



# 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- 1 701301  
Date Issued: 05/09/2017  
Start Date: 05/10/2017  
Exp. Date: 06/15/2017  
Project No: PWP1 1 0005  
Quad: SE

To: KNIFE RIVER CONSTRUCTION  
P.O. BOX 6099  
STOCKTON, CA 95206

## ENCROACHMENT PERMIT

### Encroachment Type:

Trench

### Location:

E/S OF NEWCASTLE RD. APPROX 1/4 MILE N. OF RCH RD.

In compliance with your request of 05/09/2017, 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 sheets.

Trench excavations for service connections shall be permitted within ten feet (10') of pavement centerline unless otherwise approved by the Director. Surface of trench patches shall be smooth and even with that of abutting surface. Special attention shall be given to depth of utilities through roadside area and on of future drainage facilities, road profile and/or frontage development. All underground utility facilities are to be established 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 in the County right of way. All work performed under this permit shall conform to the rules and regulations pertaining to safety by the California Division of Industrial Safety and Cal-OSHA.

The jobsite shall be kept in a safe condition for pedestrian or automobile traffic. All necessary safety devices and personnel shall be provided, placed and maintained by and at the sole expense of the Permittee.

After completion of the work permitted herein, the jobsite shall be restored to original condition or better in a neat workmanlike manner. Immediately following completion (see attached post card) provided.

### Special Comments:

Traffic Control Per MUTCD\*\*\*\*See Attached

Conditions\*\*\*\*\*

DRMS: SS/WW, R-29

Permit Fee: \$569.75

KRIS BALAJI, Director  
Department of Public Works

By:   
Permit Section

- Permittee
- PWD Central File
- Field Inspection
- Permit Section



ENCROACHMENT PERMIT GENERAL PROVISIONS  
13-1

13-

- ENCROACHMENT PERMIT GENERAL CONDITIONS**  
13-1
- This permit is issued under and subject to all laws and ordinances of agencies governing the encroachment 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, 867 and 3675.**
2. It is understood and agreed by the Permittee that the performance of any work under this permit shall be in accordance with all provisions contained herein and failure on the Permittee's part to comply with any provision will constitute a revocation of this permit. Except as otherwise provided for public agencies and franchise holders, this permit is revocable at any time during the progress of the work authorized herein.
  3. All work shall be done subject to the supervision of and the satisfaction of the grantor. The Permittee shall keep the County Highway in as neat and clean condition as is possible and upon completion 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 as a result of the maintenance of the said encroachment structure, until such time as the Permittee may be relieved of such 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 to the highway as are deemed necessary by the County Department of Public Works.
  6. It is further agreed by the Permittee that whenever construction, reconstruction or maintenance of the highway is necessary, the Permittee shall, upon request of the County Department of Public Works, completely move or removed by and install the encroachment structure within the County right of way at the sole expense of the Permittee.
  7. No material used for fill or backfill in the construction of the encroachment shall be borrowed 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. Traffic control standards shall be utilized including the use of flagmen, as required by the particular work in progress. No material shall be stacked on the highway and adequate provision shall be made for the protection of the traveling public. Traffic control standards shall be utilized including approved signs and lights; and
  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 Permittee to properly perform the work provided under this permit. In the event any claim of such liability is made against the Permittee, San Joaquin or any department, official or employee thereof, the Permittee shall defend, indemnify, and hold each of them harmless from such claim.
  10. All backfill material is to be moistened as necessary and thoroughly compacted with mechanical equipment. The Permittee shall be responsible for the surface over structures placed hereunder as may be necessary to insure the return of the roadway to a completely stable condition until relieved of such responsibility by the County Department of Public Works. Wherever a gravel, crushed rock or asphalt surface is moved or damaged in the course of work related to the permitted encroachment, such material shall either be separately stored or replaced in kind, and the roadway shall be left in 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 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 consideration in the location and methods of construction utilized.
  13. The Permittee is responsible for the preservation of survey monuments located within the work area herein permitted. Prior to the start of construction, survey monuments that potentially may be disturbed shall be located 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 in accordance with the Surveyors' Act Section 8771).
  14. Prior to any excavation, the Permittee shall notify USA North (Underground Service Bureau, California and Nevada) at 811 or 800-227-2600 forty-eight (48) hours in advance.



SPECIAL CONDITIONS FOR  
KNIFE RIVER CONSTRUCTION – NEWCASTLE ROAD  
ENCROACHMENT PERMIT

1. Maintain traffic controls for all roads. Traffic control delays shall not exceed 15 minutes. Two-way traffic shall be maintained during non-working hours with excavated areas backfilled or plated. During working hours, two-way traffic control shall be maintained.
2. Access to all properties shall be maintained at all times except when work is occurring at the access point. Minimal delays will be allowed to provide access within the work zone area. Driveway access shall be fully restored at the end of each workday. Driveways disturbed by the contractor shall be replaced with in-kind or better materials.
3. Residents and businesses shall be notified in writing, as approved by the County, 48 hours in advance of any impacts to their access.
4. Any areas where parking is to be restricted shall have signs noting the restrictions in place at least 48 hours in advance.
5. Existing fences shall not be removed without written consent of the property owner. Such consent shall be submitted to the County prior to the removal. Fences removed shall be restored with in-kind or better materials. Restored fences shall not encroach into County right-of-way.
6. All destroyed or obliterated pavement markings must be replaced in kind by the permittee. Typical pavement markings include but not limited to lane lines, centerlines, stop and stop ahead legends, limit lines, raised pavement markers and miscellaneous delineators.
7. 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)
8. All future maintenance of the pipeline and related facilities within the County right-of-way will require a San Joaquin County Encroachment Permit.
9. Trenches shall be maintained in a smooth and even condition to the satisfaction of the County throughout the project limits at all times.
10. All trenches shall be completely backfilled or shored and plated at the end of each workday, and the roadway restored to two-way traffic. If plating is to be used, a trench shoring and plating plan suitable for traffic loadings shall be prepared by a registered civil engineer and submitted for prior approval by the County.
11. The contractor shall use San Joaquin County Improvement Standard R-29 when backfilling trenches within the County right-of-way. Where the existing road structural section is below standard, a minimum section of 3 inches of asphalt concrete over 8 inches of aggregate base shall be required.

12. Contractor shall establish existing roadway and drainage grades within the construction area. Any repair to roadways and adjacent areas shall match existing grades. Any proposed grade changes shall receive prior approval from County.
13. Above ground vaults, panels and/or other similar facilities will be allowed within the right-of-way if located as far to the outside edge as possible. Utility vaults shall be located a minimum of 4'-0" from edge of pavement.
14. County roads shall be kept clean from mud and debris at all times along the access points and work zone areas during entire project. All standard roadway striping and signage shall be clearly visible, maintained and restored throughout the construction zone during and after the project.
15. In addition to standard dust control measures, streets shall be maintained in a clean condition, free of dirt, mud and debris during construction activities. The contractor shall provide daily, or as needed, street sweeping using a modern mechanical or vacuum-assisted street sweeper.



# APPLICATION FOR ENCROACHMENT PERMIT

PLEASE PRINT:

Date 5-4-17

To: San Joaquin County  
Department of Public Works

Knife River Construction  
(Applicant Name)

P.O. Box 6099  
(Mailing Address)

Stockton, CA 95206  
(City, State, Zip Code)

209-948-0302  
(Area Code - Telephone Number)

leo.vasconcelos@kniferiver.com

Sketch (Detailed plans may be submitted)

Shoulder closure for Joint Trench and Rule 20  
work from City/County line 575 FT South  
of Arch Road to 900 FT South of Arch  
Road.

## OFFICE USE ONLY

JOB #	<u>110005</u>	REF #	
APN		CR #	
EXP. DATE	<u>6/15/17</u>		
VALID	<u>5/1/17</u> TO <u>6/15/17</u>		
STREET	<u>Newcastle Rd.</u>		DRIVEWAYS:
AREA	<u>Stockton</u> QUAD <u>56</u>		*
TYPE	<u>Trenching</u>		*
FORMS	<u>R-29, SS/WW</u>		*
NOTES			

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the East side of Newcastle Rd approximately 500 FT feet/mile SOUTH of ARCH RD. by performing the following work (description of work):  
See notes above and attached Plans.

Work will commence on or about ASAP for approximately 20 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.

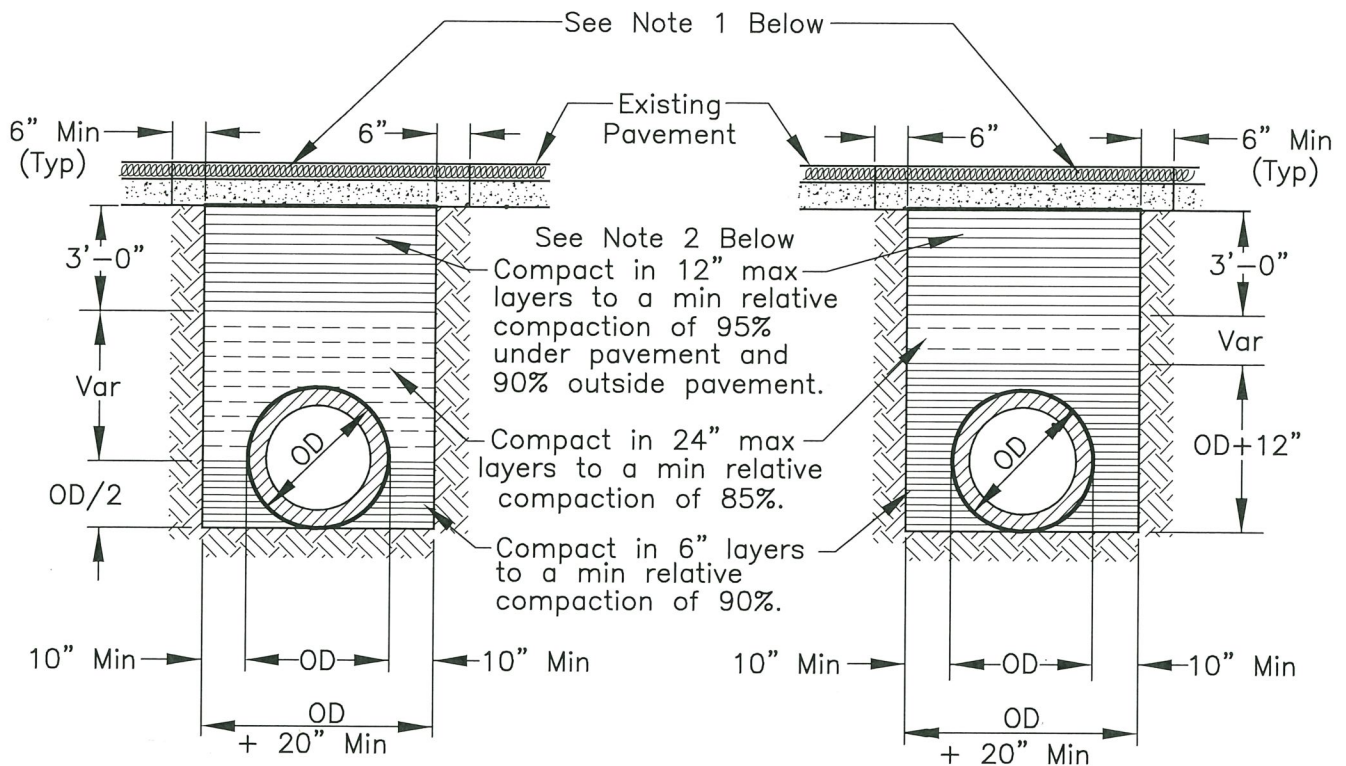
Signature of Applicant - Title

Leo Vasconcelos

Date

5/4/17



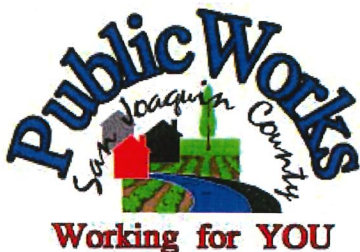


**RIGID CONDUIT**

**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. Gull*

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.



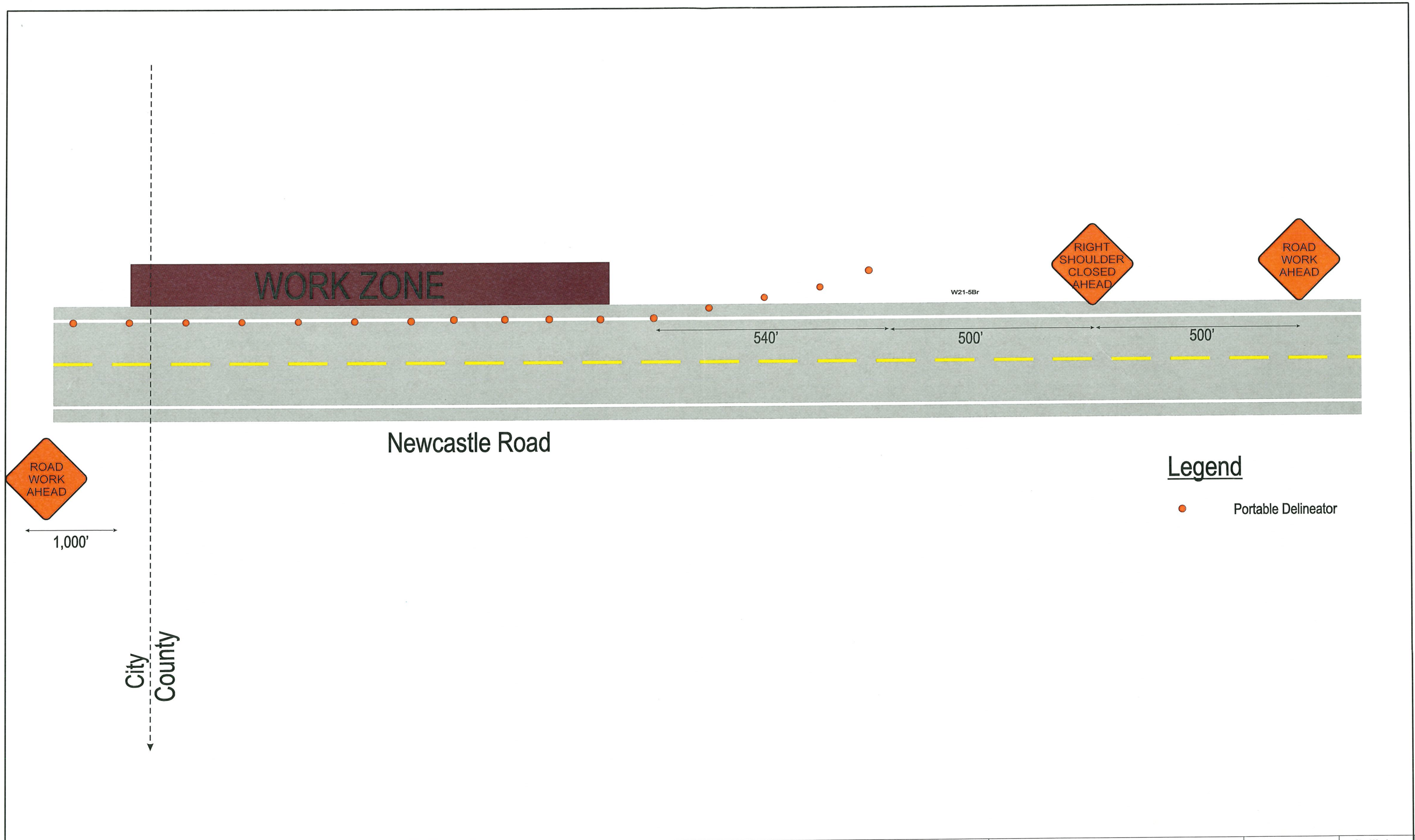
## SPECIAL PROVISIONS

### Winter Weather Utility Work

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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.





# APPLICATION FOR ENCROACHMENT PERMIT

## PLEASE PRINT:

Date 07/18/19

To: San Joaquin County  
Department of Public Works

AT&T / VCC PERMITS DESK

(Applicant Name)

5555 E. Olive Ave

(Mailing Address)

Fresno, CA 93727

(City, State, Zip Code)

(559) 454-4900 g26977@att.com

(Area Code - Telephone Number)

## OFFICE USE ONLY

JOB # 730079 REF # \_\_\_\_\_

APN \_\_\_\_\_ CR # \_\_\_\_\_

EXP. DATE \_\_\_\_\_

VALID \_\_\_\_\_ TO \_\_\_\_\_

STREET \_\_\_\_\_

AREA \_\_\_\_\_ QUAD \_\_\_\_\_

TYPE \_\_\_\_\_

FORMS \_\_\_\_\_

NOTES \_\_\_\_\_

DRIVEWAYS:

\*

\*

\*

Sketch (Detailed plans may be submitted)

A COPY OF THE TRAFFIC CONTROL PLAN IS SUBMITTED WITH THIS PERMIT;  
SEE ATTACHMENTS

*John McDowell*  
*(209) 578-7155*

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the EAST side of HARLAN RD approximately 570 feet mile NORTHEAST of E TRANSPORTATION CT, by performing the following work (description of work):  
ACCESS SPLICEBOX# 1254 TO SPLICE EXISTING FIBER CABLE. THE ASSOCIATED TCP IS  
SUBMITTED WITH THIS PERMIT FOR AT&T JOB# A01MSGR.

Work will commence on or about 7/29/2019 - 8/29/2019 for approximately 2 days.

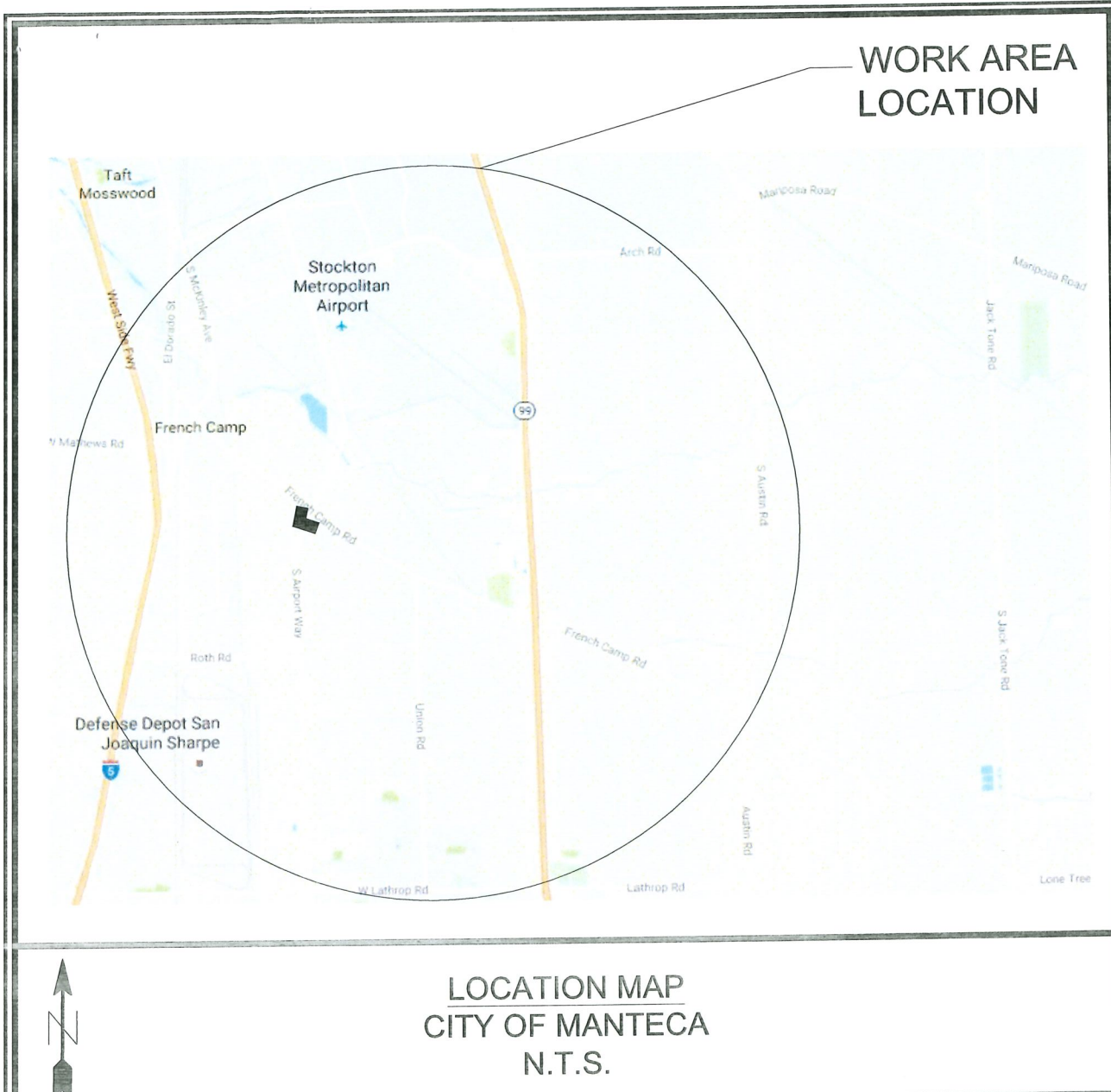
I, the undersigned, certify that I am the owner of the respective property, or am qualified to represent the owner and agree to do the work described above in accordance with the rules and regulations of San Joaquin County and subject to inspection and approval.

*Brian E. Schaff*  
Signature of Applicant - Title  
Engineering  
Administrator

7/19/2019

Date





wave

# ASTOUND BROADBAND

PROJECT #9967\_MANTECA FRENCH CAMP RD & S AIRPORT WAY  
UNDERGROUND CROSSING

## CONTACT LIST

### WAVE

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

### CITY OF MANTECA

Public Works  
CITY HALL 1001 W. CENTER ST.  
MANTECA, CA 95337  
Phone: (209) 456-8400  
EMAIL: MantecaPW@ci.manteca.ca.us

COUNTY OF SAN JOAQUIN  
PUBLIC WORKS DEPARTMENT  
1810 E. HAZELTON AVENUE  
STOCKTON, CA 95205  
PHONE: (209) 468-3000  
FAX: (209) 468-2999

### 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. CONTRACTOR TO VERIFY ALL DIMENSIONS & MATERIALS REQUIRED.
4. MAINTAIN A MINIMUM 6' SWEEP ON ALL CONDUIT BENDS.
5. PLACE PULL ROPES IN ALL CONDUIT & INNERDUCTS.
6. CONTRACTOR MUST CLEAN UP WORK AREAS AT THE END OF EACH WORK DAY & REMOVE TRASH & DEBRIS FROM WORK SITE.
7. CONTRACTOR WILL GROUT & SEAL ALL BUILDING ENTRANCES WITH APPROVED MATERIALS.
8. PLACE BUSHINGS ON ALL CONDUIT ENDS, FOR CABLE PROTECTION.
9. PLACE TRIPLEX & BLANK DUCT PLUGS AT BUILDING ENTRANCE CONDUITS.
10. CONTRACTOR IS RESPONSIBLE FOR THE REPAIR/REPLACEMENT OF DAMAGED FACILITIES AND/OR PROPERTY.
11. ALL DISTURBED SURFACES WILL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
12. ALL WORK TO BE PERFORMED PER CONSTRUCTION SPECIFICATION UNLESS OTHERWISE DIRECTED BY PROPERTY MANAGEMENT.
13. THE CONTRACTOR WILL PROVIDE AS-BUILT RECORDS TO BE GIVEN TO MANAGEMENT UPON COMPLETION OF CONSTRUCTION.
14. CONTRACTOR TO COMPLY WITH TRAFFIC CONTROL PLAN USE APPROPRIATE ATTACHMENT.
15. ALL EXISTING UTILITIES MUST BE POTHOLED BEFORE BEGINNING CONSTRUCTION.
16. 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

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SHEET
01 COVER SHEET
02 CONSTRUCTION DRAWING
03 TYPICAL DETAILS
04-13 TRAFFIC CONTROL

## 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.

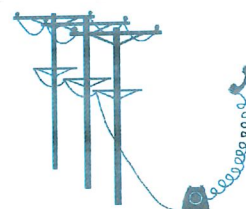


**DIGALERT**  
CALL TOLL FREE  
48 HOURS BEFORE YOU DIG  
UNDERGROUND SERVICE ALERT  
(811)

Know what's below.  
Call before you dig

## PLAN REVISIONS

REV.	DATE	DESCRIPTION	BY



STRUCTURE LEASING & ENGINEERING INC  
RAY DELGADO  
CELL: 408-504-2486  
EMAIL: RAYDELGADO@SLEGROUP.NET  
NIK DELGADO  
CELL: 408-666-3448  
EMAIL: NIKDELGADO@SLEGROUP.NET

AGENCY/CITY:



REF#

APPLICANT

wave  
ASTOUND  
BROADBAND

LOCATION:

PROJECT #9967\_MANTECA  
S AIRPORT WAY & FRENCH CAMP RD  
UNDERGROUND CROSSING

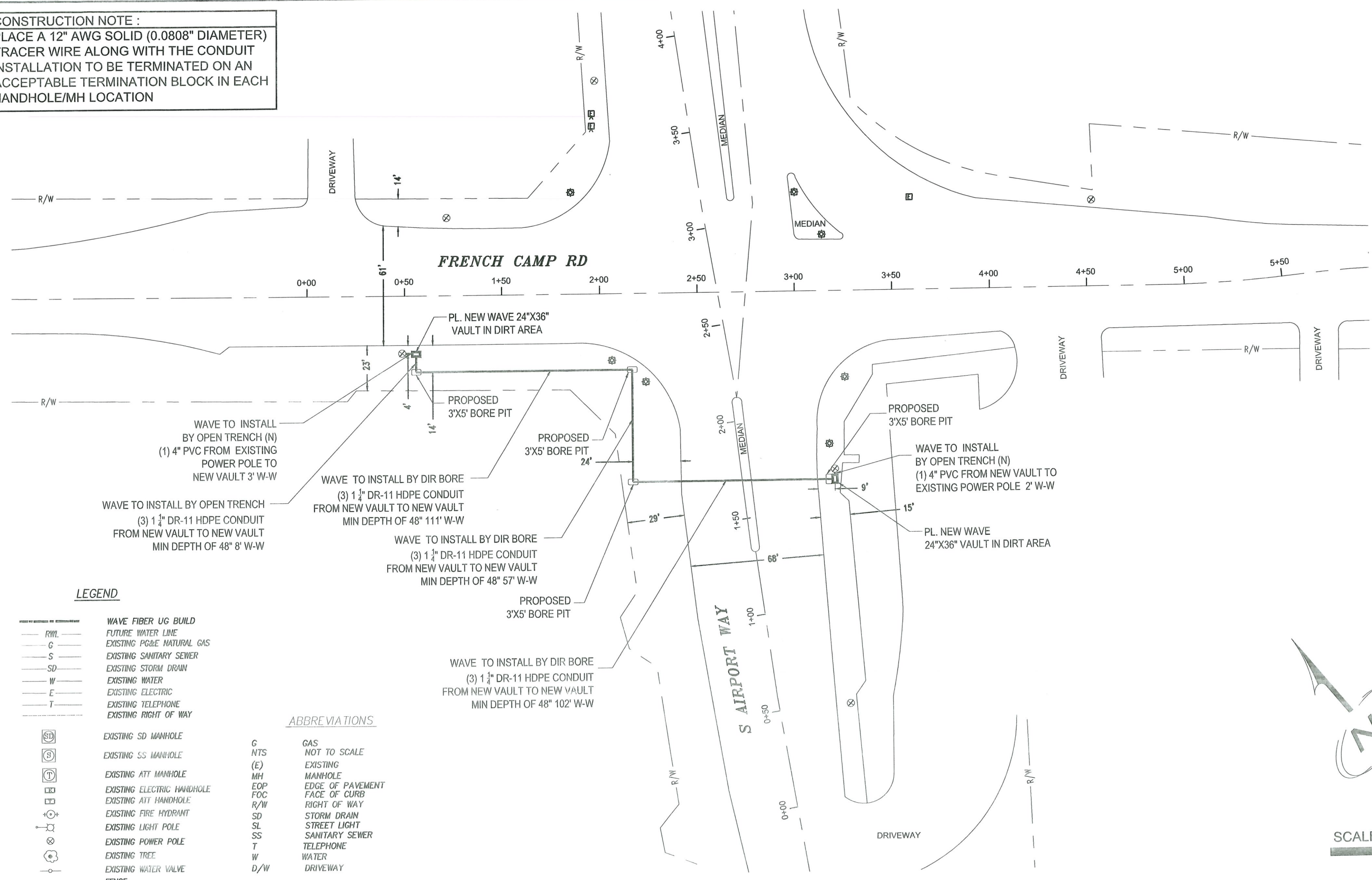
JN#

DESIGN: SLE NIK D DATE: 11/07/2016  
FIELDER: SLE NIK D DATE: 11/07/2016

SHEET  
1 OF 13



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

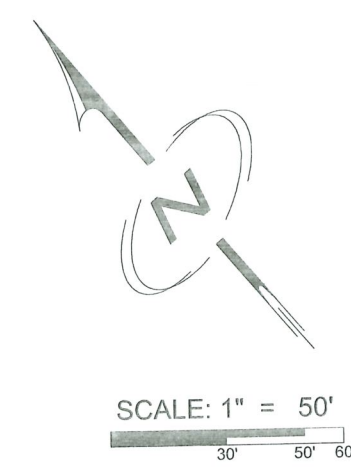


LEGEND

- RWL — FUTURE WATER LINE
- G — EXISTING PG&E NATURAL GAS
- S — EXISTING SANITARY SEWER
- SD — EXISTING STORM DRAIN
- W — EXISTING WATER
- E — EXISTING ELECTRIC
- T — EXISTING TELEPHONE
- — EXISTING RIGHT OF WAY
- SD EXISTING SD MANHOLE
- S EXISTING SS MANHOLE
- T EXISTING ATT MANHOLE
- EH EXISTING ELECTRIC HANDHOLE
- EH EXISTING ATT HANDHOLE
- FD EXISTING FIRE HYDRANT
- LP EXISTING LIGHT POLE
- PP EXISTING POWER POLE
- TR EXISTING TREE
- WV EXISTING WATER VALVE
- FENCE —

ABBREVIATIONS

- G GAS
- NTS NOT TO SCALE
- (E) EXISTING
- MH MANHOLE
- EOP EDGE OF PAVEMENT
- FOC FACE OF CURB
- R/W RIGHT OF WAY
- SD STORM DRAIN
- SL STREET LIGHT
- SS SANITARY SEWER
- T TELEPHONE
- W WATER
- D/W DRIVEWAY



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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

AGENCY/CITY:  
  
REF#

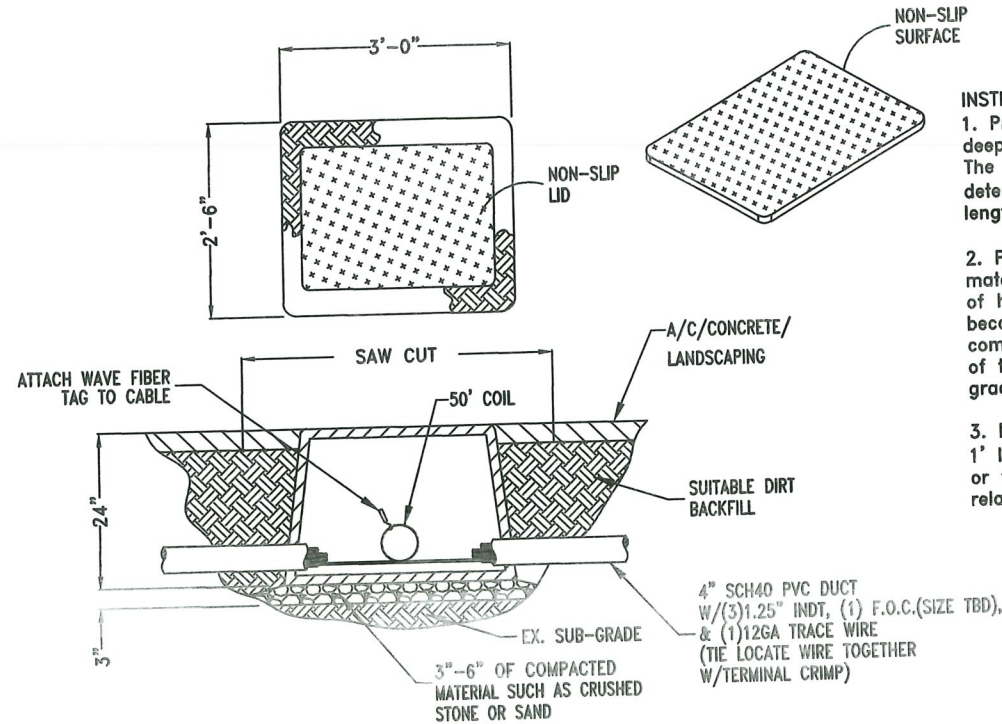
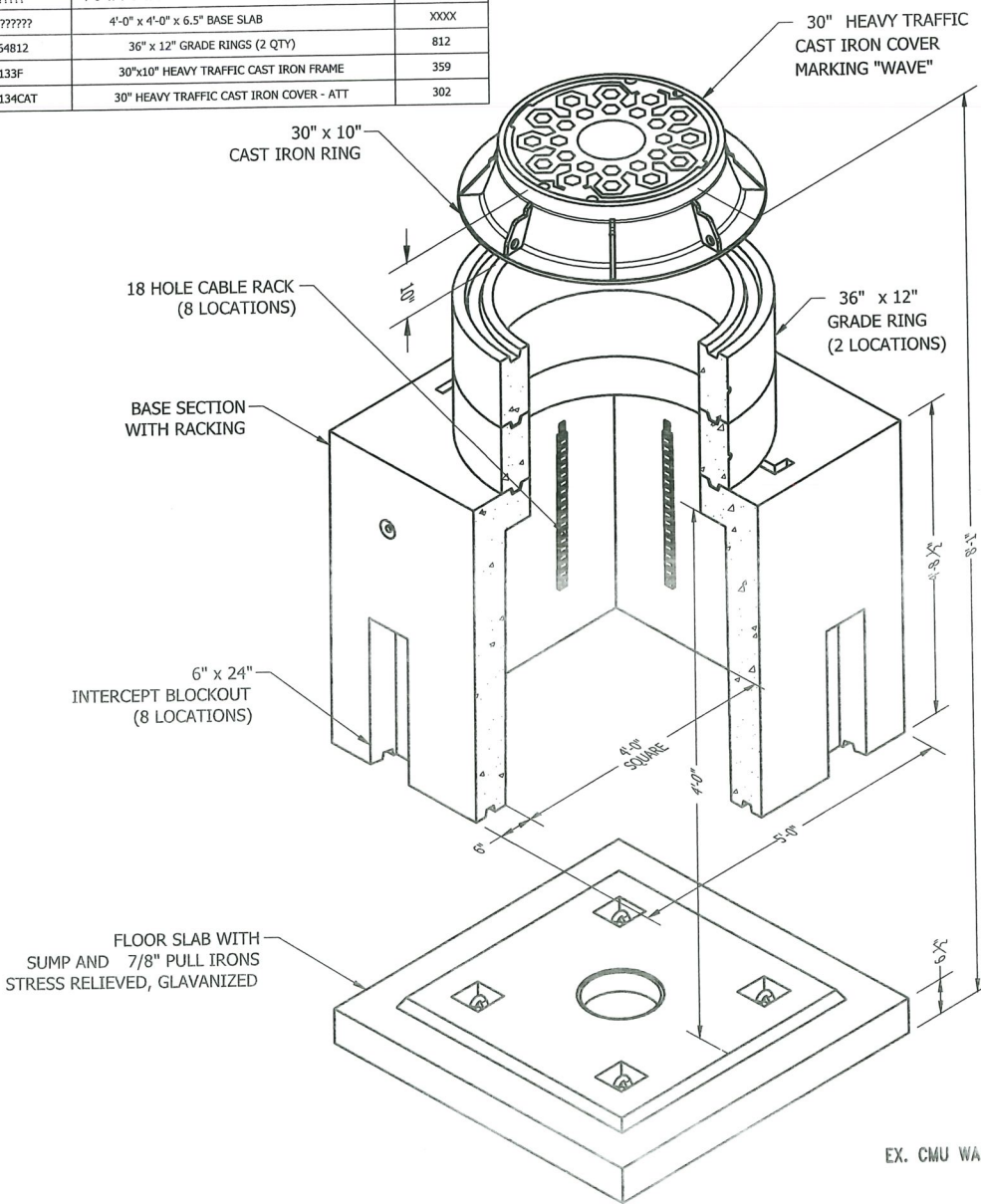
APPLICANT:

LOCATION:  
PROJECT #9967\_MANTECA  
S AIRPORT WAY & FRENCH CAMP RD  
UNDERGROUND CROSSING  
JN#  
DESIGN SLE DATE: 11/07/2016  
FIELDER SLE DATE: 11/07/2016  
SHEET 2 OF 13



TYPICAL DETAILS

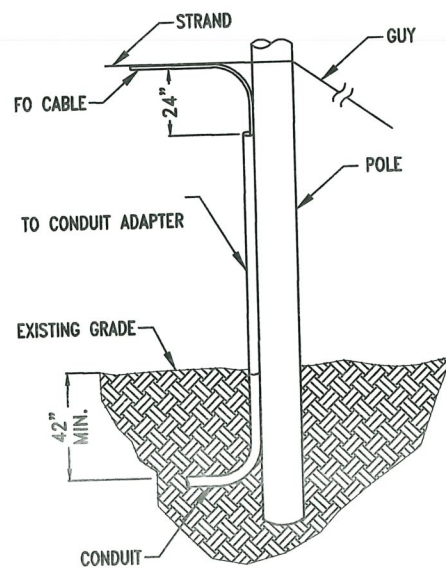
MATERIAL LIST		
PART NUM	DESCRIPTION	WEIGHT (LBS)
???????	4'-0" x 4'-0" x 4'-0" BASE SECTION RACKED AND PAINTED	XXXX
???????	4'-0" x 4'-0" x 6.5" BASE SLAB	XXXX
GR364812	36" x 12" GRADE RINGS (2 QTY)	812
CIA1133F	30"x10" HEAVY TRAFFIC CAST IRON FRAME	359
CIA1134CAT	30" HEAVY TRAFFIC CAST IRON COVER - ATT	302



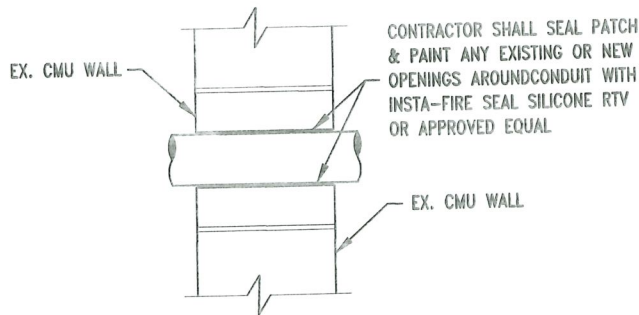
- INSTALLATION NOTES:
1. Prepare the excavation approximately 6" deeper than the overall height of the enclosure. The length and width of the excavation should be determined by adding 4" to 6" to the overall length and width of the handhole or pull box.
  2. Place approximately 3-6" of compacted material such as sand or gravel in the bottom of hole. Gravel is the recommended material because of its drainage characteristics. The compacted material should be leveled so the top of the handhole or pull box is flush to the grade.
  3. Place selected backfill into the excavation at 1' lift and compact either by manual compacting or flooding the excavation to achieve the desired relative compaction. Install with cover in place.

DIMENSION			
WIDTH	LENGTH	DEPTH	WEIGHT
(61CM)	(91.4CM)	(61CM)	100 LBS

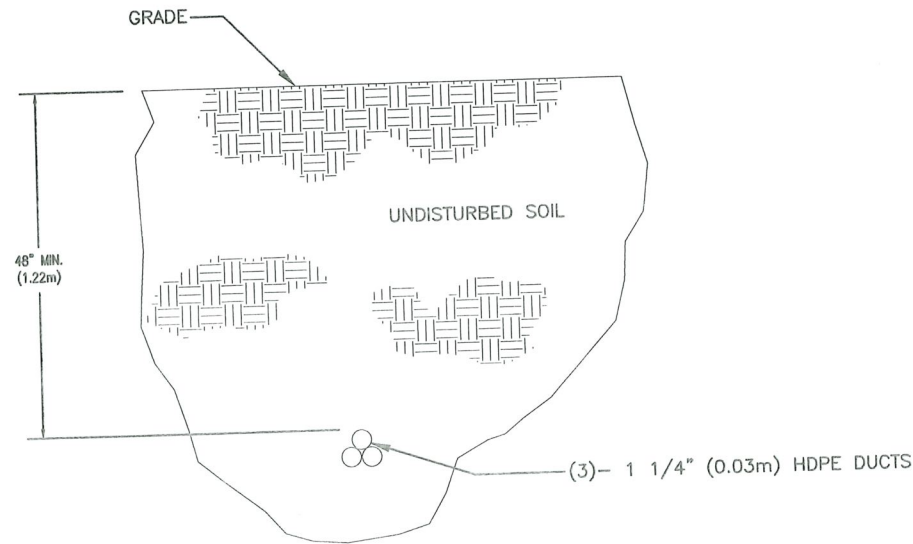
TYPICAL HANDHOLE DETAIL  
3'X2.5'X2' HDPE (MODEL #PEM-3036)  
N.T.S.



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



BLOCK WALL  
PENETRATION DETAIL  
N.T.S.



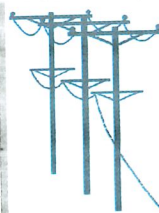
DIRECTIONAL BORE TYPICAL



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AGENCY/CITY:



REF#

APPLICANT:

**wave**  
**ASTOUND**  
**BROADBAND**

LOCATION:  
PROJECT #9967\_MANTECA  
S AIRPORT WAY & FRENCH CAMP  
UNDERGROUND CROSSING

JN#


DESIGN: SLE DATE: 11/07/2016  
FIELDER: SLE DATE: 11/07/2016

SHEET  
3 OF 1




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 (HIGH SPEED)- MORE THAN 25 MPH TO 40 MPH	250 FEET	250 FEET	250 FEET
URBAN (HIGH SPEED)- MORE THAN 40 MPH	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1500 FEET	2640 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)  
R9-3A

REVIEWED ( ) AS NOTED) BY:

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

DATE: / / 20  
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TRAFFIC CONTROL PLANS AS  
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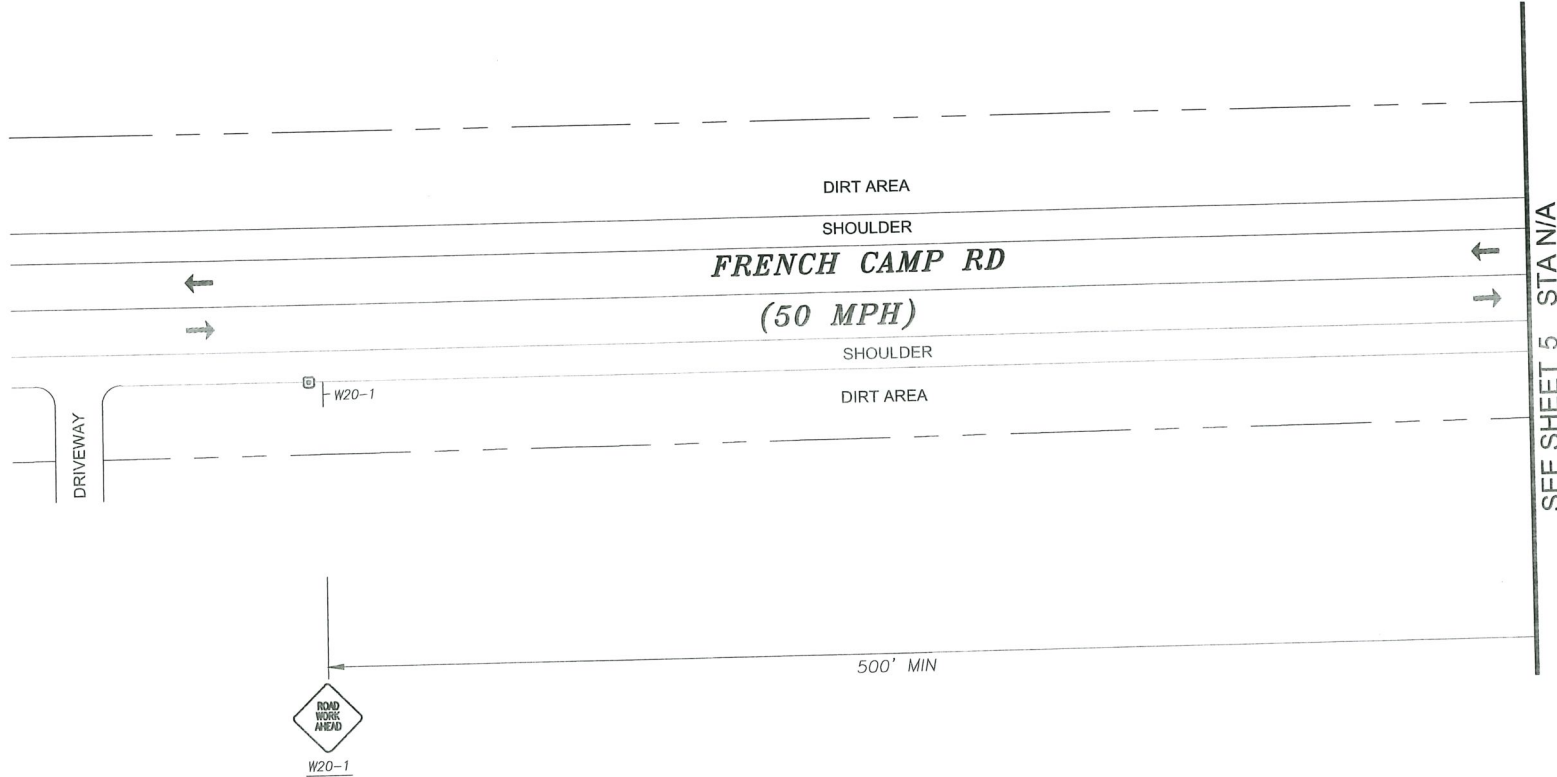


TABLE A-3  
TAPER LENGTH AND BUFFER SPACE  
USE IN TYPICAL APPLICATIONS DIAGRAMS

LENGTH OF TAPER 'L' IN FEET			STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED	
Speed in Miles per Hour*	Width of Offset**		Speed in MPH*	Distance
	11 Feet	12 Feet		
20	73	80	20	115 FEET
25	115	125	25	155 FEET
30	165	180	30	200 FEET
35	225	245	35	250 FEET
40	293	320	40	305 FEET
45	495	540	45	360 FEET
50	550	600	50	425 FEET
55	605	660	55	495 FEET
60	660	720	60	570 FEET
65	715	780	65	645 FEET
70	770	840	70	730 FEET
			75	820 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.

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

FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS^2}{60} \text{ (40 MPH OR LESS)} \quad L = WS \text{ (45 MPH OR GREATER)}$$

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

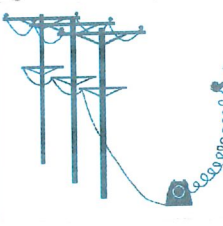
SCALE: 1" = 50'

30' 50' 60'



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APPLICANT:

**wave**  
**ASTOUND**  
**BROADBAND**

LOCATION:  
PROJECT #9967\_MANTECA  
S AIRPORT WAY & FRENCH CAMP RD  
UNDERGROUND CROSSING  
JN#  
DESIGN: SLE  
FIELDER: SLE  
DATE: 11/07/2016  
SHEET  
4 OF 13

TABLE A-2  
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	A	B	C
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URBAN (HIGH SPEED)- MORE THAN 25 MPH TO 40 MPH	250 FEET	250 FEET	250 FEET
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RURAL	500 FEET	500 FEET	500 FEET
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NOTE TO CONTRACTOR:  
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18"x42" (STANDARD)  
R9-11A



20"x32" (MIN.)  
36"x36" (STANDARD)  
R9-3A

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NOTE: See Table A  
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and Taper Lengths

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FIELD CONDITIONS DICTATE

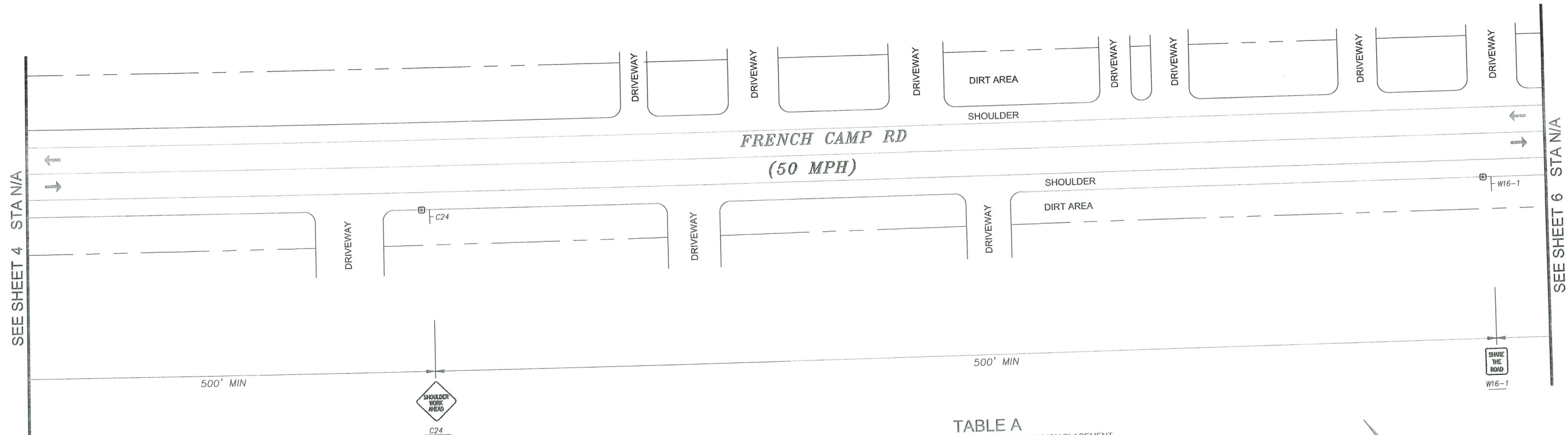


TABLE A-3  
TAPER LENGTH AND BUFFER SPACE  
USE IN TYPICAL APPLICATIONS DIAGRAMS

Speed in Miles per Hour*	Width of Offset**	
	11 Feet	12 Feet
20	73	80
25	115	125
30	165	180
35	225	245
40	293	320
45	495	540
50	550	600
55	605	660
60	660	720
65	715	780
70	770	840

STOPPING SIGHT DISTANCE AS  
A FUNCTION OF SPEED

Speed in MPH*	Distance
20	115 FEET
25	155 FEET
30	200 FEET
35	250 FEET
40	305 FEET
45	360 FEET
50	425 FEET
55	495 FEET
60	570 FEET
65	645 FEET
70	730 FEET
75	820 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.

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

FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS^2}{60} \text{ (40 MPH OR LESS)} \quad L = \frac{WS}{45} \text{ (45 MPH OR GREATER)}$$

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

SCALE: 1" = 50'

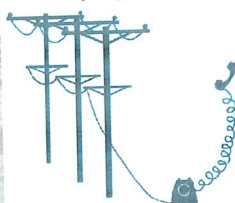


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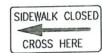


LOCATION:  
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S AIRPORT WAY & FRENCH CAMP RD  
UNDERGROUND CROSSING

JN#  
DESIGN SLE DATE: 11/07/2016  
FIELDER SLE DATE: 11/07/2016  
SHEET 5 OF 13



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18"x42" (STANDARD)  
R9-11A



20"x32" (MIN.)  
36"x36" (STANDARD)  
R9-3A

TABLE A-2  
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS		
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RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1500 FEET	2640 FEET

TABLE A  
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1

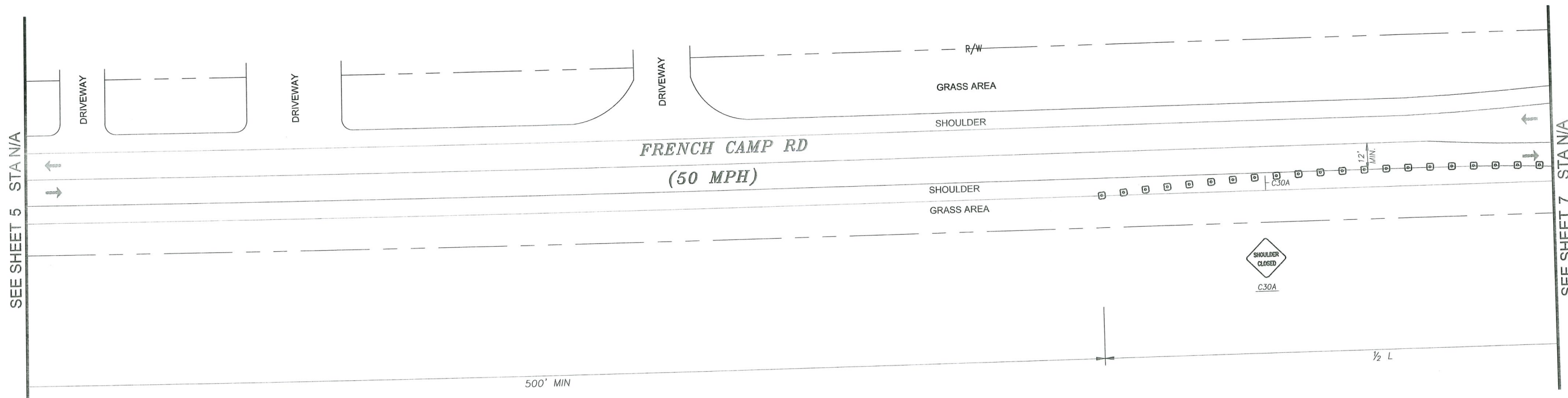
TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

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

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

DATE: / / 20  
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FIELD CONDITIONS DICTATE



FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS^2}{60}$$

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

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

LENGTH OF TAPER 'L' IN FEET

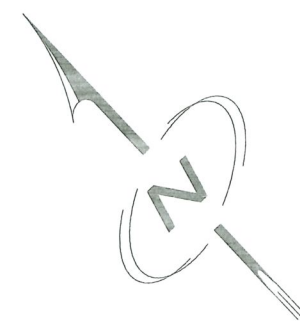
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STOPPING SIGHT DISTANCE AS  
A FUNCTION OF SPEED

Speed in MPH*	Distance
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\* Posted speed, off-peak 85th percentile speed prior to starting, or the anticipated  
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\*\* For other offset widths, apply the formula in table A-1.



SCALE: 1" = 50'

30' 50' 60'

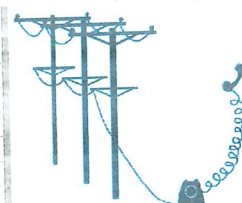


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AGENCY/CITY:



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APPLICANT:



LOCATION:  
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S AIRPORT WAY & FRENCH CAMP RD  
UNDERGROUND CROSSING

JN#

DESIGN: SLE  
FIELD: SLE

DATE: 11/07/2016  
DATE: 11/07/2016

SHEET  
6 OF 13

NOTE TO CONTRACTOR:  
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18"x42" (STANDARD)  
R9-11A



20"x32" (MIN.)  
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R9-3A

### FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS^2}{60} \text{ (40 MPH OR LESS)} \quad L = \frac{WS}{45} \text{ (45 MPH OR GREATER)}$$

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

SEE SHEET 8 STA N/A

TABLE A-3

TAPER LENGTH AND BUFFER SPACE  
USE IN TYPICAL APPLICATIONS DIAGRAMS

LENGTH OF TAPER 'L' IN FEET

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NOTE: See Table A  
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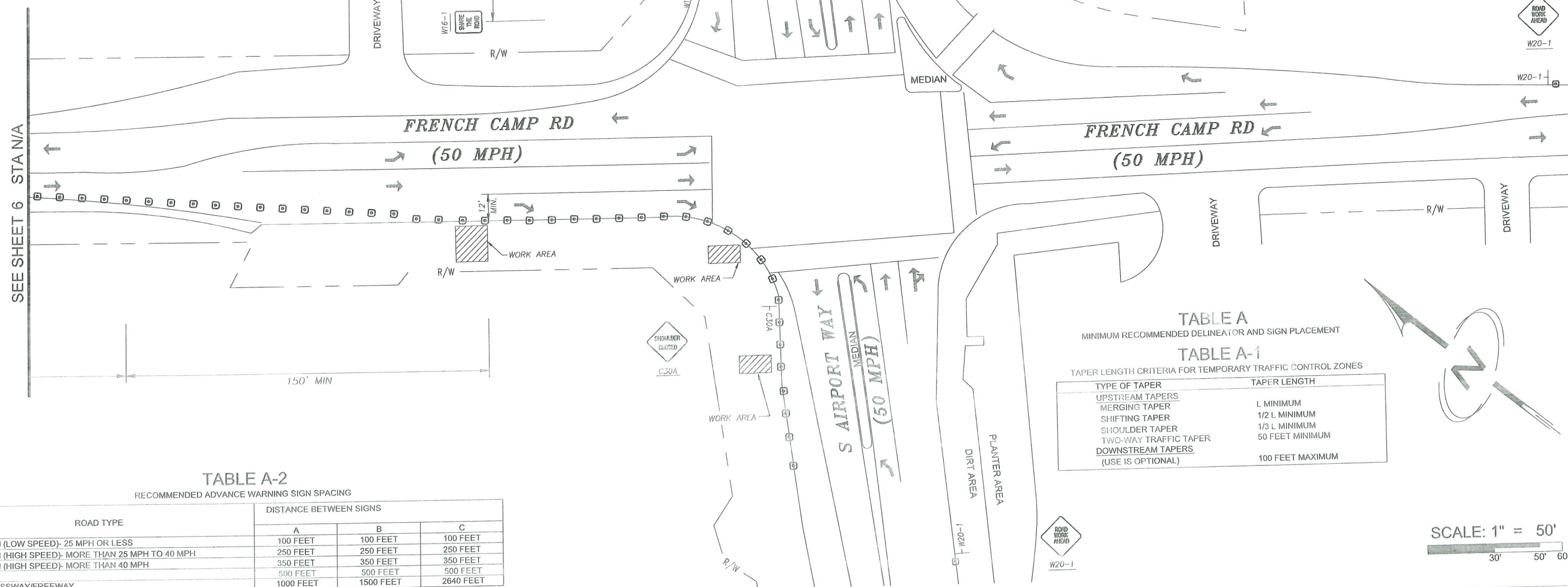


TABLE A-2

RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	A	B	C
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TABLE A

MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

TABLE A-1

TAPER LENGTH CRITERIA FOR TEMPORARY TRAFFIC CONTROL ZONES

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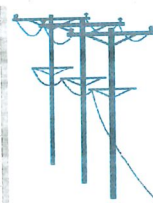


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APPLICANT:

wave

ASTOUND  
BROADBAND

LOCATION:

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JN#

DESIGN: SLE  
FIELDER: SLE

DATE: 11/07/2016  
DATE: 11/07/2016

SHEET  
7 OF 13



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FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS^2}{60} \quad (40 \text{ MPH OR LESS}) \quad L = \frac{WS}{45} \quad (45 \text{ MPH OR GREATER})$$

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

LENGTH OF TAPER 'L' IN FEET

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Speed in MPH*	Distance
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FIELD CONDITIONS DICTATE

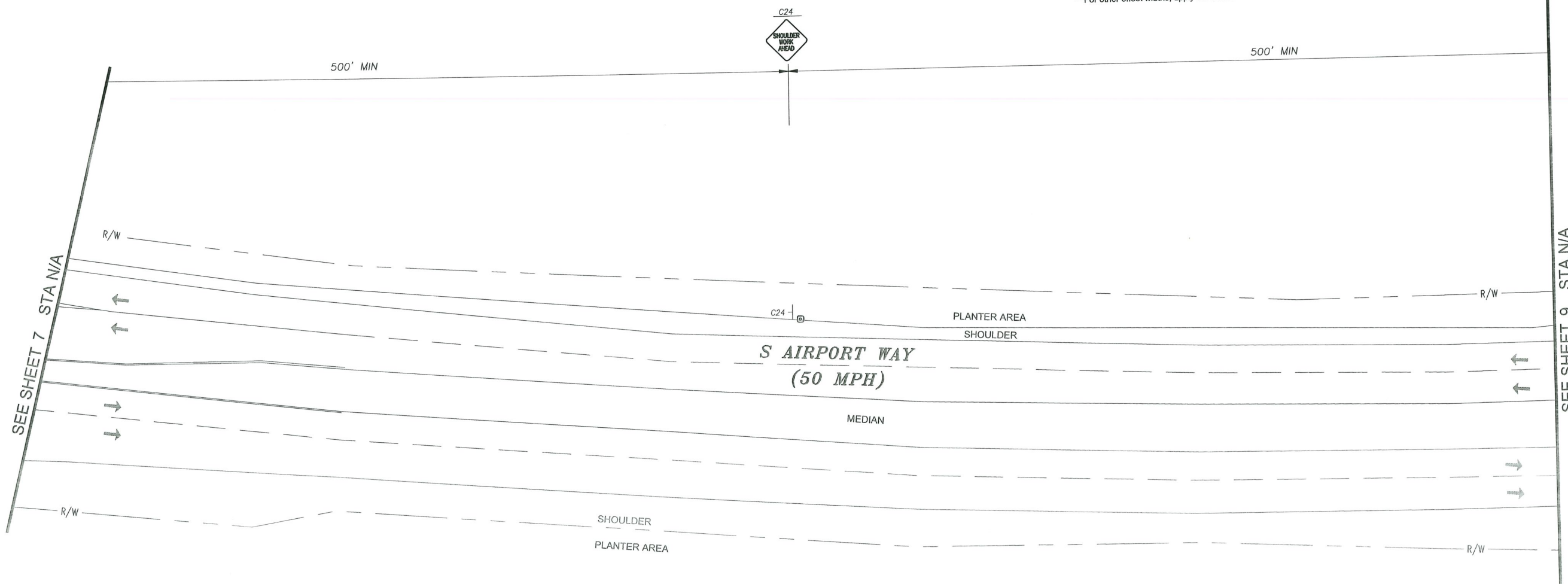
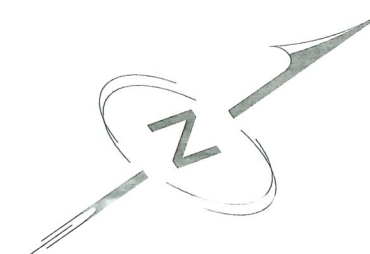


TABLE A-2  
RECOMMENDED ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS		
	A	B	C
URBAN (LOW SPEED)- 25 MPH OR LESS	100 FEET	100 FEET	100 FEET
URBAN (HIGH SPEED)- MORE THAN 25 MPH TO 40 MPH	250 FEET	250 FEET	250 FEET
URBAN (HIGH SPEED)- MORE THAN 40 MPH	350 FEET	350 FEET	350 FEET
RURAL	500 FEET	500 FEET	500 FEET
EXPRESSWAY/FREEWAY	1000 FEET	1500 FEET	2640 FEET



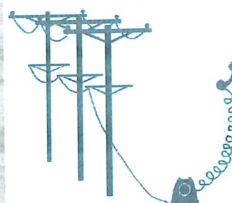
SCALE: 1" = 50'  
30' 50' 60'



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(811)  
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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

AGENCY/CITY:



APPLICANT:

**wave**

**ASTOUND  
BROADBAND**

LOCATION:

PROJECT #9867\_MANTECA  
S AIRPORT WAY & FRENCH CAMP RD  
UNDERGROUND CROSSING


JN#

DESIGN: SLE  
FIELDER: SLE


DATE: 11/07/2016  
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SHEET  
8 OF 13

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18"x42" (STANDARD)  
R9-11A



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R9-3A

TABLE A  
MINIMUM RECOMMENDED DELINEATOR AND SIGN PLACEMENT

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### FORMULA FOR TAPER LENGTH 'L'

$$L = \frac{WS^2}{60} \text{ (40 MPH OR LESS) } L = WS \text{ (45 MPH OR GREATER)}$$

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

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 Offset**		Speed in MPH*	Distance
	11 Feet	12 Feet		
20	73	80	20	115 FEET
25	115	125	25	155 FEET
30	165	180	30	200 FEET
35	225	245	35	250 FEET
40	293	320	40	305 FEET
45	495	540	45	360 FEET
50	550	600	50	425 FEET
55	605	660	55	495 FEET
60	660	720	60	570 FEET
65	715	780	65	645 FEET
70	770	840	70	730 FEET
75			75	820 FEET

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

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REVIEWED (AS NOTED) BY:

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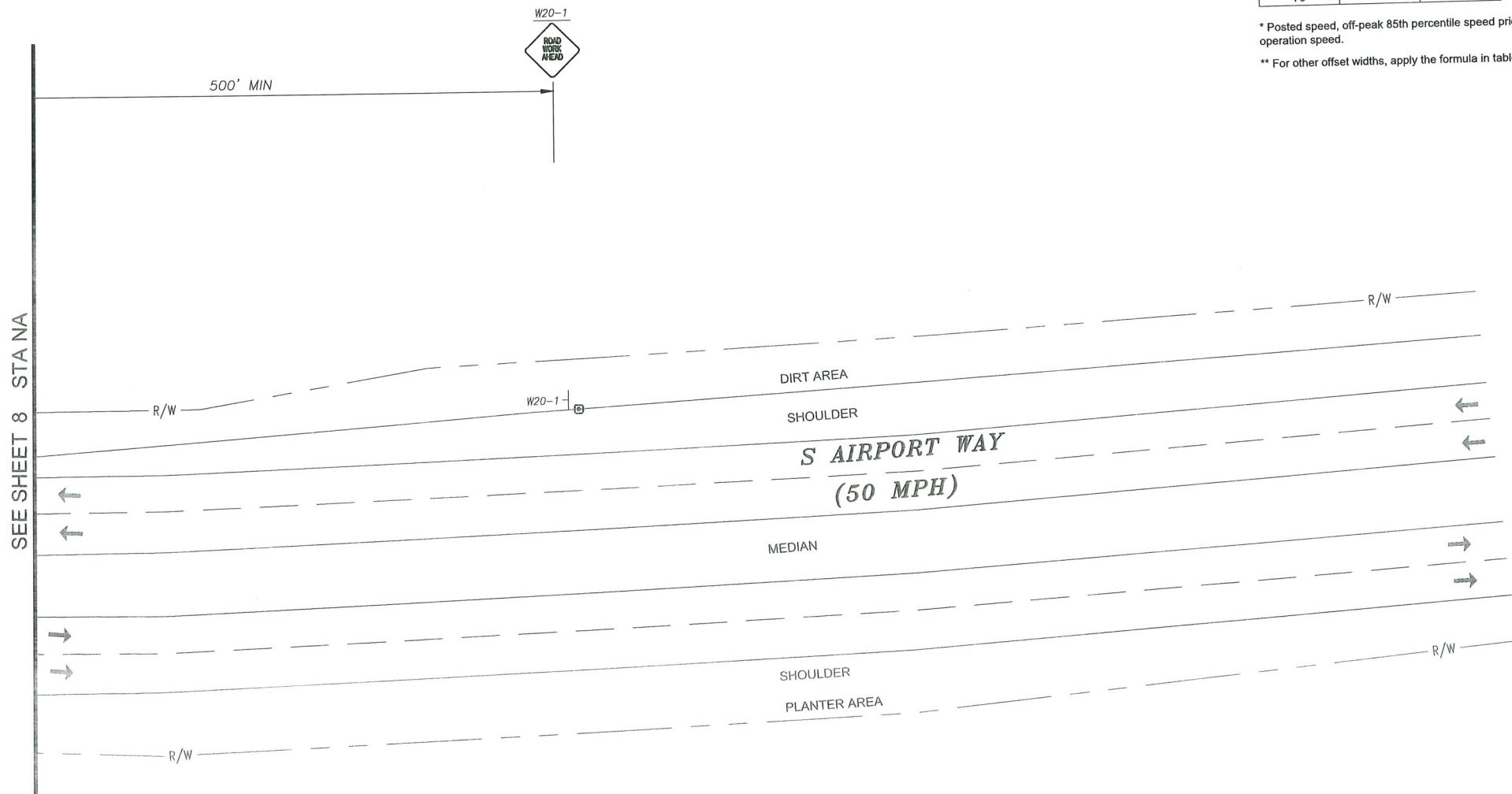


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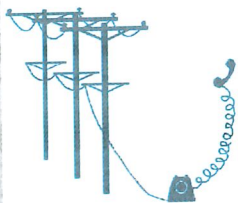


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AGENCY/CITY:



APPLICANT:

**wave**  
**ASTOUND**  
**BROADBAND**

LOCATION:

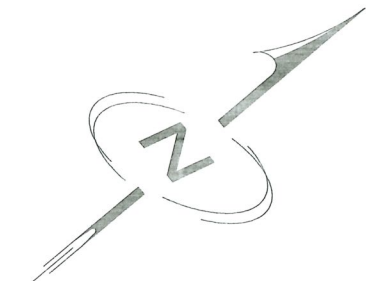
PROJECT #9967\_MANTECA  
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JN#

DESIGN SLE  
FIELDER SLE

DATE: 11/07/2016  
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SHEET  
9 OF 13



SCALE: 1" = 50'

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STOPPING SIGHT DISTANCE AS  
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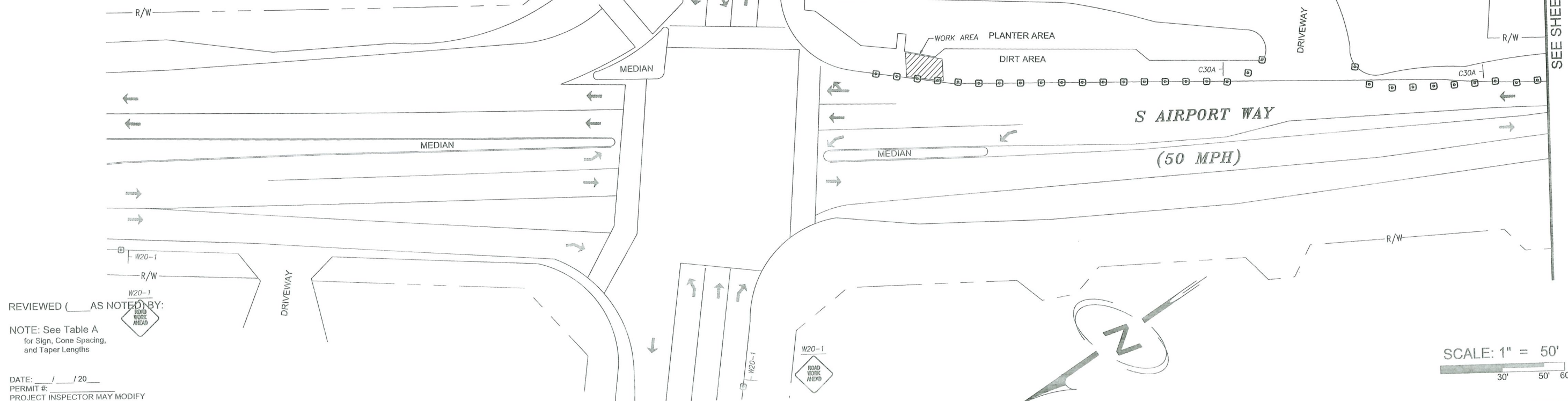
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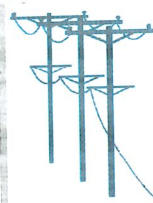


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JN#

DESIGN SLE

HOLDER SLE


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SHEET

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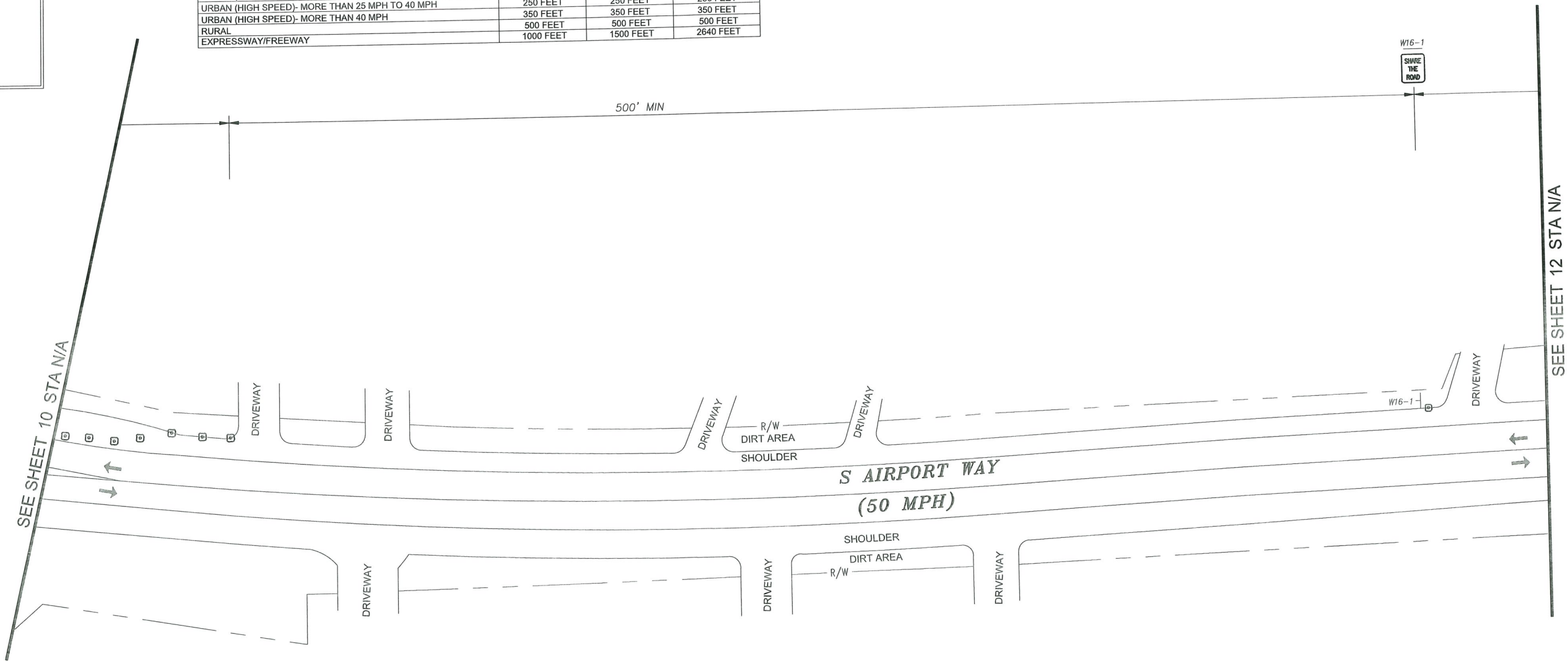


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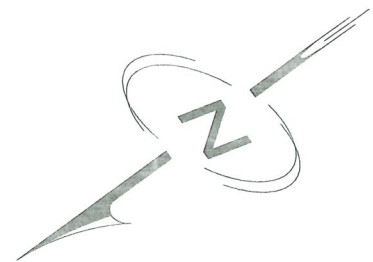
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REVIEWED (\_\_\_ AS NOTED) BY:

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SCALE: 1" = 50'  
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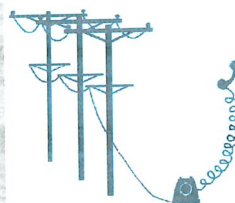


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AGENCY/CITY:



REF#

APPLICANT:

wave

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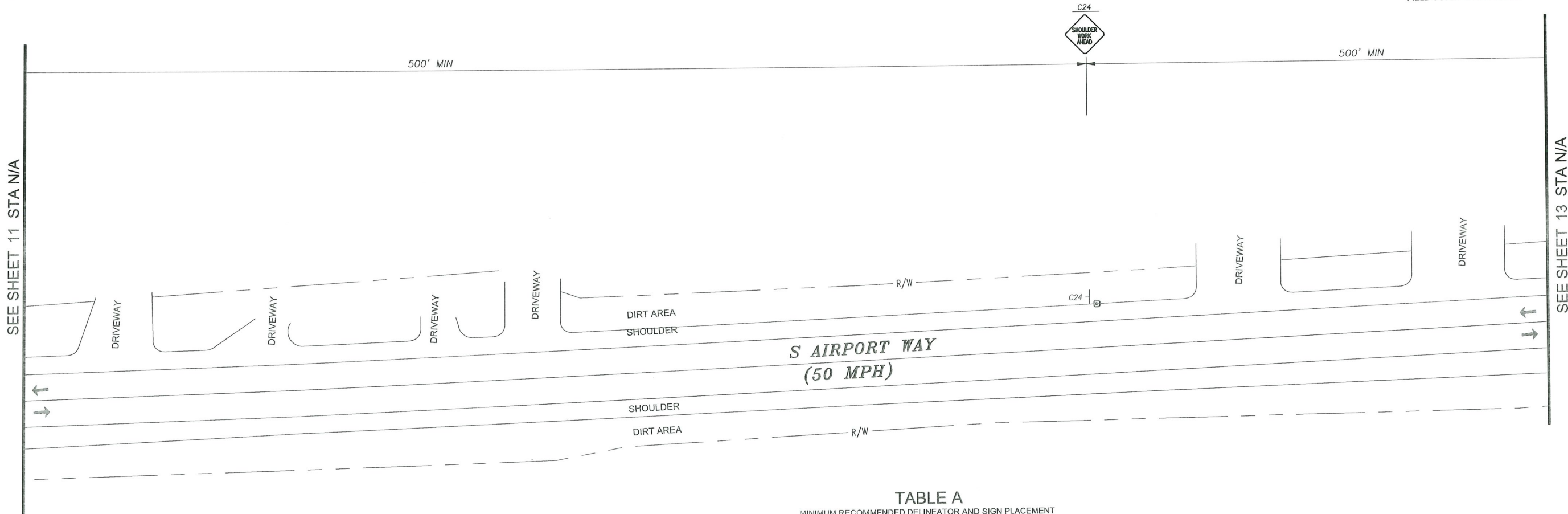


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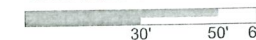
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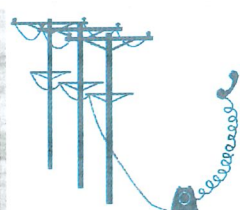


SCALE: 1" = 50'



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JN#

DESIGN SLE	DATE: 11/07/2016	SHEET
FIELD/SLE	DATE: 11/07/2016	12 OF 13

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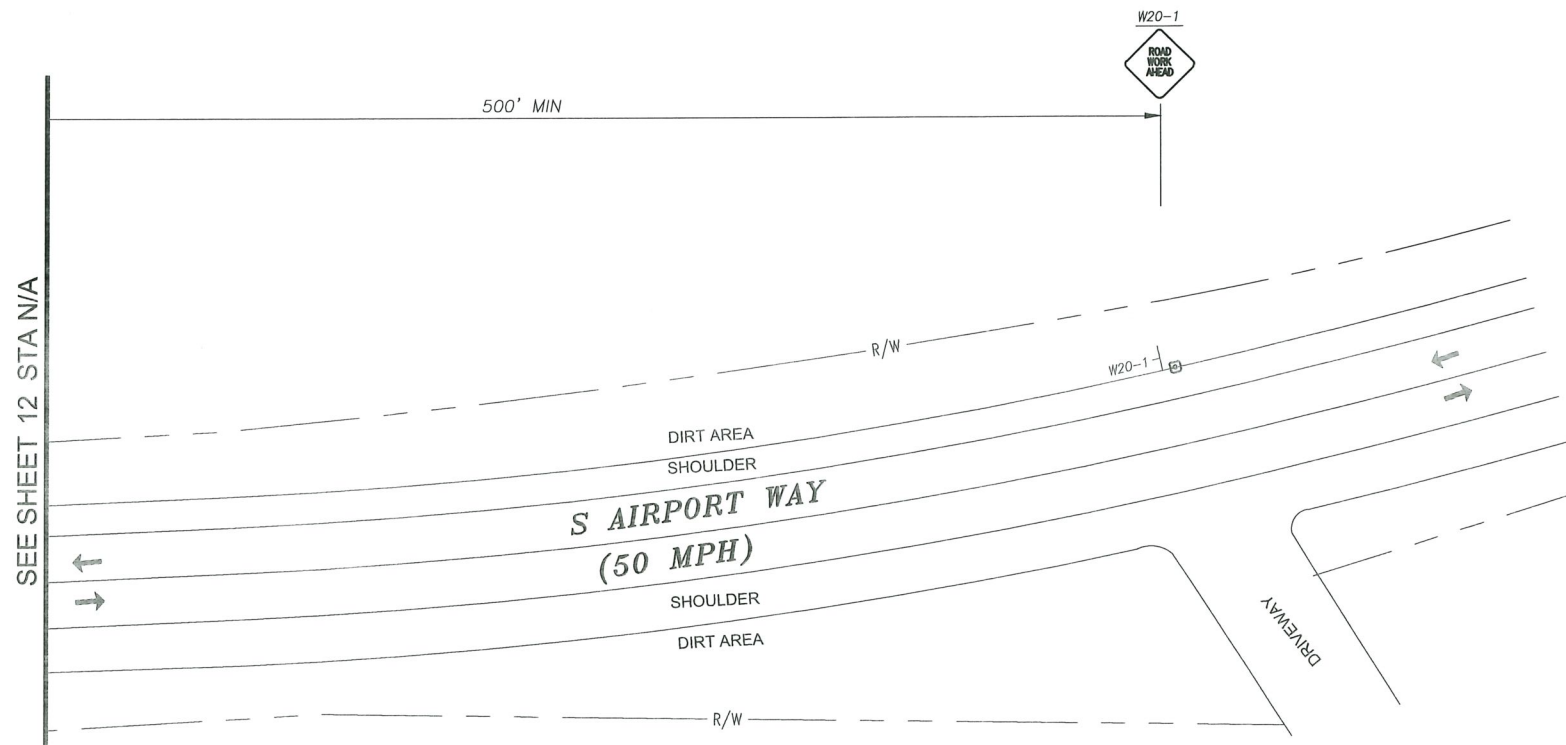


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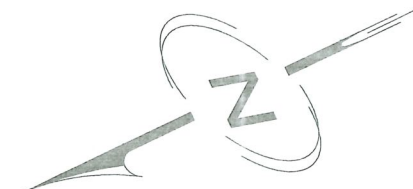
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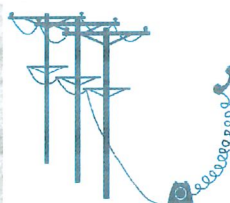


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DESIGN SLE  
FIELDER SLE  
DATE: 11/07/2016  
DATE: 11/07/2016

SHEET  
13 OF 13



## Untitled Map

Write a description for your map.



4228 Newton Road, Stockton, CA 95205 209.463.2517  
CSLB # 580907 EXP 11-31-17 A,B,C-16 & C-36  
Jim@HaleyContracting.com

July 28, 2017



Existing 6" SJCL Water Line Cut in (N) 6" Tee with SCV  
for (N) Fire Service. Provide 6" Double Detector Check  
with FDC at Property Line

Work Zone for New 6" Water Tap

(N) 6" Line in Easement to back lot

(N) 6" C-800 CL-200

(N) 6" Bldg Riser

Existing Sprinkler Riser from Private Source to be  
abandon and cap outside Building. New 6" Service to  
be connected to (E) inside Building. Work by  
Sprinkler Contractor

**New Fire Service for Bruce Bates**  
**26250 North Midsection**  
**Thornton, CA**

100 ft

Google Earth

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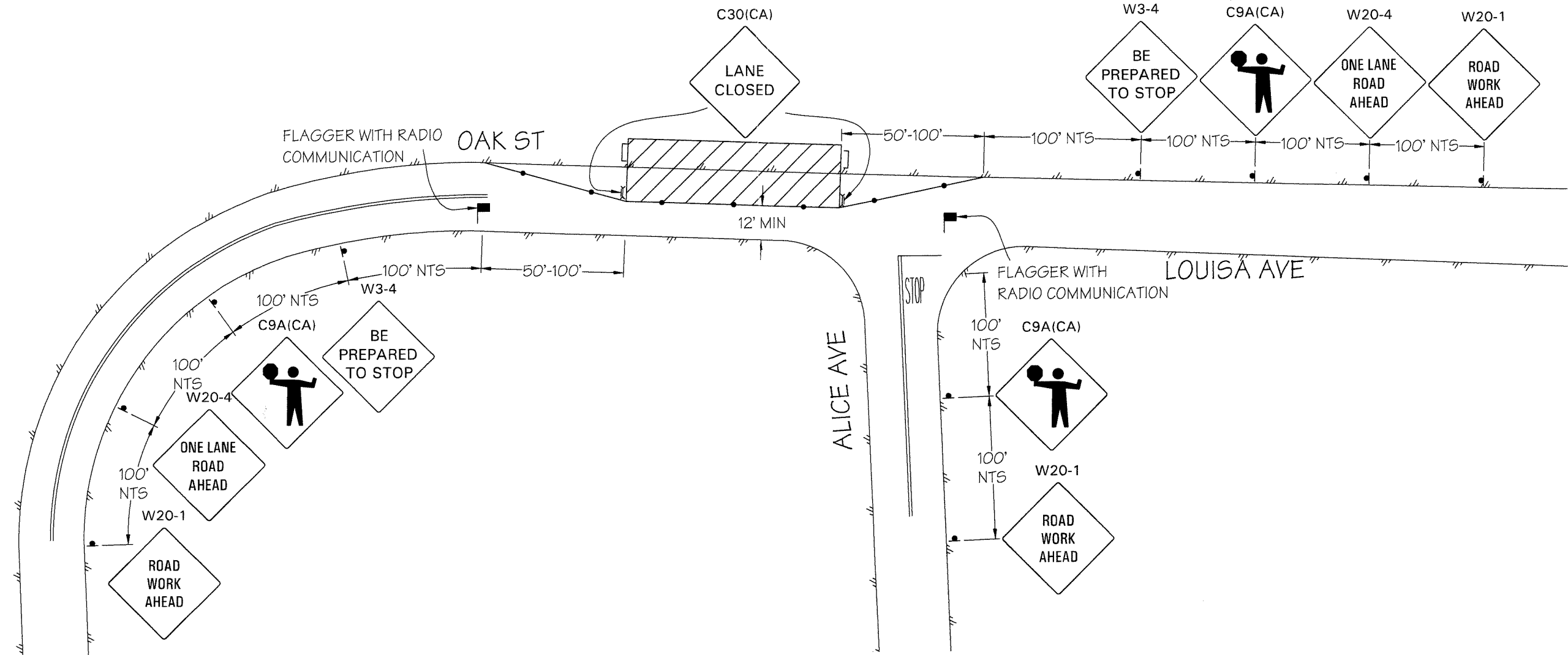


ALL DRIVEWAYS TO REMAIN OPEN UNLESS OTHERWISE INDICATED.











FLAGGER TO ASSIST WITH PEDESTRIAN TRAFFIC.



POST TEMPORARY "NO PARKING" IN ALL AREAS AFFECTED BY WORK ZONE 72 HRS PRIOR TO WORK. NOTIFY ALL AFFECTED BUSINESSES/RESIDENTS.

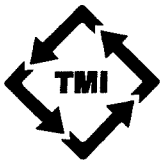
STEEL PLATE TO COVER TRENCH WHILE ROAD IS IN USE.



PHASE 2:

LEGEND		ADDRESS	WORK AREA TRAFFIC CONTROL: LOUISA AVE & ALICE AVE	
 - WORK AREA	 - TYPE-III BARRICADE W/ SIGN	LOUISA AVE & ALICE AVE, SAN JOAQUIN COUNTY	CONTACT: JIM HALEY	
 - HIGH LEVEL WARNING DEVICE	 - TYPE-II BARRICADE W/ SIGN		CONTACT: JIM@HALEYCONTRACTING.COM	
 - FLASHING ARROW SIGN (FAS)	 - ADA BARRICADE W/ SIGN		JOB NUMBER: 115312	PLAN#: 28885
 - FLAGGER	 - CHANNELIZATION DEVICE		PERMIT NUMBER:	
 - EXISTING SIGN	 - SIGN		SHEET 2 OF 2	SIZE: B
			DATE: 8/16/17	SCALE: 1"=40'
				PREPARED BY: SP
		<b>TRAFFIC MANAGEMENT, INC.</b> <i>California · Great Lakes · New York</i> <b>800.763.3999</b> <a href="http://www.trafficmanagement.com">www.trafficmanagement.com</a> Traffic Control Services - Sales & Rentals Permits & Consulting - Engineering - Training <b>C31 # 785804</b>		





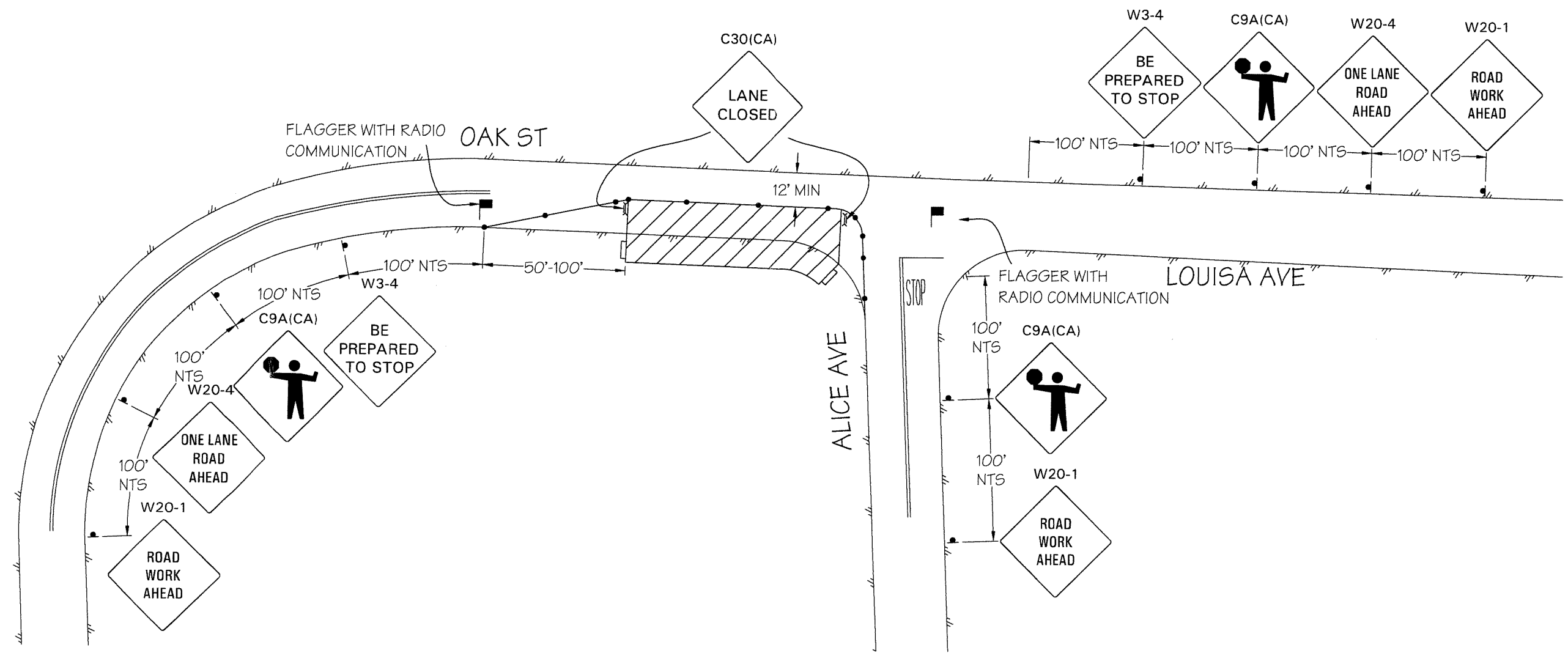


ALL DRIVEWAYS TO REMAIN OPEN UNLESS OTHERWISE INDICATED.













FLAGGER TO ASSIST WITH PEDESTRIAN TRAFFIC.

POST TEMPORARY "NO PARKING" IN ALL AREAS AFFECTED BY WORK ZONE 72 HRS PRIOR TO WORK. NOTIFY ALL AFFECTED BUSINESSES/RESIDENTS.

STEEL PLATE TO COVER TRENCH WHILE ROAD IS IN USE.













PHASE 1:

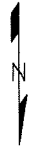
LEGEND		ADDRESS		WORK AREA TRAFFIC CONTROL: LOUISA AVE & ALICE AVE				
 - WORK AREA	 - TYPE-III BARRICADE W/ SIGN	LOUISA AVE & ALICE AVE, SAN JOAQUIN COUNTY		CONTACT: JIM HALEY				TRAFFIC MANAGEMENT, INC. <i>California · Great Lakes · New York</i> 800.763.3999 www.trafficmanagement.com Traffic Control Services - Sales & Rentals Permits & Consulting - Engineering - Training C31 # 785804
 - HIGH LEVEL WARNING DEVICE	 - TYPE-II BARRICADE W/ SIGN			CONTACT: JIM@HALEYCONTRACTING.COM				
 - FLASHING ARROW SIGN (FAS)	 - ADA BARRICADE W/ SIGN			JOB NUMBER: 115312      PLAN#: 28885				
 - FLAGGER	 - CHANNELIZATION DEVICE			PERMIT NUMBER:				
 - EXISTING SIGN	 - SIGN			SHEET 1 OF 2    SIZE: B    SCALE: 1"=40'				
				DATE: 8/16/17      PREPARED BY: SP				





## GENERAL NOTES

**RECOMMENDED ADVANCE WARNING SIGN SPACING TABLE**  
(CA MUTCD 2014 EDITION TABLE 6C-1, SEE TABLE FOR ADDITIONAL DETAILS)

	- WORK AREA		- TYPE-III BARRICADE W/ SIGN
	- HIGH LEVEL WARNING DEVICE		- TYPE-II BARRICADE W/ SIGN
	- FLASHING ARROW SIGN (FAS)		- ADA BARRICADE W/ SIGN
	- FLAGGER		- CHANNELIZATION DEVICE
	- EXISTING SIGN		- SIGN

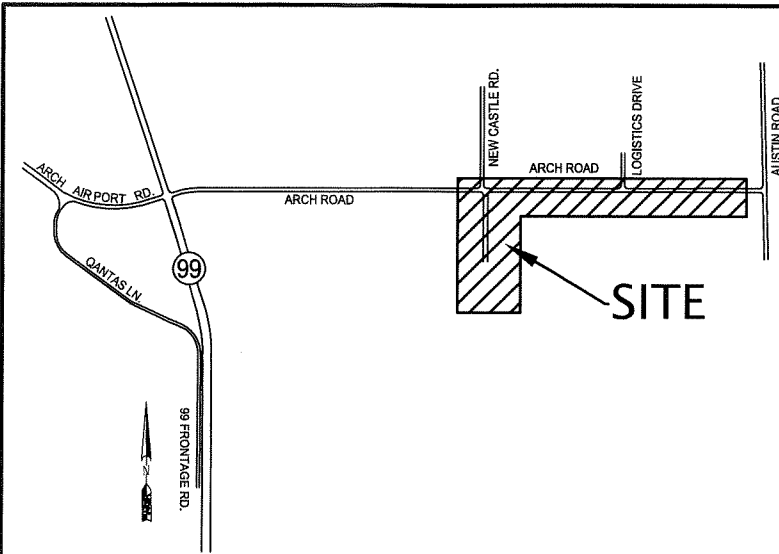


WORK AREA TRAFFIC CONTROL: LOUISA AVE & ALICE AVE		CONTACT: JIM HALEY CONTACT: JIM@HALEYCONTRACTING.COM JOB NUMBER: 115312 PLAN#: 28885 PERMIT NUMBER: COVER SHEET SIZE: B SCALE: N.T.S. PREPARED BY: SP DATE: 8/16/17	
<b>TRAFFIC MANAGEMENT, INC</b> <i>California - Great Lakes - New York</i> 800.763.3999 www.trafficmanagement.com Traffic Control Services - Sales & Rentals Permits & Consulting - Engineering - Training <b>C31 # 785804</b>			



**TRAFFIC MANAGEMENT, INC.**  
California • Great Lakes • New York  
800.763.3999





## VICINITY MAP

N.T.S.

DESIGN CHANGE COMPONENT  
ANY CHANGES TO THIS DESIGN  
MUST BE APPROVED BY

PG&E Gas ADE

### WORK RESPONSIBILITY JOINT TRENCH

TRENCHING	PG&E ELECTRIC	PG&E GAS	PG&E ADE	PG&E CONTRACTOR
EXCAVATE & BACKFILL	●	●	●	●
<b>GAS MATERIAL</b>				
SUPPLY & INSTALL	●	●	●	●
<b>*ELECTRIC CABLE</b>				
SUPPLY & INSTALL	●	●	●	●
<b>ELECTRIC CONDUIT</b>				
SUPPLY & INSTALL	●	●	●	●
<b>ELECTRIC BOXES</b>				
SUPPLY & INSTALL	●	●	●	●
EXCAVATION	●	●	●	●
<b>ELECTRIC TRANSFORMER PADS</b>				
SUPPLY & INSTALL	●	●	●	●
EXCAVATION	●	●	●	●
<b>ELECTRIC SWITCHGEAR &amp; TRANSFORMER</b>				
SUPPLY & INSTALL	●	●	●	●
<b>TELEPHONE CONDUIT</b>				
SUPPLY & INSTALL	●	●	●	●
<b>TELEPHONE CABLE</b>				
SUPPLY & INSTALL	●	●	●	●
<b>TELEPHONE SPLICE BOXES</b>				
SUPPLY & INSTALL	●	●	●	●
EXCAVATION	●	●	●	●
<b>TELEPHONE S.A.I. PAD</b>				
SUPPLY & INSTALL	●	●	●	●
EXCAVATION	●	●	●	●
<b>DIRECTIONAL DRILL / JACK AND BORE</b>				
SUPPLY & INSTALL CONDUIT	●	●	●	●
EXCAVATION	●	●	●	●

THE ● ABOVE DESIGNATES THE WORK TO BE PERFORMED BY THE RESPECTIVE CONTRACTOR & UTILITY COMPANIES.

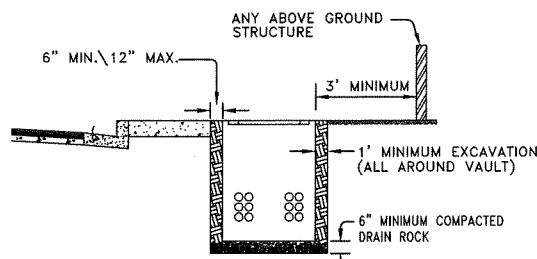
- NOT APPLICABLE UNLESS OTHERWISE SPECIFIED  
\* PG&E TO PULL CABLE INTO ENERGIZED ENCLOSURES

THESE PLANS WERE PREPARED IN CONJUNCTION WITH THE FOLLOWING PLANS:

	RECEIVED	APPROVED
CIVIL IMPROVEMENT PLANS/GRADING PLANS	05-17-2016	PRELIMINARY
ARCHITECTURAL ELECTRONIC FILE	01-21-2016	PRELIMINARY
PG&E DESIGN (GAS)	08-16-2016	PRELIMINARY
PG&E DESIGN (ELECTRIC)	06-20-2016	PRELIMINARY
TELEPHONE	10-10-2016	PRELIMINARY
C.A.T.V.	N/A	N/A
LANDSCAPE		
LIGHT LOCATIONS	BY OTHERS	PRELIMINARY

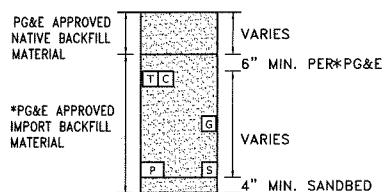
RGA DESIGN is not responsible for any subsequent changes or revisions.

Other utilities shown are approximate and based on field survey and available utility information. It is the contractors' responsibility to verify the actual location and extent of utilities prior to the commencement of work. Physical verification of utility locations shall be performed by careful probing or hand digging in accordance with Article 6 of the CAL/OSHA construction safety orders.



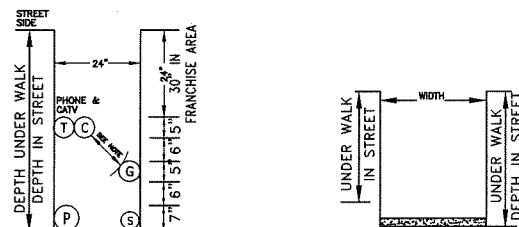
### TYPICAL EXCAVATION

FOR PG&E PRIMARY VAULTS, TRANSFORMERS AND PHONE VAULTS AND MANHOLES



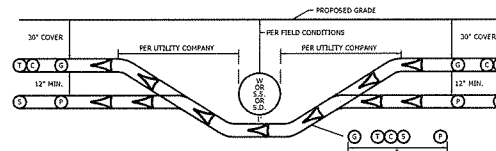
### MINIMUM BACKFILL REQUIREMENTS

\* CHECK WITH LOCAL GOVERNING AGENCIES FOR POSSIBLE VARIATIONS



### TYPICAL JOINT TRENCH

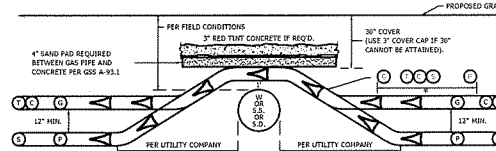
When communication ducts are installed, a min. of 12" radial separation shall be maintained from gas facilities. Exception: With mutual agreement, when 4-inch diameter or smaller gas pipe is installed, the separation may be reduced to not less than 6 inches. See Joint Trench Configuration & Occupancy Guide S5453 Exhibit "B" sheets 1 thru 4



### JOINT TRENCH UNDER WATER & S.S. & S.D.

\* WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.

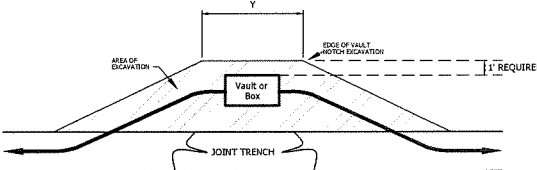
TRENCHING CONTRACTOR SHALL NOT ASSUME THAT EITHER OF THE BELOW DETAILS WILL BE ACCEPTABLE TO PG&E YOU ARE REQUIRED TO CONTACT THE LOCAL PG&E ENGINEERING OFFICE WITH ANY ISSUE RELATING TO COVERS LESS THAN MINIMUM OR COVERS REQUIRING SHORING. CONCRETE CAPPING IS ONLY ACCEPTABLE WHERE NO OTHER SOLUTION IS POSSIBLE AND ONLY WHEN CERTAIN CRITERIA ARE MET AND ONLY WITH PG&E APPROVAL.



### JOINT TRENCH OVER WATER & S.S. & S.D.

\* WIDTH PER SIZE & NUMBER OF EACH UTILITY. PG&E AND CITY INSPECTOR TO DETERMINE METHOD OF CROSSING.

NOTE: MAXIMUM DEPTH ON PLASTIC PIPE TO BE 10'



PRIMARY BOX SIZE	Y"	NOTE
3' x 5'	7'	
4'-6" x 8'-6"	11'	DISTANCE VARIES PER FIELD CONDITIONS

### TYPICAL PG&E PRIMARY BOX EXCAVATION DETAIL

Electric Conduit Minimum Bend Radius for New Construction Service		
Conduit Diameter	Vertical Radius	Horizontal Radius
3"	24"	36"
4"	36"	36"
5"	36"	60"

NOTE:

300° DEGREES MAX BENDS IN ANY CONDUIT RUN

### GENERAL NOTES:

1. THE PREFERRED TRENCH LOCATION IS IN A PUBLIC UTILITY EASEMENT (P.U.E.).
2. ALL DEPTHS AND RESULTING COVER REQUIREMENTS ARE MEASURED FROM FINAL GRADE.
3. COVER, CLEARANCES, AND SEPARATION SHALL BE AS GREAT AS PRACTICABLE UNDER THE CIRCUMSTANCES, BUT UNDER NO CIRCUMSTANCES SHALL BE LESS THAN THE MINIMUM COVER, CLEARANCE, AND SEPARATION REQUIREMENTS SET FORTH IN GENERAL ORDER 128 AND 49CFR 192.321. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE. THE SOILS MUST NOT CONTAIN HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE. THE SOILS MUST NOT BE LARGER THAN 1/2" IF TO BE USED AS SHADING, BEDDING OR LEVELING MATERIALS. REQUIREMENTS MUST MEET ANY APPLICABLE P.G.& E. FEDERAL, STATE, COUNTY, OR LOCAL REQUIREMENTS. ANY NATIVE SOILS OR IMPORT MATERIALS USED MUST NOT HINDER SUBSEQUENT TO COMPACTION.
4. TRENCH DIMENSIONS SHOWN ARE TYPICAL. TRENCH SIZES AND CONFIGURATIONS MAY VARY DEPENDING UPON OCCUPANCY AND/OR FIELD CONDITIONS. TRENCH SIZE AND CONFIGURATION MUST AT ALL TIMES BE CONSTRUCTED IN A MANNER THAT ENSURES PROPER CLEARANCES AND COVER REQUIREMENTS ARE MET. ANY "CHANGE" TO THE TRENCH WIDTH AND CONFIGURATIONS AS SHOWN IN THIS EXHIBIT MUST BE DESIGNED TO ENSURE THIS REQUIREMENT.
5. IT IS PREFERRED TO HAVE NON-PG&E OWNED STREETLIGHTS AT A LEVEL OTHER THAN THE GAS OR ELECTRIC LEVEL. NON-PG&E OWNED STREETLIGHTS MAY BE AT THE ELECTRIC LEVEL OF THE TRENCH AS LONG AS MINIMUM CLEARANCES ARE PROVIDED AND COMPLY WITH ALL SPECIAL NOTES FOR A JOINT TRENCH WITH A SECOND ELECTRIC UTILITY.
6. NON-UTILITY FACILITIES ARE NOT ALLOWED IN ANY JOINT UTILITY TRENCH, E.G., IRRIGATION CONTROL LINES, BUILDING FIRE ALARM SYSTEMS, PRIVATE TELEPHONE SYSTEMS, OUTDOOR ELECTRICAL CABLE, ETC.
7. WHEN COMMUNICATION DUCTS ARE INSTALLED, A MINIMUM OF 12" RADIAL SEPARATION SHALL BE MAINTAINED FROM GAS FACILITIES. EXCEPTION: WITH MUTUAL AGREEMENT, WHEN 4-INCH DIAMETER OR SMALLER GAS PIPE IS INSTALLED, THE SEPARATION MAY BE REDUCED TO NOT LESS THAN 6 INCHES.
8. PROVIDE SEPARATION FROM TRENCH WALL AND OTHER FACILITIES SUFFICIENT TO ENSURE PROPER COMPACTION.
9. MAINTAIN PROPER SEPARATION BETWEEN PG&E FACILITIES AND "WET" UTILITY LINES AS DESCRIBED IN UO STANDARD S5453. THE MINIMUM ALLOWABLE HORIZONTAL SEPARATION BETWEEN COMPANY FACILITIES AND "WET" FACILITIES IS 3' WITH A MINIMUM 1' OF UNDISTURBED EARTH OR THE INSTALLATION OF A SUITABLE BARRIER BETWEEN THE FACILITIES. IF A 3' HORIZONTAL SEPARATION CANNOT BE ATTAINED BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO THE SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL. SEPARATIONS OF 1' OR LESS ARE NOT PERMISSIBLE AND WILL NOT BE ALLOWED. THE COMPANY MAY AGREE TO WAIVE THE MINIMUM 3' SEPARATION REQUIREMENT AT THE REQUEST OF AN APPLICANT IF WARRANTED AND THE NEED IS JUSTIFIED. THE REQUEST FOR A WAIVER MUST:
  - BE MADE IN WRITING AND SUBMITTED TO THE COMPANY ADE DURING THE PLANNING AND DESIGN PHASE OF THE PROJECT.
  - CLEARLY DESCRIBE THE CONDITIONS NECESSITATING THE WAIVER.
  - INCLUDE A PROPOSED DESIGN, AND INCLUDE A DESIGN FOR A BARRIER BETWEEN THE "WET" UTILITIES AND COMPANY DRY FACILITIES IN THE EVENT 1' OF UNDISTURBED EARTH CANNOT BE MAINTAINED. NOTE: DRAIN LINES CONNECTED TO DOWNSPOUTS ON BUILDINGS ARE CONSIDERED A "WET" UTILITY FOR THE PURPOSES OF THIS STANDARD.
10. SEPARATIONS SHALL BE MAINTAINED AT ABOVEGROUND TERMINATION POINTS.
11. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING OF PG&E GAS FACILITIES:
  - RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. 100% OF THE SAMPLES MUST PASS THROUGH A 1/2" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
  - THE SOILS MUST NOT CONTAIN ANY ROCKS THAT HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE.
  - THE SOILS MUST NOT CONTAIN CLODS LARGER THAN 1/2" IF TO BE USED AS SHADING, BEDDING, OR LEVELING MATERIALS.
  - COMPACTION REQUIREMENTS MUST MEET ANY APPLICABLE PG&E, FEDERAL, STATE, COUNTY, OR LOCAL REQUIREMENTS.
  - AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
  - THE SIEVES AND SCREENS SHALL BE:
    - 1/2" SIEVE: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
    - #4 SCREEN: 8" DIAMETER BY 2" DEEP, STAINLESS STEEL MESH SCREEN.
12. PROCEDURES FOR APPROVING NATIVE BACKFILL FOR SHADING AT PG&E ELECTRIC FACILITIES:
  - RANDOM SOIL SAMPLES SHALL BE TAKEN FROM A MINIMUM OF 3 LOCATIONS PER 1,000' OF TRENCH. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND ARE TO BE TAKEN AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE.
  - SHADING MATERIAL CONTAINING LARGE ROCK, PAVING MATERIAL, CINDERS, SHARPLY ANGULAR SUBSTANCES, OR CORROSIVE MATERIAL SHALL NOT BE PLACED IN THE TRENCH WHERE SUCH MATERIAL MAY DAMAGE THE CONDUITS AND/OR PREVENT PROPER COMPACTION OVER OR AROUND THE CONDUITS.
  - NATIVE SOILS CONTAINING CLODS NOT TO EXCEED 6" IN DIAMETER MAY BE INCLUDED IN THE SHADING MATERIAL PROVIDED THE CLODS ARE READILY BREAKABLE BY HAND. NOTE: SOILS CONSISTING PRIMARILY OF ADOBE, HARD COMPACT (DENSE) CLAY, AND BAY MUDS SHALL NOT BE USED AS SHADING MATERIAL.
  - AT NO TIME SHALL THE OVER SATURATION OF NATIVE SOILS BE USED TO ACHIEVE THESE REQUIREMENTS.
  - REFER TO ENGINEERING DOCUMENT 062288, ITEM 13 ON PAGE 2.
13. COMPETENT NATIVE SOILS ARE PREFERRED TO BE USED FOR SHADING, BEDDING, AND BACKFILLING THROUGHOUT THE TRENCH.
  - WHERE NATIVE SOILS EXCEED 1/2" MINUS AND/OR WHERE GAS IS TO BE PLACED AT THE BOTTOM OF A TRENCH IN AREAS THAT EXCEED 1/2" MINUS SOIL CONDITIONS, OR WHERE THE BOTTOM OF A TRENCH IS CONSIDERED TO CONSIST OF HARD PAN, PG&E APPROVED 1/2" MINUS IMPORT MATERIAL SHALL BE USED FOR SHADING AND/OR BEDDING OF GAS FACILITIES.
  - PG&E APPROVED IMPORT MATERIAL IS PER CST ENGINEERING GUIDELINE 4123.
  - IF A LEVELING COURSE IS REQUIRED FOR GAS FACILITIES, THE USE OF NATIVE SOILS IS PREFERRED, BUT IF 1/2" MINUS CONDITIONS ARE NOT ATTAINABLE WITH THE NATIVE SOILS, THEN THE USE OF PG&E APPROVED IMPORT MATERIALS IS REQUIRED. BEDDING UNDER GAS FACILITIES WILL BE A MINIMUM OF 2" OF COMPACTED 1/2" MINUS NATIVE SOILS OR PG&E APPROVED IMPORT MATERIAL.
  - FOR ELECTRIC FACILITIES, REFER TO NOTE 12. THIS APPLIES TO LEVELING COURSES AS WELL AS SHADING.
  - THE MINIMUM PG&E APPROVED BEDDING MATERIAL MAY BE INCREASED AT THE DISCRETION OF PG&E WHEN WARRANTED BY EXISTING FIELD CONDITIONS (E.G., ROCKY SOILS, HARD PAN, ETC.).
  - THE USE OF ANY IMPORTED MATERIAL FOR BACKFILLING PURPOSES SHALL BE LIMITED TO THOSE SITUATIONS WHEN NATIVE SOILS DO NOT ALLOW FOR REQUIRED COMPACTION.
14. THE APPLICANT IS RESPONSIBLE FOR THE REMOVAL OF EXCESS SPOIL AND ASSOCIATED COSTS.
15. SEPARATION BETWEEN GAS FACILITIES AND ELECTRIC FACILITIES MAY BE REDUCED TO 6" WHEN CROSSING.
16. SERVICE SADDLES ARE THE PREFERRED SERVICE FITTINGS FOR USE THROUGHOUT THE JOINT TRENCH PROJECT. ALL PROJECTS WILL BE DESIGNED AND ESTIMATED USING SERVICE SADDLES. HOWEVER, SERVICE TEES MAY BE USED IF ALL CLEARANCES, SEPARATION, AND COVERAGE REQUIREMENTS ARE MAINTAINED.

### SUBSTRUCTURE VERIFICATION STAMP

DEVELOPER  
PLEASE NOTE AND SIGN

ALL PG&E ENCLOSURES AND BOXES HAVE BEEN SET TO GRADE ACCORDING TO GRADE STAKES PROVIDED BY DEVELOPERS ENGINEER. ALL COSTS TO RELOCATE OR RE-ADJUST BOXES AT A LATER DATE WILL BE BILLED TO THE DEVELOPER. PLEASE HAVE YOUR JOB SUPT. VERIFY THE CORRECT GRADE OF ALL ENCLOSURES OR BOXES, AND SIGN AND DATE DRAWING.

THANK YOU

SIGNED \_\_\_\_\_

DATE \_\_\_\_\_

### Sheet Index

JT-1 JOINT TRENCH TITLE SHEET  
JT-2 JOINT TRENCH COMPOSITE- R20  
& TRENCH SECTIONS

DATE LAST WORKED ON: 10-18-2016

REVISION NO.	DATE	BY	APPROVED	SCALE: NOT TO SCALE	APPROVED BY:
				P.M. R. HANKINS	
				DRAWN BY: M.W.	
				CHECKED BY: D.V.	
				RECORD DWG:	

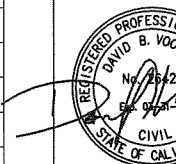
### CONSTRUCTION NOTES:

1. ALL TRENCHING, BACKFILLING AND INSTALLATION BY CONTRACTOR MUST COMPLY STANDARD S5453 (EFFECTIVE DATE 7-5-2006).
2. ALL WORK MUST COMPLY WITH P.G. & E. TELEPHONE, C.A.T.V. STANDARDS AND WORK MUST BE INSPECTED AND APPROVED BY RESPECTIVE INSPECTORS. RANDOM SHALL BE TAKEN FROM A MINIMUM OF THREE LOCATIONS PER 1,000' OF TRENCH. SAMPLES MUST PASS THROUGH A 1/2" SIEVE AND 75% MUST PASS THROUGH A #4 SCREEN. ADDITIONAL SAMPLES MUST BE TAKEN IF EXISTING SOIL CONDITIONS CHANGE AND AT THE DISCRETION OF THE PG&E REPRESENTATIVE ON SITE. THE SOILS MUST NOT CONTAIN HAVE SHARP EDGES OR THAT MAY OTHERWISE BE ABRASIVE. THE SOILS MUST NOT BE LARGER THAN 1/2" IF TO BE USED AS SHADING, BEDDING OR LEVELING MATERIALS. REQUIREMENTS MUST MEET ANY APPLICABLE P.G.& E. FEDERAL, STATE, COUNTY, OR LOCAL REQUIREMENTS. ANY NATIVE SOILS OR IMPORT MATERIALS USED MUST NOT HINDER SUBSEQUENT TO COMPACTION.
3. BACKFILL SHALL BE APPROVED BY THE UTILITY COMPANIES AND THE CITY. COMPACTION TESTED AND PASSED BY THE SOILS ENGINEER.
4. IF SOIL IS NOT ROCK FREE, ADD 4" DEPTH OF TRENCH FOR SAND BEDDING.
5. VERIFY SPLICE BOX EXCAVATION SIZES WITH SUPPLIER(S).
6. THE TRENCHING CONTRACTOR SHALL COORDINATE THE UTILITY COMPANIES' INSTALLATION.
7. CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT IMPROVEMENT PLANS AND HIS WORK ACCORDINGLY.
8. IT IS THE TRENCHING CONTRACTOR'S RESPONSIBILITY TO PROTECT IN PLACE ALL EXISTING UTILITIES. NO EXTRA PAYMENT WILL BE CONSIDERED FOR CROSSING OTHER SYSTEMS.
9. RGA DESIGN ASSUMES NO RESPONSIBILITY FOR THE PROJECT CONDITIONS. THESE PLANS WERE PREPARED USING DATA SUPPLIED BY PG&E, TELEPHONE, C.A.T.V., IMPROVEMENT PLANS, CITY'S VARIOUS "AS BUILT" INFORMATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PHYSICALLY REVIEW THE PROJECT PRIOR TO SUBMITTING HIS BID.
10. CONTRACTOR WILL COMPLY WITH ALL LAWS, ORDINANCES AND REGULATIONS. CONTRACTOR SHALL BE FAMILIAR WITH O.S.H.A., INDUSTRIAL SAFETY ORDERS AND SHALL CONDUCT HIS WORK SAFELY. WHEN WORKING NEAR ENERGIZED OR "HOT" EQUIPMENT, THE UTILITY OWNER SHALL BE NOTIFIED AND SUPPLY THE APPROPRIATE MAN POWER. PUBLIC SAFETY AND TRAFFIC CONTROL SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
11. THE CONTRACTOR SHALL PROTECT CONSTRUCTION STAKING. HE SHALL COORDINATE WITH THE PROJECT'S CIVIL ENGINEER.
12. CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) TWO WORKING DAYS PRIOR TO THE START OF WORK.
13. CONTRACTOR SHALL NOTIFY INSPECTORS OF ANY POTENTIAL CONFLICTS PRIOR TO THE START OF WORK.
14. THIS PLAN IS TO BE USED FOR SOLE PURPOSE OF DIGGING THE JOINT TRENCH. AND COMCAST PLANS FOR EXACT SIZE AND NUMBER OF CONDUITS INSTALLED IN THE TRENCH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CORRECT NUMBER, SIZE AND TYPE OF CONDUITS ARE INSTALLED PER THE ENGINEERED PLANS BY EACH UTILITY COMPANY.
15. NOTE PLANS ISSUED AT THE PRE-CONSTRUCTION MEETING MAY BE SUBJECT TO CHANGES. PLANS FROM EACH UTILITY COMPANY WERE NOT AVAILABLE AT THE START OF CONSTRUCTION.
16. WATER, SEWER, DRAINS, SANITARY WASTE, FUELS (INCLUDING DIESEL AND GASOLINE), AND OTHER VOLATILE HEAVIER THAN AIR GASES, SPRINKLER, IRRIGATION, STEAM, AND OTHER FACILITIES SHALL MAINTAIN A MINIMUM OF THREE FEET FROM THE NEAREST OUTSIDE TRENCHES. IF THE TRENCHES ARE DEEPER THAN THREE FEET, THE MINIMUM SHALL BE ONE FOOT OF EARTH (SOIL BARRIER) BETWEEN THE TRENCHES.
17. IN THE EXTRAORDINARY CASE THAT THE MINIMUM THREE FOOT HORIZONTAL SEPARATION BETWEEN "WET" UTILITIES AND COMPANY DRY FACILITIES, A VARIANCE MAY BE APPROVED BY THE LOCAL INSPECTION SUPERVISOR AND SUBMITTED TO SERVICE PLANNING SUPPORT PROGRAM MANAGER FOR APPROVAL.
18. ALL METER PANELS: INDIVIDUAL, RESIDENTIAL, OR NONRESIDENTIAL APPLICANTS WILL BE INSTALLED INSIDE A METER ROOM OR OTHER STRUCTURE, THE REQUIREMENTS DESCRIBED BELOW.
  - A. INSTALL, OWN, AND MAINTAIN A SEPARATE, NOMINAL, 2-INCH DIAMETER CONDUIT FROM THE METER ROOM INSIDE THE CONDUIT AND PULL TAPE EXTEND FROM THE OUTSIDE SURFACE OF THE BUILDING AND TERMINATE OUTSIDE THE METER PANEL OR SWITCHBOARD AT THE METER SECTION.
  - B. ENSURE THE 2-INCH DIAMETER CONDUIT AND PULL TAPE EXIT THE OUTSIDE SURFACE OF THE BUILDING AT A MINIMUM OF 8 FEET AND A MAXIMUM OF 10 FEET ABOVE GROUND. THE OPEN END OF THE CONDUIT THAT IS EXPOSED TO THE OUTSIDE MUST HAVE A REMOVABLE, TEMPORARY CAP.
  - C. DO NOT USE THE CONDUIT. THE CONDUIT IS FOR PG&E'S METERING EQUIPMENT.

PG&E PM#S:  
ELECT.:31225344  
GAS: 31249341

UTILITY APPROVALS		
UTILITY	APPROVED BY	DATE
PG&E ELECTRIC		
PG&E GAS		
AT&T (Phone)		
Comcast (CATV)		

DEVELOPER:  
KIER & WRIGHT  
2850 COLLIER CANYON RD.  
LIVERMORE CA 94551  
EMAD SARIE  
925-245-8788 FAX: 925-295-8796



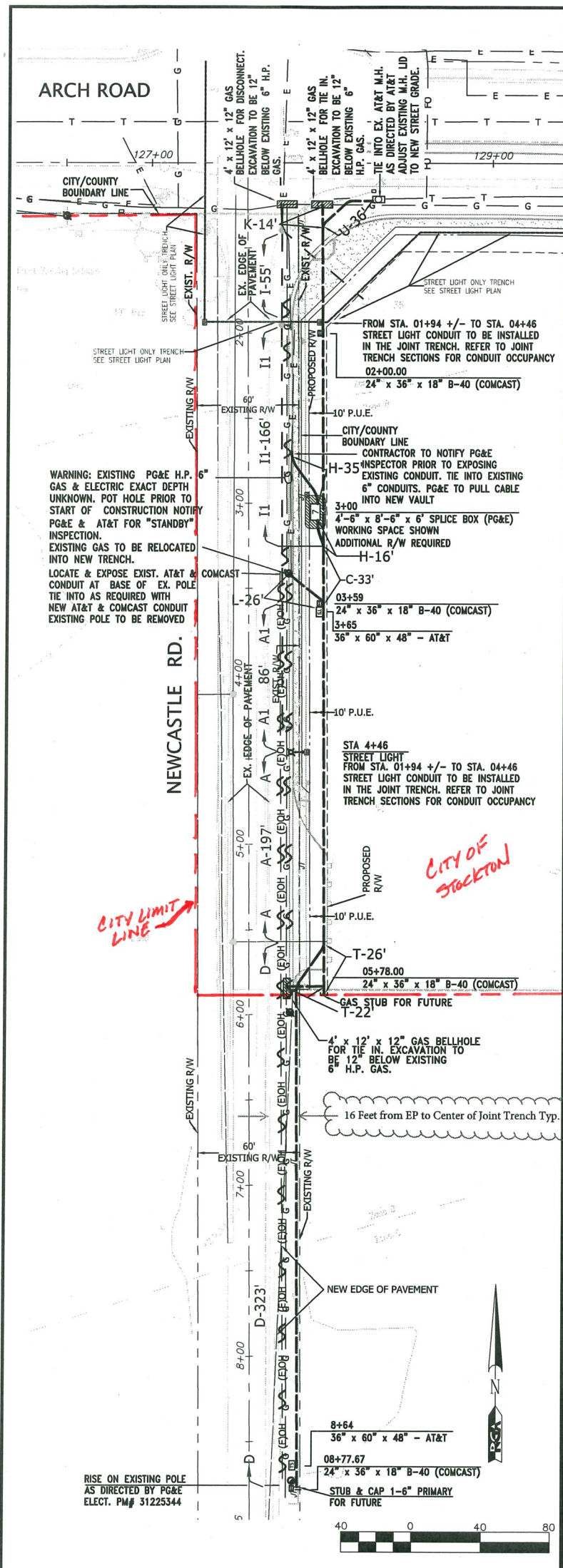
**RG**  
RGA DESIGN  
UTILITY CONSULTANTS & ENGINEERS  
6400 VILLAGE PARKWAY, SUITE 200  
TEL (925) 556-9860

IMPROVEMENT  
BUZZ OATES CO  
JOINT TRENCH RULE COM  
ARCH ROAD & NEWC

DEPARTMENT OF PUBLIC  
CITY OF STOCKTON, CA

CITY ENGINEER  
STOCKTON, CA





- LEGEND**
- NEW STREET LIGHT (SEE STREET LIGHT PLAN)
  - EXISTING STREET LIGHT
  - EXISTING JOINT TRENCH
  - EXISTING OVERHEAD TO REMAIN
  - EXIST. O.H. TO BE REMOVED
  - EXISTING ELECTRIC
  - EXISTING GAS
  - EXISTING GAS TO BE DEACTIVATED
  - EXISTING TELEPHONE
  - EXISTING FIBER
  - EXISTING JOINT POLE TO REMAIN
  - EXIST. JOINT POLE TO BE REMOVED
  - PROPOSED JOINT TRENCH
  - STREET LIGHT ONLY TRENCH SEE STREET LIGHT PLAN
  - SPLICE BOX 3-1/2 PULL BOX 10" x 17" x 12" (SEE STREET LIGHT PLAN)
  - 24" x 36" x 18" B-40 (COMCAST)
  - 4'-6" x 8'-6" x 6" SPLICE BOX (PG&E) WORKING SPACE SHOWN MAINTAIN 30' UNOBSTRUCTED OVERHEAD CLEARANCE OVER BOX
  - 36" x 60" x 48" SPLICE BOX (AT&T)
  - 4' x 12' x 12" GAS BELL HOLE FOR TIE IN. EXCAVATION TO BE 12" BELOW EX. 6" H.H.P. GAS.

- CONTRACTOR NOTES:**
- THE SYMBOLS (P) (S) (T) (C) (G) INDICATE OCCUPANCY ONLY. SEE ELECTRIC, GAS, COMCAST, & AT&T PLANS FOR EXACT SIZE AND NUMBER OF CONDUITS.
  - THIS PLAN IS TO BE USED AS A GUIDE FOR TRENCHING WIDTH AND DEPTH AND NOT CONDUIT INSTALLATION.
  - CONTRACTOR TO INCLUDE INCIDENTAL TRENCHING IN SPLICE BOX, VAULT, OR TRANSFORMER EXCAVATION IN AREAS WHERE NO ENTRANCE OR EXIT OF TRENCH IS SHOWN.
  - UTILITY COMPANIES RESERVE THE RIGHT TO MAKE FIELD ADJUSTMENTS AS NECESSARY.

- SOILS NOTES:**
- RGA IS NOT RESPONSIBLE FOR ANY SOILS ENGINEERING TO DETERMINE THE ABILITY TO CONSTRUCT OR THE PROJECT CONDITIONS.
  - RGA ASSUMES NO RESPONSIBILITY FOR ADDITIONAL WORK DUE TO ADVERSE JOB SITE CONDITIONS.
  - PG&E WILL REQUIRE SOILS ANALYSIS FOR SUBSURFACE TRANSFORMER (IF APPLICABLE).

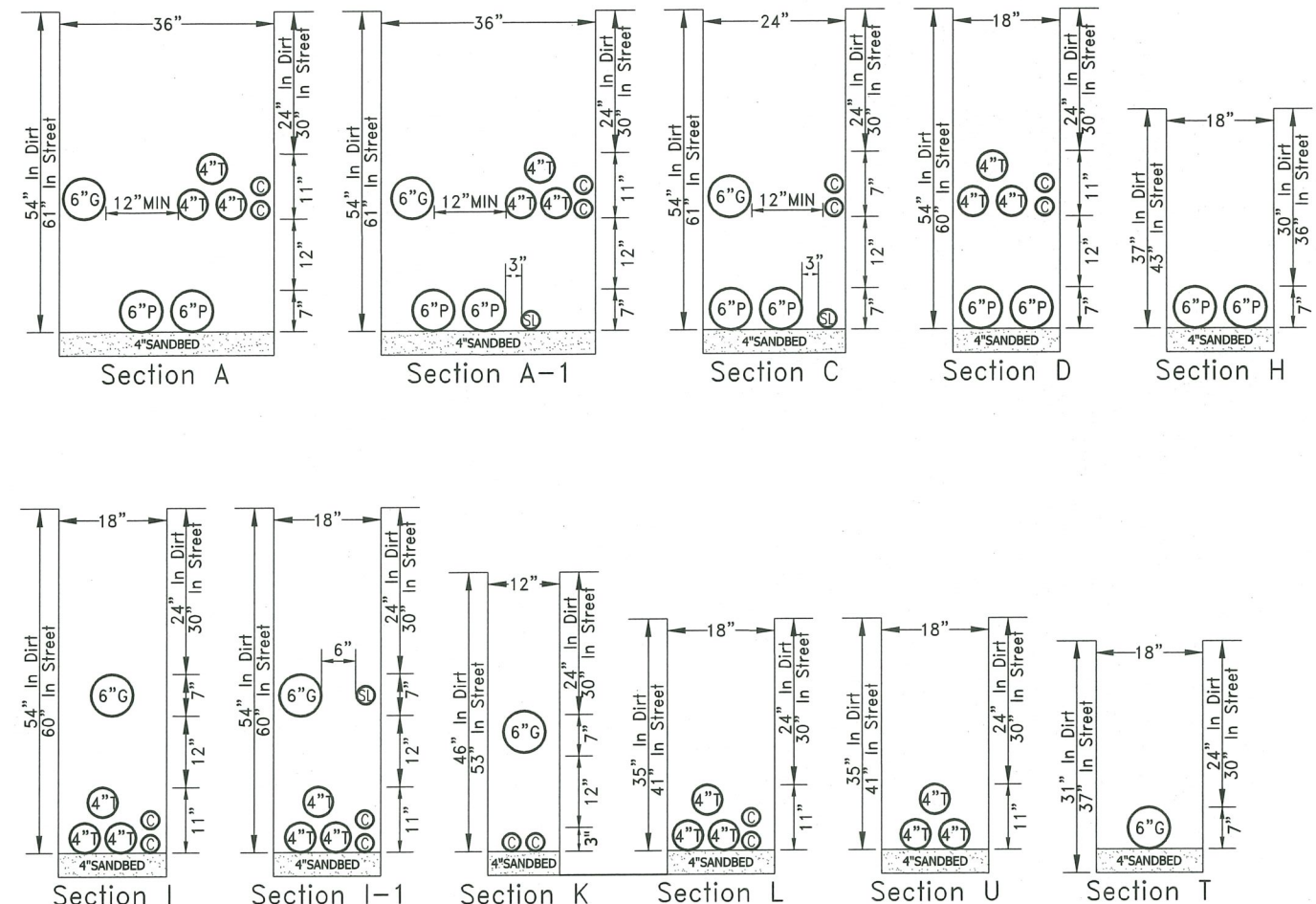
**MINIMUM SEPARATION AND CLEARANCE REQUIREMENTS**

	G	T	C	S	P	MIN. COVER
G GAS	0"	12"	12"	12"	6"	12"
T TELEPHONE (DUCT)	12"	0"	1"	1"	12"	24"; 30" IN STREET
T TELEPHONE (DIRECT BURY)	12"	1"	0"	1"	12"	24"; 30" IN STREET
C C.A.T.V.	12"	1"	1"	0"	12"	24"; 30" IN STREET
S ELECTRIC SECONDARY	6"	12"	12"	12"	1.5"	24"; 30" IN STREET
P ELECTRIC PRIMARY	12"	12"	12"	12"	3"	30"; 36" IN STREET

**TRENCH OCCUPANCY GUIDE**

SECTION	G	T	C	S	P	OTHER
A*	X	X	X	X	X	
B*	X	X	X	X	X	
C*	X	X	X	X	X	
D*	X	X	X	X	X	
E*	X	X	X	X	X	
F*	X	X	X	X	X	
G*	X	X	X	X	X	
H*	X	X	X	X	X	
I	X	X	X	X	X	
J	X	X	X	X	X	
K	X	X	X	X	X	
L	X	X	X	X	X	
M	X	X	X	X	X	
N	X	X	X	X	X	
O	X	X	X	X	X	
P	X	X	X	X	X	
Q	X	X	X	X	X	
R	X	X	X	X	X	
S	X	X	X	X	X	
T	X	X	X	X	X	
U	X	X	X	X	X	
V	X	X	X	X	X	
W	X	X	X	X	X	
X	X	X	X	X	X	

\*THESE SECTIONS MAY OR MAY NOT CONTAIN SECONDARY



## TRENCH SECTIONS

NOT TO SCALE

CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE PROJECT

- \* PG&E GAS DESIGN DESIGN
- \* PG&E ELECTRIC DESIGN
- \* AT&T PHONE DESIGN
- \* STREET LIGHT PLAN

AND CONDUCT HIS WORK ACCORDINGLY

**NOTE TO CONTRACTOR:**

FOR CONTRACTOR'S WORK RESPONSIBILITY, REFER TO JOINT TRENCH TITLE SHEET (JT-1)

SUBSTRUCTURE LOCATIONS MUST BE STAKED BY A LICENSED SURVEYOR PRIOR TO CONSTRUCTION

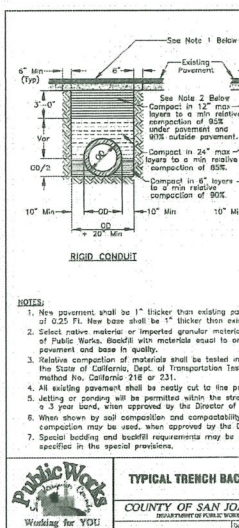
- ABBREVIATIONS:**
- (P) PRIMARY (PG&E)
  - (S) SECONDARY (PG&E)
  - (C) CATV (COMCAST)
  - (T) PHONE (AT&T)
  - (G) GAS (PG&E)
  - (SL) STREET LIGHT

**Sheet Index**

JT-1 JOINT TRENCH TITLE SHEET

JT-2 JOINT TRENCH COMPOSITE- R20 & TRENCH SECTIONS

REVISION NO.	DATE	BY	APPROVED	SCALE: 1"=40'	APPROVED BY:
				P.M. R. HANKINS	
				DRAWN BY: M.W.	
				CHECKED BY: D.V.	
				RECORD DWG:	



PG&E PM#S:  
ELECT.: 312253  
GAS: 3124934

**RG**  
RGA DESIGN  
UTILITY CONSULTANTS & ENGINEERS  
6400 VILLAGE PARKWAY, SUITE 20  
TEL (925) 556-9860

IMPROVEMENT  
BUZZ OATES CO  
JOINT TRENCH RULE 2  
ARCH ROAD & NEWC

DEPARTMENT OF PUBLIC WORKS  
CITY OF STOCKTON, CA

THIS PLAN SE  
REFERENCE  
CITY ENGR  
STOCKTON, CAL