



COUNTY OF SAN JOAQUIN

DEPARTMENT OF PUBLIC WORKS
P.O. BOX 1810-1810 E. HAZELTON AVENUE
STOCKTON, CALIFORNIA 95201
(209) 468-3000
FAX # (209) 468-9324

Permit No: **PS-1503565**
Date Issued: 12/14/2015
Start Date: 01/15/2016
Exp. Date: 03/15/2016
Project No: PWP7110005
Quad: SW

ENCROACHMENT PERMIT

To: CITY OF TRACY
325 CIVIC CENTER PLAZA
TRACY, CA 95376

Encroachment Type:

Bore (up to 12 inch Dia)			
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Location:

PATTERSON PASS@HWY 580

In compliance with your request of **12/14/2015**, permission is hereby granted to do work in County right-of-way as shown on attached application and subject to all the terms, conditions and restrictions written below or printed as general or special provisions on any part of this form. See reverse side and attached sheet, if any.

Trench excavations for service connections will not be permitted within ten feet (10') of pavement centerline unless otherwise approved by the Director. Surface of trench patches shall match in kind and be smooth and even with that of abutting surface. Special attention shall be given to depth of utilities through roadside area in anticipation of future drainage facilities, road profile and/or frontage development. All underground utility facilities are to be established and accurately dimensioned on sketches from surveyed centerline of road right of way, or from right of way (border) lines.

Permittee shall call the Department of Public Works, Field Engineering Division (Permit Inspections) at (209)953-7421 at least forty-eight hours prior to beginning any work within the County right of way. All work performed under this permit shall conform to the rules and regulations pertaining to safety established by the California Division of Industrial Safety and Cal-OSHA.

The jobsite shall be kept in a safe condition at all times by the daily removal of any excess dirt or debris which might be a hazard to either pedestrian or automobile traffic. All necessary traffic convenience and warning devices and personnel shall be provided, placed and maintained by and at the sole expense of the Permittee in accordance with the latest edition of the CALTRANS Manual of Traffic Control.

After completion of the work permitted herein, all debris, lumber, barricades, or any excess material shall be removed and the jobsite left in a neat workmanlike manner. Immediately following completion of construction permitted herein, Permittee shall fill out and mail notice of completion (see attached post card) provided by Grantor.

Special Comments:

Traffic Control Per MUTCD**SEE ATTACHED SPECIAL CONDITIONS**

FORMS: SS/WW, R-29

Est. Permit Fee: \$428.00

KRIS BALAJI, Director
Department of Public Works

WHITE -Permittee
GOLDENROD -PWD Central File
YELLOW -Field Inspection
PINK -Permit Section

By: 
Permit Section

ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

1. This permit is issued under and subject to all laws and ordinances of agencies governing the encroachment herein permitted. See the following references:

STREETS AND HIGHWAYS CODE

1. Division 1, Chapter 3
2. Division 2, Chapter 2, Section 942
3. Division 2, Chapter 4, Section 1126
4. Division 2, Chapter 5.5 and Chapter 6

SAN JOAQUIN COUNTY ORDINANCES NUMBERED: 324, 441, 648, 662, 672, 695, 700, 860, 892, 3359, and 3675.

2. It is understood and agreed by the Permittee that the performance of any work under this permit shall constitute an acceptance of all the provisions contained herein and failure on the Permittee's part to comply with any provision will be cause for revocation of this permit. Except as otherwise provided for public agencies and franchise holders, this permit is revocable on five days notice.
3. All work shall be done subject to the supervision of and the satisfaction of the grantor. The Permittee shall at all times during the progress of the work keep the County Highway in as neat and clean condition as is possible and upon completion of the work authorized herein, shall leave the County Highway in a thoroughly neat, clean and usable condition.
4. The Permittee also agrees by the acceptance of this permit to properly maintain any encroachment structure placed by the Permittee on any part of the County Highway and to immediately repair any damage to any portion of the highway, which occurs as a result of the maintenance of the said encroachment structure, until such time as the Permittee may be relieved of the responsibility for such maintenance by the County of San Joaquin.
5. The Permittee also agrees by the acceptance of this permit to make, at its own expense, such repairs as may be deemed necessary by the County Department of Public Works.
6. It is further agreed by the Permittee that whenever construction, reconstruction or maintenance work upon the highway is necessary, the installation provided for herein shall, upon request of the County Department of Public Works, be immediately moved or removed by and at the sole expense of the Permittee.
7. No material used for fill or backfill in the construction of the encroachment shall be borrowed or taken from within the County right of way.
8. All work shall be planned and carried out with as little inconvenience as possible to the traveling public. No material shall be stacked within eight feet (8') of the edge of the pavement or traveled way unless otherwise provided herein. Adequate provision shall be made for the protection of the traveling public. Traffic control standards shall be utilized including barricades; approved signs and lights; and flagmen, as required by the particular work in progress.
9. The Permittee, by the acceptance of this permit, shall assume full responsibility for all liability for personal injury or damage to property which may arise out of the work herein permitted or which may arise out of the failure of the part of the Permittee to properly perform the work provided under this permit. In the event any claim of such liability is made against the County of San Joaquin or any department, official or employee thereof, the Permittee shall defend, indemnify, and hold each of them harmless for such claim.
10. All backfill material is to be moistened as necessary and thoroughly compacted with mechanical means. If required by the County Director of Public Works, such backfill shall consist of gravel or crushed rock. The Permittee shall maintain the surface over structures placed hereunder as may be necessary to insure the return of the roadway to a completely stable condition and until relieved of such responsibility by the County Department of Public Works. Wherever a gravel, crushed rock or asphalt surface is removed or damaged in the course of work related to the permitted encroachment, such material shall either be separately stored and replaced in the roadway as nearly as possible in its original state or shall be replaced in kind, and the roadway shall be left in at least as good a condition as it was before the commencement of operations of placing the encroachment structure.
11. Whenever it becomes necessary to secure permission from abutting property owners for the proposed work, such authority must be secured by the Permittee prior to starting work.
12. The current and future safety and convenience of the traveling public shall be given every consideration in the location and methods of construction utilized.
13. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)
14. Prior to any excavation, the Permittee shall notify USA North (Underground Service Alert of Northern California and Nevada) at 811 or 800-227-2600 forty-eight (48) hours in advance.

RECEIVED
SAN JOAQUIN COUNTY
APPLICATION FOR ENCROACHMENT PERMIT

2015 DEC -1 AM 11:50

PLEASE PRINT:

DEPT. OF PUBLIC WORKS

Date 11/19/15

To: San Joaquin County
Department of Public Works

Zabih Zaca

(Applicant Name)

325 Civic Center Plaza

(Mailing Address)

Tracy, Ca 95376

(City, State, Zip Code)

209-831-6452

(Area Code - Telephone Number)

OFFICE USE ONLY

JOB # 110005 REF #
APN CR #
EXP. DATE 3-15-16
VALID 1-15-16 TO 3-15-16 DRIVEWAYS:
STREET Patterson Pass *
AREA Tracy QUAD SW *
TYPE Flashing Beacon on (E) side *
FORMS SSWW
NOTES

Sketch (Detailed plans may be submitted)

Detailed Plans Submitted

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the east & west side of Patterson Pass Road & Mtn House Pkwy approximately 500 feet/mile NB&SB approaches of I-580 EB & I-580 WB Ramp intersections respectively, by performing the following work (description of work):
Install solar-powered flashing beacon and use of traffic control signs and devices during construction of signals and intersection improvements.

Work will commence on or about January 15, 2016 for approximately 50 days.

I, the undersigned, certify that I am the owner of the respective property, or am qualified to represent the owner and agree to do the work described above in accordance with the rules and regulations of San Joaquin County and subject to inspection and approval.

Signature of Applicant - Title

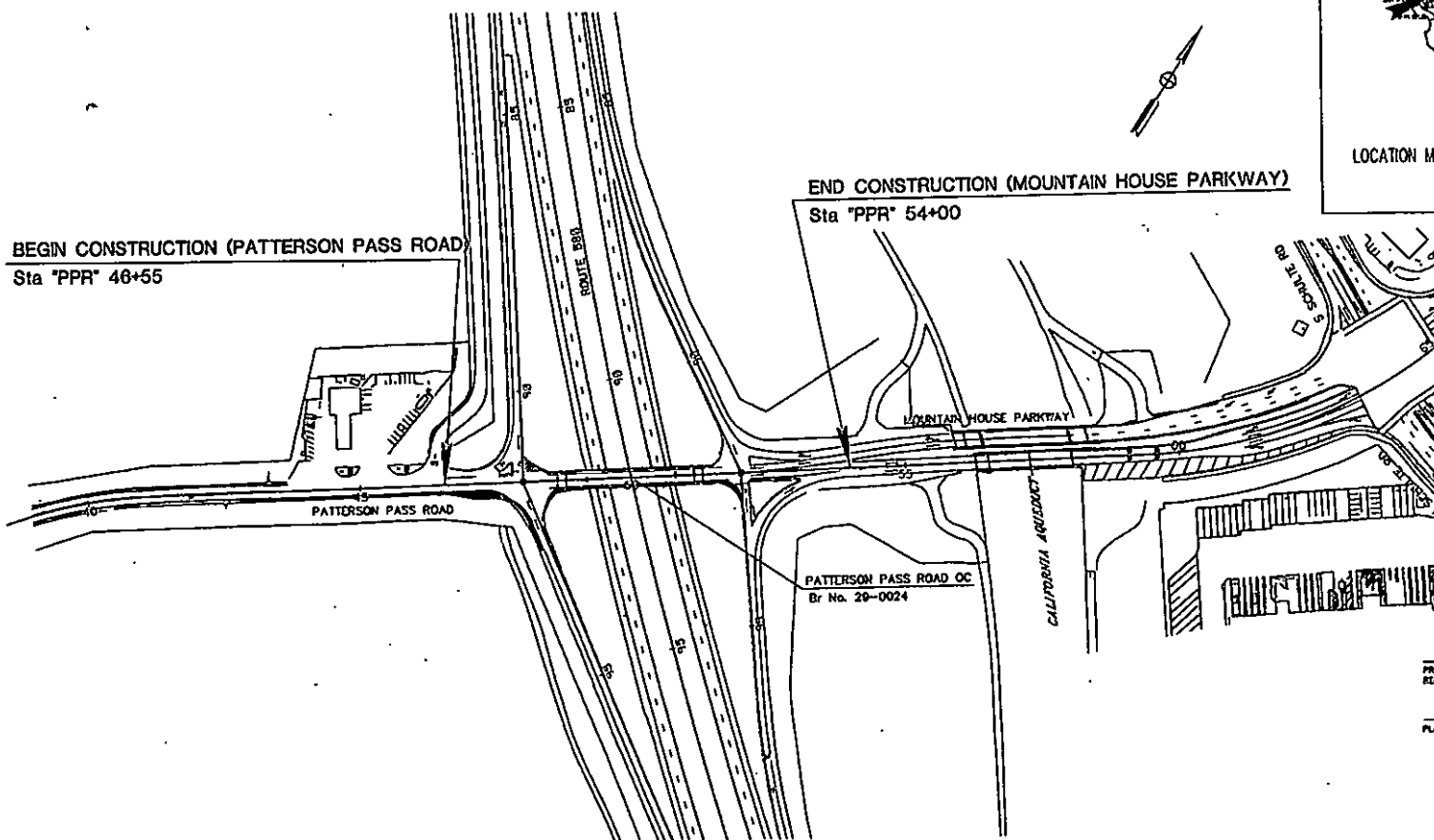
Date

INDEX OF PLANS	
Sheet No.	Description
1	Title and Location Map
2	Typical Cross Sections
3-4	Layout
5-6	Construction Details
7	Erosion Control Plan
8-9	Pavement Delineation
10	Summary of Quantities
11-15	Signage and Lighting

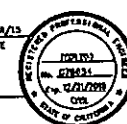
PROJECT PLANS FOR CONSTRUCTION ON STATE HIGHWAY IN SAN JOAQUIN COUNTY IN TRACY AT I-580/MOUNTAIN HOUSE PARKWAY INTERCHANGE INTERIM SIGNALIZATION PROJECT

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

DIST	COUNTY	ROUTE	PORT MILE TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	580	13.5	1	14



PROJECT ENGINEER
REGISTERED CIVIL ENGINEER
DATE 10/25/13
PLANS APPROVAL DATE



KILLAM & MENN
CONSULTING ENGINEERS INC.
1038 LITCH AVE., SUITE 100
SAN JOSE, CA 95128
CITY OF TRACY
323 CHIC CENTER PLAZA
TRACY, CA 95376
CONTRACT No.
PROJECT ID

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

BORDER LAST REVISED 10/25/2013

RELATIVE BORDER SCALE
13 IN. BY 13 IN.

USERNAME -> USER
BOM FILE -> PROJECT

USRT 1455

PROJECT NUMBER & PHASE 10000000671

DATE PLOTTED -> STATE
TIME PLOTTED -> 10:00:00

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. FOR LOCATION OF SAWCUT/CONFORM LINES, SEE LAYOUTS.
3. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT DISTRICT OFFICE.

ABBREVIATIONS:

S/C SAWCUT AND CONFORM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	580	13.5	2	14

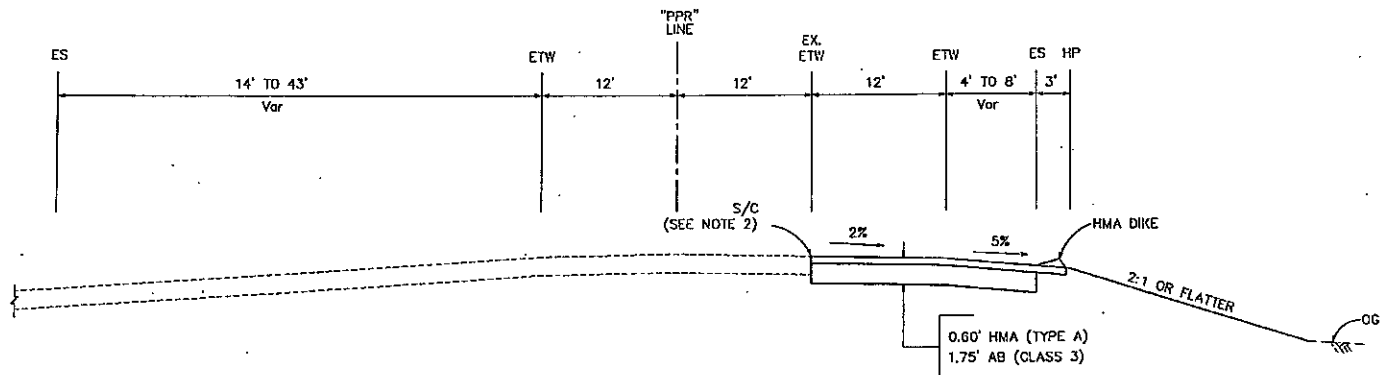
REGISTERED CIVIL ENGINEER DATE 10-28-15

PLANS APPROVAL DATE

STATE OF CALIFORNIA

RAMAPPAN & MEYER CONSULTING ENGINEERS INC. 1038 LEIGH AVE. SUITE 100 SAN JOSE, CA 95128

CITY OF TRACY 325 CIVIC CENTER PLAZA TRACY, CA 95376



PATTERSON PASS ROAD
"PPR" 46+55.01 TO "MH-4" 92+50.00

TYPICAL CROSS SECTIONS
NO SCALE

X-1

BORDER LAST REVISED 7/2/2010

USERNAME => USER
DGS FILE => \$REQREQST

RELATIVE BORDER SCALE
IS IN INCHES

0 1 2 3

UNIT 1455

PROJECT NUMBER & PHASE

10000000671

WORKSHEET DATE PLOTTED 03/04/2016
00-00-00 THE PLOTTED 03/04/2016

NOTES:

- 1) FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- 2) FOR DETAILS OF STRUCTURAL SECTIONS, REFER TO TYPICAL SECTIONS.

ABBREVIATIONS:

S/C SAWCUT AND CONFORM

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	580	13.5	3	15

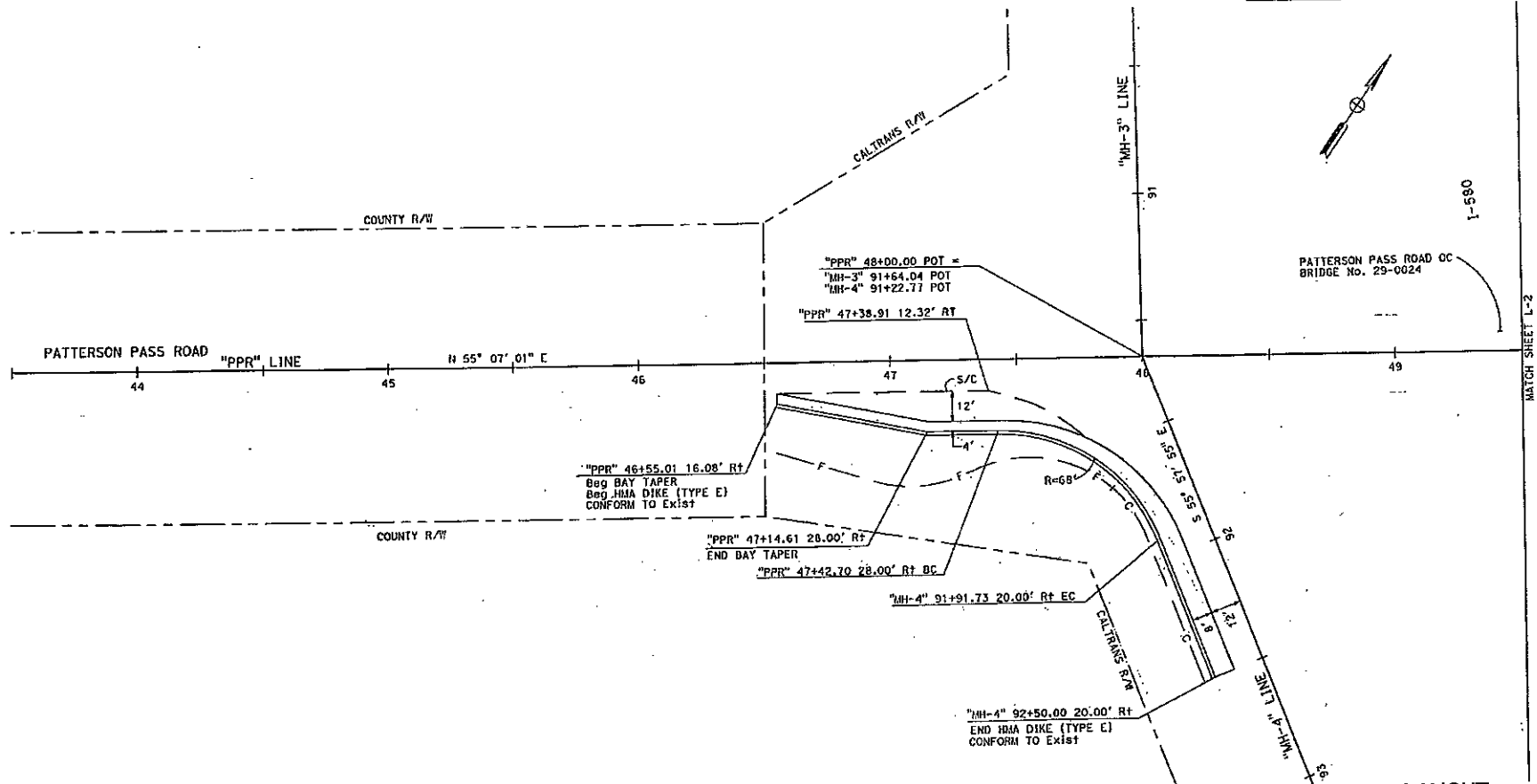
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE



RANOPAY & HEYER
CONSULTING ENGINEERS INC.
1030 LEIGH AVE, SUITE 100
SAN JOSE, CA 95128

CITY OF TRACY
325 CIVIC CENTER PLAZA
TRACY, CA 95376



LAYOUT
SCALE 1"=20'

L-1

BORDER LAST REVISED 7/2/2010

USERNAME -> USER
DGN FILE -> REQUEST

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 1455

PROJECT NUMBER & PHASE

10000005671

LAST REVISION DATE PLOTTED -> DATE
00-00-00 THE PLOTTED -> TIME

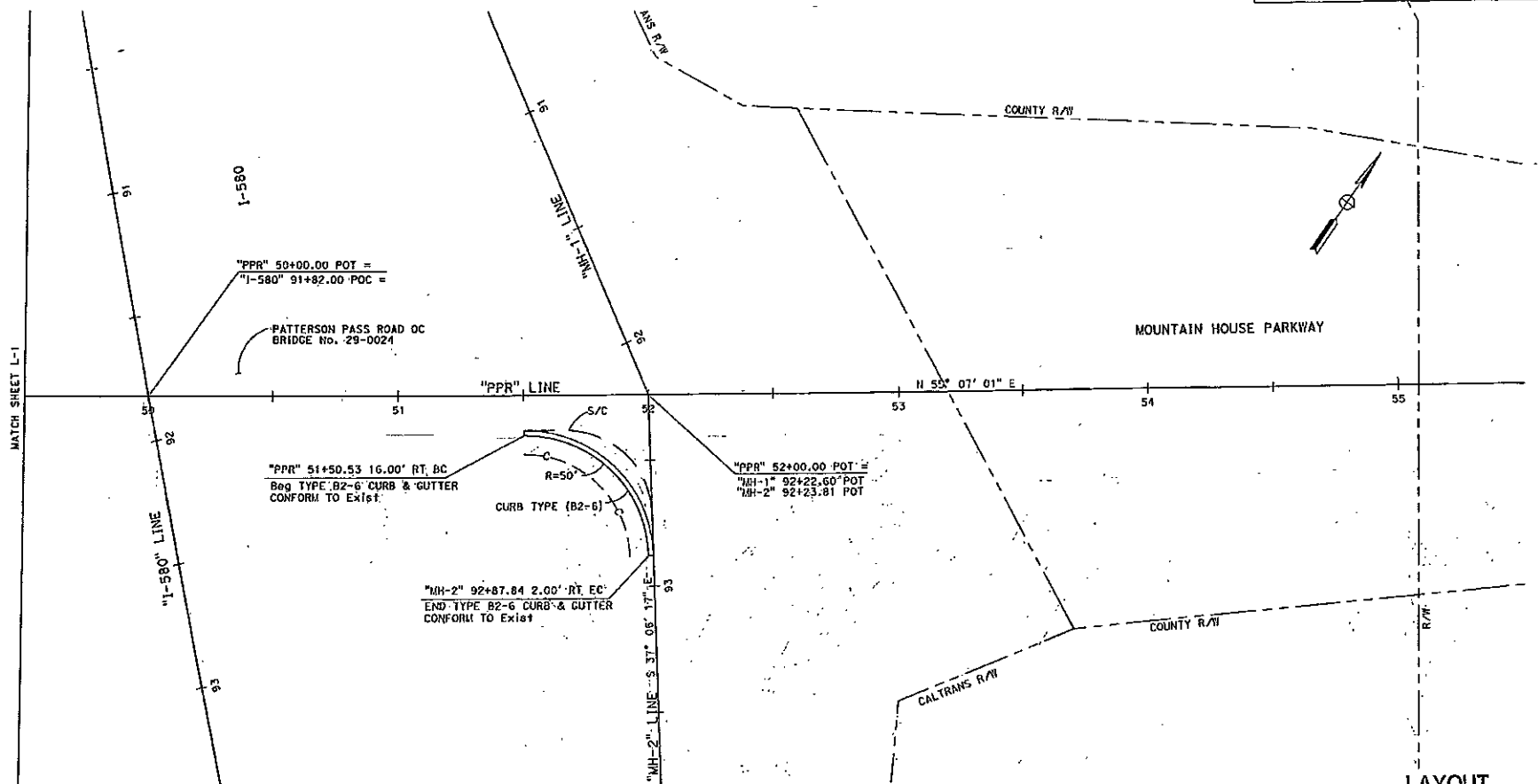
NOTE:

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	580	13.5	4	15

REGISTERED CIVIL ENGINEER	DATE
PLANS APPROVAL DATE	

RAJAPPA & MEYER CONSULTING ENGINEERS INC. 1030 LEIGH AVE, SUITE 100 SAN JOSE, CA 95128	CITY OF TRACY 325 CIVIC CENTER PLAZA TRACY, CA 95376
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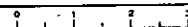
LAYOUT
SCALE 1"=20'

L-2

BORDER LAST REVISED 7/2/2010

USERNAME -> USER
CON FILE -> REQUEST

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 1455

PROJECT NUMBER & PHASE

10000000671

100-00-00 THE PLATES -> STATE
100-00-00 THE PLATES -> STATE

NOTES:

- 1) FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- 2) PAVEMENT ELEVATIONS ARE AT 50 FEET INTERVAL ON STATION UNLESS OTHERWISE POSTED.

CURVE DATA						
No.	RADIUS	DELTA	TANGENT	LENGTH	N	E
①	68.00'	68°91'78"	46.66'	81.79'	2086039.382	6262053.517
②	75.00'	68°91'78"	51.47'	90.21'	2086046.684	6262055.998

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	580	13.5	5	14

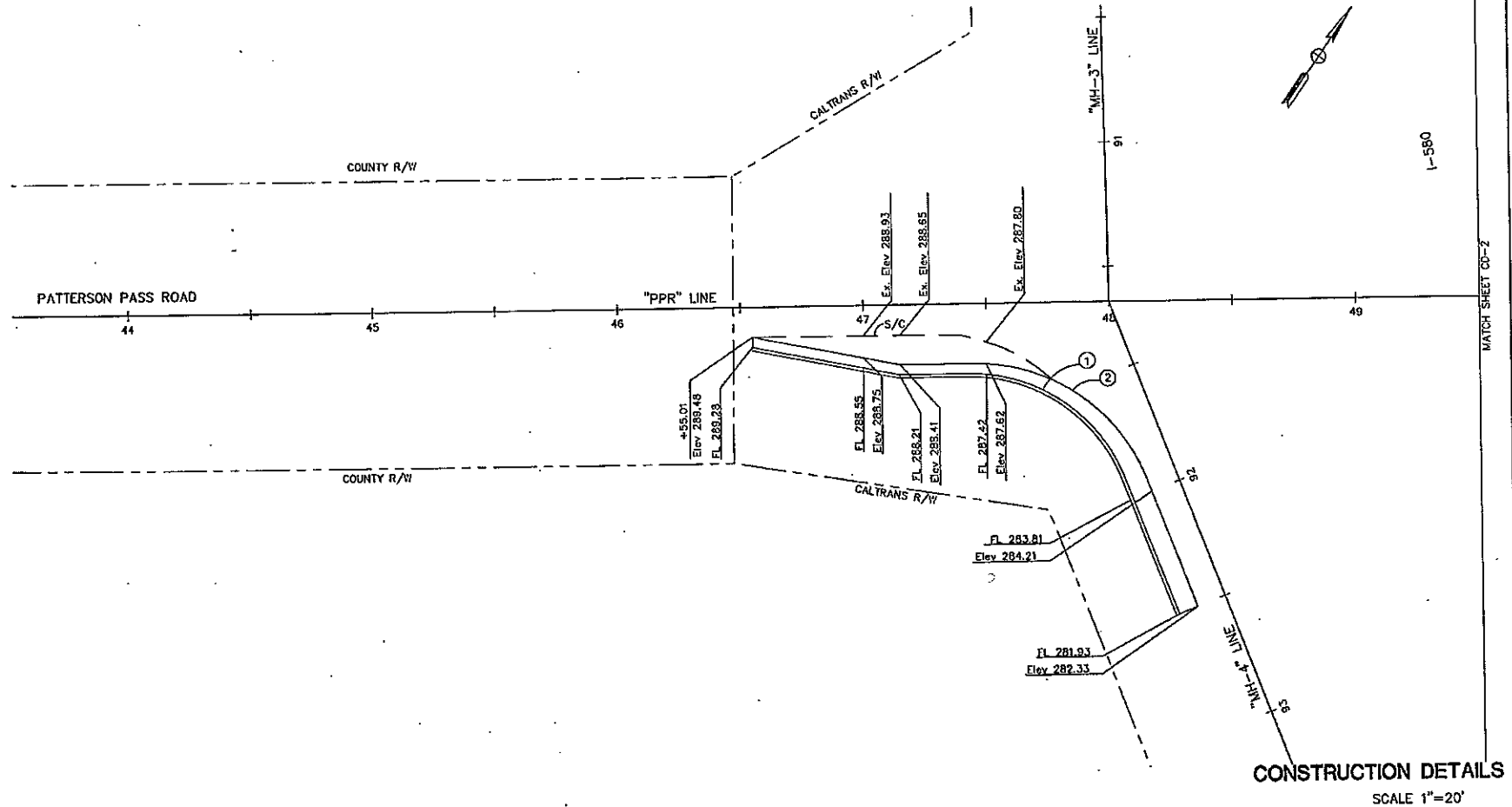
REGISTERED CIVIL ENGINEER DATE 10-28-15

PLATS APPROVAL DATE

SEAL: TSN JMW, No. C78854, 01/20/05, CIVIL, STATE OF CALIFORNIA

RAMPAN & UYER CONSULTING ENGINEERS INC. 1008 LEIGH AVE. SUITE 100 SAN JOSE, CA 95128

CITY OF TRACY 325 CIVIC CENTER PLAZA TRACY, CA 95376



MATCH SHEET CD-2

CONSTRUCTION DETAILS
SCALE 1"=20'
CD-1

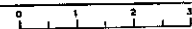
DATE PLOTTED → DATE
100-00-00 THE PLOTTED → TIME

CONSULTANT FUNCTIONAL SUPERVISOR	DESIGNED BY	CHECKED BY	DEEPA BHASKAR	REVIEWED BY
MARTHA DADALA			CHI WA NG	DATE REVISED

BORDER LAST REVISED 7/2/2010

USER NAME → USER
OON FILE → REQUEST

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 1455


PROJECT NUMBER & PHASE

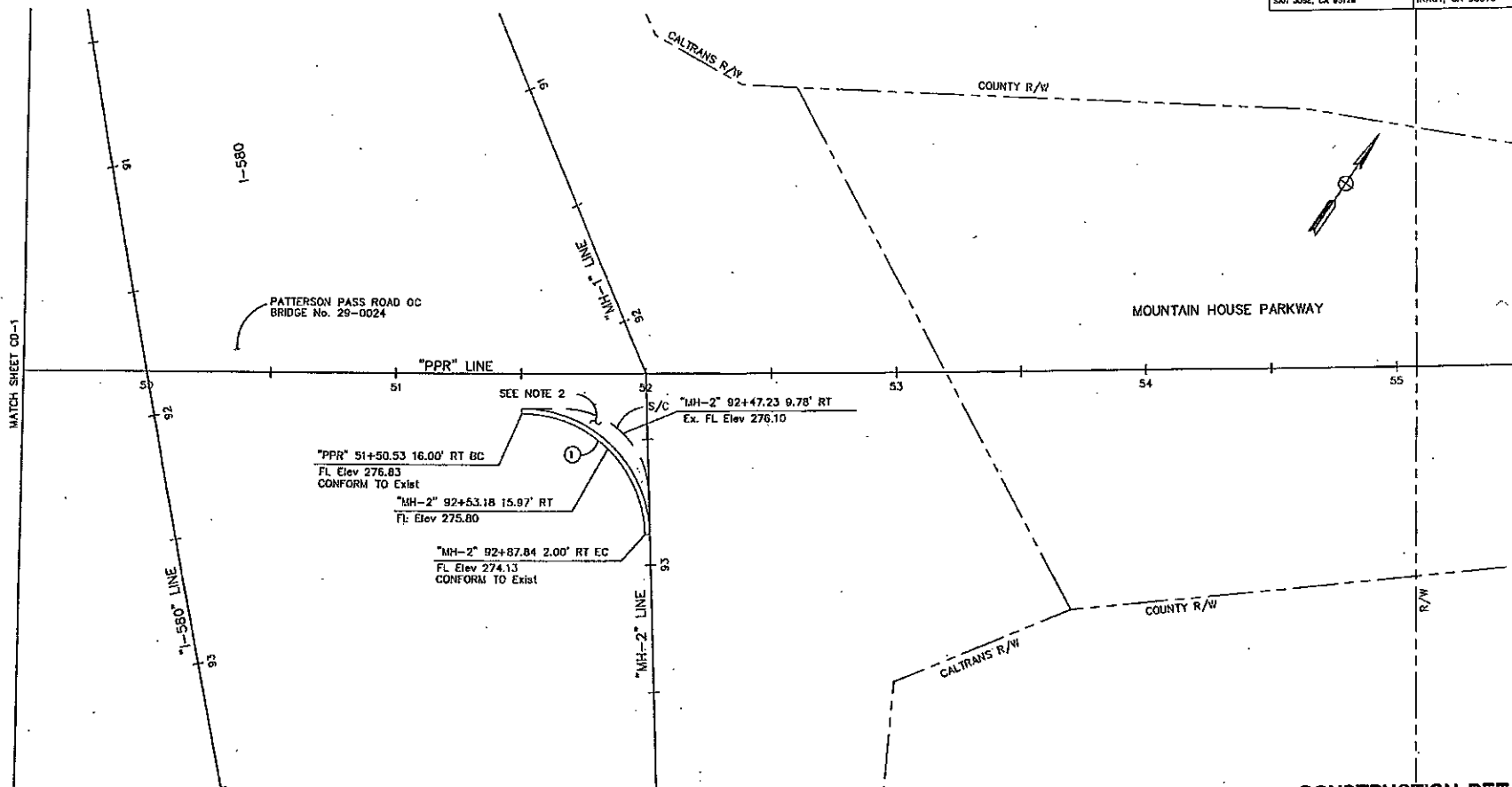
10000000671

NOTE:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. MATCH EXISTING CROSS SLOPE.

CURVE DATA						
No.	RADIUS	DELTA	TANGENT	LENGTH	N	E
①	50.00'	87°46'42"	48.10'	76.60'	2086203.285	6262382.391

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	580	13.5	6	14
REGISTERED CIVIL ENGINEER			DATE 10-28-15		
PLANS APPROVAL DATE					
RAJUPATHI & MEYER CONSULTING ENGINEERS INC. 1035 IDEAL AVE, SUITE 100 SAN JOSE, CA 95128			CITY OF TRACY 325 CIVIC CENTER PLAZA TRACY, CA 95376		



CONSTRUCTION DETAILS

SCALE 1"=20'

CD-2

BORDER LAST REVISED 7/2/2010

USERNAME -> USER
DGN FILE -> REQUEST

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 1455

PROJECT NUMBER & PHASE

10000000671

DATE PLOTTED -> DATE
100-00-00 TIME PLOTTED -> TIME

NOTES:

See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.

California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

DIST.	COUNTY	ROUTE	PROJECT TOTAL PROJECT	SHEET TOTAL

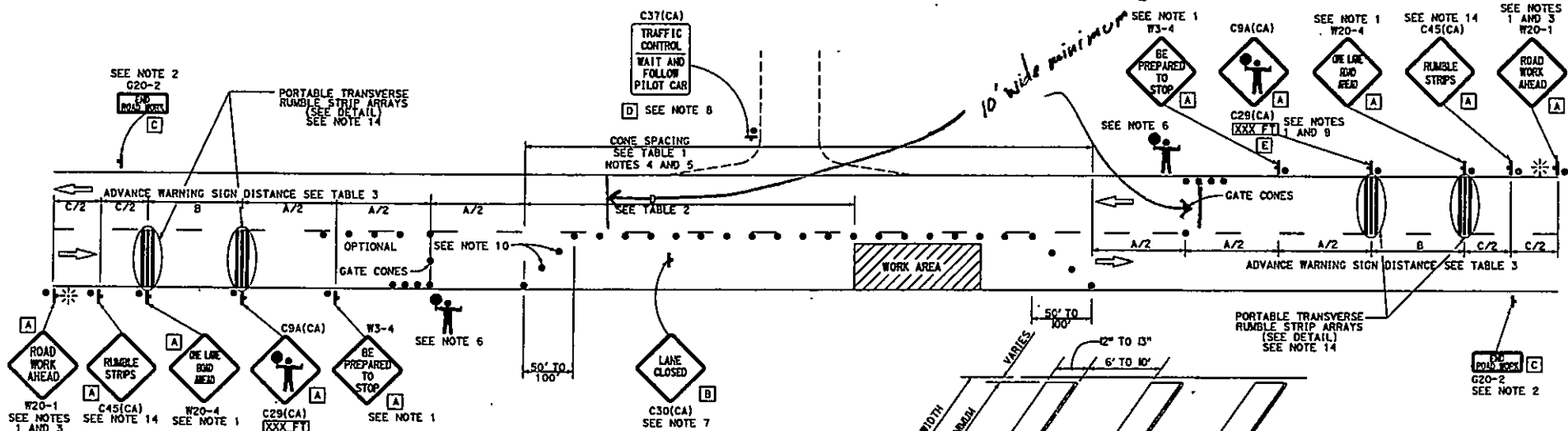
Devin Singh
REGISTERED CIVIL ENGINEER

October 30, 2015
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED _____

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



NOTES:

- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT" sign, use a W20-4 sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30(CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37(CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign with black legend on white background at all intersections, driveways and alleys without a flagger within traffic control area. Signs shall be clean and visible at all times. Where traffic can not be effectively self-regulated, at least one flagger shall be used at each intersection within traffic control area.
- An optional C29(CA) sign may be placed below the C9A(CA) sign.
- Either traffic cones or barricades shall be placed on the taper. Barricades shall be Type I, II, or III.
- The color of the portable transverse rumble strips shall be black or orange. Use 2 arrays, each array shall consist of 3 rumble strips.
- Portable transverse rumble strips shall not be placed on sharp horizontal or vertical curves nor shall they be placed through pedestrian crossings.
- If the portable transverse rumble strips become out of alignment (skewed) by more than 6 inches, measured from one end to the other, they shall be readjusted to bring the placement back to the original location.
- Portable transverse rumble strips are not required if any one of the following conditions is satisfied:
 - Work duration occupies a location for four hours or less
 - Posted speed limit is below 45 MPH
 - Work is of emergency nature
 - Work zone is in snow or icy weather conditions

PORTABLE TRANSVERSE RUMBLE STRIP ARRAY DETAIL

SIGN PANEL SIZE (Min)

- | | |
|---|-----------|
| A | 48" x 48" |
| B | 30" x 30" |
| C | 36" x 18" |
| D | 36" x 42" |
| E | 20" x 7" |

LEGEND

- TRAFFIC CONE
- TEMPORARY TRAFFIC CONTROL SIGN
- PORTABLE FLASHING BEACON
- FLAGGER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE



RSP T13 DATED OCTOBER 30, 2015 SUPERSEDES
RSP T13 DATED OCTOBER 17, 2014, RSP T13 DATED JULY 18, 2014
AND RSP T13 DATED APRIL 19, 2013 AND STANDARD PLAN T13 DATED
MAY 20, 2011 - PAGE 241 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T13

NOTES:


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

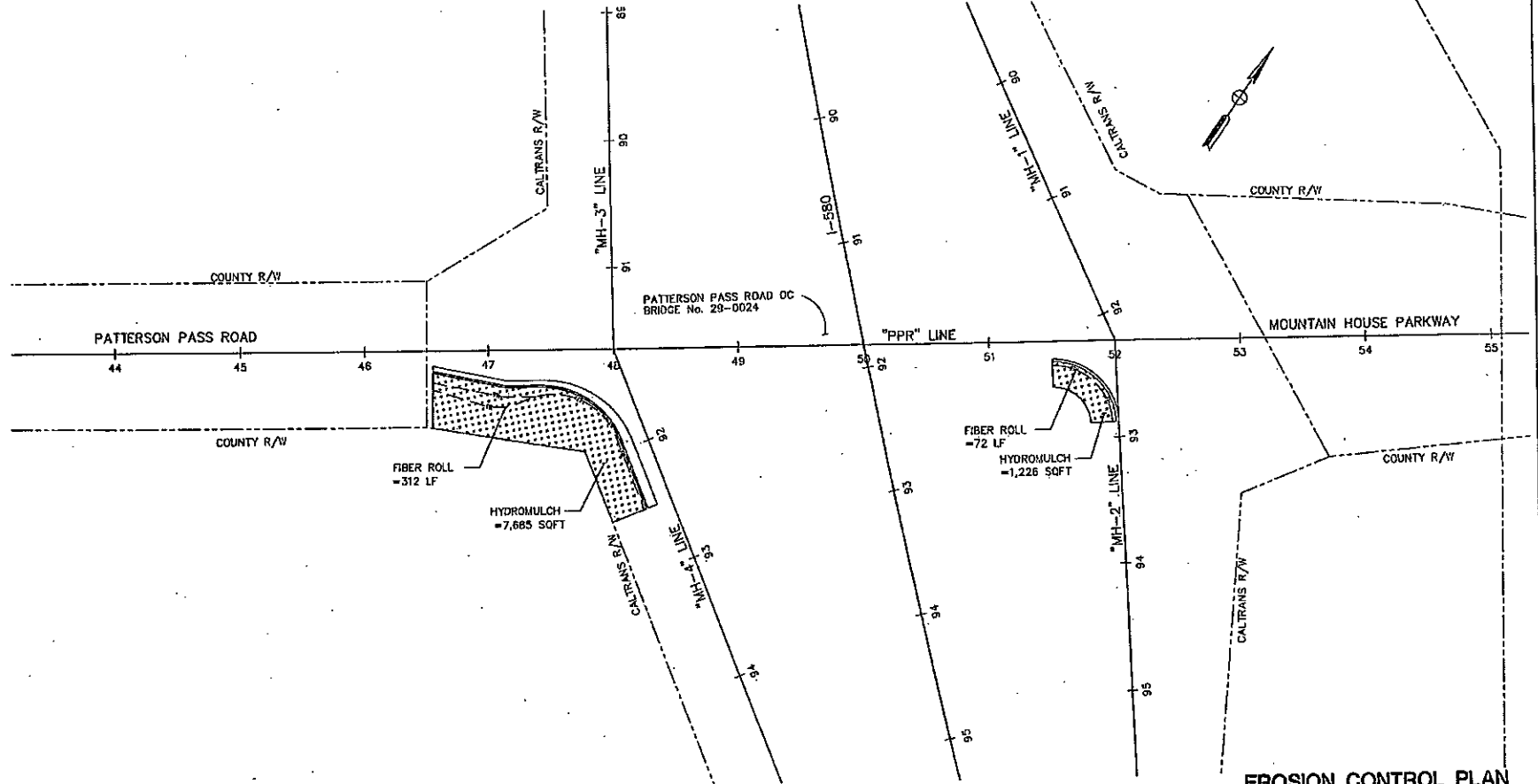
LEGEND

 HYDROMULCH
 FIBER ROLL

EROSION CONTROL QUANTITIES

LOCATION (SHEET)	DESCRIPTION	HYDROMULCH	FIBER ROLLS
		(SQFT)	(LF)
EC-1	HYDROMULCH	8,911	
	FIBER ROLLS		384
TOTAL		8,911	384

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	580	13.5	7	14
REGISTERED CIVIL ENGINEER			DATE	10-28-15	
PLANS APPROVAL DATE					
RAJAPPAH & MEYER CONSULTING ENGINEERS INC. 3038 LEIGH AVE. SUITE 100 SAN JOSE, CA 95128			CITY OF TRACY 325 CIVIC CENTER PLAZA TRACY, CA 95376		



EROSION CONTROL PLAN

SCALE 1"=40'

EC-1

APPROVED FOR EROSION CONTROL WORK ONLY

BORDER LAST REVISED 7/2/2010

USER HAVE -> USER
DOX FILE -> \$REQUEST

RELATIVE BORDER SCALE
IS IN INCHES



UNIT 1455

PROJECT NUMBER & PHASE

10000000871

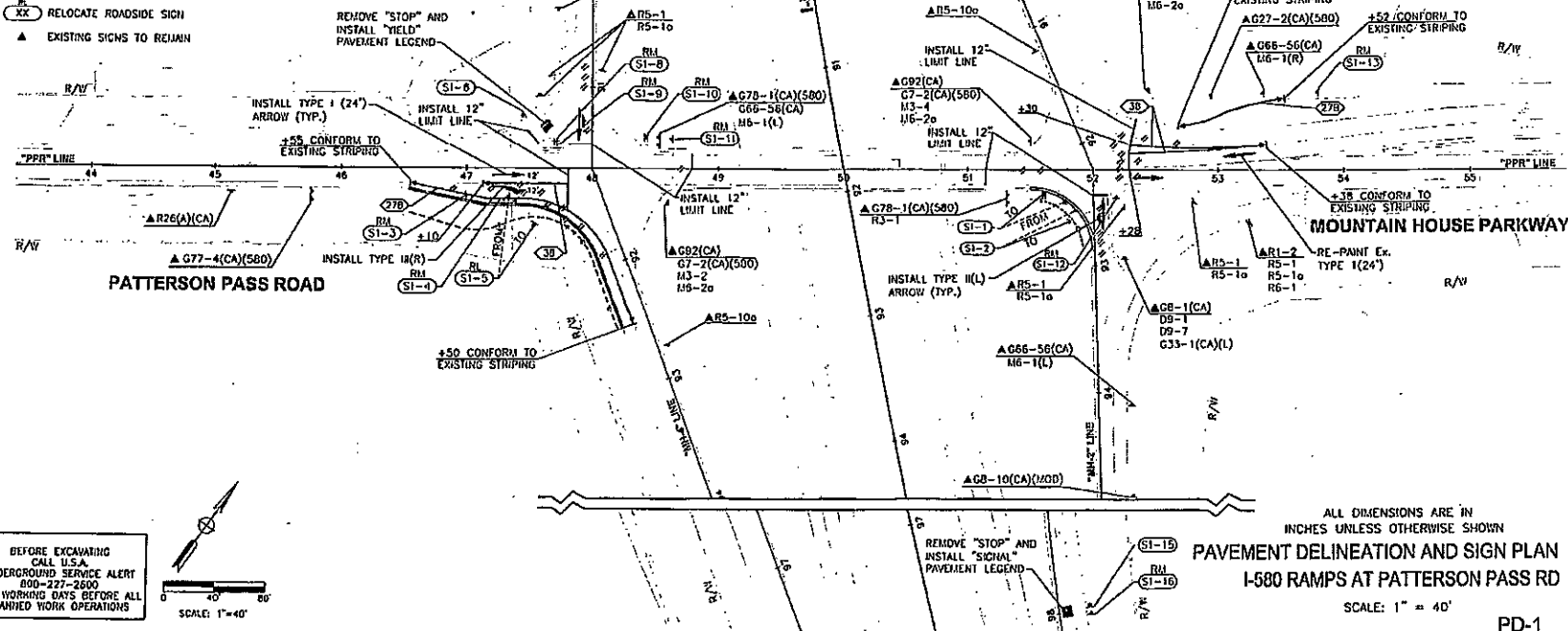
DATE PLOTTED -> DATE
DOX FILE -> \$REQUEST

STRIPING NOTES

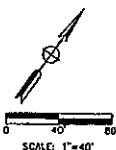
1. SIGNING AND STRIPING SHALL CONFORM TO THE APPLICABLE DETAILS OF THE 2010 CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD PLANS, STANDARD SPECIFICATIONS, LATEST EDITION OF THE CALIFORNIA MUTCD, SIGN SPECIFICATIONS SHEETS, AND THE SPECIAL PROVISIONS.
2. ALL STRIPING SHALL BE THERMOPLASTIC UNLESS OTHERWISE NOTED. ALL TRAFFIC STRIPES AND PAVEMENT MARKINGS SHALL BE APPLIED AT A THICKNESS OF 0.150 INCH.
3. ALL LIMIT LINES SHALL BE 12" WHITE STRIPES UNLESS OTHERWISE NOTED ON THE PLANS.
4. THE CONTRACTOR SHALL REMOVE ANY EXISTING STRIPING THAT CONFLICTS WITH THE PROPOSED STRIPING ON THESE PLANS.

LEGEND

- EXISTING SIGN
- PROPOSED SIGN
- EXISTING PAVEMENT MARKING
- INSTALL NEW PAVEMENT MARKING PER CALLOUT
- REMOVE EXISTING STRIPING OR PAVEMENT MARKING
- TRAFFIC STRIPE DETAIL NUMBER
- XX ROADSIDE SIGN NUMBER
- XX RESET ROADSIDE SIGN
- XX REMOVE ROADSIDE SIGN
- XX RELOCATE ROADSIDE SIGN
- ▲ EXISTING SIGNS TO REMAIN



BEFORE EXCAVATING
CALL U.S.A.
UNDERGROUND SERVICE ALERT
800-227-2600
TWO WORKING DAYS BEFORE ALL
PLANNED WORK OPERATIONS



SCALE: 1"=40'

RELATIVE BORDER SCALE
IS IN INCHES

0 1 2 3 4 5 6 7 8 9 10

USERNAME: JEFFREY
JOB FILE: JEFFREY

CU 00000

EA 000000

DS#	COUNTY	ROUTE	POST MILES	SHEET	TOTAL
10	SJ	580	13.5	B	14

REGISTERED CIVIL ENGINEER
DATE: 10-22-15
PLANS APPROVAL DATE: 10/21/15

PROFESSIONAL SEAL
CHES
15510
10/21/15
CIVIL
STATE OF CALIFORNIA

TRANSPORTATION CONSULTANTS
4285 MACARTHUR DRIVE, SUITE 550
PLEASANTON, CA 94588

OFFICE OF TRACT
375 GARCIA AVENUE PLAZA
IRVINE, CA 92618

ALL DIMENSIONS ARE IN
INCHES UNLESS OTHERWISE SHOWN
PAVEMENT DELINEATION AND SIGN PLAN
I-580 RAMPS AT PATTERSON PASS RD
SCALE: 1" = 40'

PD-1

PAVEMENT DELINEATION QUANTITIES

SHEET No.	STATION LIMIT	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)		PAVEMENT MARKER	THERMOPLASTIC PAVEMENT MARKING				
		DETAIL 270	DETAIL 30		RETRORFLECTIVE	LAST LINE	TYPE I ARROW	TYPE II(L) ARROW	TYPE III ARROW
		4" SOLID WHITE	6" SOLID WHITE						
PD-1	"PPR" LINE 47+10.00 TO "PPR" LINE 47+81.00		70	3			31	45	42
	"PPR" LINE 46+55.00 TO "WD-4" LINE 92+50.00	235							
	"PPR" LINE 47+48.00 TO "PPR" LINE 47+81.00					46			24
	"PPR" LINE 47+81.00 TO "PPR" LINE 50+00.00					28			
	"PPR" LINE 50+00.00 TO "JH-2" LINE 92+84.00					24			
	"JH-2" LINE 92+84.00 TO "PPR" LINE 53+00.00	90	220	0		52	62	45	
SUBTOTAL		325	290	12		150	93	90	42
TOTAL			615	12				309	

REMOVE PAVEMENT DELINEATION

SHEET No.	REMOVE			
	THERMOPLASTIC TRAFFIC STRIPE	YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	THERMOPLASTIC PAVEMENT MARKING	PAVEMENT MARKER
	LF		SOFT	EA
PD-1	470	60	172	6

ROADSIDE SIGN QUANTITIES

SHEET No.	SIGN No.	CODE	PANEL SIZE		C	E	S	SIGN SIZE		HEIGHT	AREA	ROADSIDE SIGN	POST SIZE		RELOCATE ROADSIDE SIGN	RELOCATE ROADSIDE SIGN		REMARKS	
			L	D				L	D				POST SIZE			ONE POST	TWO POST		
			IN.	IN.	FT.	FT.	FT.	FT.	FT.	FT ²	ONE POST	4"x4"	4"x6"	EA	EA	EA			
PD-1	SI-1	R2-1														1			
	SI-2	R3-1A														1			
	SI-3	R3-2														1			
	SI-4	R20(CA)(R)														1			
		G92(CA)																	
	SI-5	G7-2(CA)(500)														1			
		M3-2																	
		M5-20																	
	SI-6	R1-2	36	x	36	7	4.5	-	3	x	3	0.5	9		1		1		INSTALL NEW SIGN
	SI-7	G68-50(CA)																	RESET SIGN, FALLING OVER
		M6-1(L)																	
	SI-8	R1-1														1			
	SI-9	R6-1														2			2-ONE WAY SIGNS ON 1 POST
	SI-10	R6-1														2			2-ONE WAY SIGNS ON 1 POST
	SI-11	R3-1														1			
	SI-12	R1-1														1			
SI-13	R3-2														1				
SI-14	W3-3	30	x	30	7	3.5	-	2.5	x	2.5	8.25	6.25	1	1					
SI-15	W3-3	30	x	30	7	3.5	-	2.5	x	2.5	8.25	6.25	1	1					
SI-16	W3-1														1				
TOTAL												3	2	1	11	3			

PAVEMENT DELINEATION AND SIGN QUANTITIES I-580 RAMPS AT PATTERSON PASS RD

NO SCALE

PDQ-1

CDL	COUNTY	ROUTE	POST MILES	SHEET NO.	TOTAL SHEETS
10	SJ	580	13.5	9	14
REGISTERED CIVIL ENGINEER <i>Alan D. Kung</i> DATE 10-11-15			CIVIL ENGINEER No. 15317 EXPIRATION DATE 12/31/17		
PLANS APPROVAL DATE					
LASH TRANSPORTATION CONSULTANTS 1405 PACIFICA DRIVE, SUITE 350 PLEASANTON, CA 94566			OFFICE OF TRACY 325 ONE CENTER PLAZA TRACY, CA 95376		

DESIGNED BY DEEPA BHASKAR	CHECKED BY ALEX NG	REVIEWED BY DATE REVISED
CONSULTANT FUNCTIONAL SUPERVISOR MARTHA DADALA		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	SJ	580	13.5	10	14

REGISTERED CIVIL ENGINEER DATE 10-28-15	PROFESSIONAL SEAL CIVIL No. C76654 Exp. 12/31/2015 STATE OF CALIFORNIA
--	--

PLANS APPROVAL DATE	
---------------------	--

RAJAPPAH & MEYER CONSULTING ENGINEERS INC. 10218 LUCH AVE, SUITE 100 SAN JOSE, CA 95128	CITY OF TRACY 325 CIVIC CENTER PLAZA TRACY, CA 95376
--	--

EARTHWORK QUANTITIES SUMMARY

LOCATION	STATION	EXCAVATION	IMPORTED BORROW
		CY	CY
"PPR"	46+55 to 48+00	93	150
"PPR"	91+22.77 TO 92+50	67	
"MH-4"	51+50 to 52+00	23	
TOTAL		183	150

* - 10% SHRINKAGE AND LOSS FACTOR APPLIED TO ROADWAY EXCAVATION IN CALCULATING IMPORT BORROW

CONCRETE CURB

STATION	Loc	TYPE (B2-6)	
		MINOR CONCRETE (Misc Const)	CLASS 3 AGGREGATE BASE
		CY	
"PPR" 51+50.53 TO "MH-2" 92+87.84	RI	5	3
TOTAL		5	3 *

* - QUANTITY INCLUDED IN PAVEMENT STRUCTURE QUANTITIES

PAVEMENT STRUCTURE QUANTITIES

SHEET No.	STATION	HOT MIX ASPHALT (TYPE A)	CLASS 3 AGGREGATE BASE
		TON	CY
L-1	"PPR" 44+48 TO "MH-4" 92+80	98	143
L-2	"PPR" 51+50 TO "MH-2" 92+88	13	19
SUB TOTAL		111	162
FROM CONCRETE CURB TABLE			3
HMA DIKE (TYPE E)		16	
TOTAL		127	165

SUMMARY OF QUANTITIES
NO SCALE

Q-1

BORDER LAST REVISED 7/2/2010

USERNAME -> USER
DGN FILE -> REQUEST

RELATIVE BORDER SCALE
IS IN INCHES

0 1 2 3

UNIT 1455

PROJECT NUMBER & PHASE

10000009571

DATE PLOTTED -> DATE
TIME PLOTTED -> TIME

EACH TRANSPORTATION CONTRACTANTS 4325 MADISON BLVD, SUITE 200 OAKLAND, CA 94613	CITY OF TRACY 375 ORCH CENTER PLAZA TRACY, CA 95376
---	---

PROPOSED FIVE DEGREES

LEGENDA:

- ☐ TYPE A RECTANGULAR SECTION CONFIGURATION
PLA SIZE STANDARD PLY 15-25. LDCP SEALANT
SHALL BE STICK AFFORTED ELASTIC/STICK SEALANT
OR NOT WELL MODERATED
- ☒ TYPE B RECTANGULAR SECTION CONFIGURATION
PLA SIZE STANDARD PLY 15-25. LDCP SEALANT
SHALL BE STICK AFFORTED ELASTIC/STICK SEALANT
OR NOT WELL MODERATED
- WITH ATTACHED MIXTURE

GENERAL NOTES

- [illegible]

ELECTRICAL NOTES

- [illegible]



SIGNALS AND LIGHTING
I-580 EB-RAMPS AT PATTERSON PASS RD
(LOCATION 1)
SCALE: 1" = 20'

F-

RELATIVE BORDER SCALE
FE IN INCHES

UNCLASSIFIED -> FURTH
DCN FILE -> INTELINT

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NOTE:
ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED.

NOTE: ALL CONDUCTORS/CABLES ARE NEW UNLESS OTHERWISE NOTED.
MAXIMUM CONDUIT SIZE IS 2".
* ALL OTHER EXCEPTIONS ARE THE PRISON OF CABLES WITHIN SCOPE.
** NO CASE FOR CABLES ACQUISITION AND SPECIAL PROVISIONS.

120/240V, 1Ø, 3-WIRE TYPE MS-OF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS					
CND No. 1029800013530					
AMPERES	VOLTS	POLES	NAMEPLATE	MCER	PHOTOELECTRIC CONTROL TYPE
100	240	2	MATH BREAKER	YES	-
80	120	1	SIGNALS	YES	-
20	120	1	SPACE	YES	-
-	-	5	SPACE	-	-

E-2

ORDER LAST REVISED 8/28/2015

RELATIVE BORDER SCALE
IS IN INCHES

USORNAME => JUSON
DCU FILE => REQUEST

CU 00000

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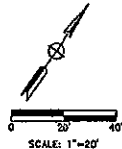
ELECTRICAL NOTES

1. WORK ON THESE PLANS SHALL CONFORM TO THE 2010 EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION CALTRANS STANDARD SPECIFICATIONS, SIGNAL PLANS, SIGN SPECIFICATION SHEETS, SPECIAL PROVISIONS, THE LATEST EDITION OF THE FMVSS AND THE CITY OF LONG BEACH SPECIFICATIONS.
2. LOCATIONS OF CONTROLLER, SIGNALS, CONDUITS, PULL BOXES AND OTHER EQUIPMENT ARE APPROXIMATE AND SHALL BE LOCATED IN THE FIELD AS DIRECTED BY THE ENGINEER.
3. ALL UNIFORM SIGNALS ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY OVERHEAD AND UNDERGROUND CLEARANCE WITH PEACE, SPS, AND OTHER AFFECTED UTILITIES PRIOR TO THE START OF WORK.
4. THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.
5. ALL LOW PULL BOXES SHALL BE 10, 5(1) (TYPICALLY NOTED) UNLESS OTHERWISE NOTED.
6. ALL NEW SIGNAL HEADS SHALL HAVE 12" WIDENINGS, WITH BACKPLATES AND TUBULAR VISIONS.
7. ALL YONGLE SIGNAL DIRECTIONS SHALL BE LEB.
8. CONDUIT INSTALLATION ACROSS ROADWAYS SHALL BE INSTALLED PER CALTRANS/CITY REQUIREMENTS. THE CONTRACTOR SHALL COORDINATE WITH THE CALTRANS/CITY INSPECTOR PRIOR TO INSTALLING CONDUITS.
9. CONTRACTOR SHALL INSTALL POLE HOLDERS FOR ALL LIGHTING POLES.
10. ALL PULL BOXES ADJACENT TO SIGNAL POLES SHALL BE 6(1)(1).
11. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF EXISTING CALTRANS DETECTORS, CONDUITS, PULL BOXES AND OTHER ELECTRICAL FACILITIES BEFORE USING TOOLS OR EQUIPMENT THAT MAY DAMAGE THOSE FACILITIES OR INTERFERE WITH ALL ELECTRICAL SYSTEMS.
12. CONTRACTOR SHALL OBTAIN THE HIGHWAY 10 FT. SIGNAL CLEARANCE IS NOT BETWEEN THE SIGNAL & EXISTING SIGNALS AND THE OVERHEAD POWER LINES. WHEN NECESSARY, POWER LINES SHALL BE MOVED TO MEET THIS CRITERIA.
13. ALL LOOPS SHALL BE INSTALLED AND TESTED PRIOR TO FINAL LIFT OF NEW PAVEMENT.

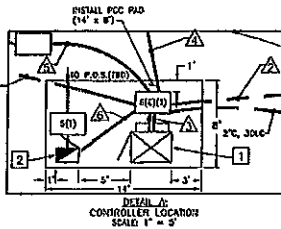
GENERAL NOTES

1. INSTALL STATE-PURCHASED TYPE 332 CABINET WITH 1000L 2000 CONDUIT/PIPE AND BATTERY WIRING SYSTEM (BWS) COMPARTMENT. INSTALL CONTRACTOR-FURNISHED WIRELESS MODEM AND BWS CABINET PLUS BATTERIES. FRONT DOOR SHALL FACE WEST.
2. TURN ON AND INSTALL TYPE 11-CP 120/240V SERVICE EQUIPMENT ENCLOSURE. DOOR SHALL FACE NORTH.
3. EXISTING TRAFFIC MONITORING SYSTEM (TMS) IS SIGNAL FOR AUTOMATED PURPOSES ONLY.
4. INSTALL 4-SECTION SIGNAL HEAD PER DETAIL D ON THE PLAN.
5. INSTALL 1/2" CAMERA ON SIGNAL STANDARD FOR DETAIL D ON CALTRANS 02-78 AND THE PROJECT SPECIAL PROVISIONS. INCLUDE IP CAMERA SYSTEM CABLES AND COMPONENTS BY CONTROLLER CABINET.
6. INSTALL EXPANSION-DEFLECTION COORDINATE FITTINGS AT EXPANSION JOINTS IN STRUCTURE.
7. INSTALL VIDEO DETECTION CAMERA ON LANE PER ES-7R DETAIL B.

BEFORE EXCAVATING
CALL U.S.A.
UNDERGROUND SERVICE ALERT
800-227-2600
TWO WORKING DAYS BEFORE ALL
PLANNED WORK OPERATIONS



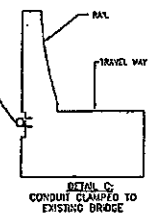
SCALE: 1"=20'



DETAIL A:
CONTROLLER LOCATION
SCALE: 1" = 2'



DETAIL D:
4-SECTION HEAD



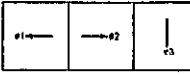
DETAIL C:
CONDUIT CLAMPED TO
EXISTING BRIDGE

2" RIGID METAL CONDUIT ATTACHED TO SIDE OF EXISTING
BRIDGE WITH PLASTIC DUTY PIPE HANGER WITH ANCHOR BOLTS
SET IN EPOXY. ALL FITTINGS GALVANIZED. SPACED BY
10'-0\"/>

SIGNALS AND LIGHTING
I-580 WB-RAMPS AT PATTERSON PASS RD
(LOCATION 2)
SCALE: 1" = 20'

E-3

STEADY DEMAND SEQUENCE



PROPOSED PULSE DIAGRAM

LEGEND:

- ☐ TYPE A RECTANGULAR DETECTOR CONFIGURATION
PER STATE STANDARD PLAN ES-36. LOOP SEALANT
SHALL BE STATE APPROVED ELASTOMERIC SEALANT
OR HOT MELT SUBSTITUTION.
- ☒ TYPE B RECTANGULAR DETECTOR CONFIGURATION
PER STATE STANDARD PLAN ES-36. LOOP SEALANT
SHALL BE STATE APPROVED ELASTOMERIC SEALANT
OR HOT MELT SUBSTITUTION.
- NEW DETECTOR IN-CHANNEL

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	SJ	580	13.5	13	14
<u>Chris P. Karp</u> REGISTERED CIVIL ENGINEER			10-28-15 DATE		
PLANS APPROVAL DATE			DATE		
TAMU TRANSPORTATION CONSULTANTS 4305 HANCOCK DRIVE, SUITE 350 PLEASANTON, CA 94666			CITY OF TRACY 325 CIVIL CENTER PLAZA TRACY, CA 95376		

BORDER LAST REVISED 8/26/2015

RELATIVE BORDER SCALE
IS IN INCHES

USERNAME => SUEET
DGN FILE => ENG0000

CU 00000

EA 000000

DATE PLOTTED 10-27-2015
TIME PLOTTED 10:27:15

DESIGNED BY	REVIEWED BY
ERIK BJORLUND	ERIK BJORLUND
CHECKED BY	DATE
ERIK BJORLUND	
CONSULTANT SUPERVISOR	
ERIK BJORLUND	

EQUIPMENT SCHEDULE										
No.	STANDARD		VEN SIG	MTG	PEO SIGNAL	MTG	APS PPB	LEO	SPECIAL REQUIREMENTS	
	Type	Sig. M.A.								
(A)	19-4-100	25'	15'	MAS	SV-2-TB	-	-	RW-1	FURNISH AND INSTALL R3-2 SIGN ON SVA AND VIDEO DETECTION CAMERA ON LMA. FURNISH AND INSTALL IP CAMERA ON POLE.	
(B)	19-4-100	25'	15'	MAS	SV-3-TB	-	-	RW-1	FURNISH AND INSTALL R73-4 SIGN ON SVA.	
(C)	17-3-100	15'	15'	MAS	SV-2-TB	-	-	RW-1	FURNISH AND INSTALL R3-2 SIGN ON SVA, VIDEO DETECTION CAMERA ON LMA, AND PEU ON SIGNAL POLE. FURNISH AND INSTALL TWO R8-1 GIVE ON EITHER SIDE OF SIGNAL POLE.	
(D)	1-A	-	-	-	TV-1-T	-	-	-		

NOTE:
ALL EQUIPMENT IS NEW UNLESS OTHERWISE NOTED.

CONDUCTOR SCHEDULE										
AND OR CABLE	POLE	Ø	CONDUCTOR RUN NUMBER AND SIZE							
			1	2	3	4	5	6		
			6"	4"	3"	4"	3"	2"		
			3/8"	3/8"	3/8"	3/8"	3/8"	1/2"		
16 COND. CABLE (10N-10) * 3 COND. CABLE (7N)	(A)	Ø1.00								
	(B)	Ø1.02, Ø8	1	1	1					
	(C)	Ø2.00			1	1				
	(D)	Ø2			1		1			
TOTAL			1	2	4	1	1			
VIDEO DETECTION	VIDEO POWER CABLE			1	2	1				
15	INTERSECTION LIGHTS		2	2	2	2	2	4		
1000	SIGNALS		2	2	2	2	2	2		
1000	SIGNAL PULSED CABLE Ø 1/2 INCH				1	1				
CABLE	TOTAL RUN, MIN. MAX.		8	4	4	4	4	4		
DIG	WALL RUN, MIN. MAX.									
	TOTAL SEC		4	4	4	4	4			

NOTE: ALL CONDUCTORS/CABLES ARE NEW UNLESS OTHERWISE NOTED.
MINIMUM CONDUIT SIZE IS 2".
* NUMBER OF CABLES ARE THE NUMBER OF CABLES WHEN COUPLED.
** SEE CABLE FOR CABLEING REQUIREMENTS AND SPECIAL PREPARATIONS.

120/240V, 1Ø, 3-WIRE TYPE III-CF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS					
AMPERES	VOLTS	POLES	HANDPLATE	METER	PHOTOELECTRIC CONTROL TYPE
100	240	2	MAIN BREAKER	YES	-
30	240	2	INTERSECTION LIGHTS	YES	-
15	120	1	LIGHTING CONTROL	YES	V
-	-	3	SPACE	-	-
30	240	2	SPACE	YES	-

120/240V, 1Ø, 3-WIRE TYPE III-CF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS					
AMPERES	VOLTS	POLES	HANDPLATE	METER	PHOTOELECTRIC CONTROL TYPE
100	240	2	MAIN BREAKER	YES	-
50	120	1	SIGNALS	YES	-
30	120	1	SPACE	YES	-
-	-	5	SPACE	-	-

DATE	COUNTY	ROUTE	PROJECT TOTAL PROJECT	SHEET TOTAL SHEETS
10-21-15	SJ	580	13.5	14
DESIGNER <i>Chris D. Kuykendall</i> REGISTERED CIVIL ENGINEER			DATE 10-21-15	
PLANS APPROVAL DATE				
CIVIL ENGINEER 15317 3/21/12 CIVIL STATE OF CALIFORNIA			CITY OF TRACY 200 GINO CENTER PLAZA TRACY, CA 95376	

BEFORE EXCAVATING
CALL U.S.A.
UNDERGROUND SERVICE ALERT
800-227-2600
TWO WORKING DAYS BEFORE ALL
PLANNED WORK OPERATIONS

CONDUCTOR & EQUIPMENT SCHEDULE
1-580 WB-RAMPS AT PATTERSON PASS RD
(LOCATION 2)
N.T.S.

E-4

BORDER LAST REVISED 8/28/2015

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DATE PLOTTED 10-21-15
TIME PLOTTED 10:21:15

GENERAL PROVISIONS

GOVERNING INSTALLATION OF SUBSURFACE STRUCTURES AND PIPELINES WITHIN COUNTY ROAD RIGHTS-OF-WAY

PUBLIC CONVENIENCE AND SAFETY:

- A. Before obstructing any private driveway entrance or County road traveled way with a trench, spoil bank, equipment or other barrier permitted for any prolonged period of time, the Permittee shall notify the known users of the respective thoroughfare(s) involved, and shall provide access for vehicular and pedestrian traffic to and from the road.
 - 1. Unless otherwise permitted, all work shall be conducted in such a manner that no less than one lane of the existing County road traveled way will be maintained open to public traffic during working hours in a smooth and safe riding condition(s). Two lanes shall be open after working hours.
 - 2. In cases where road closure is permitted, the permission to close the road will be granted under the condition that the Permittee notify the following persons and/or agencies of the time, the period of closure, and the detour route at least twenty-four (24) hours prior to said road closure.
 - a. The County of San Joaquin Public Works Department
 - b. The County of San Joaquin Sheriff's Office
 - c. The local postal service
 - d. The local fire district
 - e. The local school district
 - f. The local residents involved
- B. Should hazardous conditions relative to the installation operations warrant flagmen, as many capable flagmen as may be necessary shall be provided by the Permittee and stationed in advance of work to warn and direct traffic.
- C. Lights, signs and barricades shall be furnished, erected and maintained by the Permittee for the adequate warning and convenience of the public, with particular attention to be taken in this regard after dark.
- D. Any excess dirt and/or debris which might be a hazard to either automobile or pedestrian traffic, uncontrollable by lights, signs and barricades, shall be removed from the jobsite daily.

STRUCTURES:

- A. Walls of structures shall be such quality and strength that they will resist all pressures and will not crack or be deformed in such a way as to create a hazard or maintenance problem at any time. Therefore, the minimum structural requirements for concrete pipe placed under county road rights-of-way shall conform to the following American Association of State Highway and Transportation Officials (AASHTO) designations.
 - 1. For concrete pipe up to and including thirty-three inches (33") inside diameter, extra strength concrete conforming to AASHTO Designation M 170M.
 - 2. For concrete pipe thirty-six inches (36") inside diameter and larger, reinforced concrete pipe conforming to AASHTO Designation M 170M Class III.
 - 3. Plastic pipe conforming to AASHTO Designation M294.
- B. All concrete pipe joints within County road rights-of-way shall be sealed against leakage and/or infiltration with rubber gasket in conformance with Section 65-1:06 of the California Standard Specifications, or with other methods as may be permitted under the Special Provisions.
- C. Cast-in-place concrete pipe, vitrified clay pipe, spiral welded steel pipe, or corrugated aluminum alloy pipe shall not be installed within the County road rights-of-way unless specifically so stated in the Special Provisions, and only under the conditions as provided.
- D. All structures to be buried within the County rights-of-way shall be set at such elevations as to allow minimum coverage of thirty inches (30") to the centerline of the roadways and twelve inches (12") at the bottoms of borrow ditches each side of the roadways. The depths of structures shall be established below a flat plane extending across the rights-of-way, no part of which shall extend above the elevations stated above; manholes, lampholes, valves, etc. not included. Future surface elevations shall be anticipated as nearly as possible and structure elevations shall be established for future adjustments accordingly.
- E. The County hereby reserves the right to specify in the Special Provisions the gage and surface treatment of any galvanized corrugated metal pipe that is to be installed.
- F. All longitudinal utility facilities are to be established (and dimensioned on sketches) from surveyed centerline of road right-of-way, not from right-of-way (border) lines.

REPAIRS OF THE COUNTY RIGHT-OF-WAY:

- A. All excavations shall be backfilled and compacted immediately after work therein has been completed.
- B. Trenched shall not be left open farther than 300 feet in advance of pipe laying operations, or 200 feet to the rear thereof, unless otherwise permitted by the Engineer.
- C. Unless otherwise permitted under the Special Provisions, backfill shall be placed and mechanically compacted in such a manner that the relative compaction throughout the entire fill within the County road right-of-way shall conform to the percentages of compaction as shown on the Trench detail.
- D. Backfill material shall be placed in horizontal uniform layers not to exceed in thickness, before compaction, 0.67 foot in the bedding region, one foot where 90% compaction is required, and two feet where 80% compaction is required.
- E. No portion of the excavation(s) shall be compacted by ponding or jetting unless a maintenance bond is provided.
- F. Gravel backfill material shall be utilized only where specifically so stated on the face of the permit. It shall be compacted by means of a high-frequency internal vibrator, the compactor to be a size and type approved by the Engineer. Points of compaction shall not be greater than 18" centers and to the full depth of the lift.
- G. All pavements, curbs, gutters, sidewalks, borrow ditches, pipes, head walls, road signs, trees, shrubbery, and/or other permanent road facilities impaired by or as a result of construction operations at the construction site(s) occupied by materials and/or equipment, shall be restored immediately upon backfilling of the excavation to the original grades and cross sections, and to a condition as good as, or better than existing prior to construction.
- H. All surfacing materials of roadways and driveway approaches cut or damaged by or as a result of construction operations, shall be replaced within ONE WEEK following the backfilling of excavation, weather permitting, with compacted layers of surfacing materials at least as thick as the existing, and no less than two inches (2") of asphalt concrete over six inches (6") of aggregate base, both as specified below.
 - 1. Asphalt Concrete: Combined mineral aggregate shall conform to the quality and gradation requirements for Type "B" one-half inch (1/2) maximum aggregate, coarse or medium gradation as specified in Section 39 of the California Standard Specifications. The bituminous binder to be mixed with mineral aggregate shall be paving asphalt having (Grade PG 64-10), unless otherwise directed by the Engineer. Placement of asphalt concrete surfacing shall conform to the applicable provisions of Section 39 of the California Standard Specifications.
 - 2. Aggregate Base: Combined mineral aggregates shall conform to the quality and the grading for three-quarter inch (3/4") maximum size aggregate Class 2 Aggregate Base specified in Section 26 of the California Standard Specifications.
- I. Before acceptance of repairs to the County road rights-of-way, all unsightly and detrimental dirt, dust and/or debris shall be removed and the construction areas left in a neat and presentable condition(s).
 - 1. If necessary, County road traveled way and driveway pavements shall be washed with water to remove dirt and dust.
 - 2. Driveway approaches and field entrance pavements damaged by equipment or spoil banks shall be repaired as directed by the Engineer.
- J. Upon request by the County, any settlement, sagging of surface, or cracking of pavement shall be repaired immediately by and at the sole expense of the Permittee for a period of one year following acceptance of the work.

SPECIAL PROVISIONS

Winter Weather Utility Work

1. **SUPERVISION:** The utility company (**permittee**) shall furnish full-time supervision of all work to insure compliance with the permit provision.
2. **START OF WORK:** No work within the County right-of-way shall be started until the utility company representative has made an evaluation of weather conditions and has determined the work can be accomplished under the provisions of the permit.
3. **CLEAN PAVEMENT:** Dirt and mud shall not be deposited on the pavement outside the area of work, and if inadvertently tracked onto the road travel way shall be removed immediately.
4. **DAILY RESTORATION:** Private driveways and road intersections shall be restored daily.
5. **WEATHER-TIGHT CONDITIONS:** All trenches shall be filled and compacted, ditches and other drainage facilities regarded and opened, and the entire work area restored to weather-tight condition prior to any rain.