



**COUNTY OF SAN DIEGO**  
 DEPARTMENT OF PUBLIC WORKS  
 PRIVATE DEVELOPMENT CONST.  
 INSPECTION  
 5510 OVERLAND AVE, SUITE 210  
 SAN DIEGO, CALIFORNIA 92123-1239  
 (858) 694-3165 FAX: (858) 694-2354



**EXCAVATION PERMIT**

DATE ISSUED: 09/06/2018  
 EXPIRATION DATE: 04/05/2019

TRUST ACCOUNT NO.:

PERMIT NO.: DPW2017-RWEXCP-71191  
 Financial Source: ACCT RECV

APPLICANT:  
 NV5 / SAN DIEGO GAS & ELECTRIC  
 ALBERT DECHICO  
 15092 AVENUE OF SCIENCE, SUITE  
 200  
 SAN DIEGO, CA 92128  
 760-644-8014  
 ADechico@SEUcontractor.com

CONTRACTOR:

PERMIT OWNER:  
 SAN DIEGO GAS & ELECTRIC  
 8335 CENTURY PARK CT  
 SAN DIEGO, CA 92123  
 858-472-1790

SITE ADDRESS / JOB LOCATION:  
 POMERADO RD / SAN DIEGO - TB 1209-F6, G6

NEAREST X-STREET / INTERSECTION: POMERADO RD & I-15, POMERADO & WILLOW CREEK RD

APN:

Agency Job No.: TL23071

GPS COORD.:

**DETAILED DESCRIPTION:**

Warning! Within 1000 Feet of School Property  
 Scope of Work: TRENCHING FOR PROPOSED TL23071 ELECTRICAL TRANSMISSION LINE (8" AND 2" DUCT BANK)  
 Related Permits: DPW2017-RWTCP-00229, DPW2018-RWTCP-00981.

Notes:

- A) A Pre-construction conference is required prior to the start of any work in the County ROW. Contact your assigned Private Development Construction Inspection (PDCI) Inspector directly to schedule.
- B) Stormwater Best Management Practices (BMPs) are required at all times and shall be planned and installed in accordance with the County's Watershed Protection Ordinance, Municipal Separate Storm Sewer System Permit (MS4), and, if applicable, the State Construction General Permit regulations.
- C) Traffic Control Permit(s) are required and must be obtained prior to start of any work in the County's Road ROW.
- D) Compaction of backfill material shall be achieved by "Mechanical Compaction" methods and geotechnical compaction reports are required for all compacted sections. Exceptions to compaction testing requirements may be allowed at the discretion of DPW.
- E) Existing culverts and other road facilities shall be protected in place against any damage. Any culvert or road facility damaged during construction shall be reported to DPW immediately through your assigned Inspector.
- F) All existing paved and unpaved areas damaged, disturbed, or removed by the permitted work shall be repaired to the County Standards and as approved by DPW PDCI inspector. The trench resurfacing shall be done in accordance with San Diego Regional Standard Drawings G-24 A&B, Type D for asphalt surfacing, G-25 for concrete surfacing. In addition, the final surface treatment shall match the existing surface type.
- G) Deviations from the standard trench restoration requirements must be reviewed and approved by DPW prior to start of work.
- H) Trenches and excavation that exceeds five (5) feet in vertical depth shall be done in accordance with CAL-OSHA Safety Standards. Contact CAL-OSHA at (619) 767-2280 for permit requirements.
- I) Gate Well Cap and Can installations shall meet San Diego Regional Standard Drawing WV-02.
- J) Bollards are not allowed in the Right-of-Way to protect equipment per Highway Design Standards Section 2.2 No. 14. No less than an 8ft minimum clear recovery zone (CRZ) shall be maintained for roadways without curbs.
- K) Subject to Streets and Highways Code Sections 732.5, 1492.5 and 1810.5; Survey monuments shall be preserved, referenced, and/or replaced pursuant to Section 8771 of the Business and Professions Code.
- L) No greater than 50 Linear Feet of trench shall be opened and plated at any one time. Exceptions to the plated length may be allowed at the discretion of DPW.
- M) Hours of work may be determined by the Traffic Control Permit. No traffic controls will be allowed during students drop off and pickup periods in the vicinity of schools and peak commute hours at some locations.

N) To document pavement condition in Condition No. F) above, all permits that utilize heavy equipment and/or trucks weighing over 7-tons loaded weight, the applicant shall submit acceptable photo-documentation of the existing road surfacing including any visible cracks in the pavement for all work locations and intended haul routes to assigned PDCI inspector prior to start of construction.  
Revised 10/18/2017  
Extended 03/12/2018, 6/27/2018

LENGTH(FEET): 3100      WIDTH(FEET): 4      DEPTH(FEET): 4

PIPE SIZE: 8

MATERIAL: PVC DUCT BANK

SPECIFIC CONDITIONS:

Permittee agrees to indemnify, hold harmless and defend the County and each of its officers and employees from any liability or responsibility for accident, loss or damage to persons or property arising by reason of the work done by permittee, or permittees' agents, employees or representatives.

Before you dig, call UNDERGROUND SERVICE ALERT at 1-800-422-4133. Enter UNDERGROUND SERVICE ALERT Inquiry Identification No. here \_\_\_\_\_. This permit is not valid until an inquiry number is obtained.

Notify construction inspection at (858) 694-3165, 24 hours in advance of beginning any portion of the work, completion of work, backfill or concrete pour, and otherwise as required by the Director of Public Works.

Issuance of this permit does not authorize any work to be performed until the permission of the property has been obtained.

This permit is granted under provision of Title 7, of the San Diego County Code of Regulatory Ordinances. It is understood and agreed upon that if this location is under construction, the consent of the contractor must be obtained. This installation is granted with the strict understanding that same is subject to relocation, change of grade, or removal at the request of the Director, Department of Public Works. Permittee shall be entirely responsible for any liability due to any accident, loss or damage resulting from the design or performance of work involved. Issuance of this permit does not authorize any work to be performed until the permission of the property owner has been obtained.

County of San Diego, Director of Public Works by:  Date: 9/5/2018

This permit and all attachments must be kept on the work site, to be shown to any authorized agent of the County upon request.



# County of San Diego

DEPARTMENT OF PUBLIC WORKS  
TRAFFIC ENGINEERING SECTION

APPLICATION FOR TRAFFIC CONTROL PERMIT --

ATTACHED PLAN  
(PERMIT EXTENDED FOR DAY WORKING  
HOURS)

(type of traffic control: flag, shift, etc.)

DPW2018-RWTCP-00981

County of San Diego  
DPW / Traffic Engineering (MS 0332)  
5510 Overland Ave, Suite 410  
San Diego, CA 92123-1239

telephone/voice mail: (858) 694-3863  
secretary: (858) 694-3850  
fax: (858) 694-3928

e-mail:  
DPWTrafficControl.permit@sdcounty.ca.gov

EXTENTION PREVIOUS PERMITS: DPW2018-RWTCP-00655,  
DPW2018-RWTCP-00205, DPW2017-RWTCP-01037 &  
DPW2017-RWTCP-00229

ENCROACHMENT/EXCAVATION/CONSTRUCTION PERMIT # DPW2017-RWEXCP-71191

### Applicant Information

Company: NV5 / SAN DIEGO GAS & ELECTRIC  
Agent/Applicant: ALBERT DECHICO  
Agent Phone Number: 760-644-8014 Agent Email Address: \_\_\_\_\_  
Agent Mailing Address: 15092 AVENUE OF SCIENCE, SUITE 200  
City: SAN DIEGO State: CA Zip Code: 92128  
Reason for Traffic Control: FOR PROPOSED TL23071 ELECTRICAL TRANSMISSION LINE (8" AND 2" DUCT BANK)

Start Date: 09/06/2018

Start Time: 08:30 AM

Finish Date: 04/05/2019

End Time: 03:30 PM

It is requested that a permit be granted for traffic control on the following street/streets:

STREET 1 POMERADO RD From Street BEGIN CMR To SAN DIEGO CITY LIMITS

COMMUNITY SAN DIEGO TB 1209-F6 & G6 Thomas Bros. Map Page and Grid # \_\_\_\_\_

## Signature on Application

\_\_\_\_\_  
(Agent's or Applicant's Signature)

06/27/2018

\_\_\_\_\_  
(Date)

See Attached Plan (s) and Traffic Control Notes

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This request is approved.

Director, Department of Public Works

By   
(For Road Commissioner)

8/5/18  
(Date)



# County of San Diego

DEPARTMENT OF PUBLIC WORKS  
TRAFFIC ENGINEERING SECTION

- Copy -

APPLICATION FOR TRAFFIC CONTROL PERMIT -- ATTACHED PLAN  
(FLAGGING & INCLUDES NIGHT WORK)  
(type of traffic control: flag, shift, etc.)

DPW2018-RWTCP-00655

County of San Diego  
DPW / Traffic Engineering (MS 0332)  
5510 Overland Ave, Suite 410  
San Diego, CA 92123-1239

telephone/voice mail: (858) 694-3863  
secretary: (858) 694-3850  
fax: (858) 694-3928

e-mail:  
DPWTrafficControl.permit@sdcounty.ca.gov

EXTENSION PREVIOUS PERMITS: DPW2018-RWTCP-00205,  
DPW2017-RWTCP-01037 & DPW2017-RWTCP-00229

ENCROACHMENT/EXCAVATION/CONSTRUCTION PERMIT # DPW2017-RWEXCP-71191

### Applicant Information

Company: NV5 / SAN DIEGO GAS & ELECTRIC  
Agent/Applicant: ALBERT DECHICO  
Agent Phone Number: 760-644-8014 Agent Email Address: \_\_\_\_\_  
Agent Mailing Address: 15092 AVENUE OF SCIENCE, SUITE 200  
City: SAN DIEGO State: CA Zip Code: 92128  
Reason for Traffic Control: FOR PROPOSED TL23071 ELECTRICAL TRANSMISSION LINE (8" AND 2" DUCT BANK)

Start Date: 07/02/2018

Start Time: See Notes

Finish Date: 08/17/2018

End Time: See Notes

It is requested that a permit be granted for traffic control on the following street/streets:

STREET 1 POMERADO RD From Street BEGIN CMR To SAN DIEGO CITY LIMITS

COMMUNITY SAN DIEGO TB 1209-F6 & G6 Thomas Bros. Map Page and Grid # \_\_\_\_\_

## Signature on Application

(Agent's or Applicant's Signature)

06/26/2018

(Date)

See Attached Plan (s) and Traffic Control Notes

-----  
This request is approved.

Director, Department of Public Works

By [Signature]  
(For Road Commissioner)

06/27/18  
(Date)



**COUNTY OF SAN DIEGO  
DEPARTMENT OF PUBLIC WORKS  
TRAFFIC ENGINEERING SECTION**

**APPLICATION FOR TRAFFIC CONTROL PERMIT (Flagging), TCP-4, TCP-9 & TCP-54**  
*Type of traffic control: flag, shift, etc.*

County of San Diego  
DPW Traffic Engineering Section  
Room 470, MS 0334  
5510 Overland Ave, Suite 410  
San Diego, CA 92123-1239

Telephone/voice mail:(858) 694-3863  
Secretary (858) 694-3850  
Fax (858) 694-3928  
DPWTRAFFICCONTROL.PERMIT@SDCOUNTY.CA.GOV

Encroachment/excavation/construction permit # DPW2017-RWEXCP-71191

**Applicant Information**

Company NV5 / SDGE

Agent/applicant Albert Dechico

Last Name First

Agent Telephone # 760-644-8014 Agent Fax # \_\_\_\_\_

Agent Mailing Address: 15092 Avenue of Science, Ste 200, San Diego, CA 92128

Street Name and Number City State Zip Code

Agent E-mail Address ADechico@seucontractor.com

Reason for Traffic Control: To trench for proposed TL23071 Electrical Transmission Line (8" and 2" Duct Bank)


Start Date: 7/1/2018 Start Time: 10:00P a.m. / p.m.  
Finish Date: 10/1/2018 End Time: 5:00A a.m. / p.m.

**It is requested that a permit be granted for traffic control on the following street/streets:**

STREET 1 POMERADO RD From Street BEGIN CMR To SAN DIEGO CITY LIMITS

STREET 2 \_\_\_\_\_ From Street \_\_\_\_\_ To \_\_\_\_\_

COMMUNITY SAN DIEGO Thomas Brothers Map Page and Grid # 1209-F6 AND G6

Signed  Date 6/26/2018

Agent of Applicant

Date

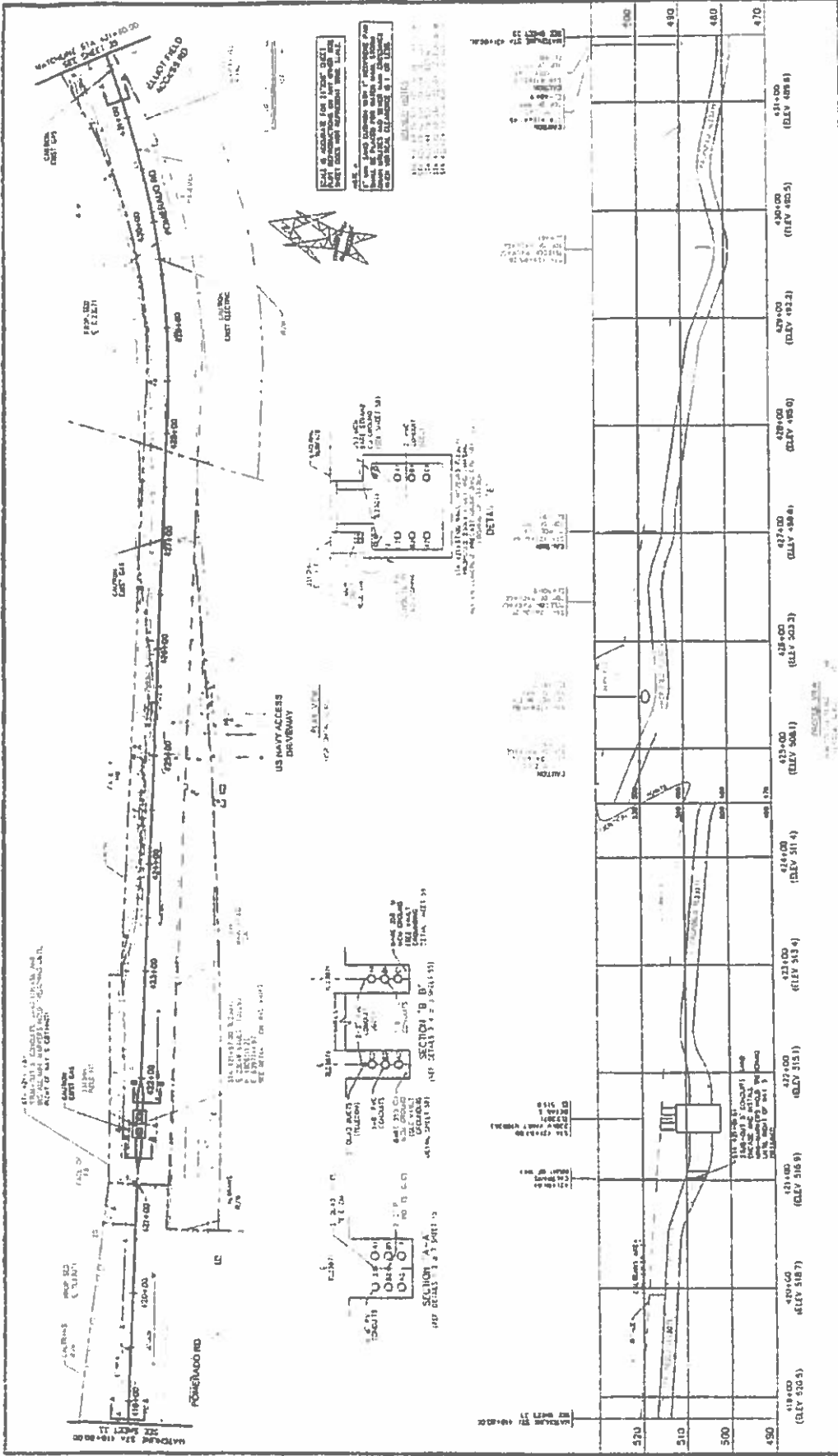
**See Attached Plan (s) and Traffic Control Notes**

This request is:

APPROVED  DENIED

Director, Department of Public Works

By \_\_\_\_\_  
*For Road Commissioner*



**SDGE**  
SAN DIEGO GAS & ELECTRIC  
TRANSMISSION ENGINEERING

**PLAN & PROFILE**  
TL23071

STYCAMORE CANYON SUBSTATION  
TO PENASQUITOS SUBSTATION  
230KV UNDERGROUND SEGMENT

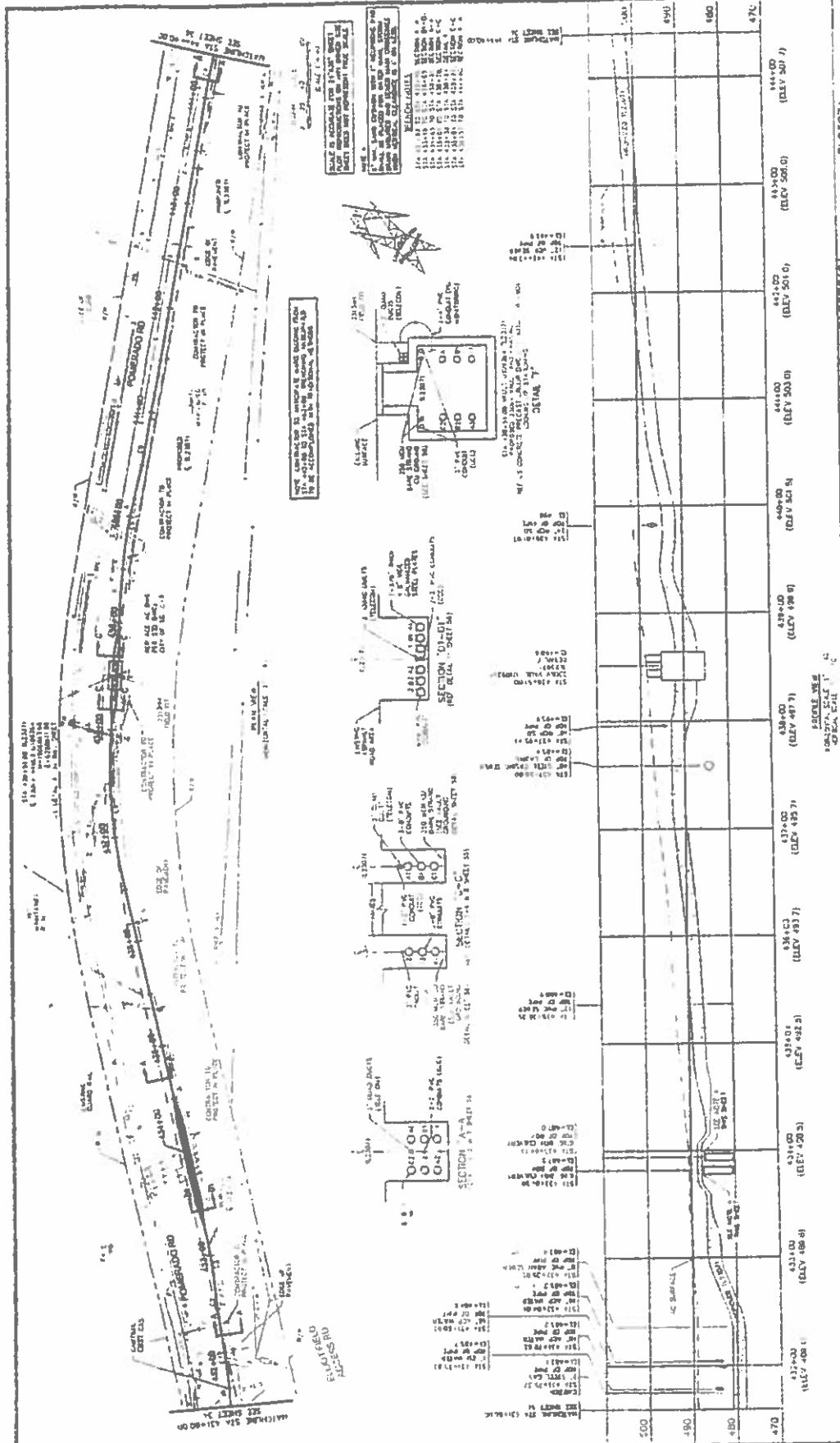
DRAWING NUMBER  
63422-34

STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION	STATION	ELEVATION
419+00	(ELEV 510.7)	420+00	(ELEV 510.7)	421+00	(ELEV 510.7)	422+00	(ELEV 510.7)	423+00	(ELEV 510.7)	424+00	(ELEV 510.7)	425+00	(ELEV 510.7)
426+00	(ELEV 516.9)	427+00	(ELEV 517.1)	428+00	(ELEV 517.3)	429+00	(ELEV 517.5)	430+00	(ELEV 517.7)	431+00	(ELEV 517.9)	432+00	(ELEV 518.1)
433+00	(ELEV 518.3)	434+00	(ELEV 518.7)	435+00	(ELEV 519.1)	436+00	(ELEV 519.5)	437+00	(ELEV 519.9)	438+00	(ELEV 520.3)	439+00	(ELEV 520.7)
440+00	(ELEV 521.1)	441+00	(ELEV 521.5)	442+00	(ELEV 521.9)	443+00	(ELEV 522.3)	444+00	(ELEV 522.7)	445+00	(ELEV 523.1)	446+00	(ELEV 523.5)
447+00	(ELEV 523.9)	448+00	(ELEV 524.3)	449+00	(ELEV 524.7)	450+00	(ELEV 525.1)	451+00	(ELEV 525.5)	452+00	(ELEV 525.9)	453+00	(ELEV 526.3)
454+00	(ELEV 526.7)	455+00	(ELEV 527.1)	456+00	(ELEV 527.5)	457+00	(ELEV 527.9)	458+00	(ELEV 528.3)	459+00	(ELEV 528.7)	460+00	(ELEV 529.1)
461+00	(ELEV 529.5)	462+00	(ELEV 529.9)	463+00	(ELEV 530.3)	464+00	(ELEV 530.7)	465+00	(ELEV 531.1)	466+00	(ELEV 531.5)	467+00	(ELEV 531.9)
468+00	(ELEV 532.3)	469+00	(ELEV 532.7)	470+00	(ELEV 533.1)								

**DIGALERT**  
Call 24 hours for  
Service Line Dept  
811

**HV5**  
HIGH VOLTAGE - NO TOUCH

SCALE: 1" = 40'



**RELATION TABLE**

NOTE: 1. Item quantities are for reference only. 2. Item quantities are for reference only. 3. Item quantities are for reference only. 4. Item quantities are for reference only.

ITEM NO.	DESCRIPTION	QUANTITY
1	CONCRETE	1.5
2	STEEL	1.5
3	PIPE	1.5
4	VALVE	1.5
5	MANHOLE	1.5
6	STRUCTURE	1.5
7	PIPE	1.5
8	VALVE	1.5
9	MANHOLE	1.5
10	STRUCTURE	1.5
11	PIPE	1.5
12	VALVE	1.5
13	MANHOLE	1.5
14	STRUCTURE	1.5
15	PIPE	1.5
16	VALVE	1.5
17	MANHOLE	1.5
18	STRUCTURE	1.5
19	PIPE	1.5
20	VALVE	1.5
21	MANHOLE	1.5
22	STRUCTURE	1.5
23	PIPE	1.5
24	VALVE	1.5
25	MANHOLE	1.5
26	STRUCTURE	1.5
27	PIPE	1.5
28	VALVE	1.5
29	MANHOLE	1.5
30	STRUCTURE	1.5

**SDGE** SAN DIEGO GAS & ELECTRIC  
TRANSMISSION ENGINEERING

SYCAMORE CANTON SUBSTATION  
TO PENASQUITOS SUBSTATION  
230KV UNDERGROUND SEGMENT

PLAN & PROFILE  
11.23071

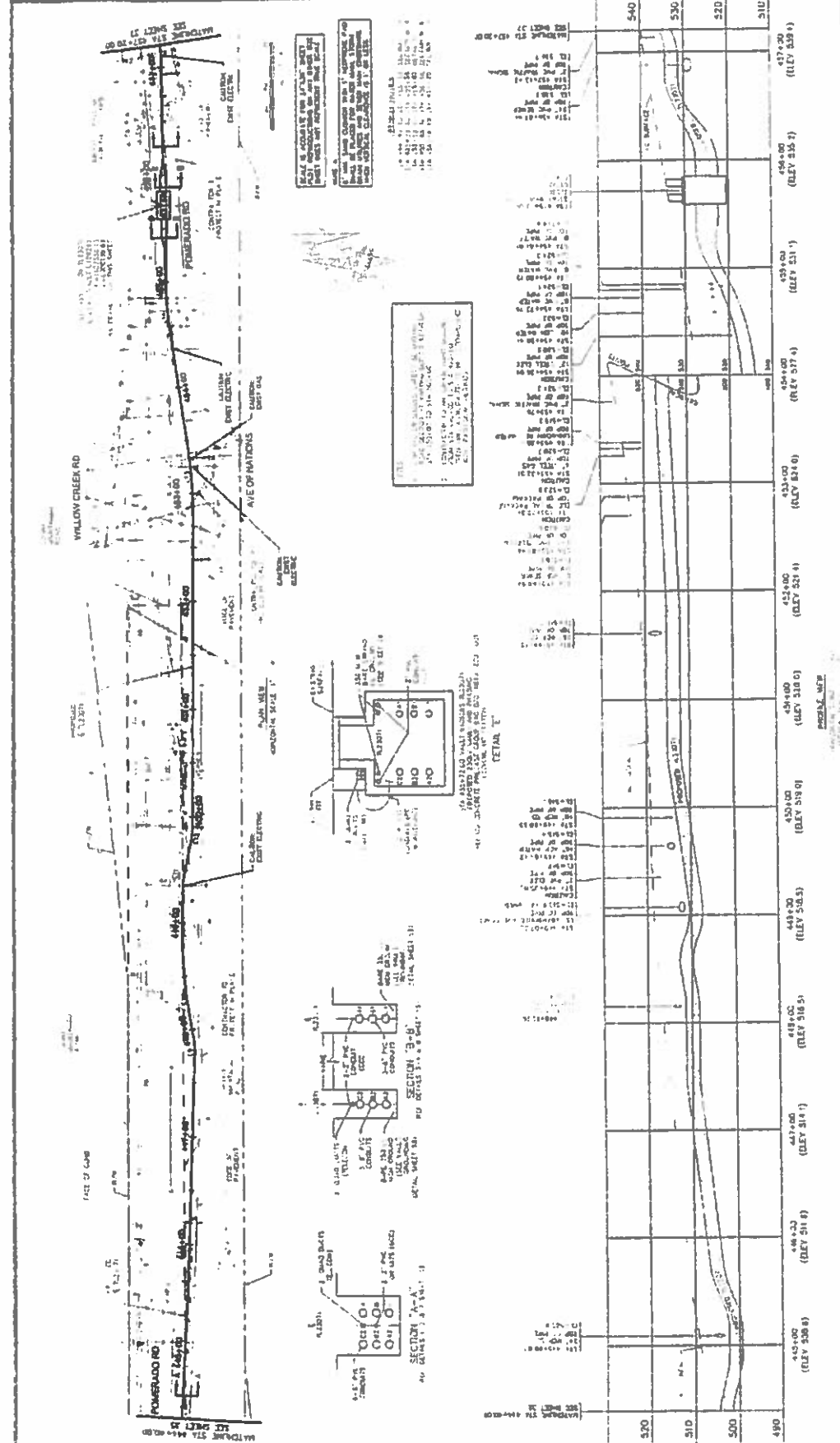
SCALE: HORIZ. 1"=100' VERT. 1"=10'

DATE	BY	CHKD.	APP'D.
11/23/01	...	...	...
11/23/01	...	...	...
11/23/01	...	...	...
11/23/01	...	...	...

SECTION 101-01 (ELEV. 487.1)  
SECTION 101-02 (ELEV. 487.7)  
SECTION 101-03 (ELEV. 488.5)  
SECTION 101-04 (ELEV. 489.3)  
SECTION 101-05 (ELEV. 490.1)  
SECTION 101-06 (ELEV. 490.9)  
SECTION 101-07 (ELEV. 491.7)  
SECTION 101-08 (ELEV. 492.5)  
SECTION 101-09 (ELEV. 493.3)  
SECTION 101-10 (ELEV. 494.1)  
SECTION 101-11 (ELEV. 494.9)  
SECTION 101-12 (ELEV. 495.7)  
SECTION 101-13 (ELEV. 496.5)  
SECTION 101-14 (ELEV. 497.3)  
SECTION 101-15 (ELEV. 498.1)  
SECTION 101-16 (ELEV. 498.9)  
SECTION 101-17 (ELEV. 499.7)  
SECTION 101-18 (ELEV. 500.5)  
SECTION 101-19 (ELEV. 501.3)  
SECTION 101-20 (ELEV. 502.1)

**DIGIART**  
Call & Excavating Dept.  
Before You Dig  
811

**NIVIS**  
ENGINEERING & DESIGN



**NVS**  
 CONSULTING ENGINEERS

Carl & Wrenley Doyle  
 Brought You the  
**811**  
 logo  
 logo

SCALE: HORIZONTAL 1" = 60' VERTICAL 1" = 10'

SHEET 36 OF 60

DRAWING NUMBER  
**TL23071**

PROJECT  
**SYCAMORE CANYON SUBSTATION  
TO PENASQUITOS SUBSTATION  
230KV UNDERGROUND SEGMENT**

DRAWING NUMBER  
**63422-36**



**POMERADO RD**

**TRAFFIC CONTROL NOTES**

Contractor shall make application to the Traffic Engineering Section of the Department of Public Works (Roads Division, 5510 Overland Ave, Suite 410, Rm 470, San Diego, CA, 92123-1239, Mail Station O332) for a traffic control permit, a minimum of three (3) weeks prior to commencement of work. There is no fee for this permit.

All Traffic control plan(s) shall be in compliance with 2015 San Diego Regional Standard Drawings and the 2014 California, Manual Uniform Traffic Control Devices (MUTCD), Chapter 6 Temporary Traffic Control.

**PROJECT SPECIFIC TRAFFIC CONTROL**

Road name and work location radius/scope: **POMERADO RD**

Road traffic control operations:

**FLAGGING, BIKE LANE CLOSURE AND PEDESTRIAN CONTROLS**

Type of work: **FOR ELECTRICAL TRANSMISSION LINE**

Traffic control shall be in accordance with attached plan. The Contractor shall maintain 12' minimum travel lanes (14' minimum travel lanes where bike lanes exist) at all times.

**Work hours shall be from 8:30 AM to 3:30 PM, Monday thru Friday.**

The Contractor shall anticipate shorter work hours where work zone is within one half mile radius from a school. Due to peak volumes of pedestrian and vehicular traffic associated with schools, the Contractor shall be required to delay the start of construction operations until a minimum 30 minutes after school is in session and complete construction operations a minimum 30 minutes before school is out of session, at the discretion of the County Engineer. Contractor shall contact school at least 2 working days before work begins to identify potential conflict hours within the approved work hours.

The Contractor will not be allowed to work during peak hours on roads that carry commuter traffic on the Mobility Element Roads per County of San Diego General Plan.

When the work zone is confined to the road shoulder with minimal or no road encroachment, refer to Chapter 6H "Typical Applications" of the "California Manual on Uniform Traffic Control Devices" (CA MUTCD), latest edition.

**ROAD CLOSURE**

No full or partial Road Closure will be allowed.

**NOTIFICATION**

By agreeing to this Permit, permittee agrees that County of San Diego shall not be liable for, and permittee shall indemnify, hold harmless, and defend the County of San Diego and each of its officers and employees against any and all claims, demands, liability, judgments, awards, fines, mechanics' liens or other liens, labor disputes, losses, damages, expenses, charges or costs of any kind or character, including attorneys' fees and court costs (hereinafter collectively referred to as "Claims"), related to this Permit or the work covered by this Permit and arising either directly or indirectly from any act, error, omission or negligence of permittee or its contractors, licensees, agents, servants or employees, including, without limitation, Claims caused by the sole passive negligent act or the concurrent negligent act, error or omission, whether active or passive, of County of San Diego Parties.

Whenever construction activity will disrupt or impede access to any residence/business, the contractor shall inform each affected residence/business by written notice the nature and expected duration of the disruptive construction activity. Such written notice shall be delivered to each affected residence/business a minimum of five (5) business days prior to the start of the disruptive construction activity.

Contractor shall coordinate with County Traffic Signal Coordinator 72 hours work days prior to start of work at (619) 701-1905 or (858) 935-5705 or (858) 694-3850 to identify location of signal detector loops and, if appropriate, to set the traffic signal on flashing red or modify signal timing prior to the start of work and to reset upon completion of work. Contractor shall provide signage for signal modification.

**SIGNING**

All signs shall conform to the guidelines set forth in the latest edition of Part 2 "Signs" and Part 6, "Temporary Traffic Control" of the "California Manual on Uniform Traffic Control Devices for Streets and Highways" (CA MUTCD).

The Contractor shall place "Tow-Away/No Parking" signs along the street 24 hours prior to the impending work. "Tow-Away/No Parking" signs shall be furnished by the Contractor and shall contain a space in which the contractor shall enter the day(s) during which parking will be prohibited. Contractor shall remove these signs immediately when they are no longer needed for use in the respective area of the project. If work is delayed or rescheduled for any reason after placement of "Tow-Away/No Parking" signs, sign(s) shall be removed and re-dated signs shall be installed two (2) days in advance of the impending work.

All signs shall be in place prior to start of construction.

All other signs shall be standard size unless otherwise noted. All advance warning signs shall be 48" x 48".

For work zone lasting more than four weeks, all W20-1 or C23, and curve warning signs shall be mounted on 4"x 4" wooden posts at standard height and equipped with type "B" high-intensity flashers, unless otherwise noted.

Temporary Traffic Control Signs shall be on a portable type installation.

Post-mounted signs shall remain in place at all times until construction is completed. Other signs required for traffic control shall be laid down or covered during non-working hours.

Temporary Traffic Control Devices shall comply with section 12-3 of Caltrans Standard Specifications unless otherwise noted.

All bike lane signs within work area shall be covered during working hours. Contractor shall use "BIKE LANE CLOSED" signs when working on roads that have designated bike lanes and remove the "BIKE LANE CLOSED" signs within the work area during non-working hours.

All advance-warning signs for night closures shall be illuminated.

Placement of all signs shall not interfere with sight distance at driveways and intersections.

Position of post-mounted signs may be adjusted as necessary to optimize visibility or sign and/or obtain suitable placement area.

W20-1 signs and all other yellow or orange signs shall have a reflective background constructed of at least high-intensity (Type III) retroreflective sheeting.

All signs shall be equipped with orange flags and signs mounted on barricades shall have flashers on roads posted 50 MPH or higher.

### **PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)**

PCMS shall comply with Section 6F.60 of the CA MUTCD.

Minimum of Two PCMS shall be considered when Road Closures (Partial or full) are necessary with detours.

### **STRIPING**

No striping changes will be allowed to start on a Friday, unless otherwise noted and approved by the County Traffic Engineer.

Contractor shall layout and stripe all interim and final striping.

Contractor shall install all interim and final pavement markers, temporary tabs, and channelizers.

All striping changes shall be the responsibility of the Contractor. Striping modifications (due to construction), which exceed one (1) week in duration, require sandblasting. All sandblasting required by said striping changes shall be completed within 24 hours of that change.

All obliterated striping, raised pavement markers, pavement paint legends and markings, shall be reflectorized and replaced by the Contractor. Markings in thermoplastic shall be replaced in kind.

**TRAFFIC SIGNAL LOOP DETECTORS**

Signal equipment, such as loop detectors, damaged by the Contractor shall be replaced by the Contractor within 48 hours from time of damage.

**DEVICES**

Actual work area shall be protected with either orange reflectorized channelizing devices or by barricades equipped with type "A" flashers sufficient in number to prevent entry of both vehicles and pedestrians except as may be noted elsewhere. At no time shall a continuous row of flashers be used adjacent to a lane of traffic. Only steady-burn type "C" lamps shall be used under these circumstances.

All cones and/or post delineators shall be fitted with reflective sleeves of the appropriate color.

If used, all type "B" flashers shall operate 24 hours a day.

**FLAGGING**

Flagging operation shall use alternate one-way movement to pass traffic through the construction area.

Traffic shall be controlled at all times by flaggers. Flaggers shall be in constant communication with each other during the flagging operation. Advance flaggers shall be positioned upstream to warn traffic when queues develop. Additional flaggers may be required at intersections.

Where the one-lane section is short enough so that each end is visible from the other end, traffic will be controlled by means of a flagger at each end of the section. They should be able to communicate with each other verbally or by means of signals. These signals should not be such as to be mistaken for flagging signals. Where the end of one-way section is not visible from the other end, the flaggers shall maintain contact by means of radio or field telephones so that a flagger may know when to allow traffic to proceed into the section.

Flaggers shall be positioned near crest of hill allowing flaggers sufficient visibility of approaching traffic.

Flaggers shall be positioned so that they are easily visible to approaching traffic.

Flagger stations for work at night shall be illuminated as referenced in Part 6 of the "California Manual on Uniform Traffic Control Devices for Streets and Highways" (CA MUTCD), latest edition.

Where a one-lane temporary traffic control zone is short enough to allow visibility from one end to the other, traffic may be controlled by a single flagger. When a single flagger is used, the flagger shall be stationed on the shoulder opposite the obstruction or work space, or in a position where good visibility and traffic control can be maintained at all times.

If unable to utilize an alternate one-way flagging operation, Contractor shall contact Department of Public Works, Roads Division at (858) 694-3850 three (3) weeks prior to the proposed closure to determine its appropriateness. If a road closure is deemed appropriate, proper advanced notification (information signs, mailed and verbal notifications) is necessary to the emergency services, police services, businesses, residents and school districts.

### **ACCESS**

Emergency vehicle access shall be maintained at all times.

Mail service, trash service, and school bus access shall be maintained at all times.

Motorist delay time shall not exceed 15 minutes unless otherwise approved by the County Traffic Engineer.

Contractor shall maintain access to all private driveways within the construction area at all times. If continuous access cannot be maintained, access must be provided as needed. Adequate provisions shall be made for pedestrian traffic.

Adequate sight distance shall be maintained at all intersections in the vicinity of the work zone. If sight distance is affected by the traffic control, the contractor shall provide adequate distance per the County of San Diego Public Road Standards. Flaggers may be needed. The use of mirrors are not permitted as an alternative to providing adequate sight distance.

### **GENERAL**

The Contractor shall be responsible for supplying, installing and maintaining all traffic control devices as shown on the plan along with additional traffic control devices that may be required to ensure safe movement of traffic and pedestrians through work area.

The Contractor shall be responsible for coordinating with any Special Events that will be affected in the area of the impending work and the Contractor shall be responsible for coordinating with other traffic control work zones, unless approved by County Inspector. The Contractor shall maintain 500 feet between beginning and end of work zone signage. Updated Special Event and Temporary Traffic Control information within the County may be found at the following link: <https://www.sandiegocounty.gov/content/sdc/dpw/roads/roadclose.html>

The provisions of this section may be modified or altered if, in the opinion of the engineer, public traffic will be better served and the work expedited. Said modifications or alterations shall not be adopted until approved in writing by the engineer.

The Contractor shall minimize the active construction zone to 250 feet to 500 feet unless approved by County Inspector.

The Contractor shall maintain maximum closure length based on work that can be completed at the end of the work day.

During non-working hours, the Contractor shall provide the full road width, which existed prior to the start of construction.

Any open trenches within the construction area shall be adequately protected with barricades, k-rails, and/or spoil piles to prevent entry of vehicles and pedestrians.

All trenches shall be back-filled and paved or plate-bridged overnight. All temporary steel plate bridging shall have non-skid surfaces. Non-skid surfaces on the temporary steel plate bridging as well as the method of installing the temporary steel plate bridging and shoring shall be as specified in Section 602.1, "Temporary Steel Plate Bridging -- With a Non-Skid Surface" of the most current Caltrans Encroachment Manual. Unless approved by the County Inspector, use of steel plate bridging shall not exceed 24 hours. At the end of every work day, steel plate bridging shall not exceed 50 feet in length, unless approved by the County Inspector. Open trenches are not allowed during non-working hours.

All dirt and debris shall be removed from the roadway each day before completion of work. Street must be maintained in drivable condition at all times. Contractor shall not use the County right of way for storage of materials and equipment.

All Traffic Control devices, including advance warning signs, delineators, and barricades shall be removed from the roadway at the end of work each day (except W20-1 signs, if plate-bridging overnight.)

The Contractor is to restore roadway and all signing to prior conditions at the completion of work.

The Contractor shall coordinate their work with impacted agencies, San Diego Metropolitan Transit System (MTS), private road owners and/or Home Owner Associations (HOA). Some agencies may require up to two weeks lead time.

Unless the work is specifically requested by the Engineer, or is Emergency in nature, no work will be performed on the following, County observed holidays:

New Year's Day  
Martin Luther King Jr. Day  
President's Day  
Cesar Chavez Day  
Memorial Day  
Independence Day

Labor Day  
Veteran's Day  
Thanksgiving Day  
Christmas Day

**SIGN LEGEND**

	C9A		C12		C19(CA)		C20(CA)L		C20(CA)R		C30(CA)		C30 (BIKE)		G20-2		M4-8A		MA-10L		M4-10R		R1-1		R3-1		R3-2		R3-4						
	R3-5L		R3-5R		R11-4		SC3(CA)		W20-5R		W20-5 (BIKE)		SPCL 1		W3-4		R3-7R		R4-7A		R4-8A		R4-11		W16-1		W20-1		W20-2		W20-3		W20-4		W20-5L

APPROACH SPEED (MPH)	MINIMUM DISTANCE (FEET) BETWEEN SIGNS AND FROM LAST SIGN TO TAPER			MINIMUM TAPER LENGTHS (L) (FEET) FOR 12-FOOT LANE			BUFFER LENGTH (FEET)	MAX CONE SPACING		
	100	250	500	1/2L	1/3L	4/5L		TAPER	TANGENT	CONFLICT
25	100	250	500	125	65	45	155	25	50	12
30	180	450	900	180	90	60	200	30	60	15
35	245	615	1230	245	125	85	250	35	70	17
40	320	800	1600	320	160	110	305	40	80	20
45	400	1000	2100	400	210	140	380	45	90	22
50	500	1250	2700	500	270	180	425	50	100	25
55+	660	1650	3600	660	330	220	495	55	110	27

- LEGEND**
- APPROXIMATE POTHOLE LOCATION
  - SIGN
  - TRAFFIC CONES / DELINEATOR
  - BARRICADE
  - FLAGGER
  - FLASHING ARROW SIGN
  - WORK ZONE
  - CONSTRUCTION VEHICLE
  - BUS STOP

*Contractor to assist pedestrians through work zone.*

**AIRX SURVEYORS, INC.**  
**Gail McMorran**  
 President

2534 EAST EL NORTE PARKWAY SUITE C  
 ESCONMUDO, CA 92027  
 PHONE (760) 480-2347  
 CELL (760) 419-3730

**PROJECT NAME:** TL23071 – Sycamore Canyon Substation To Penasquitos Substation – 230 KV Underground

**AIRX JOB#:** X160218

**THOMAS GRID#:** 1209-F6

**TYPE OF WORK:** TRENCHING / CONDUIT

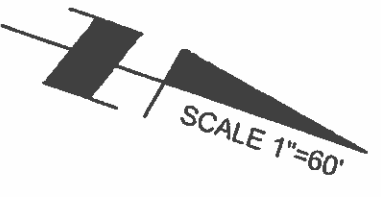
**DRAWN FOR:** SAN DIEGO COUNTY

**MISC/POTHOLES#:**

**DATE:** 4/27/2018

**DESIGNED BY:** Clint Jones

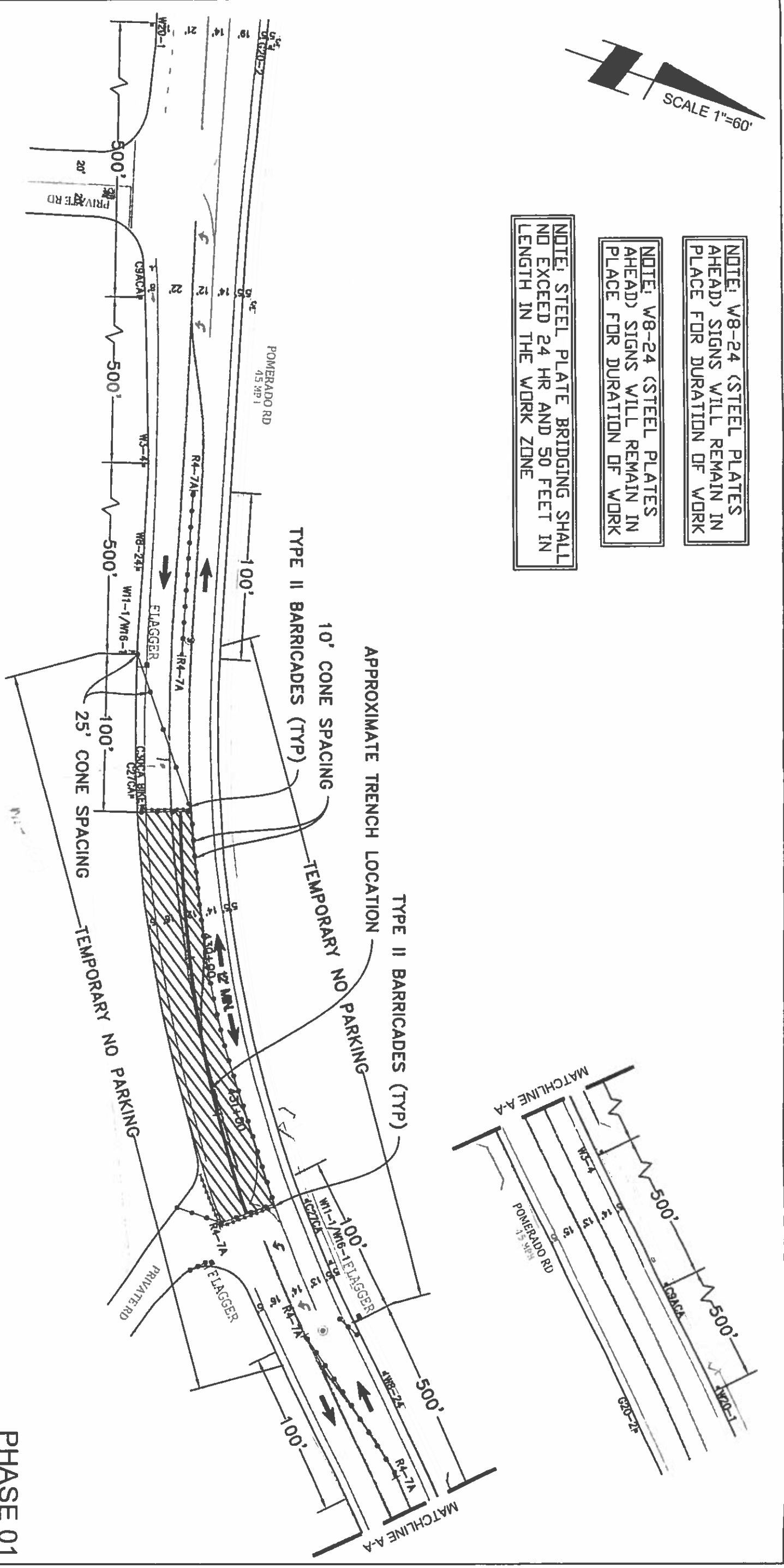
**SHEET 1 OF 10**



NOTE: W8-24 (STEEL PLATES AHEAD) SIGNS WILL REMAIN IN PLACE FOR DURATION OF WORK

NOTE: W8-24 (STEEL PLATES AHEAD) SIGNS WILL REMAIN IN PLACE FOR DURATION OF WORK

NOTE: STEEL PLATE BRIDGING SHALL NOT EXCEED 24 HR AND 50 FEET IN LENGTH IN THE WORK ZONE



PHASE 01

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 2534 EAST EL NORTE PARKWAY SUITE C  
 ESCONDIDO, CA 92027  
 PHONE: (760) 480-2347  
 CELL: (760) 419-3738

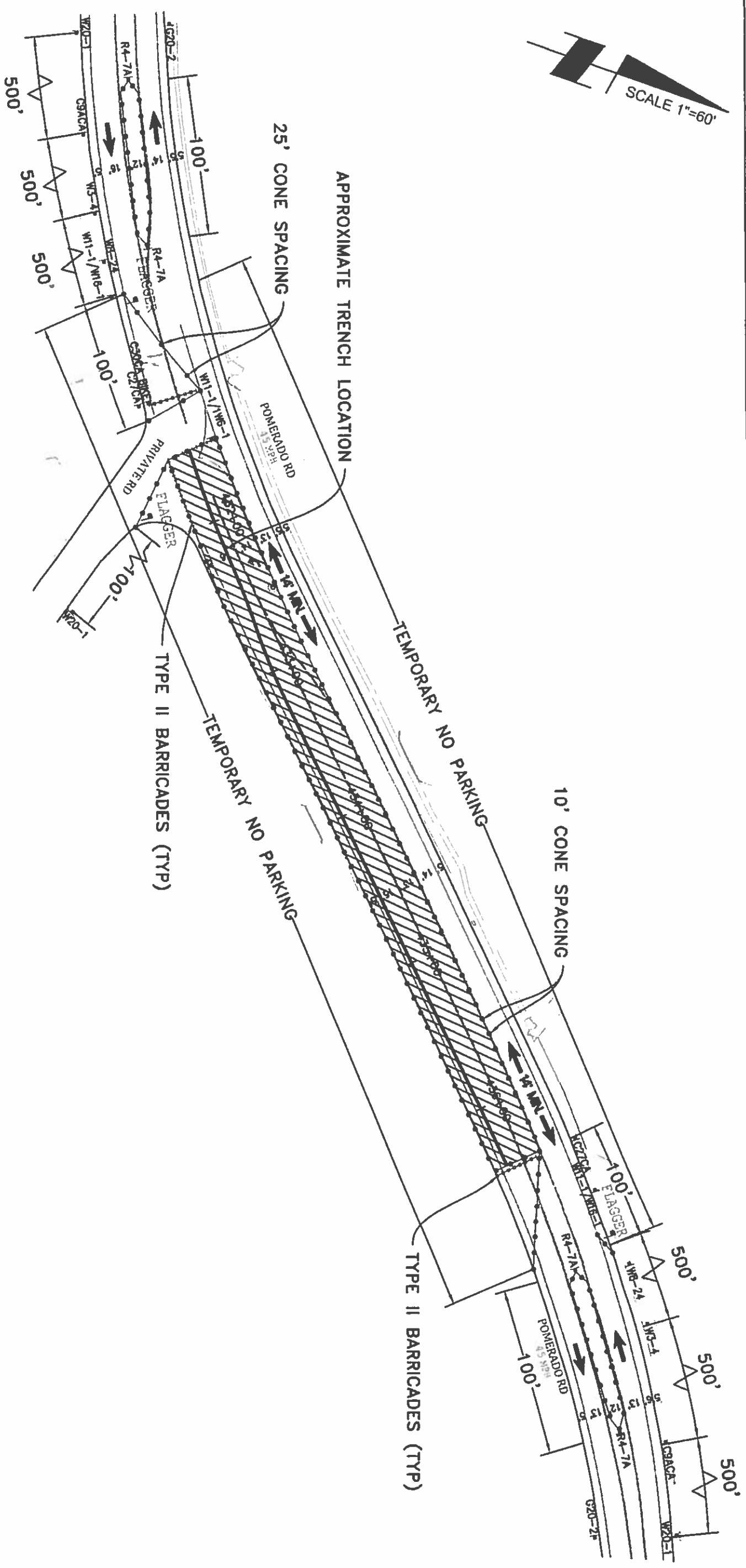
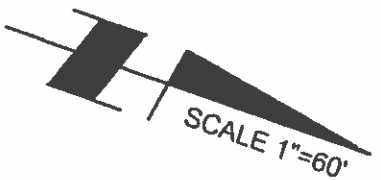
**Gail McMorran**  
 President

<b>PROJECT NAME:</b> TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground
<b>AIRX JOB#:</b> X160218
<b>TYPE OF WORK:</b> TRENCHING / CONDUIT
<b>MISC/POTHOLE#:</b>
<b>THOMAS GRID#:</b> 1209-F6
<b>DRAWN FOR:</b> SAN DIEGO COUNTY

**DATE:** 4/27/2018  
**DESIGNED BY:** Clint Jones

**SHEET 2 OF 10**





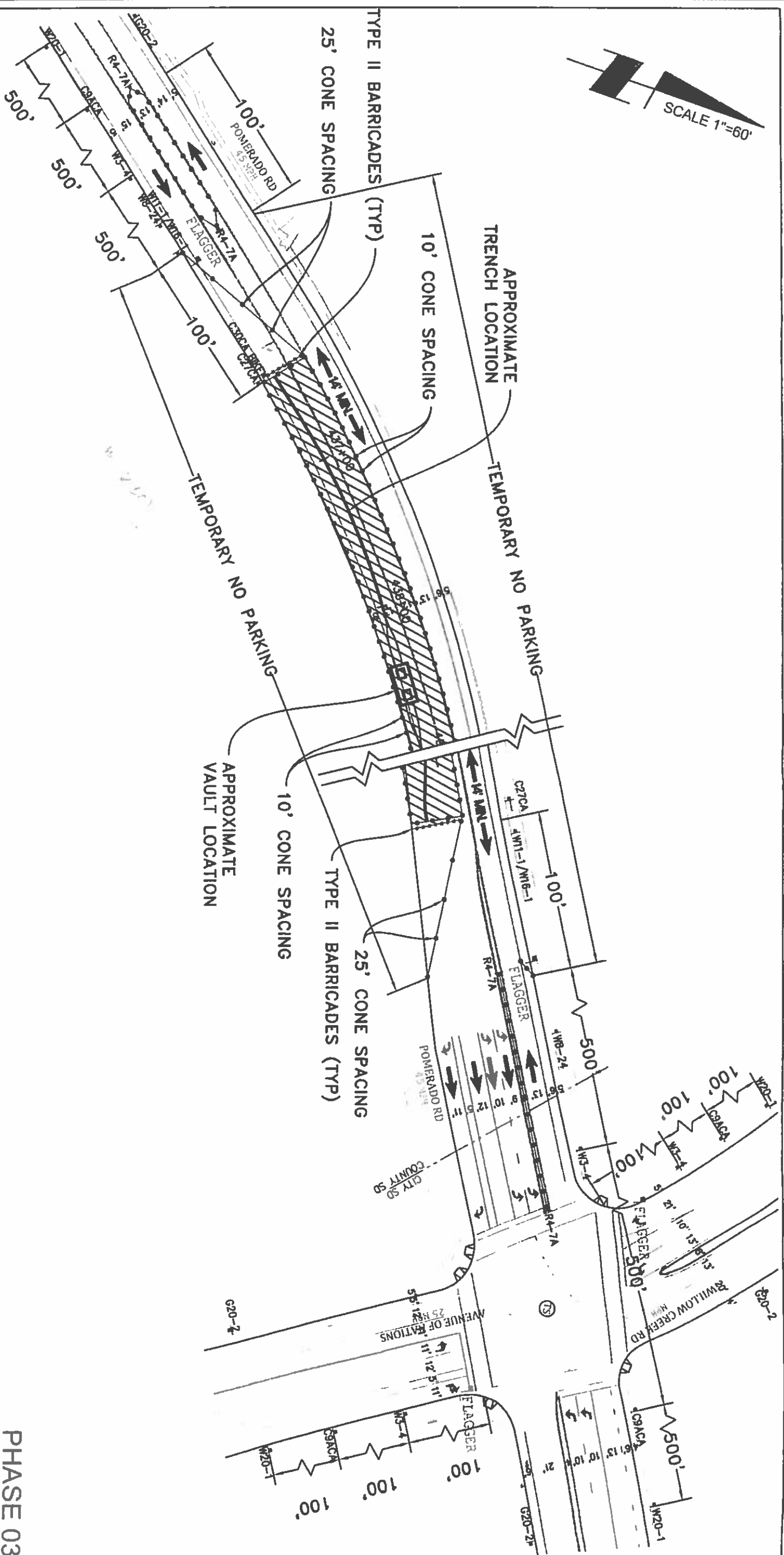
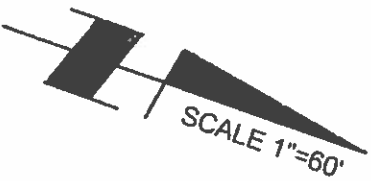
PHASE 02

**AIRX** SURVEYORS, INC.  
 Gail McMorrin  
 President

2534 EAST EL NORTE PARKWAY SUITE C  
 ESCONDIDO CA 92027  
 PHONE (760) 480 2347  
 CELL (760) 419-3738

<b>PROJECT NAME:</b> TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground	
<b>AIRX JOB#:</b> X160218	<b>THOMAS GRID#:</b> 1209-F6
<b>TYPE OF WORK:</b> TRENCHING / CONDUIT	<b>DRAWN FOR:</b> SAN DIEGO COUNTY
<b>MISC/POTHOLE#:</b>	

<b>DATE:</b> 4/27/2018
<b>DESIGNED BY:</b> Clint Jones
<b>SHEET 3 OF 10</b>



PHASE 03



**Gail McMorran**  
President

2534 EAST EL NORTE PARKWAY SUITE C  
ESCONDIDO CA 92027  
PHONE (760) 480-2347  
CELL (760) 419-3738

**PROJECT NAME:** TL23071 - Sycamore Canyon Substation To  
Penasquitos Substation - 230 KV Underground

**AIRX JOB#:** X160218

**THOMAS GRID#:** 1209-F6

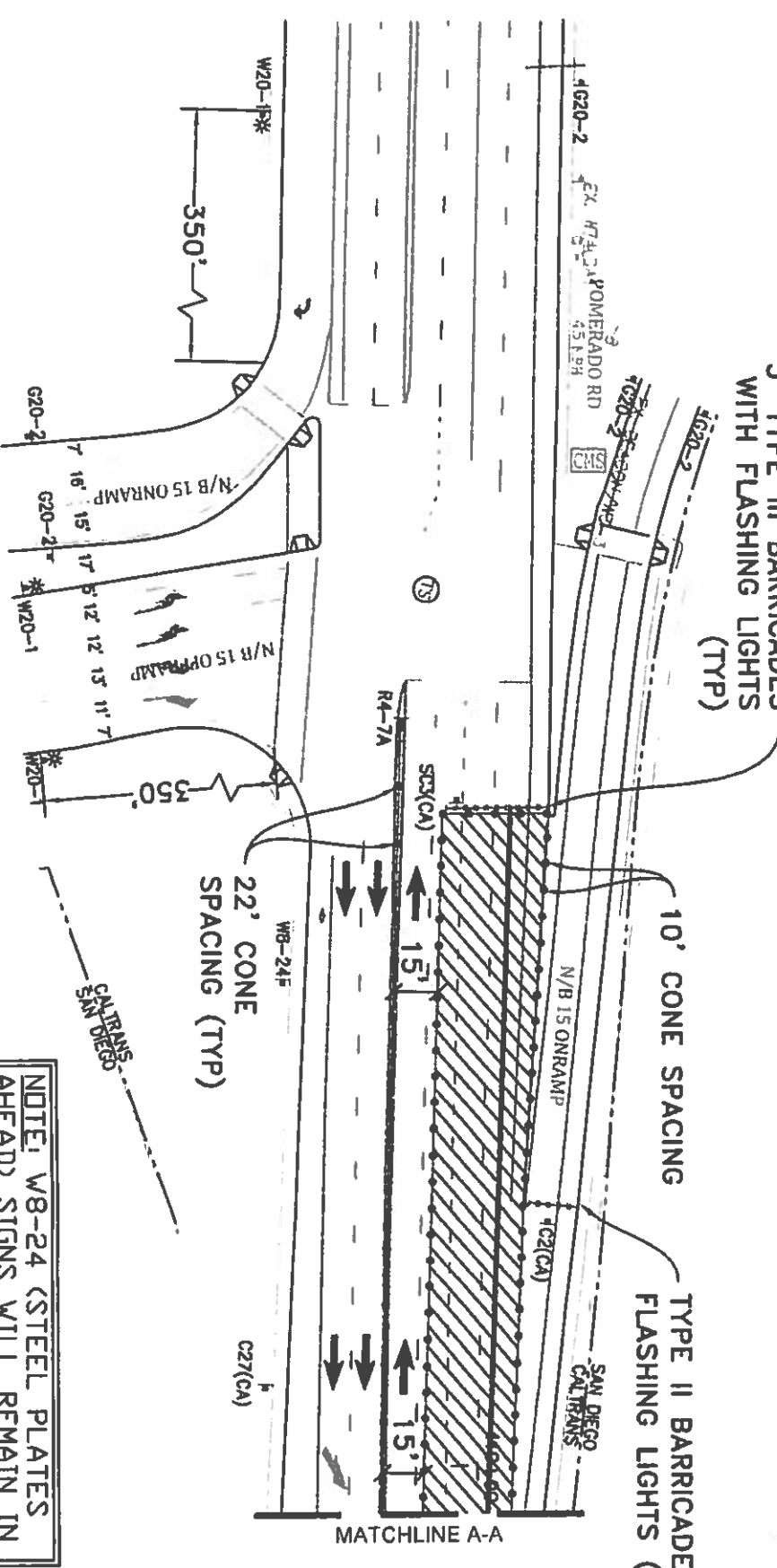
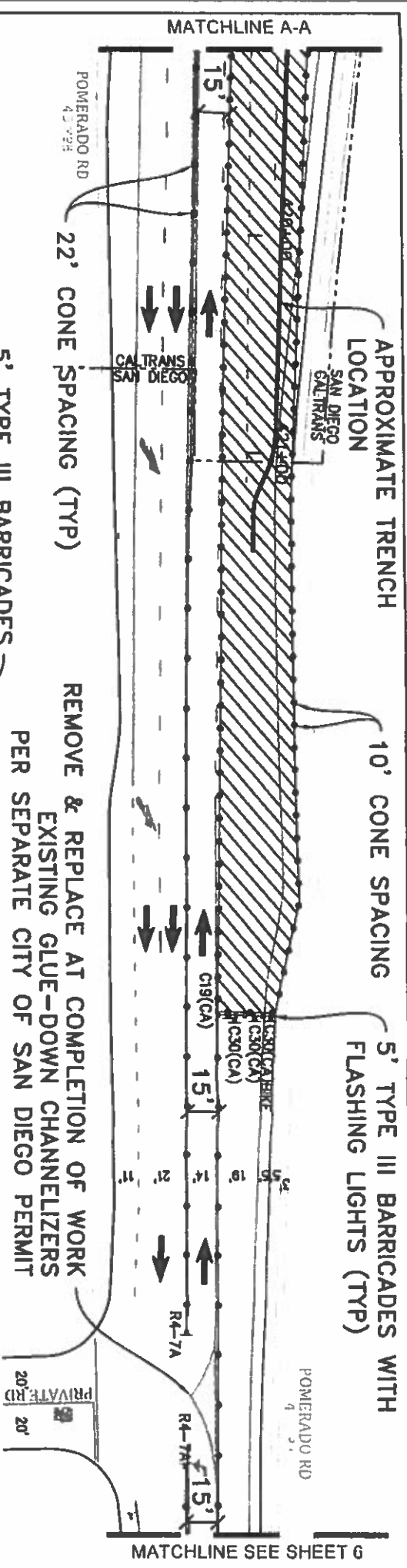
**TYPE OF WORK:** TRENCHING / CONDUIT

**DRAWN FOR:** SAN DIEGO COUNTY

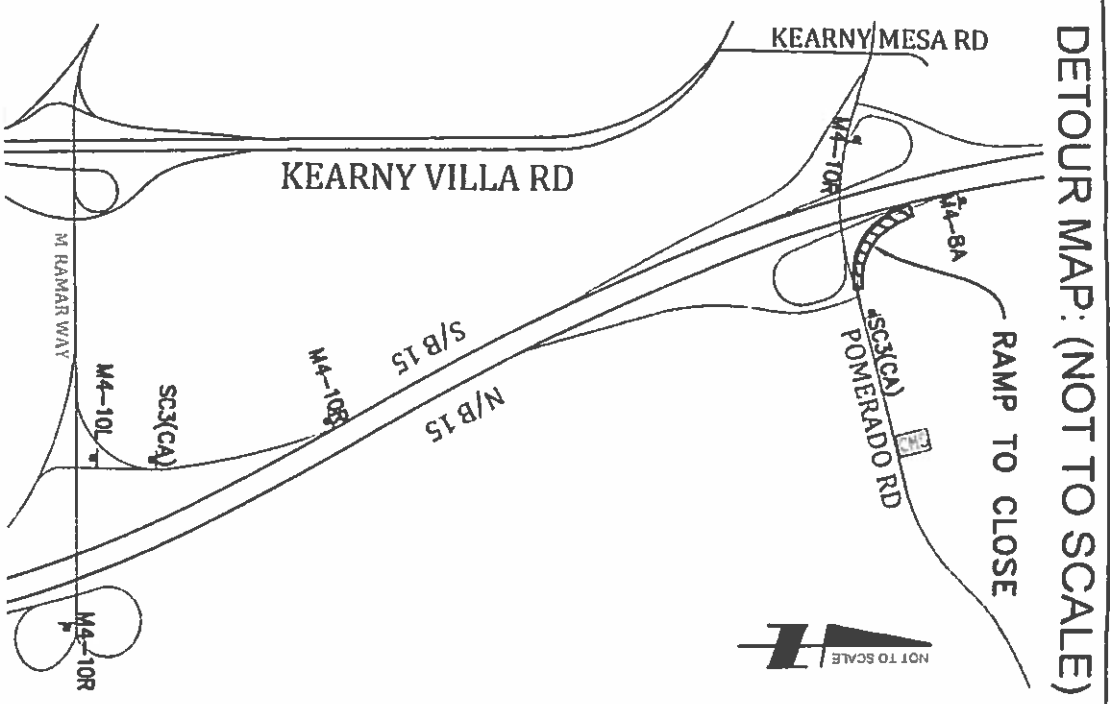
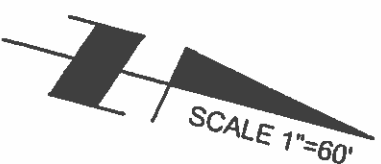
**MISC/POTHOLE#:**

**DATE:** 4/27/2018  
**DESIGNED BY:**  
Clint Jones

**SHEET 4 OF 10**



NOTE: W8-24 (STEEL PLATES AHEAD) SIGNS WILL REMAIN IN PLACE FOR DURATION OF WORK



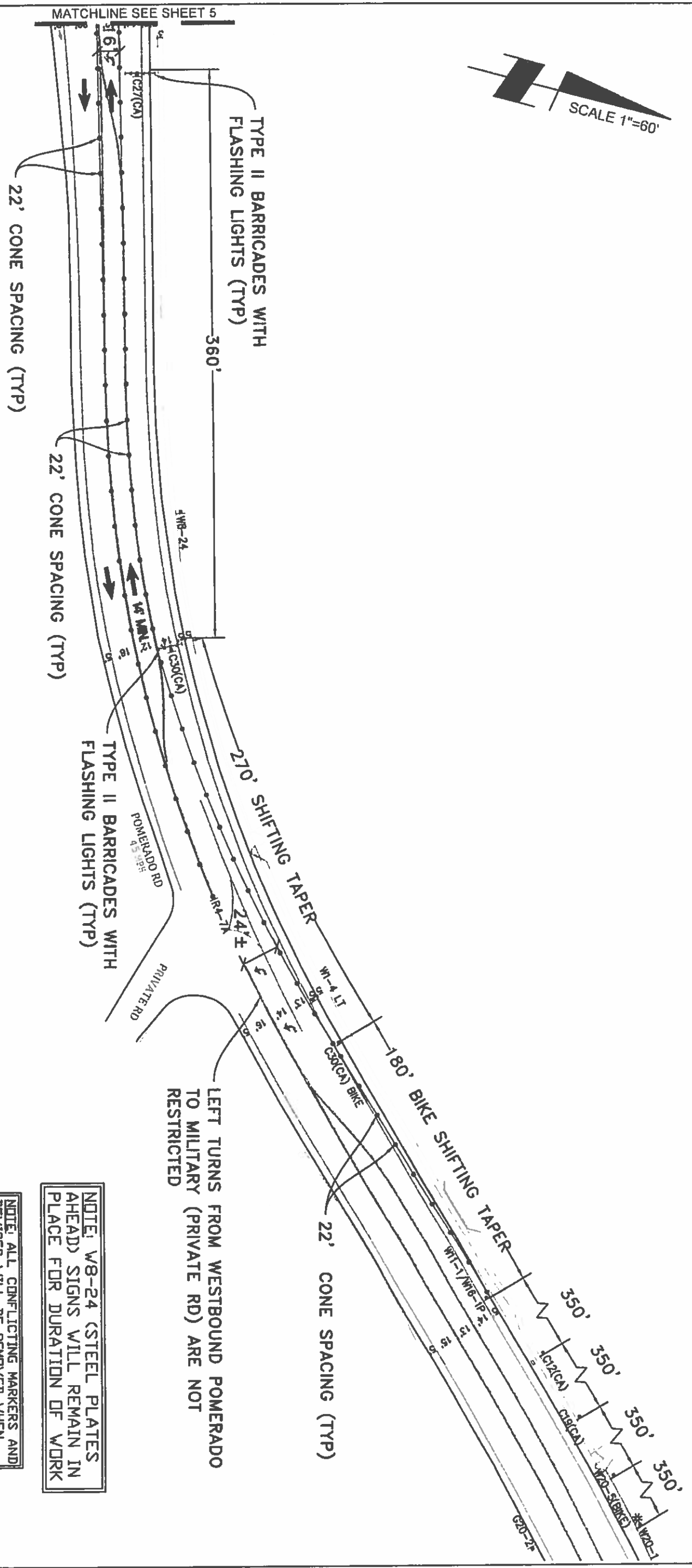
C.M.S. MESSAGE	DATE TO	DETOUR
RAMP CLOSED	DATE	MIRAMAR
FROM	9PM-5AM	WAY
NOTE: ALL CONFLICTING MARKERS AND DEVICES WILL BE REMOVED WHEN EQUIPMENT IS NOT IN USE		
PHASE 04		

**AIRX SURVEYORS, INC.**  
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PHONE (760) 480-2347  
CELL (760) 419-3738

**Gail McMorran**  
President

<b>PROJECT NAME:</b> TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground	
<b>AIRX JOB#:</b> X160218	<b>THOMAS GRID#:</b> 1209-f6
<b>TYPE OF WORK:</b> TRENCHING / CONDUIT	<b>DRAWN FOR:</b> SAN DIEGO COUNTY
<b>MISC./POTHOLE#:</b>	


<b>DATE:</b> 4/27/2018	<b>SHEET 5 OF 10</b>
<b>DESIGNED BY:</b> Clint Jones	



NOTE: WB-24 (STEEL PLATES AHEAD) SIGNS WILL REMAIN IN PLACE FOR DURATION OF WORK

NOTE: ALL CONFLICTING MARKERS AND DEVICES WILL BE REMOVED WHEN EQUIPMENT IS NOT IN USE

**PHASE 04 (CONT)**

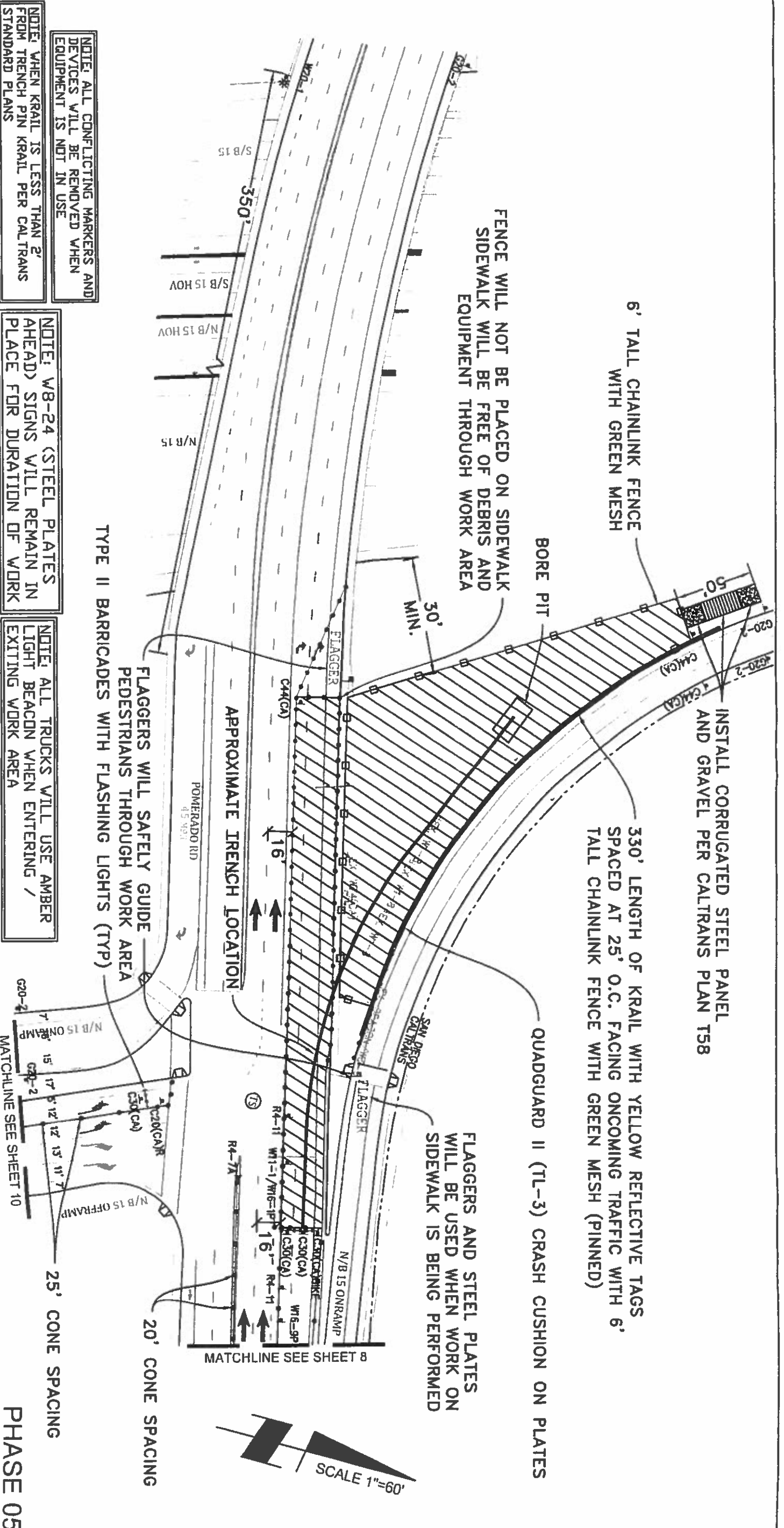


**AIRX**  
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2534 EAST EL NORTE PARKWAY SUITE C  
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PHONE (760) 480-2347  
CELL (760) 419-3738

**Gail McMorrin**  
President

<b>PROJECT NAME:</b> TL23071 – Sycamore Canyon Substation To Penasquitos Substation – 230 KV Underground	
<b>AIRX JOB#:</b> X160218	<b>THOMAS GRID#:</b> 1209-f6
<b>TYPE OF WORK:</b> TRENCHING / CONDUIT	<b>DRAWN FOR:</b> SAN DIEGO COUNTY
<b>MISC/POTHOLE#:</b>	

<b>DATE:</b> 4/27/2018	<b>DESIGNED BY:</b> Clint Jones
<b>SHEET 6 OF 10</b>	



NOTE: ALL CONFLICTING MARKERS AND DEVICES WILL BE REMOVED WHEN EQUIPMENT IS NOT IN USE

NOTE: WHEN KRAIL IS LESS THAN 2' FROM TRENCH PIN KRAIL PER CALTRANS STANDARD PLANS

NOTE: W8-24 (STEEL PLATES AHEAD) SIGNS WILL REMAIN IN PLACE FOR DURATION OF WORK

NOTE: ALL TRUCKS WILL USE AMBER LIGHT BEACON WHEN ENTERING / EXITING WORK AREA

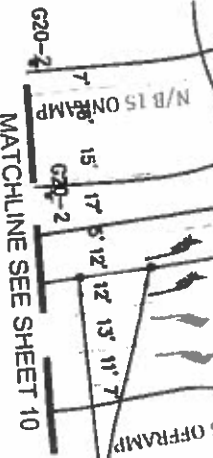
FLAGGERS WILL SAFELY GUIDE PEDESTRIANS THROUGH WORK AREA  
TYPE II BARRICADES WITH FLASHING LIGHTS (TYP)

6' TALL CHAINLINK FENCE WITH GREEN MESH  
FENCE WILL NOT BE PLACED ON SIDEWALK  
SIDEWALK WILL BE FREE OF DEBRIS AND EQUIPMENT THROUGH WORK AREA

INSTALL CORRUGATED STEEL PANEL AND GRAVEL PER CALTRANS PLAN T58  
330' LENGTH OF KRAIL WITH YELLOW REFLECTIVE TAGS SPACED AT 25' O.C. FACING ONCOMING TRAFFIC WITH 6' TALL CHAINLINK FENCE WITH GREEN MESH (PINNED)

FLAGGERS AND STEEL PLATES WILL BE USED WHEN WORK ON SIDEWALK IS BEING PERFORMED

MATCHLINE SEE SHEET 8



25' CONE SPACING

20' CONE SPACING

PHASE 05

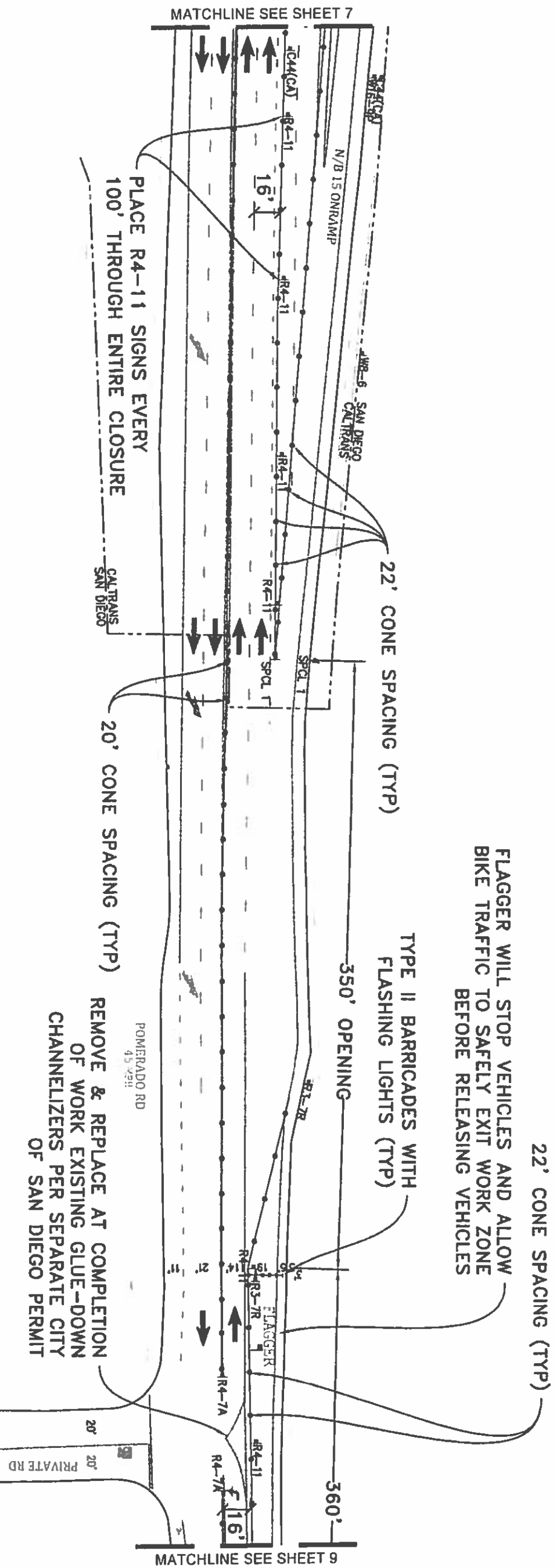
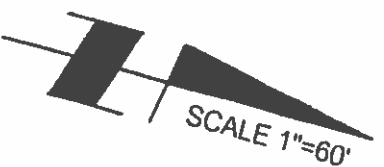


Gail McMorran  
President

2534 EAST EL NORTE PARKWAY SUITE C  
ESCONDIDO CA 92027  
PHONE (760) 480-2347  
CELL (760) 419-3738

<b>PROJECT NAME:</b> TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground	
<b>AIRX JOB#:</b> X160218	<b>THOMAS GRID#:</b> 1209-f6
<b>TYPE OF WORK:</b> TRENCHING / CONDUIT	<b>DRAWN FOR:</b> SAN DIEGO COUNTY
<b>MISC/POTHOLE#:</b>	

<b>DATE:</b> 4/27/2018
<b>DESIGNED BY:</b> Clint Jones
<b>SHEET 7 OF 10</b>



FLAGGER WILL STOP VEHICLES AND ALLOW BIKE TRAFFIC TO SAFELY EXIT WORK ZONE BEFORE RELEASING VEHICLES

TYPE II BARRICADES WITH FLASHING LIGHTS (TYP)

350' OPENING

22' CONE SPACING (TYP)

22' CONE SPACING (TYP)

20' CONE SPACING (TYP)

REMOVE & REPLACE AT COMPLETION OF WORK EXISTING GLUE-DOWN CHANNELIZERS PER SEPARATE CITY OF SAN DIEGO PERMIT

PLACE R4-11 SIGNS EVERY 100' THROUGH ENTIRE CLOSURE



SPCL 1

NOTE: KEEP K-RAIL 1' FROM CURB

NOTE: KRAIL WILL BE INSTALLED AFTER 10PM AND REMOVED BY SAM

PHASE 05 (CONT)



Gail McMortan  
President

2534 EAST EL NORTE PARKWAY SUITE C  
ESCONDIDO, CA 92027  
PHONE: (760) 480-2347  
CELL: (760) 419-3738

PROJECT NAME: TL23071 - Sycamore Canyon Substation To  
Penasquitos Substation - 230 KV Underground

AIRX JOB#: X160218

THOMAS GRID#: 1209-f6

TYPE OF WORK: TRENCHING / CONDUIT

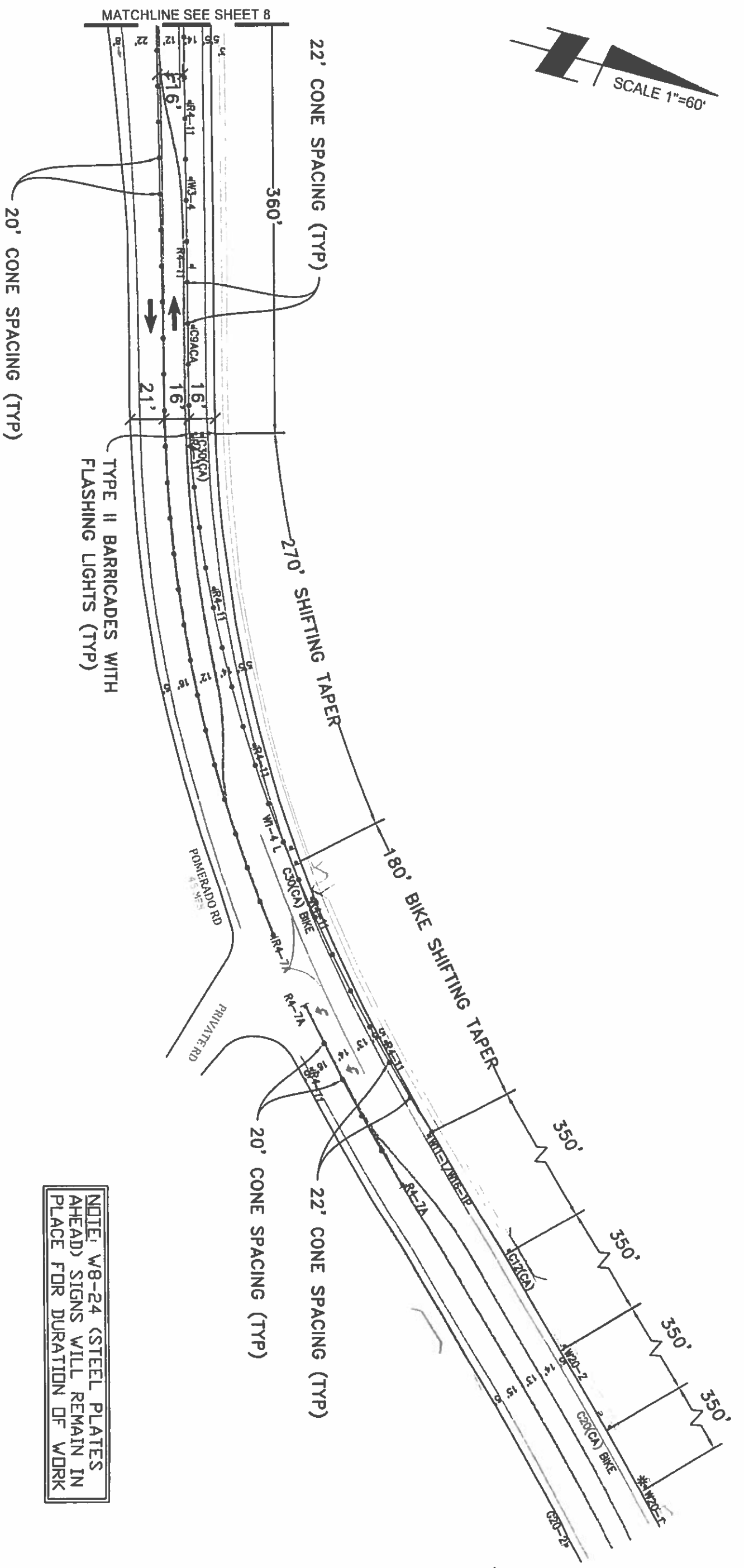
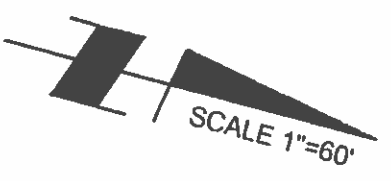
DRAWN FOR: SAN DIEGO COUNTY

MISC/POTHOLE#:

DATE: 4/27/2018

DESIGNED BY:  
Clint Jones

SHEET 8 OF 10



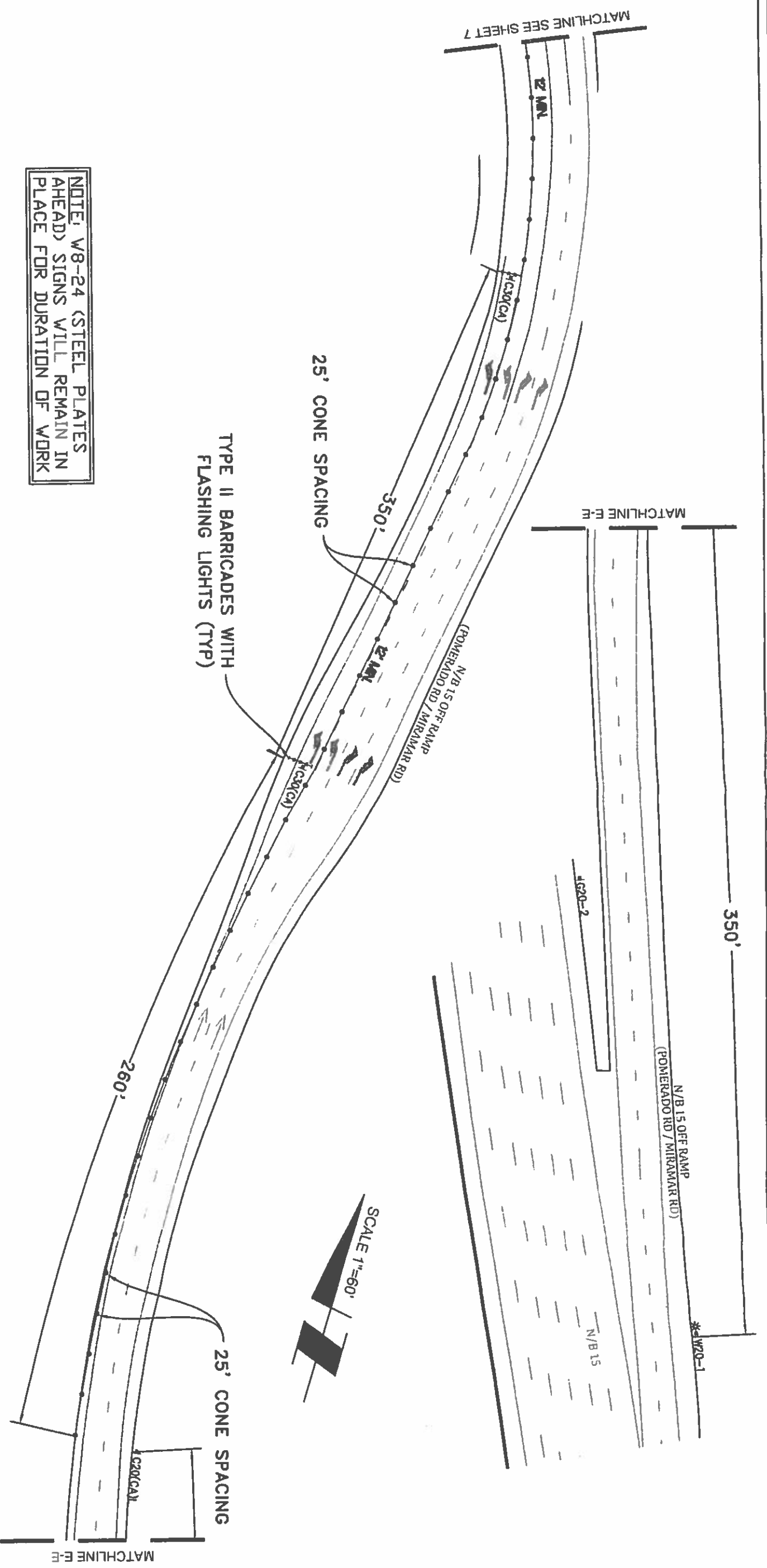
PHASE 05 (CONT)

**AIRX** SURVEYORS, INC.  
 2534 EAST EL NORTE PARKWAY SUITE C  
 ESCONDIDO, CA 92027  
 PHONE (760) 480-2347  
 CELL (760) 419-3738

Gail McMorran  
 President

<b>PROJECT NAME:</b> TL23071 – Sycamore Canyon Substation To Penasquitos Substation – 230 KV Underground	
<b>AIRX JOB#:</b> X160218	<b>THOMAS GRID#:</b> 1209-f6
<b>TYPE OF WORK:</b> TRENCHING / CONDUIT	<b>DRAWN FOR:</b> SAN DIEGO COUNTY
<b>MISC/POTHOLE#:</b>	

<b>DATE:</b> 4/27/2018
<b>DESIGNED BY:</b> Clint Jones
<b>SHEET 9 OF 10</b>



**NOTE: W8-24 (STEEL PLATES AHEAD) SIGNS WILL REMAIN IN PLACE FOR DURATION OF WORK**

**PHASE 05 (CONT)**

**AIRX SURVEYORS, INC**  
**AIRX**  
 Gail McMorran  
 President

2534 EAST EL NORTE PARKWAY SUITE C  
 ESCONDIDO CA 92027  
 PHONE (760) 480-2347  
 CELL (760) 419-9738

<b>PROJECT NAME:</b> TL23071 – Sycamore Canyon Substation To Penasquitos Substation – 230 KV Underground		<b>DATE:</b> 4/27/2018
<b>AIRX JOB#:</b> X160218	<b>THOMAS GRID#:</b> 1209-f6	<b>DESIGNED BY:</b> Clint Jones
<b>TYPE OF WORK:</b> TRENCHING / CONDUIT	<b>DRAWN FOR:</b> SAN DIEGO COUNTY	
<b>MISC/POTHOLE#:</b>		<b>SHEET 10 OF 10</b>