BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFO

FILED
05/08/25
04:59 PM
A2505002

Application of the City of Mountain House for an Order Authorizing a Public Railroad Crossing of the Union Pacific Railroad Tracy Subdivision Track with Great Valley Parkway (milepost 74.10) within the City of Mountain House, County of San Joaquin, State of California.

Application No. _____

APPLICATION

The City of Mountain House, a municipal corporation of California (hereinafter referred to as the District), hereby submits this Application to the California Public Utilities Commission (hereinafter referred to as the CPUC) for an order approving the construction of one new at-grade crossing, the extension of Great Valley Parkway, across and over the Union Pacific Railroad Tracy Subdivision (hereinafter referred to as the Railroad), near milepost (MP) 74.10 (DOT # 971 764 X) in Mountain House, County of San Joaquin, State of California (see Exhibit A).

BACKGROUND

The City of Mountain House Master Planned Community (hereinafter referred to as the Project) is currently under construction and encompasses up to 16,000 homes. Approximately 4,500 of these homes will be located north of the Railroad, which bisects Mountain House. These homes are bordered by Old River to the north and the Railroad to the south. As part of this Project as authorized by CPUC Decision 06-06-052, June 26, 2006, the Central Parkway grade separation over the Union Pacific Railroad (UPRR) track was constructed in 2008 to improve access from one side of the Railroad to the other. The Central Parkway will be the primary means of travel for the public living north of the Railroad once the Project is finished. All the current and future residents must cross the Railroad to access all roads leaving the area including Byron Road, I-205, and I-580.

Prior to the construction of the Central Parkway grade separation in 2008, there were five existing at-grade crossings in the Project area of Mountain House. The five at-grade crossings were as follows: Kelso Road, CPUC 001B-74.20, DOT #751855W, a public crossing; MP 74.94, DOT #751856D, a private crossing; MP 75.18, DOT #751857K, a private crossing; Henderson Road, CPUC 001B-75.60, DOT #751858S, a public crossing; and Wicklund Road, CPUC 001B-76.40, DOT #751859Y, a public crossing. The two private crossings have since been physically removed; Kelso Road is to be abandoned and removed; Henderson Road is to be abandoned and removed; and Wicklund Road is to be abandoned and removed.

All of these crossings were included in the Environmental Impact Report (EIR) that was completed in 1994. The 1994 EIR included an additional at-grade crossing, for a total of three (3) at-grade crossings at project completion. Initially, UPRR did not comment on the 3 at-grade crossings proposed in the 1994 EIR. More recently, UPRR did state their concern about the number of at-grade crossings to Trimark Communities, the Developer of the Mountain House Master Plan. These discussions led to a compromise. Only two (2) at-grade crossings are now planned for the Mountain House Community: Mountain House Parkway and Great Valley Parkway. UPRR generated an agreement letter dated January 14, 2008, (see Exhibit E) that indicates UPRR is in concurrence with the

Mountain House “Project” that provides the new grade-separated crossing of Central Parkway, the removal of Kelso Road public at-grade crossing (in exchange for the new at-grade crossing at Great Valley Parkway), the installation of the new Mountain House Parkway at-grade crossing, the removal of the two private at-grade crossings, and the removal of both Henderson and Wicklund public at-grade crossings.

In support of its Application, Applicant respectfully shows:

1. The identity of the Applicant: The City of Mountain House, Incorporated in the County of San Joaquin, a political subdivision of the State of California.

2. Correspondence and communications concerning this Application should be directed to:

Steve Pinkerton
City Manager
City of Mountain House
251 E. Main Street
Mountain House, CA 95391
Phone: (209) 831-2300
Email: spinkerton@sjgov.org

3. Pursuant to the requirements of Rule 3.7 of the Public Utilities Commission’s Rules of Practice and Procedure, Applicant provides the following information:

   a. The new Great Valley Parkway at-grade crossing will be located adjacent to Byron Road at Great Valley Parkway, Mountain House, California, and the proposed railroad milepost will be 74.10 with DOT # 971 764 X.

   b. A Project aerial location map prepared by the Applicant and legal description are attached as Exhibits A and D, respectively.

   c. Three existing public at-grade crossings, one at MP 74.20, Kelso Road (DOT # 751 855 W), one at MP 75.60, Henderson Road (DOT #751858S), and the other at MP 76.40, Wicklund Road (DOT #751859Y), will be abandoned and removed as part of the UPRR agreement letter dated January 14, 2008.

d. Two private at-grade crossings, one at MP 74.94 (DOT #751856D) and the other at MP 75.18 (DOT #751857K), have been removed as part of the UPRR agreement letter dated January 14, 2008.

e. A separation of grade is not practicable and is not economically or physically feasible at the proposed at-grade crossing. The at-grade crossing has been planned for over 30 years, and it has been evaluated and approved through two separate CEQA processes. Today the land is zoned and improved with roads and public utility infrastructure. Converting the proposed Great Valley Parkway at-grade crossing into a grade-separated crossing would have a severe economic impact, resulting in the loss of developable acreage. In addition to the cost of an additional 300-foot-long grade-separated crossing, a controlled access interchange would be required to connect the residences of Mountain House to Byron Road. A controlled access interchange would require rezoning of land uses and condemnation of private property. Furthermore, there is already significant public utility infrastructure now in the ground that would have to be relocated for a grade-separated crossing.

f. The Great Valley Parkway at-grade crossing will have three lanes in the westbound direction and two lanes in the eastbound direction with a non-mountable concrete curb island (median),10 feet wide, separating the two traffic directions. There will be sidewalks on both sides of the roadway separated from the roadway by decomposed granite surface and concrete curbs. Warning devices include two Commission Standard 9's on the westbound lanes, with one on the left in the median island and one on the right side behind the curb. On the eastbound lanes, one Commission Standard 9 with side flashing lights is on the right side behind the curb, and one Commission Standard 9 with side flashing lights is on the left in the median island. The existing track has infrequent train service listed as 25 mph. The future posted roadway speed at all crossings will be 45 mph. Standard MUTCD advance warning signs, pavement markings and striping, and Americans with Disabilities Act (ADA)–compliant tactile warning strips at the pedestrian sidewalks 17 feet from centerline of track will be provided. The pedestrian sidewalk crossings

will have Commission Standard 8's for each crossing on the opposite side of the track from the Commission Standard 9's. Standard UPRR concrete crossing panels will be used for the roadway surface across the tracks. The new crossing will have preemption for the adjacent intersection of Byron Road and Great Valley Parkway. Preemption plans and calculations are included in Exhibit F.

g. Details of the proposed UPRR track at-grade crossing, which include plan and profile, are attached as Exhibit B.

h. A profile of the roadway is shown on the plan attached as Exhibit C.

4. The undersigned certifies that a copy of this Application has been sent to the following:

California Public Utilities Commission
Docket Office
505 Van Ness Avenue, Room 2001
San Francisco, CA 94102

City of Mountain House
251 E. Main Street
Mountain House, CA 95391

Union Pacific Railroad Company
9451 Atkinson Street
Roseville, CA 95747

IT IS REQUESTED THAT the Public Utilities Commission of the State of California grant an order authorizing the City of Mountain House to construct and maintain a public at-grade crossing at Great Valley Parkway.

Dated 4/29/2025

Respectfully submitted,

DocuSigned by:
Steve Pinkerton
4DAD8C075E124D8...

Steve Pinkerton
City Manager
City of Mountain House
251 E. Main Street
Mountain House, CA 95391
Phone: (209) 831-2300
Email: spinkerton@sjgov.org

EXHIBITS

List of Application Exhibits

A. Project Vicinity Maps
B. UPRR Crossing Plan and Railroad Profile
C. Great Valley Parkway Profile and Roadway Plans with Kelso Road Removal Plan
D. Crossing Legal Description
E. UPRR Agreement Letter Dated January 14, 2008 and UPRR Concurrence
F. Preemption Calculations and Traffic Signal Plans
G. Scoping Memo
H. Verification

Supporting Documentation

Notice of Availability
Certificate of Service

Exhibit A

Project Vicinity Maps

IMPROVEMENT PLANS

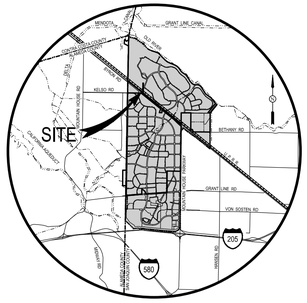
BYRON ROAD & GREAT VALLEY PARKWAY

RAILROAD CROSSING IMPROVEMENTS

DOT #971764X UPRR TRACY SUBDIVISION MP 74.10

MOUNTAIN HOUSE

SAN JOAQUIN COUNTY, CALIFORNIA



VICINITY MAP
NOT TO SCALE

DIAL TOLL FREE
1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

No.	Descriptions	Date	Appr.

COMMUNITY SERVICES DISTRICT

Approved By:

DEVON CROVE
RCE 80774
Title: ENGINEER V

DATE: SEPT 17, 2024 | DRAWN BY: LWL | PROJ. ENGR: LWL | PROJ. MGR: TRR

REGISTERED PROFESSIONAL ENGINEER TERRENCE R. REEVES 75174 CIVIL STATE OF CALIFORNIA

cbg CIVIL ENGINEERS · SURVEYORS · PLANNERS
SAN RAMON (925) 866-0322
SACRAMENTO (916) 375-1877
WWW.CBANDG.COM

MOUNTAIN HOUSE

BYRON ROAD & GREAT VALLEY PARKWAY

IMPROVEMENT PLANS - RAILROAD CROSSINGS
COVER SHEET

Comp. File No. IP01.dwg

Plan File No. 0731A

SHEET: 1 OF: 14

PROJECT INFORMATION:

1. OWNER/DEVELOPER: MOUNTAIN HOUSE DEVELOPERS, LLC.
230 S. STERLING WAY
MOUNTAIN HOUSE, CALIFORNIA 94391
(925) 580-0777
DAVID SARGENT

2. CIVIL ENGINEER: CARLSON, BARBEE & GIBSON, INC.
2633 CAMINO RAMON, STE. 350
SAN RAMON, CALIFORNIA 94583
(925) 866-0322
TERRY REEVES, RCE 75174

3. SOILS ENGINEER: ENGEO INCORPORATED
580 NORTH WILMA AVENUE, SUITE A
RIPON, CA. 95366
(209) 835-0610
STEVE HARRIS, RGE 2804

4. RAILROAD ENGINEER: HDR
100 PRINGLE AVENUE, SUITE 400
WALNUT CREEK, CA 94596
(925) 974-2500

5. SIGNAL ENGINEER: TJKM TRANSPORTATION CONSULTANTS
4305 HACIENDA DRIVE, SUITE 550
PLEASANTON, CA 94588
(925) 463-0611
CHRIS KINZEL, RCE 15347

GREAT VALLEY PARKWAY

BASIS OF BEARINGS:

THE BASIS OF BEARINGS IS TAKEN AS SOUTH 25°58'39" EAST BETWEEN STATION "MH1" AND "MH2", AS SAID STATIONS ARE SHOWN ON THE RECORD OF SURVEY FILED APRIL 14, 2004 IN BOOK 35 OF SURVEYS AT PAGE 129, SAN JOAQUIN COUNTY RECORDS, AND IS BASED ON THE CALIFORNIA COORDINATE SYSTEM ZONE 3, NAD83 (EPOCH 2002.0). DISTANCES SHOWN ARE GRID DISTANCES. TO OBTAIN GROUND DISTANCE, DIVIDE GRID DISTANCE BY THE COMBINED SCALE FACTOR OF 0.99993260 (CALCULATED AT STATION "MH1").

BENCHMARK:

"MH1", FOUND GEODETIC WELL MONUMENT PER RECORD OF SURVEY IN BOOK 35 OF SURVEYS, AT PAGE 129. ELEVATION 40.271 (NAVD 88).

LOCATION MAP
NO SCALE

INDEX OF SHEETS:

I:\673-110\Acad\IP\RAILROAD XINGS\GV\IP\IP01.dwg Sep 17, 2024 - 1:38 pm LLouis

PRELIMINARY
NOT FOR CONSTRUCTION

DRAWN BY:	BPK
CHECKED BY:	MRS
DATE:	7/29/16
SHEET NUMBER	of TXX

UNION PACIFIC RAILROAD

Office of Assistant Vice President
Engineering Design

LOCATION: Mountain House, California
Tracy Sub. MP 74.1 - 75.5

DWG TITLE: MOUNTAIN HOUSE CROSSINGS

PLOT DATE: Jul 13, 2016 - 6:13pm FILE: C:\pwworking\sac\d0843767\Exh-VicinityXings.dwg

exh-vicinityxings.dwg

Exhibit B

UPRR Crossing Plan and Railroad Profile

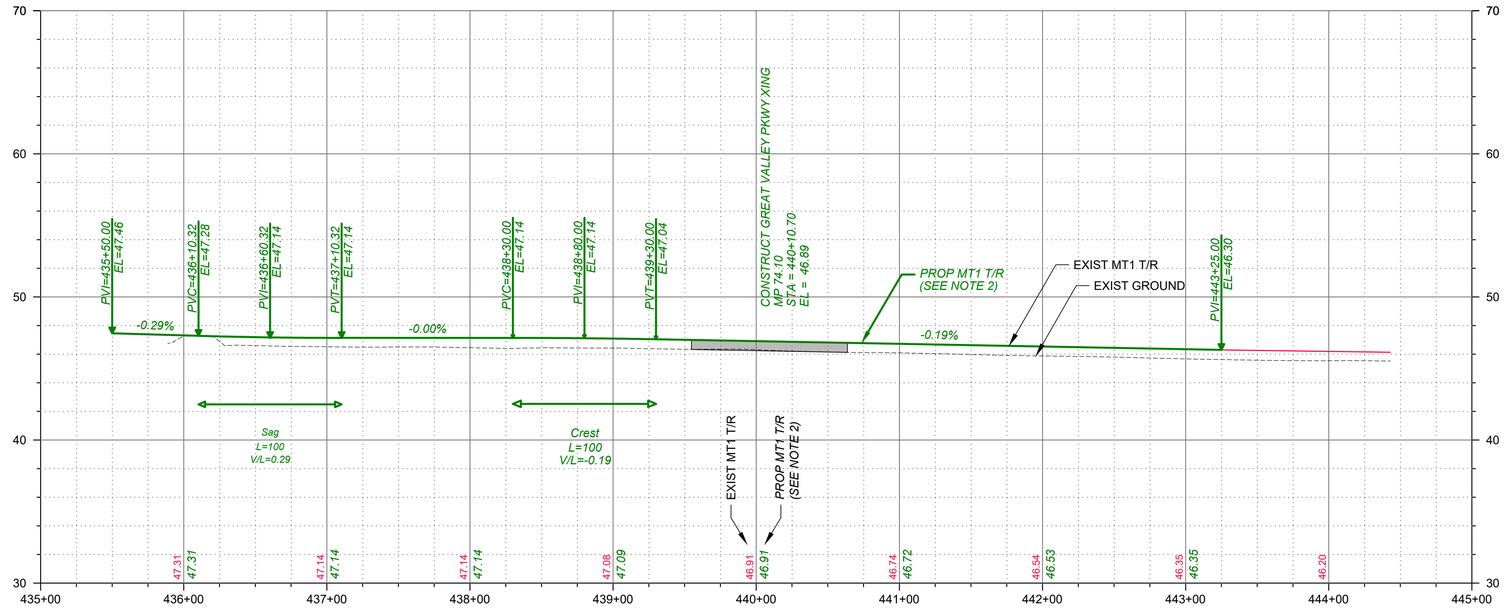
UNION PACIFIC RAILROAD
TRACY SUBDIVISION
DOT #971764X

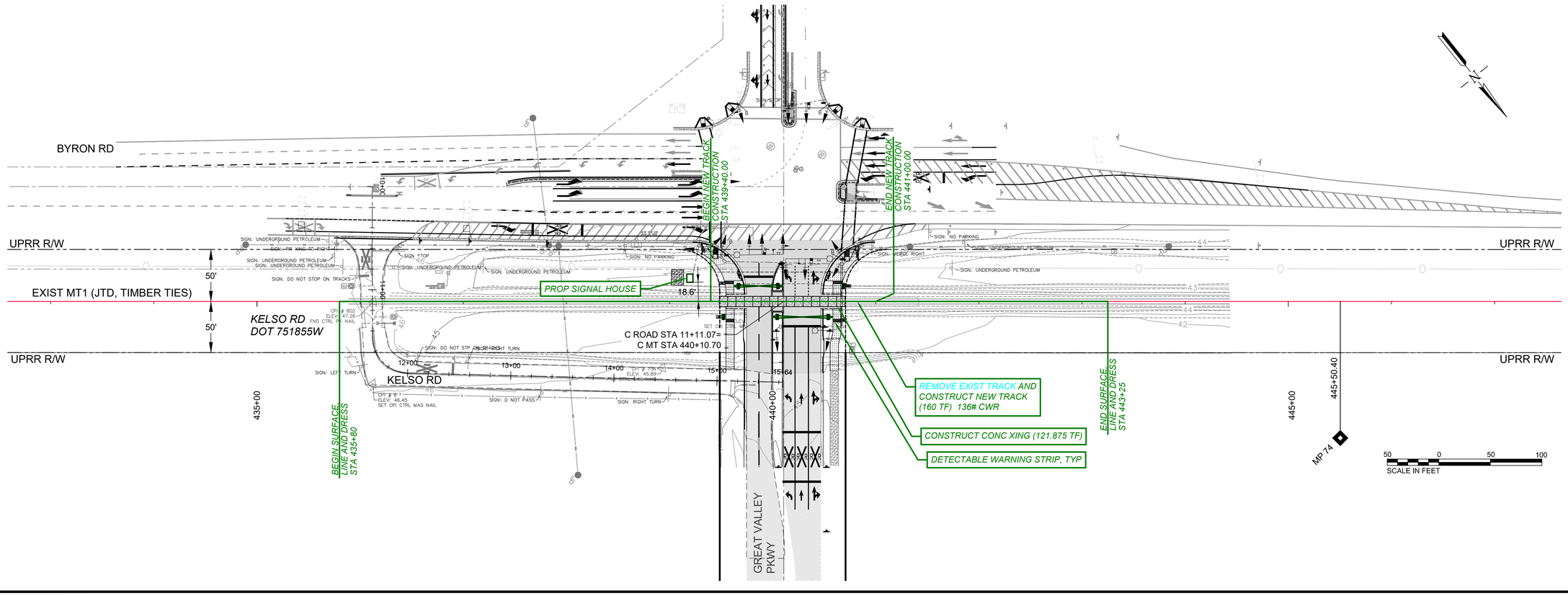
← TO TRACY
(TIMETABLE EAST)

TO MARTINEZ →
(TIMETABLE WEST)

NOTES:

1. ALL WORK DIRECTLY RELATED TO THE RAILROAD INFRASTRUCTURE WILL BE DONE BY THE RAILROAD.
2. THE FINAL TOP-OF-RAIL ELEVATION MAY INCREASE FROM THE EXISTING. THE CONTRACTOR SHOULD ADJUST IN THE FIELD IN A WAY AS TO NOT CREATE A HUMP IN THE CROSSING SURFACE.





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No.	Descriptions	Date	Appr.

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

COMMUNITY SERVICES DISTRICT

Approved By: NADER B. SHAREGHI
RCE (7891)
Title: PUBLIC WORKS DIRECTOR

DATE:	DRAWN BY:	PROJ. ENGR.	PROJ. MGR.
MAR 17, 2021	AG	BK	CG

REGISTERED PROFESSIONAL ENGINEER
KENNETH PATRICK GASKE
No. C24602
CIVIL
STATE OF CALIFORNIA

HDR
3003 Oak Road
Suite 500
Walnut Creek, CA 94597
925-465-2700

MOUNTAIN HOUSE

BYRON ROAD RAILROAD CROSSINGS

GREAT VALLEY PKWY (MP 74.1)
RAIL PLAN AND PROFILE

Comp. File No. T03.dwg

Plan File No.

SHEET: 13 OF: 14

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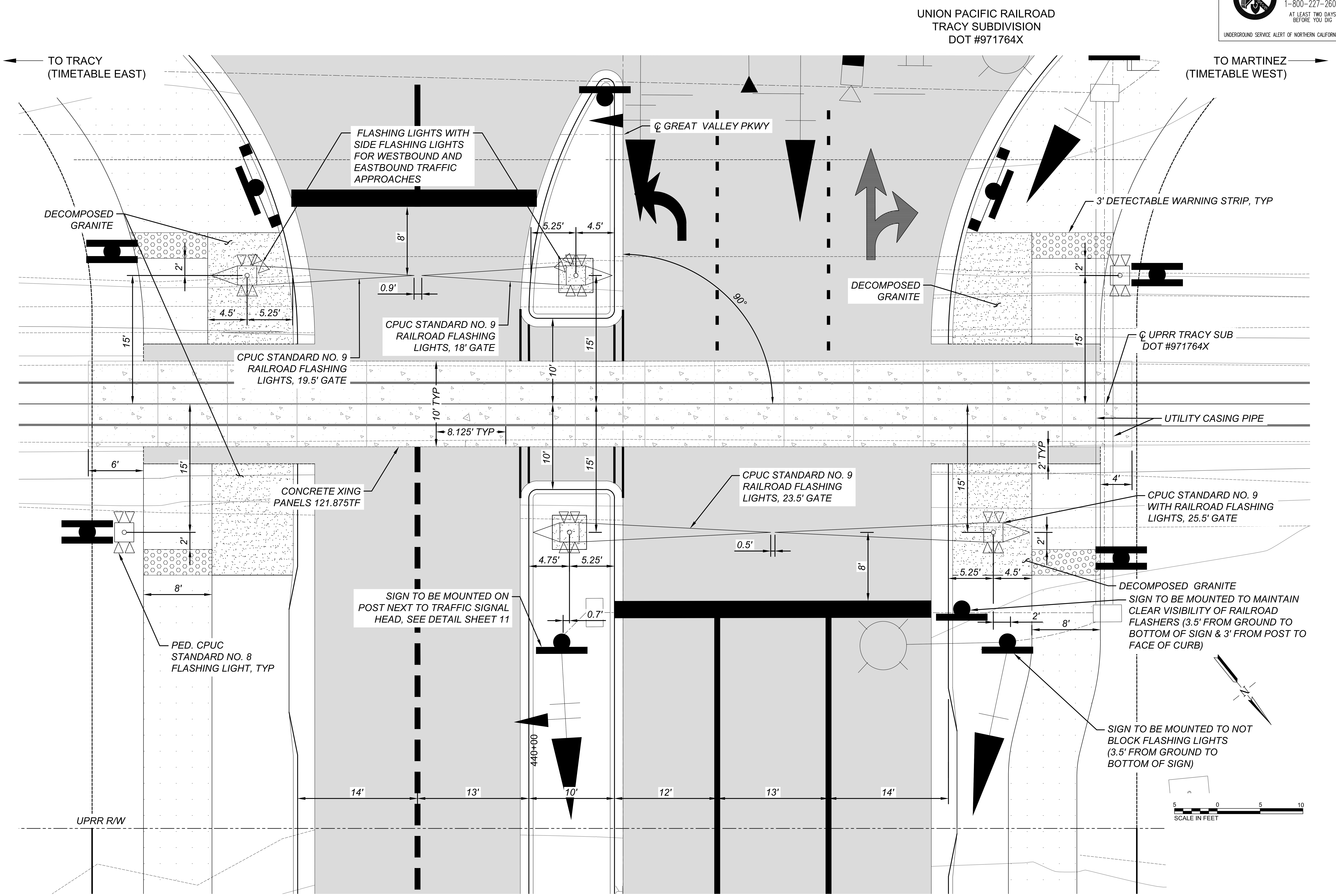

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

Approved By: NADER B. SHAREGHI, RCE, PUBLIC WORKS DIRECTOR

PRELIMINARY PLANS NOT FOR CONSTRUCTION

DATE: MAR 17, 2021
DRAWN BY: AG
PROJ. ENGR: BK
PROJ. MGR: CG

REGISTERED PROFESSIONAL ENGINEER KENNETH PATRICK CASEY No. C24602 CIVIL STATE OF CALIFORNIA

HDR
3003 Oak Road
Suite 500
Walnut Creek, CA 94597
925-465-2700

MOUNTAIN HOUSE
BYRON ROAD RAILROAD CROSSINGS
GREAT VALLEY PKWY (MP 74.1)
DETAIL PLAN - DIMENSIONS

Comp. File No. T04.dwg
Plan File No.
SHEET: 14 OF: 14

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Exhibit C

Great Valley Parkway Profile

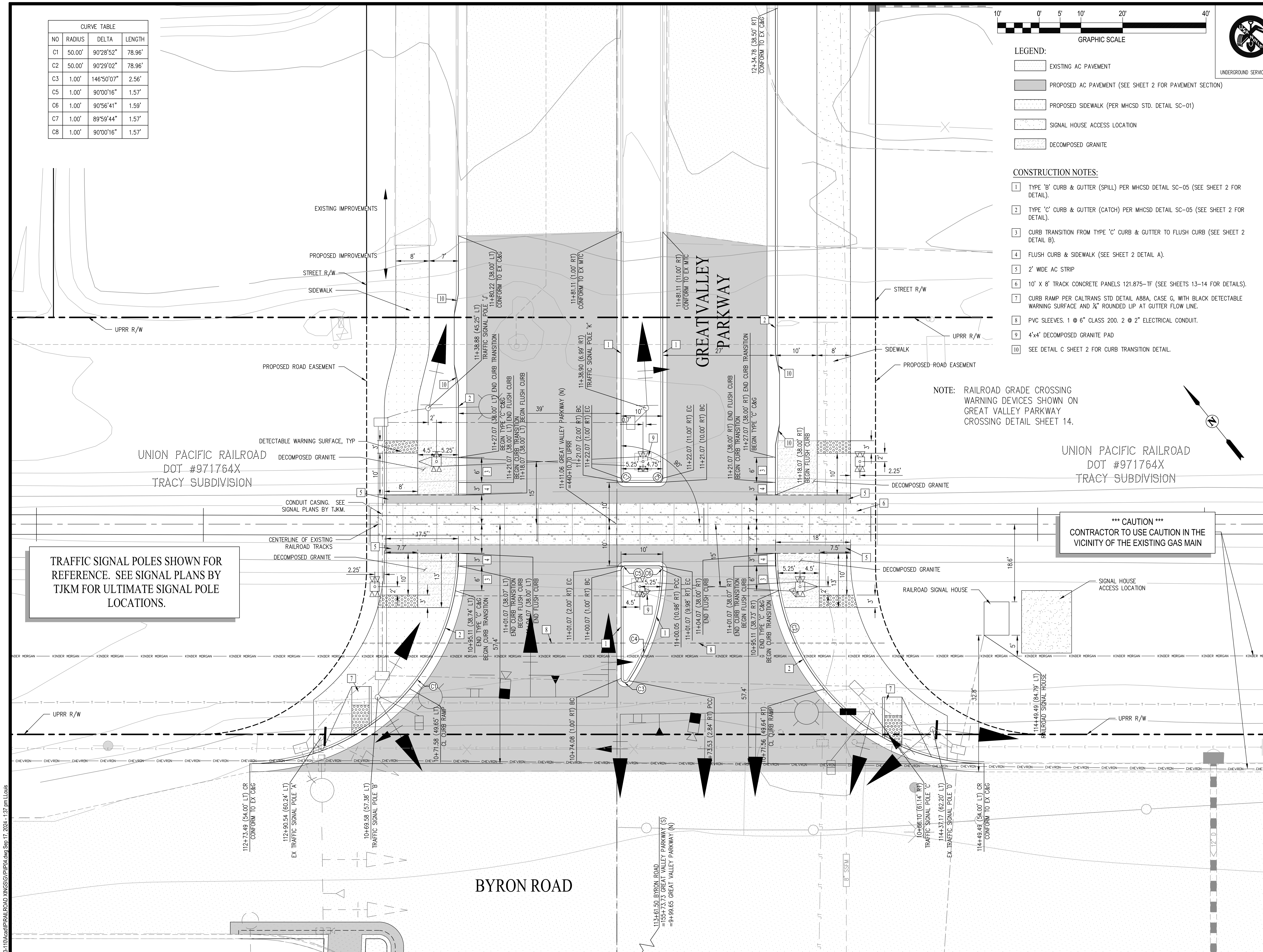
and

Roadway Plans

with

Kelso Road Removal Plan

CURVE TABLE			
NO	RADIUS	DELTA	LENGTH
C1	50.00'	90°28'52"	78.96'
C2	50.00'	90°29'02"	78.96'
C3	1.00'	146°50'07"	2.56'
C5	1.00'	90°00'16"	1.57'
C6	1.00'	90°56'41"	1.59'
C7	1.00'	89°59'44"	1.57'
C8	1.00'	90°00'16"	1.57'



GRAPHIC SCALE

LEGEND:

- EXISTING AC PAVEMENT
- PROPOSED AC PAVEMENT (SEE SHEET 2 FOR PAVEMENT SECTION)
- PROPOSED SIDEWALK (PER MHCSD STD. DETAIL SC-01)
- SIGNAL HOUSE ACCESS LOCATION
- DECOMPOSED GRANITE

CONSTRUCTION NOTES:

1. TYPE 'B' CURB & GUTTER (SPILL) PER MHCSD DETAIL SC-05 (SEE SHEET 2 FOR DETAIL).
2. TYPE 'C' CURB & GUTTER (CATCH) PER MHCSD DETAIL SC-05 (SEE SHEET 2 FOR DETAIL).
3. CURB TRANSITION FROM TYPE 'C' CURB & GUTTER TO FLUSH CURB (SEE SHEET 2 DETAIL B).
4. FLUSH CURB & SIDEWALK (SEE SHEET 2 DETAIL A).
5. 2' WIDE AC STRIP
6. 10' X 8' TRACK CONCRETE PANELS 121.875-TF (SEE SHEETS 13-14 FOR DETAILS).
7. CURB RAMP PER CALTRANS STD DETAIL A88A, CASE G, WITH BLACK DETECTABLE WARNING SURFACE AND ¼" ROUNDED LIP AT GUTTER FLOW LINE.
8. PVC SLEEVES. 1 @ 6" CLASS 200. 2 @ 2" ELECTRICAL CONDUIT.
9. 4'x4' DECOMPOSED GRANITE PAD
10. SEE DETAIL C SHEET 2 FOR CURB TRANSITION DETAIL.

NOTE: RAILROAD GRADE CROSSING WARNING DEVICES SHOWN ON GREAT VALLEY PARKWAY CROSSING DETAIL SHEET 14.

TRAFFIC SIGNAL POLES SHOWN FOR REFERENCE. SEE SIGNAL PLANS BY TJKM FOR ULTIMATE SIGNAL POLE LOCATIONS.

*** CAUTION ***
CONTRACTOR TO USE CAUTION IN THE VICINITY OF THE EXISTING GAS MAIN

DIAL TOLL FREE 1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

PRELIMINARY PLANS NOT FOR CONSTRUCTION

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

DATE: SEPT 17, 2024
DRAWN BY: LWL
PROJ. ENGR: LWL
PROJ. MGR: TRR

REGISTERED PROFESSIONAL ENGINEER TERRENCE R. REEVES 75174 CIVIL STATE OF CALIFORNIA

cbg
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MOUNTAIN HOUSE
BYRON ROAD & GREAT VALLEY PARKWAY
IMPROVEMENT PLANS - RAILROAD CROSSINGS
PLAN

Comp. File No. IP04.dwg
Plan File No. 0731A
SHEET: 4 OF: 14

UNION PACIFIC RAILROAD
DOT #971764X
TRACY SUBDIVISION

UNION PACIFIC RAILROAD
DOT #971764X
TRACY SUBDIVISION

GRAPHIC SCALE 20' 0' 10' 20' 40' 80'

EX KELSO ROAD
REMOVED PER DEMOLITION
PLAN SHEET 3

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AT LEAST TWO DAYS
BEFORE YOU DIG
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GREAT VALLEY
PARKWAY IMPROVEMENTS
SEE SHEET 4

46.75 top west rail
46.81 top west rail
46.99 top west rail
47.07 top west rail

112+70.81 (12.00' LT)
CONFORM TO EX MTC
EX MTC 47.1± (VERIFY)

112+91.31 (12.00' LT) ANGLE PT
MTC 47.21

113+01.31 (12.00' LT) ANGLE PT
MTC 47.25

113+04.36 (12.00' LT) BC
MTC 47.26

113+06.36 (10.00' LT) EC
MTC 47.34

113+61.50 BYRON ROAD
=9+99.85 GREAT VALLEY PARKWAY (N)
=155+73.73 GREAT VALLEY PARKWAY (S)

114+19.74 (11.00' RT) BC
MTC 47.72

114+21.74 (9.00' RT) EC
MTC 47.75

114+22.74 (9.00' RT) ANGLE PT
MTC 47.74

114+32.74 (9.00' RT) ANGLE PT
MTC 47.62

115+04.50 (9.00' RT) LP
MTC 47.33

UPRR R/W

115+68.66 (14.92' RT)
CONFORM TO EX MTC
EX MTC 47.3± (VERIFY)

115+94.84 (9.00' RT) BC
MTC 47.95

116+23.08 (6.32' RT) EC
MTC 47.99

116+28.65 (5.25' RT)
CONFORM TO EX MTC
EX MTC 48.0± (VERIFY)

117+21.44 (51.23' LT)
CONFORM TO EX C&G
EX TC 46.8± (VERIFY)

117+35.97 (8.80' LT) BC
CONFORM TO EX MTC
EX MTC 48.0± (VERIFY)

117+48.65 (8.73' LT) EC
MTC 48.

117+51.83 (11.67' RT)
CONFORM TO EX MTC
EX MTC 48.0± (VERIFY)

117+97.23 (49.85' LT)
CONFORM TO EX C&G
EX TC 47.1± (VERIFY)

117+85.33 (8.06' LT)
CONFORM TO EX MTC
EX MTC 48.2± (VERIFY)

EX MEDIAN

BYRON ROAD

112+89.79 (5.13' LT)
ACCESSIBLE PED SIGNAL

112+90.75 (2.00' RT)
CONFORM TO EX MTC
EX MTC 47.4± (VERIFY)

113+00.75 (2.00' RT)
ANGLE PT
MTC 47.48

155+07.47 (71.62' LT)
ACCESSIBLE PED SIGNAL

113+04.36 (2.00' RT) BC
MTC 47.49

113+06.36 (0.00' RT) EC
MTC 47.54

155+07.67 (8.00' LT)
ANGLE PT
MTC 46.92

155+10.15 (8.00' LT) BC
MTC 46.93

155+12.15 (5.98' LT) EC
MTC 47.07

155+12.33 (3.98' LT) BC
MTC 47.05

155+10.13 (2.00' LT) EC
MTC 47.05

155+07.61 (2.00' LT)
ANGLE PT
MTC 47.04

114+19.74 (13.00' RT) BC
MTC 47.60

114+21.74 (15.00' RT) EC
MTC 47.55

114+22.74 (15.00' RT)
ANGLE PT
MTC 47.54

155+07.58 (72.94' RT)
ACCESSIBLE PED SIGNAL

114+32.74 (15.00' RT)
CONFORM TO EX MTC
EX MTC 47.5± (VERIFY)

114+34.02 (11.93' RT)
ACCESSIBLE PED SIGNAL

154+97.60 (2.00' LT)
ANGLE PT
MTC 47.00

154+87.67 (8.00' LT)
ANGLE PT
MTC 46.88

154+82.28 (8.00' LT)
CONFORM TO EX MTC
EX MTC 46.7± (VERIFY)

EX MEDIAN

GREAT VALLEY
PARKWAY

ROFFONI
FUTURE
GENERAL
COMMERCIAL

NEIGHBORHOOD 'H'

BYRON ROAD IMPROVEMENTS
SCALE: 1" = 20'

LEGEND:
- EXISTING AC PAVEMENT
- PROPOSED AC PAVEMENT (SEE SHEET 2 FOR PAVEMENT SECTION)
- PROPOSED SIDEWALK (PER MHCSD STD. DETAIL SC-01)
- SIGNAL HOUSE ACCESS LOCATION
- DECOMPOSED GRANITE

CONSTRUCTION NOTES:

1. TYPE 'B' CURB & GUTTER (SPILL) PER MHCSD DETAIL SC-05 (SEE SHEET 2 FOR DETAIL).
2. TYPE 'C' CURB & GUTTER (CARTCH) PER MHCSD DETAIL SC-05 (SEE SHEET 2 FOR DETAIL).
3. CURB RAMP PER MHCSD STD DETAIL SC-17A.

CURVE TABLE				
NO	RADIUS	DELTA	LENGTH	DESC
C1	505.40'	001°26'17"	12.68'	MTC
C2	2.00'	090°00'00"	3.14'	MTC
C3	2.00'	090°00'00"	3.14'	MTC
C4	2.00'	090°00'25"	3.14'	MTC
C5	2.00'	089°59'35"	3.14'	MTC
C6	2.00'	090°35'07"	3.16'	MTC
C7	2.00'	089°24'53"	3.12'	MTC
C8	150.00'	008°31'51"	22.33'	MTC
C9	150.00'	010°51'00"	28.41'	MTC

152+93.00 (2.00' LT) BC
MTC 47.78

152+70.75 (0.34' LT) EC
CONFORM TO EX MTC
EX MTC 47.8± (VERIFY)

45.00' VC

156+10.54 BVC
CL 46.27

156+55.54 EVC
CL 46.52

155+73.73 GREAT VALLEY PARKWAY (S)
=9+99.85 GREAT VALLEY PARKWAY (N)
=113+61.50 BYRON ROAD
CL 46.64

156+25.73
CONFORM TO EX PAVEMENT
CL 46.2±

156+58.15 GB
CL 46.58

156+68.15 GB
CL 46.78

156+78.15 GB
CL 46.89

11+11.07 GREAT VALLEY PARKWAY (N)
=440+10.70 UPRR
TRACK ELEVATION 46.89

156+92.15 GB
CL 46.89

157+02.15 GB
CL 46.78

157+35.19 GB
CL 43.7±

1.00%
3%
2%
1%
0%
1%
2.00%

FG AT CL
PROFILE

14' TRACK ENVELOPE

CONFORM TO EX TC 45.8± (LT)
CONFORM TO EX TC 45.9± (RT)

EG AT CL

156+12.43 CHEVRON
APPROX. TOP OF PIPE 39.2±

156+53.47 KINDER MORGAN
APPROX. TOP OF PIPE 38.5±

GREAT VALLEY PARKWAY PROFILE
SCALE: HORIZONTAL 1" = 20'
VERTICAL 1" = 2'

50 45 40 35
9+00 10+00 11+00 12+00 13+00

No.	Descriptions	Date	App.

COMMUNITY SERVICES DISTRICT
PRELIMINARY PLANS
NOT FOR CONSTRUCTION

Approved By: DEVON CROVE
Title: CITY ENGINEER
RCE 80774

DATE: SEPT 17, 2024
DRAWN BY: LWL
PROJ. ENGR. LWL
PROJ. MGR. TRR

REGISTERED PROFESSIONAL ENGINEER
TERRENCE R. REEVES
75174
CIVIL
STATE OF CALIFORNIA

cbg CIVIL ENGINEERS · SURVEYORS · PLANNERS
SAN RAMON · (925) 866-0322
SACRAMENTO · (916) 375-1877
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MOUNTAIN HOUSE

BYRON ROAD & GREAT VALLEY PARKWAY

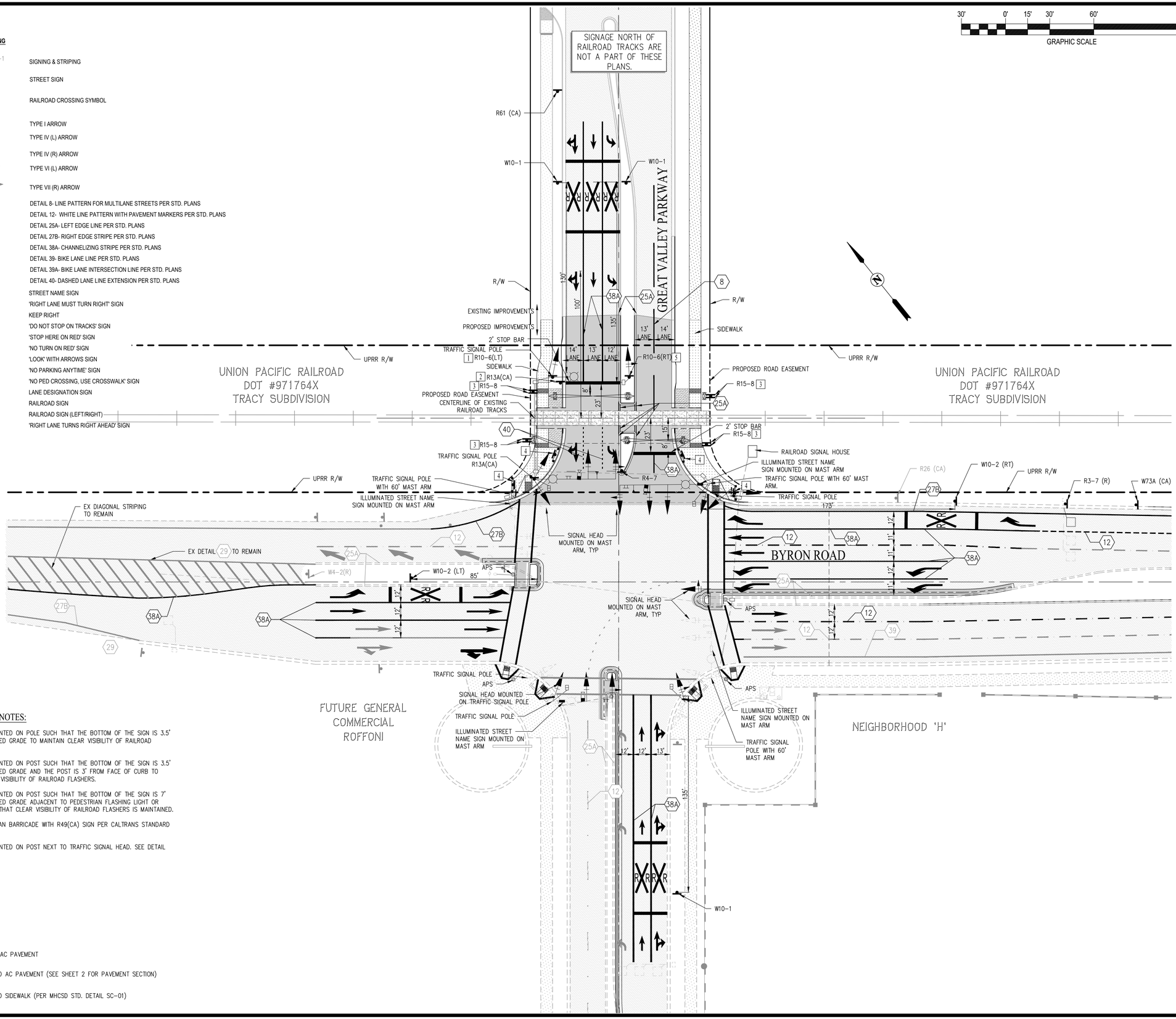
IMPROVEMENT PLANS - RAILROAD CROSSINGS
GREAT VALLEY ROAD PROFILE & BYRON ROAD IMPROVEMENTS

Comp. File No. IP05.dwg
Plan File No. 0731A
SHEET: 5 OF: 14

I:\673-110\Acad\IP\RAILROAD XINGS\GVPIP05.dwg Sep 17, 2024 - 1:37 pm Louis

LEGEND:

PROPOSED	EXISTING	
R1-1	R1-1	SIGNING & STRIPING
		STREET SIGN
		RAILROAD CROSSING SYMBOL
		TYPE I ARROW
		TYPE IV (L) ARROW
		TYPE IV (R) ARROW
		TYPE VI (L) ARROW
		TYPE VII (R) ARROW
8	8	DETAIL 8- LINE PATTERN FOR MULTILANE STREETS PER STD. PLANS
12	12	DETAIL 12- WHITE LINE PATTERN WITH PAVEMENT MARKERS PER STD. PLANS
25A	25A	DETAIL 25A- LEFT EDGE LINE PER STD. PLANS
27B	27B	DETAIL 27B- RIGHT EDGE STRIPE PER STD. PLANS
38A	38A	DETAIL 38A- CHANNELIZING STRIPE PER STD. PLANS
39	39	DETAIL 39- BIKE LANE LINE PER STD. PLANS
39A	39A	DETAIL 39A- BIKE LANE INTERSECTION LINE PER STD. PLANS
40	40	DETAIL 40- DASHED LANE LINE EXTENSION PER STD. PLANS
D3-1		STREET NAME SIGN
R3-7		'RIGHT LANE MUST TURN RIGHT' SIGN
R4-7		KEEP RIGHT
R8-8		'DO NOT STOP ON TRACKS' SIGN
R10-6		'STOP HERE ON RED' SIGN
R13A(CA)		'NO TURN ON RED' SIGN
R15-8		'LOOK' WITH ARROWS SIGN
R26 (CA)		'NO PARKING ANYTIME' SIGN
R49(CA)		'NO PED CROSSING, USE CROSSWALK' SIGN
R61 (CA)		LANE DESIGNATION SIGN
W10-1		RAILROAD SIGN
W10-2		RAILROAD SIGN (LEFT/RIGHT)
W-73 (CA)		'RIGHT LANE TURNS RIGHT AHEAD' SIGN



CONSTRUCTION NOTES:

1. SIGN TO BE MOUNTED ON POLE SUCH THAT THE BOTTOM OF THE SIGN IS 3.5' CLEAR TO FINISHED GRADE TO MAINTAIN CLEAR VISIBILITY OF RAILROAD FLASHERS.
2. SIGN TO BE MOUNTED ON POST SUCH THAT THE BOTTOM OF THE SIGN IS 3.5' CLEAR TO FINISHED GRADE AND THE POST IS 3' FROM FACE OF CURB TO MAINTAIN CLEAR VISIBILITY OF RAILROAD FLASHERS.
3. SIGN TO BE MOUNTED ON POST SUCH THAT THE BOTTOM OF THE SIGN IS 7' CLEAR TO FINISHED GRADE ADJACENT TO PEDESTRIAN FLASHING LIGHT OR SIDEWALK SUCH THAT CLEAR VISIBILITY OF RAILROAD FLASHERS IS MAINTAINED.
4. TYPE I PEDESTRIAN BARRICADE WITH R49(CA) SIGN PER CALTRANS STANDARD PLAN ES-7Q.
5. SIGN TO BE MOUNTED ON POST NEXT TO TRAFFIC SIGNAL HEAD. SEE DETAIL SHEET 11.

LEGEND:

- EXISTING AC PAVEMENT
- PROPOSED AC PAVEMENT (SEE SHEET 2 FOR PAVEMENT SECTION)
- PROPOSED SIDEWALK (PER MHCSD STD. DETAIL SC-01)

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DIAL TOLL FREE 1-800-227-2600
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

REVISIONS			
No.	Descriptions	Date	App.

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

Approved By: _____ DEVON CROWE RCE 88075
Title: _____ ENGINEER V
Date: _____

DATE: SEPT 17, 2024 | DRAWN BY: LWL | PROJ. ENGR: LWL | PROJ. MGR: TRR

PROFESSIONAL ENGINEER * REGISTERED * TERRENCE R. REEVES 75174 CIVIL STATE OF CALIFORNIA

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SACRAMENTO (916) 375-1877
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MOUNTAIN HOUSE

BYRON ROAD & GREAT VALLEY PARKWAY

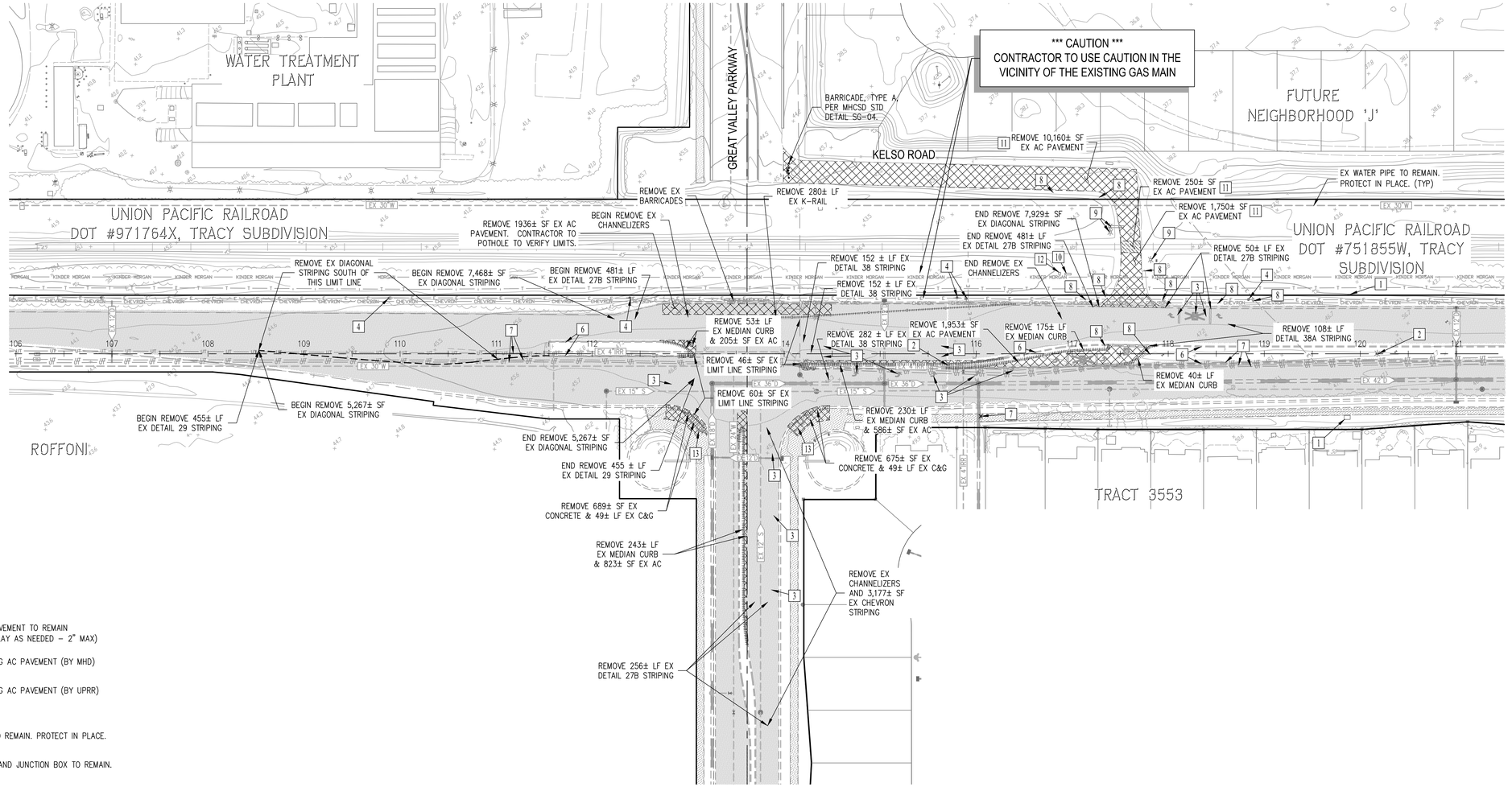
IMPROVEMENT PLANS - RAILROAD CROSSINGS SIGNAGE & STRIPING

Comp. File No. IP07.dwg

Plan File No. 0731A

SHEET: 7 OF: 14

THE EXISTING CROSSING CLOSURE AT KELSO ROAD IS TO TAKE PLACE SIMULTANEOUSLY WITH THE OPENING OF THE GREAT VALLEY PARKWAY CROSSING. THE KELSO ROAD CROSSING WILL BE CLOSED TO TRAFFIC AFTER GREAT VALLEY PARKWAY CROSSING IS OPENED AND UNTIL THE EXISTING CROSSING AND APPROACHES ARE REMOVED.



DEMOLITION PLAN

SCALE: 1" = 60'

LEGEND:

- EXISTING AC PAVEMENT TO REMAIN (GRIND & OVERLAY AS NEEDED – 2" MAX)
- REMOVE EXISTING AC PAVEMENT (BY MHD)
- REMOVE EXISTING AC PAVEMENT (BY UPRR)

DEMOLITION NOTES:

1. EXISTING UTILITY BOX TO REMAIN. PROTECT IN PLACE.
2. EXISTING STREET LIGHT AND JUNCTION BOX TO REMAIN. PROTECT IN PLACE.
3. EXISTING PAVEMENT MARKINGS TO BE REMOVED.
4. EXISTING UTILITY POLE TO REMAIN. PROTECT IN PLACE.
5. EXISTING UTILITY POLE TO BE REMOVED OR RELOCATED BY OTHERS.
6. EXISTING MEDIAN TC TO REMAIN. PROTECT IN PLACE.
7. ABANDONED EXISTING UNDERGROUND UTILITY LINES.
8. REMOVE EX SIGN & POST.
9. EXISTING RAILROAD CROSSING DEVICE TO BE REMOVED BY UPRR.
10. EXISTING RAILROAD CROSSING SIGNAL HOUSE TO BE REMOVED BY UPRR.
11. MHD TO REMOVE EX AC PAVEMENT UP TO 2' OF RAILROAD TRACKS. UPRR TO REMOVE EX AC PAVEMENT WITHIN 2' OF RAILROAD TRACKS.
12. EXISTING METERED PEDESTAL TO BE REMOVED BY UPRR.
13. EXISTING CURB RAMP TO BE REMOVED.

60' 0' 30' 60' 120' 240'

GRAPHIC SCALE

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No.	Descriptions	Date	Appr.

COMMUNITY SERVICES DISTRICT

PRELIMINARY PLANS

NOT FOR CONSTRUCTION

Approved By: DEVON CROVE RCE 80774 ENGINEER

Title:

DATE: SEPT 17, 2024 | DRAWN BY: LWL | PROJ. ENGR. LWL | PROJ. MGR. TRR

REGISTERED PROFESSIONAL ENGINEER — TERRENCE R. REEVES — 75174 — CIVIL — STATE OF CALIFORNIA

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MOUNTAIN HOUSE

BYRON ROAD & GREAT VALLEY PARKWAY

IMPROVEMENT PLANS - RAILROAD CROSSINGS
DEMOLITION PLAN

Comp. File No. IP03.dwg

Plan File No. 0731A

SHEET: 3 OF: 14

Exhibit D

Crossing Legal Description

SEPTEMBER 19, 2024
JOB NO. 673-034

EXHIBIT A
LEGAL DESCRIPTION
ROADWAY EASEMENT
GREAT VALLEY PARKWAY

REAL PROPERTY SITUATE IN THE CITY OF MOUNTAIN HOUSE, COUNTY OF SAN JOAQUIN, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

BEING A PORTION OF THE 100 FOOT WIDE STRIP ON LAND DESCRIBED IN THAT DEED TO SAN PABLO AND TULARE RAILROAD COMPANY RECORDED MAY 15, 1877 IN BOOK A OF DEEDS, VOLUME 35, AT PAGE 145, SAN JOAQUIN COUNTY RECORDS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A POINT ON THE NORTHEASTERN LINE OF SAID STRIP OF LAND, SAID POINT BEING ALSO THE WESTERN CORNER OF NEW PARCEL E, AS SAID PARCEL IS DESCRIBED IN THAT GRANT DEED RECORDED JULY 15, 2019, AS DOCUMENT NUMBER 2019-074718, SAN JOAQUIN COUNTY RECORDS;

THENCE, FROM SAID POINT OF COMMENCEMENT, ALONG THE COMMON LINE OF SAID LANDS, SOUTH 51°15'35" EAST 74.99 FEET TO THE **POINT OF BEGINNING;**

THENCE, FROM SAID POINT BEGINNING, CONTINUING ALONG SAID COMMON LINE, SOUTH 51°15'35" EAST 122.00 FEET;

THENCE, LEAVING SAID COMMON LINE, SOUTH 38°44'03" WEST 60.01 FEET;

THENCE, ALONG THE ARC OF A TANGENT 40.00 FOOT RADIUS CURVE TO THE LEFT, THROUGH A CENTRAL ANGLE OF 89°30'49", AN ARC DISTANCE OF 62.49 FEET TO A POINT ON THE NORTHEASTERLY RIGHT OF WAY LINE OF BYRON ROAD, AS SAID ROAD IS SHOWN ON TRACT NO. 3544 RECORDED NOVEMBER 8, 2006, FILED IN BOOK 41 OF MAPS AND PLATS, AT PAGE 6, IN THE OFFICE OF THE COUNTY RECORDER OF SAN JOAQUIN COUNTY;

THENCE, ALONG SAID RIGHT OF WAY LINE, NORTH 51°15'35" WEST 201.33 FEET;

THENCE, LEAVING SAID RIGHT OF WAY LINE, SOUTHEASTERLY ALONG THE ARC OF A NON-TANGENT 40.00 FOOT RADIUS CURVE TO THE LEFT, FROM WHICH THE CENTER OF SAID CURVE BEARS NORTH 38°15'36" EAST, THROUGH A CENTRAL ANGLE OF 89°31'33", AN ARC DISTANCE OF 62.50 FEET;

THENCE, NORTH 38°44'03" EAST 60.00 FEET TO THE **POINT OF BEGINNING.**

CONTAINING 12,887 SQUARE FEET OF LAND, MORE OR LESS.

DISTANCES LISTED HEREIN ARE GROUND DISTANCES. TO OBTAIN GRID DISTANCES MULTIPLY BY THE COMBINED SCALE FACTOR OF 0.99993260.

ATTACHED HERETO IS EXHIBIT B, A PLAT TO ACCOMPANY LEGAL DESCRIPTION, AND BY THIS REFERENCE MADE A PART HEREOF.

END OF DESCRIPTION

2/19/2025

MATHEW A. STEWARD, P.L.S.
L.S. NO. 9036

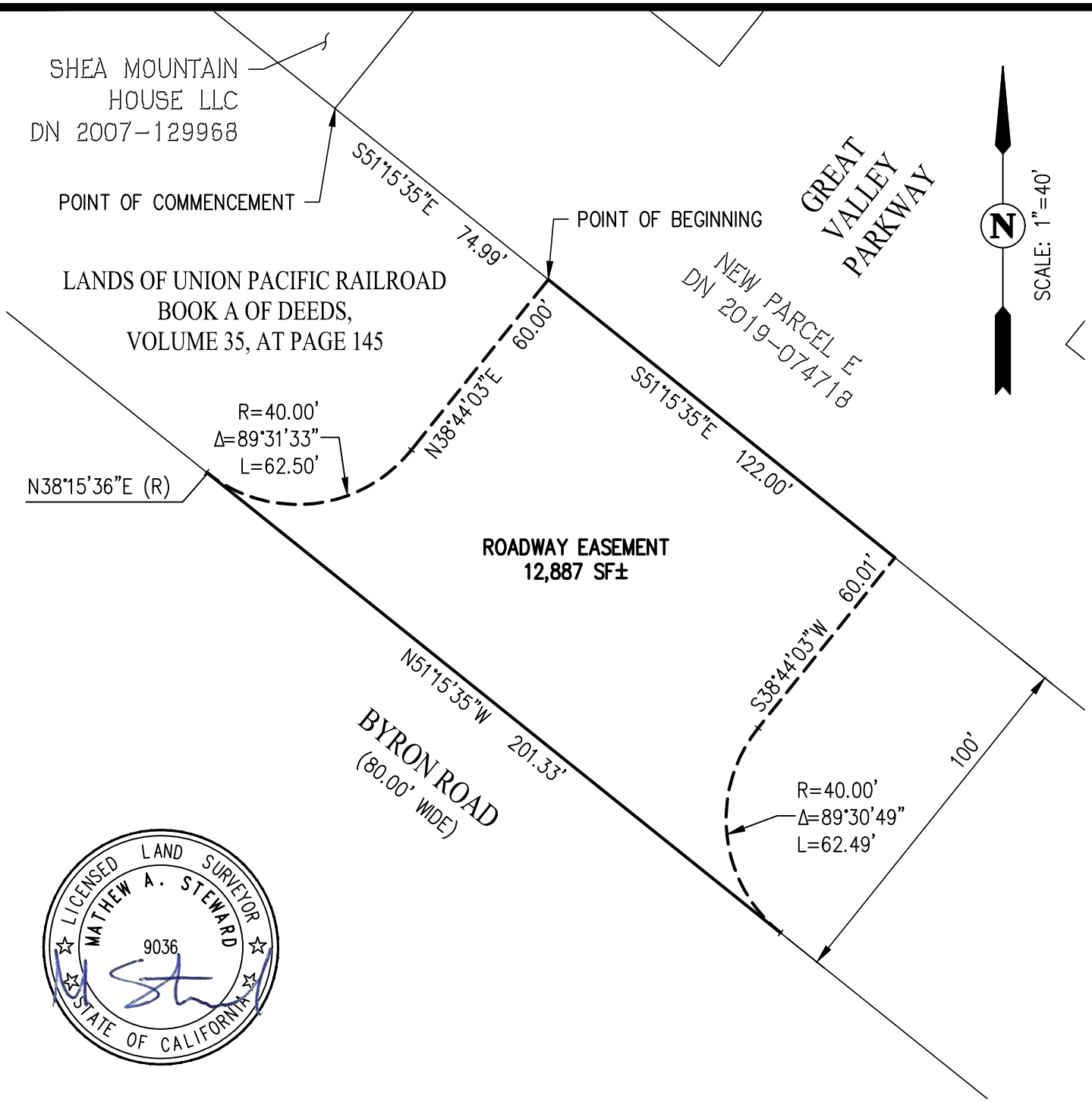

EXHIBIT B

PLAT TO ACCOMPANY LEGAL DESCRIPTION

ROADWAY EASEMENT - GREAT VALLEY PARKWAY
LANDS OF UNION PACIFIC RAILROAD
CITY OF MOUNTAIN HOUSE, SAN JOAQUIN COUNTY, CALIFORNIA

SEPTEMBER 19, 2024

SHEET 1 OF 1

cbg
CIVIL ENGINEERS ▪ SURVEYORS ▪ PLANNERS

SAN RAMON ▪ (925) 866-0322
ROSEVILLE ▪ (916)788-4456
WWW.CBANDG.COM

Parcel Map Check Report

Parcel Name: Site 1 - GVP
Description:
Process segment order counterclockwise: False
Enable mapcheck across chord: False
North:2,113,853.7518' East:6,257,992.6176'

Segment# 1: Line
Course: S51° 15' 34.94"E Length: 122.000'
North: 2,113,777.4052' East: 6,258,087.7765'

Segment# 2: Line
Course: S38° 44' 03.00"W Length: 60.006'
North: 2,113,730.5971' East: 6,258,050.2302'

Segment# 3: Curve
Length: 62.492' Radius: 40.000'
Delta: 89°30'49" Tangent: 39.662'
Chord: 56.328' Course: S6° 01' 21.47"E
Course In: S51° 15' 57.00"E Course Out: S39° 13' 14.06"W
RP North: 2,113,705.5688' East: 6,258,081.4325'
End North: 2,113,674.5801' East: 6,258,056.1402'

Segment# 4: Line
Course: N51° 15' 34.94"W Length: 201.329'
North: 2,113,800.5700' East: 6,257,899.1055'

Segment# 5: Curve
Length: 62.501' Radius: 40.000'
Delta: 89°31'33" Tangent: 39.670'
Chord: 56.334' Course: N83° 29' 49.38"E
Course In: N38° 15' 35.75"E Course Out: S51° 15' 57.00"E
RP North: 2,113,831.9784' East: 6,257,923.8747'
End North: 2,113,806.9501' East: 6,257,955.0770'

Segment# 6: Line
Course: N38° 44' 03.00"E Length: 59.997'

North: 2,113,853.7512'
East: 6,257,992.6176'

Perimeter: 568.325'
Area: 12,886.60Sq.Ft.
Error Closure: 0.0006
Course: S0° 12' 37.28"W
Error North : -0.00057
East: 0.00000

Precision 1: 947,208.333

Exhibit E

UPRR Agreement Letter

Dated January 14, 2008

and

UPRR Concurrence

1.91
673-51
UPR

RECEIVED
SHEA HOMES

UNION PACIFIC RAILROAD COMPANY

LAW DEPARTMENT
10031 Foothills Boulevard, Suite 200, Roseville California 95747-7101
General Office: (916) 789-6400 / Facsimile (916) 789-6227

DAVID M. PICKETT
General Attorney
Direct: (916) 789-6218

January 14, 2008

Christopher Johnson
Shea Mountain House, LLC
Director of Operations
2580 Shea Center Drive
Livermore, CA 94551

Kevin Peters
Shea Mountain House, LLC
2580 Shea Center Drive
Livermore, CA 94551

Edward Merrill
Bingham McCutchen
1333 North California Blvd.
Walnut Creek, CA 94596

Michael McGrew
Nevmiller & Beardslee
509 West Weber Avenue, 5th Floor
Stockton, CA 95203

Re: Central Parkway overcrossing

Gentlemen:

I write to confirm that Union Pacific Railroad, Mountain House Community Services District, and Shea Homes have agreed that the private crossings located at milepost 74.94 (DOT #751856D) and 75.18 (DOT #751857K) on the Tracy Subdivision will be removed without delay when the Central Parkway overcrossing is opened for use and accepted by the Mountain House Community Services District.

This agreement is part of the understanding among the parties regarding the overall treatment of the location of crossings within the Mountain House development. In addition to the changes described above, Mountain House Community Services District and Shea Homes intend to close the existing public crossings at Henderson Road (DOT #751858S) and Wicklund Road (DOT #751859Y), realign the Kelso Road crossing (DOT #751855W)within approximately 300 feet of its existing alignment, and open a new public grade crossing at Mountain House Parkway (M.P. 75.4). As long as all of these changes transpire, Union Pacific will not object to applications made to the California Public Utilities Commission for the Kelso Road and Mountain House Parkway projects on the basis that additional grade crossings must be closed. Union Pacific retains its right to oppose such applications on the basis of design features.

Thank you for your courtesy. Please contact me immediately if this correspondence does not accurately reflect our agreement.

Very truly yours,

DAVID M. PICKETT

DMP/lmr

cc: David Stewart, CPUC

673-31
UPRR

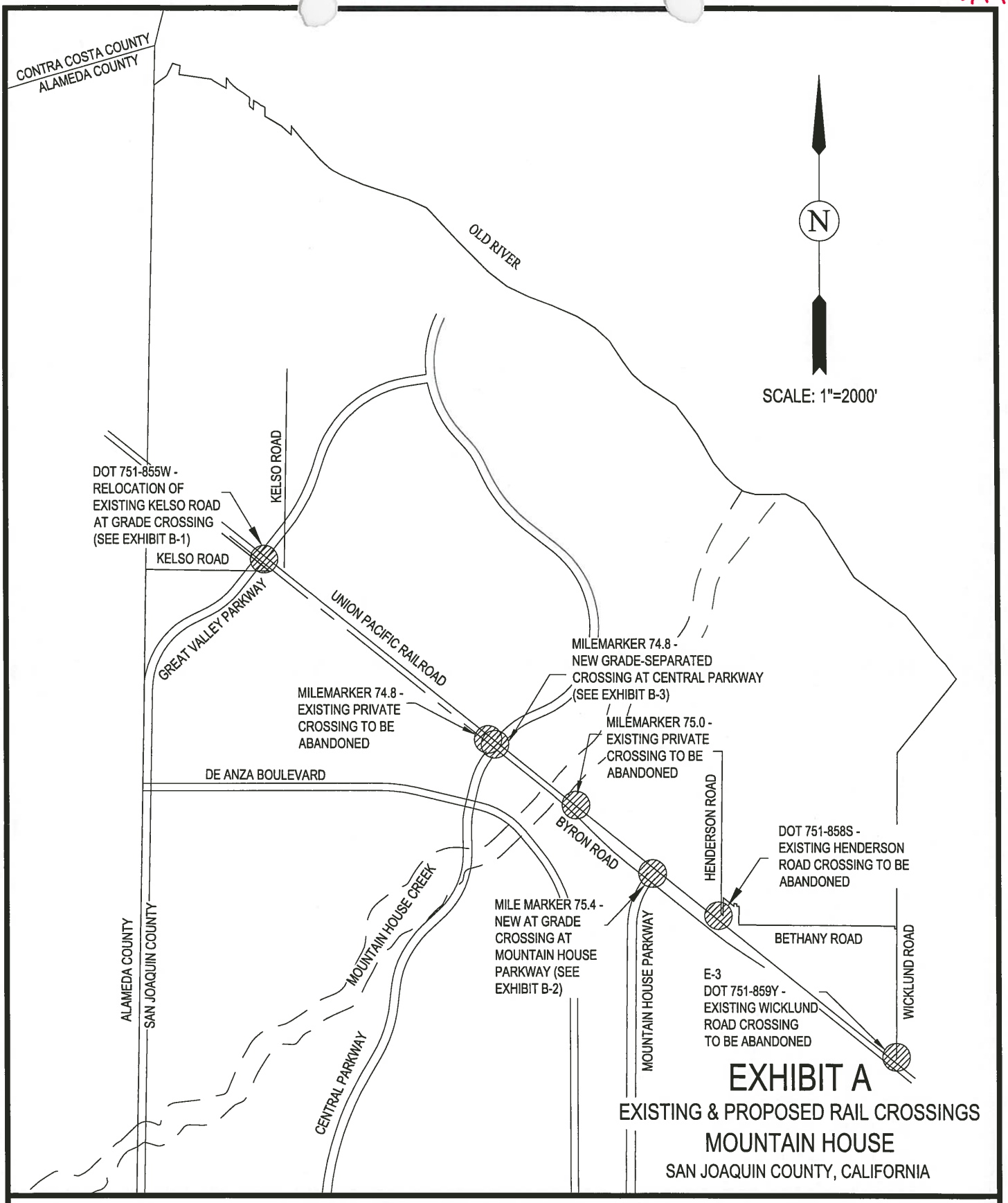

EXHIBIT A

EXISTING & PROPOSED RAIL CROSSINGS
MOUNTAIN HOUSE
SAN JOAQUIN COUNTY, CALIFORNIA

Carlson, Barbee & Gibson, Inc.

CIVIL ENGINEERS • SURVEYORS • PLANNERS

6111 BOLLINGER CANYON ROAD, SUITE 150, SAN RAMON, CALIFORNIA 94583

TELEPHONE: (925) 866-0322 FAX: (925) 866-8575

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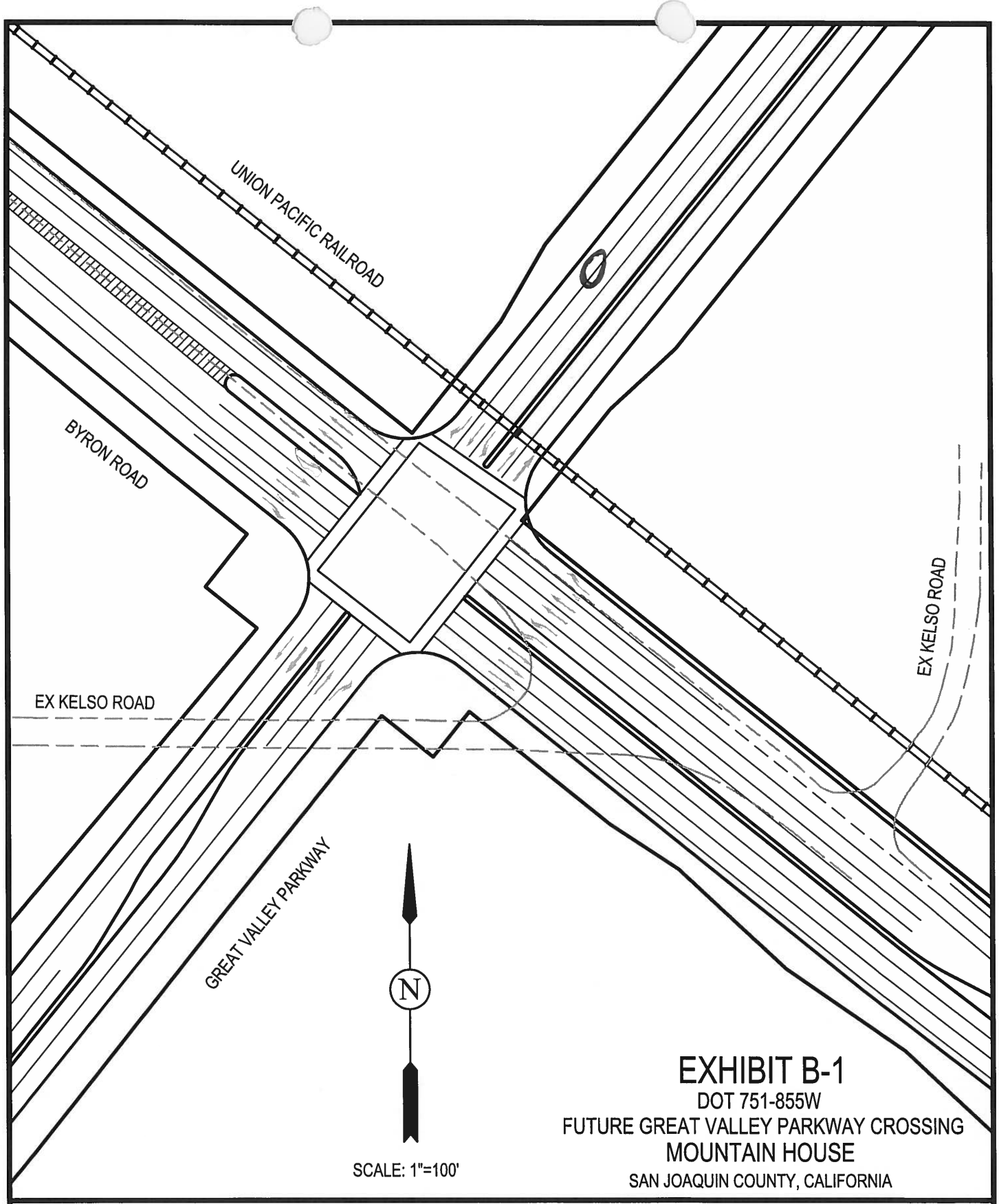

SCALE: 1"=100'

EXHIBIT B-1

DOT 751-855W

FUTURE GREAT VALLEY PARKWAY CROSSING

MOUNTAIN HOUSE

SAN JOAQUIN COUNTY, CALIFORNIA

Carlson, Barbee & Gibson, Inc.

CIVIL ENGINEERS • SURVEYORS • PLANNERS

6111 BOLLINGER CANYON ROAD, SUITE 150, SAN RAMON, CALIFORNIA 94583

TELEPHONE: (925) 866-0322 FAX: (925) 866-8575

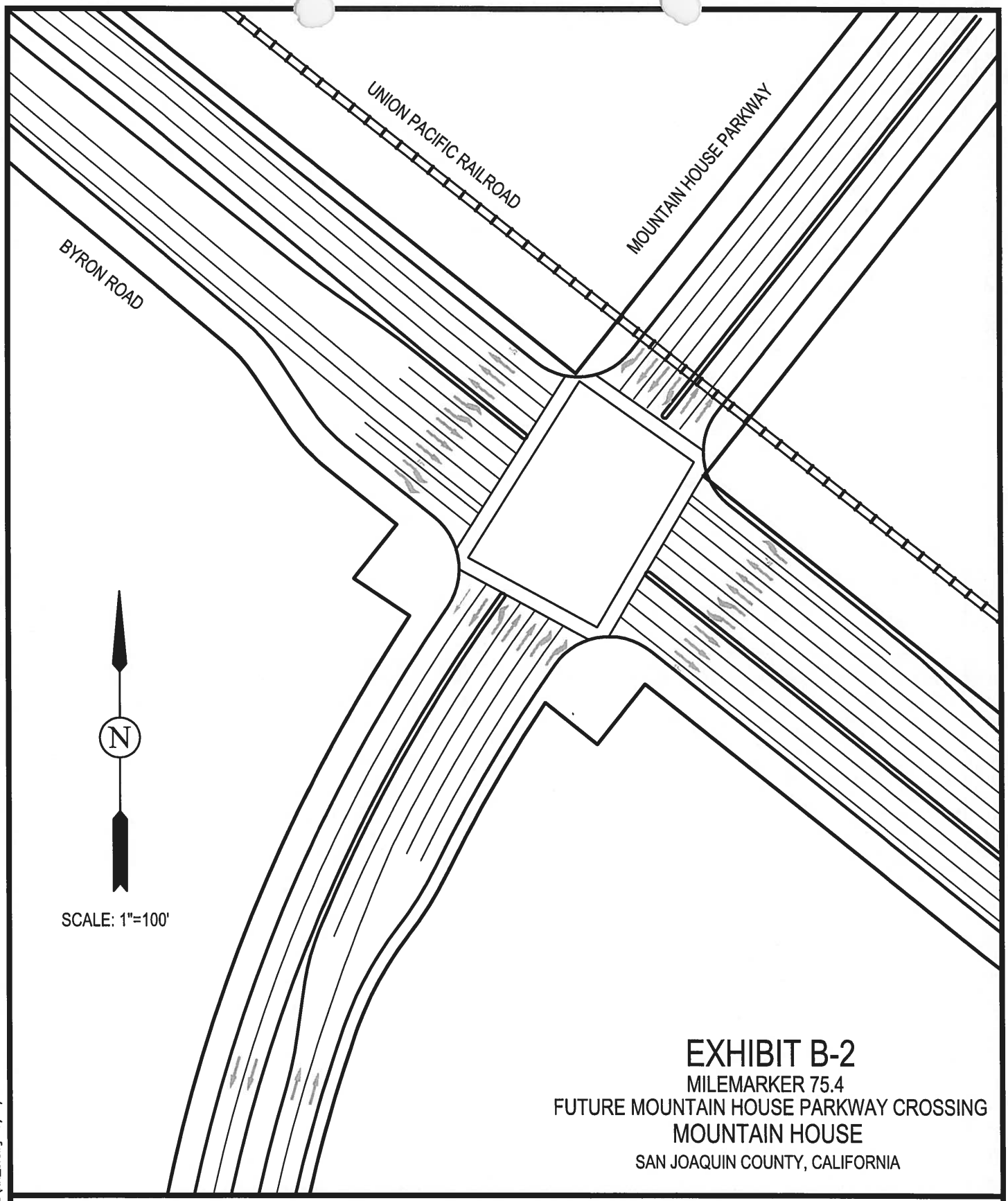

EXHIBIT B-2

MILEMARKER 75.4
FUTURE MOUNTAIN HOUSE PARKWAY CROSSING
MOUNTAIN HOUSE
SAN JOAQUIN COUNTY, CALIFORNIA

Carlson, Barbee & Gibson, Inc.

CIVIL ENGINEERS • SURVEYORS • PLANNERS
6111 BOLLINGER CANYON ROAD, SUITE 150, SAN RAMON, CALIFORNIA 94583
TELEPHONE: (925) 866-0322 FAX: (925) 866-8575

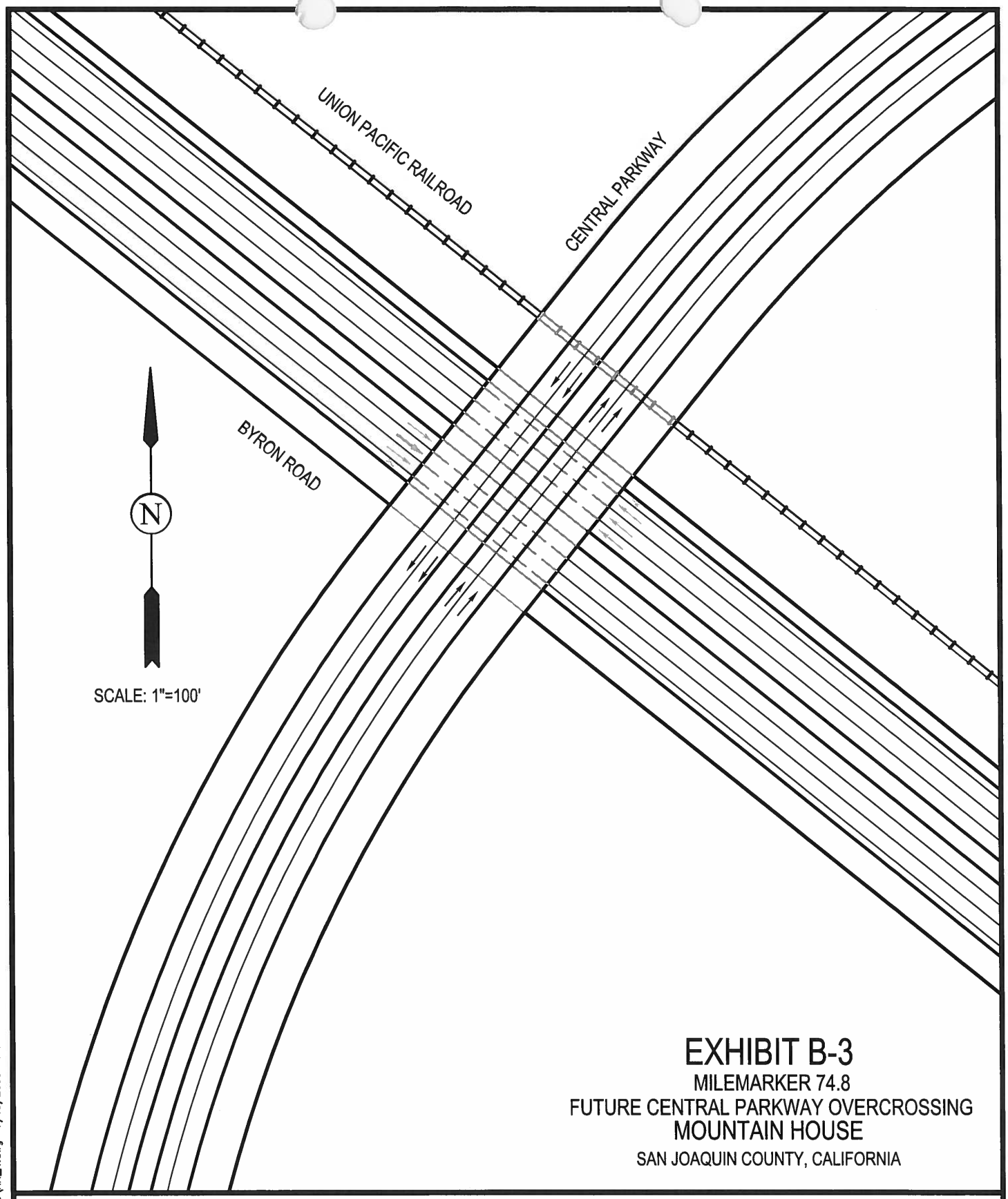

EXHIBIT B-3

MILEMARKER 74.8

FUTURE CENTRAL PARKWAY OVERCROSSING

MOUNTAIN HOUSE

SAN JOAQUIN COUNTY, CALIFORNIA

Carlson, Barbee & Gibson, Inc.

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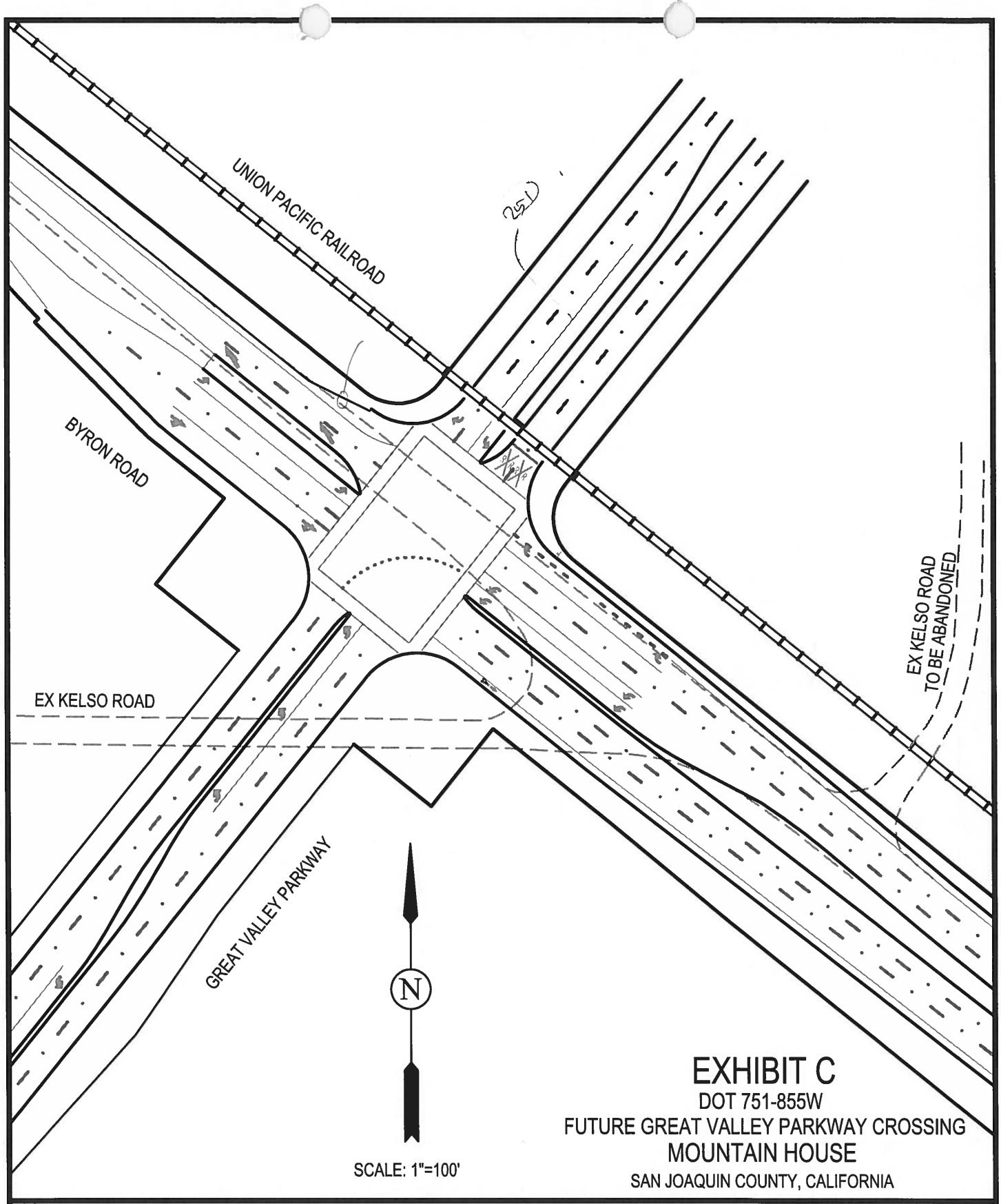
6111 BOLLINGER CANYON ROAD, SUITE 150, SAN RAMON, CALIFORNIA 94583

TELEPHONE: (925) 866-0322 FAX: (925) 866-8575



SCALE: 1"=100'

EXHIBIT C

DOT 751-855W

FUTURE GREAT VALLEY PARKWAY CROSSING

MOUNTAIN HOUSE

SAN JOAQUIN COUNTY, CALIFORNIA

Carlson, Barbee & Gibson, Inc.

CIVIL ENGINEERS • SURVEYORS • PLANNERS

6111 BOLLINGER CANYON ROAD, SUITE 150, SAN RAMON, CALIFORNIA 94583

TELEPHONE: (925) 866-0322 FAX: (925) 866-8575

I:\673-90\ACAD\Exhibits\rail road 061606\ACAD-RR_2.dwg 6/16/2006

BUILDING AMERICA®

April 13, 2025

David R. Stewart
Utilities Engineer
California Public Utilities Commission
Rail Safety Division
(415) 806-0490
Sent Via email (David.Stewart@cpuc.ca.gov)

RE: New Public At-Grade Crossings, City of Mountain House, California, Great Valley Parkway (UPRR Tracy Subdivision MP 74.10, DOT #971764X) and Mountain House Parkway (UPRR Tracy Subdivision MP 75.54, DOT # 971765E)

Dear Mr. Stewart:

Union Pacific Railroad Company (UPRR) has been coordinating with the Mountain House community now City of Mountain House (City) for several years regarding two proposed new at-grade crossings – Great Valley Parkway (Tracy Sub MP 74.10, DOT #971764X) and Mountain House Parkway (Tracy Sub MP 75.54, DOT #971765E). In 2008, UPRR Law Department provided conditional approval of the new at-grade crossings with the understanding that three existing public at-grade crossings and two private at-grade crossings in the vicinity would be closed. In 2009, the two private at-grade crossings (DOT #751856D and DOT #751857K) were closed. Recently, the City has completed preparation of final plans for the new at-grade crossings and closure of three public at-grade crossings: Kelso Road (Tracy Sub MP 74.18, DOT #751855W), Henderson Road (Tracy Sub MP 75.76, DOT #751858S), and Wicklund Road (Tracy Sub MP 76.40, DOT #751859Y).

UPRR has reviewed and approved the Final Plans, including the new at-grade crossing designs, traffic signal pre-emption, and parallel fencing to separate the railroad right-of-way from proposed residential development. UPRR will continue to coordinate with the City of Mountain House on these projects and does not object to CPUC approval of these new at-grade crossings, on the condition that the City follows the UPRR Public Project process and executes Construction & Maintenance agreements for each new crossing and Crossing Closure agreements for each crossing to be closed. The preparation of the Construction and Maintenance agreements will commence after the City has approved UPRR cost estimates for all project-related work.

Please contact Cliff Cessna or me if you have questions or wish to discuss further. Thank you.

Very truly yours,

Signed by:
Amber Stoffels
4A3A055320904BD...

Amber L. Stoffels
Manager I Industry and Public Projects

cc: Clifford Cessna, UPRR Contractor (ccessna@benesch.com)
Steven Pinkerton, City Manager, City of Mountain House (spinkerton@sjgov.org)

UNION PACIFIC RAILROAD
1400 W. 52nd Avenue, Unit 1259
Denver, CO 80221

Amber L. Stoffels
Manager I Industry and Public Projects
Engineering

P 720-243-0759
E amber.stoffels@up.com

Exhibit F

Preemption Calculations

and

Traffic Signal Plans

Set 1 - Preemption Calculations - Includes left turns towards the track (Line 28) and does not include pedestrian clearance time during right of way transfer (Line 22)

Version 07/12/2017

RESET

Texas Department of Transportation

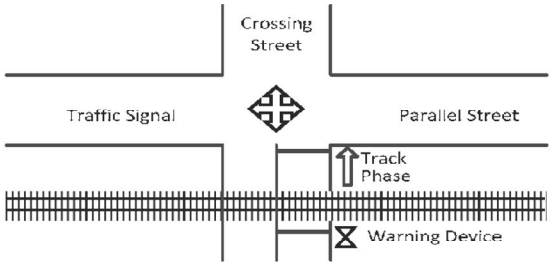
Form 2304
(Rev. 7/17)

GUIDE FOR DETERMINING TIME REQUIREMENTS FOR TRAFFIC SIGNAL PREEMPTION AT HIGHWAY-RAIL GRADE CROSSINGS

City	Mountain House	CSJ	
County	San Joaquin		
District	Mountain House CSD		

Date	6/21/24
Completed by	Erik Bjorklund
District Approval	Devon Crowe

Show North Arrow



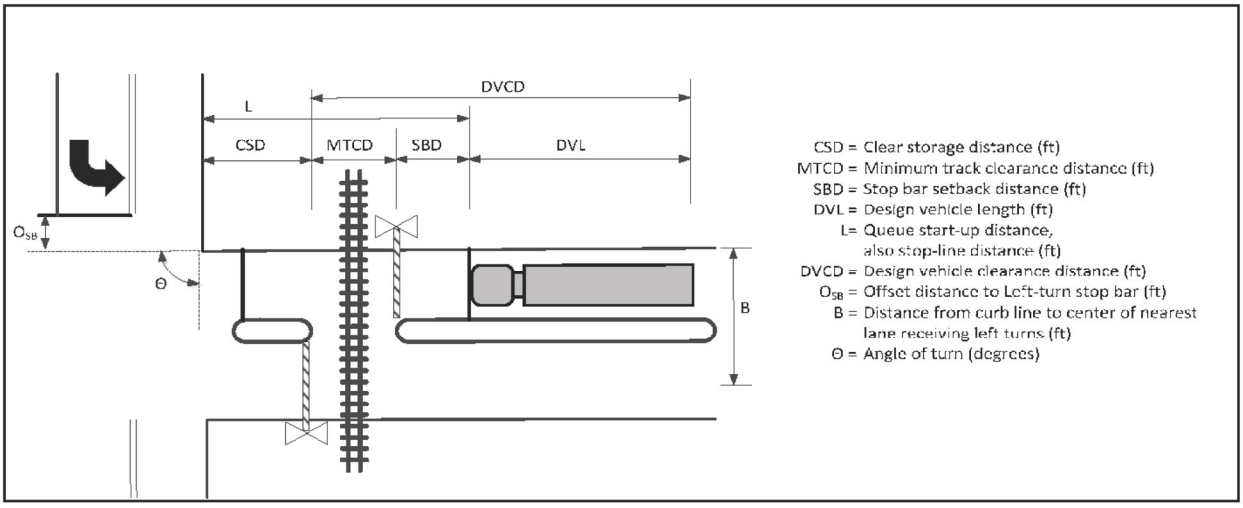
Parallel Street Name: Bryon Road

Crossing Street Name: Great Valley Parkway

Railroad	Union Pacific	Railroad Contact	Amber Stoffels
Crossing DOT#	971764X	Phone	(720) 243-0759

NOTE: After approval by the District, a copy of this form, along with the traffic signal design sheets and the phasing diagrams for normal and preempted operation, shall be placed in the traffic signal cabinet. See Section 7 for traffic signal timings.

SECTION 1: GEOMETRY DATA & DEFAULTS



GEOMETRIC DATA FOR CROSSING

			Remarks
1.	Clear storage distance (CSD, feet)	1. 67	
2.	Minimum track clearance distance (MTCD, feet)	2. 24	
3.	Stop bar setback distance (SBD, feet)	3. 14	Enter "0" if no stop bar is present
4.	Width of receiving approach (B, feet)	4. 56	
5.	Offset distance of left turn stop bar (O_{SB}, feet)	5. 33	
6.	Approach grade. % (0 if approach is on downgrade)	6. 2.5	
7.	Angle of turn at Intersection (Θ, degrees)	7. 90	

DESIGN VEHICLE DATA

8. Select Design Vehicle

☐ School Bus ☐ Intermediate Truck ☑ Interstate Semi-Truck ☐ Other

9.	Default design vehicle length (feet)	9. 75	Based on selected Design Vehicle
a.	Additional vehicle length, if needed (feet)	9a. 0	Use only if "Other" selected as Design Vehicle
10.	Total design vehicle length (DVL, feet)	10. 75	Sum of line 9 and 9a
11.	Centerline turning radius of design vehicle (R, feet)	11. 41	Based on selected Design Vehicle
12.	Passenger car vehicle length (LV, feet)	12. 19	Default value

SECTION 2: RIGHT-OF-WAY TRANSFER TIME CALCULATION

Preempt verification and response time

				Remarks
13.	Preempt delay time (seconds)	13.	0	
14.	Controller response time to preempt (seconds)	14.	0.0	Manufacturer:
				Firmware Version:
15.	Preempt verification and response time (seconds): add lines 13 and 14	15.	0.0	

Worst-case conflicting vehicle time

				Remarks
16.	Minimum green time during right-of-way transfer (seconds)	16.	3	Value may be adjusted to meet local conditions
17.	Other green time during right-of-way transfer (seconds)	17.	0	
18.	Yellow change time (seconds)	18.	5.5	
19.	Red clearance time (seconds)	19.	0.4	
20.	Worst-case conflicting vehicle time (seconds): add lines 16 through 19	20.	8.9	

Worst-case conflicting pedestrian time

				Remarks
21.	Minimum walk time during right-of-way transfer (seconds)	21.	0	Value may be adjusted to meet local conditions
22.	Pedestrian clearance time during right-of-way transfer (seconds)	22.	0	Refer to instructions for pedestrian truncation guidance
23.	Vehicle yellow change time, if not included on line 22 (seconds)	23.	5.5	
24.	Vehicle red clearance time, if not included on line 22 (seconds)	24.	0.4	
25.	Worst-case conflicting pedestrian time (seconds): add lines 21 through 24	25.	5.9	

Worst-case conflicting vehicle or conflicting pedestrian time

26.	Worst-case conflicting vehicle or conflicting pedestrian time (seconds): maximum of lines 20 and 25	26.	8.9
27.	**Right-of-way transfer time (seconds): add lines 15 and 26**	27.	8.9

SECTION 3: QUEUE CLEARANCE TIME CALCULATION

					Remarks
28.	Are there left-turns towards the tracks?	☑ Yes	☐ No		
29.	Distance traveled by truck during left-turn (LTL, feet):	29.	64		LTL = ∏RΘ/180
30.	Travel speed of left-turning truck (S_{LTT}, mph):	30.	10		Default value
31.	Distance required to clear left-turning truck from travel lanes on track clearance approach (feet):	31.	206		Equation: (line 4 + line 5 + line 12 - line 11) + line 29 + line 10
32.	Additional time required to clear left-turning truck from travel lanes on track clearance approach (seconds):	32.	8.1		Equation: [(line 31 * 3600) / (line 30 * 5280) - line 18 - line 19]
33.	Worst-case Left Turning Truck time (seconds): if Line 28 = 'Yes', use line 32; otherwise Use 0	33.	8.1		
34.	Queue start-up distance, L (feet): add lines 1 through 3	34.	105		
35.	Time required for design vehicle to start moving (seconds): calculate as 2+(L÷20)	35.	7.3		
36.	Design vehicle clearance distance, DVCD (feet): add lines 2, 3 and 10	36.	113		
37.	Time for design vehicle to accelerate through the DVCD (seconds), level terrain	37.	14.2		
38.	Factor to account for slower acceleration on uphill grade	38.	1.17		
39.	Time for design vehcle to accelerate through DVCD (seconds), adjusted for grade: multiply lines 37 and 38	39.	16.6		
40.	**Queue clearance time (seconds): add lines 33, 35 and 39**	40.	32.0		

SECTION 4: MAXIMUM PREEMPTION TIME CALCULATION

				Remarks
41.	Right-of-way transfer time (seconds): line 27	41.	8.9	
42.	Queue clearance time (seconds): line 40	42.	32.0	
43.	Desired minimum separation time (seconds)	43.	2.0	Typical Value
44.	Maximum preemption time for Queue Clearance (seconds): add lines 41 through 43	44.	42.9	

SECTION 5: SUFFICIENT WARNING TIME CHECK

Remarks

45.	Required minimum time, MT (seconds): per regulations	45.	20
46.	Clearance time, CT (seconds): (line 2 -35) / 10 (rounded up to nearest second)	46.	0
47.	Total minimum warning time, MWT, needed (seconds): add lines 45 and 46 (excludes buffer time and equipment response time)	47.	20
48.	Required advance preemption time (APT) from railroad (seconds): subtract line 47 from line 44, round up to nearest full second, enter 0 if less than 0	48.	23
49.	APT currently provided by railroad (seconds): Enter "0" if new crossing or signal	49.	0

If the required advance preemption time (line 48) is greater than the amount of advance preemption time currently provided by the railroad (line 49), additional warning time must be requested from the railroad. Alternatively, the maximum preemption time (line 48) may be decreased after performing an engineering study to investigate the possibility of reducing the values on lines 13, 16, 17, 21, 22 and 43.

Remarks: Left turns towards the tracks is included in the Queue Clearance Time Calculation. Pedestrian clearance time during right-of-way transfer is not included in the Right Of Way Transfer Time Calculations. Either left turns towards the tracks or pedestrian clearance time will be served when railroad preemption is initiated, as they are not sequential movements.

SECTION 6: TRACK CLEARANCE GREEN TIME CALCULATION (IF NO GATE DOWN CIRCUIT PROVIDED)

Preempt Trap Check

Remarks

50. Warning Time Variability (Select One)

☐ Consistent Warning Times ☑ Low Warning Time Variability ☐ High Warning Time Variability

51.	APT required or provided (seconds): maximum of Line 48 or Line 49	51.	23
52.	Multiplier for maximum APT due to train handling	52.	1.25
53.	Maximum APT (seconds): multiply line 51 and 52	53.	28.8
54.	Minimum duration for the track clearance green interval (seconds)	54.	15
55.	Track Clearance Green Time to avoid Preempt Trap (seconds): add lines 53 and 54	56.	43.8

See Instructions for details.

Clearing of Clear Storage Distance

56.	Time waiting on left-turn truck (seconds): line 33	56.	8.1
57.	Time required for design vehicle to start moving (seconds): line 35	57.	7.3
58.	Design vehicle clearance distance (DVCD, feet): line 36	58.	113

If CSD ≤ DVL, you must clear the design vehicle through the entire CSD during the traffic clearance phase; however, if CSD > DVL, you should consider providing enough time to clear the design vehicle from the crossing.

Is the clear storage distance (CSD) less than or equal to the design vehicle length (DVL)?

☑ YES. The design vehicle MUST clear through the entire CSD. (CSD will be entered in Line 59).

☐ NO. The design vehicle may clear through a portion of the CSD.

Do you want to clear the design vehicle through the entire CSD?

☑ YES. Clear the entire CSD. (CSD will be entered in Line 59).

☐ NO. Clear the crossing ONLY. (DVL will be entered in Line 59).

GATE DOWN CIRCUIT WILL BE PROVIDED. SECTION IS NOT APPLICABLE

59.	Portion of CSD to clear during track clearance phase (feet)	59.	67
60.	Design vehicle relocation distance (DVRD, feet): add lines 58 and 59	60.	180
61.	Time required to accelerate design vehicle through DVRD (seconds), level terrain:	61.	18.3
62.	Factor to account for slower acceleration on uphill grade	62.	1.18
63.	Time required to accelerate design vehicle through DVRD (seconds), adjusted for grade: multiply lines 61 and 62	63.	21.5
64.	Time to clear portion of clear storage distance (seconds): add lines 56, 57 and 63	64.	36.9
65.	**Track clearance green interval (seconds): maximum of lines 55 or 64, round up to nearest full second**	65.	44

Maximum Duration of Track Clearance Green after gates are down (in absence of a gate down circuit)

66.	Total time to complete track clearance green (seconds): line 27 + line 65	66.	52.9
67.	Total time before gates are down (seconds): subtract 5 seconds from line 44 (per AREMA Manual)	67.	37.9
68.	**Maximum Duration of Track Clearance Green after gates are down (seconds): Line 66 - Line 67**	68.	16

SECTION 7: SUMMARY OF CONTROLLER PREEMPTION SETTINGS

			Remarks
69.	Duration Time (seconds)	0	Default Value
70.	Preempt Delay Time (seconds)	0	From Line 13

Right of Way Transfer Phase

			Remarks
71.	Minimum Green Interval (seconds)	3	From Line 16
72.	Pedestrian Walk Interval (seconds)	0	From Line 21
73.	Pedestrian Clearance Interval (Flashing "DON'T WALK", seconds)	0	From Line 22
74.	Yellow Change Interval (seconds)	5.5	From Line 18
75.	All Red Vehicle Clearance (seconds)	0.4	From Line 19

Track Clearance Phase

			Remarks
76.	Green Interval (seconds) (in the absence of gate down circuit)	44	From Line 65
77.	Green Interval (seconds) with gate down circuit	32	From Line 40
78.	Yellow Change Interval (seconds)	5.5	From Line 18
79.	All Red Vehicle Clearance (seconds)	0.4	From Line 19

Exit Phase

			Remarks
80.	Dwell/Cycle Minimum Green Time (seconds)	0	Default Value
81.	Yellow Change Interval (seconds)	5.5	From Line 18
82.	All Red Vehicle Clearance (seconds)	0.4	From Line 19

Remarks:

Version 07/12/2017

RESET

Set 2 - Preemption Calculations - Includes pedestrian clearance time during right of way transfer (Line 22) and does not include left turns towards the track (Line 28)

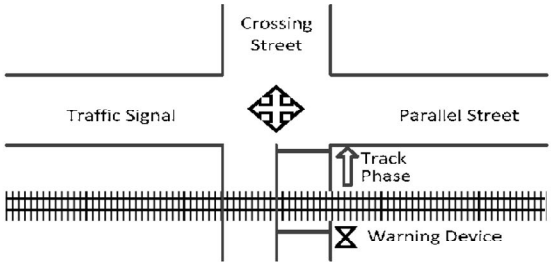
Texas Department of Transportation

Form 2304
(Rev. 7/17)

GUIDE FOR DETERMINING TIME REQUIREMENTS FOR TRAFFIC SIGNAL PREEMPTION AT HIGHWAY-RAIL GRADE CROSSINGS

City	Mountain House	CSJ		Date	6/11/24
County	San Joaquin			Completed by	Erik Bjorklund
District	Mountain House CSD			District Approval	Devon Crowe

Show North Arrow



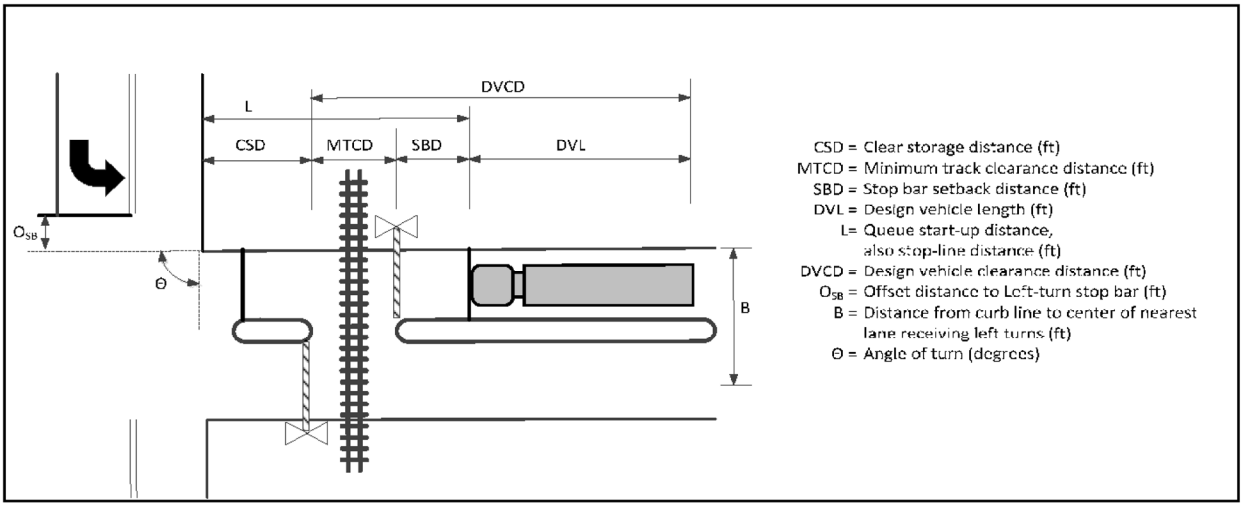
Parallel Street Name: Bryon Road

Crossing Street Name: Great Valley Parkway

Railroad	Union Pacific	Railroad Contact	Amber Stoffels
Crossing DOT#	971764X	Phone	(720) 243-0759

NOTE: After approval by the District, a copy of this form, along with the traffic signal design sheets and the phasing diagrams for normal and preempted operation, shall be placed in the traffic signal cabinet. See Section 7 for traffic signal timings.

SECTION 1: GEOMETRY DATA & DEFAULTS



GEOMETRIC DATA FOR CROSSING

			Remarks
1. Clear storage distance (CSD, feet)	1.	67	
2. Minimum track clearance distance (MTCD, feet)	2.	24	
3. Stop bar setback distance (SBD, feet)	3.	14	Enter "0" if no stop bar is present
4. Width of receiving approach (B, feet)	4.	56	
5. Offset distance of left turn stop bar (O_{SB}, feet)	5.	33	
6. Approach grade. % (0 if approach is on downgrade)	6.	2.5	
7. Angle of turn at Intersection (Θ, degrees)	7.	90	

DESIGN VEHICLE DATA

8. Select Design Vehicle

☐ School Bus ☐ Intermediate Truck ☑ Interstate Semi-Truck ☐ Other

9. Default design vehicle length (feet)	9.	75	Based on selected Design Vehicle
a. Additional vehicle length, if needed (feet)	9a.	0	Use only if "Other" selected as Design Vehicle
10. Total design vehicle length (DVL, feet)	10.	75	Sum of line 9 and 9a
11. Centerline turning radius of design vehicle (R, feet)	11.	41	Based on selected Design Vehicle
12. Passenger car vehicle length (LV, feet)	12.	19	Default value

SECTION 2: RIGHT-OF-WAY TRANSFER TIME CALCULATION

Preempt verification and response time

				Remarks
13.	Preempt delay time (seconds)	13.	0	
14.	Controller response time to preempt (seconds)	14.	0.0	Manufacturer:
				Firmware Version:
15.	Preempt verification and response time (seconds): add lines 13 and 14	15.	0.0	

Worst-case conflicting vehicle time

				Remarks
16.	Minimum green time during right-of-way transfer (seconds)	16.	0	Value may be adjusted to meet local conditions
17.	Other green time during right-of-way transfer (seconds)	17.	0	
18.	Yellow change time (seconds)	18.	0.0	
19.	Red clearance time (seconds)	19.	0.0	
20.	Worst-case conflicting vehicle time (seconds): add lines 16 through 19	20.	0.0	

Worst-case conflicting pedestrian time

				Remarks
21.	Minimum walk time during right-of-way transfer (seconds)	21.	0	Value may be adjusted to meet local conditions
22.	Pedestrian clearance time during right-of-way transfer (seconds)	22.	16	Refer to instructions for pedestrian truncation guidance
23.	Vehicle yellow change time, if not included on line 22 (seconds)	23.	0.0	
24.	Vehicle red clearance time, if not included on line 22 (seconds)	24.	0.0	
25.	Worst-case conflicting pedestrian time (seconds): add lines 21 through 24	25.	16.0	

Worst-case conflicting vehicle or conflicting pedestrian time

26.	Worst-case conflicting vehicle or conflicting pedestrian time (seconds): maximum of lines 20 and 25	26.	16.0
27.	**Right-of-way transfer time (seconds): add lines 15 and 26**	27.	16.0

SECTION 3: QUEUE CLEARANCE TIME CALCULATION

				Remarks
28.	Are there left-turns towards the tracks? ☐ Yes ☑ No			
29.	Distance traveled by truck during left-turn (LTL, feet):	29.	0	LTL = ∏RΘ/180
30.	Travel speed of left-turning truck (S_{LTT}, mph):	30.	10	Default value
31.	Distance required to clear left-turning truck from travel lanes on track clearance approach (feet):	31.	0	Equation: (line 4 + line 5 + line 12 - line 11) + line 29 + line 10
32.	Additional time required to clear left-turning truck from travel lanes on track clearance approach (seconds):	32.	0.0	Equation: [(line 31 * 3600) / (line 30 * 5280) - line 18 - line 19]
33.	Worst-case Left Turning Truck time (seconds): if Line 28 = 'Yes', use line 32; otherwise Use 0	33.	0.0	
34.	Queue start-up distance, L (feet): add lines 1 through 3	34.	105	
35.	Time required for design vehicle to start moving (seconds): calculate as 2+(L÷20)	35.	7.3	
36.	Design vehicle clearance distance, DVCD (feet): add lines 2, 3 and 10	36.	113	
37.	Time for design vehicle to accelerate through the DVCD (seconds), level terrain	37.	14.2	
38.	Factor to account for slower acceleration on uphill grade	38.	1.17	
39.	Time for design vehcle to accelerate through DVCD (seconds), adjusted for grade: multiply lines 37 and 38	39.	16.6	
40.	**Queue clearance time (seconds): add lines 33, 35 and 39**	40.	23.8	

SECTION 4: MAXIMUM PREEMPTION TIME CALCULATION

				Remarks
41.	Right-of-way transfer time (seconds): line 27	41.	16.0	
42.	Queue clearance time (seconds): line 40	42.	23.8	
43.	Desired minimum separation time (seconds)	43.	2.0	Typical Value
44.	Maximum preemption time for Queue Clearance (seconds): add lines 41 through 43	44.	41.8	

SECTION 5: SUFFICIENT WARNING TIME CHECK

Remarks

45.	Required minimum time, MT (seconds): per regulations	45.	20
46.	Clearance time, CT (seconds): (line 2 -35) / 10 (rounded up to nearest second)	46.	0
47.	Total minimum warning time, MWT, needed (seconds): add lines 45 and 46 (excludes buffer time and equipment response time)	47.	20
48.	Required advance preemption time (APT) from railroad (seconds): subtract line 47 from line 44, round up to nearest full second, enter 0 if less than 0	48.	22
49.	APT currently provided by railroad (seconds): Enter "0" if new crossing or signal	49.	0

If the required advance preemption time (line 48) is greater than the amount of advance preemption time currently provided by the railroad (line 49), additional warning time must be requested from the railroad. Alternatively, the maximum preemption time (line 48) may be decreased after performing an engineering study to investigate the possibility of reducing the values on lines 13, 16, 17, 21, 22 and 43.

Remarks: Pedestrian clearance time is included in the APT. Left turns towards the tracks is not included in the Queue Clearance Time Calculation. Either pedestrian clearance time or left turns towards the tracks will be served when railroad preemption is initiated, as they are not sequential movements.

SECTION 6: TRACK CLEARANCE GREEN TIME CALCULATION (IF NO GATE DOWN CIRCUIT PROVIDED)

Preempt Trap Check

Remarks

50. Warning Time Variability (Select One)

☐ Consistent Warning Times ☑ Low Warning Time Variability ☐ High Warning Time Variability

51.	APT required or provided (seconds): maximum of Line 48 or Line 49	51.	22
52.	Multiplier for maximum APT due to train handling	52.	1.25
53.	Maximum APT (seconds): multiply line 51 and 52	53.	27.5
54.	Minimum duration for the track clearance green interval (seconds)	54.	15
55.	Track Clearance Green Time to avoid Preempt Trap (seconds): add lines 53 and 54	56.	42.5

See Instructions for details.

Clearing of Clear Storage Distance

56.	Time waiting on left-turn truck (seconds): line 33	56.	0.0
57.	Time required for design vehicle to start moving (seconds): line 35	57.	7.3
58.	Design vehicle clearance distance (DVCD, feet): line 36	58.	113

If CSD ≤ DVL, you must clear the design vehicle through the entire CSD during the traffic clearance phase; however, if CSD > DVL, you should consider providing enough time to clear the design vehicle from the crossing.

Is the clear storage distance (CSD) less than or equal to the design vehicle length (DVL)?

☑ YES. The design vehicle MUST clear through the entire CSD. (CSD will be entered in Line 59).

☐ NO. The design vehicle may clear through a portion of the CSD.

Do you want to clear the design vehicle through the entire CSD?

☑ YES. Clear the entire CSD. (CSD will be entered in Line 59).

☐ NO. Clear the crossing ONLY. (DVL will be entered in Line 59).

GATE DOWN CIRCUIT WILL BE PROVIDED. SECTION IS NOT APPLICABLE

59.	Portion of CSD to clear during track clearance phase (feet)	59.	67
60.	Design vehicle relocation distance (DVRD, feet): add lines 58 and 59	60.	180
61.	Time required to accelerate design vehicle through DVRD (seconds), level terrain:	61.	18.3
62.	Factor to account for slower acceleration on uphill grade	62.	1.18
63.	Time required to accelerate design vehicle through DVRD (seconds), adjusted for grade: multiply lines 61 and 62	63.	21.5
64.	Time to clear portion of clear storage distance (seconds): add lines 56, 57 and 63	64.	28.8
65.	**Track clearance green interval (seconds): maximum of lines 55 or 64, round up to nearest full second**	65.	43

Maximum Duration of Track Clearance Green after gates are down (in absence of a gate down circuit)

66.	Total time to complete track clearance green (seconds): line 27 + line 65	66.	59.0
67.	Total time before gates are down (seconds): subtract 5 seconds from line 44 (per AREMA Manual)	67.	36.8
68.	**Maximum Duration of Track Clearance Green after gates are down (seconds): Line 66 - Line 67**	68.	23

SECTION 7: SUMMARY OF CONTROLLER PREEMPTION SETTINGS

			Remarks
69.	Duration Time (seconds)	0	Default Value
70.	Preempt Delay Time (seconds)	0	From Line 13

Right of Way Transfer Phase

			Remarks
71.	Minimum Green Interval (seconds)	0	From Line 16
72.	Pedestrian Walk Interval (seconds)	0	From Line 21
73.	Pedestrian Clearance Interval (Flashing "DON'T WALK", seconds)	16	From Line 22
74.	Yellow Change Interval (seconds)	0.0	From Line 18
75.	All Red Vehicle Clearance (seconds)	0.0	From Line 19

Track Clearance Phase

			Remarks
76.	Green Interval (seconds) (in the absence of gate down circuit)	43	From Line 65
77.	Green Interval (seconds) with gate down circuit	24	From Line 40
78.	Yellow Change Interval (seconds)	0.0	From Line 18
79.	All Red Vehicle Clearance (seconds)	0.0	From Line 19

Exit Phase

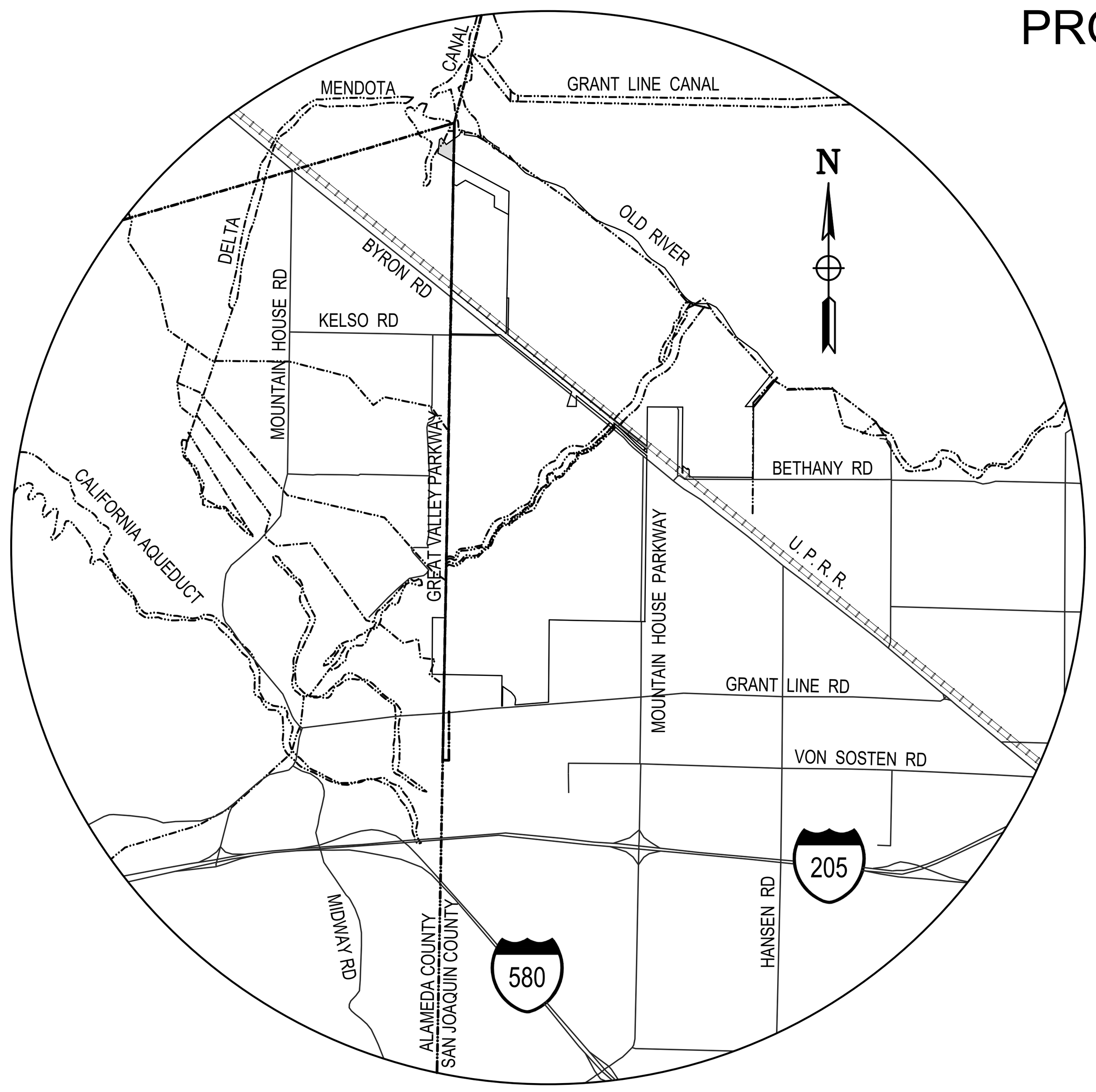
			Remarks
80.	Dwell/Cycle Minimum Green Time (seconds)	0	Default Value
81.	Yellow Change Interval (seconds)	0.0	From Line 18
82.	All Red Vehicle Clearance (seconds)	0.0	From Line 19

Remarks:

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

TRAFFIC SIGNAL MODIFICATION PLANS

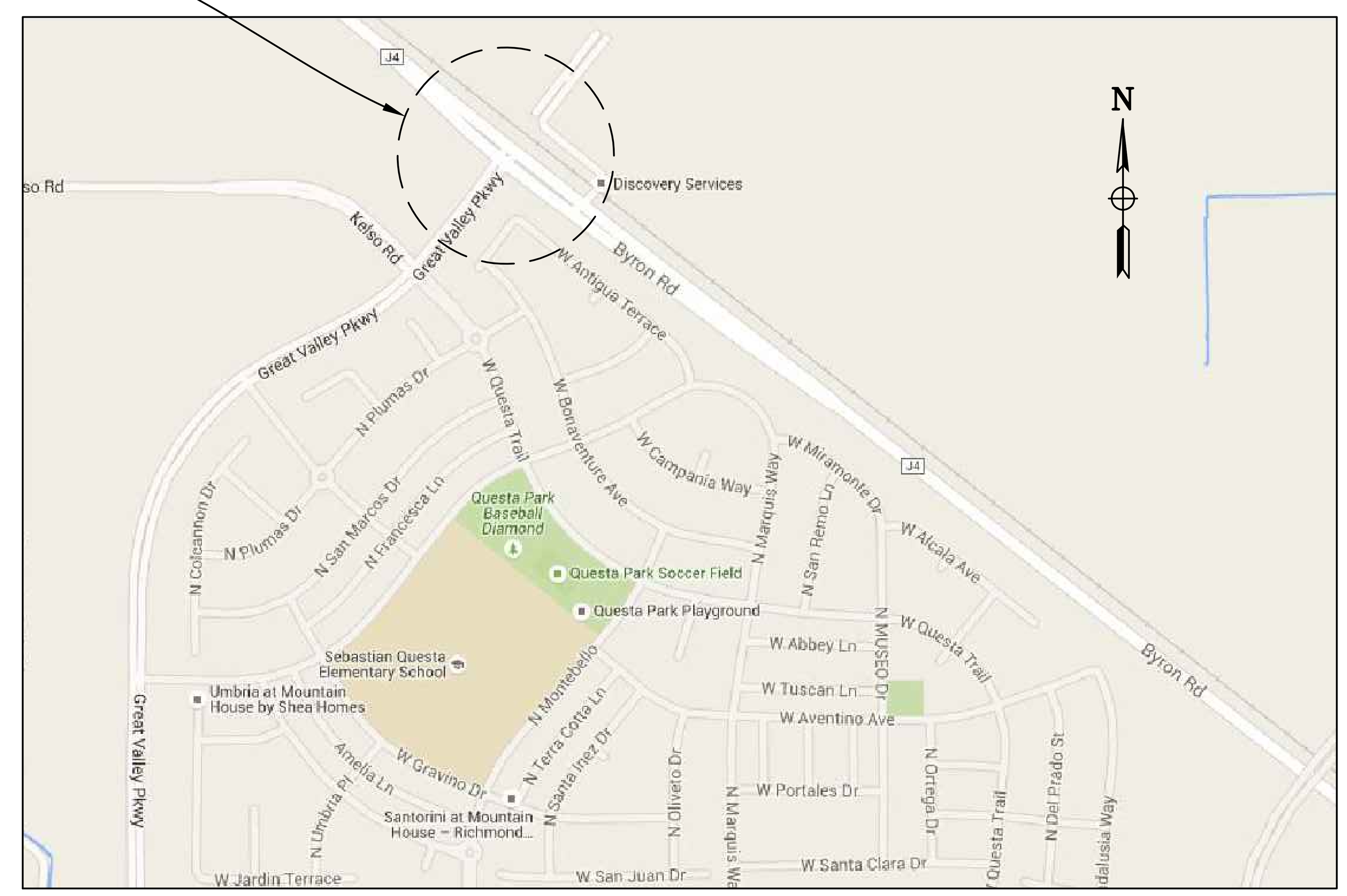
BYRON ROAD AT GREAT VALLEY PARKWAY



VICINITY MAP

N.T.S.

PROJECT LOCATION



LOCATION MAP

N.T.S.

SHEET INDEX

DOT # 971764X / TRACY SUBDIVISION

Know what's below. Call before you dig.

REVISIONS
No. | Descriptions | Date | App.

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT
Approved By: NADER B. SHAREGHI - RCE 47837
Title: PUBLIC WORKS DIRECTOR
Date:

DATE: APRIL 2024
DRAWN BY: AM
PROJ. ENGR: ESB
PROJ. MGR: ESB

TJKM
4305 Hacienda Drive, Suite 550
Pleasanton, CA 94588
tjkm@tjkm.com

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT
TRAFFIC SIGNAL MODIFICATION PLAN
BYRON ROAD AT GREAT VALLEY PARKWAY
TITLE SHEET

PROJECT No. 94-088
Plan File No. XXXX
SHEET: 8 OF: 14
TS-1

GENERAL NOTES (FOR ALL SHEETS)

1. WORK ON THESE PLANS SHALL CONFORM TO THE 2018 EDITION OF THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS, STANDARD PLANS, SIGN SPECIFICATION SHEETS, CALIFORNIA MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), SPECIAL PROVISIONS, AND THE MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT (MHCSD) STANDARD SPECIFICATIONS AND DETAILS AND ANY REVISIONS. FOUNDATIONS AND POLES FOR TRAFFIC SIGNALS AND STANDARDS SHALL BE IN ACCORDANCE WITH 2002 CALTRANS STANDARD PLANS, AND BASE PLATE/ANCHOR BOLT DETAILS, ALL IN ACCORDANCE WITH THE "ES" DETAILS SET FORTH FOR THE SPECIFIC POLE NOTED ON THE EQUIPMENT SCHEDULE ON SHEET TS-4.
2. LOCATIONS OF CONTROLLER, STANDARDS, CONDUITS, PULL BOXES AND OTHER EQUIPMENT ARE APPROXIMATE AND SHALL BE LOCATED IN THE FIELD AS DIRECTED BY THE MHCSD ENGINEER.
3. ALL UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY OVERHEAD AND UNDERGROUND CLEARANCE WITH MID, PG&E, PACIFIC BELL, AND OTHER AFFECTED UTILITIES PRIOR TO THE START OF WORK.
4. THESE PLANS ARE ACCURATE FOR ELECTRICAL WORK ONLY.
5. FOR NEIGHBORHOOD "H" OFFSITE ARTERIALS IMPROVEMENT PLANS (STREET/CIVIL AND SIGNING AND STRIPING PLANS), SEE PLANS PREPARED BY CBG ENGINEERING.
6. ALL NEW PULL BOXES SHALL BE CALTRANS NO. 5 UNLESS OTHERWISE NOTED. PULL BOXES SHALL COMPLY WITH THE MHCSD SUPPLEMENTAL SPECIFICATIONS FOR TRAFFIC SIGNALS SECTION S86-6. ALL NEW PULL BOXES SHALL HAVE VANDAL RESISTANT/LOCKING LIDS PER MHCSD REQUIREMENTS.
7. EXISTING INDIVIDUAL PULL BOXES THAT ARE #5 & #6 FOR TRAFFIC SIGNAL INTERCONNECT AND MHCSD COMMUNICATIONS SHALL BE REPLACED WITH ONE N48 FIBER OPTIC SPLICE BOX WITH AN EXTENSION TO A MINIMUM DEPTH OF 24-INCHES WITH A SPLIT LID LABELED "MOUNTAIN HOUSE COMMUNICATIONS", LOCATED NO MORE THAN 400-FEET APART. EXISTING TRAFFIC SIGNAL INTERCONNECT CONDUITS (3") AND MOUNTAIN HOUSE COMMUNICATIONS CONDUIT (4") SHALL BE RE-ROUTED INTO AND OUT OF THE N48 FIBER OPTIC SPLICE BOX INSTALLED. THE COMBINED TRAFFIC SIGNAL INTERCONNECT AND MOUNTAIN HOUSE COMMUNICATIONS CONDUIT WILL HEREON-IN BOTH USE A SINGLE 3-INCH CONDUIT.
8. PULL BOXES SHALL BE INSTALLED AT A MAXIMUM OF 200' APART.
9. ALL NEW SIGNAL HEADS SHALL HAVE 12" INDICATIONS, WITH LOUVERED BACKPLATES AND TUNNEL VISORS.
10. ALL NEW VEHICLE SIGNAL INDICATIONS SHALL BE LED.
11. ALL PED SIGNALS SHALL BE GELCORE OR LEOTEK COUNTDOWN WITH AUDIBLE-TACTILE ACCESSIBLE PUSH BUTTON STATIONS (PBS).
12. CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT BEFORE WORK IS TO BEGIN.
13. CONTRACTOR SHALL KEEP A SET OF ALL PERMITS AND APPROVED PLANS ON JOBSITE AT ALL TIMES.
14. CONTRACTOR IS TO NOTIFY MHCSD A MINIMUM OF TWO WORKING DAYS PRIOR TO ANY CONSTRUCTION ACTIVITY.
15. ELECTRICAL SERVICE FOR THE TRAFFIC SIGNAL PROVIDED BY MID (MODESTO IRRIGATION DISTRICT).
16. VIDEO DETECTION ZONES SHALL BE LOCATED IN THE FIELD AS DIRECTED BY THE ENGINEER.
17. EMERGENCY PRE-EMPTION SYSTEM SHALL BE LOCATED ON THE SMA IN A SUCH A POSITION TO ENSURE UNOBSTRUCTED OPERATION FROM TREE CANOPIES, AND SHALL BE TESTED AND PROGRAMMED IN THE FIELD WITH THE ENGINEER PRESENT TO OBSERVE THE OPERATION.
18. FOR JOINT TRENCH, INTERCONNECT AND STREET LIGHTING PLANS REFER TO NEIGHBORHOOD "H" OFFSITE ARTERIALS – JOINT TRENCH COMPOSITE, STREET LIGHTING AND TRAFFIC SIGNAL INTERCONNECT PLANS PREPARED BY PRECISION PLANNING FOR COORDINATION AND CROSS REFERENCING OF ELECTRICAL PLANS.
19. IISNS SHALL BE SINGLE-SIDED AND MOUNTED BETWEEN THE SIGNAL POLE MAST ARM AND SIGNAL POLE SHAFT PER MHCSD DETAIL SG-07. MOUNTING BRACKETS SHALL BE APPROVED BEFORE INSTALLATION.
20. VIDEO DETECTION CABLE SHALL HAVE TERMINAL CONNECTORS AT BOTH ENDS PRE-INSTALLED BY THE MANUFACTURER AND SHALL HAVE NO SPLICES FROM THE VIDEO CAMERA CONNECTION TO THE TRAFFIC SIGNAL CABINET. CABLE SHALL BE TAGGED AS TO SIGNAL PHASE IT SERVES IN THE PULL BOXES AND WITHIN THE SIGNAL CONTROLLER CABINET.
21. ALL HYBRID VIDEO DETECTION CAMERAS SHALL BE POSITIONED DIRECTLY ON SMA WITHOUT THE RISER AND SECURED OPPOSITE DETAIL 38 FOR LEFT TURN LANES.
22. POSITION TRAFFIC SIGNAL CONTROLLER CABINETS IN FIELD SO THAT OPERATOR SHALL COMMAND FULL VIEW OF THE INTERSECTION FRONTING THE CABINET WHEN DOOR IS OPEN.
23. ALL STREET LIGHTS AND IISNS SIGNS SHALL HAVE INDIVIDUAL SPLICED FUSED CONNECTORS LOCATED IN THE NEAREST PULL BOX TO THE POLES ON WHICH THEY ARE MOUNTED.
24. THE CONTRACTOR SHALL SUBMIT NAME OF MANUFACTURER, MODEL NUMBER, DETAILS AND WARRANTY COVERAGE FOR ALL EQUIPMENT.
25. PRIOR TO SIGNAL ACTIVATION ALL STOP SIGN AND RELATED PAVEMENT MARKINGS SHALL BE GROUND OUT BEFORE TRAFFIC SIGNAL IS TURNED ON. (COATING WITH BLACK PAINT IS NOT PERMITTED)
26. CONTRACTOR TO VERIFY THAT EXISTING CONDUITS AND CONDUCTORS ARE ALL STILL USABLE AND NOT DAMAGED.
27. CONTRACTOR SHALL VERIFY THAT THE EXISTING ADVANCE LOOPS ON ALL APPROACHES ARE NOT DAMAGED AND RE-INSTALL IF THEY ARE.
28. CONTRACTOR TO CONTACT UPRR MANAGER OF PUBLIC WORKS PROJECTS PRIOR TO ANY WORK WITHIN UNION PACIFIC RAILROAD RIGHT-OF-WAY OR WITHIN 25' OF THE CROSSING AFFECTING GRADE CROSSING OPERATIONS.
29. PROVIDE AN INTERCONNECTED WARNING LABEL IN THE TRAFFIC SIGNAL CABINET TO WARN TRAFFIC SIGNAL TECHNICIANS THAT THE TRAFFIC SIGNAL IS INTERCONNECTED WITH THE RAILROAD AND PROVIDE BOTH HIGHWAY AND RAILROAD AGENCY CONTACT INFORMATION.
30. RECYCLABLE CONSTRUCTION WASTE, SUCH AS WOOD AND METAL, SHALL BE SEPARATED AND ARRANGEMENTS SHALL BE MADE WITH WEST VALLEY DISPOSAL SERVICE CO. FOR COLLECTION.
31. REFUSE, GARBAGE, AND OTHER SOLID WASTE MATERIAL SHALL BE STORED AND ARRANGEMENTS SHALL BE MADE WITH WEST VALLEY DISPOSAL SERVICE CO. FOR COLLECTION.
32. KEYS TO THE CONTROLLER CABINET SHALL BE TURNED OVER TO THE OVER TO THE MHCSD AT FINAL ACCEPTANCE.
33. THE CONTRACTOR SHALL VERIFY THE LOCATION CONDITION OF ALL EXISTING CONDUITS AND PULL BOXES. THE INTERCONNECT CONDUIT AND PULL BOXES ARE BASED ON PLANS BY OTHER AND SHOWN TO THE BEST OF OUR KNOWLEDGE.
34. CONTRACTOR SHALL HAVE THE CONTROLLER MANUFACTURER AND VIDEO DETECTION MANUFACTURER ON SITE DURING ALL SIGNAL TURN ON. THIS WILL APPLY TO ALL NEW SIGNAL WORK AND SIGNAL MODIFICATIONS.
35. VENDOR SHALL PROVIDE A TESTING CERTIFICATION THAT THEY HAVE TESTED THE UNITS AND ALL ARE FUNCTIONAL.
36. BOTH ITERIS AND SIEMENS SHALL BE ON-SITE FOR ALL SIGNAL TURN ON.
37. MHCSD AND POLARA PPB TECHNICIAN SHALL VERIFY THAT APS PPBS HAVE BEEN INSTALLED PER MUTCD AND ARE PROGRAMMED CORRECTLY MHCSD REQUIREMENTS.

PROJECT NOTES

[1] EXISTING MODEL M60 CONTROLLER IN EXISTING TYPE "P" TS2-1 CABINET ENCLOSURE. EXISTING EAGLE SEPAC OPERATIONAL SOFTWARE INSTALLED ON THE CONTROLLER AND IT SHALL BE ABLE TO FULLY COMMUNICATE WITH THE TRAFFIC CONTROL MASTER (TCM) AND TACTICS CENTRAL SYSTEM VIA FIBER OPTIC CABLE TO THE ETHERNET HUB BY MEANS OF A FIELD HARDENED ETHERNET SWITCH. FURNISH AND INSTALL NECESSARY EQUIPMENT TO CABINET FOR RAILROAD PRE-EMPTION COMMUNICATION, SEE RIOTECH X-RPS UNIT WITH A/C OUTPUT MODULE (OR APPROVED EQUAL) DETAIL ON THIS SHEET. CONNECT NEW FIELD CONDUCTORS TO SAME. THE DISTRICT SHALL IMPLEMENT A PRE-EMPTION OPERATION AND MAINTENANCE PROGRAM WITH UPRR. CONTRACTOR SHALL FURNISH AND INSTALL FIBER DISTRIBUTION UNIT WITH LC CONNECTOR IN THE CONTROLLER CABINET IN CONFORMANCE WITH MHCSD REQUIREMENTS.

[2] EXISTING TYPE III-CF SERVICE EQUIPMENT ENCLOSURE EQUIPPED WITH AN UPS BACKUP UNIT, AND A CABINET MOUNTED PHOTO CELL, TO REMAIN

[3] INSTALL HYBRID ITERIS VIDEO DETECTION CAMERAS OR APPROVED EQUIVALENT. MOUNT DIRECTLY ACROSS FROM DETAIL 38. NO RISER IS REQUIRED.

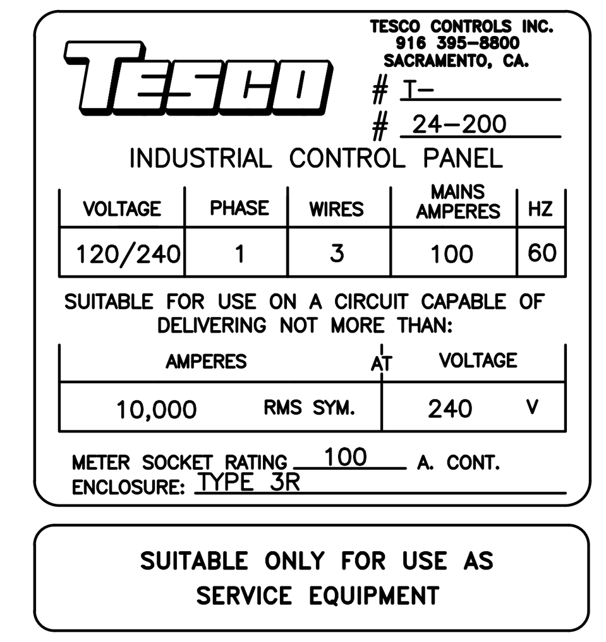
[4] INSTALL OPTICOM EMERGENCY PRE-EMPTION RECEIVER CENTERED TO APPROACHING THRU LANE.

[5] THE CONTRACTOR SHALL OBTAIN A RIGHT OF ENTRY FROM UNION PACIFIC RAILROAD PRIOR TO THE START OF WORK. THE CONTRACTOR SHALL CONTACT UPRR FOR ANY WORK WITHIN UNION PACIFIC RAILROAD RIGHT-OF-WAY.

[6] CONDUIT CROSSING UNDER THE RAILROAD TRACKS SHALL BE THE RIGID STEEL TYPE AND SHALL BE PLACED BY JACKING OR DRILLING METHODS AT A DEPTH OF NOT LESS THAN 4.5 FEET BELOW THE BOTTOM OF THE RAILROAD TIES. INSTALL CASING 4.5 FEET MINIMUM BELOW RAILROAD TIES AND EXTEND CASING A MINIMUM OF 30' FROM EACH SIDE OF THE CENTERLINE OF THE TRACK.

[7] EXISTING HYBRID ITERIS VIDEO DETECTION CAMERAS.

[8] THE CONTRACTOR SHALL [CC] NEW CONDUITS TO THE EXISTING CONDUITS.



ELECTRICAL SERVICE EQUIPMENT ENCLOSURE

SEE MHCSD STANDARD PLAN LT-08 FOR DETAILS

APPLICABLE CALTRANS STANDARD PLANS

DATED 2018

ES-1A	RSP ES-3C	ES-5C	ES-7P
ES-1B	ES-4A	ES-5D	ES-7Q
RSP ES-1C	ES-4B	RSP ES-7A	ES-7R
ES-2A	ES-4C	RSP ES-7B	ES-8
ES-2C	ES-4D	RSP ES-7F	ES-10
ES-2D	ES-4E	RSP ES-7M	RSP ES-11
ES-3A	RSP ES-5A	RSP ES-7N	RSP ES-13A
RSP ES-3B	RSP ES-5B	ES-7O	RSP ES-13B

APPLICABLE MCHSD STANDARD PLANS

DATED 2014

LT-04, LT-06, LT-08, LT-09, LT-11, LT-12, SG07, SG-11, SG-13

LEGEND

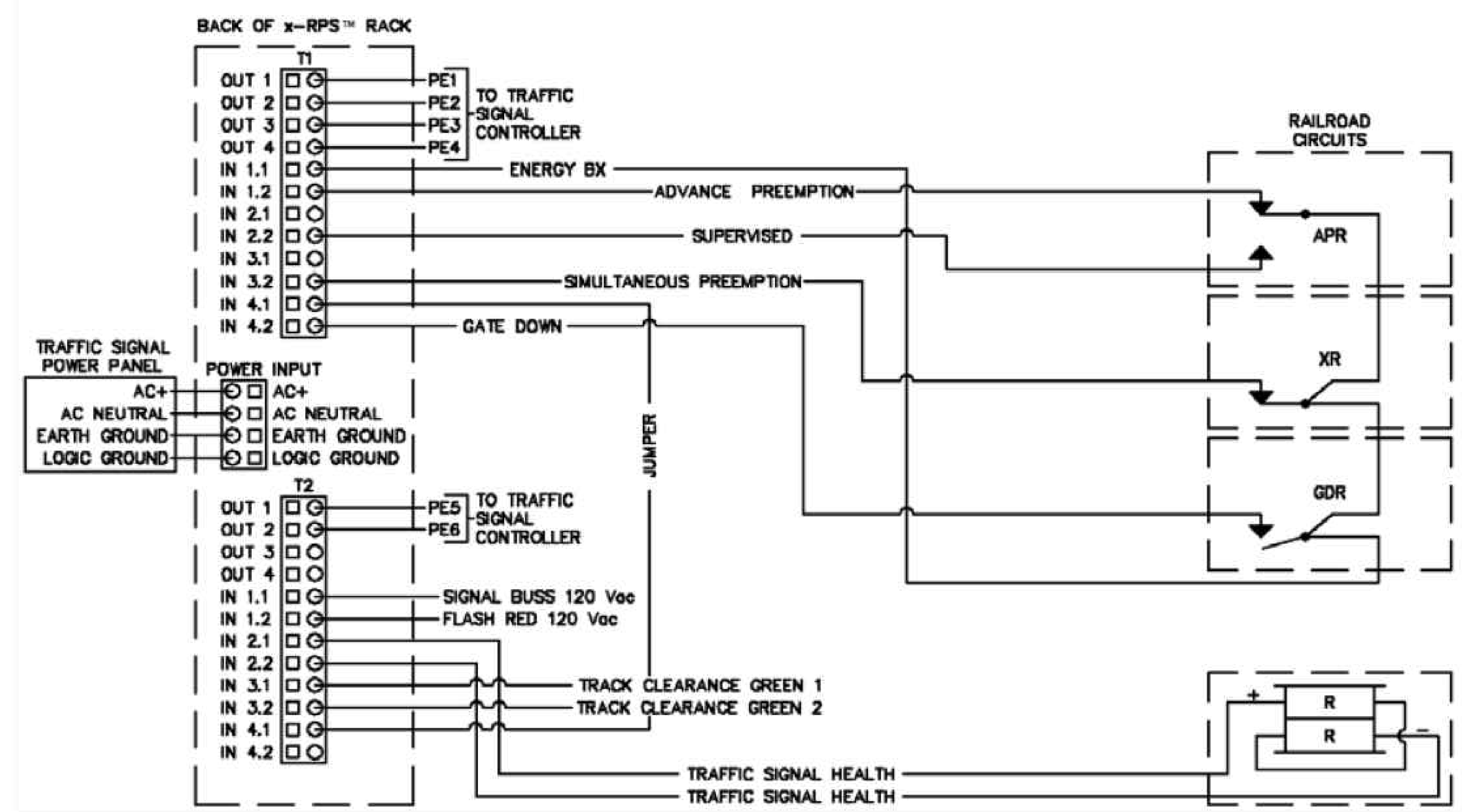
- AB — ABANDON
- CB — INSTALL CONDUIT INTO EXISTING PULL BOX
- RC — EQUIPMENT OR MATERIAL TO BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR
- RS — REMOVE AND SALVAGE EQUIPMENT
- CSD = COMMUNITY SERVICE DISTRICT
- SIC = 6 FIBER
- VIDEO DETECTION CAMERA
- DETECTION ZONE
- PHASE NO. ø2-2 DETECTOR NO.
- SIGNAL MAST ARM POLE WITH IISNS INSTALLED
- EXISTING TRAFFIC SIGNAL SAFETY LIGHT
- TYPE "A" LOOP. SEE ES-5B
- VEHICLE SIGNAL HEAD
- VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN LEFT ARROW SECTIONS
- VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN RIGHT ARROW SECTIONS
- PEDESTRIAN SIGNAL HEAD
- MAST ARM SIGN
- OPTICAL DETECTOR FOR THE EMERGENCY VEHICLE DETECTION
- SERVICE EQUIPMENT ENCLOSURE
- CONTROLLER CABINET

OPTION #4

ADVANCE PREEMPTION
SIMULTANEOUS PREEMPTION
GATE DOWN
SINGLE BREAK/SUPERVISED
TRAFFIC SIGNAL HEALTH

PREEMPTION OUTPUTS TO TRAFFIC SIGNAL CONTROLLER

PE1 – ALL RED FLASH
PE2 – SIMULTANEOUS PREEMPTION
PE3 – ADVANCE PREEMPTION
PE4 – DWELL OPERATION/LIMITED SERVICE
PE5 – UNUSED
PE6 – UNUSED



RIOTECH X-RPS WIRING DIAGRAM

NO SCALE

Know what's **below.** **Call** before you dig.

DOT # 971764X / TRACY SUBDIVISION

REVISIONS			
No.	Descriptions	Date	App.

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

Approved By: NADER B. SHAREGHI – RCE 47837

Title: PUBLIC WORKS DIRECTOR

Date:

DATE: APRIL 2024
DRAWN BY: AM
PROJ. ENGR: ESB
PROJ. MGR: ESB

REGISTERED PROFESSIONAL ENGINEER RUTA JARIWALA No. 73649 Exp. 6/30/25 CIVIL STATE OF CALIFORNIA

TJKM 4305 Hacienda Drive, Suite 550 Pleasanton, CA 94588 tjkm@tjkm.com

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

TRAFFIC SIGNAL MODIFICATION PLAN BYRON ROAD AT GREAT VALLEY PARKWAY

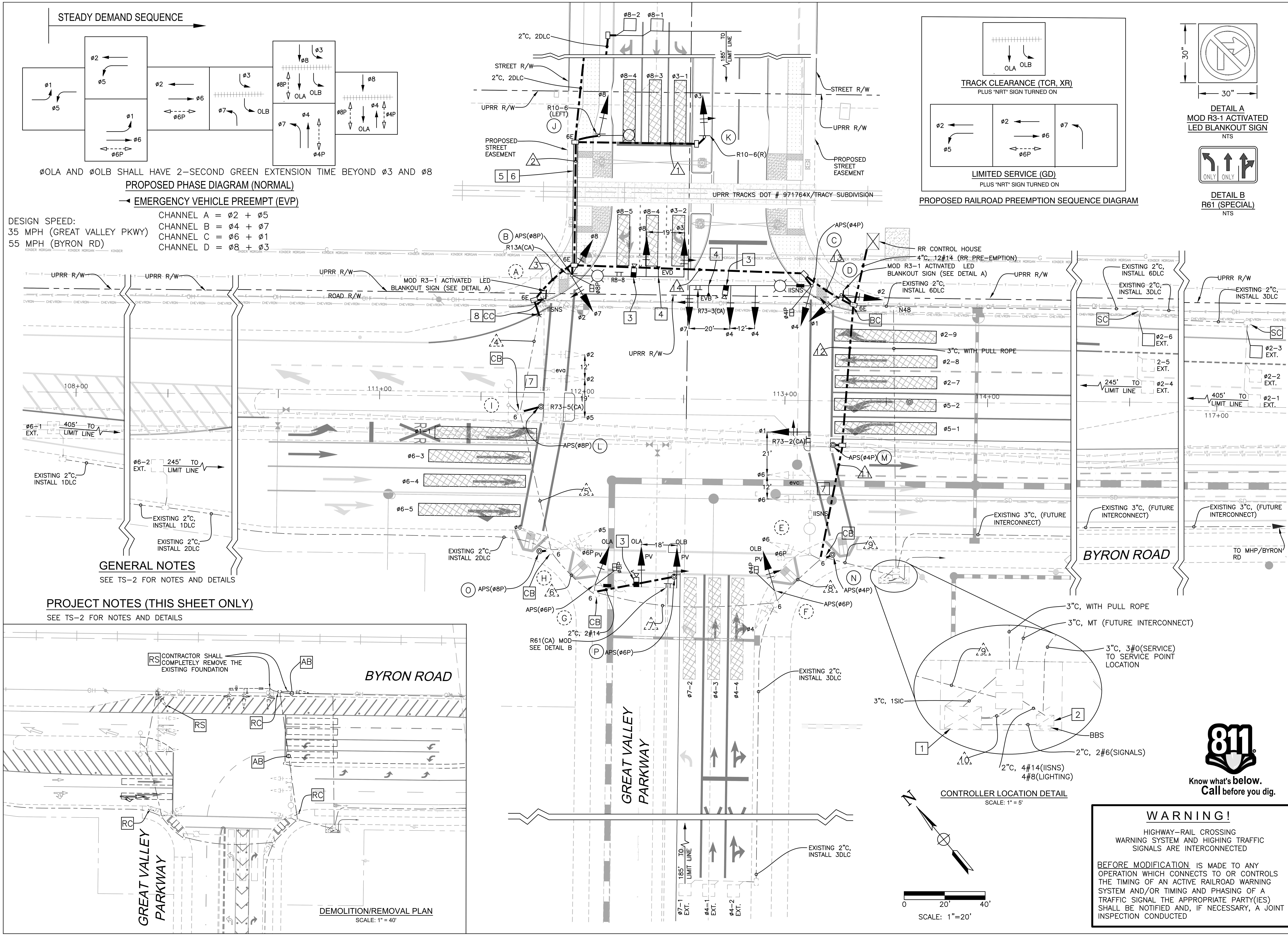
NOTES AND DETAILS

PROJECT No. 94-088

Plan File No. XXXX

SHEET: 9 OF: 14

TS-2



GENERAL NOTES

SEE TS-2 FOR NOTES AND DETAILS

PROJECT NOTES (THIS SHEET ONLY)

SEE TS-2 FOR NOTES AND DETAILS

811 Know what's **below.** **Call** before you dig.

WARNING!

HIGHWAY-RAIL CROSSING WARNING SYSTEM AND HIGHING TRAFFIC SIGNALS ARE INTERCONNECTED

BEFORE MODIFICATION IS MADE TO ANY OPERATION WHICH CONNECTS TO OR CONTROLS THE TIMING OF AN ACTIVE RAILROAD WARNING SYSTEM AND/OR TIMING AND PHASING OF A TRAFFIC SIGNAL THE APPROPRIATE PARTY(IES) SHALL BE NOTIFIED AND, IF NECESSARY, A JOINT INSPECTION CONDUCTED

DOT # 971764X / TRACY SUBDIVISION

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

TRAFFIC SIGNAL MODIFICATION PLAN
BYRON ROAD AT GREAT VALLEY PARKWAY

TRAFFIC SIGNAL MODIFICATION

TJKM
4305 Hacienda Drive, Suite 550
Pleasanton, CA 94588
tjkm@tjkm.com

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

No.	REVISIONS Descriptions	Date	App.

DATE: APRIL 2024
DRAWN BY: AM
PROJ. ENGR: ESB
PROJ. MGR: ESB

Approved By: NADER B. SHAREGHI - RCE 47837
Title: PUBLIC WORKS DIRECTOR
Date:

PROJECT No. 94-088
Plan File No. XXXXX
SHEET: 10 OF: 14
TS-3

CONDUCTOR TABLE

AWG	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12	13	14
NO. 14	ø1									3	3	3	3		
	ø2				3	3	3	3	3	6	6	3	3		
	ø3	3	3	3	3	3	3	3	3	3	3				
	ø4								3	6	6	3	3	3	
	ø5				3	3	3	3	3	3	3				
	ø6						3	3	3	3	3				
	ø7			3	3	3	3	3	3	6	6	3	3	3	
	ø8		3	3	3	3	3	3	3	3	3				
	øOLA							3	3	3	3				
	øOLB							3	3	3	3				
	ø2P														
	ø4P								2	2	2	2	2	2	
	ø6P						2	2	2	2	2				
	ø8P			2	2	2	2	2	2	2	2				
	APS(ø2P)														
	APS(ø4P)									2	2	2	2	2	
	APS(ø6P)						2	2	2	2	2				
	APS(ø8P)			2	2	2	2	2	2	2	2				
	PPB COMMON			1	1	1	1	1	1	2	2	1	1	1	
	IISNS				2	2	2	2	2	4		2	2	2	
	SPARES				3	3	3	3	3	6	6	3	3	3	
	TOTAL No. 14	3	6	14	25	25	32	38	43	63	59	22	22	16	
VIDEO DETECTION															
	VIDEO/POWER CABLE			1	2	2	2	3	3	4	4	1	1	1	
NO. 8	SIGNAL NEUTRAL	1	1	1	1	1	1	1	1	2	2	1	1	1	
	LUMINAIRE	2	2	2	2	2	2	2	2	4		2	2	2	
	TOTAL No. 8	3	3	3	3	3	3	3	3	6	2	3	3	3	
DLC	ø1														
	ø2									6	6	6	6		
	ø3														
	ø4								2	2	2				
	ø5														
	ø6						2	2	2	2	2				
	ø7								1	1	1				
	ø8		2							2	2	2	2	2	2
	TOTAL DLC		2				2	2	5	13	13	8	8	2	2
OPTICOM CABLE	EVA				1	1	1	1	1	1	1				
	EVB									1	1	1	1	1	
	EVC									1	1				
	EVD			1	1	1	1	1	1	1	1				
	TOTAL CABLES			1	2	2	2	2	2	4	4	1	1	1	
RR PRE-EMPTION (12#14)										1	1	1	1		
CONDUIT SIZE (INCHES)		4"	4"	4"	3"	3"	3"	3"	3"	2-4"	2-4"	3"	4"	4"	4"
PERCENT FILL		2%	4%	6%	15%	15%	19%	22%	26%	14%	13%	22%	11%	7%	2%
NOTE:		(N)	(N)	(N)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(N)	(N)	(N)

INTERSECTION SHALL BE WIRED WITH ALL NEW CONDUCTOR/CABLES

EQUIPMENT SCHEDULE

No.	STANDARD Type	Sig. M.A.	Lum.M.A.	VEH SIG MTG Mast Arm	Pole	PED ø	SIGNAL MTG	APS*** ø	ARROW	LED** LUMINAIRE	SPECIAL REQUIREMENTS	STREET LIGHT POLE NUMBER
A	60-5-80	60'	–	MAS MAS MAS	SV-1-TB	–	–	–	–	–	EXISTING OPTICOM CHANNEL "A", R73-5(CA), *IISNS "Great Valley Pkwy", AND VIDEO DETECTION CAMERA ON SMA. FURNISH AND INSTALL MOD R3-1 ACTIVATED LED BLANKOUT SIGN, MOUNT ABOVE SIGNAL HEADS (SEE DETAIL A ON SHEET TS-3).	
B	29-5-100 (N)	55'	4'	MAS (N) MAS (N)	SV-2-TB (N)	8 (N)	SP-1-T (N)	8(N)	RIGHT	250W (N)	FURNISH AND INSTALL OPTICOM CHANNEL "D", R8-8 SIGN, AND VIDEO DETECTION CAMERA ON SMA. FURNISH AND INSTALL R13A(CA) SIGN ON POLE.	HJ05
C	61-5-100 (N)	60'	4'	MAS (N) MAS (N) MAS (N)	SV-1-TA (N)	4(N)	SP-1-T (N)	4(N)	LEFT	250W (N)	FURNISH AND INSTALL OPTICOM CHANNEL "B", R73-3(CA), *IISNS "Byron Rd", AND VIDEO DETECTION CAMERA ON SMA.	HJ06
D	1-B	–	–	–	TV-2-T (N)	–	–	–	–	–	FURNISH AND INSTALL MOD R3-1 ACTIVATED LED BLANKOUT SIGN, 7' MINIMUM ABOVE GRADE(SEE DETAIL A ON SHEET TS-3).	
E	61-5-80	60'	4'	MAS(N) MAS MAS	SV-1-T	6	SP-1-T	4 (N)	LEFT	250W	EXISTING OPTICOM CHANNEL "C", *IISNS "Great Valley Pkwy", AND VIDEO DETECTION CAMERA ON SMA. FURNISH AND INSTALL LEFT TURN SIGNAL HEAD AND R73-2(CA) ON SMA.	HJ03
F	1-B	–	–	–	TV-2-T (N)	4	SP-1-T (N)	6 (N)	RIGHT	–		
G	26-4-80	40'	4'	MAS (N) MAS (N)	SV-1-T (N)	8	SP-1-T (N)	6 (N)	LEFT	250W	FURNISH AND INSTALL OPTICOM CHANNEL "D", R73-1(CA), *IISNS "Byron Rd", AND VIDEO DETECTION CAMERA ON SMA.	HJ04
H	1-B	–	–	–	TV-2-T	–	–	8 (N)	RIGHT	–		
I	15D	–	–	–	–	–	–	–	–	250W 250W		HJ01 HJ02
J	15TS (N)	–	4'	–	SV-1-T (N)	–	–	–	–	250W	FURNISH AND INSTALL R10-6(L) ON POLE.	HJ07
K	MODIFIED 1-B (N)	–	–	–	SV-1-T (N)	–	–	–	–	–	FURNISH AND MOUNT R10-6(R) SIGNS ON POLE. MODIFIED TYPE 1-B POLE, SEE DETAIL BELOW ON THIS SHEET.	
L	PPB POST (N)	–	–	–	–	–	–	8 (N)	BOTH	–		
M	PPB POST (N)	–	–	–	–	–	–	4 (N)	BOTH	–		
N	PPB POST (N)	–	–	–	–	–	–	4 (N)	RIGHT	–		
O	PPB POST (N)	–	–	–	–	–	–	8 (N)	LEFT	–		
P	PPB POST (N)	–	–	–	–	–	–	6 (N)	BOTH	–		

NOTE:

ALL EQUIPMENT IS EXISTING UNLESS OTHERWISE NOTED.

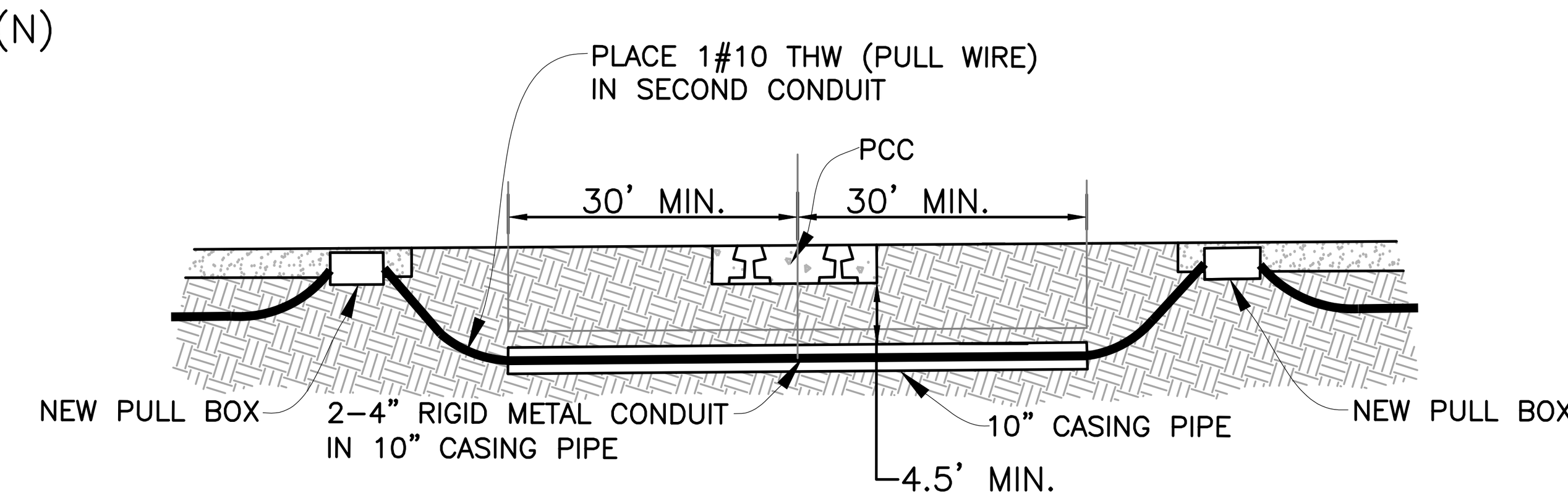
(N)=NEW

EXISTING STREET LIGHTS ARE 240 VOLTS AND ARE CURRENTLY ENERGIZED. STREET LIGHTS ARE REQUIRED TO BE MAINTAINED IN OPERATING CONDITION DURING HOURS OF DARKNESS.

* IISNS SHALL BE SINGLE-SIDED MOUNTED ON THE SIGNAL POLE BETWEEN THE MAST ARM AND POLE PER MHCSD DETAIL SG-07. MOUNTING TYPE SHALL BE APPROVED BEFORE INSTALLATION.

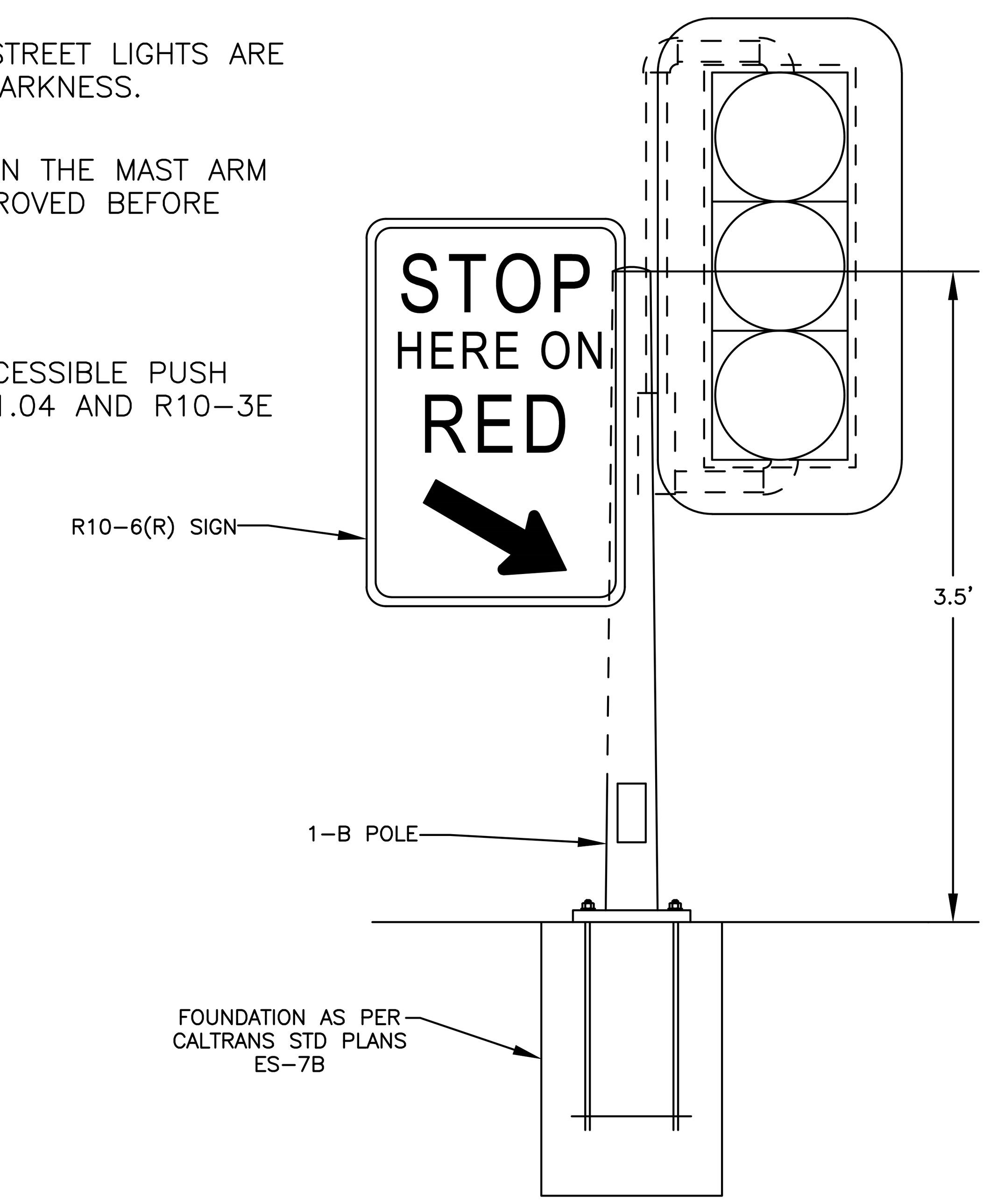
** FURNISH AND INSTALL WISCAPE CONTROL MODULE ON ALL LUMINAIRES.

*** ALL PEDESTRIAN BUSH BUTTONS (PPB) SHALL BE AUDIBLE-TACTILE ACCESSIBLE PUSH BUTTON STATIONS PER MHCSD SUPPLEMENTARY SPECIFICATIONS S86-11.04 AND R10-3E PLAQUE.



CONDUIT INSTALLATION AT RAIL ROAD CROSSING

NO SCALE



MODIFIED TYPE 1-B POLE DETAIL

NO SCALE

Know what's **below.**
Call before you dig.

DOT # 971764X / TRACY SUBDIVISION

REVISIONS | No. | Descriptions | Date | App.

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

Approved By: NADER B. SHAREGHI - RCE 47837

Title: PUBLIC WORKS DIRECTOR

Date:

DATE: APRIL 2024 | DRAWN BY: AM | PROJ. ENGR: ESB | PROJ. MGR: ESB

TJKM
4305 Hacienda Drive, Suite 550
Pleasanton, CA 94588
tjkm@tjkm.com

MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT

TRAFFIC SIGNAL MODIFICATION PLAN
BYRON ROAD AT GREAT VALLEY PARKWAY

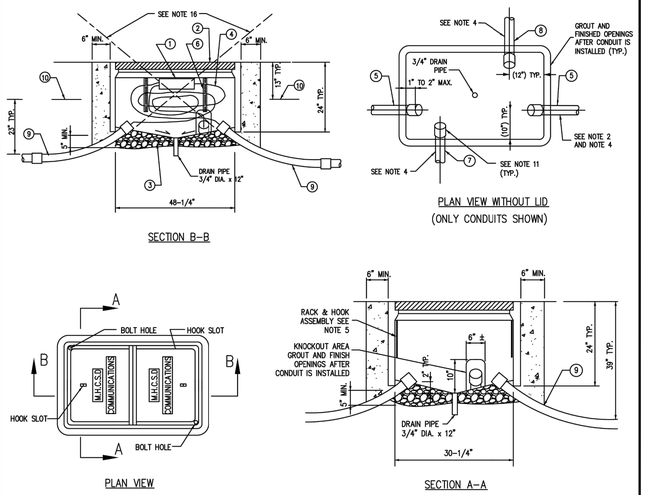
CONDUCTOR AND EQUIPMENT SCHEDULES

PROJECT No. 94-088

Plan File No. XXXXX

SHEET: 11 OF: 14

TS-4



SECTION B–B

PLAN VIEW WITHOUT LID
(ONLY CONDUITS SHOWN)

PLAN VIEW

SECTION A–A

LEGEND:

1. FIBER OPTIC CABLE SPLICE CLOSURE
2. FIBER OPTIC SPLICE VAULT LID
3. 1.5 INCH MAXIMUM COARSE AGGREGATE. BOTTOM OF SPLICE VAULT SHALL BE SLOPED TOWARD THE DRAIN PIPE FOR DRAINAGE.
4. FIBER OPTIC CABLE, COIL AS REQUIRED
5. CONDUIT FOR TRUNKLINE CABLE AND/OR BRANCH CABLES
6. RACK AND HOOK ASSEMBLY (SEE NOTE 5)
7. EXISTING TRAFFIC SIGNAL CONDUIT (TYP.)
8. PROPOSED BRANCH OR TRUNKLINE CONDUIT
9. 45 DEGREE ELBOW, 36" RADIUS (MIN). ELBOW AND COUPLING MAY NOT BE NECESSARY FOR CONDUIT INSTALLED BY DIRECTIONAL BORING. NEW CONDUIT INSTALLED BY DIRECTIONAL DRILLING SHALL ENTER SPLICE VAULT WITH BENDING RADIUS OF 36" (MIN). SEE NOTE 16
10. WARNING TAPE (FOR NEW CONDUIT INSTALLED BY TRENCHING)

NOTE:

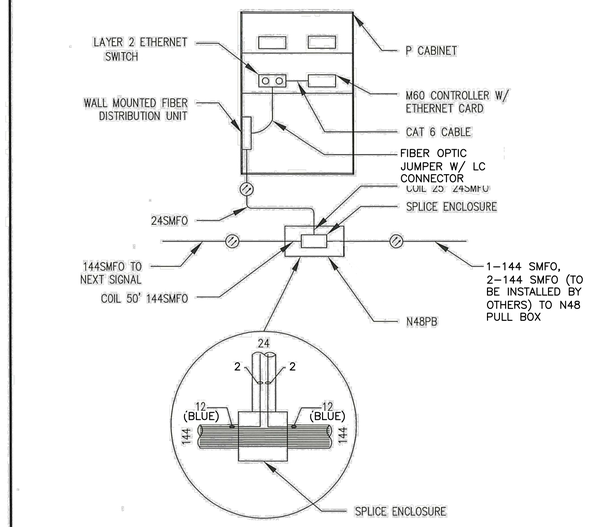
SEE DETAIL UU-23 FOR NOTES.

DRAWING DATE: 4/2019	**N48 FIBER OPTIC SPLICE BOX (PAGE 1 OF 2)**	APPROVED BY: Public Works Director DATE: 4/10/2019
SCALE: NONE		
DRAWN BY: AG/PT	**MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT**	DETAIL NO.: UU-22 / PAGE NO.: 243

NOTES:

1. TRUNKLINE CONDUIT(S) FROM THE TYPICAL BORE OR TRENCH SECTION SHALL NOT DEFLECT BY MORE THAN THREE (3) FEET PER 10 FEET FROM THE ALIGNMENT PRECEDING OR FOLLOWING PULL BOX/SPLICE VAULT ENTRANCE/EXIT.
2. EXCESS CONDUIT FOR ALL CONDUIT ENDS SHALL BE CUT BACK TO PROVIDE STUB ENDS OF 1" MINIMUM TO 2" MAXIMUM.
3. ALL MHCSD COMMUNICATIONS CONDUITS SHALL BE 3".
4. IF MORE THAN 3 CONDUITS ARE REQUIRED IN SAME KNOCKOUT, KNOCKOUT SHALL BE WIDENED TO 1/2" MORE THAN THE COMBINED CONDUIT WIDTH.
5. ALL SPLICE VAULTS SHALL BE FURNISHED WITH TWO RACKS AND HOOKS INSTALLED ON EACH OF THE TWO LONG SIDES.
6. TRUNKLINE CONDUITS SHALL ENTER THROUGH KNOCKOUTS.
7. SPLICE VAULTS, VAULT EXTENSION, AND VAULT LIDS SHALL BE CHRISTY N48 UTILITY BOX OR APPROVED EQUIVALENT, AND SUPPORT MINIMUM TEST LOAD OF 12,500 LBS. IF SPLICE VAULT IS LOCATED IN TRAVEL WAY, SPLICE VAULT AND LID SHALL CONFORM VERTICAL PROOF LOAD STRENGTH REQUIREMENT AS PER CALTRANS 2010 STANDARD SPECIFICATIONS, SECTION 86-2.06.
8. LOCKING MECHANISM SHALL BE PROVIDED FOR VAULT LID. TWO 3/8" PENTA HEAD BOLTS AT 90° SHALL BE USED. ONE 3/8" PENTA HEAD SOCKET AND RATCHET SHALL BE PROVIDED TO MHCSD FOR EVERY 10 SPLICE VAULTS.
9. "M.H.C.S.D. COMMUNICATIONS" SHALL BE CASTED ON TOP FACE OF ALL VAULT LIDS.
10. CUT CONDUIT, DE-BURR AND RE-THREAD PRIOR TO INSTALLING FIBER OPTIC CABLE AND/OR OTHER CABLES/CONDUCTORS. ALL METALLIC CONDUITS SHALL HAVE THREADED METALLIC BUSHINGS. ALL PVC AND HDPE CONDUITS SHALL HAVE BELL ENDS.
11. FURNISH AND INSTALL CAPS OR DUCT PLUGS FOR ALL UNUSED CONDUITS.
12. SPLICE CLOSURE SHALL BE ATTACHED TO THE RACK AND HOOK SYSTEM ON THE SAME SIDE AS THE FIBER OPTIC CABLE. THE SPLICE CLOSURE SHALL BE ANGLED TO FACILITATE MINIMUM BENDING RADIUS IN THE CABLE.
13. IF APPLICABLE, SPLICE VAULT HEIGHT ABOVE EXISTING DIRT GRADE SHALL PERMIT 1" OF FUTURE SURFACE LANDSCAPING. WHEN SPLICE VAULT IS INSTALLED IN EXISTING SIDEWALK, SPLICE VAULT LID SHALL SIT FLUSH WITH THE SIDEWALK. COORDINATED WITH ENGINEER WHERE THIS APPLIES.
14. EACH FIBER OPTIC SPLICE VAULT SHALL BE EQUIPPED WITH 50' MIN. OF SLACK IN THE TRUNKLINE CABLE AND 15' OF SLACK IN THE BRANCH CABLE ON EACH SIDE OF THE VAULT.
15. BOTTOM OF CONDUIT CENTERLINE SHALL BE ALIGNED TO EXIT TOP OF SPLICE VAULT TO FACILITATE CABLE PULLING.
16. MINIMUM SPLICE VAULT DEPTH SHALL BE 2'. IF NECESSARY, AN EXTENSION MAY BE USED TO MEET THIS REQUIREMENT.

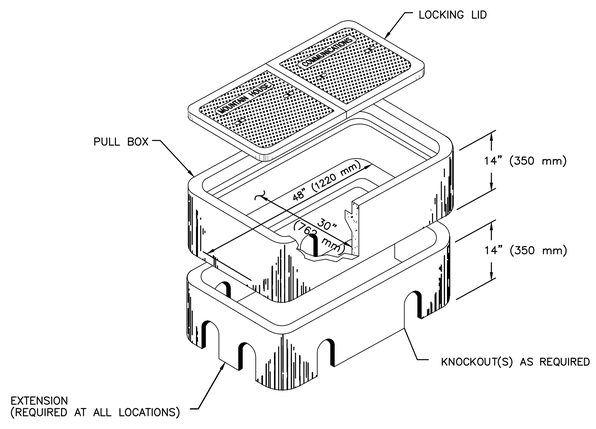
DRAWING DATE:	**N48 FIBER OPTIC SPLICE BOX (PAGE 2 OF 2)**	APPROVED BY: DATE:
SCALE:		
DRAWN BY:		DETAIL NO.: / PAGE NO.:



NOTES:

1. SOME ITEMS MAY BE DEFERRED BY MHCSD.

DRAWING DATE:	**CONTROLLER CABINET COMMUNICATION LAYOUT**	APPROVED BY: Public Works Director DATE:
SCALE: NONE		
DRAWN BY:	**MOUNTAIN HOUSE COMMUNITY SERVICES DISTRICT**	DETAIL NO.: / PAGE NO.:



N48 FIBER OPTIC (F/0) SPICE BOX
Not To Scale

Know what's **below.** **Call** before you dig.

REVISIONS

No.	Description	Date	App.

MOUNTAIN HOUSE
COMMUNITY SERVICES DISTRICT

Approved By: NADER B. SHAHROKHI - RCE 47837
Title: PUBLIC WORKS DIRECTOR Date:

DATE: APRIL 2024 | DRAWN BY: AM | PROJ. ENGR: ESB | PROJ. MGR: ESB

REGISTERED PROFESSIONAL ENGINEER * RITA JANELLA * No. 47837 * Civil * STATE OF CALIFORNIA *

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DOT # 971764X / TRACY SUBDIVISION

MOUNTAIN HOUSE
COMMUNITY SERVICES DISTRICT

TRAFFIC SIGNAL MODIFICATION PLAN
BYRON ROAD AT GREAT VALLEY PARKWAY

FIBER OPTIC SPLICE BOX DETAIL

PROJECT No. 94-088
Plan File No. XXXXX

SHEET: 12 OF: 14
TS-5

Exhibit G

Scoping Memo

Scoping Memo Information for Applications

A. Category (Check the category that is most appropriate)

☐ **Adjudicatory** – "Adjudicatory" proceedings are: (1) enforcement investigations into possible violations of any provision of statutory law or order or rule of the Commission; and (2) complaints against regulated entities, including those complaints that challenge the accuracy of a bill, but excluding those complaints that challenge the reasonableness of rates or charges, past, present, or future, such as **formal rough crossing complaints** (maximum 12 month process if hearings are required).

☒ **Ratesetting** – "Ratesetting" proceedings are proceedings in which the Commission sets or investigates rates for a specifically named utility (or utilities), or establishes a mechanism that in turn sets the rates for a specifically named utility (or utilities). "Ratesetting" proceedings include complaints that challenge the reasonableness of rates or charges, past, present, or future. Other proceedings may also be categorized as ratesetting when they do not clearly fit into one category, such as **railroad crossing applications** (maximum 18 month process if hearings are required).

☐ **Quasi-legislative** – "Quasi-legislative" proceedings are proceedings that establish policy or rules (including generic ratemaking policy or rules) affecting a class of regulated entities, including those proceedings in which the Commission investigates rates or practices for an entire regulated industry or class of entities within the industry.

B. Are hearings necessary? ☐ **Yes** ☒ **No**

If yes, identify the material disputed factual issues on which hearings should be held, and the general nature of the evidence to be introduced. Railroad crossing applications which are not controversial usually do not require hearings.

_____

_____

_____

_____

Are public witness hearings necessary? ☐ **Yes** ☒ **No**

Public witness hearings are set up for the purpose of getting input from the general public and any entity that will not be a party to the proceeding. Such input usually involves presenting written or oral statements to the presiding officer, not sworn testimony. Public witness statements are not subject to cross-examination.

C. Issues – List here the specific issues that need to be addressed in the proceeding.

No issues

_____

_____

_____

D. Schedule (Even if you checked "No" in B above) Should the Commission decide to hold hearings, indicate here the proposed schedule for completing the proceeding within 12 months (if categorized as adjudicatory) or 18 months (if categorized as ratesetting or quasi-legislative).

The schedule should include proposed dates for the following events as needed:

_____ Prehearing conference

_____ Hearings

_____ Briefs due

_____ Submission

_____ Proposed decision (90 days after submission)

_____ Final decision (60 days after proposed decision is mailed)

Exhibit H

Verification

I am the designated City Manager for the City of Mountain House, a political subdivision of the State of California, which is the Applicant herein. I make this verification for and on behalf of the City of Mountain House for the reason that it is a political subdivision of the state. I have read the foregoing Application, I know the contents thereof and the same is true of my own knowledge except for those matters which are stated therein upon information and belief, and as to those matters, I believe them to be true. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 29th day of April, 2025, in Mountain House, California.

DocuSigned by:
Steve Pinkerton
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Steve Pinkerton
City Manager
City of Mountain House

NOTICE OF AVAILABILITY

FINAL ENVIRONMENTAL IMPACT REPORT

TO ALL PARTIES TO THIS APPLICATION:

Pursuant to Rule 1.9(d) of the Public Utilities Commission's Rules of Practice and Procedures, the Applicant is issuing this Notice of Availability (NOA). The NOA is being served on all parties named in the official Service List for this Application, which is attached to the Certificate of Service for this document.

The Final EIR is available at the following URL and has been posted on the website since late 1994 in the CEQA Documents folder:

https://www.mountainhouseca.gov/departments/planning

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of the City of Mountain House for an Order Authorizing a Public Railroad Crossing of the Union Pacific Railroad Tracy Subdivision Track with Great Valley Parkway (MP 74.10) within the City of Mountain House, County of San Joaquin, State of California.

Application No. _____

CERTIFICATE OF SERVICE

I, Patrick Casey, PE, of HDR Engineering, Inc., on behalf of the City of Mountain House, certify that I have on this day mailed a copy of the attached Application and its Exhibits by e-mail or hand delivery to each party named in the following Service List, on this ___15___ day of ____April_____, 2025, at Walnut Creek, California.

By: _____

Patrick Casey, PE
Senior Rail Engineer/Project Manger
HDR Engineering, Inc.

Service List
Parties:
Steve Pinkerton City Manager City of Mountain House 251 E. Main Street Mountain House, CA 95391 spinkerton@sjgov.org

Service List Continued on Next Page

Service List	
Information Only:	
Amber L. Stoffels Union Pacific Railroad Manager I Industry and Public Projects amber.stoffels@up.com E-Mail Only	Clifford Cessna Public Project Manager/Associate Benesch ccessna@benesch.com E-Mail Only
State:	
David Stewart Utilities Engineer Rail Crossings and Engineering Branch California Public Utilities Commission 300 Capitol Mall, Suite 400 Sacramento, CA 95814 david.stewart@cpuc.ca.gov Chi Cheung To, PE Senior Utilities Engineer Specialist Rail Crossings and Engineering Branch California Public Utilities Commission ChiCheung.To@cpuc.ca.gov E-Mail Only	Antranig Garabetian, PE Program Manager Rail Crossings and Engineering Branch California Public Utilities Commission antranig.garabetian@cpuc.ca.gov E-Mail Only