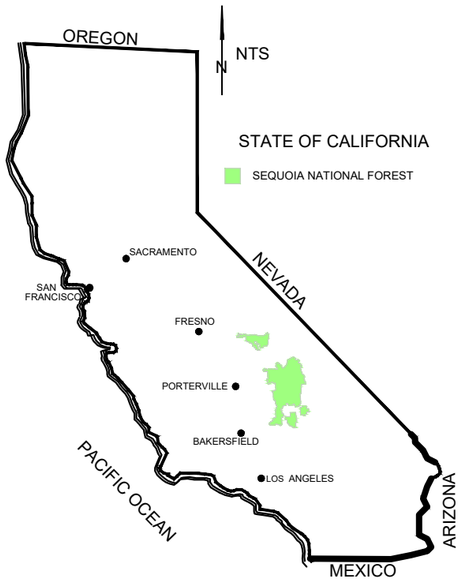
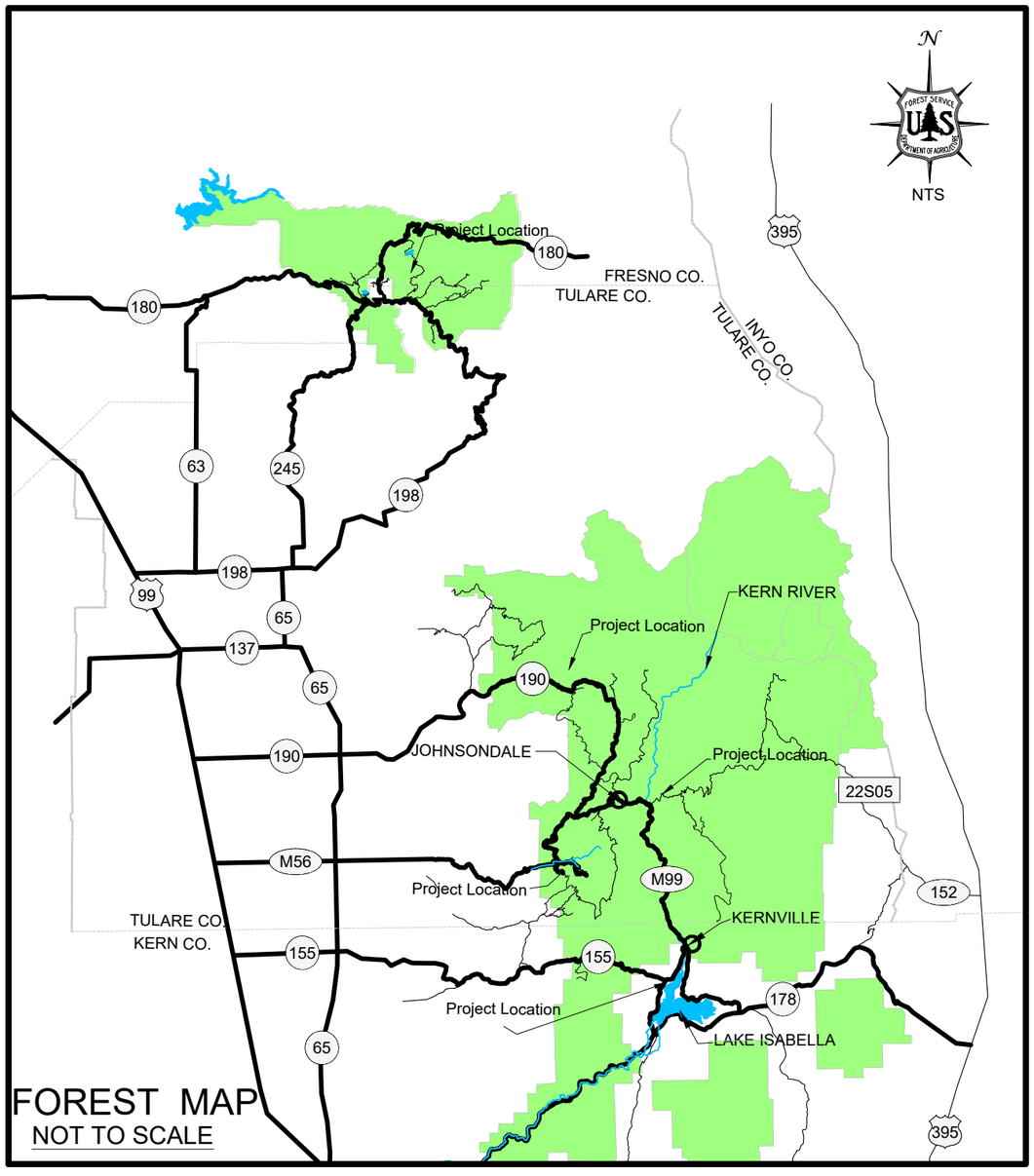
UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE-REGION FIVE

SEQUOIA NATIONAL FOREST

FY2023 ERFO REPAIRS PROJECT





FOREST MAP
NOT TO SCALE

LEGEND

- SEQUOIA NATIONAL FOREST
- PRIVATE LAND WITHIN N.F.
- HWY — U.S. HIGHWAY
- HWY — STATE HIGHWAY
- ROAD — COUNTY ROAD
- ROAD — FOREST ROAD
- NATIONAL FOREST BOUNDARY
- COUNTY LINE
- PRIMARY PAVED ROAD/ROUTE
- FOREST PAVED ROAD
- NATIVE SURFACE ROAD

INDEX TO SHEETS

NO.	DESCRIPTION
1	TITLE SHEET
2	GENERAL NOTES AND BMPS
3-4	VICINITY MAP
5-7	PROJECT AREAS
8	QUANTITIES
9-11	WORK LIST
12-13	DAVIS ROAD
14	LITTLE BOULDER
15-16	CRAWFORD ROAD
17	HUME LAKE TRAIL
18-19	FOX FARM ROAD
20-22	SHERMAN PASS
23-24	CAPINERO
25	JACK RANCH
26	CLEARING TYPICAL
27	ROLLING DIP TYPICAL
28	SPILLWAY INLET ASSEMBLY TYPICAL (SIA)
29	CULVERT TYPICAL
30	ROAD STRUCTURE TYPICAL (NATIVE SURFACE)
31	ROAD STRUCTURE TYPICAL (AGGREGATE)
32	HOT MIX

REVIEWED

JASON GONZALES	Digitally signed by JASON GONZALES Date: 2026.05.20 15:29:08 -07'00'
DESIGNER	DATE
JASON GONZALES	Digitally signed by JASON GONZALES Date: 2026.05.20 15:30:02 -07'00'
E.R / C.O.R.	DATE

APPROVAL

ABDULRAHIM CHAFI	Digitally signed by ABDULRAHIM CHAFI Date: 2026.05.26 10:03:31 -07'00'
FOREST ENGINEER	DATE
Nancy Kelly	Digitally signed by Nancy Kelly Date: 2026.05.26 10:44:22 -07'00'
DISTRICT RANGER	DATE
KYLE LANE	Digitally signed by KYLE LANE Date: 2026.05.26 11:46:37 -07'00'
DISTRICT RANGER	DATE
NANCY CHAPMAN	Digitally signed by NANCY CHAPMAN Date: 2026.06.08 13:04:55 -07'00'
FOREST SUPERVISOR	DATE
	Digitally signed by ANTHONY EDWARDS Date: 2026.06.08 13:12:36 -07'00'

Project: FY2023 ERFO REPAIRS PROJECT
District: HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
Title: TITLE SHEET

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT
Title: TITLE SHEET

Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 01 OF 32

GENERAL NOTES AND BMPS

N.T.S.

PROJECT STAKING:
GOVERNMENT WILL STAKE LOCATIONS OF NEW FEATURES AND SEGMENTS WHERE AGGREGATE BASE WILL BE PLACED. CONTRACTOR IS RESPONSIBLE TO LOCATE REMAINING FEATURES AND WORK ITEMS; INCIDENTAL TO OTHER PAY ITEMS. GOVERNMENT STAKING WILL BE PROTECTED AND PRESERVED BY CONTRACTOR DURING CONSTRUCTION.

DEVELOPING WATER SUPPLY AND WATERING:
POTENTIAL WATER SOURCES ARE SHOWN ON THE MAP. OTHER LOCAL WATER SOURCES IDENTIFIED FOR PROJECT USE BY THE CONTRACTOR, SHALL BE SUBMITTED TO THE CONTRACTING OFFICER FOR REVIEW AND APPROVAL IN WRITING, PRIOR TO THEIR USE IN PROJECT WORK. WATERING IS INCIDENTAL TO OTHER PAY ITEMS.

NO MORE THAN ONE HALF (½) THE STREAM FLOW SHALL BE TAKEN AT ANY ONE TIME FROM THE WATER SOURCES, APPROVED BY THE CONTRACTING OFFICER FOR PROJECT USE.

MOBILIZATION:
CLEANING OF EQUIPMENT FOR NOXIOUS WEEDS IS INCIDENTAL TO MOBILIZATION.

CLEARING AND GRUBBING AND SLASH TREATMENT:
CLEARING AND GRUBBING AS NEEDED FOR WORK IN THIS CONTRACT IS INCIDENTAL TO OTHER PAY ITEMS. LOGS WILL BE LIMBED, CUT TO LENGTHS, AND DECKED AT AREAS LOCATED AND APPROVED IN WRITING BY THE C.O.R. AS SPECIFIED IN SECTION 201. SLASH TREATMENT OF STUMPS, TOPS AND LIMBS WILL BE SCATTERING ON FILL SIDE OF THE ROADWAY.

CUT AND FILL SLOPES:
FINISHED EXCAVATION SLOPE RATIO IS 1:1 AND EMBANKMENT RATIO IS 1½:1.

METAL END SECTIONS, AND OVERSIDE DRAINS:
CONTRACTOR SHALL SUBMIT A FABRICATOR'S CERTIFICATION FOR ALL CONTRACTOR FURNISHED CULVERTS AND OVERSIDE DRAINS AS SPECIFIED BY SECTION 602, 606. METAL DRAINAGE FEATURES THAT ARE REMOVED AND NOT SPECIFIED FOR SALVAGE OR REUSE, SHALL BE DISPOSED OFF FOREST SERVICE LANDS IN AN APPROVED MANNER.

RIPRAP:
RIPRAP FOR DRAINAGE FEATURES IS INCIDENTAL TO THE DRAINAGE FEATURE PAY ITEM. ALL SUITABLE RIPRAP THAT MEETS PROJECT REQUIREMENTS AS SPECIFIED BY SECTION 705, MAY BE OBTAINED FROM COMMERCIAL SOURCES APPROVED IN WRITING BY THE C.O.R. GATHERING OF RIPRAP IN THE PROJECT AREA MUST HAVE APPROVAL BY THE C.O.R. PRIOR TO USE.

SURFACE AGGREAGE:
AGGREGATE BASE SHALL MEET SECTION 703 REQUIREMENTS AND BE OBTAINED FROM A COMMERCIAL SOURCE CURRENTLY APPROVED BY CALTRANS AS SPECIFIED BY SECTION 301. SUBGRADE SHALL BE INSPECTED AND APPROVED IN WRITING BY C.O.R. BEFORE PLACING AGGREGATE IS ALLOWED; AS SPECIFIED BY SECTION 301.

RECONDITIONING OF ROADWAY:
ALL SUITABLE NATIVE MATERIAL FROM THE RECONDITIONING OF THE ROADWAY SHALL BE USED IN RESHAPING OF THE EXISTING ROADBED, UNLESS SHOWN OTHERWISE ON THE DRAWINGS. THERE SHALL BE NO SIDE CASTING OF MATERIAL. CLEANING OF (CULVERTS & OVERSIDE DRAINS), RECONSTRUCTION OF ALL EXISTING DRAINAGE FEATURES (ROLLING DIPS, DITCHES), SHOULDER, TURN-OUTS, ROADBED SCARIFICATION AND ROADBED BLASTING AS REQUIRED IS INCIDENTAL TO ROAD RECONDITIONING. SUBGRADE FINISH SHALL COMPLY WITH SECTION 204. ALL ROADBED CROSS SLOPE TRANSITIONS SHALL BE 100 FT. MINIMUM IN LENGTH AND 2% MINIMUM CROSS SLOPE.

TRAFFIC CONTROL:
HAUL ROUTES FOR MATERIALS, WORK ZONES, AND ROAD IMPROVEMENTS OPERATIONS SHALL BE SIGNED IN ACCORDANCE WITH CURRENT MUTCD STANDARDS.

PROJECT ROADS MUST BE MAINTAINED OPEN FOR TRAFFIC WITH UP TO 30 MINUTE DELAYS DURING CONSTRUCTION.

A CONSTRUCTION SCHEDULE AND TEMPORARY TRAFFIC CONTROL SIGN PLAN SHALL BE SUBMITTED AND ACCEPTED BY THE C.O.R. PRIOR TO CONSTRUCTION.

DEMOLITION AND DISPOSAL:
TRASH GENERATED DUE TO CONSTRUCTION SHALL BE DISPOSED OFF FOREST SERVICE LAND.

GEOTEXTILE:
USE A NONWOVEN CLASS 1, TYPE A GEOTEXTILE WITH SPECIFICATIONS AS SHOWN ON TABLE 714-1.

ASPHALT AND ASPHALT GRINDINGS:
ASPHALT DEBRIS AND TRASH GENERATED DUE TO CONSTRUCTION SHALL BE DISPOSED OFF FOREST SERVICE LAND.

CONTRACTOR SHALL MAKE NOTE AND MARK ALL EXISTING ASPHALT AND CONCRETE PAVEMENT MARKING PRIOR TO PAVING OPERATIONS, AND REPAINT AFTER PAVING OPERATIONS.

MINIMUM AND MAXIMUM TEMPERATURES FOR HOT MIX ASPHALT DELIVERY, PLACEMENT, AND COMPACTION SHALL BE MET PER SPECIFICATIONS. VEHICLES HAULING HOT MIX ASPHALT SHALL HAVE THE LOADS TARPED FOR DELIVERY TO THE SITE.

CLEARING, REMOVAL OF LOOSE MATERIAL, AND SLOUGH TO ROAD AND PARKING LOT SHOULDERS WHERE REQUIRED FOR PATCH PAVE, FULL DEPTH PATCH, AND OVERLAY OPERATIONS, IS INCIDENTAL TO SECTION 403, 418 PAY ITEMS. ASPHALT GRINDINGS SHALL BE STOCKPILED AT DESIGNATED AREAS. EXCESS GRINDING NOT USED FOR THE PROJECT SHALL EB SPREAD OUT AND LEVELED. DESIGNATED AREAS ARE TO BE APPROVED BY THE C.O.R.

BEST MANAGEMENT PRACTICES TO BE INCORPORATED WITH THIS PROJECT

BMPS AS DESCRIBED IN THE "NATIONAL BEST MANAGEMENT PRACTICES FOR WATER QUALITY MANAGEMENT ON NATIONAL FOREST SYSTEM LANDS" HAVE BEEN EFFECTIVE IN PROTECTING BENEFICIAL USES. VISUAL FIELD SURVEYS HAVE INDICATED THAT THESE BMPS, WHERE PROPERLY IMPLEMENTED, HAVE ADEQUATELY PROTECTED AND MINIMIZED THE IMPACTS TO ACCEPTABLE LEVELS. PAST DEFICIENCIES IN THE IMPLEMENTATION OF THESE BMPS HAVE BEEN THE CAUSE FOR THE EROSION PROBLEMS ASSOCIATED TO ROADS AND SKID TRAILS.

THE PURPOSE OF THIS SET OF BEST MANAGEMENT PRACTICES (BMPS) IS TO AVOID, MINIMIZE, OR MITIGATE ADVERSE EFFECTS TO SOIL, WATER QUALITY, AND IN-STREAM RIPARIAN RESOURCES THAT MAY RESULT FROM ROAD MANAGEMENT ACTIVITIES. ROAD MANAGEMENT ACTIVITIES INCLUDE TRAVEL ROUTE PLANNING, DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, RECONSTRUCTION, STORAGE, AND DECOMMISSIONING. OTHER TRANSPORTATION-SYSTEM-RELATED ACTIVITIES INCLUDE STREAM AND WATERBODY CROSSINGS, SNOW REMOVAL, PARKING AREAS, AND EQUIPMENT REFUELING AND SERVICING AREAS.

- FAC-2. FACILITY CONSTRUCTION AND STORMWATER CONTROL

OBJECTIVE: AVOID, MINIMIZE, OR MITIGATE ADVERSE EFFECTS TO SOIL, WATER QUALITY, AND RIPARIAN RESOURCES BY CONTROLLING EROSION AND MANAGING STORMWATER DISCHARGE ORIGINATING FROM GROUND DISTURBANCE DURING CONSTRUCTION OF DEVELOPED SITES.

- ROAD-7. STREAM CROSSINGS

OBJECTIVE: AVOID, MINIMIZE, OR MITIGATE ADVERSE EFFECTS TO SOIL, WATER QUALITY, AND RIPARIAN RESOURCES WHEN CONSTRUCTING OR MAINTAINING TEMPORARY AND PERMANENT WATERBODY CROSSINGS.

- ROAD-9. PARKING AND STAGING AREAS

OBJECTIVE: AVOID, MINIMIZE, OR MITIGATE ADVERSE EFFECTS TO SOIL, WATER QUALITY, AND RIPARIAN RESOURCES WHEN CONSTRUCTING AND MAINTAINING PARKING AND STAGING AREAS.

- ROAD-10. EQUIPMENT REFUELING AND SERVICING

OBJECTIVE: AVOID OR MINIMIZE ADVERSE EFFECTS TO SOIL, WATER QUALITY, AND RIPARIAN RESOURCES FROM FUELS, LUBRICANTS, CLEANERS, AND OTHER HARMFUL MATERIALS DISCHARGING INTO NEARBY SURFACE WATERS OR INFILTRATING THROUGH SOILS TO CONTAMINATE GROUNDWATER RESOURCES DURING EQUIPMENT REFUELING AND SERVICING ACTIVITIES.

- WATUSES-2.5. WATER SOURCE DEVELOPMENT AND UTILIZATION

OBJECTIVE: TO SUPPLY WATER FOR ROAD CONSTRUCTION, MAINTENANCE, DUST ABATEMENT, FIRE PROTECTION, AND OTHER MANAGEMENT ACTIVITIES WHILE PROTECTING AND MAINTAINING WATER QUALITY,

- WATUSES-3. ADMINISTRATIVE WATER DEVELOPMENTS

OBJECTIVE: AVOID, MINIMIZE, OR MITIGATE ADVERSE EFFECTS TO SOIL, WATER QUALITY, AND RIPARIAN RESOURCES WHEN DEVELOPING AND OPERATING WATER SOURCES FOR FOREST SERVICE ADMINISTRATIVE AND RESOURCE MANAGEMENT PURPOSES.

NOTE: PLEASE REFER TO THE "NATIONAL BEST MANAGEMENT PRACTICES FOR WATER QUALITY MANAGEMENT ON NATIONAL FOREST SYSTEM LANDS" APRIL 2012, FULL DESCRIPTION OF THE BMPS LISTED ABOVE.

FY2023 ERFO REPAIRS PROJECT
Project
HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District
GENERAL NOTES AND BMPS
TITLE

SEQUOIA
NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

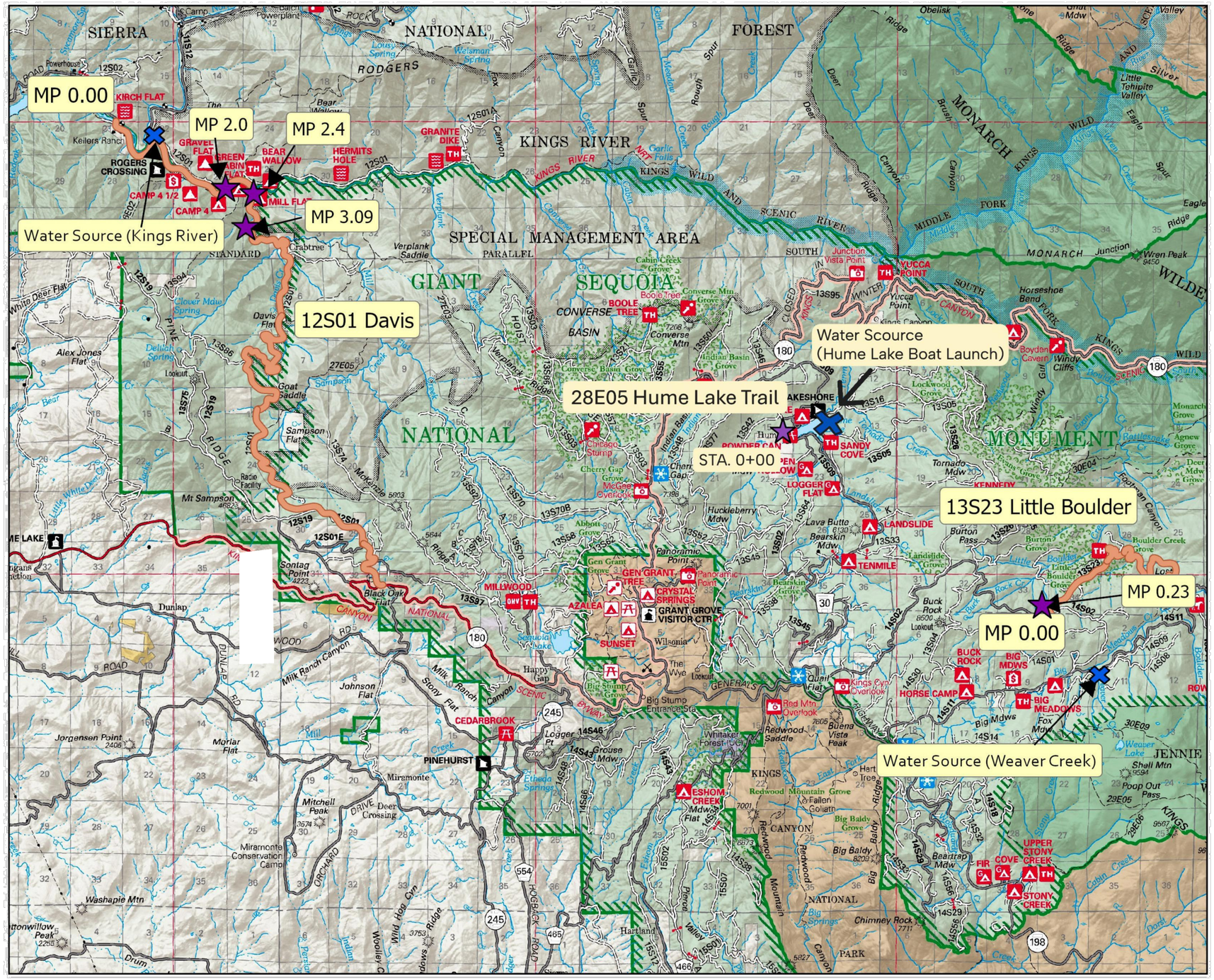
No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT
Title
GENERAL NOTES AND BMPS

Drawn By
J. GONZALES
Date
DATE
Scale
NONE
Sheet
02
OF 32

Vicinity Map

N.T.S.



SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

FY2023 ERFO REPAIRS PROJECT (Project)

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS (District)

VICINITY MAP (TITLE)

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT

Title: VICINITY MAP

Drawn By: J. GONZALES

Date: DATE

Scale: NONE

Sheet: 03 OF 32

Vicinity Map

N.T.S.

FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

VICINITY MAP 2
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

FOREST SERVICE · U.S. · DEPARTMENT OF AGRICULTURE

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
VICINITY MAP 2

Drawn By
J. GONZALES

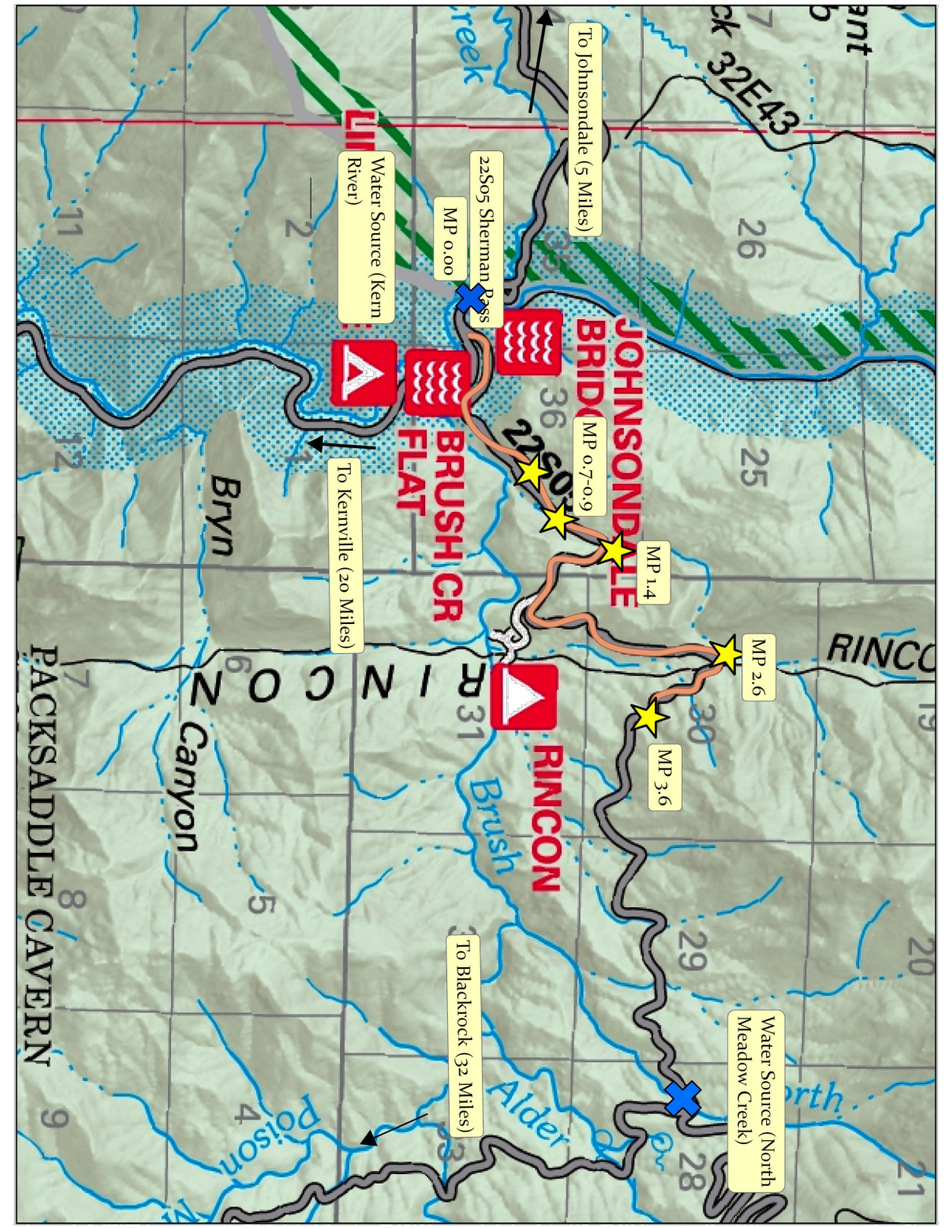
Date
DATE

Scale
NONE

Sheet
04
OF 32

20S03 Fox Farm and 22S05 Sherman Pass Project Areas

N.T.S.



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

PROJECT AREA 1
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
PROJECT AREA 1

Drawn By
J. GONZALES

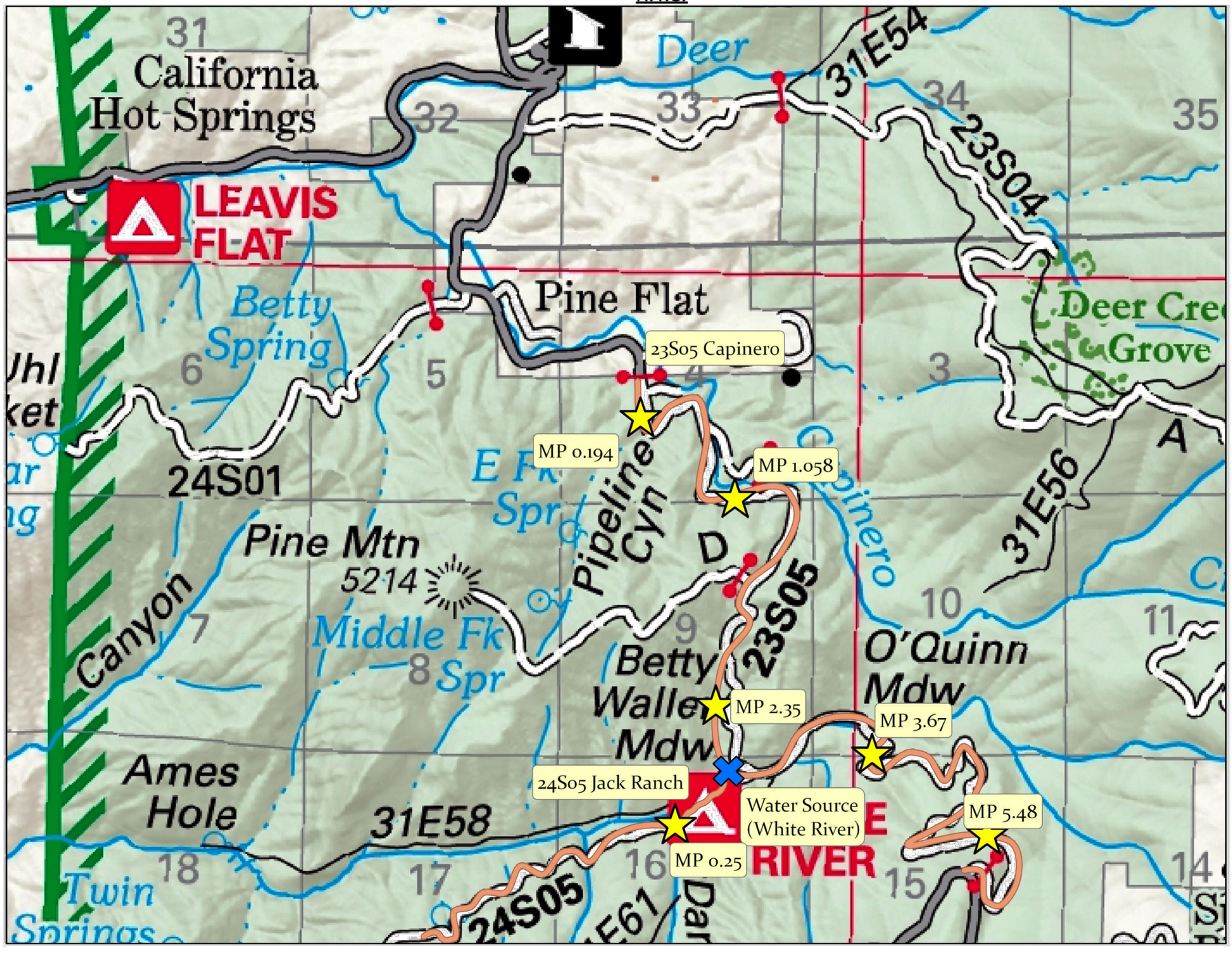
Date
DATE

Scale
NONE

Sheet
05
OF 32

23S05 Capinero , 24S05 Jack Ranch

N.T.S.



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

PROJECT AREA 2
Title

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

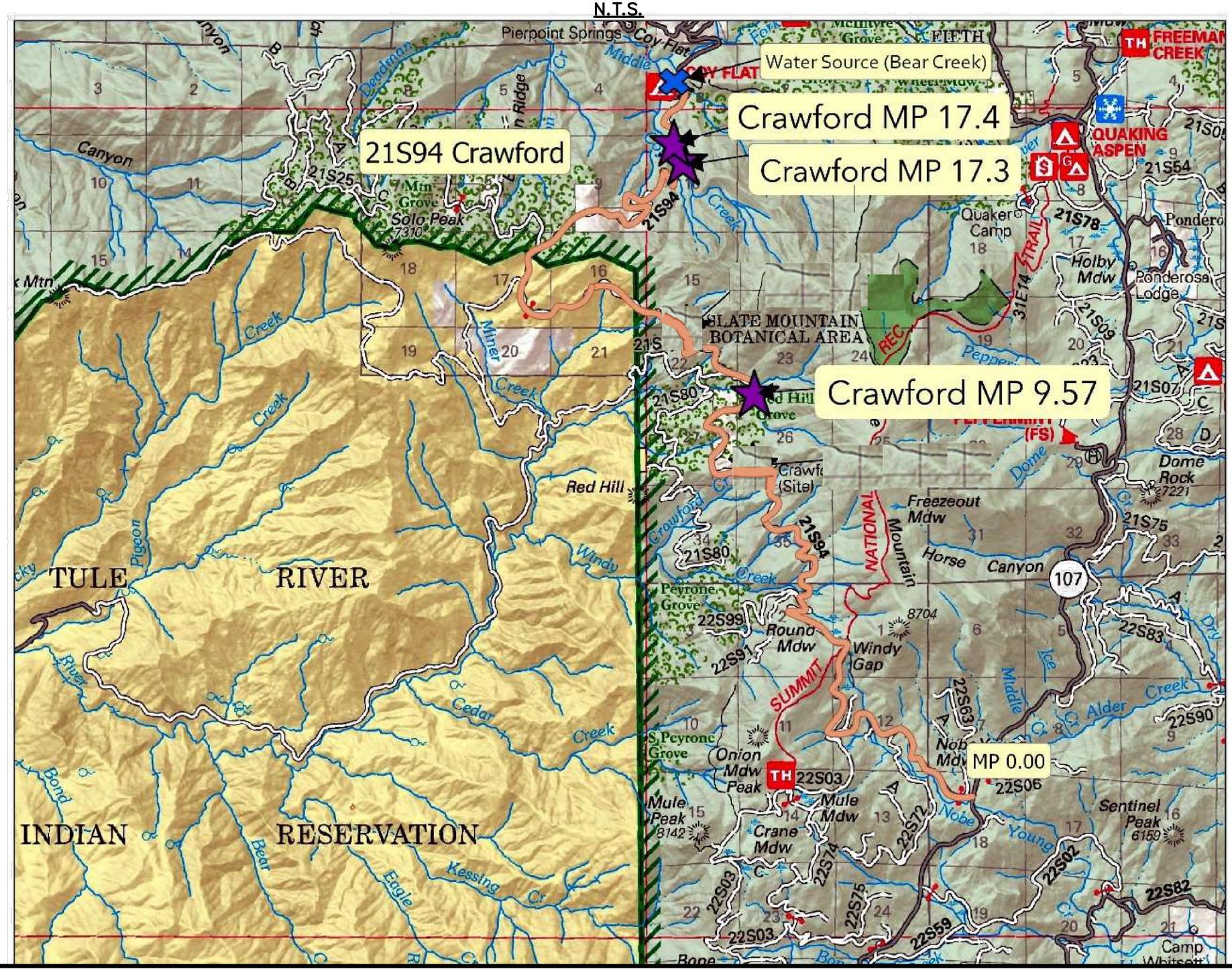
Project: FY2023 ERFO REPAIRS PROJECT

Title: PROJECT AREA 2

Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 06 OF 32

Crawford Road

N.T.S.



SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT

Title: PROJECT AREA 3

Drawn By: J. GONZALES

Date: DATE

Scale: NONE

Sheet: 07 OF 32

QUANTITIES

WORK ITEMS					ERFO Funds															
PAY ITEM NO.	ITEM DESCRIPTION	METHOD OF MEASURE	UNIT	TOTALS	SITES															
					1 2 S 0 1	1 2 S 0 1	1 2 S 0 1	1 3 S 2 3	2 1 S 9 4	2 1 S 9 4	2 1 S 9 4	2 8 E 0 5	2 0 S 0 3	2 0 S 0 3	2 2 S 0 5	2 2 S 0 5	2 2 S 0 5	2 3 S 0 5	2 3 S 0 5	2 3 S 0 5	2 4 S 0 5
					MP 2.0	MP 2.4	MP3.09	MP 0.23	MP 9.57	MP 17.3	MP 17.4	MP 0.02	MP.7-1.34	MP 4.04	MP .7-.9	MP 2.6	MP 1.4	MP 1.94	MP 2.3-2.4	MP 3.67	MP 5.48	MP 0.25
151(01)	Mobilization	LSQ	LS	18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
156(01)	Traffic Control	LSQ	LS	4			1	1								1			1			
204(01)	Slope Failure Repair	AQ	CY	1837			30	229					432	524	144	197	133			148		
204(02)	Remove Slide Debris and Reestablish Ditch	LSQ	LS	95												95						
204(03)	Earthwork to Complete Permanent Repair (see contract drawings)	LSQ	LS	1																		1
251(01)	Armor Rolling Dip with 3" Rock	AQ	Ton	2										2								
204(03)	Trail Prism Repair	AQ	CY	30								30										
252(01)	Reconstruct Dry Stack Rock Retaining Wall.	AQ	SY	46			46															
252(01)	Construct Class 4 Grouted Riprap Headwall	AQ	CY	28													28					
301(01)	Aggregate Base, Grading 3/4 inch Max, Type CalTrans Class 2 Base	AQ	Ton	315.3	28	21	4	11		5.8	8.5	21	77.2	16	11.2	3.3	21	22	11.3	23	31	
301(01)	Recondition Ditch	LSQ	LF	600										200	400							
303(01)	Road Reconditioning	LSQ	LS	2	1	1																
413(01)	Asphalt Pavement Milling, 2"-3" Existing Depth, 1" minus material and stockpile	AQ	SY	96								96										
418(01)	Asphalt Concrete Pavement, Base and Subgrade. Full Depth Patch Type 1 (FDP-1) with Hot Asphalt Concrete Mixture 3/4" Asphalt; Type 1 Caltrans Approved Mix Design.	AQ	Ton	10					10													
418(02)	Asphalt Concrete Pavement Patching, Full Depth Patch Type 2 (FDP-2) with Hot Asphalt Concrete Mixture 3/4" Asphalt; Type 1 Caltrans Approved Mix Design	AQ	Ton	72.7				12				23			12.1	3.6	22					
606(01)	Furnish & Install 12" Type 2 Spillway Inlet Assembly 12 ga w/ Rectangular corrugated 12" 16 ga Flume Flex neck 16 ga Anchor Stakes & Riprap	AQ	EA	3									1		2							
606(02)	Relay Existing Overside Drain	AQ	EA	2									1	1								
607(01)	Clear debris at 18" CMP inlet and outlet.	AQ	LF	20								20										
607(01)	Clean And Flush CMP	AQ	EA	2											1						1	
607(02)	Excavate and Relay 60" Dia CMP	AQ	LF	75													75					
607(03)	Reinstall Existing 60" Culvert Downdrain with New Stakes	AQ	LF	45													45					
607(04)	Reinstall Exisiting 24" Culvert Half Round Downdrain with New Stakes	AQ	EA	1												1						

FY2023 ERFO REPAIRS PROJECT (Project)

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS (District)

QUANTITIES SHEET (TITLE)

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

FOREST SERVICE — DEPARTMENT OF AGRICULTURE

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT

Title: QUANTITIES SHEET

Drawn By: J. GONZALES

Date: DATE

Scale: NONE

Sheet: 08 OF 32

WORK LIST

N.T.S.

Davis Road Site 1 – Road 12S01	
Mile Post	Description (RP = Reference Point)
0.000	Bailey Bridge, RP.
2.0	Recondition Roadway, Place Aggregate 12 ft wide by 140' Long and 3" thickness. (approximately 28 Tons, as marked in the field).

Davis Road Site 2 – Road 12S01	
Mile Post	Description (RP = Reference Point)
0.000	Bailey Bridge, RP.
2.4	Recondition Roadway, Place Aggregate 12 ft wide by 105' Long and 3" thickness. (approximately 21 Tons, as marked in the field).

Davis Road Site 3 – Road 12S01	
Mile Post	Description (RP = Reference Point)
0.000	Bailey Bridge, RP.
2.7	End of ML 3 section, RP.
3.09	Back Fill (30 C.Y.) with Compaction Method 2. Reconstruct Dry Stack Rock Retaining Wall (46 SY). Place Aggregate 3 ft wide by 82' Long and 3" thickness. (approximately 4 Tons, as marked in the field).

Little Boulder-Road 13S23	
Mile Post	Description (RP = Reference Point)
0.000	FS Road 14S02, RP.
0.23	Excavate and remove trees from temporary roadway backfill. Backfill (229 CY) with Compaction Method 2. Place Aggregate base 110' Long by 6' wide average and 3" thickness (approximately 11 Tons, as marked in the field). Patch Segment with asphalt (approximately 12 Tons, as marked in the field). Pay Item 418(02).

Crawford Site 1 - Road 21S94	
Mile Post	Description (RP = Reference Point)
0.000	CO RD 107, RP.
9.57	Asphalt Concrete Pavement, Base, and Subgrade Full Depth Patch Type 1 (FDP-1) with Hot Asphalt Concrete Mixture 3/4" Asphalt; Type 1 Caltrans Approved Mix Design. Remove & Replace Asphalt 14'W x 40' L x 0.25' Th with subgrade repair. (approximately 10 Tons, as marked in the field). Pay Item 418(01).

Crawford Site 2 - Road 21S94	
Mile Post	Description (RP = Reference Point)
0.000	CO RD 107, RP.
17.3	Place Aggregate 14 ft wide by 25' Long and 3" thickness. (approximately 5.8 Tons), as marked in the field).

Crawford Site 3 - Road 21S94	
Mile Post	Description (RP = Reference Point)
0.000	CO RD 107, RP.
17.4	Place Aggregate 14 ft wide by 14' Long and 3" thickness and 7ft wide by 45' Long and 3" thickness (approximately 8.5 Tons), as marked in the field).

Hume Lake Trail Site 1- Trail 28E05	
STA.	Description (RP = Reference Point)
0+00	Powder Can Picnic area Hume Lake Trail sign, RP.
0+90	Begin Pavement milling 4' average width. Pay Item 413(01). Saw cut to match. Begin asphalt pavement and aggregate base replacement 3" depth each 5' width. Pay Items 301(01) and 418(02).
1+56	End Asphalt Milling.
1+95	Begin Asphalt Milling 5' average width
2+62	Begin Trail Prism Reconstruction(30CY). Pay Item 204(03).
3+00	Clear 10' upstream and 10' downstream of CMP. Pay Item 607(01). Clean and flush CMP. Incidental to Pay Item 607(01)
3+05	End Trail Prism Reconstruction.
3+15	End Asphalt and Aggregate replacement. End Asphalt Milling. Saw cut to match.

Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 09 OF 32

Title: WORK LIST 1
Project: FY2023 ERFO REPAIRS PROJECT

No. | Revision/Issue | Date

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

WORK LIST 1
TITLE

WORK LIST

N.T.S.

Fox Farm Site 1 – Road 20S03	
Mile Post	Description (RP = Reference Point)
0.000	CO RD 208, RP.
1.03	Place Aggregate 14ft wide and 3" thickness for 212 feet in length. (approximately 49 Tons, as marked in the field).
1.107	Reconstruct fill (129 C.Y.) with Compaction Method 2. Place Aggregate 14ft wide average and 3" thickness for 89 feet in length. (approximately 20.7 Tons, as marked in the field). Reconstruct rolling Dip and Install new Overside Drain, Pay Item 606(01)
1.173	Reconstruct fill (35 C.Y.) with Compaction Method 2. Relay Existing OSD. Place Aggregate 4ft wide average and 3" thickness for 52 feet in length. (approximately 23.4 Tons, as marked in the field).
1.306	Reconstruct fill (68 C.Y.) with Compaction Method 2.
1.344	Reconstruct fill (67 C.Y.) with Compaction Method 2. Relay Existing OSD. Place Aggregate 4ft wide average and 3" thickness for 27 feet in length. (approximately 1.8 Tons, as marked in the field).
5.1	Private Property, RP.

Fox Farm Site 2– Road 22S05	
Mile Post	Description (RP = Reference Point)
0.000	CO. RD. M99, RP.
4.04	Excavate Reconstruct fill (525 C.Y.) with Compaction Method 2. Place Aggregate base 80 ft long by 12 ft wide average and 3" thickness (approximately 16 Tons, as marked in the field). Reestablish ditch for 100 ft on each side of failure Reset SIA and reconstruct rolling dip. Pay Iten 607(05). Armor Rolling Dio with 3" rock (2 Tons). (see 251 Rip rap in contract specifications).

Sherman Pass Site 1– Road 22S05	
Mile Post	Description (RP = Reference Point)
0.000	CO. RD. M99, RP.
0.7	Reconstruct fill (83 C.Y.) with Compaction Method 2. Place Aggregate base 25' Long by 6' wide average and 3" thickness (approximately 7 Tons, as marked in the field). Patch Segment with asphalt (approximately 8 Tons, as marked in the field). Pay Item 418(02). Install new SIA with 20 ft of Flume. Pay Item 606(01).
0.8	Reconstruct fill (41 C.Y.) with Compaction Method 2. Place Aggregate base 25' Long by 6' wide average and 3" thickness (approximately 2.5 Tons, as marked in the field). Patch Segment with asphalt (approximately 2.7 Tons, as marked in the field). Pay Item 418(02).
0.9	Reconstruct fill (20 C.Y.) with Compaction Method 2. Place Aggregate base 15' Long by 6' wide average and 3" thickness (approximately 1.5 Tons, as marked in the field). Patch Segment with asphalt (approximately 1.6 Tons, as marked in the field). Pay Item 418(02). Install New SIA with 20' of Flume. Pay Item 606(01). Clean and Flush Culvert and Recondition Ditch for 400'. Pay Items 607(01) and 303(01).

Sherman Pass Site 2– Road 22S05	
Mile Post	Description (RP = Reference Point)
0.000	CO. RD. M99, RP.
1.4	Excavate and relay 60" Dia x 75' CMP. Pay item 607(02). Reinstall 60" Dia x 45' Down drain. Pay item 607(03). Reconstruct fill (133 C.Y.) with Compaction Method 2. Place Aggregate base (approximately 21 Tons, as marked in the field). Patch Segment with asphalt (approximately 22 Tons, as marked in the field). Pay Item 418(02). Armor culvert inlet with grouted class 4 rip rap (approximately 28 CY as marked in field). Pay item 252(01).

Sherman Pass Site 3– Road 22S05	
Mile Post	Description (RP = Reference Point)
0.000	CO. RD. M99, RP.
2.6	Reconstruct fill (197 C.Y.) with Compaction Method 2. Place Aggregate base 25' Long by 8' wide average and 3" thickness (approximately 3.3 Tons, as marked in the field). Patch Segment with asphalt (approximately 3.6 Tons, as marked in the field). Pay Item 418(02). Remove Slide Debris and Reestablish Ditch (95 CY). Pay Item 204(02). Reinstall existing 24" Dia culvert half round downdrain with new stakes. Pay Item 607(04)

Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 10 OF 32

Title: WORK LIST 2
Project: FY2023 ERFO REPAIRS PROJECT

No. | Revision/Issue | Date

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

FY2023 ERFO REPAIRS PROJECT
Project
HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District
WORK LIST 2
TITLE

WORK LIST

N.I.S.

Capinero Site 1– Road 23S05	
Mile Post	Description (RP = Reference Point)
0.000	CO. RD. M56, RP.
0.194	Shape and compact subgrade. Place Aggregate base 95’ Long by 14’ wide average and 3” thickness (approximately 22 Tons, as marked in the field).
6.48	CO. RD M9, RP.

Capinero Site 3– Road 23S05	
Mile Post	Description (RP = Reference Point)
0.000	CO. RD. M56, RP.
2.36	Shape and compact subgrade. Place Aggregate base 39 Long by 14’ wide average and 3” thickness (approximately 9.1 Tons, as marked in the field).
2.38	Shape and compact subgrade. Place Aggregate base 17’ Long by 8’ wide average and 3” thickness (approximately 2.2 Tons, as marked in the field).
6.48	CO. RD M9, RP.

Capinero Site 4– Road 23S05	
Mile Post	Description (RP = Reference Point)
0.000	CO. RD. M56, RP.
3.67	Excavate top 5’ of settled fill. Recompact and Reconstruct fill (148 C.Y.) with Compaction Method 2. Place Aggregate base 95’ Long by 14’ wide average and 3” thickness (approximately 23 Tons, as marked in the field).
6.48	CO. RD M9, RP.

Capinero Site 5– Road 23S05	
Mile Post	Description (RP = Reference Point)
0.000	CO. RD. M56, RP.
5.48	Shape and compact subgrade. Place Aggregate base 135’ Long by 14’ wide average and 3” thickness (approximately 31 Tons, as marked in the field). Clean and Flush CMP, Pay Item 607(01)
6.48	CO. RD M9, RP.

Jack Ranch Site 1- Road 24S05	
Mile Post	Description (RP = Reference Point)
0.000	FS Road 23S05, RP.
0.25	Remove Debris and compact fill slope. Shape and recompact earth berm on fill side. Fill washout under overside drain. Raise grade of filled area and shape road surface to drain into overside drain. Clean and reshape ditch for 100’ to culvert inlet. Pay Item 204(04).
2.75	FS Boundary, RP.

Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 11 OF 32

Title: WORK LIST 3
Project: FY2023 ERFO REPAIRS PROJECT

No. | Revision/Issue | Date

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

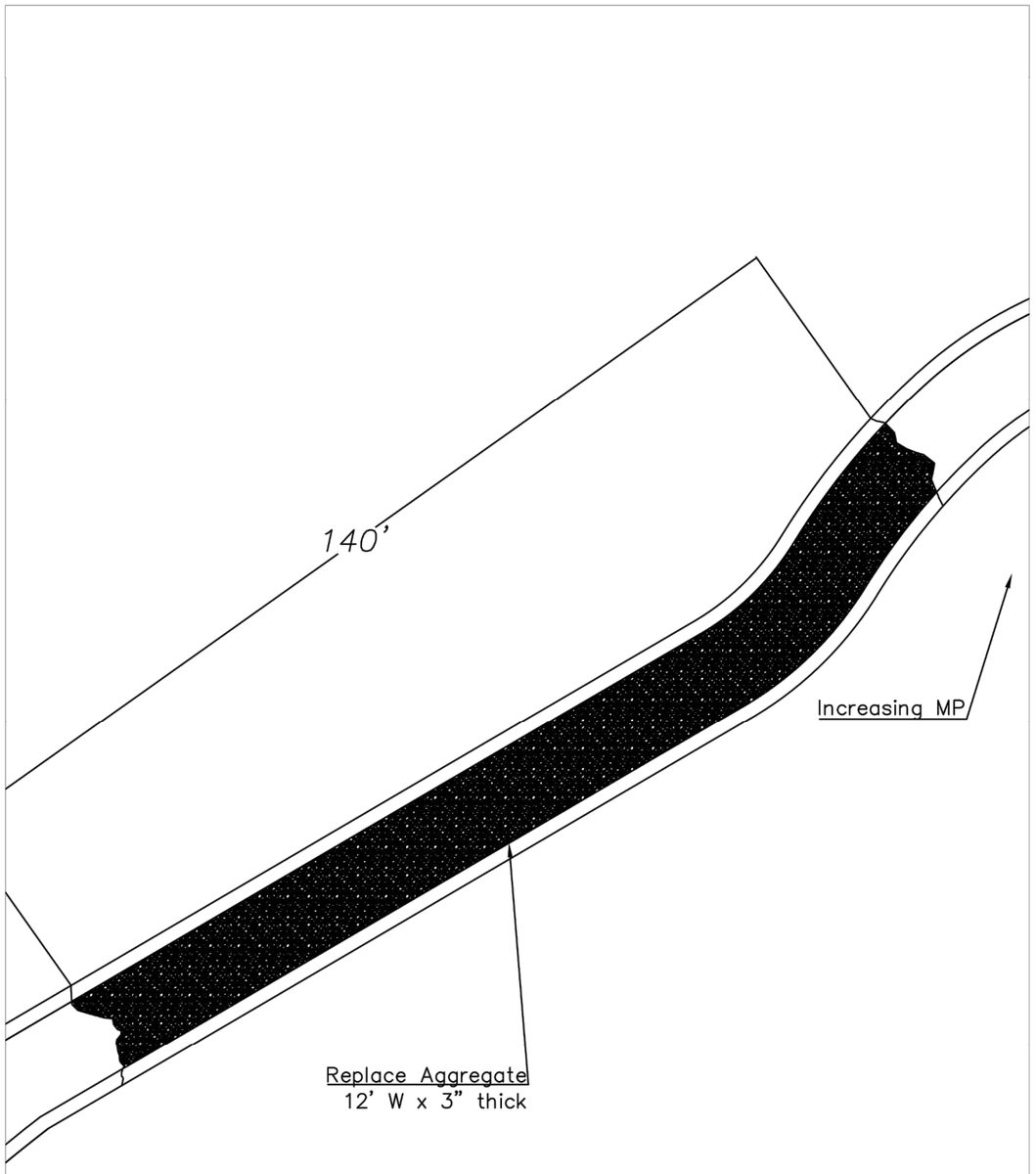
FY2023 ERFO REPAIRS PROJECT
Project

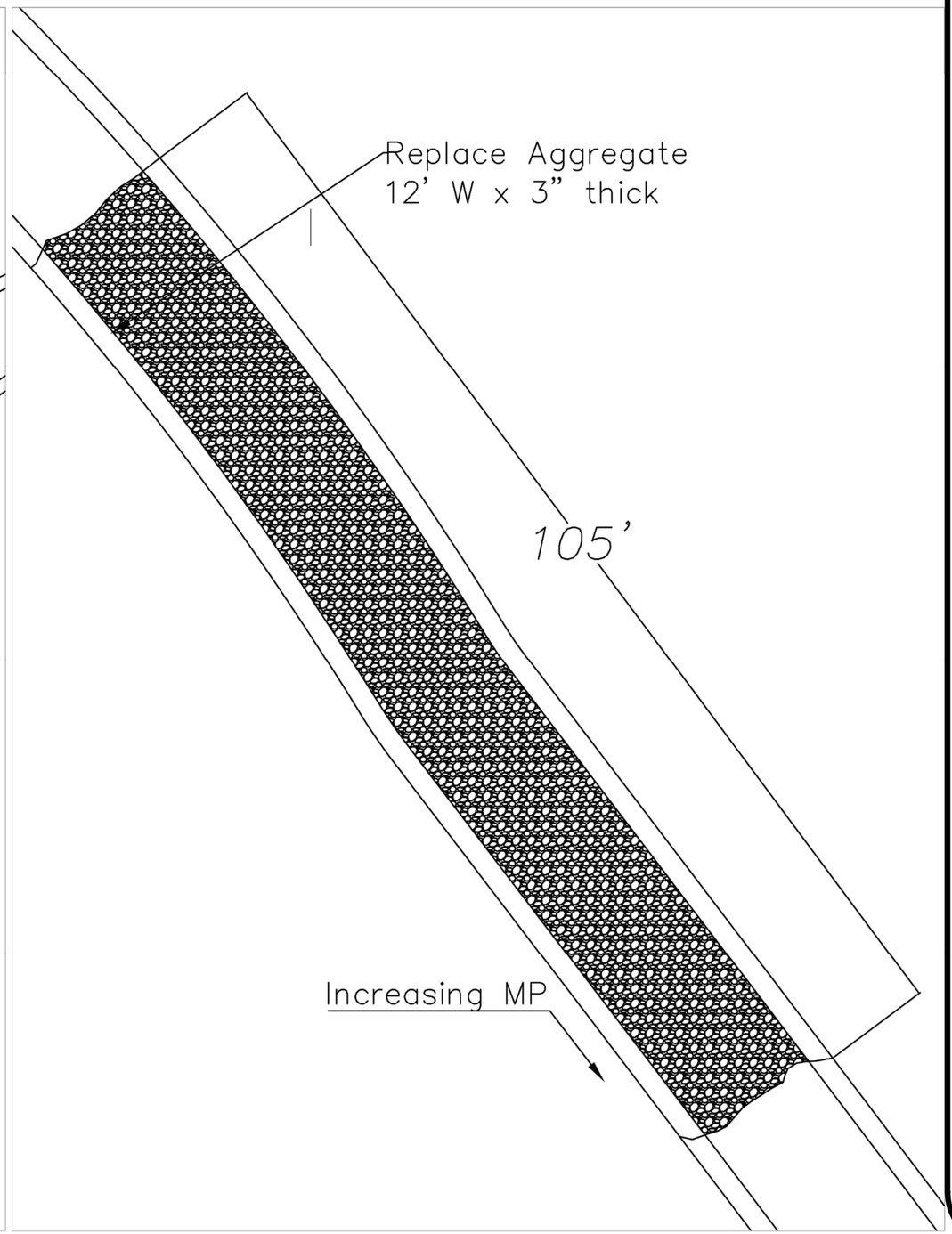
HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

WORK LIST 3
TITLE

12S01 Davis MP 2.0 (Left) and MP 2.4 (Right) Repairs Plan View

N.T.S.





FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

DAVIS MP 2.0 & 2.4
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
DAVIS MP 2.0 & 2.4

Drawn By
J. GONZALES

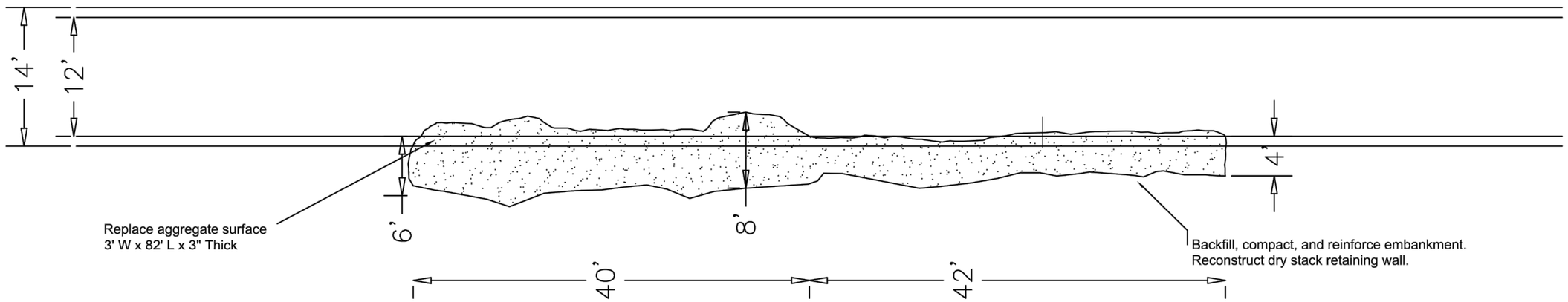
Date
DATE

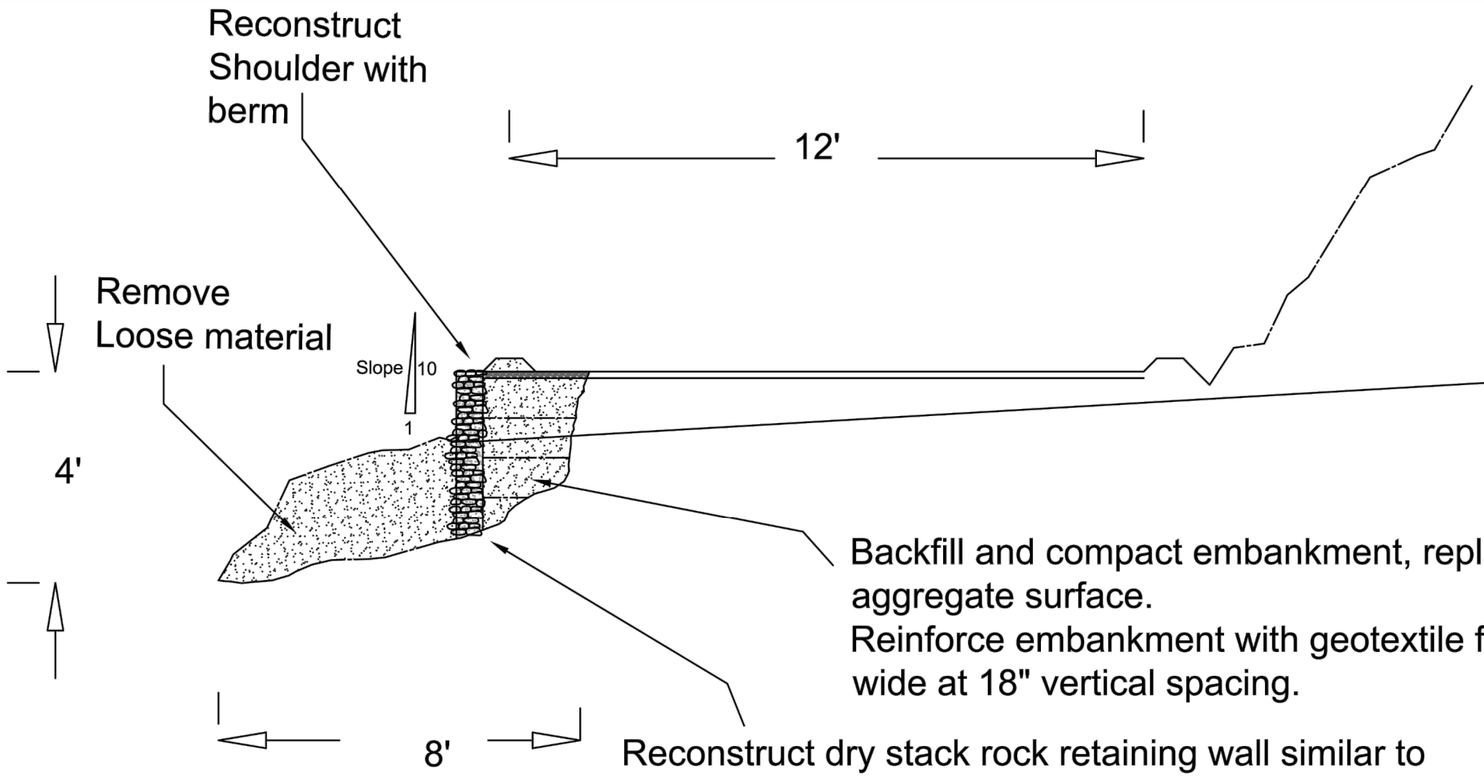
Scale
NONE

Sheet
12
OF 32

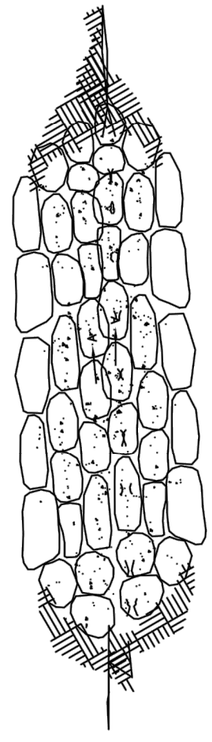
12S01 Davis MP 3.09 Plan View and Cross Section

N.T.S.





DRY STACK ROCK WALL
ELEVATION VIEW



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

DAVIS MP 3.09
TITLE

SEQUOIA
NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
DAVIS MP 3.09

Drawn By
J. GONZALES

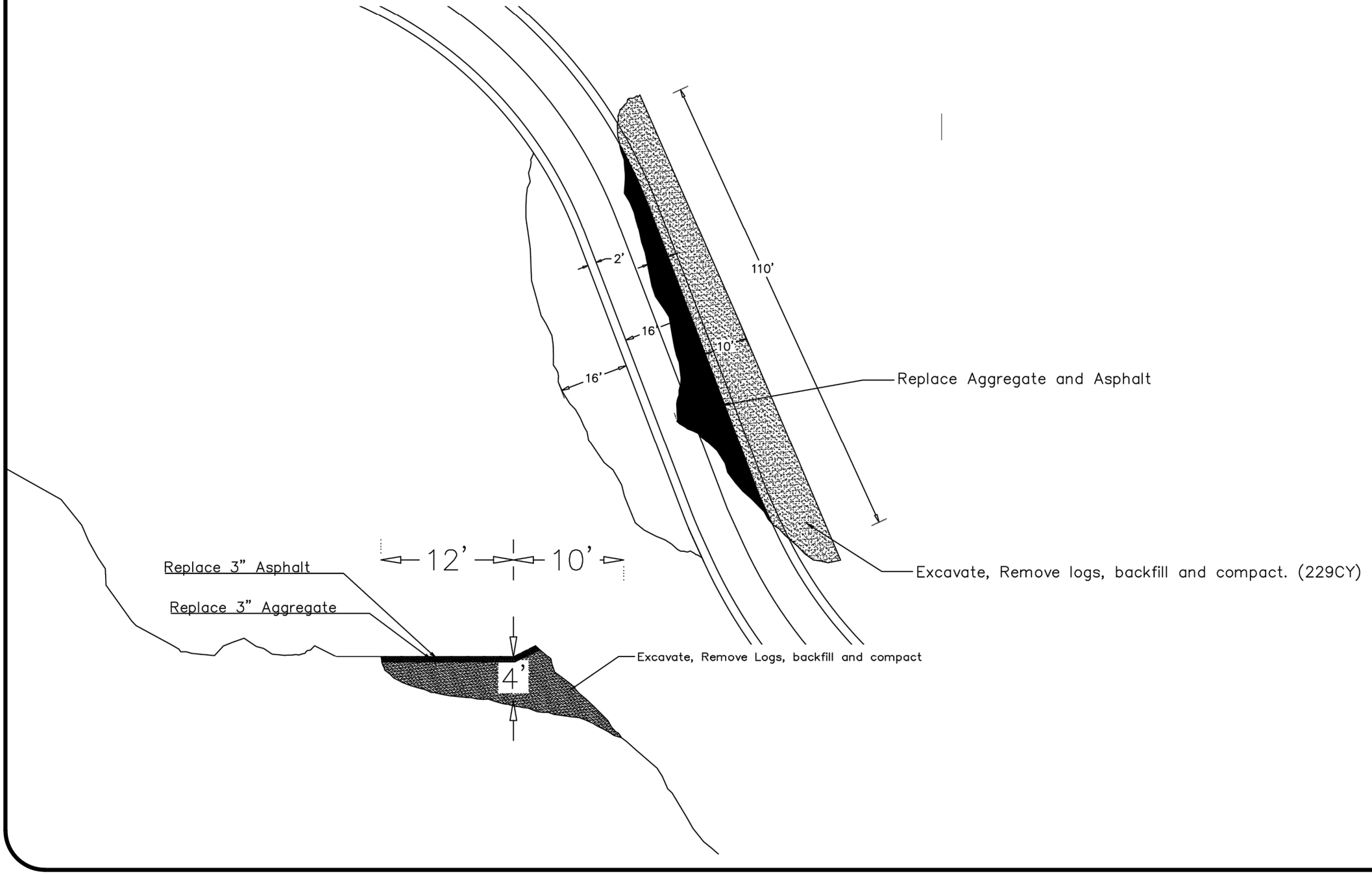
Date
DATE

Scale
NONE

Sheet
13
OF 32

13S23 Little Boulder MP 0.23 Plan View and Cross Section

N.T.S.



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

LITTLE BOULDER
TITLE

SEQUOIA
NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
LITTLE BOULDER

Drawn By
J. GONZALES

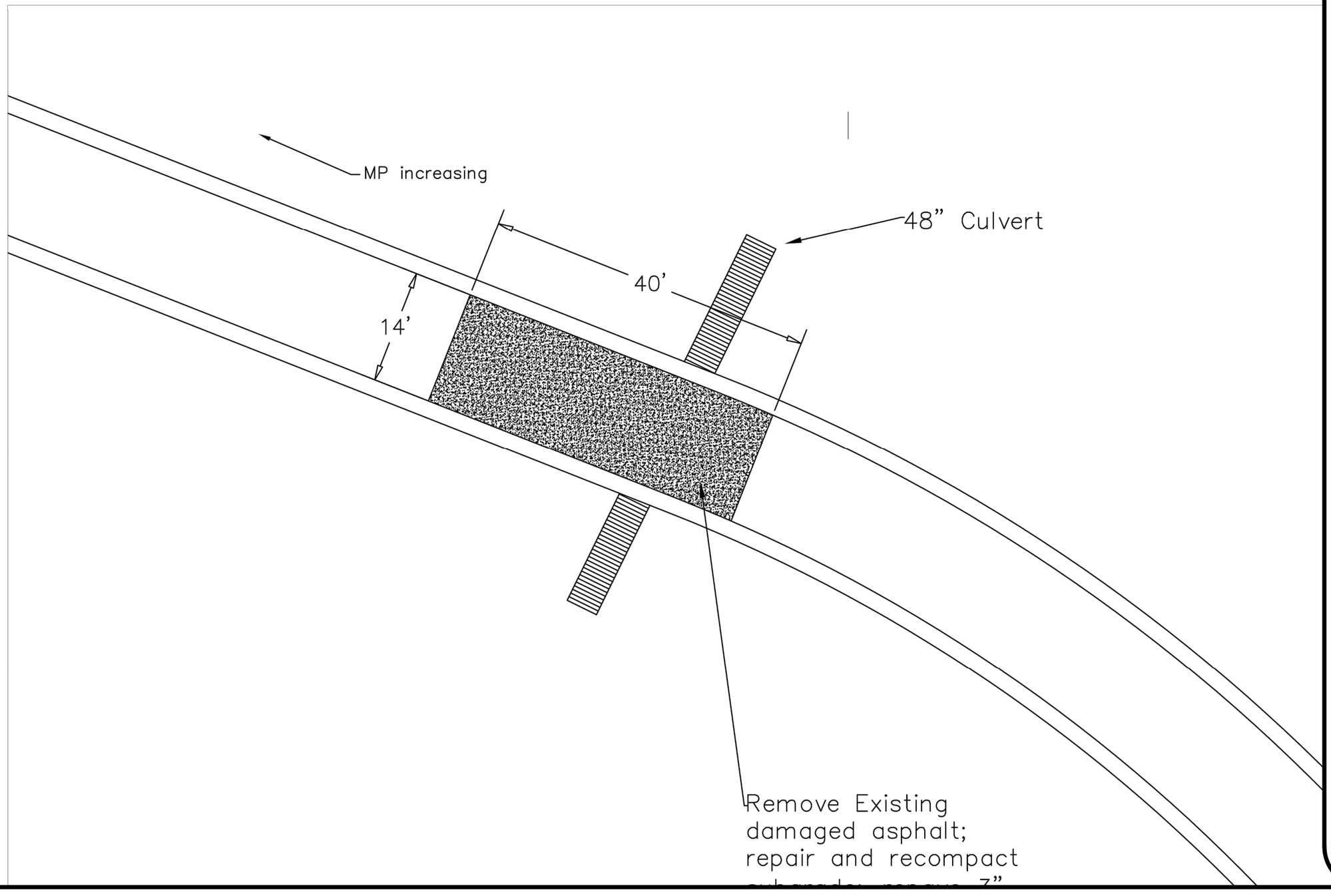
Date
DATE

Scale
NONE

Sheet
14
OF 32

21S94 Crawford MP 9.571(Left) Plan View

N.T.S.



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

CRAWFORD RD MP 9.57
TITLE

SEQUOIA
NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
CRAWFORD RD MP 9.57

Drawn By
J. GONZALES

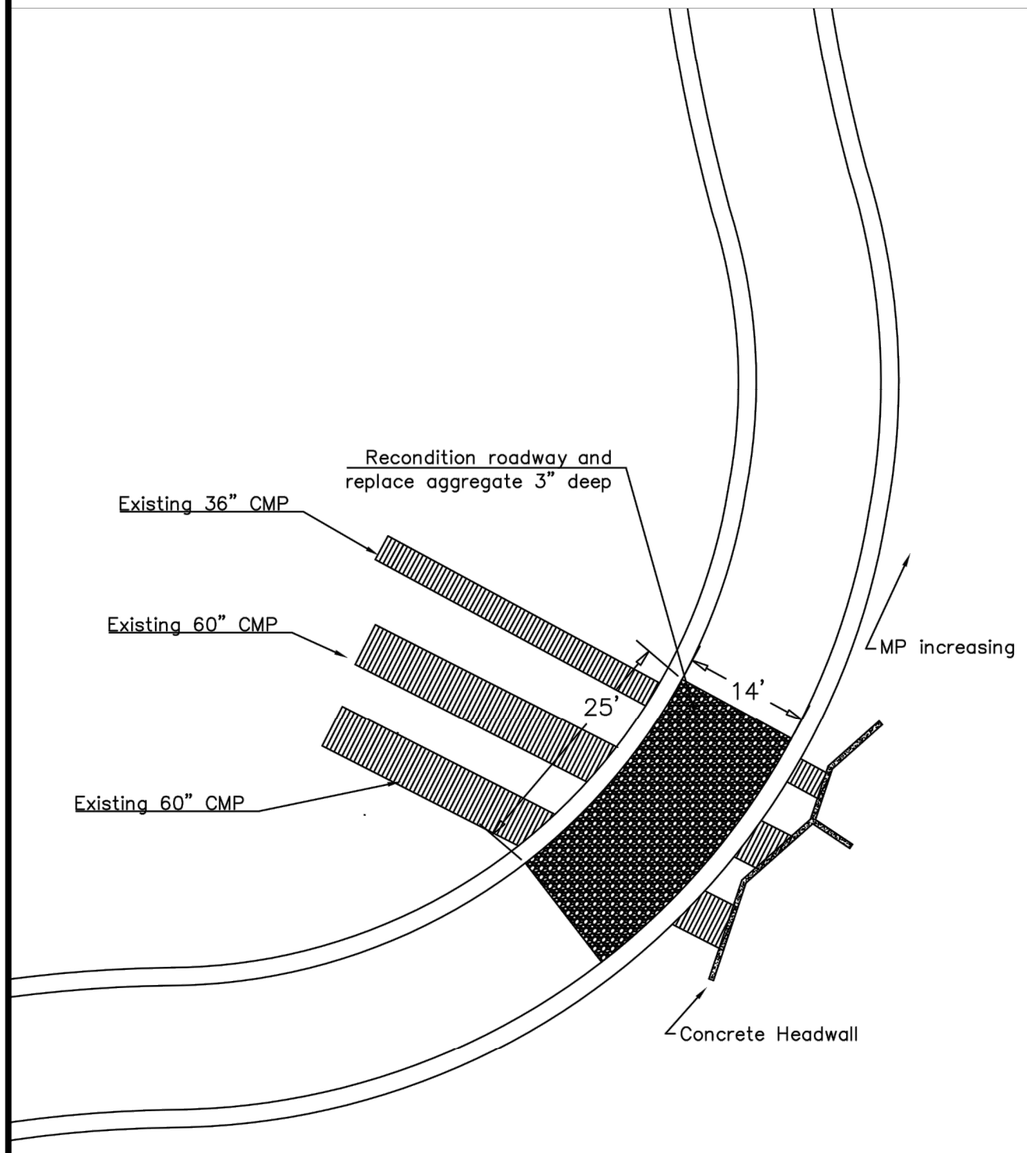
Date
DATE

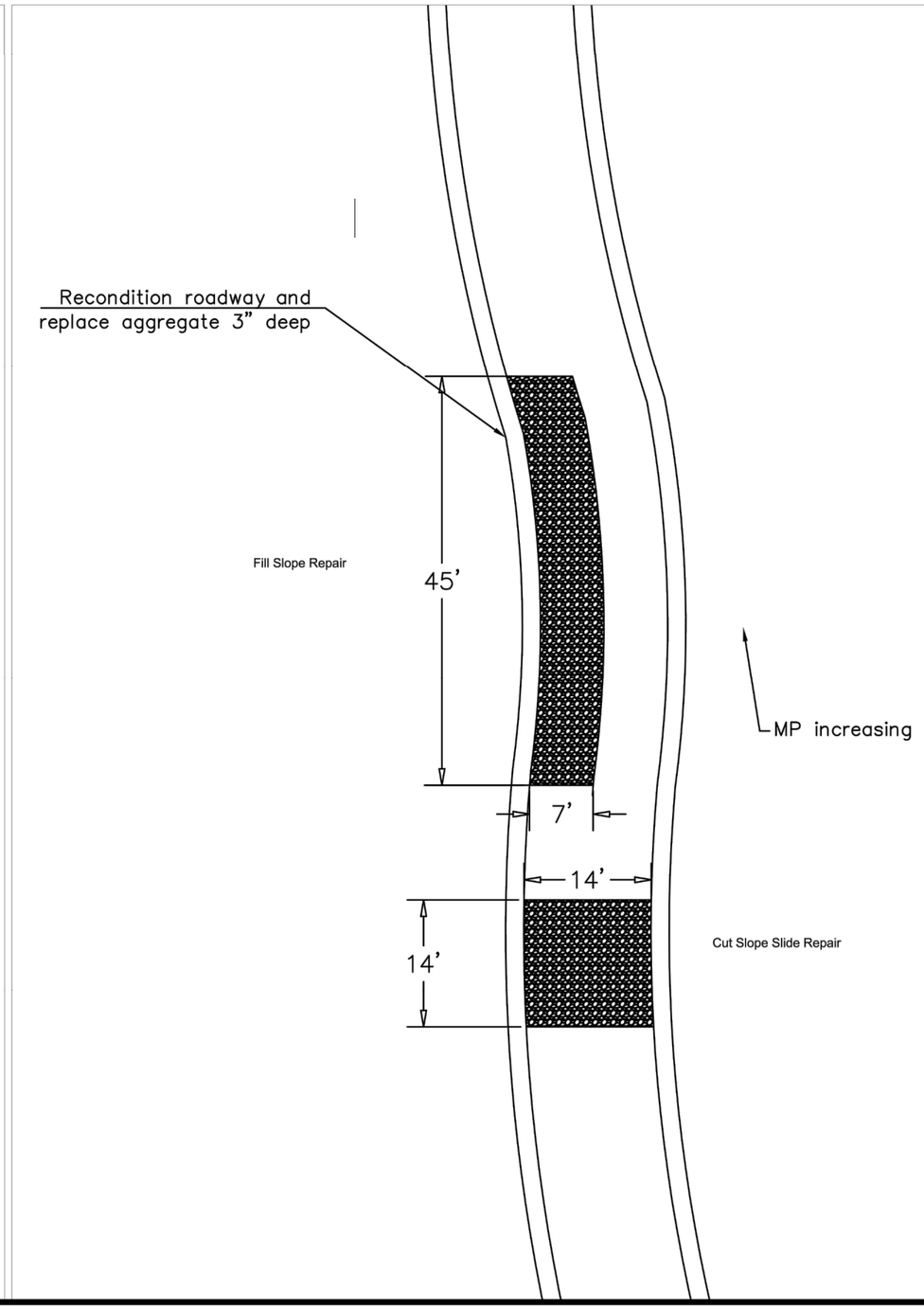
Scale
NONE

Sheet
15
OF 32

21S94 Crawford MP 17.3 (Left) & MP 17.4 (Right) Plan View

N.T.S.





FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

CRAWFORD RD MP 17.3 & 17.4
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
CRAWFORD RD MP 17.3 & 17.4

Drawn By
J. GONZALES

Date
DATE

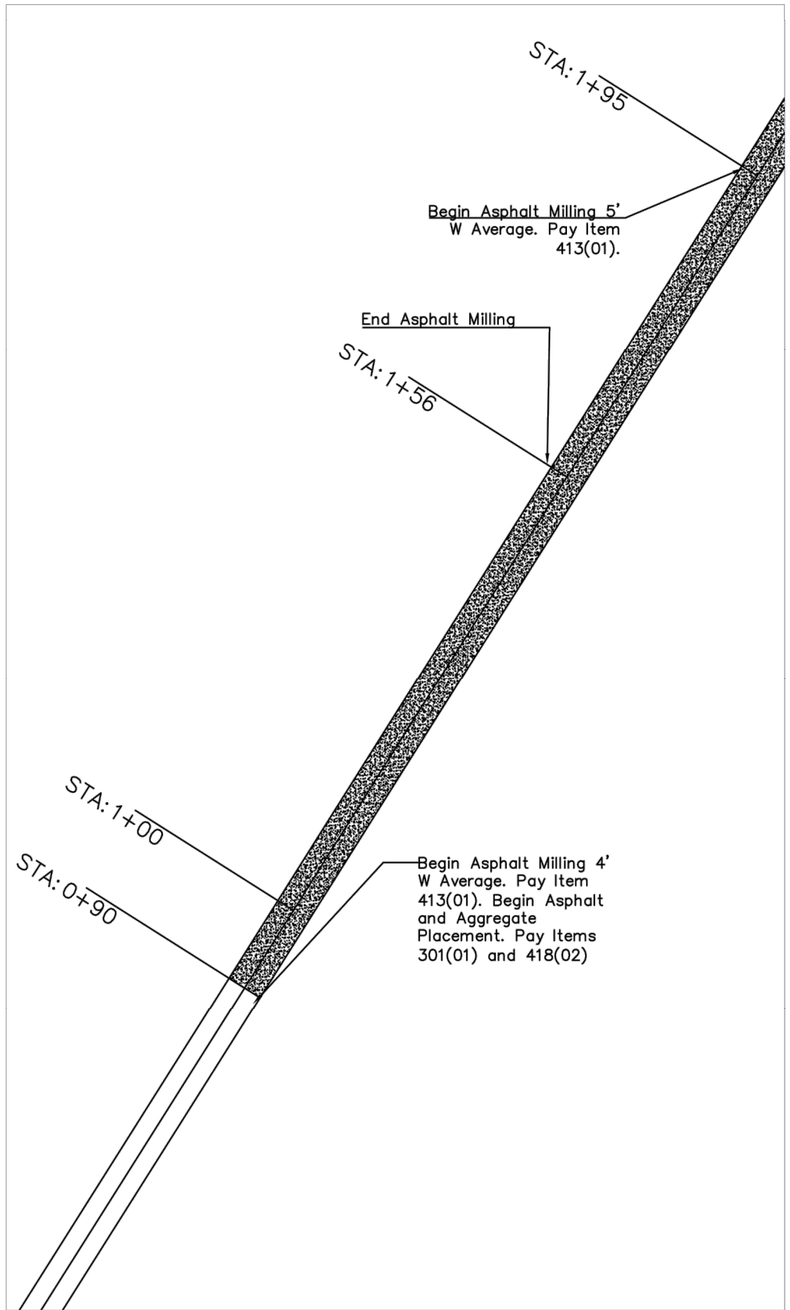
Scale
NONE

Sheet
16
OF 32

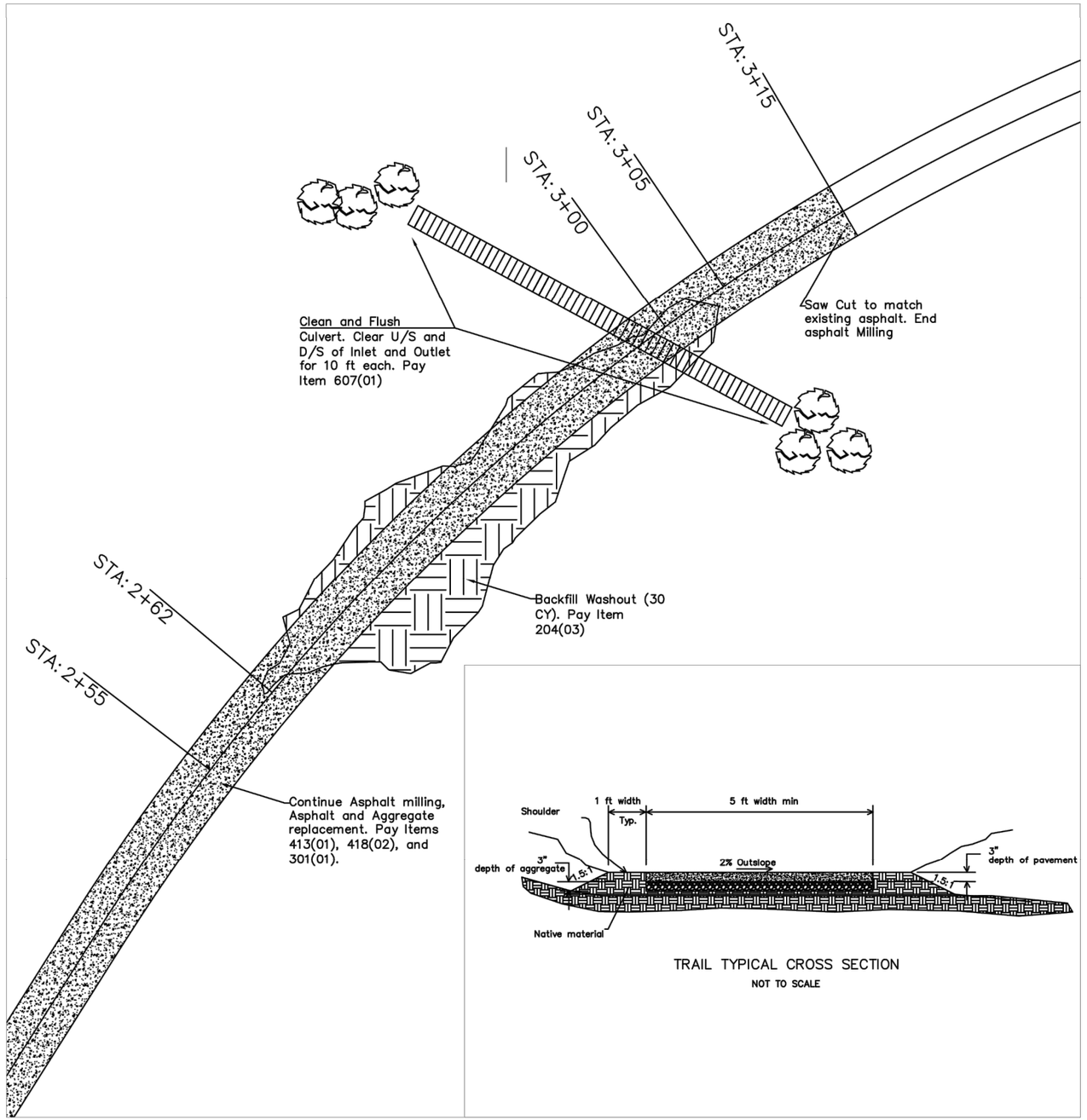
HUME LAKE TRAIL 28E05 PLAN VIEW

N.T.S.

STA. 0+90 to 1+95



STA. 2+55 to 3+15



TRAIL TYPICAL CROSS SECTION

NOT TO SCALE

FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

HUME LAKE
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT

Title: HUME LAKE

Drawn By: J. GONZALES

Date: DATE

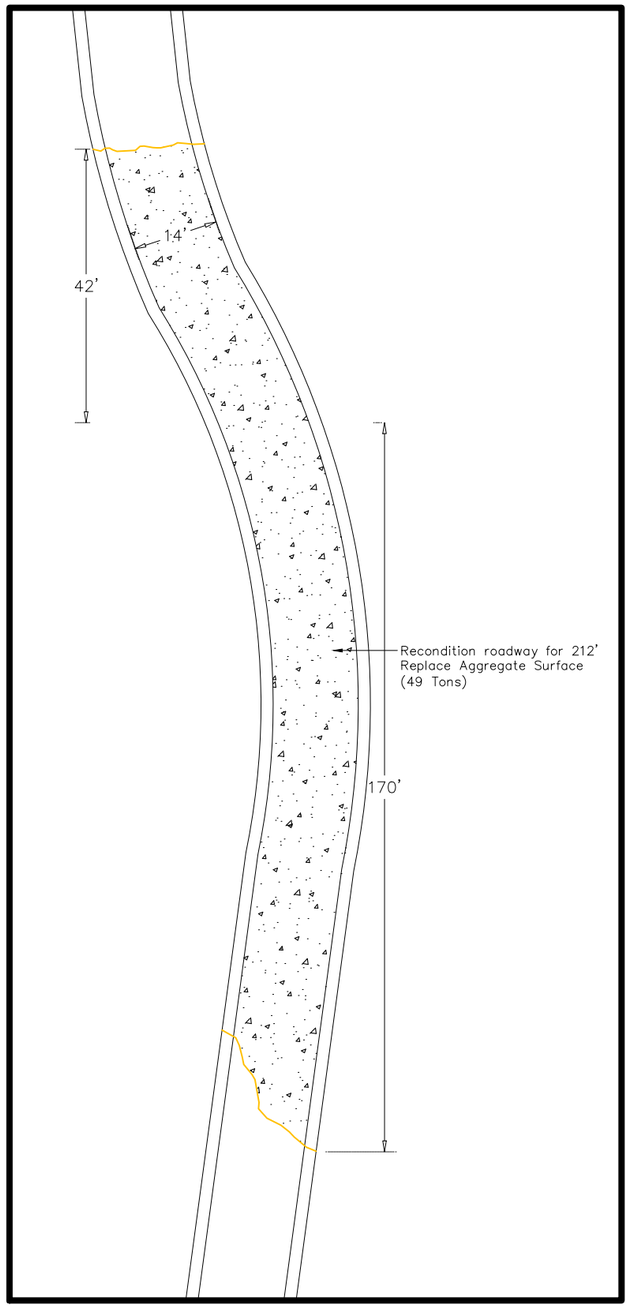
Scale: NONE

Sheet: 17 OF 32

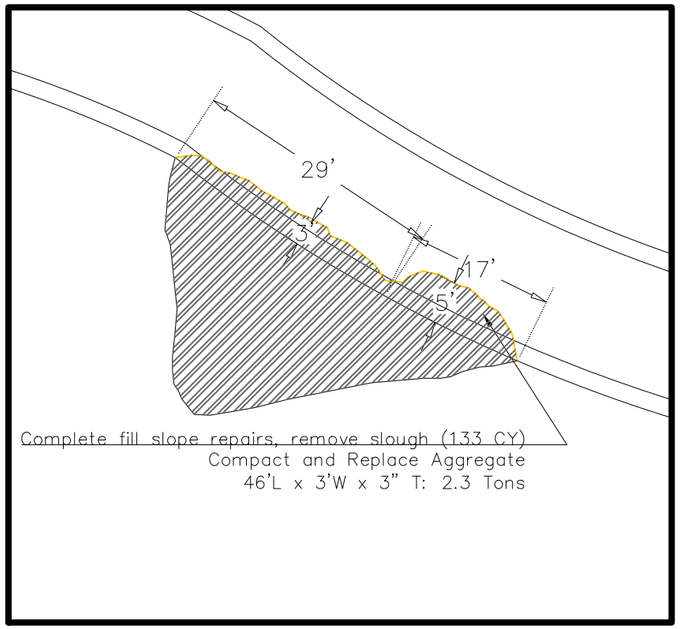
22S03 Fox Farm MP 0.74 - MP 1.344

N.T.S.

MP 0.75

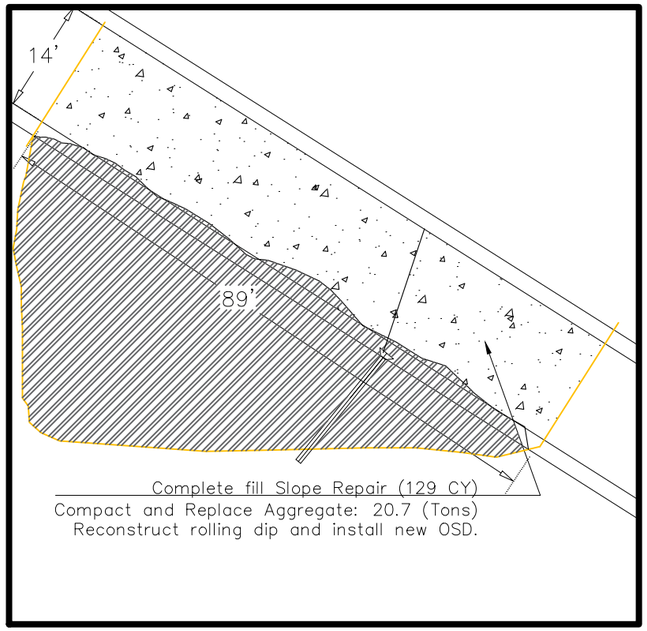


MP 1.03



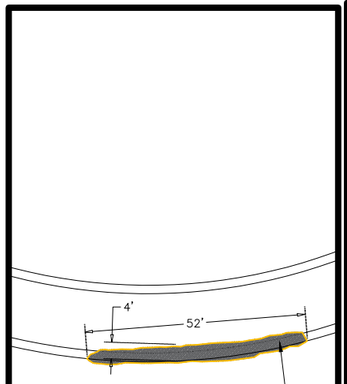
Complete fill slope repairs, remove slough (133 CY)
Compact and Replace Aggregate
46'L x 3'W x 3" T: 2.3 Tons

MP 1.107



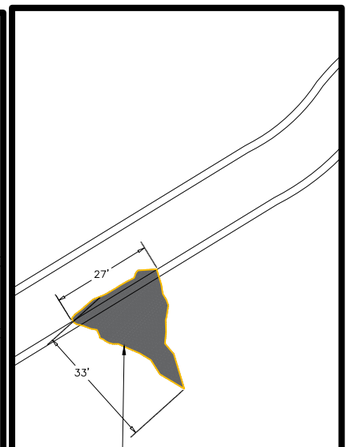
Complete fill Slope Repair (129 CY)
Compact and Replace Aggregate: 20.7 (Tons)
Reconstruct rolling dip and install new OSD.

MP 1.173



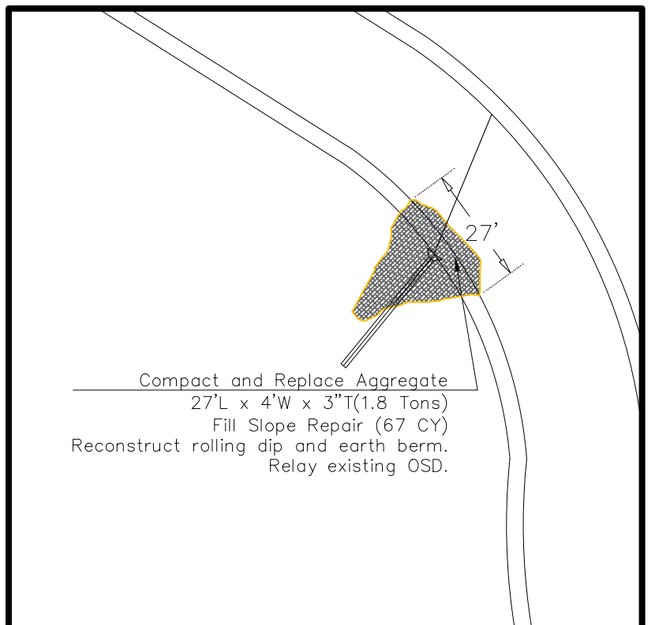
Compact and Replace Aggregate:
52'L x 4'W x 3"T 3.4 Tons
Fill Slope Repair (35 CY).
Reconstruct earth berm.

MP 1.306



Fill Slope Repair 68 CY.
Reconstruct earth berm.

MP 1.344



Compact and Replace Aggregate
27'L x 4'W x 3"T(1.8 Tons)
Fill Slope Repair (67 CY)
Reconstruct rolling dip and earth berm.
Relay existing OSD.

FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

FOX FARM MP 0.74 - 1.344
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT

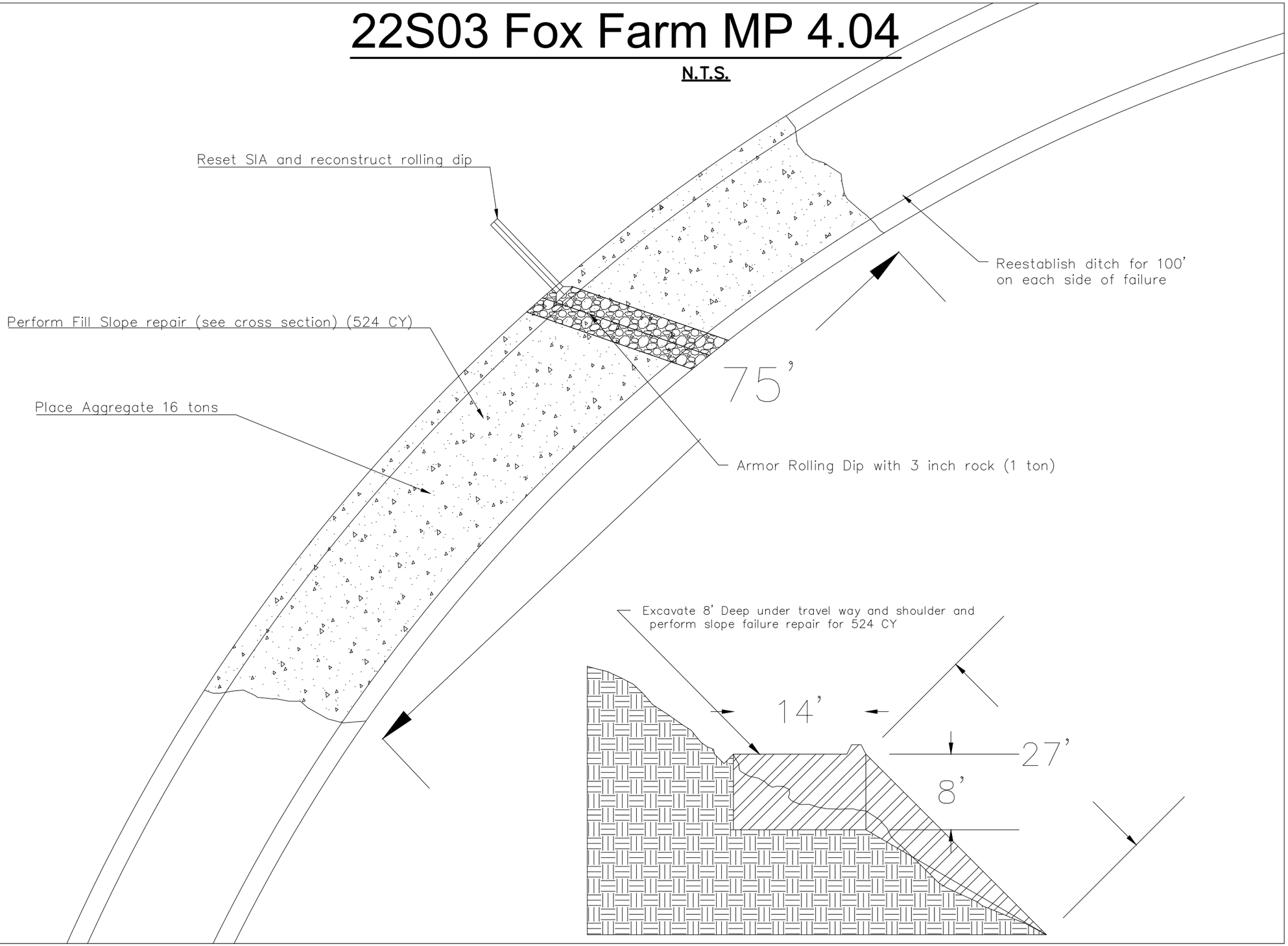
Title: FOX FARM MP 0.74-1.344

Drawn By: J. GONZALES
Date: DATE
Scale: NONE

Sheet: 18 OF 32

22S03 Fox Farm MP 4.04

N.T.S.



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

FOX FARM MP 4.04
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
FOX FARM MP 4.04

Drawn By
J. GONZALES

Date
DATE

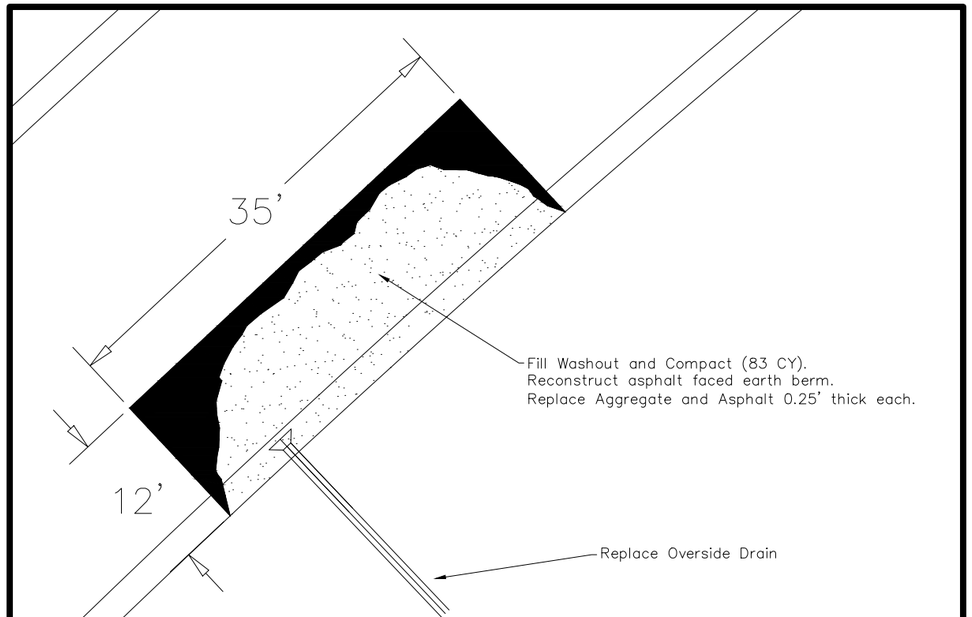
Scale
NONE

Sheet
19
OF 32

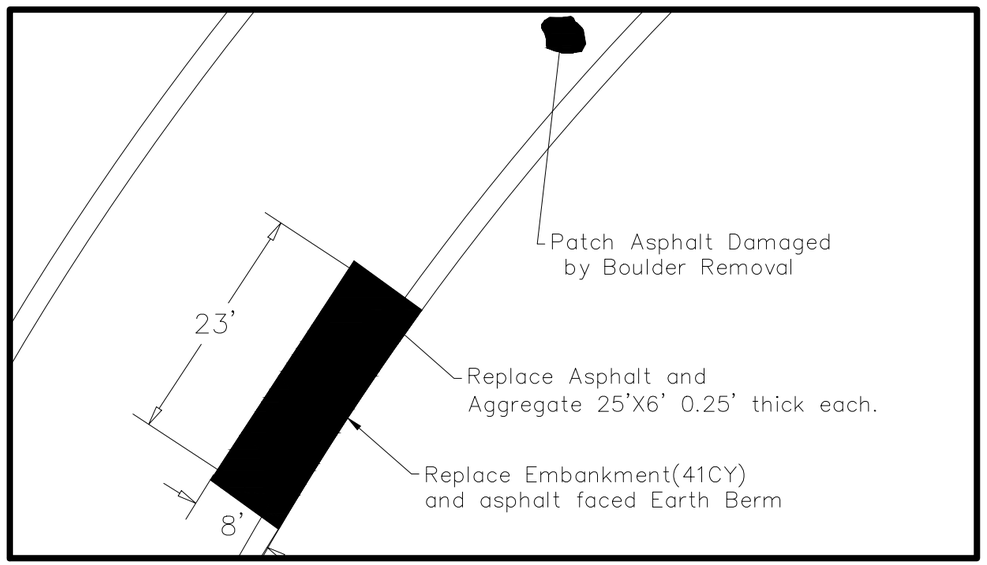
22S05 Sherman Pass MP 0.7- MP 0.9

N.T.S.

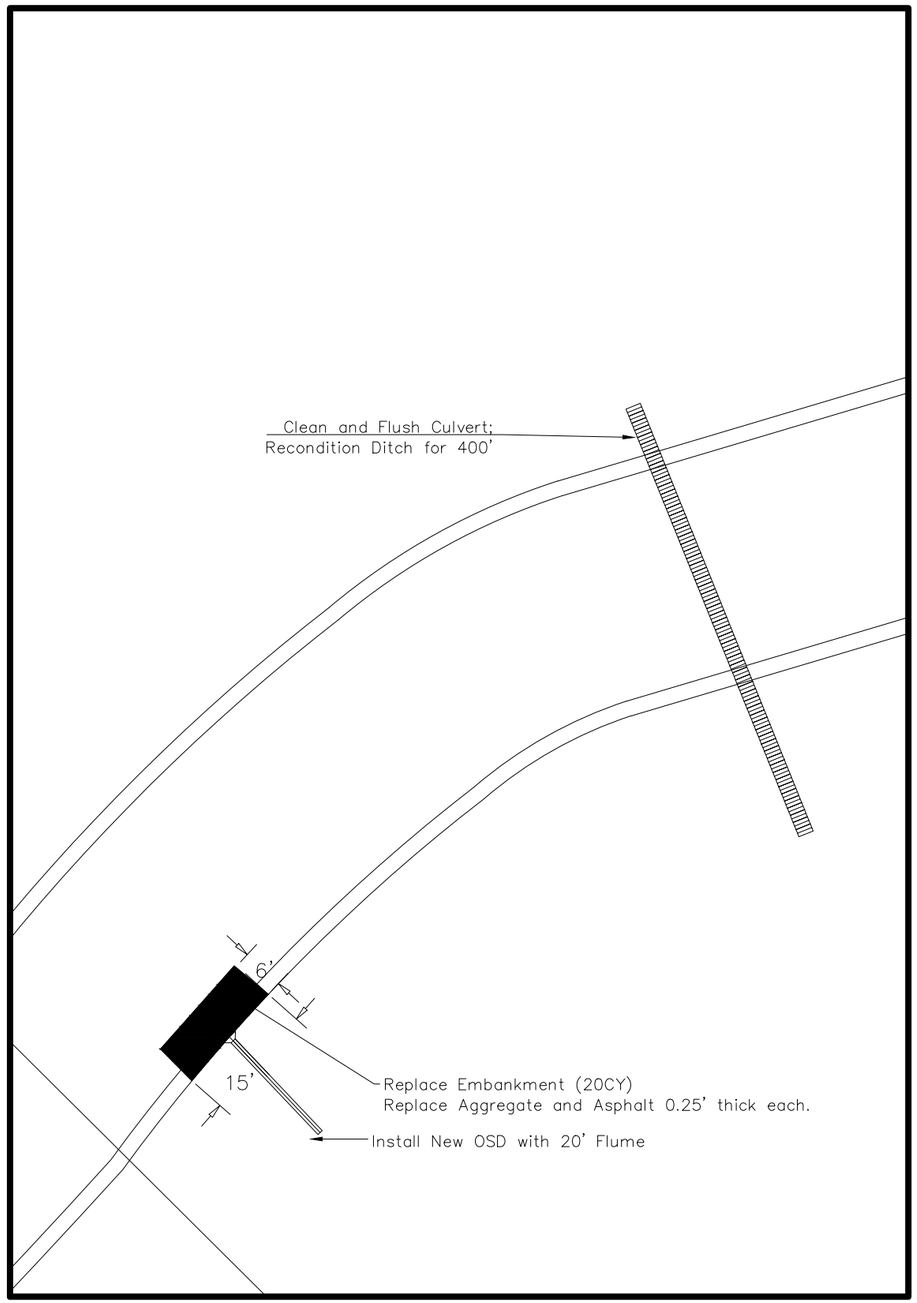
MP 0.7



MP 0.8



MP 0.9



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

SHERMAN PASS MP 0.7-0.9
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT

Title: SHERMAN PASS MP 0.7-0.9

Drawn By: J. GONZALES
Date: DATE
Scale: NONE

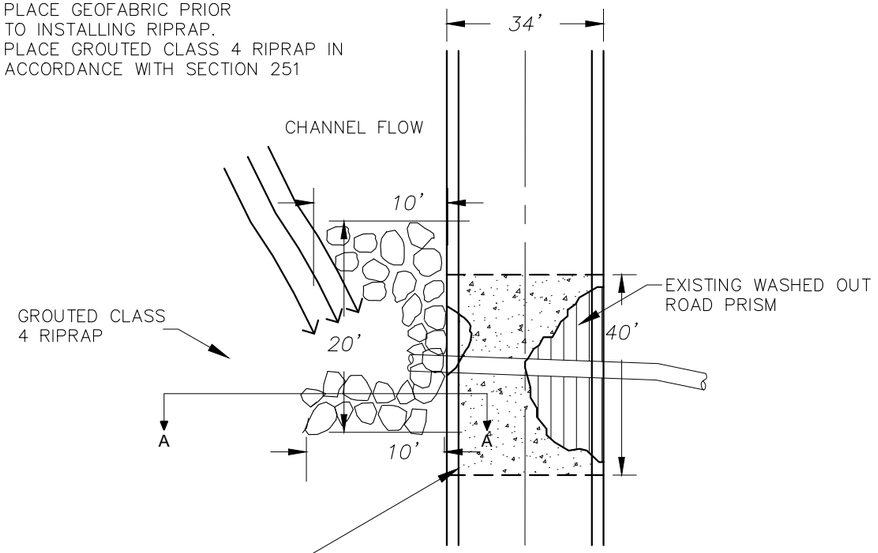
Sheet: 20 OF 32

Sherman Pass MP 1.4

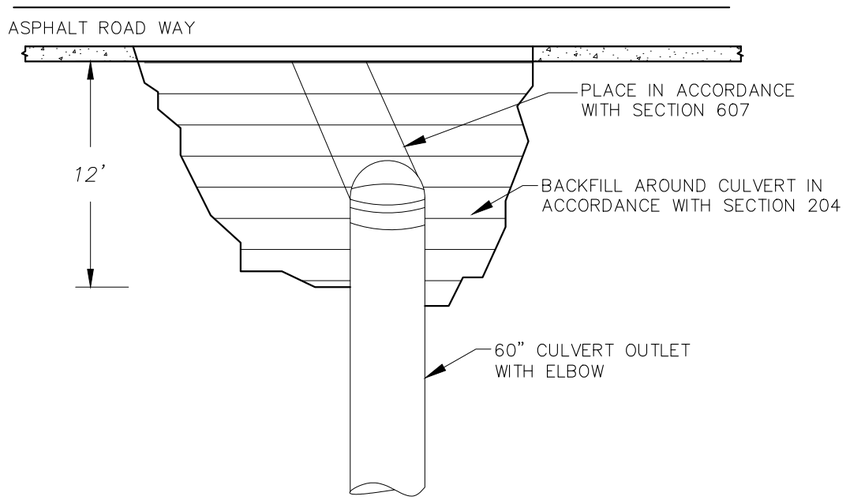
NOTES:

PLACE GEOFABRIC PRIOR TO INSTALLING RIPRAP.
PLACE GROUTED CLASS 4 RIPRAP IN ACCORDANCE WITH SECTION 251

N.T.S.



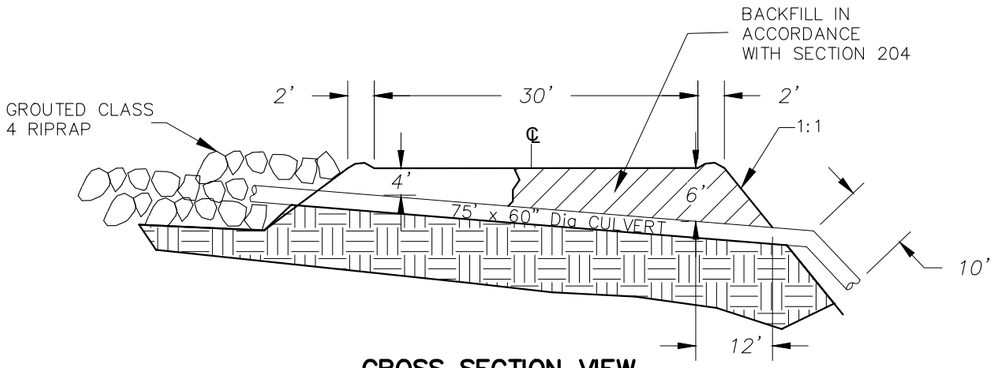
PLAN VIEW OF DAMAGE AREA



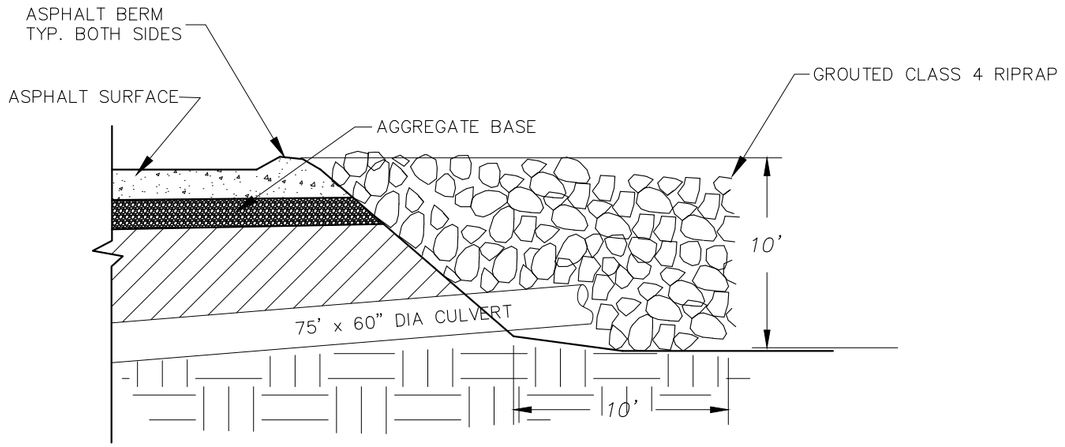
PROFILE VIEW OF OUTLET

NOTES:

SAW CUT ASPHALT TO A CLEAN EDGE.
EXCAVATE AND REMOVE LOOSE MATERIAL FROM THE WASHED OUT ROAD PRISM.
REMOVE AND RESET CULVERT.
REPAIR BENT SECTION OF PIPE.
BACKFILL AND COMPACT AREA IN ACCORDANCE WITH SECTION 204 IN COMPACTED LIFTS.
PLACE AGGREGATE BASE IN ACCORDANCE WITH SECTION 301.
PATCH PAVE AREA IN ACCORDANCE WITH SECTION 418.
RECONSTRUCT ASPHALT BERM ON BOTH SIDES OF ROAD WAY.



CROSS SECTION VIEW



CROSS SECTION VIEW A–A

FY2023 ERFO REPAIRS PROJECT (Project)
HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS (District)
SHERMAN PASS MP 1.4 (TITLE)

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

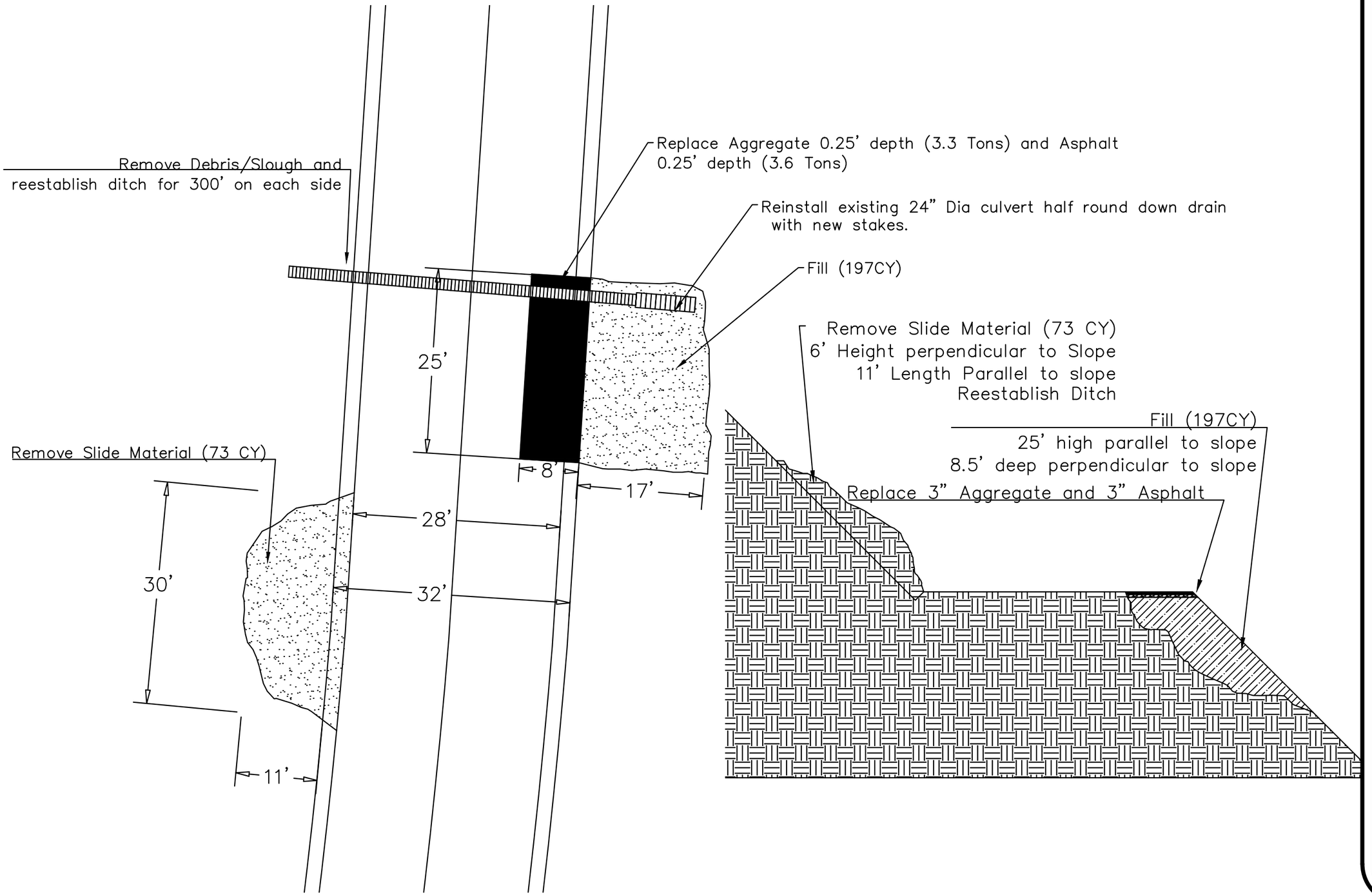
No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT
Title: SHERMAN PASS MP 1.4

Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 21 OF 32

Sherman Pass 2.6

N.T.S.



FY2023 ERFO REPAIRS PROJECT (Project)

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS (District)

SHERMAN PASS MP 2.6 (TITLE)

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT

Title: SHERMAN PASS MP 2.6

Drawn By: J. GONZALES

Date: DATE

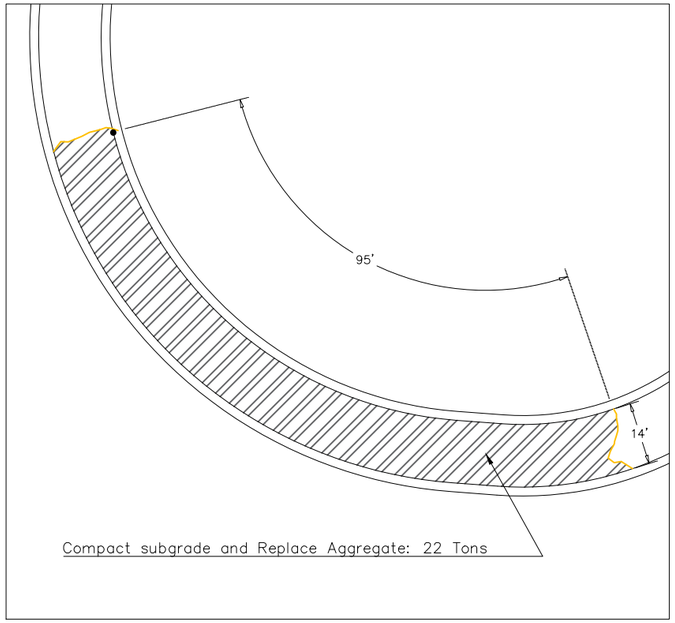
Scale: NONE

Sheet: 22 OF 32

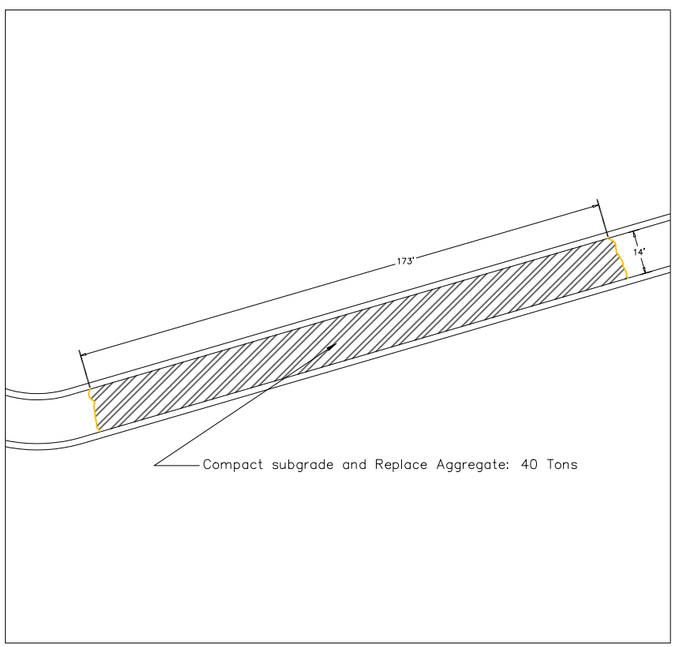
23S05 Capinero MP 0.19- MP 2.38

N.T.S.

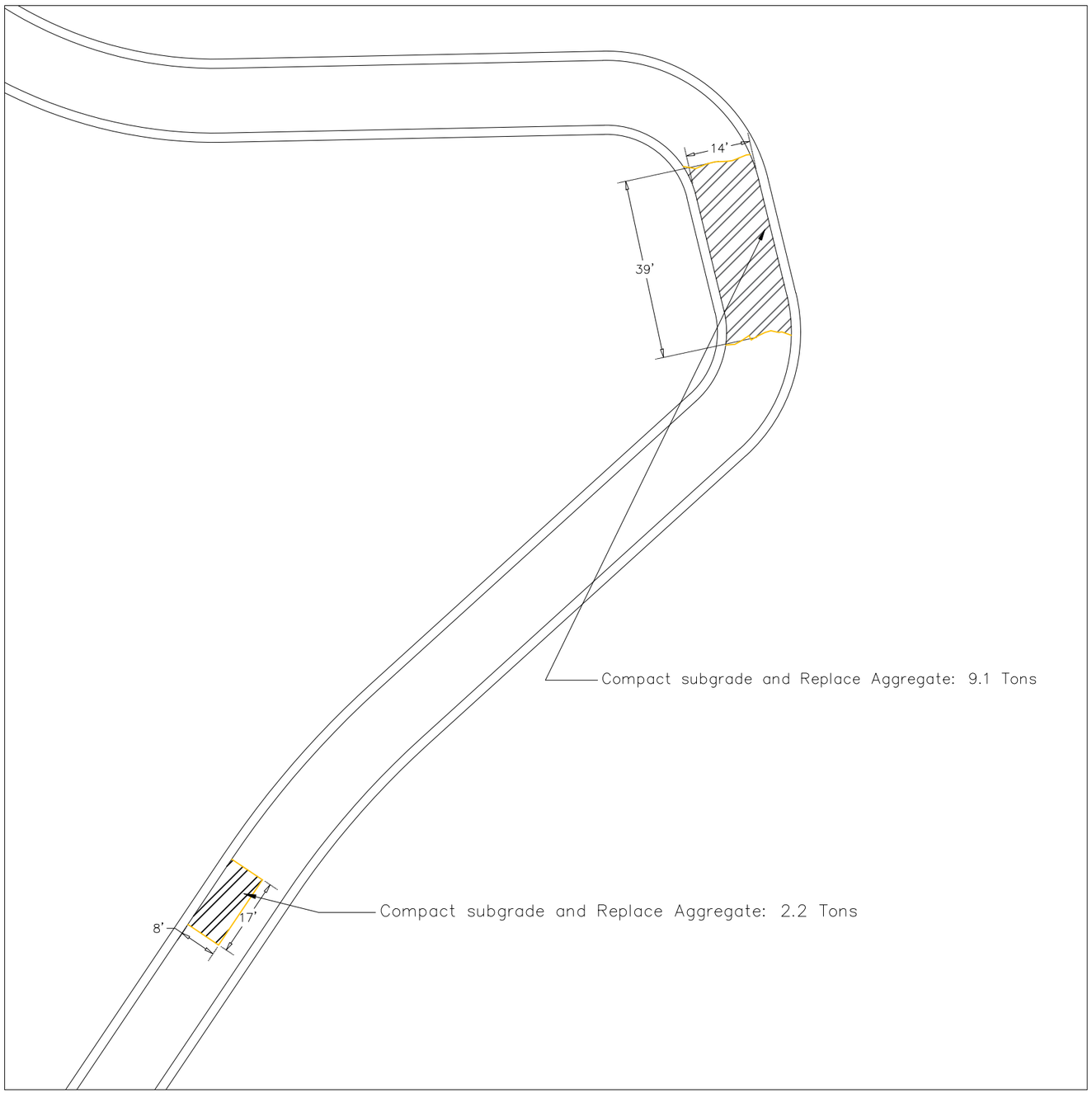
MP 0.19



MP 1.06



MP 2.36–2.38



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

DAVIS MP 0.19 - 2.38
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

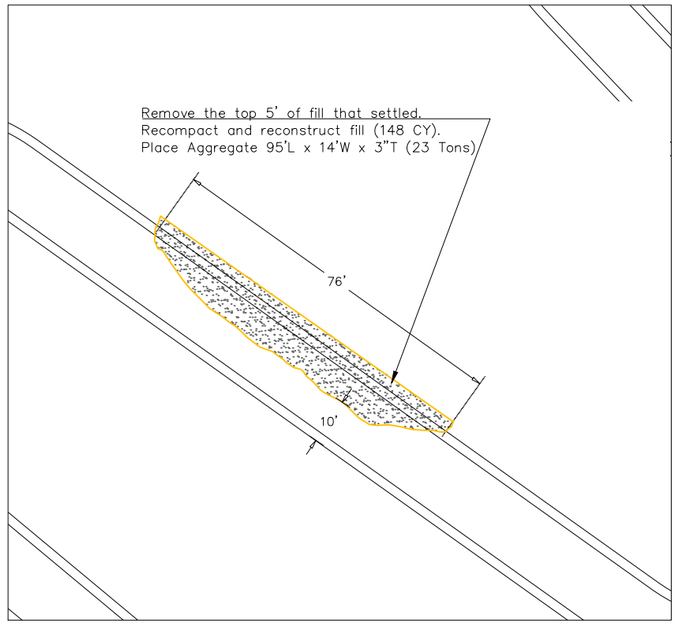
Title
CAPINERO MP 0.19 - 2.38

Drawn By	Sheet
J. GONZALES	23
Date: DATE	OF 32
Scale: NONE	

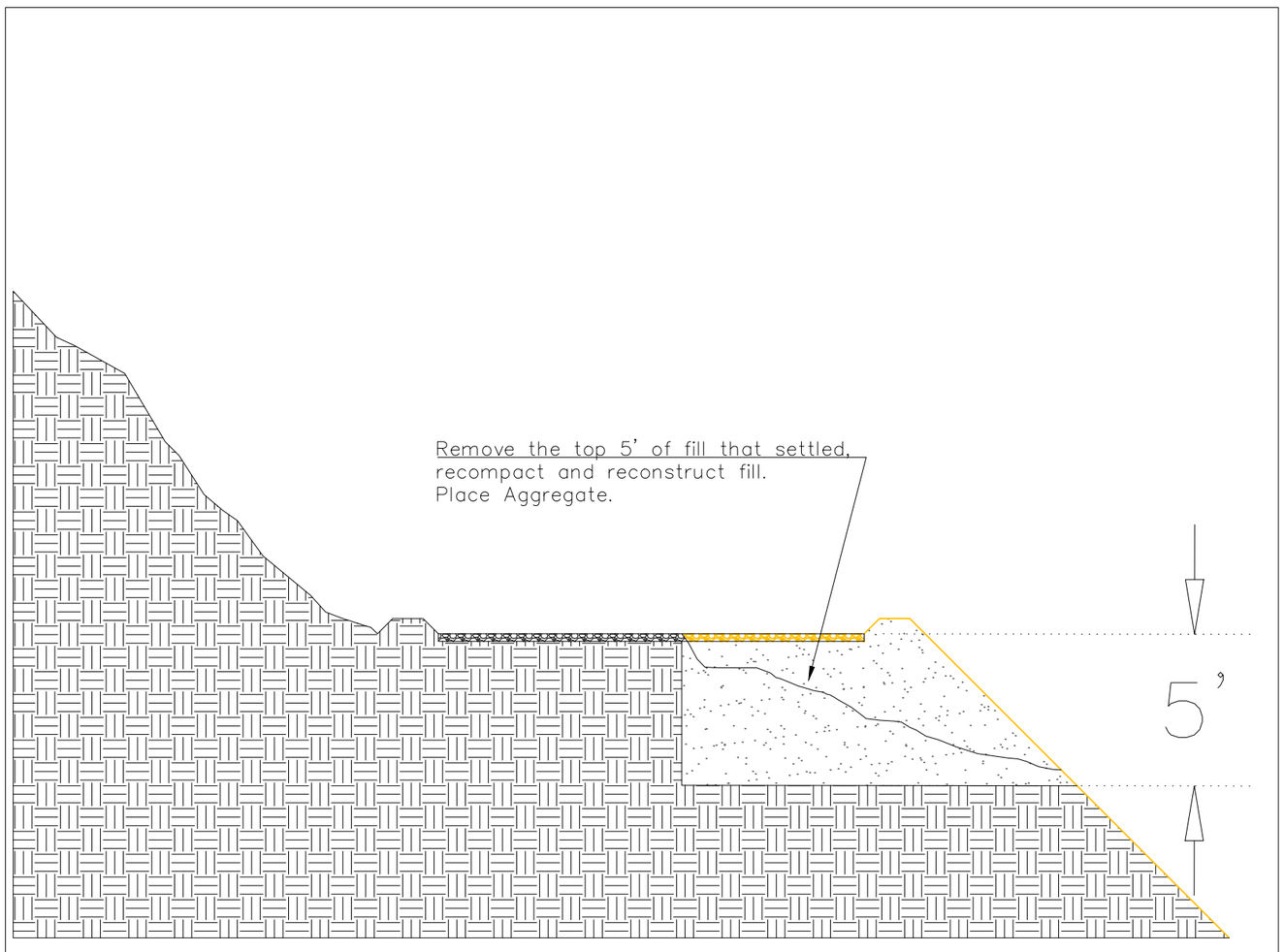
23S05 Capinero MP 3.67 & MP 5.48

N.T.S.

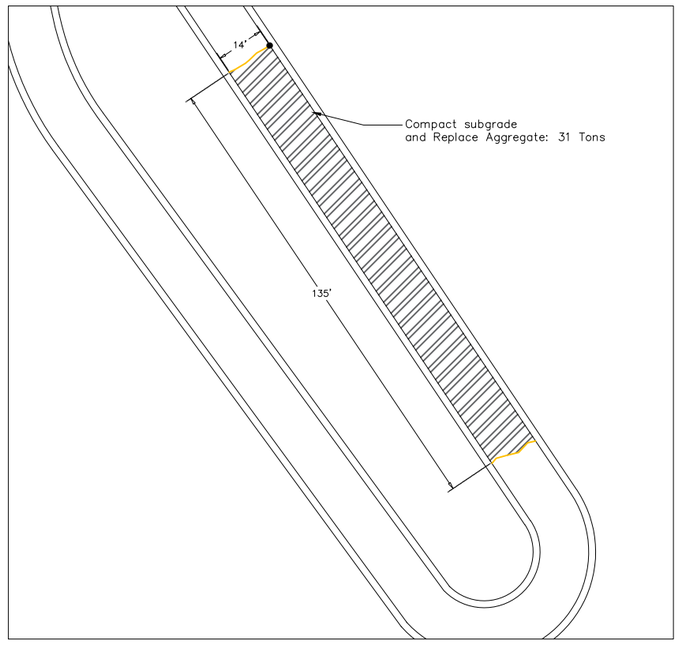
MP 3.67 Plan View



MP 3.67 Cross Section



MP 5.48



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

CAPINERO MP 3.67 & 5.48
TITLE

SEQUOIA
NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
CAPINERO MP 3.67 & 5.48

Drawn By
J. GONZALES

Date
DATE

Scale
NONE

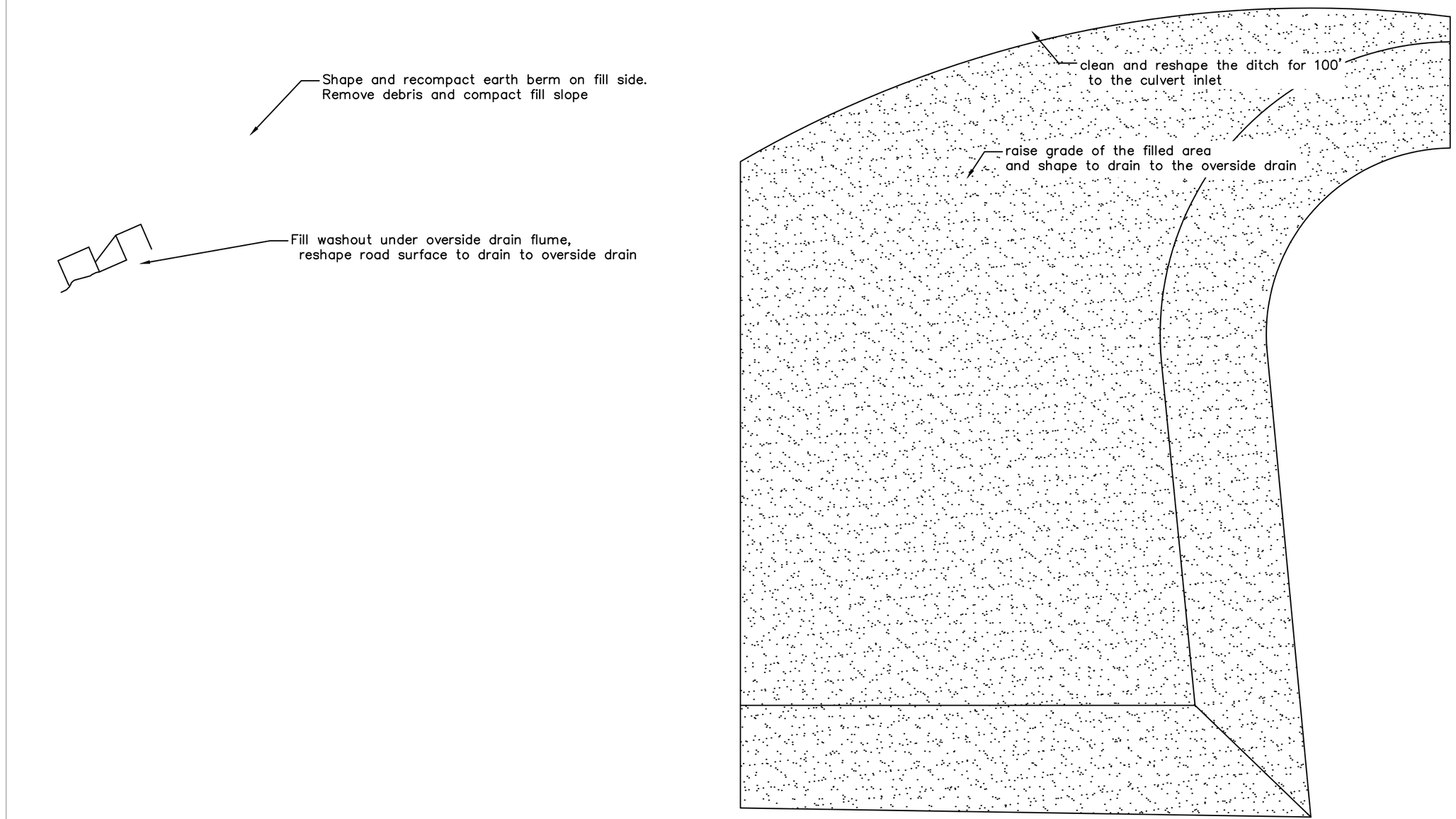
Sheet
24
OF 32

24S05 Jack Ranch MP 0.25

N.T.S.

To 23S05 Capinero

To Forest Boundary, HWY 155



FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

JACK RANCH MP 0.25
TITLE

SEQUOIA
NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
JACK RANCH MP 0.25

Drawn By
J. GONZALES

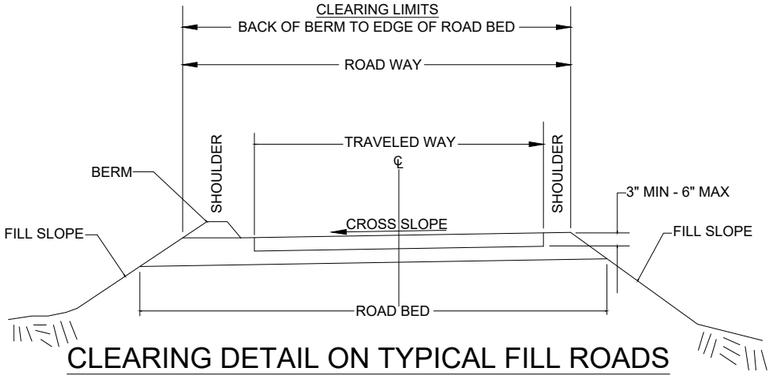
Date
DATE

Scale
NONE

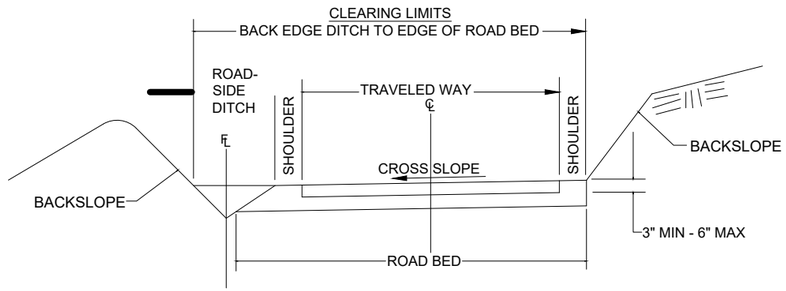
Sheet
25
OF 32

CLEARING TYPICAL

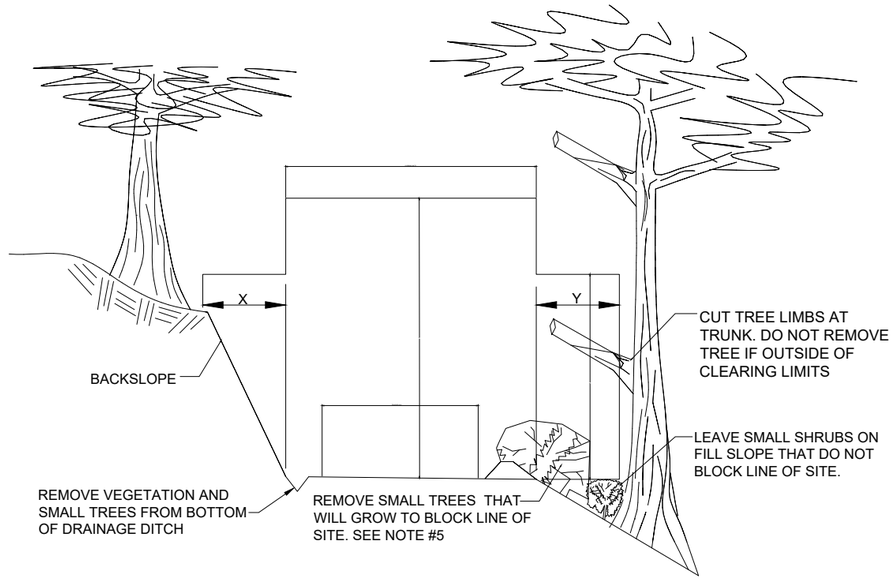
N.T.S.



CLEARING DETAIL ON TYPICAL FILL ROADS



CLEARING DETAILS ON TYPICAL CUT ROADS



CLEARING DETAIL ON CURVED PORTION OF ROADS

NOTES:

1. ROADS AND LIMITS OF CLEARING WILL BE IDENTIFIED BY WORK ORDERS ISSUE BY THE GOVERNMENT.
2. PRIOR TO CLEARING CONFIRM METHOD OF VEGETATIVE DEBRIS DISPOSAL; REMOVAL, SCATTERING OR CHIPPING.
3. DO NOT PLACE DEBRIS AS TO CLOG DRAINAGE STRUCTURES.
4. X' AND Y' APPLY ONLY TO THE SITE DISTANCE ON THE INSIDE OF THE CURVES.
5. WITHIN THE CLEARING AREA AND BEYOND 4' FROM ROADBED, TREES 8" DBH AND LARGER SHALL BE LIMBED. ALL OTHER VEGETATIVE MATERIALS (EXCEPT ELDERBERRY TREES) SHALL BE REMOVED.
6. CLEARING LIMITS SHALL EXTEND TO OUTSIDE EDGE OF DITCH OR BACK OF BERM.
7. SAW BRANCHES FLUSH WITH TRUNK RATHER THAN CUT TREE.
8. CLEARING FOR SIA AND FLUME SHALL, AS A MINIMUM, BE 2-FT (0.61-M) TO EACH SIDE OF THE STRUCTURE AND 2-FT (0.61-M) ABOVE THE STRUCTURE.

				TANGENTS		CURVES (MAX)		
ROAD NO.	FROM	TO	LENGTH	CUT SLOPE Y	FILL SLOPE Y	CUT SLOPE X[1]	FILL SLOPE Y[1]>300'S.D.	FILL SLOPE Y[1]<300'S.D.
ALL ROADS				4'	4'	8'	8'	20'
AS NEEDED								

VEGETATION CLEARING TABLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

FOREST SERVICE U.S. DEPARTMENT OF AGRICULTURE

No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT

Title: CLEARING TYPICAL

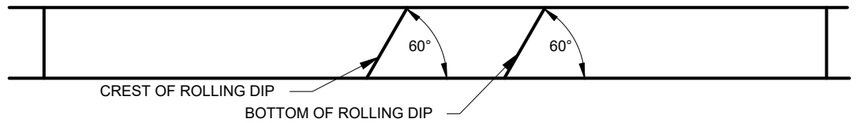
Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 26 OF 32

FY2023 ERFO REPAIRS PROJECT (Project)
HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS (District)
CLEARING TYPICAL (TITLE)

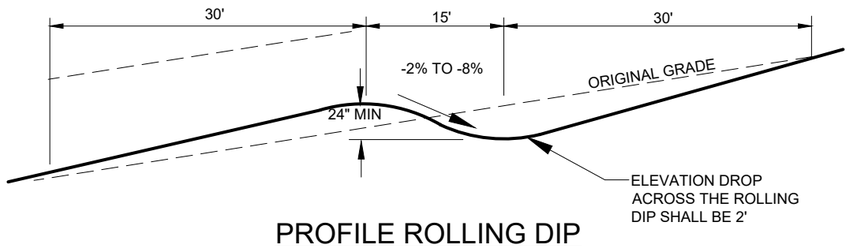
ROLLING DIP TYPICAL

N.T.S.

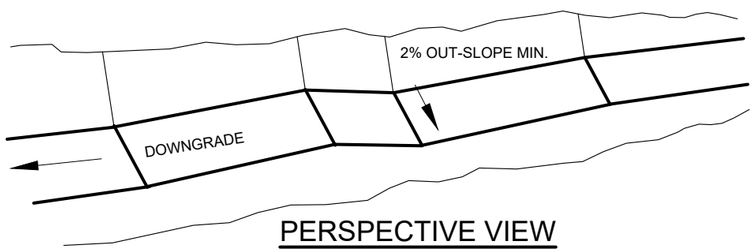
ROLLING DIP FOR HIGH CLEARANCE VEHICLE ML2 ROADS



PLAN VIEW

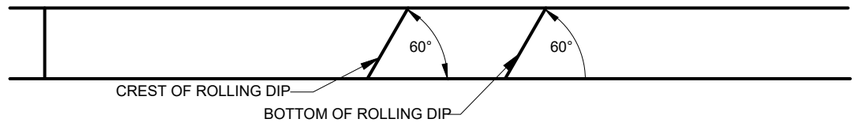


PROFILE ROLLING DIP

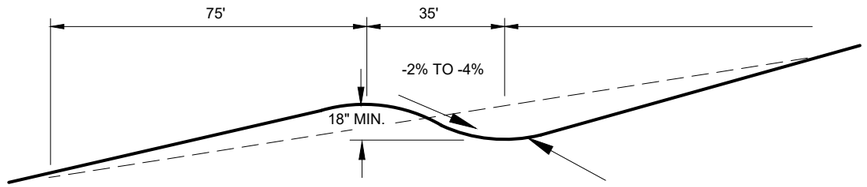


PERSPECTIVE VIEW

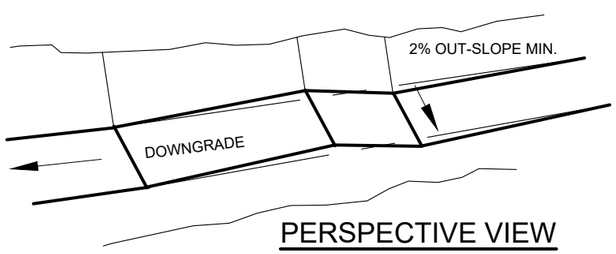
ROLLING DIP FOR PASSENGER VEHICLE ML3 ROADS



PLAN VIEW



PROFILE ROLLING DIP



PERSPECTIVE VIEW

NOTES:

1. WHEN ROLLING DIPS ARE CONSTRUCTED IN DITCH SECTIONS THE DITCH SHALL DRAIN ACROSS THE ROLLING DIP. RESUME DITCH CONSTRUCTION 25' DOWNGRADE FROM THE CREST OF THE ROLLING DIP.
2. OUTLET DRAIN DITCHES SHALL HAVE CUT SLOPES EQUAL TO OR FLATTER THAN 1.5:1. EXCAVATION FROM OUTLET DITCHING SHALL BE WASTED ALONG THE SIDES OF THE DITCH. ALL NECESSARY CLEARING WILL BE TREATED IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS.
3. TOLERANCE CLASS THROUGH THE ROLLING DIP SHALL BE CLASS C TABLE 204-2.

FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

ROLLING DIP TYPICAL
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
ROLLING DIP TYPICAL

Drawn By
J. GONZALES

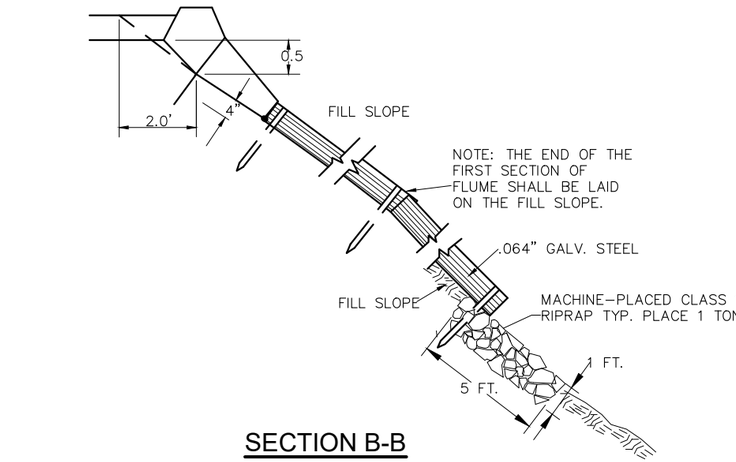
Date
DATE

Scale
NONE

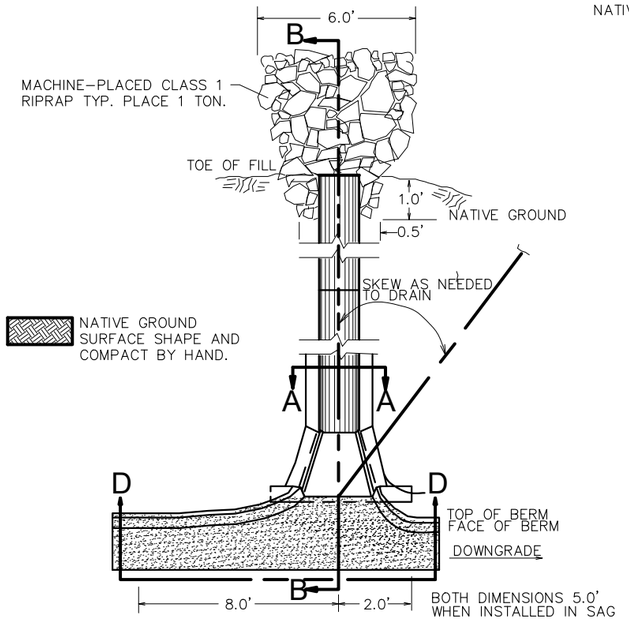
Sheet
27
OF 32

SPILLWAY INLET ASSEMBLY (SIA) TYPICALS

N.T.S.

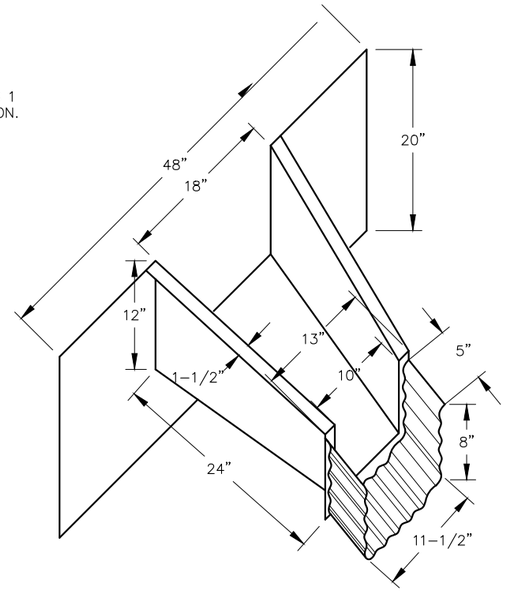


SECTION B-B



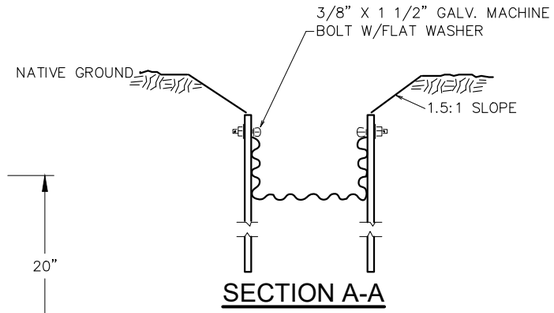
UPLAN VIEW

CROSS SECTION
NO SCALE



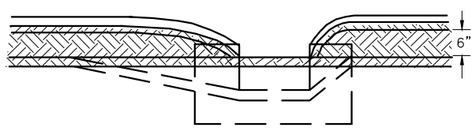
TYPE 1:
GALV. 3/8"x 1 1/2"x36" 3/8"x1 1/2" GALV. MACHINE BOLT W/NUT AND FLAT WASHER

NOTE:
ANCHOR STAKE ALLOWANCE INCLUDES 1 GALV. MACHINE BOLT W/NUT AND FLAT WASHER.



SECTION A-A

SPILLWAY INLET ASSEMBLY
(TAPERED RECTANGULAR)



SECTION D-D

CROSS SECTION
NO SCALE

FY2023 ERFO REPAIRS PROJECT (Project)
HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS (District)
SIA TYPICAL (TITLE)

SEQUOIA
NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

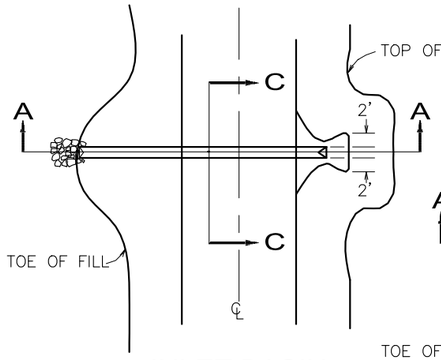
No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT
Title: SIA TYPICAL

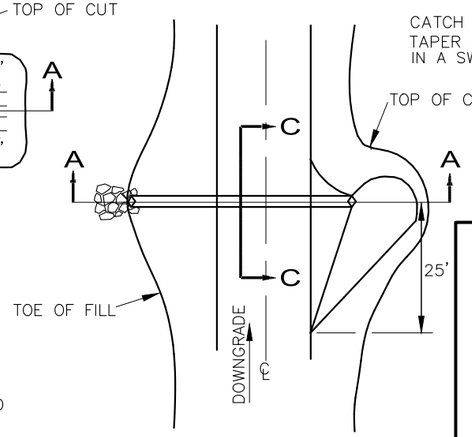
Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 28 OF 32

CULVERT AND BIG MAC TYPICALS

N.T.S.



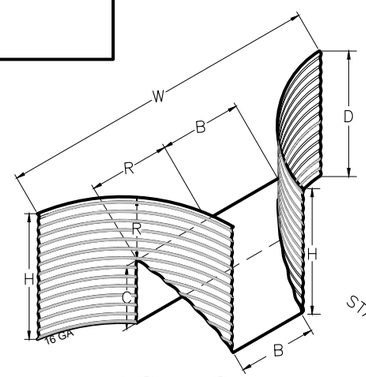
INLET BASIN



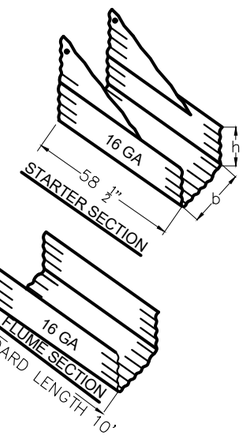
CATCH BASIN

NOTE: INLET BASIN & CATCH BASINS SHALL BE CLEAN FROM SEDIMENT AND DEBRIS TO ALLOW FREE FLOW OF WATER. RESTORED BASINS TO ITS ORIGINAL SHAPE/DIMENSIONS TO MAXIMIZE CAPACITY.

	b x h	B X H	R	W	C	D	REMARKS
LITTLE MAC	12" X 8"	12" X 25 1/2"	18	90 1/2	10	27"	SINGLE PIECE
BIG MAC	24 1/2" X 12"	24" X 37 1/2"	28	128	18	36"	SINGLE PIECE
SUPER MAC	32" X 15" TO 84" X 15"	32" X 49" TO 64" X 49"	36	200 232	26	51 1/2"	TWO PIECE VARIABLE WIDTH



BIG MAC



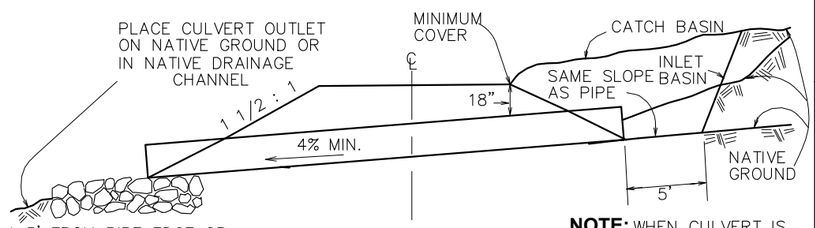
ANCHOR STAKES

TYPE 1-LITTLE MAC
GALV. 3/8"x1 1/2"x36"
GALV. 3/8"x 1 1/2"
MACHINE BOLT W/NUT AND FLAT WASHER

TYPE 2-BIG & SUPER MAC
GALV. 3/8"x 1 1/2"x48"
GALV. 3/8"x1 1/2"
MACHINE BOLT W/NUT AND FLAT WASHER

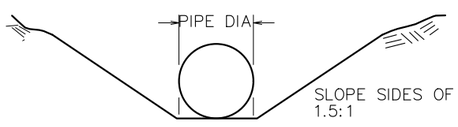
NOTES:
ANCHOR STAKE ALLOWANCE INCLUDES 1 GALV. MACHINE BOLT W/NUT AND FLAT WASHER.

INSTALL SIMILAR TO REGULAR SPILLWAY INLET ASSEMBLY



TYPICAL PIPE INSTALLATION SECTION A-A

NOTE: WHEN CULVERT IS INSTALLED IN A NATURAL DRAINAGE CHANNEL, CLEAR CHANNEL UPSTREAM FROM DEBRIS 20'–25'.



INLET AND OUTLET CHANNEL

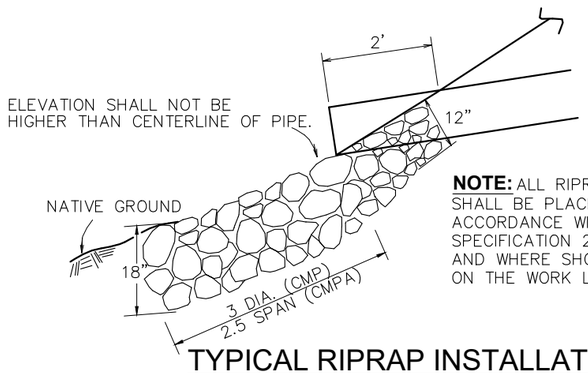
NOTES:

CAMBER:1% OF LENGTH TO A MAXIMUM OF 12 INCHES EXCEPT THAT THE SLOPE FROM INLET TO CENTERLINE SHALL NOT BE LESS THAN 1%.

CORRUGATED COUPLING BANDS SHALL BE 10 1/2" WIDE, MINIMUM. BANDS OF SPECIAL DESIGN THAT ENGAGE FACTORY REFORMED ENDS OF CORRUGATED PIPE AND THAT MEET THE REQUIREMENTS OF SUBSECTION 602 ARE ACCEPTABLE. DIMPLED BANDS ARE NOT ACCEPTABLE EXCEPT WHEN CONNECTING TO EXISTING CUT CULVERTS. ALL JOINTS SHALL HAVE TAR COATING TO PREVENT LEAKS.

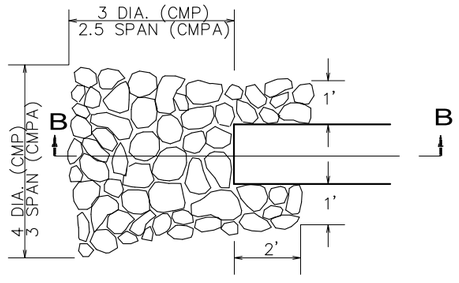
WHEN DEPTH OF FILL IS SHOWN ON THE DRAWINGS, IT IS MEASURED FROM THE INVERT OF THE PIPE TO THE FINISHED GRADE AT THE CENTERLINE OF THE ROAD.

WHEN "CONSTRUCT MINIMUM FILL" IS SHOWN ON THE DRAWINGS, THE COVER OVER THE PIPE SHALL BE 18" AT THE SHOULDER OF THE ROAD. SEE SECTION A–A.

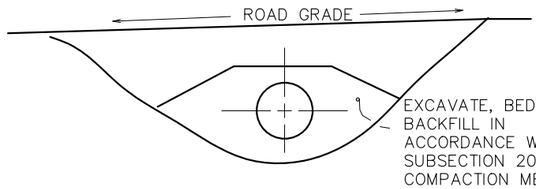


TYPICAL RIPRAP INSTALLATION SECTION B-B

NOTE: ALL RIPRAP SHALL BE PLACED IN ACCORDANCE WITH SPECIFICATION 251, AND WHERE SHOWN ON THE WORK LISTS.



TYPICAL RIPRAP INSTALLATION



TYPICAL PIPE INSTALLATION SECTION C-C

FY2023 ERFO REPAIRS PROJECT (Project)
HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS (District)
CULVERT AND BIG MAC TYPICAL (TITLE)

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

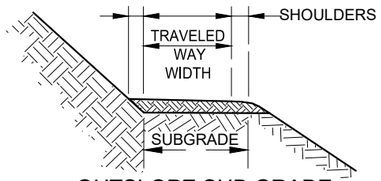
No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT
Title: CULVERT AND BIC MAC TYPICAL

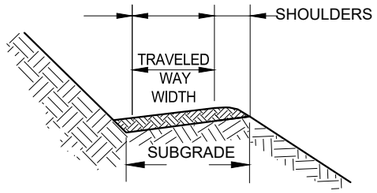
Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 29 OF 32

ROAD STRUCTURE TYPICAL (NATIVE SURFACE)

N.T.S.



OUTSLOPE SUB GRADE
W/O DITCH, 2-4%
CROSS SECTION



INSLOPE SUB GRADE
W/O DITCH, 2-4%
CROSS SECTION

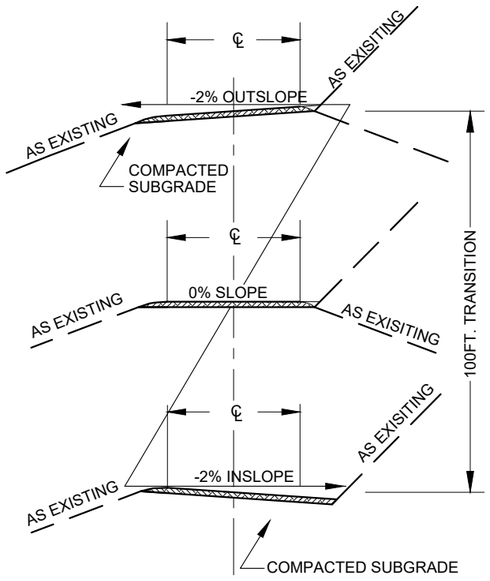
NOTES:

DEPTHS SHOWN ARE COMPACTED DEPTHS. CROWN SUB GRADE AT 2% UNLESS OTHERWISE SPECIFIED. CURVE WIDENING SHALL BE AS SHOWN ON THE WORK LISTS. DRAWINGS ARE NOT TO SCALE

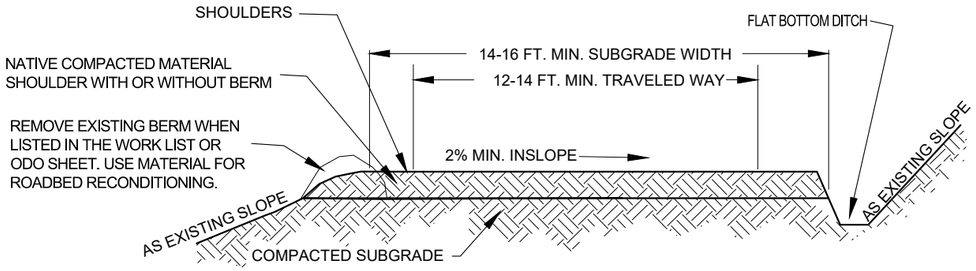
PREPARE AND COMPACT THE SUBGRADE, AS SPECIFIED BY SECTION 303.

RECONDITION ALL EXISTING TURN OUTS TO THERE EXISTING LENGTHS AND WIDTHS

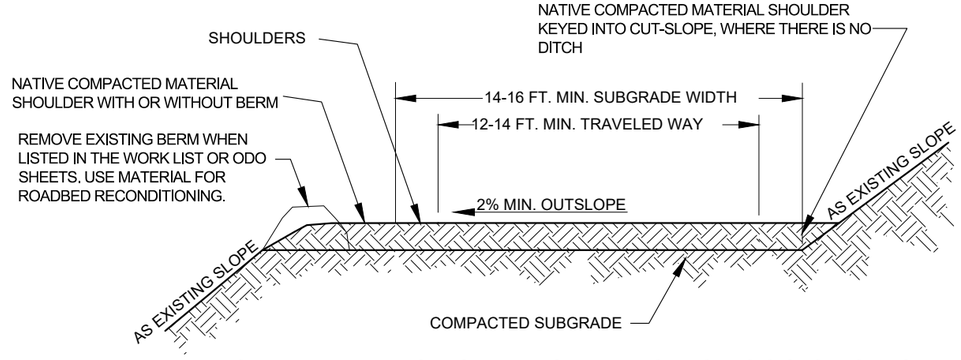
RECONDITION ROADWAY PRISMS TO EXISTING WIDTHS 12-14' WIDE MINIMUM TRAVEL WAY (12' for ML 2; 14' for ML 3) WITH 1' MINIMUM SHOULDERS EACH SIDE UNLESS NOTED ON WORK LIST OR ODO SHEET. .
OUT-SLOPE ROADWAYS WHERE NEEDED TO MINIMIZE WATER CONCENTRATION, EROSION, AND SEDIMENT PRODUCTION.



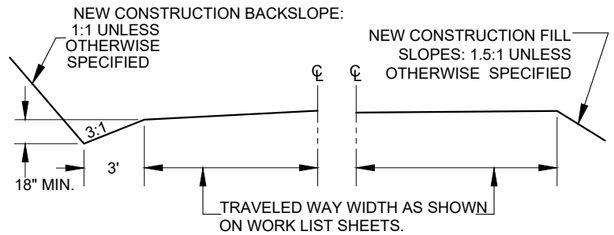
TYPICAL ROADBED TRANSITION
CROSS SECTION



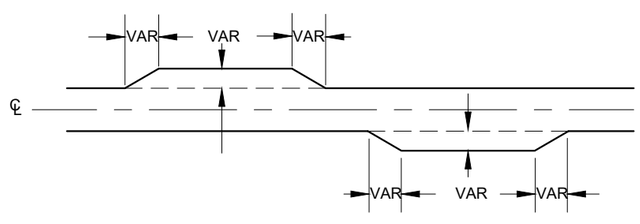
TYPICAL NATIVE GROUND SURFACE CROSS SECTION WITH BERM REMOVAL AND EXISTING DITCH
CROSS SECTION



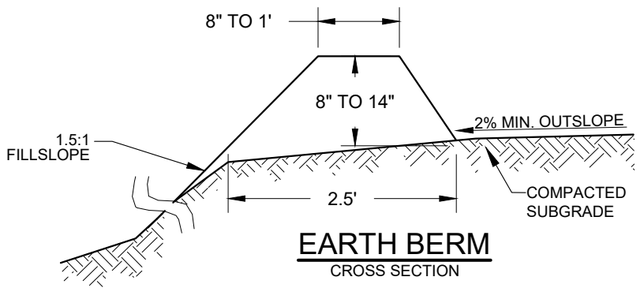
TYPICAL NATIVE GROUND SURFACE CROSS SECTION WITHOUT DITCH
CROSS SECTION



TYPICAL GRADING SECTIONS
CROSS SECTION



TYPICAL TURNOUT SECTIONS
PLAN VIEW



EARTH BERM
CROSS SECTION

FY2023 ERFO REPAIRS PROJECT
Project
HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District
ROAD STRUCTURE (NATIVE) TYPICAL
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

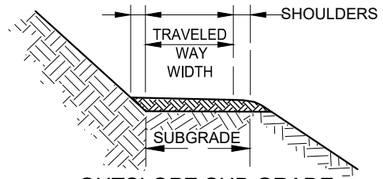
No.	Revision/Issue	Date

Project: FY2023 ERFO REPAIRS PROJECT
Title: ROAD STRUCTURE (NATIVE) TYPICAL

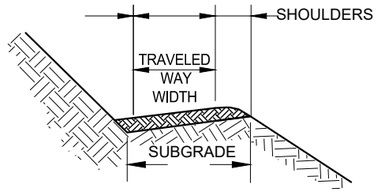
Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 30 OF 32

ROAD STRUCTURE TYPICAL (AGGREGATE)

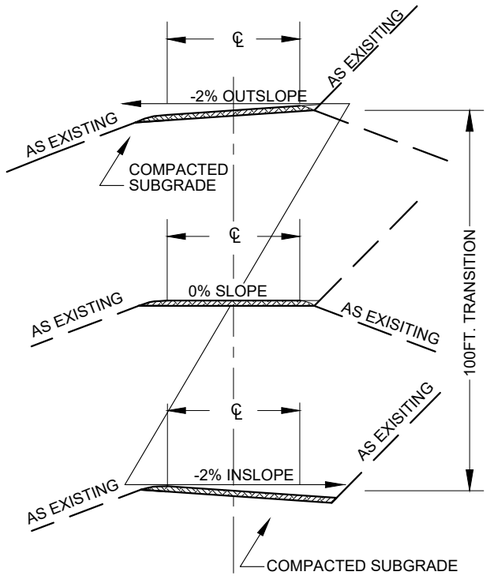
N.T.S.



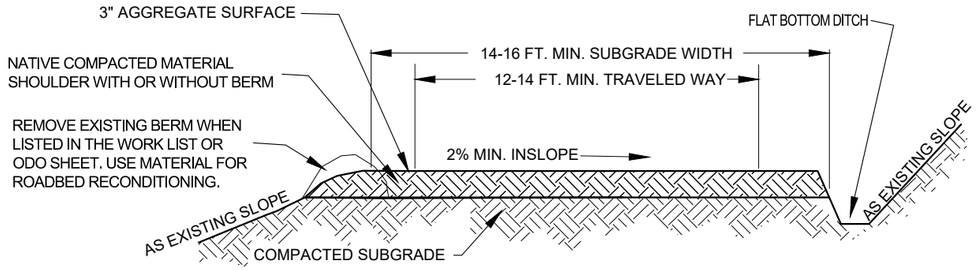
OUTSLOPE SUB GRADE
W/O DITCH, 2-4% CROSS SECTION



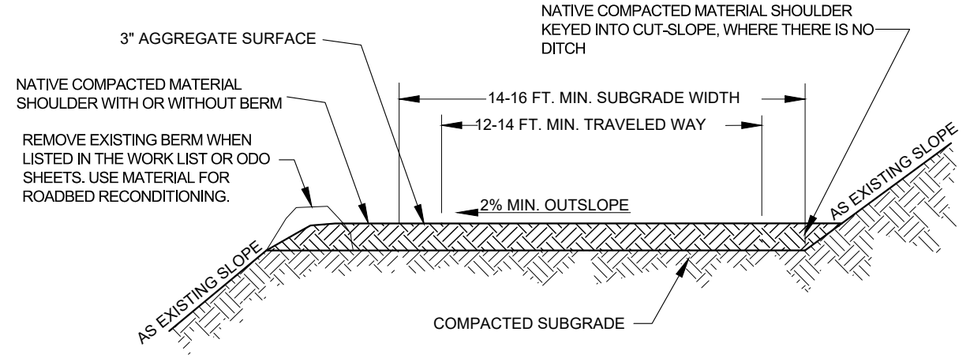
INSLOPE SUB GRADE
W/O DITCH, 2-4% CROSS SECTION



TYPICAL ROADBED TRANSITION
CROSS SECTION



TYPICAL AGGREGATE SURFACE CROSS SECTION WITH BERM REMOVAL AND EXISTING DITCH
CROSS SECTION



TYPICAL AGGREGATE SURFACE CROSS SECTION WITHOUT DITCH
CROSS SECTION

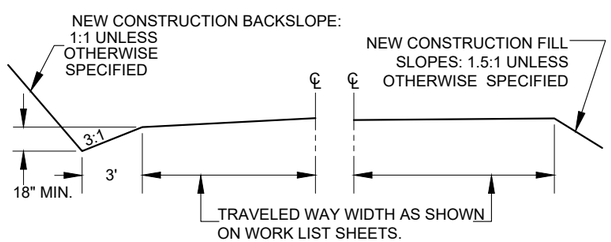
NOTES:

DEPTHS SHOWN ARE COMPACTED DEPTHS. CROWN SUB GRADE AT 2% UNLESS OTHERWISE SPECIFIED. CURVE WIDENING SHALL BE AS SHOWN ON THE WORK LISTS. DRAWINGS ARE NOT TO SCALE.

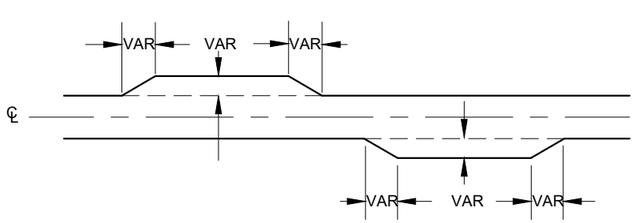
PREPARE AND COMPACT THE SUBGRADE, AS SPECIFIED BY SECTION 303.

RECONDITION ALL EXISTING TURN OUTS TO THEIR EXISTING LENGTHS AND WIDTHS.

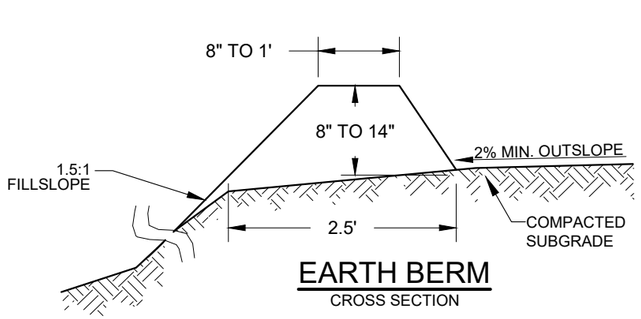
RECONDITION ROADWAY PRISMS TO EXISTING WIDTHS 12-14' WIDE MINIMUM TRAVEL WAY (12' for ML 2; 14' for ML 3) WITH 1' MINIMUM SHOULDERS EACH SIDE UNLESS NOTED ON WORK LIST OR ODO SHEET.
OUT-SLOPE ROADWAYS WHERE NEEDED TO MINIMIZE WATER CONCENTRATION, EROSION, AND SEDIMENT PRODUCTION.



TYPICAL GRADING SECTIONS
CROSS SECTION



TYPICAL TURNOUT SECTIONS
PLAN VIEW



EARTH BERM
CROSS SECTION

FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

ROAD STRUCTURE (AGGREGATE) TYPICAL
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

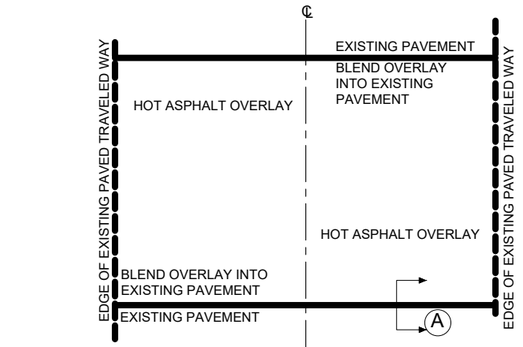
Project: FY2023 ERFO REPAIRS PROJECT

Title: ROAD STRUCTURE (AGGREGATE) TYPICAL

Drawn By: J. GONZALES
Date: DATE
Scale: NONE
Sheet: 31 OF 32

HOT MIX ASPHALT TYPICAL DETAILS

N.T.S.



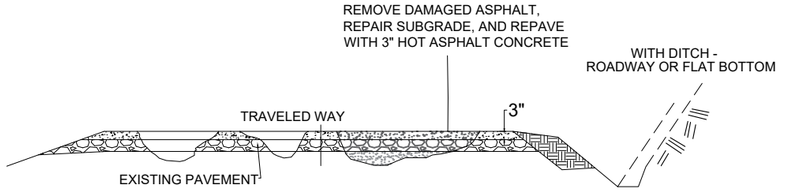
PAVEMENT TRANSITIONS BETWEEN EXISTING AND NEW ASPHALT SKIN PATCH/OVERLAY SURFACES

***NOTES:**

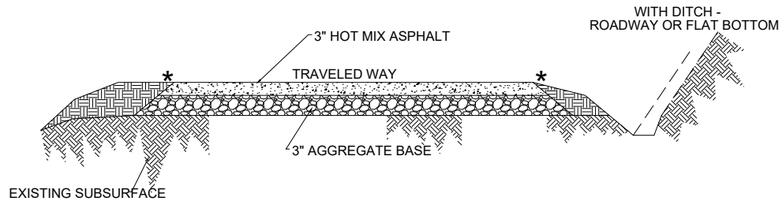
1. BERMS MAY BE LOCATED ON ONE, BOTH OR NEITHER SIDES OF THE ROAD. BERMS TO BE RECONSTRUCTED ARE IDENTIFIED IN THE ROAD LOGS.

2. MATCH RECONSTRUCTED ROADWAY JOINTS WITH EXISTING SHOULDERS AND BERMS AHEAD AND BACK.

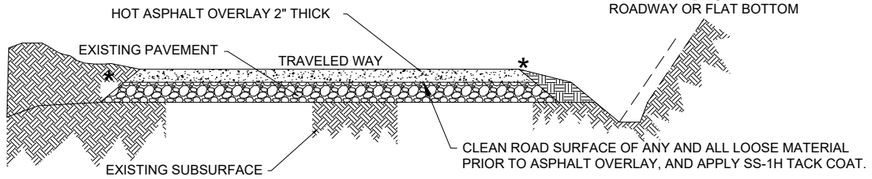
3. USE 3/4" HOT MIX ASPHALT FOR ALL OVERLAYS, FULL DEPTH PATCHES, AND PATCH PAVE.



418(01) HOT ASPHALT FULL DEPTH PATCH TYPE 1(FDP-1) WITH SUBGRADE REPAIR
WITH OR WITHOUT DITCH - ROADWAY OR FLAT BOTTOM



418(02) HOT ASPHALT PAVEMENT FULL DEPTH PATCH TYPE 2(FDP-2)
WITH OR WITHOUT DITCH - ROADWAY OR FLAT BOTTOM

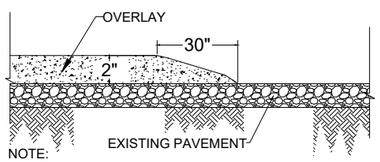


418(04) HOT ASPHALT OVERLAY (FULL LANE WIDTH)

***NOTES:**

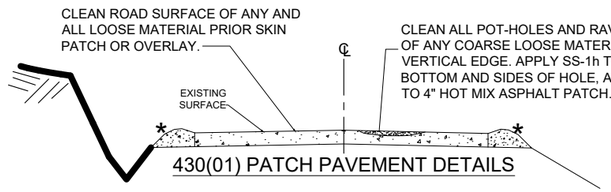
1. BERMS MAY BE LOCATED ON ONE, BOTH OR NEITHER SIDES OF THE ROAD. BERMS TO BE RECONSTRUCTED ARE IDENTIFIED IN THE ROAD LOGS.

2. MATCH RECONSTRUCTED ROADWAY JOINTS WITH EXISTING SHOULDERS AND BERMS AHEAD AND BACK.

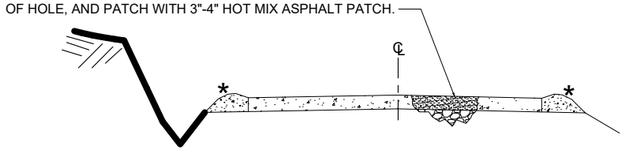


NOTE:
APPLY TAPER TO ALL EDGES OF OVERLAYS IN THE TRAVEL WAY.

Ⓐ TYPICAL TRANSITION TAPER



430(01) PATCH PAVEMENT DETAILS



430(01) DEEP POTHOLE PATCH PAVEMENT DETAILS

FY2023 ERFO REPAIRS PROJECT
Project

HUME, KERN RIVER, WESTERN DIVIDE DISTRICTS
District

HOT MIX TYPICAL
TITLE

SEQUOIA NATIONAL FOREST
220 E. MORTON AVE., PORTERVILLE, CA 93257
Phone 559-784-1500 Fax 559-783-1654

No.	Revision/Issue	Date

Project
FY2023 ERFO REPAIRS PROJECT

Title
HOT MIX TYPICAL

Drawn By
J. GONZALES

Date
DATE

Scale
NONE

Sheet
32
OF 32