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-1301676**
Date Issued: 06/21/2013
Exp. Date: 08/01/2013
Project No: PWP110005
Quad: NW

ENCROACHMENT PERMIT

To: DESILVA GATES CONSTRUCTION
11555 DUBLIN BLVD.
DUBLIN, CA 94568

Encroachment Type:

Bell Hole	Bore (up to 6 inch Dia)		

Location:
BOTH SIDES OF THORNTON ROAD 1,800' N/0 WOODBRIDGE ROAD

In compliance with your request of **06/21/2013** , 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.

rmittee shall call the Department of Public Works, Field Engineering Division (Permit Inspections) at (209)953-7421 at least orty-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: $0.00

THOMAS M. GAU, Director
Department of Public Works

By: _____
Permit Section

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

ENCROACHMENT PERMIT GENERAL PROVISIONS

13-1

1. This permit is issued under and subject to a11 1aws 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 within the work herein permitted. If any are disturbed, the Permittee is required to tie out each location and re-establish them after completion of work, using a licensed land surveyor. A corner record must be filed in accordance with state law for any re-set monuments.

APPLICATION FOR ENCROACHMENT PERMIT

PLEASE PRINT:

Date June 3, 2013

To: San Joaquin County
Department of Public Works

DeSilva Gates Construction
(Applicant Name)

11555 Dublin Boulevard
(Mailing Address)

Dublin CA 94568
(City, State, Zip Code)

925 - 829 - 9220
(Area Code - Telephone Number)

OFFICE USE ONLY

JOB #	PWP110005	REF #	
APN		CR #	
EXP. DATE	8-1-2013		
VALID	6-21-2013 TO 8-1-2013	DRIVEWAYS:	
STREET	Thornton Rd	*	
AREA	Thornton QUAD NW	*	
TYPE	Bell Hole & Bore	*	
FORMS	SS/WW, R29		
NOTES			

Sketch (Detailed plans may be submitted)

- See Attached

The undersigned hereby applies for permission to excavate, construct and/or otherwise encroach on County Highway Right-of-Way on the Both side of Thornton Rd approximately 1,800 ~~feet~~/mile North of Woodbridge Rd See Attached, by performing the following work (description of work):

Work will commence on or about June 3, 2013 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.

Project Manager — 6/3/13
Signature of Applicant - Title — **Date**

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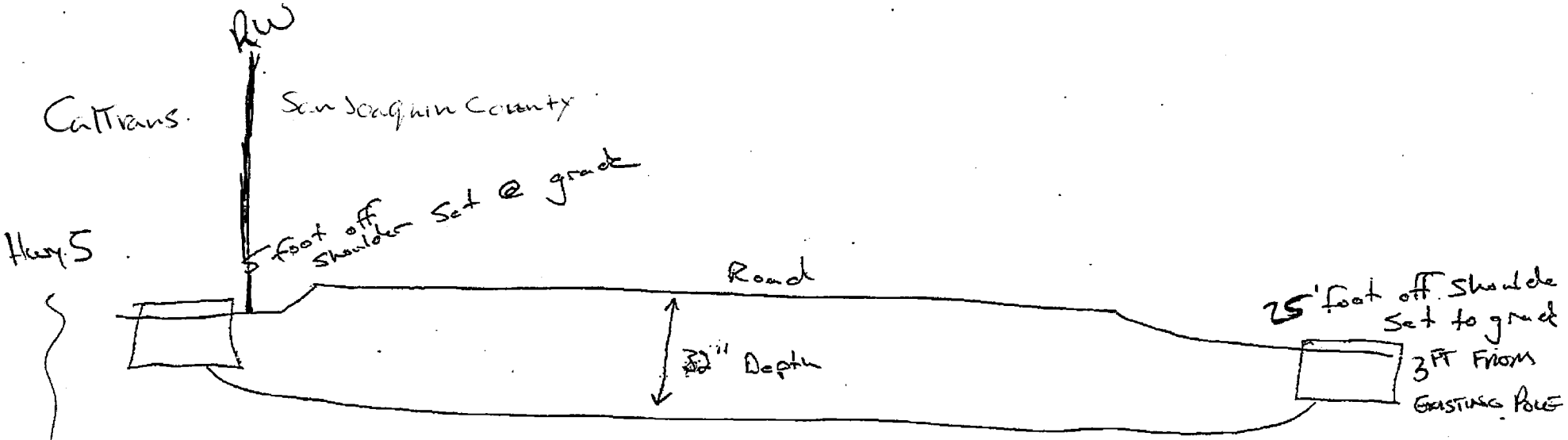


We will dig two pits, pot hole any utilities, and Bore at a depth of 30" plus the Diameter of the pipe (2") For a final depth of 32". We will use the Standard Caltrans T-13 Sheet (see attached) for traffic control.

DIST	COUNTY	ROUTE	ALLOWATION POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

December 30, 2004
PLANS APPROVAL DATE

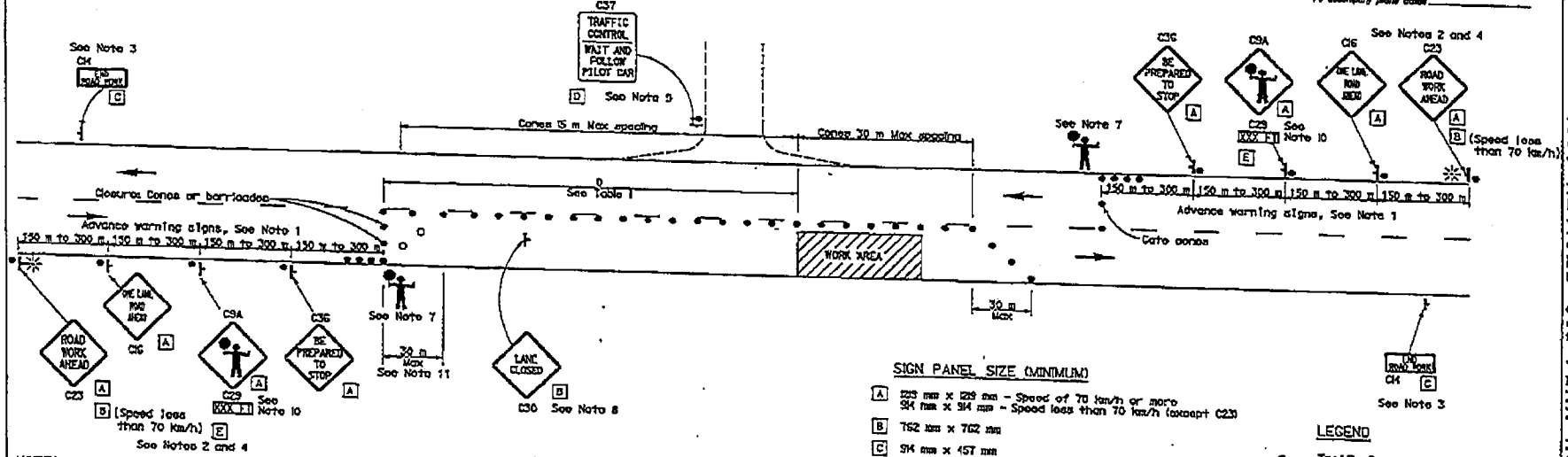
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To get to the Caltrans web site, go to: http://www.dot.ca.gov

To accompany plans dated _____

Caltrans Metric

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A 1219 mm x 1219 mm – Speed of 70 km/h or more
  914 mm x 914 mm – Speed less than 70 km/h (except C23)
- B 762 mm x 762 mm
- C 914 mm x 457 mm
- D 914 mm x 1067 mm
- E 914 mm x 229 mm

NOTES

1. Where approach speeds are low, advance warning signs may be placed at 90 m spacing, and closer in urban areas.
2. Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 400 mm x 400 mm in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
3. A C14 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
4. If the C23 sign would follow within 600 m of a stationary C23 or C1 "ROAD WORK NEXT_____ MILES", use a C16 sign for the first advance warning sign.
5. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
6. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
7. Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 5 m in diameter. Place a minimum of four cones at 15 m intervals in advance of flagger station as shown.
8. Place C30 "LANE CLOSED" sign at 150 to 300 m intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
9. When a pilot car is used, place a C37 "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.
10. An optional C29 sign may be placed below the C9A sign.
11. Traffic cones or barricades may be placed on the optional taper as shown, barricades shall be Type I, II, or III.

TABLE I

Approach Speed	Minimum D	Downgrade Minimum D *
km/h	m	m
30	60	72
40	60	72
50	60	72
60	90	108
70	90	108
80	150	180
90	150	180
100	150	180
110	170	204

* Use on substained downgrade steeper than -3 percent and longer than 1.6 km.

LEGEND

- Traffic Cone
- Traffic Cone (optional taper)
- Portable Sign
- Direction of Travel
- Portable Flashing Beacon
- Flagger

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON TWO LANE CONVENTIONAL HIGHWAYS

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

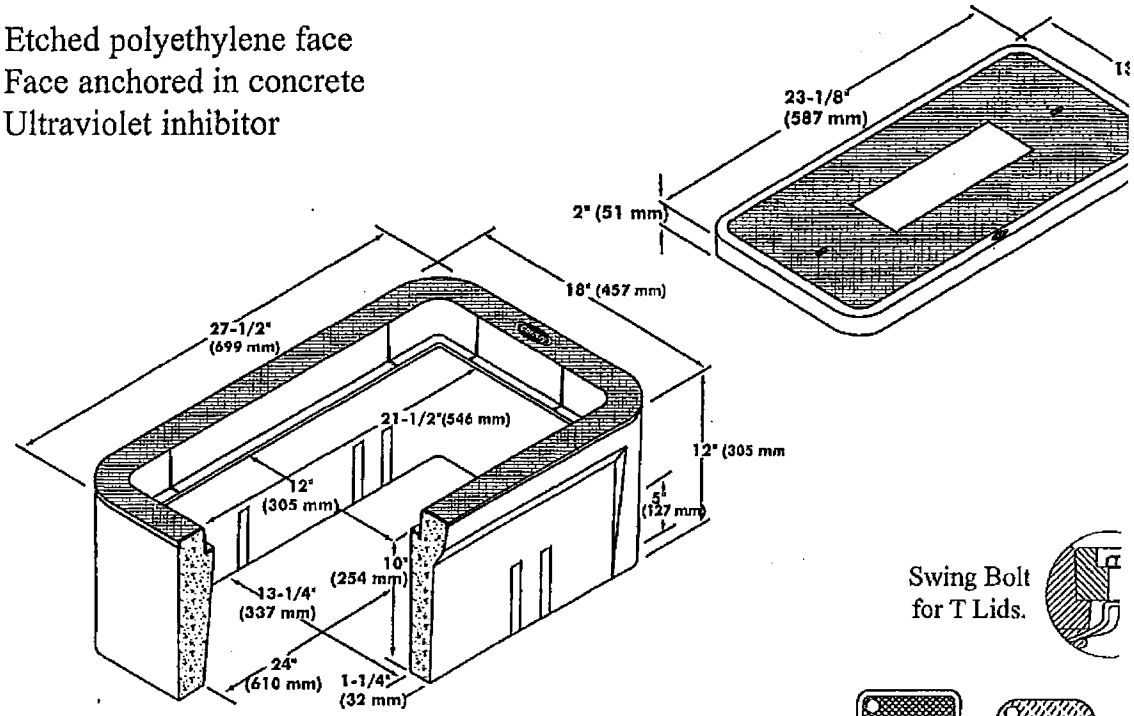
RSP T13 DATED DECEMBER 30, 2004 SUPERSEDES STANDARD PLAN T13 DATED JULY 1, 1999-PAGE 166 OF THE STANDARD PLANS BOOK DATED JULY 1999.

REVISED STANDARD PLAN RSP T13

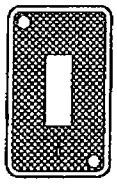
N30 Electrical Box 13-1/4" x 24"

Meets Caltrans #5 State Specifications

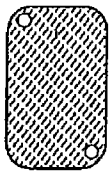
- Etched polyethylene face
- Face anchored in concrete
- Ultraviolet inhibitor



Swing Bolt for T Lids.



N30T



N30-61J

A high density reinforced concrete box with end and side knockouts. Non-settling shoulders maintain grade and facilitate back filling. Approximate dimensions shown.

Christy Ordering Code	Item	Approx. Shipping Weight	Description
N30BOX	Box	141	N30 Electrical Box (13-1/4" x 24") Meets #5 State Specifications - 12 per pallet
B30D	Lid	49	Reinforced concrete
FL30D	Lid	20	Fibrelyte lid, non-concrete
N30T	Lid	49	Reinforced concrete, bolt down (order bolts s
FL30T	Lid	20	Fibrelyte lid, bolt down (order bolts separate)
B30-61D	Cover	38	Steel checker plate
N30-61J	Cover	38	Steel checker plate, bolt down (order bolts se
B30X6	Extension	60	6" reinforced concrete - 15 per pallet
B30X12	Extension	134	12" reinforced concrete - 12 per pallet
B30SL	Slab	54	Reinforced concrete - (16" x 27")
B30BA	Base	90	5-1/2" high reinforced concrete
		Galvanizing available on all steel covers.	

LAKE CABLE, LLC
WHEN DELIVERY MATTERS...
529 Thomas Drive, Bensenville, IL 60106 USA - Ph: 847.238.3000 Toll Free: 888.518.8086 Fax: 630.860.5944

CALTRANS TYPE 2 LOOP DETECTOR CABLE SPECIFICATION

Lake Cable Part #: S80050520

Description: Specification covers a single conductor type THHN or THWN constructed with polyvinylchloride and nylon insulation in an overall polyvinylchloride loose encasing tube for use as an inductance loop detector cable rated 600V, 105°C. Cable is manufactured in the USA in accordance to CALTRANS Specification Section # 86-5.01A(4):

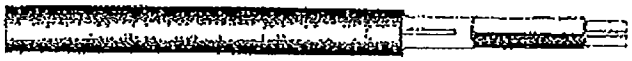
1. Conductor:
   - 1.1 AWG Size: 14 AWG, Class C 19 Strands
   - 1.2 Material: Annealed Bare Copper
2. Insulation:
   - 2.1 Material: Polyvinylchloride & Nylon
   - 2.2 Wall Thickness: 0.015" PVC & 0.005" Nylon - The minimum at any point shall not be less than 90% of the specified wall thickness
   - 2.3 Insulated Conductor OD: 0.114", Nominal
   - 2.4 Legend: 14AWG STRANDED PVC/NYLON GAS AND OIL RESISTANT 600V 105°C
3. Color Code:
   - 3.1 Code: Black
4. Assembly:
   - 4.1 Lay Length: N/A
   - 4.2 Shield: N/A
   - 4.3 Drain: N/A
   - 4.4 Fillers: N/A
   - 4.5 Binder: N/A
5. Jacket (Loose Tube):
   - 5.1 Material: Polyvinylchloride (PVC)
   - 5.2 Wall Thickness: 0.030" - The minimum at any point shall not be less than 80% of the specified wall thickness
   - 5.3 Diameter: 0.205", Nominal - Overall diameter shall not exceed 0.220" at any point
   - 5.4 Color: Black
   - 5.5 Weight: 31 lbs./Mft.
   - 5.6 Ripcord: N/A
6. Markings:
   - 6.1 Type: Cable shall be identified by means of surface ink jet print
   - 6.2 Legend: LAKE CABLE CALTRANS TYPE 2 LOOP DETECTOR CABLE 1C 14AWG STRANDED PVC/NYLON 600V 105°C GASOLINE & OIL RESISTANT (SEQENTIAL FOOTAGE MARKERS)(YEAR OF MFG) "ROHS"
7. Testing:
   - 7.1 Cable shall be tested in accordance to IMSA 51-5 600V, 105°C
   - 7.2 All materials used in the manufacture of this cable are RoHS compliant

ALL SPECIFIED PARAMETERS ARE NOMINAL AND SUBJECT TO VERIFICATION

Written by: RRC Date: 07-31-07

R Capelli, Engineering Mgr 8/22/2007

Advanced Digital Cable, Inc.	Specification Sheet for CALTRANS 16 awg 1 pair Type B Lead-In Cable	Date:	12/12/02
		Part Number:	8750CA
Drawn by:	Customer Approval:	UL Type:	N/A



Construction Details:

This cable is constructed with one pair composed of 16 awg tinned copper conductors insulated with high density polyethylene. The pair is cabled with polyester fillers, an aluminum/polyester tape wrap and a 20 awg tinned copper drain wire. A jacket of black high density polyethylene completes the package

Physical Specifications

Conductors:	2 – 16 awg (19/29) tinned copper .056"
Dielectric:	20 mil wall of high density polyethylene to a nominal diameter of .096".
Cabling:	Cable together two insulated conductors, per the color code, and two polyester fillers with an overall aluminum/polyester tape – foil out, and a 20 awg (7/28) tinned copper drain in a 2" left hand lay to a nominal diameter of .196"
Jacket:	32 mil wall of black high density polyethylene to a nominal diameter of .260"
Print:	Printed marker tape under jacket ADVANCED DIGITAL CABLE YYYY CALTRANS TYPE B LEAD-IN 600V
Put Up:	Per customer specification

Color Code

Pair Number	Insulation Color
One	1-Black 1 Clear

317-023-1601 A

KEY-SEAL

YOUR KEY TO QUALITY

PARKING LOT CRACK FILLER

HOT MELT ASPHALT CRACK SEALANT

USE:
A crack joint sealant ideally suited for parking, slow vehicle and pedestrian traffic areas. Very fast cure time. Can also be used for road and street applications. Jacketed, agitated melting equipment is required.

GENERAL:
Highly waterproof. Good melting and high temperature properties result in a workable crack sealant preferred by pavement maintenance contractors where a hard, yet pliable crack sealant is required.

PHYSICAL PROPERTIES:

TEST	TYPICAL RESULTS
CONE PENETRATION ASTM D-3405	25-45 dmm
SOFTENING POINT ASTM D-36	220 F
RESILIENCE ASTM D-3405	45
FLOW AT 140 ASTM D-3405	0
MANDREL BEND AT 0 F 90 DEG BEND 10 SEC, 1/2" DIA.	PASS
TOUGHNESS/TENACITY IN/LBS.	600/300
DUCTILITY ASTM D-113	45 cm
ASPHALT COMPATIBILITY ASTM D-3405	PASS
SAFE HEATING TEMPERATURE	420 F

PACKAGING
60 lb. boxes containing two 30 lb. bags of sealant.

PREPARATION
All cracks and joints are to be thoroughly cleaned and moisture free. Cracks less than 1/4 inch should be routed for proper application.

WARRANTY
Keas Inc. warrants that all sealant meets applicable specifications at time of shipment. Remedies against Keas Inc. are limited, at option of Keas Inc., to product replacement or full or partial refund and does not include installation or any other costs. Claims must be made within 60 days of the date of purchase.

Distributed by

KEAS INDUSTRIAL COATINGS, INC. 724 W. LINWOOD, TURLOCK, CA 95380

(800) 548-9430

Key Seal Products, Inc.

Material Safety Data Sheet

Key Seal PLF 210

Hot Applied Sealant

Description Key Seal PLF 210 a Premium Grade, hot applied, single component, elastically modified composition of asphalt cement, virgin synthetic polymer, premium rubber, and other modifiers, which results in a Fast Set Up sealant.

Use Key Seal PLF 210 is a moderate viscosity pavement preservation sealant ideally suited for parking lots, slow vehicle and pedestrian areas, plus highway, street and aviation applications for sealing longitudinal and transverse joints and random cracks in Asphalt or Concrete pavements where a firm yet pliable material is desirable. Properly installed, Key Seal PLF 210 is an effective barrier against damage from debris and moisture infiltration into cracks and joints within regions experiencing moderate high and moderate low pavement temperatures

Heating Sealant shall be heated in a hot-oil jacketed melter capable of constant mechanical agitation and equipped with a calibrated thermometer to monitor sealant temperature Material shall be heated to and maintained at Recommended Application Temperature during use. Material can be cooled and then reheated, but only if prolonged heating is avoided. Prolonged heating at or above Recommended Application Temperature may severely damage product. If overheating damage occurs, immediately drain machine completely and refill with new material

Application Key Seal PLF 210 is pre-reacted and can be applied immediately after heating to Recommended Application Temperature. With pavement temperature at 40°F (4°C) or higher, place material into clean, dry crack or prepared reservoir by means of a hand-held pot, wheeled push tractor or wand applicator. Squeegee any excess sealant tight to pavement surface. Pavement may be warmed to 40°F (4°C) or higher with a Hot Air Lance.

Properties of Key Seal PLF 210
When sampled and heated to maximum heating temperature in accordance with ASTM D5167

TEST	METHOD	SPECIFICATION
Cone Penetration @ 77°F (25°C)	ASTM D5329	20-50 dmm
Flow @ 140°F (60°C)	ASTM D5329	3.0 mm maximum
Resilience @ 77°F (25°C)	ASTM D5329	40% minimum
Asphalt Compatibility	ASTM D5329	pass
Softening Point	ASTM D36	190°F (82°C) minimum
Cold Bend Flexibility @ -10°F (-23°C)	Deory	Bend without cracking
Recommended Application Temp	ASTM D5167	380-400°F (193-204°C)
Maximum Heating Temperature	ASTM D6690	400°F (204°C)

- Temperature of product measured at pavement surface Use highest Recommended Application Temperature in Cool Weather.
- Prolonged heating at or above Recommended Application Temperature may severely damage product.

Packaging Material is packaged in cardboard boxes sized to Accommodate a maximum of 40 lb (18.0kg). Material Contained in each box is wrapped in a quick melt liner which is dissolved and incorporated into the melted product. Standard packaging is 30 lb (13.6kg) per box, palletized 75 Boxes per pallet with an approximate net weight of 2,250 lb (1,021.0 kg). Pallets are moisture protected with a plastic and bound with a minimum of two layers of UV resistant stretch wrap

Key Seal Products, Inc.
724 W. Linwood Ave.
Turlock, Ca. 95380
209-667-8443

Performance Temperature fluctuations, site conditions, surface preparation, traffic, installation technique, material selection, shape factor and surface treatment compatibility influence the effectiveness and useful life of Pavement Preservation treatments. Consider and monitor each element for optimum results. Purchaser and end user should determine applicability for use in their specific conditions.

Key Seal Products, Inc.

Material Safety Data Sheet

Date Prepared 4-1-2006

OMB No. 1218 0072

Trade Names: Key Seal Hot Applied Crack & Joint Sealants and Adhesives
Note: This MSDS covers principle types and/or grades of Key Seal hot applied sealants. Sub-grades are not specifically identified.
101, 101ELT, 102, 102OL-3SB, 102P, 102PL, 103, 103-25, 103-25F, 103OL, 103OLSTLC, 103P, 115, 115UT, 180, 180NR, 200, 220, 974, 974D, 974+, 3723, 5078, PRO-PL, PLP 210, Modified AC & Fiber, AC-20, AC & Fiber, Super Stretch, and miscellaneous Sealants and Adhesives.

Identity: Hot Applied Sealants and Adhesives
Chemical Formula and CAS Number: MIXTURE

Emergency Telephone Numbers:
Information Telephone: Normal Business Hours 1-970-858-3678
Manufacturing Plant: 1-301-778-8610
Call CHEMTREC day or night: Domestic North America 800-424-9300
International 703-527-3887 (collect calls accepted)

SECTION II – INGREDIENTS – IDENTITY INFORMATION

Ingredient Name	CAS Number	Weight %
Petroleum Asphalt	8052-42-4	10-97%
Mineral Filler	1317-65-3	0-70%
Butadiene/Styrene Copolymers	9003-55-8	0-20%
Polyethylene	9002-88-4	0-20%
Hydro-treated Heavy Naphthenic Oil	64742-52-5	0-5%
Vulcanized Reclaimed Rubber Compound	N/A	0-30%
Styrene/Isoprene Copolymers	25038-32-8	0-30%
De-asphalted Oil	64741-95-3	0-20%
Styrene/Ethylene/Butadiene Copolymers	66070-58-4	0-15%
Ethylene-Butadiene Copolymer	66070-58-4	0-12%
Polyester Fibers	25038-59-9	0-10%
Hydrocarbon Resin	8052-42-4	0-8.5%
		0-5%

SECTION III – HAZARDS IDENTIFICATION

HMIS Rating

Health	1	Moderate
Fire	1	Slight
Reactivity	0	Least

The primary potential hazards associated with this product are due to skin contact with hot product and inhalation of fumes from the product and fumes generated by equipment utilized to heat the product to an use without adequate ventilation. Heating and application should be limited to outdoors.
Skin Contact: Contact with hot material will cause thermal burns. Prolonged exposure may cause dermatitis. Hot material will stick to skin.
Inhalation: Do not inhale fumes of heated material. Petroleum fumes may be irritating when heated. Fumes can be irritating to the eyes, nose, throat, skin and lungs. Fumes may cause coughing, headache, and dizziness. Prolonged exposure to fumes may cause irritation to the eyes, nose, throat, skin and lungs.
Ingestion: Not a Expected
Eyes: Direct contact with hot material may cause burns and blindness. Exposure to fumes or mists may cause irritation.
Health Hazards: The cool solid material is not expected to cause eye or skin irritation, nor is it expected to have acute systemic toxicity by ingestion. This material is classified as having a low order of reactivity. Operation of processing and heating equipment may release fumes that will cause primary irritation if ingested from an area without sufficient ventilation. CONTACT WITH HOT MATERIAL WILL CAUSE BURNS
Carcinogenicity: See section XI

SECTION IV – FIRST AID MEASURES

EYES: If hot material should splash into the eyes, flush eyes immediately with fresh cool water while holding the eyelids open. See a doctor.
SKIN: If hot, melted material gets on skin, IMMEDIATELY SUBMERGE area in water. Cold water is preferable. See a doctor for extensive burns. DO NOT try to peel solidified material from skin. Do not use hydrocarbon solvents, thinners or other products that may be hazardous to flush the solidified material. Vegetable oil, mineral oil, baby oil or other combustible products are not recommended for removal of this material from the skin.
INHALATION: If there are signs or symptoms as described in the MSDS due to breathing this material, move the person to fresh air. If breathing has stopped, apply artificial respiration. Call a doctor. Seek medical attention.
INGESTION: Do not induce vomiting. Seek medical attention.

SECTION V – FIRE FIGHTING MEASURES

NFPA Hazard Ratings

Health	1	Moderate
Fire	1	Slight
Reactivity	0	Least

Flash Point-COC-410°F Minimum (COC) Auto Ignition Temperature – 600°F+
Extinguishing Media – Dry Chemical, CO2 Flammability Classification – Class III & Combustible
Special Fire Fighting Procedures – Same as all fire. Unusual Fire & Explosion Hazard – Smoke from fire may be hazardous
Fire fighting instructions – Use of water or foam directly on flames may spread fire. Use a water spray to cool containers. Use air supplied breathing apparatus where heavy smoke occurs. Do not release fire control runoff into sewers.
Products of Combustion – Carbon Monoxide, Hydrogen Sulfide, Carbon Dioxide, and other products of combustion of hydrocarbons

SECTION VI – ACCIDENTAL RELEASE MEASURES

Spill: Eliminate sources of ignition. Stop spill. Contain spill if necessary by diking, impoundment, or other means. Allow material to cool. Scrape or gather cooled material and prepare for disposal. Do not flush spill to sewer or other waters. Ventilate area to avoid breathing fumes. Follow appropriate OSHA regulations (29 CFR 1910.120). Cooled material is not a hazardous waste as defined by RCRA. For disposal comply with all local, federal, and state regulations regarding solid waste.

SECTION VII – HANDLING & STORAGE

Handling and Storage Precautions: Use metal scraper until pressure is known to be safe. Eliminate sources of ignition from storage area.

SECTION VIII – EXPOSURE CONTROLS & PERSONAL PROTECTION

Ventilation Requirements: Melting of product and melting equipment operation must be sealed to open, outside areas. Provide ventilation to keep fumes below threshold limit values. Product application should be limited to open, outside areas. For operations where fume exposure can occur or is thought to occur, a MSHA/NIOSH approved respirator may be necessary. Seek professional advice for a recommendation as to type of respirator that may be necessary.
Eye/Face Protection: For operations where eye or face contact with hot material may occur, eye protection such as safety goggles or a face shield is recommended.
Skin Protection: When heating and/or applying hot material, wear equipment that will offer protection against thermal burns and contact with hot product such a protective gloves, long sleeve shirts, and hard-soled shoes. Do not wear rubber or composite shoes, gloves, or any other article of clothing that may melt or otherwise be affected by heat.
Hygiene: Wash hands before eating or smoking.

SECTION IX PHYSICAL & CHEMICAL PROPERTIES

Appearance: Solid at room temperature. Product becomes fluid once temperature is elevated beyond softening point (approximately 200°F)
Boiling Point: 500°F+
Incompatible Materials: Strong oxidizing agents
Hazardous Decomposition Products: See Section 5
Hazardous Polymerization: Will not occur
Solubility in Petroleum Solvents: Soluble
Volatility %: Less than 1%
Solubility: Stable
Specific Gravity: 1.0 (Medium)
Odor: Slight petroleum at room temperature. Moderate petroleum odor at 350°F
Water Solubility: Not soluble in water
Evaporation Rate: 0%

SECTION X – STABILITY AND REACTIVITY

Polymerization: Will not occur
Hazardous Decomposition Products: See Section V
Chemical Incompatibilities: Strong oxidizing agents
Stability: Stable

SECTION XI – TOXICOLOGICAL INFORMATION

Carcinogenicity: There is inadequate evidence that asphalt (bitumen) is carcinogenic to humans. The International Agency for Research on Cancer (IARC) has recently reviewed the carcinogenic potential of asphalts. They concluded that there was insufficient evidence that asphalt was carcinogenic to animals, while there was only limited evidence that steam-refined asphalts were carcinogenic to animals. Additionally, there was insufficient evidence to conclude that asphalts were carcinogenic to human beings. Studies in which mice were exposed to a variety of whole asphalts did not result in any increased cancer risk when exposed to asphalt diluted with hydrocarbon solvents and increased incidences of certain types of cancer. Brief or intermittent skin contact with this asphalt product is not expected to produce any serious effects. While normal handling of this product is not likely to cause exposure in excess, skin contact and breathing of mists, fumes or vapors that could be inhaled by a employee. We strongly recommend that the precautions outlined in this MSDS be followed when handling this material. Some asphalt contain sulfur components, which may form H2S when heated. The pure gas odor of H2S is overlable as an indication of concentration because it may be easily masked by the odor of asphalt. Signs and symptoms of overexposure to H2S include respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbances, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. H2S concentrations of 1000-2000 PPM can be extremely hazardous.

SECTION XII – ECOLOGICAL INFORMATION

Soil Absorption: None known
Environmental Impact: No Data
Environmental Degradation: No Data
Ecotoxicity: Unknown, No Data

SECTION XIII – DISPOSAL

According to Federal regulations (40 CFR 261) this product, as supplied, is not a hazardous waste when discarded or disposed of. It is the responsibility of the user to determine, at the time of disposal if the product is a hazardous waste subject to RCRA. Transportation, storage, and disposal of RCRA waste must be conducted in compliance with 40 CFR 262, 263, 264, 268, and 270.

SECTION XIV – TRANSPORTATION

Product as Packaged and Shipped:
D.O.T. Shipping Label: N/A
Hazard Class: N/A
Shipping Name or Designation: N/A
D.O.T./I.M.: N/A

Melted Product (heated above softening point of 200°F)
Placard Requirement: "Hot" UN3257
Packaging Group: PG III
Hazard Class: 9
Shipping Name: Elevated Temperature N.O.S.

SECTION XV – REGULATORY INFORMATION

State regulatory: The following chemicals are known to be specifically listed by indicated states. Contact the appropriate state regulatory agency for more specific requirements.
New Jersey Right to Know: Petroleum Fumes
Illinois Toxic Substance Disclosure to Employees List: Petroleum Fumes
Minnesota Right to Know: Petroleum fumes
Pennsylvania Right to Know: Petroleum fumes
Rhode Island Hazardous Substances List: Petroleum Fumes, Trace Air Contaminants Screening Level
California Safe Drinking Water and Hazardous Substance
Florida Hazardous Substance List: Petroleum Fumes
Massachusetts Right to Know: Petroleum fumes, petroleum distillates including heavy naphthenics
California Proposition 65 Carcinogens or Reproductive Toxins List: Petroleum Fumes or distillates

U.S. Federal Regulatory Information:
RCRA Hazardous Waste Classification (40 CFR 261): This material should not be hazardous
RCRA Hazardous Waste Number: No Listing
CERLA: No Listing
CERLA Reportable Quantity (RQ): This product in solid form is not a hazardous substance and does not have a reportable quantity. If applied in liquid form into waters of the United States, it may be reportable under the CLEAN WATER ACT

SARA 311 Categories: Immediate (Acute) Health Effects: Yes (when product is heated)
Delayed (chronic) Health Effects: Yes (when product is heated)
Fire Hazard: No
Sudden Release of Pressure: No
Reactivity Hazard: No

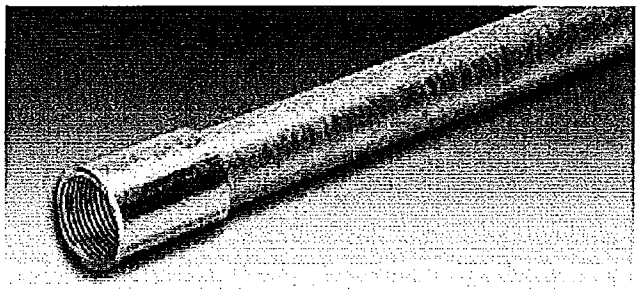
Other Regulations: None Known

Galvanized Rigid Metal Conduit (GRC) and Kwik-Couple™ GRC

Rigid Steel Conduit (GRC)

- Hot-dip galvanized for excellent corrosion resistance
- High strength ductile steel for long life and easy bending
- Smooth, continuous raceways for fast wire-pulling
- UL listed to UL 6, manufactured in accordance with ANSI C80.1
- True Color GRC special orders available
- Available in trade sizes 1/2 thru 6

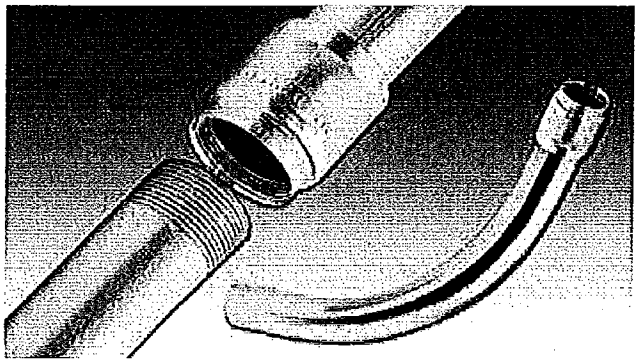
Quality, Long Lasting Heavy Duty Steel Conduit



Kwik-Couple (GRC) Rigid Steel Conduit & Elbows

- Factory-installed Kwik-Couple couplings are available in GRC rigid conduits and elbows
  Just line up the ends, spin the coupling forward onto the next piece and wrench tighten. It's that easy!
- No separate couplings to purchase, store, carry or install
- Kwik-Release End Cap · Requires no tools
- True Color GRC special orders available
- All the benefits of GRC Conduit
- Patented*
- Available in Trade sizes 1/2 thru 4

For Faster Installations Use the Kwik-Couple GRC Connection



* U.S. Patent Numbers 4258936,4547004.

Galvanized Rigid Steel Conduit Weights and Dimensions

Trade Size	Metric Designator	Approx. Wt. Per 100 Ft. (30.5M)		Outside Diameter[1]		Nominal Wall Thickness[2]		Quantity In Master Bundle*	
		lb.	kg.	in.	mm.	in.	mm.	ft.	m.
1/2	16	82	37.2	0.840	21.3	0.104	2.60	2500	762.5
3/4	21	109	49.4	1.050	26.7	0.107	2.70	2000	610.0
1	27	161	73.0	1.315	33.4	0.126	3.20	1250	381.3
1-1/4	35	218	98.9	1.660	42.2	0.133	3.40	900	274.5
1-1/2	41	263	119.3	1.900	48.3	0.138	3.50	800	244.0
2	53	350	158.7	2.375	60.3	0.146	3.70	600	183.0
2-1/2	63	559	253.5	2.875	73.0	0.193	4.90	370	112.9
3	78	727	329.7	3.500	88.9	0.205	5.20	300	91.5
3-1/2	91	880	399.1	4.000	101.6	0.215	5.50	250	76.3
4	103	1030	467.1	4.500	114.3	0.225	5.70	200	61.0
5	129	1400	634.9	5.563	141.3	0.245	6.20	150	45.8
6	155	1840	834.5	6.625	168.3	0.266	6.80	100	30.5

[1] Tolerances: Trade Size 1/2 to 1-1/2: ±0.015" (0.38mm); Trade Size 2-6: ± 1% Length equals 10 ft. (3.05m) with a tolerance of +/- .25 in. (6.35mm)
[2] For information only. Not a requirement of the UL standard.

NOTE: Special orders are non-cancelable, non-returnable and non-refundable.

Galvanized Rigid Metal Conduit (GRC) and Kwik-Couple™ GRC

FEATURES & SPECIFICATIONS

Full Electrical System Protection

Manufactured from mild steel, Allied's Rigid Steel Conduit is highly resistant to damage from impact per NEC article 344 yet ductile to facilitate bending.

The 3/4" taper NPT threads (ANSI B1.20.1) are full cut and hot galvanized after cutting. Color-coded end-cap thread protectors keep the threads clean, sharp and also provide instant trade size recognition. Trade sizes are color-coded blue, 1/2 trade sizes black, and 1/4 trade sizes red.

Coatings

Hot-dip galvanized inside and out to provide galvanic corrosion protection, it is also top-coated with a compatible organic layer to protect against white rust. The inside surface is evenly coated for wire-pulling ease, even through multiple 90° bends.

EMI Shielding

Allied RIGID is very effective in reducing the effects of electromagnetic field levels for encased power distribution circuits, shielding computers and other sensitive electronic equipment from the effects of electromagnetic interference.

Visit www.alliedeg.com to obtain the **GEMI** (**G**rounding and **E**lectro-**M**agnetic **I**nterference) software analysis program.

Codes & Standards Compliance

Allied Rigid Steel Conduit is precision manufactured for dependable, long-lasting value and ultimate protection for electrical conductors. Covered by article 344 of the National Electrical Code™ (NEC), rigid steel conduit is highly resistant to damage from impact. It can be installed in all occupancies and locations, including Class I Division 1 hazardous locations. Rigid steel conduit is recognized as an equipment grounding conductor in Section 250.118 of the NEC. It is listed to Underwriters Laboratories Safety Standard UL 6. and is manufactured to ANSI C80.1,both of which have been adopted as Federal Specifications in lieu of WWC 581.

Installation of Rigid Metal Conduit shall be in accordance with the National Electrical Code and UL General Information card #DYIX. Master bundles conform to NEMA standard RN2.

Specification Data

Rigid Steel Conduit shall be hot-dip galvanized and manufactured by Allied Tube & Conduit. Threads shall be hot galvanized after cutting. Rigid steel conduit shall be listed to UL Safety Standard 6 by a nationally-recognized testing laboratory with follow up service. It shall be manufactured in accordance with ANSI C80.1.

Kwik-Couple Rigid steel conduit shall be listed to UL 6 and UL 514B and manufactured in accordance with ANSI C80.1.

Note: Federal specification WW-C-581, Class 1, Type A has been superseded by UL Standard 6, which has been adopted by the federal government.

Kwik-Couple GRC Conduit Weights and Dimensions

Trade Size	Metric Designator	Approx. Wt. Per 100 Ft. (30.5M)		Outside Diameter[1]		Nominal Wall Thickness[2]		Quantity In Master Bundle	
		lb.	kg.	in.	mm.	in.	mm.	ft.	m.
2-1/2	63	559	253.5	2.875	73.0	0.193	4.90	400	122.0
3	78	727	329.7	3.500	88.9	0.205	5.20	300	91.5
3-1/2	91	880	399.1	4.000	101.6	0.215	5.50	250	76.3
4	103	1030	467.1	4.500	114.3	0.225	5.70	200	61.0

[1] Tolerances: Trade Size 2-5: ± 1%

NOTE: Special orders are non-cancelable, non-returnable and non-refundable.

Galvanized Rigid Metal Conduit (GRC) and Kwik-Couple™ GRC

FEATURES & SPECIFICATIONS

Full Electrical System Protection

Manufactured from mild steel, Allied's Rigid Steel Conduit is highly resistant to damage from impact per NEC article 344 yet ductile to facilitate bending.

The 3/4" taper NPT threads (ANSI B1.20.1) are full cut and hot galvanized after cutting. Color-coded end-cap thread protectors keep the threads clean, sharp and also provide instant trade size recognition. Trade sizes are color-coded blue, 1/2 trade sizes black, and 1/4 trade sizes red.

Coatings

Hot-dip galvanized inside and out to provide galvanic corrosion protection, it is also top-coated with a compatible organic layer to protect against white rust. The inside surface is evenly coated for wire-pulling ease, even through multiple 90° bends.

EMI Shielding

Allied RIGID is very effective in reducing the effects of electromagnetic field levels for encased power distribution circuits, shielding computers and other sensitive electronic equipment from the effects of electromagnetic interference.

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Installation of Rigid Metal Conduit shall be in accordance with the National Electrical Code and UL General Information card #DYIX. Master bundles conform to NEMA standard RN2.

Specification Data

Rigid Steel Conduit shall be hot-dip galvanized and manufactured by Allied Tube & Conduit. Threads shall be hot galvanized after cutting. Rigid steel conduit shall be listed to UL Safety Standard 6 by a nationally-recognized testing laboratory with follow up service. It shall be manufactured in accordance with ANSI C80.1.

Kwik-Couple Rigid steel conduit shall be listed to UL 6 and UL 514B and manufactured in accordance with ANSI C80.1.

Note: Federal specification WW-C-581, Class 1, Type A has been superseded by UL Standard 6, which has been adopted by the federal government.

Kwik-Couple GRC Conduit Weights and Dimensions

Trade Size	Metric Designator	Approx. Wt. Per 100 Ft. (30.5M)		Outside Diameter[1]		Nominal Wall Thickness[2]		Quantity In Master Bundle	
		lb.	kg.	in.	mm.	in.	mm.	ft.	m.
2-1/2	63	559	253.5	2.875	73.0	0.193	4.90	400	122.0
3	78	727	329.7	3.500	88.9	0.205	5.20	300	91.5
3-1/2	91	880	399.1	4.000	101.6	0.215	5.50	250	76.3
4	103	1030	467.1	4.500	114.3	0.225	5.70	200	61.0

[1] Tolerances: Trade Size 2-5: ± 1%

NOTE: Special orders are non-cancelable, non-returnable and non-refundable.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sac,SJ, Sol	5,12	Var	1	188

ACNH-000C(348)E

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN SACRAMENTO, SAN JOAQUIN, AND SOLANO COUNTIES ON ROUTES 5 AND 12 AT VARIOUS LOCATIONS

INDEX OF PLANS

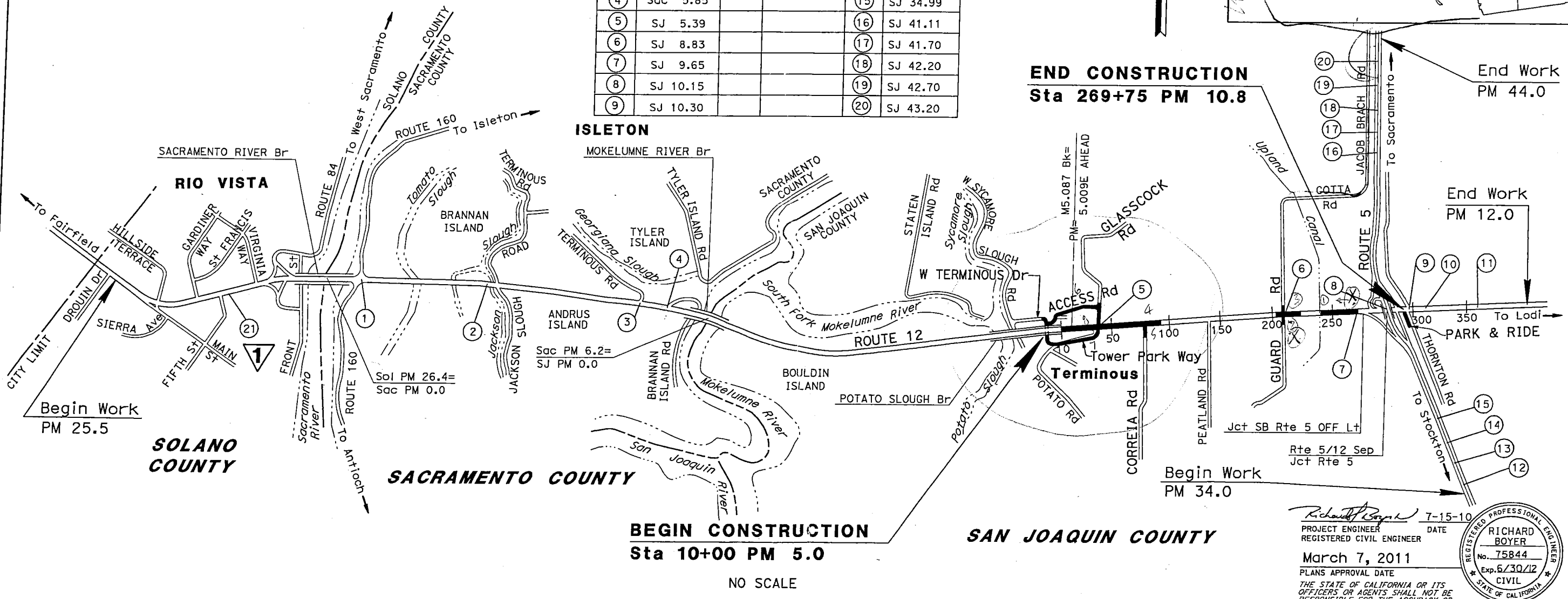
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-7	TYPICAL CROSS SECTIONS
8-17	LAYOUTS
18-25	PROFILES AND SUPERELEVATION DIAGRAMS
26-35	CONSTRUCTION DETAILS
36-45	EROSION CONTROL
46-63	DRAINAGE PLANS, PROFILES, DETAILS AND QUANTITIES
64-73	UTILITY PLANS
74	CONSTRUCTION AREA SIGNS
75-92	STAGE CONSTRUCTION PLANS
93-116	TRAFFIC HANDLING PLANS
117-132	PAVEMENT DELINEATION PLANS AND QUANTITIES
133-136	SIGN PLANS
137-139	SUMMARY OF QUANTITIES
140-154	ELECTRICAL PLANS
155-158	ELECTRICAL SYSTEMS
159-188	REVISED AND NEW STANDARD PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

LOCATION TABLE 1

ROUTE 12	PM	ROUTE 12	PM	ROUTE 5	PM
1	Sac 0.57	10	SJ 10.65	12	SJ 33.49
2	Sac ~~3.64~~ 3.67	11	SJ 11.28	13	SJ 33.99
3	Sac 5.65	21	Sol 26.11	14	SJ 34.49
4	Sac 5.85			15	SJ 34.99
5	SJ 5.39			16	SJ 41.11
6	SJ 8.83			17	SJ 41.70
7	SJ 9.65			18	SJ 42.20
8	SJ 10.15			19	SJ 42.70
9	SJ 10.30			20	SJ 43.20



NO SCALE

1 REVISED PER ADDENDUM No. 1 DATED NOVEMBER 17, 2011

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

PROJECT MANAGER: SCOTT GUIDI
DESIGN ENGINEER: PAUL ELLIOTT

Richard P. Boyer 7-15-10
PROJECT ENGINEER REGISTERED CIVIL ENGINEER — DATE

March 7, 2011
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER — RICHARD BOYER — No. 75844 — Exp. 6/30/12 — CIVIL — STATE OF CALIFORNIA

CONTRACT No.	10-0A8404
PROJECT ID	1000000010

LAST REVISION: 07-10-10 | DATE PLOTTED => 16-NOV-2011 | TIME PLOTTED => 13:43

BORDER LAST REVISED 7/1/2010 | CALTRANS WEB SITE IS: HTTP//WWW.DOT.CA.GOV/ | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | USERNAME => s121614 | DGN FILE => g0a840ab001.dgn | UNIT 1454 | PROJECT No. & PHASE 1000000010

NOTES: (FOR SHEETS E-1A THROUGH E-10)

1. EXTINGUISHABLE MESSAGE SIGN, SEE DETAILS ON SHEET E-11.
2. Exist TRAFFIC SIGNAL SYSTEM NOT SHOWN.
3. NOT USED.
4. NOT USED.
5. NOT USED.
6. COIL 70' OF TELEPHONE CABLE IN PULL BOX. SERVICE PROVIDER WILL EXTEND CONDUIT AND CABLE TO Tel SP.
7. 120/240 V, 1Ø, 3-WIRE, TYPE III-DF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 1024012R000600C

AMPERES	VOLTS	POLES	NAME PLATE	METER	PEC TYPE
100	240	2	MAIN	YES	-
15	120	1	EMS	YES	-
15	120	1	WMS	YES	-
20	120	1	HAR	YES	-
15	240	2	SPARE	YES	-
-	-	4	SPACES	YES	-

8. NOT USED.
9. WEATHER MONITORING STATION WITH WIRELESS MODEM. SEE SHEET E-13 FOR DETAILS. INSTALL PER MANUFACTURER'S RECOMMENDATION.
10. MODEL 334 CABINET WITH WIRELESS MODEM FOR HAR.
11. 1½"C, 1-ACC, 1#4 STRANDED BARE COPPER WIRE TO EQUIPMENT GROUND AT CABINET.
12. TYPE 21F FIBERGLASS POLE WITH HAR EQUIPMENT, SEE SHEET E-12 FOR DETAILS.
13. INSTALL PULL BOX AT EVERY 200'.
14. NOT USED.
15. SF MODEL 170 CONTROLLER ASSEMBLY FOR CMS. INSTALL ONE WIRELESS MODEM.
16. MODEL 334 CABINET WITH WIRELESS MODEM FOR CCTV.
17. TYPE 10 CCTV POLE WITH CCTV CAMERA ASSEMBLY ON TOP OF CMS POST.
18. SF MODEL 510 CMS.
19. INSTALL CMS EQUIPMENT GROUNDING ELECTRODE IN PULL BOX.
20. TYPE 40 VDS POLE WITH MICROWAVE VEHICLE DETECTION SYSTEM. SEE SHEET E-14 FOR DETAILS.
21. Exist TYPE III-AF 120/240 V, 1Ø, 3-WIRE, SERVICE EQUIPMENT ENCLOSURE. INSTALL 2-30 A, 120 V, 1P CB FOR VCS-1, AND VCS-2.
22. MODEL 334 CABINET WITH AUTOMATED TRAFFIC COUNTER AND WIRELESS MODEM FOR VCS-1.
23. MODEL 334 CABINET WITH AUTOMATED TRAFFIC COUNTER AND WIRELESS MODEM FOR VCS-2.
24. SEE SHEET E-15 FOR LOOP DETECTOR AND PIEZO AXLE SENSOR INSTALLATION DETAILS.
25. Exist TYPE III-AF 120/240 V, 1Ø, 3-WIRE, SERVICE EQUIPMENT ENCLOSURE. INSTALL 2-30 A, 120 V, 1P CB FOR VCS-1 AND VCS-2, AND 15 A, 120 V, 1P, CB FOR WMS.
26. 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 1029012R000539C

AMPERES	VOLTS	POLES	NAME PLATE	METER	PEC TYPE
100	240	2	MAIN	YES	-
30	120	1	VCS-1	YES	-
30	120	1	VCS-2	YES	-
30	240	2	HWY LIGHTING	YES	
15	120	1	LIGHTING CONTROL	YES	V
15	120	1	WMS	YES	-
20	120	1	SPARE	YES	-
-	-	2	SPACES	YES	-

27. 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 1029012R000876C

AMPERES	VOLTS	POLES	NAME PLATE	METER	PEC TYPE
100	240	2	MAIN	YES	-
30	120	1	VCS-1	YES	-
30	120	1	VCS-2	YES	-
20	120	1	SPARE	YES	-
-	-	2	SPACES	YES	-

28. SF MODEL 500 CMS.
29. 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

(REFER TO SHEETS E-7 AND E-8 FOR CTID No.)

AMPERES	VOLTS	POLES	NAME PLATE	METER
100	240	2	MAIN	YES
30	120	1	CCTV CABINET	YES
30	240	1	CMS LAMPS	YES
60	120	1	CMS CABINET	YES
15	120	1	SPARE	YES
-	-	2	SPACES	-

30. 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

CTID No. 10290050042700C

AMPERES	VOLTS	POLES	NAME PLATE	METER
100	240	2	MAIN	YES
80	240	2	SUB PANEL 31	YES
15	120	1	TDC	YES
20	120	1	SPARE	YES
-	-	2	SPACES	-

31. 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH THE FOLLOWING CIRCUIT BREAKERS:

AMPERES	VOLTS	POLES	NAME PLATE	METER
80	240	2	MAIN	NO
30	120	1	CCTV CABINET	NO
30	240	2	CMS LAMPS	NO
60	120	1	CMS CABINET	NO
15	120	1	SPARE	NO
-	-	2	SPACES	NO

32. Exist TYPE III-CF 120/240 V, 1Ø, 3-WIRE, SERVICE EQUIPMENT ENCLOSURE. INSTALL 2-30 A, 120 V, 1P CB UNDER METER 1 FOR VCS-1 AND VCS-2.
33. ELECTROLIER SHALL HAVE RAISED FOUNDATION 3' ABOVE FINISHED GRADE.

LEGEND:

WMS WEATHER MONITORING STATION

ABBREVIATONS:

SF - STATE-FURNISHED
PAS - PIEZO AXLE SENSOR
ACC - ANTENNA COAXIAL CABLE
CTID - CALTRANS IDENTIFICATION
WMS - WEATHER MONITORING STATION
STC - SCREENED TRANSMISSION CABLE
PG&E - PACIFIC GAS AND ELECTRIC COMPANY
MVDS - MICROWAVE VEHICLE DETECTION SYSTEM
PV - PHOTOVOLTAIC
VCS - VEHICLE CLASSIFICATION STATION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sac,SJ, Sol	5,12	Var	140	188

07-15-10
REGISTERED ELECTRICAL ENGINEER DATE

REGISTERED PROFESSIONAL ENGINEER
JASPAL SINGH
No. E16657
Exp. 06/30/12
ELECTRICAL
STATE OF CALIFORNIA

3-7-11
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CONDUIT AND CONDUCTOR SCHEDULE

CONDUCTOR DESIGNATION		CONDUCTOR RUN AND SIZE									
AWG	CIRCUIT	1	2	3	4	5	6	7	8	9	10
#6	334 CABINET CMS									2	
#6	334 CABINET CCTV	2	2					2	2		
#6	CMS LAMPS	2	2			2	2		2		
#6	CMS LAMPS NEUTRAL	1	1			1	1		1		
#6	CMS GROUND	1	1			1	1		1		
	SF HARNESS #4			1	1						1
	SF HARNESS #5			1	1						1
*	CAMERA COMPOSITE CABLE					1	1	1			
	CONDUIT SIZE	2"	2"	2-3"	3"	2"	2-3"	2-3"	2"	2"	3"

* NO CAMERA COMPOSITE CABLE IN CONDUIT 5 ON SHEET E-1A.

LIGHTING (PARKING LOT)
WEATHER MONITORING STATION
VEHICLE CLASSIFICATION STATION
HIGHWAY ADVISORY RADIO SYSTEM
CLOSED CIRCUIT TELEVISION SYSTEM
CHANGEABLE MESSAGE SIGN SYSTEM
EXTINGUISHABLE MESSAGE SIGN SYSTEM
MICROWAVE VEHICLE DETECTION SYSTEM
MODIFY LIGHTING

1 REVISED PER ADDENDUM No. 1 DATED NOVEMBER 17, 2011

E-1

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

REVISED BY	DATE REVISED
RS	07-10-10

CALCULATED-DESIGNED BY: FRED IYASERE
CHECKED BY: JASPAL SINGH
FUNCTIONAL SUPERVISOR: ALI BAKHDOUD

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

LAST REVISION: DATE PLOTTED => 16-NOV-2011
07-12-10 TIME PLOTTED => 13:49

BORDER LAST REVISED 7/1/2010
USERNAME => s128843
DGN FILE => a0a840ua001.dgn
RELATIVE BORDER SCALE 0 1 2 3

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sac,SJ, Sol	5,12	Var	148	188

07-15-10
REGISTERED ELECTRICAL ENGINEER DATE

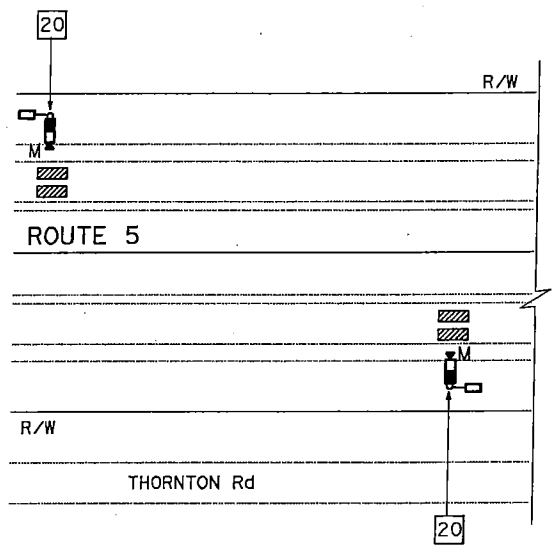
3-7-11
PLANS APPROVAL DATE

JASPAL SINGH
No. E16657
Exp. 06/30/12
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

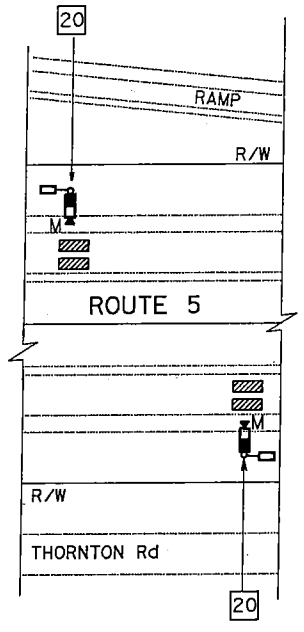
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

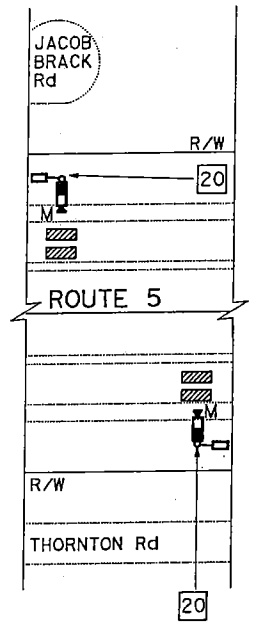
1. FOR NOTES AND SCHEDULES, SEE SHEET E-1.
2. FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



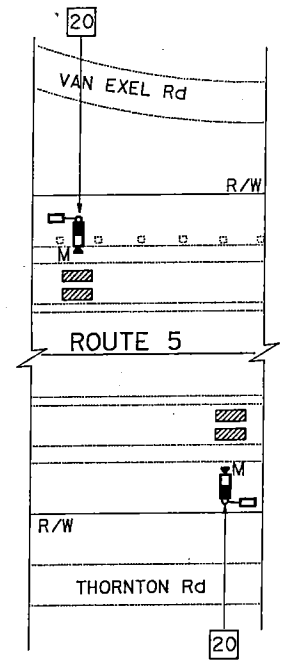
LOCATION-16
SJ Rte 5 PM 41.11



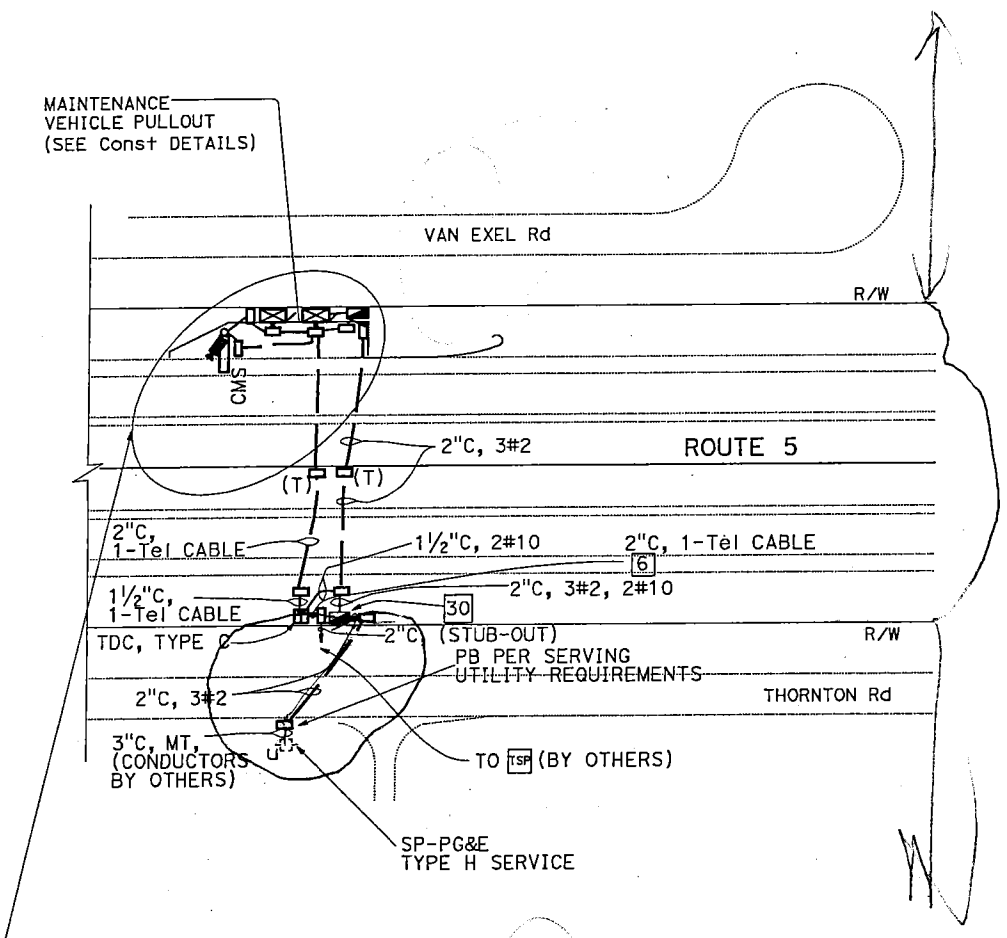
LOCATION-17
SJ Rte 5 PM 41.70



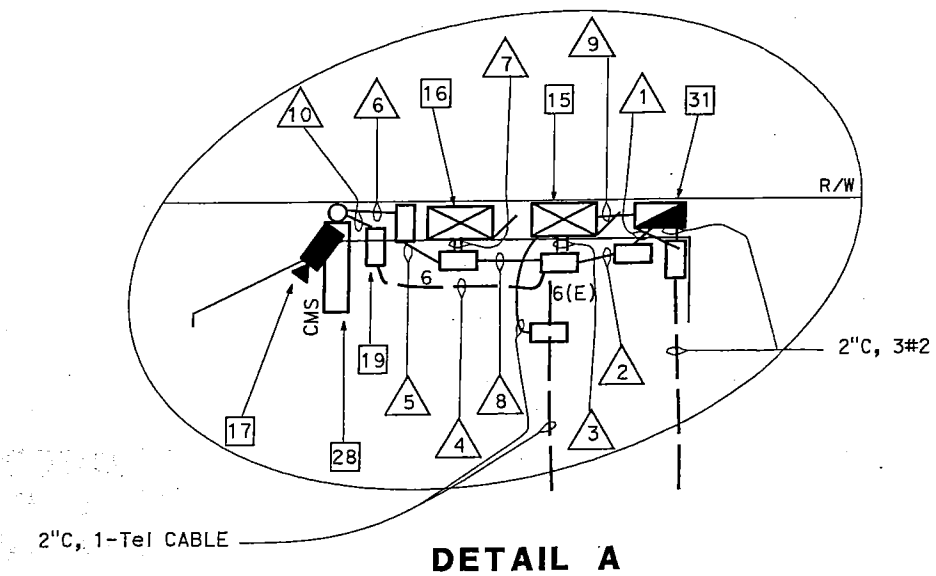
LOCATION-18
SJ Rte 5 PM 42.20



LOCATION-19
SJ Rte 5 PM 42.70



LOCATION-20
SJ Rte 5, PM 43.20



DETAIL A
NO SCALE

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

CLOSED CIRCUIT TELEVISION SYSTEM
CHANGEABLE MESSAGE SIGN SYSTEM
MICROWAVE VEHICLE DETECTION SYSTEM

SCALE: 1" = 50'

E-9

LAST REVISION 07-13-10
DATE PLOTTED => 30
TIME PLOTTED => 08:30

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: ALI BAKHDOUD
CALCULATED-DESIGNED BY: FRED IYASERE
CHECKED BY: JASPAL SINGH
REVISED BY | DATE REVISED

BORDER LAST REVISED 7/1/2010
USERNAME => trienard
DGN FILE => g0g840ug010.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1515
PROJECT NUMBER & PHASE 10000000101