WITH A COMMON FACEPLATE.
9. THE CONTRACTOR SHALL PROVIDE LIGHTING CONTROLS THAT ARE COMPATIBLE WITH THE DIMMING TECHNOLOGY OF THE LIGHTING FIXTURES (0-10V, ELV, MLV, ETC.).
10. CONTRACTOR SHALL PROVIDE ALL REQUIRED JUNCTION BOXES, THROUGH WIRING, DROPS, CONDUIT, POWER AND CONTROL WIRING AS REQUIRED TO PROVIDE A COMPLETE AND OPERATIONAL INSTALLATION IN ACCORDANCE WITH LIGHTING MANUFACTURERS SHOP DRAWINGS, FIELD CONDITIONS, CODE REQUIREMENTS, BUILDING STANDARDS AND CONTRACT DOCUMENTS. CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR ALL REQUIRED WIRING BETWEEN LIGHTING FIXTURES, LIGHTING CONTROLS EQUIPMENT & DEVICES (INCLUDING BUT NOT LIMITED TO: SWITCHES, DIMMERS, KEYPADS, OCCUPANT SENSORS, DAYLIGHT HARVESTING SENSORS, POWER PACKS, ETC), AND EQUIPMENT BY OTHER DISCIPLINES THAT INTERFACE WITH THE LIGHTING CONTROL SYSTEM (E.G. PLUG LOAD CONTROLS DEVICES, FIRE ALARM SYSTEM, AUDIO-VISUAL SYSTEM, HVAC CONTROLS, NETWORK INTERFACES ETC).



1 Grade LIGHTING RCP
1/4" = 1'-0"

EMERGENCY LIGHTING NOTES

1. THE EMERGENCY LIGHTING FOR THIS PROJECT IS SERVED VIA INTEGRAL BATTERIES WITHIN FIXTURES INDICATED BY "EM" & EMERGENCY BATTERY UNITS (EBU).
2. PROVIDE UNSWITCHED HOT LEG FOR ALL NIGHT LIGHTS, EXIT SIGNS, AND EMERGENCY BATTERY PACKS.
3. CIRCUIT EXIT SIGNS AS INDICATED ON DRAWINGS. IF CIRCUITING INFORMATION IS NOT INDICATED, CIRCUIT EXIT SIGN TO CLOSEST EMERGENCY CIRCUIT (INCLUDING CENTRAL BATTERY CIRCUIT) ON THE FLOOR. WHERE AN EMERGENCY CIRCUIT IS NOT AVAILABLE, CIRCUIT EXIT SIGN TO CLOSEST 120/277V LIGHTING CIRCUIT.
4. ALL DIMMING EMERGENCY FIXTURES/ZONES INDICATED BY "EM" POWERED BY AN EMERGENCY CIRCUIT OR CENTRAL BATTERY INVERTER SHALL BE EQUIPPED WITH A UL 924 TRANSFER RELAY. THE CONTRACTOR SHALL PROVIDE ONE RELAY FOR EVERY DISCRETE LIGHTING CONTROL ZONE. FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS TO CONNECT TO FIRE ALARM OR SECURITY SYSTEM AS REQUIRED.

LIGHTING FIXTURE LIST

			LAMPS		FIXTURE INPUT		
FIXTURE TYPE DESIGNATION	FIXTURE DESCRIPTION	FIXTURE MANUFACTURERS & CATALOG NUMBERS (CATALOG NUMBERS MAY REQUIRE ADJUSTMENT TO CONFORM FIXTURE TO CEILING FINAL CONSTRUCTION)	QUANTITY PER FIXTURE	DESIGNATION (LAMP MANUFACTURERS STANDARD ABBREVIATION)	VOLTS	VOLT AMPS	REMARKS
CD	DOWNLIGHT	JUNO RB4 RB4S SWW5 MW M6	-	LED	120	7.2	

SCALE OF FEET

COMMONWEALTH OF MASSACHUSETTS
OSAJI ARAH ELECTRICAL No. 57882
PROFESSIONAL ENGINEER

A/E FIRM	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	J.Powers CADD: J.Powers TECH. REVIEW: DATE: 03/20/25	E201	GROUND LVL. RCP PLAN EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD	457 193869 PKG. NO. 154176 SHEET 4 OF 5

FEEDER SCHEDULE

ALL FEEDERS ARE COPPER IN EMT, RMC OR SCHED. 40 RIGID PVC CONDUIT, U.O.N.

TAG	CONDUIT & WIRE
C30	3#10 + 1#10G - 3/4"C
C30N	4#10 + 1#10G - 3/4"C
C40	3#8 + 1#10G - 1"C
C40N	4#8 + 1#10G - 1"C
C55	3#6 + 1#8G - 1-1/4"C
C55N	4#6 + 1#8G - 1-1/4"C
C70	3#4 + 1#8G - 1-1/4"C
C70N	4#4 + 1#8G - 1-1/4"C
C85	3#3 + 1#8G - 1-1/2"C
C85N	4#3 + 1#8G - 1-1/2"C
C95	3#2 + 1#6G - 1-1/4"C
C95N	4#2 + 1#6G - 1-1/2"C
C110	3#1 + 1#6G - 1-1/2"C
C110N	4#1 + 1#6G - 2"C
C150	3#1/0 + 1#6G - 2"C
C150N	4#1/0 + 1#6G - 2"C
C175	3#2/0 + 1#4G - 2"C
C175N	4#2/0 + 1#4G - 2"C
C200	3#3/0 + 1#2G - 2"C
C200N	4#3/0 + 1#2G - 2-1/2"C
C230	3#4/0 + 1#4G - 2-1/2"C
C230N	4#4/0 + 1#4G - 2-1/2"C
C255	3#250KCMIL + 1#4G - 2-1/2"C
C255N	4#250KCMIL + 1#4G - 2-1/2"C
C285	3#300KCMIL + 1#4G - 3"C
C285N	4#300KCMIL + 1#4G - 3"C
C310	3#350KCMIL + 1#3G - 3"C
C310N	4#350KCMIL + 1#3G - 3"C
C335	3#400KCMIL + 1#3G - 3"C
C335N	4#400KCMIL + 1#3G - 3"C
C380	3#500KCMIL + 1#2G - 3-1/2"C
C380N	4#500KCMIL + 1#2G - 3-1/2"C
C420	3#600KCMIL + 1#2G - 3-1/2"C
C420N	4#600KCMIL + 1#2G - 4"C
C510	2 SETS OF (3#250KCMIL + 1#1G - 2-1/2"C)
C510N	2 SETS OF (4#250KCMIL + 1#1G - 2-1/2"C)

NOTES:
1.) FEEDER CONDUCTORS IN TABLE BE SHALL BE TYPE THHN, THWN, THWN-2, XHH, XHHW OR XHHW-2 INSULATION.
2.) CONDUCTOR AMPACITIES FOR FEEDERS #1 AWG AND SMALLER SHALL BE RATED FOR 60-DEGREES C, AND FEEDERS #1/0 AWG AND LARGER SHALL BE RATED FOR 75-DEGREES C PER NEC ARTICLE 110.14(C)(1).
3.) "E" DENOTES 2 HR RATED FEEDER. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.

BRANCH PANEL: APL-1

LOCATION: KITCHENETTE 2
SUPPLY FROM:
MOUNTING: RECESSED
ENCLOSURE TYPE: NEMA 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C RATINGS:
MAINS TYPE:
PANEL RATING:
MAIN BREAKER RATING: 200 A

CKT	TYPE	MTR	DESCRIPTION	TRIP	POL...	A		B		C		POL...	TRIP	DESCRIPTION	MTR	TYPE	CKT
A1		PL	OUTLET AT THE PANEL-PLUG LOAD	20 A	1	0.2	0.4					1	20 A	Lighting -LIGHTING LOAD	IL		A2
A3																	A4
A5																	A6
A7																	A8
A9																	A10
A11																	A12
A13																	A14
A15																	A16
A17																	A18
A19																	A20
A21																	A22
A23																	A24
A25																	A26
A27																	A28
A29																	A30
A31																	A32
A33																	A34
A35																	A36
A37																	A38
A39																	A40
A41																	A42
				TOTAL LOAD:		0.5 kVA		0.0 kVA		0.0 kVA							
				TOTAL AMPS:		4.4 A		0 A		0 A							

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND
Lighting - Dwelling Unit	0 kW	100.00%	0 kW
Plug Load	0 kW	100.00%	0 kW

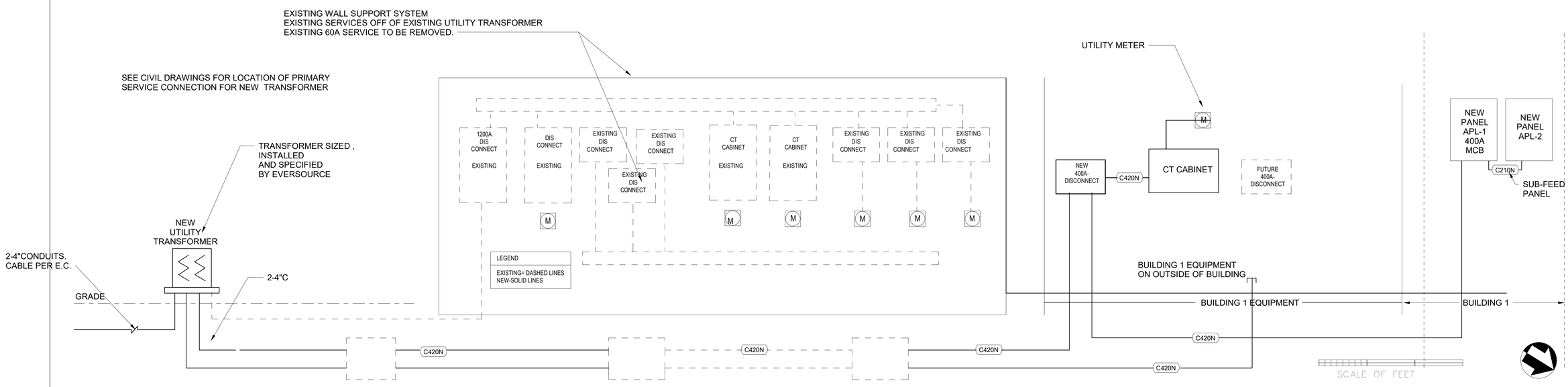
PANEL TOTALS

TOTAL CONNECTED LOAD:	0.5 kVA
TOTAL DEMAND LOAD:	0.5 kVA
TOTAL CONNECTED CURRENT:	1.5 A
TOTAL DEMAND CURRENT:	1.5 A
SPARE LOAD:	0 A
AMPACITY REQUIRED:	1.5 A

NOTES:

TYPES	
ST	SHUNT-TRIP
GF	GND FAULT
AF	ARC FLASH
KK	KIRK-KEY

METER TYPE (MTR)	
HL	HVAC SYSTEM LOAD
IL	INTERIOR LIGHTING
EL	EXTERIOR LIGHTING
PL	PLUG LOADS
PR	PROCESS LOADS
BO	BUILDING OPERATIONS

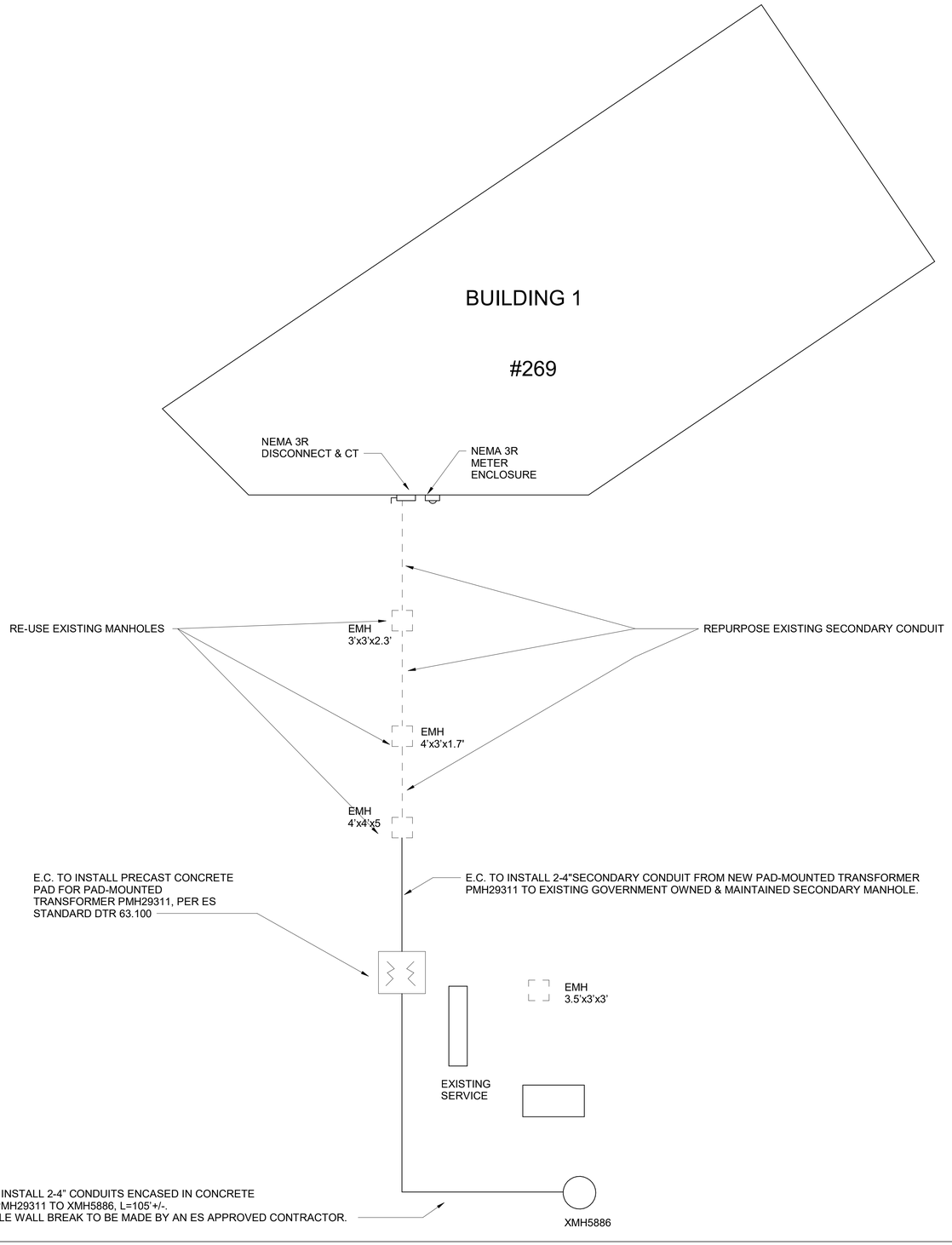


ELEVATION OF EXISTING ELECTRICAL DISTRIBUTION

SEE PICTURES ON SITE PLAN

COMMONWEALTH OF MASSACHUSETTS
OSAJI ARAH
ELECTRICAL
No. 57882
PROFESSIONAL ENGINEER

A/E FIRM	DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
PRIME: SCHWARTZ/SILVER ARCHITECTS, INC., BOSTON, MA	J.Powers	E300	ONE LINE POWER RISER	457 193869
SUBCONTRACTOR: COSENTINI ASSOCIATES, INC., BOSTON, MA	CADD: J.Powers		EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD	PKG. NO. 154176
	TECH. REVIEW:			SHEET 5 OF 5
	DATE: 03/20/25			



CONDUIT INSTALLATION NOTE: GOVERNMENT TO COORDINATE WITH EVERSOURCE'S CONDUIT GROUP PRIOR TO, DURING AND UPON COMPLETION OF PRIVATE PROPERTY DUCTBANK INSTALLATION. LIVE MANHOLE BREAKS WILL NEED TO BE DONE BY A CONTRACTOR ON THE APPROVED CONTRACTOR LIST.

IMPORTANT CUSTOMER/CONTRACTOR NOTE:
PLEASE LEAVE A MESSAGE ON THE CONDUIT INSPECTION LINE (617-541-7071), A MINIMUM OF 72 HOURS PRIOR TO STARTING CONSTRUCTION, TO ARRANGE A REQUIRED PRE-CONSTRUCTION MEETING WITH AN EVERSOURCE INSPECTOR. ALL DUCTWORK, GROUNDING, TRANSFORMER BASES AND MANHOLES MUST BE INSPECTED BY EVERSOURCE PRIOR TO BACKFILLING OR CONCRETE ENCASEMENT. ALL CONDUIT MUST BE INSTALLED PER EVERSOURCE STANDARDS: DTR 76.650, DTR 63.100, DTR 76.654 & DTR 42.100

IMPORTANT NOTE: NEW SECONDARY CABLES TO #269 MUST BE KEPT IN SEPARATE CONDUIT TRAJECTORY FROM ANY OTHER EXISTING SERVICE(S) TO #265

SCALE OF FEET

COMMONWEALTH OF MASSACHUSETTS
OSAJI ARAH ELECTRICAL No. 57882
PROFESSIONAL ENGINEER

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: J.Powers CADD: J.Powers TECH. REVIEW: DATE: 03/20/25	SUB SHEET NO. E301	TITLE OF SHEET SITE POWER DIAGRAM EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 193869
PKG. NO. 154176
SHEET ___ OF ___

KEY OF SYMBOLS AND ABBREVIATIONS

PIPE SYMBOLS AND ACCESSORIES

CD	CONDENSATE DRAIN
CHWS/R	CHILLED WATER SUPPLY/RETURN
CWS/R	CONDENSER WATER SUPPLY/RETURN
D	DRAIN LINE
DW	DOMESTIC WATER
FOF	FUEL OIL FILL
FOS/R	FUEL OIL SUPPLY/RETURN
FOV	FUEL OIL VENT
GHWS/R	GLYCOL HOT WATER SUPPLY/RETURN
GCHWS/R	GLYCOL CHILLED WATER SUPPLY/RETURN
LPS/R	LOW PRESSURE STEAM SUPPLY/RETURN
MPS/R	MEDIUM PRESSURE STEAM SUPPLY/RETURN
HPS/R	HIGH PRESSURE STEAM SUPPLY/RETURN
HWS/R	HOT WATER SUPPLY/RETURN
PCWS/R	PRIMARY CONDENSER WATER SUPPLY/RETURN
R	RELIEF
RL	REFRIGERANT LIQUID LINE
RS	REFRIGERANT SUCTION LINE
SCWS/R	SECONDARY CONDENSER WATER SUPPLY/RETURN
V	VENT LINE

A	AIR FLOW SWITCH
M	METHANE DETECTOR
H	HUMIDISTAT
T	THERMOSTAT
S	SWITCH
SD	DUCT MOUNTED SMOKE DETECTOR
PS	PRESSURE SENSOR
TS	TEMPERATURE SENSOR
FS	FIRE STAT
BG	EMERGENCY BREAK GLASS SWITCH
CO	CARBON MONOXIDE SENSOR
CO2	CARBON DIOXIDE SENSOR
NO2	NITROGEN DIOXIDE SENSOR

	FLOW DIRECTION
	PIPE UP
	PIPE DN
	PIPE BOTTOM CONNECTION
	PIPE TOP CONNECTION
	REDUCER
FS	FLOW SWITCH
FM	FLOW METER
BTU	BTU METER
	VALVED CAPPED OUTLET
	ISOLATION VALVE (REFER TO SPECIFICATIONS FOR VALVE TYPE)
	GATE VALVE
	GLOBE VALVE
	BALL VALVE
	CHECK VALVE
	AUTOMATIC CONTROL VALVE (REFER TO SPECIFICATIONS FOR VALVE TYPE)
	3-WAY AUTOMATIC CONTROL VALVE
	STRAINER WITH BLOW-OFF VALVE
	BUTTERFLY VALVE HAND OPERATED

	PLUG VALVE
	SOLENOID VALVE
	AIR VENT
	FLEXIBLE CONNECTOR
	THERMOMETER
	PRESSURE GAGE W/ GAGE COCK
	PUMP
	DUAL BASKET STRAINER
AS	AIR SEPARATOR
	FLANGED CONNECTION
	UNION FITTING
	EXPANSION JOINT
	EXPANSION BALL JOINT
E.L.	EXPANSION LOOP
	PIPE RISER GUIDE
	PIPE RISER ANCHOR

MECHANICAL AND DUCTWORK SYMBOLS AND ACCESSORIES

(200)	AIR QUANTITY (200 CFM)
	NEW WORK
	EXISTING TO REMAIN
	EXISTING TO BE REMOVED
(RL)	EXISTING TO BE RELOCATED
	CONNECT NEW TO EXISTING
	LIMIT OF DEMOLITION
	CAPPED OUTLET
	RETURN/EXHAUST AIR
	SUPPLY AIR
U	UNDER-CUT DOOR
36/12	OVAL DUCT SIZE (WIDTH x DEPTH IN INCHES)
36x12	RECTANGULAR DUCT SIZE (WIDTH x DEPTH IN INCHES)
36x12	DUCT WITH ACOUSTICAL LINING (SIZE INDICATES CLEAR AREA INSIDE)
	DUCT IN FIRE RATED ENCLOSURE
8□	ROUND DUCT SIZE (DIAMETER IN INCHES)
36x12□	OVAL DUCT SIZE (WIDTH X DEPTH IN INCHES)
	FLEXIBLE CONNECTION
	FLEXIBLE DUCT
(UP) (DOWN)	SUPPLY AIR DUCT
(UP) (DOWN)	RETURN/EXHAUST AIR DUCT
VD	VOLUME DAMPER
FD	FIRE DAMPER
SM	SMOKE DAMPER
FSM	FIRE SMOKE DAMPER W/FUSIBLE LINK & ACCESS DOOR
FSM(HS)	FIRE SMOKE DAMPER W/HEAT SENSOR & ACCESS DOOR
ALD	AUTOMATIC LOUVERED DAMPER
	TRANSFER OPENING
	TRANSFER BOOT WITH ACOUSTICAL LINING
A #	AIR RISER (SEE PLANS FOR TYPE)
W #	WATER RISER (SEE PLANS FOR TYPE)

	UNIT HEATER
	FAN
	ROOF TOP FAN
	FAN COIL UNIT
	FAN POWERED TERMINAL UNIT
	FAN POWERED TERMINAL UNIT WITH HEATING COIL
	VARIABLE AIR VOLUME BOX
	VARIABLE AIR VOLUME BOX W/ HEATING UNIT
	VARIABLE AIR VOLUME BOX W/ SOUND ATTENUATOR AND HEATING UNIT
	HEAT PUMP
	4-WAY CEILING DIFFUSER (REFER TO PLANS FOR BLANKED OFF SECTIONS)
	RETURN GRILLE/REGISTER
	SIDEWALL REGISTER
	ACCESS PANEL
1 M-101	SEE DETAIL NO. 1 ON DRAWING M-101
M 101	SEE DETAIL NO. 1 ON DRAWING M-101
	SQUARE VANED ELBOW
	RADIUS ELBOW
	RADIUS ELBOW WITH TURNING VANES

ABBREVIATIONS

AC	AIR CONDITIONING/UNIT
ACCU	AIR COOLED CONDENSER UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AFMS	AIR FLOW MONITORING STATION
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHU	AIR HANDLING UNIT
A.L.	ACOUSTICAL LINING
ALD	AUTOMATIC LOUVERED DAMPER
ALT	ALTERNATE
AMP	AMPERE
AP	ACCESS PANEL
APD	AIR PRESSURE DROP
ARCH	ARCHITECT
ATC	AUTOMATIC TEMPERATURE CONTROL
ATM	ATMOSPHERE
AVE	AVERAGE
BDD	BACKDRAFT DAMPER
BHP	BREAK HORSEPOWER
BO	BLANK OFF
BOD	BOTTOM OF DUCT
BOP	BOTTOM OF PIPE
BOS	BOTTOM OF STRUCTURE
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
BTUH	BTU PER HOUR
CAV	CONSTANT AIR VOLUME
CC	COOLING COIL
CD	CEILING DIFFUSER
CD	CONDENSATE DRAIN
CENT	CENTRIFUGAL
CFM	CUBIC FEET PER MINUTE
CFS	CUBIC FEET PER SECOND
CG	CEILING GRILLE
CHW	CHILLED WATER
CHWP	CHILLED WATER PUMP
CHWR	CHILLED WATER RETURN
CHWS	CHILLED WATER SUPPLY
CLG	CEILING OR COOLING
CO2	CARBON DIOXIDE
CO	CARBON MONOXIDE
COP	COEFFICIENT OF PERFORMANCE
CONTR	CONTRACTOR
CP	CONDENSATE PUMP
CU FT	CUBIC FEET
CUH	CABINET UNIT HEATER
CU IN	CUBIC INCHES
CW	COLD WATER
CWP	CONDENSER WATER PUMP
CWR	CONDENSER WATER RETURN
CWS	CONDENSER WATER SUPPLY
D	DRAIN
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROL
DEG	DEGREE
DIA	DIAMETER
DN	DOWN
DP	DIFFERENTIAL PRESSURE
DWG(S)	DRAWING(S)
DX	DIRECT EXPANSION
(E)	EXISTING
EA	EACH OR EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EER	ENERGY EFFICIENCY RATING
EF	EXHAUST FAN
EFF	EFFICIENCY
EHC	ELECTRICAL HEATING COIL
EL	EXPANSION LOOP
ELEC	ELECTRICAL
EM	EMERGENCY
EMS	ENERGY MANAGEMENT SYSTEM
ER	EXHAUST REGISTER
ERU	ENERGY RECOVERY UNIT
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EUH	ELECTRIC UNIT HEATER
EWT	ENTERING WATER TEMPERATURE
EWB	ENTERING WET BULB
EXH	EXHAUST
FA	FREE AREA
FCU	FAN COIL UNIT
FLA	FULL LOAD AMPS
FD	FLOOR DRAIN OR FIRE DAMPER
FPB	FAN POWERED BOX
FPI	FINS PER INCH

FPM	FEET PER MINUTE
FSM(HS)	FIRE SMOKE DAMPER (RESETTABLE TYPE) W/ HEAT SENSOR & ACCESS DOOR
FSM	FIRE SMOKE DAMPER W/ FUSIBLE LINK AND ACCESS DOOR
FT	FOOT OR FEET
FTR	FIN-TUBE RADIATION
GA	GAUGE
GAL	GALLONS
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GX	GENERAL EXHAUST
HB	HOSE BIBB CONN.
HC	HEATING COIL
HD	HEAD
HP	HORSE POWER OR HEAT PUMP
HPS	HIGH PRESSURE STEAM
HR	HOUR
HTG	HEATING
H&V	HEATING & VENTILATING
HW	HOT WATER
HWP	HOT WATER PUMP
HWR	HOT WATER RETURN
HWS	HOT WATER SUPPLY
HX	HEAT EXCHANGER
LAT	LEAVING AIR TEMPERATURE
LD	LINEAR DIFFUSER
LDB	LEAVING DRY BULB
LF	LINEAR FEET
LP	LOW POINT
LPS	LOW PRESSURE STEAM
LVG	LEAVING
LWB	LEAVING WET BULB
LWT	LEAVING WATER TEMPERATURE
MCA	MINIMUM CIRCUIT AMPS
MCC	MOTOR CONTROL CENTER
MER	MECHANICAL EQUIPMENT ROOM
MERV	MINIMUM EFFICIENCY RATING VALUE
MFR	MANUFACTURER
MOCP	MINIMUM EFFICIENCY RATING VALUE
MPS	MEDIUM PRESSURE STEAM
(N)	NEW
N/A	NOT APPLICABLE
N.C.	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NFA	NET FREE AREA
N.O.	NORMALLY OPEN
NO2	NITROGEN DIOXIDE
NPSH	NET POSITIVE SUCTION HEAD
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OAI	OUTSIDE AIR INTAKE
OAT	OUTSIDE AIR TEMPERATURE
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
OED	OPEN ENDED DUCT
PCF	POUNDS PER CUBIC FOOT
PD	PRESSURE DROP
PFSP	POST FIRE SMOKE PURGE
PH	PHASE
PHC	PREHEAT COIL
PLBG	PLUMBING
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	PSI GAUGE
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
REG	REGISTER
RET	RETURN
RF	RETURN FAN
RG	RETURN GRILLE
RH	RELATIVE HUMIDITY
RHC	RE-HEAT COIL
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SCH	SCREEN
SD	SMOKE DETECTOR
SEER	SEASONAL ENERGY EFFICIENCY RATING
SF	SQUARE FEET OR SUPPLY FAN
SG	SUPPLY GRILLE
SHC	SENSIBLE HEAT CAPACITY
SM	SMOKE DAMPER W/ ACCESS DOOR

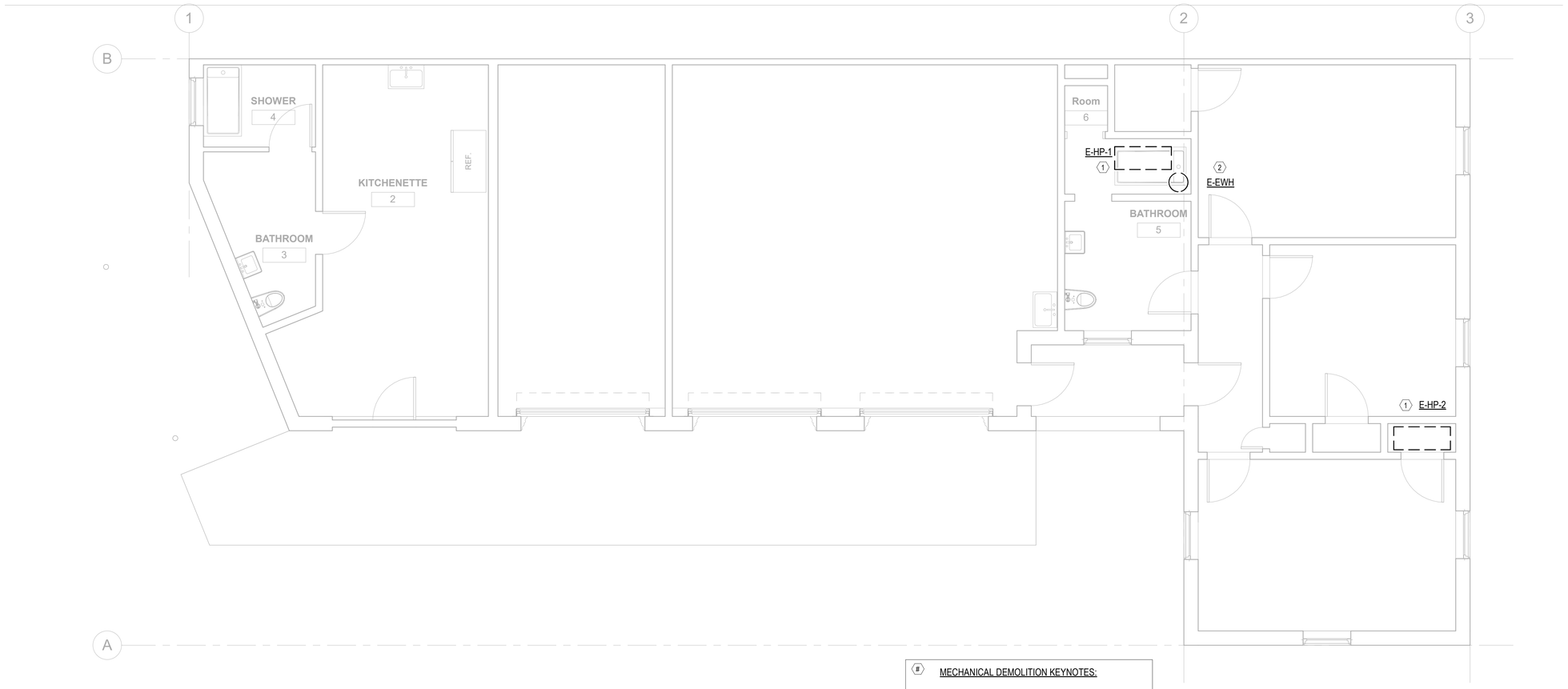
S.P.	STATIC PRESSURE
SP	STAIR PRESSURIZATION
SQ	SQUARE
SQ IN	SQUARE INCH
SS	STAINLESS STEEL
SSO	SAFETY SHUT-OFF VALVE
ST	SOUND TRAP
STL	STEEL
SUP	SUPPLY
TD	TRANSFER DUCT
TDH	TOTAL DYNAMIC HEAD
TEFC	TOTALLY ENCLOSED FAN COOLED
TEMP	TEMPERATURE
TF	TRANSFER FAN
TG	TRANSFER GRILLE
TI	TENANT IMPROVEMENT
TO	TRANSFER OPENING
TOD	TOP OF DUCT
TSP	TOTAL STATIC PRESSURE
TSTAT	THERMOSTAT
TXV	THERMAL EXPANSION VALVE
TYP	TYPICAL
UH	UNIT HEATER
U.O.N.	UNLESS OTHERWISE NOTED
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VEL	VELOCITY
V.I.	VIBRATION ISOLATOR
V.I.F	VERIFY IN FIELD
WB	WET BULB TEMPERATURE
WC	WATER COLUMN
WG	WATER GAUGE
WH	WALL HEATER
WMS	WIRE MESH SCREEN
WPD	WATER PRESSURE DROP
WSHP	WATER SOURCE HEAT PUMP

SCALE OF FEET

COMMONWEALTH OF MASSACHUSETTS
LASZLO F. HORSIK
MECHANICAL
No. 45456
REGISTERED PROFESSIONAL ENGINEER

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: D. Richardson CADD: D. Richardson TECH. REVIEW: DATE: 03/20/25	SUB SHEET NO. M0.1	TITLE OF SHEET MECHANICAL LEGEND EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 193869
PKG. NO. 154176
SHEET ___ OF ___



1 MECHANICAL PLAN DEMO
1/4" = 1'-0"

MECHANICAL DEMOLITION KEYNOTES:

1. EXISTING HEAT PUMP TO BE REMOVED IN ITS ENTIRETY. ALL ASSOCIATED DUCTWORK, PIPING, CONTROLS AND WIRING SHALL BE DEMOLISHED. ASSOCIATED OUTDOOR UNIT SHALL BE DEMOLISHED.
2. EXISTING ELECTRIC WATER HEATER TO BE REMOVED IN ITS ENTIRETY. ALL ASSOCIATED PIPING AND CONTROLS SHALL BE DEMOLISHED.

SCALE OF FEET

COMMONWEALTH OF MASSACHUSETTS
LASZLO F. HORSIK
MECHANICAL
No. 45466
REGISTERED PROFESSIONAL ENGINEER

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: D. Richardson CADD: D. Richardson TECH. REVIEW: DATE: 03/20/25	SUB SHEET NO. M1.0	TITLE OF SHEET MECHANICAL DEMOLITION PLAN EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 / 193869
PKG. NO. 154176
SHEET ___ OF ___

ABBREVIATIONS

CONTR	CONTRACTOR
CTE	CONNECT TO EXISTING
CW	COLD WATER
DN	DOWN
DWG	DRAWING
ETR	EXISTING TO REMAIN
EX	EXISTING
FT	FEET
GAL	GALLONS
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GW	GARAGE WASTE
HVAC	HEATING, VENTILATION AND AIR CONDITIONING
HW	HOT WATER
INV.	INVERT IN INCHES
IN	INCHES
IW	INDIRECT WASTE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
PD	PUMP DISCHARGE
PO	PUMP OUT LINE FOR GREASE TRAP
RM	ROOM
RR	RESTROOM
TYP	TYPICAL
V	VENT
WD	WATER DISPENSER

DRAWING NOTES

1	DEMOLITION NOTE
1	NEW WORK NOTE
	CONNECT TO EXISTING
	CAP EXISTING
	LIMIT OF DEMOLITION
1	DRAWING REVISION DESIGNATION
	REVISION CLOUD
1	DETAIL DESIGNATION NUMBER
P002	DETAIL DESIGNATION DRAWING

GENERAL NOTES

1. PIPE ROUTING IS SHOWN DIAGRAMMATICALLY ON PLUMBING DRAWINGS AND SHALL BE ADJUSTED FOR ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL CLEARANCES AND LIMITATIONS AND FOR EQUIPMENT SELECTION. FURNISH AND INSTALL ALL ELEMENTS REQUIRED TO COMPLETE INTENDED PIPING SYSTEMS WHETHER OR NOT THESE ELEMENTS ARE SPECIFICALLY SHOWN ON DRAWINGS OR CALLED FOR IN SPECIFICATIONS.
2. CONSULT ALL DRAWINGS. NOTE ARCHITECTURAL DETAILS AND ALL CONDITIONS THAT MAY AFFECT THE WORK AND CARE FOR SAME, WHILE EXECUTING THE WORK UNDER THIS SECTION. COOPERATE AND COORDINATE WITH THE ARCHITECT. ALL OTHER TRADES, BLDG, MANAGEMENT, AND THE OWNER.
3. IN EVENT OF CONFLICT BETWEEN OR AMONG SPECIFIED REQUIREMENTS AND PERTINENT CODES OR REGULATIONS, MORE STRINGENT REQUIREMENTS SHALL GOVERN.
4. TAKE ALL MEASURES REQUIRED TO PROTECT OWNER'S PROPERTY AND EQUIPMENT DURING COURSE OF WORK. SHOULD DAMAGE TO OWNER'S PROPERTY OR EQUIPMENT OCCUR, REPAIR DAMAGE PROMPTLY AT NO COST TO OWNER.
5. INSTALL ALL EQUIPMENT AND MATERIALS IN STRICT CONFORMANCE WITH EQUIPMENT AND MATERIALS MANUFACTURERS WRITTEN RECOMMENDATIONS.
6. LOCATIONS, PLUMBING MOUNTING HEIGHTS, AND DETAILS SHOWN ON ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER SAME SHOWN ON PLUMBING DRAWINGS AND DESCRIBED IN SECTIONS OF THE SPECIFICATIONS. WHEN ARCHITECTURAL DRAWINGS DO NOT SHOW PRECISE LOCATIONS OF DEVICES OR EQUIPMENT, LOCATE AS DIRECTED BY THE OWNER.
7. LOCATE PIPES TO FALL WITHIN PARTITIONS, WALLS, OR ROOF CAVITIES AND TO PRECLUDE FURRING, OTHER THAN THAT SHOWN ON ARCHITECTURAL DRAWINGS.
8. ALL PLUMBING EQUIPMENT, VALVES, ETC. SHALL BE INSTALLED WITH CLEARANCE FOR SERVICING AS RECOMMENDED BY THE MANUFACTURER.
9. REFER TO SCHEDULES AND SPECIFICATIONS FOR PLUMBING FIXTURES AND EQUIPMENT REQUIRING LOW VOLTAGE. COORDINATE ALL LOW VOLTAGE REQUIREMENTS, INCLUDING ALARMS, WITH CONTROLS CONTRACTOR.
10. REFER TO SCHEDULE AND SPECIFICATIONS FOR PLUMBING FIXTURES AND EQUIPMENT REQUIRING ELECTRICAL POWER. COORDINATE ALL POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.

PIPING LEGEND

CW	COLD WATER
HW	HOT WATER
HWC	HOT WATER CIRCULATION
S OR W	SANITARY OR WASTE
V	VENT
G	GAS
S OR W	SANITARY OR WASTE - BELOW FLOOR
ETR	EXISTING PIPE TO REMAIN
	RUN-OUT OFF TOP
	RUN-OUT OFF BOTTOM
	PIPE UP
	PIPE DOWN
	CAP ON END OF PIPE
	PIPE BREAK
CTE	CONNECT TO EXISTING
W&T	WASTE AND TRAP
	DIRECTION OF FLOW
	DIRECTION OF PITCH DOWN

GENERAL LEGEND

FD	FLOOR DRAIN
	BALL VALVE
EWH	ELECTRIC WATER HEATER
FS	FLOOR SINK

EQUIPMENT TAGS

FD-X	FLOOR DRAIN
KS-X	KITCHEN SINK
LAV-X	LAVATORY
MV-X	MIXING VALVE
WC-X	WATER CLOSET

PLUMBING EQUIPMENT COORDINATION

PLUMBING CONTRACTOR SHALL REFER TO THE ARCHITECTURAL, FIRE PROTECTION, MECHANICAL, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR LOCATIONS AND QUANTITIES OF EQUIPMENT RELATED TO EACH TRADE.

COMMONWEALTH OF MASSACHUSETTS
LASZLO F. HORSIK
MECHANICAL
No. 45466
REGISTERED PROFESSIONAL ENGINEER

SCALE OF FEET

A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: KR CADD: KR TECH. REVIEW: DATE: 03/20/25	SUB SHEET NO. P001	TITLE OF SHEET PLUMBING LEGEND, NOTES & SCHEDULES EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457/193869
PKG. NO. 154176
SHEET ___ OF ___

PLUMBING CONSTRUCTION GENERAL NOTES:

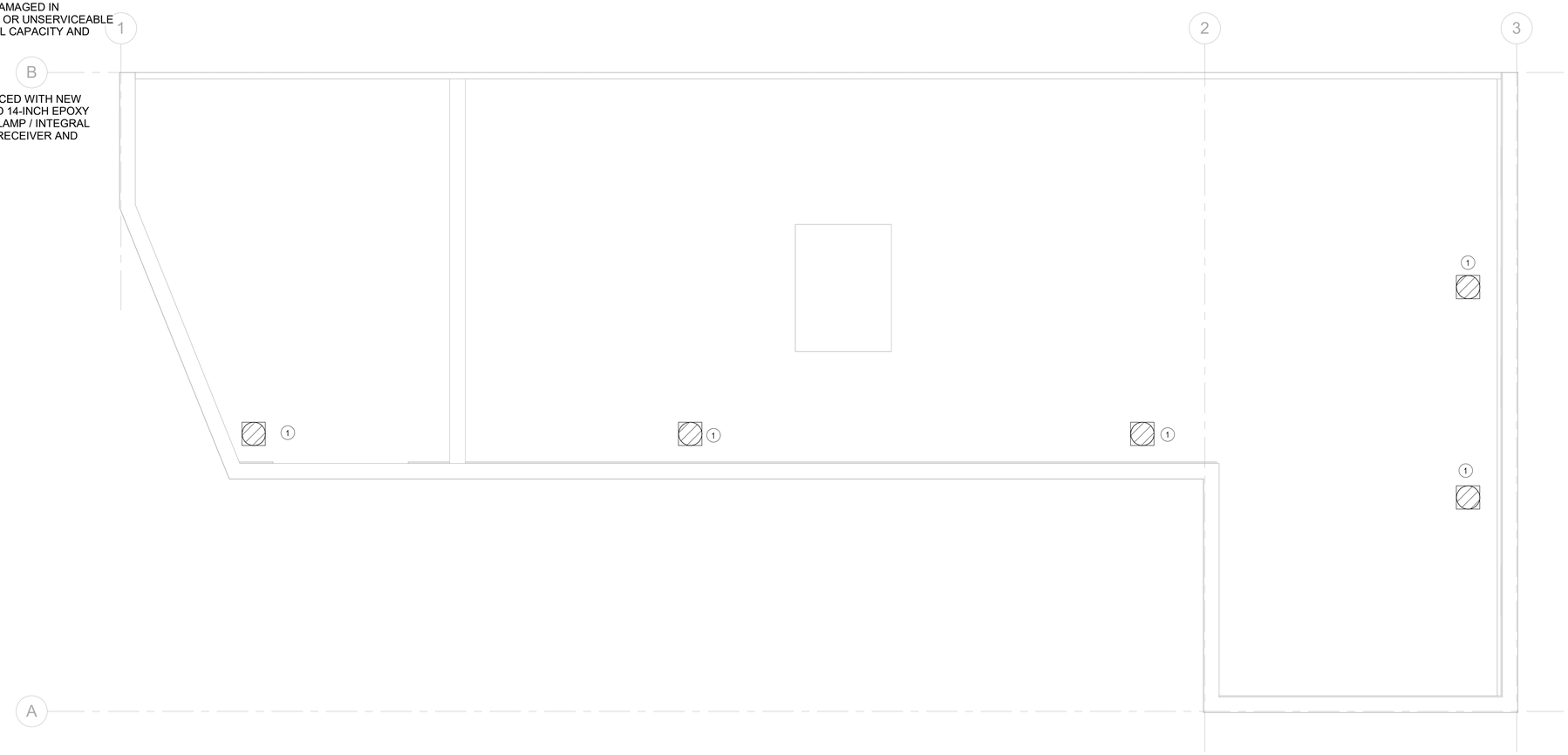
1. ALL EXISTING CONDITIONS CANNOT BE COMPLETELY DETAILED ON THE DRAWINGS. THESE INCLUDE, BUT ARE NOT LIMITED TO, PIPING, EQUIPMENT, ETC. CONTRACTOR SHALL SURVEY THE SITE AND INCLUDE ALL REQUIRED COSTS IN MAKING UP THEIR BID PROPOSAL.

2. DURING CONSTRUCTION, CONTRACTOR IS TO PROPERLY CAP, PLUG, AND COVER ALL OPENINGS IN PIPE LINES AND EQUIPMENT SO AS TO PREVENT THE ENTRANCE OF SAND, DIRT, AND FOREIGN MATTER. EACH SYSTEM OF PIPING SHALL BE FLUSHED (FOR THE PURPOSE OF REMOVING GRIT, DIRT, SAND, AND FOREIGN MATTER FROM THE PIPING), FOR AS LONG A TIME AS IS REQUIRED TO THOROUGHLY CLEAN THE SYSTEMS.

3. IF PIPING, INSULATION, OR EQUIPMENT TO REMAIN IS DAMAGED IN APPEARANCE OR IS UNSERVICEABLE, REMOVE DAMAGED OR UNSERVICEABLE PORTIONS AND REPLACE WITH NEW PRODUCTS OF EQUAL CAPACITY AND QUANTITY.

PLUMBING KEYED NOTES:

1. EXISTING ROOF DRAIN TO BE REMOVED AND REPLACED WITH NEW DRAINS. ROOF DRAIN SHALL BE WATTS RD-100-K-B-D 14-INCH EPOXY COATED CAST IRON ROOF DRAIN WITH FLASHING CLAMP / INTEGRAL GRAVEL STOP, (-K) DUCTILE IRON DOME, (-B) SUMP RECEIVER AND (-D) UNDERDECK CLAMP



1 Roof PLUMBING PLAN
1/4" = 1'-0"

SCALE OF FEET

COMMONWEALTH OF MASSACHUSETTS
LASZLO F. HORSIK
MECHANICAL
No. 45466
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A/E FIRM PRIME: SCHWARTZ/SILVER ARCHITECTS, INC. BOSTON, MA SUBCONTRACTOR: COSENTINI ASSOCIATES, INC. BOSTON, MA	DESIGNED: KR CADD: KR TECH. REVIEW: DATE: 03/20/25	SUB SHEET NO. P102	TITLE OF SHEET ROOF PLUMBING CONSTRUCTION PLAN EXTERIOR REHABILITATION REMEDIATION, & MECHANICAL UPGRADES BUILDING 1, CHARLESTOWN NAVY YARD

DRAWING NO. 457 / 193869
PKG. NO. 154176
SHEET ___ OF ___