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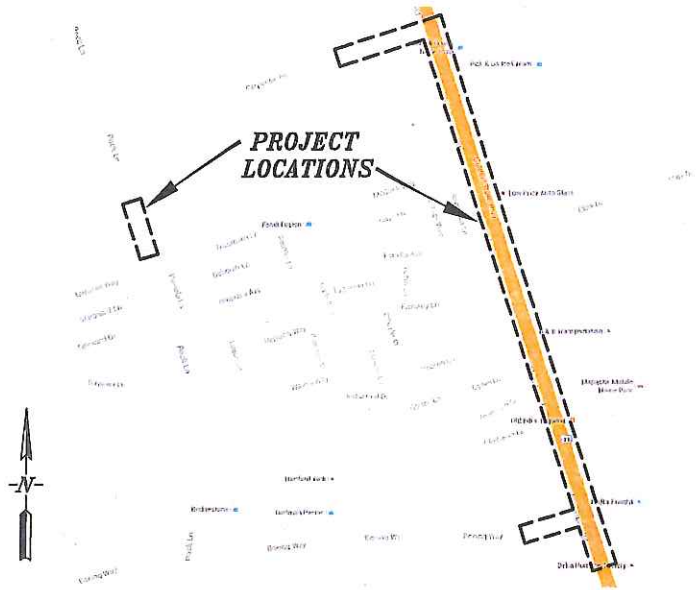
3136 Boeing Way Fiber Connection

Stockton, CA

Permit Submittal



LOCATION MAP
NO SCALE

DRAWING INDEX

T–1	TITLE SHEET, SITE MAP, INDEX, CONTACTS
G–1	GENERAL NOTES & ABBREVIATIONS
G–2	SHEET LAYOUT
C–1 to C–14	CONSTRUCTION PLAN
CD–1 to CD–4	CONSTRUCTION DETAILS
TC–1 to TC–2	TRAFFIC CONTROL PLANS

REGISTERED PROFESSIONAL ENGINEER
PAUL R. MARSHALL
No. C 46732
Exp. 6/30/17
CIVIL
STATE OF CALIFORNIA

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Rev.	Description	Date
1	SUBMITTAL	6/2/15
2	DESIGN REVISION	6/9/15
3	DESIGN REVISION	7/7/15

TITLE SHEET

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : AS SHOWN
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015–PG09

DWG. NO. T-1

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH APPLICABLE LOCAL AND REGULATORY AGENCIES INCLUDING, BUT NOT LIMITED TO OSHA, ETC. GENERAL NOTES SHALL APPLY TO ALL DRAWINGS.
2. EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. SOME EXISTING UTILITIES MAY NOT BE DEPICTED ON THIS PLAN.
3. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN CONSTRUCTION AS-BUILT DATA.
4. APPROXIMATE LOCATIONS OF MANHOLES, SPLICE BOXES AND HANDHOLE'S ARE SHOWN ON THE PLANS. EXACT FINAL LOCATION OF SPLICE BOXES AND HH'S SHALL BE DETERMINED IN THE FIELD AFTER ALL EXISTING UTILITIES IN THE AREA OF WORK HAVE BEEN LOCATED. COORDINATE FINAL SPLICE BOX/HH LOCATIONS WITH PG&E.

CONSTRUCTION NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE IN PLACE BEFORE WORK IS STARTED. DEVICES NO LONGER REQUIRED SHALL BE REMOVED AS SOON AS POSSIBLE.
2. PEDESTRIAN TRAFFIC MUST BE MAINTAINED AT ALL TIMES. PEDESTRIANS MAY BE RELOCATED ONTO PRIVATE PROPERTY WITH OWNERS PERMISSION ONLY.
3. NO EQUIPMENT OR MATERIALS SHALL BE STORED OR PERMITTED TO STAND UNPROTECTED WHERE TRAFFIC IS MAINTAINED UNLESS IT IS ALLOWED BY LOCAL JURISDICTION IN WRITING.
4. NO EQUIPMENT OR MATERIALS SHALL BE STORED ON ROAD SURFACE DURING NON-WORKING PERIODS UNLESS IT IS ALLOWED BY LOCAL JURISDICTION IN WRITING.
5. NO EQUIPMENT OR MATERIALS SHALL BE STORED ON SIDEWALK UNLESS IT IS ALLOWED BY LOCAL JURISDICTION
6. EXCAVATION MATERIAL SHALL BE STORED AWAY FROM THE PAVED ROADWAY WHENEVER POSSIBLE. ALL SPILLED MATERIAL IS TO BE REMOVED TO AVOID SLIPPERY CONDITIONS.
7. EXISTING SIGNS, DELINEATIONS, GUARDRAILS, MARKERS, TREES, SHRUBS, FENCES, WALKS, STEPS, ETC. THAT ARE DISTURBED BY THIS CONSTRUCTION SHALL BE REPLACED OR RESTORED TO THEIR ORIGINAL OR BETTER CONDITION.
8. CONTRACTOR SHALL VERIFY EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES IN AREA OF WORK PRIOR TO CONSTRUCTION. CALL UNDERGROUND SERVICE ALERT (CALIFORNIA, 1-800-227-2600) AT LEAST 48 HRS PRIOR TO START OF CONSTRUCTION ACTIVITIES.
9. CONTRACTOR SHALL HAND DIG AND USE EXTREME CARE WHEN WORKING IN CLOSE PROXIMITY TO EXISTING UTILITIES. CONTRACTOR MUST POTHOLE & EXPOSE EXISTING UTILITIES WHEN NEW CONSTRUCTION CROSSES IT.
10. TRAFFIC SIGNAL DETECTOR LOOP CIRCUITS ARE NOT SHOWN. CONTRACTOR SHALL LOCATE ALL TRAFFIC SIGNAL DETECTOR LOOP CIRCUITS PRIOR TO ANY TRENCHING OR BORING. ALL TRAFFIC LOOP DETECTOR CIRCUITS SHALL BE MAINTAINED AND PROTECTED. NOTIFY TRAFFIC DEPARTMENT 48 HOURS PRIOR TO ANY WORK IN THESE AREAS.
11. THE REMOVAL, STORAGE, AND REPLACEMENT OF ALL SHRUBBERY WILL BE THE RESPONSIBILITY OF THE CONTRACTOR OR SUBCONTRACTOR.
12. CONTRACTOR IS RESPONSIBLE TO ARRANGE A PRE-CONSTRUCTION MEETING WITH THE CITY INSPECTORS AT LEAST 72 HOURS BEFORE STARTING WORK.
13. BORING PITS: EXCAVATION AND RESTORATION OF BORING PITS SHALL BE IN ACCORDANCE WITH THE CITY STANDARDS FOR UTILITY EXCAVATIONS AND LOCATED TO THE SATISFACTION OF THE CITY ENGINEER.
14. MAINTAIN 12" SEPERATION FROM PRIVATE UTILITIES. MAINTAIN 5' SEPERATION FROM WATER, SEWER AND STOWM DRAIN.
15. DEPTHS OF EXISTING UTILITIES NOT REQUIRED OR AVAILABLE. LIGHT VERTICAL LINES SHOWN IN PROFILES INDICATE APPROXIMATE UTILITY LOCATION ALONG THE DUCT. THE CONTRACTOR SHALL POTHOLE TO CONFIRM EACH DEPTH.

SAFETY

1. THE CONTRACTOR IS RESPONSIBLE FOR JOB-SITE SAFETY AND SHALL BE RESPONSIBLE FOR ALL LIABILITY IMPOSED BY LAW FOR PERSONAL INJURY OR PROPERTY DAMAGE WHICH MAY ARISE OUT OF THE WORK PERFORMED UNDER THE ENCROACHMENT PERMIT, OR WHICH MAY ARISE OUT OF THE SAFETY FAILURE ON THE PART OF THE PERMITTEE TO PERFORM HIS OBLIGATIONS UNDER THIS PERMIT IN RESPECT TO MAINTENANCE OF THE ENCROACHMENT.
2. ALL TRAFFIC CONTROL SHALL CONFORM TO THE CURRENT CALIFORNIA DEPARTMENT OF TRANSPORTATION ("MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE WORK ZONE") ("MANUAL OF WARNING SIGNS, LIGHTS AND DEVICES FOR USE IN PERFORMANCE OF WORK UPON HIGHWAYS").
3. ALL EXCAVATIONS SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF CALIFORNIA DIVISION OF OCCUPATIONAL SAFETY AND HEALTH. THE PERMITTEE MAY BE REQUIRED TO OBTAIN A "PERMIT TO EXCAVATE" FROM THE DIVISION OF INDUSTRIAL SAFETY, DEPARTMENT OF INDUSTRIAL RELATIONS, STATE OF CALIFORNIA
4. CONTRACTOR SHALL FURNISH AND MAINTAIN ALL DEVICES FOR PEDESTRIAN AND VEHICULAR TRAFFIC SAFETY. UNSAFE CONDITIONS WILL BE CORRECTED BY CITY PERSONNEL (OR AGENTS THEREOF) AND THE PERMITTEE WILL BE BILLED FOR ALL EXPENSES INCURRED, OR COSTS SHALL BE RECOVERED FROM CASH DEPOSITS HELD FOR SUCH PURPOSES.

—— PGE ——	NEW PGE CONDUIT
—— MCI ——	EXISTING MCI CONDUIT
—— MFS ——	EXISTING MFS CONDUIT
—— SPT ——	EXISTING SPRINT CONDUIT
—— QWT ——	EXISTING QWEST CONDUIT
—— C ——	EXISTING CONDUIT(S)
—— G ——	EXISTING PG&E NATURAL GAS
—— NZ ——	EXISTING AIR PRODUCTS NITROGEN MAIN
—— SS ——	EXISTING SANITARY SEWER
—— SD ——	EXISTING STORM DRAIN
—— RCW ——	EXISTING RECLAIMED WATER
—— W ——	EXISTING WATER
—— E ——	EXISTING ELECTRIC
—— JT ——	EXISTING JOINT TRENCH
—— T ——	EXISTING TELEPHONE
—— FO ——	EXISTING FIBER OPTIC LINE
—— CTV ——	EXISTING CABLE TV
	EXISTING U/E MANHOLE W/ METAL COVER
—— S ——	SUBSCRIBER CONDUIT
	EXISTING MANHOLE
	EXISTING FIRE HYDRANT
	LIGHT POLE
	EXIST. TREE
	WATER VALVE
XXX	PROPERTY ADDRESS

PROJECT CONTACTS

CIVTEL, INC (Engineering Consultant)

PAUL MARSHALL	OFFICE:	(916) 861-2220
CIVIL ENGINEER	MOBILE:	(510) 703-0671
3501 SUNRISE BLVD., STE. 15	FAX:	(916) 861-2222
RANCHO CORDOVA, CA 95742	EMAIL:	pmarshall@civtel.com

PG&E

GEORGE PAGANO	MOBILE:	(415) 517-5650
	EMAIL:	gxpz@pge.com

USA (Call before you dig service alert)

CALIFORNIA/NEVADA	OFFICE:	(800) 227-2600

ABBREV.	DESCRIPTION
BOC	BACK OF CURB
CB	CATCH BASIN
CATV	COMMUNITY ANTENNA TELEVISION
C/L	CENTERLINE
CNDT	CONDUIT
CONC	CONCRETE
CSW	CONCRETE SIDEWALK
D/W	DRIVEWAY
EOC	EDGE OF CURB
EOP	EDGE OF PAVEMENT
FOC	FACE OF CURB
FCB	FIRE CALL BOX
FH	FIRE HYDRANT
GSP	GALVANIZED STEEL PIPE
GM	GAS METER
GV	GAS VALVE
GI	GAS INLET
HH	HAND HOLE
HDPE	HIGH DENSITY POLYETHYLENE
HYD	FIRE HYDRANT
IC	IRRIGATION CONTROLLER
INDT	INNERDUCT
I/O	INDOOR/OUTDOOR
JB	JUNCTION BOX
JT	JOINT TRENCH
MH	MANHOLE
MON	CITY MONUMENT
MP	MILE POST
NTS	NOT TO SCALE
O/S	OFFSET
PED	PEDESTAL (UTIL)
PP	POWER POLE
PVC	POLY VINYL CHLORIDE
P/L	PROPERTY LINE
R/L	RUNNING LINE
R/W	RIGHT OF WAY
RR	RAILROAD
STA	STATION (0+00)
SS	SANITARY SEWER
STM MH	STORM MANHOLE
SL	STREET LIGHT
STLT HH	STREET LIGHT HANDHOLE
STS	STREET SIGN
T	TELEPHONE
TEL HH	TELEPHONE HANDHOLE
TEL MH	TELEPHONE MANHOLE
TS	TRAFFIC SIGNAL
TS SL	TRAFFIC SIGNAL STREET LIGHT
TS HH	TRAFFIC SIGNAL HANDHOLE
VNT	VENT
WHH	WATER HANDHOLE
WM	WATER METER
WV	WATER VALVE

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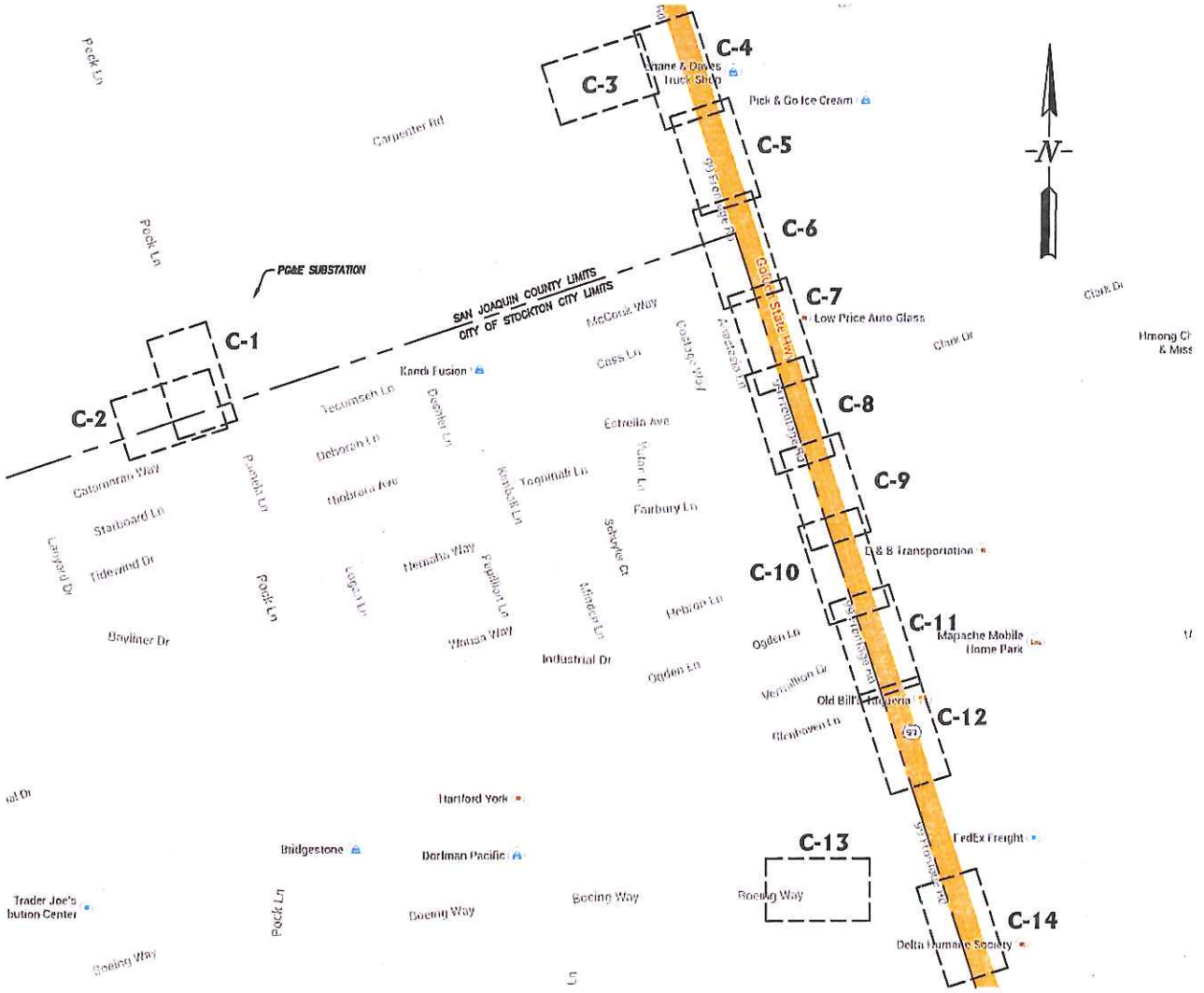
GENERAL NOTES

PG&E

3136 Boeing Way
Fiber Connection

Designed By : JD	Scale : AS SHOWN
Drawn By : JD	Date : 6/2/15
Checked By : PRM	Job No. : 2015-P009

DWG. NO. **G-1**



SHEET LAYOUT
NOT TO SCALE

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Rev.	Description	Date
1	SUBMITTAL	8/3/15

SHEET LAYOUT

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : AS SHOWN
Drawn By : JC	Date : 8/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO. G-2

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and worker, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL-OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

NOTE:
CONTRACTOR TO REMOVE AND REPLACE SECTION OF CURB, GUTTER, AND SIDEWALK PER CITY OF STOCKTON STANDARDS AS NEEDED FOR CONSTRUCTION

Restore Pavement Markings, Pavement Markers, and Traffic Lines to Original or Better Condition

NOTES:
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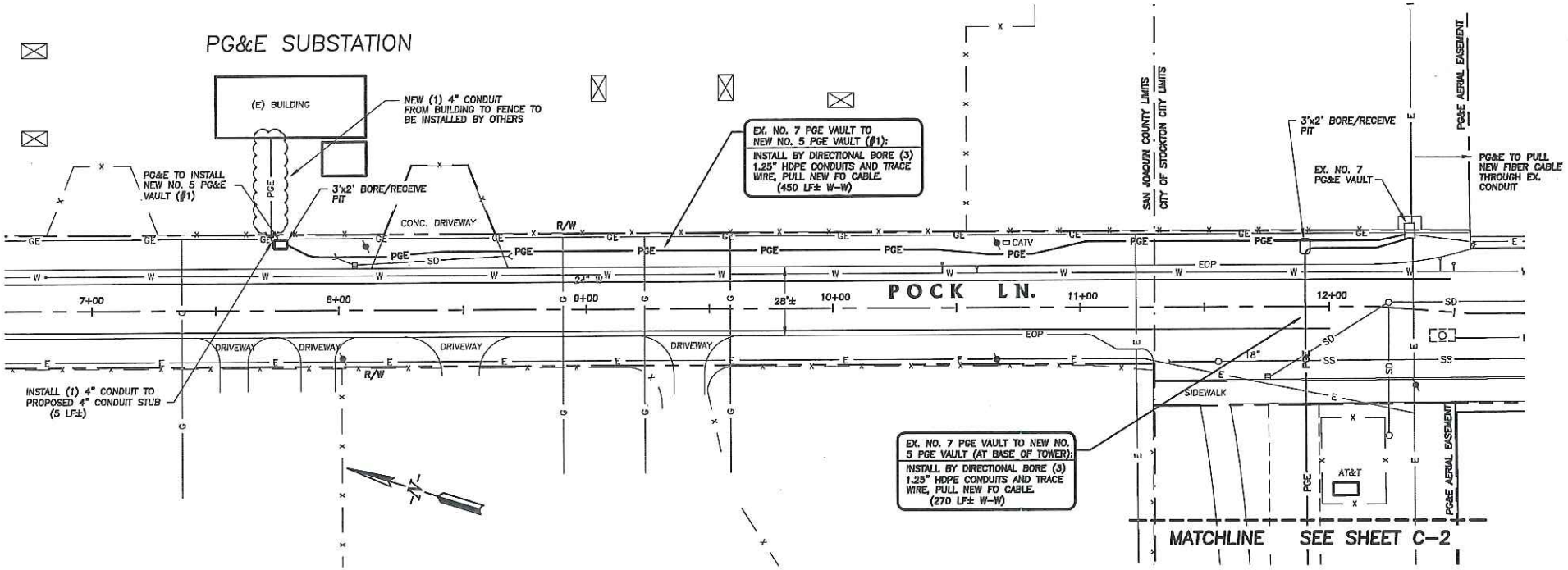
2. LOCATION OF UNDERGROUND FACILITIES IS APPROXIMATE. CONTRACTOR TO U.S.A. AND POTHOLE TO VERIFY EXACT LOCATION.



PLAN
1"=40'

20 0 20 40
1"=40'

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CONSTRUCTION PLAN

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO.
C-1

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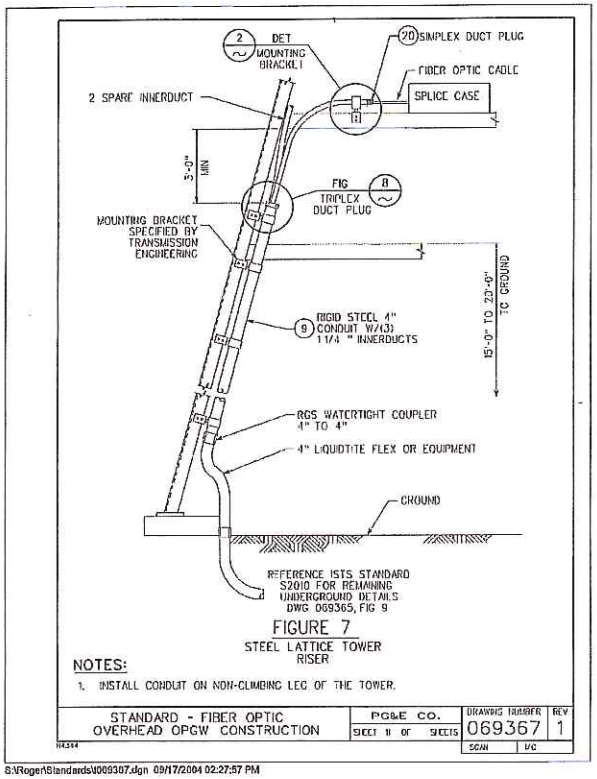

FIGURE 7
STEEL LATTICE TOWER RISER

NOTES:
1. INSTALL CONDUIT ON NON-CLIMBING LEG OF THE TOWER.

STANDARD - FIBER OPTIC OVERHEAD OPGW CONSTRUCTION	PG&E CO. SHEET 11 OF SHEETS	DRAWING NUMBER 069367	REV 1
		SCAN	I/C

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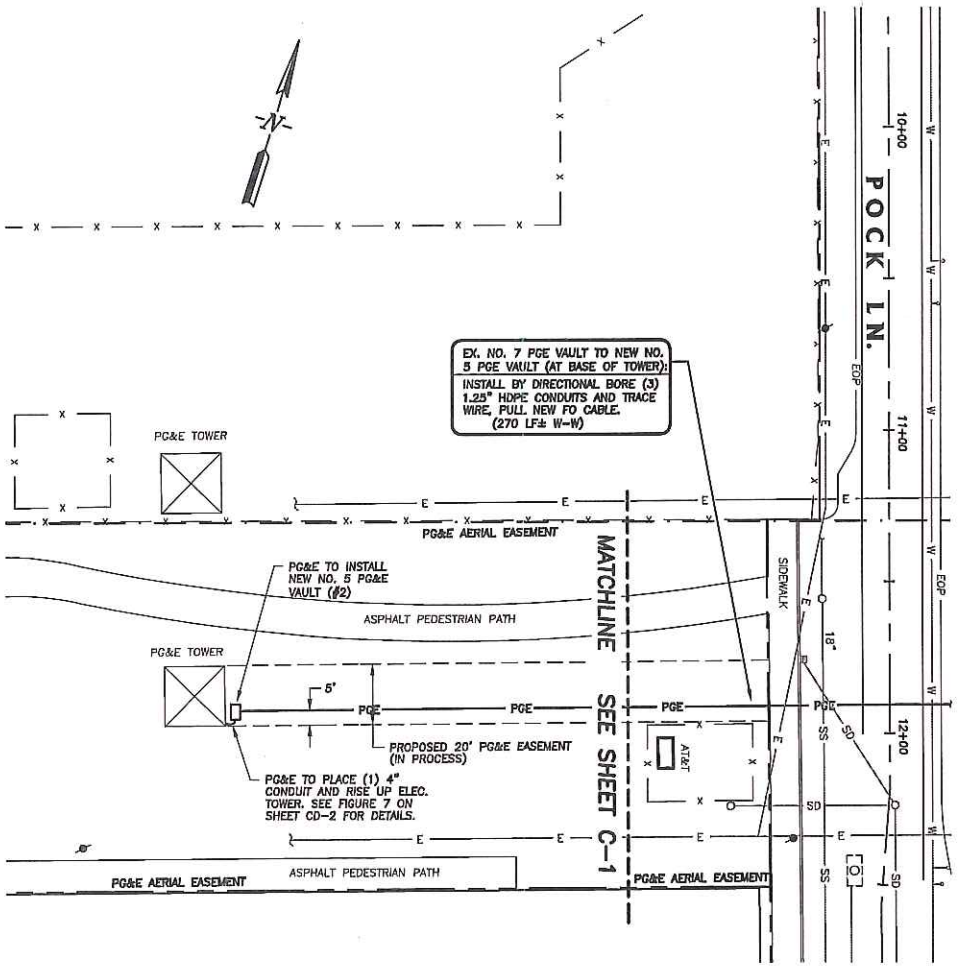

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1"=40'

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CONSTRUCTION PLAN

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
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Checked By : PRM	Job No. : 2015-PG09

DWG. NO. C-2

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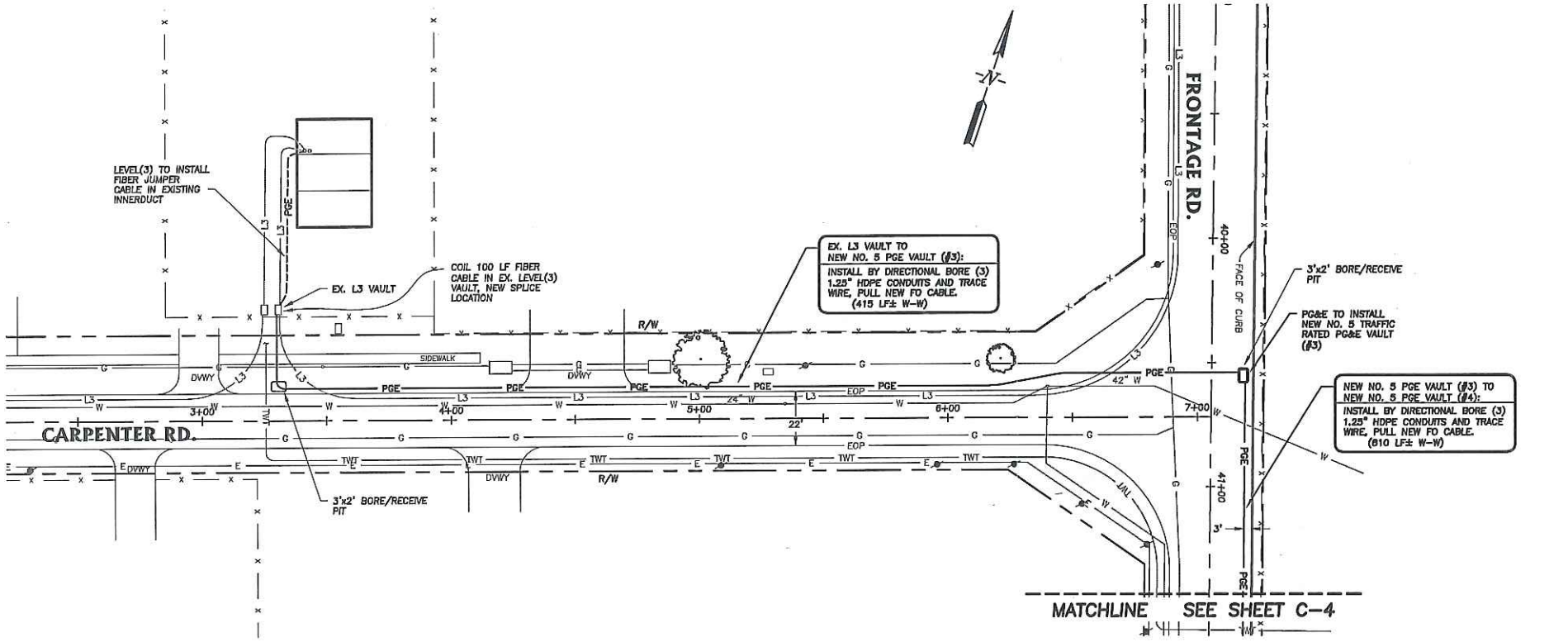

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CONSTRUCTION PLAN

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 8/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO. C-3

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and worker, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL-OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

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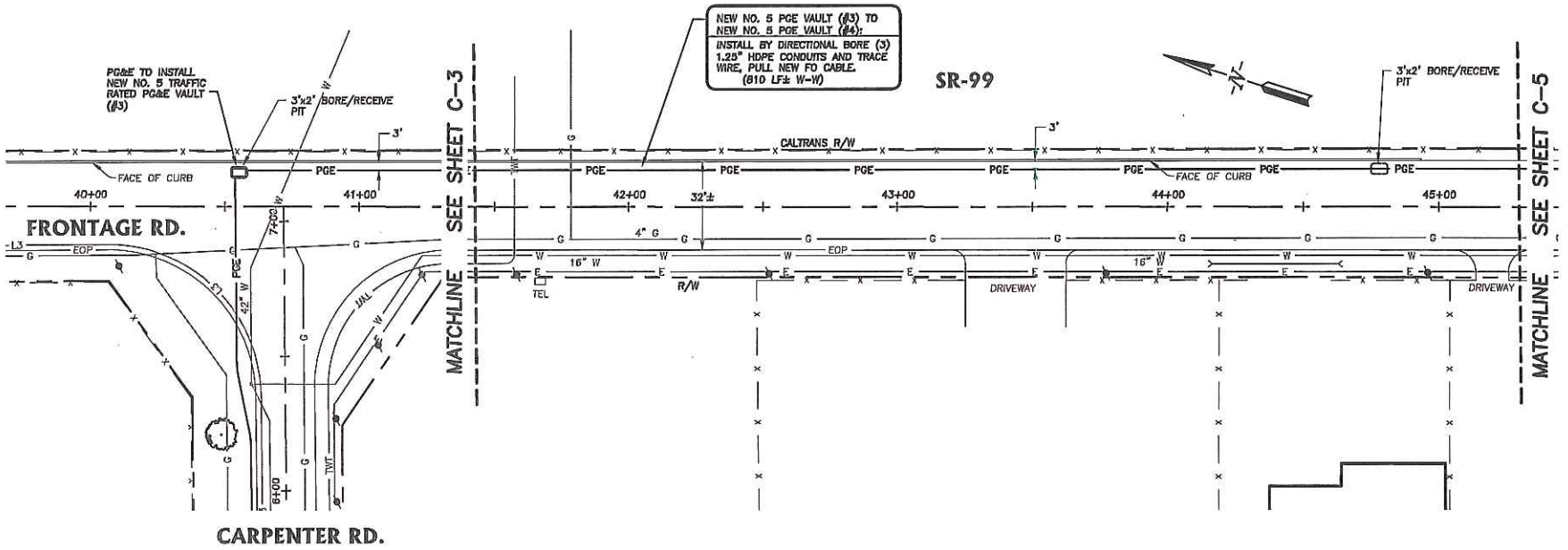

PLAN
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1"=40'

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CONSTRUCTION PLAN

3136 Boeing Way Fiber Connection

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Drawn By : JC	Date : 8/2/15
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DWG. NO. C-4

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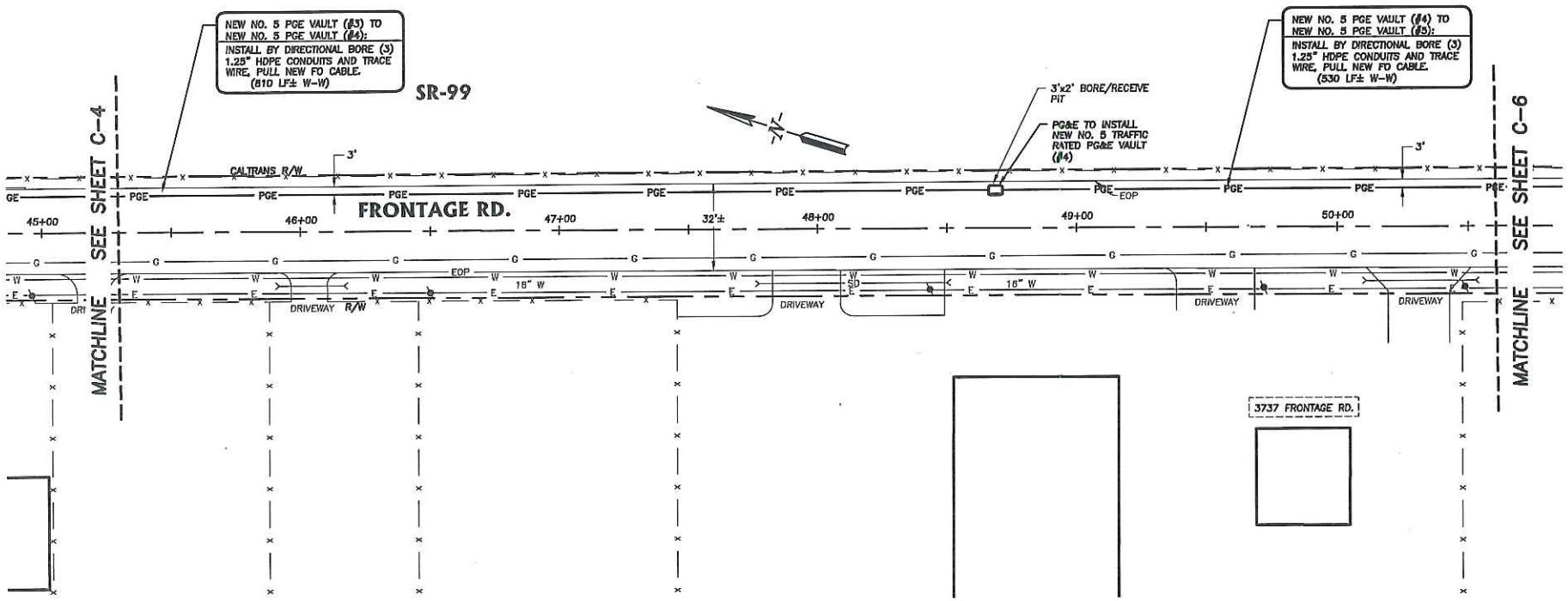

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CONSTRUCTION PLAN

PG&E

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DWG. NO. C-5

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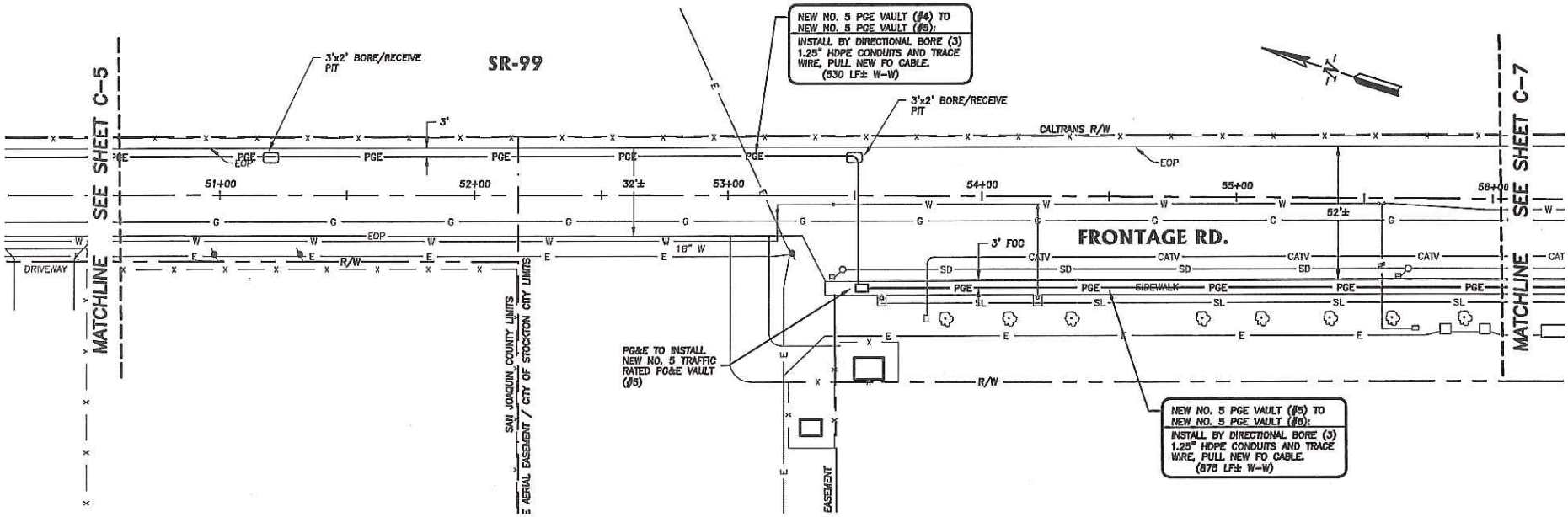

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DWG. NO. C-6

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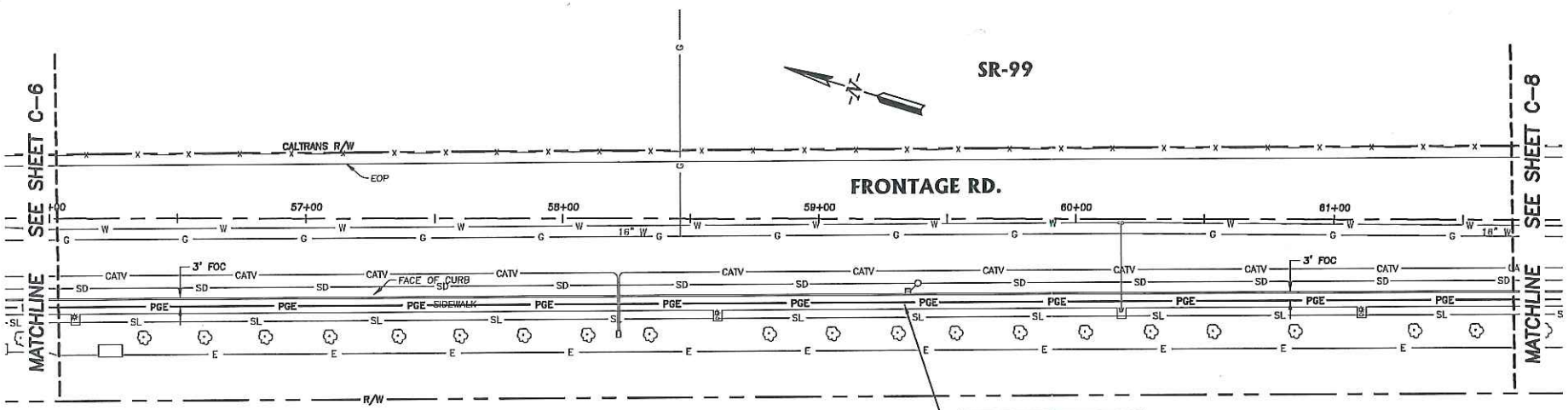

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Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015–PG09

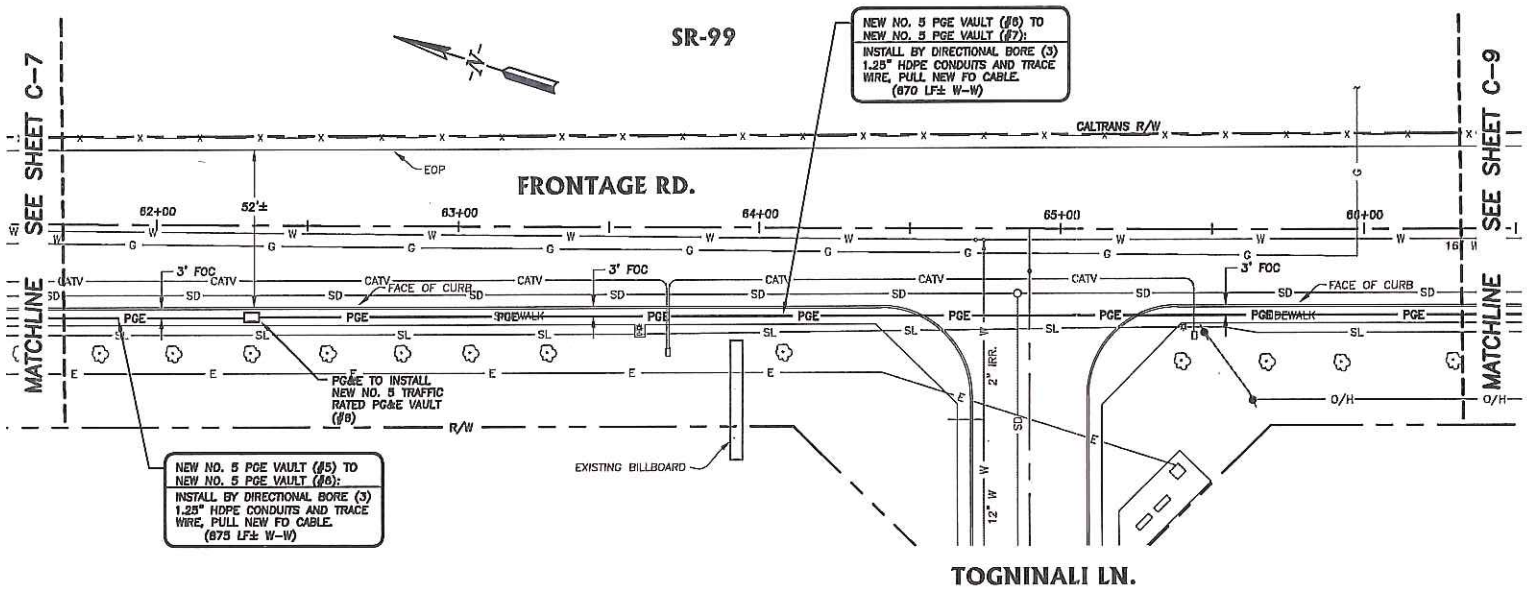
DWG. NO. C-7

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and worker, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL-OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

NOTE:
CONTRACTOR TO REMOVE AND REPLACE SECTION OF CURB, GUTTER, AND SIDEWALK PER CITY OF STOCKTON STANDARDS AS NEEDED FOR CONSTRUCTION

Restore Pavement Markings, Pavement Markers, and Traffic Lines to Original or Better Condition

NOTES:
1. FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS SEE SHEET G-1.
2. LOCATION OF UNDERGROUND FACILITIES IS APPROXIMATE. CONTRACTOR TO U.S.A. AND POTHOLE TO VERIFY EXACT LOCATION.



PLAN
1"=40'

20 0 20 40
1"=40'

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REGISTERED PROFESSIONAL ENGINEER
PAUL R. MARSHALL
No. C 46732
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

Civil inc.	3501 Sunrise Blvd Suite 15 Rancho Cordova, CA 95742 (916) 861-2220

Rev.	Description	Date
1	SUBMITTAL	6/3/15

CONSTRUCTION PLAN

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-P009

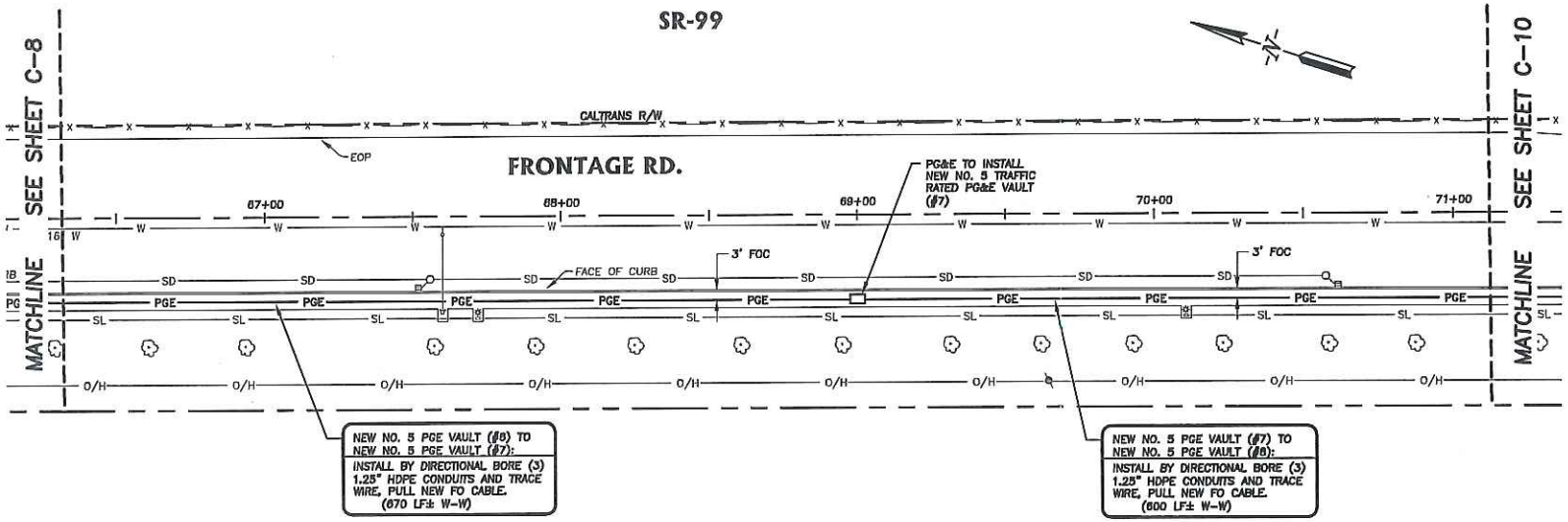
DWG. NO. C-8

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and worker, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL–OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

NOTE:
CONTRACTOR TO REMOVE AND REPLACE SECTION OF CURB, GUTTER, AND SIDEWALK PER CITY OF STOCKTON STANDARDS AS NEEDED FOR CONSTRUCTION

Restore Pavement Markings, Pavement Markers, and Traffic Lines to Original or Better Condition

NOTES:
1. FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS SEE SHEET G–1.
2. LOCATION OF UNDERGROUND FACILITIES IS APPROXIMATE. CONTRACTOR TO U.S.A. AND POTHOLE TO VERIFY EXACT LOCATION.



PLAN
1"=40'

20 0 20 40
1"=40'

REGISTERED PROFESSIONAL ENGINEER
PAUL R. MARSHALL
No. C 46732
Exp. 6–30–17
CIVIL
STATE OF CALIFORNIA

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(916) 861–2220

Rev.	Description	Date
1	SUBMITTAL	8/2/15

CONSTRUCTION PLAN

PG&E

3136 Boeing Way
Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 8/2/15
Checked By : PRM	Job No. : 2015–PG09

DWG. NO.
C-9

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and worker, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL-OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

NOTE:
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Restore Pavement Markings, Pavement Markers, and Traffic Lines to Original or Better Condition

NOTES:
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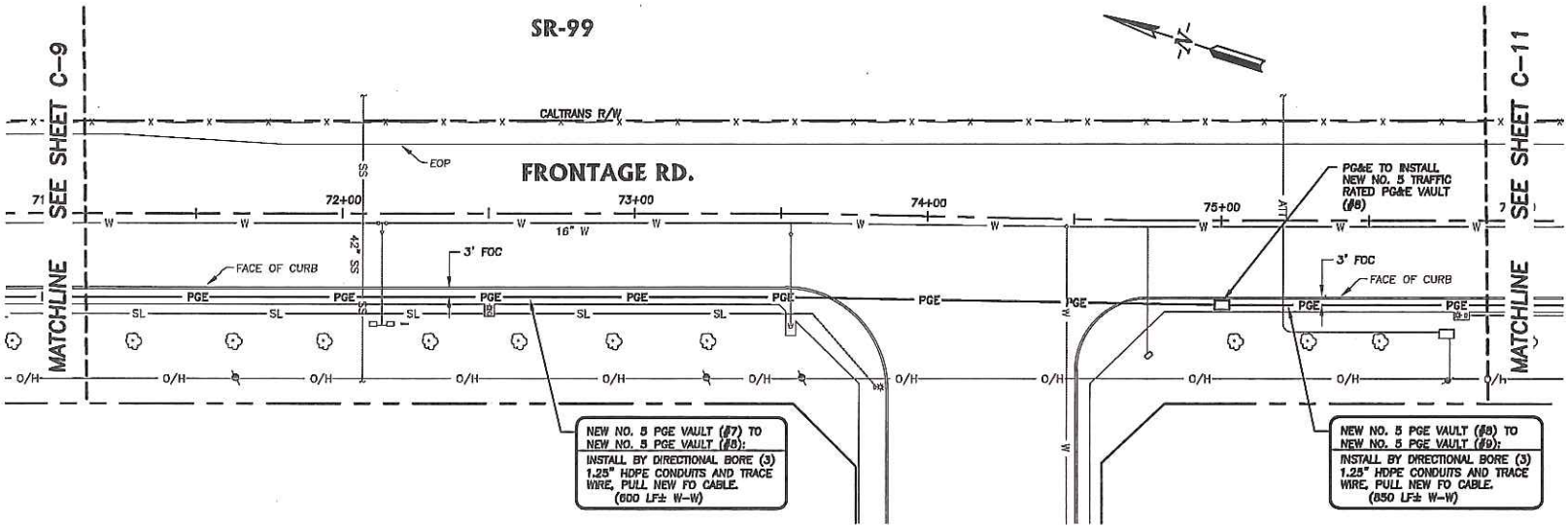

PLAN
1"=40'

20 0 20 40
1"=40'

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Rev.	Description	Date
1	SUBMITTAL	6/2/15

CONSTRUCTION PLAN

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO.
C-10

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and worker, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL-OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

NOTE:
CONTRACTOR TO REMOVE AND REPLACE SECTION OF CURB, GUTTER, AND SIDEWALK PER CITY OF STOCKTON STANDARDS AS NEEDED FOR CONSTRUCTION

Restore Pavement Markings, Pavement Markers, and Traffic Lines to Original or Better Condition

NOTES:
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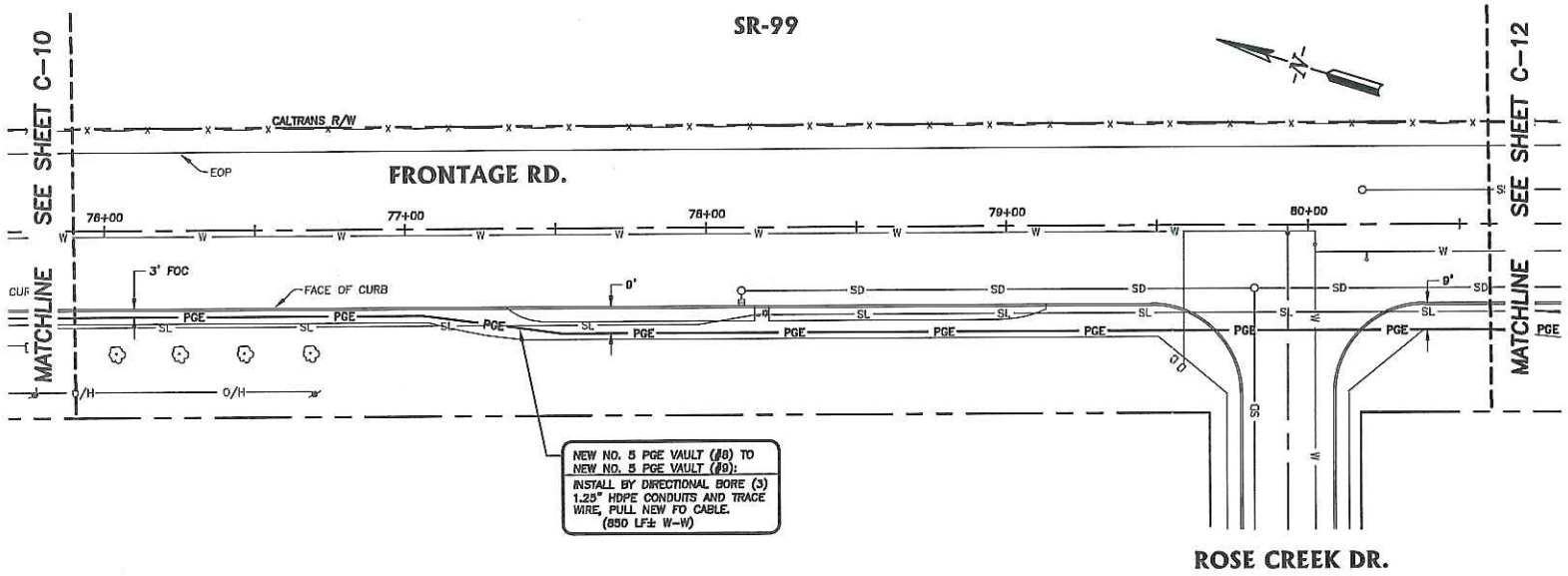
2. LOCATION OF UNDERGROUND FACILITIES IS APPROXIMATE. CONTRACTOR TO U.S.A. AND POTHOLE TO VERIFY EXACT LOCATION.



PLAN
1"=40'

20 0 20 40
1"=40'

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PAUL R. MARSHALL
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Exp. 6-30-17
CIVIL
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Rev.	Description	Date
1	SUBMITTAL	6/2/15

CONSTRUCTION PLAN

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO. C-11

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and worker, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL-OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

NOTE:
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Restore Pavement Markings, Pavement Markers, and Traffic Lines to Original or Better Condition

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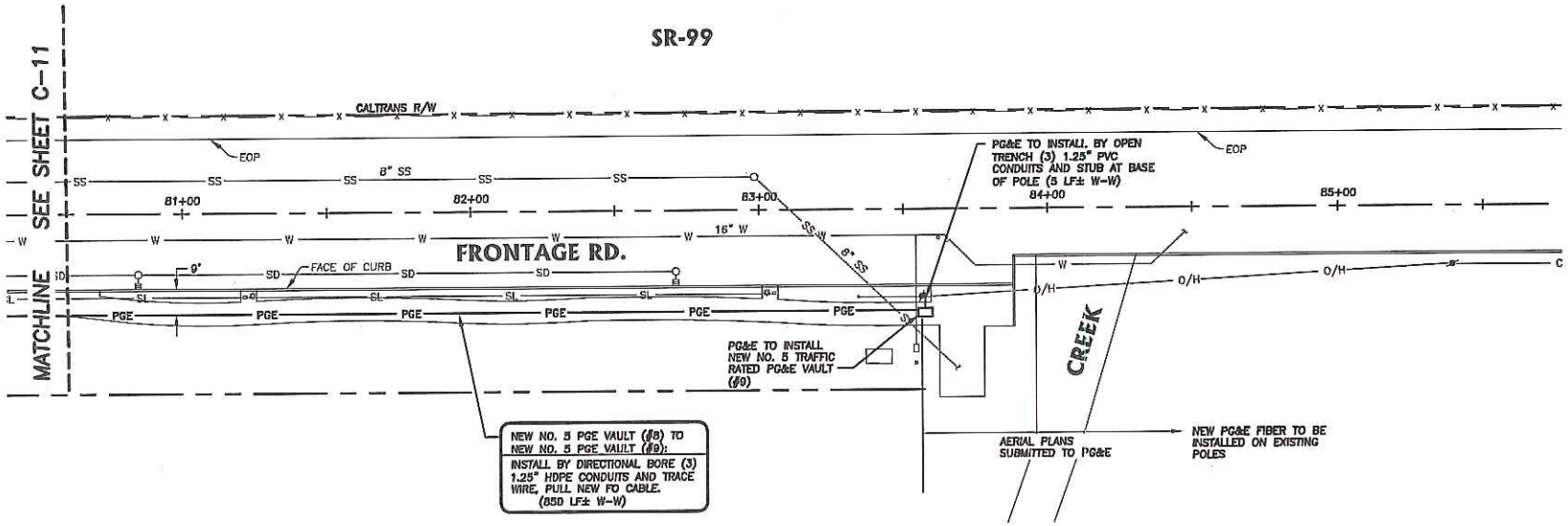

PLAN
1"=40'

20 0 20 40
1"=40'

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No. C 46732
Exp. 6-30-17
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Rev.	Description	Date
1	SUBMITTAL	6/2/15

CONSTRUCTION PLAN

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO. C-12

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and worker, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL-OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

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Restore Pavement Markings, Pavement Markers, and Traffic Lines to Original or Better Condition

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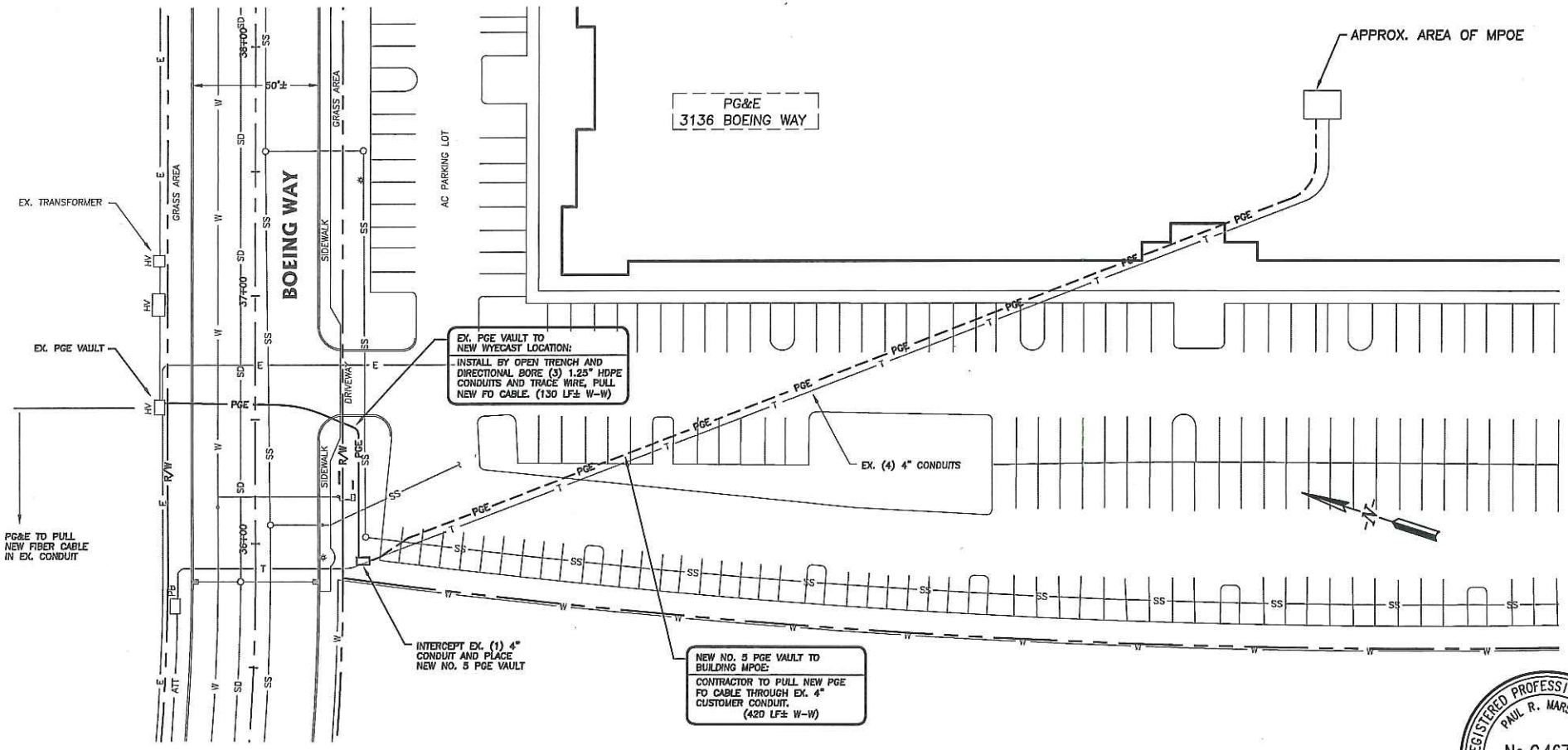

PLAN
1"=40'

20 0 20 40
1"=40'

REGISTERED PROFESSIONAL ENGINEER
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No. C 46732
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

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Rev.	Description	Date
1	SUBMITTAL	8/2/15

CONSTRUCTION PLAN

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 8/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO.
C-13

The Contractor shall submit detail drawings showing design of shoring, bracing, sloping or other provisions for the safety of structures and workers, and public protection when trench excavation will exceed a depth of five feet. If such a plan varies from the shoring systems standards established by the CAL-OSHA Construction Safety Orders, the detail drawings shall be prepared by a Registered Civil or Structural Engineer.

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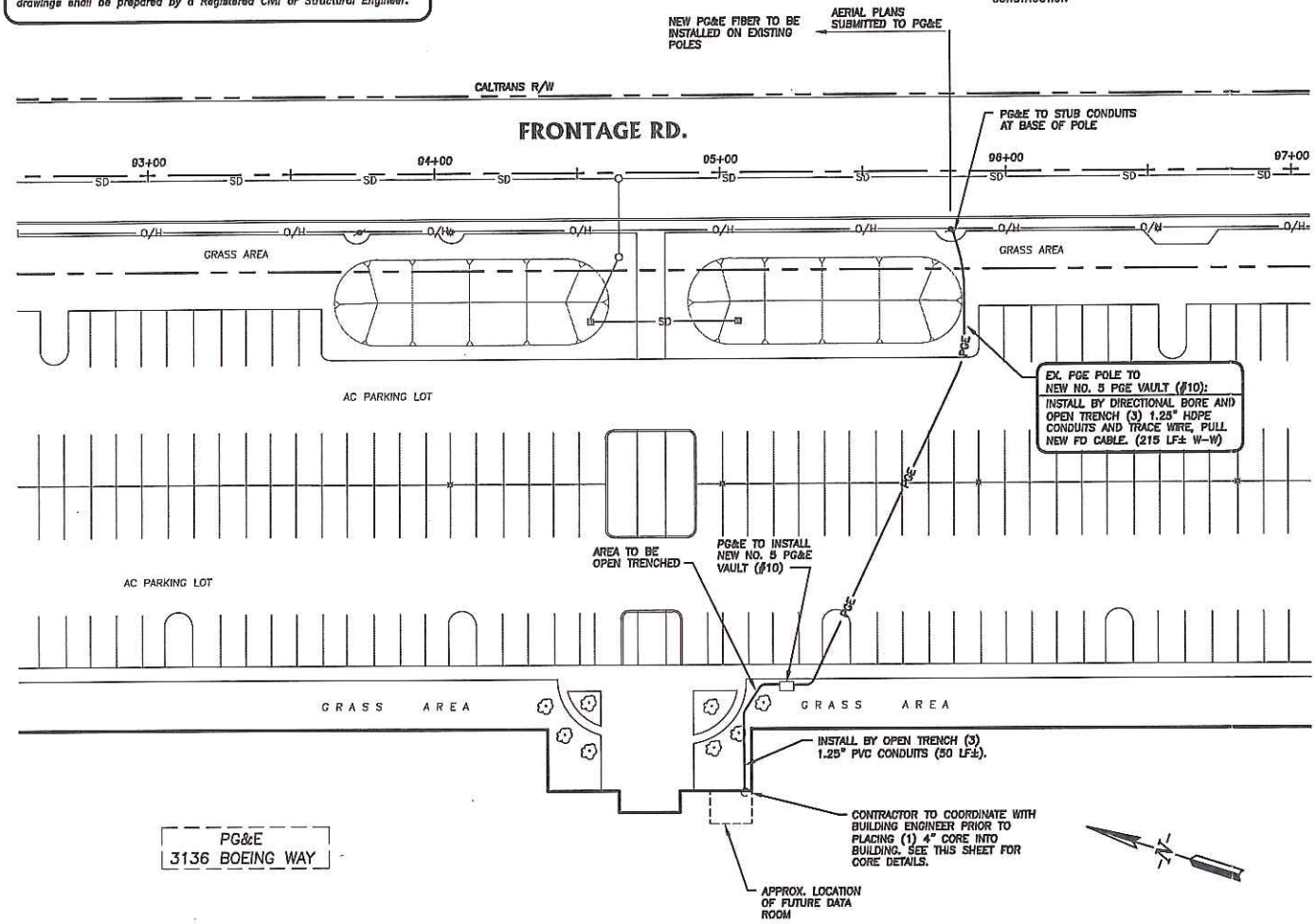
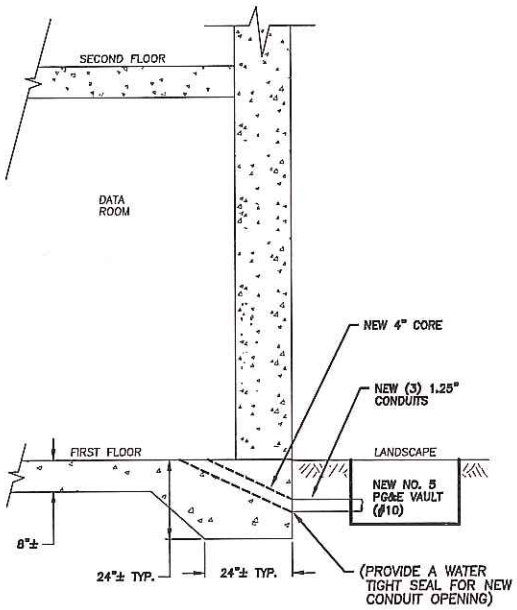


PLAN
1"=40'



1. CORE DRILL (1) 4" HOLE WHERE SHOWN
2. ANY REINFORCING BARS ENCOUNTERED WHEN CORING CONCRETE SHALL BE COATED WITH EPOXY PAINT.
3. GROUT ALL VOIDS AROUND NEW CONDUIT(S) WITH NON-SHRINK GROUT

WALL ENTRANCE DETAIL
(Section View)
N.T.S.

REGISTERED PROFESSIONAL ENGINEER
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Exp. 6-30-17
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STATE OF CALIFORNIA

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Rancho Cordova, CA 95742
(916) 851-2220

Rev.	Description	Date
1	SUBMITTAL	6/2/15

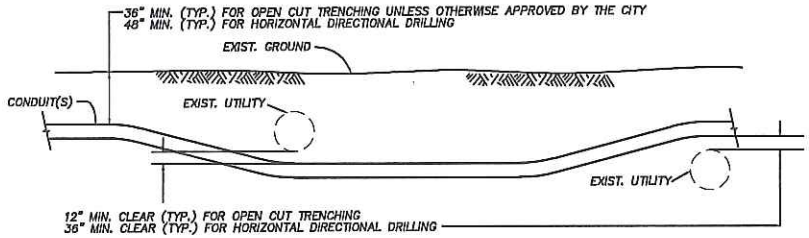
CONSTRUCTION PLAN

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : 1"=40'
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

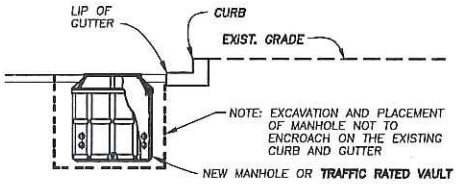
DWG. NO. **C-14**



DETAIL

TYPICAL UTILITY CROSSING DETAIL

NO SCALE

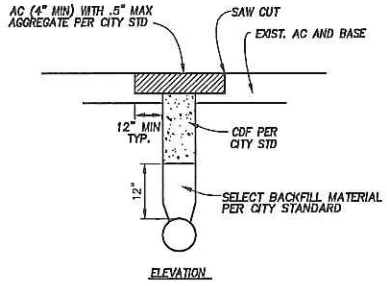


MH/HH PLACEMENT

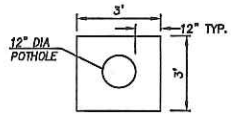
NO SCALE

CONTROLLED DENSITY FILL

Material	Abs Vol.
Cement (1.25 Sacks)	0.60
Flyash	0.84
Water	6.41
Sand	19.35
	27.00



ELEVATION



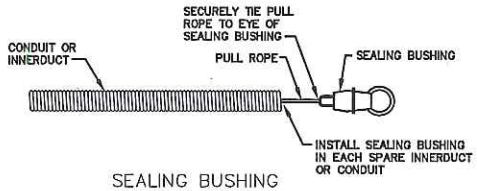
PLAN VIEW

POTHOLE REPAIR DETAIL

NO SCALE

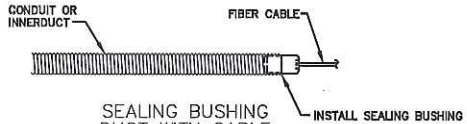
NOTES:

1. FOR EXISTING PAVEMENT, SAWCUT EDGE OR USE A WHEEL TYPE CUTTER.
2. APPLY TACK COAT TO CUT EDGE OF EXISTING PAVEMENT.
3. FOR PAVED SURFACES FOR WHICH THE PERMANENT SURFACING CANNOT BE INSTALLED BEFORE RETURNING THE PAVEMENT TO USE BY THE PUBLIC, A TEMPORARY SURFACING OF 2" MIN. OF CUTBACK SHALL BE INSTALLED, FLUSH WITH THE ADJACENT PAVEMENT, UNTIL SUCH TIME AS THE PERMANENT SURFACING IS INSTALLED. TEMPORARY SURFACING SHALL BE CONSTRUCTED FLUSH WITH THE ADJACENT PAVEMENT AND SHALL BE MAINTAINED FLUSH.
4. TEMPORARY SURFACING SHALL NOT BE USED FOR MORE THAN TWO WEEKS.



SEALING BUSHING SPARE DUCTS

NO SCALE



SEALING BUSHING DUCT WITH CABLE

NO SCALE

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REGISTERED PROFESSIONAL ENGINEER
PAUL R. MARSHALL
No. C 46732
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

Civil inc.
3501 Sunrise Blvd
Suite 15
Rancho Cordova, CA 95742
(916) 851-2220

Rev.	Description	Date
1	ADD ADDITIONAL 6" CONDUIT	6/2/15

CONSTRUCTION DETAILS

PG&E

3136 Boeing Way Fiber Connection

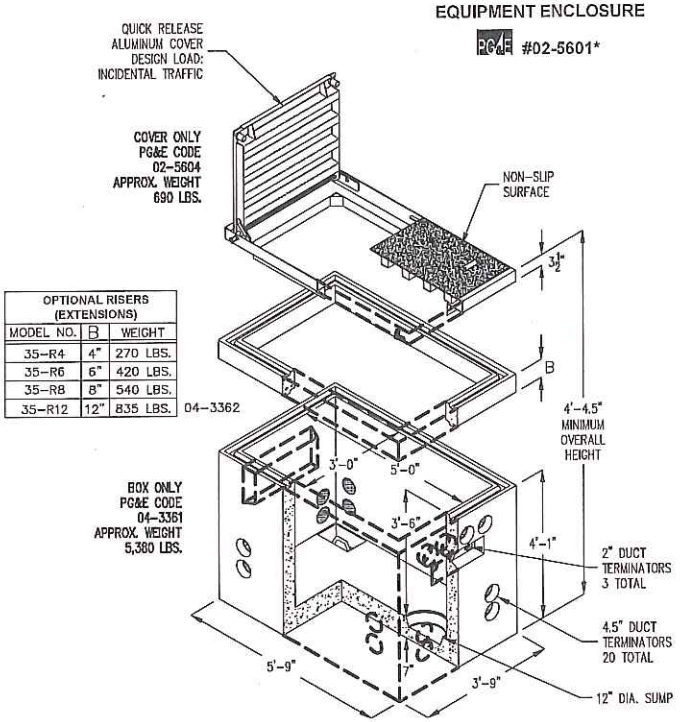
Designed By : JC	Scale : NO SCALE
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO. CD-1

4686 PG&E

4'-6"x8'-6"x6'-0" I.D.
(NOMINAL DIMENSIONS)
SPLICE BOX OR
EQUIPMENT ENCLOSURE

PG&E #02-5601*



OPTIONAL RISERS (EXTENSIONS)		
MODEL NO.	B	WEIGHT
35-R4	4"	270 LBS.
35-R6	6"	420 LBS.
35-R8	8"	540 LBS.
35-R12	12"	835 LBS.

04-3362

*CODE INCLUDES BOX, FRAME AND COVER ASSEMBLY.

DUCT TERMINATOR SIZE AND LOCATION, KNOCKOUTS, PULLING IRONS, ETC. PER CURRENT PG&E SPECIFICATIONS.

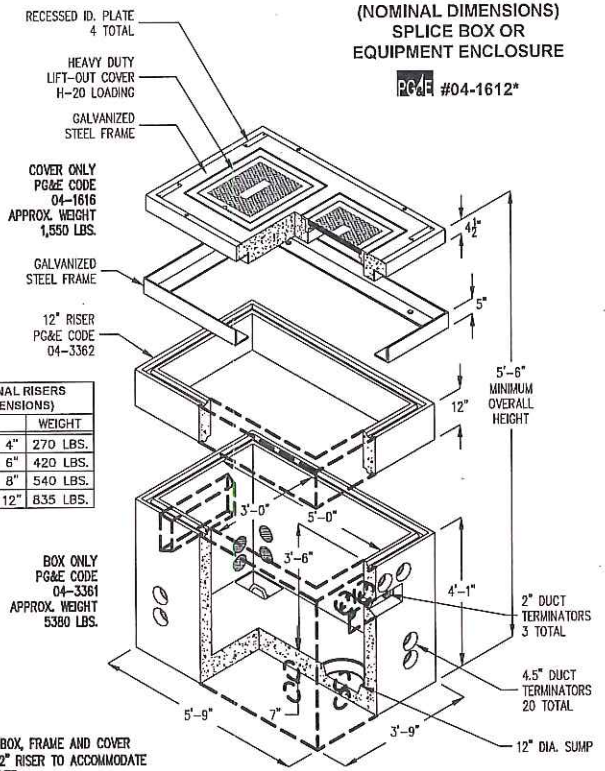
FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST.

JENSEN PRECAST

4686 PG&E

4'-6"x8'-6"x6'-0" I.D.
(NOMINAL DIMENSIONS)
SPLICE BOX OR
EQUIPMENT ENCLOSURE

PG&E #04-1612*



OPTIONAL RISERS (EXTENSIONS)		
MODEL NO.		WEIGHT
35-R4	4"	270 LBS.
35-R6	6"	420 LBS.
35-R8	8"	540 LBS.
35-R12	12"	835 LBS.

*CODE INCLUDES BOX, FRAME AND COVER ASSEMBLY AND 12" RISER TO ACCOMMODATE FULL TRAFFIC COVER.

DUCT TERMINATOR SIZE AND LOCATION, KNOCKOUTS, PULLING IRONS, ETC. PER CURRENT PG&E SPECIFICATIONS.

FOR COMPLETE DESIGN AND PRODUCT INFORMATION CONTACT JENSEN PRECAST.

7/10/08
36PGE_IVT_42_B.dwg
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JENSEN PRECAST

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Exp. 6-30-17
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STATE OF CALIFORNIA

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Rancho Cordova, CA 95742
(916) 861-2220

Rev.	Description	Date
1	ADD ADDITIONAL 4" CONDUIT	6/2/15

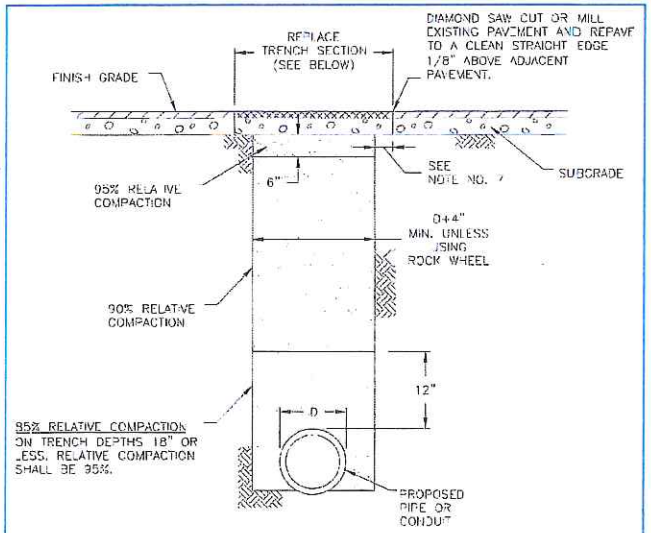
CONSTRUCTION DETAILS

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : NO SCALE
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO.
CD-2

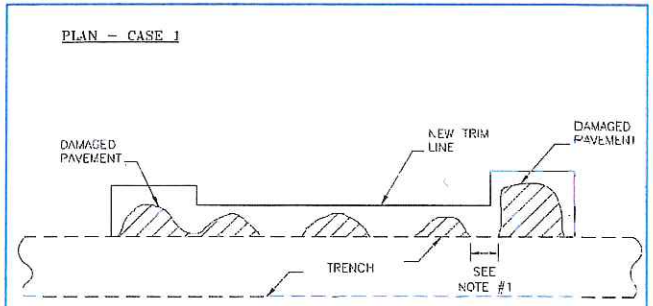


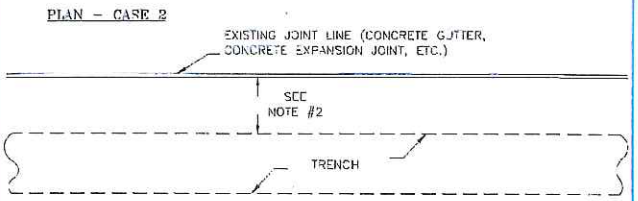
TYPICAL TRENCH SECTION IN EXISTING STREETS

NOTES:

1. TRENCH - WHERE THE TRENCH SECTION PARALLELS THE EXISTING CURB AND GUTTER, THE EDGE OF THE TRENCH SHALL BE A MIN. OF 1'-0" FROM THE LIP OF THE EXISTING GUTTER AND THE PAVEMENT SHALL BE REMOVED AND REPLACED TO THE LIP OF THE GUTTER
2. BACKFILL - CONTROLLED DENSITY FILL (CDF) SHALL BE MANDATORY FOR TRENCHES 8" WIDE OR LESS AS PER SECTION 19-3.066 OF THE STANDARD SPECIFICATIONS.
3. PAVEMENT REPLACEMENT - 1 1/2" OF A.C. SHALL BE PLACED WHEN TRENCHES ARE BACKFILLED WITH CDF. PAVEMENT SECTION AS SPECIFIED IN AN "ENCROACHMENT PERMIT" SHALL TAKE PRECEDENCE OVER THE PAVEMENT SECTION AS SHOWN.
4. APPLY FOG SEAL COAT OF CSS-1 OR SS-1 ASPHALT EMULSION.
5. PAVING SHALL CONFORM TO SECTION 100-6 OF THESE STANDARDS AND SPECIFICATIONS.
6. ALL VERTICAL EDGES OF EXISTING ASPHALT CONCRETE SHALL BE TACK COATED.
7. GRIND 3" DEEP, 12" EACH SIDE OF TRENCH, AND REPAVE FOR ROCK WHEEL EXCAVATIONS.

REV. NO	REV. DATE	REV. BY	EXISTING STREET TRENCH SECTION FOR PIPES 4" AND SMALLER	DIVISION APPROVED BY CITY ENGINEER Finbarr J. O'Regan DATE 01/09/02
DIGITIZED	7/1/91			
DWG. BY	RC	SCALE	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED 10/7/93 — DRAWING NO 504
CK. BY		NONE		





NOTES

1. UNDAMAGED PAVEMENT OF 3'-0" OR LESS BETWEEN DAMAGED SECTIONS OF PAVEMENT SHALL BE REMOVED AND REPAVED WITH TRENCH RESTORATION
2. UNDAMAGED PAVEMENT OF 3'-0" OR LESS BETWEEN EDGE OF TRENCH AND EXISTING JOINT LINE SHALL BE REMOVED AND REPAVED WITH TRENCH RESTORATION.

REV. NO	REV. DATE	REV. BY	DETAIL SECTION (EXISTING STREET) ADDITIONAL PAVEMENT RESTORATION	DIVISION APPROVED BY CITY ENGINEER Finbarr J. O'Regan DATE 01/09/02
DIGITIZED	7/1/91			
DWG. BY	RC	SCALE	CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SUPERCEDES DWG. DATED 10/7/93 — DRAWING NO 505
CK. BY		NONE		

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Suite 15
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(916) 861-2220

Rev.	Description	Date
1	ADD ADDITIONAL 6" CONDUIT	6/2/15

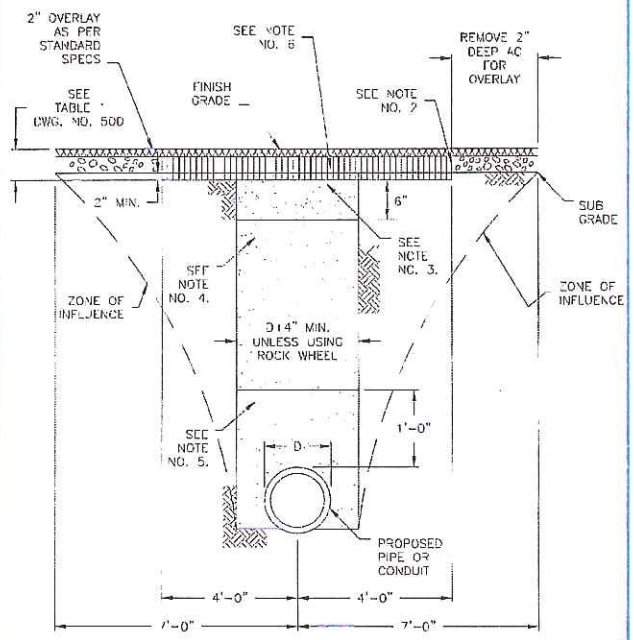
CONSTRUCTION DETAILS

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : NO SCALE
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO. CD-3



TYPICAL OVERLAY OVER TRENCH

SEE DWG. NO. 50D FOR TABLE AND NOTES.

REV. NO	REV. DATE	REV. BY
1	6/1/2003	MLJEA

DIGITIZED
DWG. BY HLE | SCALE
CK. BY | NONE

ALTERNATIVE TRENCH OVERLAY

CITY OF STOCKTON
DEPARTMENT OF PUBLIC WORKS

NEW DRAWING APPROVED BY CITY ENGINEER
Finbar C. O'Regan
DATE 11/25/03
SUPERSEDES DWG. DATED 01/09/02
DRAWING NO. 50C

SUB GRADE

NE OF LUENCE

ITY ENGINEER
Regan
ING NO.
0C

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

REGISTERED PROFESSIONAL ENGINEER
PAUL R. MARSHALL
No. C 46732
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

Civtel inc.
3501 Sunrise Blvd
Suite 15
Rancho Cordova, CA 95742
(916) 861-2220

Rev.	Description	Date
1	ADD ADDITIONAL 6" CONDUIT	6/2/15

CONSTRUCTION DETAILS

PG&E

3136 Boeing Way Fiber Connection

Designed By : JC	Scale : NO SCALE
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO.
CD-4

Speed* S (mph)	Minimum Taper Length** for Width of Offset 12 ft (W)			
	Merging L (ft)	Shifting L/2 (ft)	Shoulder L/3 (ft)	Down Stream (ft)
20	80	40	27	50
25	125	63	42	50
30	180	90	60	50
35	245	123	82	50
40	320	160	107	50
45	540	270	180	50
50	600	300	200	50
55	660	330	220	50
60	720	360	240	50
65	780	390	260	50
70	840	420	280	50

* – POSTED SPEED, OFF-PEAK 85TH PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED.
** – FOR OTHER OFFSETS USE THE FOLLOWING MERGING TAPER LENGTH

FORMULA FOR L:
FOR SPEEDS OF 65 KM/H (40MPH) OR LESS. L=WSS/155 (L=WSS/60)
FOR SPEEDS OF 70 KM/H (45MPH) OR MORE, L=WS/1.6 (L=WS)

REQUIREMENTS/STANDARDS

*2012 CALIF MUTCD

WORK HOURS

9:30 AM TO 3:00 PM
(SINGLE LANE CLOSURE ONLY)

ROAD TYPE	DISTANCE BETWEEN SIGNS**		
	A	B	C
Urban (low speed)* 25 mph or less	30 (100)	30 (100)	30 (100)
Urban (high speed)* more than 25 mph to 40 mph	76 (250)	76 (250)	76 (250)
Urban (high speed)* more than 40 mph	100 (350)	100 (350)	100 (350)
Rural	150 (500)	150 (500)	150 (500)
Expressway / Freeway	300 (1,000)	450 (1,500)	800 (2,640)

* SPEED CATEGORY TO BE DETERMINED BY HIGHWAY AGENCY.

** DISTANCES ARE SHOWN IN METERS (FEET). THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN FIGURES 6H-1 THROUGH 6H-46. THE DIMENSION A IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE THIRD SIGN IS THE FIRST ONE IN A THREE-SIGN SERIES ENCOUNTERED BY A DRIVER APPROACHING A TTC ZONE.)

BICYCLE CONSIDERATIONS:

1. UNLESS A SEPARATE BIKE PATH THROUGH OR AROUND THE TRAFFIC CONTROL ZONE IS PROHIBITED, ADEQUATE ROADWAY LANE TO ALLOW BICYCLISTS AND MOTOR VEHICLES TO TRAVEL SIDE BY SIDE THROUGH OR AROUND THE WORK ZONE SHALL BE PROVIDED.

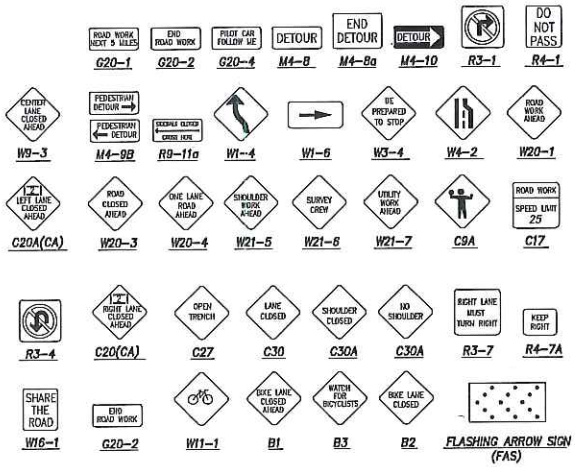
2. BICYCLISTS SHOULD NOT BE LED INTO DIRECT CONFLICT WITH MAINLINE TRAFFIC, WORK SITE VEHICLES, OR EQUIPMENT MOVING THROUGH OR AROUND THE TRAFFIC CONTROL ZONE.

PROVIDE PEDESTRIAN ESCORT AS NEEDED, AND POST PEDESTRIAN TRAFFIC SIGNAGE AT WORK AREA

CONTRACTOR TO MAINTAIN ACCESS TO ALL DRIVEWAYS & CROSSWALKS DURING THE TIME OF CONSTRUCTION.

CONTRACTOR TO PLACE "NO PARKING" SIGNS 72 HRS IN ADVANCE AND NOTIFY CONCORD PD 48 HRS IN ADVANCE @ (925) 671-3220 FOR POSTING VERIFICATION

PORTABLE SIGN TYPES

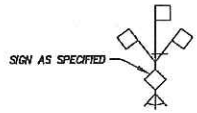


NOTES

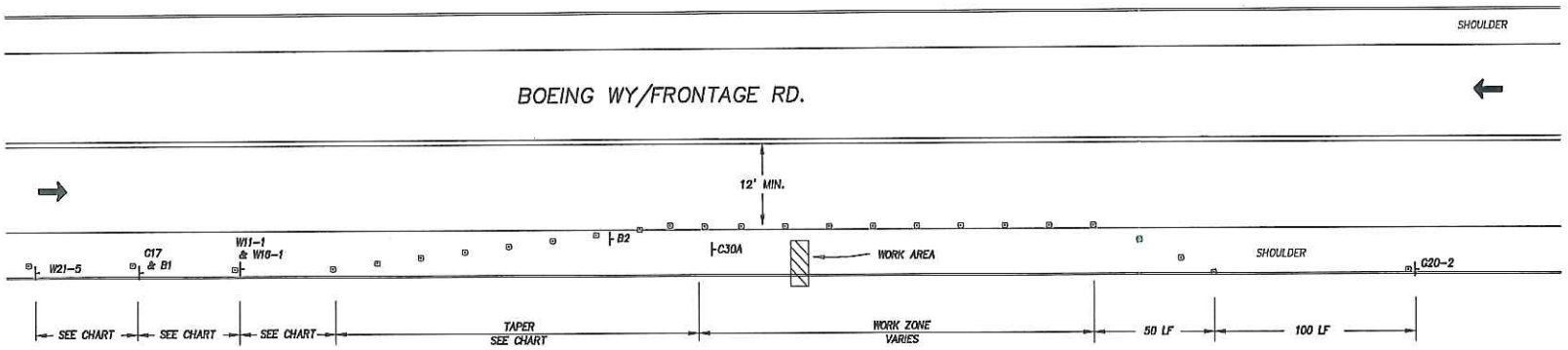
1. All advance warning sign installations shall be equipped with flags for daytime closures.
2. Flaggers are required to control traffic whenever the contractor must interrupt traffic flow to access the work area with materials or equipment.
3. Allow access to driveways in work area.
4. All warning signs placed within work zone shall have a black legend on an orange background.
5. Cone spacing shall be:
   Tangent: 15' (4.6 M)
   Taper: 15' (4.6 M)

LEGEND

- TRAFFIC CONE
- PORTABLE SIGN
- WORK AREA
- FLAGGER/ RESERVE OFFICER



HIGH LEVEL WARNING DEVICE (HLWD)



TYPICAL TRAFFIC CONTROL (SHOULDER CLOSURE)

NO SCALE

REGISTERED PROFESSIONAL ENGINEER
PAUL R. MARSHALL
No. C 46732
Exp. 6-30-17
CIVIL
STATE OF CALIFORNIA

Civtel inc.
3501 Sunrise Blvd
Suite 15
Rancho Cordova, CA 95742
(916) 861-2220

Rev.	Description	Date
1	ADD ADDITIONAL 6" CONDUIT	6/2/15

TRAFFIC CONTROL

PG&E

3136 Boeing Way
Fiber Connection

Designed By : JC	Scale : AS SHOWN
Drawn By : JC	Date : 6/2/15
Checked By : PRM	Job No. : 2015-PG09

DWG. NO. **TC-1**

Speed* S (mph)	Minimum Taper Length** for Width of Offset 18 ft (W)			
	Merging L (ft)	Shifting L/2 (ft)	Shoulder L/3 (ft)	Down Stream (ft)
20	80	40	27	50
25	125	63	42	50
30	180	90	60	50
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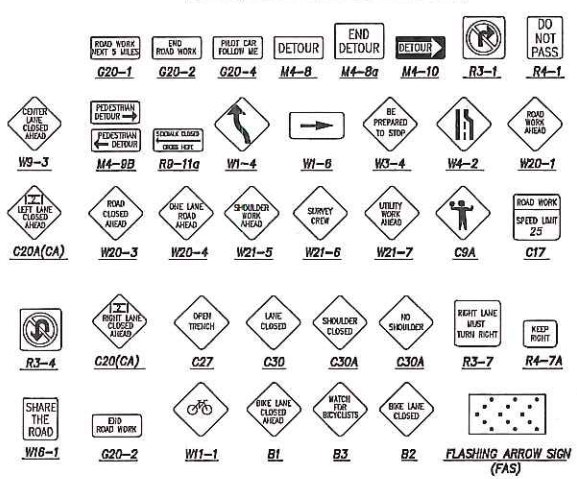

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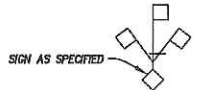

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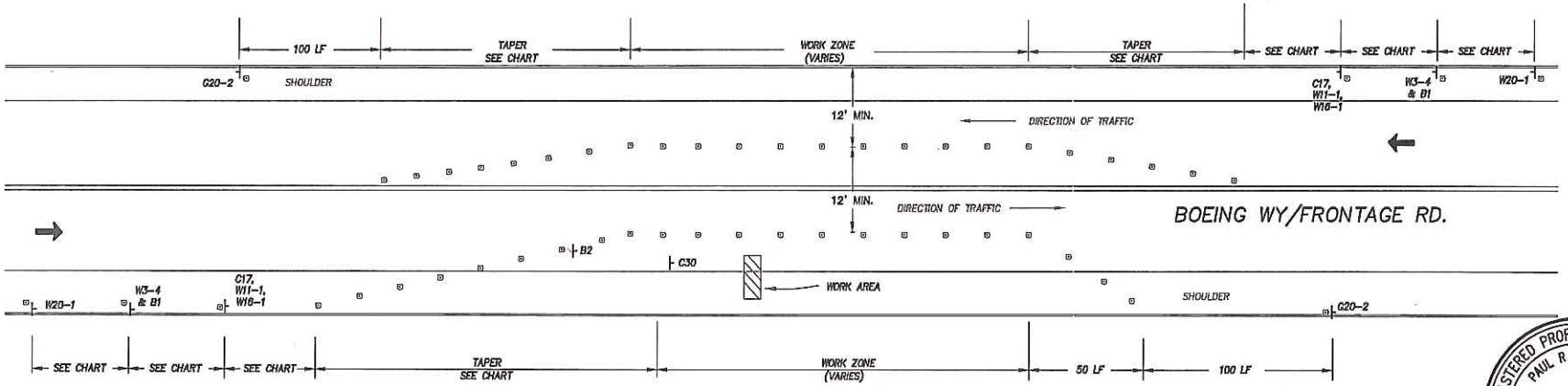

TYPICAL TRAFFIC CONTROL (SHOULDER CLOSURE)

NO SCALE

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Rev.	Description	Date
1	ADD ADDITIONAL 6" CONDUIT	8/2/15

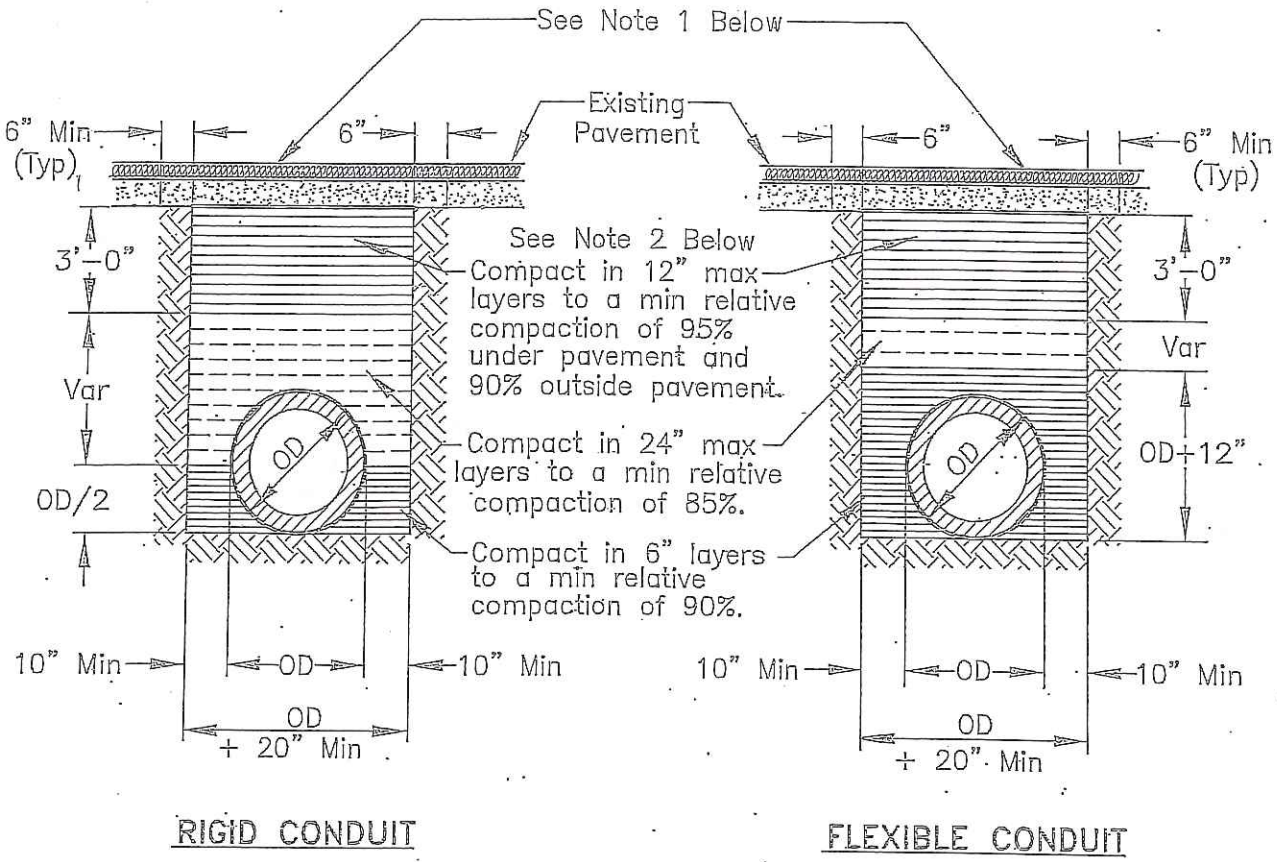
TRAFFIC CONTROL

PG&E

3136 Boeing Way
Fiber Connection

Designed By : JC	Scale : AS SHOWN
Drawn By : JC	Date : 8/2/15
Checked By : PRM	Job No. : 2015-P009

DWG. NO. TC-2



RIGID CONDUIT

FLEXIBLE CONDUIT

NOTES:

1. New pavement shall be 1" thicker than existing pavement, minimum of 0.25 Ft. New base shall be 1" thicker than existing base, min of 0.50 Ft.
2. Select native material or imported granular material as approved by the Director of Public Works. Backfill with materials equal to or better than the existing pavement and base in quality.
3. Relative compaction of materials shall be tested in accordance with the State of California, Dept. of Transportation Testing Manuals, test method No. California 216 or 231.
4. All existing pavement shall be neatly cut to line prior to trench excavation.
5. Jetting or ponding will be permitted within the street right-of-way with a 3 year bond, when approved by the Director of Public Works.
6. When shown by soil composition and compactability, ninety percent (90%) compaction may be used, when approved by the Director of Public Works.
7. Special bedding and backfill requirements may be shown on the plans or specified in the special provisions.

Public Works San Joaquin County
Working for YOU

TYIPCAL TRENCH BACKFILL

COUNTY OF SAN JOAQUIN
DEPARTMENT OF PUBLIC WORKS

Date: DEC 2014

Approved by: Thomas M. Flinn

No.	Revision Description	Date

Std. Dwg. No. R-29

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 with 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.