

NOTES

1. THE CONTRACTOR SHALL HAVE A CLASS "A" LICENSE FOR THIS PROJECT.
2. STANDARD PLAN LIST APPLICABLE TO THIS CONTRACT INCLUDED IN THE SPECIAL PROVISIONS.
3. MATTOLE RD PM 40.98 GEOTECHNICAL MEMORANDUM: CRAWFORD AND ASSOCIATES, SEPTEMBER 30, 2019.
4. MATTOLE RD PM 42.76 GEOTECHNICAL REPORT: CRAWFORD AND ASSOCIATES, SEPTEMBER 2019.

ABBREVIATIONS

(TO SUPPLEMENT CALTRANS STANDARD PLANS A3A, A3B & A3C)

APN	ASSESSORS PARCEL NUMBER
CCP	CORRUGATED PLASTIC PIPE
CL	CENTERLINE
(E)	EXISTING
EL	ELEVATION
K	K-VALUE
LT	LEFT
PVI	POINT OF VERTICAL INTERSECTION
RT	RIGHT
S	SLOPE
WWF	WELDED WIRE FABRIC

FUNDING SOURCE

THIS PROJECT IS FUNDED BY THE US DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION EMERGENCY RELIEF PROGRAM

GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME: MATTOLE ROAD	DESIGN SECTION: ENGINEERING
ROAD NO: F3C010	DESIGNED BY: C.PROVO
MILE POST: 40.98, 42.76, & 43.62	DRAWN BY: C.PROVO
PROJECT NO.: ER-32LO(115), ER-32LO(117), & ER-32LO(111)	REVIEWED BY: J.WOLF
CONTRACT NO.: 217208, 217209, & 217274	APPROVED BY: J.WOLF
PLOT DATE: 01/19/2021	

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD
PM 40.98, PM 42.76 & PM 43.62
COVER SHEET, SHEET INDEX AND MAPS

SHEET
1
OF
27

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS PROJECT PLANS FOR CONSTRUCTION OF STORM DAMAGE REPAIRS

MATTOLE ROAD (F3C010) AT P.M. 40.98, PM 42.76 & 43.62
PROJECT NO. ER-32LO(115), ER-32LO(117) & ER-32LO(111)
CONTRACT NO. 217208, 217209 & 217274

TO BE SUPPLEMENTED BY STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION 2018 STANDARD PLANS, 2018 STANDARD SPECIFICATIONS, AND LATEST REVISED STANDARD PLANS AND SPECIFICATIONS.



SHEET LIST TABLE

SHEET	SHEET TITLE
1	COVER SHEET, SHEET INDEX AND MAPS
2	TRAFFIC CONTROL PLAN AND QUANTITIES
3	CONSTRUCTION DETAILS
4	PM 40.98 SURVEY CONTROL PLAN
5	PM 40.98 TYPICAL SECTIONS
6	PM 40.98 TEMPORARY DETOUR & EXCAVATION PLAN
7	PM 40.98 ROADWAY PLAN
8	PM 40.98 ROADWAY PROFILE & SUPERELEVATION
9	PM 40.98 EROSION CONTROL PLAN
10	PM 40.98 CROSS SECTIONS - 1 OF 2
11	PM 40.98 CROSS SECTIONS - 2 OF 2
12	PM 42.76 SURVEY CONTROL PLAN
13	PM 42.76 TYPICAL SECTIONS
14	PM 42.76 TEMPORARY DETOUR
15	PM 42.76 ROADWAY PLAN
16	PM 42.76 ROADWAY PROFILE & SUPERELEVATION
17	PM 42.76 DRAINAGE PROFILE
18	PM 42.76 EROSION CONTROL PLAN
19	PM 42.76 CROSS SECTIONS
20	PM 42.76 RETAINING WALL GENERAL PLAN
21	PM 43.62 SURVEY CONTROL PLAN
22	PM 43.62 TYPICAL SECTIONS
23	PM 43.62 ROADWAY PLAN
24	PM 43.62 ROADWAY PROFILE & SUPERELEVATION
25	PM 43.62 EROSION CONTROL PLAN
26	PM 43.62 CROSS SECTIONS - 1 OF 2
27	PM 43.62 CROSS SECTIONS - 2 OF 2



LOCATION MAP
NOT TO SCALE



JOSH WOLF
RCE C70358
CIVIL ENGINEER
GHD INC.

1/19/2021
DATE

APPROVED

Tony R. Seghetti
TONY R. SEGHETTI
RCE 63714
DEPUTY DIRECTOR OF ENGINEERING
COUNTY OF HUMBOLDT
1/20/21
DATE



VICINITY MAP
NOT TO SCALE



VICINITY MAP
NOT TO SCALE





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME: MATTOLE ROAD
ROAD NO: F3C010
MILE POST: 40.98, 42.76, & 43.62
PROJECT NO.: ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.: 217208, 217209, & 217274
PLOT DATE: 01/19/2021

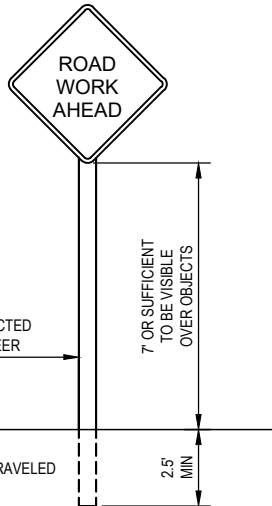
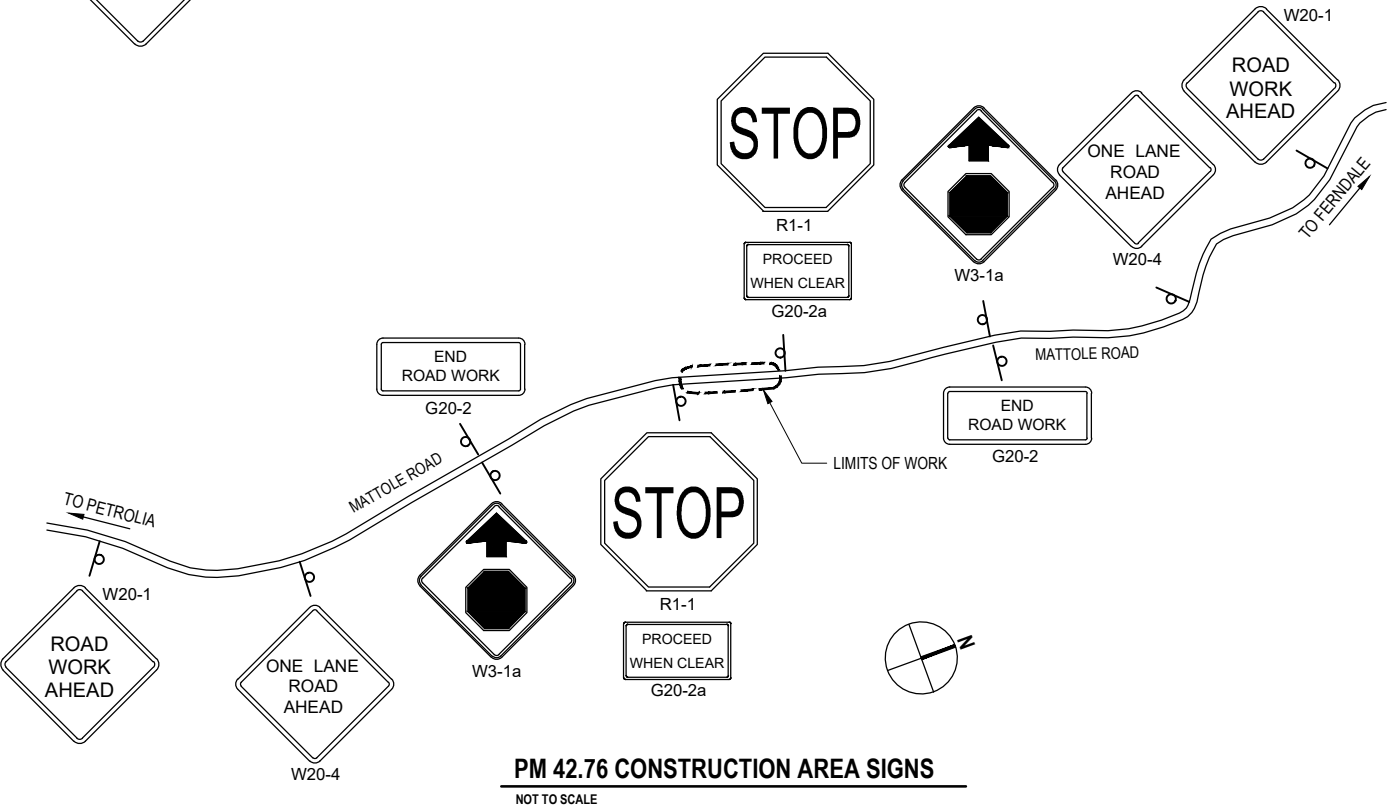
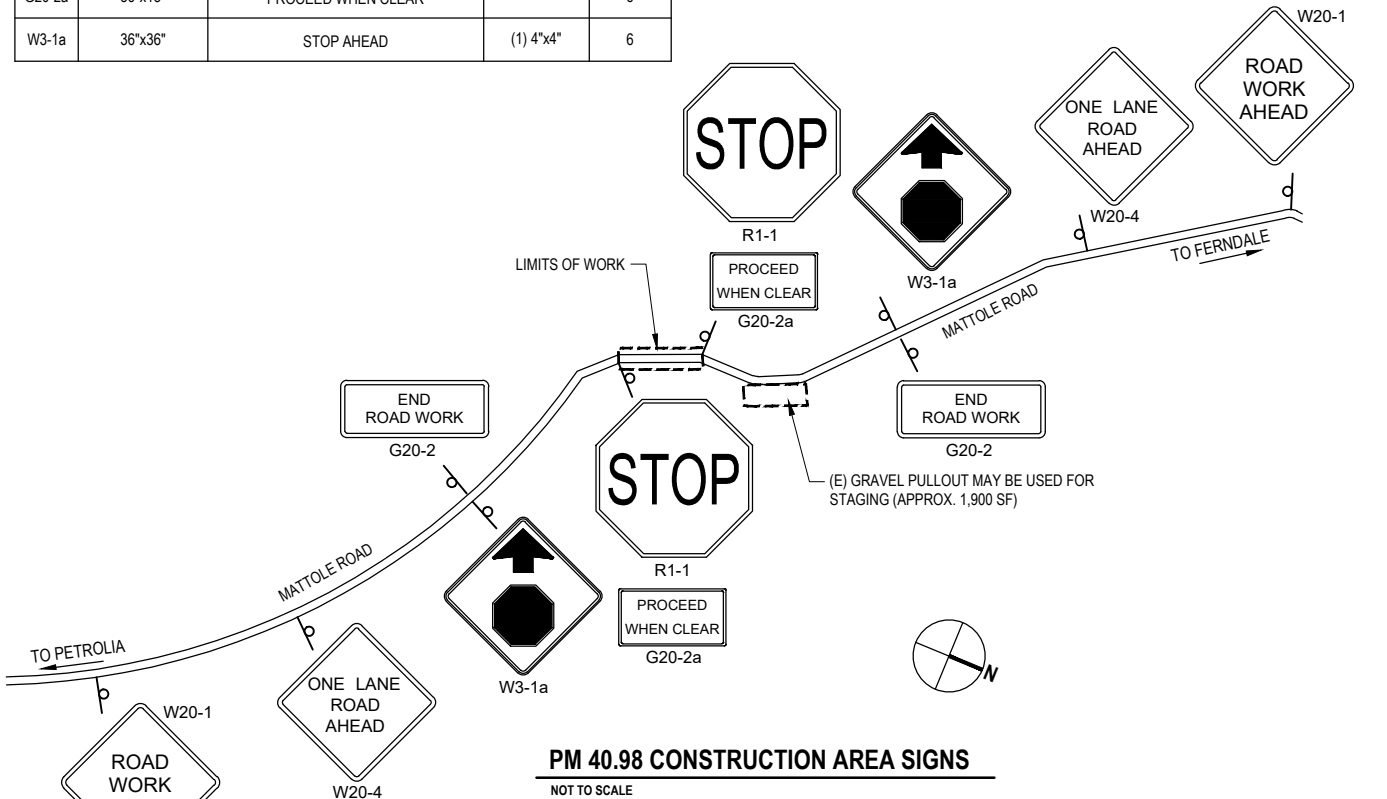
DESIGN SECTION ENGINEERING
DESIGNED BY: C.PROVO
DRAWN BY: C.PROVO
REVIEWED BY: J.WOLF
APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
TRAFFIC CONTROL PLAN AND QUANTITIES

SHEET
2
OF
27

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

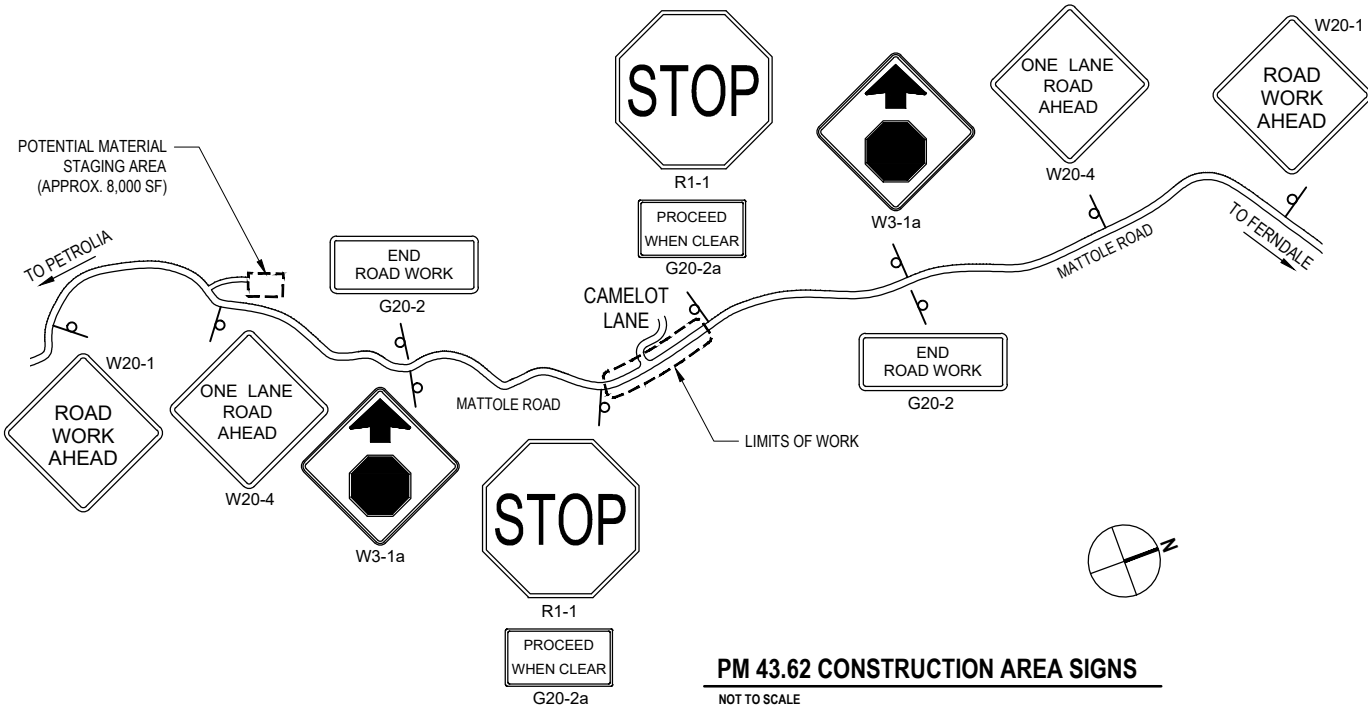
SIGN CODE	PANEL SIZE	SIGN MESSAGE	NUMBER & POST SIZE	NO. OF SIGNS
W20-1	36"x36"	ROAD WORK AHEAD	(1) 4"x4"	6
G20-2	36"x18"	END ROAD WORK	(1) 4"x4"	6
W20-4	36"x36"	ONE LANE ROAD AHEAD	(1) 4"x4"	6
R1-1	36"x36"	STOP	(1) 4"x4"	6
G20-2a	36"x18"	PROCEED WHEN CLEAR		6
W3-1a	36"x36"	STOP AHEAD	(1) 4"x4"	6



TYPICAL STATIONARY CONSTRUCTION AREA SIGNS

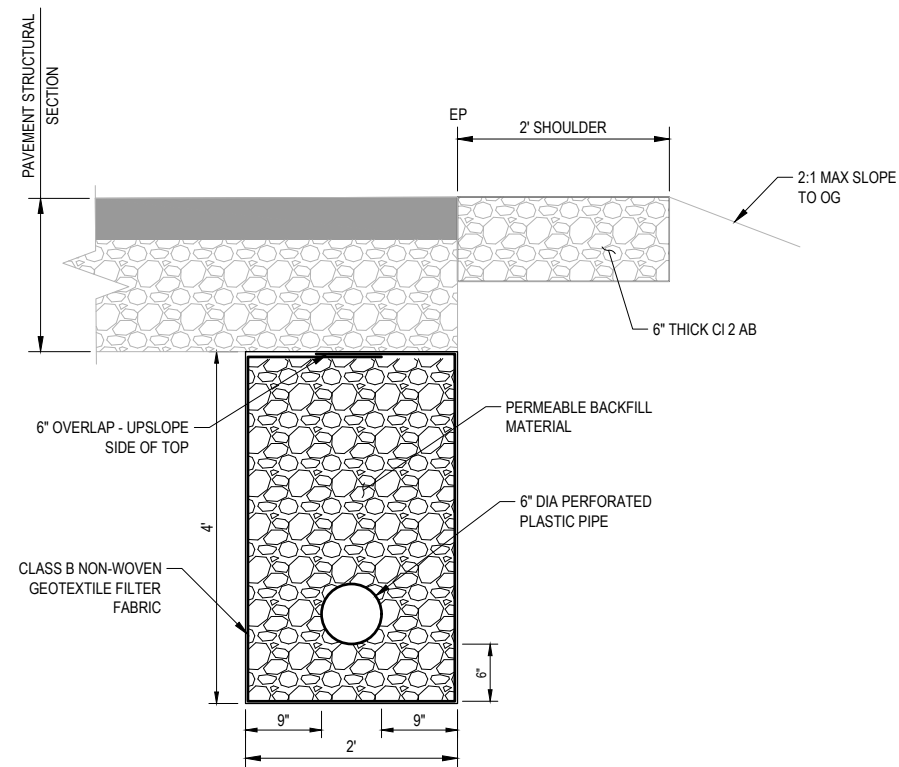
CONSTRUCTION SIGN NOTES:

- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROLS DEVICES (CAMUTCD) AND CALTRANS 2018 STANDARD PLANS.
- EXACT SIGN LOCATIONS AND POSITIONS TO BE APPROVED BY THE ENGINEER.
- ALL WARNING SIGNS SHALL HAVE A BLACK LEGEND AND BORDER ON ORANGE BACKGROUND.
- ALTERNATIVE POST CONFIGURATION TO BE APPROVED BY ENGINEER.
- SPACING PER CALIFORNIA MUTCD TA-11.
- MAINTAIN ALL SIGNS THROUGHOUT DURATION OF CONSTRUCTION.
- KEEP A MINIMUM OF ONE LANE AT LEAST 10' WIDE OPEN FOR TRAFFIC AT ALL TIMES, EXCEPT THE FULL WIDTH OF THE TRAVEL WAY MUST BE OPEN WHEN CONSTRUCTION OPERATIONS ARE NOT ACTIVE OR AN APPROVED TRAFFIC CONTROL PLAN IS IN PLACE.
- PROVIDE FLAGGERS AS REQUIRED TO ACCOMMODATE CONSTRUCTION.



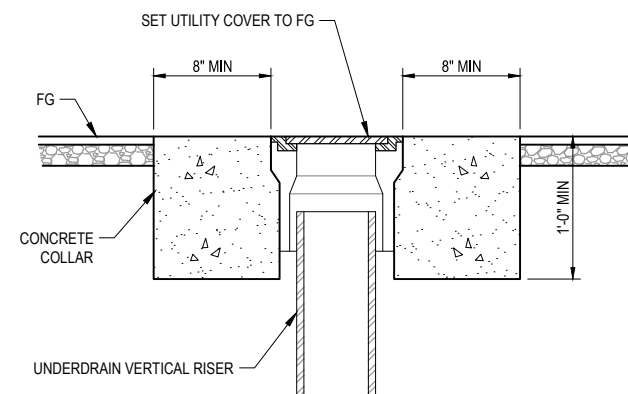
QUANTITIES

ITEM NO.	ITEM CODE	ITEM DESCRIPTION	UNIT	PM 40.98 QUANTITY	PM 42.76 QUANTITY	PM 43.62 QUANTITY	TOTAL QUANTITY
1	120070	Construction Area Signs	EA	10	10	10	30
2	120100	Traffic Control Systems	LS	0.50	0.35	0.15	1
3	129000	Temporary Railing (Type K)	LF	320	200		520
4	130100	Job Site Management	LS	0.50	0.35	0.15	1
5	130200	Prepare Water Pollution Control Plan	LS	0.50	0.35	0.15	1
6	130610	Temporary Check Dam	LF			30	30
7	130620	Temporary Inlet Protection	EA	1			1
8	130680	Temporary Silt Fence	LF	130	140	375	645
9	170103	Cleaning and Grubbing (LS)	LS	0.50	0.35	0.15	1
10	190101	Roadway Excavation	CY	5445	190	30	5665
11	192037	Structure Excavation (Retaining Wall)	CY		1495		1495
12	193013	Structure Backfill (Retaining Wall)	CY		1060		1060
13	198010	Imported Borrow (CY)	CY		405		405
14	198050	Embankment	CY	4596	705	60	5361
15	198250A	Geosynthetic Reinforcement Fabric	SQYD		400		400
16	210212	Dry Seed (SQFT)	SQFT	8250	4700	2380	15330
17	210280	Rolls Frosion Control Product (Blanket)	SQFT	7500	440	2380	10320
18	210350	Fiber Rolls	LF	800	150	85	1035
19	210420	Straw	SQFT	750	4260		5010
20	260203	Class 2 Aggregate Base (CY)	CY	190	192	290	672
21	303000	Pulverized Roadbed	SQYD			850	850
22	390132	Hot Mix Asphalt (Type A)	TON	125	80	150	355
23	394076	Place Hot Mix Asphalt Dike (Type C)	LF	173			173
24	477020	Mechanically Stabilized Embankment	SQFT		1712		1712
25	641107A	18" Plastic Pipe (HDPE Type S)	LF		148		148
26	641113A	24" Plastic Pipe (HDPE Type S)	LF			45	45
27	680902	6" Perforated Plastic Pipe Underdrain	LF	175	180		355
28	680902A	6" Perforated Plastic Pipe (Pipe Only)	LF	137	115		252
29	680903	6" Non-Perforated Plastic Pipe Underdrain	LF	51	70		121
30	682008	Permeable Material (Blanket)	CY	575	125		700
31	692381	Concrete Anchor and Cable Assembly	EA		1		1
32	700638	36" Corrugated Steel Pipe Inlet (.079" Thick)	LF		7		7
33	710137	Remove Culvert (LF)	LF		21	46	67
34	710136A	Remove Perforated Plastic Pipe (LF)	LF	122			122
35	723080	Rock Slope Protection (60 lb, Class II, Method B) (CY)	CY	9	8	43	60
36	729011	Rock Slope Protection Fabric (Class 8)	SQYD	37	30	173	240
37	800321	Chain Link Fence (Type C-4, Vinyl-Clad)	LF		130		130
38	840505A	4" Thermoplastic Traffic Stripe	LF	300	228	357	885
39	999990	Mobilization	LS	0.50	0.35	0.15	1



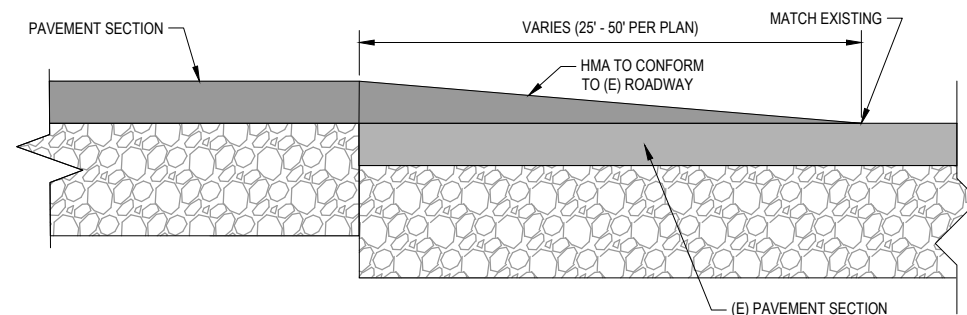
TRENCH UNDERDRAIN DETAIL

NOT TO SCALE



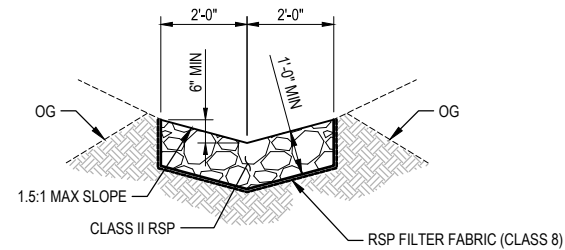
UTILITY COVER AND CONCRETE COLLAR DETAIL

NOT TO SCALE



PAVEMENT CONFORM DETAIL

NOT TO SCALE

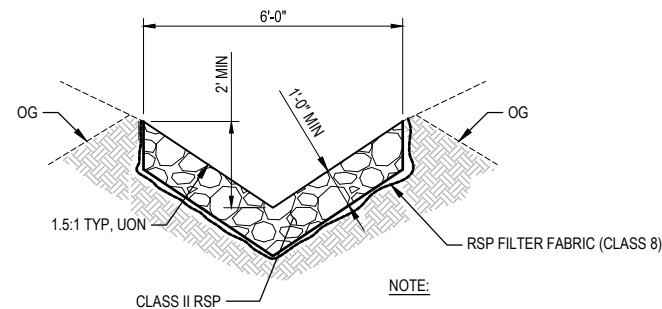


NOTE:

1. EXCAVATION FOR PLACEMENT OF RSP
WILL NOT BE MEASURED FOR PAYMENT.

ROCK-LINED OVERDRAIN DETAIL

NOT TO SCALE

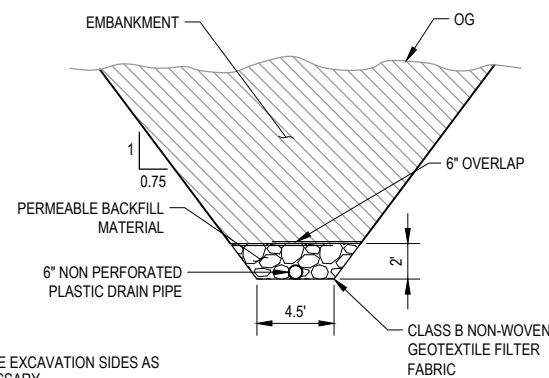


NOTE:

1. EXCAVATION FOR PLACEMENT OF RSP
WILL NOT BE MEASURED FOR PAYMENT.

ROCK-LINED DITCH DETAIL

NOT TO SCALE



NOTE:

1. SHORE EXCAVATION SIDES AS NECESSARY.

SUBDRAIN OUTLET DETAIL

NOT TO SCALE

SURVEY CONTROL NOTES

- TOPOGRAPHIC AND RIGHT-OF-WAY SURVEY PROVIDED BY THE COUNTY OF HUMBOLDT, DEPARTMENT OF PUBLIC WORKS. FIELD WORK DATE: THE TOPOGRAPHIC SURVEY SHOWN HEREON IS A COMBINATION OF THE TOPO DONE BY COUNTY SURVEY CREW IN 2010 AND 2018.
- SOUTHEAST QUARTER OF SECTION 22, TOWNSHIP 2 NORTH, RANGE 2 WEST, HUMBOLDT MERIDIAN, COUNTY OF HUMBOLDT.
- THE BASIS OF BEARINGS FOR THIS DESCRIPTION IS BOOK 56 OF SURVEYS, PAGE 58, HUMBOLDT COUNTY RECORDS, BETWEEN SAID MONUMENT DESCRIBED AND THE 1/4 CORNER BETWEEN SECTIONS 23 AND 26, BEING A 1/2" IRON PIPE WITH PLUG STAMPED "LS 2820" HAVING A RECORD BEARING AND DISTANCE OF NORTH 89°52'10" EAST 2623.73 FEET.
- HORIZONTAL DATUM: TIED TO CONTROL FROM PM 40.3 WHICH IS TIED TO SURROUNDING GOV'T CORNERS SEE 56 SURVEYS 58 BY COUNTY FILE MAY 1995. FOUND CP 21 & CP 22.
- VERTICAL DATUM: NGS BM K-1468 1992 NAVD 88 EL=1262.72.
- DISTANCES SHOWN HEREON ARE IN U.S. SURVEY FEET AND DECIMALS THEREOF.
- MATTOLE ROAD RIGHT OF WAY: 50' WIDE PER ROAD REGISTER NO.1 PAGE 276, FEB 1879.
- UNDERGROUND UTILITIES RESEARCH WAS NOT PERFORMED.

GENERAL NOTES

- CONTRACTOR MUST COMPLY WITH BUSINESS AND PROFESSIONS CODE SECTION 8771 (b) REGARDING REFERENCING, PRESERVING AND RECONSTRUCTING SURVEY MONUMENTS, WHETHER OR NOT SURVEY MONUMENTS ARE SHOWN IN THESE PLANS.
- IF SURVEY MONUMENT IS DAMAGED BY CONTRACTORS OPERATIONS, CONTRACTOR SHALL REPLACE SURVEY MONUMENT AT CONTRACTORS EXPENSE.

LEGEND

- △ TEMPORARY CONTROL POINT
- MATTOLE ROAD R/W
- EMBANKMENT & DRAINAGE R/W
- TCE
- ALIGNMENT LINE



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

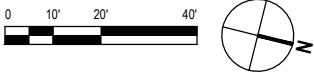
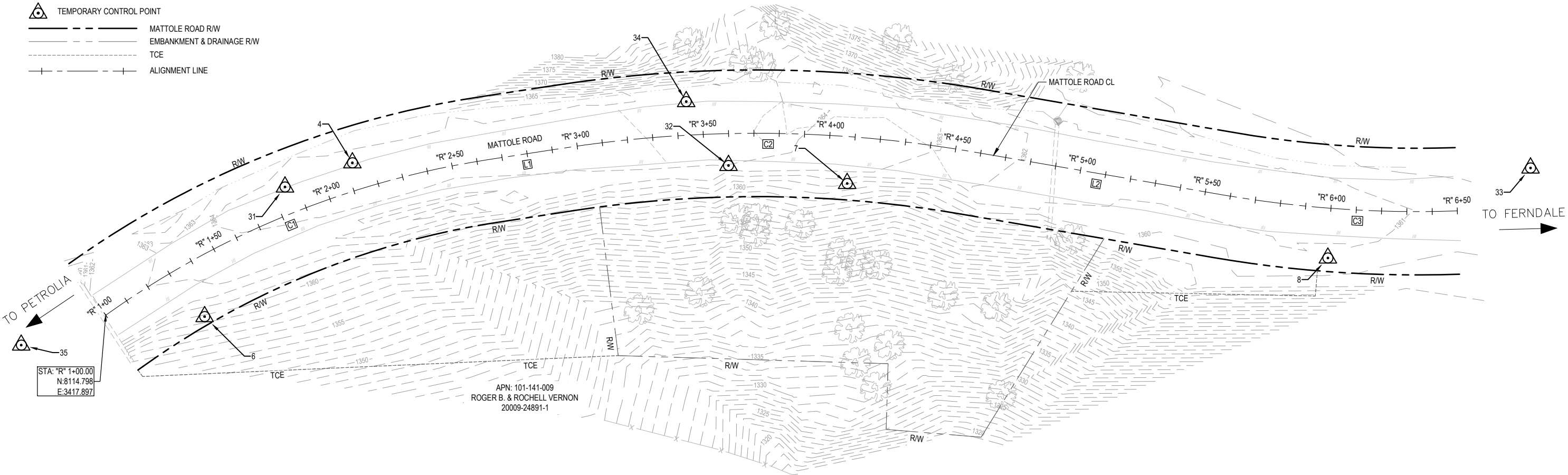
DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 40.98 SURVEY CONTROL PLAN

SHEET
4
OF
27

POINT TABLE				
POINT#	EASTINGS	NORTHINGS	ELEVATION	DESCRIPTION
4	3335.99	8194.70	1364.32	CP 30 CONC NAIL
6	3409.00	8152.79	1355.11	1/2" GIP KELLY LS2820
7	3296.64	8386.17	1361.59	SET 60d NAIL
8	3279.28	8577.42	1360.75	SET80DNAIL
31	3351.66	8171.18	1364.90	CP SET G IN SPIKE & HUMCO TAG
32	3301.09	8338.99	1363.83	CP SET 80D & SHINER
33	3225.45	8646.44	1359.81	CPSET G IN SPIKE & HUMCO TAG
34	3280.65	8316.71	1364.57	
35	3437.43	8085.26	1363.43	CP 3 80d SPIKE

MATTOLE ROAD CONSTRUCTION CENTERLINE GEOMETRY - "R" ALIGNMENT						
Segment	Type	Length	Radius	Direction	Start Station	End Station
C1	CURVE	164.06	350.00		"R" 1+00.00	"R" 2+64.06
L1	LINE	30.84	-	N22° 44' 13.31"W	"R" 2+64.06	"R" 2+94.90
C2	CURVE	161.52	500.00		"R" 2+94.90	"R" 4+56.41
L2	LINE	100.98	-	N4° 13' 43.05"W	"R" 4+56.41	"R" 5+57.39
C3	CURVE	92.53	450.00		"R" 5+57.39	"R" 6+49.92





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



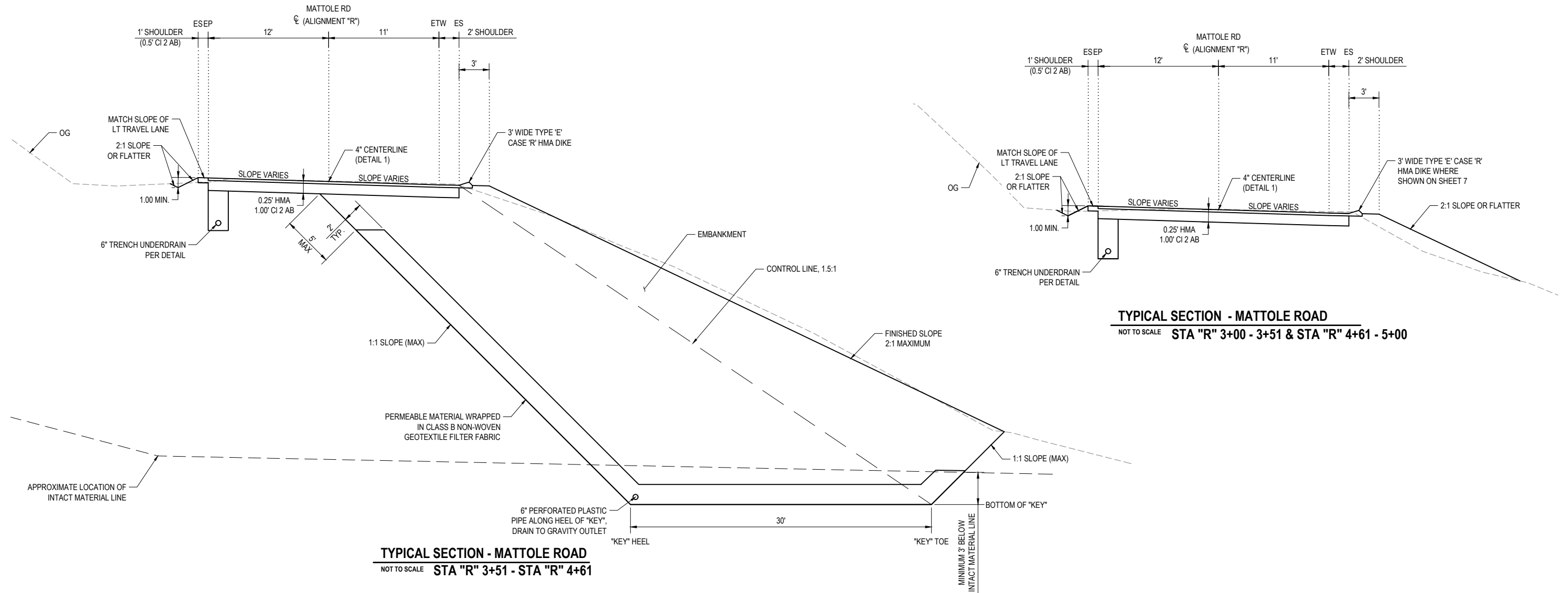
BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME: MATTOLE ROAD	DESIGN SECTION
ROAD NO: F3C010	ENGINEERING
MILE POST: 40.98, 42.76, & 43.62	DESIGNED BY: C.PROVO
PROJECT NO.: ER-32LO(115), ER-32LO(117), & ER-32LO(111)	DRAWN BY: C.PROVO
CONTRACT NO.: 217208, 217209, & 217274	REVIEWED BY: J.WOLF
PLOT DATE: 01/19/2021	APPROVED BY: J.WOLF

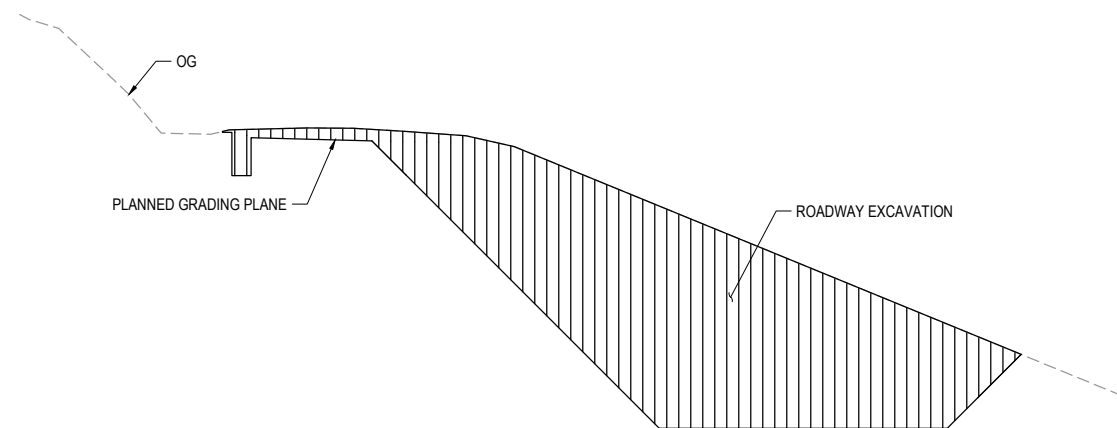
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 40.98 TYPICAL SECTIONS

SHEET
5
OF
27

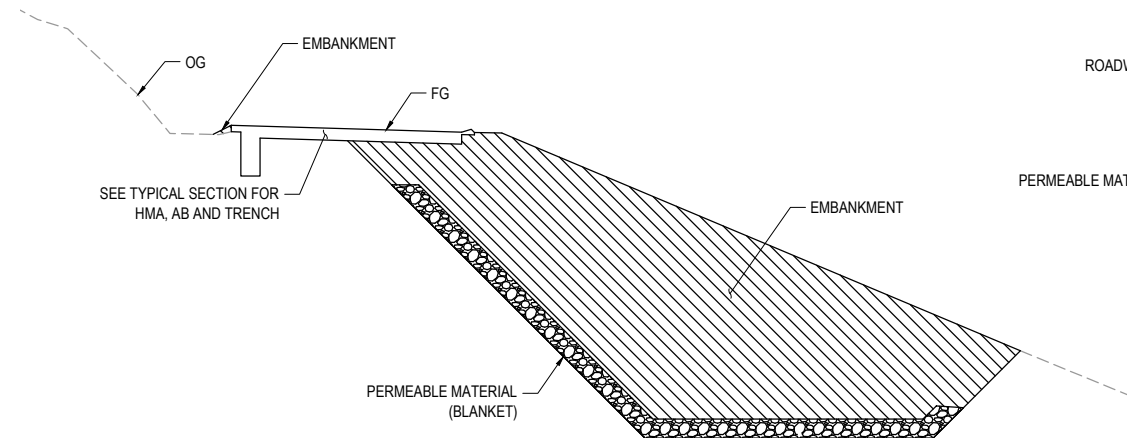


LEGEND

ROADWAY EXCAVATION	
EMBANKMENT	
PERMEABLE MATERIAL (BLANKET)	



LIMITS OF PAYMENT FOR EXCAVATION
NOT TO SCALE



LIMITS OF PAYMENT FOR EMBANKMENT
NOT TO SCALE



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

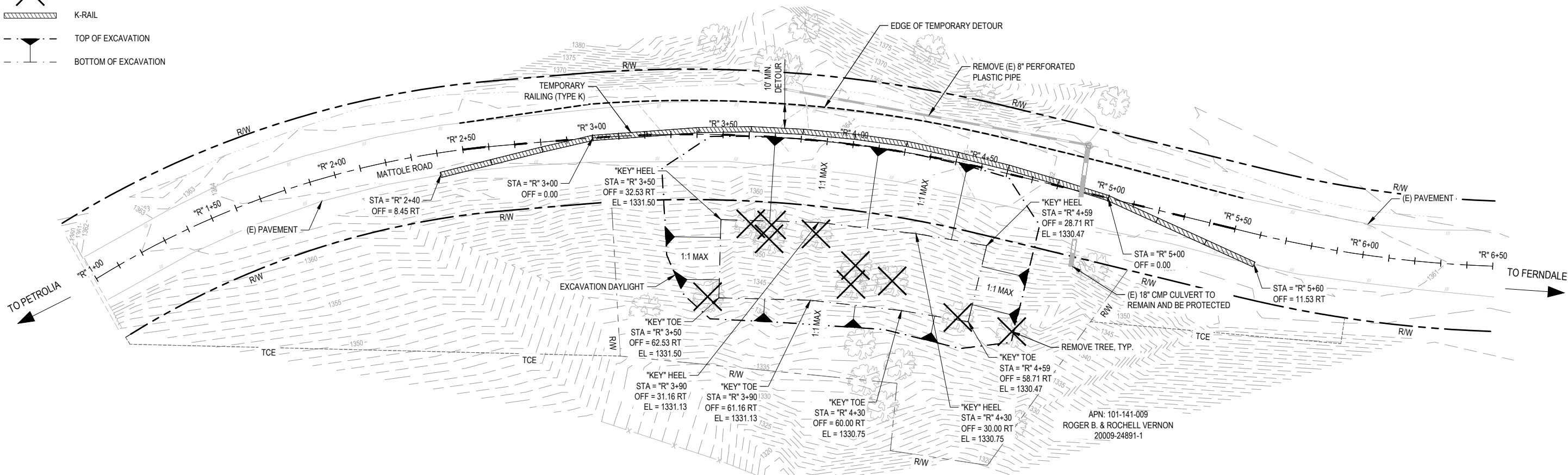
DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 40.98 TEMPORARY DETOUR & EXCAVATION PLAN

SHEET
6
OF
27

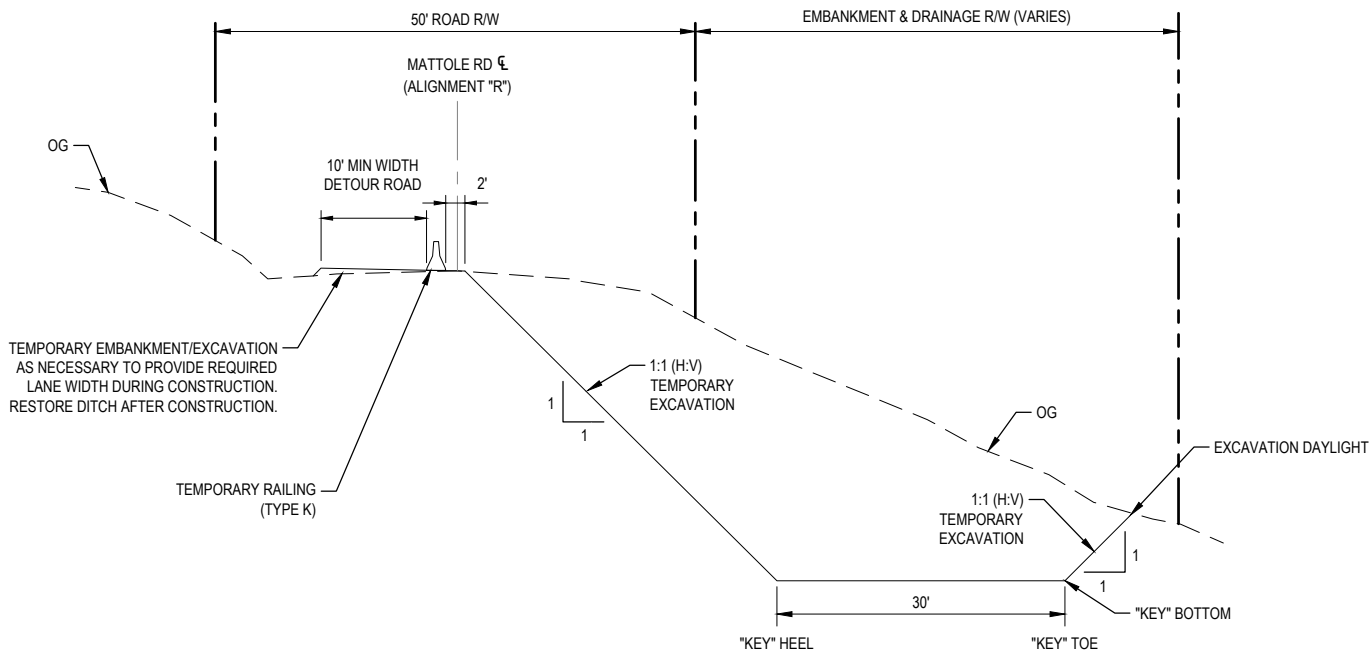
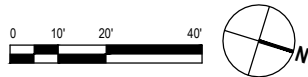
LEGEND

- REMOVE TREE
- K-RAIL
- TOP OF EXCAVATION
- BOTTOM OF EXCAVATION

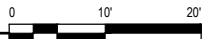


TEMPORARY DETOUR PLAN

SCALE 1" = 20'



TEMPORARY DETOUR AND EXCAVATION TYPICAL SECTION





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

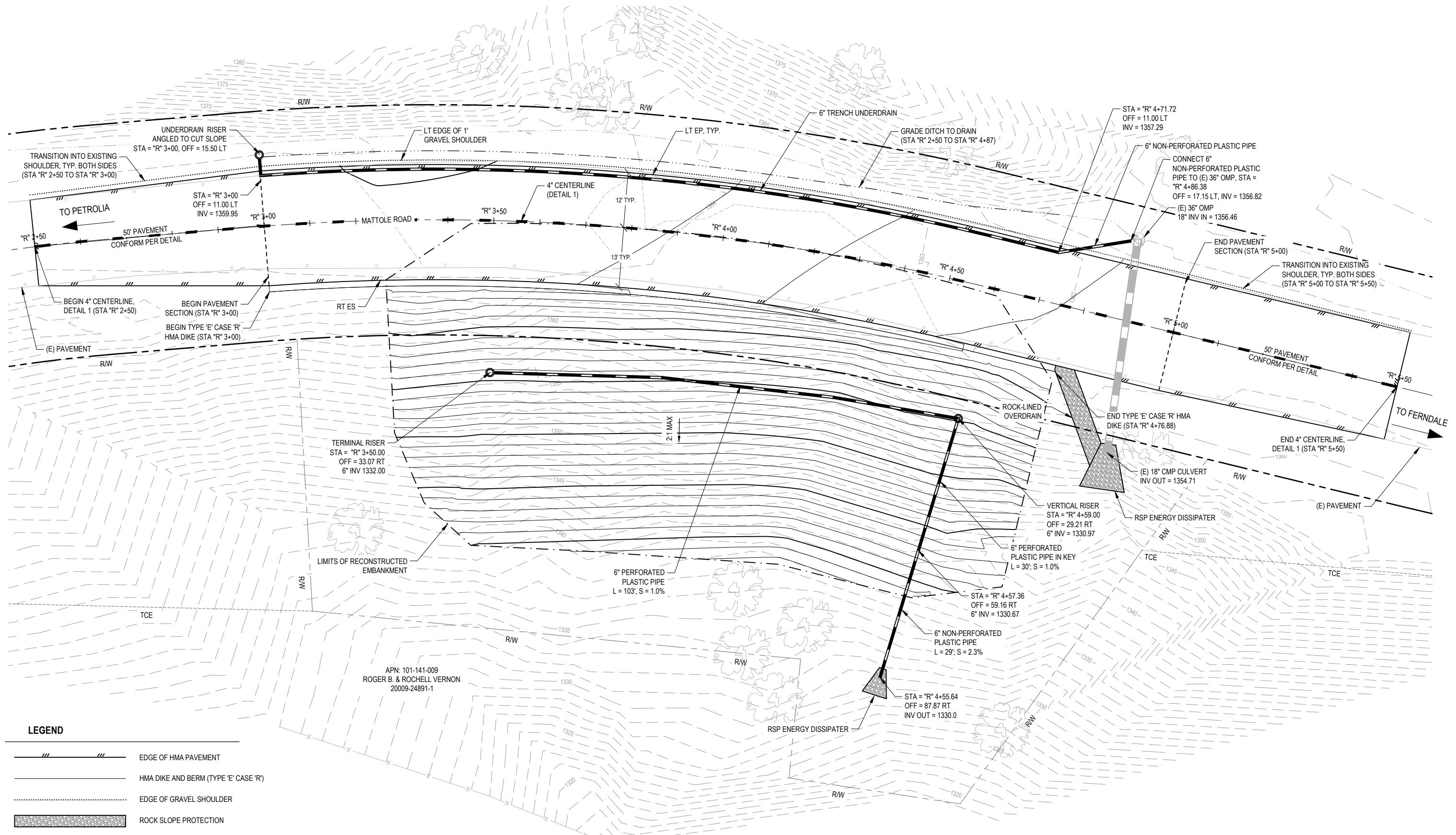
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME: MATTOLE ROAD
ROAD NO: F3C010
MILE POST: 40.98, 42.76, & 43.62
PROJECT NO.: ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.: 217208, 217209, & 217274
PLOT DATE: 01/19/2021

DESIGN SECTION ENGINEERING
DESIGNED BY: C.PROVO
DRAWN BY: C.PROVO
REVIEWED BY: J.WOLF
APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 40.98 ROADWAY PLAN

SHEET
7
OF
27



LEGEND

	EDGE OF HMA PAVEMENT
	HMA DIKE AND BERM (TYPE 'E' CASE 'R')
	EDGE OF GRAVEL SHOULDER
	ROCK SLOPE PROTECTION
	(E) STORM DRAIN PIPE
	STORM DRAIN PIPE





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

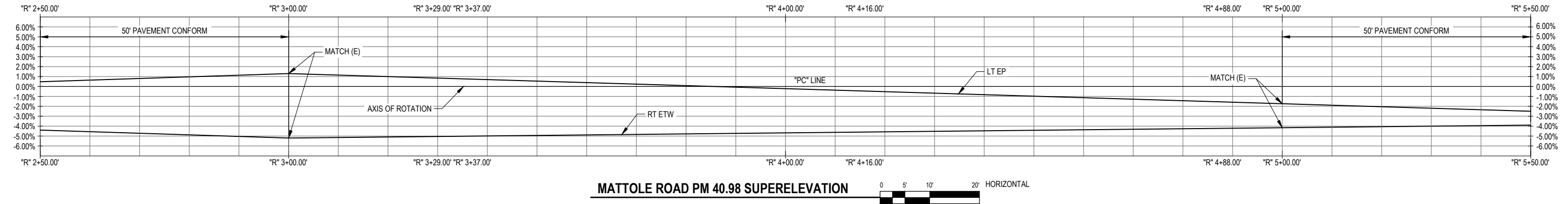
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 40.98 ROADWAY PROFILE & SUPERELEVATION

SHEET
8
OF
27

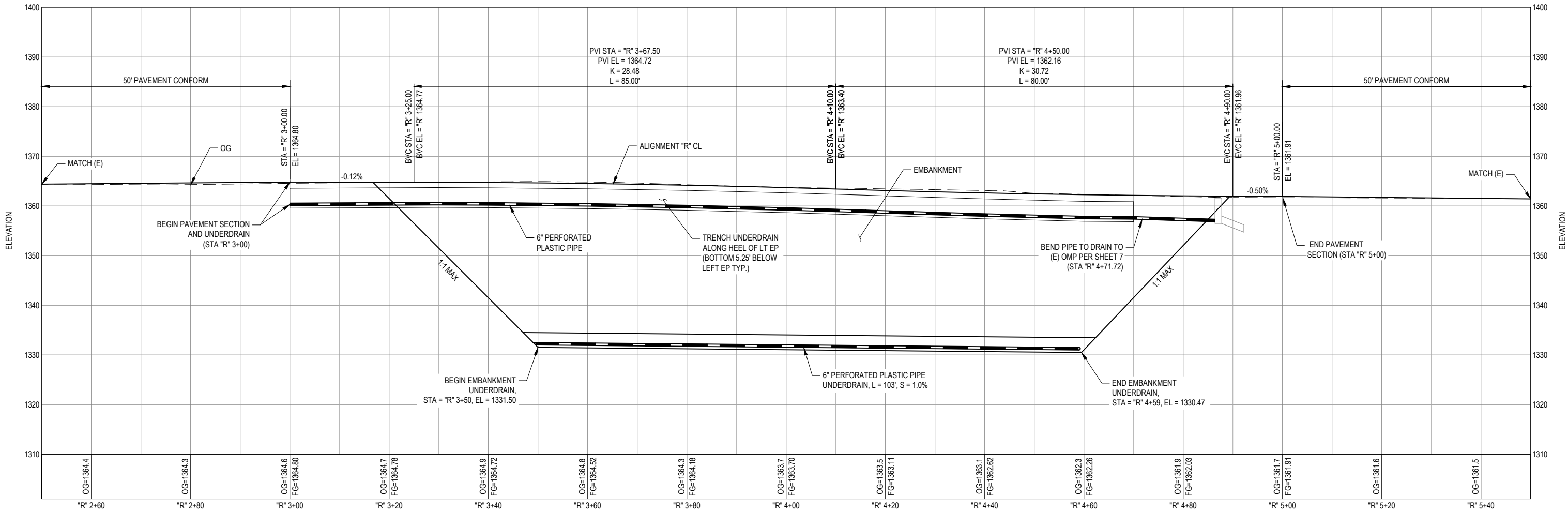
STATION	LT TRAVEL LANE CROSS SLOPE	LT EP ELEVATION	CROWN ELEVATION	RT ETW ELEVATION	RT TRAVEL LANE CROSS SLOPE
"R" 3+00	1.30%	1364.96	1364.80	1364.23	-5.20%
"R" 5+00	-2.00%	1361.67	1361.91	1361.50	-3.70%

Note: Negative cross slopes indicate downwards sloping away from centerline

ROADWAY ELEVATIONS



MATTOLE ROAD PM 40.98 SUPERELEVATION



MATTOLE ROAD PM 40.98 PROFILE VIEW



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

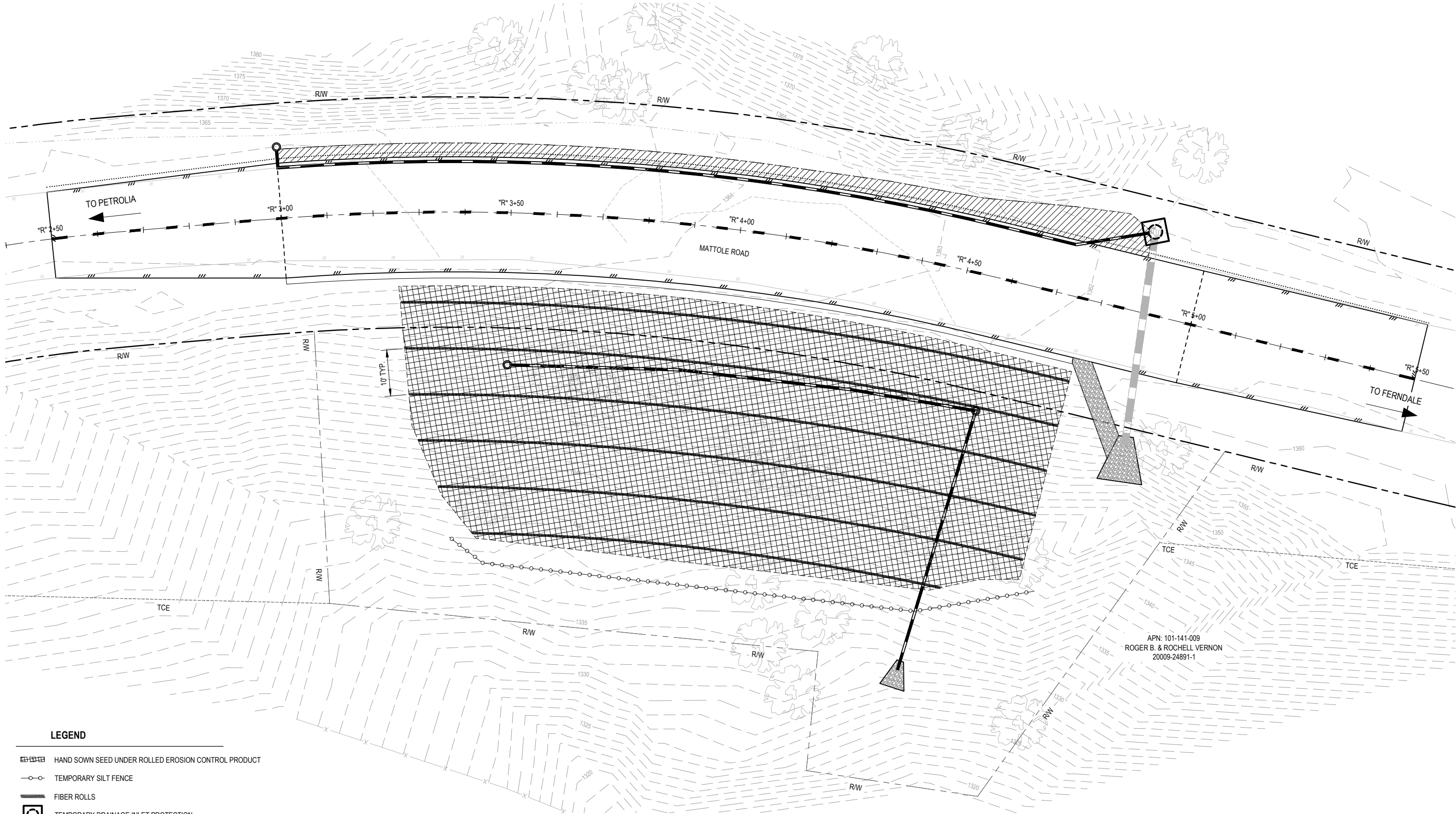
ROAD NAME:	MATTOLE ROAD
ROAD NO.:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32LO(115), ER-32LO(117), & ER-32LO(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

DESIGN SECTION
ENGINEERING
DESIGNED BY: C.PROVO
DRAWN BY: C.PROVO
REVIEWED BY: J.WOLF
APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD
PM 40.98, PM 42.76 & PM 43.62
PM 40.98 EROSION CONTROL PLAN

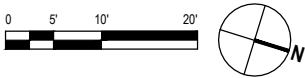
SHEET
9
OF
27

NOTE: THIS PLAN IS ACCURATE FOR
EROSION CONTROL ONLY



APN: 101-141-009
ROGER B. & ROCHELL VERNON
20009-24891-1

- LEGEND**
- HAND SOWN SEED UNDER ROLLED EROSION CONTROL PRODUCT
 - TEMPORARY SILT FENCE
 - FIBER ROLLS
 - TEMPORARY DRAINAGE INLET PROTECTION
 - SEED AND STRAW





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



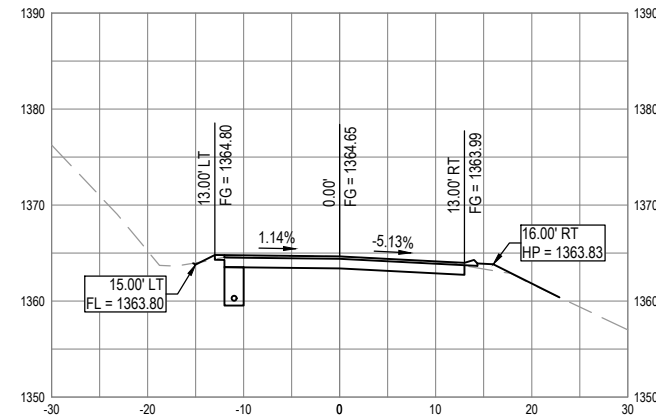
BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

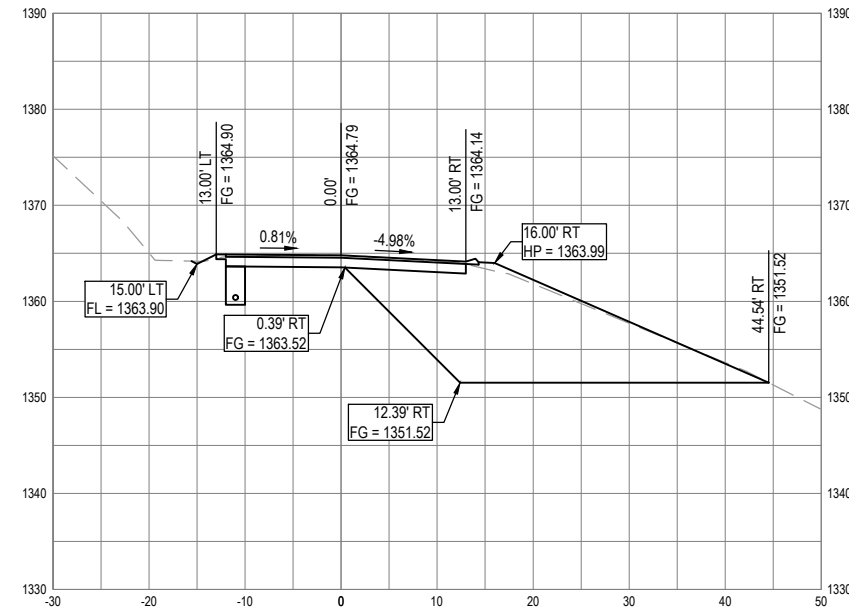
ROAD NAME: MATTOLE ROAD	DESIGN SECTION
ROAD NO: F3C010	ENGINEERING
MILE POST: 40.98, 42.76, & 43.62	DESIGNED BY: C.PROVO
PROJECT NO.: ER-32L0(115), ER-32L0(117), & ER-32L0(111)	DRAWN BY: C.PROVO
CONTRACT NO.: 217208, 217209, & 217274	REVIEWED BY: J.WOLF
PLOT DATE: 01/19/2021	APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 40.98 CROSS SECTIONS - 1 OF 2

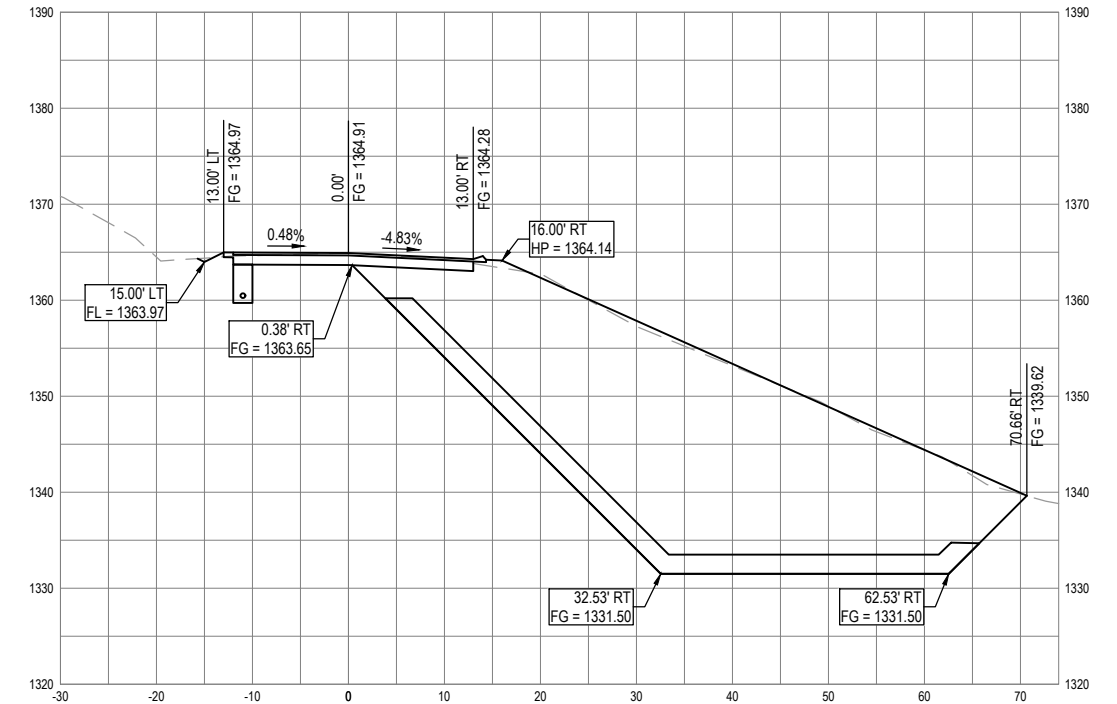
SHEET
10
OF
27



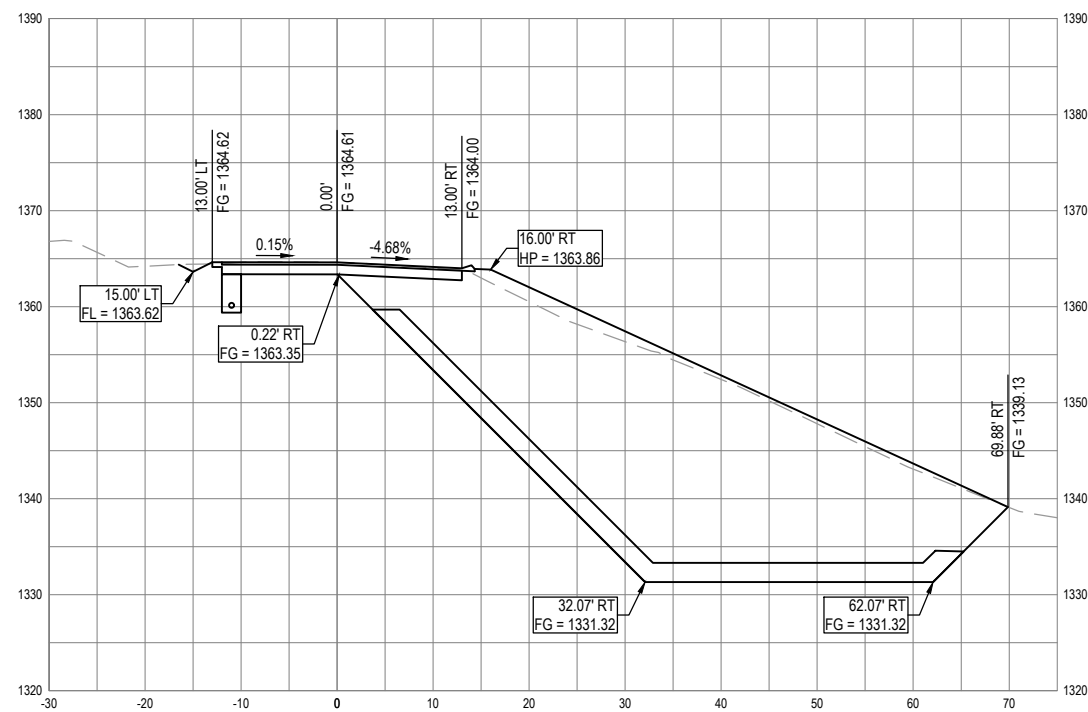
SECTION - STA "R" 3+10



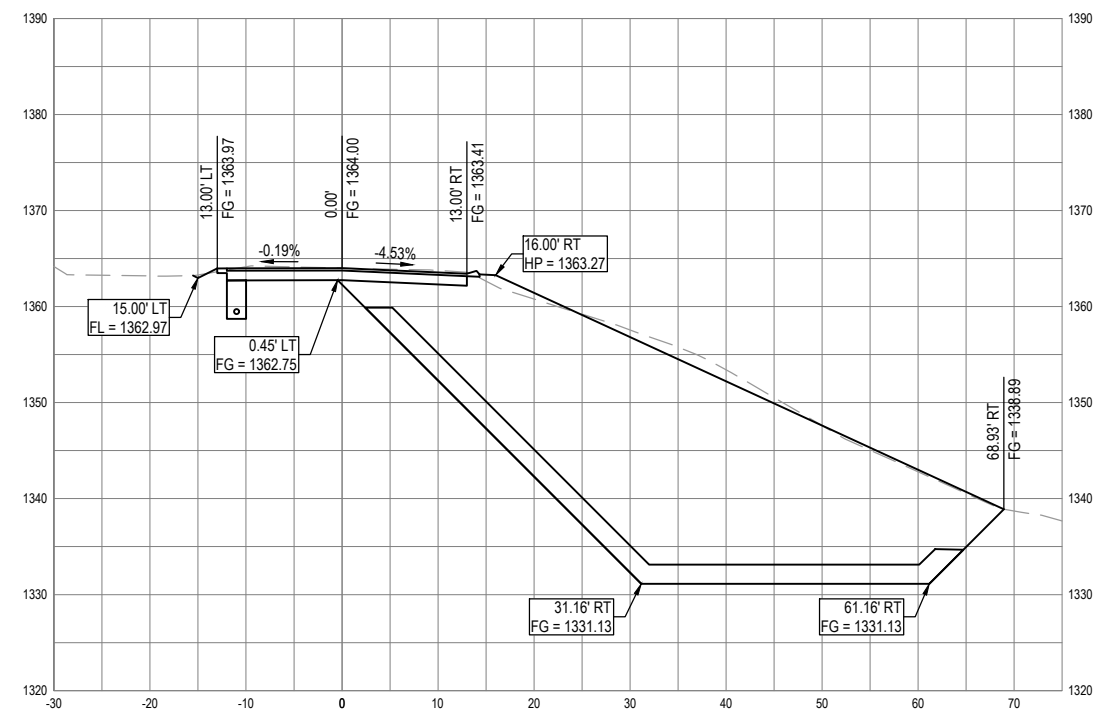
SECTION - STA "R" 3+30



SECTION - STA "R" 3+50



SECTION - STA "R" 3+70



SECTION - STA "R" 3+90



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

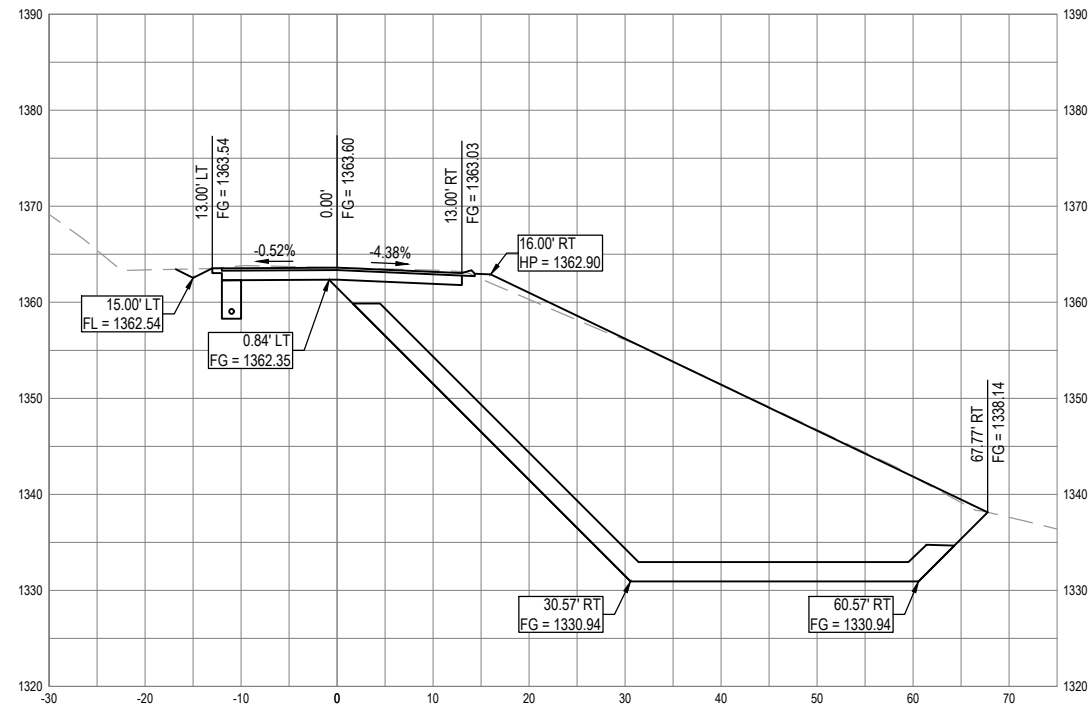
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

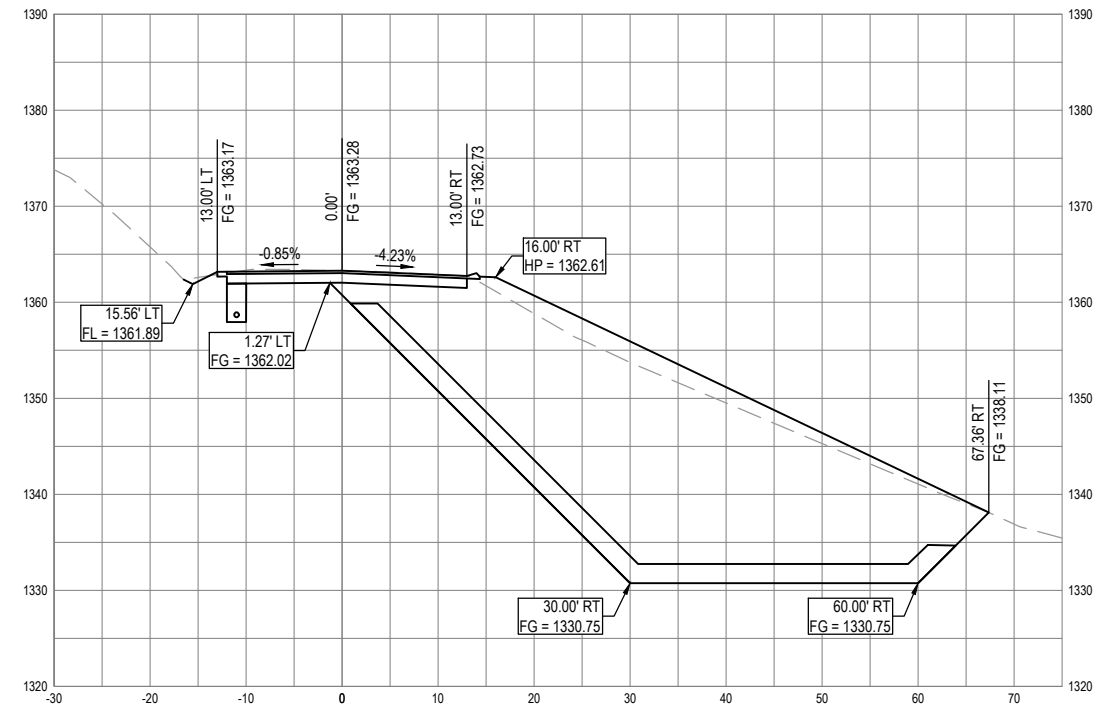
DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD
PM 40.98, PM 42.76 & PM 43.62
PM 40.98 CROSS SECTIONS - 2 OF 2

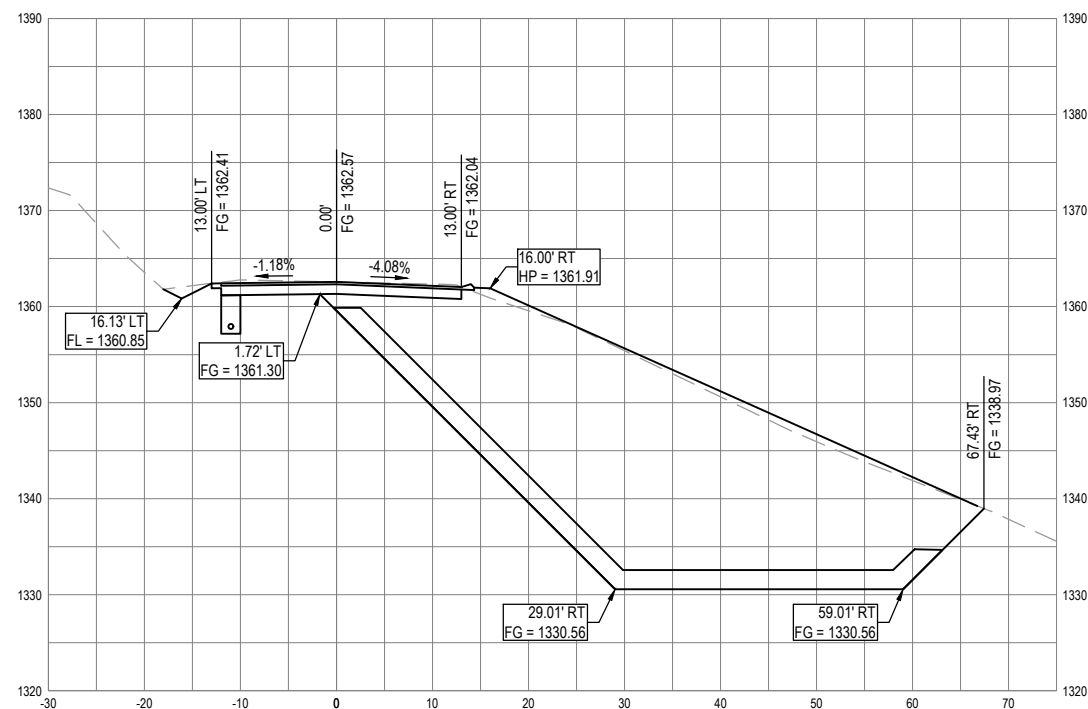
SHEET
11
OF
27



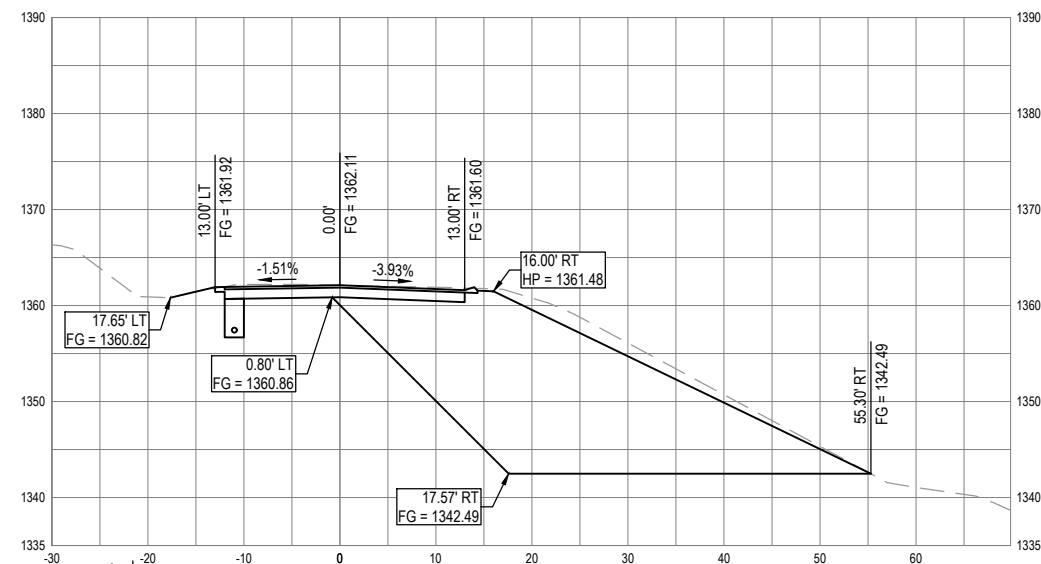
SECTION - STA "R" 4+10



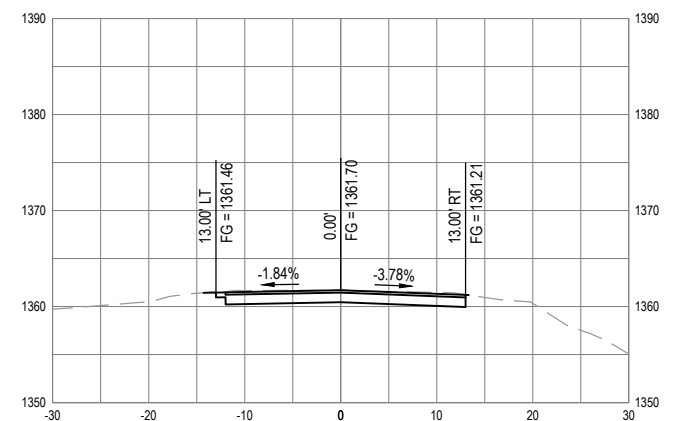
SECTION - STA "R" 4+30



SECTION - STA "R" 4+50



SECTION - STA "R" 4+70



SECTION - STA "R" 4+90

SURVEY CONTROL NOTES

- TOPOGRAPHIC AND RIGHT-OF-WAY SURVEY PREPARED BY POINTS WEST SURVEYING. FIELD WORK DATE: MARCH 8 THROUGH 22, 2019.
- THE PURPOSE OF THIS SURVEY IS TO DETERMINE TOPOGRAPHY FOR A STORM DAMAGE REPAIR SITE AT POST MILE 42.76 OF MATTOLE ROAD. THIS SURVEY REFLECTS CONDITIONS AT THE TIME OF SURVEY.
- COORDINATES FOR THIS SURVEY ARE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83) ZONE 1, NAD 83 (2011), EPOCH 2010.0 BASED ON A STATIC GPS CONTROL SURVEY USING THE NGS OPUS POST PROCESSING SOFTWARE. THE CONTROL POINT IDENTIFIED AS POINT 50 WAS HELD FOR HORIZONTAL POSITIONS SHOWN HEREON. THE MAPPING ANGLE IS 1 DEGREE 29 MINUTES 12 SECONDS; ROTATE BEARINGS HEREON COUNTERCLOCKWISE BY THIS ANGLE TO OBTAIN "TRUE" OR GEODETIC BEARINGS. GRID DISTANCES SHOWN SHOULD BE DIVIDED BY THE COMBINED SCALE FACTOR OF 0.99987094 TO OBTAIN GROUND DISTANCES. MAPPING ANGLE AND GRID SCALE FACTOR ARE TAKEN AT CONTROL POINT NUMBER 50, A 12 INCH SPIKE.
- ELEVATIONS ARE NAVD 88 DATUM BASED ON OPUS SOLUTION UTILIZING THE GEOID 12B MODEL: AN ELEVATION OF 842.87 FEET WAS MEASURED AT THE AFOREMENTIONED CONTROL POINT 50.
- DISTANCES SHOWN HEREON ARE IN U.S. SURVEY FEET AND DECIMALS THEREOF.
- THE RIGHT OF WAY SHOWN IS BASED ON THE DEED RECORDED IN BOOK 750 OF OFFICIAL RECORDS, PAGE 347. THE DEED BEARINGS WERE ROTATED COUNTER-CLOCKWISE 0°23'07" TO COINCIDE WITH THE CENTERLINE OF THE NORTH END OF COURSE NUMBER 4 OF THE RECORD OF SURVEY BY MIKE MCGEE RECORDED IN BOOK 41 OF SURVEYS PAGE 63. SAID SURVEY WAS USED TO CALCULATE THE DEED "POINT OF BEGINNING", BEING THE SOUTHWEST CORNER OF SECTION 14. BOOK 41 OF SURVEYS PAGE 63 WAS ROTATED CLOCKWISE 1°30' 57" TO COINCIDE WITH OUR GRID BEARING TIE BETWEEN MONUMENT P-1 & P-2 SHOWN THEREON. DEED AND SAID MAP WERE SCALED BY THE COMBINED SCALE FACTOR NOTED ABOVE. NOTE: THE DEED CLOSING COURSE DOES NOT MATHEMATICALLY CLOSE BY 8.1 FEET AS WAS NOTED ON PRIOR SURVEY BY HUMBOLDT COUNTY IN 2012, PROJECT NO. 211267. THIS SURVEY HOLDS DEED COURSE "N 5°49'03" E 3,399.17 FEET" FROM SOUTHWEST CORNER OF SECTION 14 TO ESTABLISH STATION 0+00 IN SAID DEED, SUBJECT TO ROTATION AND SCALE AS NOTED ABOVE.
- CONTOURS AND SPOT ELEVATIONS WERE OBTAINED BY CONVENTIONAL SURVEY TECHNIQUES. ONLY TREES 12 INCH AND LARGER WERE LOCATED; NUMEROUS OTHER SMALLER TREES EXIST WITHIN AREA SURVEYED AND ARE NOT SHOWN. TREE LOCATIONS ARE GENERALLY SHOWN AT BREAST HEIGHT AND ARE APPROXIMATE DUE TO THE FACT NOT ALL TREES ARE GROWING VERTICALLY.
- SOME CONTROL POINTS SHOWN HEREON ARE SET IN AN AREA SUBJECT TO MOVEMENT (POINTS 52 AND 53). POINTS 50 AND 51 SHOULD BE USED TO CHECK OTHER CONTROL POINTS SHOWN TO CONFIRM NO MOVEMENT HAS OCCURRED.
- UNDERGROUND UTILITIES ARE SHOWN BASED ON A COMBINATION OF VISIBLE PHYSICAL EVIDENCE AND RECORDS MADE AVAILABLE TO THE SURVEYOR. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES ARE IN THE EXACT LOCATIONS INDICATED. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

DESIGN SECTION	ENGINEERING
DESIGNED BY:	S.GOULD
DRAWN BY:	S.GOULD
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 42.76 SURVEY CONTROL PLAN

SHEET
12
OF
27

GENERAL NOTES

- CONTRACTOR MUST COMPLY WITH BUSINESS AND PROFESSIONS CODE SECTION 8771 (b) REGARDING REFERENCING, PRESERVING AND RECONSTRUCTING SURVEY MONUMENTS, WHETHER OR NOT SURVEY MONUMENTS ARE SHOWN IN THESE PLANS.
- IF SURVEY MONUMENT IS DAMAGED BY CONTRACTORS OPERATIONS, CONTRACTOR SHALL REPLACE SURVEY MONUMENT AT CONTRACTORS EXPENSE.

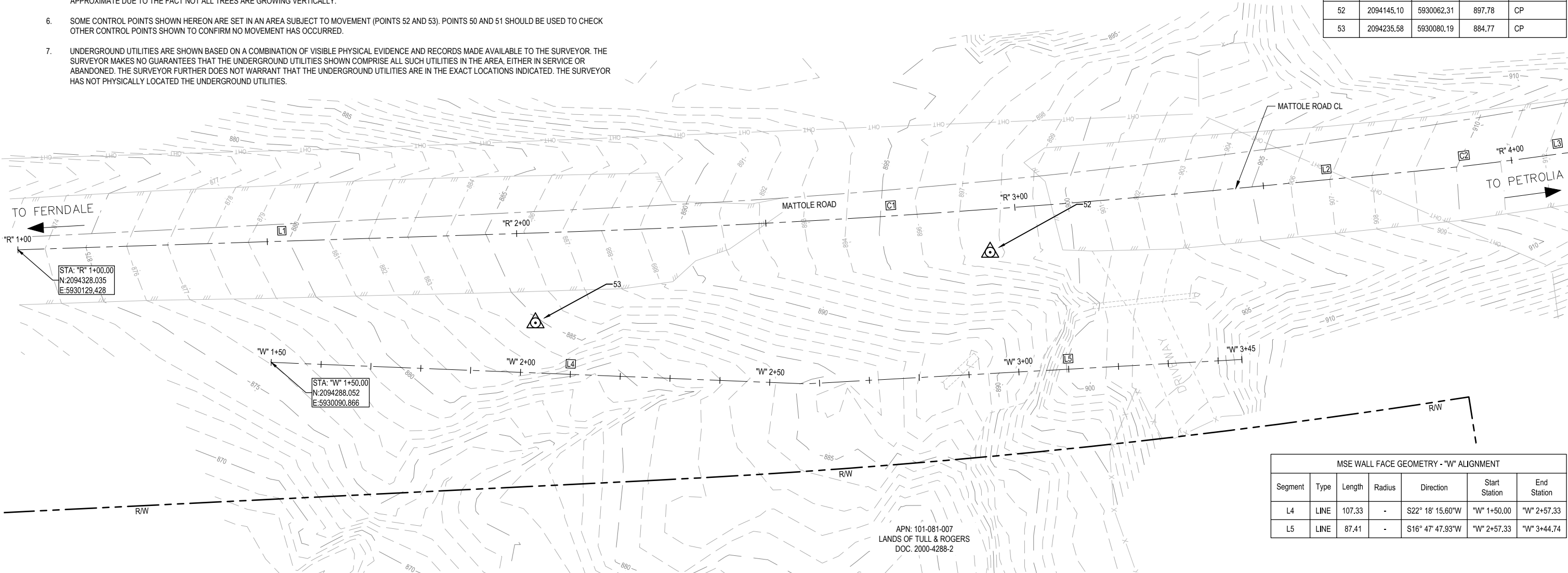
LEGEND

- TEMPORARY CONTROL POINT
- ALIGNMENT LINE
- MATTOLE ROAD R/W
- PROPERTY LINE

APN: 101-081-006
LANDS OF SILVA, CONWAY & CONWAY
DOC. 2018-14179

MATTOLE ROAD CONSTRUCTION CENTERLINE GEOMETRY - "R" ALIGNMENT						
Segment	Type	Length	Radius	Direction	Start Station	End Station
L1	LINE	105.95	-	S18° 08' 08.10"W	"R" 1+00.00	"R" 2+05.95
C1	CURVE	138.50	2200.00		"R" 2+05.95	"R" 3+44.46
L2	LINE	36.81	-	S14° 31' 42.57"W	"R" 3+44.46	"R" 3+81.26
C2	CURVE	18.71	500.00		"R" 3+81.26	"R" 3+99.97
L3	LINE	29.23	-	S12° 23' 03.91"W	"R" 3+99.97	"R" 4+29.21

SURVEY CONTROL POINT TABLE				
POINT#	NORTHINGS	EASTINGS	ELEVATION	DESCRIPTION
50	2094504.86	5930052.00	842.87	CP_SPK
51	2094476.19	5930160.93	854.53	CP_SPK
52	2094145.10	5930062.31	897.78	CP
53	2094235.58	5930080.19	884.77	CP



MSE WALL FACE GEOMETRY - "W" ALIGNMENT						
Segment	Type	Length	Radius	Direction	Start Station	End Station
L4	LINE	107.33	-	S22° 18' 15.60"W	"W" 1+50.00	"W" 2+57.33
L5	LINE	87.41	-	S16° 47' 47.93"W	"W" 2+57.33	"W" 3+44.74



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

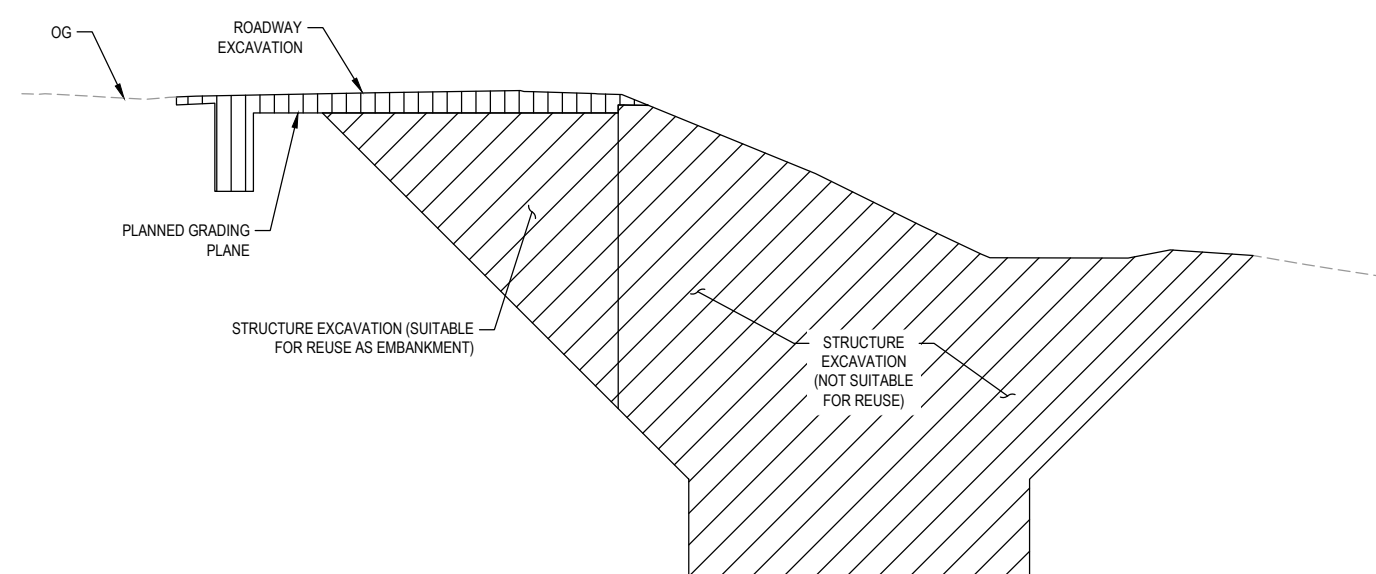
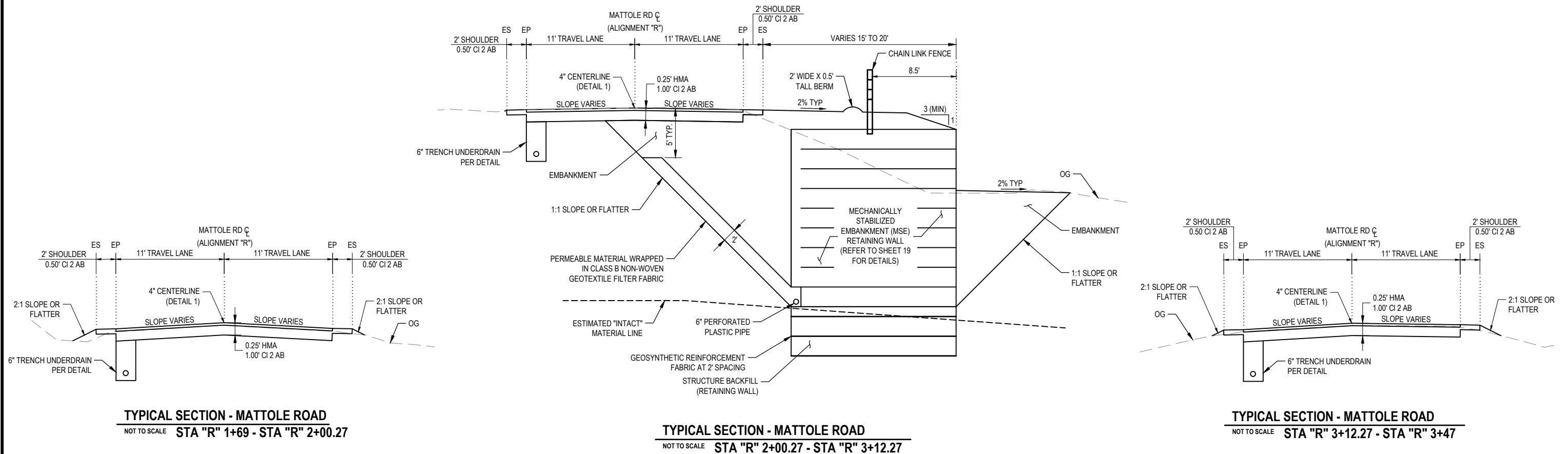
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

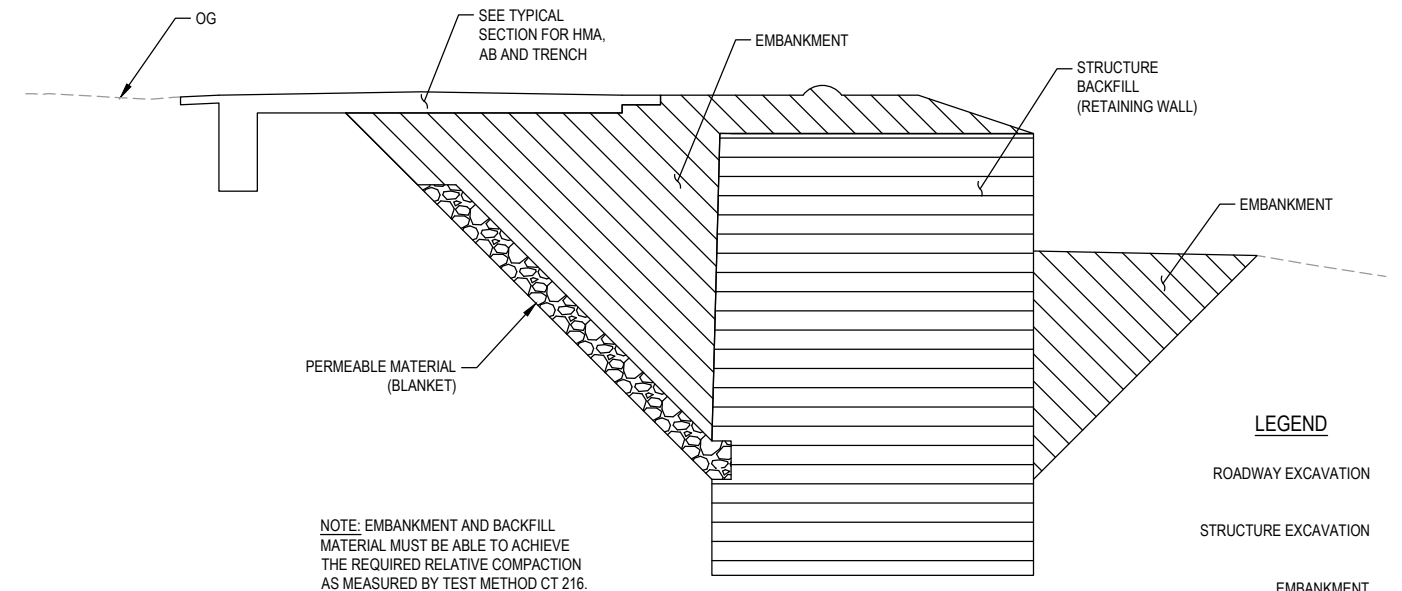
DESIGN SECTION	ENGINEERING
DESIGNED BY:	S.GOULD
DRAWN BY:	S.GOULD
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 42.76 TYPICAL SECTIONS

SHEET
13
OF
27



LIMITS OF PAYMENT FOR EXCAVATION
NOT TO SCALE



LIMITS OF PAYMENT FOR FILL
NOT TO SCALE

LEGEND	
ROADWAY EXCAVATION	
STRUCTURE EXCAVATION	
EMBANKMENT	
STRUCTURE BACKFILL	
PERMEABLE MATERIAL (BLANKET)	



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

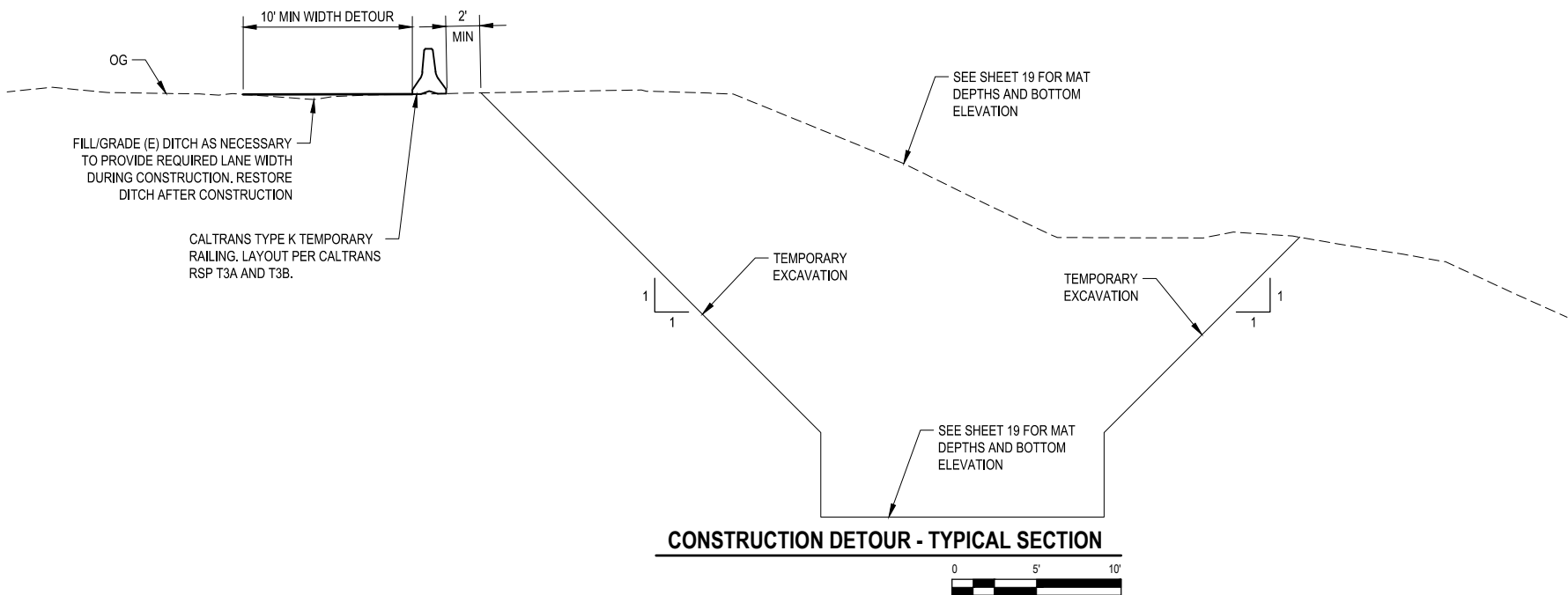
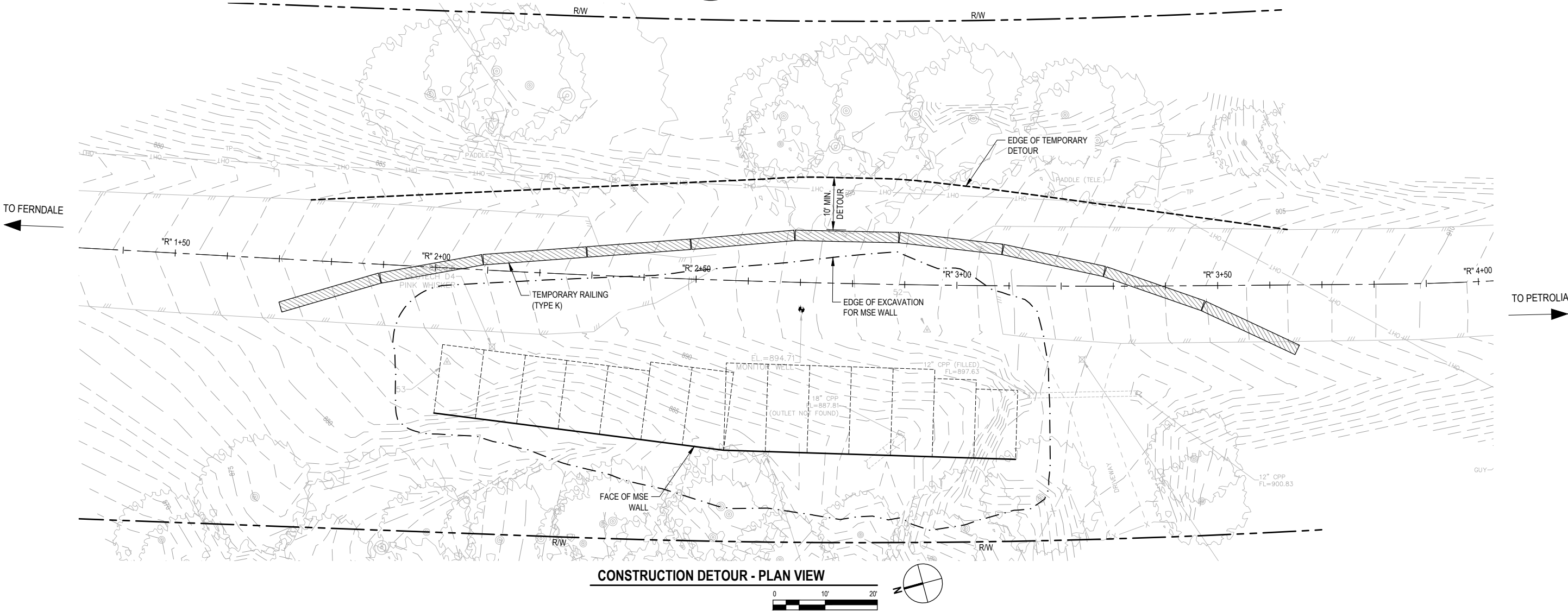
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

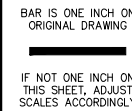
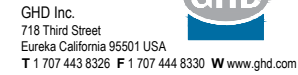
ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

DESIGN SECTION	ENGINEERING
DESIGNED BY:	S.GOULD
DRAWN BY:	S.GOULD
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

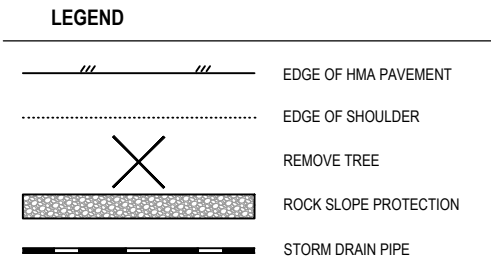
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 42.76 TEMPORARY DETOUR

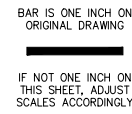
SHEET
14
OF
27





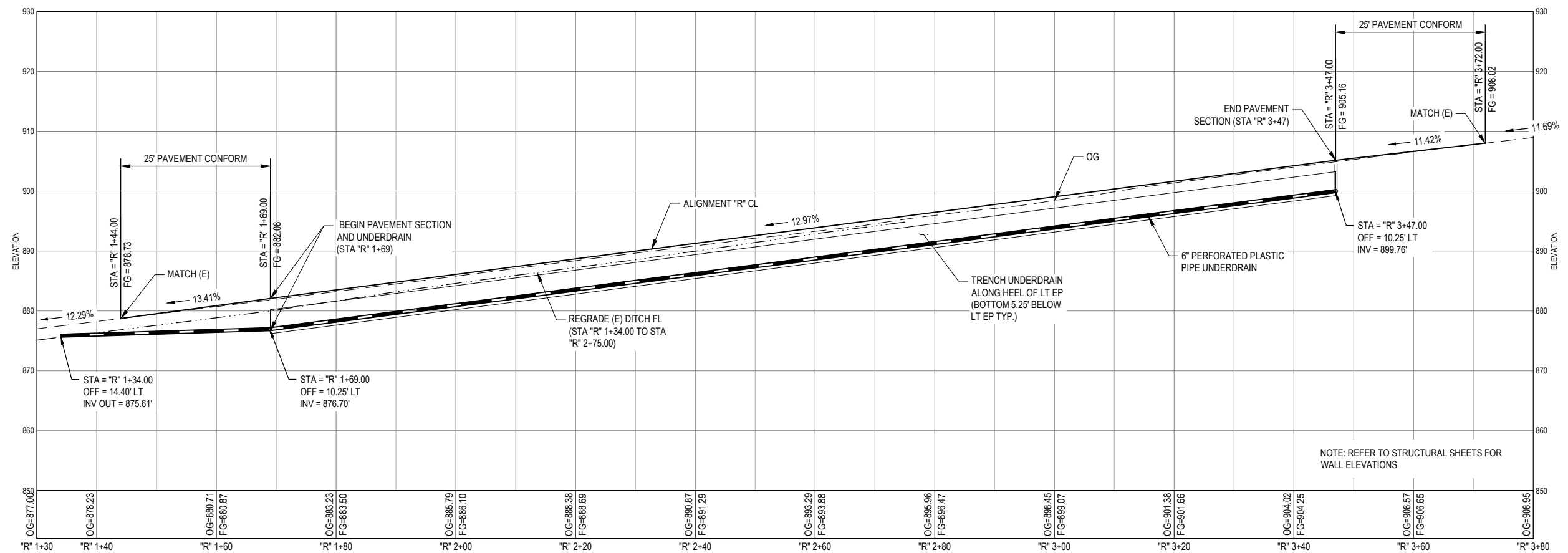
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 15 OF 27
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62	
PM 42.76 ROADWAY PLAN	





COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS	SHEET 16 OF 27
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62	
PM 42.76 ROADWAY PROFILE & SUPERELEVATION	

Note: Negative cross slopes indicate downwards sloping away from centerline





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

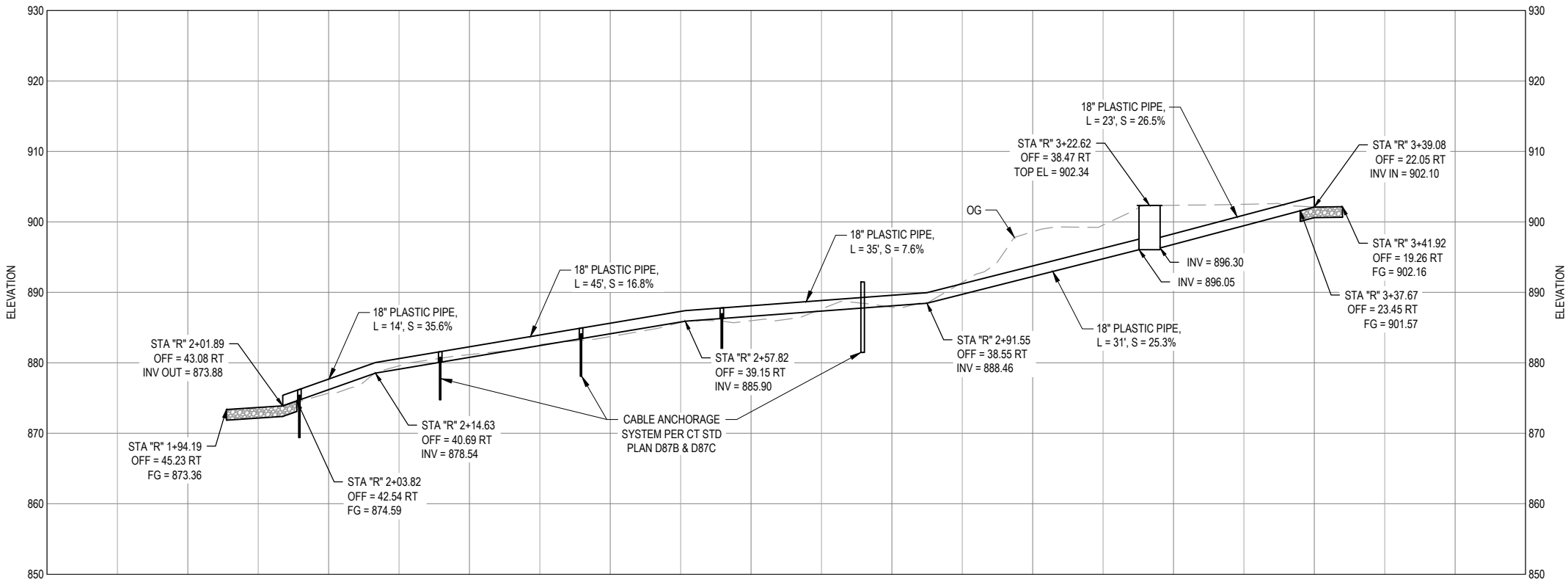
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

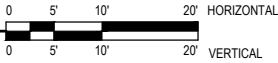
DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD
PM 40.98, PM 42.76 & PM 43.62
PM 42.76 DRAINAGE PROFILE

SHEET
17
OF
27



18" STORM DRAIN SYSTEM PROFILE





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

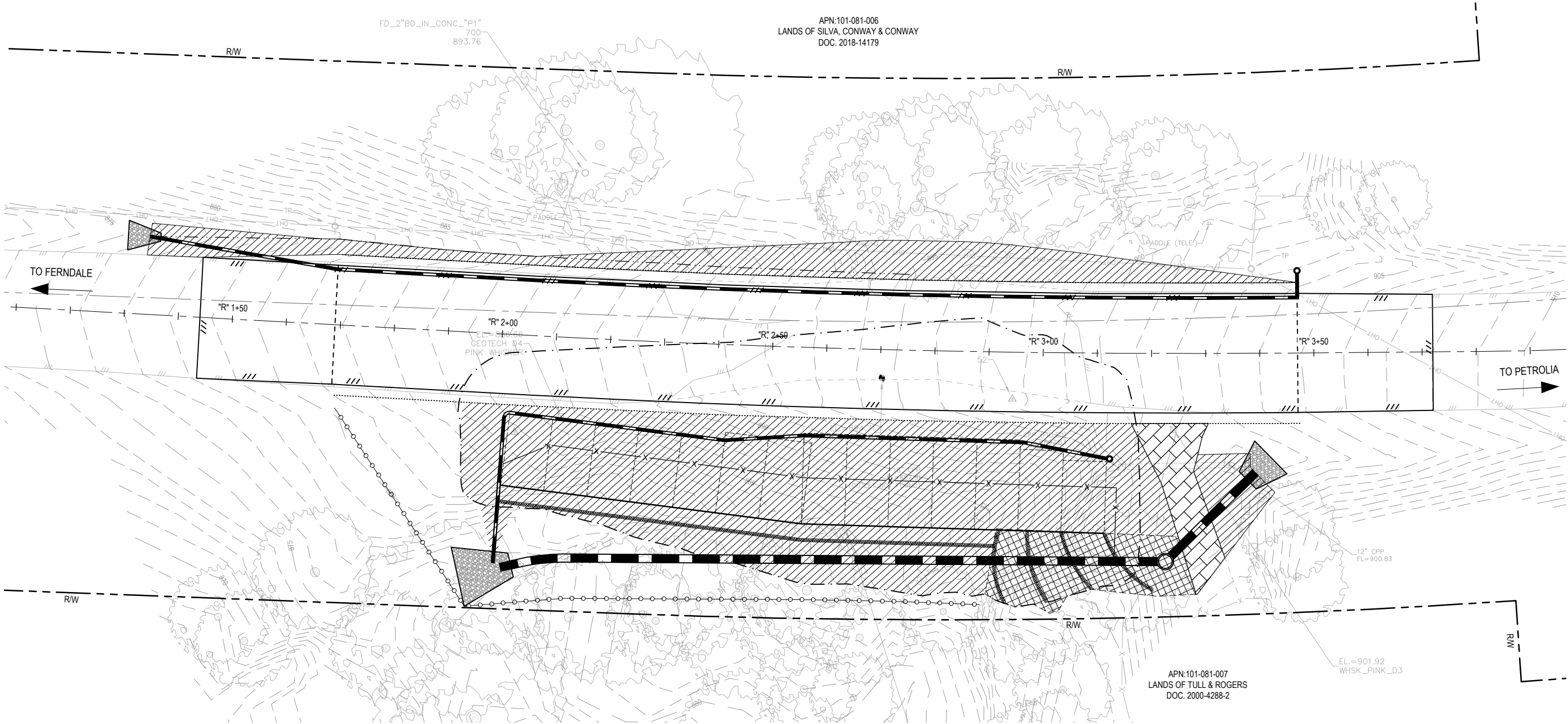
ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32LO(115), ER-32LO(117), & ER-32LO(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

DESIGN SECTION
ENGINEERING
DESIGNED BY: S.GOULD
DRAWN BY: S.GOULD
REVIEWED BY: J.WOLF
APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD
PM 40.98, PM 42.76 & PM 43.62
PM 42.76 EROSION CONTROL PLAN

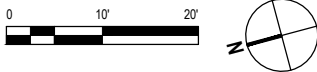
SHEET
18
OF
27

NOTE: THIS PLAN IS ACCURATE FOR
EROSION CONTROL ONLY



LEGEND

- HAND SOWN SEED UNDER ROLLED EROSION CONTROL PRODUCT
- TEMPORARY SILT FENCE
- FIBER ROLLS
- SEED AND STRAW
- CI 2 AB (4")





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME: MATTOLE ROAD
ROAD NO: F3C010
MILE POST: 40.98, 42.76, & 43.62
PROJECT NO.: ER-32LO(115), ER-32LO(117), & ER-32LO(111)
CONTRACT NO.: 217208, 217209, & 217274
PLOT DATE: 01/19/2021

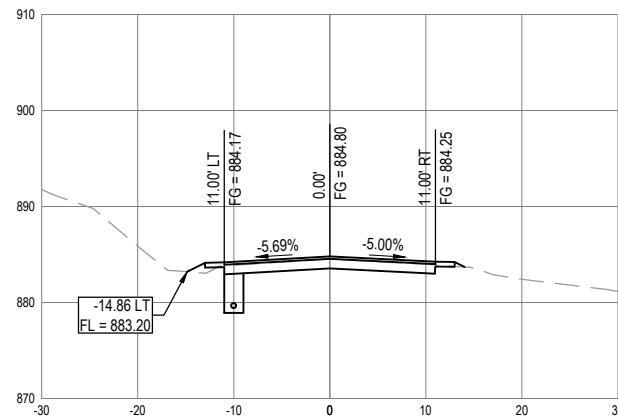
DESIGN SECTION ENGINEERING
DESIGNED BY: S.GOULD
DRAWN BY: S.GOULD
REVIEWED BY: J.WOLF
APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 42.76 CROSS SECTIONS

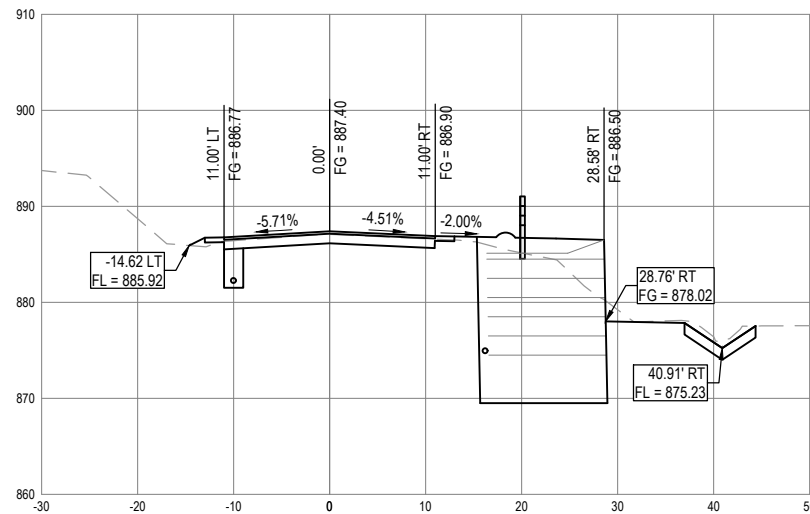
SHEET
19
OF
27



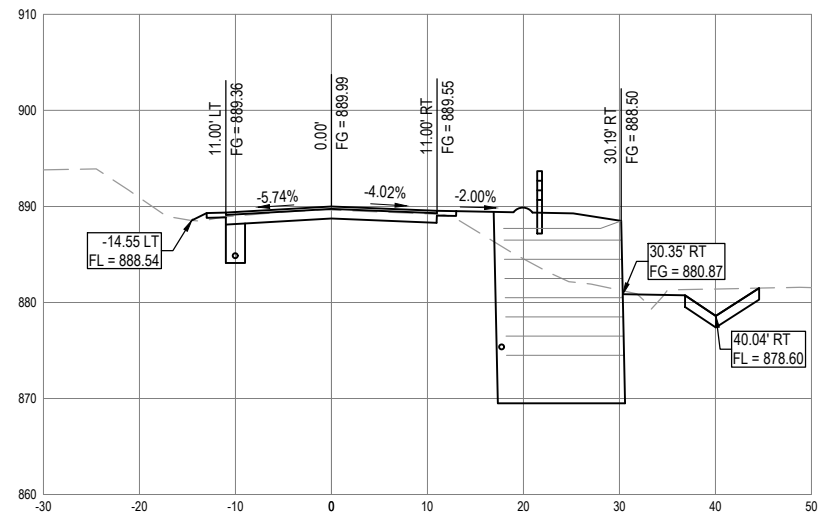
SECTION - STA "R" 1+69



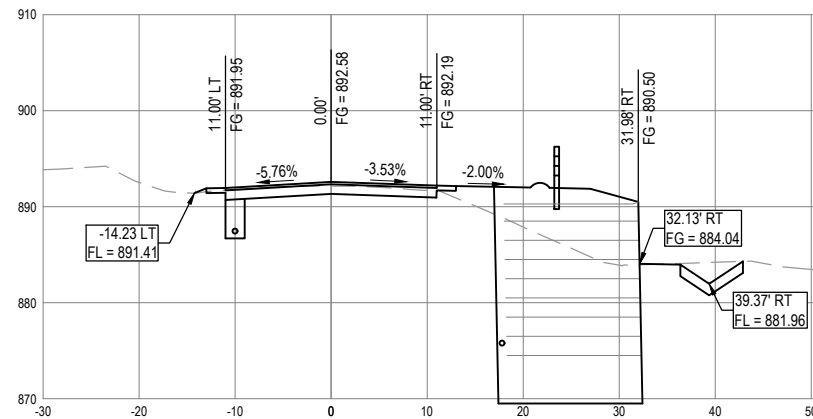
SECTION - STA "R" 1+90



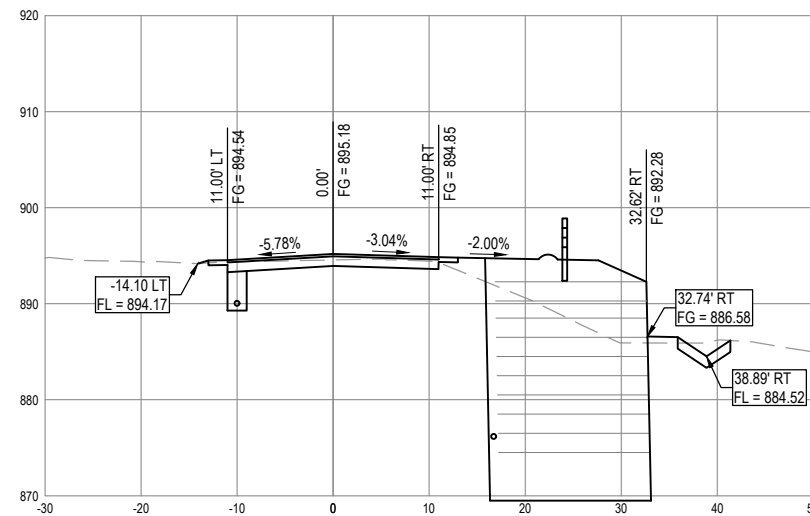
SECTION - STA "R" 2+10



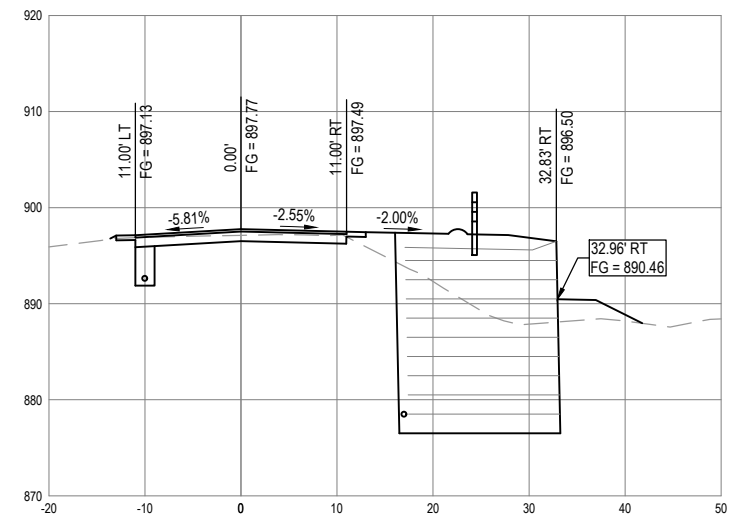
SECTION - STA "R" 2+30



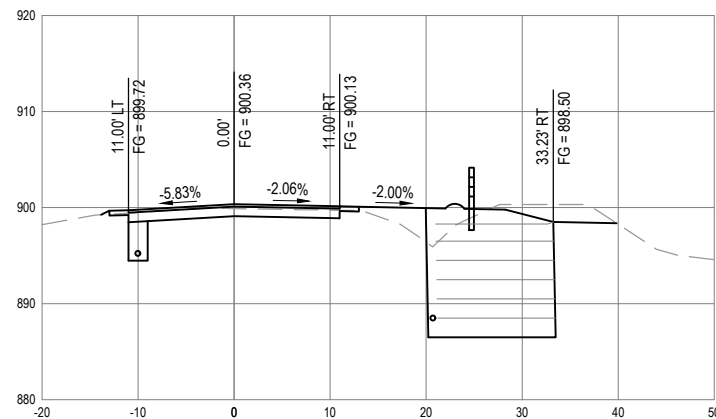
SECTION - STA "R" 2+50



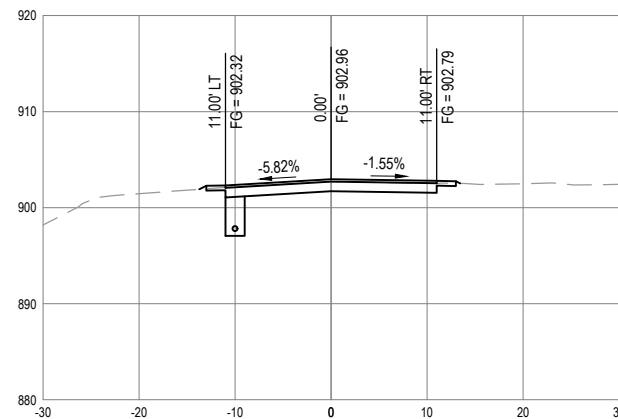
SECTION - STA "R" 2+70



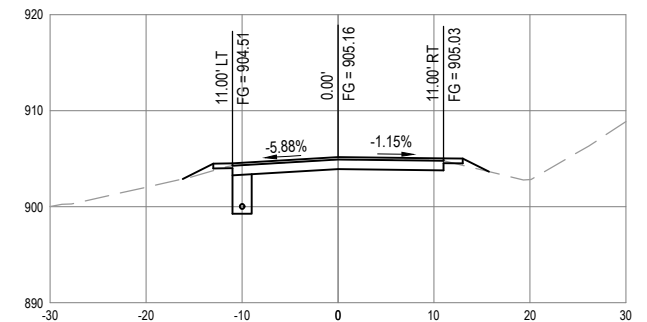
SECTION - STA "R" 2+90



SECTION - STA "R" 3+10



SECTION - STA "R" 3+30



SECTION - STA "R" 3+47



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON ORIGINAL DRAWING

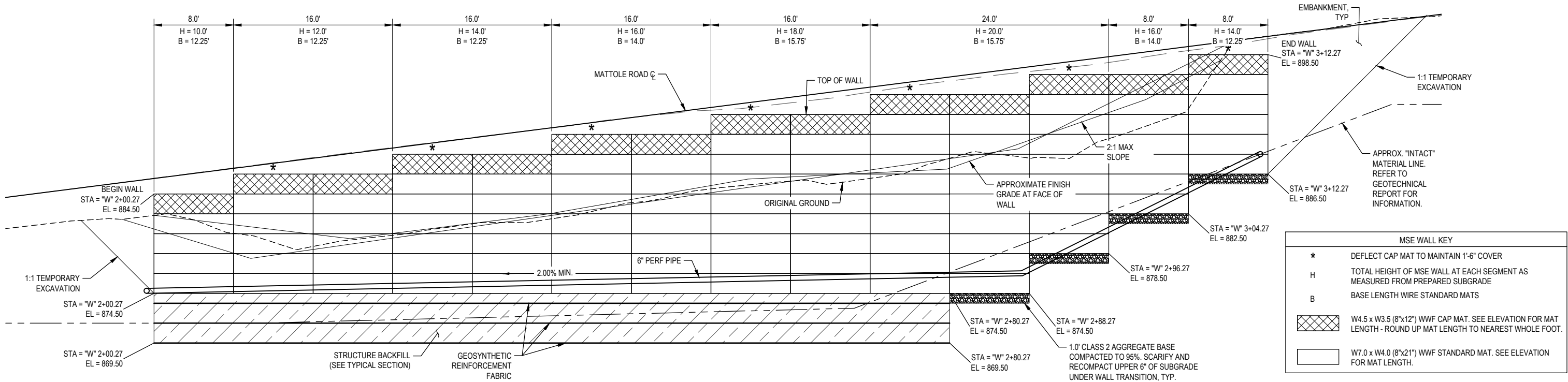
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO.:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32LO(115), ER-32LO(117), & ER-32LO(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

DESIGN SECTION	ENGINEERING
DESIGNED BY:	S.GOULD
DRAWN BY:	S.GOULD
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 42.76 RETAINING WALL GENERAL PLAN

SHEET
20
OF
27

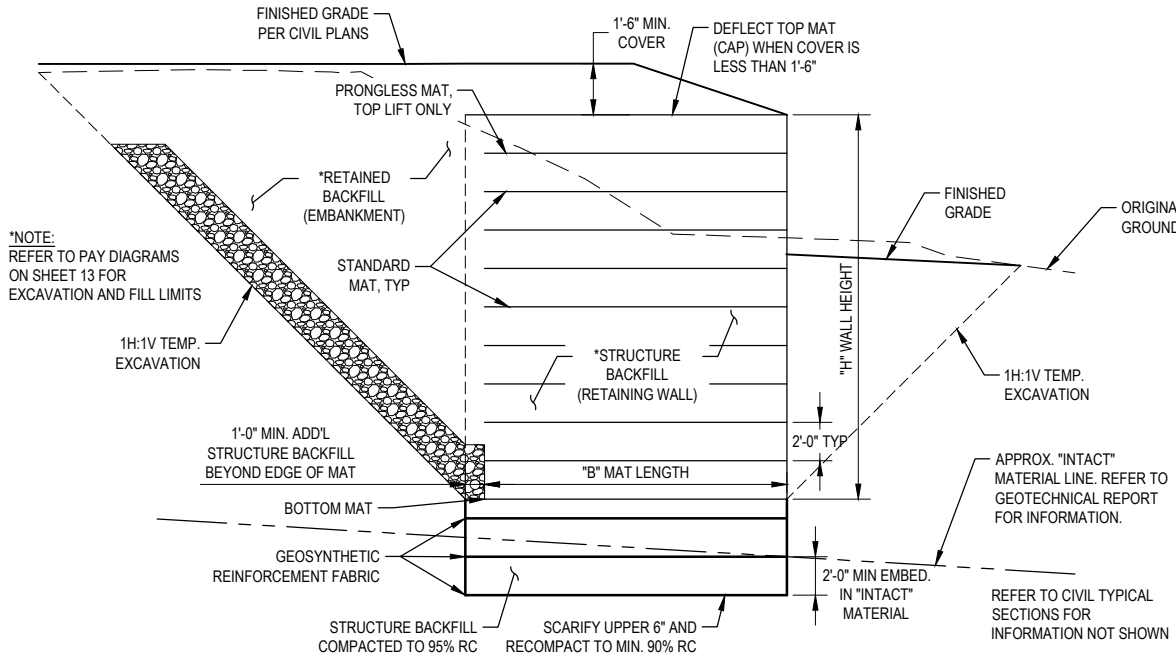


GENERAL NOTES:

- THE WALL HAS BEEN DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION.
- THE WALL IS PERMANENT (75 YEAR DESIGN LIFE MAXIMUM).
- THE WALLS HAVE BEEN DESIGNED FOR A 2-FT SOIL EQUIVALENT LIVE LOAD TRAFFIC SURCHARGE.
- THE WALL HAS BEEN DESIGNED FOR A HORIZONTAL SEISMIC ACCELERATION COEFFICIENT OF 0.27g AND A VERTICAL ACCELERATION COEFFICIENT OF 0.0g FOR INTERNAL STABILIZATION, AND AN INCREMENTAL INCREASE OF 24 PCF FOR SEISMIC ACTIVE PRESSURE FOR EXTERNAL STABILITY
- THE FOLLOWING SOIL PROPERTIES HAVE BEEN UTILIZED IN THE WALL DESIGN:
 - WALL BACKFILL:
 - MOIST UNIT WEIGHT = 125 PCF
 - FRICTION ANGLE = 34 DEGREES (WITHIN REINFORCED SOIL MASS)
 - COEFFICIENT OF ACTIVE LATERAL PRESSURE, $K_a = 0.283$
 - RETAINED SOIL:
 - MOIST UNIT WEIGHT = 135 PCF
 - FRICTION ANGLE = 34 DEGREES
 - EQUIVALENT ACTIVE FLUID PRESSURE = 38.2 PCF
 - SUBGRADE COEFFICIENT OF FRICTION (FOR REINFORCED BASE PAD) = 0.47
 - COEFFICIENT OF ACTIVE LATERAL PRESSURE, $K_a = 0.283$
 - FOUNDATION ("INTACT") MATERIAL:
 - UNIT WEIGHT = 138 PCF
 - FRICTION ANGLE = 43 DEGREES
- REFERENCE SHALL BE MADE TO GEOTECHNICAL REPORT BY CRAWFORD AND ASSOCIATES, INC, DATED SEPTEMBER 2019 FOR REQUIRED GEOTECHNICAL DESIGN PARAMETERS.
- THE ACTUAL UNFACTORED BEARING PRESSURES (WITH SURCHARGE LOADING & WITHOUT SEISMIC) AT THE BASE OF THE WALL ARE AS FOLLOWS:

MSE WALL HEIGHT: H (FT)	STATIC LOADING BEARING PRESSURE UNFACTORED (PSF)
10	1,190
12	2,200
14	2,700
16	3,000
18	3,400
20	3,900

MSE WALL ELEVATION



MSE WALL TYPICAL SECTION





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD	DESIGN SECTION	ENGINEERING
ROAD NO:	F3C010	DESIGNED BY:	C.PROVO
MILE POST:	40.98, 42.76, & 43.62	DRAWN BY:	C.PROVO
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)	REVIEWED BY:	J.WOLF
CONTRACT NO.:	217208, 217209, & 217274	APPROVED BY:	J.WOLF
PLOT DATE:	01/19/2021		

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 43.62 SURVEY CONTROL PLAN

SHEET
21
OF
27

SURVEY CONTROL NOTES

- TOPOGRAPHIC AND RIGHT-OF-WAY SURVEY PROVIDED BY THE COUNTY OF HUMBOLDT, DEPARTMENT OF PUBLIC WORKS. FIELD WORK DATE: 11/7/18
- THE BASIS OF BEARINGS SHOWN HEREON ARE BASED ON HOLDING A COMPASS BEARING OF NORTH 12 DEGREES WEST BETWEEN CONTROL POINT 1 AND CONTROL POINT 2.
- THE BASIS OF ELEVATIONS SHOWN HEREON IS BASED UPON AN ASSUMED ELEVATION OF 5000.00 FEET AT CONTROL POINT 2.
- DISTANCES SHOWN HEREON ARE IN U.S. SURVEY FEET AND DECIMALS THEREOF.
- PER ROAD REGISTER 1, PAGE 276, THE RIGHT-OF-WAY IS 50' WIDE, 25' ON EACH SIDE OF THE EXISTING ROAD CENTERLINE.
- UNDERGROUND UTILITIES RESEARCH WAS NOT PERFORMED.

GENERAL NOTES

- CONTRACTOR MUST COMPLY WITH BUSINESS AND PROFESSIONS CODE SECTION 8771 (b) REGARDING REFERENCING, PRESERVING AND RECONSTRUCTING SURVEY MONUMENTS, WHETHER OR NOT SURVEY MONUMENTS ARE SHOWN IN THESE PLANS.
- IF SURVEY MONUMENT IS DAMAGED BY CONTRACTORS OPERATIONS, CONTRACTOR SHALL REPLACE SURVEY MONUMENT AT CONTRACTORS EXPENSE.

LEGEND

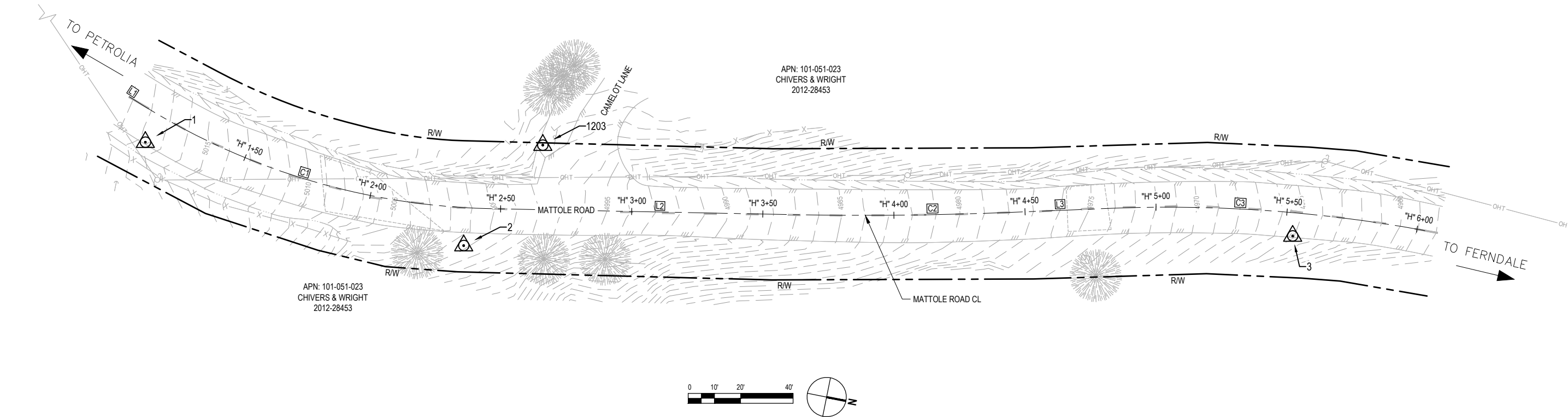
- TEMPORARY CONTROL POINT
- MATTOLE ROAD R/W
- ALIGNMENT LINE

SURVEY CONTROL POINT TABLE

POINT #	NORTHINGS	EASTINGS	ELEVATION	DESCRIPTION
1	4873.23	4985.21	5017.68	SPIKE
2	5000.00	5000.00	5000.00	80D SHINER
3	5309.22	4934.27	4965.23	SPIKE
1203	5022.04	4956.53	4998.28	NGS BENCHMARK N1468

MATTOLE ROAD CONSTRUCTION CENTERLINE GEOMETRY - "H" ALIGNMENT

Segment	Type	Length	Radius	Direction	Start Station	End Station
L1	LINE	0.24	-	N21° 52' 45.61"E	"H" 1+00.00	"H" 1+00.24
C1	CURVE	146.14	261.00		"H" 1+00.24	"H" 2+46.38
L2	LINE	115.04	-	N10° 12' 07.64"W	"H" 2+46.38	"H" 3+61.42
C2	CURVE	82.75	1373.00		"H" 3+61.42	"H" 4+44.17
L3	LINE	38.62	-	N13° 39' 19.09"W	"H" 4+44.17	"H" 4+82.79
C3	CURVE	120.30	540.00		"H" 4+82.79	"H" 6+03.09





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

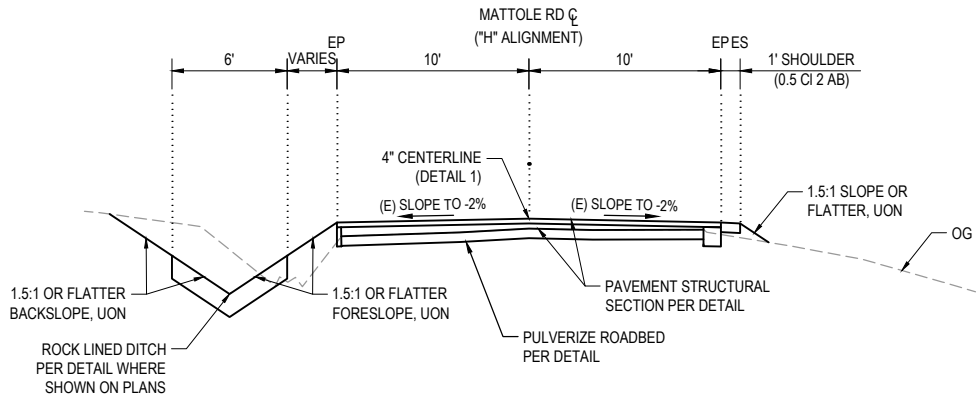
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32LO(115), ER-32LO(117), & ER-32LO(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

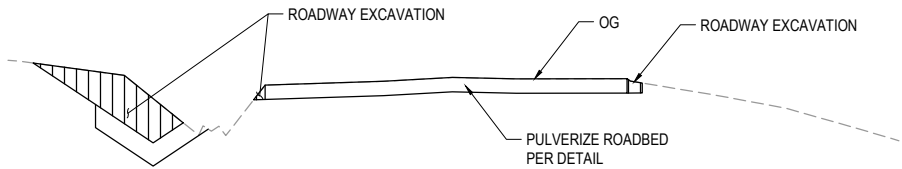
DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD
PM 40.98, PM 42.76 & PM 43.62
PM 43.62 TYPICAL SECTIONS

SHEET
22
OF
27



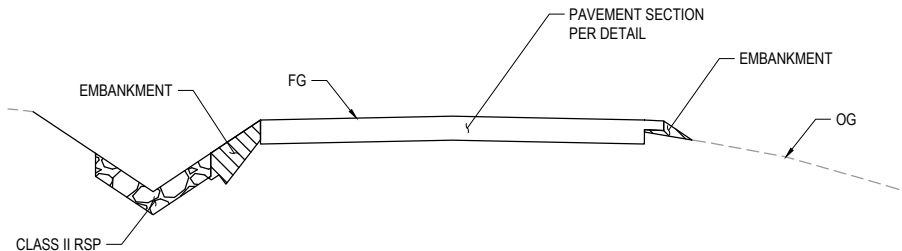
TYPICAL SECTION - MATTOLE ROAD
NOT TO SCALE STA "H" 1+50 - STA "H" 5+07



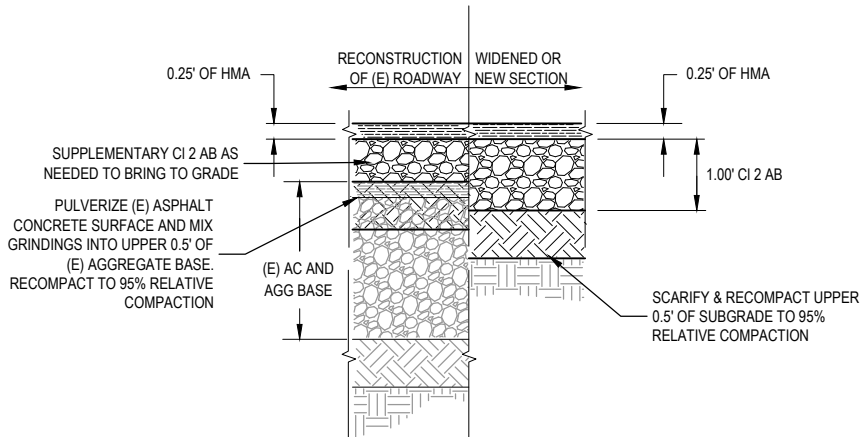
LIMITS OF PAYMENT - CUT
NOT TO SCALE

LEGEND

ROADWAY EXCAVATION	
EMBANKMENT	
CLASS II RSP	



LIMITS OF PAYMENT - FILL
NOT TO SCALE



PM 43.62 TYPICAL PAVEMENT STRUCTURAL SECTION DETAIL
NOT TO SCALE



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

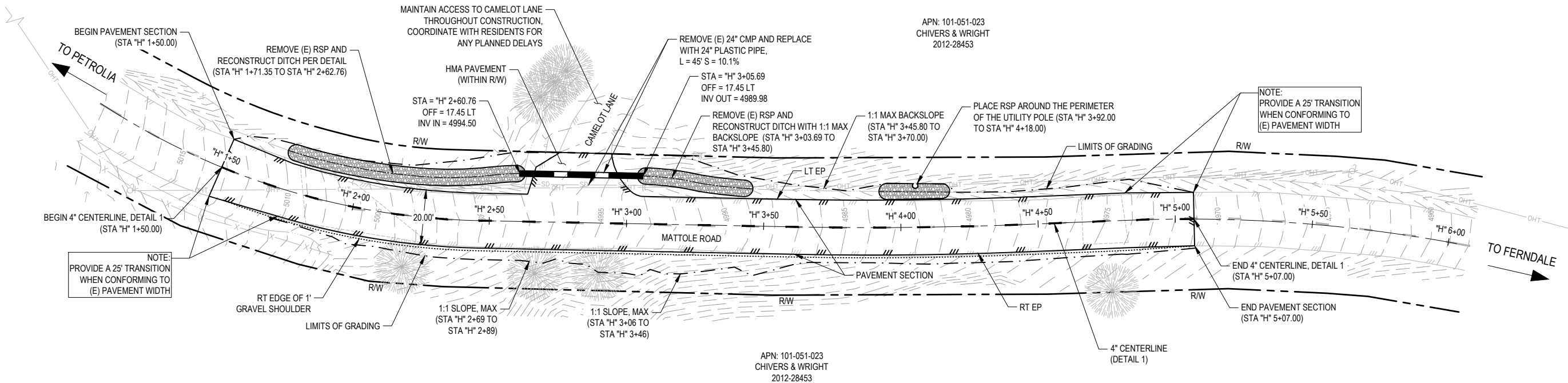
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

DESIGN SECTION
ENGINEERING
DESIGNED BY: C.PROVO
DRAWN BY: C.PROVO
REVIEWED BY: J.WOLF
APPROVED BY: J.WOLF

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD
PM 40.98, PM 42.76 & PM 43.62
PM 43.62 ROADWAY PLAN

SHEET
23
OF
27



LEGEND

- EDGE OF HMA PAVEMENT
- EDGE OF SHOULDER
- ROCK SLOPE PROTECTION
- 24" PLASTIC PIPE



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME: MATTOLE ROAD	DESIGN SECTION ENGINEERING
ROAD NO: F3C010	DESIGNED BY: C.PROVO
MILE POST: 40.98, 42.76, & 43.62	DRAWN BY: C.PROVO
PROJECT NO.: ER-32L0(115), ER-32L0(117), & ER-32L0(111)	REVIEWED BY: J.WOLF
CONTRACT NO.: 217208, 217209, & 217274	APPROVED BY: J.WOLF
PLOT DATE: 01/19/2021	

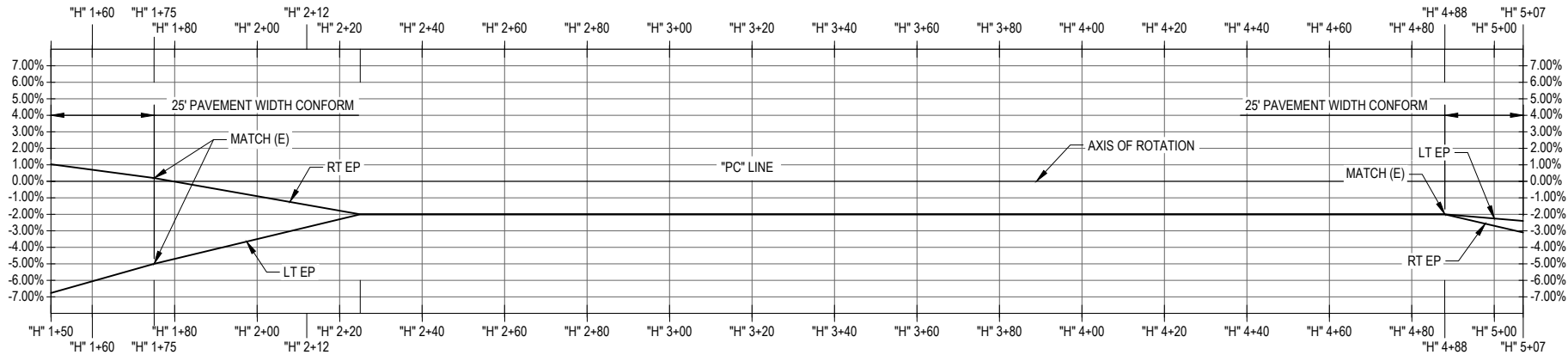
COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 43.62 ROADWAY PROFILE & SUPERELEVATION

SHEET
24
OF
27

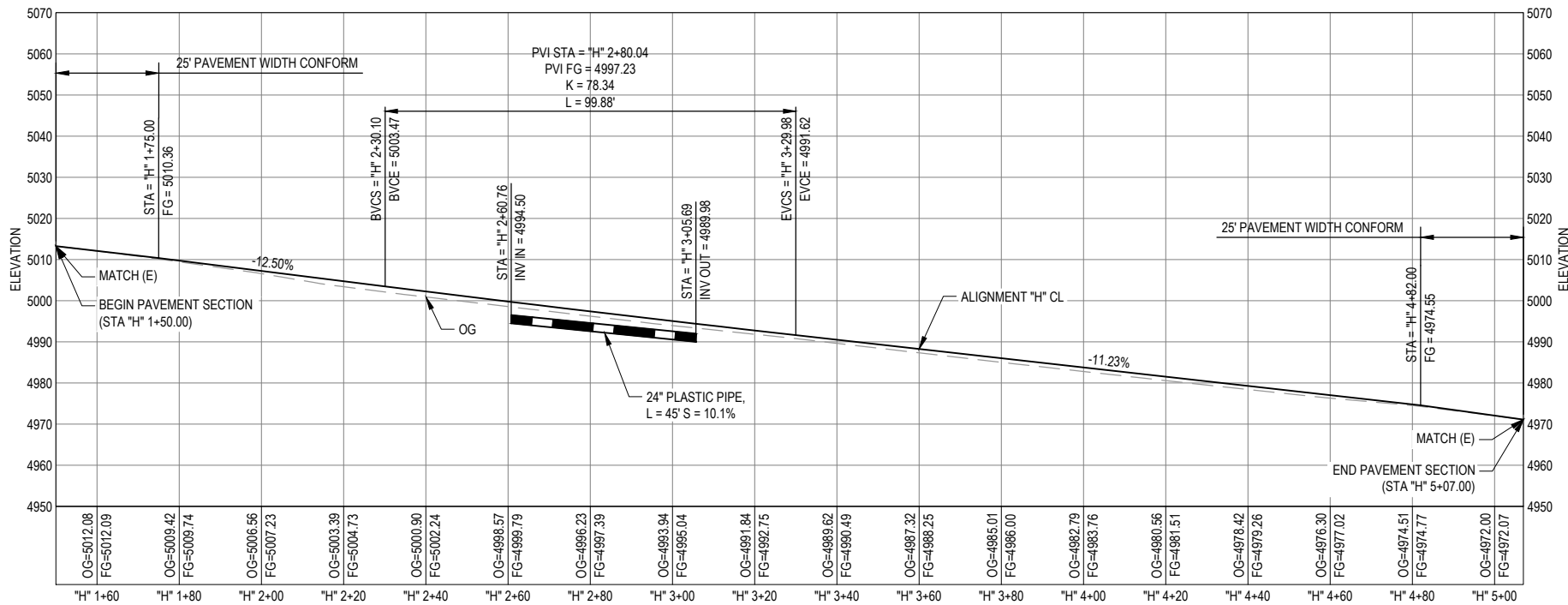
ROADWAY GEOMETRY - PM 43.62					
STATION	LT TRAVEL LANE CROSS SLOPE	LT EP ELEVATION	CROWN ELEVATION	RT EP ELEVATION	RT TRAVEL LANE CROSS SLOPE
"H" 1+50	-6.76%	5012.57	5013.25	5013.35	1.03%
"H" 1+75	-5.00%	5009.86	5010.36	5010.38	0.20%
"H" 2+25	-2.00%	5003.91	5004.11	5003.91	-2.00%
"H" 4+88	-2.00%	4973.52	4973.72	4973.52	-2.00%
"H" 5+07	2.40%	4970.85	4971.10	4970.79	3.10%

Note: Negative cross slopes indicate downwards sloping away from centerline

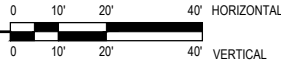
ROADWAY ELEVATIONS



MATTOLE ROAD PM 43.62 SUPERELEVATION



MATTOLE ROAD PM 43.62 PROFILE VIEW





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

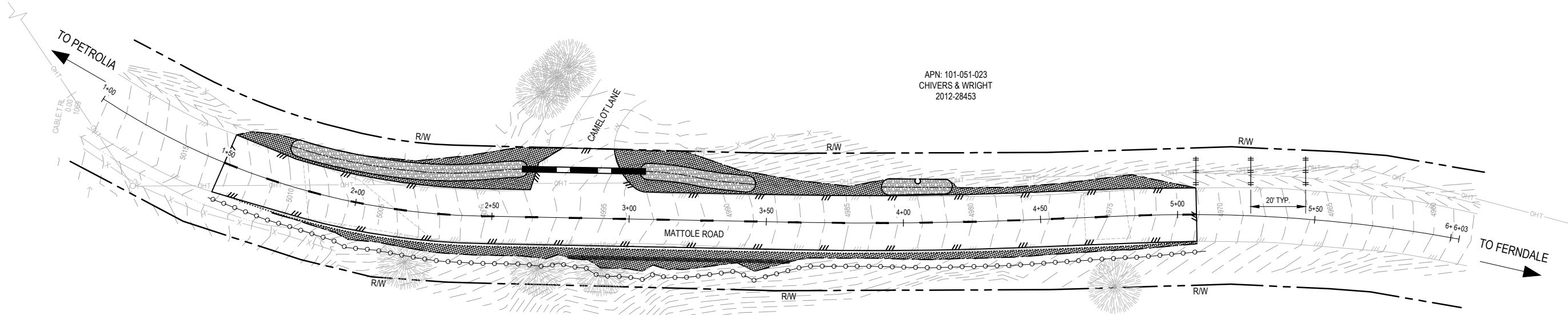
ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32LO(115), ER-32LO(117), & ER-32LO(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 43.62 EROSION CONTROL PLAN

SHEET
25
OF
27

NOTE: THIS PLAN IS ACCURATE FOR
EROSION CONTROL ONLY





GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

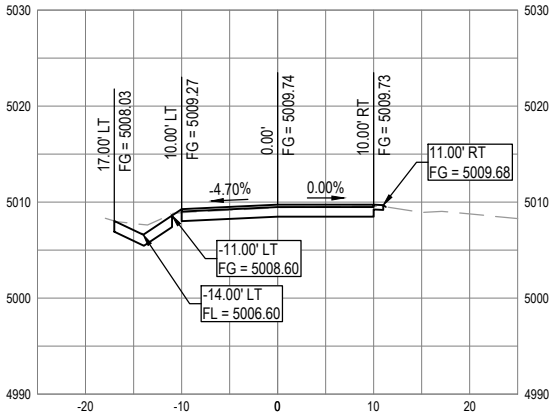
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

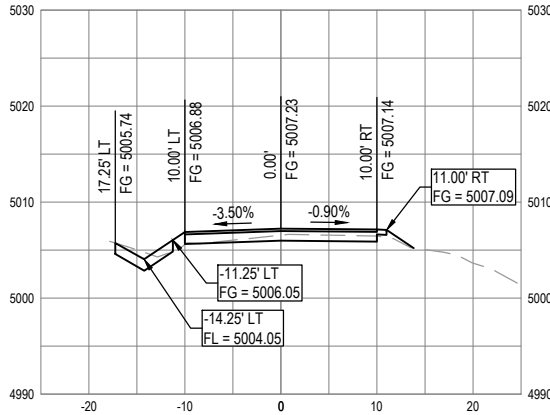
DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD PM 40.98, PM 42.76 & PM 43.62
PM 43.62 CROSS SECTIONS - 1 OF 2

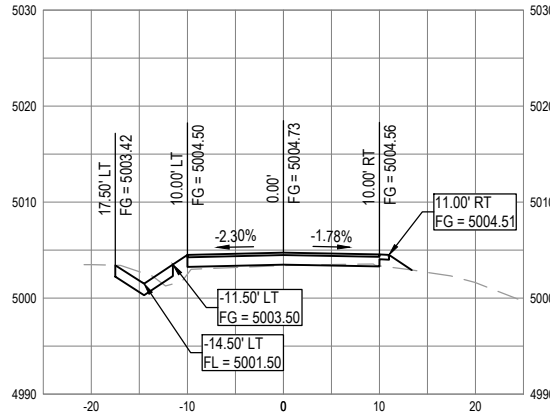
SHEET
26
OF
27



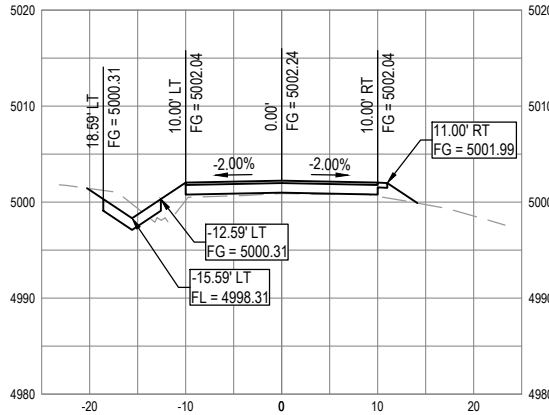
SECTION - STA "H" 1+80



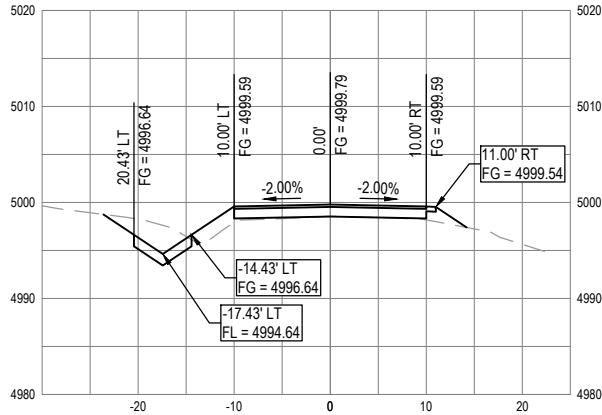
SECTION - STA "H" 2+00



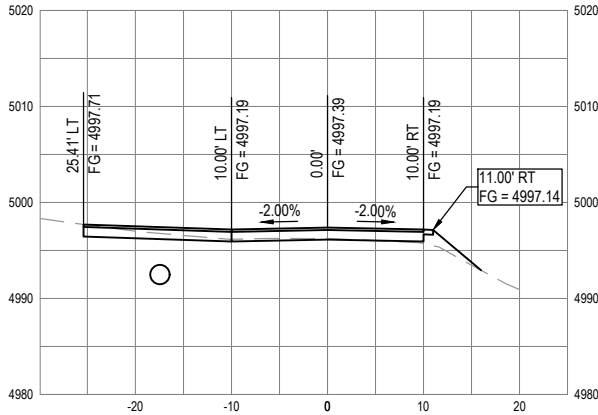
SECTION - STA "H" 2+20



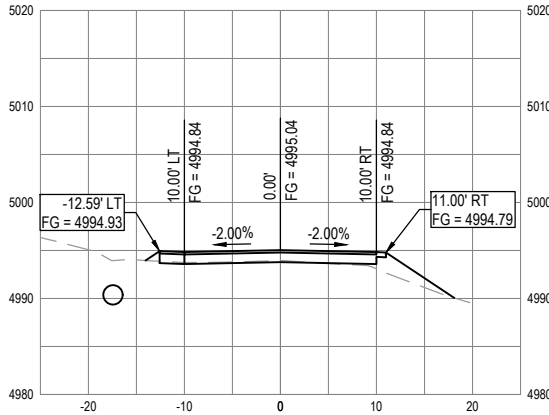
SECTION - STA "H" 2+40



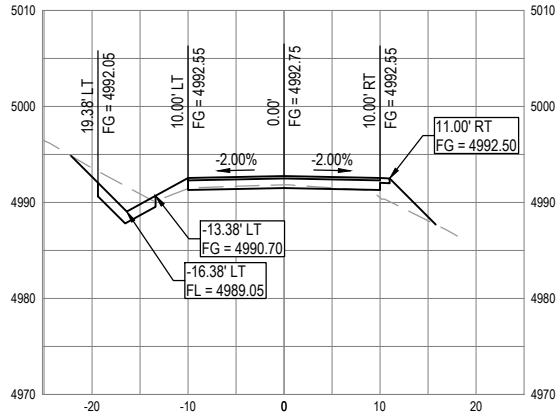
SECTION - STA "H" 2+60



SECTION - STA "H" 2+80



SECTION - STA "H" 3+00



SECTION - STA "H" 3+20



GHD Inc.
718 Third Street
Eureka California 95501 USA
T 1 707 443 8326 F 1 707 444 8330 W www.ghd.com



BAR IS ONE INCH ON
ORIGINAL DRAWING

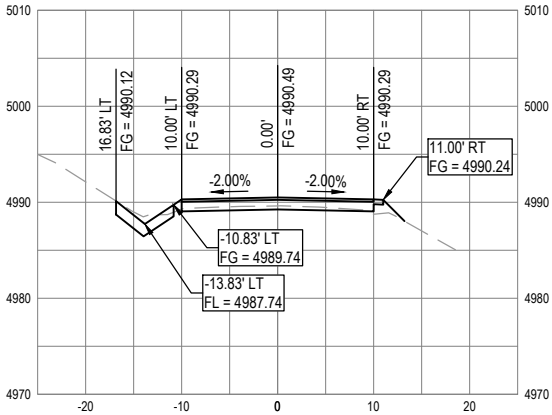
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

ROAD NAME:	MATTOLE ROAD
ROAD NO:	F3C010
MILE POST:	40.98, 42.76, & 43.62
PROJECT NO.:	ER-32L0(115), ER-32L0(117), & ER-32L0(111)
CONTRACT NO.:	217208, 217209, & 217274
PLOT DATE:	01/19/2021

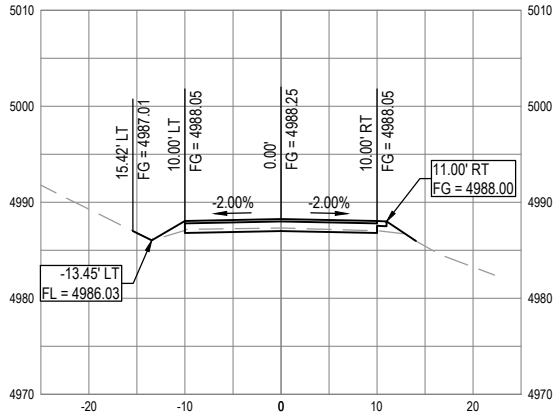
DESIGN SECTION	ENGINEERING
DESIGNED BY:	C.PROVO
DRAWN BY:	C.PROVO
REVIEWED BY:	J.WOLF
APPROVED BY:	J.WOLF

COUNTY OF HUMBOLDT
DEPARTMENT OF PUBLIC WORKS
STORM DAMAGE REPAIR MATTOLE ROAD
PM 40.98, PM 42.76 & PM 43.62
PM 43.62 CROSS SECTIONS - 2 OF 2

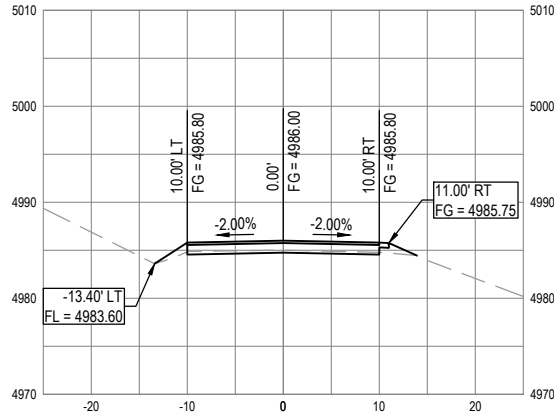
SHEET
27
OF
27



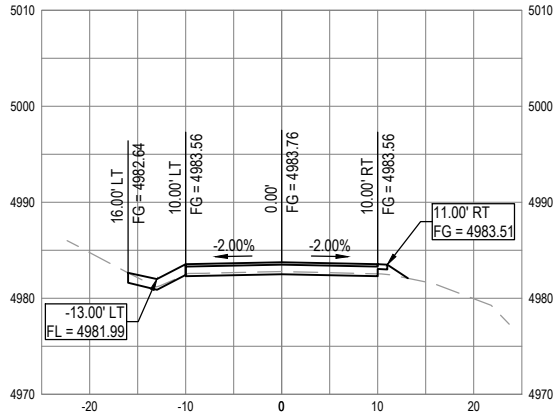
SECTION - STA "H" 3+40



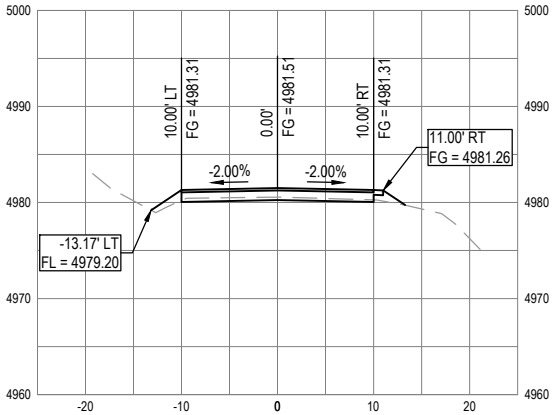
SECTION - STA "H" 3+60



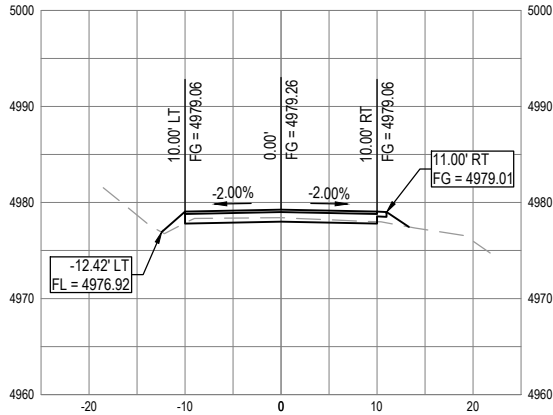
SECTION - STA "H" 3+80



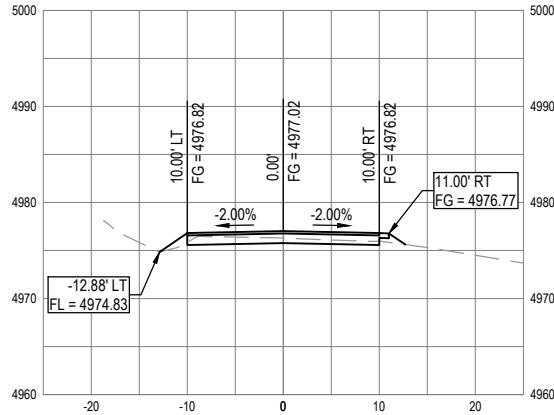
SECTION - STA "H" 4+00



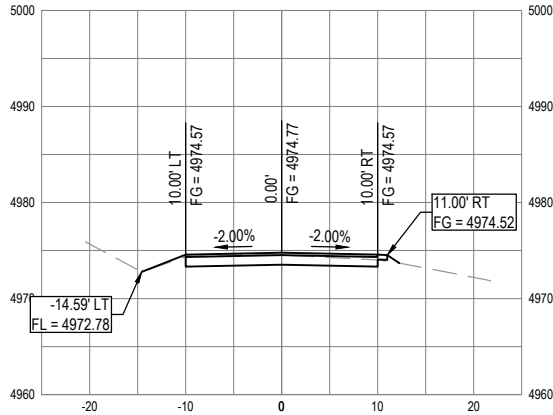
SECTION - STA "H" 4+20



SECTION - STA "H" 4+40



SECTION - STA "H" 4+60



SECTION - STA "H" 4+80