



COUNTY OF SAN JOAQUIN

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

Permit No: PS-1800177
Date Issued: 01/22/2018
Start Date: 02/06/2018
Exp. Date: 08/14/2018
Project No: PWP730052
Quad: SE

UE/CR/PM NO:31354223

ENCROACHMENT PERMIT

To: PACIFIC GAS & ELECTRIC - STOCKTON
PO BOX 930
STOCKTON, CA 95201

Encroachment Type:

New Pole Install			
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Location:

N/S KELLY RD 765' E/O STEINGUL RD

In compliance with your request of 01/22/2018, permission is hereby granted to do work in County right-of-way as shown on attached application and subject to all the terms, conditions and restrictions written below or printed as general or special provisions on any part of this form. See reverse side and attached sheet, if any.

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

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

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

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

Special Comments:

Traffic Control Per MUTCD

FORMS:

SS/WW		
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Est. Permit Fee: \$824.00

KRIS BALAJI, Director
Department of Public Works

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

By: 
Permit Section

ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

1. This permit is issued under and subject to all laws and ordinances of agencies governing the encroachment herein permitted. See the following references:
STREETS AND HIGHWAYS CODE
 1. Division 1, Chapter 3
 2. Division 2, Chapter 2, Section 942
 3. Division 2, Chapter 4, Section 1126
 4. Division 2, Chapter 5.5 and Chapter 6
- SAN JOAQUIN COUNTY ORDINANCES NUMBERED: 324, 441, 648, 662, 672, 695, 700, 860, 892, 3339, and 3675.
2. It is understood and agreed by the Permittee that the performance of any work under this permit shall constitute an acceptance of all the provisions contained herein and failure on the Permittee's part to comply with any provision will be cause for revocation of this permit. Except as otherwise provided for public agencies and franchise holders, this permit is revocable on five days notice.
3. All work shall be done subject to the supervision of and the satisfaction of the grantor. The Permittee shall at all times during the progress of the work keep the County Highway in as neat and clean condition as is possible and upon completion of the work authorized herein, shall leave the County Highway in a thoroughly neat, clean and usable condition.
4. The Permittee also agrees by the acceptance of this permit to properly maintain any encroachment structure placed by the Permittee on any part of the County Highway and to immediately repair any damage to any portion of the highway, which occurs as a result of the maintenance of the said encroachment structure, until such time as the Permittee may be relieved of the responsibility for such maintenance by the County of San Joaquin.
5. The Permittee also agrees by the acceptance of this permit to make, at its own expense, such repairs as may be deemed necessary by the County Department of Public Works.
6. It is further agreed by the Permittee that whenever construction, reconstruction or maintenance work upon the highway is necessary, the installation provided for herein shall, upon request of the County Department of Public Works, be immediately moved or removed by and at the sole expense of the Permittee.
7. No material used for fill or backfill in the construction of the encroachment shall be borrowed or taken from within the County right of way.
8. All work shall be planned and carried out with as little inconvenience as possible to the traveling public. No material shall be stacked within eight feet (8') of the edge of the pavement or traveled way unless otherwise provided herein. Adequate provision shall be made for the protection of the traveling public. Traffic control standards shall be utilized including barricades; approved signs and lights; and flagmen, as required by the particular work in progress.
9. The Permittee, by the acceptance of this permit, shall assume full responsibility for all liability for personal injury or damage to property which may arise out of the work herein permitted or which may arise out of the failure of the part of the Permittee to properly perform the work provided under this permit. In the event any claim of such liability is made against the County of San Joaquin or any department, official or employee thereof, the Permittee shall defend, indemnify, and hold each of them harmless for such claim.
10. All backfill material is to be moistened as necessary and thoroughly compacted with mechanical means. If required by the County Director of Public Works, such backfill shall consist of gravel or crushed rock. The Permittee shall maintain the surface over structures placed hereunder as may be necessary to insure the return of the roadway to a completely stable condition and until relieved of such responsibility by the County Department of Public Works. Wherever a gravel, crushed rock or asphalt surface is removed or damaged in the course of work related to the permitted encroachment, such material shall either be separately stored and replaced in the roadway as nearly as possible in its original state or shall be replaced in kind, and the roadway shall be left in at least as good a condition as it was before the commencement of operations of placing the encroachment structure.
11. Whenever it becomes necessary to secure permission from abutting property owners for the proposed work, such authority must be secured by the Permittee prior to starting work.
12. The current and future safety and convenience of the traveling public shall be given every consideration in the location and methods of construction utilized.
13. The Permittee is responsible for the preservation of survey monuments located within the area of work herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located and referenced by a Licensed Land Surveyor, and a Corner Record filed with the County Surveyor. Any Survey Monuments disturbed during the course of construction shall be reestablished by a Licensed Land Surveyor and another Corner Record filed with the County Surveyor. (Land Surveyors' Act Section 8771)
14. Prior to any excavation, the Permittee shall notify USA North (Underground Service Alert of Northern California and Nevada) at 811 or 800-227-2600 forty-eight (48) hours in advance.

APPLICATION FOR ENCROACHMENT PERMIT

PLEASE PRINT:

Date 01 / 02 / 2018

To: San Joaquin County
Department of Public Works

PG&E PM 31354223
(Applicant Name)

4040 West Lane
(Mailing Address)

Stockton, CA 95204
(City, State, Zip Code)

(209) 373 - 9432 rxd2@pge.com
(Area Code - Telephone Number)

OFFICE USE ONLY

JOB #	REF #	
APN	CR #	
EXP. DATE		
VALID	TO	DRIVEWAYS:
STREET		*
AREA	QUAD	*
TYPE		*
FORMS		
NOTES		

Sketch (Detailed plans may be submitted)

See Sketch.

Crew to call SJ County inspector at (209) 953 - 7421 48 to 72 hours before work starts. When calling, Crew shall request "Rain Clearance" for any work during winter months November through March.

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the N side of Kelley Rd approximately 765 feet/mile E of Steingal Rd, Escalon, by performing the following work (description of work):

Replace Deteriorated Pole

Work will commence on or about 2-6-18 for approximately 2 days.
End 8-14-18

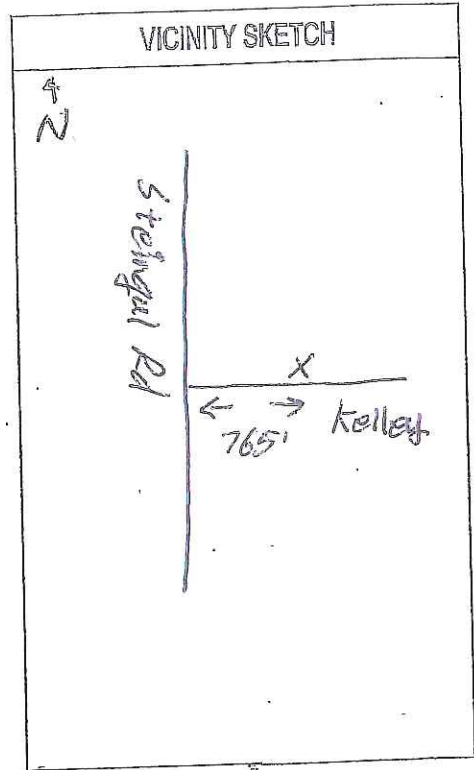
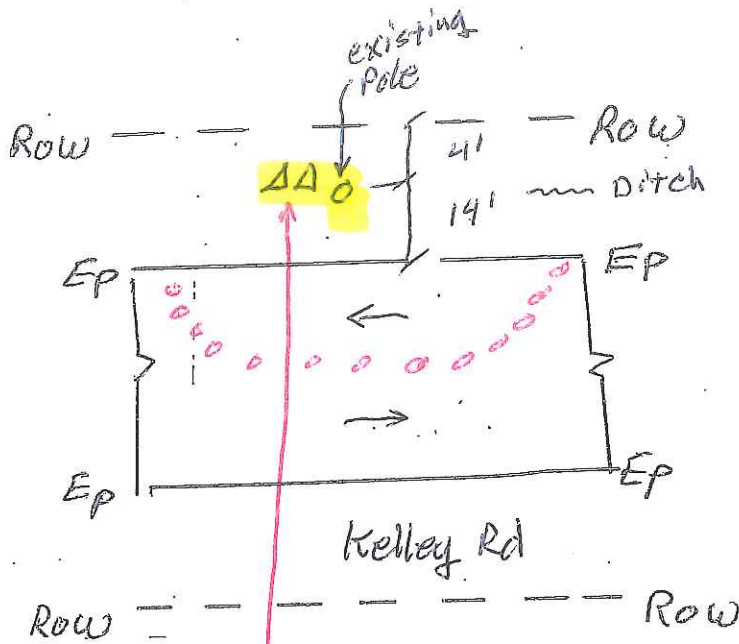
I, the undersigned, certify that I am the owner of the respective property, or am qualified to represent the owner and agree to do the work described above in accordance with the rules and regulations of San Joaquin County and subject to inspection and approval.

Poland Davis FLO Engr
Signature of Applicant - Title

01 / 02 / 2018
Date

↑
N

765' to Steingul Rd
←

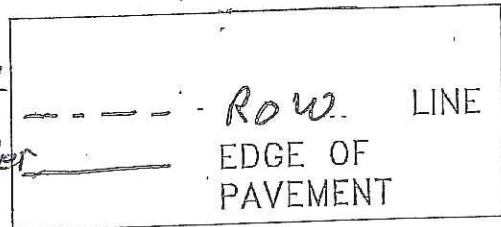


37.81305
-120.95760

Work Area
Replace 2 Transformers at Pole Top
Existing pole to remain

LEGEND

Note: 1) Provide Alternating 1-way
TC, unable to park on shoulder



EST: ADAM VOGELAAR

ADE:

SUPV:

REP:

PLNR:

SCALE: NTS DATE:



PERMIT SKETCH
REPLACE DETERIORATED Transformer

28970 Kelley Rd, Escalon.
PACIFIC GAS AND ELECTRIC COMPANY

SJC

CO:

SD:

NOTIF:

OTHER:

SHT: 1 OF 1

SHEETS

PM:

REV.

31354223 0

SCOPE OF WORK ONE LANE TWO WAY TRAFFIC CONTROL



NOTE: Use multiple flaggers when applicable with signage spaced according to the CAMUTCD Table 6C-1. In all directions from the work area. In addition to plans, additional flagger/traffic controller may be required to slow/stop traffic and to assist pedestrians. Flaggers to be competent, trained and qualified per Cal/Osha regulations and equipped with reflective vest, hard hat and a C28 "Stop/Slow" paddle. Flaggers to maintain visual and/or radio contact at all times.

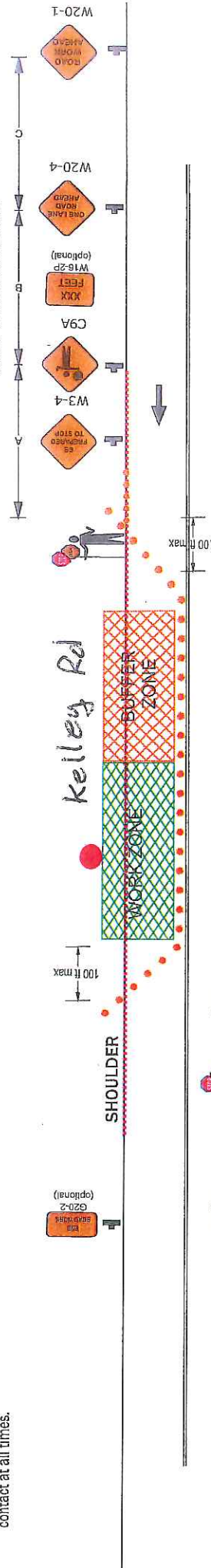
✓ Work Zone Safety Checklist

- ☐ All devices meet or exceed CAMUTCD standards.
- ☐ Devices not meeting requirements are removed and replaced.
- ☐ All personnel trained and equipped.
- ☐ Proper tapers and buffer lengths and properly channelized.
- ☐ DRIVE THE CLOSURE and correct any deficiencies before closing lanes.
- ☐ All traffic control contract provisions and permits are met.
- ☐ Installation and removal of the traffic control is planned and crew protection is adequate.

DRAWING NOTES: 28970 Kelley Rd, Escalon (SSC)
ONE LANE TWO WAY TRAFFIC CONTROL

1. SET ADVANCE NOTIFICATION "TEMPORARY NO PARKING" WHERE APPLICABLE, REFER TO THE ENCROACHMENT PERMIT REQUIREMENTS.
2. PLACE ADVANCE WARNING SIGNS IN EACH DIRECTION FROM WORK ZONE. SUGGESTED SPACING AT 100 FT MIN.
3. IF APPLICABLE: SET PEDESTRIAN CLOSURE WITH DETOURS. IF ESTABLISHING OR MAINTAINING AN ALTERNATE ROUTE IS NOT FEASIBLE DURING THE PROJECT CONTRACTOR TO ASSIST PEDESTRIANS SAFELY AROUND THE WORK ZONE.
4. PLACE "ROAD WORK AHEAD" (W20-1) ON CROSSROADS OR MAJOR (HIGH VOLUME) DRIVEWAYS WHERE TRAFFIC CAN ENTER THE TRAFFIC CONTROL ZONE.
5. PLACE BICYCLE (W11-1) AND SHARE THE ROAD (W16-1) SIGNS HALF THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS.

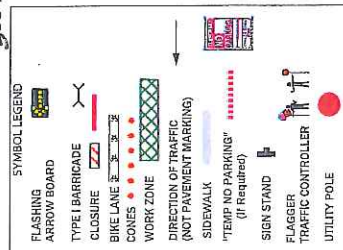
250 FT SIGN SPACING



55 MPH = 460 FT SIGN SPACING W/ 90 FT CONE SPACING



"Approach Cones" Placed down the fogline preceding flagger.



NOTE (2)

ADVANCE WARNING SIGN PLACEMENT DISTANCES FOR ADVANCE WARNING SIGNS ARE SUGGESTED AND ADEQUATE SIGHT DISTANCE AND PROXIMITY TO OTHER ROADWAY FEATURES MAY DICTATE THE NEED FOR ADJUSTMENT WHEN PLACED. Reference CAMUTCD Table 6C-1

TTCP PM# 313541223
28970 Kelley Rd, Escalon (SSC)

SHEET 1 OF 1
NOT TO SCALE

ONE-LANE, TWO-WAY TRAFFIC GUIDELINES

1. All traffic control devices shall conform to the latest edition of the California Uniform Traffic Control Devices (CAMUTCD) and Caltrans Standard Plans and Specifications.
2. Each advance warning sign in each direction of travel shall be 48" x 48" and equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed on the "Road Work Ahead" signs during hours of darkness.
3. All cones used for lane closures during the hours of darkness shall be fitted with retro-reflective bands as specified in the specifications. Flaggers should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped.
4. During hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter.
5. Place a minimum of four cones at 50ft intervals in advance of the flagger-station.
6. Place C30(CA) "Lane Closed" sign(s) at 500ft to 1000ft intervals throughout extended work areas. Place every 200ft on expressways/freeways.
7. Additional flaggers may be required when work zone at/near intersections or may be required to slow/stop traffic and to assist pedestrians and bicycles safely around the work zone.
8. Remove or reduce control zone when work area no longer affects that area of the roadway.
9. Flaggers to be competent, trained and qualified per CalOSHA regulations and equipped with retro-reflective vests, hardhat and a C28 "Stop/Slow" paddle. Flaggers to maintain visual and/or radio contact at all times.
10. When the work zone becomes relatively long, such that traffic may find it difficult to maintain correct path and speed for the entire length of the work space. A pilot car operation must be considered as a supplement to the flagger control.

NOTE:

GUIDELINES LISTED ARE GENERAL AND MAY NOT APPLY TO ALL SITUATIONS. REFER TO THE PROJECT SPECIFICATIONS AND ENCROACHMENT PERMIT APPROVED FOR EACH LOCATION.

CONTRACTOR GENERAL GUIDELINES:

1. CONTRACTOR TO NOTIFY THE EMERGENCY SERVICES PRIOR TO THE BEGINNING OF CONSTRUCTION.
2. WHEN APPLICABLE, NO PARKING SIGNS SHALL BE PLACED IN ADVANCE. REFER TO ENCROACHMENT PERMIT FOR SPECIFIC REQUIREMENTS. MUST DESIGNATE START AND END DAY/TIME OF THE RESTRICTED ZONE. SIGNS SHALL BE POSTED EVERY 20 LINEAR FEET OF OCCUPIED SPACE WITH AT LEAST ONE SIGN AT EACH END OF OCCUPIED SPACE.
3. CONTRACTOR SHALL MAINTAIN EMERGENCY VEHICLE AND DRIVEWAY ACCESS AT ALL TIMES.
4. KEEP PATH TO DRIVEWAYS OPEN. IF CLOSING IS NECESSARY NOTIFY PROPERTY OWNERS TWO (2) DAYS BEFORE WORK BEGINS. DRIVEWAYS TO BE COMPLETELY ACCESSIBLE DURING NONWORKING HOURS.
5. CITY, COUNTY OR STATE ENGINEER OR HIS/HER REPRESENTATIVE HAS THE AUTHORITY TO INITIATE FIELD CHANGES TO ASSURE PUBLIC SAFETY.
6. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLAN FOR CONSTRUCTION AREAS WHICH ARE NOT COVERED BY THESE TRAFFIC CONTROL PLANS.
7. CONTRACTOR TO PLACE TYPICAL PEDESTRIAN CONTROL AS NEEDED, REQUIRED OR DIRECTED.
8. CONTRACTOR MAY BE REQUIRED TO PROVIDE PERSONNEL TO ESCORT PEDESTRIANS AND CYCLISTS THROUGH and/or AROUND WORK ZONE IN A SAFE MANNER DURING WORKING HOURS.
9. ALL PATHWAYS OPEN DURING NON-WORKING HOURS.
10. CONTRACTOR MAY BE REQUIRED TO PROVIDE TEMPORARY ADA RAMPS AT ALL PEDESTRIAN DIVERSION WALKWAY LOCATIONS FOR TEMPORARY ACCESS ON AND OFF THE STREET.
11. ADDITIONAL PERMITS ARE REQUIRED BY CALTRANS FOR ALL WORK ON STATE HIGHWAYS AND MAY ALSO BE REQUIRED WHEN WORKING WITHIN 200 FT OF A STATE HIGHWAY. CONTACT CALTRANS FOR LANE CLOSURE APPROVALS AND PERMIT REQUIREMENTS.
12. WHERE 2 OR MORE LANES IN THE SAME DIRECTION ARE ADJACENT TO THE AREA WHERE THE WORK IS BEING PERFORMED INCLUDING SHOULDERS, THE ADJACENT LANE MUST BE CLOSED UNDER ANY OF THE FOLLOWING CONDITIONS:
 - a. WORK IS OFF THE TRAVELED WAY BUT WITHIN 6 FEET OF THE EDGE OF THE TRAVELED WAY, AND THE APPROACH SPEED IS GREATER THAN 45 MILES PER HOUR.
 - b. WORK IS PERFORMED OFF THE TRAVELED WAY BUT WITHIN 3 FEET OF THE EDGE OF THE TRAVELED WAY, AND THE APPROACH SPEED IS LESS THAN 45 MILES PER HOUR.

Speed* S (mph)	Reference Table 6C-3(CA). Minimum Taper Length ** for Width of Offset 12 feet (W)				
	Merging L (feet)	Shifting L/2 (feet)	Shoulder L/3 (feet)	Down Stream (feet)	Buffer*** (feet)
20	80	40	27	50-100	115
25	125	63	42	50-100	155
30	180	90	60	50-100	200
35	245	123	82	50-100	250
40	320	160	107	50-100	305
45	540	270	180	50-100	360
50	600	300	200	50-100	425
55	660	330	220	50-100	495
60	720	360	240	50-100	570
65	780	390	260	50-100	645
70	840	420	280	50-100	730
75	900	450	300	50-100	820

*Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph.

**For other offsets use the following merging taper length formula for L:

For Speeds of 40 mph or less, $L = WS / 80$

For Speeds of 45 mph or more, $L = WS$

Where: L = taper length in feet

W = width of offset in feet

S = posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph.

***Note: Buffer space based on level roads.

Use Table 6C-10(CA) Stopping Sight Distance as a Function of Speed on Downgrades.

Type of Taper	Taper Length
Merging Taper	at least L
Shifting Taper	at least 1/2 L
Shoulder Taper	at least 1/3 L
One-Lane, Two-Way Traffic (Flagger Taper)	50 min - 100 max (feet)
Downstream Taper	50 min - 100 max (feet)

Speed* S (mph)	Reference Table 6F-101(CA). Maximum Channelizing Devices Spacing		
	Taper* (feet)	Tangent (feet)	Conflict** (feet)
20	20	40	10
25	25	50	12
30	30	60	15
35	35	70	17
40	40	80	20
45	45	90	22
50	50	100	25
55	50	100	25
60	50	100	25
65	50	100	25
70	50	100	25
75	50	100	25

*Maximum channelizing device spacing for all speeds on one-lane/two-way tapers is 20 feet.

Maximum channelizing device spacing for all speeds on downstream tapers is 20 feet.

All other tapers are as shown.

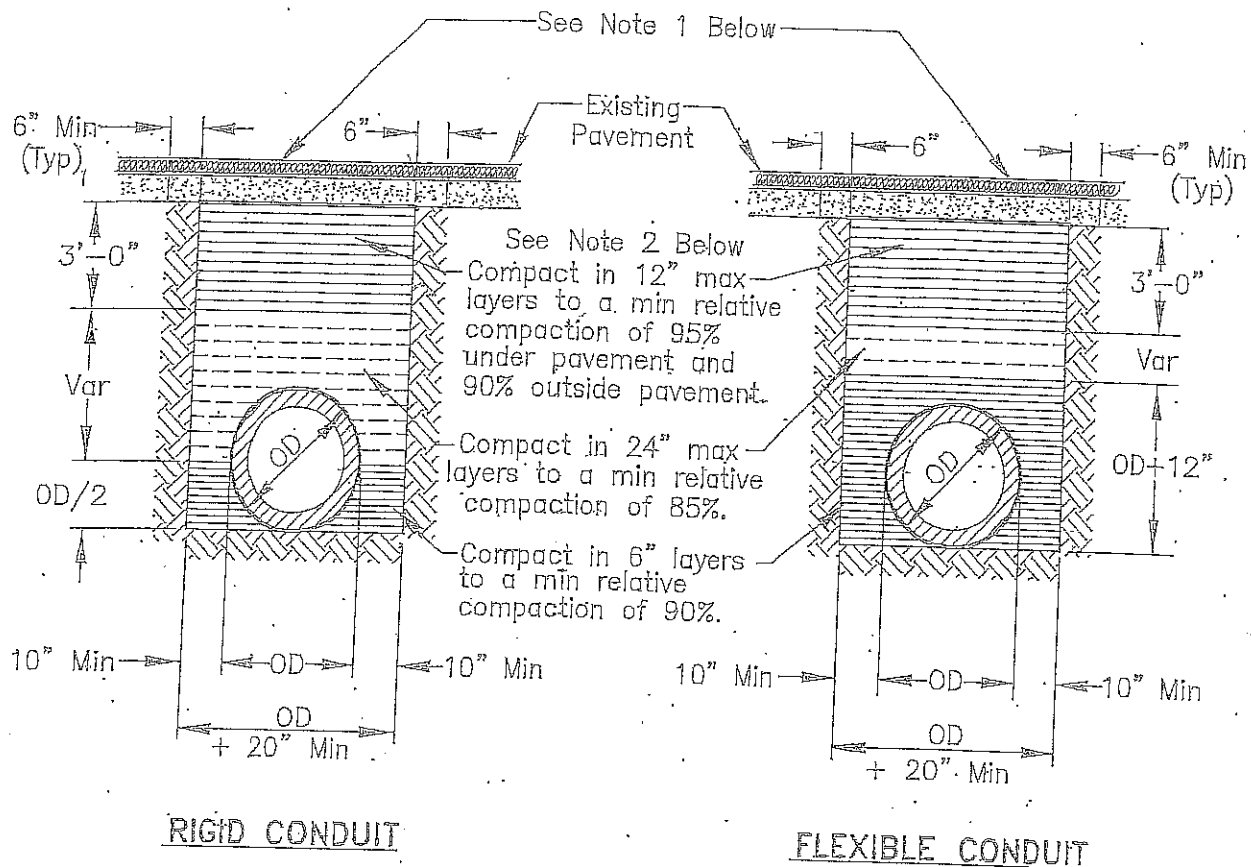
**Use on intermediate and short-term projects for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizing devices.

ROAD TYPE	Reference Table 6C-1 (CA) Distance Between Signs**		
	A	B	C
Urban - 25 mph or less **	100 feet	100 feet	100 feet
Urban - more than 25 mph to 40 mph***	250 feet	250 feet	250 feet
Urban - more than 40 mph ***	350 feet	350 feet	350 feet
Rural	500 feet	500 feet	500 feet
Expressway / Freeway	1,000 feet	1,500 feet	2,640 feet

**The column headings A, B, and C are the dimensions shown in Figures 6H-1 through 6H-46. The A dimension 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 "first sign" is the sign in a three-sign series that is closest to the TTC zone. The "third sign" is the sign that is furthest upstream from the TTC zone.)

***Posted speed limit off-peak 85th-percentile speed prior to work starting, or other anticipated operating speed in mph.

THE DISTANCES CONTAINED IN TABLE 6C-1 ARE APPROXIMATE, ARE INTENDED FOR GUIDANCE PURPOSES ONLY, AND SHOULD BE APPLIED WITH ENGINEERING JUDGMENT. THESE DISTANCES SHOULD BE ADJUSTED FOR FIELD CONDITIONS, ADEQUATE SIGHT DISTANCES AND PROXIMITY TO OTHER ROADWAY FEATURES.



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.



TYPICAL TRENCH BACKFILL

COUNTY OF SAN JOAQUIN
DEPARTMENT OF PUBLIC WORKS

Approved by:

Thomas M. Gull

No.	Revision	Description	Date

Date: DEC. 2014

Std. Dwg. No.

R-29

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	d. The local fire district
b. The County of San Joaquin Sheriff's Office	e. The local school district
c. The local postal service	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.