



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-1700214
Date Issued: 01/30/2017
Start Date: 01/30/2017
Exp. Date: 03/01/2017
Project No: PWP7110005
Quad: NS

ENCROACHMENT PERMIT

To: WAVE BROADBAND
1225 E SUNSET DR 145 823
BELLINGHAM, WA 98226

Encroachment Type:

Bore (up to 12 inch Dia)	Bell Hole		
--------------------------	-----------	--	--

Location:

E/S WEST LN(FULTON AND ALPINE)

In compliance with your request of 01/30/2017, 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: \$1,251.00

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

KRIS BALAJI, Director
Department of Public Works

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

RECEIVED
SAN JOAQUIN COUNTY

2016 NOV -8 AM 11:01

DEPT. OF PUBLIC WORKS

PLEASE PRINT:

Date 10/11/16

To: San Joaquin County
Department of Public Works

Wave Broadband
(Applicant Name)

215 Mason Circle
(Mailing Address)

Concord, CA, 94520
(City, State, Zip Code)

(415) 516-3902
(Area Code - Telephone Number)

OFFICE USE ONLY	
JOB #	<u>116005</u>
APN	
EXP. DATE	<u>3-1-17</u>
VALID	<u>1-30-17</u> TO <u>3-1-17</u>
STREET	<u>West Ln</u>
AREA	<u>Stockton</u> QUAD <u>NS</u>
TYPE	<u>Bore</u>
FORMS	<u>SS WW R29 R7 RS</u>
NOTES	

Sketch (Detailed plans may be submitted)
Please see attached construction permit drawing
9967- BACKBOME APP#1 WEST LN TO E ALPINE AVE

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the NORTH E side of WEST LN approximately 1400± Between feet/mile 0 of El Dorado Ave Fulton & Alpine, French Camp Rd, by performing the following work (description of work):
Placing conduit by directional bore method.

Work will commence on or about ASAP for approximately 30 days.

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


Signature of Applicant - Title

11/08/2016

Date

wave

ASTOUND BROADBAND

PROJECT #9967_BACKBONE APP#1
WEST LN TO SUNESYS MEET ME VAULT
UNDERGROUND CROSSING

CONTACT LIST

WAVE
JEREMY BUBENICEK
FIBER CONSTRUCTION MANAGER
215 MASON CIRCLE
CONCORD, CA 94520
TEL: 415-516-3902
jbubenicek@wavebroadband.com

CITY OF STOCKTON
PERMIT CENTER
345 N. EL DORADO STREET
STOCKTON, CA 95202
PHONE: (209) 937-8900
FAX: (209) 937-8901

COUNTY OF SAN JOAQUIN
PUBLIC WORKS DEPARTMENT
1810 E. HAZELTON AVENUE
STOCKTON, CA 95205
PHONE: (209) 468-3000
FAX: (209) 468-2959

STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2486
EMAIL: RAYDELGADO@SLEGROUP.NET

NIK DELGADO
CELL: 408-666-3448
EMAIL: NIKDELGADO@SLEGROUP.NET

GENERAL CONSTRUCTION NOTES

1. CONTACT "USA" FOR UNDERGROUND UTILITY LOCATES, 48 HOURS PRIOR TO CONSTRUCTION
CA PHONE NO.: 1-800-227-2600
2. CONTRACTOR TO FOLLOW ALL OSHA, LOCAL, STATE, AND BUILDING CODES.
3. MAINTAIN A MINIMUM 6' SWEEP ON ALL CONDUIT BENDS.
4. CONTRACTOR MUST CLEAN UP WORK AREAS AT THE END OF EACH WORK DAY & REMOVE TRASH & DEBRIS FROM WORK SITE.
5. CONTRACTOR WILL GROUT & SEAL ALL BUILDING ENTRANCES WITH APPROVED MATERIALS.
6. PLACE BUSHINGS ON ALL CONDUIT ENDS, FOR CABLE PROTECTION.
7. PLACE TRIPLEX & BLANK DUCT PLUGS AT BUILDING ENTRANCE CONDUITS.
8. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR/REPLACEMENT OF DAMAGED FACILITIES AND/OR PROPERTY.
9. ALL DISTURBED SURFACES WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
10. ALL WORK TO BE PERFORMED PER CONSTRUCTION SPECIFICATION UNLESS OTHERWISE DIRECTED BY PROPERTY MANAGEMENT.
11. THE CONTRACTOR WILL PROVIDE AS-BUILT RECORDS TO BE GIVEN TO MANAGEMENT UPON COMPLETION OF CONSTRUCTION.
12. CONTRACTOR TO COMPLY WITH TRAFFIC CONTROL PLAN.
13. USE APPROPRIATE ATTACHMENT.
14. ALL EXISTING UTILITIES MUST BE POTHOLED BEFORE BEGINNING CONSTRUCTION.
15. PLACE A 12" AVG. SOLID (0.0808" DIAMETER) TRACER WIRE ALONG WITH THE CONDUIT INSTALLED. TERMINATION TO BE TERMINATED ON AN ACCEPTABLE TERMINATION BLOCK IN EACH HANDHOLE/HOT LOCATION.

CONTRACTOR
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY FIELD INSPECTION AND A SEARCH OF THE AVAILABLE CITY OR COUNTY RECORDS. SINCE THE ACTUAL LOCATION AND NATURE OF THE UNDERGROUND FACILITIES MAY BE SOMEWHAT DIFFERENT FROM THAT SHOWN, THE CONTRACTOR IS REQUIRED TO VERIFY THE INFORMATION THROUGH UNDERGROUND SERVICE ALERT (USA) OR BY CONTACTING THE UTILITY COMPANIES DIRECTLY, PRIOR TO EXCAVATION.

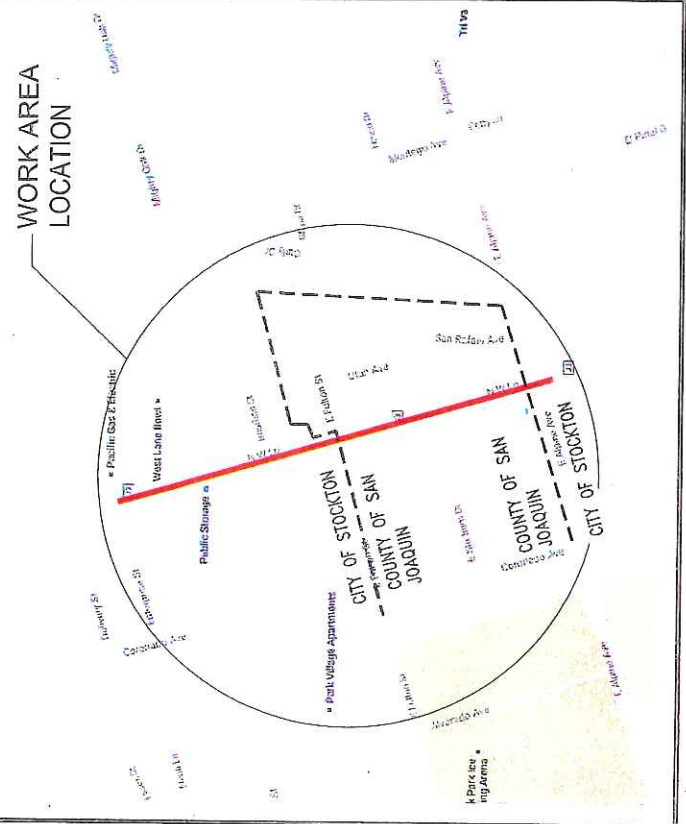


TABLE OF CONTENTS

SHEET	DESCRIPTION
01 COVER SHEET	
02 CONSTRUCTION DRAWING	
03 CONSTRUCTION DRAWING	
04 CONSTRUCTION DRAWING	
05 CONSTRUCTION DRAWING	
06 CONSTRUCTION DRAWING	
07 TYPICAL DETAILS	
08 TRAFFIC CONTROL	
9-24 TRAFFIC CONTROL	

DIGALERT
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
this UNDERGROUND SERVICE ALERT!
(811)



PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY



STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2486
EMAIL: RAYDELGADO@SLEGROUP.NET

NIK DELGADO
CELL: 408-666-3448
EMAIL: NIKDELGADO@SLEGROUP.NET

wave
ASTOUND
BROADBAND

PROJECT #9967 BACKBONE APP#1
WEST LN TO SUNESYS MEET ME VAULT
UNDERGROUND CROSSING

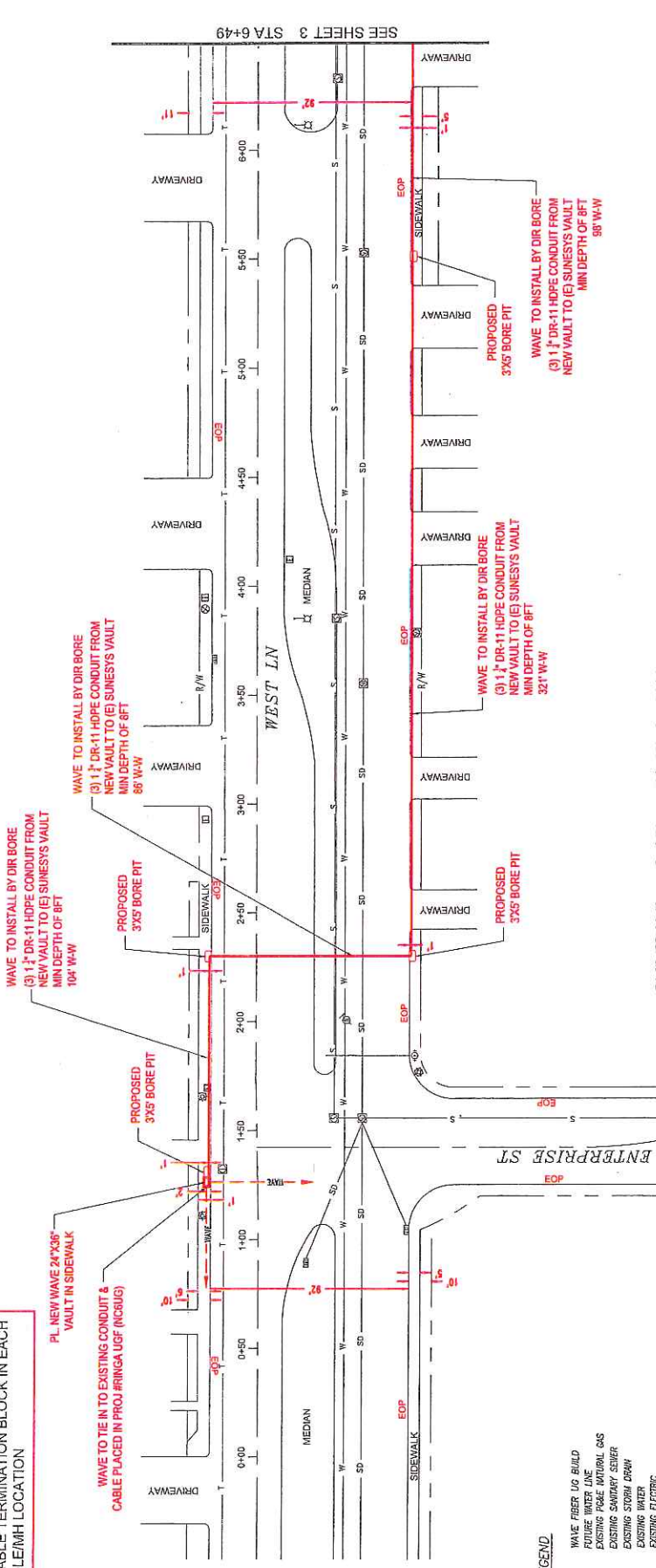
JIN#

LOCATION: PROJECT #9967 BACKBONE APP#1
WEST LN TO SUNESYS MEET ME VAULT
UNDERGROUND CROSSING

DATE: 10/14/2010
DATE: 10/14/2010

SHEET
1 OF 24

CONSTRUCTION NOTE:
PLACE A 12" AWG SOLID (0.0808" DIAMETER) TRACER WIRE ALONG WITH THE CONDUIT INSTALLATION TO BE TERMINATED ON AN ACCEPTABLE TERMINATION BLOCK IN EACH HAND-TOE/MH LOCATION



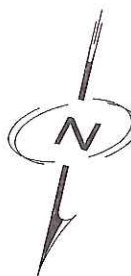
ABBREVIATIONS

- GAS TO SCALE
- EXISTING
- MANHOLE
- EDGE OF PAVEMENT
- FACE OF CURB
- RIGHT OF WAY
- STREET LIGHT
- SANITARY SEWER
- TELEPHONE
- WATER
- DRIVEWAY

LEGEND

- WAVE FIBER LG BUILD
- FUTURE WATER LINE
- EXISTING PALE NATURAL GAS
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING WATER
- EXISTING ELECTRIC
- EXISTING TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SD MANHOLE
- EXISTING S MANHOLE
- EXISTING ATT MANHOLE
- EXISTING ELECTRIC MANHOLE
- EXISTING ATT MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING TREE
- EXISTING WATER VALVE
- FENCE

CITY OF STOCKTON



SCALE: 1" = 50'

811
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
(811)
Know what's below.
Call before you dig.

PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
RAY DELCADO
CELL: 408-504-2485
EMAIL: RAYDELCA@GMAIL.COM
NIR DELCADO
CELL: 408-566-3548
EMAIL: NIRDELCA@GMAIL.COM

APPLICANT:

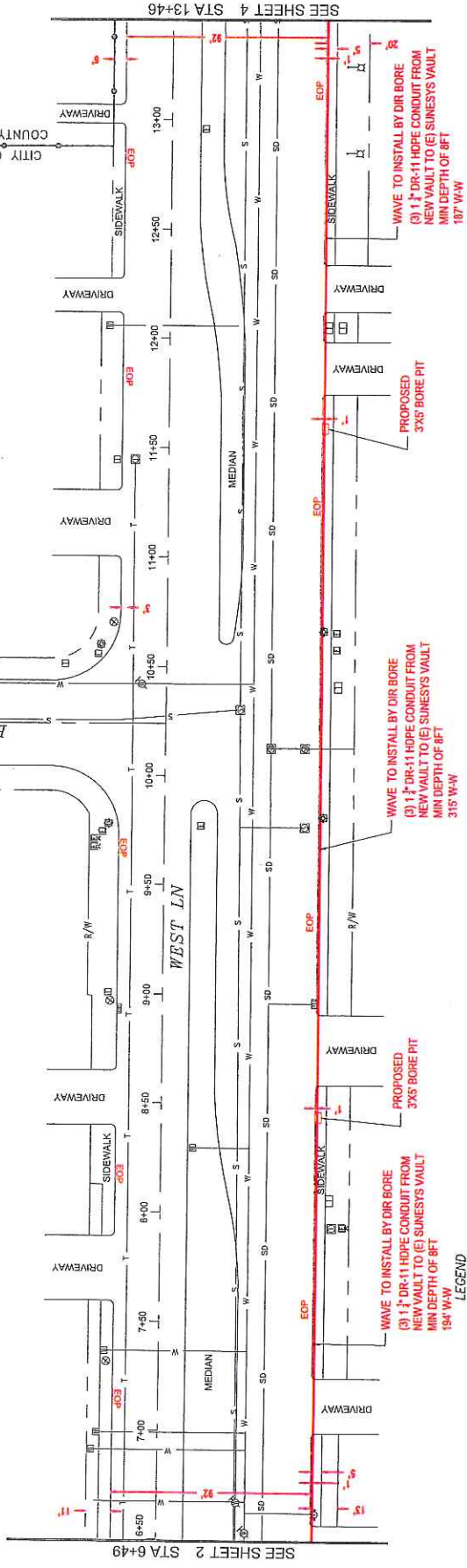
ASTOUND BROADBAND

PROJECT #9987 BACKBONE APP#1
WEST LN TO
SUNESYS MEET ME VAULT
UNDERGROUND CROSSING
JUN#

DESIGN SHEET
DATE: 11/14/2018
DATE: 11/14/2018

SHEET
2 OF 24

CONSTRUCTION NOTE:
 PLACE A 12" AWG SOLID (0.0808" DIAMETER) TRACER WIRE ALONG WITH THE CONDUIT INSTALLATION TO BE TERMINATED ON AN ACCEPTABLE TERMINATION BLOCK IN EACH HANDHOLE/MH LOCATION



CITY OF STOCKTON

ABBREVIATIONS

- G NOT TO SCALE
- NTS
- (E) EXISTING
- MANHOLE
- EDGE OF PAVEMENT
- EDGE OF DRIVEWAY
- R/W RIGHT OF WAY
- SD STORM DRAIN
- SL STREET LIGHT
- T TELEPHONE
- W WATER
- D/W DRIVEWAY
- WAVE FIBER UC BUILD
- EXISTING POLE NATURAL GAS
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING WATER
- EXISTING ELECTRIC
- EXISTING TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SD MANHOLE
- EXISTING S MANHOLE
- EXISTING ATT MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING ATT HANDHOLE
- EXISTING FIRE HYDRANT
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING TREE
- EXISTING WATER VALVE
- FENCE

LEGEND

- WAVE FIBER UC BUILD
- EXISTING POLE NATURAL GAS
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING WATER
- EXISTING ELECTRIC
- EXISTING TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SD MANHOLE
- EXISTING S MANHOLE
- EXISTING ATT MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING ATT HANDHOLE
- EXISTING FIRE HYDRANT
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING TREE
- EXISTING WATER VALVE
- FENCE

DIGALERT
 CALL TOLL FREE
 48 HRS BEFORE YOU DIG
 1-800-485-5844
 (IN CA) 1-800-485-5844

Know what's below.
 Call before you dig.

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
 BAY DELCADO
 CELL: 408-504-2486
 EMAIL: RAYTEL@GMAIL.COM (GROUP: HT)
 BAY DELCADO
 CELL: 408-504-2486
 EMAIL: RAYTEL@GMAIL.COM (GROUP: HT)

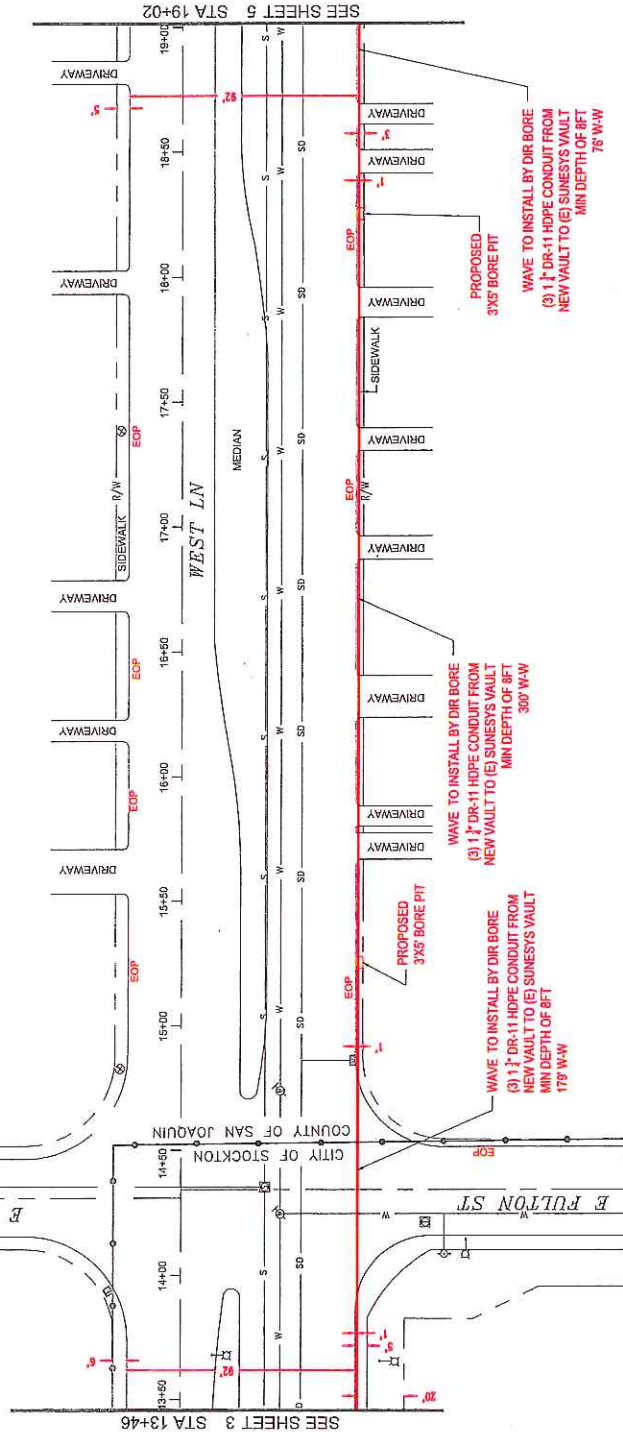
AGENCY: CITY OF STOCKTON
 PROJECT: #9987 BACKBONE APP#1
 WEST LN TO
 SUNESYS MEET ME VAULT
 UNDERGROUND CROSSING
 JN#

APPLICANT: wave ASTOUND BROADBAND

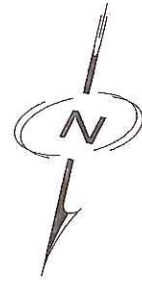
DESIGN: SLE
 PREPARED: DATE: 10/20/15
 SHEET: 9 OF 24

CONSTRUCTION NOTE:
PLACE A 12" AVG SOLID (0.0808" DIAMETER) TRACER WIRE ALONG WITH THE CONDUIT INSTALLATION TO BE TERMINATED ON AN ACCEPTABLE TERMINATION BLOCK IN EACH HANDHOLE/11H LOCATION

COUNTY OF SAN JOAQUIN



- LEGEND**
- WAVE FEET US BUILD
 - FUTURE WIRE LINE
 - EXISTING PAVE NATURAL GAS
 - EXISTING SANITARY SETTER
 - EXISTING STORM DRAIN
 - EXISTING ELECTRIC
 - EXISTING TELEPHONE
 - EXISTING RIGHT OF WAY
 - EXISTING SD MANHOLE
 - EXISTING S MANHOLE
 - EXISTING ATT MANHOLE
 - EXISTING ELECTRIC HANDHOLE
 - EXISTING ATT HANDHOLE
 - EXISTING FIRE HYDRANT
 - EXISTING LIGHT POLE
 - EXISTING POWER POLE
 - EXISTING TREE
 - EXISTING WATER VALVE
 - FENCE
- ABBREVIATIONS**
- GAS
 - NOT TO SCALE
 - EXISTING
 - MANHOLE
 - EDGE OF PAVEMENT
 - EDGE OF CURB
 - RIGHT OF WAY
 - STORM DRAIN
 - STREET LIGHT
 - SANITARY SETTER
 - UNDERGROUND SERVICE ALERT
 - WATER
 - DRIVEWAY



SCALE: 1" = 50'

811
CALL TO FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
(811)
Know what's below.
Call before you dig.

PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
P.O. BOX 408-2485
FARM : 408-504-2485
NIR : 408-504-2485
CELL : 408-666-3418
EMAIL : NIKELG@GMAIL.COM

AGENCY:

APPLICANT:

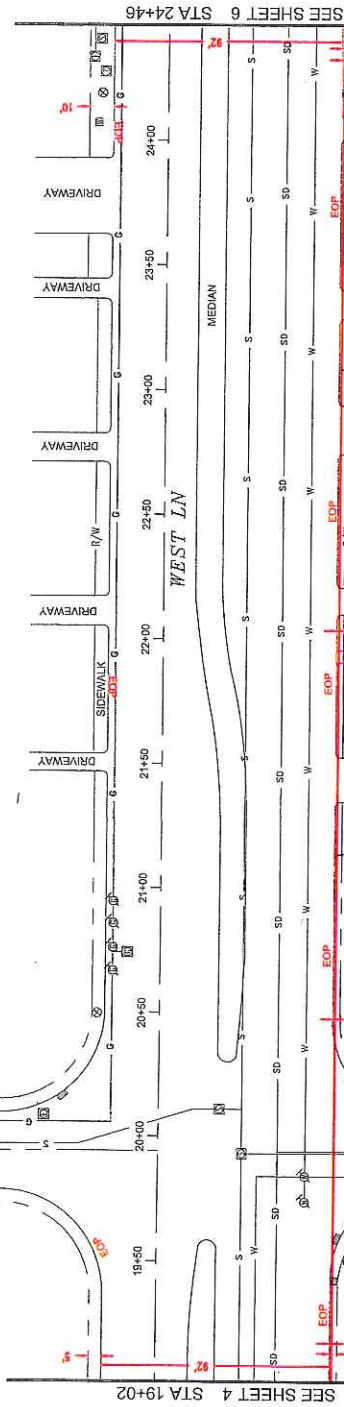
PROJECT #9987 BACKBONE APP#1
WEST LN TO
SUNESYS MEET ME VAULT
UNDERGROUND CROSSING
JN#

DESIGN & EIT
DATE 10/20/2016
DATE 10/20/2016

SHEET
4 OF 4

CONSTRUCTION NOTE:
 PLACE A 12" AWG SOLID (0.0808" DIAMETER)
 TRACER WIRE ALONG WITH THE CONDUIT
 INSTALLATION TO BE TERMINATED ON AN
 ACCEPTABLE TERMINATION BLOCK IN EACH
 HANDHOLE/MH LOCATION

COUNTY OF SAN JOAQUIN

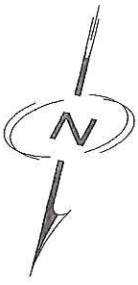


LEGEND

- WAVE FIBER UC BUILD
- EXISTING 12" WATER MAIN
- EXISTING 12" NATURAL GAS
- EXISTING 12" SANITARY SEWER
- EXISTING 12" STORM DRAIN
- EXISTING 12" WATER
- EXISTING 12" ELECTRIC
- EXISTING 12" TELEPHONE
- EXISTING 12" RIGHT OF WAY
- EXISTING 12" MANHOLE
- EXISTING 12" UNHOLE
- EXISTING 12" ATT MANHOLE
- EXISTING 12" ATT UNHOLE
- EXISTING 12" FIRE HYDRANT
- EXISTING 12" LIGHT POLE
- EXISTING 12" POWER POLE
- EXISTING 12" TREE
- EXISTING 12" WATER VALVE
- FENCE

ABBREVIATIONS

- GAS
- NOT TO SCALE
- EXISTING
- MANHOLE
- FACE OF CURB
- RIGHT OF WAY
- STORM DRAIN
- STREET LIGHT
- SANITARY SEWER
- TELEPHONE
- WATER
- DRIVEWAY



SCALE: 1" = 50'

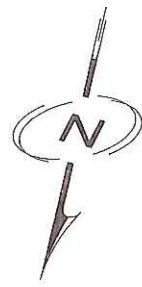
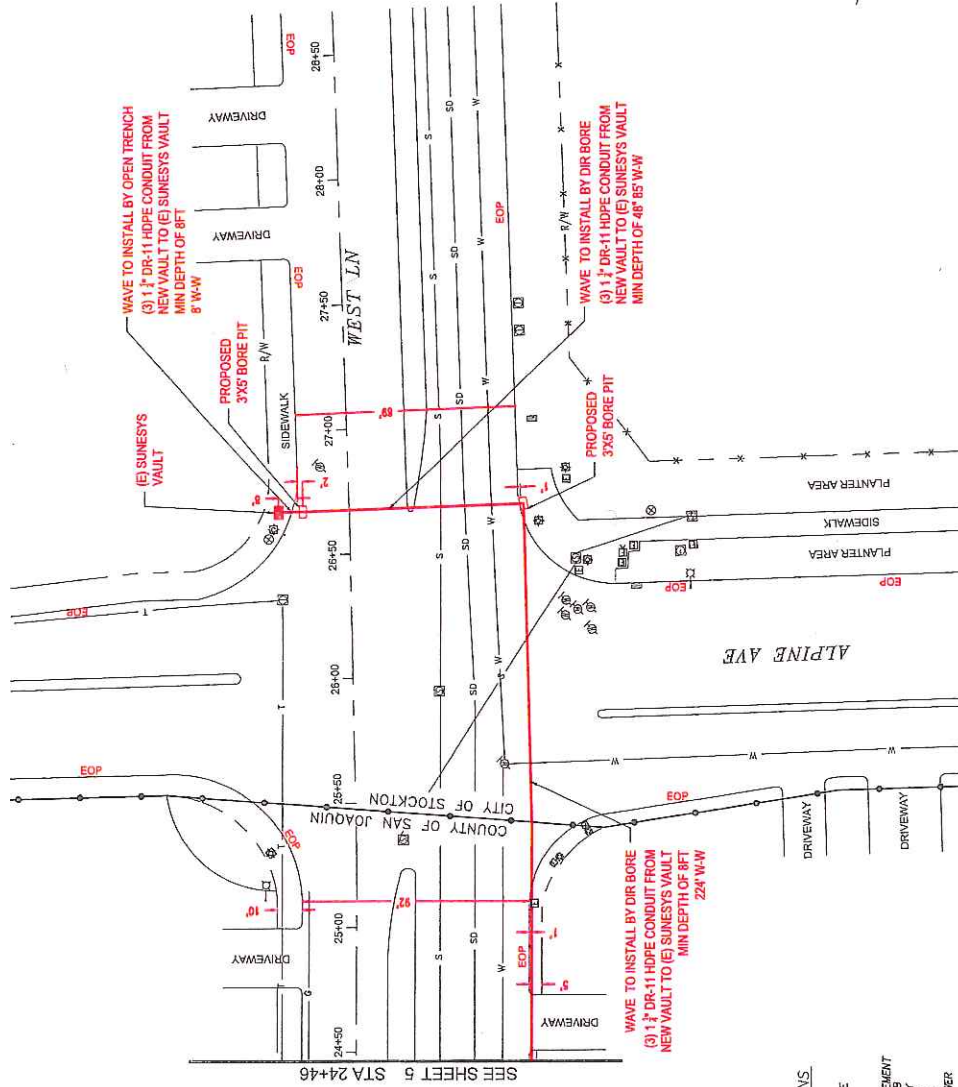
811
 DIGAlert
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
 1-800-485-5844
 Know what's below.
 Call before you dig.

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
 RAY DELGADO
 CELL: 408-504-2486
 EMAIL: RAY@SLGROUP.NET
 RAY DELGADO
 CELL: 408-666-3444
 EMAIL: RAY@SLGROUP.NET

APPLICANT:
wave! ASTOUND BROADBAND
 PROJECT #9867 BACKBONE APP#1
 WEST LN TO
 SUNESYS MEET ME VAULT
 UNDERGROUND CROSSING
 JN#

CONSTRUCTION NOTE:
PLACE A 12" AWG SOLID (0.0808" DIAMETER) TRACER WIRE ALONG WITH THE CONDUIT INSTALLATION TO BE TERMINATED ON AN ACCEPTABLE TERMINATION BLOCK IN EACH HANDHOLE/INH LOCATION



SCALE: 1" = 50'

LEGEND

- WAVE FIBER US BUILD
- FUTURE WATER LINE
- EXISTING POLE NATURAL GAS
- EXISTING POLE SANITARY SEWER
- EXISTING STORM DRAIN
- EXISTING WATER
- EXISTING ELECTRIC
- EXISTING TELEPHONE
- EXISTING RIGHT OF WAY
- EXISTING SD MANHOLE
- EXISTING S MANHOLE
- EXISTING ATT MANHOLE
- EXISTING ELECTRIC HANDHOLE
- EXISTING ELECTRIC MANHOLE
- EXISTING FIBER MANHOLE
- EXISTING FIBER HUBBARD
- EXISTING LIGHT POLE
- EXISTING POWER POLE
- EXISTING TREE
- EXISTING WATER VALVE
- FENCE

ABBREVIATIONS

- GAS
- NOT TO SCALE
- EXISTING
- EXISTING
- EDGE OF PAVEMENT
- FACE OF CURB
- RIGHT OF WAY
- STREET LIGHT
- STREET LIGHT
- SANITARY SEWER
- TELEPHONE
- WATER
- DRIVEWAY

DIGALERT

CALL TOLL FREE 800-451-4646
40 HOUR SERVICE ALERT
(811)



PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY

AGENCY:

STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2485
FAX: 408-504-2485
NKK DELGADO
CELL: 408-666-3448
EMAIL: NKKDELGADO@GMAIL.COM

AFFILIATE:

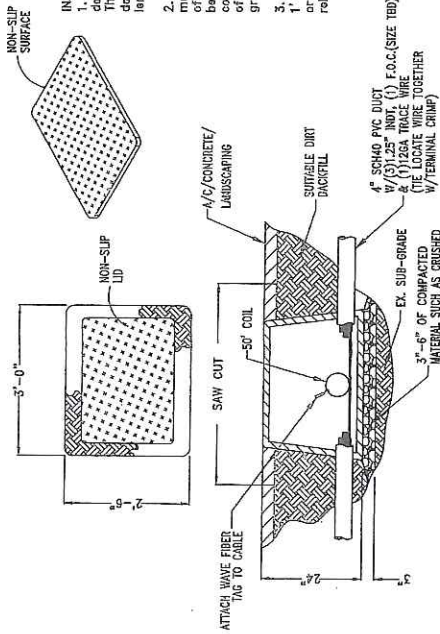
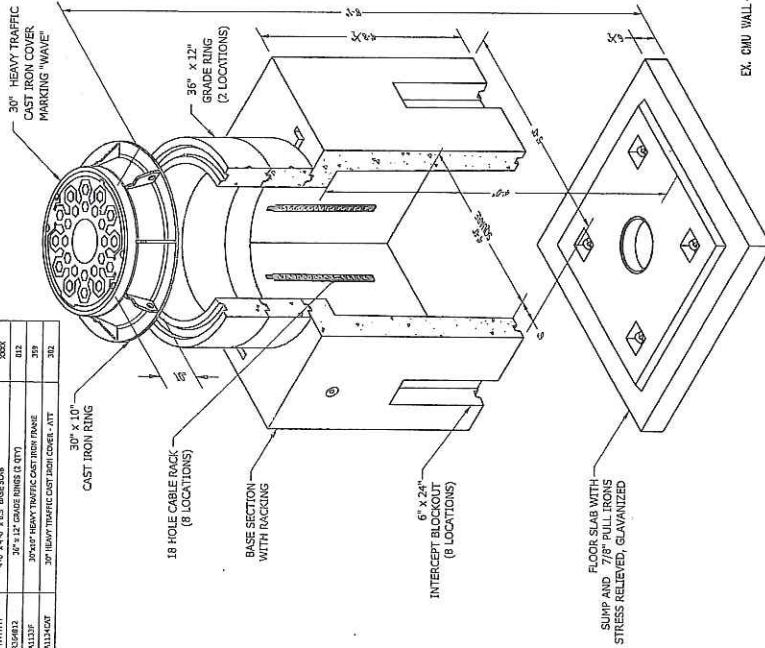
wave!
ASTOUND
BROADBAND

PROJECT #9987_BACKBONE APP#1
WEST LN TO
SUNESYS MEET ME VAULT
UNDERGROUND CROSSING

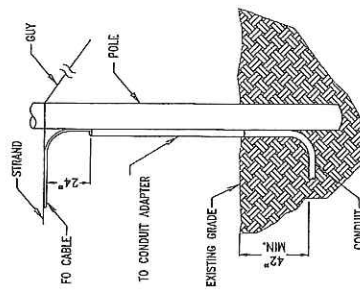
DESIGNER: DATE: 10/20/13
PROJECT: DATE: 10/20/13
SHEET: 5 OF 24

TYPICAL DETAILS

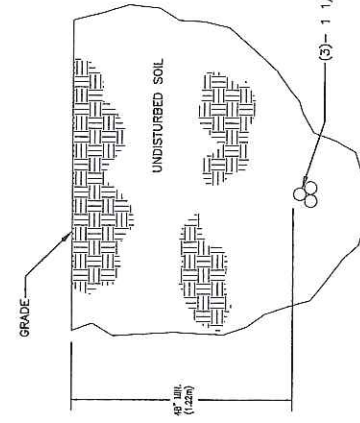
MATERIAL LIST		
PART NUM	DESCRIPTION	WEIGHT (LBS)
18H000	18" HOLE CABLE BACK (8 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000
20H000	20" HOLE CABLE BACK (2 LOCATIONS)	2000



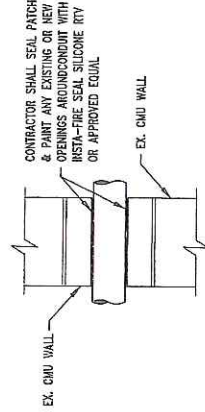
TYPICAL HANDHOLE DETAIL
3'X2.5'X2' HDPE (MODEL #PEM-3036)
N.T.S.



TYPICAL DIRECTIONAL
POLE ARRANGEMENT
AERIAL TO BURIED CABLE
N.T.S.



DIRECTIONAL BORE TYPICAL



BLOCK WALL
PENETRATION DETAIL
N.T.S.

811

DIGALERT
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT
(811)

Know what's below.
Call before you dig.

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2486
EMAIL: RAYDELGADO@SLEGROUP.NET

NIK DEY
CELL: 408-006-3448
EMAIL: NIKDEY@SLEGROUP.NET

wave
A'STOUND
BROADBAND

LOCATION: PROJECT #9567 BACKBONE APP#1
WEST LN TO SUNESYS MEET ME VAULT

DESIGN: JN# UNDERGROUND CROSSING

DATE: 10/14/2010 DATE: 10/14/2010

SHEET 7 OF 24

R3-2	R3-1	TYPE P (CA)	W1-1/W16-1						
W3-4	W3-9	R9-3A	R1-1	W4-2	W4-2	W1	W12-1		
W15-1	W9-3	R3-4	W20-4	C17(CA)	W21-5B		C12A		
R7A	W21-5	G37A	C30A	W20-2		W1-6			
E3-2	R1B	W1-4	W4-2			R4-8A			
G20-2	C20	W20-1	C30 (CA)		FLASHING ARROW SIGN				
R9-9	R9-11A								

	WORK AREA
	TRAFFIC SIGNS (ARROW DIRECTION INDICATES SIGN ORIENTATION)
	CHANNELIZING DEVICES (TRAFFIC CONES, DELINEATOR POSTS, VERTICAL PANELS, ETC.)
	HIGH LEVEL WARNING DEVICE
	FLAGGER (COUNTERMANDING TRAFFIC SIGNALS REQUIRES OFF-DUTY LAW ENFORCEMENT OFFICER)
	SURVEY RODMAN
	BARRICADES
	FLASHING ARROW SIGN

1. ALL WORK SHALL BE DONE IN CONFORMANCE WITH THE LATEST EDITION OF THE "WATCH MANUAL" & "MUTCO"
2. FOR NIGHT TIME USE, REFER TO "WARNING LIGHT APPLICATIONS DURING NIGHT TIME OPERATIONS"
3. ADDITIONAL TEMPORARY TRAFFIC CONTROL DEVICES (SEQUENCIAL ARROWS, BARRICADES, STEEL PLATES) MAY BE REQUIRED.
4. ALL LIGHT BOARDS & LIGHTED SIGNAGE TO BE SOLAR POWERED
5. DEVICES PER "MUTCO"
6. TRAFFIC CONTROL REQUIRED AT ALL WORK LOCATION IN STREET INCLUDING BORE PITS, POT HOLES AND EXCAVATION/TRENCHES.

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO BE AFFECTED, USE THE FOLLOWING SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



18'x42' (STANDARD)
RS-11A

20'x33' (MIN.)
36'x36' (STANDARD)
RS-11A

TABLE A-3
TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS

Speed in Miles Per Hour*	Length of Taper in Feet	Width of Offset**
20	111	12
25	139	12
30	167	12
35	195	12
40	223	12
45	251	12
50	279	12
55	307	12
60	335	12
65	363	12
70	391	12
75	419	12
80	447	12
85	475	12
90	503	12
95	531	12
100	559	12

* Posted speed, off-peak 8th percentile speed prior to starting, or the anticipated operation speed.
** For other offset widths, apply the formula in Table A-1.

NOTE: MAINTAIN CROSSWALK OPEN DURING CONSTRUCTION

REVIEWED () AS NOTED BY:

NOTE: See Table A

DATE: / / 20

PERMIT # _____
PROJECT OR MAY MODIFY
TRAFFIC CONFIGURATION
FIELD CONDITIONS DICTATE

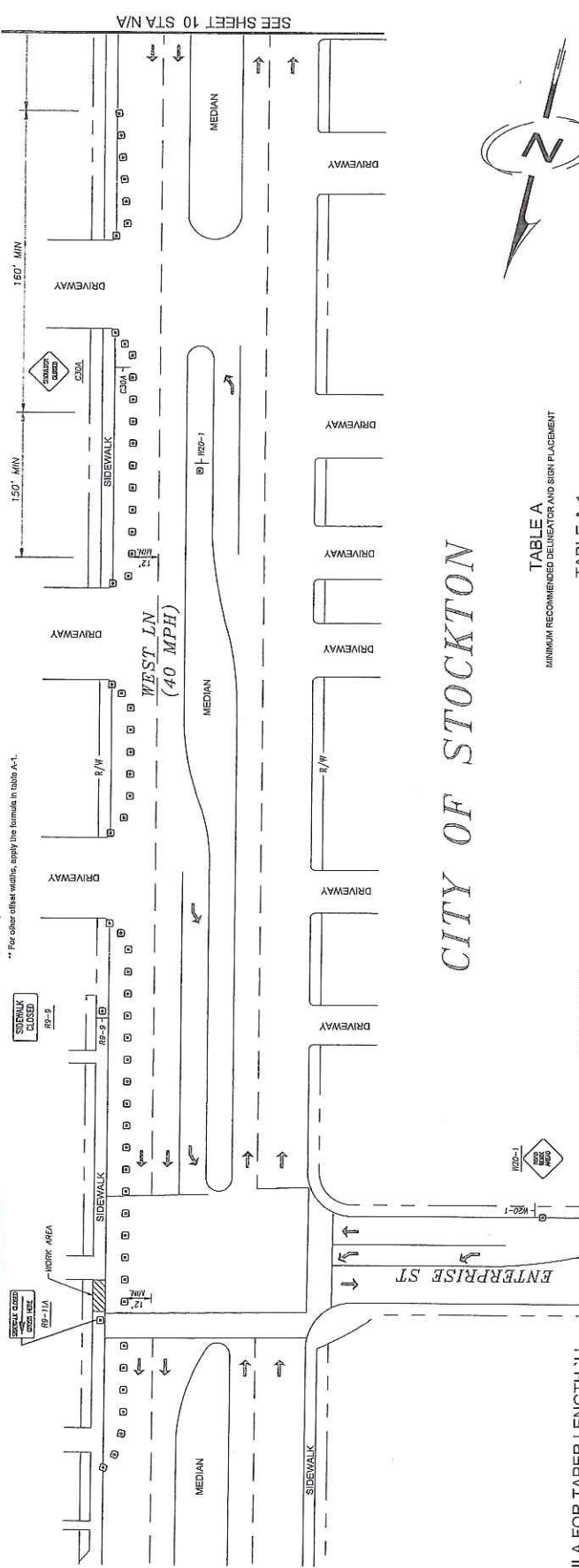


TABLE A
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1
TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
SHIFTING TAPER	MINIMUM 12 L MINIMUM 10 L MINIMUM 8 L MINIMUM
MERGING TAPER	MINIMUM 12 L MINIMUM 10 L MINIMUM 8 L MINIMUM
DOWNSTREAM TAPER	MINIMUM 12 L MINIMUM 10 L MINIMUM 8 L MINIMUM
(USE IS OPTIONAL)	100 FEET MAXIMUM

TABLE A-2
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS
URBAN LOW SPEED - 25 MPH OR LESS	100 FEET
URBAN HIGH SPEED - MORE THAN 25 MPH TO 40 MPH	200 FEET
URBAN HIGH SPEED - MORE THAN 40 MPH	300 FEET
RURAL	400 FEET
EXPRESSWAY/FREEWAY	1000 FEET

FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS^2}{60} \text{ OR } L = WS \text{ (40 MPH OR GREATER)}$$

L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = SPEED IN MPH

CITY OF STOCKTON



SCALE: 1" = 50'

811
CALL TOLL FREE
800-441-8111
FOR AN HOUR OF SERVICE
24 HOURS A DAY
KNOW WHAT'S BELOW.
Call before you dig.

REV.	DATE	DESCRIPTION	BY

PLAN REVISIONS

STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2486
FAX: 408-504-2486
EMAIL: RAY@SL&E.COM
WWW.SL&E.COM

wave
ASTOUND
BROADBAND

LOCATION: PROJECT #9987_BACKBONE APP#1
WEST LN TO
ENTERPRISE ST MEET ME VALLEY
UNDERGROUND CROSSING
JN#

DESIGNER: DATE: 10/14/2010
FILED: DATE: 10/14/2010

SHEET: 9 OF 24

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE RESTRICTED AND/OR AFFECTED, USE THE FOLLOWING
SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



18-42 (STANDARD)
R9-11A

20'x38" (MIN.)
38'x38" (STANDARD)
R9-2A

REVIEWED (AS NOTED) BY:

NOTE: See Table A

and Taper Lengths

DATE: 1/1/20
PERMIT #:
PROJECT #:
TRAFFIC CONTROL PLANS
FIELD CONDITIONS DICTATE

TABLE A-3

TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS

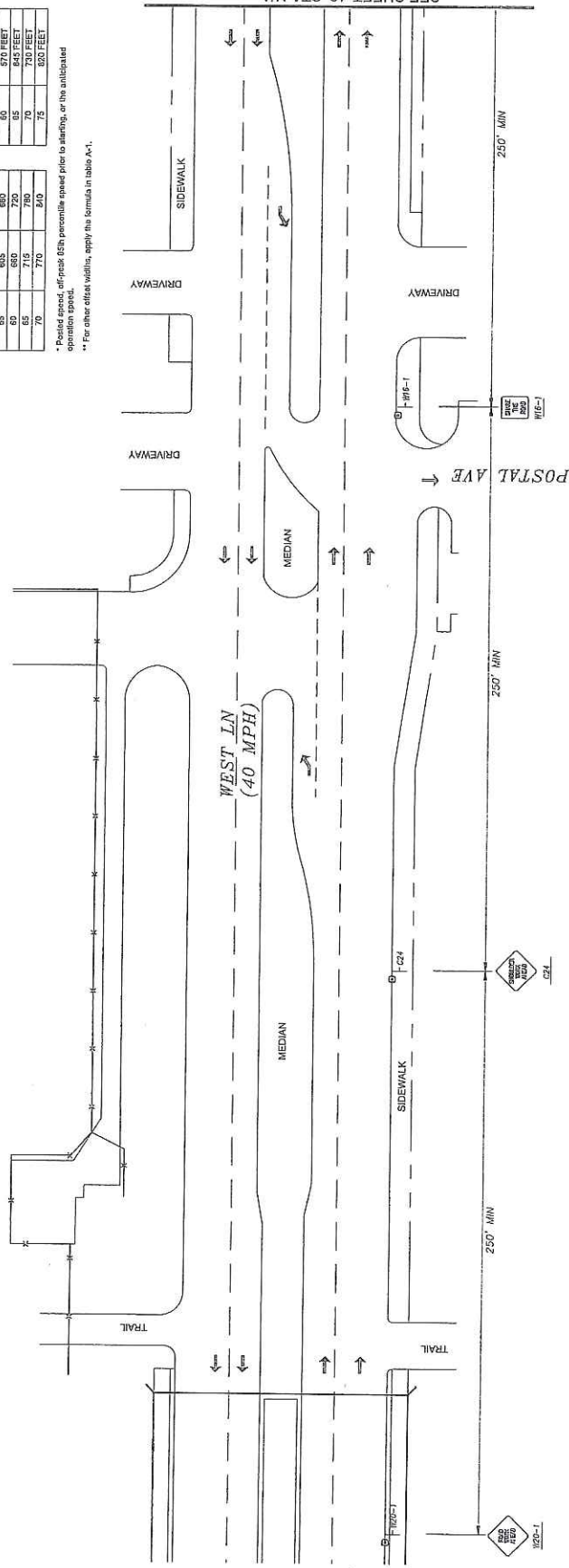
STOPPING SIGHT DISTANCE AS
A FUNCTION OF SPEED

Speed in Mph	Length of Taper, L, in Feet	Width of Clearance	Distance in Feet
20	11 Feet	12 Feet	20
25	73	80	25
30	115	125	30
35	165	150	35
40	225	245	40
45	300	300	45
50	385	350	50
55	480	400	55
60	585	450	60
65	700	500	65
70	825	550	70
75	960	600	75
80	1100	650	80
85	1250	700	85
90	1400	750	90
95	1560	800	95
100	1725	850	100

* Posted speed, off-peak 65th percentile speed prior to starting, or the anticipated
operation speed.

** For other offset widths, apply the formula in table A-1.

CITY OF STOCKTON



FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{W^2}{S} \quad \text{WIDE (40 MPH OR LESS)} \quad L = \frac{W^2}{S} \quad \text{WIDE (45 MPH OR GREATER)}$$

L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = SPEED IN MPH

TABLE A

MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
SHIFTER TAPER	MINIMUM
SHIFTER TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
DOWNSTREAM TAPER	50 FEET MINIMUM
(USE IS OPTIONAL)	100 FEET MAXIMUM

TABLE A-2

RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	A	B	C
URBAN LOW SPEED: 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN HIGH SPEED: MORE THAN 25 MPH TO 40 MPH	200 FEET	250 FEET	250 FEET
URBAN HIGH SPEED: MORE THAN 40 MPH	300 FEET	350 FEET	350 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1500 FEET	2000 FEET

811
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
UNDEGROUND UTILITY SERVICE ALERT
(811)
www.811california.gov
Call before you dig.

REV.	DATE	DESCRIPTION	BY



STRUCTURE LEASING & ENGINEERING INC

RAY DELGADO
CELL: 408-504-2486
EMAIL: RAY@STOCKTONCALIFORNIA.HT
MR. T. LOAN
MR. T. LOAN
MR. T. LOAN

AGENCY:

PROJECT #9987 BACKBONE APP#1
WEST LN TO
SUNESYS MEET ME VAULT
UNDERGROUND CROSSING
JN#

LOCATION:

DESIGNER: SLE
FIELDER: SLE
DATE: 01/04/2010
DATE: 01/04/2010
SHEET
11 OF 24

REVIEWED _____ AS NOTED BY:

NOTE: See Table A
for sign sizes, spacing,
and taper lengths.

DATE: _____ / ____ / ____
PERMIT #: _____
PROJECT: _____
FIELD CONDITIONS DICTATE

TABLE A-2

RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	A	B	C
URBAN LOW SPEED, 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN MEDIUM SPEED, 30 TO 40 MPH	200 FEET	250 FEET	250 FEET
URBAN HIGH SPEED, MORE THAN 40 MPH	300 FEET	350 FEET	350 FEET
RURAL LOW SPEED, 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
RURAL MEDIUM SPEED, 30 TO 40 MPH	200 FEET	250 FEET	250 FEET
RURAL HIGH SPEED, MORE THAN 40 MPH	300 FEET	350 FEET	350 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1500 FEET	2000 FEET

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE RESTRICTED AND/OR AFFECTED, USE THE FOLLOWING
SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



18"x42" (STANDARD)
R9-11A

20"x32" (MIN.)
36"x36" (STANDARD)
R9-11A

CITY OF STOCKTON



TABLE A-3
TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS

Speed in Miles per Hour*	Length of Taper 'L' in Feet	Width of Offset**
20	115	60
25	135	75
30	155	90
35	175	105
40	195	120
45	215	135
50	235	150
55	255	165
60	275	180
65	295	195
70	315	210
75	335	225
80	355	240

STOPPING SIGHT DISTANCE AS
A FUNCTION OF SPEED

Speed in MPH*	Distance in Feet
20	115
25	135
30	155
35	175
40	195
45	215
50	235
55	255
60	275
65	295
70	315
75	335
80	355

FORMULA FOR TAPER LENGTH 'L'

$L = \frac{V^2}{10}$ (40 MPH OR LESS) $L = WS$ (45 MPH OR GREATER)
 L = TAPER LENGTH IN FEET
 W = WIDTH OF OFFSET IN FEET
 S = SPEED IN MPH

TABLE A

MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
STANDARD TAPER	100 FEET MINIMUM
SHIFTER TAPER	125 FEET MINIMUM
SHOULDER TAPER	150 FEET MINIMUM
STANDARD TAPER	100 FEET MINIMUM
SHOULDER TAPER	150 FEET MINIMUM
STANDARD TAPER	100 FEET MINIMUM
SHOULDER TAPER	150 FEET MINIMUM
STANDARD TAPER	100 FEET MINIMUM
SHOULDER TAPER	150 FEET MINIMUM
STANDARD TAPER	100 FEET MINIMUM
SHOULDER TAPER	150 FEET MINIMUM

SCALE: 1" = 50'

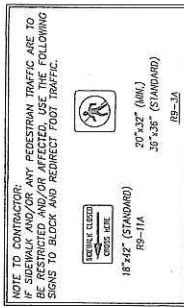
811
CALL TOLL FREE
800-450-4500
FOR MORE INFORMATION
CALL 811
Know what's below.
Call before you dig.

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC.
RAY DELCADO
CELL: 408-504-2486
EMAIL: RAYDEL@DELCAENGINEERING.COM
NIK DELCADO
CELL: 408-866-3448
EMAIL: NIK@DELCAENGINEERING.COM

APPLICANT: **ASTOUND BROADBAND**
AGENCY: **WAVE**
PROJECT: #9987 BACKBONE APP#1
LOCATION: WEST LN TO
SUNSHINE MEET ME VAULT
UNDERGROUND CROSSING
JN#

DESIGN: SLE
DATE: 10/20/2016
DATE: 10/20/2016
SHEET: 12 OF 24



REVIEWED () AS NOTED BY:

NOTE: See Table A for Sign Spacing and Taper Lengths

DATE: 1/20
 PERMIT #:
 PROJECT #:
 TYPING CONTROL PLANS
 FIELD CONDITIONS DICTATE

TABLE A-2
 RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	A	B	C
URBAN LOW SPEED: 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN MEDIUM SPEED: 30 TO 40 MPH	200 FEET	200 FEET	200 FEET
URBAN HIGH SPEED: 45 TO 55 MPH	300 FEET	300 FEET	300 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY/RENEWAY	1000 FEET	1000 FEET	2000 FEET

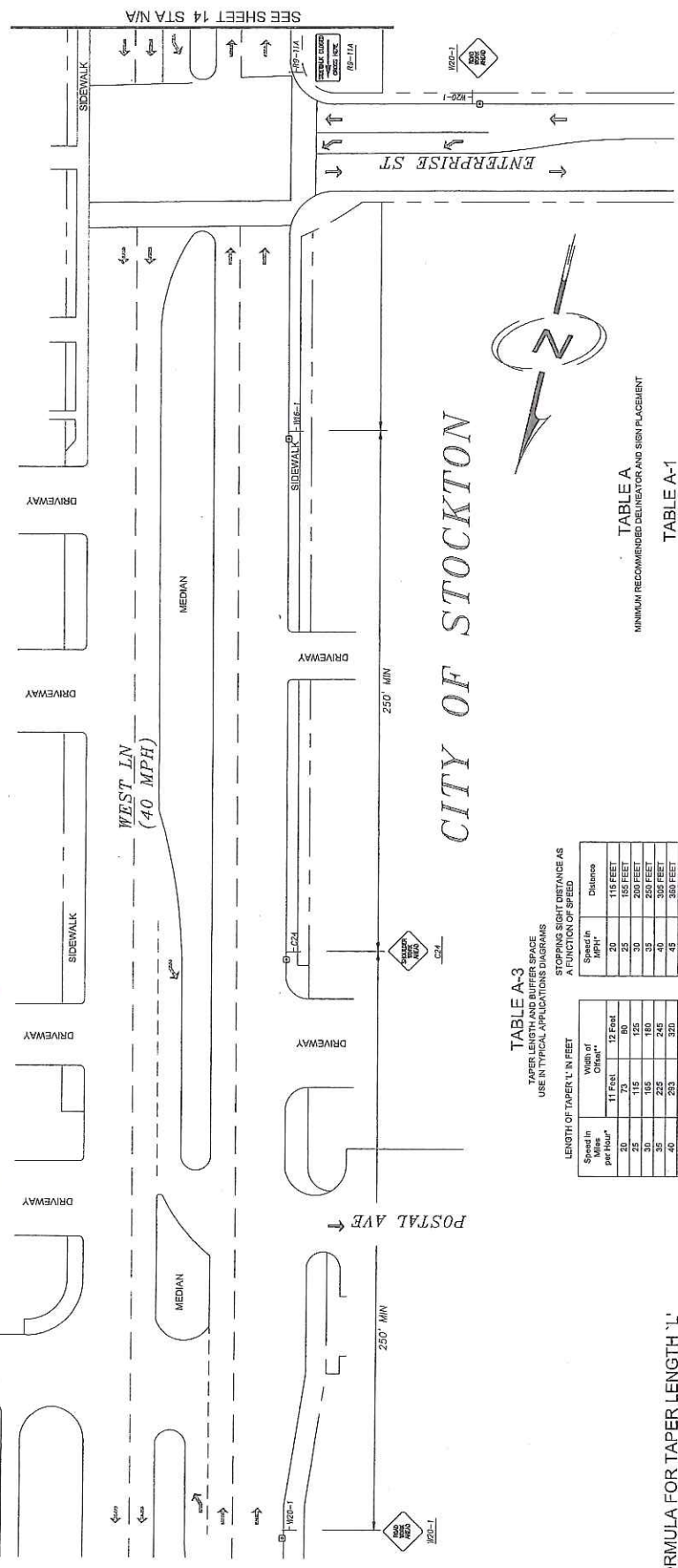


TABLE A
 MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TAPER LENGTH	MINIMUM	MAXIMUM
SHIFTER TAPER	15 L MINIMUM	15 L MINIMUM
SHIFTER TAPER	15 L MINIMUM	15 L MINIMUM
DOWNSTREAM TAPER	80 FEET MINIMUM	100 FEET MAXIMUM
(USE IS OPTIONAL)		

TABLE A-3
 TAPER LENGTH AND BUFFER SPACE
 USE IN TYPICAL APPLICATIONS DIAGRAMS

Speed in Miles per Hour	Length of Taper L' in Feet	Length of Buffer Space B' in Feet	Distance in Feet
11	75	12	87
15	100	16	116
20	125	20	145
25	150	25	175
30	175	30	205
35	200	35	235
40	225	40	265
45	250	45	295
50	275	50	325
55	300	55	355
60	325	60	385
65	350	65	415
70	375	70	445
75	400	75	475
80	425	80	505
85	450	85	535
90	475	90	565
95	500	95	595
100	525	100	625

FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS}{S} \text{ (40 MPH OR LESS)} \text{ OR } \frac{WS}{S} \text{ (45 MPH OR GREATER)}$$

L = TAPER LENGTH IN FEET
 W = WIDTH OF OBJECT IN FEET
 S = SPEED IN MPH

811
 DIGALERT
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
 1-800-485-5840
 Know what's below.
 Call before you dig.

PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
 RAY DELGADO
 CCL: 408-504-2466
 T408: 408-504-2466
 F408: 408-504-2466
 M408: 408-504-2466
 L408: 408-504-2466

AGENCY: PROJECT #9967, BACKBONE APP#1
 WEST LN TO
 SUNFIS MEET ME VALU T
 UNDERGROUND CROSSING
 JIN

wave
 ASTOUND
 BROADBAND

APPLICANT: PROJECT #9967, BACKBONE APP#1
 WEST LN TO
 SUNFIS MEET ME VALU T
 UNDERGROUND CROSSING
 JIN

REVISION	DATE	BY

NOTE TO CONTRACTOR:
 ALL SIGNS AND ANY RECESSED TRAFFIC ARE TO
 BE RESTRICTED AND/OR AFFECTED USING THE FOLLOWING
 SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



15' x 42" (STANDARD)
 10-11A
 20' x 42" (MIN.)
 35' x 40" (STANDARD)
 20-3A

REVIEWED _____ AS NOTED BY:

NOTE: See Table A
 for sign placement,
 and Taper Lengths

DATE: 1/20
 PERMIT # _____
 PROJECT # _____
 TRAFFIC CONTROL PLANS AS
 FIELD CONDITIONS DICTATE

CITY OF STOCKTON

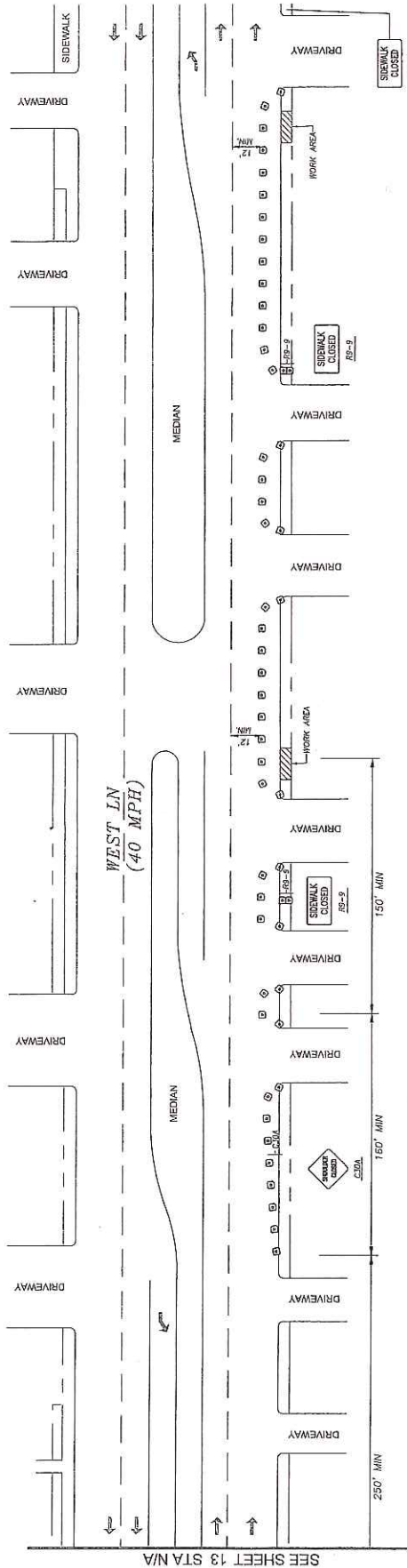


TABLE A
 MINIMUM RECOMMENDED DELIVERY AND SIGN PLACEMENT

TABLE A-1
 TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
SHOULDER TAPER	L MINIMUM
SHOULDER TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
DOWNSTREAM TAPER	50 FEET MINIMUM
(USE IS OPTIONAL)	100 FEET MAXIMUM

FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{W \times S^2}{100}$$

W = WIDTH OF OFFSET IN FEET
 S = SPEED IN MPH

TABLE A-3
 TAPER LENGTH AND BUFFER SPACE
 USE IN TYPICAL APPLICATION DIAGRAMS

SPACING SHORT DISTANCE AS
 A FUNCTION OF SPEED

Speed in mi/hr	Length of Taper 'L' in Feet	Width of Offset in Feet	Distance in Feet
20	11	7	20
25	15	10	25
30	20	13	33
35	25	16	41
40	30	19	49
45	35	22	57
50	40	25	65
55	45	28	73
60	50	31	81
65	55	34	89
70	60	37	97
75	65	40	105

* Posted speed, off-peak 85th percentile speed prior to starting, or the anticipated operation speed.

** For other offset widths, apply the formula in table A-1.

TABLE A-2
 RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	A	B	C
URBAN LOW SPEED: 35 MPH OR LESS	150 FEET	100 FEET	100 FEET
URBAN HIGH SPEED: 40 MPH TO 49 MPH	200 FEET	150 FEET	150 FEET
URBAN HIGH SPEED: MORE THAN 49 MPH	300 FEET	200 FEET	200 FEET
RURAL	500 FEET	350 FEET	350 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1500 FEET	2000 FEET

811
 CALL TOLL FREE
 48 HOURS BEFORE YOU DIG
 1-800-4-A-DIG
 (BTL)
 Know what's below.
 Call before you dig.

PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
 RAY DELGADO
 CELL: 408-504-2485
 FAX: 408-504-2486
 EMAIL: RAY.DELGADO@SLE.COM
 RAY.DELGADO@SLE.COM

AGENCY:

APPLICANT:

LOCATION:
 PROJECT #9967 BACKBONE APP#1
 WEST LN TO
 SUIRYS MEET ME VALUET
 UNDERGROUND CROSSING
 JN#
 DATE: 1/20/20
 DATE: 1/20/20
 DATE: 1/20/20

REVIEWED () AS NOTED BY:

NOTE: See Table A
for Sign, Color, Spacing,
and Taper Lengths.

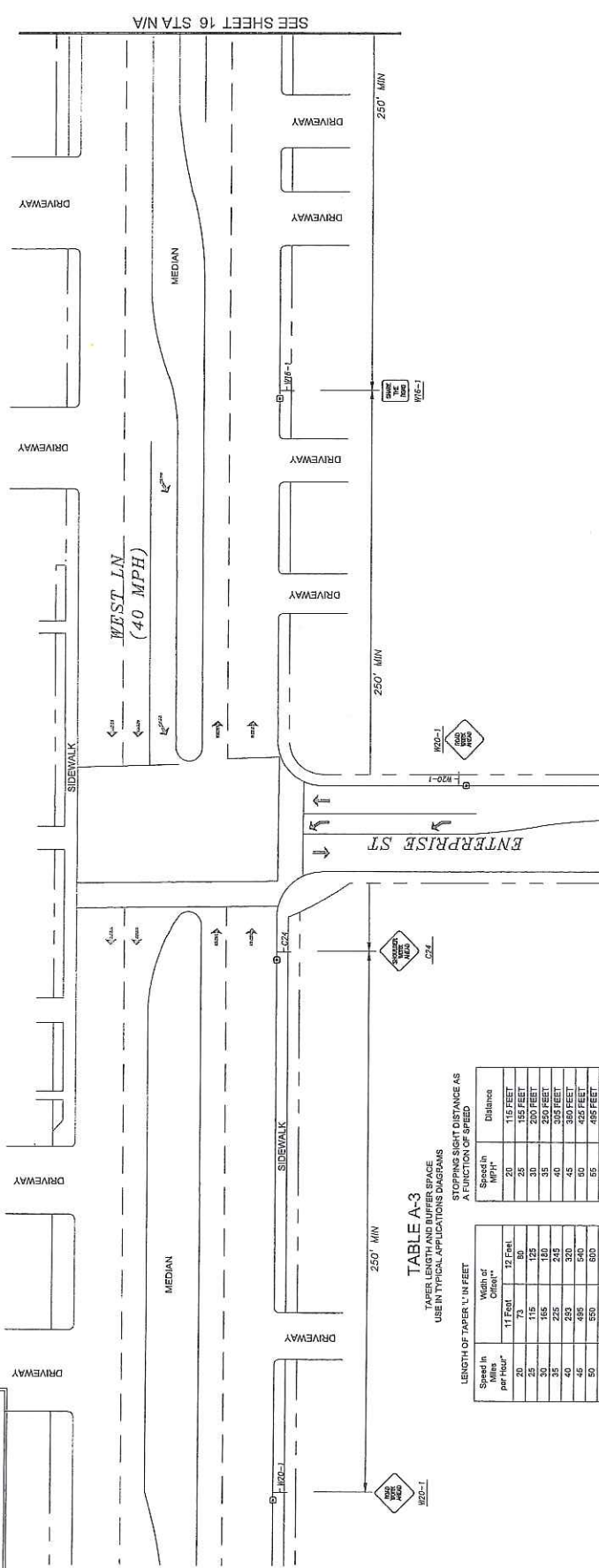
DATE: / / 20
PERMIT # _____
CONTRACT # _____
TRAFFIC CONTROL PLANS AS
FIELD CONDITIONS DICTATE

CITY OF STOCKTON

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE RESTRICTED AND/OR AFFECTED, USE THE FOLLOWING
SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



15'x42" (STANDARD)
R9-11A
20'x32" (MIN.)
35'x36" (STANDARD)
R9-2A



SCALE: 1" = 50'
30' 50' 60'

TABLE A
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1
TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER	L MINIMUM
MERGING TAPER	1/2 L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
DOWNSTREAM TAPER	50 FEET MINIMUM
TWO-WAY TRAFFIC TAPER	50 FEET MINIMUM
(USE IS OPTIONAL)	100 FEET MAXIMUM

TABLE A-2
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	A	B	C
URBAN LOW SPEED - 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN MEDIUM SPEED - 30 TO 35 MPH	150 FEET	150 FEET	150 FEET
URBAN HIGH SPEED - MORE THAN 35 MPH TO 40 MPH	200 FEET	200 FEET	200 FEET
URBAN HIGH SPEED - MORE THAN 40 MPH	300 FEET	300 FEET	300 FEET
RURAL	400 FEET	400 FEET	400 FEET
EXPRESSWAY/FREEWAY	600 FEET	600 FEET	600 FEET

TABLE A-3
TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS

Speed in mi/hr	Width of Offset*	Distance in Feet
20	12 Feet	115 FEET
25	12 Feet	115 FEET
30	12 Feet	115 FEET
35	12 Feet	115 FEET
40	12 Feet	115 FEET
45	12 Feet	115 FEET
50	12 Feet	115 FEET
55	12 Feet	115 FEET
60	12 Feet	115 FEET
65	12 Feet	115 FEET
70	12 Feet	115 FEET
75	12 Feet	115 FEET
80	12 Feet	115 FEET
85	12 Feet	115 FEET
90	12 Feet	115 FEET
95	12 Feet	115 FEET
100	12 Feet	115 FEET

* Period speed, off-peak 85th percentile speed prior to starting, or the anticipated operation speed.

** For other offset widths, apply the formula in table A-1.

FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{V^2}{2S} \quad \text{or} \quad L = \frac{V^2}{2S} \quad \text{or} \quad L = \frac{V^2}{2S}$$

L = 1/2 W (40 MPH OR LESS) L = W (45 MPH OR GREATER)
L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = SPEED IN MPH

Call before you dig.

DIGALERT
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
TO GET LIGHT AND SERVICE ALERT
(811)
www.811.org
Call before you dig.

APPLICANT: PROJECT #9967 BACKBONE APP#1
WEST LN TO
SUNFYS MPET ME VALUET
UNDERGROUND CROSSING
JN#

AGENCY/CITY: STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2486
FAX: 408-504-2486
EMAIL: RAY.DELGADO@SLEINC.COM

DATE: 10/10/2019
DATE: 10/10/2019
DATE: 10/10/2019
DATE: 10/10/2019

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE RESTRICTED AND/OR ALTERED, USE THE FOLLOWING
SIGNS TO ADVISE AND REDIRECT FOOT TRAFFIC.



18" X 24" (STANDARD)
RS-11A



20" X 32" (MAX.)
RS-24 (STANDARD)

TABLE A-3

TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS

STOPPING SIGHT DISTANCE AS
A FUNCTION OF SPEED

Speed in MPH	Width of Obstacle	Distance
20	11 Feet	115 FEET
25	12	145 FEET
30	15	185 FEET
35	15	230 FEET
40	20	280 FEET
45	20	330 FEET
50	25	390 FEET
55	30	455 FEET
60	35	525 FEET
65	40	600 FEET
70	45	680 FEET
75	50	770 FEET
80	55	860 FEET

* Posted speed, off-peak 85th percentile speed prior to standing, or the anticipated
operation speed.

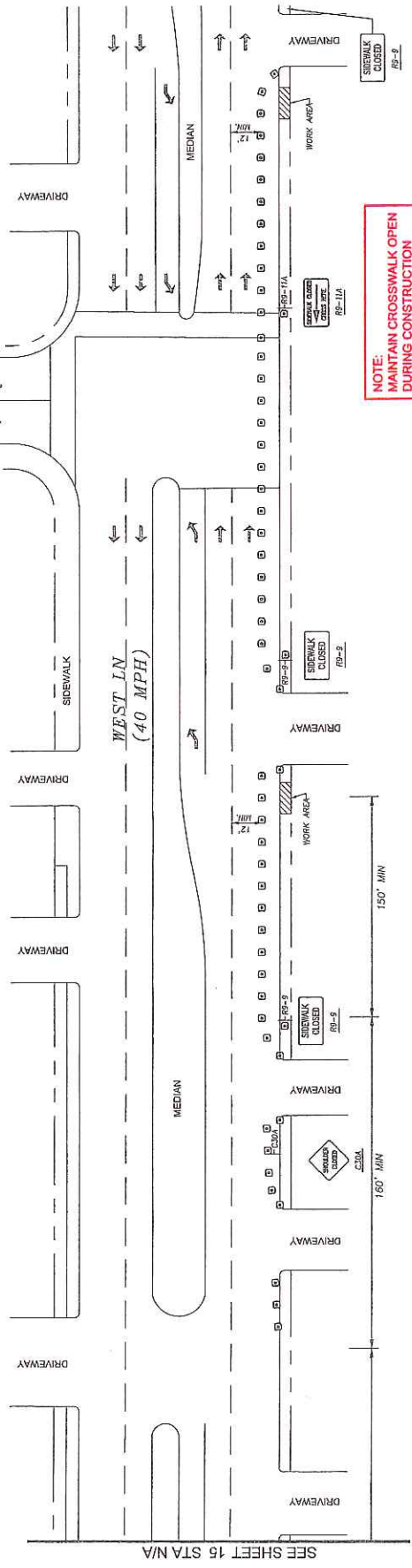
** For other offset widths, apply the formula in table A-1.

REVIEWED () AS NOTED BY:

NOTE: See Table A
and Table Lengths

DATE: 11/20
PERMIT #: 1111111111111111
PROJECT: 1111111111111111
THESE CONTROL PLANS AS
FIELD CONDITIONS DICTATE

CITY OF STOCKTON



NOTE: MAINTAIN CROSSWALK OPEN
DURING CONSTRUCTION

TABLE A

MINIMUM RECOMMENDED DELIVERABLE AND SIGN PLACEMENT

TABLE A-1

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
SHOULDER TAPER	MINIMUM 12 L MINIMUM
SHOULDER TAPER	MINIMUM 10 L MINIMUM
DOWNSTREAM TAPER	MINIMUM 50 FEET MINIMUM
DOWNSTREAM TAPER	100 FEET MAXIMUM
(USE IS OPTIONAL)	

TABLE A-2

RECOMMENDED ADVANCE WARNING SIGN SPACINGS

ROAD TYPE	A	B	C
URBAN (LOW SPEED: 25 MPH OR LESS)	100 FEET	100 FEET	100 FEET
URBAN (HIGH SPEED: MORE THAN 25 MPH TO 40 MPH)	250 FEET	250 FEET	250 FEET
RURAL (LOW SPEED: 25 MPH OR LESS)	500 FEET	500 FEET	500 FEET
RURAL (HIGH SPEED: MORE THAN 25 MPH)	1000 FEET	1000 FEET	1000 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1000 FEET	2500 FEET

FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{V^2}{S} \quad \text{V} \geq 40 \text{ MPH OR LESS} \quad L = \frac{V^2}{S} \quad \text{V} \geq 40 \text{ MPH OR GREATER}$$

L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = SPEED IN MPH

811

Call before you dig.
Know what's below.

PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2186
EMAIL: RAYDEL@GMAIL.COM (P. INC)
NICK - JELGADO
CELL: 408-666-3448
EMAIL: NICKJELGADO@GMAIL.COM

AGENCY:

APPLICANT:

LOCATION:

PROJECT #9967_BACKBONE APP#1
WEST LN TO
STINE-SYS MEET ME VALLEY
UNDERGROUND CROSSING

DESIGNER: JN#

DATE: 11/20/11

SHEET 16 OF 24

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE RESTRICTED AND/OR AFFECTED, USE THE FOLLOWING
SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



18-42 (STANDARD)
R9-11A

20'-0" (MIN.)
35'-0" (STANDARD)



TABLE A-3
TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS

LENGTH OF TAPER, L, IN FEET		STOPPING SIGHT DISTANCE, AS A FUNCTION OF SPEED	
Speed in Miles per Hour	Width of Shoulder*	Speed in MPH*	Distance
20	11 Feet	20	115 FEET
25	73	25	155 FEET
30	115	30	200 FEET
35	155	35	250 FEET
40	195	40	300 FEET
45	235	45	350 FEET
50	275	50	400 FEET
55	315	55	450 FEET
60	355	60	500 FEET
65	395	65	550 FEET
70	435	70	600 FEET
75	475	75	650 FEET
80	515	80	700 FEET
85	555	85	750 FEET
90	595	90	800 FEET
95	635	95	850 FEET
100	675	100	900 FEET

* Posted speed, off-peak 85th percentile speed prior to starting, or the anticipated
operation speed.

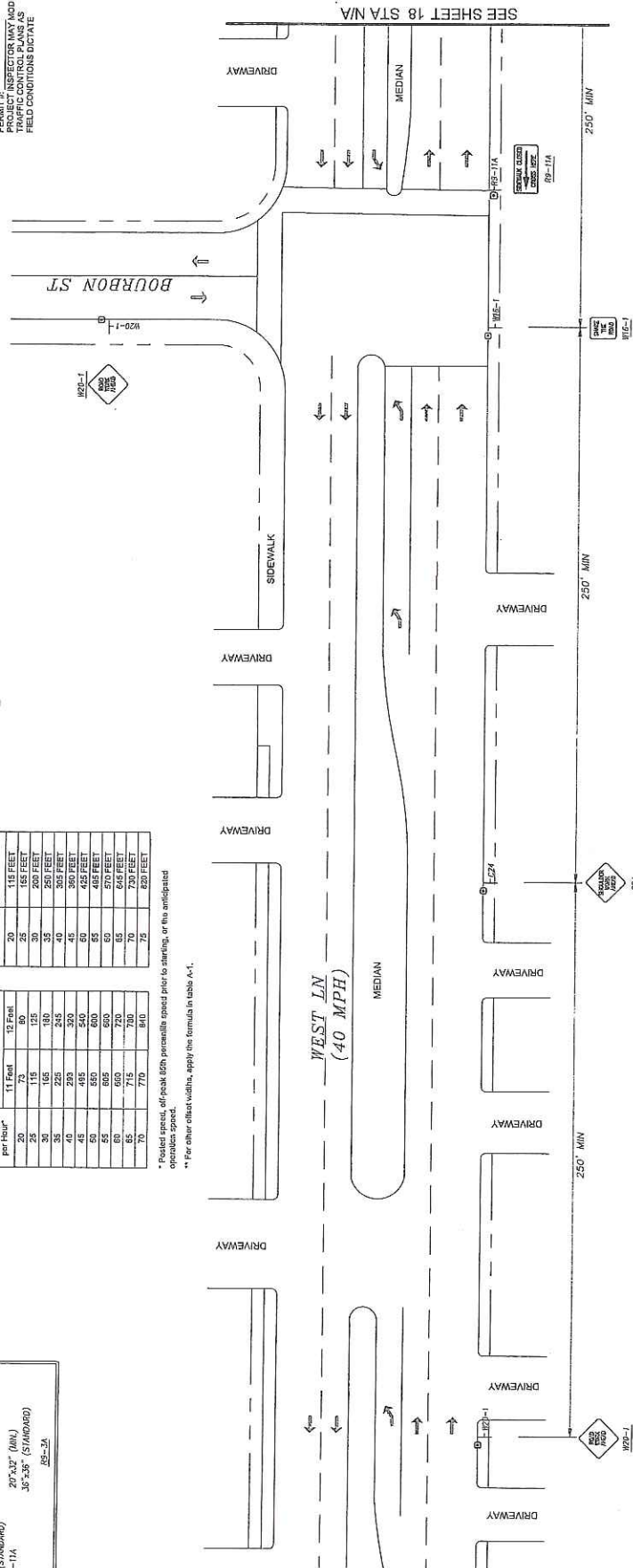
** For other offset widths, apply the formula in table A-1.

REVIEWED () AS NOTED) BY:

NOTE: See Table A
for Sign, Color Spacing,
and Taper Lengths

DATE: 11/15/10
PROJECT: WEST LN TO
PROJECT INSPECTOR MAY MODIFY
TRAFFIC CONTROL PLANS AS
FIELD CONDITIONS DICTATE

CITY OF STOCKTON



FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{V^2}{2S} \quad (40 \text{ MPH OR LESS}) \quad L = \frac{V^2}{2S} \quad (40 \text{ MPH OR GREATER})$$

TABLE A-2
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	A	B	C
URBAN LOW SPEED, 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN MEDIUM SPEED, 30-40 MPH	200 FEET	200 FEET	200 FEET
URBAN HIGH SPEED, MORE THAN 40 MPH	300 FEET	300 FEET	300 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1000 FEET	2000 FEET

TABLE A
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TYPE OF TAPER	MINIMUM TAPER LENGTH
SHIFTER TAPER	100 FEET MINIMUM
SHOULDER TAPER	121 FEET MINIMUM
DOWNSTREAM TAPER	121 FEET MINIMUM
DOWNSTREAM TAPER (USE IS OPTIONAL)	100 FEET MINIMUM

TABLE A-1
TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

811
DIGALERT
CALL TOLL FREE
AN HOURS BEFORE YOU DIG
IF AN UNDERGROUND SERVICE ALERT
(USA)
MAY SAVE YOUR LIFE!
Call before you dig.

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2485
FAX: 408-504-2485
EMAIL: RAY.DELGADO@SLENGR.COM
1501 J STREET, SUITE 100, STOCKTON, CA 95210

APPLICANT:
ASTOUND BROADBAND

LOCATION:
PROJECT #9967, BACKBONE APP#1
WEST LN TO
SINIFESYS MEET ME VAULT
UNDERGROUND CROSSING
JNH

DESIGN: 10/10/10
DATE: 10/10/10
SHEET: 17 OF 24

REVIEWED () AS NOTED BY:

NOTE: See Table A-1
for Sign, Color, Spacing,
and Taper Lengths

DATE: 1/22
PERMIT #
ENGINEER'S SIGNATURE
TRAFFIC CONTROL PLANS AS
FIELD CONDITIONS DICTATE

TABLE A-3

TABLE A-3
TAPER LENGTH RECOMMENDATIONS
USE IN TYPICAL APPLICATIONS DIAGRAM

LENGTH OF TAPER 'L' IN FEET		STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED	
Speed in Miles per Hour*	Width of Object*	Speed in MPH	Distance
20	11	20	115 FEET
25	11	25	165 FEET
30	11	30	200 FEET
35	11	35	260 FEET
40	11	40	305 FEET
45	11	45	355 FEET
50	11	50	405 FEET
55	11	55	455 FEET
60	11	60	505 FEET
65	11	65	555 FEET
70	11	70	605 FEET
75	11	75	655 FEET
80	11	80	705 FEET
85	11	85	755 FEET
90	11	90	805 FEET
95	11	95	855 FEET
100	11	100	905 FEET

* Posted speed, off-peak 85th percentile speed prior to starting, or the anticipated operation speed.

** For other object widths, apply the formula in Table A-1.

TABLE A

MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPERS	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
TWO-WAY TRAFFIC TAPER	50 FEET MINIMUM
DOWNSTREAM TAPERS	
(USE IS OPTIONAL)	100 FEET MAXIMUM

FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS^2}{100}$$

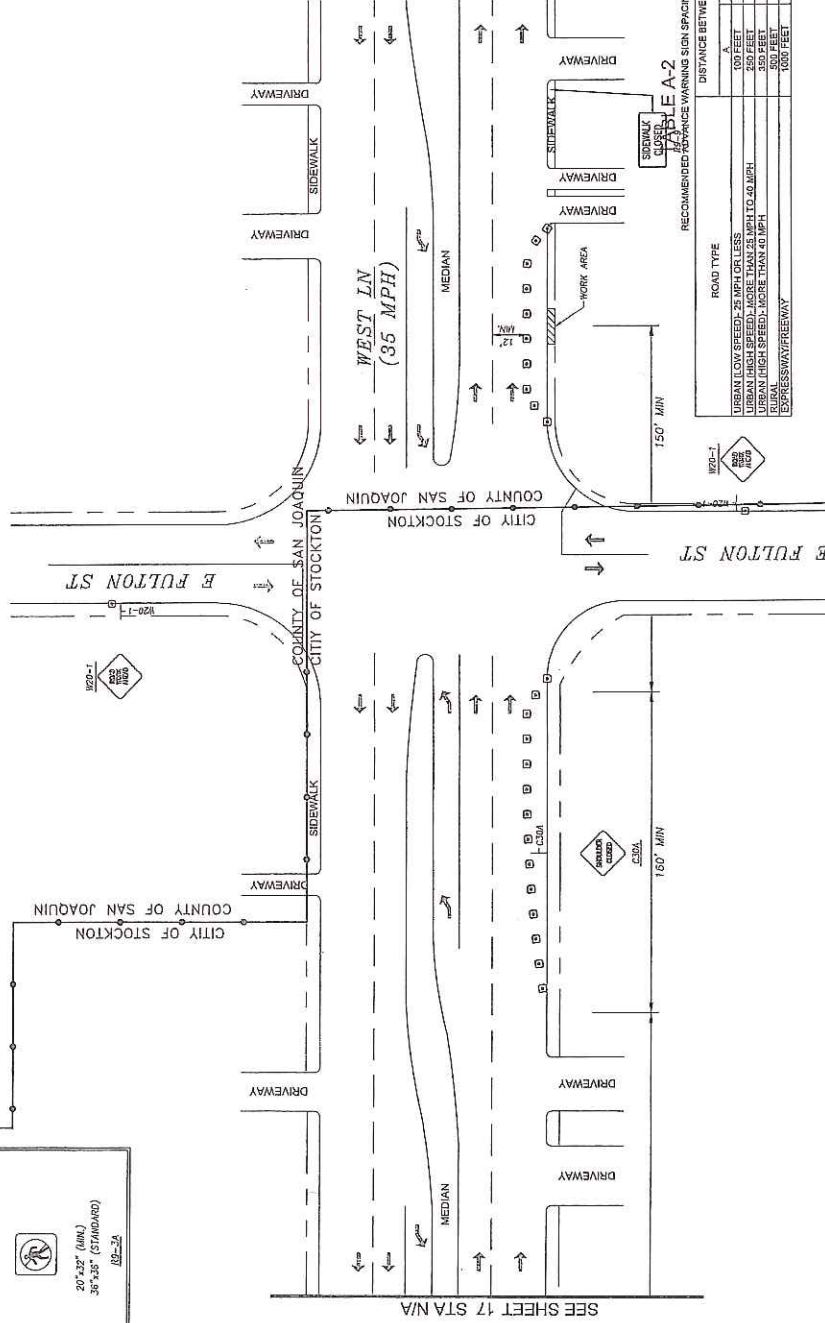
L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET
S = SPEED IN MPH

NOTE TO CONTRACTOR:
SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE MAINTAINED CLEAR OF THE FOLLOWING
SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



18" x 24" (STANDARD)
R9-11A
30" x 36" (STANDARD)
R9-11A

18" x 24" (MIN)
R9-11A



ROAD TYPE	A	B	C
URBAN LOW SPEED, 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN MEDIUM SPEED, 30-40 MPH	150 FEET	150 FEET	150 FEET
URBAN HIGH SPEED, MORE THAN 40 MPH	200 FEET	200 FEET	200 FEET
RURAL	300 FEET	300 FEET	300 FEET
EXPRESSWAY/FREEWAY	500 FEET	500 FEET	500 FEET



SCALE: 1" = 50'

811
Call before you dig.
newline's location.

REV.	DATE	DESCRIPTION	BY

PLAN REVISIONS

STRUCTURE LEASING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2485
FAX: 408-504-2485
EMAIL: RAY@SL&E.COM
PROJECT: 17 STA N/A
DATE: 1/22/2020
DRAWN BY: RAY DELGADO
CHECKED BY: RAY DELGADO
APPROVED BY: RAY DELGADO

APPLICANT:
wave
ASTOUND
BROADBAND

AGENCY:
CITY OF STOCKTON

PROJECT #: 9967 BACKBONE APP#1
**WEST LN TO
TIMESYS MEET ME VALLEY
UNDERGROUND CROSSING**

DATE: 1/22/2020
DATE: 1/22/2020
DATE: 1/22/2020

89-16

REVIEWED (____AS NOTED) BY:

NOTE: See Table A for Sign, Cono Spacing and Taper Lengths

DATE: / / 20
 PERMIT #:
 PROJECT INSPECTOR MAY MODIFY
 TRAFFIC CONTROL PLANS AS
 FIELD CONDITIONS DICTATE

TABLE A-2

RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	A	B	C
URBAN (LOW SPEED); 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN (MEDIUM SPEED); 35 MPH TO 45 MPH	250 FEET	250 FEET	250 FEET
URBAN (HIGH SPEED); MORE THAN 45 MPH	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1000 FEET	1000 FEET

TABLE A-3

**TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS**

Length of Paper, $\frac{1}{2}$ in. in Feet	Speed in Miles per Hour		Width of Paper, $\frac{1}{2}$ in. in Feet
	11 Foot	12 Foot	
20	73	80	
25	75	80	
30	75	80	
35	103	115	
40	103	115	
45	225	245	
50	225	245	
55	225	245	
60	225	245	
65	495	540	
70	495	540	
75	550	600	
80	550	600	
85	605	650	
90	605	650	
95	605	650	
100	65	75	
105	715	760	
110	715	760	
115	770	840	
120	770	840	

* Posted speed, off-peak 85th percentile speed prior to starting, or the anticipated

** For other offset widths, apply the formula in table A-1.

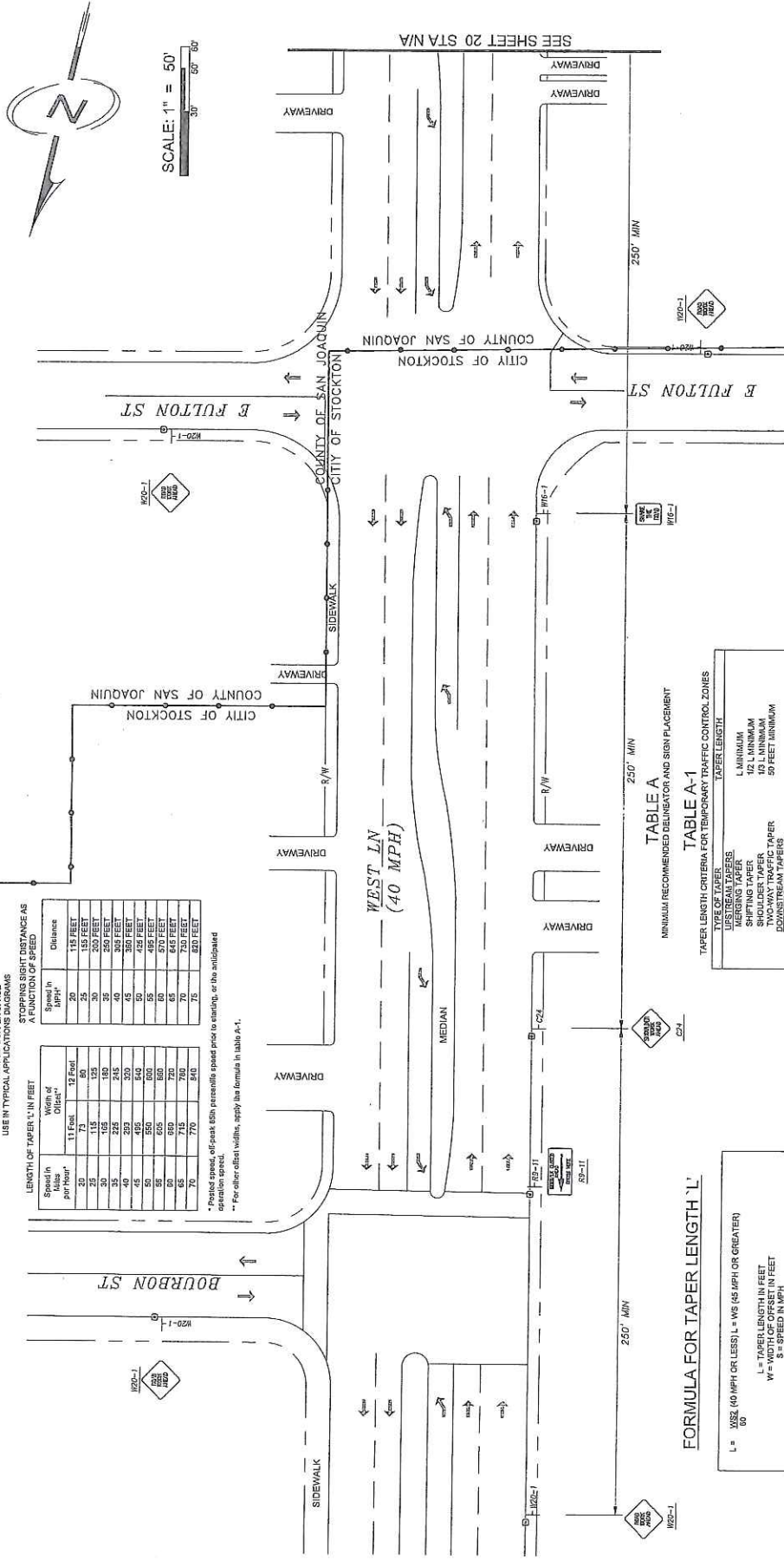


TABLE A

TABLE A
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPERS	
MERGING TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
SHOULDER TAPER	1/3 L MINIMUM
TWO-WAY TRAFFIC TAPER	50 FEET MINIMUM
DOWNSTREAM TAPERS	
(USE IS OPTIONAL)	400 FEET MINIMUM

FORMULA FOR TAPER LENGTH¹

$$L = \frac{WS^2}{50} \text{ (40 MPH OR LESS) } L = WS \text{ (45 MPH OR GREATER)}$$

L = TAPER LENGTH IN FEET
W = WIDTH OF OFFSET IN FEET

DIGALERT

CALL TOLL FREE
9 HOURS BEFORE YOU DIE

(1.12)

Call before you dig.

PLAN REVISIONS

DESCRIPTION

[illegible]

THESE YOU DIG
S. S. F. 011-1/21-1111
(1991)

1924.

More you dig.

AGENCY/CITY:

STRUCTURE LEASING & ENGINEERING INC.
DAY, DEL CADO

CELL: 408-504-2486
EMAIL: PAVYJ@GADG.COM TEL: (503) 447-4447

NRK DETCART
CELL: 408-686-3441

LEAH: NIKKI + GADGETS & GLOVES #11

1

APPLICANT:

wave
ACTOFLAND
BROADBAND

LOCATION:
PROJECT #9967_BACKBONE APP#1

WEST LN TO
SUNESYS METEOR ME VAULT
UNDERGROUND CROSSING

INT

DATE: 10/1/2016

DATE: 10/14/2010	SHEET
DATE: 10/14/2010	19 OF 24

COUNTY OF SAN JOAQUIN

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE RESTRICTED AND/OR AFFECTED, USE THE FOLLOWING
SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



18" x 48" (STANDARD)
R9-11A



20" x 32" (AASHTO)
R9-3A

TABLE A-3
TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATION DIAGRAMS

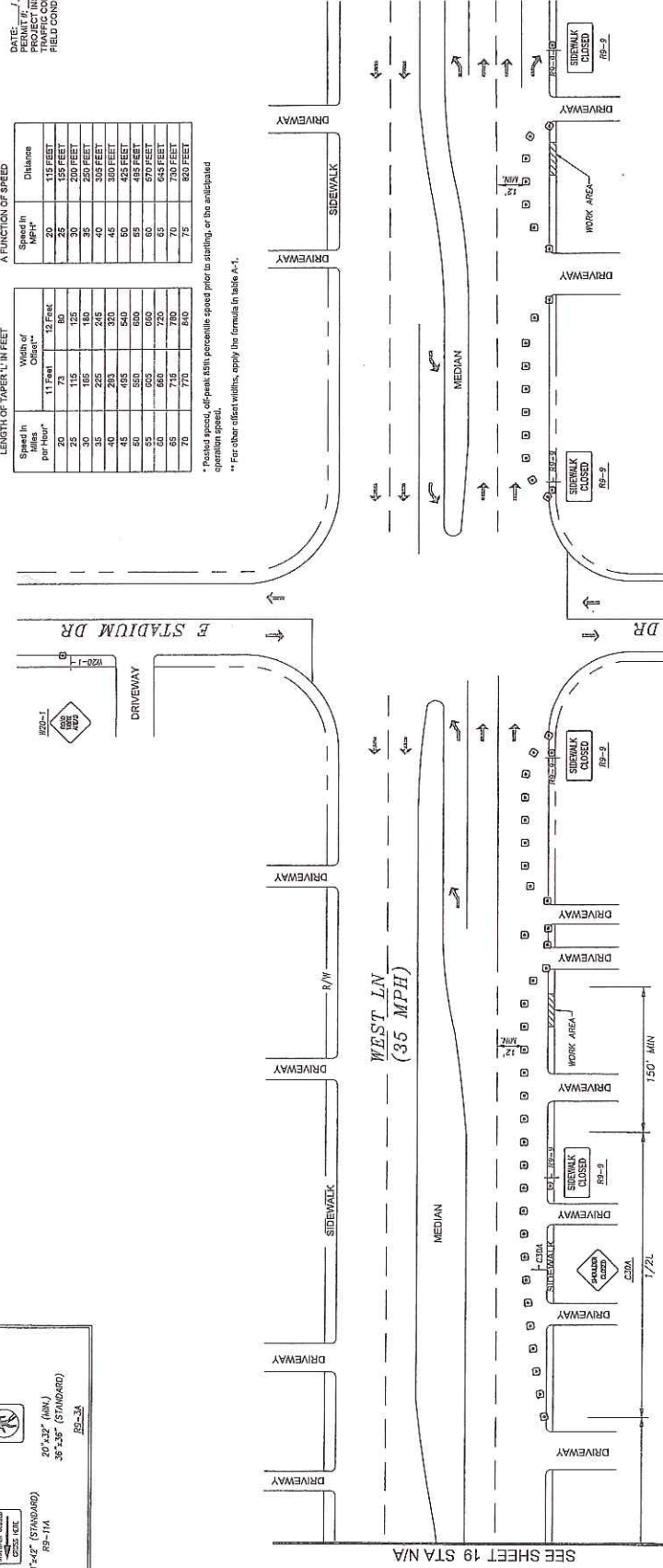
LENGTH OF TAPER "L" IN FEET		STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED	
Speed in mi/hr	Width of Clearance ft	Speed in mi/hr	Distance ft
20	11	20	115
25	11	25	135
30	11	30	155
35	11	35	175
40	11	40	195
45	11	45	215
50	11	50	235
55	11	55	255
60	11	60	275
65	11	65	295
70	11	70	315
75	11	75	335
80	11	80	355
85	11	85	375
90	11	90	395
95	11	95	415
100	11	100	435
105	11	105	455
110	11	110	475
115	11	115	495
120	11	120	515
125	11	125	535
130	11	130	555
135	11	135	575
140	11	140	595
145	11	145	615
150	11	150	635
155	11	155	655
160	11	160	675
165	11	165	695
170	11	170	715
175	11	175	735
180	11	180	755
185	11	185	775
190	11	190	795
195	11	195	815
200	11	200	835

* Posted speed, off-peak 85th percentile speed prior to starting, or the unregulated operation speed.

** For other offset widths, apply the formula in table A-1.

REVIEWED () AS NOTED BY:
NOTE: See Table A
for Sign, Color, Spacing,
and Taper Lengths.

DATE: 1/1/20
PERMIT IF: INSPECTOR MAY MODIFY
TRAFFIC CONTROL PLANS AS
FIELD CONDITIONS DICTATE



FORMULA FOR TAPER LENGTH "L"

$$L = \frac{WS^2}{60} \quad \text{L = TAPER LENGTH IN FEET}$$

$$W = \text{WIDTH OF TAPER IN FEET}$$

$$S = \text{SPEED IN MPH}$$

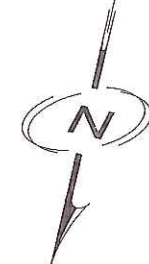
TABLE A-2
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	A	B	C
URBAN LOW SPEED: 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN MEDIUM SPEED: 30 TO 40 MPH	100 FEET	100 FEET	100 FEET
URBAN HIGH SPEED: MORE THAN 40 MPH	300 FEET	300 FEET	300 FEET
RURAL LOW SPEED: 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
RURAL MEDIUM SPEED: 30 TO 40 MPH	100 FEET	100 FEET	100 FEET
RURAL HIGH SPEED: MORE THAN 40 MPH	300 FEET	300 FEET	300 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1000 FEET	2500 FEET

TABLE A
MAXIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1
TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER	L MINIMUM
SHIFTING TAPER	1/2 L MINIMUM
DOWNSTREAM TAPER	L MINIMUM
TWO-WAY TRAFFIC TAPER	50 FEET MINIMUM
DOWNSTREAM TAPERS	100 FEET MAXIMUM
(USE IS OPTIONAL)	



SCALE: 1" = 50'

811
Call before you dig.
Call toll free
800-451-7247
800-451-7247
800-451-7247

REV.	DATE	DESCRIPTION	BY

STRUCTURE LEASING & ENGINEERING INC.
RAY DELGADO
CELL: 408-504-2486
1324 S. RAY ST. CHICO, CA 95926
HQR: 701 GARD
CELL: 408-886-1440
EMAIL: MARGARET@SLENGR.COM

APPLICANT:
wave
ASTOUND
BROADBAND
INC.

LOCATION:
PROJECT #9987_BACKBONE APP#1
WEST LN TO
STADIUM DR
UNDERGROUND CROSSING

AGENCY:
COUNTY OF SAN JOAQUIN

DATE: 01/01/20
DATE: 01/01/20
DATE: 01/01/20

SHEET
20 OF 24

NOTE TO CONTRACTOR:
IF SIDEWALK AND/OR ANY PEDESTRIAN TRAFFIC ARE TO
BE RESTRICTED AND/OR AFFECTED, USE THE FOLLOWING
SIGNS TO BLOCK AND REDIRECT FOOT TRAFFIC.



19'x42" (STANDARD)
R9-11A



20'x32" (MIN.)
35'x35" (STANDARD)
R9-12A

TABLE A-3
TAPER LENGTH AND BUFFER SPACE
USE IN TYPICAL APPLICATIONS DIAGRAMS

LENGTH OF TAPER 'L' IN FEET			MINIMUM BUFFER DISTANCE AS A FUNCTION OF SPEED		
Speed in Miles per Hour*	Width of Shoulder Feet**	Length of Taper Feet	Speed in Miles per Hour*	Width of Shoulder Feet**	Length of Taper Feet
20	7.5	80	30	11.5	125
25	11.5	125	35	15.5	165
30	15.5	165	40	19.5	205
35	19.5	205	45	23.5	245
40	23.5	245	50	27.5	285
45	27.5	285	55	31.5	325
50	31.5	325	60	35.5	365
55	35.5	365	65	39.5	405
60	39.5	405	70	43.5	445
65	43.5	445	75	47.5	485
70	47.5	485	80	51.5	525
75	51.5	525	85	55.5	565
80	55.5	565	90	59.5	605
85	59.5	605	95	63.5	645
90	63.5	645	100	67.5	685
95	67.5	685	105	71.5	725
100	71.5	725	110	75.5	765
105	75.5	765	115	79.5	805
110	79.5	805	120	83.5	845

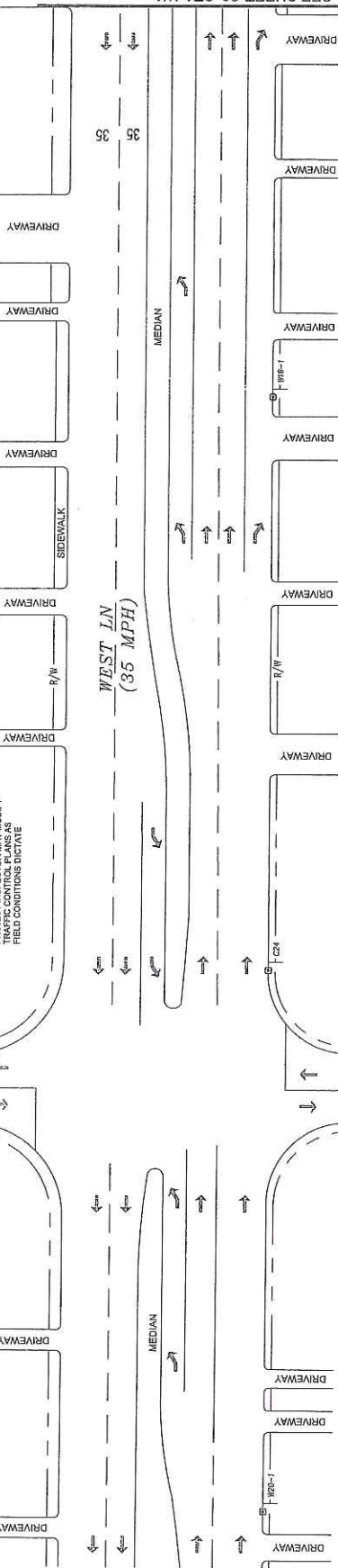
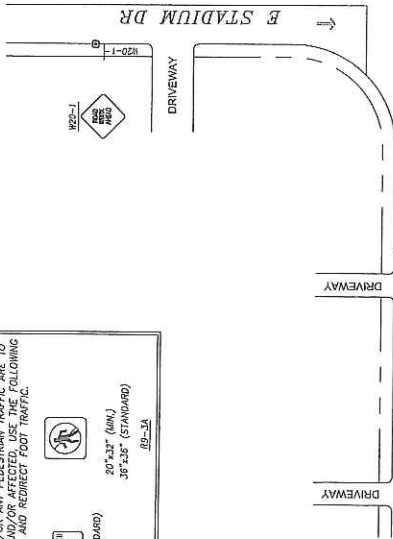
* Posted speed, off-peak 85th percentile speed prior to staffing, or the anticipated operation speed.

** For other offset widths, apply the formula in Table A-1.

REVIEWED (AS NOTED) BY:

NOTE: See Table A
for Sign Color, Spacing,
and Taper Lengths

DATE: 1/20
PERMIT: 120
INSTRUCTIONS: 120
TRAFFIC CONTROL PLANS AS
FIELD CONDITIONS DICTATE



FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS}{S} \quad \text{WHERE: } W = \text{WIDTH OF OFFSET IN FEET} \\ S = \text{SPEED IN MPH}$$

TABLE A
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES	
TYPE OF TAPER	TAPER LENGTH
UPSTREAM TAPER	100 FEET MINIMUM
MERGING TAPER	100 FEET MINIMUM
SHIFTS TAPER	100 FEET MINIMUM
DOWNSTREAM TAPER	100 FEET MINIMUM
(USE IS OPTIONAL)	100 FEET MINIMUM

TABLE A-2
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	A	B	C
URBAN LOW SPEED, 35 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN MEDIUM SPEED, 40 TO 45 MPH	150 FEET	150 FEET	150 FEET
URBAN HIGH SPEED, MORE THAN 45 MPH TO 60 MPH	200 FEET	200 FEET	200 FEET
RURAL	300 FEET	300 FEET	300 FEET
EXPRESSWAY/FREEWAY	500 FEET	500 FEET	500 FEET

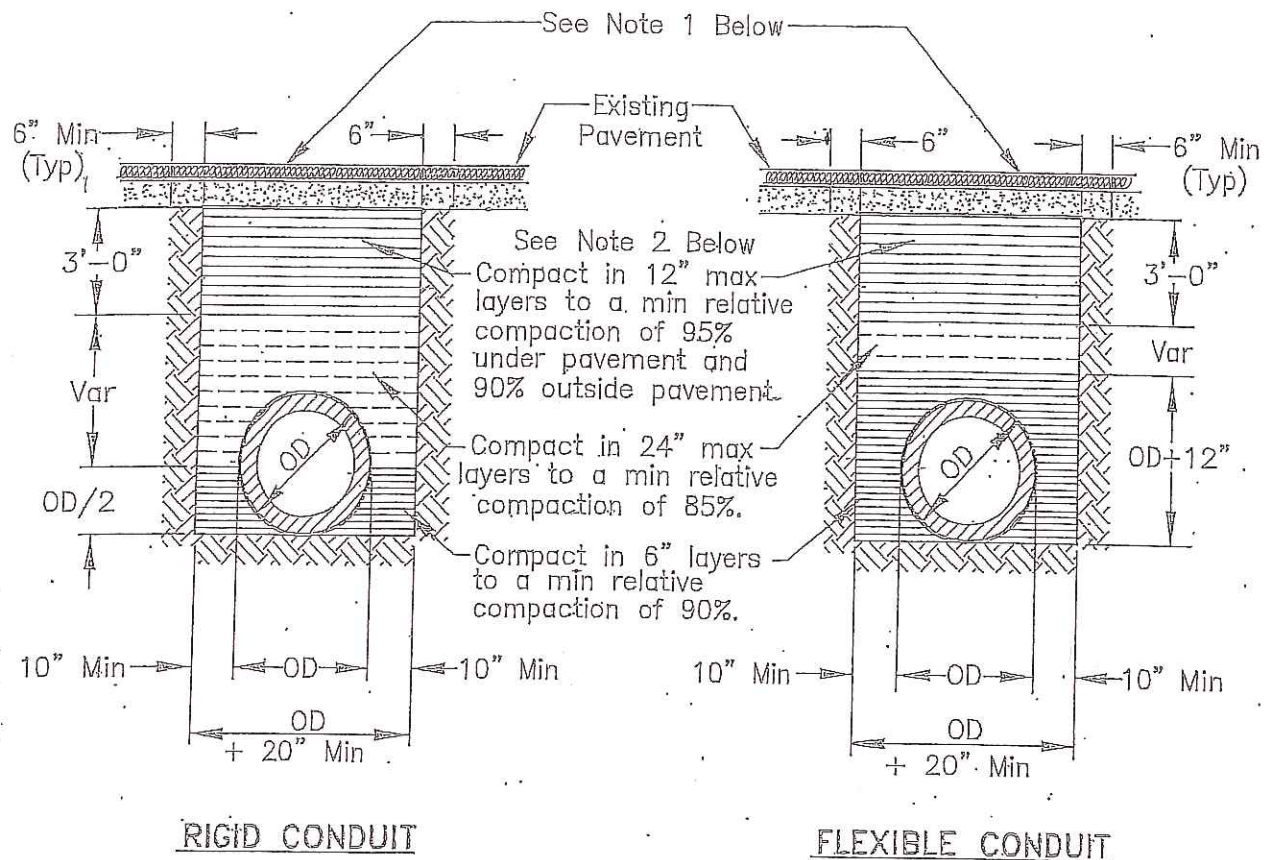
811
CALL TOLL FREE
48 HOURS BEFORE YOU DIG
1-800-4-A-SHIRT
Call before you dig.

REV.	DATE	DESCRIPTION	BY

STRUCTURE LADING & ENGINEERING INC
RAY DELGADO
CELL: 408-504-2485
FAX: 408-504-2486
HIRE: 408-504-2486
12001 MARKET GARDEN LANE, SUITE 100, SAN JOSE, CA 95128

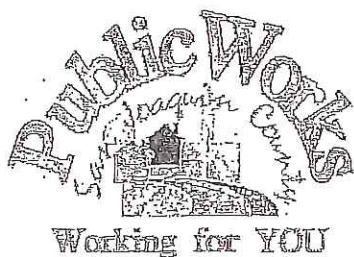
ASTOUND
ROADBAND
APPLICANT: PROJECT #9967 BACKBONE APP#1
WEST LN TO
TIMMERS MET ME VALU
UNDERGROUND CROSSING

LOCATION: PROJECT #9967 BACKBONE APP#1
WEST LN TO
TIMMERS MET ME VALU
UNDERGROUND CROSSING
DATE: 10/20/2019
DATE REVISED: 21 OF 24



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. Glick

No.	Revision	Description	Date

Date: DEC 2014

Std. Dwg. No.

R-29

CONCRETE CURB, GUTTER AND SIDEWALK CONSTRUCTION NOTES

1. Curb, gutter and sidewalk construction shall conform to Section 73, Standard Specifications, California Department of Transportation (Caltrans), except as modified herein.
2. Reference is made to the local agencies Standard Specifications for additional requirements relating to the construction of concrete curb, gutter and sidewalk.
3. Subgrade for Curb, gutter and sidewalk and Driveways shall be compacted to a minimum relative compaction of 90% to a depth of 6". Where the subgrade "R" value is less than 30, place 4" minimum of aggregate subbase class IV under the concrete sections and compacted to a minimum of 95%.
4. All radii for rounding edges shall be 3/4" unless otherwise noted.
5. Portland cement concrete shall be Class 3, per Caltrans Section 90, Standard Specifications, California Department of Transportation (Caltrans), except as modified herein.
6. Expansion joints and weakened plane joint shall be placed as indicated elsewhere in the Construction Standards. Expansion joint spacing shall not exceed 80'.
7. Curb, gutter and sidewalk shall have a light broom finish. curb and gutter; parallel to the flow line, Sidewalks; perpendicular to the flowline.
8. Depress a 2" high letter "W" or "S", 1 1/4" deep into the top of the curb to identify service locations.
9. During construction of gutters, water shall be used to ensure proper drainage along the flowline.
10. Access curb ramps, sidewalks and improvements in the ADA path of travel shall be constructed in conformance with the Federal Americans with Disabilities Act, California Title 24, and these Standards.



CONCRETE CURB, GUTTER AND SIDEWALK CONSTRUCTION STANDARDS

COUNTY OF SAN JOAQUIN
DEPARTMENT OF PUBLIC WORKS

Approved by:

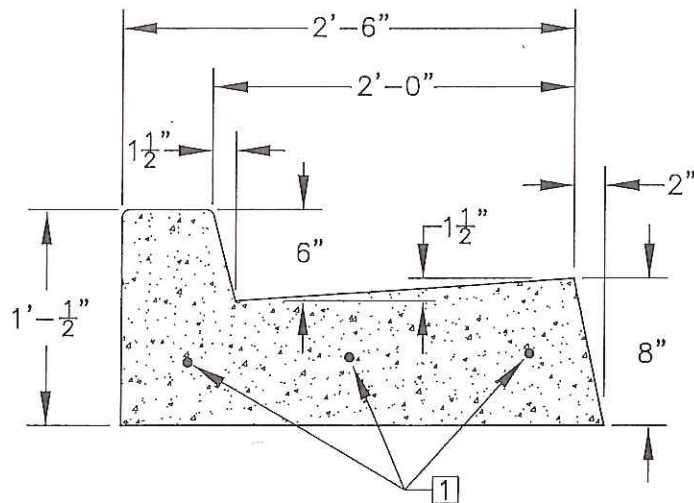
Thomas M. Hall

No.	Revision	Description	Date

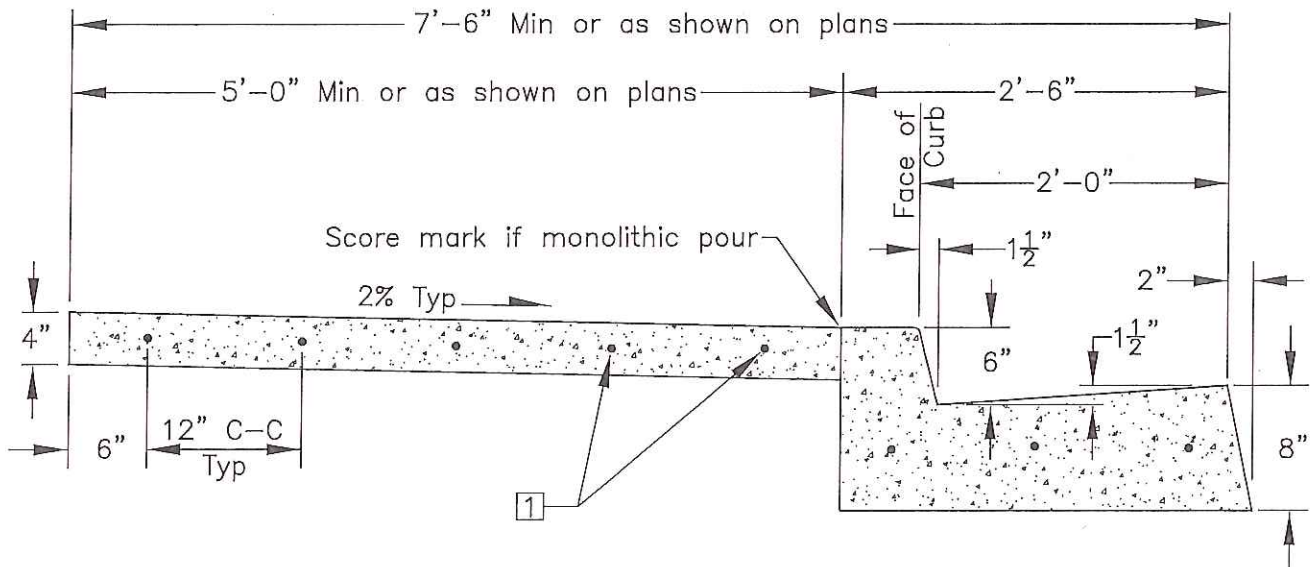
Date: DEC 2014

Std. Dwg. No.

R-5



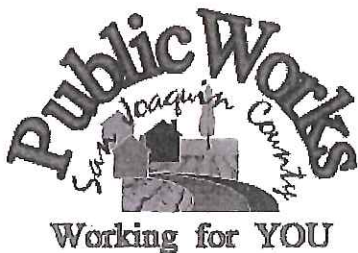
VERTICAL
CURB AND GUTTER



VERTICAL
CURB, GUTTER AND SIDEWALK

NOTES:

- 1 1/2" x 24" rebar, greased and wrapped one side through all expansion and cold joints.



**VERTICAL CURB,
GUTTER AND SIDEWALK**

COUNTY OF SAN JOAQUIN
DEPARTMENT OF PUBLIC WORKS

Date: DEC 2014

Approved by:

Thomas M. Gull

No.	Revision	Description	Date

Std. Dwg. No.

R-7

GENERAL PROVISIONS

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

PUBLIC CONVENIENCE AND SAFETY:

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

STRUCTURES:

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

REPAIRS OF THE COUNTY RIGHT-OF-WAY:

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

SPECIAL PROVISIONS

Winter Weather Utility Work

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