



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-1901149
Date Issued: 04/17/2019
Start Date: 04/17/2019
Exp. Date: 07/01/2019
Project No: PWP7110005
Quad:

ENCROACHMENT PERMIT

To: COMCAST
12687 S MANTHEY RD
LATHROP, CA 95330

Encroachment Type:

TCP			
-----	--	--	--

Location:

N/S SOUTHLAND RD 400' W/O COTTAGE DR

In compliance with your request of 04/17/2019, 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:

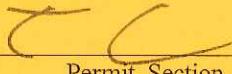
Traffic Control Per MUTCD

FORMS: SS/WW, R-29

Est. Permit Fee: \$490.00

KRIS BALAJI, Director
Department of Public Works

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

By: 
Permit Section

ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

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

STREETS AND HIGHWAYS CODE

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

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

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

APPLICATION FOR ENCROACHMENT PERMIT

PLEASE PRINT:

Date 3-29-19

To: San Joaquin County
Department of Public Works

COMCAST / CHRIS PERRY
(Applicant Name)

12687 S. MANTNEY RD
(Mailing Address)

LATNROP, CA 95330
(City, State, Zip Code)

(925)783-4877
(Area Code - Telephone Number)

OFFICE USE ONLY		
JOB #	<u>110005</u>	REF #
APN		CR #
EXP. DATE		
VALID	TO	DRIVEWAYS:
STREET		*
AREA	QUAD	*
TYPE		*
FORMS		
NOTES		

Sketch (Detailed plans may be submitted)

SEE ATTACHED

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the NORTH side of SOUTHLAND RD approximately 400 feet/mile WEST of COTTAGE DR., MANTEC, by performing the following work (description of work):
FROM JOINT POLE BORE 60' SOUTH THEN 150' WEST TO NEW HOUSING DEVELOPMENT INSTALL 2-2" CONDUIT FOR CATV SERVICE.

Work will commence on or about 5-20-19 for approximately 60 days.

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

Chris Perry PERMIT COORDINATOR
Signature of Applicant - Title

3-29-19

Date



Department of Public Works

Kris Balaji, Director of Public Works

Fritz Buchman, Deputy Director/Development

Michael Selling, Deputy Director/Engineering

Jim Stone, Deputy Director/Operations

Kristi Rhea, Manager of Strategic Initiatives

Acknowledgement of Monument Preservation

I, Ryan Schiess, PLS, a duly Licensed Land Surveyor or a Professional Engineer
(Please print)

authorized to perform Land Surveying in the State of California, Registration No. PLS 8366

hereby acknowledge and accept all responsibility for the monument preservation as required
per Section 8771(a-f) of the Business and Professions Code within the bounds of the
construction activity permitted by San Joaquin County Permit No._____.

I further acknowledge that I am hereby responsible for the Acknowledgement of Monument
Preservation prior to final acceptance of the construction activity.

Signature

Seal

3-28-2019

Date

PS MONUMENT PRESERVATION



APPLICATION FOR ENCROACHMENT PERMIT

PLEASE PRINT:Date 3-29-19To: San Joaquin County
Department of Public WorksCOMCAST / CHRIS PERRY
(Applicant Name)12687 S. MANTNEY RD
(Mailing Address)LATN RD, CA 95330
(City, State, Zip Code)(925)783-4877
(Area Code - Telephone Number)

OFFICE USE ONLY		
JOB #	<u>110005</u>	REF #
APN		CR #
EXP. DATE		
VALID	TO	DRIVEWAYS:
STREET		*
AREA	QUAD	*
TYPE		*
FORMS		
NOTES		

Sketch (Detailed plans may be submitted)

SEE ATTACHED

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the NORTH side of SOUTHLAND RD approximately 400 feet/mile WEST of COTTAGE DR., MANTECA, by performing the following work (description of work):
FROM JOINT POLE BORE 60' SOUTH THEN 150' WEST TO
NEW HOUSING DEVELOPMENT INSTALL Z-2= CONDUIT FOR CATV
SERVICE.

Work will commence on or about 5-20-19 for approximately 60 days.

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



Chris Perry
PERMIT COORDINATOR

Signature of Applicant - Title

3-29-19

Date



Department of Public Works

Kris Balaji, Director of Public Works

Fritz Buchman, Deputy Director/Development

Michael Selling, Deputy Director/Engineering

Jim Stone, Deputy Director/Operations

Kristi Rhea, Manager of Strategic Initiatives

Acknowledgement of Monument Preservation

I, Ryan Schiess, PLS, a duly Licensed Land Surveyor or a Professional Engineer
(Please print)

authorized to perform Land Surveying in the State of California, Registration No. PLS 8366,

hereby acknowledge and accept all responsibility for the monument preservation as required
per Section 8771(a-f) of the Business and Professions Code within the bounds of the
construction activity permitted by San Joaquin County Permit No._____.

I further acknowledge that I am hereby responsible for the Acknowledgement of Monument
Preservation prior to final acceptance of the construction activity.

Signature

Seal

3-28-2019

Date

PS-MONUMENT PRESERVATION



**Mitchell Rd & E Southland Rd - Intersection
Manteca, CA 95336**

CONTACTS

SFNCO:
Christian Rojas



- Scope Of Work,
- Tie onto existing Stub ups and place new vault back of walk.
 - Bore 192' back of walk and place new vault.
 - Continue bore 46' across Mitchell Rd. to pole 1 and rework riser up 25'.
 - Overlash 1,050' to pole 6.
 - 100' back from pole 6, overlash 559' across Southland Rd and along Cottage Rd mid-way after pole 9.

BUILD

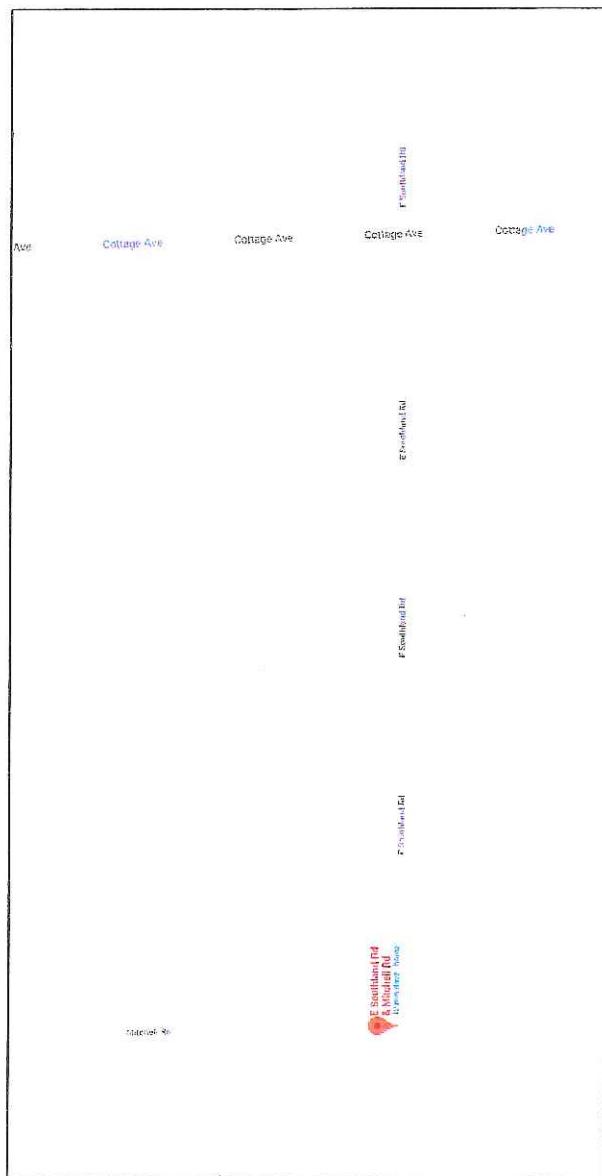
- Bore Footage 238 ft
- Riser Footage (1) 25 ft
- Overlash Footage 1,609 ft
- New Vault (24x36) 2

LEGEND

- Cover Sheet
- Legends & General Notes
- Site Plan
- Traffic Control Plan
- Typical Detail Page
- Pedestrian Detour/Escort Plan



VICINITY MAP



THIS IS A COMCAST DOCUMENT. PROPRIETARY & CONFIDENTIAL		
DESIGN:	REV:	DATE:
DRAWN BY:	SFNCO	3/7/2019
APPROVED:		
APPROVED:		
APPROVED:		

1 OF

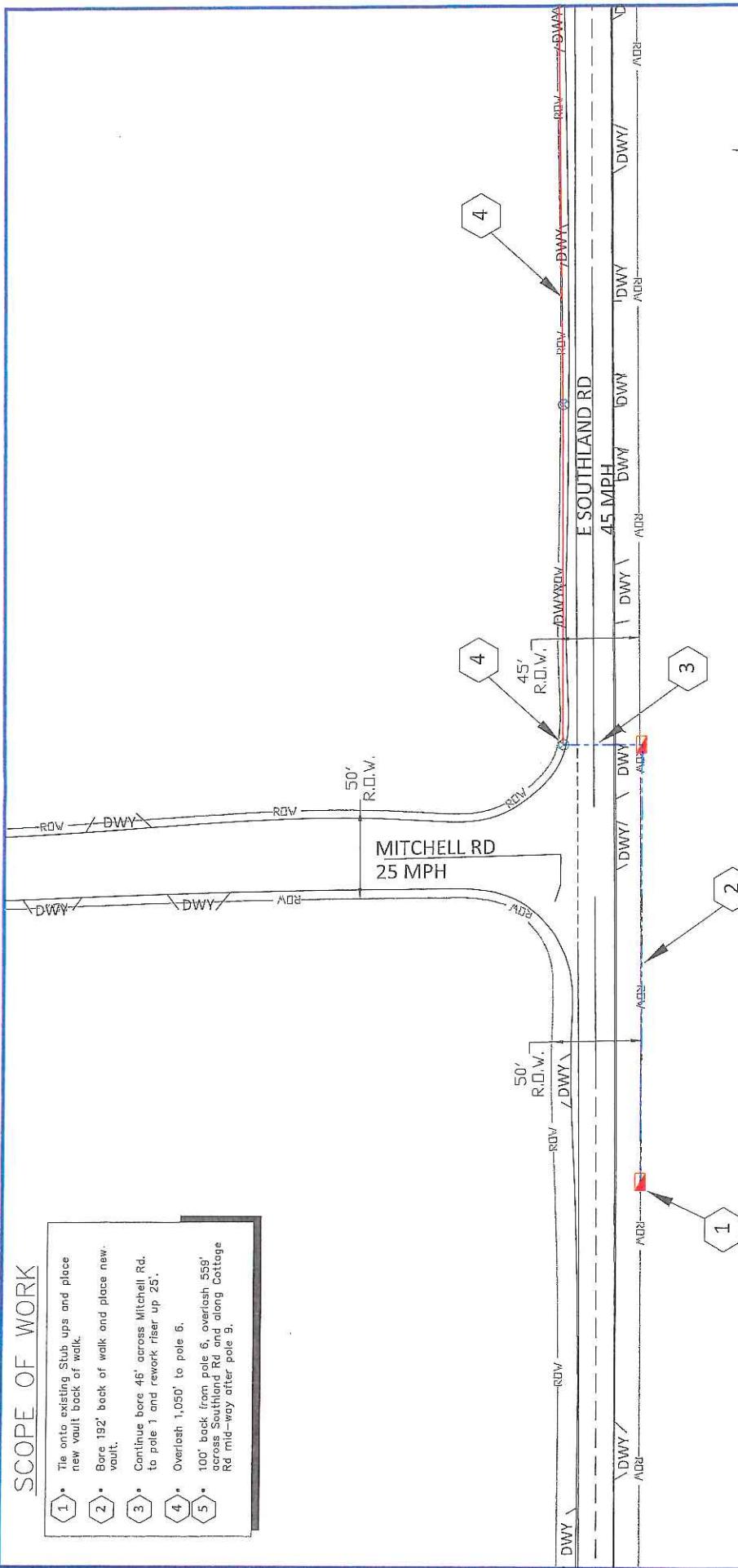
PROJ#:	278075
CONSTRUCTION TYPE:	BORE
SYSTEM:	
NODE:	

SHEET: 1 OF 19

LINE TYPES		GENERAL NOTES:														
	tv	PROPOSED TRENCH/BORE ROUTE EXISTING COMCAST ROUTE EXISTING TELEPHONE SYSTEM EXISTING ELECTRICAL SYSTEM EXISTING GAS SYSTEM 														
	tv	ALL 90 DEGREE BENDS IN CONDUIT CONSTRUCTION WILL BE A MINIMUM OF 36° RADIUS UNLESS SPECIFIED OTHERWISE.														
	tv	BURIED FIBER OPTIC WARNING SIGNS SHALL BE PLACED AT EACH SIDE OF ALL ROAD CROSSINGS, AT CULVERTS, DITCHES AND IN A STRAIGHT LINE OF SIGHT SPACING OF APPROXIMATELY 50 FEET.														
	tv	DEVIATIONS FROM THE ENGINEERED ROUTE REQUIRES A PROJECT MANAGER AND RIGHT-OF-WAY OWNER OR CARETAKER APPROVAL PRIOR TO CONSTRUCTION.														
	tv	WHERE PERMITS FROM STATE, COUNTY, CITY, RAILROAD OR GOVERNMENT AGENCIES ARE REQUIRED, ALL WORK PERFORMED WILL COMPLY WITH THESE AGENCIES STANDARD SPECIFICATIONS.														
	tv	THE PROJECT MANAGER WILL NOTIFY BUILDING MANAGEMENT WHEN WORK WILL BEGIN ON EXISTING CONTRACTOR TO COORDINATE ROOM ACCESS AND WORK START AND STOP TIMES WITH BUILDING MANAGEMENT.														
	tv	THE PROJECT MANAGER IS TO BE NOTIFIED BY THE CONTRACTOR 24 HOURS PRIOR TO NUMBER(s).														
	tv	THE PROJECT MANAGER WILL RESERVE THE RIGHT TO INSPECT AT ANY TIME THE WORK BEING PERFORMED BY THE CONTRACTOR. IF PROJECT MANAGER DETERMINES THAT THE WORK IS NOT BEING PERFORMED TO MINIMUM QUALITY STANDARDS, THEN THE CONTRACTOR SHALL PROVIDE REWORK AT HIS OWN COST.														
	tv	ANY CHANGE IN PROJECT SCOPE, INCLUDING BUT NOT LIMITED TO, CONDUIT LENGTH, CONDUIT PATH, AERIAL PATH/ETC., MUST BE APPROVED BY THE PROJECT MANAGER.														
	tv	11. ALL CORING CONSTRUCTION THAT WILL CAUSE NOISE AND/OR VIBRATION SHALL BE DONE WITHIN ALLOWED (RAM-AMP) BUSINESS HOURS.														
	tv	12. ANY AND ALL UNDERGROUND UTILITIES ENCOUNTERED ARE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, PROTECT, AND REPAIR IF DAMAGED.														
	tv	13. ALL FOOTAGES ARE BASED ON FIELD GATHERED MEASUREMENTS, AS SUCH SOME VARIANCE SHOULD BE ANTICIPATED, ADJUST AS NEEDED.														
	tv	14. ALL BURIED CONDUIT/CABLE WILL BE PLACED AT 36° MINIMUM COVER, SITE HAS POTENTIAL FOR ROCK THAT WOULD PREVENT THE ABILITY TO PROVIDE THE MINIMUM COVER, IN CASES WHERE THE MINIMUM COVER CAN NOT BE ACHIEVED, THE CONDUIT SHALL BE PLACED IN A SCH 40 ENT SLEEVE OR APPROVED EQUIVALENT.														
	tv	15. WATER, SEWER, STORM SEWER AND EASEMENT LOCATIONS ARE BASED OFF OF CITY MAPS.														
	tv	16. BORING OF AC PAVING IS REQUIRED AT ALL LOCATIONS AS INDICATED ON PLANS.														
	tv	17. AT NO TIME SHALL CURBS, GUTTERS OR HANDICAP BE DISTURBED.														
	tv	18. DOOR HANGERS ARE TO BE PLACED A MINIMUM OF 72 HOURS PRIOR TO START OF CONSTRUCTION.														
	tv	19. PRIOR TO START OF CONSTRUCTION, CONTRACTOR SHALL PLACE MESSAGE BOARDS STATING LANE CLOSURES, AND DELAYS A WEEK IN ADVANCE, LOCATION OF THE MESSAGE BOARD SHALL BE COORDINATED WITH THE CITY INSPECTOR AT THE PRE-CONSTRUCTION MEETING.														
	tv	20. LANE CLOSURES CANNOT EXCEED MORE THAN 300 FT. AT A TIME, FOR SAFETY PURPOSES THERE SHALL BE ONLY ONE CLOSURE AT A TIME ALONG INTERNATIONAL BLVD, MORE FLAGGERS WILL BE NECESSARY TO HELP VEHICLES AND PEDESTRIANS IN THE WORK ZONES DURING THE LANE CLOSURES.														
ABBREVIATIONS																
COMCAST	COMCAST	PROPERTY LINE PL PUBLIC UTILITY EASEMENT RIGHT OF WAY														
	EXISTING CENTER LINE	EXISTING STORM DRAIN SD														
(E)	FACE OF CURB	EXISTING SANITARY SEWER SS														
FOC	MINIMUM	EXISTING TELEPHONE T														
MIN	MAXIMUM	EXISTING WATER W														
COT	CONDUIT	PROPERTY LINE														
SYMBOLS																
	TRANSFORMER															
	STREET LIGHT															
	TRAFFIC SIGNAL COMBINATION															
	FIRE HYDRANT															
	MONUMENT															
	CATCH BASIN															
	STORM DRAIN MANHOLE															
	WATER MANHOLE															
	SANITARY SEWER MANHOLE															
	SEWER CLEAN OUT															
	ELECTRIC MANHOLE															
	UNIDENTIFIED MANHOLE															
	WATER METER															
	GAS METER															
IMPORTANT NOTICE																
Section # 4216/4217 of the Government Code requires a "Permit to Excavate" will be valid For your Dig Alert ID. Call TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-427-2800																
LEGEND & GENERAL NOTES																
DESIGN:	REV:	DESCRIPTION:	DATE:													
DRAWN BY:		SEFCO	3/7/2019													
APPROVED:																
APPROVED:																
APPROVED:																

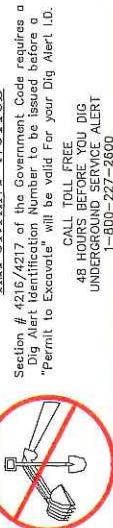
SCOPE OF WORK

- 1*** Tie onto existing Stub ups and place new vault back of walk.
- 2*** Bore 19' back of walk and place new vault.
- 3*** Continue bore 46' across Mitchell Rd. to pole 1 and rework riser up 25'. Overjash 1,050' to pole 6.
- 4*** 100' back from pole 6, overlash 55' across Southland Rd. and along Cottage Rd mid-way after pole 9.



THIS IS A CONCAST DOCUMENT, PROPRIETARY & CONFIDENTIAL		DATE
DESIGN:	REV:	
DRAWN BY:	SEFCO	3/7/2019
APPROVED:		
APPROVED:		
APPROVED:		

IMPORTANT NOTICE



SITE PLAN 1 - 1

PROJ#: 278075
CONSTRUCTION TYPE: BOREC
SYSTEM:
NODE:



TABLE A			
APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)
25 MPH	125 FT.	6	25 FT.
30 MPH	180 FT.	7	30 FT.
35 MPH	245 FT.	8	35 FT.
40 MPH	320 FT.	9	40 FT.
45 MPH	400 FT.	10	45 FT.
50 MPH	500 FT.	11	50 FT.
55 MPH	600 FT.	12	55 FT.
55+ MPH	1000 FT.	21	100 FT.

(*) NOTE— BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

LEGEND



THIS IS A COMCAST DOCUMENT. PROPRIETARY & CONFIDENTIAL		DATE	TRAFFIC CONTROL PLAN 1 - 1
DESIGN:	REV	DESCRIPTION	PROJ#:
DRAWN BY:		SIFNCO	276075
APPROVED:			CONSTRUCTION TYPE: BORE
APPROVED:			SYSTEM: Gas Pipeline
APPROVED:			NODE:

IMPORTANT NOTICE

Section # 4216 /4217 of the Government Code requires a Dig Alert Identification Number to be issued before a permit to excavate will be valid for your Dig Alert I.D.
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

DESIGN:	REV	DESCRIPTION	DATE	SCALE = N.T.S
DRAWN BY:				
APPROVED:				
APPROVED:				
APPROVED:				

Sheet: 4 of 19

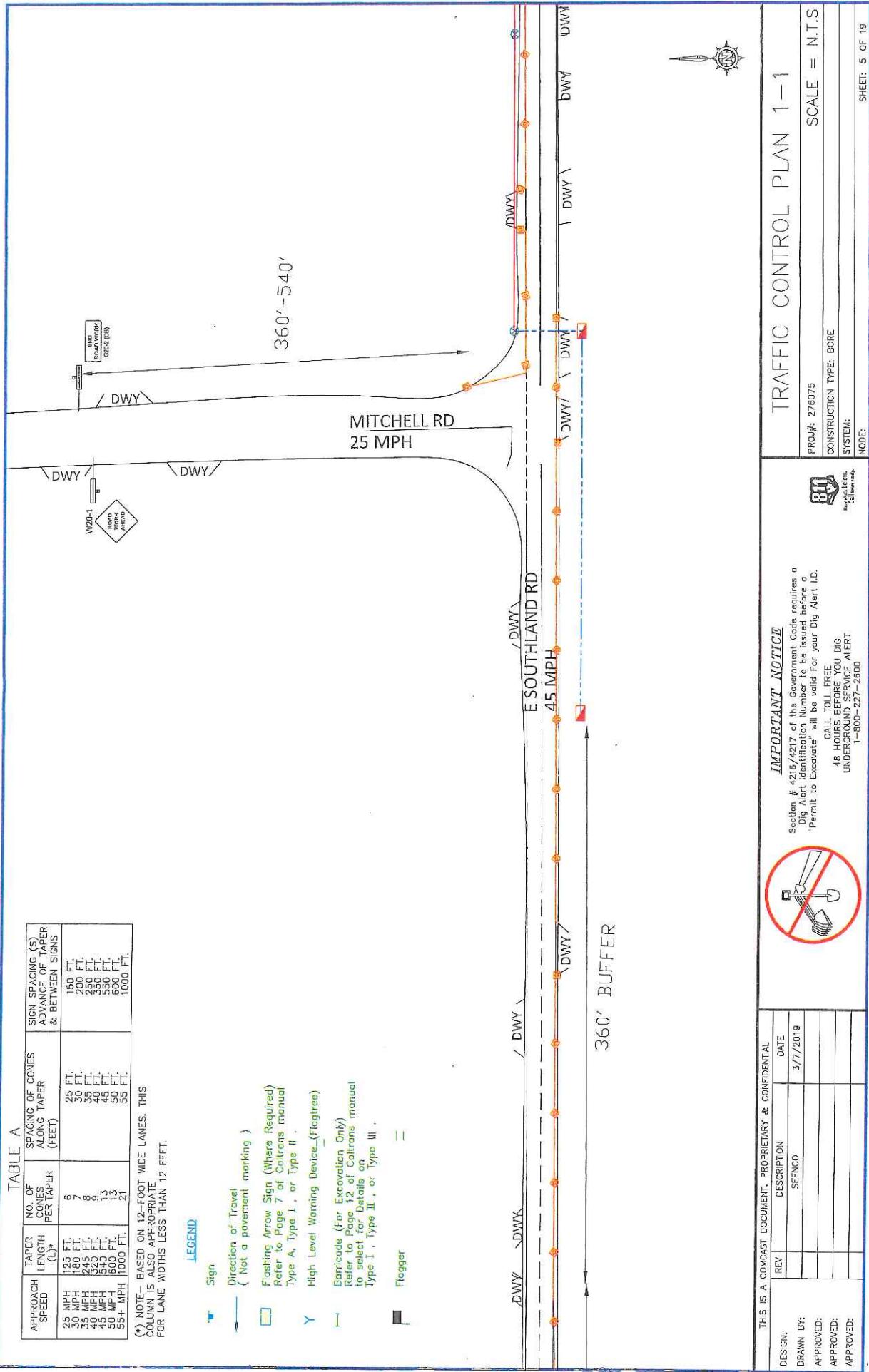


TABLE A

APPROACH SPEED	TAPE LENGTH (L)*	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)	SIGN SPACING (S) & ADVANCE OF TAPE & BETWEEN SIGNS
25 MPH	125 FT.	6	25 FT.	150 FT.
30 MPH	180 FT.	7	30 FT.	200 FT.
35 MPH	245 FT.	8	35 FT.	250 FT.
40 MPH	310 FT.	9	40 FT.	350 FT.
45 MPH	375 FT.	13	45 FT.	550 FT.
50 MPH	440 FT.	13	50 FT.	600 FT.
55+ MPH	1000 FT.	21	55 FT.	1000 FT.

(*) NOTE—BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

LEGEND

- Sign
Direction of Travel
(Not a pavement marking)
- Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II
- Υ High Level Warning Device (Fogtree)
- ▀ Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
to select for Details on
Type I, Type II, or Type III
- Flagger

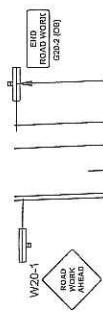
THIS IS A COMCAST DOCUMENT. PROPRIETARY & CONFIDENTIAL		IMPORTANT NOTICE	
DESIGN:	REV	DESCRIPTION	DATE
DRAWN BY:		SENCO	3/7/2019
APPROVED:			
APPROVED:			

THIS IS A COMCAST DOCUMENT. PROPRIETARY & CONFIDENTIAL
Section # 4216/4217 of the Government Code requires
"Permit to Excavate" will be valid For your Dig Alert ID.
CALL TOLL FREE
48 HOURS BEFORE
UNDERGROUND SERVICE ALERT
1-800-422-2600



TRAFFIC CONTROL PLAN 1-1	
PROJECT#:	278075
SCALE =	N.T.S.
CONSTRUCTION TYPE:	BORE
SYSTEM:	Caltrans, Gallatin, etc.
NOTE:	
SHEET:	5 OF 19

MATCH PAGE 7



360'-540'

COTTAGE RD
45 MPH

DWY



MATCH PAGE 9



IMPORTANT NOTICE
Section # 4216/4217 of the Government Code requires
"Permit to Excavate" will be valid For your Dig Alert I.D.
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2660

MATCH PAGE 9



THIS IS A COMCAST DOCUMENT, PROPRIETARY & CONFIDENTIAL	REV	DATE
	SEFCO	3/7/2019
DESIGN:		
DRAWN BY:		
APPROVED:		
APPROVED:		
APPROVED:		

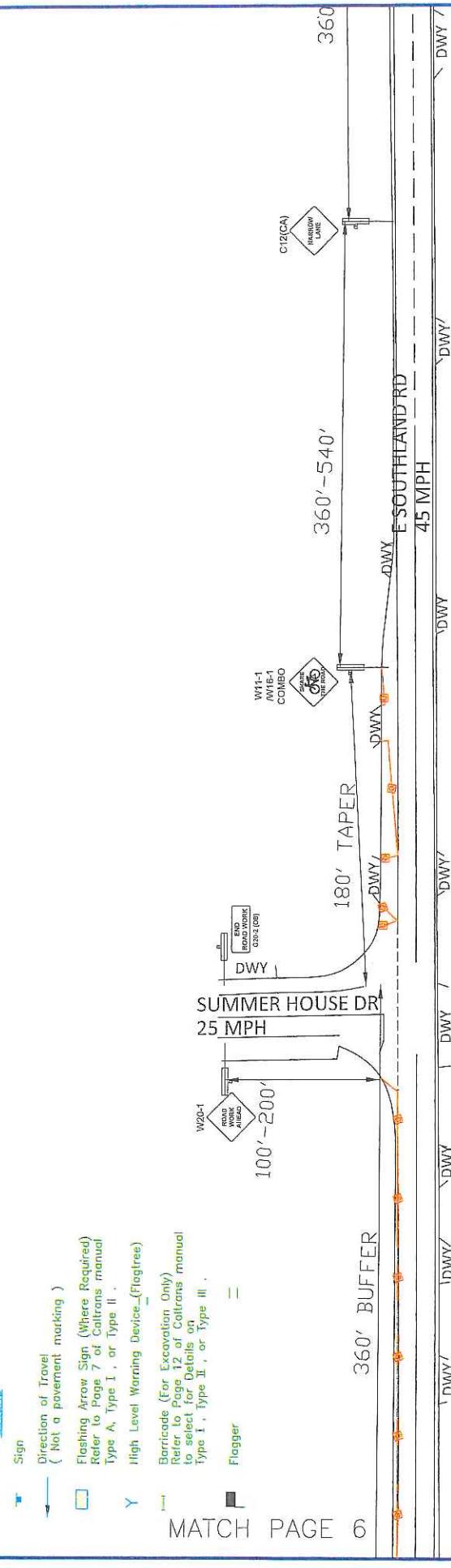
TRAFFIC CONTROL PLAN 1-1

SCALE = N.T.S
PROJ# 276075
CONSTRUCTION TYPE: BORE
SYSTEM:
NODE: SHEET: 6 OF 19

TABLE A			
APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES ALONG TAPER	SIGN SPACING (S) & ADVANCE OF TAPER SIGNS
25 MPH	125 FT.	6	25 FT. 150 FT.
30 MPH	180 FT.	7	30 FT. 200 FT.
35 MPH	225 FT.	8	35 FT. 250 FT.
40 MPH	260 FT.	9	40 FT. 300 FT.
45 MPH	300 FT.	13	45 FT. 350 FT.
50 MPH	360 FT.	13	50 FT. 400 FT.
55+ MPH	600 FT.	21	55 FT. 600 FT. 1000 FT.

(*) NOTE - BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

LEGEND



MATCH PAGE 6

THIS IS A COMCAST DOCUMENT. PROPRIETARY & CONFIDENTIAL	
DESIGN:	REV
DRAWN BY:	SEINCO
APPROVED:	
APPROVED:	

IMPORTANT NOTICE

Section # 216-4217 of the Government Code requires a "Permit to Excavate" will be valid For your Dig Alert ID. Call TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600

TRAFFIC CONTROL PLAN 1-1

SCALE = N.T.S
PROJ#: 276075
CONSTRUCTION TYPE: BOREC
SYSTEM: None

PAGE: 7 OF 19

TABLE A

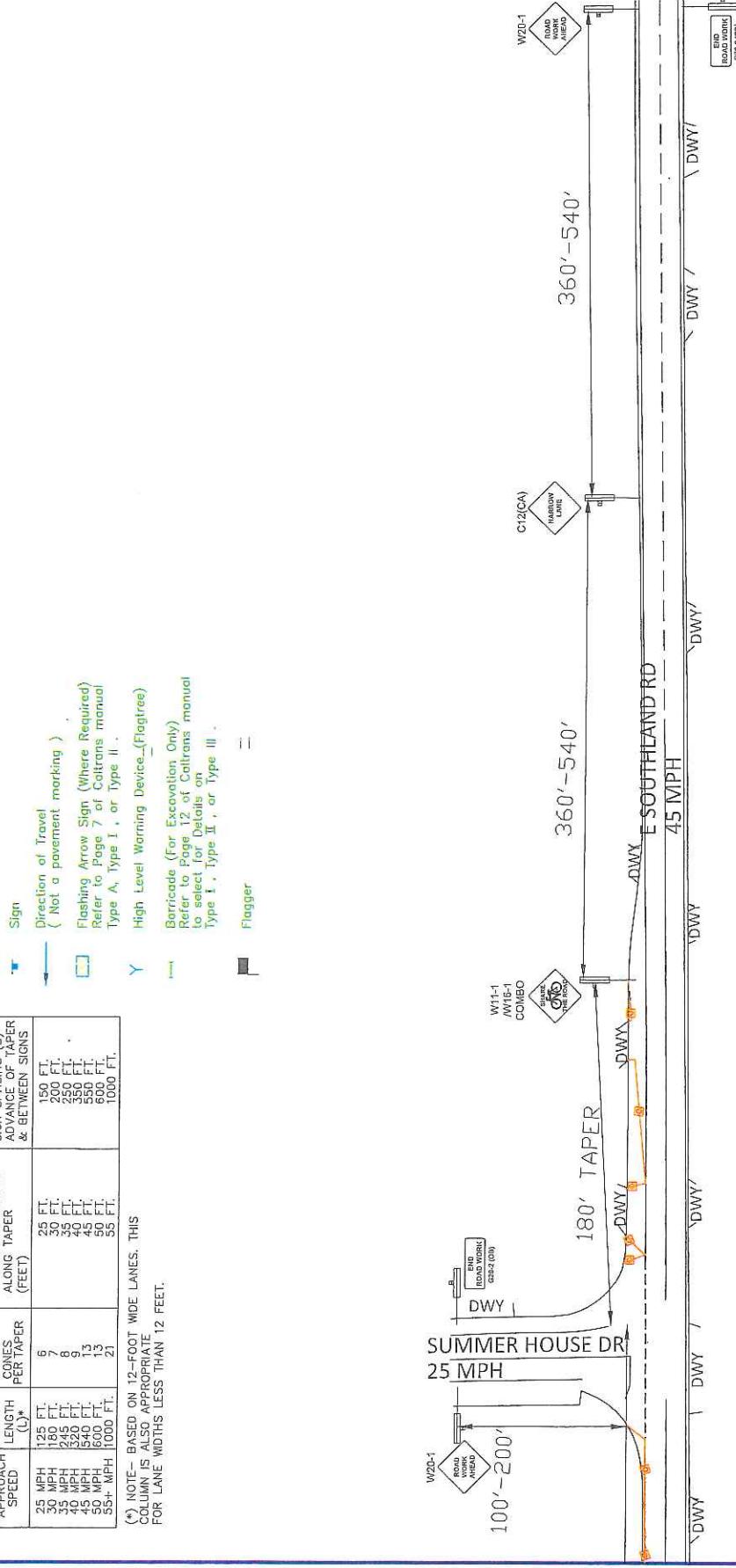
APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)	SIGN SPACING (S) ADVANCE OF TAPER & BETWEEN SIGNS
25 MPH	125 FT.	6	25 FT.	150 FT.
30 MPH	180 FT.	7	30 FT.	200 FT.
35 MPH	245 FT.	8	35 FT.	250 FT.
40 MPH	320 FT.	9	40 FT.	350 FT.
45 MPH	394 FT.	13	45 FT.	550 FT.
50 MPH	460 FT.	13	50 FT.	600 FT.
55+ MPH	500 FT.	21	55 FT.	1000 FT.

(*) NOTE— BASED ON 12'-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

BARRICADE (For Excavation Only)
Refer to Page 12 of Caltrans manual
To select for Details on Type I , or Type II .

HIGH LEVEL WARNING DEVICE (Flagtree)
Flagger

LEGEND



DESIGN:	REV:	DATE:
DRAWN BY:		3/7/2019
APPROVED:		
APPROVED:		
APPROVED:		

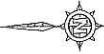
IMPORTANT NOTICE

Section # 4216/4217 of the Government Code requires a Dig Alert Identification Number to be issued before a Permit to Excavate will be valid. For your Dig Alert ID, call TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2500

TRAFFIC CONTROL PLAN 1-1

PROJ#:	276075	SCALE = N.T.S.
CONSTRUCTION TYPE:	BORE	
SYSTEM:		
NODE:		

Sheet: 8 of 19



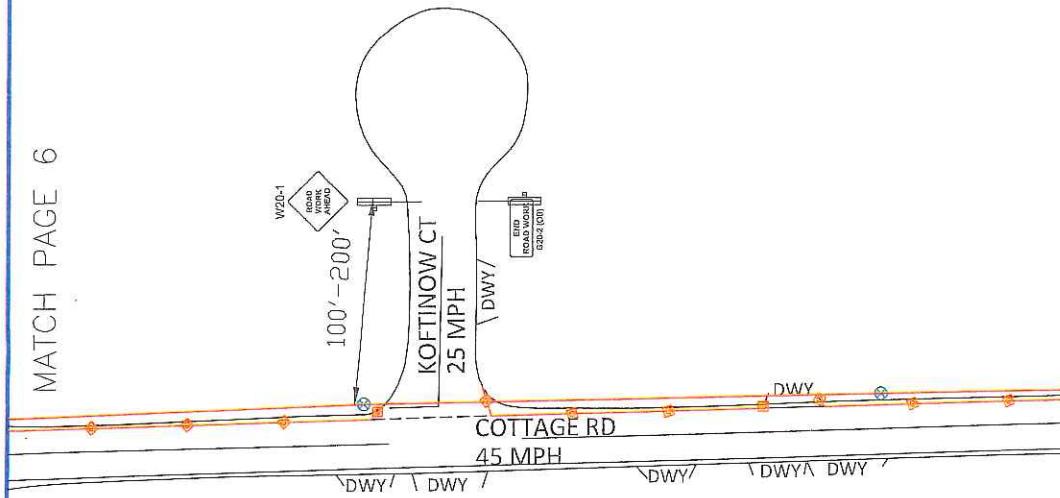
MATCH PAGE 6

TABLE A					
APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES PER TAPER	SPACING OF CONES (FEET)	SIGN SPACING (S) ADVANCE OF TAPER & BETWEEN SIGNS	
25 MPH	125 FT.	6	25 FT.	150 FT.	
30 MPH	100 FT.	7	30 FT.	200 FT.	
35 MPH	85 FT.	8	35 FT.	250 FT.	
40 MPH	70 FT.	9	40 FT.	350 FT.	
45 MPH	50 FT.	13	45 FT.	500 FT.	
50 MPH	30 FT.	13	50 FT.	600 FT.	
55 MPH	600 FT.	21	55 FT.	1000 FT.	

(*) NOTE—BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

LEGEND

- Sign
- Direction of Travel
(Not a pavement marking)
- Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II
- Y High Level Warning Device (Flagtree)
- Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
to select for Details on
Type I, Type II, or Type III
- Flagger



THIS IS A COMCAST DOCUMENT PROPRIETARY & CONFIDENTIAL	DESIGN: REV: DATE:
DRAWN BY: SEFNCO	3/7/2019
APPROVED: APPROVED: APPROVED:	

IMPORTANT NOTICE	Section # 4216/4217 of the Government Code requires a "Permit to Excavate" will be valid for your Dig Alert I.D.
PROJECT: 276075	SCALE = N.T.S.
CONSTRUCTION TYPE: BORRE	CALL TOLL FREE 48 HOURS BEFORE YOU DIG
SYSTEM: NODE: 611	UNDERGROUND SERVICE ALERT 1-800-227-2800





1-1

SCALE = N.T.S
PROJ# : 276075
CONSTRUCTION TYPE: BORING

SHEET: 10 OF 19

IMPORTANT NOTICE

Section # 4218 / 217 of the Government Code requires a
 Dig Alert identification Number to be issued before a
 Permit to Excavate will be valid. For your Dig Alert I.D.
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT
 1-800-227-2600

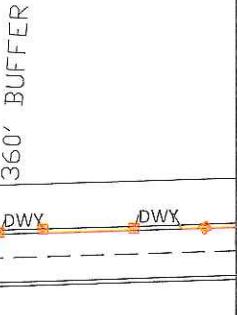


TABLE A					
APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)	SIGN SPACING (S) ADVANCE OF TAPER & BETWEEN SIGNS	
25 MPH	125 FT.	6	25 FT.	150 FT.	
30 MPH	180 FT.	7	30 FT.	200 FT.	
35 MPH	245 FT.	8	35 FT.	250 FT.	
40 MPH	320 FT.	9	40 FT.	350 FT.	
45 MPH	400 FT.	10	45 FT.	550 FT.	
50 MPH	600 FT.	13	50 FT.	600 FT.	
55+ MPH	1000 FT.	21	55 FT.	1000 FT.	

(* NOTE— BASED ON 12-FOOT WIDE LANES. THIS
 COLUMN IS ALSO APPROPRIATE
 FOR LANE WIDTHS LESS THAN 12 FEET.

LEGEND

-  Sign Direction of Travel (Not a pavement marking)
-  Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
-  Type I, or Type II
-  High Level Warning Device (Flagtree)
-  Boricode (For Excavation Only)
Refer to Page 12 of Caltrans manual
-  To select for Details on
Type I, Type II, or Type III
-  Flagger

THIS IS A COMCAST DOCUMENT. PROPRIETARY & CONFIDENTIAL	DATE	TRAFFIC CONTROL PLAN 1-1
DESIGN:	REV	PROJ# : 276075
DRAWN BY:	DESCRIPTION	SCALE = N.T.S
APPROVED:	SEFCIO	CONSTRUCTION TYPE: BORING
APPROVED:		SYSTEM: 
APPROVED:		NOTE: Below the dimensions.



TRAFFIC CONTROL PLAN 1-1

PROJ#:	276075	SCALE = N.T.S.
CONSTRUCTION TYPE:	BORE	
SYSTEM:		
NODE:		



SHEET: 11 OF 19

IMPORTANT NOTICE



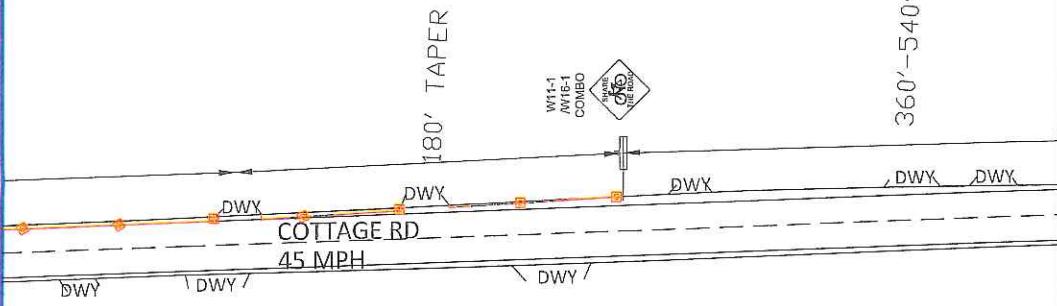
Section # 4216 / 4217 of the Government Code requires a
 "Permit to Excavate" will be valid for your Dig Alert I.D.
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT
 1-800-427-2800

TABLE A					
APPROACH SPEED	TAPER LENGTH (L*)	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)	SIGN SPACING (S) ADVANCE OF TAPER & BETWEEN SIGNS	
25 MPH	125 FT.	6	25 FT.	150 FT.	
30 MPH	180 FT.	7	30 FT.	200 FT.	
35 MPH	245 FT.	8	35 FT.	250 FT.	
40 MPH	320 FT.	9	40 FT.	350 FT.	
45 MPH	340 FT.	13	45 FT.	550 FT.	
50 MPH	600 FT.	13	55 FT.	600 FT.	
55 MPH	900 FT.	21	55 FT.	1000 FT.	

(*) NOTE - BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

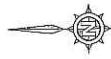
LEGEND

- Sign
- Direction of Travel
(Not a pavement marking)
- Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II
- High Level Warning Device-(Flagtree)
- Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
to select for Details on
Type I, Type II, or Type III
- Flagger



THIS IS A COMCAST DOCUMENT, PROPRIETARY & CONFIDENTIAL		DATE
DESIGN:	REV:	
DRAWN BY:	SEFCO	3/7/2019
APPROVED:		
APPROVED:		
APPROVED:		

IMPORTANT NOTICE



TRAFFIC CONTROL PLAN 1-1

SCALE = N.T.S.

PROJ# : 276075

CONSTRUCTION TYPE: BORE

SYSTEM: GBCB/BCB/BCB

SHEET: 12 OF 19



IMPORTANT NOTICE

Section # 42164277 of the Government Code requires a "Dig Alert" Identification Number to be issued before a Permit to Excavate will be valid for your Dig Alert ID.

CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2660

THIS IS A COMCAST DOCUMENT, PROPRIETARY & CONFIDENTIAL		
DESIGN:	REV	DATE
DRAWN BY:		3/7/2019
APPROVED:		
APPROVED:		
APPROVED:		

360'-540'

LEGEND

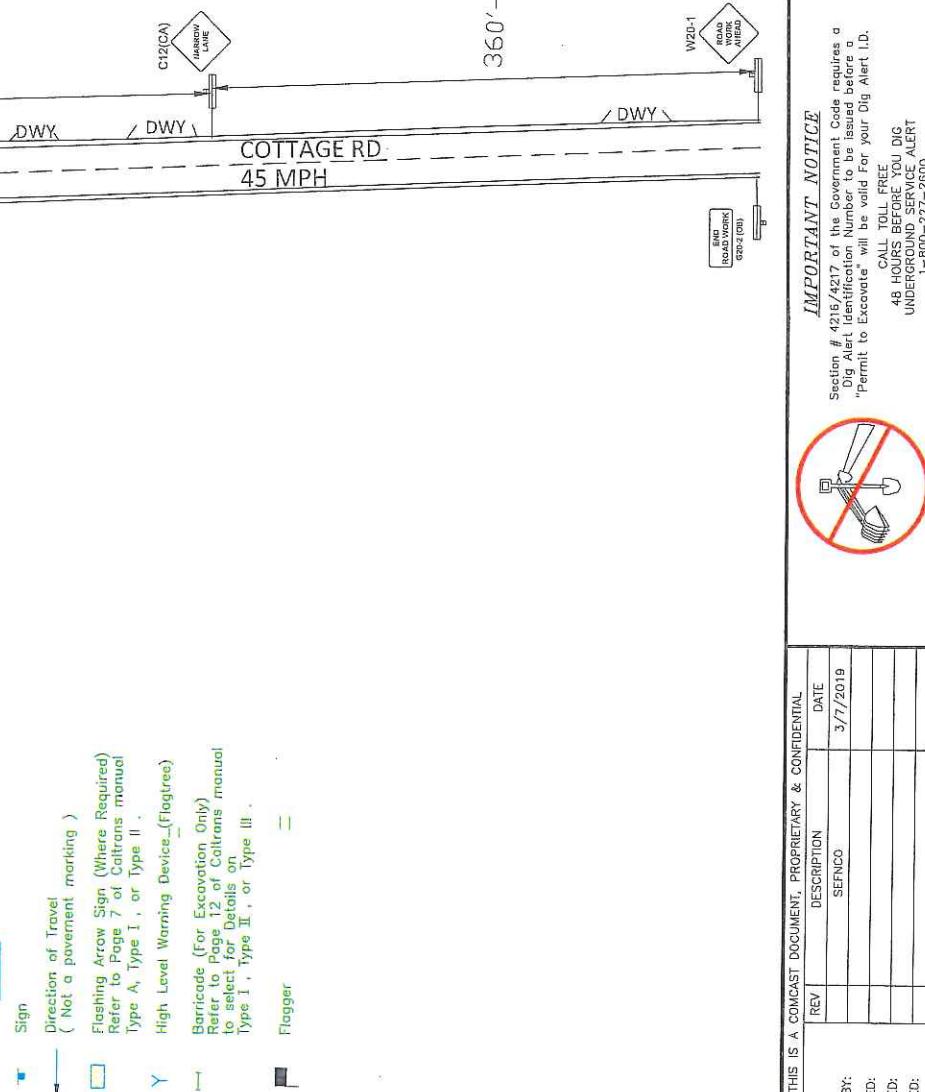


TABLE A		
APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES PER TAPER
25 MPH	125 FT.	6
30 MPH	180 FT.	7
35 MPH	245 FT.	8
40 MPH	310 FT.	9
45 MPH	340 FT.	13
50 MPH	400 FT.	13
55 MPH	460 FT.	21
55+ MPH	1000 FT.	55 FT.

(* NOTE - BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

Sign

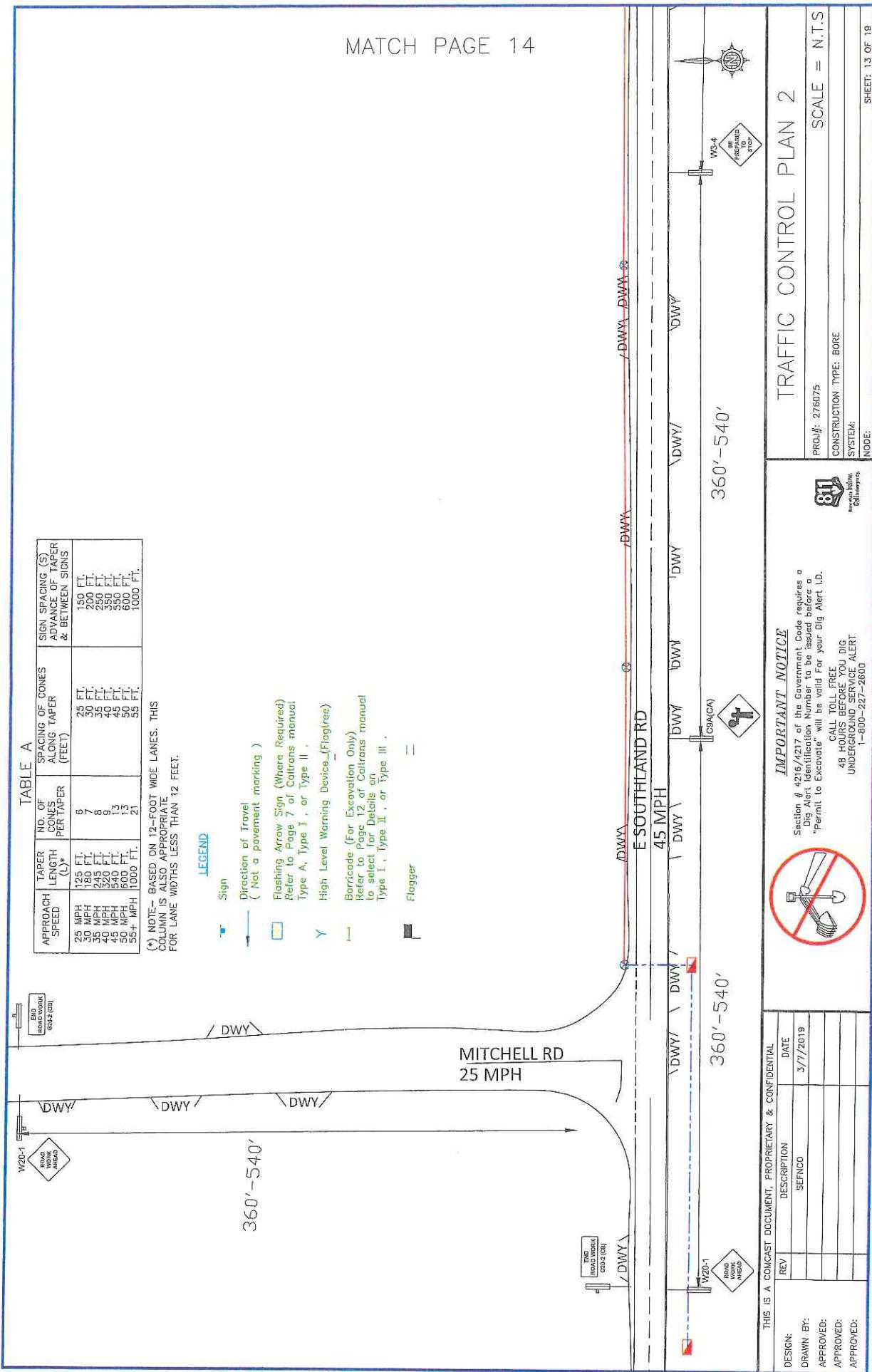
Direction of Travel
(Not a pavement marking)

Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II.

High Level Warning Device (Flagtree)
Refer to Page 12 of Caltrans manual
to select for details on

Type I , Type II , or Type III .

Flagger



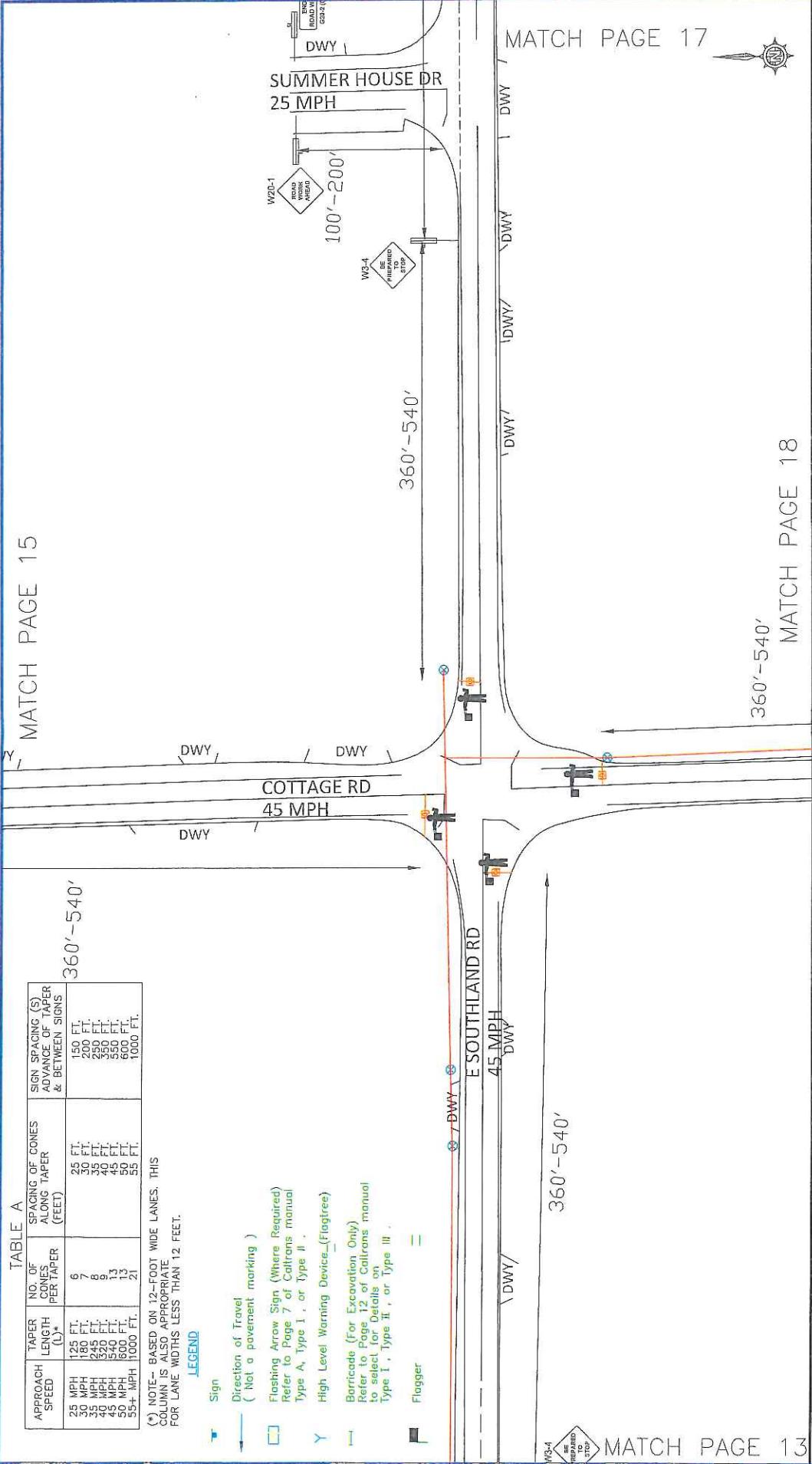
MATCH PAGE 15

TABLE A			
APPROACH SPEED	TAPER LENGTH (L)	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)
25 MPH	125 FT.	6	25 FT.
30 MPH	180 FT.	7	25 FT. 30 FT.
35 MPH	245 FT.	8	35 FT. 40 FT.
40 MPH	320 FT.	9	45 FT. 50 FT.
45 MPH	394 FT.	10	55 FT. 60 FT.
50 MPH	460 FT.	11	65 FT. 70 FT.
55+ MPH	500 FT.	12	75 FT. 80 FT.
	1000 FT.	21	95 FT. 1000 FT.

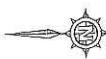
(*) NOTE— BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

LEGEND

- Sign
- Direction of Travel
(Not a pavement marking)
- Flushing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II.
- Y High Level Warning Device. (Flagtree)
- Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
to select for Details on
Type I, Type II, or Type III.
- Flagger



MATCH PAGE 17



TRAFFIC CONTROL PLAN 2

DESIGN:	REV	DATE
DRAWN BY:	SFNC0	3/7/2019
APPROVED:		
APPROVED:		
APPROVED:		

SCALE = N.T.S

PROJ #: 276075

CONSTRUCTION TYPE: BORE

SYSTEM:

NODE:

SH: 14 OF 19

MATCH PAGE 18

IMPORTANT NOTICE

Section # 4216/4217 of the Government Code requires a "Dig Alert Identification Number to be issued before a "Permit to Excavate" will be valid for your Dig Alert ID. CALL TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2660



MATCH PAGE 13





TRAFFIC CONTROL PLAN 2

PROJ#:	278075
SCALE =	N.T.S.
CONSTRUCTION TYPE:	BORE
SYSTEM:	Provo City

SHEET: 15 OF 19

MATCH PAGE 14

IMPORTANT NOTICE

Section # 216/4217 of the Government Code requires a "Permit to Excavate" will be valid for your Dig Alert ID. Call TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600



THIS IS A COMCAST DOCUMENT, PROPRIETARY & CONFIDENTIAL	
DESIGN:	REV
DRAWN BY:	DESCRIPTION
APPROVED:	DATE
APPROVED:	3/7/2019
APPROVED:	
APPROVED:	

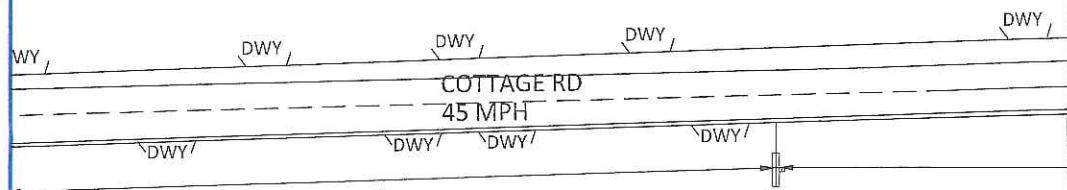


TABLE A

APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)	SIGN SPACING (S) ADVANCE OF TAPER & BETWEEN SIGNS
25 MPH	125 FT.	6	25 FT.	150 FT.
30 MPH	180 FT.	7	30 FT.	200 FT.
35 MPH	245 FT.	8	35 FT.	250 FT.
40 MPH	320 FT.	9	40 FT.	350 FT.
45 MPH	340 FT.	13	45 FT.	550 FT.
50 MPH	600 FT.	13	50 FT.	600 FT.
55+ MPH	600 FT.	21	55 FT.	1000 FT.

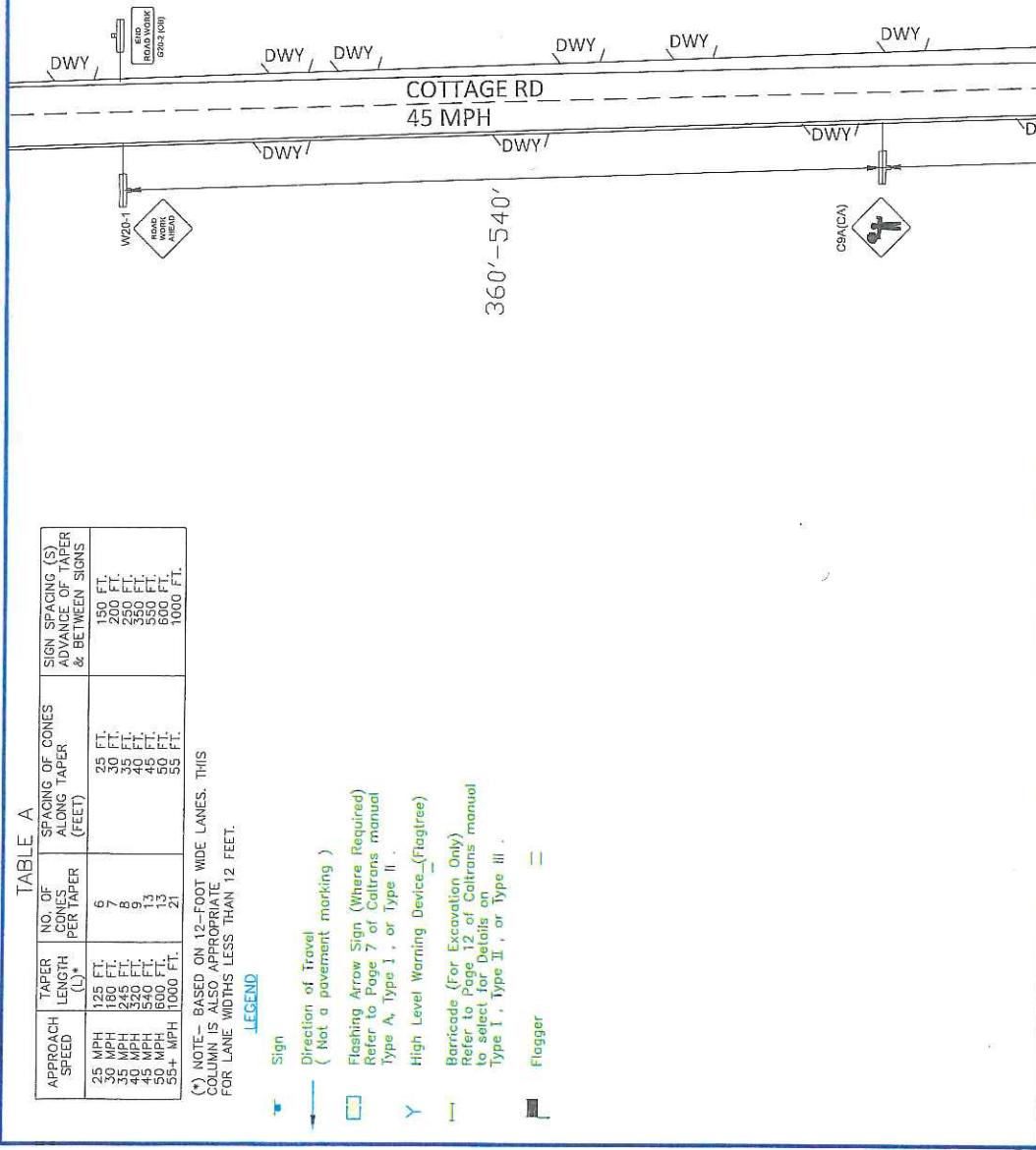
(*) NOTE - BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

LEGEND

- Sign
- Direction of Travel
(Not a pavement marking)
- Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II.
- Y High Level Warning Device (Flaggers)
- Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
to select for Details on
Type I, Type II, or Type III.
- Flagger



THIS IS A COMCAST DOCUMENT, PROPRIETARY & CONFIDENTIAL		TRAFFIC CONTROL PLAN 2	
DESIGN BY:	REV	DATE	PROJECT #: 276075
APPROVED:		3/7/2019	SCALE = N.T.S
APPROVED:			CONSTRUCTION TYPE: BORE
APPROVED:			SYSTEM:
SHEET: 16 OF 19			



IMPORTANT NOTICE

Section # 42164217 of the Government Code requires a "Permit to Excavate" will be issued For your Dig Alert I.D. Call TOLL FREE 48 HOURS BEFORE YOU DIG UNDERGROUND SERVICE ALERT 1-800-227-2600



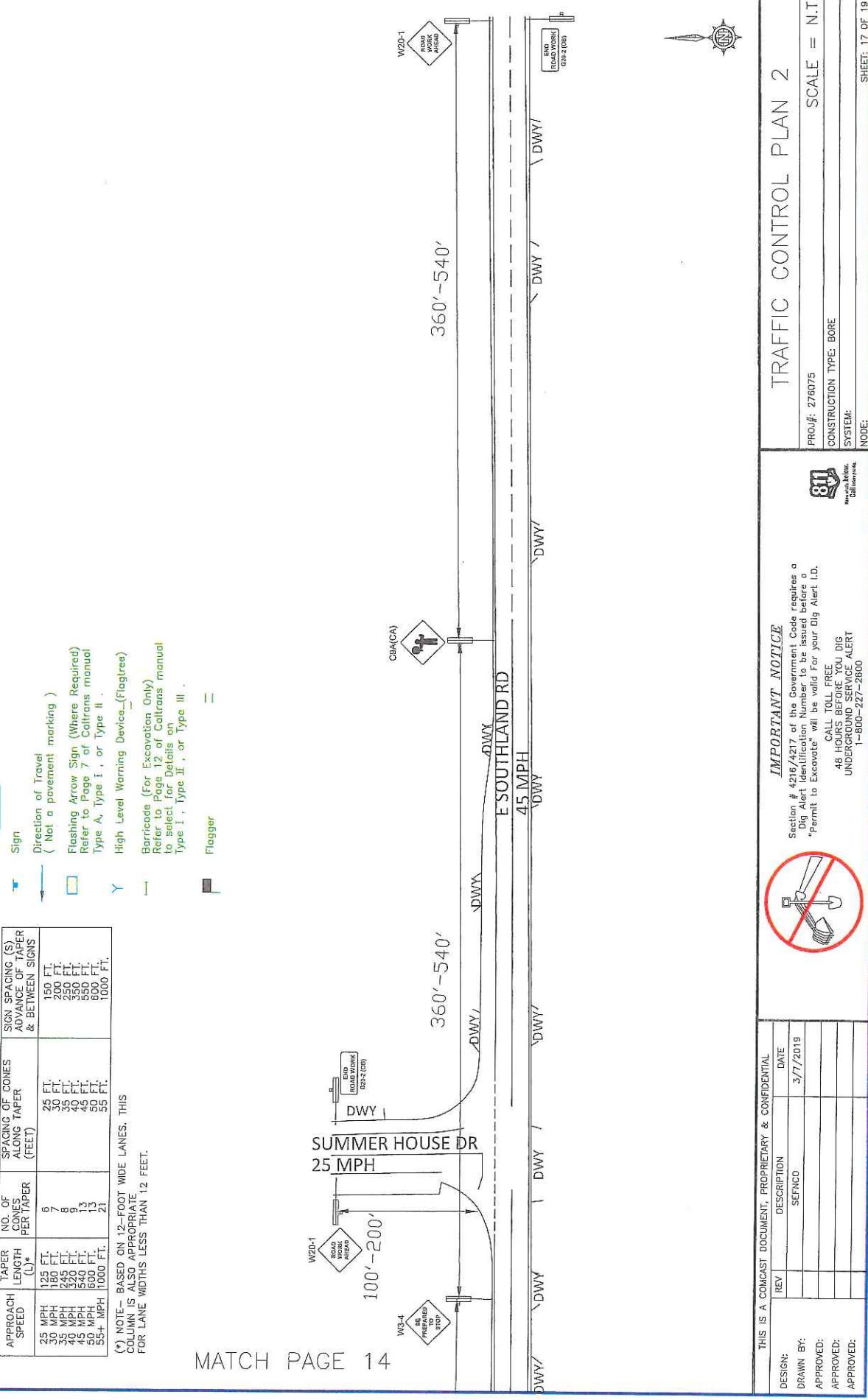
TABLE A

APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)	SIGN SPACING (S) & ADVANCE OF TAPER & BETWEEN SIGNS
25 MPH	125 FT.	6	25 FT.	150 FT. 200 FT. 250 FT. 300 FT. 350 FT. 400 FT. 450 FT. 500 FT. 550 FT. 600 FT. 650 FT. 700 FT. 750 FT. 800 FT. 850 FT. 900 FT. 950 FT. 1000 FT.
30 MPH	180 FT.	7	30 FT.	
35 MPH	245 FT.	8	35 FT.	
40 MPH	310 FT.	9	40 FT.	
45 MPH	340 FT.	10	45 FT.	
50 MPH	400 FT.	11	50 FT.	
55 MPH	600 FT.	13	55 FT.	
	1000 FT.	21		

(*) NOTE - BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

MATCH PAGE 14

LEGEND



THIS IS A COMCAST DOCUMENT. PROPRIETARY & CONFIDENTIAL	REV _____	DATE _____
DRAWN BY: _____	SEINCO	3/7/2019
APPROVED: _____	_____	_____
APPROVED: _____	_____	_____
APPROVED: _____	_____	_____

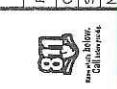
IMPORTANT NOTICE

Section # 426/4217 of the Government Code requires a 'Dig Alert' identification number to be issued before a 'Permit to Excavate' will be valid for your Dig Alert ID.

CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
1-800-227-2800

TRAFFIC CONTROL PLAN 2

PROJ.#: 278075
CONSTRUCTION TYPE: BORE
SYSTEM:
NOTE:



SCALE = N.T.S
SHEET: 17 OF 19



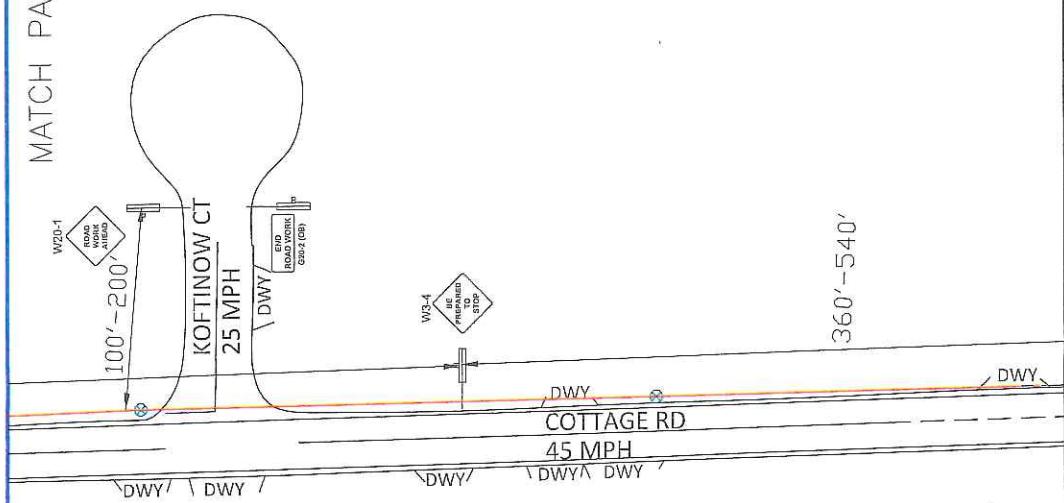
MATCH PAGE 14

TABLE A					
APPROACH SPEED	TAPE LENGTH (L)*	NO. OF CONES ALONG TAPER (FEET)	SPACING OF CONES (S)	SIGN SPACING (S) ADVANCE OF TAPER & BETWEEN SIGNS	
25 MPH	125 FT.	6	25 FT.	150 FT.	
30 MPH	180 FT.	7	35 FT.	200 FT.	
35 MPH	245 FT.	8	35 FT.	250 FT.	
40 MPH	320 FT.	9	45 FT.	350 FT.	
45 MPH	390 FT.	10	45 FT.	550 FT.	
50 MPH	540 FT.	13	50 FT.	600 FT.	
55+ MPH	600 FT.	13	55 FT.	1000 FT.	

(* NOTE—BASED ON 12-FOOT WIDE LANES. THIS COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.)

LEGEND

- Sign
- Direction of Travel
(Not a pavement marking)
- Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
- Type A, Type I, or Type II
- High Level Warning Device—(Flagtree)
- Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
- To select for Details on Type I, Type II, or Type III
- Flagger



360'-540'

IMPORTANT NOTICE
Section # 4216/4217 of the Government Code requires a
Dig Alert Identification Number to be issued before a
"Permit to Excavate" will be valid. For your Dig Alert I.D.
CALL TOLL FREE
48 HOURS BEFORE TO DIG
UNDERGROUND SERVICE ALERT
1-800-227-2600

TRAFFIC CONTROL PLAN 2

DESIGN:	REV	DESCRIPTION	DATE
DRAWN BY:		SEFCO	3/7/2019
APPROVED:			
APPROVED:			
APPROVED:			



SCALE = N.T.S

PROJ# : 276075
CONSTRUCTION TYPE: BORE

SYSTEM: *Temporary Construction*

NOTE: SHEET: 18 OF 19



TRAFFIC CONTROL PLAN 2

PROJ#: 276075
SCALE = N.T.S.
CONSTRUCTION TYPE: BOREC
SYSTEM:
NODE:
SHEET: 19 OF 19



Massachusetts
Department of
Transportation

IMPORTANT NOTICE

Section # 4216/4217 of the Government Code requires a "Permit to Excavate" will be valid for your Dig Alert ID.

CALL TOLL FREE

48 HOURS BEFORE YOU DIG

UNDERGROUND SERVICE ALERT

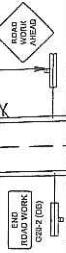
1-800-227-2600



360'-540'

COTTAGE RD
45 MPH

DWY DWY DWY DWY



END INDICATE WORK
COTAGE RD

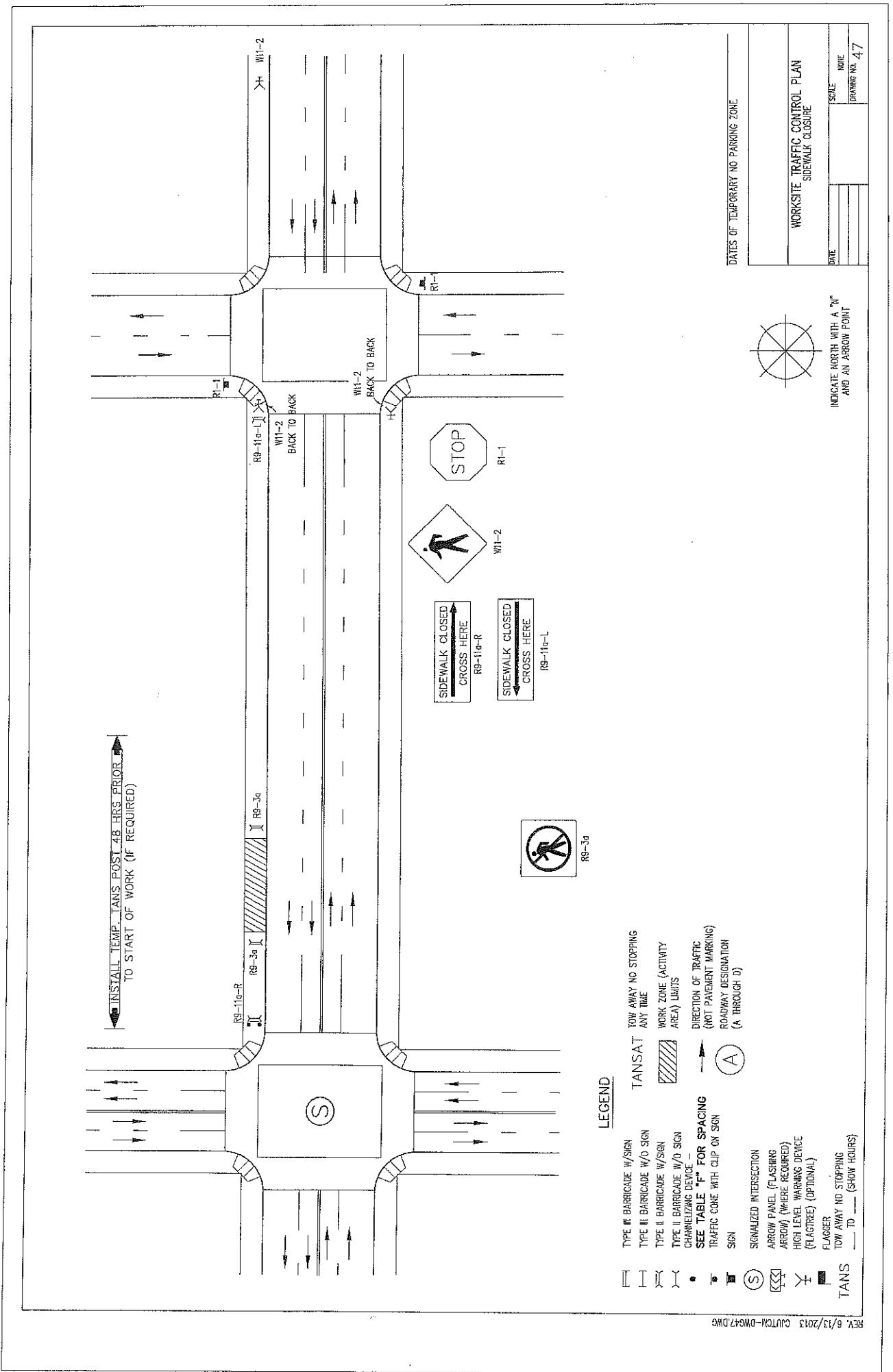
TABLE A			
APPROACH SPEED	TAPER LENGTH (L)*	NO. OF CONES PER TAPER	SPACING OF CONES ALONG TAPER (FEET)
25 MPH	125 FT.	6	25 FT.
30 MPH	180 FT.	7	30 FT.
35 MPH	245 FT.	8	35 FT.
40 MPH	320 FT.	9	40 FT.
45 MPH	400 FT.	13	45 FT.
50 MPH	500 FT.	13	50 FT.
55+ MPH	1000 FT.	21	55 FT.

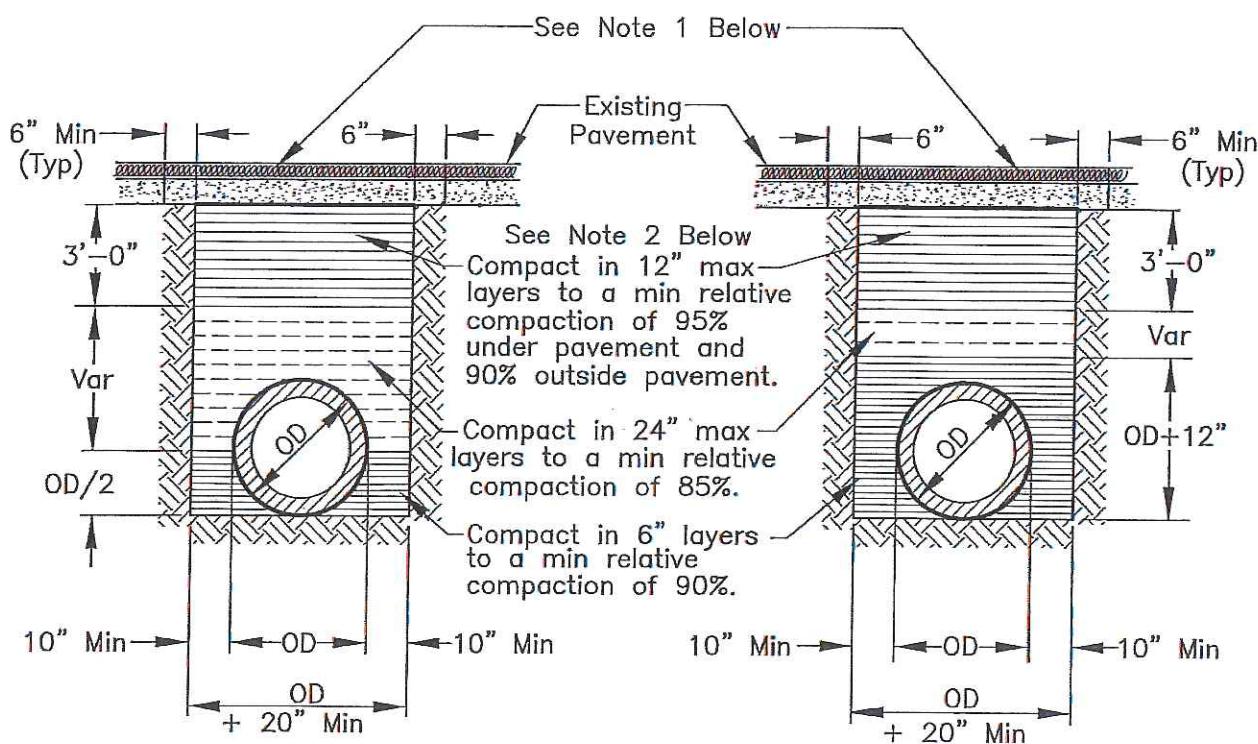
(* NOTE - BASED ON 12-FOOT WIDE LANES. THIS
COLUMN IS ALSO APPROPRIATE FOR LANE WIDTHS LESS THAN 12 FEET.

LEGEND

- Sign
- Direction of Travel
(Not a pavement marking)
- Flashing Arrow Sign (Where Required)
Refer to Page 7 of Caltrans manual
Type A, Type I, or Type II.
- Y High Level Warning Device (Flagtree)
- Barricade (For Excavation Only)
Refer to Page 12 of Caltrans manual
to select for details on
Type I, Type II, or Type III.
- Flagger

THIS IS A COMCAST DOCUMENT. PROPRIETARY & CONFIDENTIAL	DATE
DESIGN: REV:	3/7/2019
DRAWN BY: SEFCO	
APPROVED: APPROVED:	
APPROVED: APPROVED:	



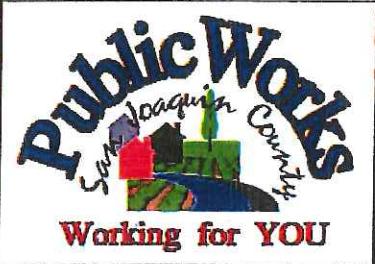


RIGID CONDUIT

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.



TYPICAL TRENCH BACKFILL

COUNTY OF SAN JOAQUIN
DEPARTMENT OF PUBLIC WORKS

Approved by:

Thomas M. Gau

No.	Revision	Description	Date

Date: DEC 2014

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.