ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	1	47

COUNTY OF SAN LUIS OBISPO, CALIFORNIA
PUBLIC WORKS DEPARTMENT
DESIGN DIVISION

APPROVED: December 23, 20 15
for Dave Flynn
WADE HORTON, DIRECTOR OF PUBLIC WORKS

THE CONTRACTOR SHALL POSSES THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS"

PLANS FOR WIDENING OF PRICE CANYON ROAD BETWEEN ORMONDE ROAD AND HWY 227, CA.
COUNTY CONTRACT No. 300464
FEDERAL No. RPLCML-5949(074)

To Be Supplemented By State Standard Plans 2006

DIGALERT
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ROCK DOWEL WALL PLANS

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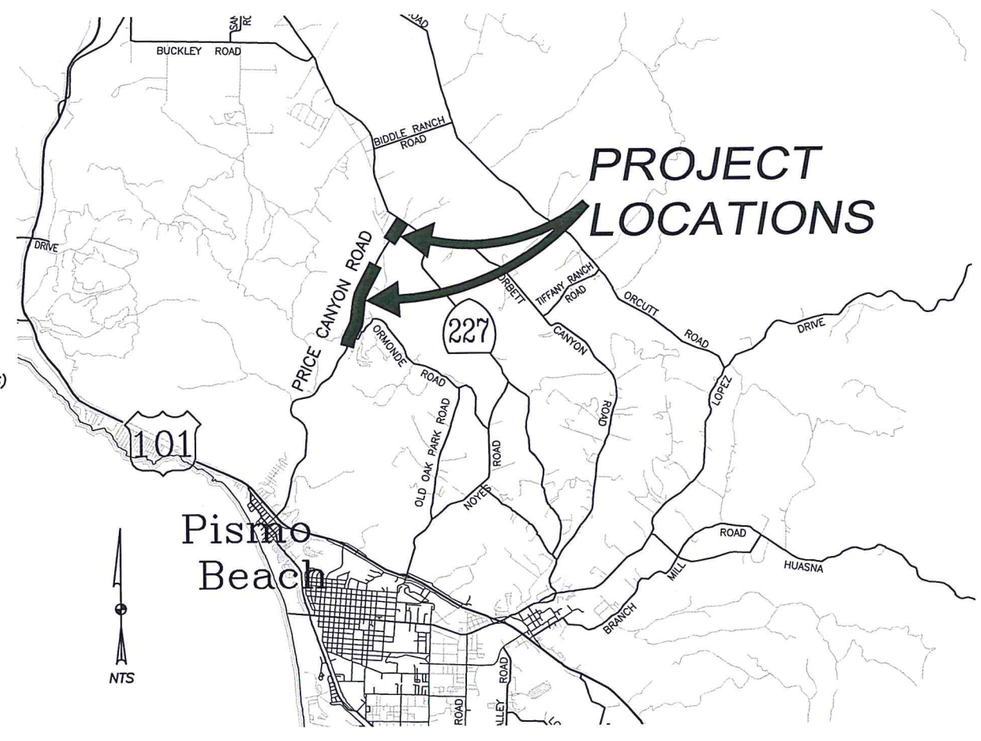
SIGNAL AND LIGHTING PLANS

SHEET NO.	E-1	NOTES AND INDEX
SHEET NO.	E-2	SIGNAL AND LIGHTING
SHEET NO.	E-3	SIGNAL AND LIGHTING
SHEET NO.	E-4	SIGNAL AND LIGHTING (CONDUCTOR, POLE AND EQUIPMENT SCHEDULES)

ABBREVIATIONS

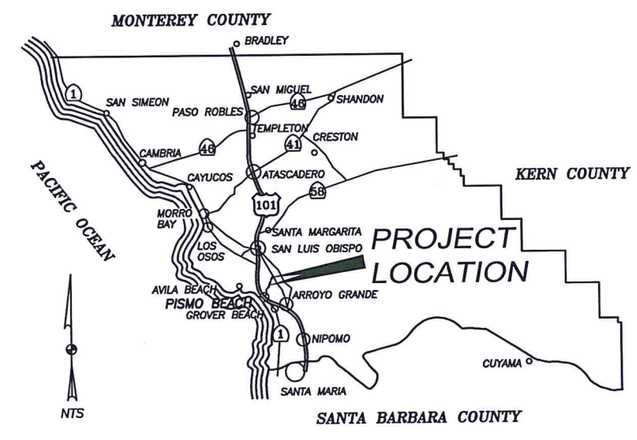
PP	POWER POLE
TP	TELEPHONE POLE
DWY	DRIVEWAY
EMB	EMBANKMENT
EXC	EXCAVATION
Yds	YARDS
CU	CUBIC
EG	EXISTING GROUND
FG	FINISH GROUND
Elev.	ELEVATION
EC	END CURVE
BC	BEGIN CURVE
CL	CENTERLINE
OVHD	OVERHEAD
CMP	CORRUGATED METAL PIPE
G.R.	GUARD RAIL
MBGR	METAL BEAM GUARD RAIL
LT	LEFT
RT	RIGHT
HMA	HOT MIX ASPHALT
ESA	EVIRONMENTALLY SENSITIVE AREA
RSP	ROCK SLOPE PROTECTION
ETW	EDGE OF TRAVEL WAY
TW	TOP OF WALL



LOCATION MAP
NO SCALE

CONVENTIONAL SYMBOLS

FENCE
UNFENCED PROPERTY LINE
RIGHT OF WAY LINE
TRAVELED WAY
CULVERT (OR)
DROP INLET
UTILITY POLE
POWER TOWER
STREAM
RAILROAD TRACKS
TOP OF CUT/TOE OF FILL (C/F)
BASE OR SURVEY LINE (54)



VICINITY MAP
NO SCALE

REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63477 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
TITLE SHEET					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\1 TITLE SHEET.DWG, 12/21/2015 4:18 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	2	47

GENERAL ROAD WORK

MISCELLANEOUS

- ■ **A10A** Abbreviations
- ■ **A10B** Symbols
- ■ **A20A** Pavement Markers and Traffic Lines, Typical Details
- ■ **A20B** Pavement Markers and Traffic Lines, Typical Details
- ■ **A20C** Pavement Markers and Traffic Lines, Typical Details
- ■ **A20D** Pavement Markers and Traffic Lines, Typical Details
- ■ **A24A** Pavement Markings– Arrows
- □ **A24B** Pavement Markings– Arrows
- ■ **A24C** Pavement Markings– Symbols and Numerals
- ■ **A24D** Pavement Markings– Words
- □ **A24E** Pavement Markings– Words and Crosswalks
- □ **A35A** Portland Cement Concrete Paving Details
- ■ **A62A** Excavation and Backfill– Miscellaneous Details
- ■ **A62B** Limits of Payment for Excavation and Backfill Bridge– Surcharge and Wall
- □ **A62C** Limits of Payment for Excavation and Backfill– Bridge
- □ **A62D** Excavation and Backfill– Concrete Pipe Culverts
- □ **A62E** Excavation and Backfill– Cast–In–Place Reinforced Concrete Box and Arch Culverts
- ■ **A62F** Excavation and Backfill– Metal and Plastic Culverts
- ■ **A73A** Markers
- ■ **A73B** Markers
- ■ **A73C** Delineators, Channelizers and Barricades
- □ **A74** Survey Monuments
- □ **A75A** Concrete Barrier Type 50
- □ **A75B** Concrete Barrier Type 50E
- □ **A75C** Headlight Glare Screen
- ■ **A77A** Metal Beam Guard Railing
- ■ **A77B** Metal Beam Guard Railing– Standard Hardware
- ■ **A77C** Metal Beam Guard Railing– Posts and Blocks
- □ **A77D** Guard Rail Flares
- ■ **A77E** Guard Rail Flares
- ■ **A77F** Metal Beam Guard Railing– Miscellaneous Details
- □ **A77G** Guard Rail End Anchors (Breakaway)
- □ **A77H** Guard Rail End Anchors (Breakaway Hardware)
- ■ **A77I** Barrier and Guard Rail End Anchors
- ■ **A77J** Guard Rail Connections to Bridge Rails, Retaining Walls and Abutments
- □ **A77K** Guard Rail Connections to Bridge Sidewalks and Curbs
- ■ **A77L** Guard Rail Connections to Bridge Sidewalks and Curbs

- □ **A78A** Thrie Beam Barrier
- □ **A78B** Thrie Beam Barrier– Standard Hardware and Miscellaneous Details
- □ **A78C** Thrie Beam Barrier– End Anchors
- □ **A78D** Thrie Beam Barrier Connections to Bridge Rails
- □ **A78E** Thrie Beam Barrier Connection to Concrete Barrier Type 50
- □ **A78F** Thrie Beam Barrier Connections to Bridge Curbs, Retaining Walls and Abutments
- □ **A80** Thrie Beam Barrier Emergency Passageway
- □ **A81** Crash Cushion, Sand Filled
- □ **A83** Portable Scale Pad and Approach Slab Details
- □ **A85** Chain Link Fence
- ■ **A86** Barbed Wire and Wire Mesh Fences
- ■ **A86A** Barbed Wire and Wire Mesh Fence Detail on Sharp Break in Grade
- ■ **A86B** Barbed Wire and Wire Mesh Fence Details
- ■ **A86C** Barbed Wire and Wire Mesh Fence Details at Ditch Crossing
- ■ **A87** Curbs, Dikes and Driveways

The New Standard Plans (NSP) which apply to this contract are included as individual sheets of the project plans.

DRAINAGE

- □ **D72** Drainage Inlets
- ■ **D73** Drainage Inlets
- □ **D74A** Drainage Inlets
- □ **D74B** Drainage Inlets
- □ **D74C** Drainage Inlets Details
- □ **D75** Pipe Inlet
- ■ **D77A** Grate Details
- ■ **D77B** Bicycle Proof Grate Details
- □ **D77C** Alternative Hinged Cover for Type OL and OS Inlets and Trash Rack for Type OCP Inlet
- □ **D78** Gutter Depressions
- □ **D79** Precast Reinforced Concrete Pipe– Direct Design Method
- □ **D80** Cast–In–Place Reinforced Concrete Single Box Culvert
- □ **D81** Cast–In–Place Reinforced Concrete Double Box Culvert
- □ **D82** Cast–In–Place Reinforced Concrete Box Culvert Miscellaneous Details
- □ **D84** Box Culvert Wingwalls– Types A,B,C
- □ **D85** Box Culvert Wingwalls– Types D and E
- □ **D86A** Box Culvert Warped Wingwalls
- ■ **D86B** Pipe Culvert Headwalls, Endwalls and Warped Wingwalls
- ■ **D86C** Arch Culvert Headwalls, Endwalls and Warped Wingwalls
- ■ **D87A** Overside Drains
- □ **D87B** Overside Drains
- □ **D87C** Underdrains
- ■ **D87D** Overside Drains
- □ **D88** Construction Loads on Culverts
- □ **D88A** Strut Details for Structural Steel Plate Pipes, Arches, and Vehicular Undercrossings
- ■ **D89** Pipe Headwalls
- □ **D90** Pipe Culvert Headwalls, Endwalls and Wingwalls– Types A,B and C
- □ **D93A** Pipe Riser Connections
- □ **D93B** Drainage Inlet Riser Connections
- □ **D93C** Pipe Riser with Debris Rack Cage
- □ **D94A** Metal and Plastic Flared End Sections
- □ **D94B** Concrete Flared End Sections
- □ **D95** Concrete Arch Culverts
- ■ **D97A** Corrugated Metal Pipe Coupling Details No.1– Annular Coupling Band Bar and Strap and Angle Connectors
- ■ **D97B** Corrugated Metal Pipe Coupling Details No. 2– Hat Band Coupler and Flange Details
- ■ **D97C** Corrugated Metal Pipe Coupling Details No. 3– Helical and Universal Couplers
- ■ **D97D** Corrugated Metal Pipe Coupling Details No. 4– Hugger Coupling Bands
- ■ **D97E** Corrugated Metal Pipe Coupling Details No. 5– Standard Joint
- ■ **D97F** Corrugated Metal Pipe Coupling Details No. 6– Positive Joint
- ■ **D97G** Corrugated Metal Pipe coupling Details No. 7– Positive Joints and Downdrains
- □ **D97H** Reinforced Concrete Pipe or Non–Reinforced Concrete Pipe Standard and Positive Joints
- □ **D98A** Slotted Corrugated Steel Pipe Drain Details
- □ **D98B** Slotted Corrugated Steel Pipe Drain Details
- □ **D99A** Structural Section Drainage System Details
- □ **D99B** Edge Drain Outlet and Vent Details
- □ **D99C** Edge Drain Cleanout and Vent Details
- □ **D99D** Cross Drain Interceptor Details
- ■ **D102** Underdrains

HIGHWAY PLANTING

- □ **H1** Planting and Irrigation– Abbreviations
- □ **H2** Planting and Irrigation– Symbols
- □ **H3** Planting and Irrigation– Details
- □ **H4** Planting and Irrigation– Details
- □ **H5** Planting and Irrigation– Details
- □ **H6** Planting and Irrigation– Details
- □ **H7** Planting and Irrigation– Details
- □ **H8** Planting and Irrigation– Details

The Standard Plan sheets applicable to this contract include, but are not limited to those indicated by a marked box.

TEMPORARY FACILITIES

- □ **T1** Temporary Crash Cushion, Sand Filled
- □ **T2** Temporary Crash Cushion, Sand Filled
- ■ **T3** Temporary Railing (Type K)
- □ **T4** Temporary Traffic Screen
- □ **T10** Traffic Control System for Lane Closure on Freeways and Expressways
- □ **T10A** Traffic Control System for Lane and Complete Closures on Freeways and Expressways
- □ **T11** Traffic Control System for Lane Closure on Multilane Conventional Highways
- □ **T12** Traffic Control System for Lane Closure on Multilane Conventional Highways
- ■ **T13** Traffic Control System for Lane Closure on Two Lane Conventional Highways
- □ **T14** Traffic Control System for Ramp Closures
- ■ **TA–6** Shoulder Closure (MUTCD)
- ■ **TA–13** Road Closure (MUTCD)
- ■ **TA–10** Lane Closure (MUTCD)

ROADSIDE SIGNS

- ■ **RS1** Roadside Signs, Typical Installation Details No. 1
- ■ **RS2** Roadside Signs, Wood Posts, Typical Installation Detail No. 2
- ■ **RS3** Roadside Signs, Laminated Box Wood Posts, Typical Installation Details No. 3
- ■ **RS4** Roadside Signs, Typical Installation Detail No. 4

BRIDGE DETAILS

- ■ **B0–3** Bridge Details
- ■ **B3–7** Retaining Wall Type 5
- ■ **B3–8** Retaining Wall Details No. 1
- ■ **B11–55** Concrete Barrier Type 732A
- ■ **B11–47** Cable Railing
- ■ **B11–51** Tubalar Hand Railing

COUNTY IMP. STD

- ■ **A–1h** Typical Rural Road Section
- ■ **B–1a** Rural Residential Driveway for Edge of Pavement (No Dike)
- ■ **B–1e** Rural High Speed Approach
- □ **C–3** Hot Mix Asphalt (HMA) Dikes
- □ **D–2a** Rural Catch Basin Edge of Pavement Condition
- □ **D–2b** Rural Catch Basin Hot Mix Asphalt Dike Condition
- ■ **H–5** Rock Slope Protection Sizing Method at Culvert Outlets
- ■ **R–2** Rural Road Widening
- ■ **R–3** Trench Repair
- ■ **U–4** Trench Detail
- ■ **U–4a** Trench Detail
- □ **R–1** Allowable Pavement Seam Locations
- ■ **M–1** Standard Street Monument for Paved Roads
- □ **M–1a** Standard Street Monument for Gravel Roads

REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63472 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II

STATE AND COUNTY STANDARD PLANS LIST

PISMO BEACH, CA

ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

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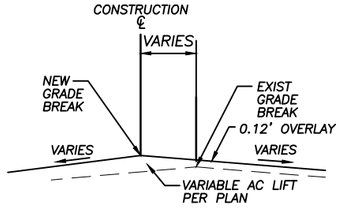
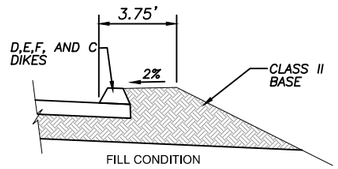
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	3	47

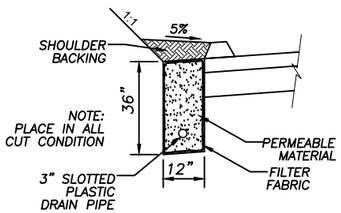


TYPICAL OVERLAY CORRECTION

NO SCALE



FILL CONDITION

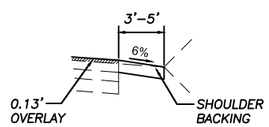


SUBDRAIN LIMITS
STA. 268+67 TO 274+60 (LEFT)
STA. 293+62 TO 300+97 (LEFT)

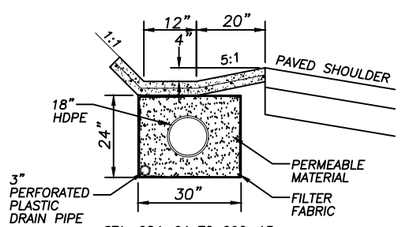
CUT CONDITION

TYPICAL BACKING DETAILS

NO SCALE



OVERLAY DETAIL (SHOULDER NOT SUBJECT TO ROAD WIDENING)



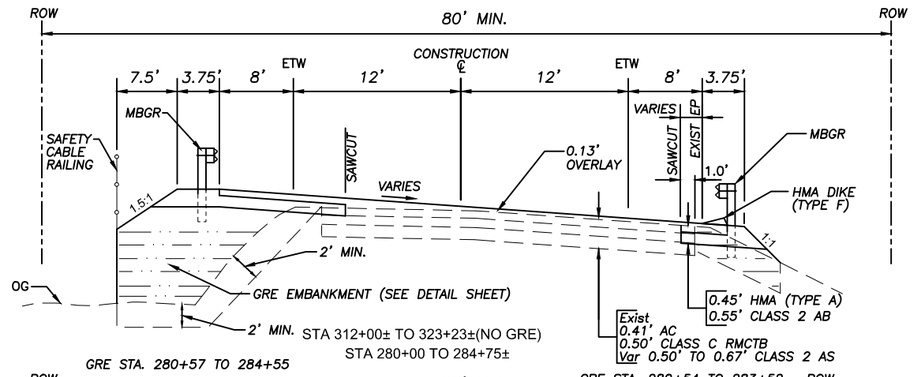
STA. 284+64 TO 290+15

HIGHSIDE SUPER DITCH DETAIL

NO SCALE

NOTES:

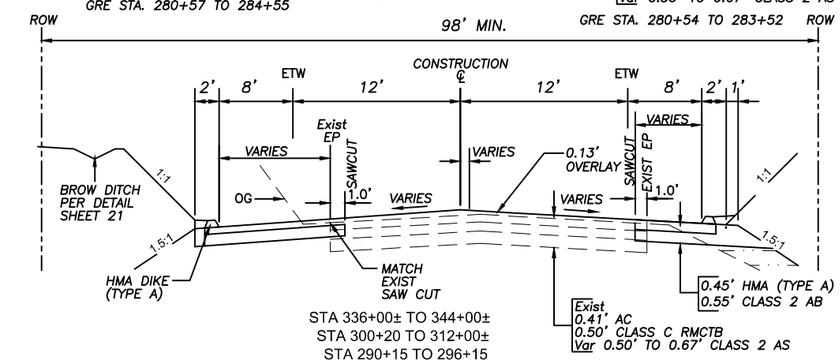
1. DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED ON THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. FOR LOCATIONS OF MBGR AND DIKE, SEE LAYOUTS AND SUMMARY OF QUANTITIES.
4. SEE CONSTRUCTION DETAILS FOR LOCATION OF GEOSYNTHETIC REINFORCED EMBANKMENT.
5. FOR LOCATIONS OF COLD PLANE AC PAVEMENT SEE LAYOUTS.



STA 312+00± TO 323+23±(NO GRE)
STA 280+00 TO 284+75±

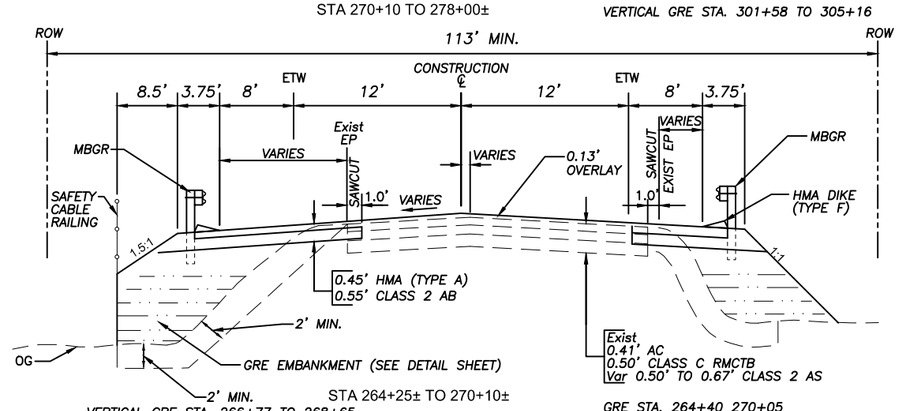
GRE STA. 280+57 TO 284+55

GRE STA. 280+54 TO 283+52



STA 336+00± TO 344+00±
STA 300+20 TO 312+00±
STA 290+15 TO 296+15
STA 270+10 TO 278+00±

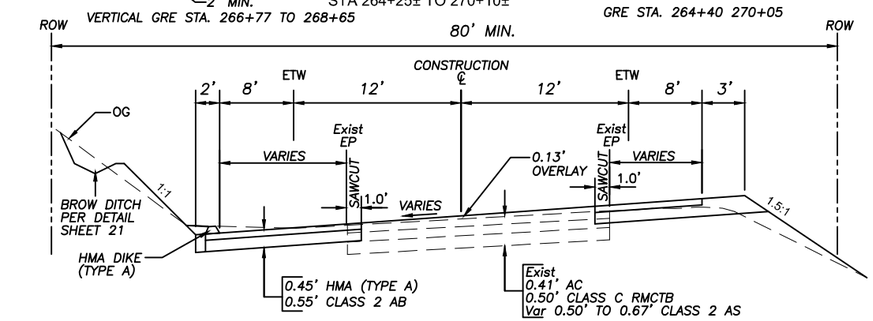
VERTICAL GRE STA. 301+58 TO 305+16



STA 264+25± TO 270+10±

VERTICAL GRE STA. 266+77 TO 268+65

GRE STA. 264+40 270+05

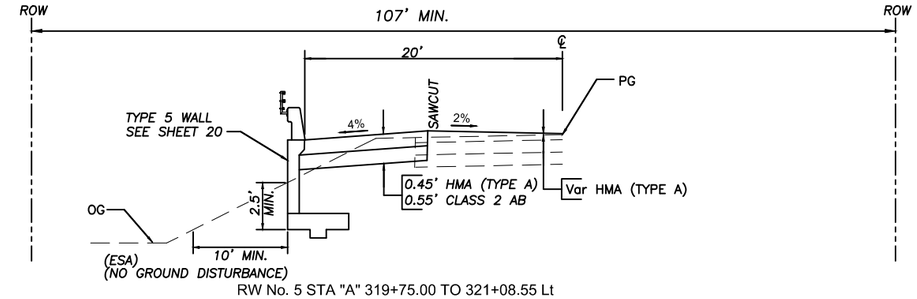


STA 256+00 TO 264+25

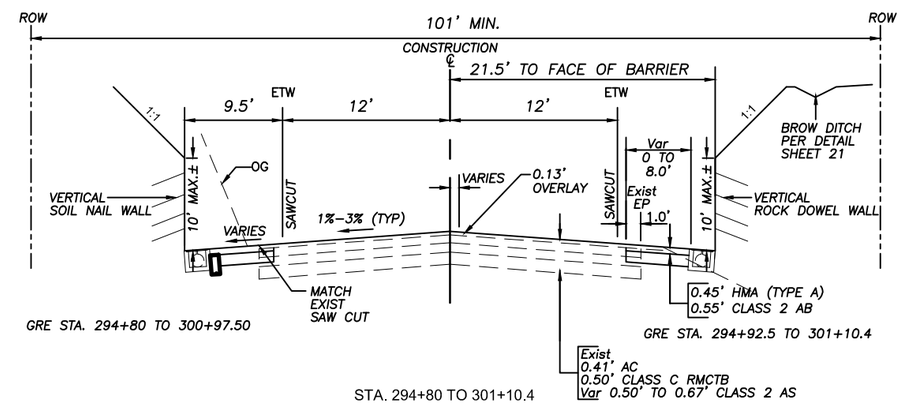
DESIGN DESIGNATION (PRICE CANYON ROAD)

2010 ADT = 6,960
2028 ADT = 12,100
DHV = 1,210

D = 55%
T = 5%
V = 50
TI = 9
R VALUE = 5



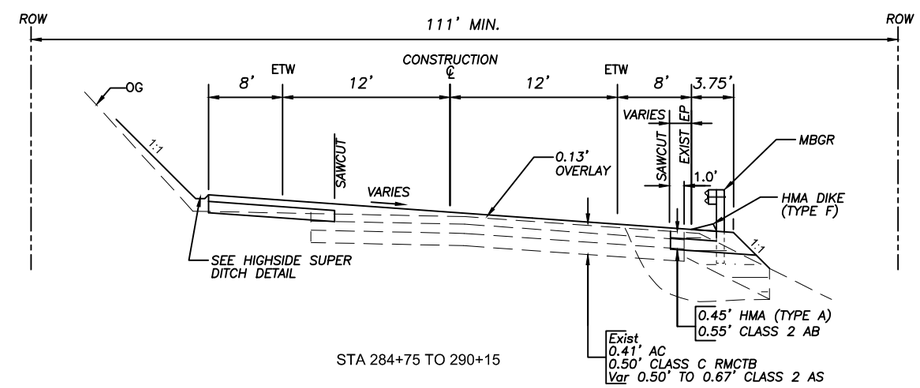
RW No. 5 STA "A" 319+75.00 TO 321+08.55 Lt



GRE STA. 294+80 TO 300+97.50

GRE STA. 294+92.5 TO 301+10.4

STA. 294+80 TO 301+10.4



STA 284+75 TO 290+15

REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63477 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
TYPICAL SECTIONS					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\3 TYPICAL SECTIONS.DWG,12/21/2015 4:20 PM, ----, CRAIG COX

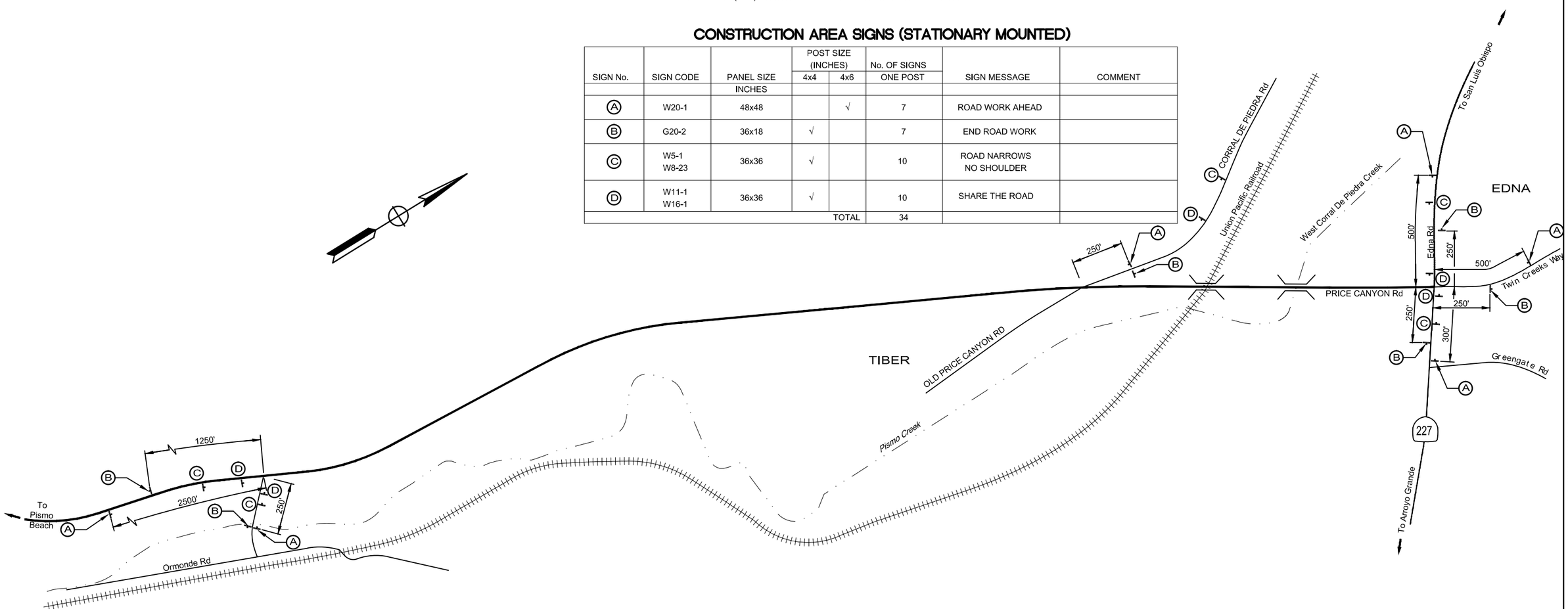
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	4	47

NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATION TO BE DETERMINED BY THE ENGINEER.
2. THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.
3. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE TRAFFIC HANDLING PLAN.
4. CONTRACTOR SHALL RESPONSIBLE FOR FURNISHING AND INSTALLING TRAFFIC CONTROL THROUGHOUT ALL PHASES OF WORK IN ACCORDANCE WITH PART 6 OF THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD).
5. ALL DELINEATORS AND STATIONARY MOUNTED CONSTRUCTION AREA SIGNS SHALL BE FLUORESCENT ORANGE, USING MATERIALS FROM THE CALTRANS "PREQUALIFIED PRODUCTS LIST" FOR SIGNING AND DELINEATION MATERIALS. THE LIST IS AVAILABLE AT THE WEBSITE OF THE CALTRANS OFFICE ENGINEER: WWW.DOT.CA.GOV/HQ/ESC/APPROVED_PRODUCTS_LIST/
6. ALL FLAGGERS SHALL BE TRAINED IN ACCORDANCE WITH THE CALIFORNIA CODE OF REGULATIONS, TITLE 8, SECTION 1599(F), AND USE PERSONAL PROTECTIVE EQUIPMENT (PPE) CONSISTENT WITH SECTION 6E.02 OF CAMUTCD.

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

SIGN No.	SIGN CODE	PANEL SIZE	POST SIZE (INCHES) 4x4	POST SIZE (INCHES) 4x6	No. OF SIGNS ONE POST	SIGN MESSAGE	COMMENT
		INCHES					
A	W20-1	48x48		√	7	ROAD WORK AHEAD	
B	G20-2	36x18	√		7	END ROAD WORK	
C	W5-1 W8-23	36x36	√		10	ROAD NARROWS NO SHOULDER	
D	W11-1 W16-1	36x36	√		10	SHARE THE ROAD	
				TOTAL	34		



REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63472 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II			
CONSTRUCTION AREA SIGNS			
PISMO BEACH, CA			
ENGINEERED BY: M DAVIS	CADD BY: C COX	CHECKED BY: G MARSHALL	

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\4 CONSTRUCTION AREA SIGNS.DWG, 12/21/2015 4:21 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	5	47

CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

SIGN No.	SIGN CODE	PANEL SIZE	POST SIZE (INCHES)	No. OF SIGNS
		INCHES	6x6	
1	SIGN A	78x108	2	8
2	R11-4	60x30	6x6	2
3	R11-2	48x30	6x6	2
4	R11-3a (1.3)	60x30	6x6	1
			TOTAL	12

NOTES:

1. SIGN LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. FOR ADDITIONAL CONSTRUCTION AREA SIGNS, SEE CONSTRUCTION AREA SIGN SHEET.

PORTABLE CHANGEABLE MESSAGE SIGNS

PCMS	LOCATIONS	MESSAGE	
		FIRST FLASH	SECOND FLASH
1	ROUTE 101 SB	PRICE CYN Rd CLOSED*	AT HWY 227
2	ROUTE 101 NB	PRICE CYN Rd CLOSED*	TAKE ALTERNATE ROUTE
3	ROUTE 227 SB	PRICE CYN Rd CLOSED*	TAKE ALTERNATE ROUTE
4	ROUTE 227 NB	PRICE CYN Rd CLOSED*	TAKE ALTERNATE ROUTE

*MESSAGE SHALL DESCRIBE EITHER CLOSURES OR DELAYS

**THE STATE INSPECTOR MAY REQUIRE PCM SIGNS TO BE REMOVED AND REPLACED WITH STATIONARY MOUNTED SIGNS ON WOOD POST AFTER 2 WEEKS.

PRICE CYN RD
CLOSED AT 227
DATE
THRU
DATE
6 PM - 5 AM

SIGN A

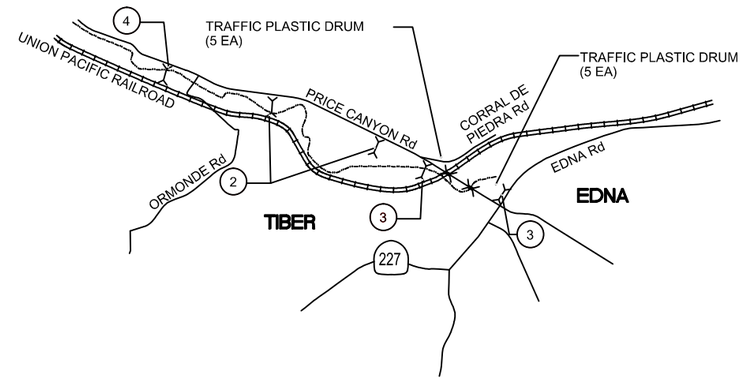
NOTE:
USE 8" SERIES E LETTERS ON REFLECTIVE ORANGE BACKGROUND WITH BLACK BORDER.

PRICE CANYON ROAD TRAFFIC CONTROL NOTES

1. *Location of construction area signs is approximate. Exact location to be determined by the engineer.*
2. *This plan is accurate for area sign work only.*
3. *Contractor shall responsible for furnishing and installing traffic control throughout all phases of work in accordance with Part 6 of the California Manual on Uniform Traffic Control Devices (CA MUTCD).*
4. *All delineators and stationary mounted construction area signs shall be fluorescent orange, using materials from the Caltrans "Prequalified Products List" for Signing and Delineation Materials. The list is available at the website of the Caltrans Office Engineer: www.dot.ca.gov/hq/esc/approved_products_list/*
5. *All flaggers shall be trained in accordance with the California Code of Regulations, Title 8, Section 1599(f), and use Personal Protective Equipment (PPE) consistent with section 6E.02 of CAMUTCD.*
6. *Contractor shall coordinate with County Traffic Signal Technician (Ron Wallravin 781–4475) and/or Caltrans Signal Technician (contact Name #) at least 72 hours prior to any work involving the traffic signal.*
7. *Contractor shall maintain access to driveways and side streets throughout all phases of work.*
8. *Traffic control shall be placed according to TA–3 for Work on the Shoulders or TA–10 for lane Closure on Two–Lane Road Using Flaggers during construction operations. NO FULL WIDTH CLOSURES ARE PERMITTED. NO LANE CLOSURES ARE PERMITTED BETWEEN 0700–0830 and 1600–1800.*
9. *When bike lanes are impacted, traffic control shall also include a W20–5 (BIKE LANE CLOSED) and a W11–1 & W16–1 combination (SHARE THE ROAD) signs in the affected direction.*
10. *Where parking is impacted, Parking Pre notification R30B or similar no parking signs shall be placed 24 hours in advance.*

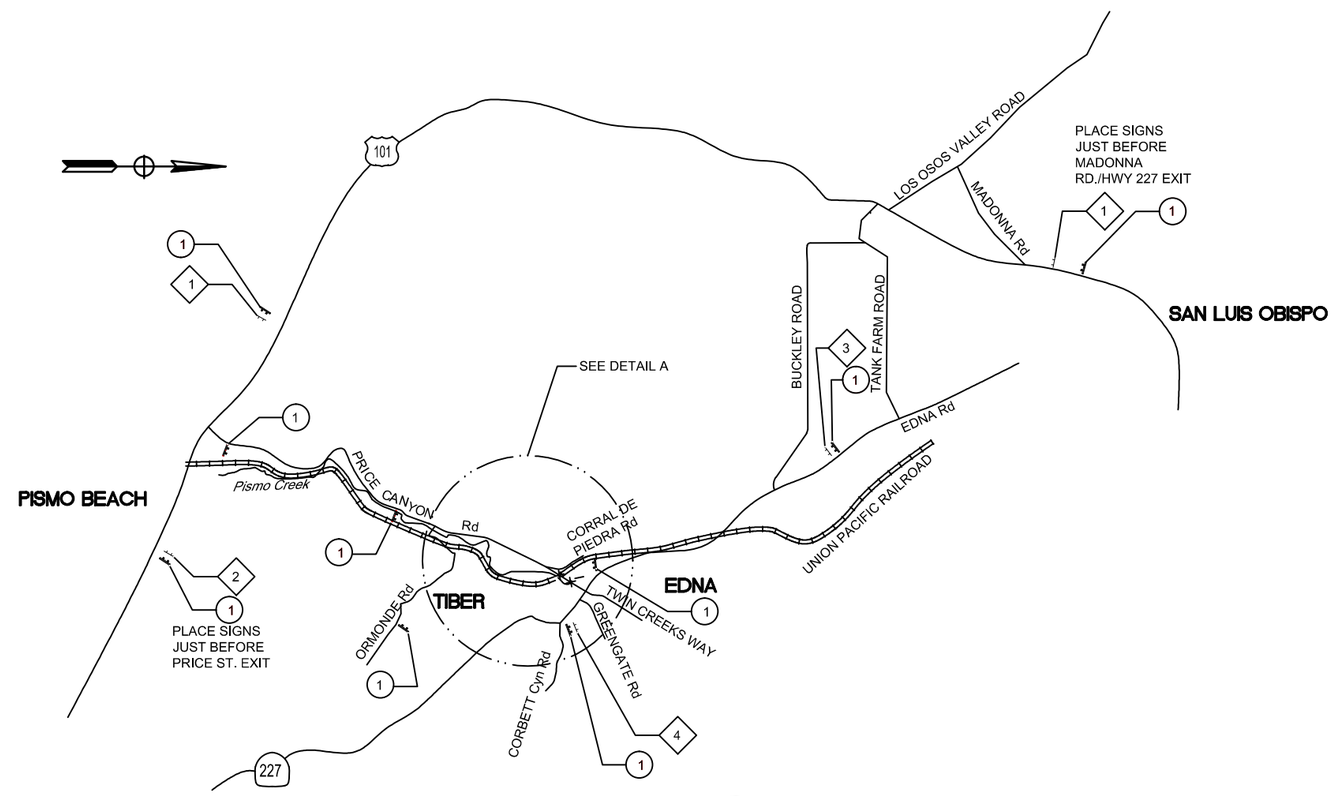
LEGEND

TYPE III BARRICADE WITH FLASHING BEACON



NOTE:
MUST PROVIDE 24-HOUR ACCESS TO PROPERTIES OFF CORRAL DE PIEDRA ROAD. CONSTRUCTION TO COORDINATE WITH PROPERTY OWNERS.

DETAIL A



NO SCALE

REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63477 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
TRAFFIC HANDLING AND ROAD CLOSURE PLAN					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\5 TRAFFIC HANDLING PLAN.DWG, 12/21/2015 4:22 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	6	47

BASIS OF BEARINGS

THE BASIS OF BEARINGS, FOR THE "DENSIFICATION" GROUND AS SURVEY, IS THE BEARING OF A LINE
BETWEEN FOUND AERIAL TARGETS 9064 AND 9036 AND BEING N21°13'25"E

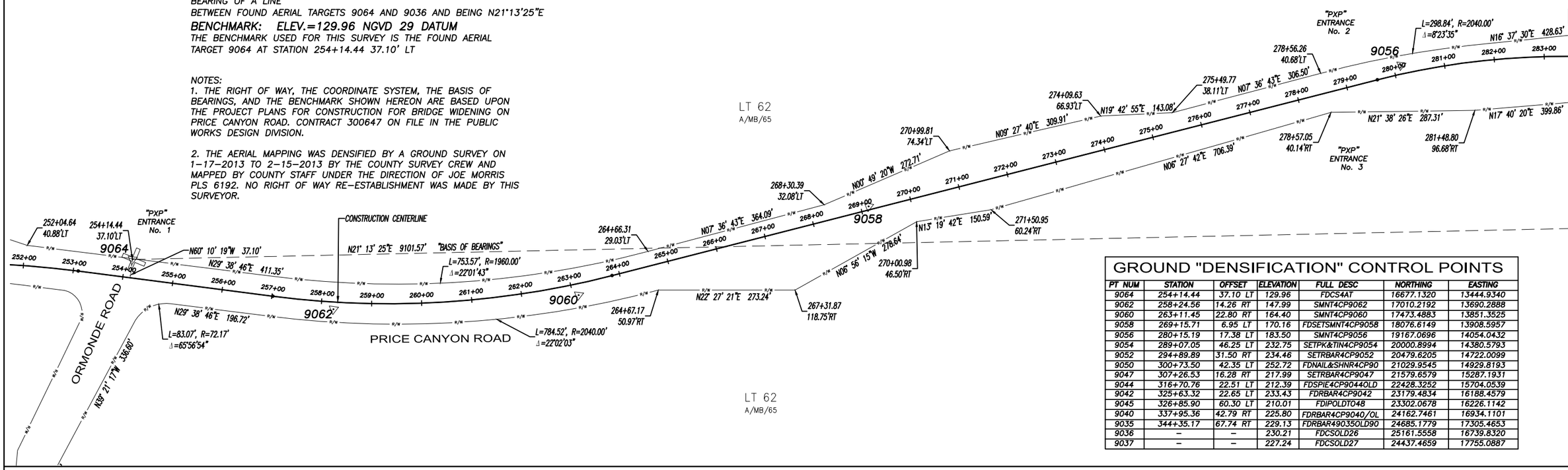
BENCHMARK: ELEV.=129.96 NGVD 29 DATUM

THE BENCHMARK USED FOR THIS SURVEY IS THE FOUND AERIAL TARGET 9064 AT STATION 254+14.44 37.10' LT

NOTES:

1. THE RIGHT OF WAY, THE COORDINATE SYSTEM, THE BASIS OF BEARINGS, AND THE BENCHMARK SHOWN HEREON ARE BASED UPON THE PROJECT PLANS FOR CONSTRUCTION FOR BRIDGE WIDENING ON PRICE CANYON ROAD. CONTRACT 300647 ON FILE IN THE PUBLIC WORKS DESIGN DIVISION.

2. THE AERIAL MAPPING WAS DENSIFIED BY A GROUND SURVEY ON 1-17-2013 TO 2-15-2013 BY THE COUNTY SURVEY CREW AND MAPPED BY COUNTY STAFF UNDER THE DIRECTION OF JOE MORRIS PLS 6192. NO RIGHT OF WAY RE-ESTABLISHMENT WAS MADE BY THIS SURVEYOR.



GROUND "DENSIFICATION" CONTROL POINTS

PT NUM	STATION	OFFSET	ELEVATION	FULL DESC	NORTHING	EASTING
9064	254+14.44	37.10 LT	129.96	FDCS4AT	16677.1320	13444.9340
9062	258+24.56	14.26 RT	147.99	SMNT4CP9062	17010.2192	13690.2888
9060	263+11.45	22.80 RT	164.40	SMNT4CP9060	17473.4883	13851.3525
9058	269+15.71	6.95 LT	170.16	FDSETSMNT4CP9058	18076.6149	13908.5957
9056	280+15.19	17.38 LT	183.50	SMNT4CP9056	19167.0696	14054.0432
9054	289+07.05	46.25 LT	232.75	SETPK&TIN4CP9054	20000.8994	14380.5793
9052	294+89.89	31.50 RT	234.46	SETRBAR4CP9052	20479.6205	14722.0099
9050	300+73.50	42.35 LT	252.72	FDNAIL&SHNR4CP90	21029.9545	14929.8193
9047	307+26.53	16.28 RT	217.99	SETRBAR4CP9047	21579.6579	15287.1931
9044	316+70.76	22.51 LT	212.39	FDSPIE4CP9044OLD	22428.3252	15704.0539
9042	325+63.32	22.65 LT	233.43	FDRBAR4CP9042	23179.4834	16188.4579
9045	326+85.90	60.30 LT	210.01	FDIPOLDT048	23302.0678	16226.1142
9040	337+95.36	42.79 RT	225.80	FDRBAR4CP9040/OL	24162.7461	16934.1101
9035	344+35.17	67.74 RT	229.13	FDRBAR490350LD90	24685.1779	17305.4653
9036	–	–	230.21	FDCSOLD26	25161.5558	16739.8320
9037	–	–	227.24	FDCSOLD27	24437.4659	17755.0887

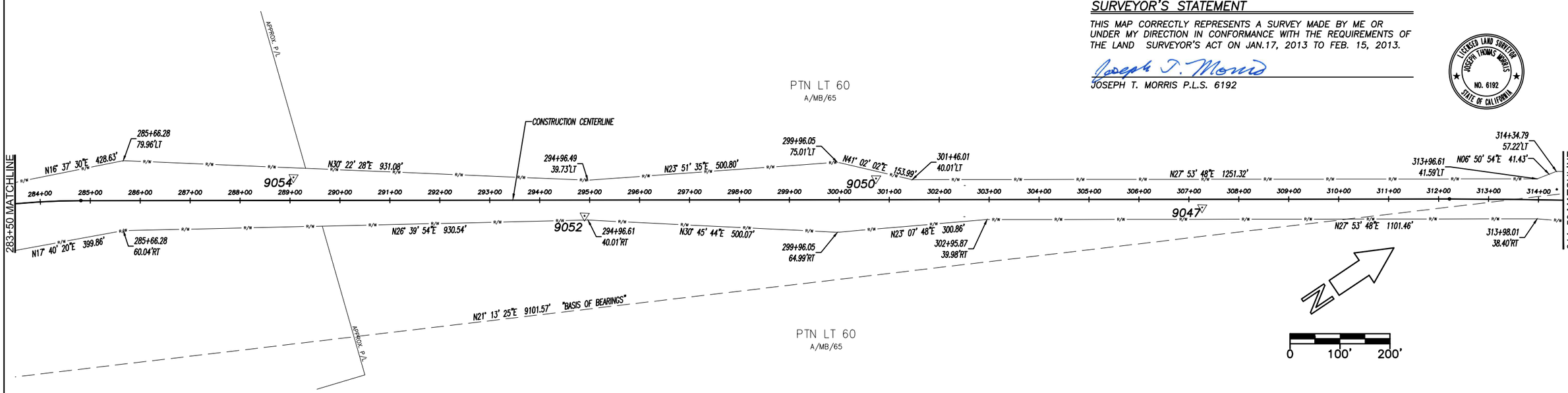
SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE LAND SURVEYOR'S ACT ON JAN.17, 2013 TO FEB. 15, 2013.

Joseph T. Morris

JOSEPH T. MORRIS P.L.S. 6192

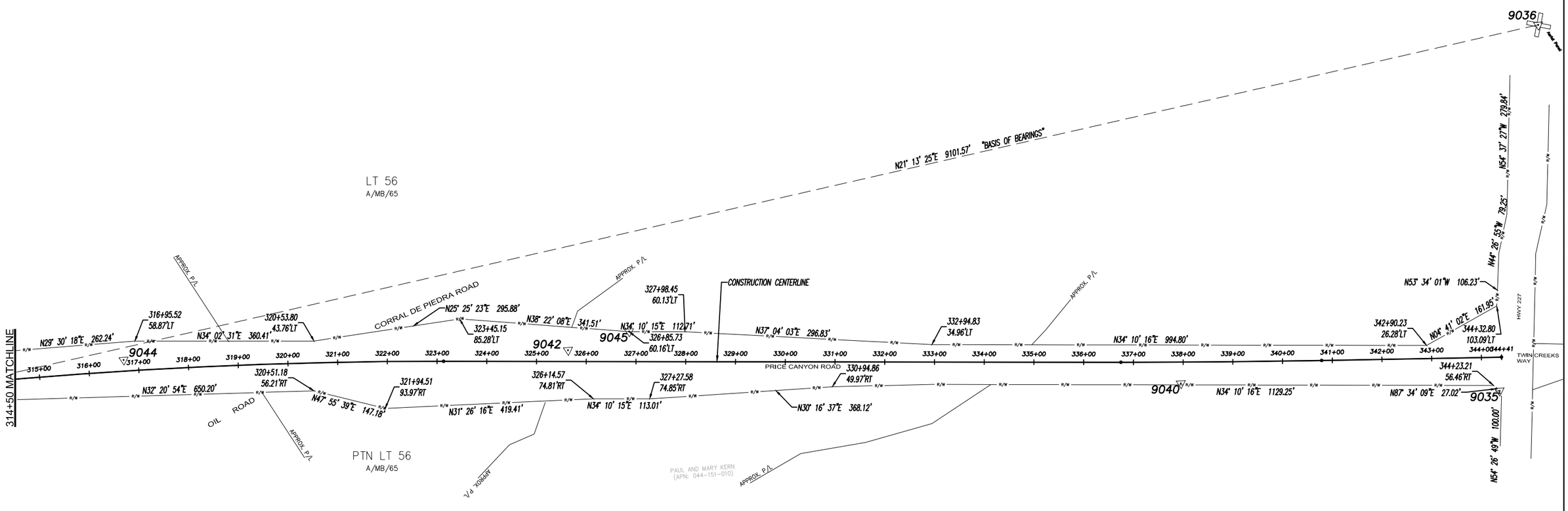
LICENSED LAND SURVEYOR JOSEPH THOMAS MORRIS NO. 6192 STATE OF CALIFORNIA



PRICE CANYON ROAD WIDENING PHASE II					
SURVEY CONTROL AND RIGHT OF WAY					
PISMO BEACH, CA					
SURVEYED BY:	J MORRIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\CONTROL AND RIGHT OF WAY.DWG, 12/21/2015 4:28 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	7	47



GROUND "DENSIFICATION" CONTROL POINTS

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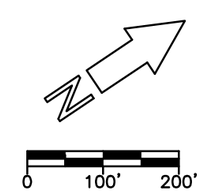


PRICE CANYON ROAD WIDENING PHASE II

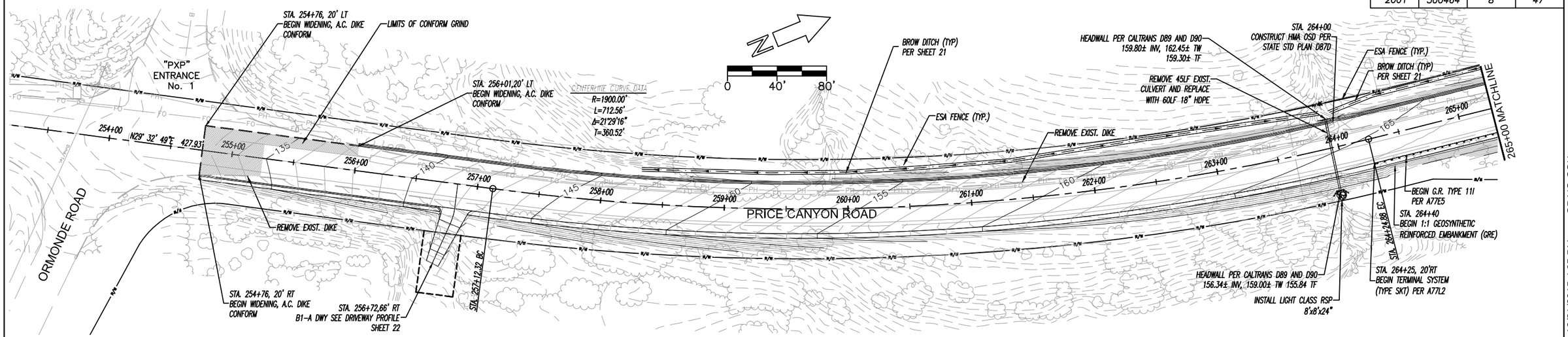
SURVEY CONTROL AND RIGHT OF WAY

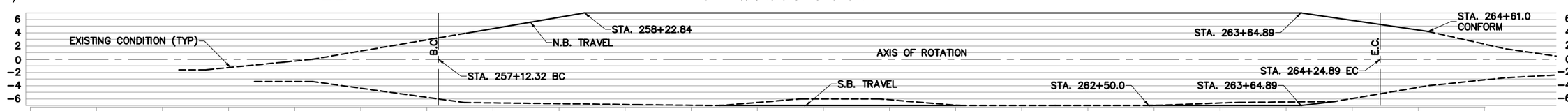
PISMO BEACH, CA

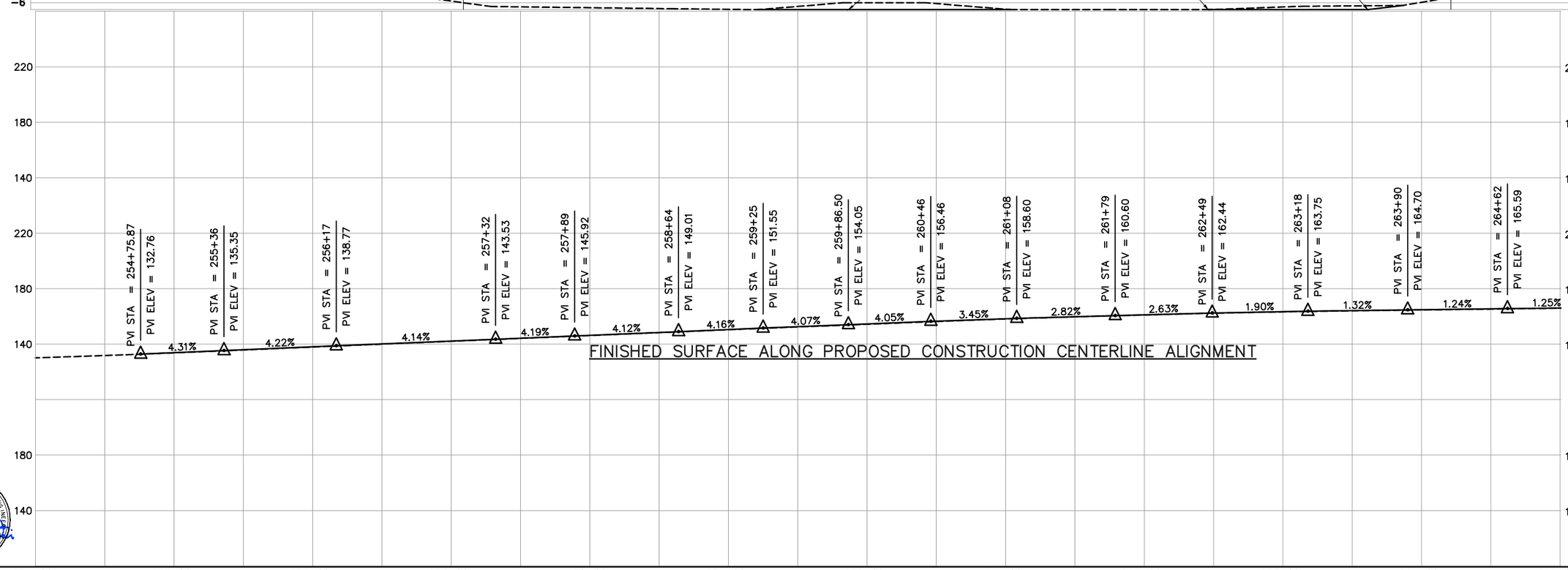
SURVEYED BY:	J MORRIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\CONTROL AND RIGHT OF WAY.DWG, 12/21/2015 4:29 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	8	47







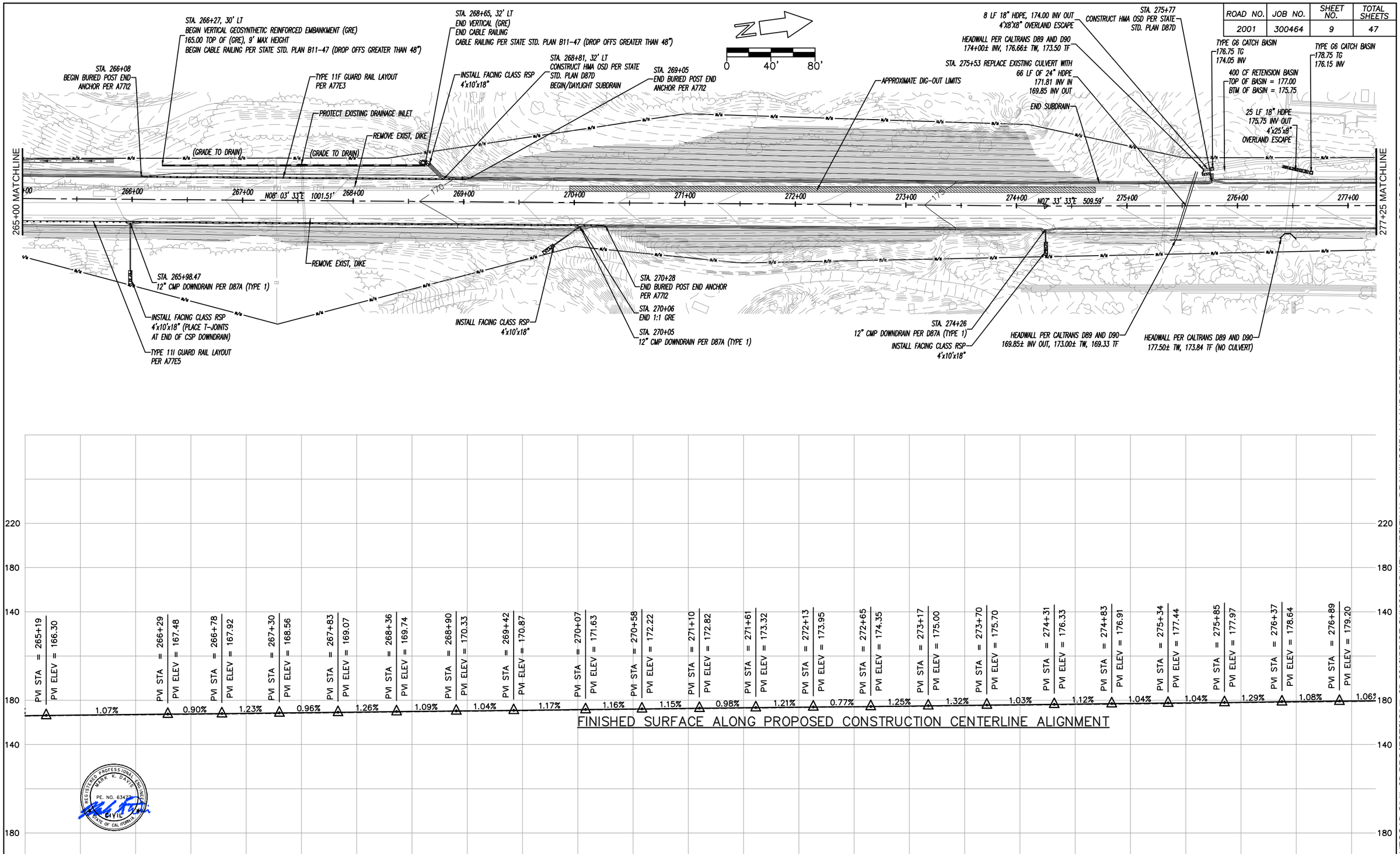
STA	254+00	255+00	256+00	257+00	258+00	259+00	260+00	261+00	262+00	263+00	264+00	265+00
CU YDS												
EXC EMB												

ENGINEERED BY:	CADD BY:	CHECKED BY:
M DAVIS	C COX	G MARSHALL

PRICE CANYON ROAD WIDENING PHASE II
PLAN AND PROFILE STA. 255+00 TO 265+00

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\PLAN AND PROFILE.DWG, 12/21/2015 4:05 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	9	47



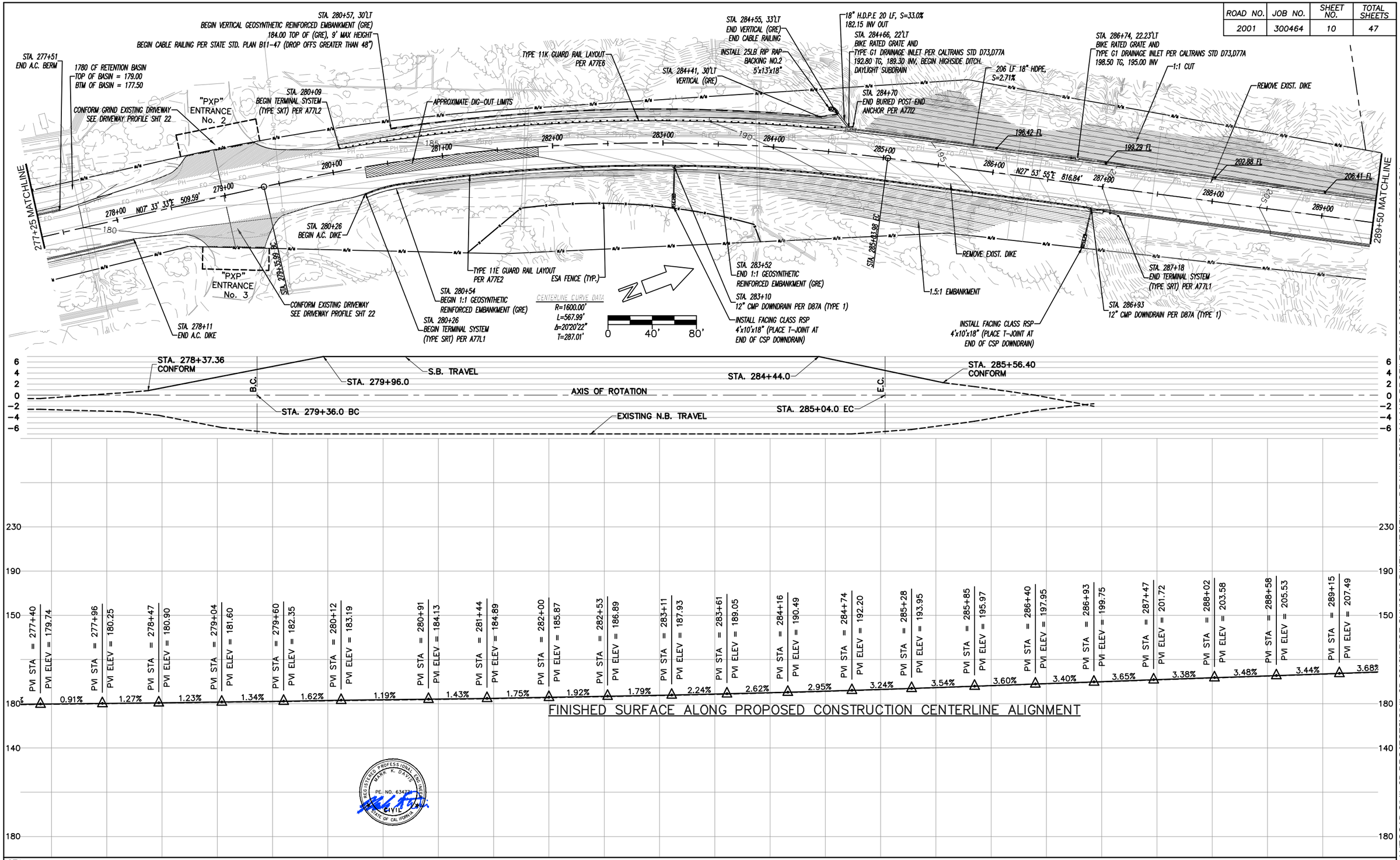
ENGINEERED BY:	CADD BY:	CHECKED BY:
M DAVIS	C COX	G MARSHALL

PRICE CANYON ROAD WIDENING PHASE II

PLAN AND PROFILE STA. 265+00 TO 277+25

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\PLAN AND PROFILE.DWG, 12/21/2015 4:06 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	10	47



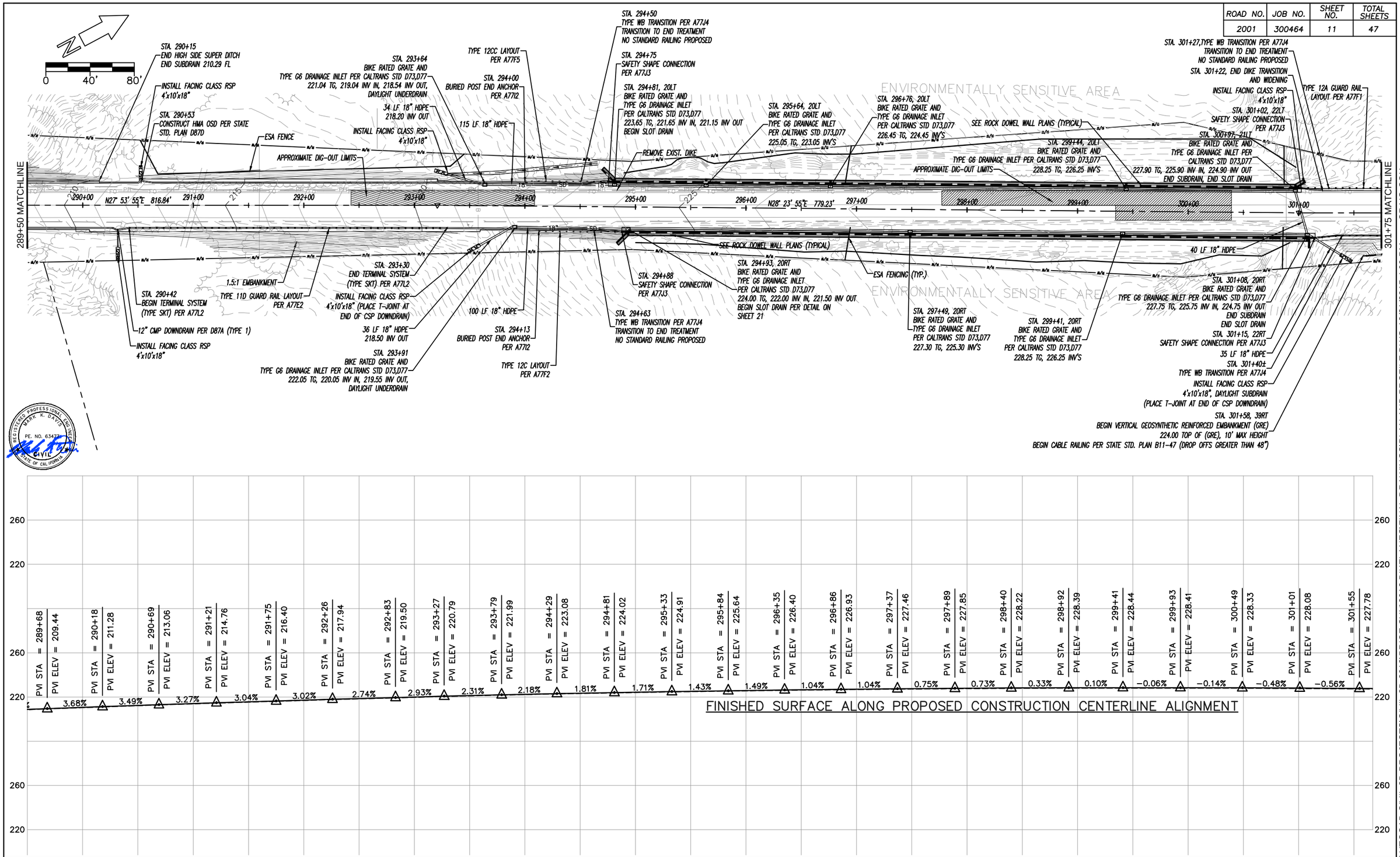
REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
P.E. NO. 63477
CIVIL
STATE OF CALIFORNIA

ENGINEERED BY:	CADD BY:	CHECKED BY:
M DAVIS	C COX	G MARSHALL

PRICE CANYON ROAD WIDENING PHASE II
PLAN AND PROFILE STA. 277+25 TO 289+50

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\PLAN AND PROFILE.DWG, 12/21/2015 4:08 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	11	47



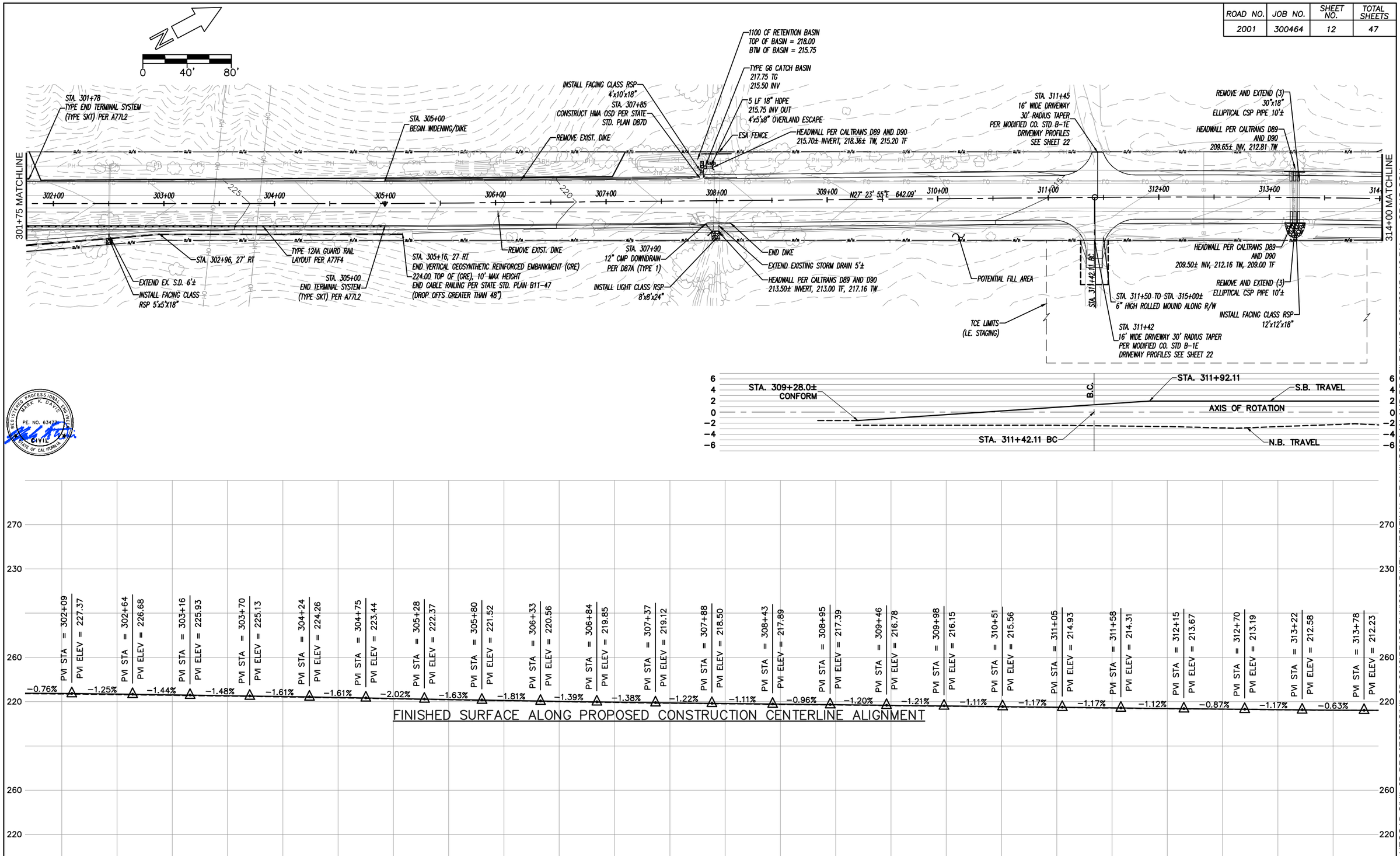
CU YDS	EXC EMB

ENGINEERED BY:	CADD BY:	CHECKED BY:
M DAVIS	C COX	G MARSHALL

PRICE CANYON ROAD WIDENING PHASE II
PLAN AND PROFILE STA. 289+50 TO 301+75

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\PLAN AND PROFILE.DWG, 12/21/2015 4:09 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	12	47



REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
PE. NO. 63477
CIVIL
STATE OF CALIFORNIA

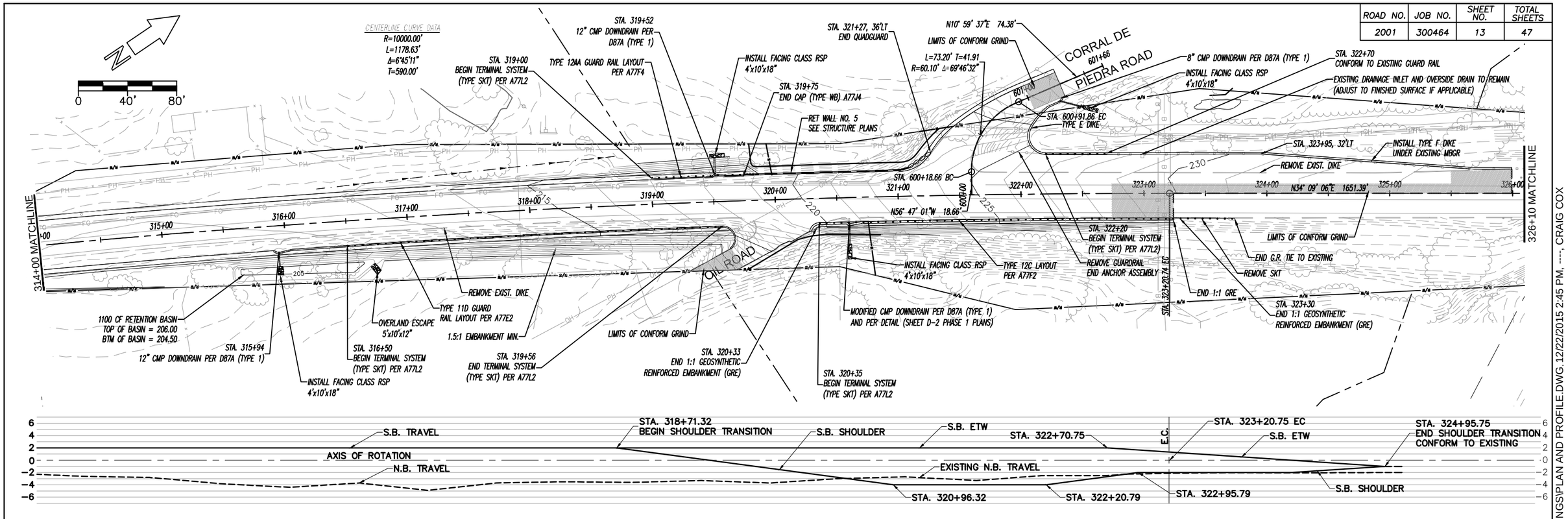
ENGINEERED BY:	CADD BY:	CHECKED BY:
M DAVIS	C COX	G MARSHALL

PRICE CANYON ROAD WIDENING PHASE II

PLAN AND PROFILE STA. 301+75 TO 314+00

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\PLAN AND PROFILE.DWG, 12/21/2015 4:10 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	13	47



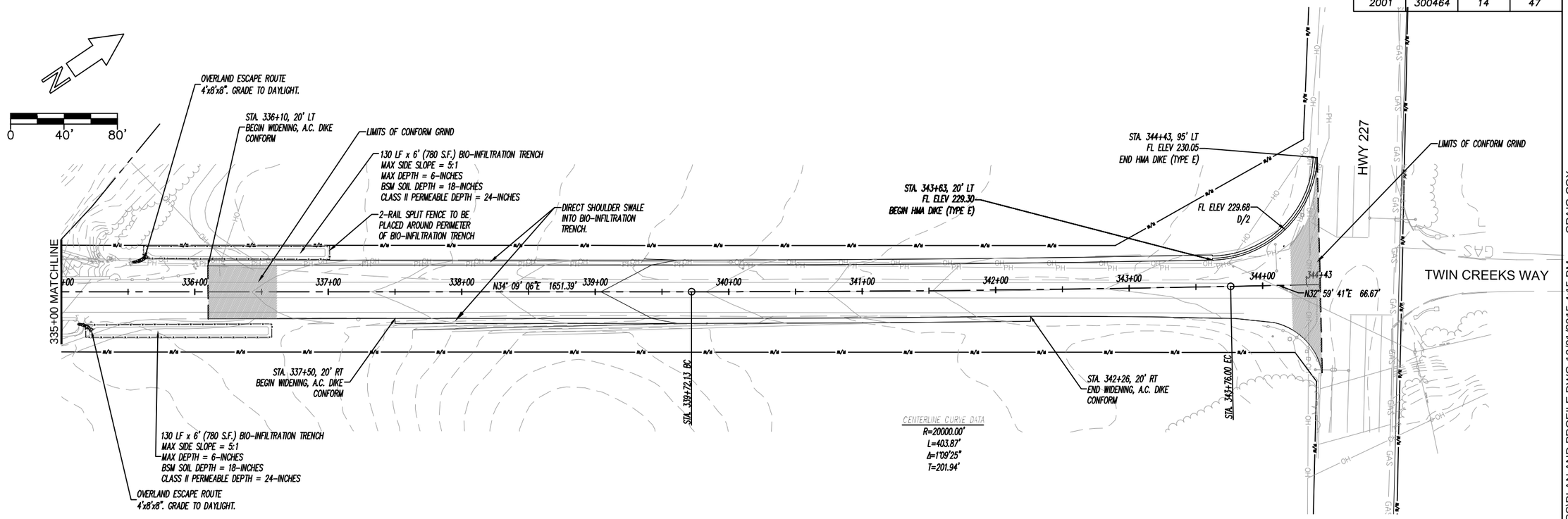
ENGINEERED BY:	CADD BY:	CHECKED BY:
M DAVIS	C COX	G MARSHALL

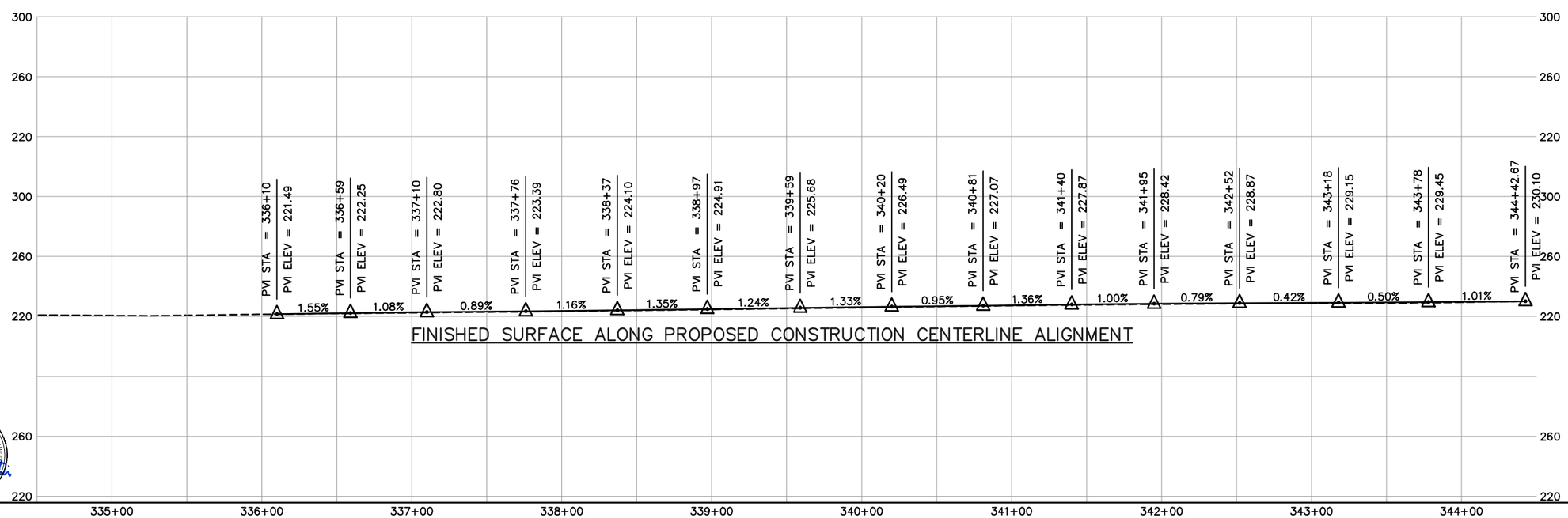
PRICE CANYON ROAD WIDENING PHASE II

PLAN AND PROFILE STA. 314+00 TO 326+10

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\PLAN AND PROFILE.DWG, 12/22/2015 2:45 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	14	47





REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
P.E. NO. 63473
CIVIL
STATE OF CALIFORNIA

CU YDS	EXC EMB

ENGINEERED BY:	CADD BY:	CHECKED BY:
M DAVIS	C COX	G MARSHALL

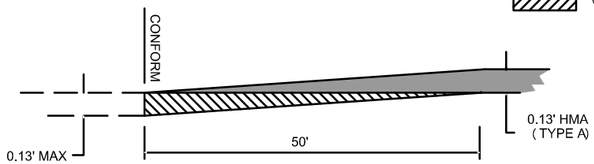
PRICE CANYON ROAD WIDENING PHASE II
PLAN AND PROFILE STA. 335+00 TO 344+00

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\PLAN AND PROFILE.DWG, 12/21/2015 4:15 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	15	47

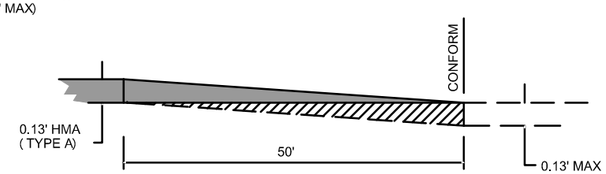
LEGEND

COLD PLANE AC PAVEMENT
(0.13' MAX)



ELEVATION VIEW
PAVING TAPER

STA 254+75 TO 255+25
STA 336+10 TO 336+60
NO SCALE

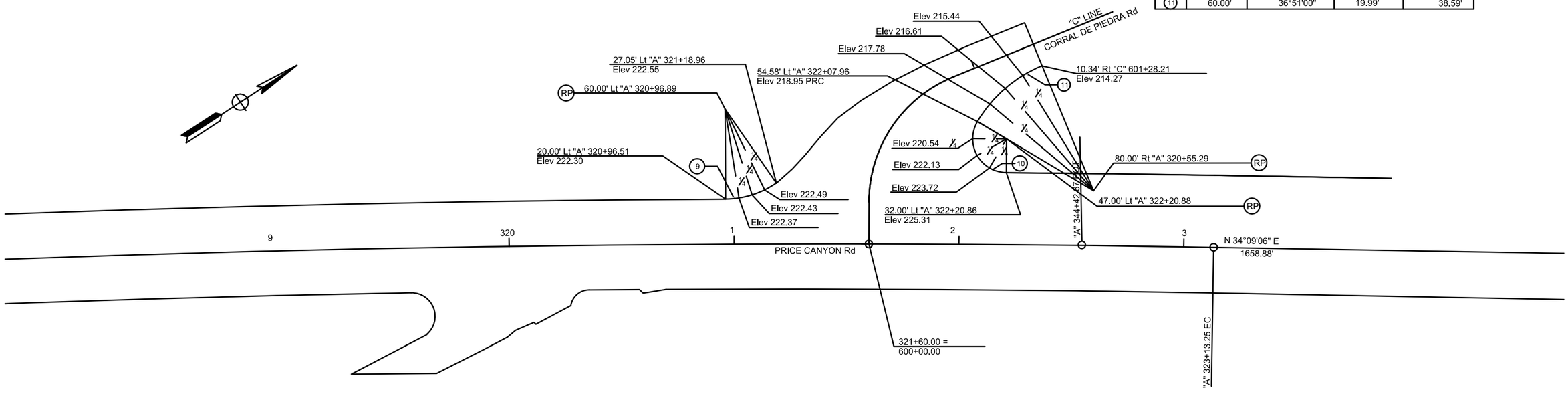


ELEVATION VIEW
PAVING TAPER

STA 325+50 TO 326+00
STA 343+92 TO 344+42.67
CORRAL DE PIEDRA RD. INTX.
STA 600+62 TO 601+12

NO SCALE

CURVE DATA				
No.	R	D	T	L
7	10.00'	153°20'25"	42.20'	26.76'
8	60.00'	27°53'36"	14.90'	29.21'
9	40.00'	34°29'05"	12.41'	24.07'
10	15.00'	120°20'14"	26.16'	31.50'
11	60.00'	36°51'00"	19.99'	38.59'



REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
PE. NO. 63472
CIVIL
STATE OF CALIFORNIA

CORRAL DE PIEDRA RD INTERSECTION

STA

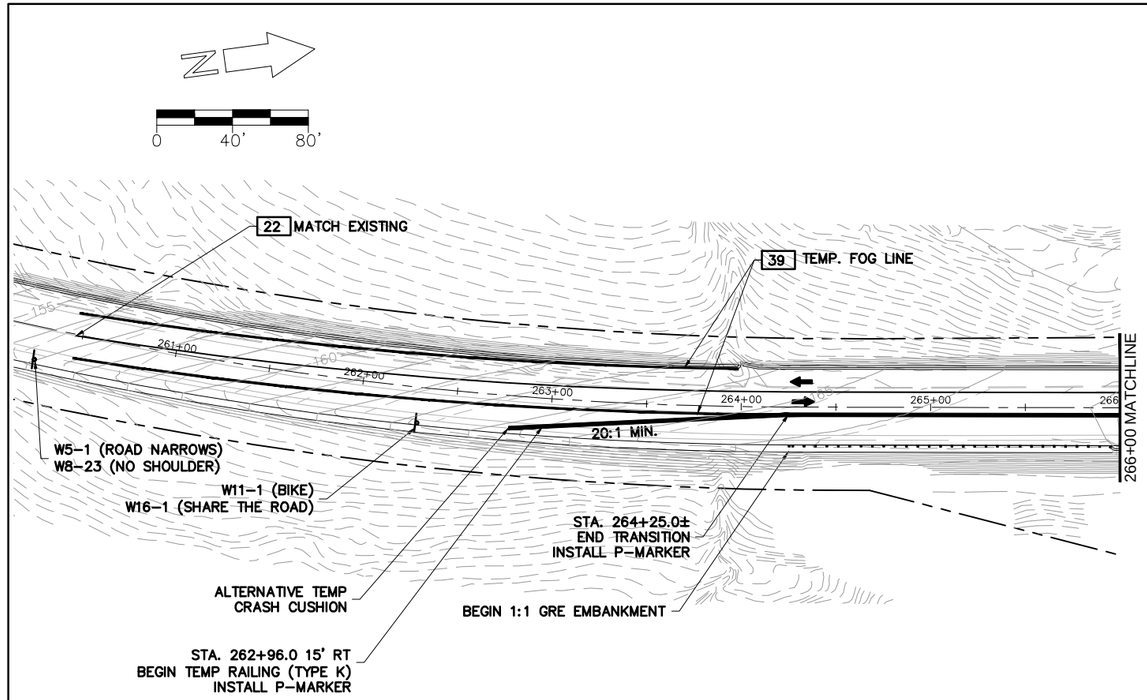
CU YDS	EXC EMB

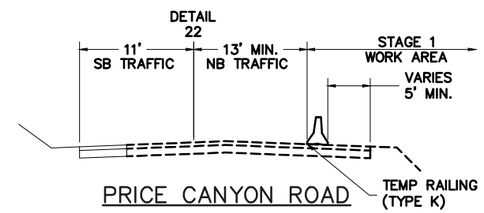
ENGINEERED BY:	CADD BY:	CHECKED BY:
M DAVIS	C COX	G MARSHALL

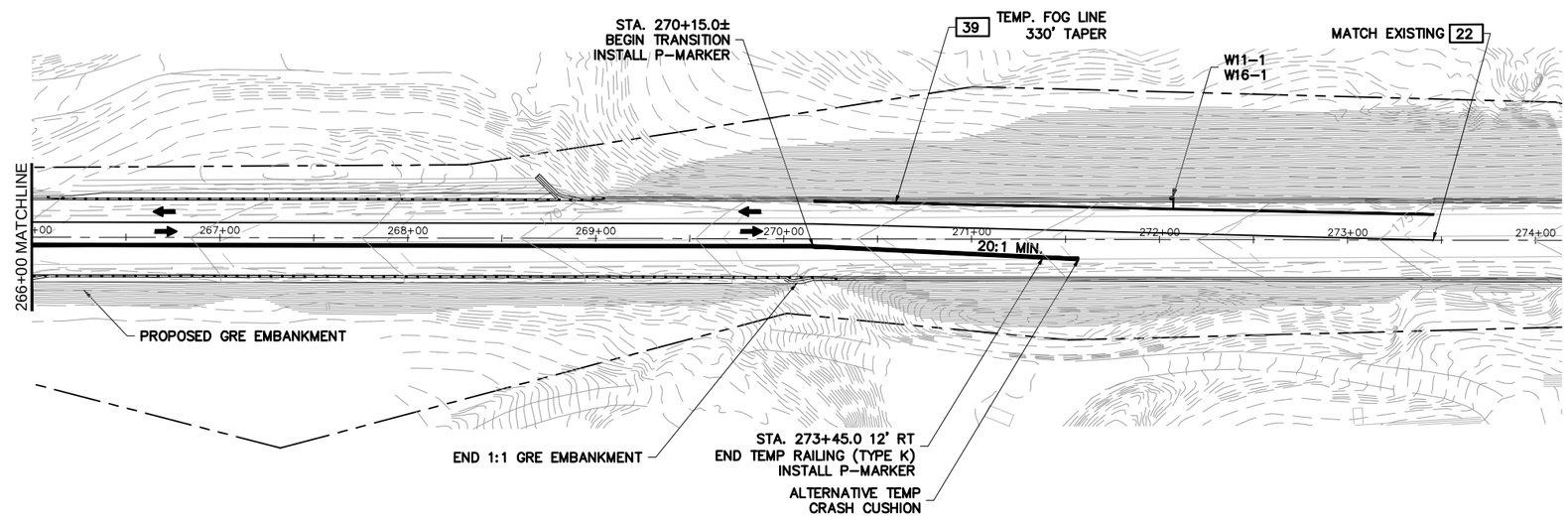
PRICE CANYON ROAD WIDENING PHASE II
CORRAL DE PIEDRA ROAD INTERSECTION

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\15 CORRAL DE PIEDR ROAD INTERSECTION.DWG, 12/21/2015 4:30 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	16	47







NOTES:

1. THIS PLAN ACCURATE OF TYPICAL STAGE CONSTRUCTION WORK ONLY.
2. INSTALL P-MARKER AT ALL K-RAIL ANGLE POINTS

LEGEND

- NO. — TEMPORARY PAVEMENT DELINEATION DETAIL
- TEMPORARY RAILING (TYPE K)
- DIRECTION OF TRAFFIC
- SIGN – 1 POST

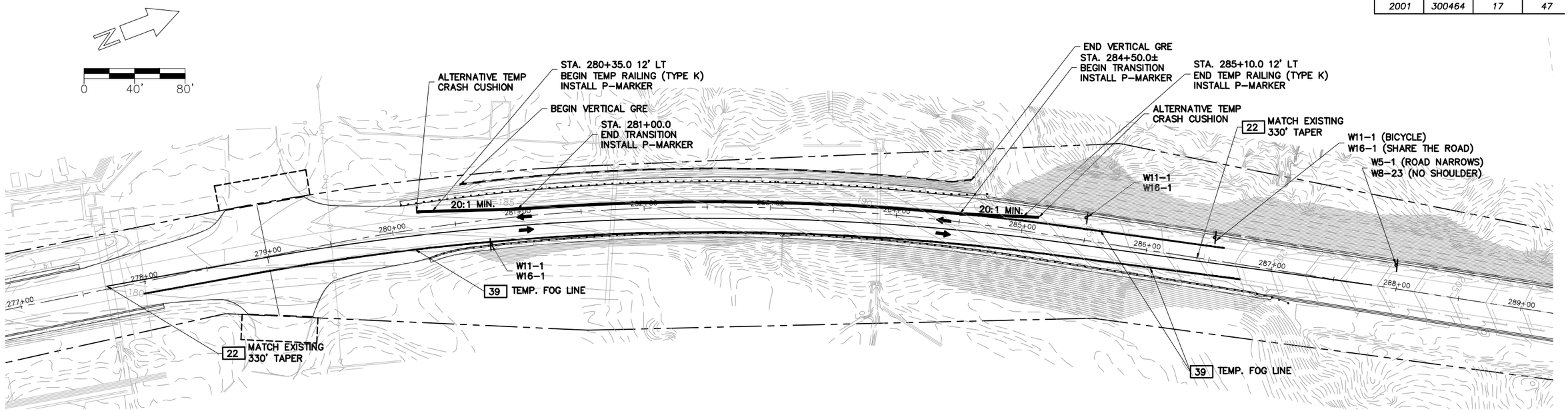
WORK TO BE PERFORMED DURING THIS STAGE

1. SHIFT TRAFFIC TO WEST AFTER WESTERLY WIDENING.
2. ADJUST CL STRIPE. PLACE K-RAIL AND TEMP CRASH CUSHIONS.
3. WIDEN EAST SIDE OF ROAD.
4. CONSTRUCT GEOSYNTHETIC REINFORCED EMBANKMENT SLOPE.

REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63477 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
STAGING PLAN NO. 1					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	17	47



NOTES:

1. THIS PLAN ACCURATE OF STAGE CONSTRUCTION WORK ONLY.
2. INSTALL P-MARKERS AT ALL K-RAIL ANGLE POINTS.

LEGEND

NO. TEMPORARY PAVEMENT DELINEATION DETAIL

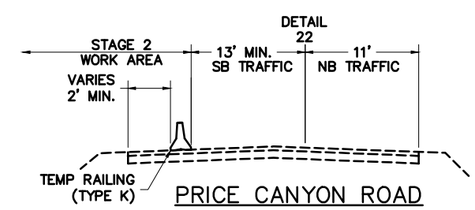
TEMPORARY RAILING (TYPE K)

DIRECTION OF TRAFFIC

SIGN – 1 POST

WORK TO BE PERFORMED DURING THIS STAGE

1. SHIFT TRAFFIC TO EAST
2. ADJUST CL STRIPE. PLACE K-RAIL AND TEMP CRASH CUSHIONS.
3. WIDEN WEST SIDE OF ROAD.
4. CONSTRUCT VERTICAL GEOSYNTHETIC REINFORCED EMBANKMENT.

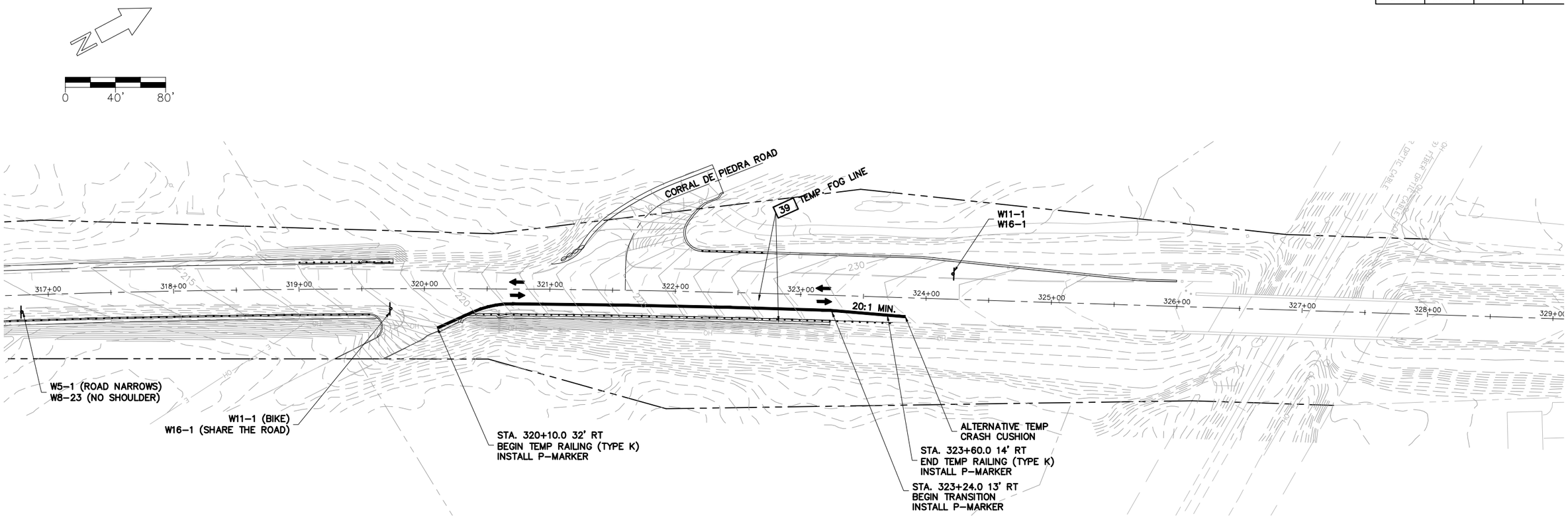


PRICE CANYON ROAD

REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63477 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
STAGING PLAN NO. 2					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	18	47



NOTES:

1. THIS PLAN ACCURATE OF STAGE CONSTRUCTION WORK ONLY.
2. INSTALL P-MARKER AT ALL K-RAIL ANGLE POINTS

LEGEND

NO. TEMPORARY PAVEMENT DELINEATION DETAIL

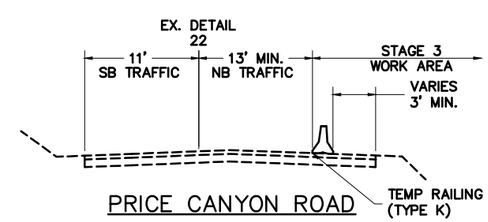
TEMPORARY RAILING (TYPE K)

DIRECTION OF TRAFFIC

SIGN – 1 POST

WORK TO BE PERFORMED DURING THIS STAGE

1. REDUCE N.B. TRAVELED WAY WIDTH TO 11' MIN.
2. EX CL STRIPE TO REMAIN. PLACE K-RAIL AND TEMP CRASH CUSHIONS.
3. WIDEN EAST SIDE OF ROAD.
4. CONSTRUCT GEOSYNTHETIC REINFORCED EMBANKMENT.

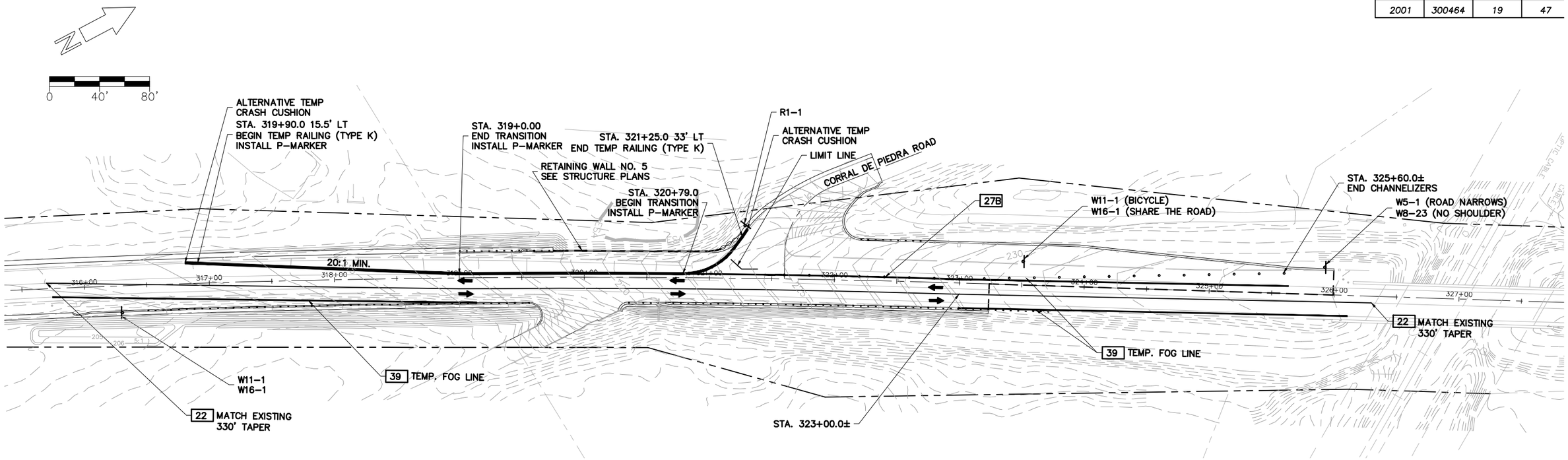


PRICE CANYON ROAD

REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
PE. NO. 63473
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
STAGING PLAN NO. 3					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	19	47



NOTES:

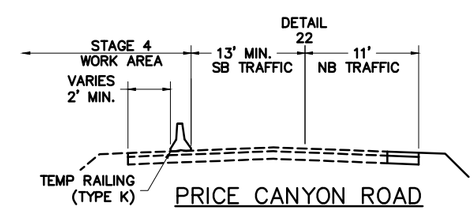
1. THIS PLAN ACCURATE OF STAGE CONSTRUCTION WORK ONLY.
2. CHANNELIZERS PLACED AT 20' C-C SPACING UNLESS OTHEWISE NOTED.
3. INSTALL P-MARKERS AT ALL K-RAIL ANGLE POINTS

LEGEND

- NO. — TEMPORARY PAVEMENT DELINEATION DETAIL
- TEMPORARY RAILING (TYPE K)
- DIRECTION OF TRAFFIC
- SIGN – 1 POST
- CHANNELIZERS

WORK TO BE PERFORMED DURING THIS STAGE

1. SHIFT TRAFFIC TO EAST AFTER EASTERLY WIDENING.
2. REMOVE STRIPE, RESTRIPE AND PLACE CHANNELIZERS. PLACE K-RAIL AND TEMP CRASH CUSHIONS.
3. CONSTRUCT RETAINING WALL NO. 5.
4. WIDEN WEST SIDE OF ROAD STA. 316+50.0± TO STA. 321+00.0±

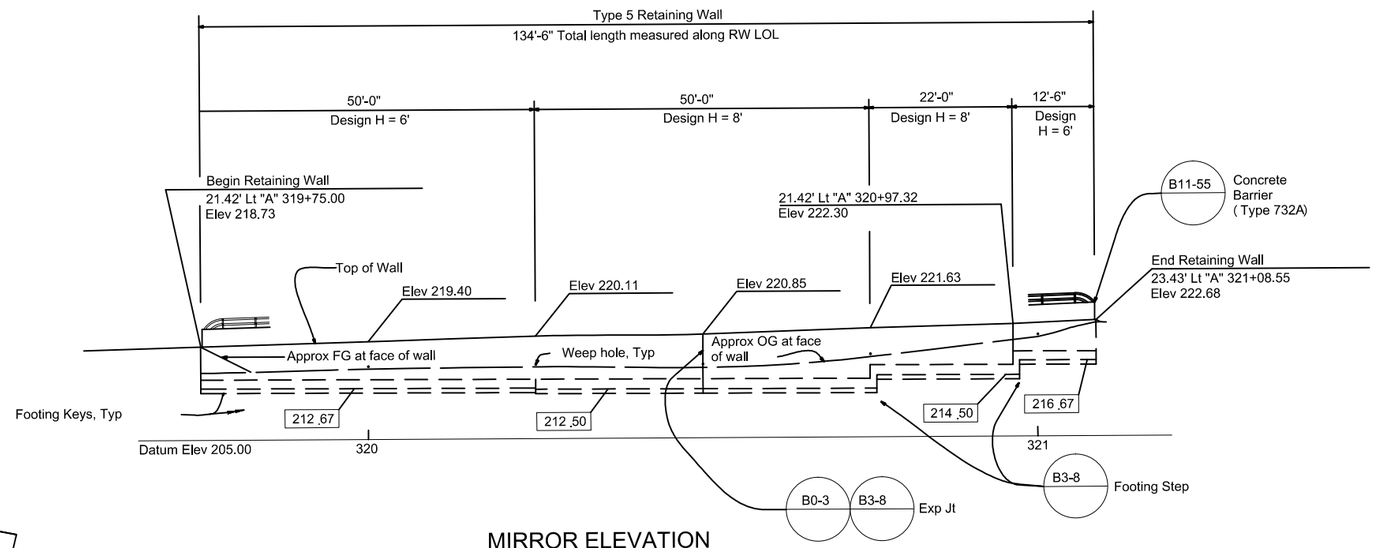


PRICE CANYON ROAD

REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS RE. NO. 63473 CIVIL STATE OF CALIFORNIA

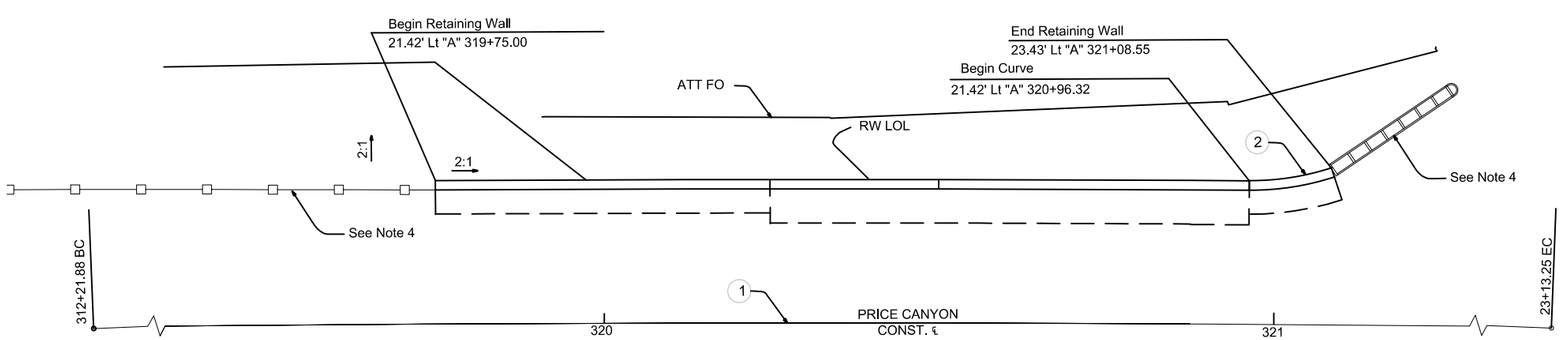
PRICE CANYON ROAD WIDENING PHASE II					
STAGING PLAN NO. 4					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	20	47



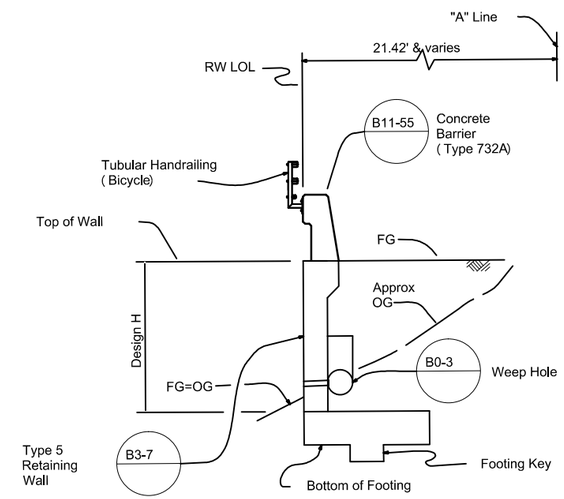
MIRROR ELEVATION

1"=10'



PLAN

1"=10'



TYPICAL SECTION

1"=1'-0"

Legend:

Bottom of Footing Elevation

Notes:

1. For Tubular Handrailing (Bicycle) details, see "WEST CORRAL DE PIEDRE CREEK BRIDGE (WIDEN), TUBULAR HANDRAILING (BICYCLE)".
2. Top of wall follows roadway profile. Elevations shown for information only.
3. Weakened planes not shown.
4. For MBGR and Alternative In-Line Terminal System details, see Road Plans

INDEX TO PLANS

Sheet No.	Title
1	General Plan
2	Log of Test Borings

Note:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

STANDARD PLAN SHEET NO.

DETAIL NO.

CURVE DATA

(1) R=10,000'
Δ=6^15'11"
T=546.22'
L=1,091.37'

(2) R=38.58'
Δ=18^31'35"
T=6.29'
L=12.47'

QUANTITIES

Structure Excavation (Retaining Wall)	188 CY
Structure Backfill (Retaining Wall)	123 CY
Structural Concrete, Retaining Wall	77 CY
Bar Reinforcing Steel (Retaining Wall)	4610 LB
Concrete Barrier (Type 732)	135 LF
Tubular Handrailing (Bicycle)	135 LF

STANDARD PLANS DATED MAY 2006

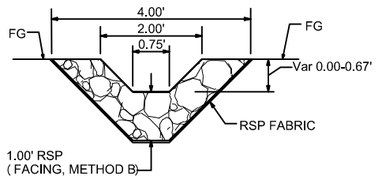
A10A	Acronyms and Abbreviations (Sheet 1 of 2)
A10B	Acronyms and Abbreviations (Sheet 2 of 2)
A10C	Symbols (Sheet 1 of 2)
A10D	Symbols (Sheet 2 of 2)
A62B	Limit of Payment for Excavation and Backfill Bridge Surcharge and Wall
B0-3	Bridge Details
B3-7	Retaining Wall Type 5
B3-8	Retaining Wall Details No.1
B11-55	Concrete Barrier Type 732A

REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
PE. NO. 63477
CIVIL
STATE OF CALIFORNIA

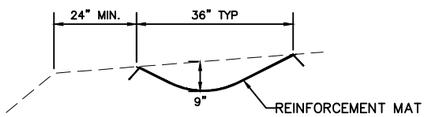
PRICE CANYON ROAD WIDENING PHASE II					
RETAINING WALL NO. 5					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\20 RETAINING WALL NO. 5.DWG, 12/21/2015 4:39 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	21	47



SECTION C-C

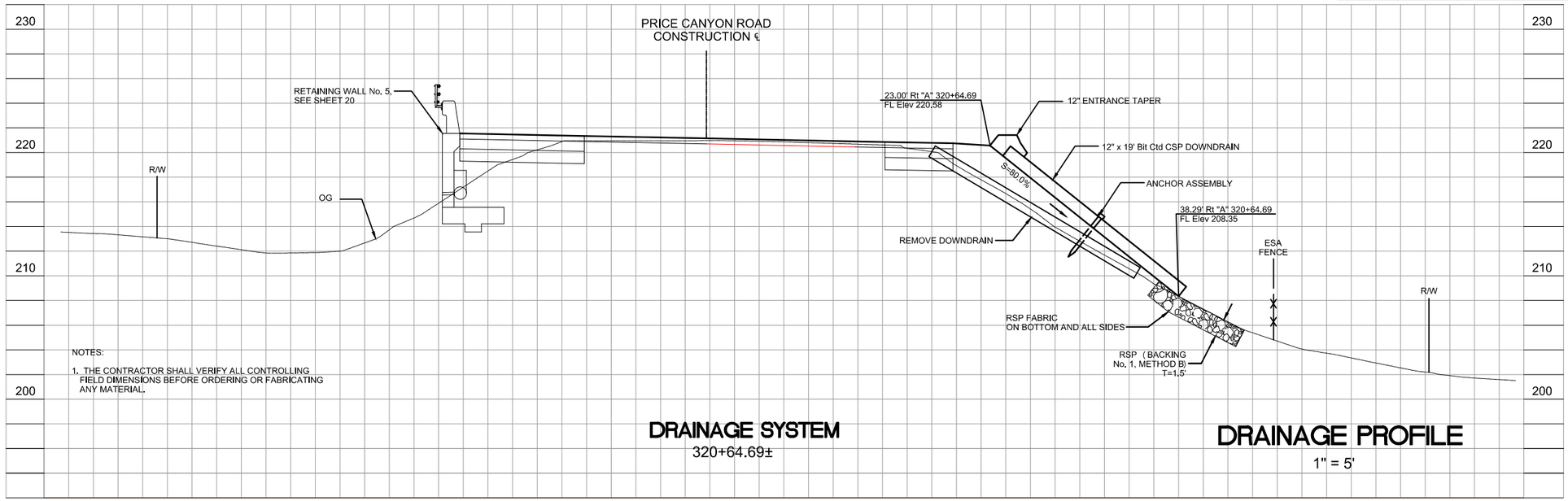


BROW DITCH

NOT TO SCALE

▽ = EPOXY COATED

DESIGN HEIGHT "H" (FT.)	ROWS OF #4▽ DOWEL BARS REQUIRED N (NO.)
UP TO 5	2
6	3
7	3
8	3
9	3
10	4
11	4
12	4



NOTES:

1. THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DRAINAGE SYSTEM

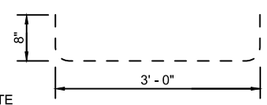
320+64.69±

DRAINAGE PROFILE

1" = 5'

KEY NOTES

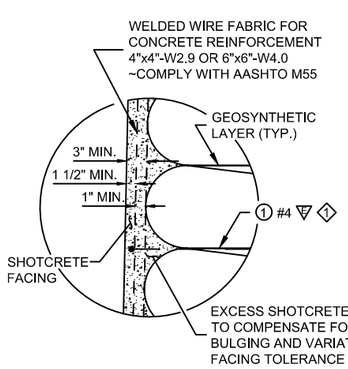
1. "N" ROWS OF 1 #4▽ DOWEL REINFORCEMENT PLACE BETWEEN GEOSYNTHETIC LAYERS AT 5'-0" O.C. HORIZONTAL SPACING, SEE TABLE. VERTICAL SPACING BETWEEN ROWS TO BE EQUAL.
2. 3" I.D. PVC PIPE FOR WEEP HOLE IN WALL FACING - PLACE BETWEEN GEOSYNTHETIC LAYERS APPROX. 9" DEEP AT 12" - 0" HORIZONTAL SPACING. LENGTH TO EXTEND TO OUTER SURFACE OF SPECIFIED WALL. WEEP HOLES SHALL BE KEPT CLEAR OF CONCRETE.



NOTE

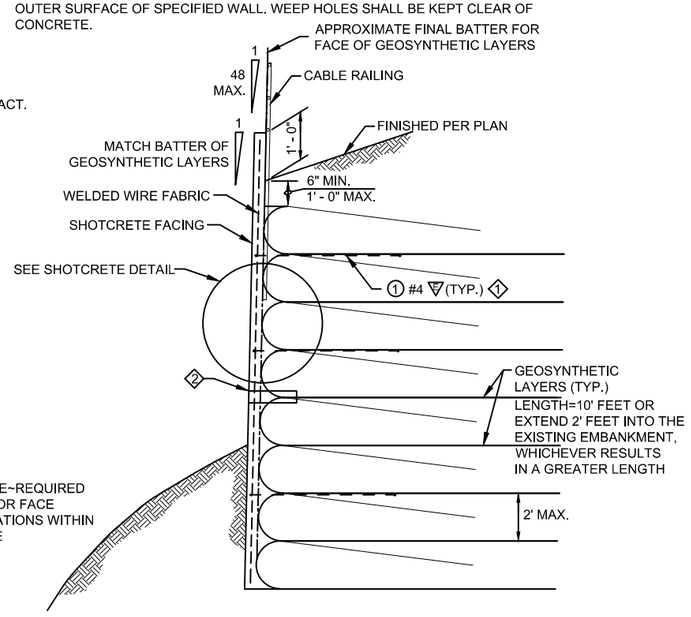
1. ALL BARS SHOWN SHALL BE ASTM A706 UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.

DOWEL DETAIL

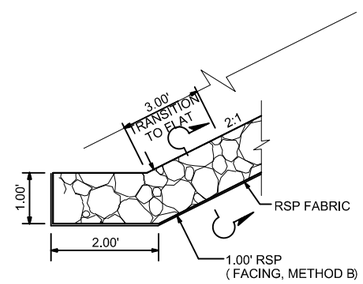


SHOTCRETE DETAIL

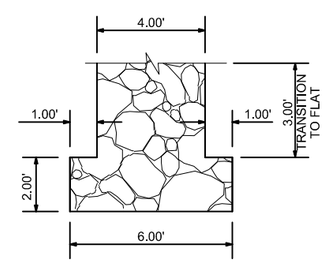
NOTE:
REFER TO PLATE 7
OF GEOTECHNICAL
REPORT DATED
DECEMBER 2015



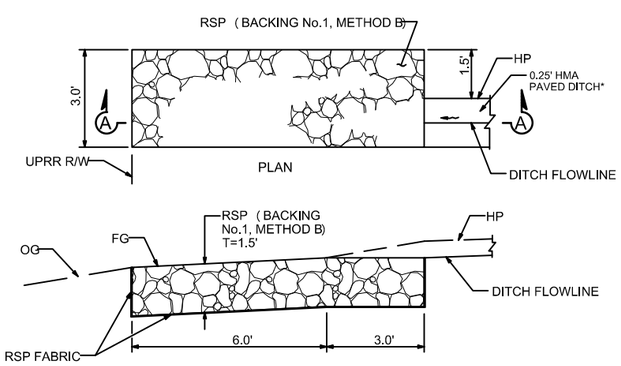
TYPICAL SECTION
PERMANENT GEOSYNTHETIC RETAINING WALL
WITH SHOTCRETE FACING



RSP OVERSIDE DRAIN

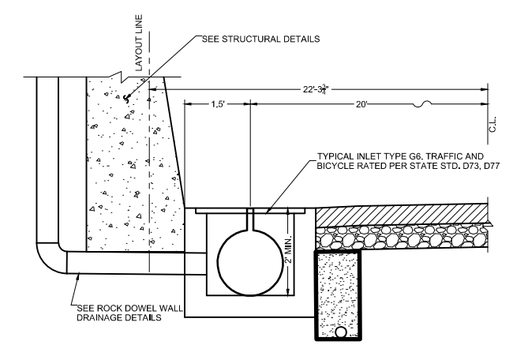


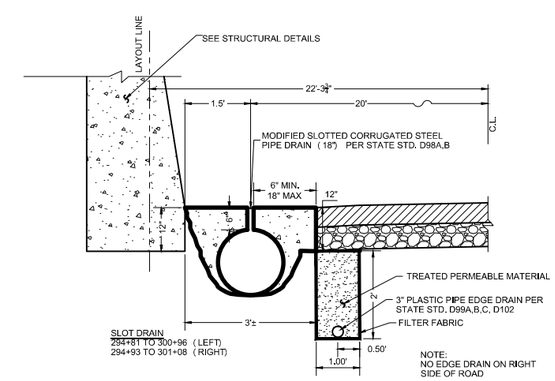
RSP PAD PLAN



SECTION A-A

ENERGY DISSIPATER



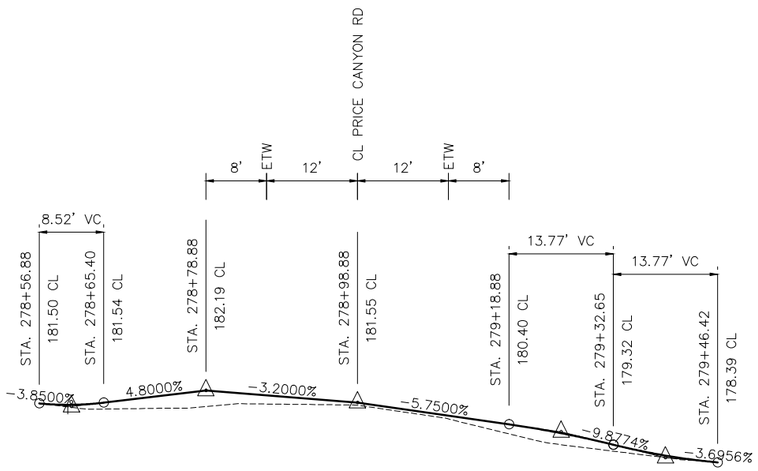


TYPICAL SLOT AND EDGE DRAIN

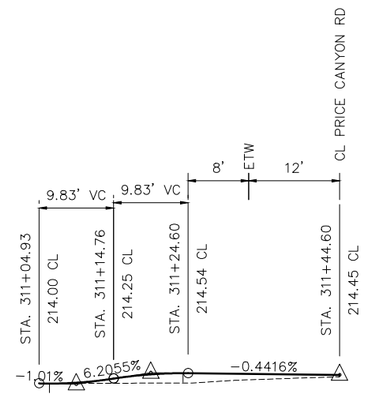
PRICE CANYON ROAD WIDENING PHASE II					
DETAILS					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\21 DETAILS.DWG,12/21/2015 4:40 PM, ---, CRAIG COX

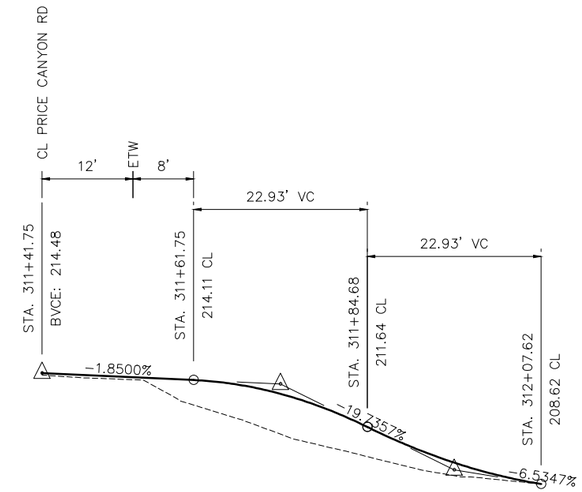
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	22	47



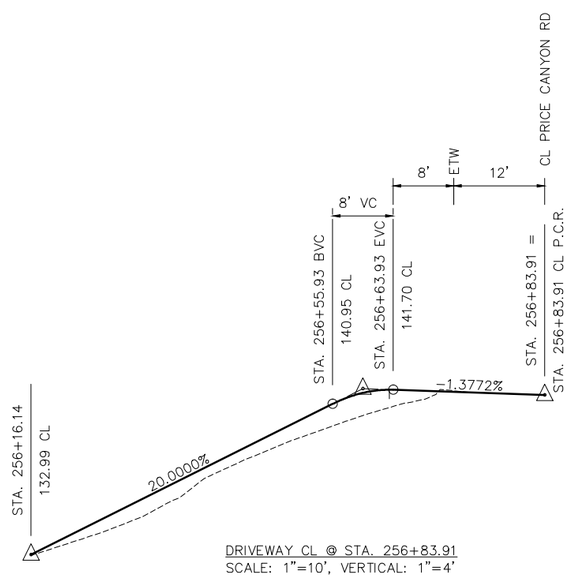
DRIVEWAY CL @ STA. 278+98.88
SCALE: 1"=10', VERTICAL: 1"=4'



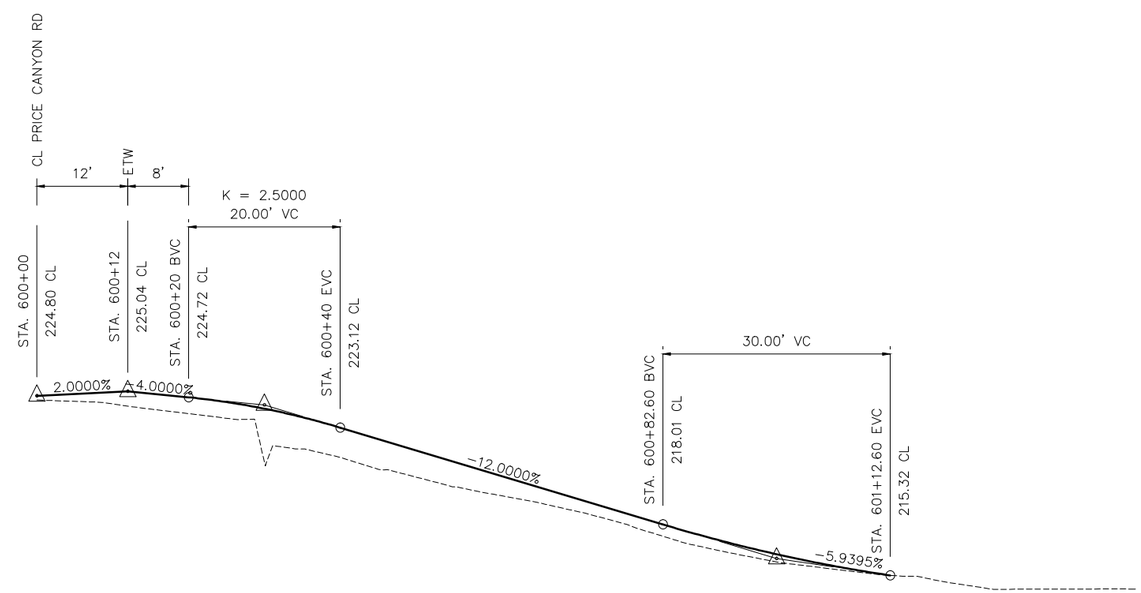
DRIVEWAY CL @ STA. 311+44.60
SCALE: 1"=10', VERTICAL: 1"=4'



DRIVEWAY CL @ STA. 311+41.75 RT
SCALE: 1"=10', VERTICAL: 1"=4'



DRIVEWAY CL @ STA. 256+83.91
SCALE: 1"=10', VERTICAL: 1"=4'



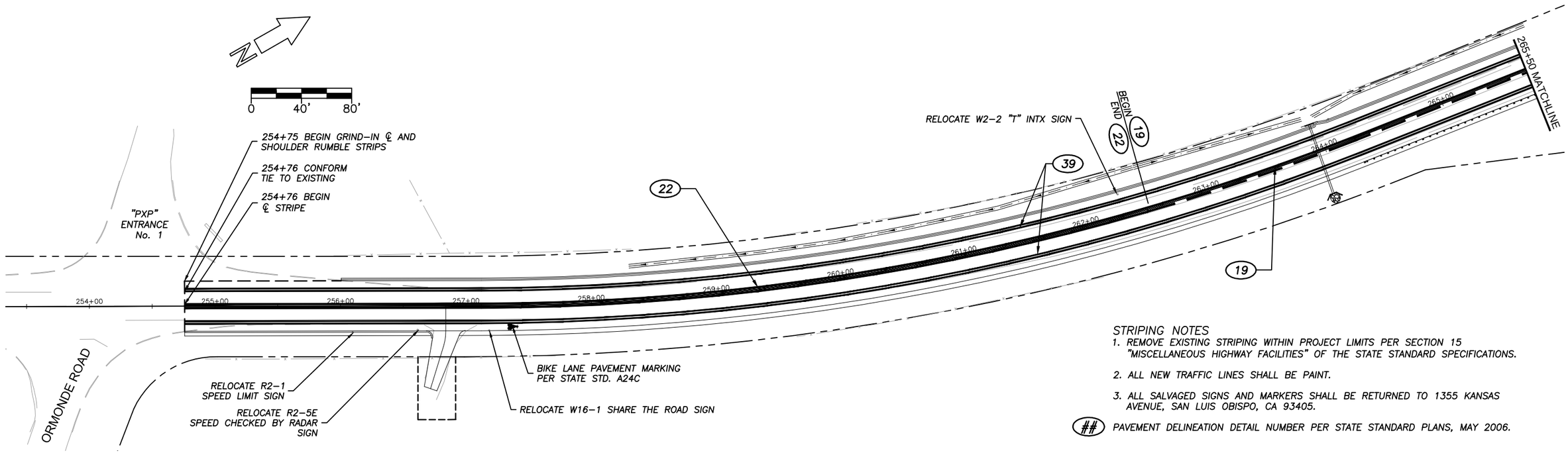
CORRAL DE PIEDRA PROFILE
SCALE: 1"=10', VERTICAL: 1"=4'

REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63472 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II			
DRIVEWAY PROFILES			
PISMO BEACH, CA			
ENGINEERED BY: M DAVIS	CADD BY: C COX	CHECKED BY: G MARSHALL	

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\22 DWY-PROFILES.DWG,12/21/2015 4:41 PM, ----, CRAIG COX

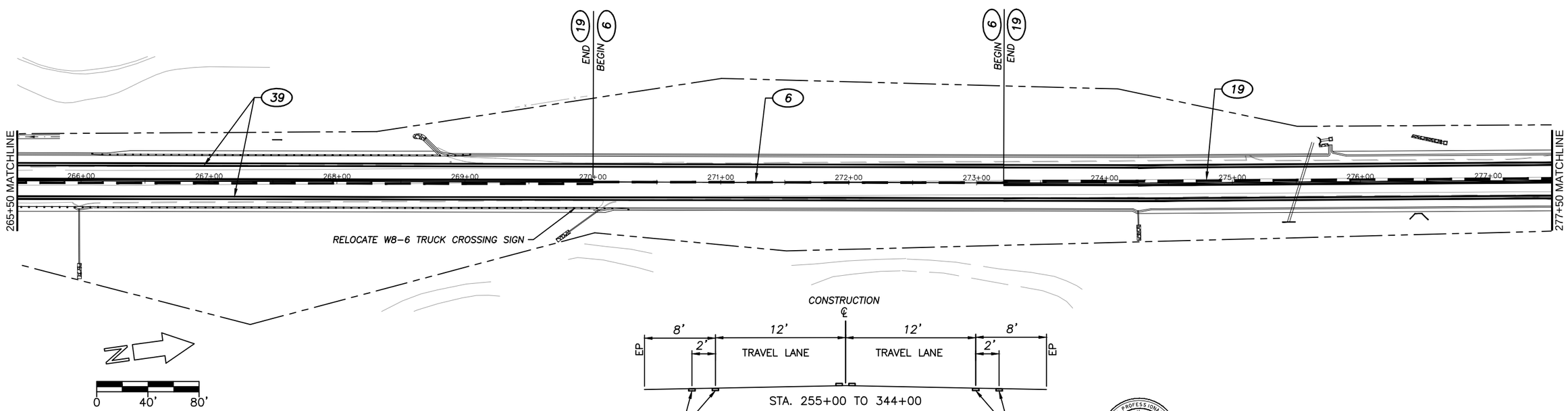
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	23	47

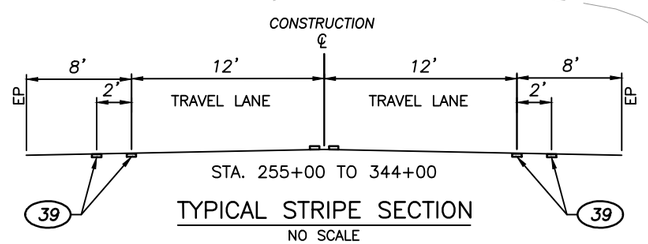


STRIPING NOTES

1. REMOVE EXISTING STRIPING WITHIN PROJECT LIMITS PER SECTION 15 "MISCELLANEOUS HIGHWAY FACILITIES" OF THE STATE STANDARD SPECIFICATIONS.
2. ALL NEW TRAFFIC LINES SHALL BE PAINT.
3. ALL SALVAGED SIGNS AND MARKERS SHALL BE RETURNED TO 1355 KANSAS AVENUE, SAN LUIS OBISPO, CA 93405.

(##) PAVEMENT DELINEATION DETAIL NUMBER PER STATE STANDARD PLANS, MAY 2006.





STA. 255+00 TO 344+00

TYPICAL STRIPE SECTION

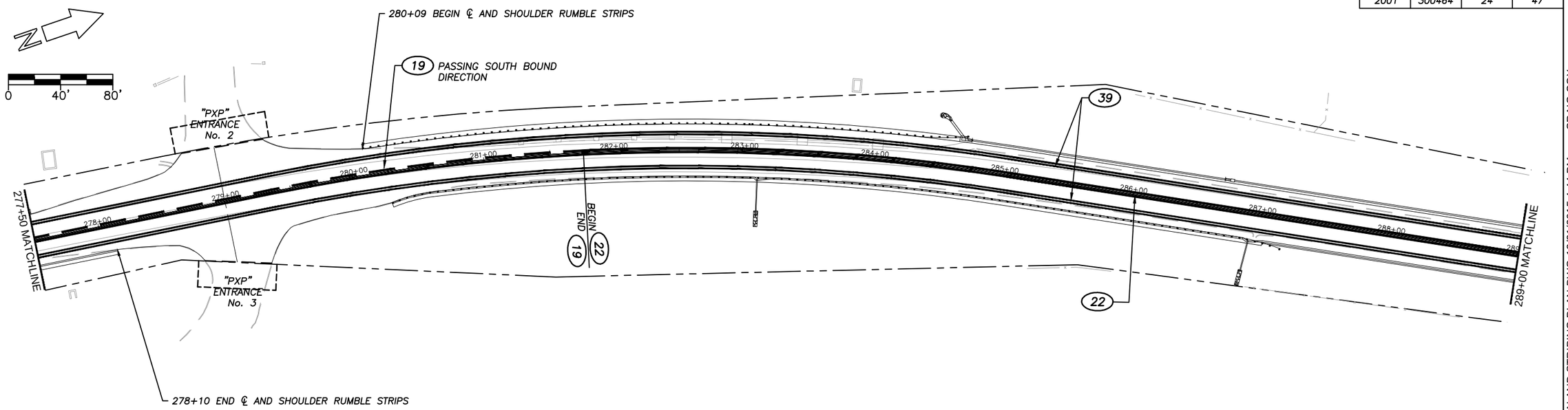
NO SCALE

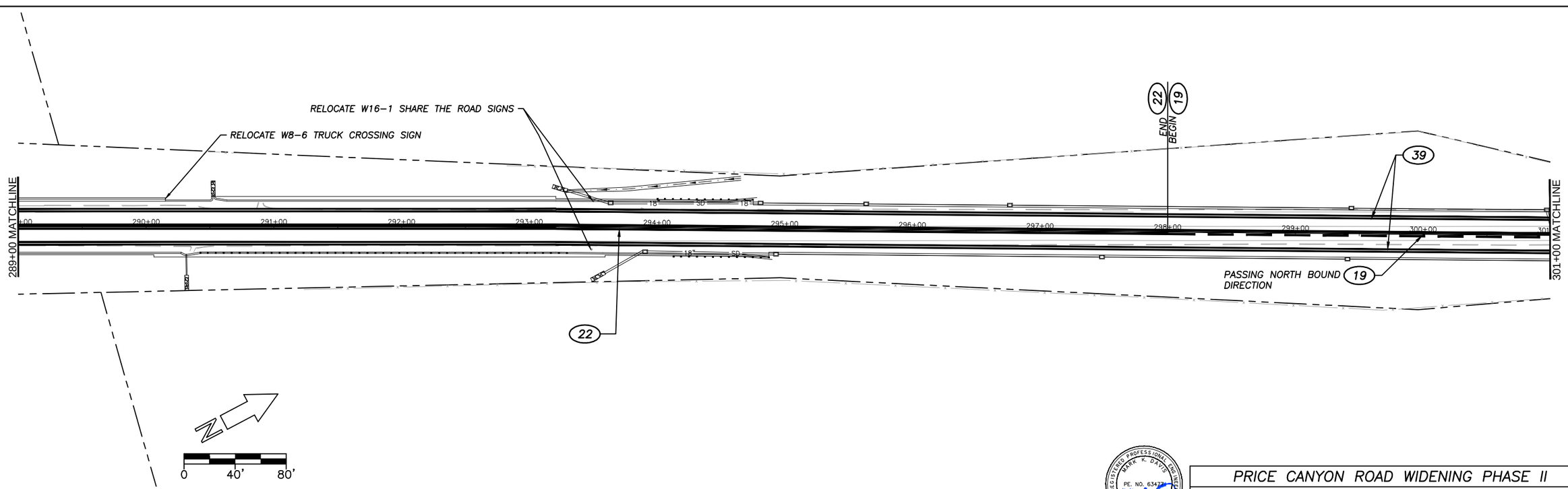
REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63477 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
ROADSIDE SIGN AND STRIPING PLAN					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\ROADSIDE SIGN AND STRIPING PLAN.DWG, 12/21/2015 4:43 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	24	47



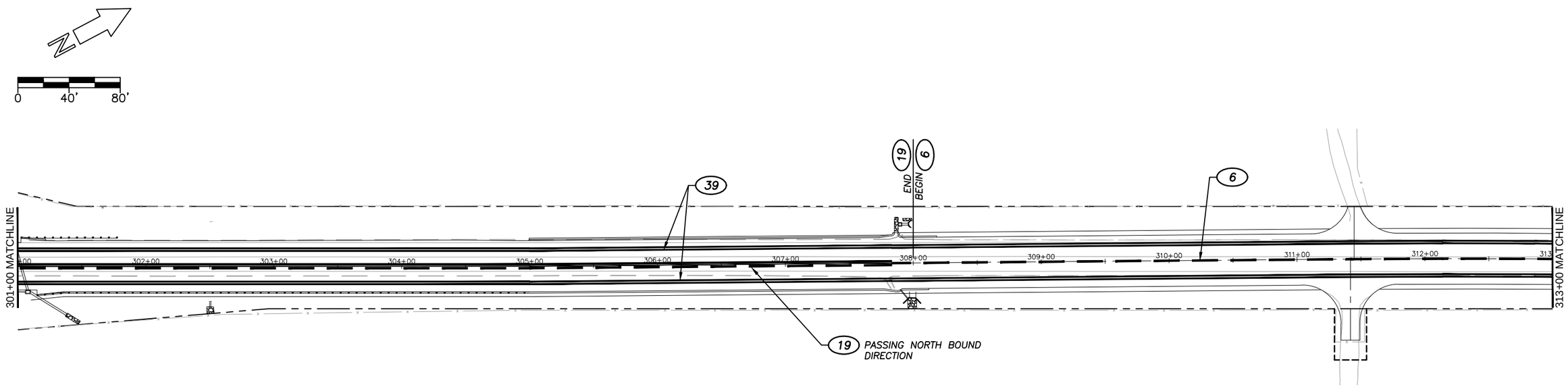


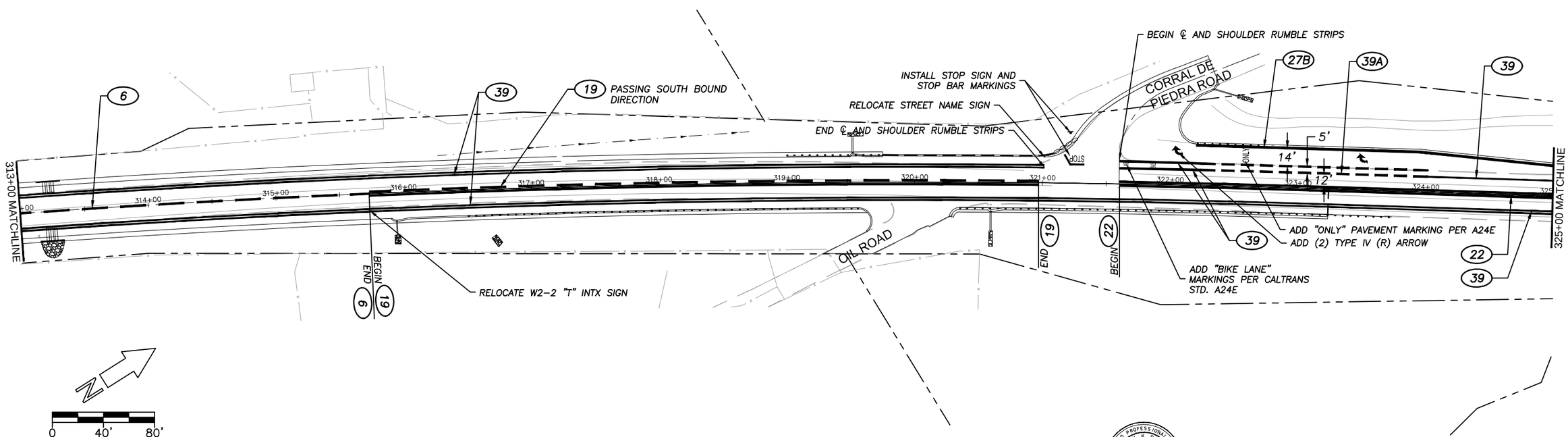
REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63477 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
ROADSIDE SIGN AND STRIPING PLAN					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\ROADSIDE SIGN AND STRIPING PLAN.DWG 12/21/2015 4:44 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	25	47



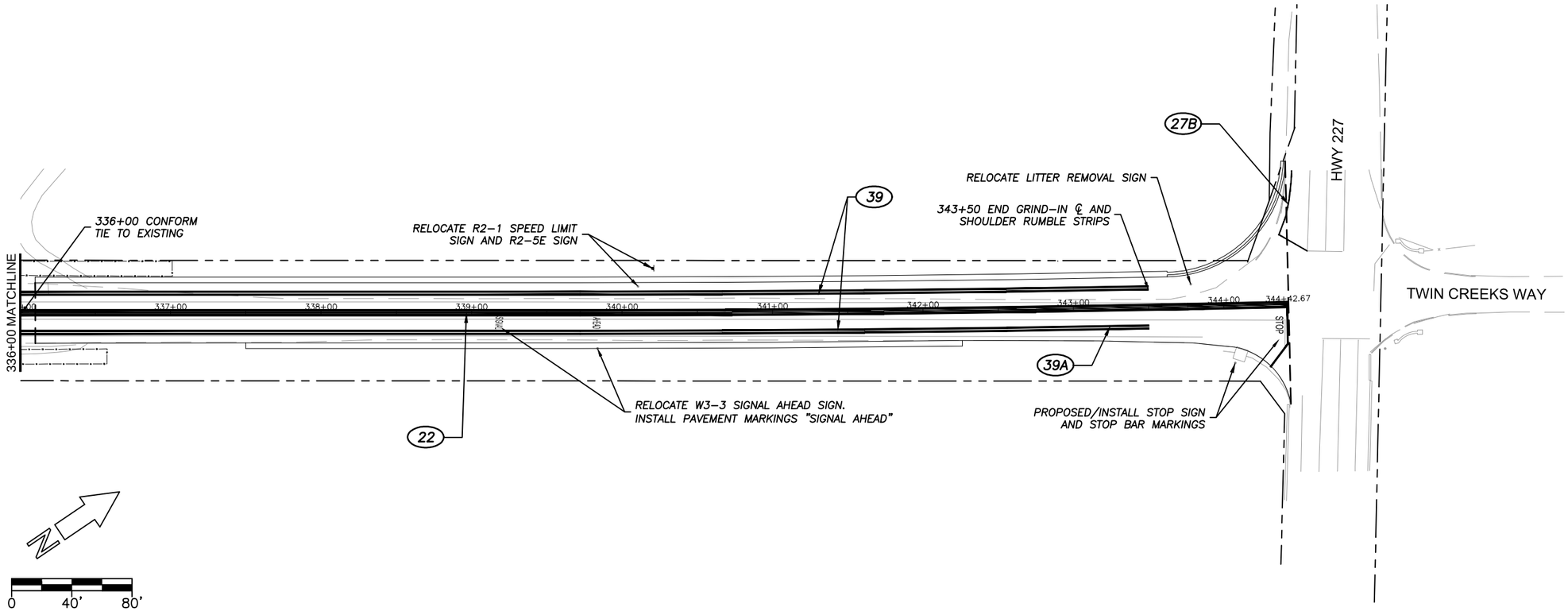


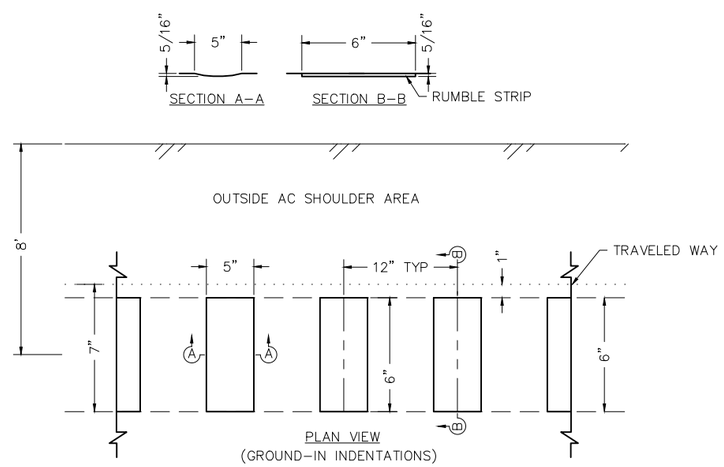
REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
PE. NO. 63477
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
ROADSIDE SIGN AND STRIPING PLAN					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\ROADSIDE SIGN AND STRIPING PLAN.DWG, 12/21/2015 4:45 PM, ----, CRAIG COX

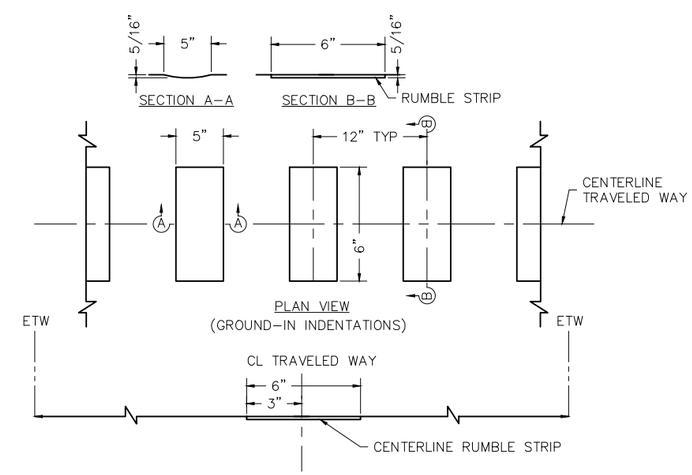
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	26	47





OUTSIDE SHOULDER AREA RUMBLE STRIP DETAIL

N.T.S.



CENTER LINE RUMBLE STRIP DETAIL

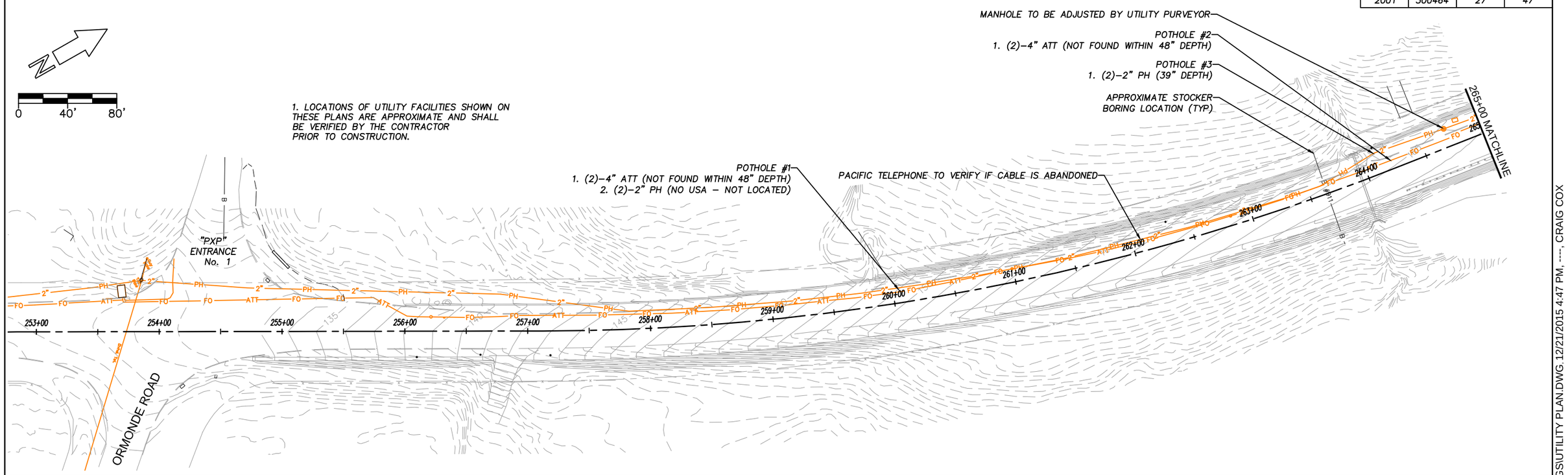
N.T.S.

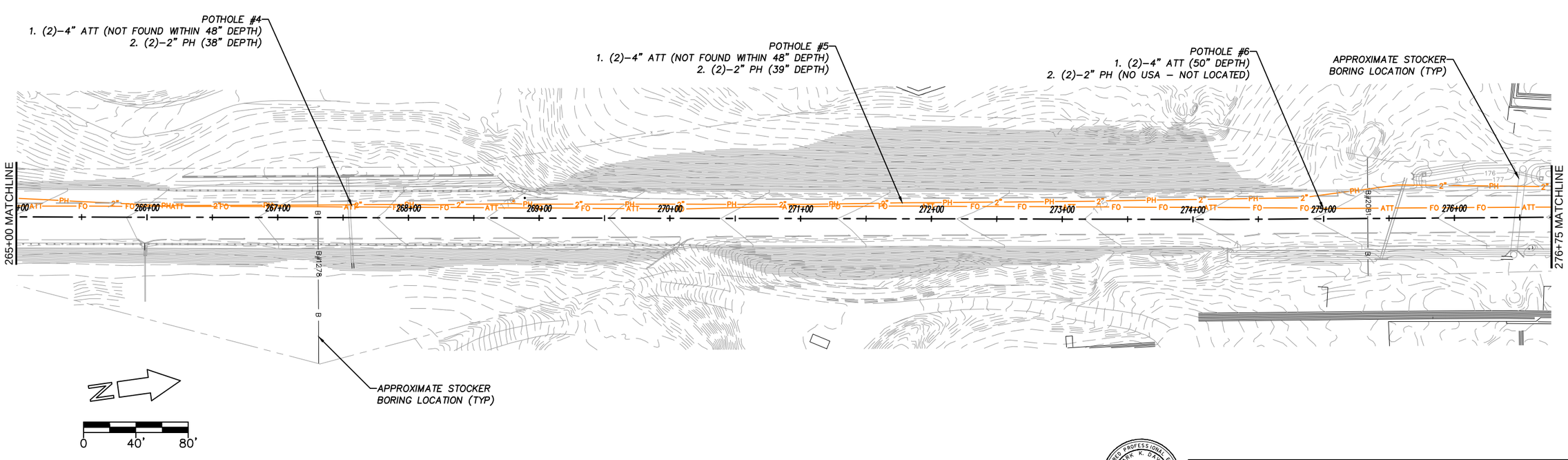
REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
PE. NO. 63477
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
ROADSIDE SIGN AND STRIPING PLAN					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\ROADSIDE SIGN AND STRIPING PLAN.DWG, 12/21/2015 4:45 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	27	47





REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63472 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II			
UTILITY PLAN			
PISMO BEACH, CA			
ENGINEERED BY: M DAVIS	CADD BY: C COX	CHECKED BY: G MARSHALL	

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\UTILITY PLAN.DWG 12/21/2015 4:47 PM, ----, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
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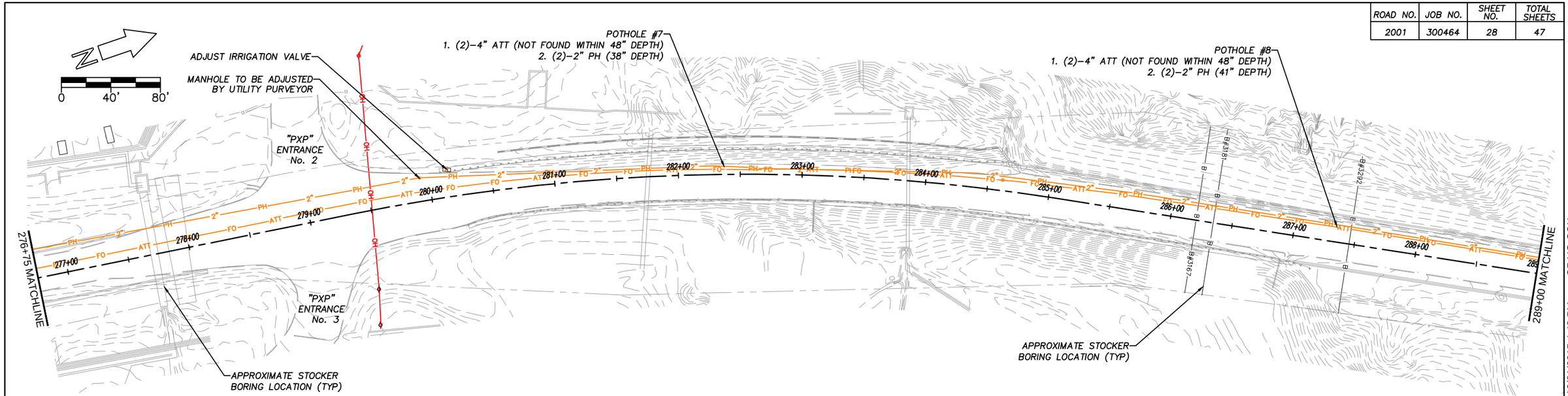
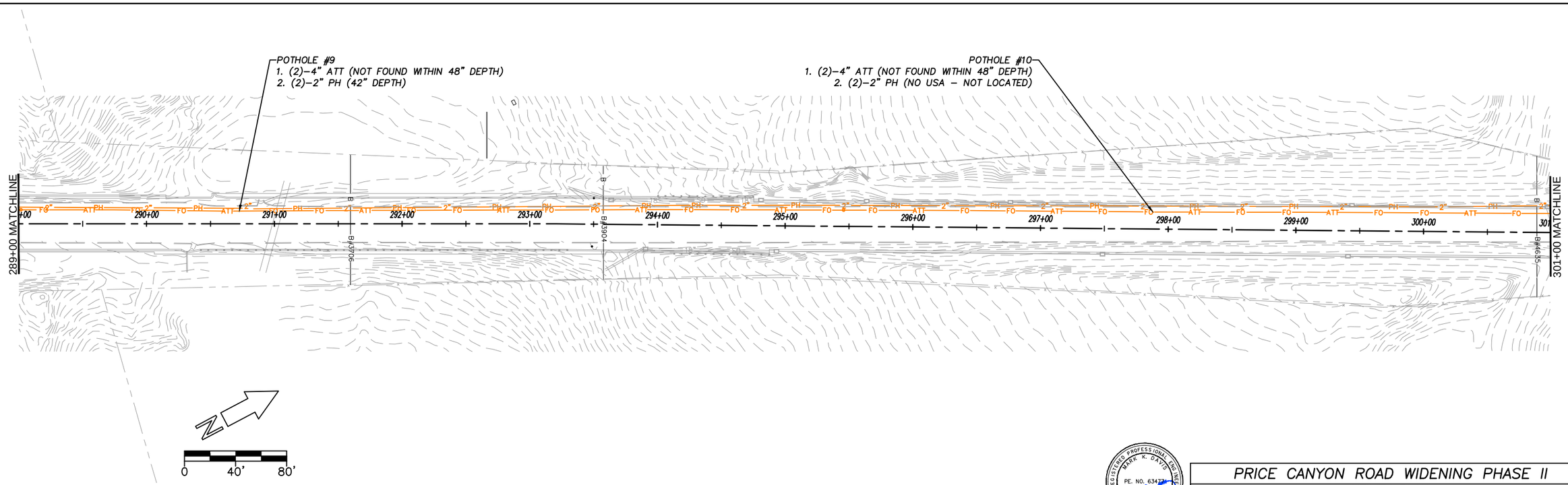


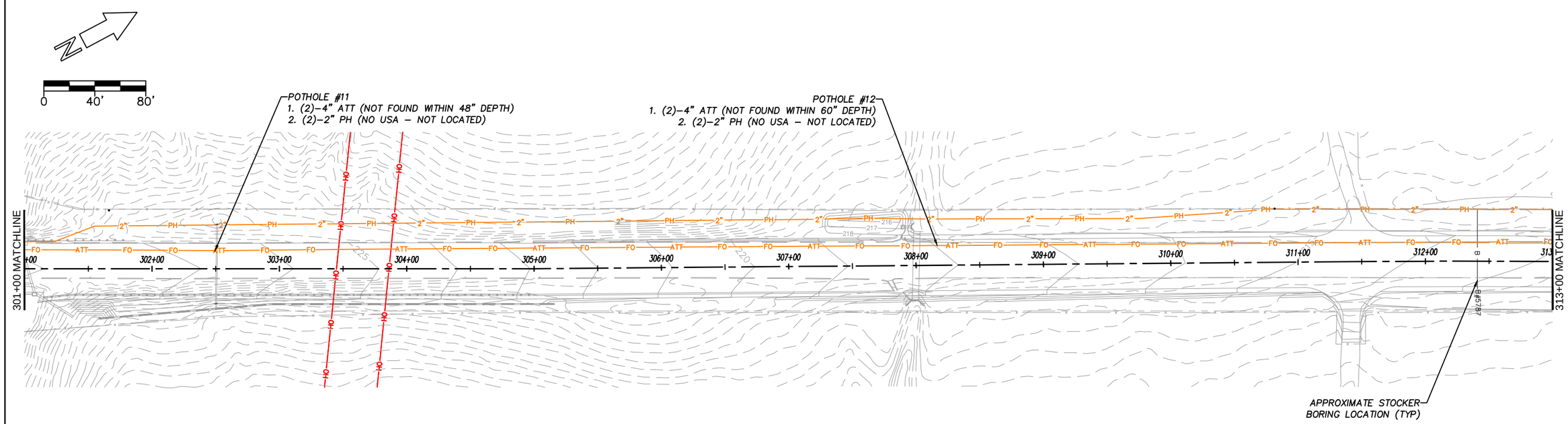


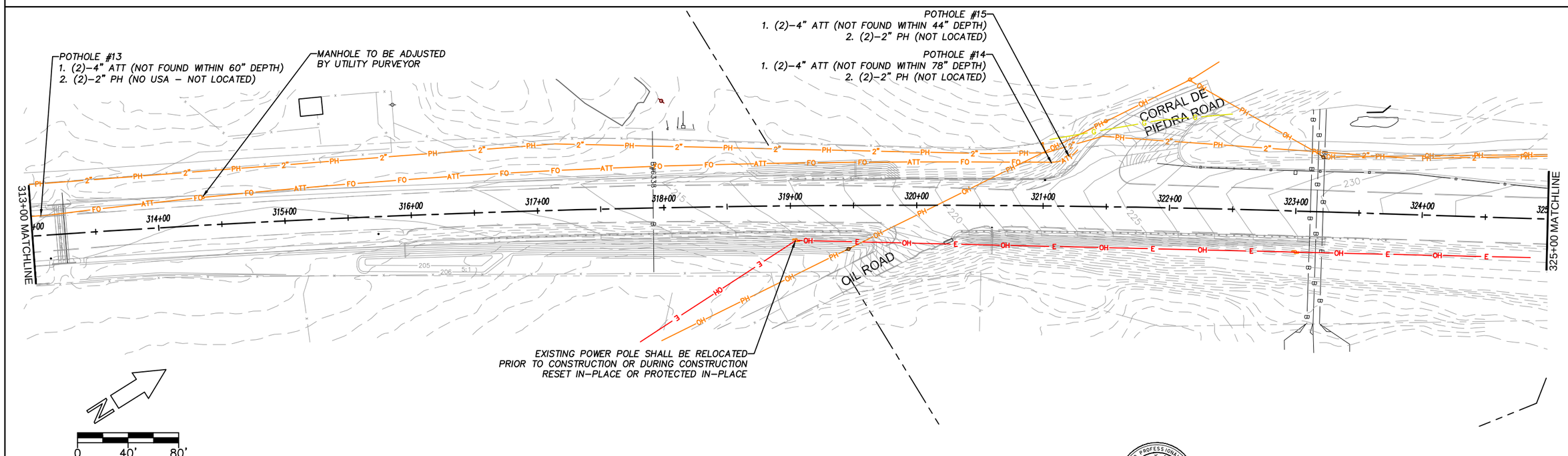
REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63473 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
UTILITY PLAN					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\UTILITY PLAN.DWG 12/21/2015 4:48 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	29	47



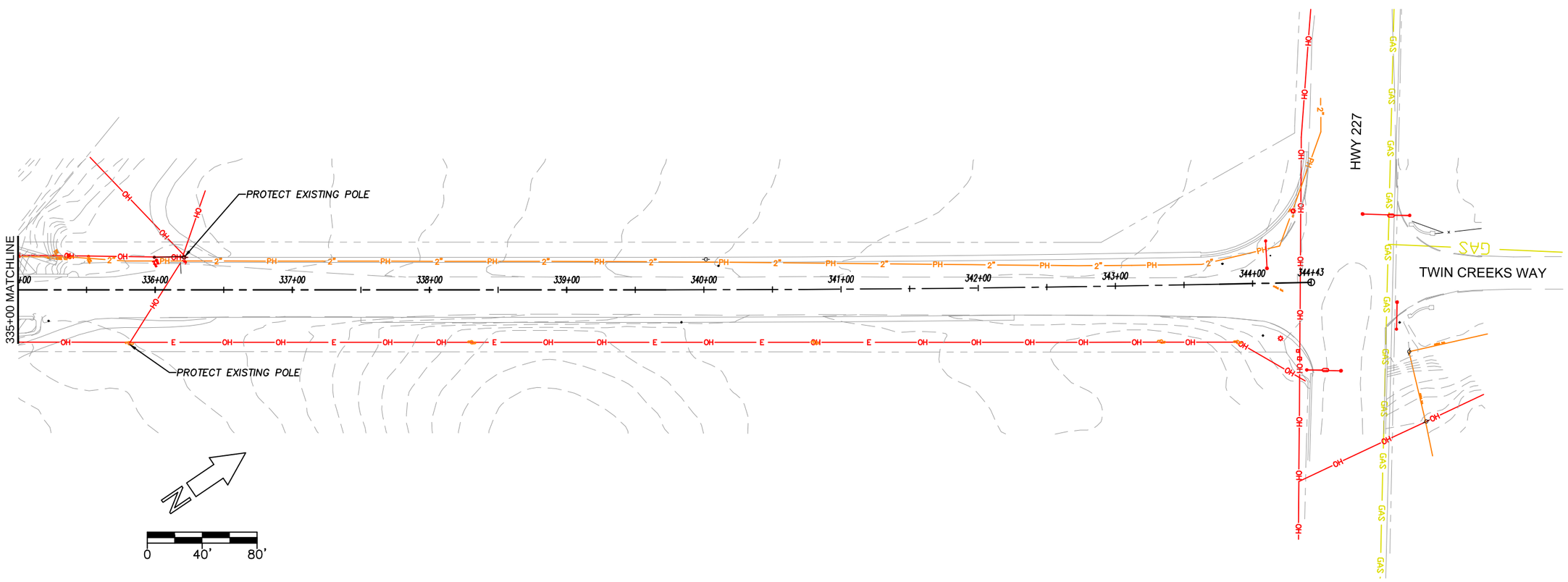


REGISTERED PROFESSIONAL ENGINEER MARK K. DAVIS PE. NO. 63427 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
UTILITY PLAN					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\UTILITY PLAN.DWG, 12/21/2015 4:48 PM, ---, CRAIG COX

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	30	47



REGISTERED PROFESSIONAL ENGINEER
MARK K. DAVIS
PE. NO. 63477
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
UTILITY PLAN					
PISMO BEACH, CA					
ENGINEERED BY:	M DAVIS	CADD BY:	C COX	CHECKED BY:	G MARSHALL

G:\DESIGN\AUTOCAD CIVIL 3D PROJECTS\CIVIL 3D 2013\PRICE CYN\2013 BIKELANES\FINAL DRAWINGS\UTILITY PLAN.DWG,12/21/2015 4:49 PM, ----, CRAIG COX

ROCK DOWEL WALL PLANS

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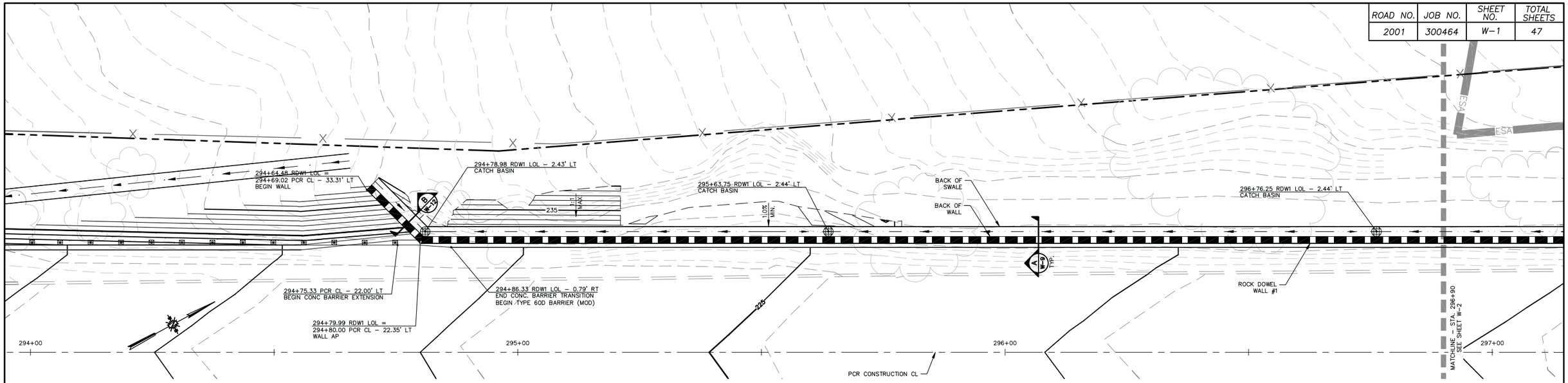
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-1	47



ROCK DOWEL WALL #1 – PLAN VIEW

SCALE HORIZ 1"=10'

LEGEND

- ROCK DOWEL ASSEMBLY LOCATION
- VERIFICATION TEST ROCK DOWEL ASSEMBLY LOCATION

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
2. THE EXACT LOCATION AND QUANTITY OF THE TEST ROCK DOWELS SHALL BE DETERMINED BY THE ENGINEER. TEST ROCK DOWELS CAN BE RELOCATED AT THE ENGINEER'S DISCRETION.
3. ROCK DOWELS SHALL BE PLACED NORMAL TO SHOTCRETE SURFACE IN THE PLAN VIEW.
4. BOTTOM ROW ROCK DOWELS ARE PARALLEL TO ROADWAY FINISHED SURFACE.
5. FOR VERTICAL CURVE AT TOP OF WALL SLOPE CHANGE, SEE CALTRANS STD. B3-8.
6. UTILITIES NOT SHOWN FOR CLARITY, SEE UTILITY PLANS.
7. DIMENSIONS ARE TO ROCK DOWEL CENTERLINE UNLESS NOTED OTHERWISE.

ABBREVIATIONS

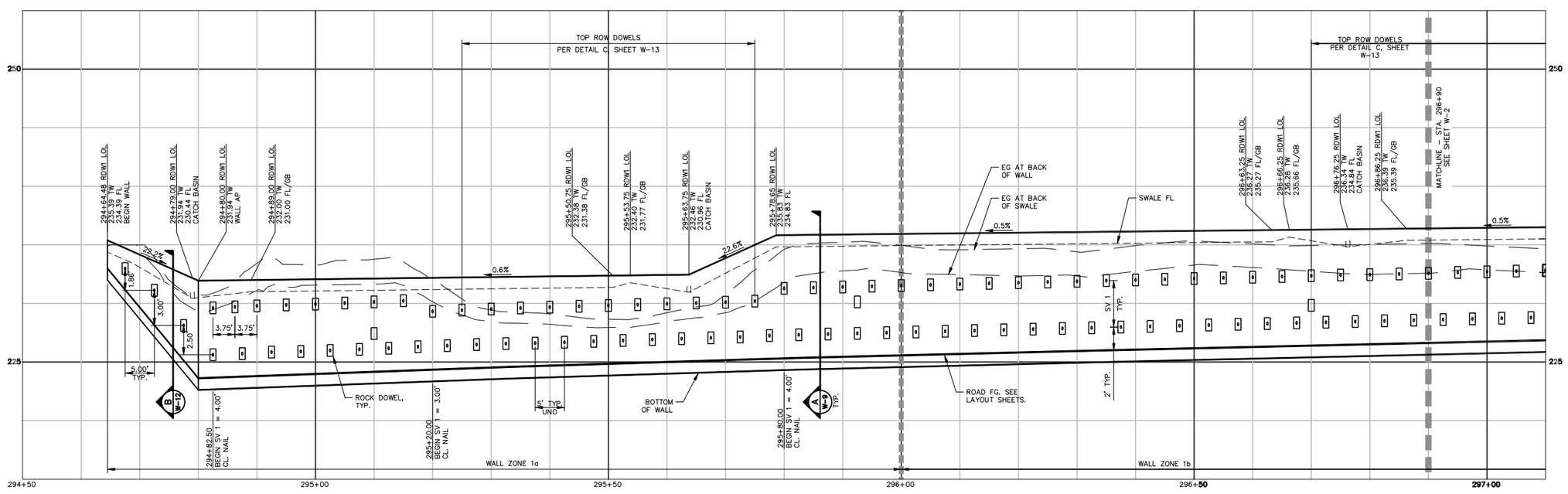
LOL	LAYOUT LINE
PCR	PRICE CANYON ROAD
RDW	ROCK DOWEL WALL
UNO	UNLESS NOTED OTHERWISE
SV	VERTICAL SPACING OF ROCK DOWEL ASSEMBLY

SPACING ROW NUMBER
(SPACING VARIES FOR SAME ROW NUMBER)

ROCK DOWEL SCHEDULE

Stationing		Wall Zone	Dowel Length	Design Pullout Resistance	Dowel Quantity
Begin	End		feet	plf	
Rock Dowel Wall # 1					
294+64	296+00	1a	15	3,900	51
296+00	300+60	1b	25	950	170
300+60	301+07	1c	10	3,900	10
Rock Dowel Wall # 2					
294+64	296+50	2a	10	3,900	71
296+50	297+00	2b	20	950	30
297+00	300+60	2c	25	950	218
300+60	301+20	2d	10	3,900	27

NOTE: DOWEL QUANTITY DOES NOT INCLUDE VERIFICATION DOWEL ASSEMBLIES



ROCK DOWEL WALL #1 – PROFILE VIEW

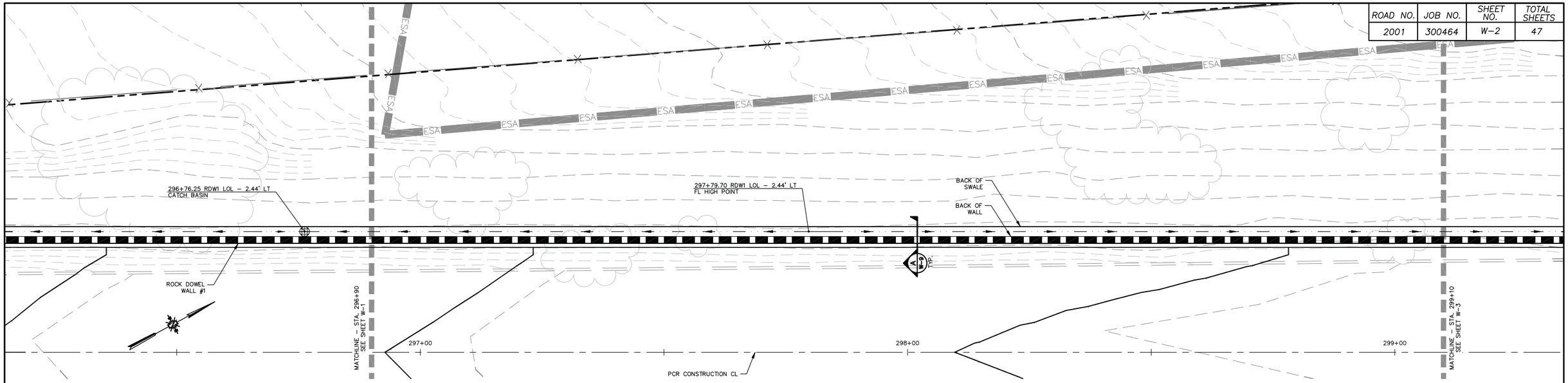
SCALE HORIZ 1"=10'; VERT 1"=5'

REGISTERED PROFESSIONAL ENGINEER
LEE MILES MICHETTI
No. C80574
Exp. 3/31/17
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
ROCK DOWEL WALL #1 PLAN & PROFILE					
PISMO BEACH, CA					
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-2	47



ROCK DOWEL WALL #1 – PLAN VIEW

SCALE HORIZ 1"=10'

LEGEND

- ROCK DOWEL ASSEMBLY LOCATION
- VERIFICATION TEST ROCK DOWEL ASSEMBLY LOCATION

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
2. THE EXACT LOCATION AND QUANTITY OF THE TEST ROCK DOWELS SHALL BE DETERMINED BY THE ENGINEER. TEST ROCK DOWELS CAN BE RELOCATED AT THE ENGINEER'S DISCRETION.
3. ROCK DOWELS SHALL BE PLACED NORMAL TO SHOTCRETE SURFACE IN THE PLAN VIEW.
4. BOTTOM ROW ROCK DOWELS ARE PARALLEL TO ROADWAY FINISHED SURFACE.
5. FOR VERTICAL CURVE AT TOP OF WALL SLOPE CHANGE, SEE CALTRANS STD. B3-8.
6. UTILITIES NOT SHOWN FOR CLARITY, SEE UTILITY PLANS.
7. DIMENSIONS ARE TO ROCK DOWEL CENTERLINE UNLESS NOTED OTHERWISE.

ABBREVIATIONS

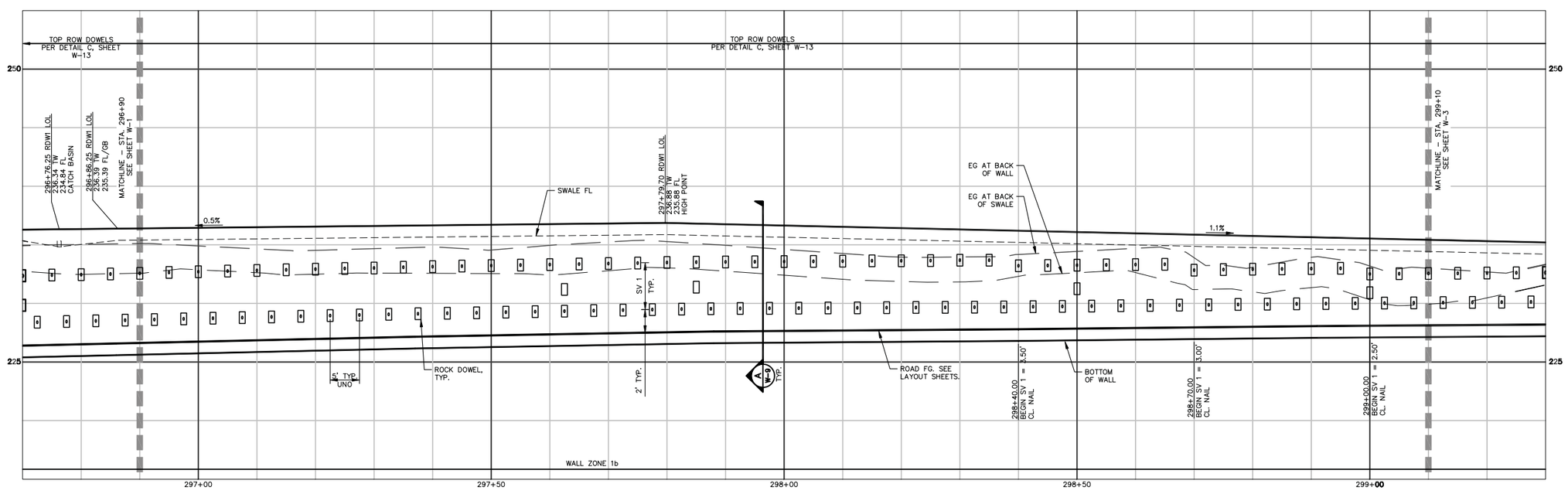
LOL	LAYOUT LINE
PCR	PRICE CANYON ROAD
RDW	ROCK DOWEL WALL
UNO	UNLESS NOTED OTHERWISE
SV #	VERTICAL SPACING OF ROCK DOWEL ASSEMBLY

SV # — SPACING ROW NUMBER (SPACING VARIES FOR SAME ROW NUMBER)

ROCK DOWEL SCHEDULE

Stationing		Wall Zone	Dowel Length	Design Pullout Resistance	Dowel Quantity
Begin	End		feet	plf	
Rock Dowel Wall # 1					
294+64	296+00	1a	15	3,900	51
296+00	300+60	1b	25	950	170
300+60	301+07	1c	10	3,900	10
Rock Dowel Wall # 2					
294+64	296+50	2a	10	3,900	71
296+50	297+00	2b	20	950	30
297+00	300+60	2c	25	950	218
300+60	301+20	2d	10	3,900	27

NOTE: DOWEL QUANTITY DOES NOT INCLUDE VERIFICATION DOWEL ASSEMBLIES



ROCK DOWEL WALL #1 – PROFILE VIEW

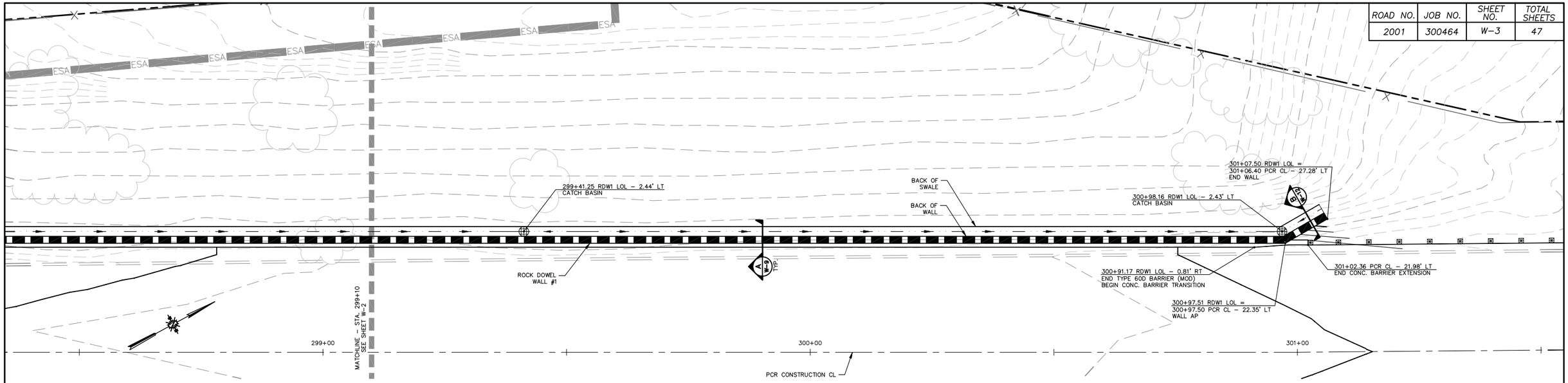
SCALE HORIZ 1"=10'; VERT 1"=5'

REGISTERED PROFESSIONAL ENGINEER LEE MILES MICHETTI No. C80574 Exp. 3/31/17 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
ROCK DOWEL WALL #1 PLAN & PROFILE					
PISMO BEACH, CA					
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3 ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-3	47



ROCK DOWEL WALL #1 – PLAN VIEW

SCALE HORIZ 1"=10'

LEGEND

- ROCK DOWEL ASSEMBLY LOCATION
- VERIFICATION TEST ROCK DOWEL ASSEMBLY LOCATION

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
2. THE EXACT LOCATION AND QUANTITY OF THE TEST ROCK DOWELS SHALL BE DETERMINED BY THE ENGINEER. TEST ROCK DOWELS CAN BE RELOCATED AT THE ENGINEER'S DISCRETION.
3. ROCK DOWELS SHALL BE PLACED NORMAL TO SHOTCRETE SURFACE IN THE PLAN VIEW.
4. BOTTOM ROW ROCK DOWELS ARE PARALLEL TO ROADWAY FINISHED SURFACE.
5. FOR VERTICAL CURVE AT TOP OF WALL SLOPE CHANGE, SEE CALTRANS STD. B3-8.
6. UTILITIES NOT SHOWN FOR CLARITY, SEE UTILITY PLANS.
7. DIMENSIONS ARE TO ROCK DOWEL CENTERLINE UNLESS NOTED OTHERWISE.

ABBREVIATIONS

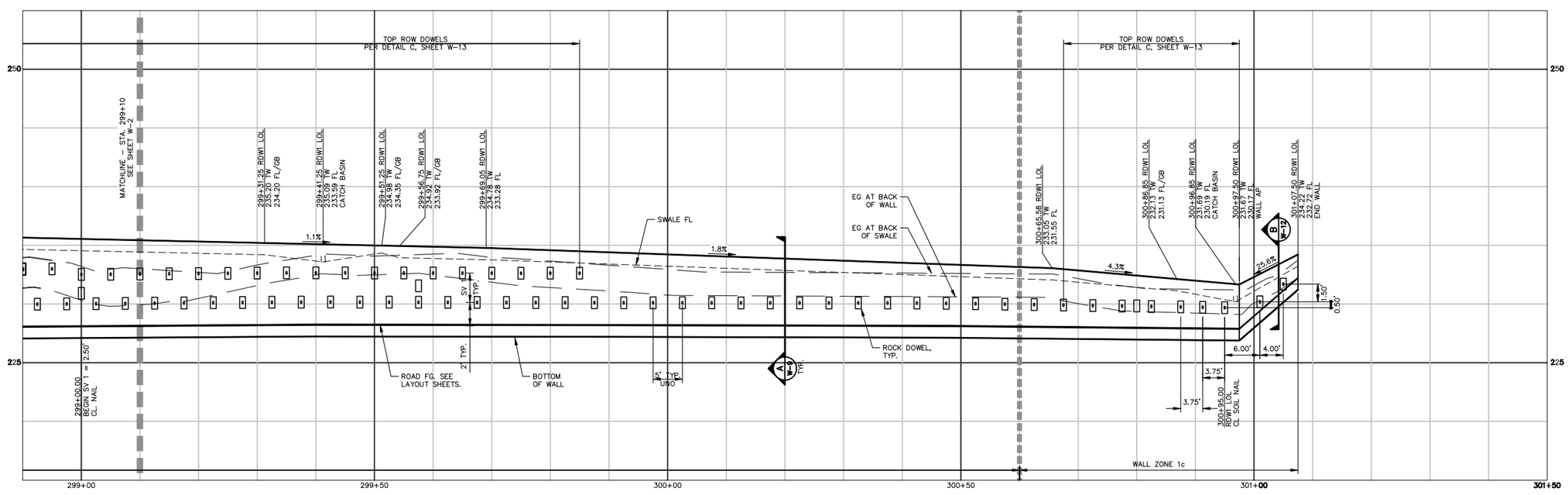
LOL	LAYOUT LINE
PCR	PRICE CANYON ROAD
RDW	ROCK DOWEL WALL
UNO	UNLESS NOTED OTHERWISE
SV	VERTICAL SPACING OF ROCK DOWEL ASSEMBLY

SPACING ROW NUMBER
(SPACING VARIES FOR SAME ROW NUMBER)

ROCK DOWEL SCHEDULE

Stationing		Wall Zone	Dowel Length	Design Pullout Resistance	Dowel Quantity
Begin	End		feet	plf	
Rock Dowel Wall # 1					
294+64	296+00	1a	15	3,900	51
296+00	300+60	1b	25	950	170
300+60	301+07	1c	10	3,900	10
Rock Dowel Wall # 2					
294+64	296+50	2a	10	3,900	71
296+50	297+00	2b	20	950	30
297+00	300+60	2c	25	950	218
300+60	301+20	2d	10	3,900	27

NOTE: DOWEL QUANTITY DOES NOT INCLUDE VERIFICATION DOWEL ASSEMBLIES



ROCK DOWEL WALL #1 – PROFILE VIEW

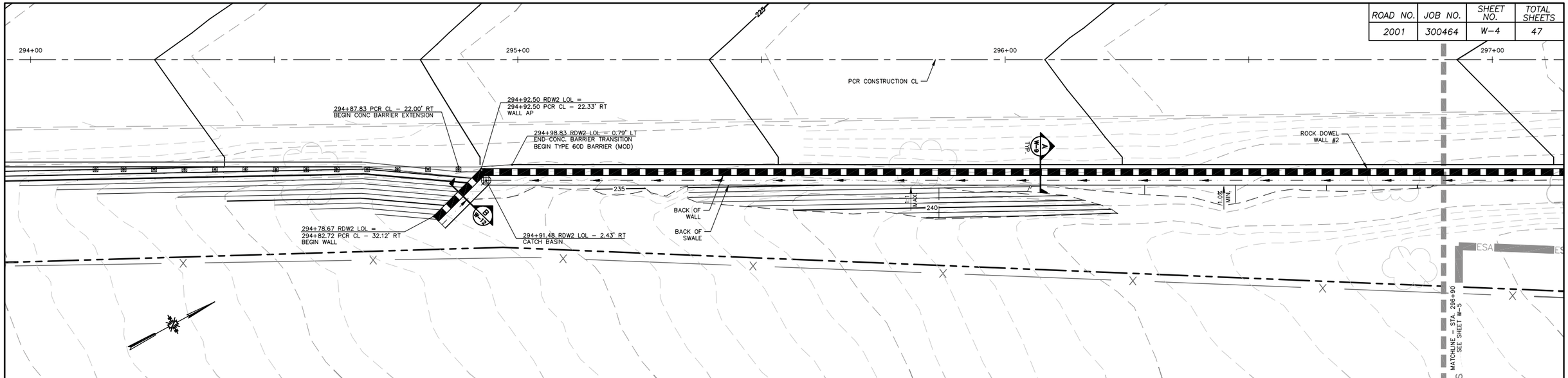
SCALE HORIZ 1"=10'; VERT 1"=5'

REGISTERED PROFESSIONAL ENGINEER
LEE MILES MICHETTI
No. C80574
Exp. 3/31/17
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
ROCK DOWEL WALL #1 PLAN & PROFILE					
PISMO BEACH, CA					
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-4	47



ROCK DOWEL WALL #2 – PLAN VIEW

SCALE HORIZ 1"=10'

LEGEND

- ROCK DOWEL ASSEMBLY LOCATION
- VERIFICATION TEST ROCK DOWEL ASSEMBLY LOCATION

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
2. THE EXACT LOCATION AND QUANTITY OF THE TEST ROCK DOWELS SHALL BE DETERMINED BY THE ENGINEER. TEST ROCK DOWELS CAN BE RELOCATED AT THE ENGINEER'S DISCRETION.
3. ROCK DOWELS SHALL BE PLACED NORMAL TO SHOTCRETE SURFACE IN THE PLAN VIEW.
4. BOTTOM ROW ROCK DOWELS ARE PARALLEL TO ROADWAY FINISHED SURFACE.
5. FOR VERTICAL CURVE AT TOP OF WALL SLOPE CHANGE, SEE CALTRANS STD. B3-8.
6. UTILITIES NOT SHOWN FOR CLARITY, SEE UTILITY PLANS.
7. DIMENSIONS ARE TO ROCK DOWEL CENTERLINE UNLESS NOTED OTHERWISE.

ABBREVIATIONS

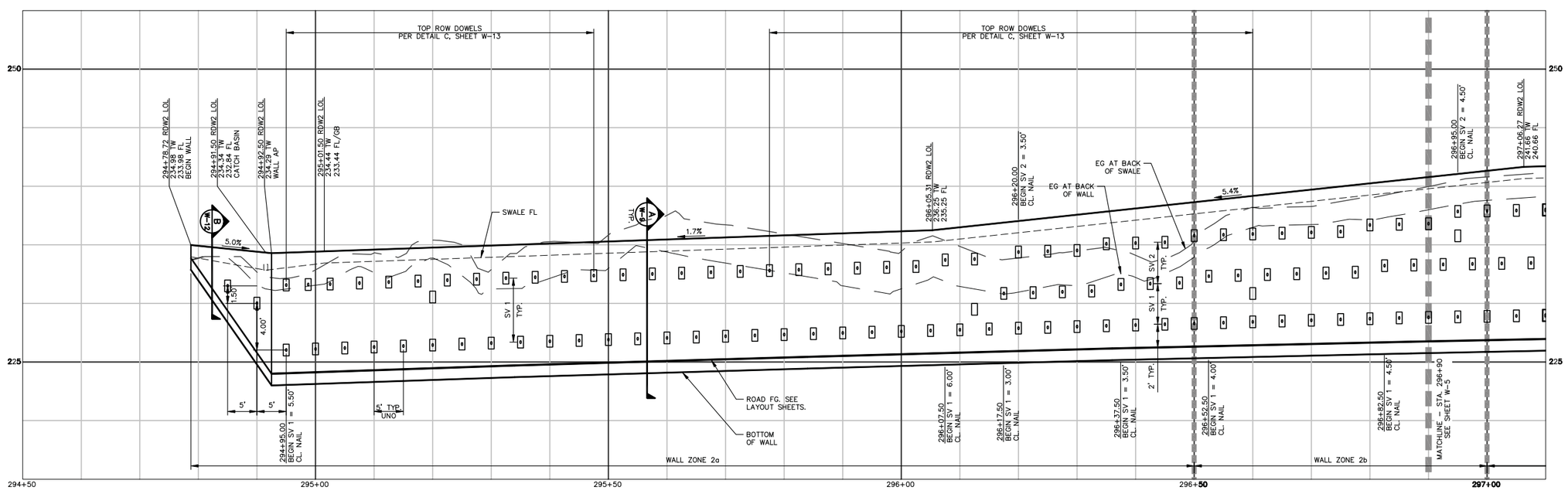
LOL	LAYOUT LINE
PCR	PRICE CANYON ROAD
RDW	ROCK DOWEL WALL
UNO	UNLESS NOTED OTHERWISE
SV	VERTICAL SPACING OF ROCK DOWEL ASSEMBLY

SPACING ROW NUMBER
(SPACING VARIES FOR SAME ROW NUMBER)

ROCK DOWEL SCHEDULE

Stationing		Wall Zone	Dowel Length	Design Pullout Resistance	Dowel Quantity
Begin	End		feet	plf	
Rock Dowel Wall # 1					
294+64	296+00	1a	15	3,900	51
296+00	300+60	1b	25	950	170
300+60	301+07	1c	10	3,900	10
Rock Dowel Wall # 2					
294+64	296+50	2a	10	3,900	71
296+50	297+00	2b	20	950	30
297+00	300+60	2c	25	950	218
300+60	301+20	2d	10	3,900	27

NOTE: DOWEL QUANTITY DOES NOT INCLUDE VERIFICATION DOWEL ASSEMBLIES



ROCK DOWEL WALL #2 – PROFILE VIEW

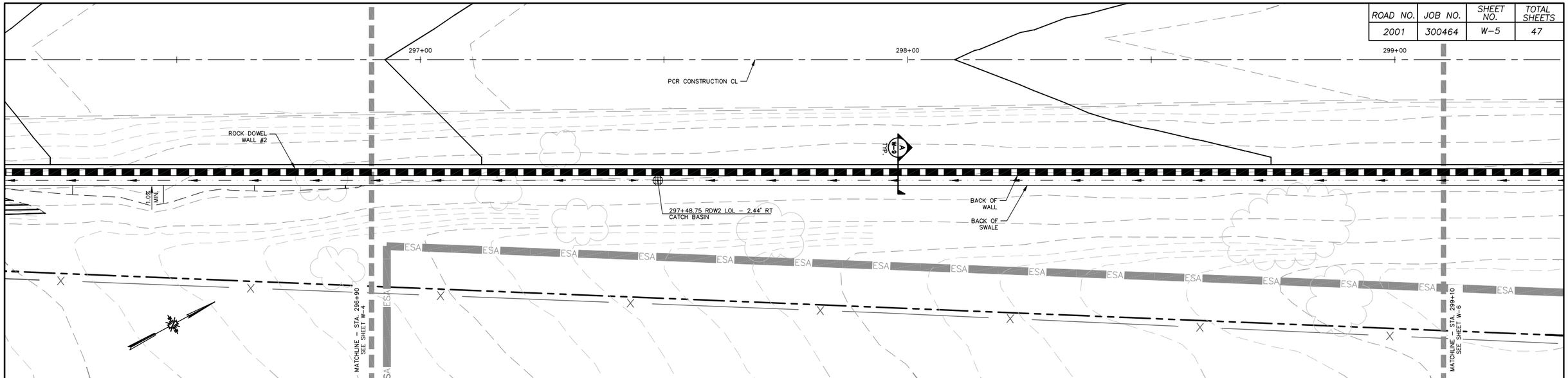
SCALE HORIZ 1"=10'; VERT 1"=5'

REGISTERED PROFESSIONAL ENGINEER
LEE MILES MICHETTI
No. C80574
Exp. 3/31/17
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
ROCK DOWEL WALL #2 PLAN & PROFILE					
PISMO BEACH, CA					
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-5	47



ROCK DOWEL WALL #2 – PLAN VIEW

SCALE HORIZ 1"=10'

LEGEND

- ROCK DOWEL ASSEMBLY LOCATION
- VERIFICATION TEST ROCK DOWEL ASSEMBLY LOCATION

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
2. THE EXACT LOCATION AND QUANTITY OF THE TEST ROCK DOWELS SHALL BE DETERMINED BY THE ENGINEER. TEST ROCK DOWELS CAN BE RELOCATED AT THE ENGINEER'S DISCRETION.
3. ROCK DOWELS SHALL BE PLACED NORMAL TO SHOTCRETE SURFACE IN THE PLAN VIEW.
4. BOTTOM ROW ROCK DOWELS ARE PARALLEL TO ROADWAY FINISHED SURFACE.
5. FOR VERTICAL CURVE AT TOP OF WALL SLOPE CHANGE, SEE CALTRANS STD. B3-8.
6. UTILITIES NOT SHOWN FOR CLARITY, SEE UTILITY PLANS.
7. DIMENSIONS ARE TO ROCK DOWEL CENTERLINE UNLESS NOTED OTHERWISE.

ABBREVIATIONS

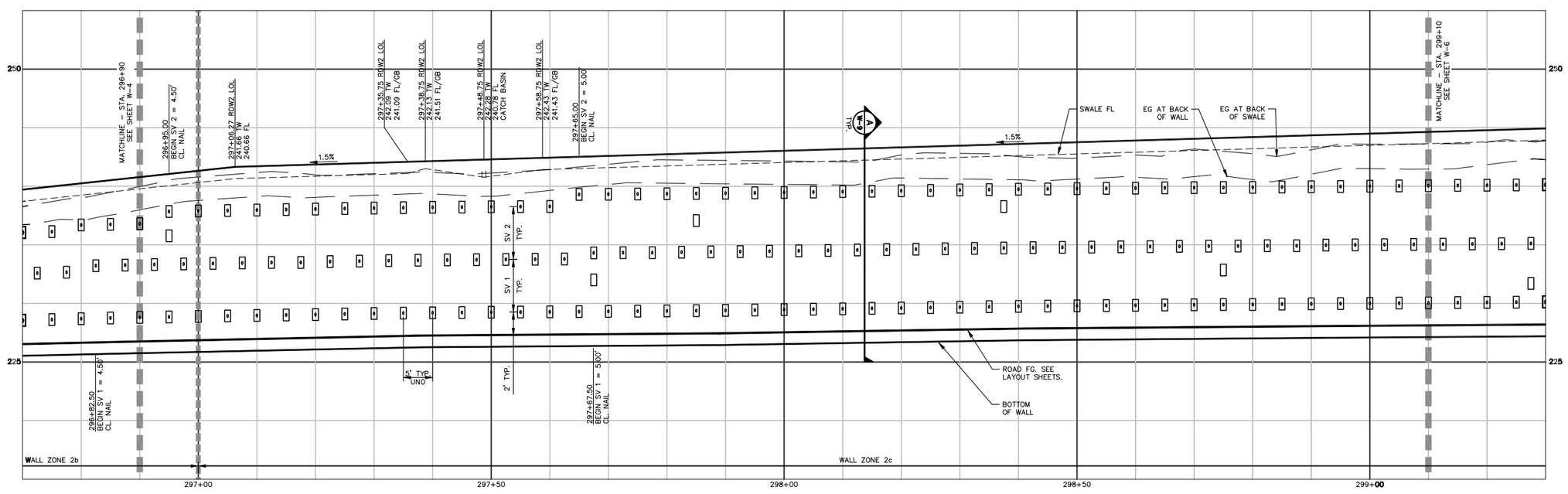
LOL	LAYOUT LINE
PCR	PRICE CANYON ROAD
RDW	ROCK DOWEL WALL
UNO	UNLESS NOTED OTHERWISE
SV #	VERTICAL SPACING OF ROCK DOWEL ASSEMBLY

SPACING ROW NUMBER (SPACING VARIES FOR SAME ROW NUMBER)

ROCK DOWEL SCHEDULE

Stationing Begin	Stationing End	Wall Zone	Dowel Length feet	Design Pullout Resistance plf	Dowel Quantity
Rock Dowel Wall # 1					
294+64	296+00	1a	15	3,900	51
296+00	300+60	1b	25	950	170
300+60	301+07	1c	10	3,900	10
Rock Dowel Wall # 2					
294+64	296+50	2a	10	3,900	71
296+50	297+00	2b	20	950	30
297+00	300+60	2c	25	950	218
300+60	301+20	2d	10	3,900	27

NOTE: DOWEL QUANTITY DOES NOT INCLUDE VERIFICATION DOWEL ASSEMBLIES



ROCK DOWEL WALL #2 – PROFILE VIEW

SCALE HORIZ 1"=10'; VERT 1"=5'

REGISTERED PROFESSIONAL ENGINEER LEE MILES MICHETTI No. C80574 Exp. 3/31/17 CIVIL STATE OF CALIFORNIA

0 1 2 3 ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

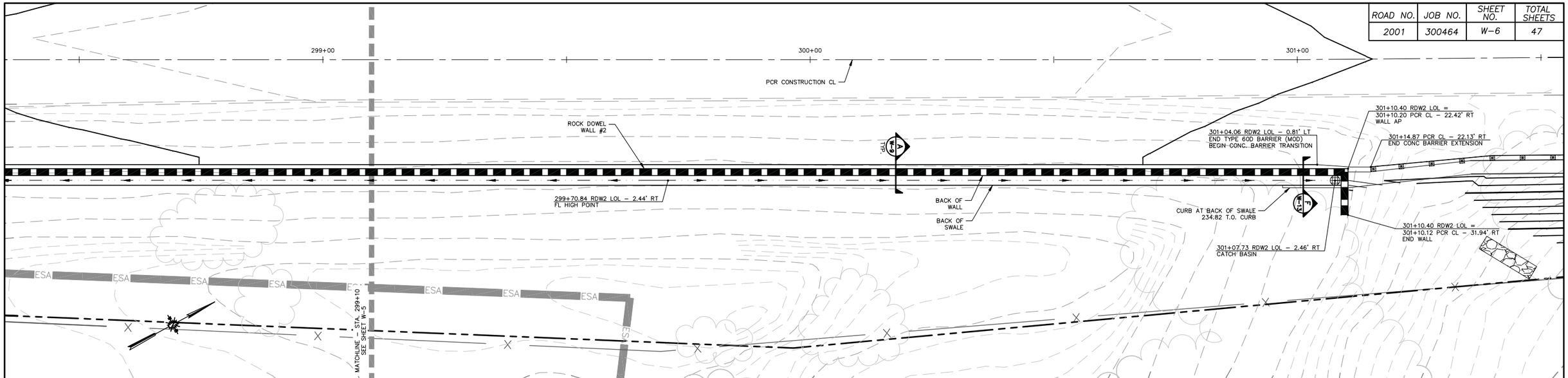
PRICE CANYON ROAD WIDENING PHASE II

ROCK DOWEL WALL #2 PLAN & PROFILE

PISMO BEACH, CA

Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-6	47



ROCK DOWEL WALL #2 – PLAN VIEW

SCALE HORIZ 1"=10'

LEGEND

- ROCK DOWEL ASSEMBLY LOCATION
- VERIFICATION TEST ROCK DOWEL ASSEMBLY LOCATION

GENERAL NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.
2. THE EXACT LOCATION AND QUANTITY OF THE TEST ROCK DOWELS SHALL BE DETERMINED BY THE ENGINEER. TEST ROCK DOWELS CAN BE RELOCATED AT THE ENGINEER'S DISCRETION.
3. ROCK DOWELS SHALL BE PLACED NORMAL TO SHOTCRETE SURFACE IN THE PLAN VIEW.
4. BOTTOM ROW ROCK DOWELS ARE PARALLEL TO ROADWAY FINISHED SURFACE.
5. FOR VERTICAL CURVE AT TOP OF WALL SLOPE CHANGE, SEE CALTRANS STD. B3-8.
6. UTILITIES NOT SHOWN FOR CLARITY, SEE UTILITY PLANS.
7. DIMENSIONS ARE TO ROCK DOWEL CENTERLINE UNLESS NOTED OTHERWISE.

ABBREVIATIONS

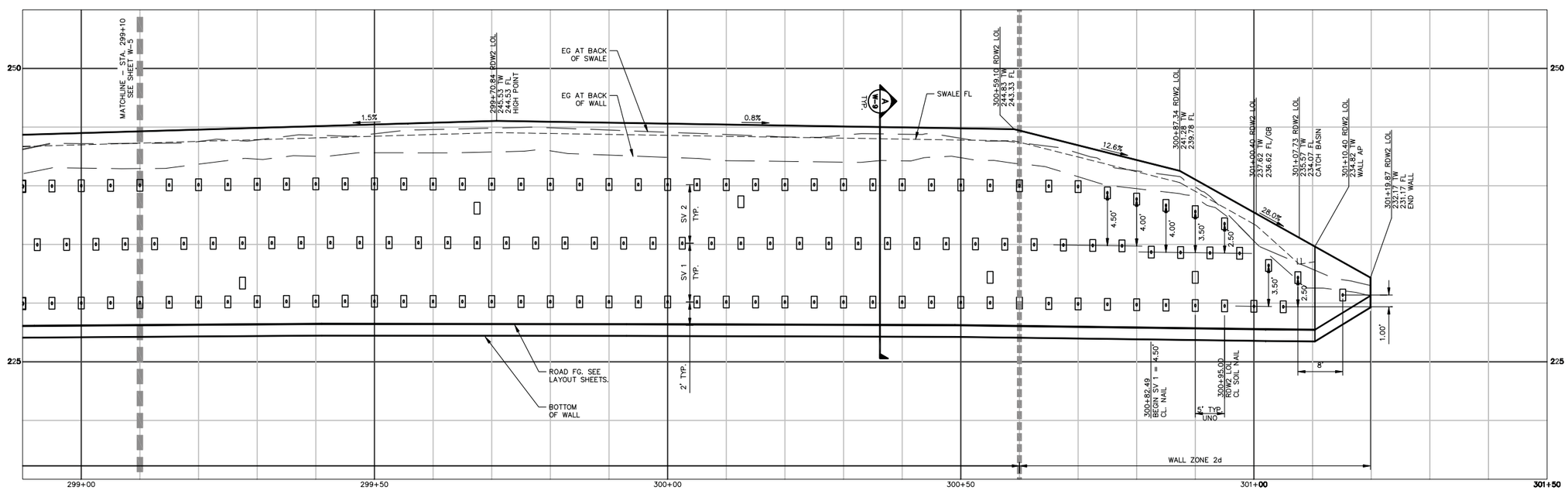
LOL	LAYOUT LINE
PCR	PRICE CANYON ROAD
RDW	ROCK DOWEL WALL
UNO	UNLESS NOTED OTHERWISE
SV #	VERTICAL SPACING OF ROCK DOWEL ASSEMBLY

SPACING ROW NUMBER (SPACING VARIES FOR SAME ROW NUMBER)

ROCK DOWEL SCHEDULE

Stationing Begin	Stationing End	Wall Zone	Dowel Length feet	Design Pullout Resistance plf	Dowel Quantity
Rock Dowel Wall # 1					
294+64	296+00	1a	15	3,900	51
296+00	300+60	1b	25	950	170
300+60	301+07	1c	10	3,900	10
Rock Dowel Wall # 2					
294+64	296+50	2a	10	3,900	71
296+50	297+00	2b	20	950	30
297+00	300+60	2c	25	950	218
300+60	301+20	2d	10	3,900	27

NOTE: DOWEL QUANTITY DOES NOT INCLUDE VERIFICATION DOWEL ASSEMBLIES



ROCK DOWEL WALL #2 – PROFILE VIEW

SCALE HORIZ 1"=10'; VERT 1"=5'

REGISTERED PROFESSIONAL ENGINEER
LEE MILES MICHETTI
No. C80574
Exp. 3/31/17
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II

ROCK DOWEL WALL #2 PLAN & PROFILE

PISMO BEACH, CA

Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-7	47

ABBREVIATIONS

#	NUMBER OR POUND
~	APPROXIMATELY
∠	ANGLE
@	AT
AB	ANCHOR BOLT
ABV.	ABOVE
ADDL.	ADDITIONAL
ADJ.	ADJACENT
AITC.	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION
AFF	ABOVE FINISH FLOOR
ALT.	ALTERNATE
APA	AMERICAN PLYWOOD ASSOCIATION
APPROX.	APPROXIMATE
ARCH.	ARCHITECTURAL, ARCHITECT
ASTM	AMERICAN STANDARDS OF TESTING AND MATERIALS
BLDG.	BUILDING
BLK.	BLOCK, BLOCKING
BLW.	BELOW
BM.	BEAM
BN	BOUNDARY NAILING
BO	BOTTOM OF
BOT.	BOTTOM
BRG.	BEARING
BS	BOTH SIDES
BTWN.	BETWEEN
CANT.	CANTILEVER
CB	CARRIAGE BOLT
CHD.	CHORD
CJ	CONSTRUCTION OR CONTROL JOINT
CTR.	CENTER
℄ or CL	CENTER LINE
CLG.	CEILING
CLR.	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
COMP.	COMPOSITE, COMPOSITION
CONC.	CONCRETE
CONN.	CONNECTION
CONST.	CONSTRUCTION
CONT.	CONTINUOUS
COORD.	COORDINATE
CP	COMPLETE PENETRATION
CSK.	COUNTERSINK
D or d	NAIL PENNY SIZE
Ø or DIA.	DIAMETER
DBL.	DOUBLE
DET.	DETAIL
DF	DOUGLAS FIR
DFL	DOUGLAS FIR-LARCH
DIAG.	DIAGONAL
DIM.	DIMENSION
DKG.	DECKING
DL	DEAD LOAD
DWG.	DRAWING
(E)	EXISTING
EA.	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
ELEV.	ELEVATION
EMBED.	EMBEDMENT
EN	EDGE NAIL, END NAIL
EQ.	EQUAL
EQUIP.	EQUIPMENT
ES	EACH SIDE
EW	EACH WAY
EXP.	EXPANSION
EXT.	EXTERIOR
FAB.	FABRICATED
FDN.	FOUNDATION
FF	FINISH FLOOR
FG	FINISH GRADE
FIN.	FINISH
FJ	FLOOR JOIST
FLR.	FLOOR
FN	FIELD NAIL
FOC	FACE OF CONRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FRMG.	FRAMING
FS	FAR SIDE
FT.	FOOT, FEET
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
GB	GALVANIZED BOX
GLB	GLUED-LAMINATED BEAM
GYP. BD.	GYSPUM BOARD
(H)	HORIZONTAL
HD	HOLDOWN
HDG	HOT DIPPED GLAVANIZED
HDR.	HEADER
HK.	HOOK
HGR.	HANGER
HOR.	HORIZONTAL
HS	HIGH STRENGTH
HSS	HOLLOW STRUCTURAL SECTION
HT.	HEIGHT
ICC	INTERNATIONAL CODE COUNCIL
ID	INSIDE DIAMETER
INFO.	INFORMATION
INSTALL.	INSTALLATION
INT.	INTERIOR
INTRM.	INTERMEDIATE
INTX.	INTERSECTION
JST.	JOIST
JT.	JOINT
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LONG.	LONGITUDINAL
LOC.	LOCATION
LS	LAG SCREW
LTWT	LIGHT WEIGHT
MAX.	MAXIMUM
MB	MACHINE BOLT
MECH.	MECHANICAL
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
(N)	NEW
NIC	NOT IN CONTRACT
NLG.	NAILING
NS	NEAR SIDE
NTS	NOT TO SCALE
oc	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OPNG.	OPENING
ORIG.	ORIGINAL
°/	OVER
PERP.	PERPENDICULAR
℞ OR PL.	PLATE
PLF	POUNDS PER LINEAR FOOT
PP	PARTIAL PENETRATION
PREFAB.	PREFABRICATED
PROJ.	PROJECT, PROJECTS, PROJECTION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PT.	POINT
PTDF	PRESSURE TREATED DOUGLAS FIR
PW.	PLYWOOD
QTY.	QUANTITY
R.	RADIUS
REINF.	REINFORCING
REQ.	REQUIRED
RET.	RETAINING
SCHD.	SCHEDULE
SECT.	SECTION
SGL.	SINGLE
SHT.	SHEET
SHTG.	SHEATHING
SIM.	SIMILAR
SMS	SHEET METAL SCREW
SOG	SLAB ON GRADE
SPEC.	SPECIFICATION
SQ.	SQUARE
SS	STAINLESS STEEL
STD.	STANDARD
STGD.	STAGGERED
STIFF.	STIFFENER
STL.	STEEL
STRUCT.	STRUCTURAL
STRGR.	STRINGER
SW	SHEAR WALL
SYM.	SYMMETRICAL
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEMP.	TEMPORARY
TF	TOP FLANGE
THK.	THICK
THRU.	THROUGH
TN	TOE NAIL
TO	TOP OF
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANSV.	TRANSVERSE
TYP.	TYPICAL
UNO	UNLESS NOTED OTHERWISE
URM	UNREINFORCED MASONRY
(V)	VERTICAL
VERT.	VERTICAL
WWF	WELDED WIRE FABRIC
w/	WITH
w/o	WITHOUT
WD.	WOOD
WP	WORK POINT
WSHR.	WASHER

GENERAL NOTES

1. CONSTRUCTION SHALL COMPLY WITH CALTRANS STANDARD SPECIFICATIONS (MAY 2006 & PROJECT SPECIAL PROVISIONS), THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE (CBC), IBC STANDARDS, IBC ADOPTED STANDARDS, AND IBC RECOGNIZED STANDARDS.
2. THE CONSTRUCTION DOCUMENTS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE METHODS, PROCEDURES OR SEQUENCE OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO TAKE NECESSARY PRECAUTIONS TO MAINTAIN AND ENSURE THE INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION. NEITHER THE OWNER NOR ARCHITECT OR STRUCTURAL ENGINEER WILL ENFORCE SAFETY MEASURES OR REGULATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN, CONSTRUCT AND MAINTAIN ALL SAFETY DEVICES, INCLUDING BUT NOT LIMITED TO TEMPORARY GUARDRAILS, SHORING AND BRACING. THE CONTRACTOR SHALL SUBMIT A PLAN AND SEQUENCE FOR CONSTRUCTING WALLS TO BE APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS AND REGULATIONS.
3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE WORK OF THE SUB-CONTRACTORS AND TO CHECK DIMENSIONS. DISCREPANCIES SHALL BE CONVEYED TO THE ATTENTION OF THE STRUCTURAL ENGINEER IN A TIMELY MANNER TO BE RESOLVED BEFORE PROCEEDING.
4. STRUCTURAL MEMBERS SHALL NOT BE CUT, NOTCHED OR OTHERWISE PENETRATED UNLESS SPECIFICALLY APPROVED BY THE STRUCTURAL ENGINEER IN ADVANCE OR SHOWN ON THESE DRAWINGS. NO CHANGES ARE TO BE MADE TO THESE PLANS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE STRUCTURAL ENGINEER MATERIALS SHALL BE FURNISHED AS SHOWN HEREIN UNLESS EQUAL ALTERNATES ARE APPROVED IN WRITING BY THE OWNER AND THE STRUCTURAL ENGINEER.
5. DETAILS NOT SPECIFICALLY SHOWN SHALL BE SIMILAR TO DETAILS FOR SIMILAR CONSTRUCTION SHOWN ON THESE DRAWINGS.
6. TYPICAL DETAILS SHALL APPLY UNLESS NOTED OTHERWISE ON THE DRAWINGS.
7. WHERE THE GENERAL NOTES AND THE TYPICAL DETAILS ARE IN CONFLICT WITH THE SPECIFICATIONS, THE GENERAL NOTES AND TYPICAL DETAILS SHALL GOVERN. NOTES AND DETAILS WITHIN THESE DRAWINGS TAKE PRECEDENCE OVER GENERAL NOTES.
8. DO NOT SCALE DRAWINGS. DRAWING SCALES GIVEN ARE APPROXIMATE. DISCREPANCIES SHALL BE CONVEYED TO THE STRUCTURAL ENGINEER TO BE RESOLVED PRIOR TO PROCEEDING.
9. REFER TO CIVIL DRAWINGS FOR DIMENSIONS, SLOPES, DEPRESSIONS AND OTHER INFORMATION NOT SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS.
10. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE EXPENSE OF REPAIR OR REPLACEMENT IN CONJUNCTION WITH THE EXECUTION OF THIS WORK.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE DETAILS TO AVOID THE INTERFERENCE OF EMBEDDED ITEMS, INCLUDING BUT NOT LIMITED TO REINFORCING STEEL, PRE-STRESSED STEEL AND HARDWARE AS WELL AS MISCELLANEOUS STEEL AND CONDUITS.
12. UNLESS SPECIFICALLY SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS, ANCHOR BOLTS OR INSETS FOR EQUIPMENT ANCHORAGE OR INSTALLATION SHALL BE DESIGNED BY A CIVIL OR STRUCTURAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA, AND SHALL BE SHOWN ON THE MECHANICAL AND/OR ELECTRICAL DRAWINGS AND SUBMITTED TO THE ENGINEER FOR APPROVAL.
13. GENERAL CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY ALL GRADES, DIMENSIONS, AND CONDITIONS PRIOR TO BIDDING AND COMMENCING CONSTRUCTION. DIMENSIONS CONTROLLED BY EXISTING CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE.
14. MATERIALS USED IN THIS DESIGN MAY BE HAZARDOUS TO ONES HEALTH. THE CONTRACTOR SHALL ACCEPT ALL RESPONSIBILITY AND SHALL POST SUCH WARNING DURING CONSTRUCTION.

DESIGN CRITERIA

1. GEOTECHNICAL
   REPORT BY: FUGRO CONSULTANTS, INC.
   5855 CAPISTRANO AVENUE, SUITE C
   ATASCADERO, CA 93422

   REPORT DATE: T.B.D.

   SOIL NAILS:

MINIMUM EMBEDMENT	= VARIES	
MAX. HORIZONTAL SPACING	= 5	FT.
MAX. VERTICAL SPACING	= 5.0	FT.
MIN. HOLE DIAMETER	= 8	IN.
ULTIMATE BOND STRESS	= 3.5	KSF (NON-BITUMINOUS)
ULTIMATE BOND STRESS	= 0.9	KSF (HEAVILY-BITUMINOUS)
MIN. STEEL ANCHOR YIELD LOAD	= 75	KIPS

   SOIL CORROSIVITY:
   TYPE "V" WITH 25 PERCENT MINERAL ADMIXTURE REPLACEMENT AND w/C RATIO OF 0.40.
   SOIL NAILS SHALL INCLUDE DOUBLE CORROSION PROTECTION.
2. CODE
   2013 CALIFORNIA BUILDING CODE (CBC) AND REFERENCED CODES
3. LATERAL SYSTEM
   STRUCTURAL SYSTEM: REINFORCED SHOTCRETE WALL WITH ROCK DOWELS.
4. SEISMIC
   SITE CLASS = D
   RISK CATEGORY = II
   S_S = 1.282
   F_a = 1.000
   S_{MS} = 1.282 (SEISMIC CATEGORY D)
   S_1 = 0.485
   F_v = 1.515
   S_{M1} = 0.735 (SEISMIC CATEGORY D)
   I = 1.0
   S_{DS} = 0.855
   S_{D1} = 0.490
5. SNOW
   NO SNOW LOAD
6. FLOOD
   NO FLOOD LOAD

MATERIAL PROPERTIES

1. REINFORCING STEEL
   TYPICAL REINFORCING: ASTM A615, GRADE 60
   WELDED REINFORCING: ASTM A706, GRADE 60
   WELDED WIRE FABRIC: ASTM A185
2. CONCRETE

	F'c, PSI 28-DAY	MAX. SLUMP	MAX. W/C RATIO
NEAT CEMENT GROUT	4,500	4±1	0.45
SHOTCRETE	4,500	4±1	0.45
BARRIER	4,500	4±1	0.45

   AGGREGATE SHALL CONFORM TO ASTM C33 CEMENT SHALL BE ASTM C150, TYPE V. WHERE GEOTECHNICAL REPORT HAS DETERMINED THAT CONCRETE WILL BE EXPOSED TO SULFATES, MIX DESIGN SHALL COMPLY WITH ACI TABLE 4.3.1
3. STRUCTURAL STEEL

COMPONENTS	YIELD Fy, KSI	ASTM
STEEL PLATES & MISC	36	A36
HEADED STUDS	51	ASTM A29-12, TYPE B
DOWEL THREADBAR	75	ASTM A615/A615M

PROPRIETARY COMPONENTS

1. COMPONENTS SHALL BE INSTALLED PER MANUFACTURES WRITTEN INSTRUCTIONS AND THE CORRESPONDING ICC REPORT.
2. PROVIDE ANCHORS WITH TYPE, DIAMETER, AND MINIMUM EMBEDMENT DEPTH AS NOTED ON THE DRAWINGS. SUBSTITUTIONS ARE NOT ALLOWED WITHOUT SUBMITTAL TO THE STRUCTURAL ENGINEER AND BUILDING OFFICIAL FOR REVIEW.
3. STAINLESS STEEL AND/OR GALVANIZED ANCHORS (AND/OR THREADED RODS) SHALL BE USED IN AREAS EXPOSED TO DAMP CONDITIONS.
4. WELDED STUDS SHALL BE ASTM A108 NELSON SHEAR CONNECTOR STUDS, ICC 2614. STUD WELDING TESTING AND INSPECTION SHALL CONFORM TO LATEST EDITION OF AWS D1.1
5. WHERE COMPONENTS OF CONSTRUCTION ARE CALLED OUT BY MANUFACTURER, EQUIVALENT PRODUCTS OF OTHER MANUFACTURERS SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW. SUBMITTALS MUST CONTAIN ICC ER REPORT OR OTHER PROOF OF EQUIVALENT STRUCTURAL CAPACITIES.

REINFORCING STEEL

1. DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF THE ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES ACI 315, LATEST EDITION.
2. TO HOLD REINFORCING BARS IN THEIR TRUE POSITION AND PREVENT DISPLACEMENT, STANDARD TIE AND ANCHORAGE DEVICES MUST BE PROVIDED. PLACING OF REINFORCEMENT SHALL CONFORM TO THE CBC.
3. ALL REINFORCING BAR BENDS SHALL BE MADE COLD. REINFORCING BARS SHALL NOT BE RE-BENT WITHOUT APPROVAL OF STRUCTURAL ENGINEER.
4. LAP SPLICES FOR REINFORCING BARS SHALL BE PER THE REINFORCING SCHEDULE ON THESE DRAWINGS. WIRE BARS TOGETHER AT LAPS OR SPLICES. STAGGER LAPS IN ADJACENT HORIZONTAL OR SLOPING REINFORCING BARS A MINIMUM OF THE REQUIRED SPLICE LENGTH. SPLICES AT OTHER LOCATIONS SHALL BE REVIEWED BY THE STRUCTURAL ENGINEER ALL VERTICAL WALL REINFORCEMENT SHALL BE CONTINUOUS BETWEEN SPLICE LOCATIONS SHOWN IN THE DETAILS.
5. WELDED WIRE FABRIC SHALL BE SPLICED BY LAPPING A MINIMUM OF 18" OR TWO CROSS WIRES, WHICHEVER IS GREATER.
6. REINFORCING STEEL SHALL BE CLEAN, FREE OF EXCESSIVE RUST, GREASE, OIL OR OTHER MATERIAL LIKELY TO IMPAIR BOND.
7. SPACING OF BARS SHALL BE CONSIDERED AS MAXIMUM SPACING.

SHOTCRETE

1. ALL SHOTCRETE MATERIALS, PROPORTIONING, APPLICATION, TESTING AND INSPECTION SHALL CONFORM TO ACI 301, ACI 506R AND ACI 506.2
2. TESTING AND INSPECTION OF SHOTCRETE SHALL MEET THE REQUIREMENTS OF THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE (CBC)
3. ALL SHOTCRETE SHALL HAVE A COMPRESSIVE STRENGTH AT 28 DAYS OF f'c = 4500 p.s.i.
4. SHOTCRETE MIX DESIGN SHALL BE DESIGNED BY A QUALIFIED TESTING LABORATORY, STAMPED AND SIGNED BY THE TESTING LAB'S CIVIL ENGINEER LICENSED IN THE STATE OF CALIFORNIA. COARSE AGGREGATE SIZE SHALL NOT EXCEED 3/4". USE WATER - CEMENT RATIOS BETWEEN 0.33 AND 0.45 (BY VOLUME) UNLESS OTHERWISE AUTHORIZED IN WRITING. MIX DESIGN SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR REVIEW - SEE "SUBMITTALS" NOTES.
5. CEMENT SHALL CONFORM TO ASTM C150 AND SHALL BE TYPE V.
6. ADMIXTURES MAY BE USED WITH PRIOR APPROVAL OF THE ENGINEER. ADMIXTURES USED TO INCREASE THE WORKABILITY OF CONCRETE SHALL NOT BE CONSIDERED TO REDUCE THE SPECIFIED MINIMUM CEMENT CONTENT. (CALCIUM CHLORIDES SHALL NOT BE USED)
7. THE MAXIMUM SIZE OF REBAR SHALL BE No. 5 BARS. THERE SHALL BE A MINIMUM CLEARANCE BETWEEN PARALLEL BARS OF 2 1/2 INCHES.
8. LAP SPLICES IN REBAR SHALL BE BY THE NON-CONTACT LAP SPLICE METHOD WITH AT LEASE 2 INCHES OF CLEARANCE BETWEEN BARS.
9. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE IN A MANNER THAT PREVENTS ANY MOVEMENT DURING THE SHOTCRETE PLACEMENT.
10. SHOTCRETE REQUIRES CONTINUOUS INSPECTION BY A SPECIAL INSPECTOR. THE SPECIAL INSPECTOR SHALL PROVIDE CONTINUOUS INSPECTION DURING THE PLACEMENT OF ALL REINFORCING, THE PLACEMENT OF SHOTCRETE, AND THE ASSEMBLY, SHOOTING, TESTING AND DISASSEMBLY OF TEST PANELS AND SHALL SUBMIT A STATEMENT INDICATING COMPLIANCE WITH THE PLANS AND SPECIFICATIONS.

REINFORCED CONCRETE

1. CONCRETE SHALL DEVELOP A MINIMUM ULTIMATE COMPRESSIVE STRENGTH PER MATERIAL PROPERTIES.
2. CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST EDITIONS OF THE CBC AND ACI STANDARD 318, UNLESS SHOWN OR NOTED OTHERWISE ON THESE DRAWINGS.
3. FORMS FOR CONCRETE SHALL BE LAID OUT AND CONSTRUCTED TO PROVIDE FOR ANY REQUIRED CAMBERS.
4. CLEAR DISTANCE BETWEEN PARALLEL REINFORCEMENT SHALL NOT BE LESS THAN 2 TIMES THE NOMINAL DIAMETER OF THE REINFORCEMENT, OR 1-1/3 TIMES MAXIMUM SIZE AGGREGATE, NOR LESS THAN 1-1/2".
5. REINFORCING STEEL IN NON-PRESTRESSED CAST-IN-PLACE CONCRETE SHALL HAVE A MINIMUM COVER AS FOLLOWS, UNLESS NOTED OTHERWISE:
   - CONCRETE AGAINST EARTH (UNFORMED): 3 IN.
   - CONCRETE AGAINST EARTH (FORMED) AND EXPOSED TO WEATHER:
     BARS #6 AND LARGER: 2 IN.
     BARS #5 AND SMALLER: 1½ IN.
   - CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH EARTH:
     SLABS AND WALLS (#11 BARS AND SMALLER): ¾ IN.
     BEAMS (TIES, STIRRUPS AND SPIRALS): 1½ IN.
     UNPROTECTED COLUMNS: 2½ IN.
6. PROVIDE SLEEVES FOR ANY PIPING PASSING THROUGH STRUCTURAL CONCRETE BEFORE PLACING CONCRETE. CORING IN CONCRETE IS NOT PERMITTED EXCEPT AS SHOWN - SEE TYPICAL DETAILS. NOTIFY STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS.
7. ALL REINFORCING STEEL, WIRE MESH, ANCHOR BOLTS, HOLD DOWN ANCHORS AND OTHER INSERTS OR EMBEDED ITEMS SHALL BE PLACED ACCURATELY AND SECURED BEFORE BEGINNING CONCRETE PLACEMENT. STABBING OF ANCHOR BOLTS OR REINFORCING INTO WET CONCRETE IS NOT ALLOWED.
8. PROVIDE 6% ENTRAINED AIR BY VOLUME WITH ADMIXTURE PER ASTM C260 FOR SITES ABOVE 1500 FEET IN ELEVATION.
9. CONCRETE SHALL BE CONSOLIDATED BY MECHANICAL VIBRATORS.
10. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ASTM C94 AND ACI STANDARD 304.
11. LOCATION OF CONSTRUCTION JOINTS NOT SPECIFIED IN THESE DRAWINGS MUST BE REVIEWED BY THE STRUCTURAL ENGINEER.
12. CURE EXPOSED CONCRETE SURFACES WITH LIQUID MEMBRANE-FORMING CURING COMPOUND CONFORMING TO ASTM C309, TYPE 1, CLASS A OR OTHER APPROVED CURING METHOD IMMEDIATELY AFTER PLACING CONCRETE. WHERE PLACEMENT OCCURS IN TEMPERATURES OVER 90°F OR IN WINDY CONDITIONS, CONTRACTOR SHALL TAKE ADDITIONAL MEASURES TO INSURE PROPER CONCRETE CURING. IF CONTROL JOINT SAW-CUTTING TAKES PLACE AFTER APPLICATION OF CURING COMPOUND, RE-APPLY CURING COMPOUND TO SAWCUTS.
13. WHEN COLD WEATHER CONDITIONS EXIST, PLACE CONCRETE IN COMPLIANCE WITH CBC.
14. WHEN HOT WEATHER CONDITIONS EXIST, PLACE CONCRETE IN COMPLIANCE WITH THE CBC. REINFORCING SHALL BE KEPT COOL DURING PLACEMENT OF CONCRETE.
15. WHEN CONCRETE IS PLACED AGAINST EXISTING CONCRETE WALL PANELS AND FOOTINGS SURFACES, EXISTING CONCRETE SURFACES SHALL BE THOROUGHLY CLEANED AND ROUGHENED TO AN AMPLITUDE OF 1/4" MINIMUM. A CONCRETE BONDING AGENT SHALL BE APPLIED TO THE EXISTING CONCRETE SURFACE.

REGISTERED PROFESSIONAL ENGINEER
LEE MILES MICHETTI
No. C80574
Exp. 3/31/17
CIVIL
STATE OF CALIFORNIA

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

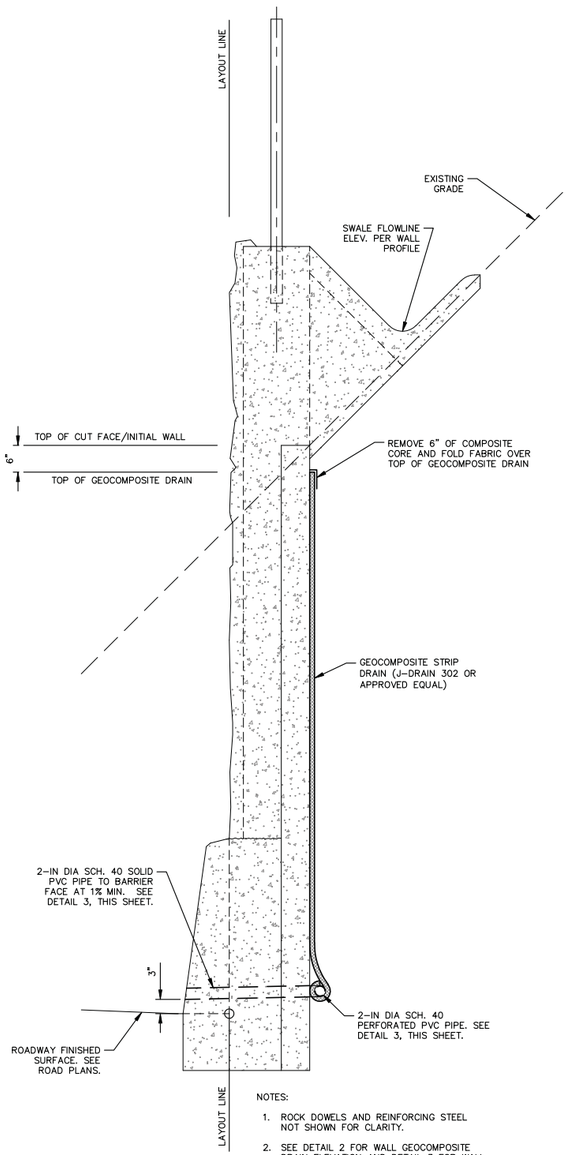
PRICE CANYON ROAD WIDENING PHASE II

WALL NOTES

PISMO BEACH, CA

Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

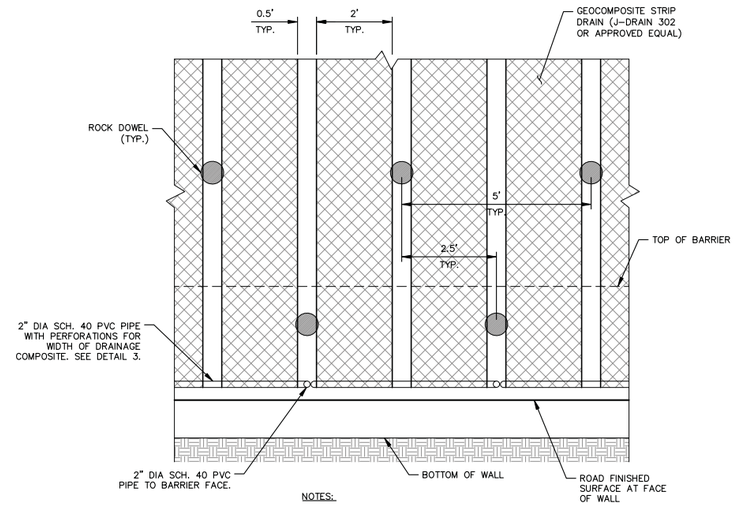
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-8	47



NOTES:

1. ROCK DOWELS AND REINFORCING STEEL NOT SHOWN FOR CLARITY.
2. SEE DETAIL 2 FOR WALL GEOCOMPOSITE DRAIN ELEVATION AND DETAIL 3 FOR WALL DRAIN OUTLET DETAIL, THIS SHEET.

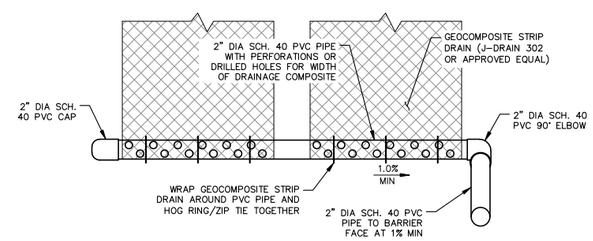
WALL GEOCOMPOSITE DRAIN DETAIL (1)
NTS



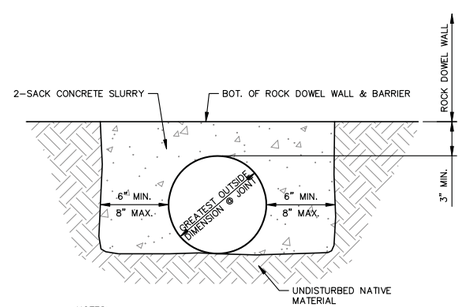
NOTES:

1. CENTER GEOCOMPOSITE STRIP DRAINS BETWEEN ROCK DOWEL COLUMNS.
2. GEOCOMPOSITE STRIP DRAINS ARE NOT REQUIRED AT CATCH BASINS.

WALL GEOCOMPOSITE DRAIN ELEVATION (2)
NTS



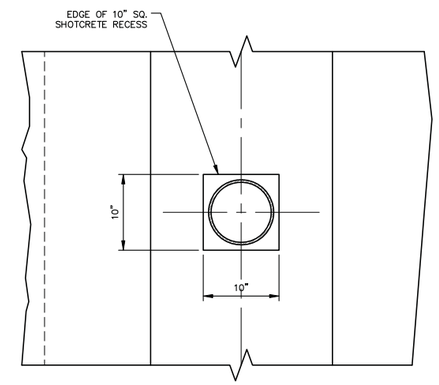
WALL DRAIN OUTLET DETAIL (3)
NTS



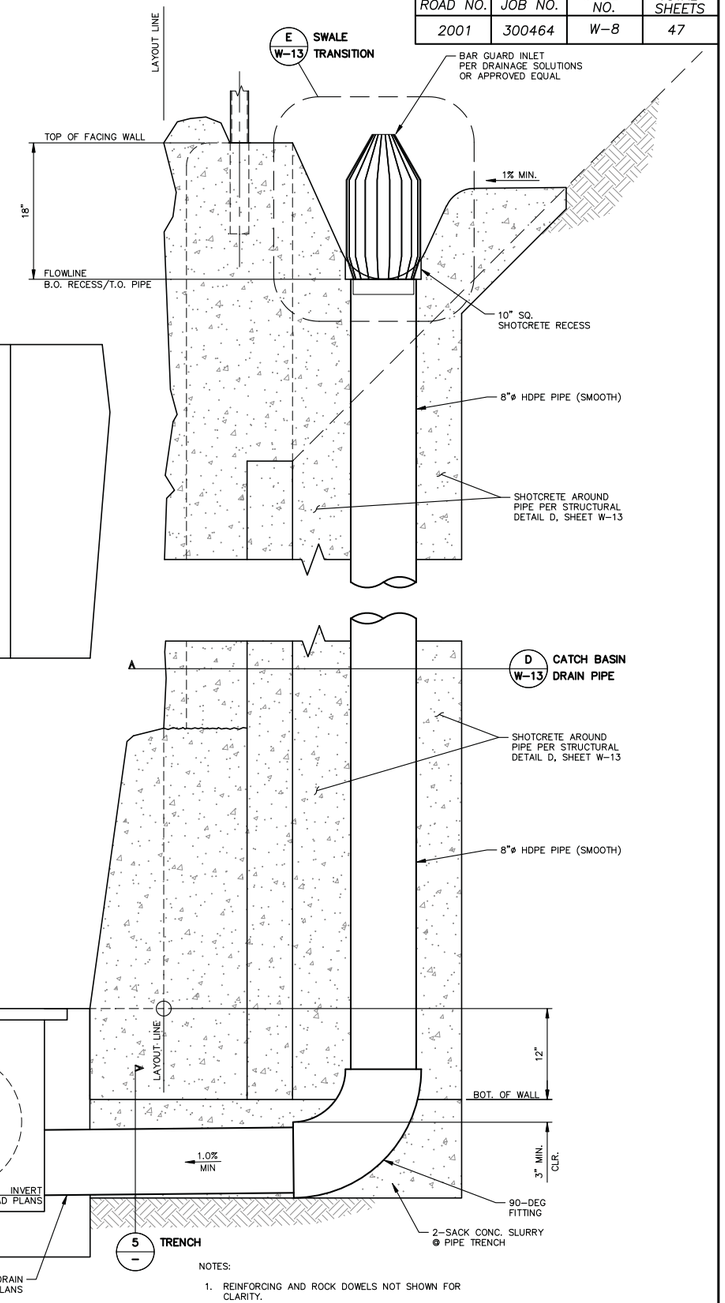
NOTES:

1. PIPE SHALL BE PLACED ON UNDISTURBED NATIVE MATERIAL UNLESS EXISTING SOILS CONDITIONS REQUIRES ADDITIONAL MEASURES.
2. CONCRETE SLURRY TRENCH BACKFILL SHALL CONFORM TO STATE STANDARD 90-1.01, 188 LBS/CY CEMENTITIOUS MATERIAL (2 SACK). DO NOT PLACE AGGREGATE BASE ABOVE SLURRY BACKFILL.
3. PIPE SHALL BE SECURED IN PLACE TO KEEP LINE AND GRADE WHILE CONCRETE SLURRY IS PLACED AND UNTIL THE SLURRY HAS SET.

PIPE TRENCH DETAIL (5)
NTS



PLAN VIEW



NOTES:

1. REINFORCING AND ROCK DOWELS NOT SHOWN FOR CLARITY.
2. FOR SHOTCRETE/CONCRETE DIMENSIONS, REINFORCING, FENCE, AND ROCK DOWEL INFORMATION, SEE STRUCTURAL DETAILS.

V-DITCH CATCH BASIN DETAIL (4)
NTS

REGISTERED PROFESSIONAL ENGINEER LEE MILES MICHETTI No. C80574 Exp. 3/31/17 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II

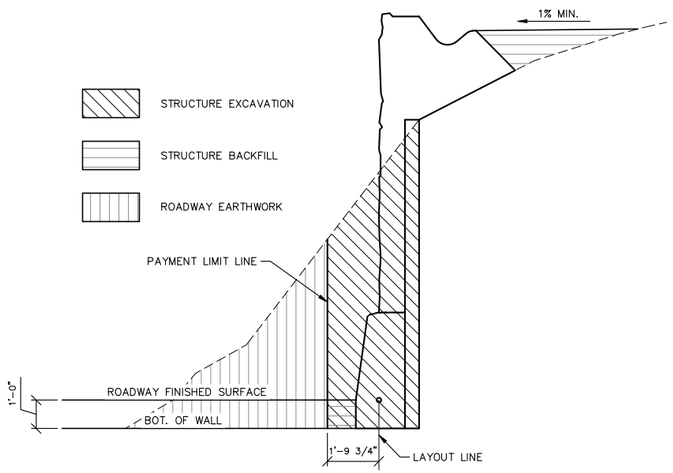
ROCK DOWEL WALL DRAINAGE DETAILS

PISMO BEACH, CA

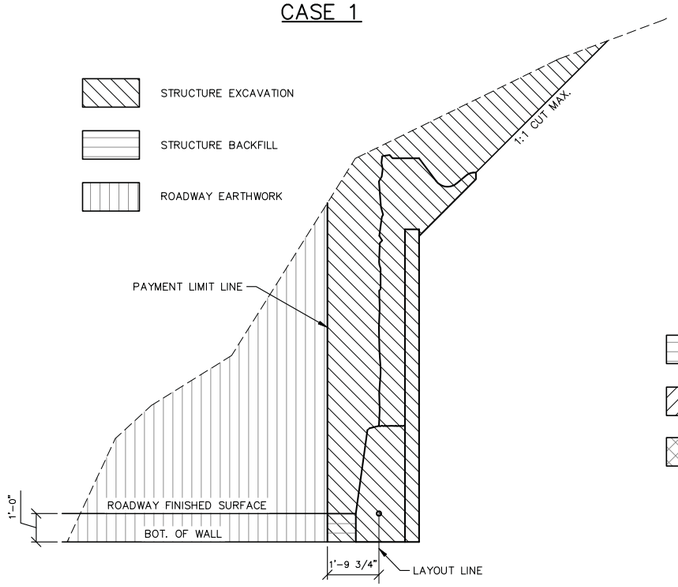
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	C GRAY	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-9	47



CASE 1



CASE 2

LIMIT OF PAYMENT
FOR EXCAVATION & BACKFILL (C)

SCALE: N.T.S.

ROCK DOWEL WALL NOTES

DESIGN:
CALTRANS STANDARD SPECIFICATIONS, MAY 2006 & PROJECT SPECIAL PROVISIONS
FHWA PUBLICATION NO. FHWAO-1F-03-017 GEOTECHNICAL ENGINEERING CIRCULAR NO. 7 – ROCK DOWEL WALLS

SEISMIC CRITERIA: PGA = 0.78g

REINFORCED SHOTCRETE: F'c = 4.5 KSI

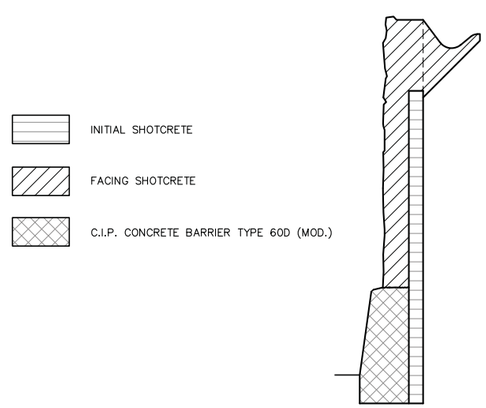
REINFORCING STEEL: fy = 60 KSI
ASTM A709/A709M, GRADE 36

ROCK DOWELS: ASTM A615/A615M, GRADE 75, fy = 75 KSI

SLIGHTLY BITUMINOUS & HEAVILY BITUMINOUS SANDSTONE:
DESIGN BOND STRESS = 0.45 KSF

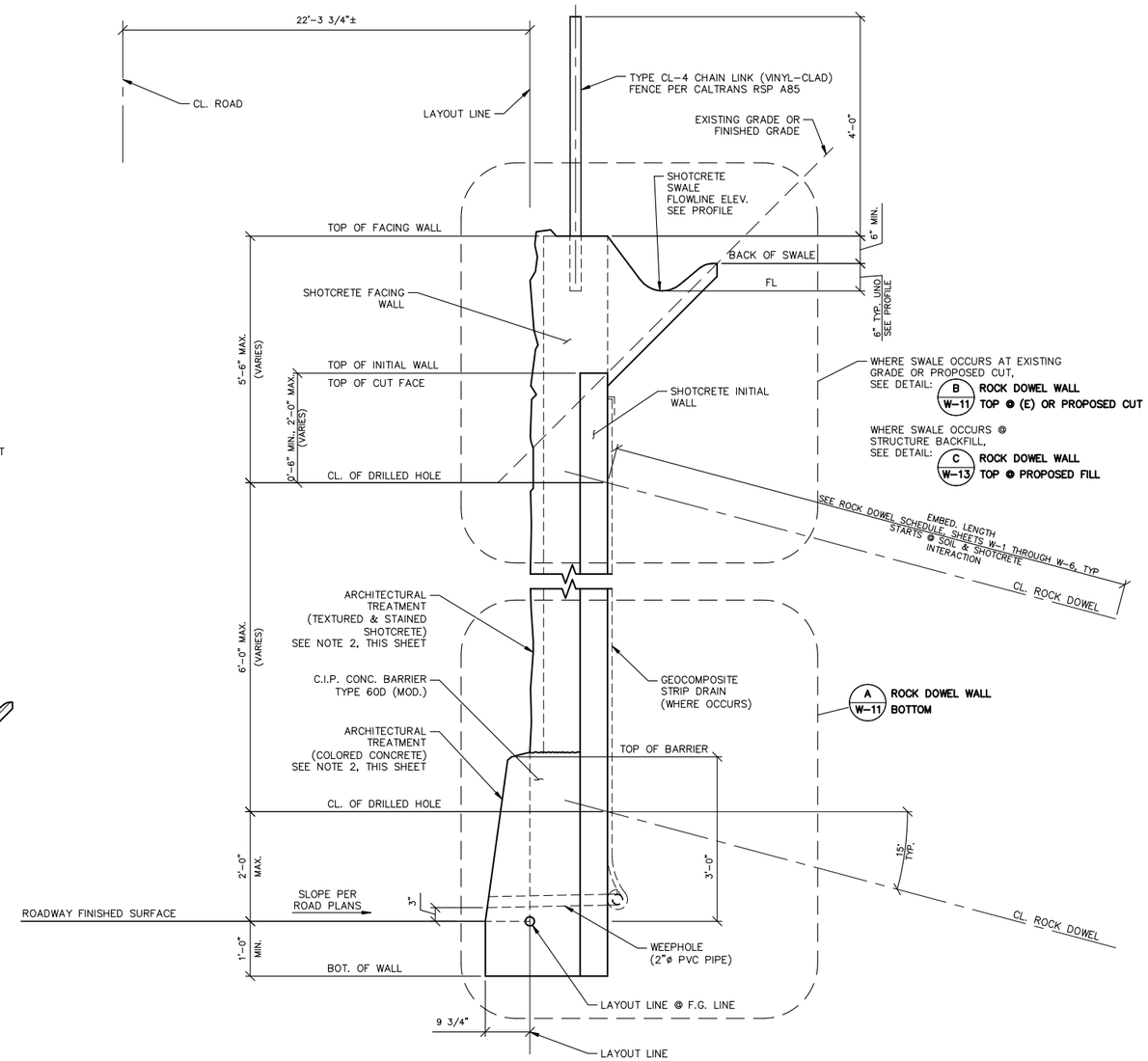
NON-BITUMINOUS SANDSTONE DESIGN PULLOUT RESISTANCE:
DESIGN BOND STRESS = 1.75 KSF

NOTES:
1. FOR DRAINAGE INFORMATION, SEE SHEET W-8.
2. SEE SPECIAL PROVISIONS AND ARCHITECTURAL TREATMENT EXHIBIT
3. TOP OF WALL ELEVATIONS SHALL BE FIELD VERIFIED.



PAY ITEM DETAIL
TYPICAL ROCK DOWEL WALL MATERIALS (B)

SCALE: N.T.S.



TYPICAL ROCK DOWEL WALL SECTION (A)

SCALE: N.T.S.

REGISTERED PROFESSIONAL ENGINEER
LEE MILES MICHETTI
No. C80574
Exp. 3/31/17
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
STRUCTURAL DETAILS					
PISMO BEACH, CA					
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
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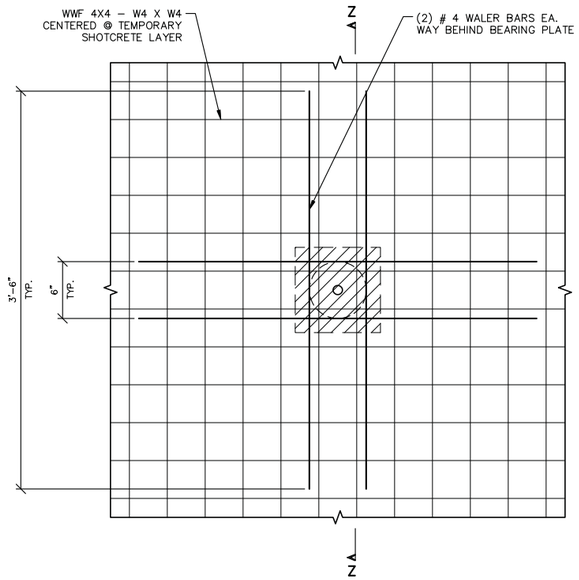
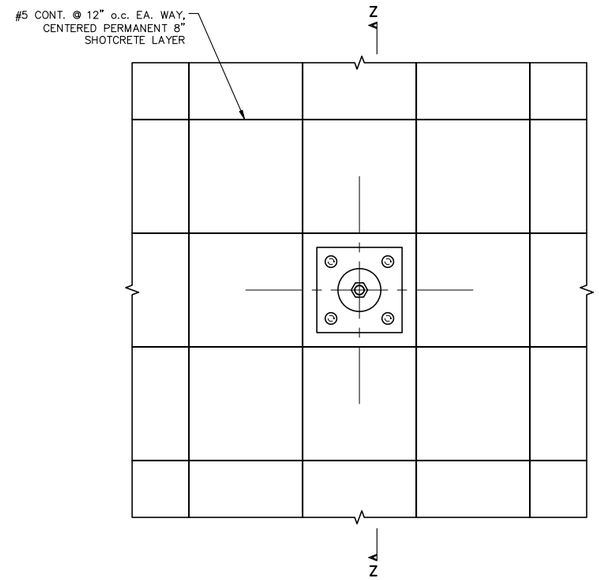
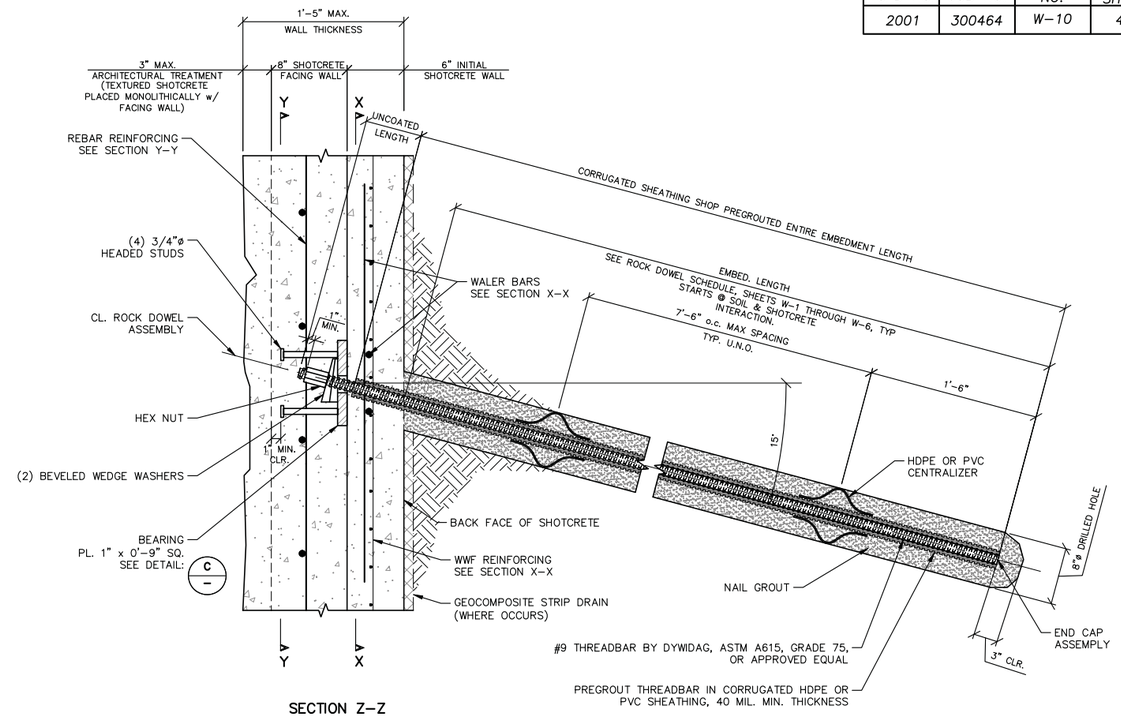


SECTION X–X



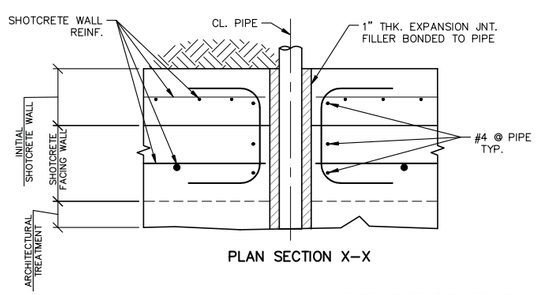
SECTION Y–Y



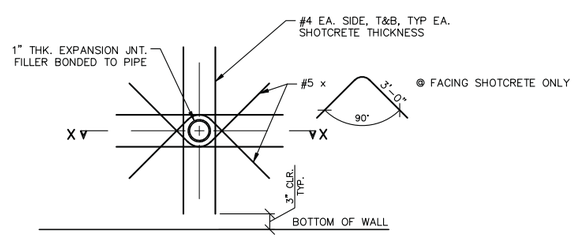
SECTION Z–Z

TYPICAL ROCK DOWEL ASSEMBLY & WALL REINFORCEMENT DETAIL (A)

SCALE: 1 1/2" = 1'-0"

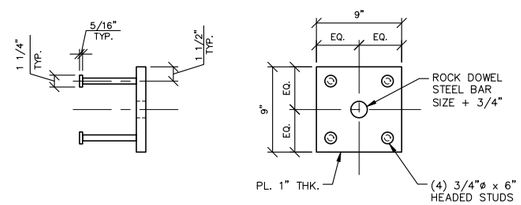


PLAN SECTION X–X



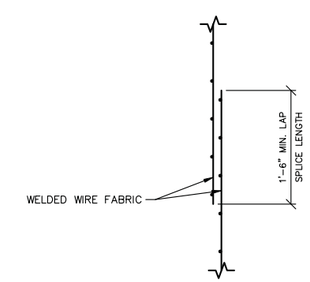
REINFORCEMENT AT PIPE OPENINGS (B)

SCALE: N.T.S.



ANCHOR PLATE DETAIL (C)

SCALE: 1 1/2" = 1'-0"



TYP. WWF LAP SPLICE DETAIL (D)

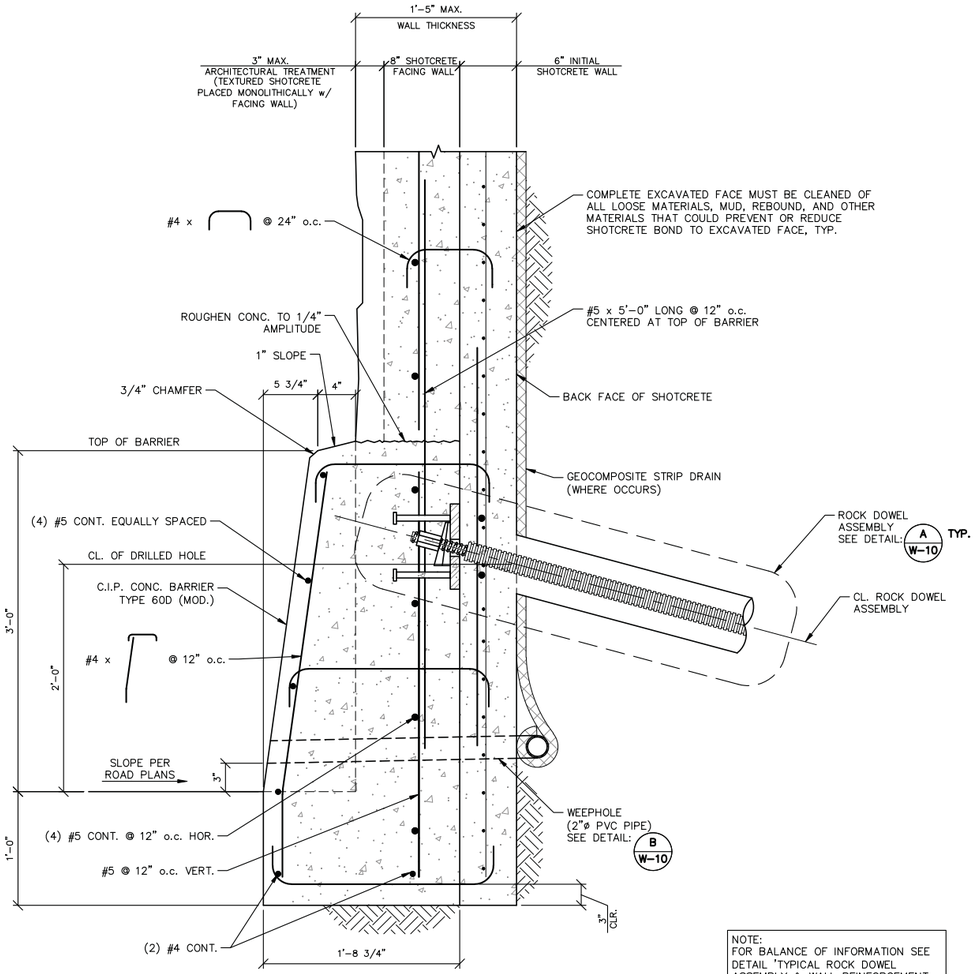
SCALE: N.T.S.

REGISTERED PROFESSIONAL ENGINEER LEE MILES MICHETTI No. C80574 Exp. 3/31/17 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
STRUCTURAL DETAILS					
PISMO BEACH, CA					
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3 ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

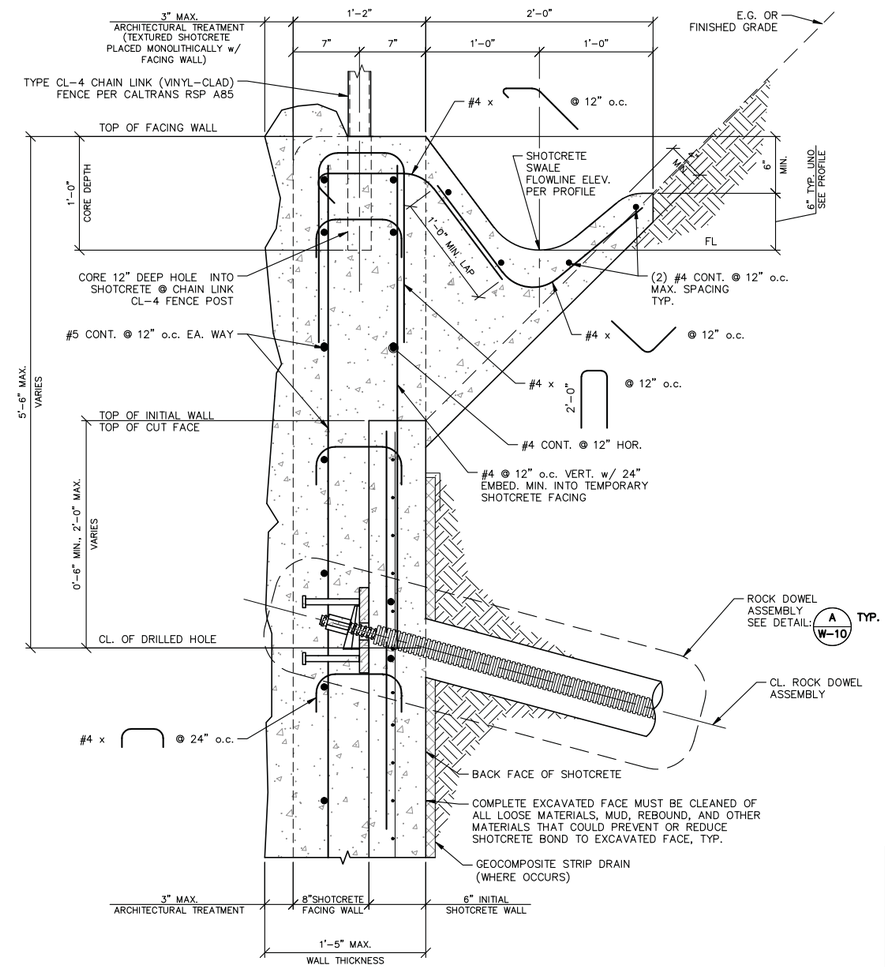
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-11	47



NOTE:
FOR BALANCE OF INFORMATION SEE DETAIL 'TYPICAL ROCK DOWEL ASSEMBLY & WALL REINFORCEMENT DETAIL', SHEET W-10.

TYPICAL BOTTOM OF ROCK DOWEL WALL SECTION (A)

SCALE: 1 1/2" = 1'-0"



NOTE:
FOR BALANCE OF INFORMATION SEE DETAIL 'TYPICAL ROCK DOWEL ASSEMBLY & WALL REINFORCEMENT DETAIL', SHEET W-10.
WHERE ROCK DOWEL OCCURS @ SLOPED FACE (ABOVE TOP OF CUT FACE), SEE DETAIL 'TYPICAL TOP OF ROCK DOWEL WALL SECTION @ PROPOSED FILL, SHEET W-13.

TYPICAL TOP OF ROCK DOWEL WALL SECTION @ EXISTING OR PROPOSED CUT (B)

SCALE: 1 1/2" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER
LEE MILES MICHETTI
No. C80574
Exp. 3/31/17
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II

STRUCTURAL DETAILS

PISMO BEACH, CA

Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
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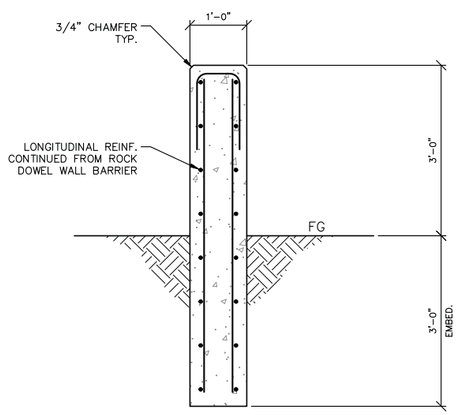
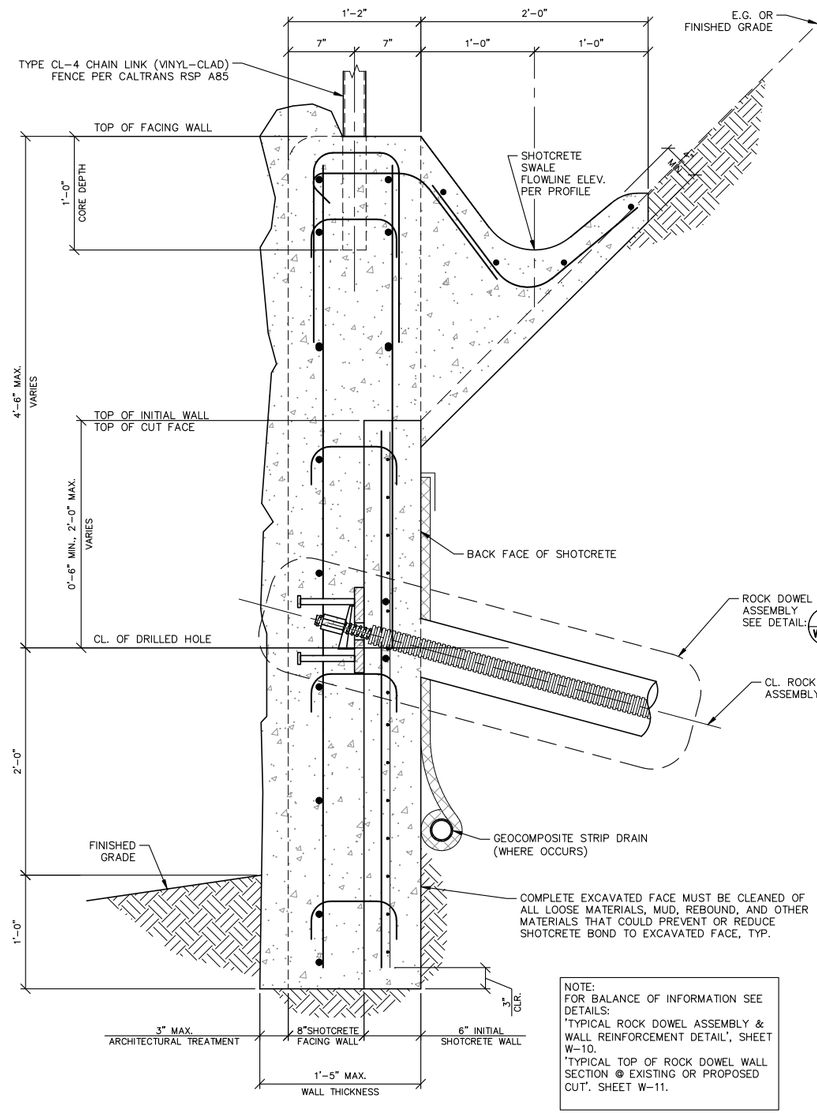


CONCRETE BARRIER EXTENSION SECTION (C)

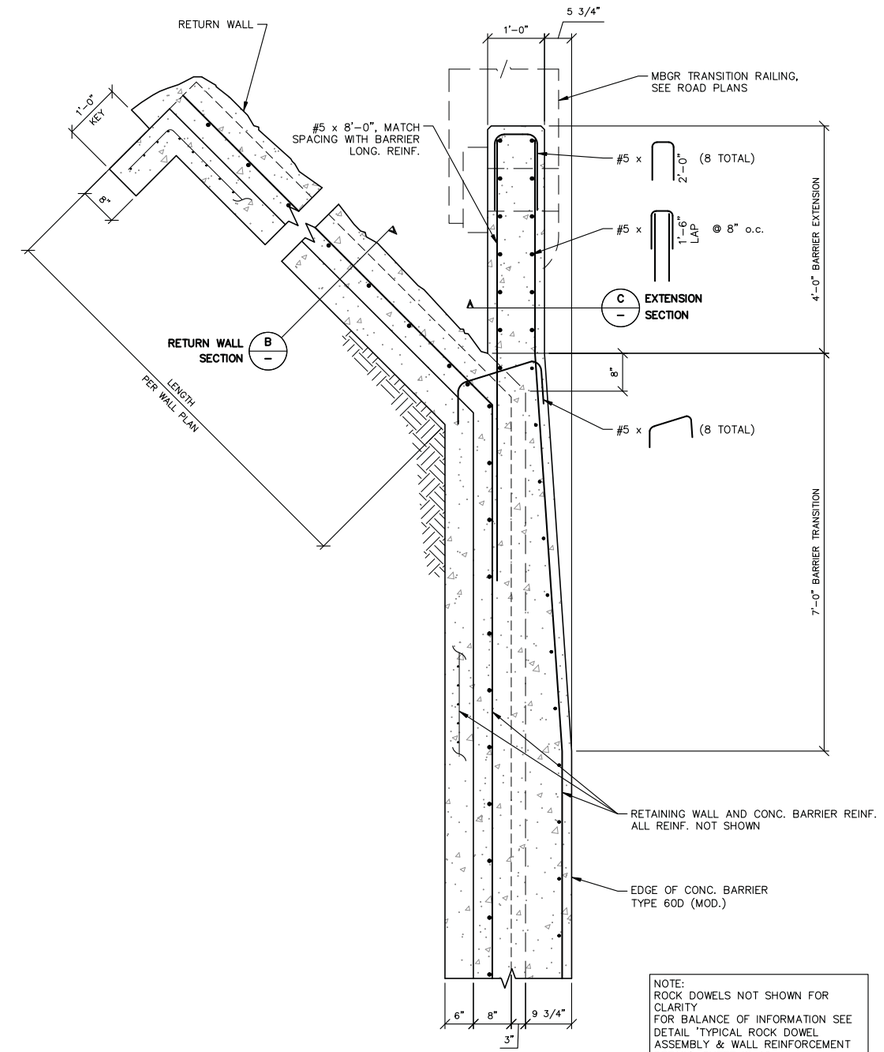
SCALE: 3/4" = 1'-0"



NOTE:
FOR BALANCE OF INFORMATION SEE DETAILS:
'TYPICAL ROCK DOWEL ASSEMBLY & WALL REINFORCEMENT DETAIL', SHEET W-10.
'TYPICAL TOP OF ROCK DOWEL WALL SECTION @ EXISTING OR PROPOSED CUT'. SHEET W-11.

TYPICAL TOP OF ROCK DOWEL WALL SECTION @ RETURN WALL (B)

SCALE: 1 1/2" = 1'-0"



NOTE:
ROCK DOWELS NOT SHOWN FOR CLARITY
FOR BALANCE OF INFORMATION SEE DETAIL 'TYPICAL ROCK DOWEL ASSEMBLY & WALL REINFORCEMENT DETAIL', SHEET W-10.

CONCRETE BARRIER TRANSITION (A)

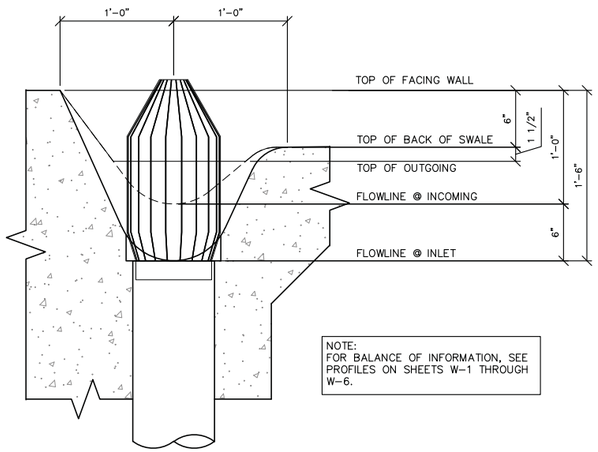
SCALE: 3/4" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER LEE MILES MICHETTI No. C80574 Exp. 3/31/17 CIVIL STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
STRUCTURAL DETAILS					
PISMO BEACH, CA					
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

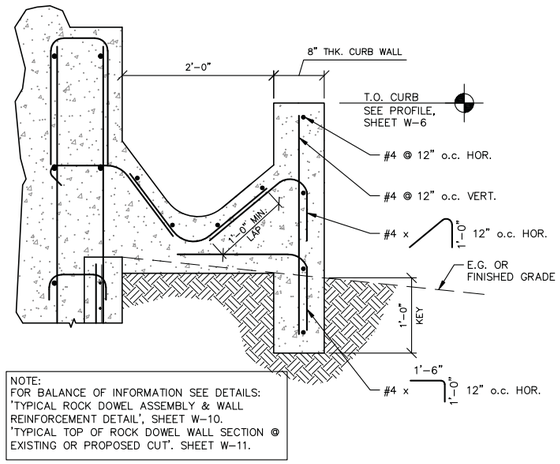
ROAD NO.	JOB NO.	SHEET NO.	TOTAL SHEETS
2001	300464	W-13	47



NOTE:
FOR BALANCE OF INFORMATION, SEE PROFILES ON SHEETS W-1 THROUGH W-6.

TYP. SWALE TRANSITION @ INLET @ NON-RETURN WALL CORNER (E)

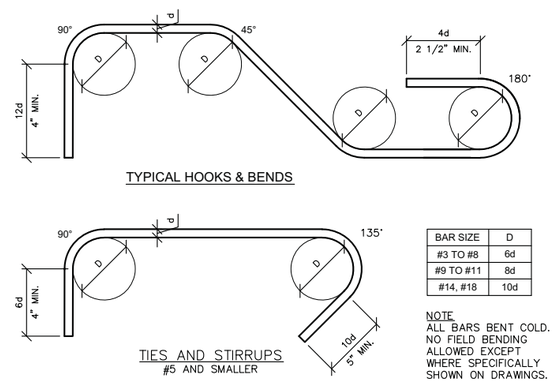
SCALE: N.T.S.



NOTE:
FOR BALANCE OF INFORMATION SEE DETAILS:
'TYPICAL ROCK DOWEL ASSEMBLY & WALL REINFORCEMENT DETAIL', SHEET W-10.
'TYPICAL TOP OF ROCK DOWEL WALL SECTION @ EXISTING OR PROPOSED CUT'. SHEET W-11.

CURB @ BACK OF SWALE (F)

SCALE: N.T.S.



BAR SIZE	D
#3 TO #8	6d
#9 TO #11	8d
#14, #18	10d

NOTE
ALL BARS BENT COLD. NO FIELD BENDING ALLOWED EXCEPT WHERE SPECIFICALLY SHOWN ON DRAWINGS.

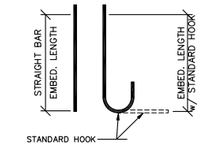
REINF. BAR BENDS (A)

SCALE: N.T.S.

REINFORCEMENT LAP SPLICE & EMBEDMENT LENGTH

f'c = 3,000 PSI, Fy = 60,000 PSI

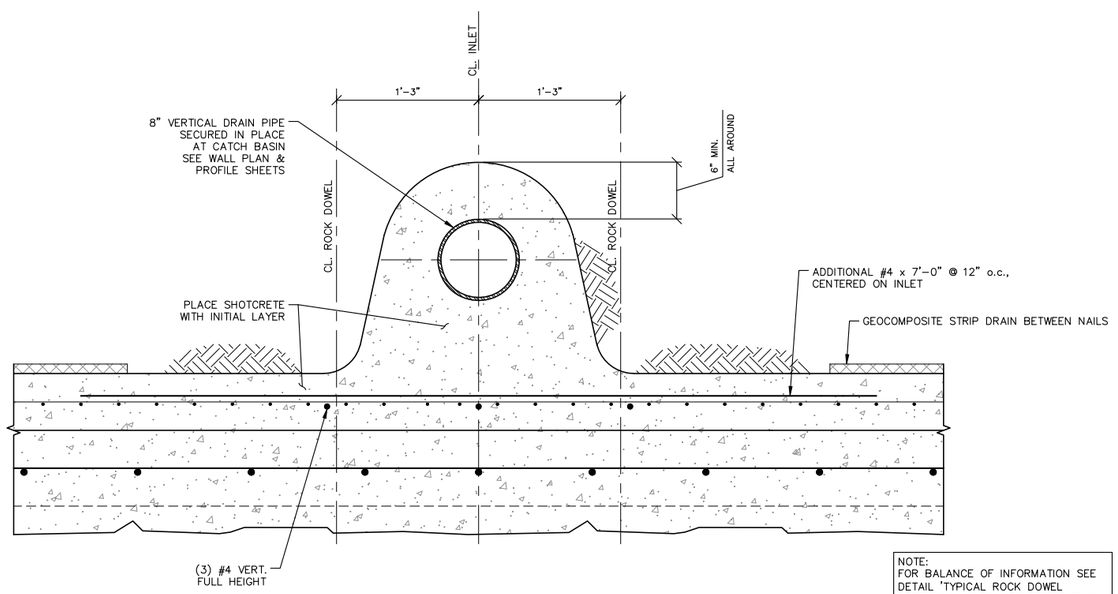
BAR SIZE	BAR SPACING	MIN. LAP LENGTH (IN.)[4]		MIN. EMBED. LENGTH (IN.)[4]		
				STRAIGHT BARS		w/ STD. HOOK
		TOP BARS	OTHER BARS	TOP BARS	OTHER BARS	
REQUIREMENTS FOR SLABS AND WALLS						
#3	6" TO 12"	21	16	16	12	6
#4		28	22	22	16	8
#5		35	27	27	21	10
#6		42	32	32	25	12
#7		50	38	38	29	14
#8		66	51	51	39	16
#9	6"	104	80	80	62	18
	7" TO 12"	83	64	64	49	
#10	6"	132	102	102	78	20
	7" TO 12"	106	81	81	63	
#11	6"	162	125	125	96	22
	7" TO 12"	130	100	100	77	
REQUIREMENTS FOR BEAMS, COLUMNS, AND FOUNDATIONS						
#3	-	SAME AS SLABS AND WALLS				8
#4	-					11
#5	-					14
#6	-					16
#7	-					19
#8	-	59	45	45	35	22
#9	-	74	57	57	44	25
#10	-	94	73	73	56	28
#11	-	116	89	89	69	31



NOTES
1. MIN. LAP ALL BARS CLASS 'B' UNLESS NOTED OTHERWISE
2. STAGGER LAP OF HORIZONTAL WALL BARS
3. TOP BARS ARE HORIZONTAL BARS w/ MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THE REINFORCEMENT. MULTIPLE HORIZONTAL BARS IN A SINGLE VERTICAL PLAN SUCH AS COLUMN TIES OR HORIZONTAL BARS IN WALLS ARE NOT TOP BARS
4. FOR BAR CLEAR SPACING LESS THAN 3 BAR DIAMETER, ADD 40%. FOR BAR CLEAR SPACING LESS THAN 2 BAR DIAMETER, ADD 100%

REBAR SPLICE & EMBEDMENT (B)

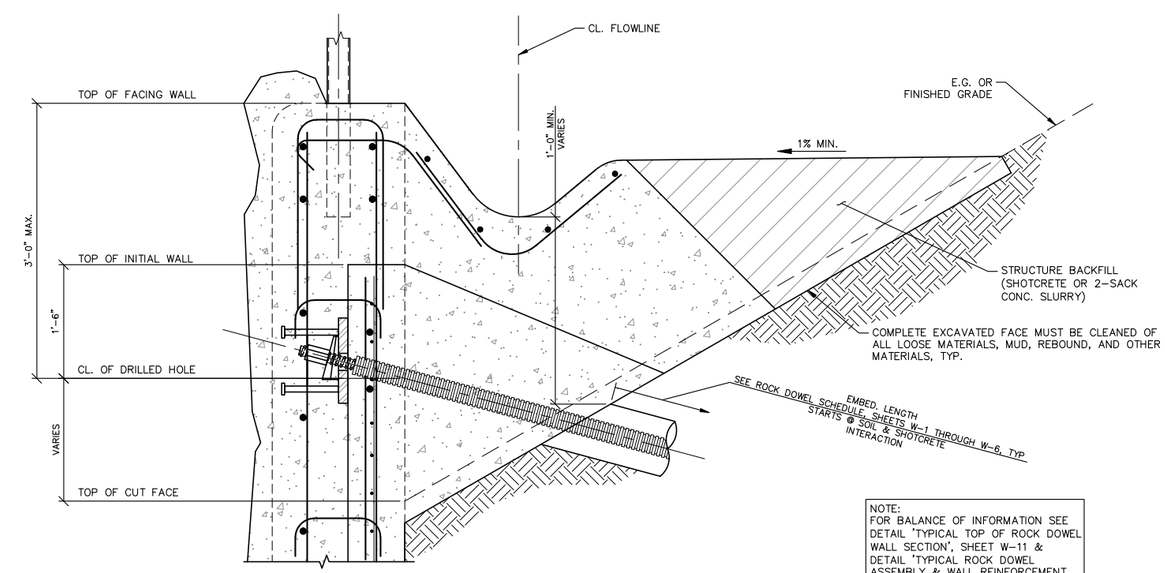
SCALE: N.T.S.



NOTE:
FOR BALANCE OF INFORMATION SEE DETAIL 'TYPICAL ROCK DOWEL ASSEMBLY & WALL REINFORCEMENT DETAIL', SHEET W-10.

CATCH BASIN DRAIN PIPE INSTALLATION DETAIL (D)

SCALE: N.T.S.



NOTE:
FOR BALANCE OF INFORMATION SEE DETAIL 'TYPICAL TOP OF ROCK DOWEL WALL SECTION', SHEET W-11 & DETAIL 'TYPICAL ROCK DOWEL ASSEMBLY & WALL REINFORCEMENT DETAIL', SHEET W-10

TYPICAL TOP OF ROCK DOWEL WALL SECTION @ PROPOSED FILL (C)

SCALE: N.T.S.

REGISTERED PROFESSIONAL ENGINEER
LEE MILES MICHETTI
No. C80574
Exp. 3/31/17
CIVIL
STATE OF CALIFORNIA

PRICE CANYON ROAD WIDENING PHASE II					
STRUCTURAL DETAILS					
PISMO BEACH, CA					
Designer	Date	Drawn By	Date	Project Manager	Date
L MICHETTI	04/15	L MICHETTI	04/15	M PIHL	04/15

0 1 2 3
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS

SIGNAL AND LIGHTING PLANS

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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO	CR			47

REGISTERED CIVIL ENGINEER 8/3/15 DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KIN Y. CHAN No. 55391 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

Y&C TRANSPORTATION CONSULTANTS, INC.
2350 RAMOS CIRCLE
SACRAMENTO, CA 95827

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PUBLIC WORKS
ROOM 206
COUNTY GOVERNMENT CENTER
SAN LUIS OBISPO, CA 93408

INDEX:

E-1 NOTES AND INDEX

E-2 & E-3 SIGNAL AND LIGHTING

E-4 SIGNAL AND LIGHTING (CONDUCTOR, POLE AND EQUIPMENT SCHEDULES)

ELECTRICAL GENERAL NOTES:

1. ALL ELECTRICAL WORK SHALL CONFORM TO THE 2010 CALTRANS STANDARD PLANS AND SPECIFICATIONS AND THE SPECIAL PROVISIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SUBSTRUCTURES. PRIOR TO COMMENCEMENT OF ANY DIGGING, POTHOLING, TRENCHING, JACKING, OR BORING, CALL UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 (811), 48 HOURS IN ADVANCE, TO HAVE EXISTING UNDERGROUND FACILITIES MARKED. PROVIDE PROTECTION OF THESE FACILITIES FROM DAMAGE PRIOR TO AND DURING DIGGING, POTHOLING, TRENCHING, JACKING, OR BORING OPERATIONS. THE EXPENSES OF REPAIR OR REPLACEMENT OF SAID FACILITIES SHALL BE BORNE BY THE CONTRACTOR. HAND DIG FOUNDATIONS UNTIL CLEAR OF UNDERGROUND FACILITIES.
3. THE CONTRACTOR SHALL VERIFY OVERHEAD AND UNDERGROUND CLEARANCE REQUIREMENTS WITH PG&E, AT&T AND OTHER AFFECTED UTILITIES PRIOR TO START OF WORK.
4. LOCATIONS OF PULL BOXES, STANDARDS, DETECTOR HANDHOLES, CONDUIT AND OTHER EQUIPMENT SHOWN ON THE PLANS ARE APPROXIMATE AND MAY BE CHANGED TO SUIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL OBTAIN APPROVAL FOR LOCATIONS PRIOR TO FINAL PLACEMENT.

PROJECT NOTES:

1. EXISTING TYPE 170 CONTROLLER ASSEMBLY IN EXISTING MODEL 332 CABINET AND BBS TO REMAIN.
2. EXISTING TYPE III SERVICE EQUIPMENT ENCLOSURE TO REMAIN.
3. EXISTING SERVICE CONDUIT AND CONDUCTORS TO REMAIN.
4. EXISTING 2"C, 2#6 (120 V SIGNAL), 2#10 (240 V LIGHTING), 2#10 (120 V IISNS), 4#10 (120 V FLASHING BEACON).
5. INSTALL 4-SECTION VEHICLE SIGNAL HEAD. SEE DETAIL A ON SHEET E-3.
6. 2"C, 2#10 (FB), 2 DLC.
7. EXISTING 1 1/2"C, 2#10 (120 V FLASHING BEACON), 2 DLC, REMOVE 2 DLC. ADD 2 DLC.
8. EXISTING 1 1/2"C, 2#10 (120 V FLASHING BEACON), 1 DLC, REMOVE 1 DLC. ADD 1 DLC.
9. EXISTING 1 1/2"C, 2#10 (120 V FLASHING BEACON) TO REMAIN.

ELECTRICAL NOTES AND INDEX

NO SCALE

E-1

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY
MENG YANG	DAN YAU

FUNCTIONAL SUPERVISOR: KIN CHAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED = | TIME PLOTTED =

DWG PATH =
DWG FILE =

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000 | EA 00-000000 | PIN 00 0000 0000

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO	CR			47

REGISTERED CIVIL ENGINEER — DATE 8/3/15

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — KIN Y. CHAN — No. 55391 — Exp. 12/31/16 — CIVIL — STATE OF CALIFORNIA

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SACRAMENTO, CA 95827

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DEPARTMENT OF PUBLIC WORKS
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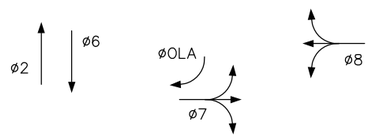
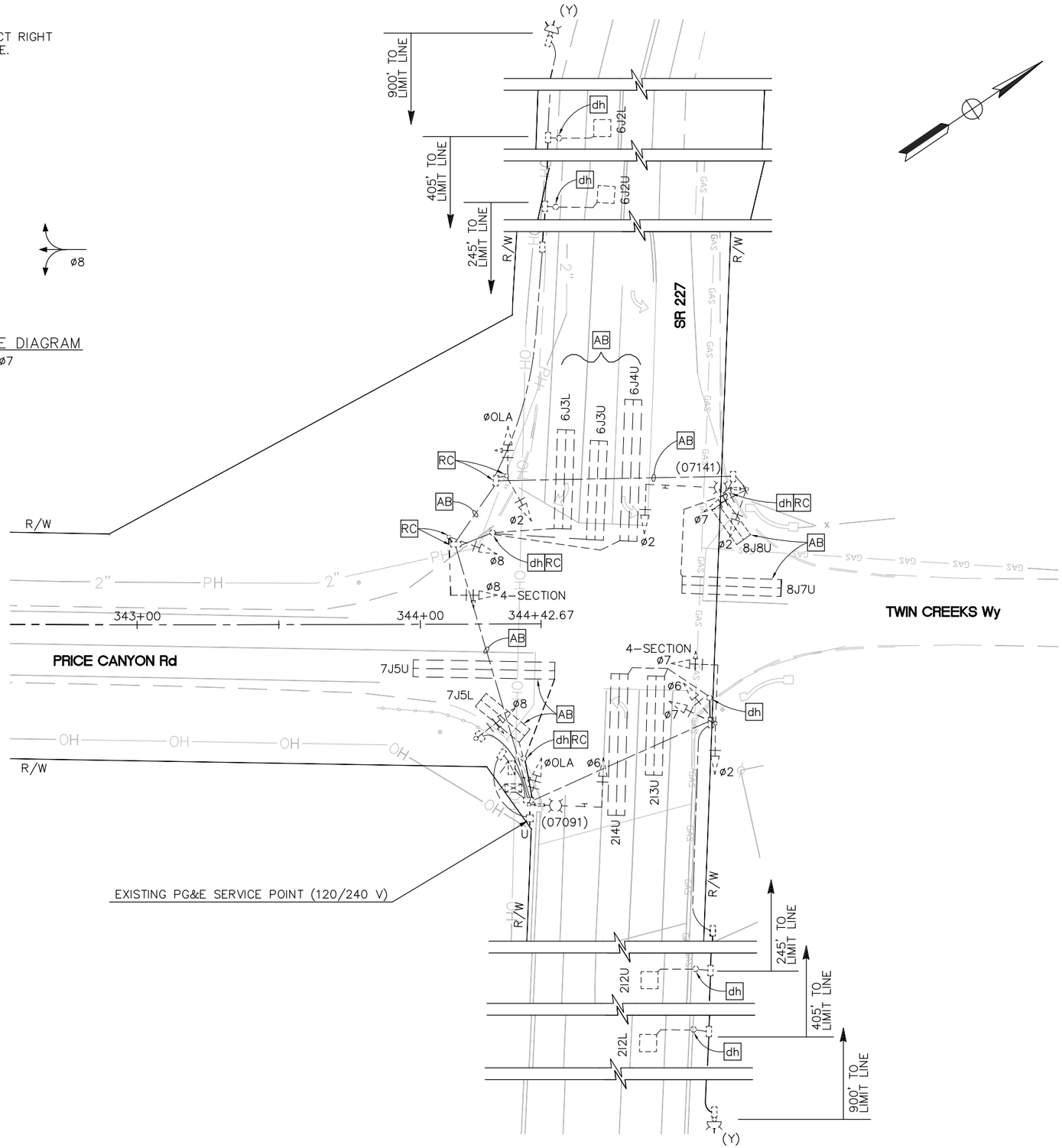
SAN LUIS OBISPO, CA 93408

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



EXISTING TRAFFIC PHASE DIAGRAM
øOLA = ø6 + ø7



FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEETS E-1 AND E-2.

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

SIGNAL AND LIGHTING (EXISTING)

SCALE 1" = 20'

E-2

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY
MENG YANG	DAN YAU

FUNCTIONAL SUPERVISOR: KIN CHAN

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION — Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED = | TIME PLOTTED =

DWG PATH =
DWG FILE =

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000 | EA 00-000000 | PIN 00 0000 0000

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO	CR			47

REGISTERED CIVIL ENGINEER — DATE 8/3/15

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — KIN Y. CHAN — No. 55391 — Exp. 12/31/16 — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

Y&C TRANSPORTATION CONSULTANTS, INC.
2350 RAMOS CIRCLE
SACRAMENTO, CA 95827

SAN LUIS OBISPO COUNTY
DEPARTMENT OF PUBLIC WORKS
ROOM 206
COUNTY GOVERNMENT CENTER
SAN LUIS OBISPO, CA 93408

NOTE:

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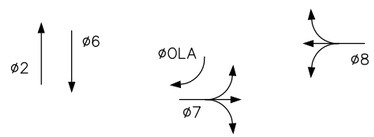
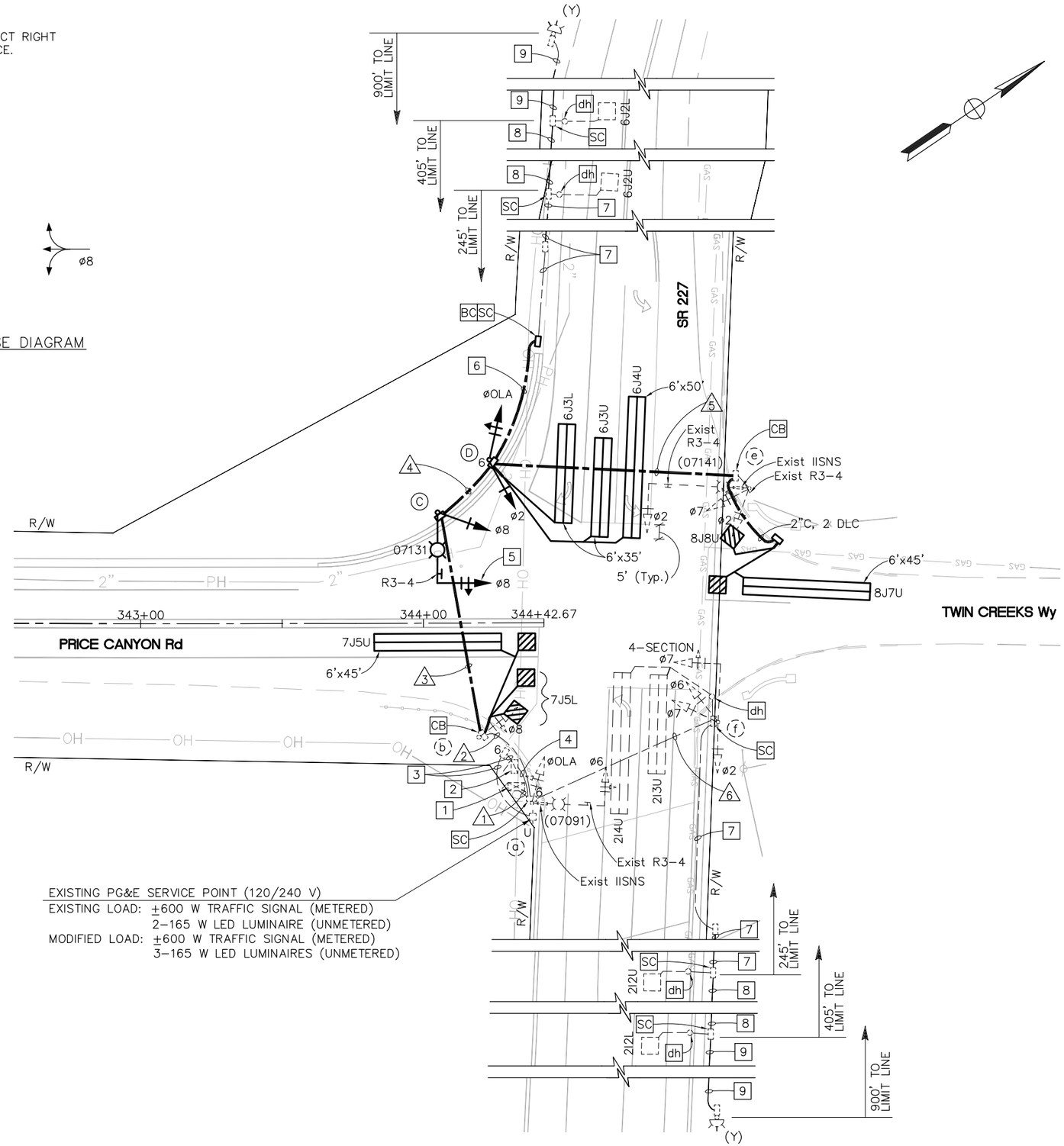
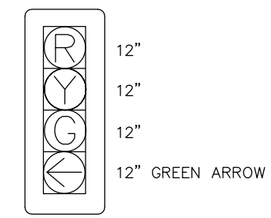
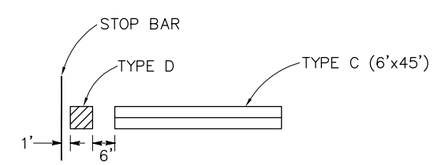


EXISTING TRAFFIC PHASE DIAGRAM
(NO CHANGE)
øOLA = ø6 + ø7





DETAIL A
4-SECTION SIGNAL HEAD
NO SCALE



DETAIL B
LOOP LAYOUT DETAIL
NO SCALE

SIGNAL AND LIGHTING

SCALE 1" = 20'

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEETS E-1 AND E-2.

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

E-3

REVISED BY	DATE REVISED
MENG YANG	DAN YAU
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	KIN CHAN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans

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DWG PATH =
DWG FILE =

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0000 | EA 00-000000 | PIN 00 0000 0000

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
05	SLO	CR			47

REGISTERED CIVIL ENGINEER 8/3/15 DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER KIN Y. CHAN No. 55391 Exp. 12/31/16 CIVIL STATE OF CALIFORNIA

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ROOM 206
COUNTY GOVERNMENT CENTER
SAN LUIS OBISPO, CA 93408

CONDUCTOR SCHEDULE

AWG OR CODE	CONDUCTOR DESIGNATION	1+	2+	3	4	5	6+
NO. 14	CONDUIT SIZE	2-3"	2"	3"	3"	3"	3"
	ø2	6	3	3	3	3	3
	ø6	3					3
	ø7	6	3	3	3	3	3
	ø8	3	3	3			
	øOLA	5	5	5	5		
	SPARES	6	3	3	3	3	3
	TOTAL NO. 14	29	17	17	14	9	12
NO. 10	FLASHING BEACON		2	2	2		2
	LUMINARE		2	2	2	2	
	IISNS		2	2	2	2	
	SIGNAL COMMON	2	1	1	1	1	1
	TOTAL NO. 10	2	7	7	7	5	3
NO. 6	NO. 6 SIGNAL SERVICE	2					
DLC	DETECTOR LEAD-IN CABLE (DLC)						
	ø2	4					4
	ø6	5	5	5	5		
	ø7	2	2				
	ø8	2	2	2	2	2	
	TOTAL DLC	13	9	7	7	2	4
NEW/EXISTING CONDUIT (N/EX)		EX	EX	N	N	N	EX
% FILL		12	36	15	14	7	9

+ = REMOVE ALL CONDUCTORS/CABLES. INSTALL NEW CONDUCTORS/CABLES IN EXISTING CONDUIT.

POLE AND EQUIPMENT SCHEDULE

No.	STANDARD TYPE	STANDARD SIG. MA (FT)	STANDARD LUM. MA (FT)	VEHICLE SIGNAL MOUNTING MAST ARM	VEHICLE SIGNAL MOUNTING POLE	LED LUMINAIRE (MAX WATTS)	REMARKS *
a	EXISTING 19-4-70	25'	12'	MAT	SV-1-T	ROADWAY 1 165	ALL EXISTING EQUIPMENT TO REMAIN
b	EXISTING 1-A				TV-1-T		ALL EXISTING EQUIPMENT TO REMAIN
C	19-4-100	25'	15'	MAS-4B	SV-1-T	ROADWAY 1 165	INSTALL R3-4 SIGN ON SMA
D	1-A				TV-2-T		
e	EXISTING 24-4-70	35'	12'	MAT	SV-2-TB	ROADWAY 1 165	ALL EXISTING EQUIPMENT TO REMAIN
f	EXISTING 16-1-70	20'		MAS-4B	SV-3-TB		ALL EXISTING EQUIPMENT TO REMAIN

* OTHER REQUIREMENTS ARE COVERED BY NOTES, LEGEND, SPECIAL PROVISIONS AND STANDARD SPECIFICATIONS. FOR TYPE OF STANDARD AND VEHICLE SIGNAL MOUNTING, SEE STANDARD PLANS.

SIGNAL AND LIGHTING
(CONDUCTOR, POLE AND EQUIPMENT SCHEDULE)
NO SCALE

E-4

REVISED BY	DATE REVISED
MENG YANG	DAN YAU
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	KIN CHAN

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