

Traffic Control Permit (TCP) Multiple Location List

(Franchise Utility Company Only - May Not Be submitted By Contractor)

To: City of San Diego, Traffic Permit Section

From: (Company):

SDG&E

Contact Person:

Rod Nelson

W.O. or Account #: Permit #

Date: 3/13/2018

Phone No.: 619-778-2405

Fax: _____

TCP No. _____

City Use Only

Authorized #

By

Yes

No

Date Reviewed

TYPE OF WORK

- 1 = Lane Closure
2 = Street Closure
3 = Sidewalk Closure
4 = Alley Closure
5 = Parking Lane
6 = Detour
7 = Trenching
8 = Flagging

Location	From	To	Start Date *	End Date *	Work Hours **	Thomas Bros.	Type of Work
Miramar Road	Padgett Street	Kearny Mesa Road	3/18/18	4/6/18	9:00PM - 5:00AM	1209-E6, F6	1,5,7,8
Black Mountain Road	Activity Road	Miramar Road	3/18/18	4/6/18	9:00PM - 5:00AM	1209-E6	6,8
Kearny Villa Road	Maya Linda Rd	Kearny Mesa Road	3/18/18	4/6/18	9:00PM - 5:00AM	1209-E5, E6, F6	6,8
Kearny Mesa Road	Miramar Road	End of Kearny Mesa Road	3/18/18	4/6/18	9:00PM - 5:00AM	1209-F6	1,5,7,8

Comments: Caltrans Phases C-5 through C-11, City Phase SD-1, Sunday - Thursday night work 9pm - 5am

Must be submitted a minimum of 2 working days prior to start of work. All columns must be filled out for proper authorization

Fax or mail to: City of San Diego • Traffic Control Permit Section • 1222 First Avenue, MS 501 • San Diego, CA 92101. Fax (619) 446-5489 Office (619) 446-5150

* Work Days: Monday Through Friday ** Work Hours : 8:30 AM - 3:30PM. Unless other hours are preapproved)

No Work on Saturdays, Sundays, or Holidays Unless Approved and Noted In Comments

Minimum of 5 working days required for construction work which affects traffic signal e-mail info to: JVaca@sandiego.gov**ATTENTION UTILITY COMPANY**

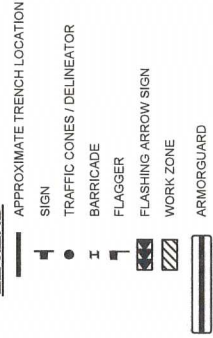
Special Inspection Fees May Be
Applied By City of San Diego For
Any Night or Weekend Work.



SPEED (5)	TAPER				TAPER				CONJECT			
	TARGET	MEASURE	LIGHTING	SHOULDER	TARGET	MEASURE	LIGHTING	SHOULDER	TARGET	MEASURE	LIGHTING	SHOULDER
200	160	160	160	160	160	160	160	160	160	160	160	160
250	250	125	125	125	250	125	125	125	250	125	125	125
300	300	150	150	150	300	150	150	150	300	150	150	150
350	400	245	175	175	400	245	175	175	400	245	175	175
400	640	320	160	107	640	320	160	107	640	320	160	107
450	1080	540	270	180	1080	540	270	180	1080	540	270	180
500	1280	640	320	200	1280	640	320	200	1280	640	320	200
550	1320	680	350	230	1320	680	350	230	1320	680	350	230
600	1440	720	360	240	1440	720	360	240	1440	720	360	240
650	1440	720	360	240	1440	720	360	240	1440	720	360	240
700	1580	800	420	280	1580	800	420	280	1580	800	420	280
750	1800	920	450	300	1800	920	450	300	1800	920	450	300

SPEED *	DOWNGRADE Min D					
	Min D **		-3%		-6%	
	ft	ft	ft	ft	ft	ft
20 mph	20	115	116	120	126	126
25	25	150	158	165	173	173
30	30	185	195	203	211	211
35	35	220	232	241	250	250
40	40	265	279	291	303	304
45	45	360	378	400	427	427
50	50	465	485	510	540	540
55	55	565	590	620	653	653
60	60	670	698	738	788	788
65	65	785	815	862	918	918
70	70	900	935	990	1050	1050
75	75	1020	1060	1120	1190	1190
80	80	1140	1185	1250	1330	1330
85	85	1260	1310	1380	1470	1470
90	90	1380	1435	1510	1610	1610
95	95	1500	1560	1640	1750	1750
100	100	1620	1685	1770	1890	1890
105	105	1740	1810	1900	2030	2030
110	110	1860	1935	2030	2170	2170
115	115	1980	2060	2160	2310	2310
120	120	2100	2185	2290	2450	2450
125	125	2220	2310	2420	2590	2590
130	130	2340	2435	2550	2730	2730
135	135	2460	2560	2680	2870	2870
140	140	2580	2685	2810	3010	3010
145	145	2700	2810	2940	3150	3150
150	150	2820	2935	3070	3300	3300
155	155	2940	3060	3200	3450	3450
160	160	3060	3185	3330	3600	3600
165	165	3180	3310	3460	3760	3760
170	170	3300	3435	3590	3920	3920
175	175	3420	3560	3720	4080	4080
180	180	3540	3685	3850	4250	4250
185	185	3660	3795	3970	4420	4420
190	190	3780	3910	4090	4590	4590
195	195	3900	4025	4210	4760	4760
200	200	4020	4145	4330	4930	4930
205	205	4140	4270	4450	5100	5100
210	210	4260	4390	4570	5270	5270
215	215	4380	4510	4690	5440	5440
220	220	4500	4630	4810	5610	5610
225	225	4620	4750	4930	5780	5780
230	230	4740	4870	5050	5950	5950
235	235	4860	4990	5170	6120	6120
240	240	4980	5110	5290	6290	6290
245	245	5100	5230	5410	6460	6460
250	250	5220	5355	5530	6630	6630
255	255	5340	5475	5650	6800	6800
260	260	5460	5595	5770	6970	6970
265	265	5580	5715	5890	7140	7140
270	270	5700	5835	6010	7310	7310
275	275	5820	5955	6130	7480	7480
280	280	5940	6075	6250	7650	7650
285	285	6060	6195	6370	7820	78

ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSION / FREEWAY	1000	1500	2640



* - The distances are approximate, are intended for guidance purposes only, and should be adjusted with engineering judgment. These distances should be adjusted by the Engineer for field conditions. The distances are intended to provide the recommended distances.

- ** = Longitudinal buffer space or flagger station spacing
- *** = Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

W = Width of offset in feet
S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

** - Use for taper and tangent sections where there are no pavement markings. If there is a conflict between existing pavement markings and the

** - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

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

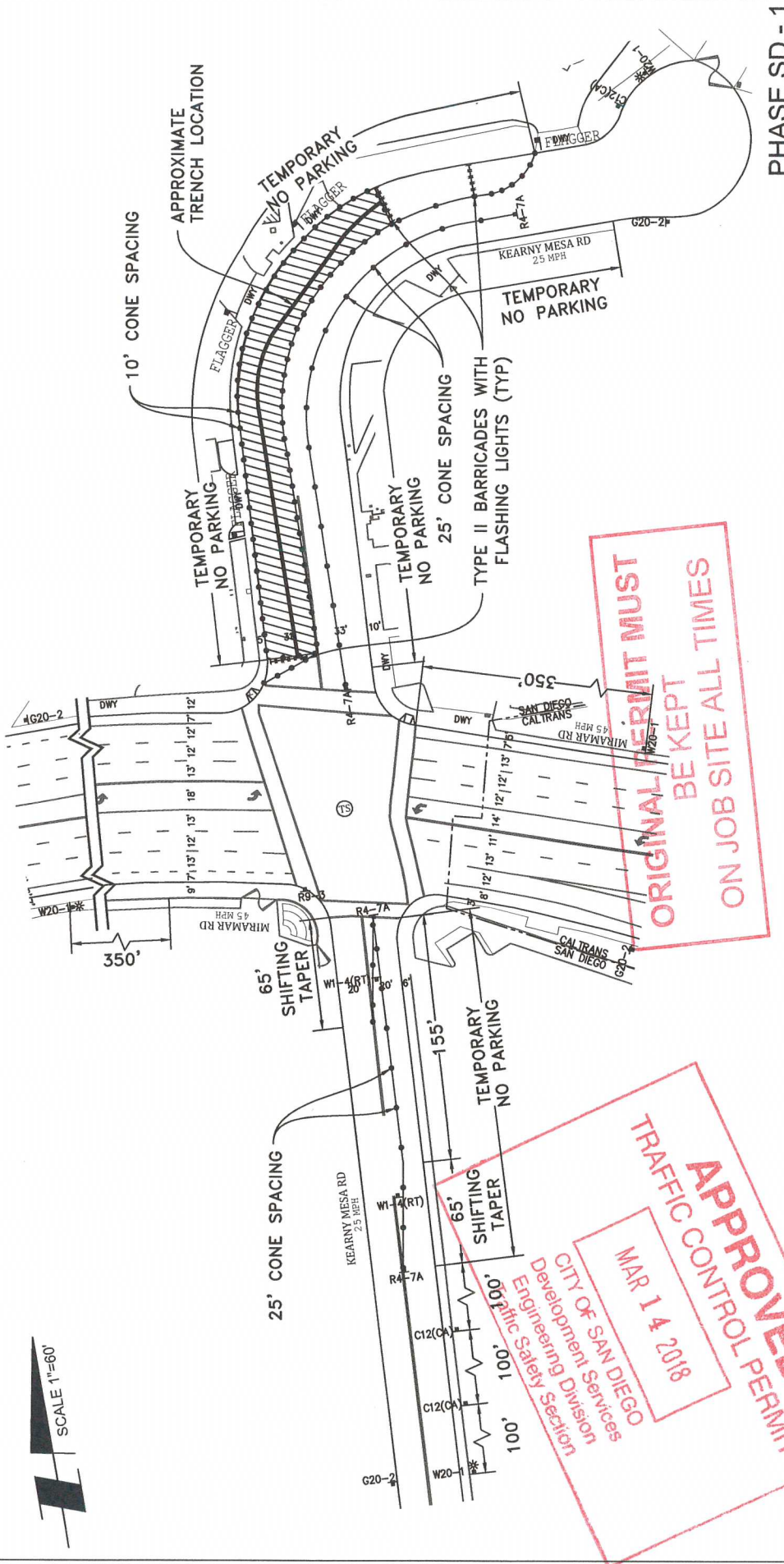
AIRX
UTILITY SURVEYORS, INC.
2514 EAST EL NORTE PARKWAY, SUITE C
ESCONDIDO, CA 92027
PHONE: (760) 480-2347
CELL: (760) 419-3738
President
Gail McMorran

AIRX JOB#: X160218

MISC/POTHLES#:

TYPE OF WORK: TRENCHING / CONDUIT

DATE: 1/4/2018
 DESIGNED: Clint Jones
 CHECKED BY: Mark Webb
SHEET 1 OF 4



PHASE SD - 1

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

DATE: 1/4/2018

DESIGNED: Clint Jones

CHECKED BY: Mark Webb

SHEET 2 OF 4

UTILITY SURVEYORS, INC.



Gail McMoran

President

2554 EAST EL NORTE PARKWAY, SUITE C
ESCONDIDO, CA 92027
PHONE: (760) 498-3847
CELL: (760) 514-0278

NV5

15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92131
P: 655.355.0500 WWW.NV5.COM

AIRX JOB#: X160218

MISC/POTHOLE#:

TYPE OF WORK: TRENCHING / CONDUIT

THOMAS GRID#: 1209-F6

DRAWN FOR: SAN DIEGO

RECEIVED
JAN 24 2018

SIGN LEGEND

C2(CA)	C12(CA)	C18(CA)	C20(CA)1R	C20(CA)3R	R3-7 L	R3-7 R	C30(CA)	C30A(CA)	C30(CA)BIKE	C44(CA)	G20-2	M4-5A							
R9-10	R9-11	R9-11A	R11-4	SC3(CA)	R3-2	R3-4	R3-18	R3-5L	R3-5R	R3-7 L	R3-7 R	R4-7A	R4-11	R49(CA)1	R49(CA)R	W16-1P	W20-1	R9-9	W20-2
W20-4	W12-1	W21-5	W21-5BL	OM-3R	W1-4L	W1-4R	OM-3L	OM-3C	OM-4-1	W1-7	R8-1 R	SPCL 1	SPCL 2	SPCL 3	SCB-4	W11-1	W20-1	W20-2	W20-2

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING

SPEED (mi/h)	TAPER LENGTH (ft)		CHANNELIZING DEVICE SPACING (ft)	
	W	L	W	L
20	100	100	10	10
30	150	150	15	15
40	200	200	20	20
50	250	250	25	25
60	300	300	30	30
70	350	350	35	35
80	400	400	40	40
90	450	450	45	45
100	500	500	50	50
110	550	550	55	55
120	600	600	60	60
130	650	650	65	65
140	700	700	70	70
150	750	750	75	75
160	800	800	80	80
170	850	850	85	85
180	900	900	90	90
190	950	950	95	95
200	1000	1000	100	100

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING

SPEED (mi/h)	LONGITUDINAL BUFFER SPACE (ft)		FLAGGER STATION SPACING (ft)	
	W	L	W	L
20	100	100	10	10
30	150	150	15	15
40	200	200	20	20
50	250	250	25	25
60	300	300	30	30
70	350	350	35	35
80	400	400	40	40
90	450	450	45	45
100	500	500	50	50
110	550	550	55	55
120	600	600	60	60
130	650	650	65	65
140	700	700	70	70
150	750	750	75	75
160	800	800	80	80
170	850	850	85	85
180	900	900	90	90
190	950	950	95	95
200	1000	1000	100	100

TABLE 3

ADVANCE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS (ft)		
	W	L	T
URBAN - 25 mph or less	100	100	100
URBAN - MORE THAN 25 mph	150	150	150
URBAN - MORE THAN 40 mph	200	200	200
URBAN - MORE THAN 50 mph	250	250	250
URBAN - MORE THAN 60 mph	300	300	300
URBAN - MORE THAN 70 mph	350	350	350
URBAN - MORE THAN 80 mph	400	400	400
URBAN - MORE THAN 90 mph	450	450	450
URBAN - MORE THAN 100 mph	500	500	500
URBAN - MORE THAN 110 mph	550	550	550
URBAN - MORE THAN 120 mph	600	600	600
URBAN - MORE THAN 130 mph	650	650	650
URBAN - MORE THAN 140 mph	700	700	700
URBAN - MORE THAN 150 mph	750	750	750
URBAN - MORE THAN 160 mph	800	800	800
URBAN - MORE THAN 170 mph	850	850	850
URBAN - MORE THAN 180 mph	900	900	900
URBAN - MORE THAN 190 mph	950	950	950
URBAN - MORE THAN 200 mph	1000	1000	1000

LEGEND

APPROXIMATE TRENCH LOCATION

SIGN

TRAFFIC CONES / DELINEATOR

BARRICADE

FLAGGER

FLASHING ARROW SIGN

WORK ZONE

ZONE GUARD

SIGN WITH PORTABLE FLASHING BEACON

QUADGUARD II CRASH CUSHION

CALTRANS CRASH ARRAY TU17

ORIGINAL PERMIT MUST BE KEPT ON JOB SITE ALL TIMES

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

AIRX

Gail McMoran
President

15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858 385 0500 WWW.AIRX.COM

NV5

15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858 385 0500 WWW.NV5.COM

AIRX JOB#: X160218

MISC/POTHOLE#:

TYPE OF WORK: TRENCHING / CONDUIT

THOMAS GRID#: 1209-F8

DRAWN FOR: CALTRANS

DATE: 1/22/2018

DESIGNED: Clint Jones

CHECKED BY: Mark Webb

SHEET 1 **OF** 48

REGISTERED ENGINEER

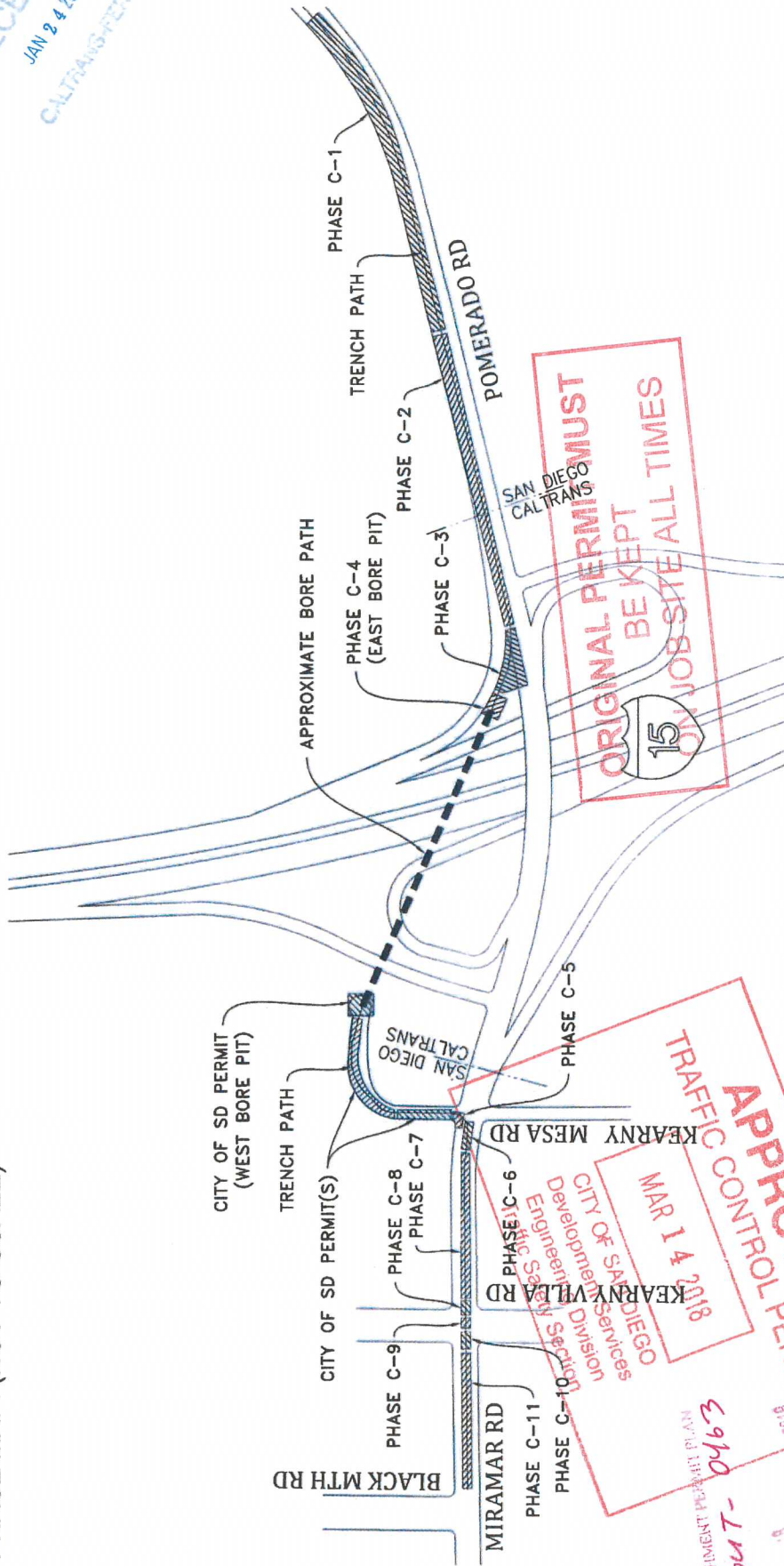
MARK H. WEBB

NO. 46328

STATE OF CALIFORNIA

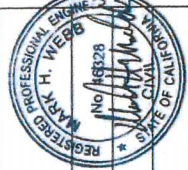
PHASE MAP: (NOT TO SCALE)

RECEIVED
JAN 24 2018
CALTRANS-REC



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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



THOMAS GRID#: 1209-F6
DRAWN FOR: CALTRANS

AIRX JOB#: X160218
MISC/POTHOLE#:
TYPE OF WORK: TRENCHING / CONDUIT

NV5
15002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P. 619.594.1100
WWW.NV5.COM

AIRX SURVEYORS, INC.
Gail McMoran
President
234 EAST EL MONTE PARKWAY, SUITE C
PUEBLO, CO 81001
PHONE (719) 594-1100
CELL (719) 413-3738

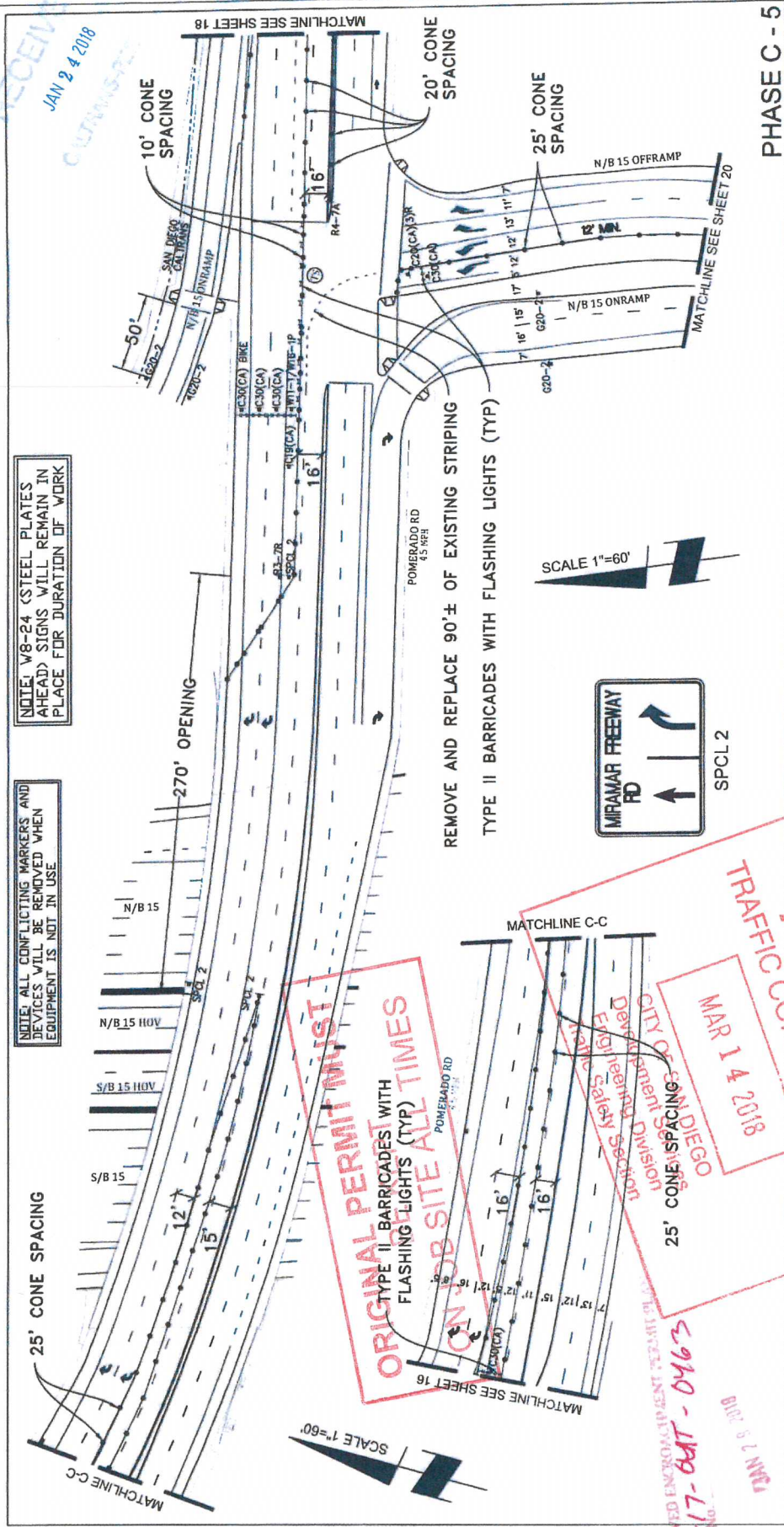
TRAFFIC CONTROL APPROVAL
MAR 14 2018
CITY OF SAN DIEGO
Engineering Services
Development Division
15000 LA JOLLA VILLAGE
SAN DIEGO, CA 92131
P. 619.594.1100
WWW.CITYOFSD.GOV

11-17-647-0463
JAN 24 2018
ENCLOSURE PERMIT PLAN

RECEIVED
JAN 24 2018
CUTTING

NOTE: W8-24 (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



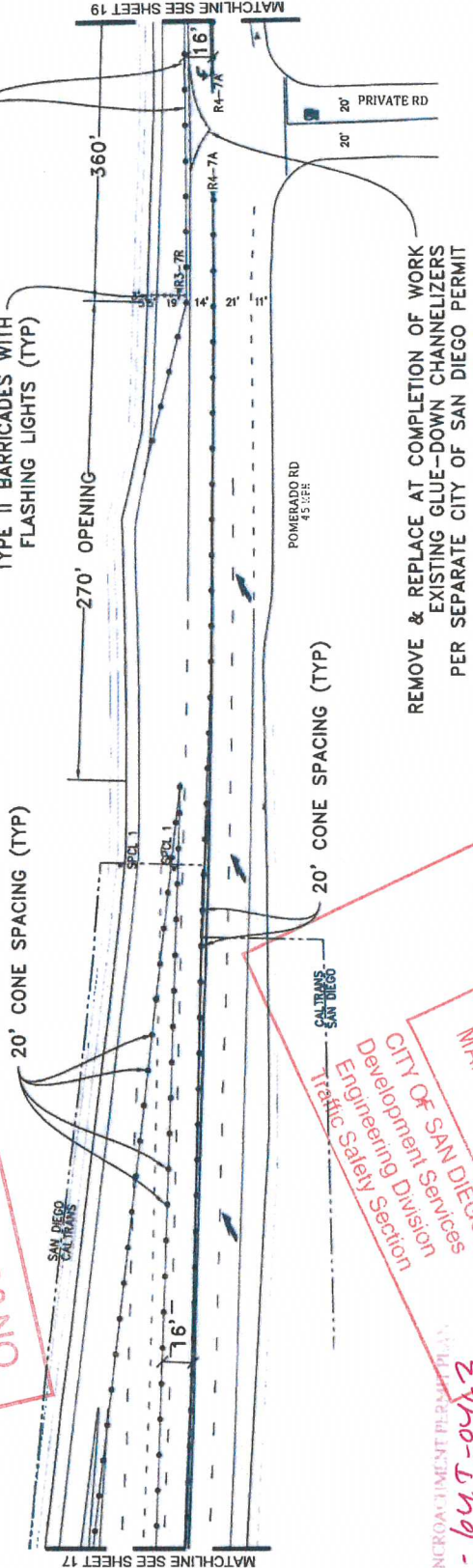
PHASE C - 5

DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb	THOMAS GRID#: 1209-F6 DRAWN FOR: SAN DIEGO	AIR JOB#: X160218 MISC/POTHOLE#:	PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground
SHEET 17 OF 48	TYPE OF WORK: TRENCHING / CONDUIT	15082 AVENUE OF SCIENCE, SUITE 200 SAN DIEGO, CA 92128 P. 858.385.0500 WWW.NV5.COM	APPROVED ENCLOSURE PERMIT NO. 11-17-64T-0463 JAN 29 2018



RECEIVED
JAN 24 2018
CITY OF SAN DIEGO

ORIGINAL PERMIT MUST
BE KEPT
ON JOB SITE ALL TIMES



PHASE C - 5

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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb

AIRX
SUPERIOR, INC.
Gail McMoran
Principal
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858 385 0500
WWW.NVS.COM

NV 5
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858 385 0500
WWW.NVS.COM

AIRX JOB#: X160218
MISC/POTHLES:
TYPE OF WORK: TRENCHING / CONDUIT

THOMAS GRID#: 1209-F6
DRAWN FOR: SAN DIEGO

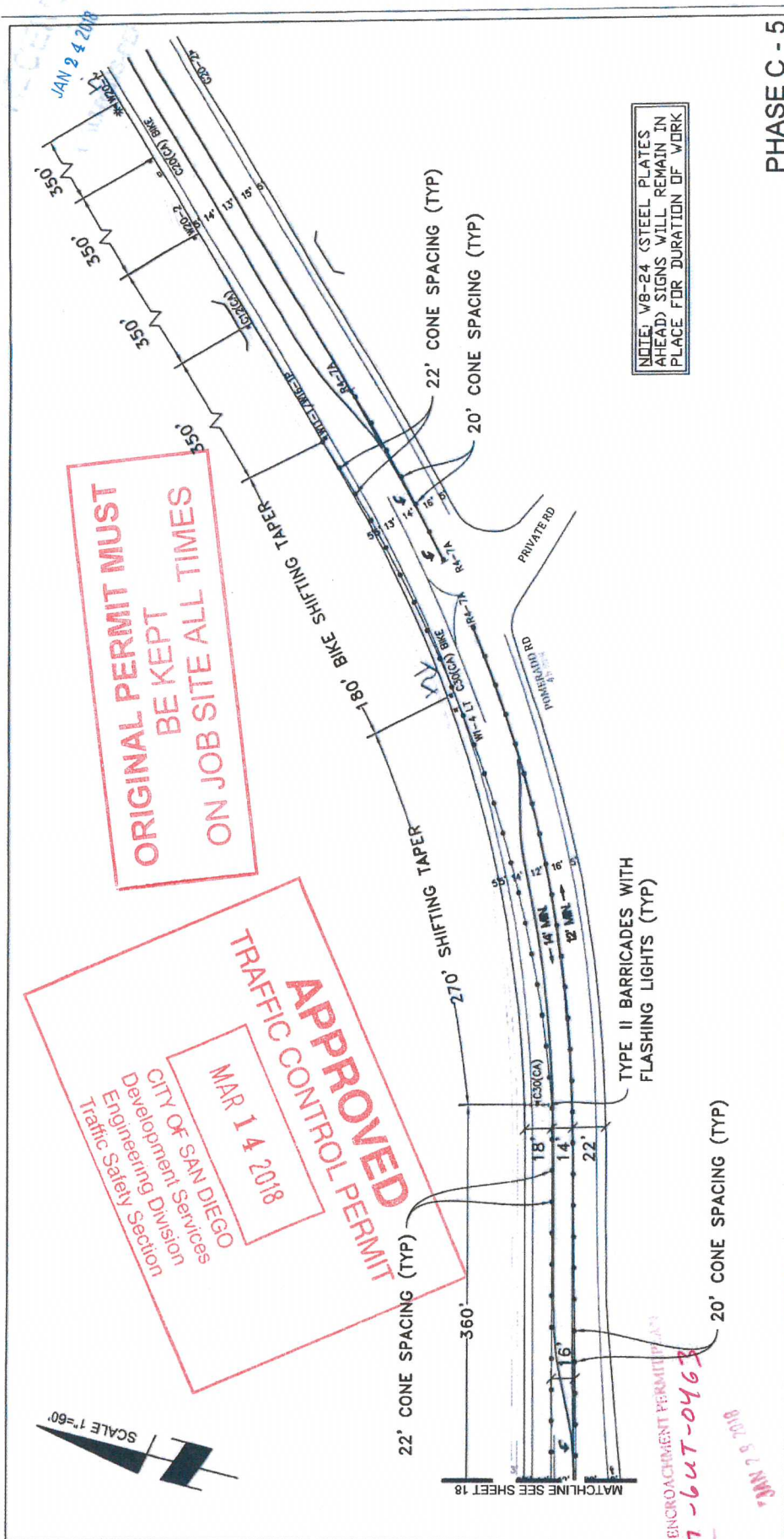
SHEET 18 OF 48

APPROVED ENCROACHMENT PERMIT
11-17-64T-0463
Permit No.:

APPROVED
TRAFFIC CONTROL PERMIT
MAR 14 2018
CITY OF SAN DIEGO
Development Services
Engineering Division
Traffic Safety Section



SPCL 1



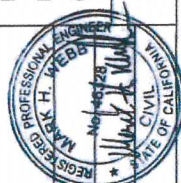
PHASE C - 5

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

DATE: 1/22/2018

DESIGNED: Clint Jones

CHECKED BY: Mark Webb



THOMAS GRID# 1209-F6

DRAWN FOR: SAN DIEGO

AIRX JOB#: X160218

MISC/POTHOLE#:

TYPE OF WORK: TRENCHING / CONDUIT

NV5

15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 619 585 0500 WWW.NV5.COM

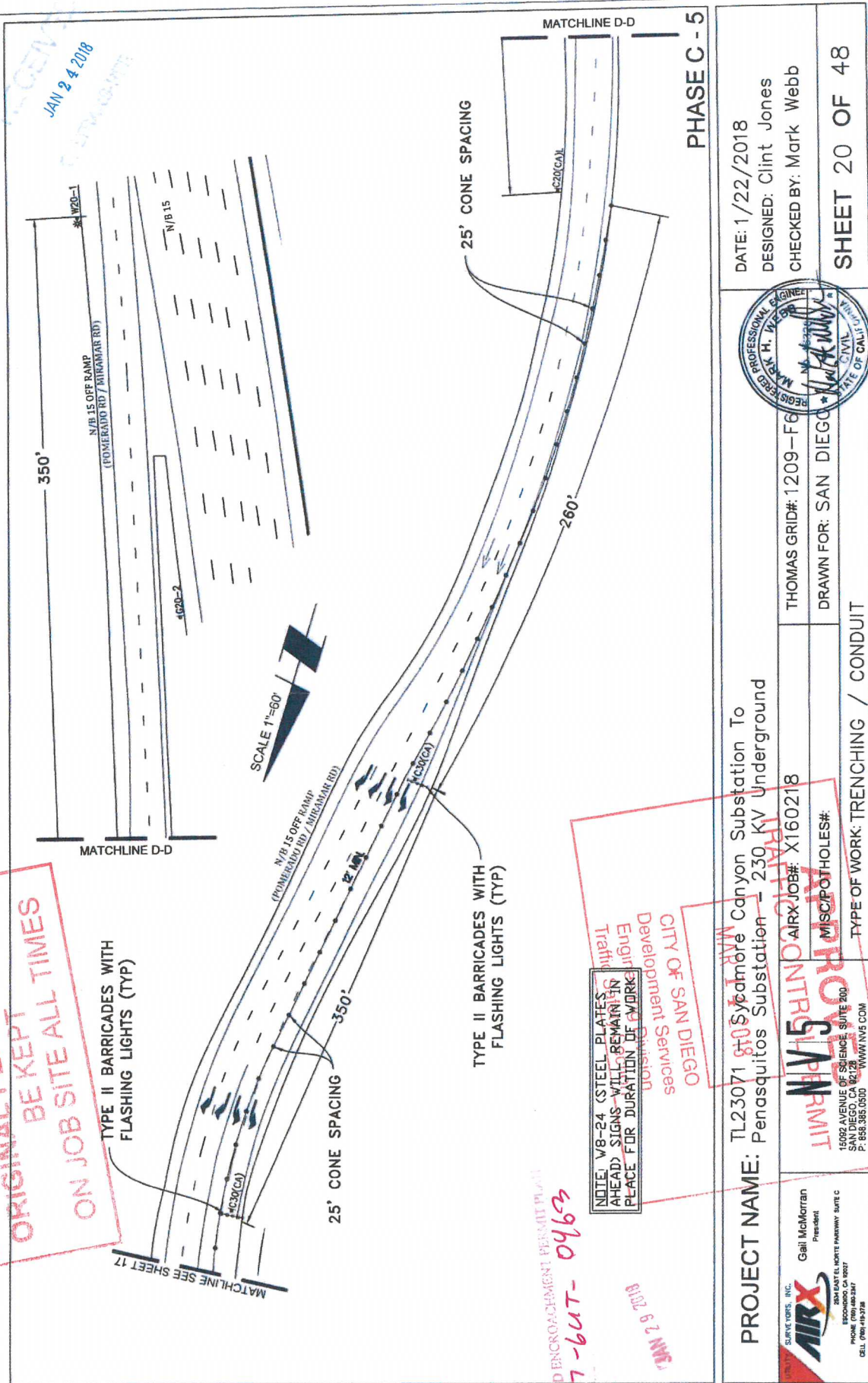


15000 LA JOLLA VILLAGE DRIVE, SUITE C
SAN DIEGO, CA 92131
PHONE (619) 684-2347
CELL (760) 416-3756

SHEET 19 OF 48

ORIGINAL PERMIT MUST
BE KEPT
ON JOB SITE ALL TIMES

JAN 24 2018



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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb

PHASE C - 5

THOMAS GRID#: 1209-F6
DRAWN FOR: SAN DIEGO

SHEET 20 OF 48



AIRX JOB#: X160218
MISC/POTHOLES#:

TYPE OF WORK: TRENCHING / CONDUIT

Gail McMoran
President
AIRX SURVEYING, INC.
15002 AVENUE OF SCIENCE SUITE 200
SAN DIEGO, CA 92128
P: 858.385.0500 WWW.AIRX.COM

APPROVED ENCROACHMENT PERMIT PLAN
11-17-6UT-0463
JAN 29 2018

ORIGINAL PERMIT MUST
BE KEPT
ON JOB SITE ALL TIMES

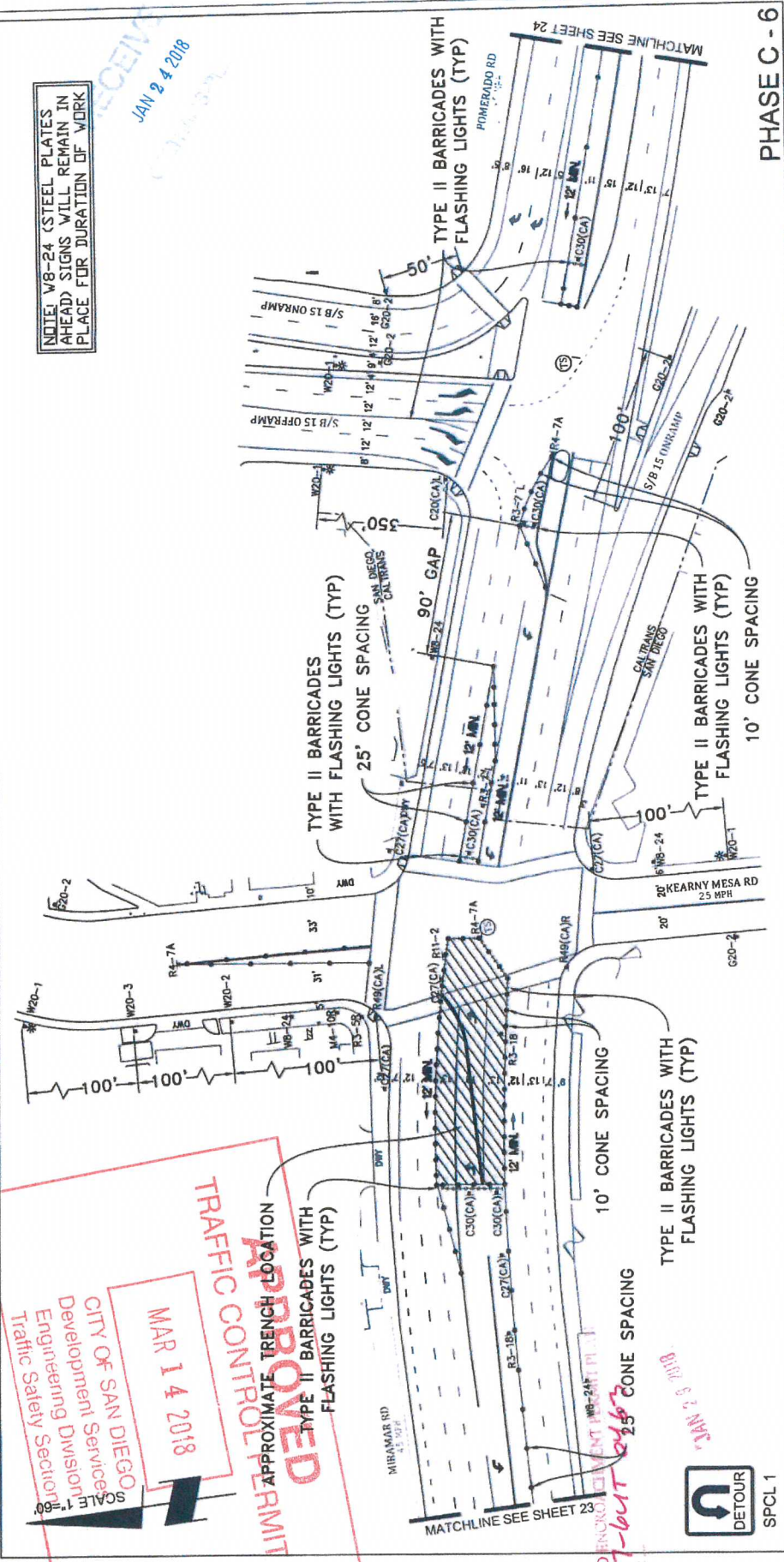
SCALE 1"=60'
CITY OF SAN DIEGO
Development Services
Engineering Division
Traffic Safety Section

MAR 14 2018

APPROVED
TRAFFIC CONTROL PERMIT
APPROXIMATE TRENCH LOCATION

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

JAN 24 2018



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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb

AIRX
SURVEYING, INC.
Gail McMoran
President
254 EAST 111 NORTH PARKWAY SUITE C
ESCONDIDO, CA 92027
TEL: 760-940-8847
CELL: 760-190-2728

NIV5
16002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858-585-0500 WWW.NIV5.COM

AIRX JOB#: X160218
MISC/POTHOLESH:
TYPE OF WORK: TRENCHING / CONDUIT



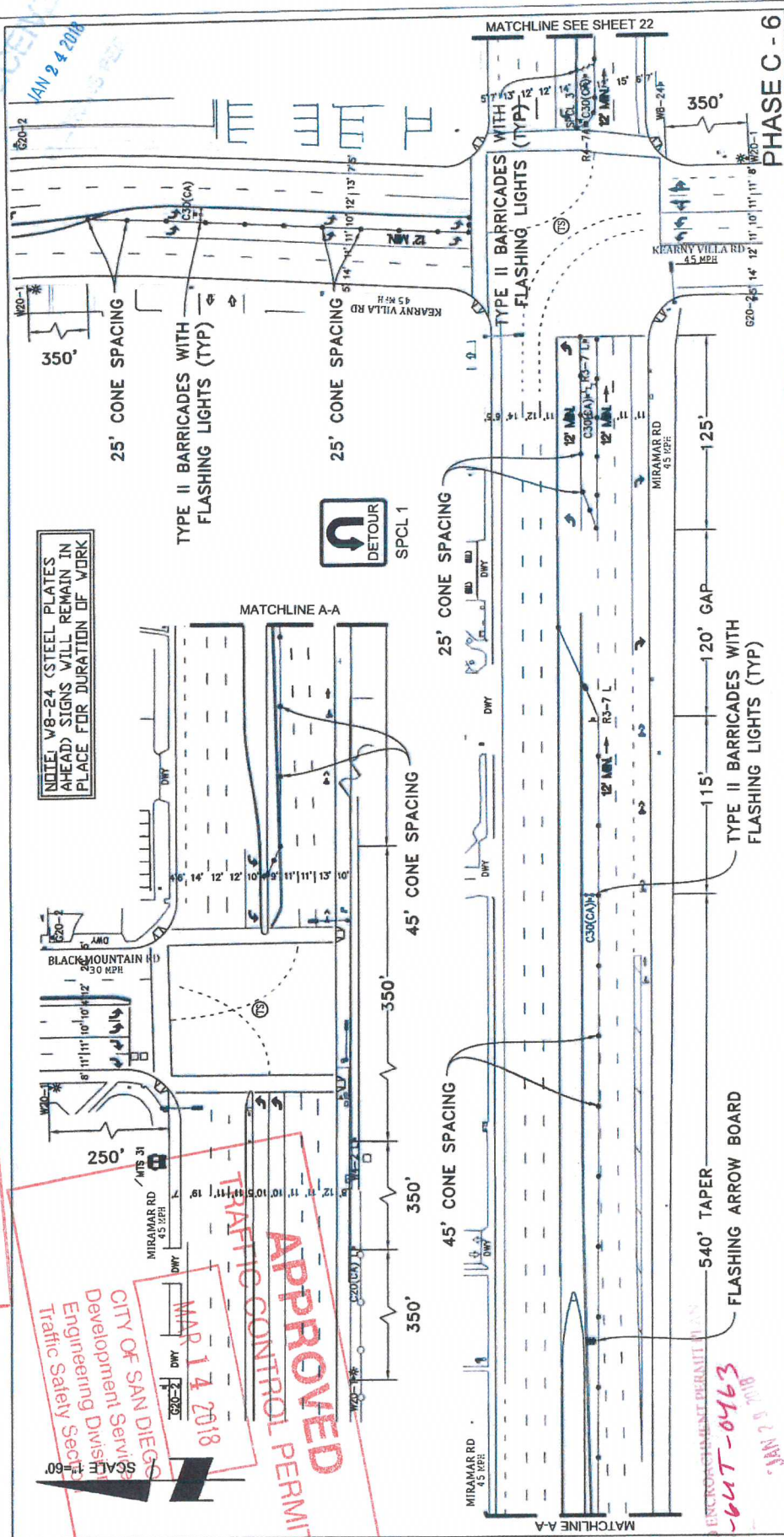
SHEET 22 OF 48

ORIGINAL PERMIT MUST
BE KEPT
ON JOB SITE ALL TIMES

CITY OF SAN DIEGO
Development Services
Engineering Division
Traffic Safety Section

MAR 14 2018

APPROVED
TRAFFIC CONTROL PERMIT



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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



NV15
16002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858 385 0500 WWW.NV5.COM

AIRX
SURVEYORS, INC.
Gail McMorran
President
2501 EAST L. MONTE PARKWAY, SUITE C
ESCONDIDO, CA 92027
PHONE: (760) 941-1041
CELL: (760) 418-2708

THOMAS GRID#: 1209-F6
DRAWN FOR: SAN DIEGO
TYPE OF WORK: TRENCHING / CONDUIT

AIRX JOB#: X160218
MISC/POTHOLE#:
TYPE OF WORK: TRENCHING / CONDUIT

SHEET 23 OF 48

11-77-641T-0463
Permit No. 11-77-641T-0463
JAN 29 2018

SCALE 1"=60'

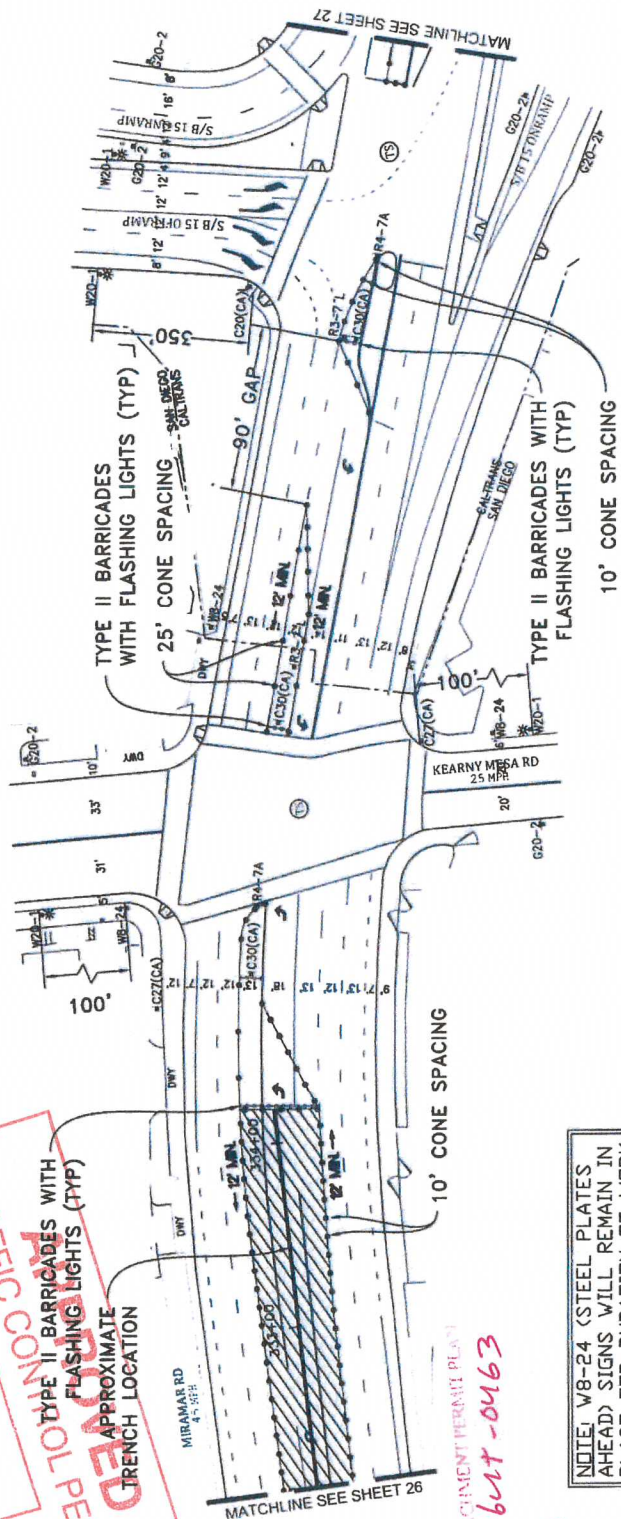
CITY OF SAN DIEGO
Development Services
Engineering Division
Traffic Safety Section

MAR 14 2018

TRAFFIC CONTROL PERMIT
APPROVED

ORIGINAL PERMIT MUST
BE KEPT
ON JOB SITE ALL TIMES

JAN 24 2018



PHASE C - 7

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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



THOMAS GRID#: 1209-F6
DRAWN FOR: CAL TRANS

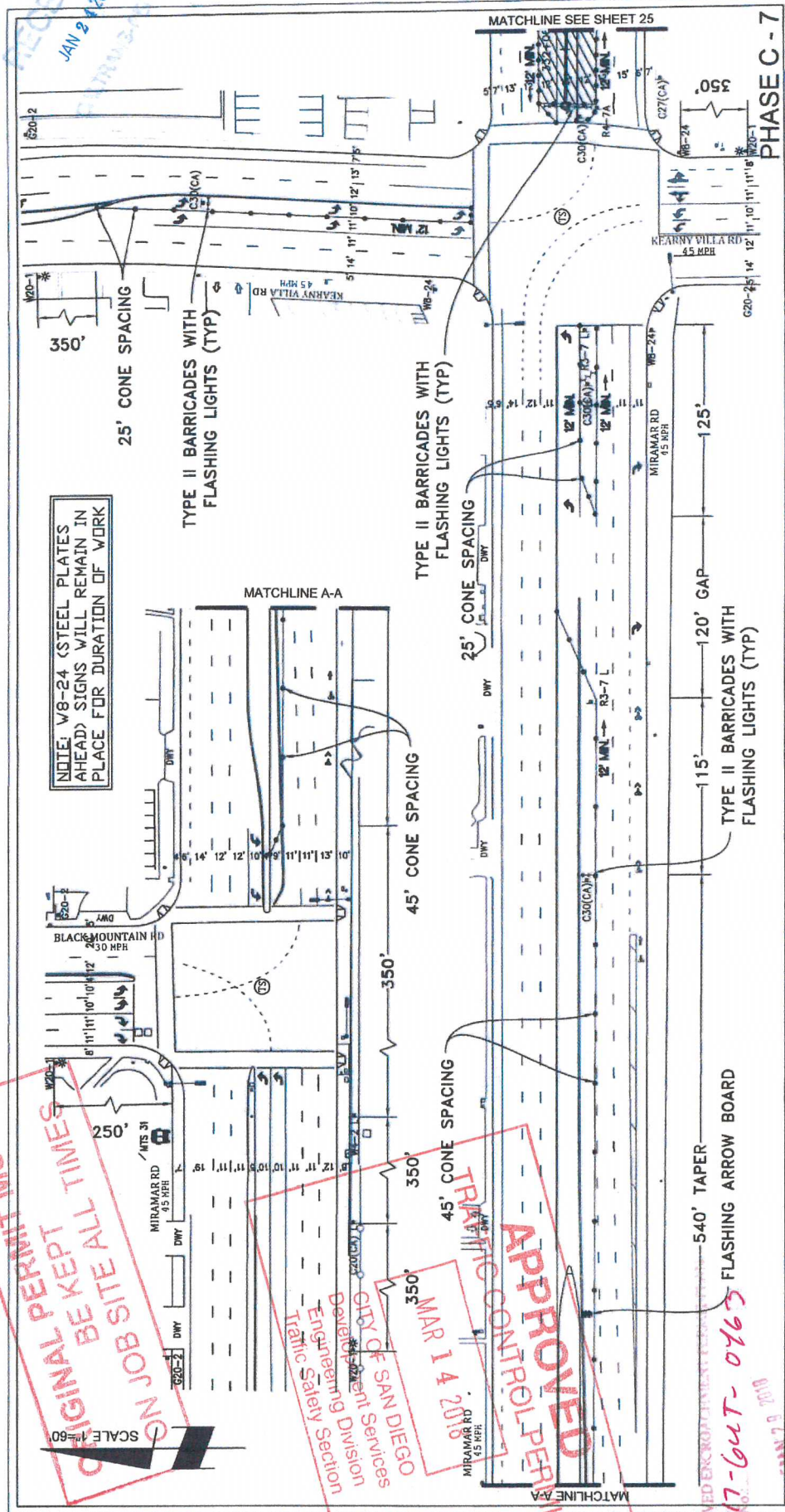
AIRX JOB#: X160218
MISC/POTHOLE#:
TYPE OF WORK: TRENCHING / CONDUIT

NV5

Gail McMorran
President
AIRX SURVEYORS, INC.
15609 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.585.0500 WWW.NV5.COM

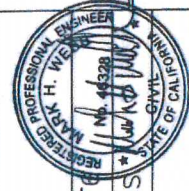
SHEET 25 OF 48

APPROVED ENCROACHMENT PERMIT PLAN
41-17-647-0463
JAN 29 2018



PHASE C-7

PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground		DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb	
AIRX JOB#: X160218 MISC/POTHOLE#:		THOMAS GRID#: 1209-F8 DRAWN FOR: CALTRANS	
TYPE OF WORK: TRENCHING / CONDUIT		SHEET 26 OF 48	



AIRX
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 619 395 1500
WWW.AIRX.COM

Gail McMoran
President
15092 AVENUE OF SCIENCE, SUITE C
SAN DIEGO, CA 92128
P: 619 483 3247
CELL: 760 719 3728

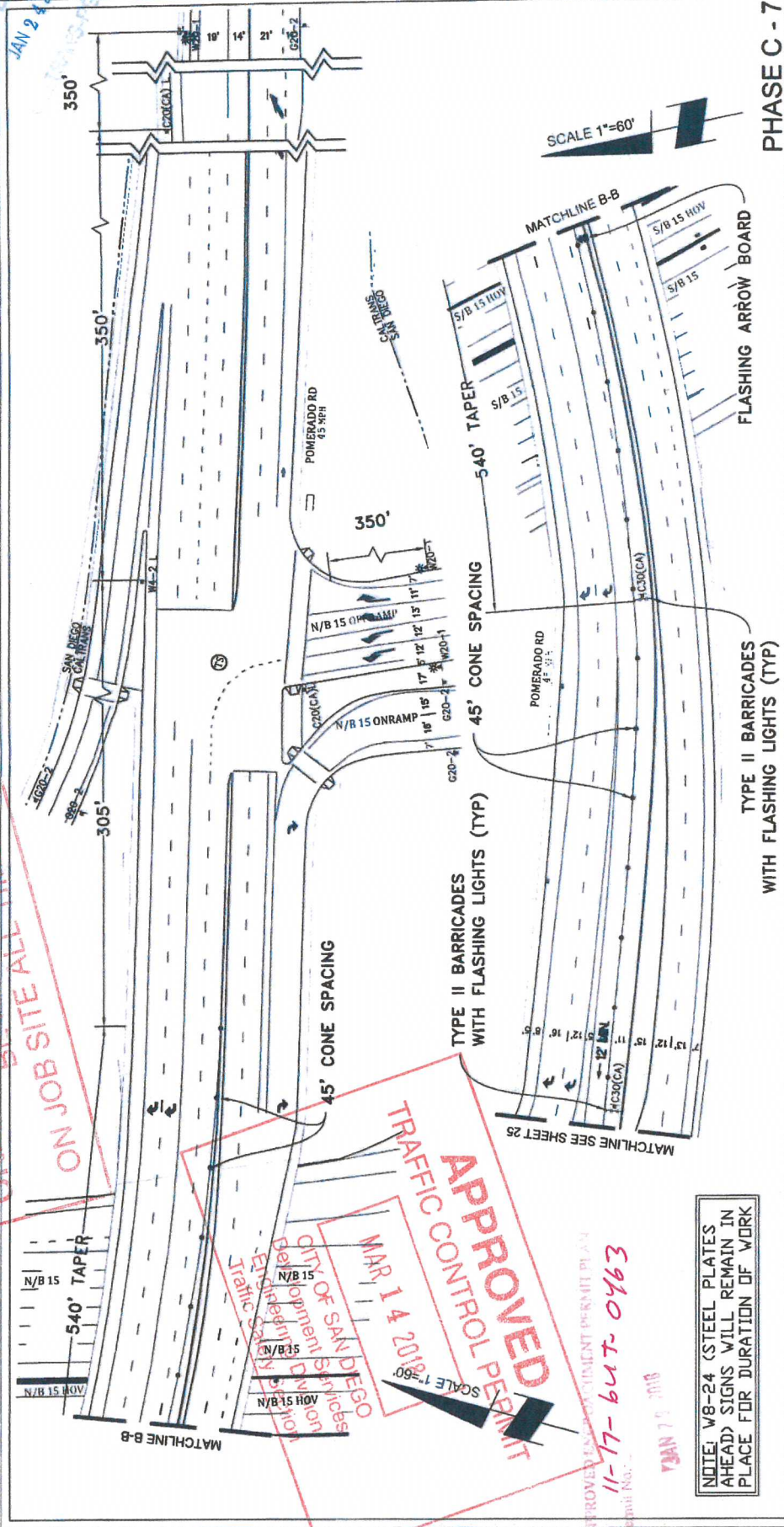
ORIGINAL PERMIT MUST BE KEPT ON JOB SITE ALL TIMES

APPROVED
MAR 14 2018
CITY OF SAN DIEGO
Engineering Services
Development Division
Traffic Safety Section

11-17-64T-0765
APPROVED ENCLOSURE
Permit No.

JAN 24 2018

ORIGINAL PERMIT MUST
BE KEPT
ON JOB SITE ALL TIMES



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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



AIRX JOB#: X160218

THOMAS GRID#: 1209-F6

MISC/POTHOLE#:

DRAWN FOR: CALTRANS

TYPE OF WORK: TRENCHING / CONDUIT

SHEET 27 OF 48

AIRX SURVEYING, INC.
Gail McMoran
President
15002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.385.0500
WWW.AIRX.COM
CELL: (760) 415-5726

NV5

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

TRAFFIC CONTROLLED PERMIT
APPROVED
MAR 11 4 2018
CITY OF SAN DIEGO
DEPARTMENT OF PUBLIC WORKS
DIVISION OF TRAFFIC CONTROL
Permit No. 11-17-but-0463
SCALE 1"=60'

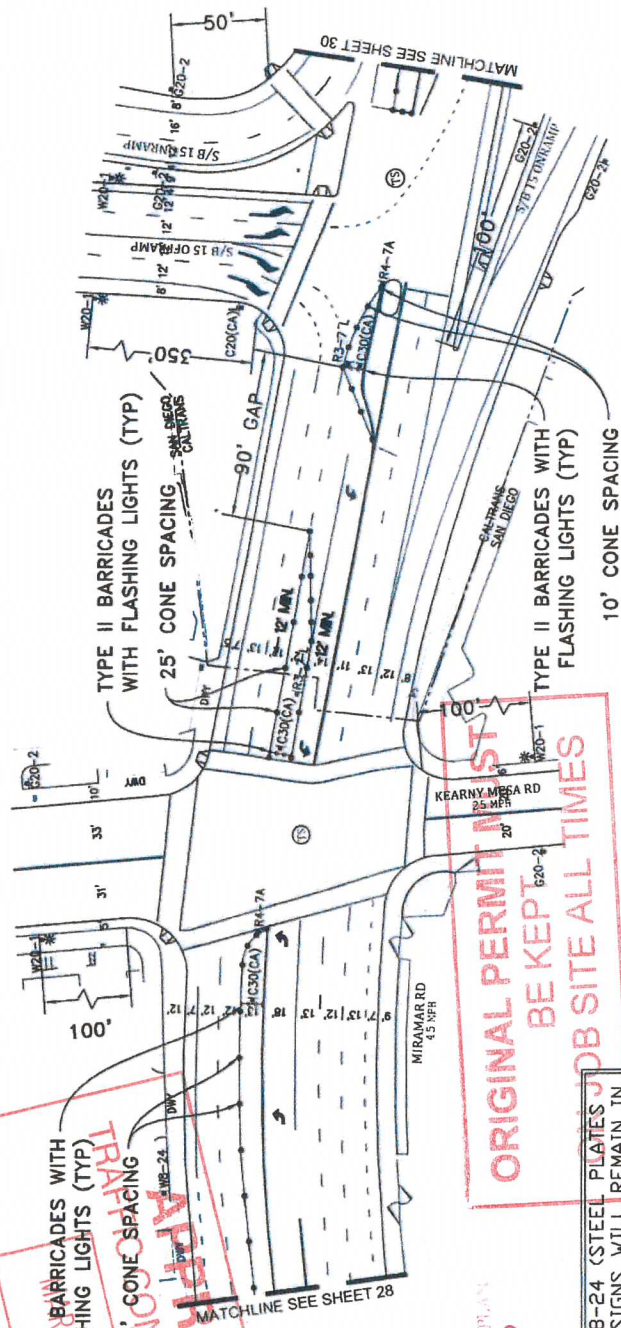
JAN 24 2018

SCALE 1"=60'

CITY OF SAN DIEGO
Development Services
Engineering Division
Traffic Safety Section

TYPE II BARRICADES WITH
FLASHING LIGHTS (TYP)
25' CONE SPACING

APPROVED
TRAFFIC CONTROL PERMIT
2018



ORIGINAL PERMIT MUST
BE KEPT
ON JOB SITE ALL TIMES

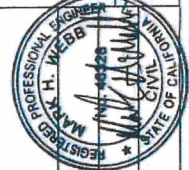
NOTE: W8-24 (STEEL PLATES
AHEAD) SIGNS WILL REMAIN IN
PLACE FOR DURATION OF WORK

APPROVED ENCROACHMENT PERMIT PLAN
11-17-64 t-0467
Permit No. ...
JAN 29 2018

PHASE C - 8

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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



AIRX JOB#: X160218
THOMAS GRID#: 1209-F6
MISC/POTHOLE#:
DRAWN FOR: CALTRANS

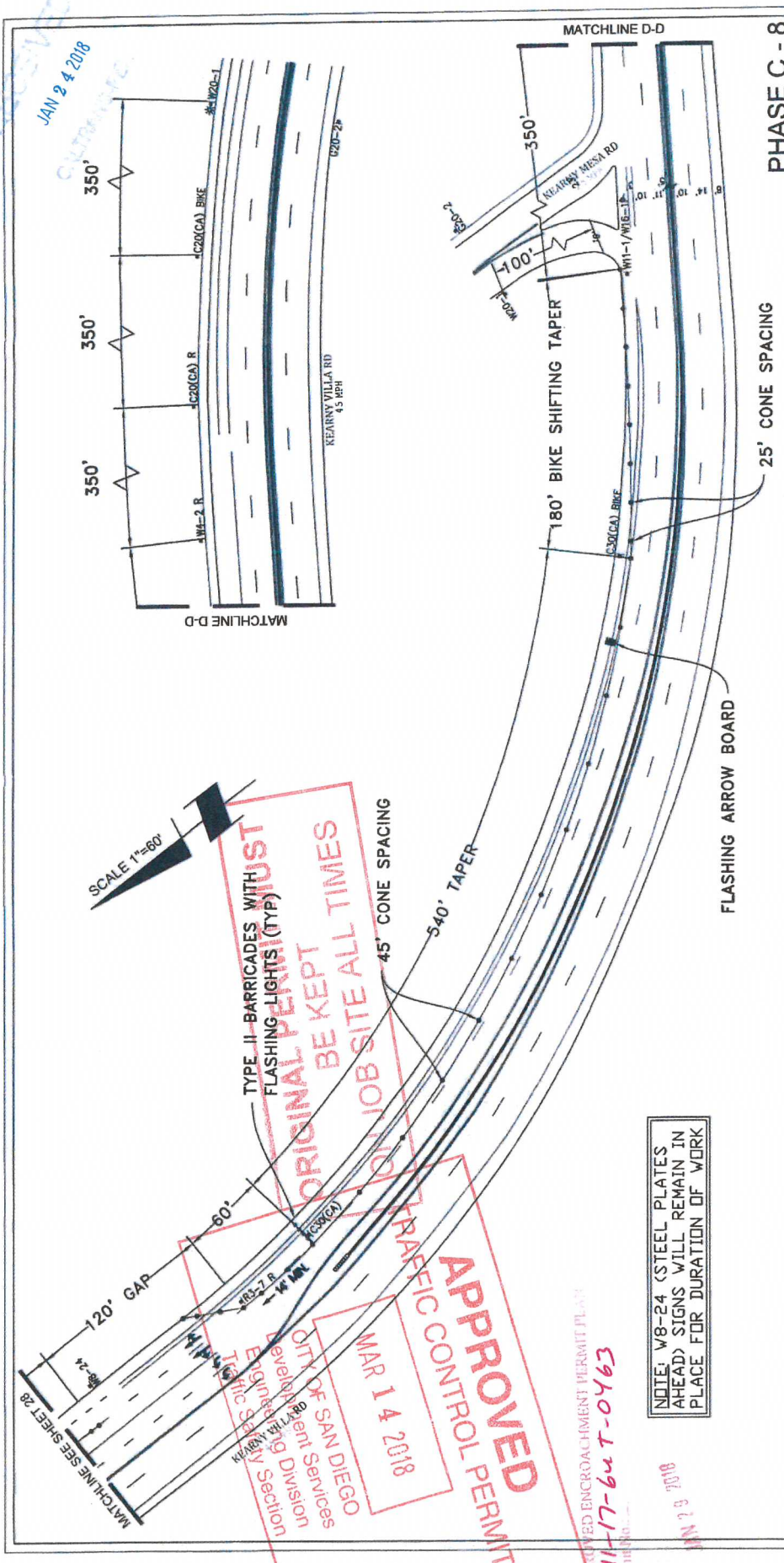
TYPE OF WORK: TRENCHING / CONDUIT

NV15
15082 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.385.0500 WWW.NV5.COM

AIRX SURFACES, INC.
Gail McMoran
President
15000 LA JOLLA VILLAGE PARKWAY, SUITE C
SAN DIEGO, CA 92127
PHONE: (760) 488-2947
CELL: (760) 418-3728

SHEET 29 OF 48

RECEIVED
JAN 24 2018
CITY OF SAN DIEGO



SCALE 1"=60'

TYPE II BARRICADES WITH FLASHING LIGHTS (TYP) MUST BE KEPT ALL TIMES

ORIGINAL PERMIT

ON JOB SITE

45' CONE SPACING

540' TAPER

180' BIKE SHIFTING TAPER

25' CONE SPACING

FLASHING ARROW BOARD

PHASE C-8

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

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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



AIRX JOB#: X160218
MISC/POTHOLE#:
TYPE OF WORK: TRENCHING / CONDUIT

NV5
15002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P. 858.385.0500 WWW.NV5.COM

AIRX
Gail McMoran
President
204 EAST L. MONTGOMERY SUITE C
ESCONDIDO, CA 92025
PHONE (760) 465-2411
CELL (760) 119-3728

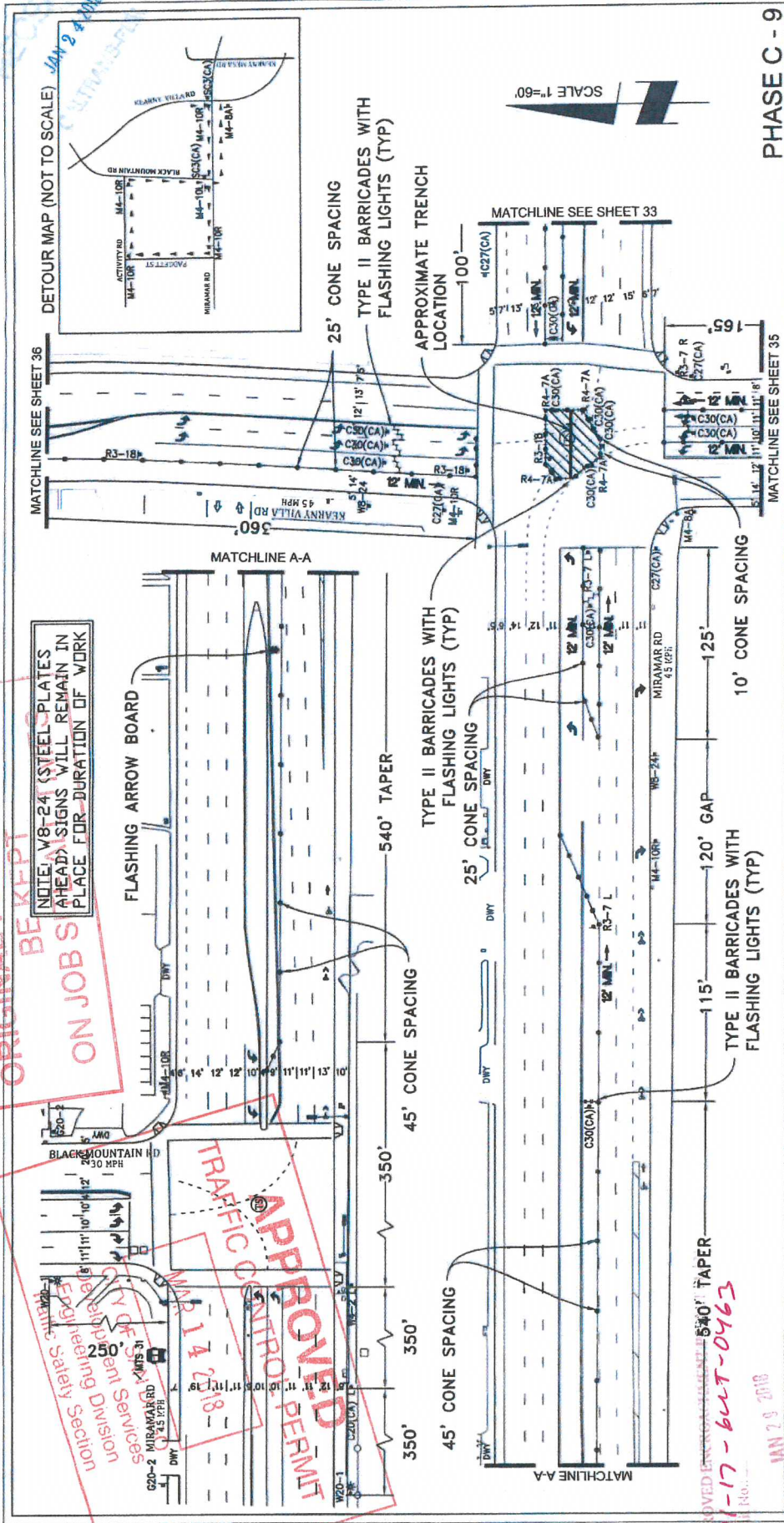
SHEET 31 OF 48

APPROVED ENCROACHMENT PERMIT PLAN
11-17-6u T-0463
MAR 14 2018
CITY OF SAN DIEGO
Engineering Division
Traffic Section
Kearny Villa Rd

ORIGINAL PERMIT MUST BE KEPT ON JOB SITE

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

APPROVED PERMIT
TRAFFIC CONTROL PERMIT
MIR 14218



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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb

NIV5
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 656 385 0500 WWW.NIV5.COM

AIR JOB#: X160218
MISC/POTHOLE#: _____

THOMAS GRID# 1209-F6
DRAWN FOR: CALTRANS

TYPE OF WORK: TRENCHING / CONDUIT

SHEET 32 OF 48

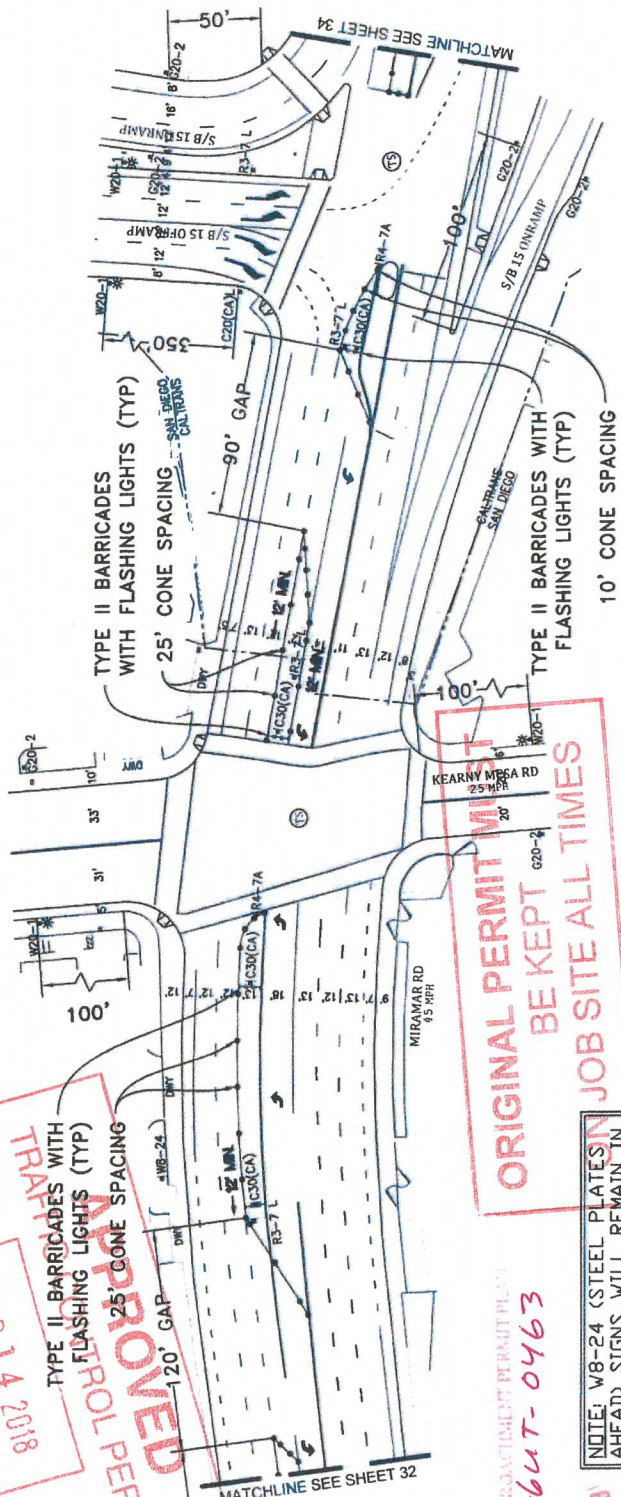


PHASE C - 9

JAN 24 2018

APPROVED
TRAFFIC CONTROL PERMIT
MAR 14 2018
CITY OF SAN DIEGO
Development Services
Engineering Division
Traffic Safety Section

SCALE 1"=60'



ORIGINAL PERMIT MUST
BE KEPT
JOB SITE ALL TIMES

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

APPROVED ENCLOSURE PERMIT PLAN
41-17-6UT-0463
Permit No.:

JAN 29 2018

PHASE C - 9

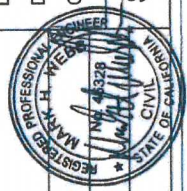
PROJECT NAME: TL23071 - Sycamore Canyon Substation To
Penasquitos Substation - 230 KV Underground

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb

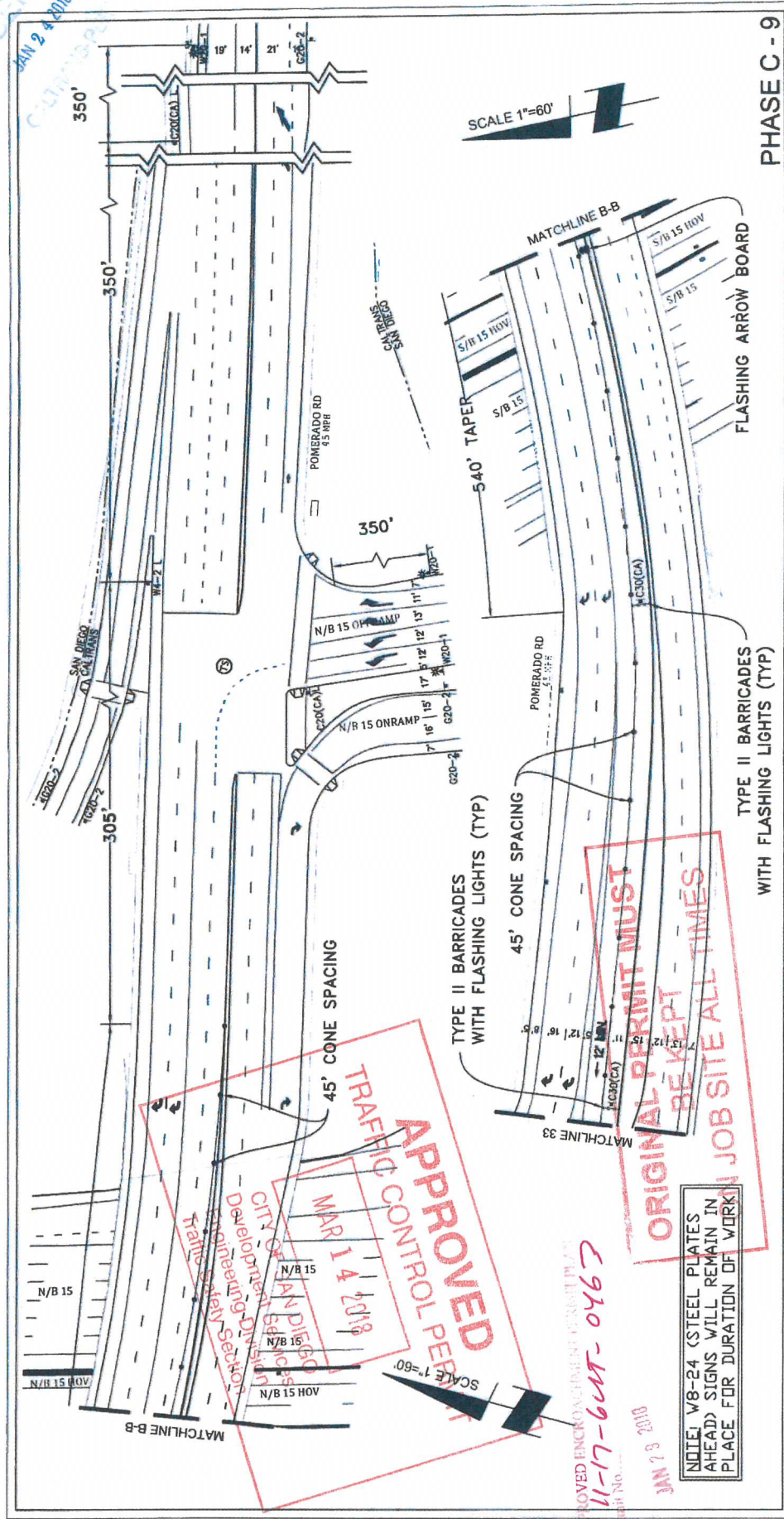
AIRX SURVEYING, INC.
Gail McMoran
President
234 EAST L L HORTON AVENUE, SUITE C
SAN DIEGO, CA 92123
PHONE: (760) 488-2747
CELL: (760) 418-5328

NV5
15002 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92123
P. 858.385.0500
WWW.NV5.COM

AIRX JOB#: X160218
MISC/POTHOLE#:
TYPE OF WORK: TRENCHING / CONDUIT



SHEET 33 OF 48

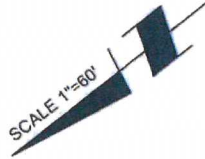
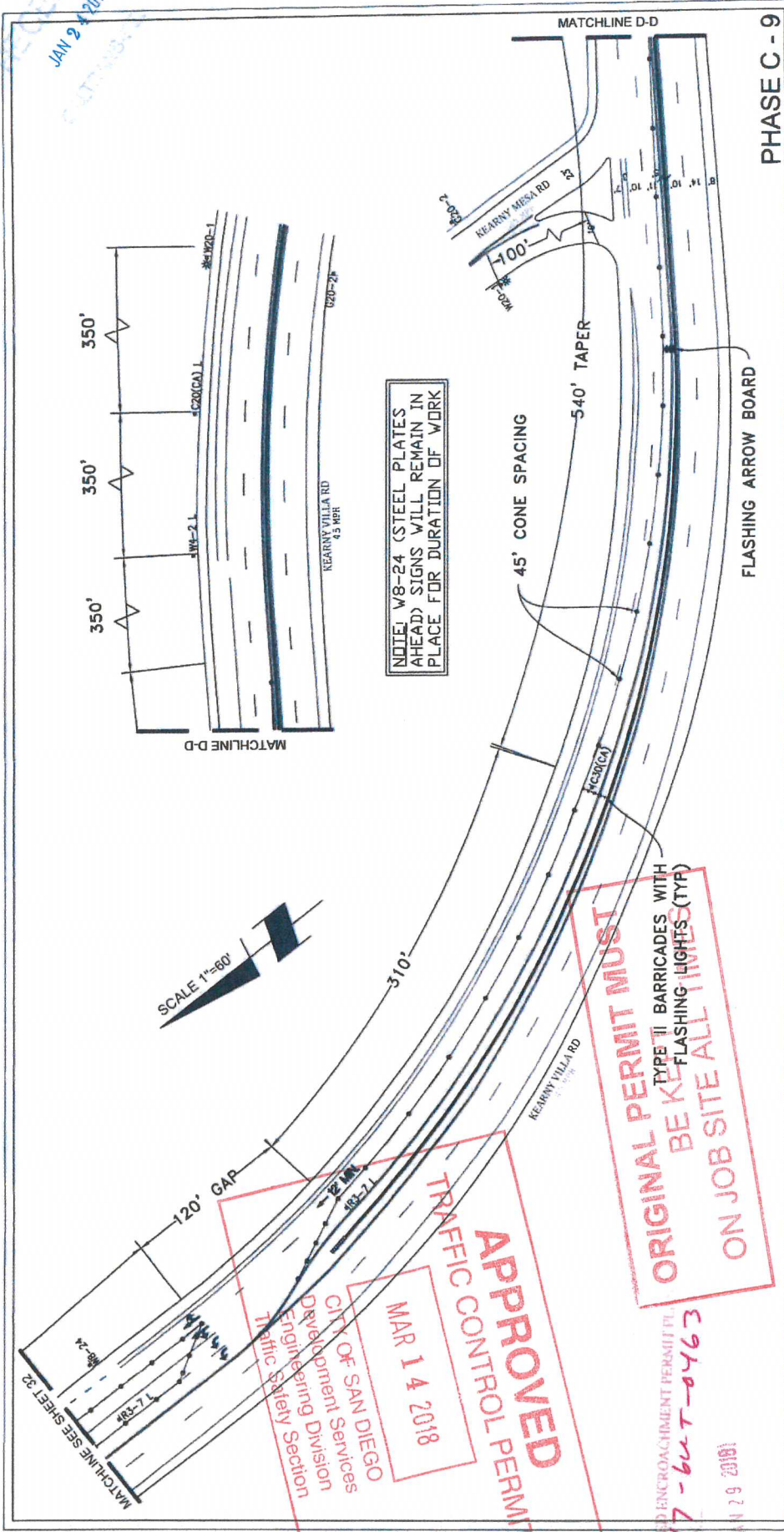


PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground		DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb
AIR JOB#: X160218 MISC/POTHOLE#:	THOMAS GRID#: 1209-F6 DRAWN FOR: CALTRANS	SHEET 34 OF 48
TYPE OF WORK: TRENCHING / CONDUIT		

AIRX
SUNNY VORES, INC.
Gail McMoran
President
200 EAST EL MONTE AVENUE, SUITE C
SEACONDO, CA 92128
PHONE: (760) 480-2427
CELL: (760) 480-2428

NV5
15082 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 655 385 0500 WWW.NV5.COM

JAN 24 2018



SCALE 1"=60'

CITY OF SAN DIEGO
Development Services
Engineering Division
Traffic Safety Section

MAR 14 2018

APPROVED

TRAFFIC CONTROL PERMIT

ORIGINAL PERMIT MUST
BE KEPT ON JOB SITE ALL TIMES

TYPE II BARRICADES WITH
FLASHING LIGHTS (TYP)

11-17-667-0463

144 29 2018

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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



NV5
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.385.0500 WWW.NV5.COM

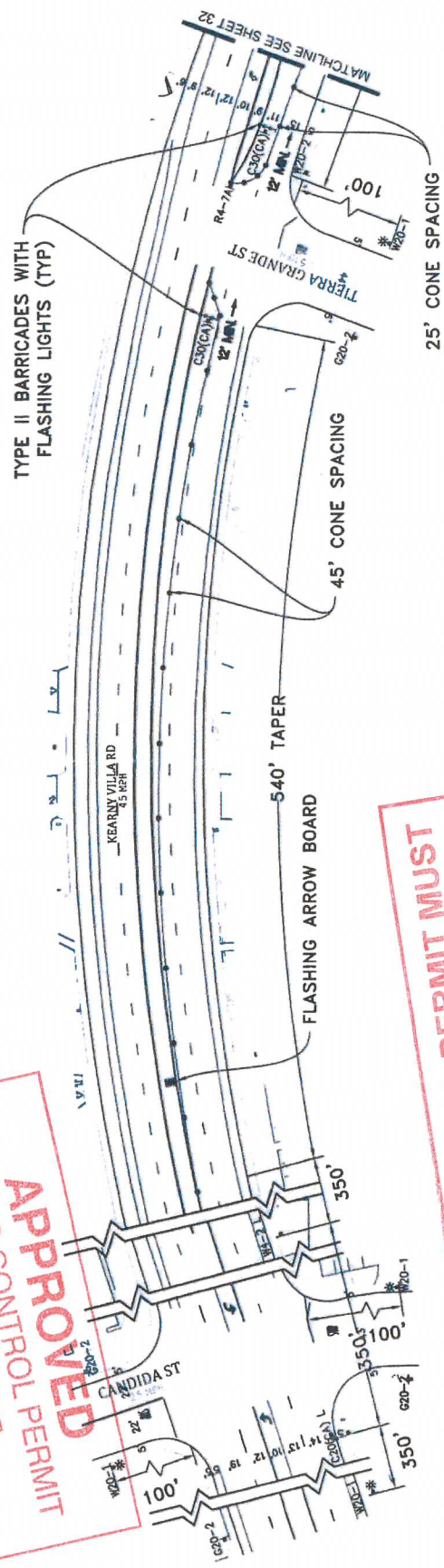
AIRX
Gail McMoran
President
10400 EL NORTE AVENUE, SUITE C
SAN DIEGO, CA 92131
PHONE: (760) 480-2447
CELL: (760) 416-3726

AIRX JOB#: X160218
MISC/POTHLES#:
THOMAS GRID#: 1209-F6
DRAWN FOR: CALTRANS
TYPE OF WORK: TRENCHING / CONDUIT

SHEET 35 OF 48

TRAFFIC CONTROL PERMIT
APPROVED
 MAR 14 2018
 SCALE 1"=80'-0"
 CITY OF SAN DIEGO
 Development Services
 Engineering Division
 Traffic Safety Section

JAN 24 2018
 CULMANSZ



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

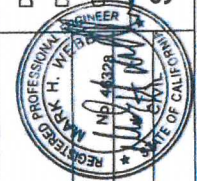
**ORIGINAL PERMIT MUST
 BE KEPT
 ON JOB SITE AT ALL TIMES**

APPROVED ENCROACHMENT PERMIT PLAN
 11-17-64T-0463
 Permit No. 11-17-64T-0463

PHASE C - 9

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

DATE: 1/22/2018
 DESIGNED: Clint Jones
 CHECKED BY: Mark Webb



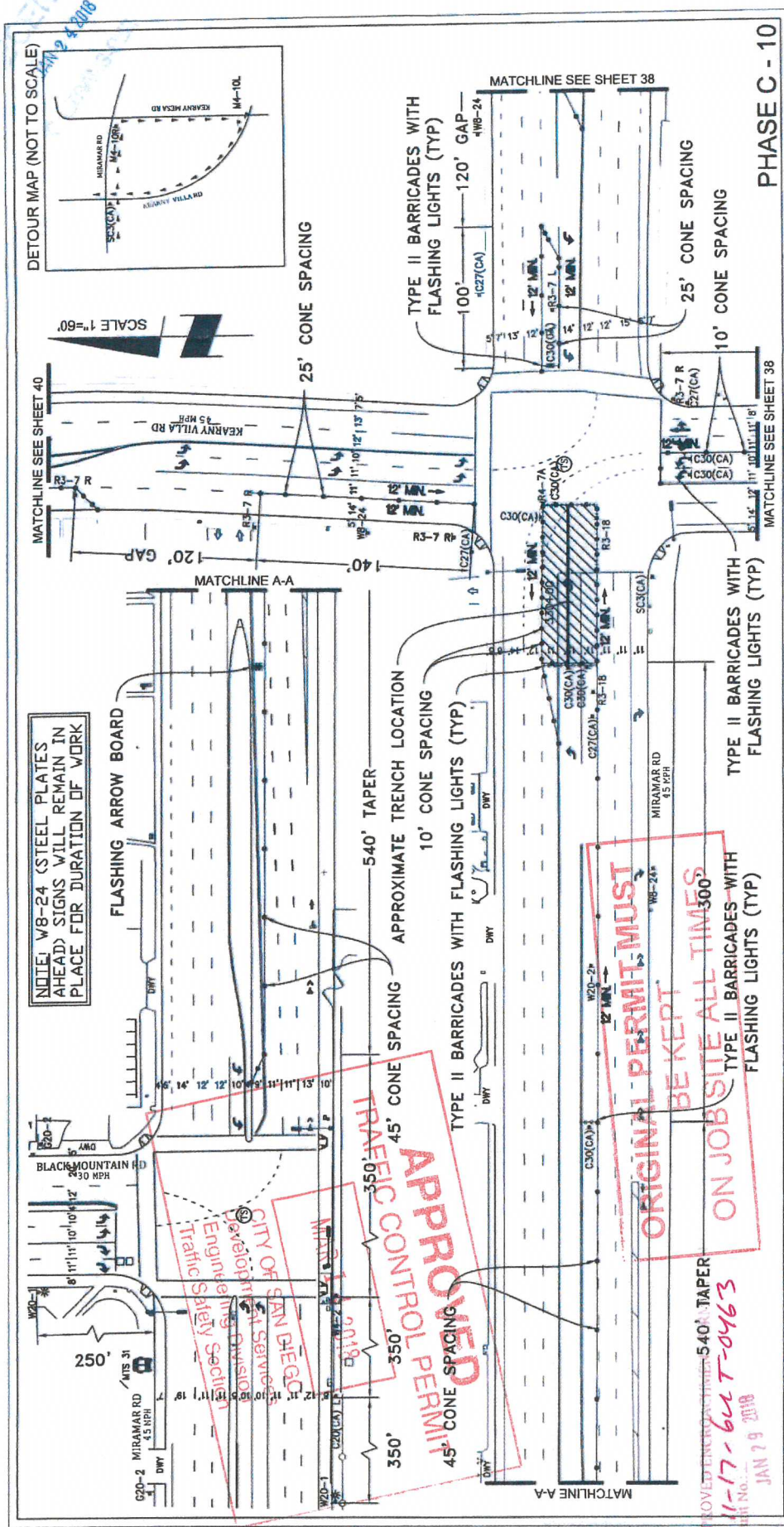
AIRX JOB#: X160218
 THOMAS GRID#: 1209-F6
 MISC/POTHOLES#:
 DRAWN FOR: CALTRANS

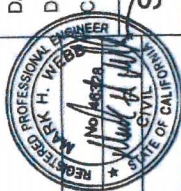
NV 5
 15092 AVENUE OF SCIENCE, SUITE 200
 SAN DIEGO, CA 92128
 P: 858.385.0500 WWW.NV5.COM

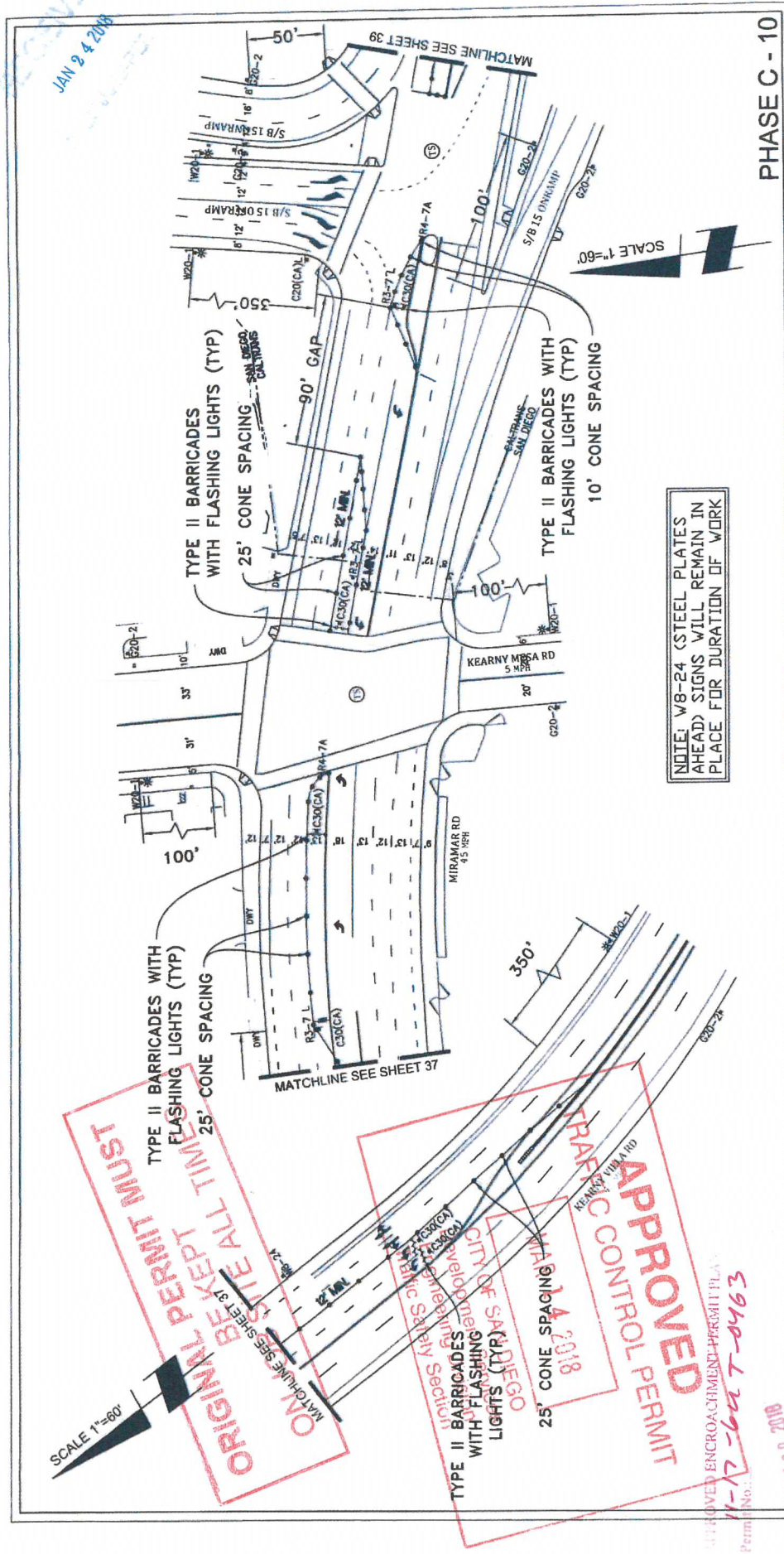
AIRX
 Gail McMoran
 President
 15092 AVENUE OF SCIENCE, SUITE C
 SAN DIEGO, CA 92128
 PHONE: (619) 483-2947
 CELL: (760) 719-3738

SHEET 36 OF 48

TYPE OF WORK: TRENCHING / CONDUIT



PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground		DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb	
AIR JOB#: X160218		THOMAS GRID# 1209-F6	
MISC/POTHOLE#:		DRAWN FOR: CALTRANS	
TYPE OF WORK: TRENCHING / CONDUIT		SHEET 37 OF 48	
 Gail McMorran President 15092 AVENUE OF SCIENCE, SUITE 200 SAN DIEGO, CA 92128 P: 619 595 0500 WWW.NVS.COM			



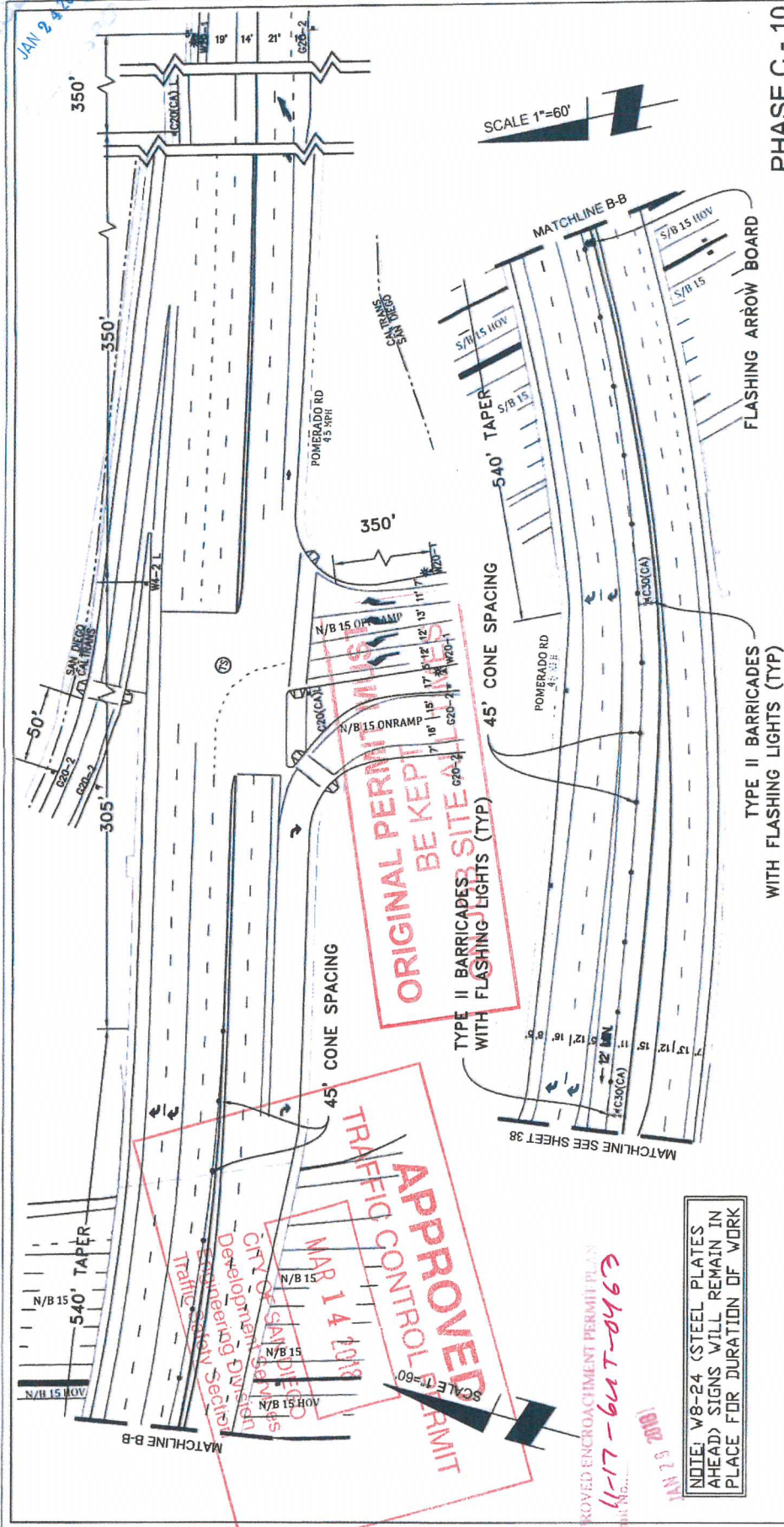
PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground		DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb	
AIRX JOB#: X160218 MISC/POTHOLE#:	THOMAS GRID#: 1209-F6 DRAWN FOR: CALTRANS	SHEET 38 OF 48	
TYPE OF WORK: TRENCHING / CONDUIT		REGISTERED PROFESSIONAL ENGINEER MARK H. WEBB CIVIL STATE OF CALIF.	



AIRX
SURVEYORS, INC.
Gail McMoran
President
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P. 658.385.0500
WWW.NV5.COM

NV5

JAN 29 2018



PHASE C - 10

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

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



AIRX JOB#: X160218
MISC/POTHOLE#:
TYPE OF WORK: TRENCHING / CONDUIT

THOMAS GRID#: 1209-F6
DRAWN FOR: CALTRANS

SHEET 39 OF 48

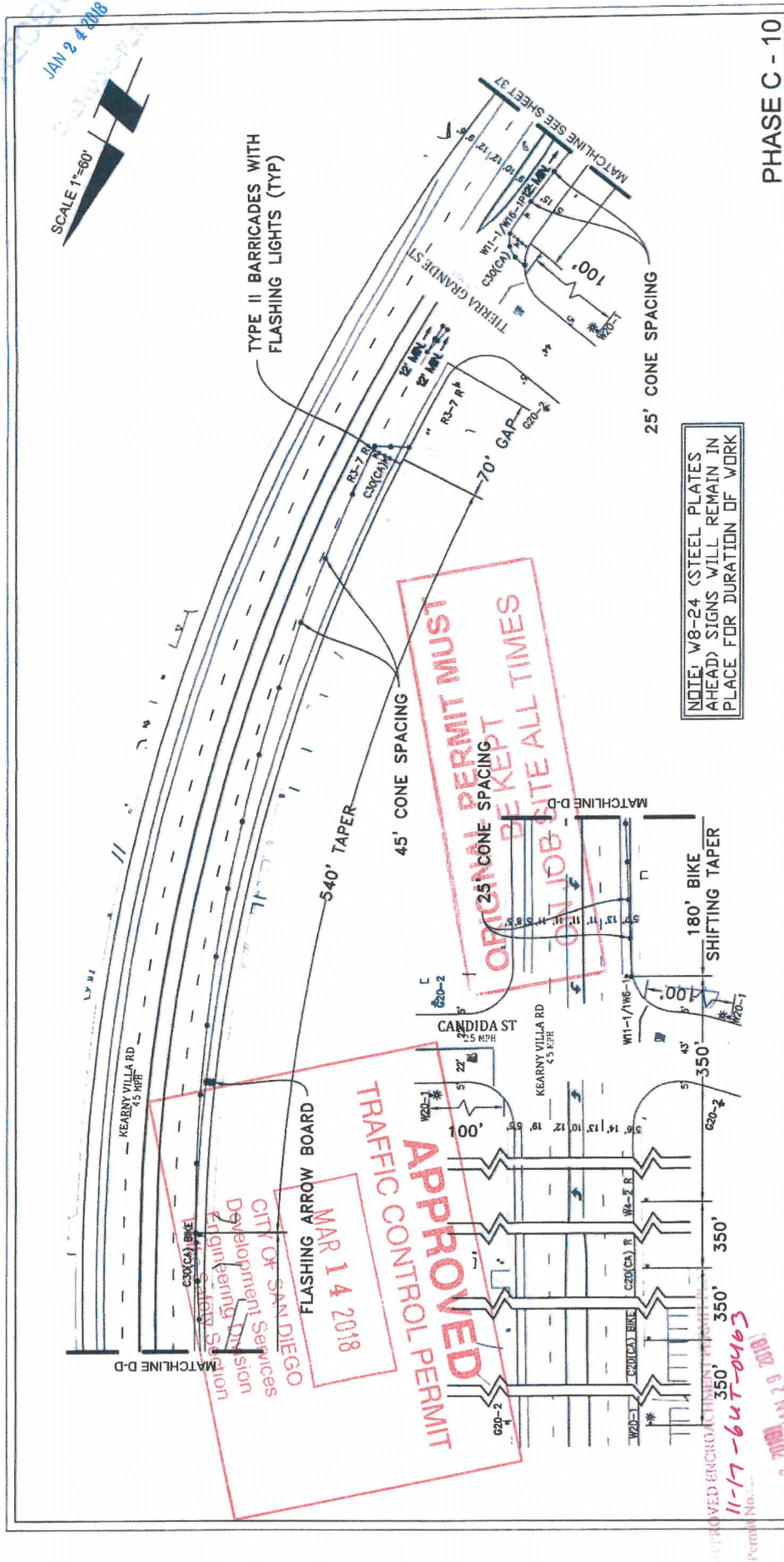
NIV 5

AIRX INC.
Gail McMoran
President
15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.985.0500 WWW.NIV5.COM

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

APPROVED ENCROACHMENT PERMIT (P. 1.3)
11-17-64 T-0463
JAN 29 2018

TRAFFIC CONTROL
APPROVED
MAR 1 2018
CITY OF SAN DIEGO
DIVISION OF PUBLIC WORKS
SECTION 1000



PHASE C - 10

PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground		DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb	SHEET 40 OF 48
AIRX JOB#: X160218 MISC/POTHOLES#:	THOMAS GRID#: 1209-F6 DRAWN FOR: CALTRANS	REGISTERED PROFESSIONAL ENGINEER MARK H. WEBB CIVIL STATE OF CALIF.	
TYPE OF WORK: TRENCHING / CONDUIT			



AIRX
SURFACE CORP., INC.
15000 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 855 385 0500 WWW.AIRX.COM

NV5

15000 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 855 385 0500 WWW.NV5.COM

Gail McMoran
President

PROJECT NAME: TL23071 - Sycamore Canyon Substation To

Penasquitos Substation - 230 KV Underground

THOMAS GRID#: 1209-F6

DATE: 1/22/2018

DESIGNED: Clint Jones

CHECKED BY: Mark Webb

SHEET 40 OF 48

TYPE OF WORK: TRENCHING / CONDUIT

AIRX JOB#: X160218

MISC/POTHOLES#:

NV5

15000 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 855 385 0500 WWW.NV5.COM

Gail McMoran
President

PROJECT NAME: TL23071 - Sycamore Canyon Substation To

Penasquitos Substation - 230 KV Underground

THOMAS GRID#: 1209-F6

DATE: 1/22/2018

DESIGNED: Clint Jones

CHECKED BY: Mark Webb

SHEET 40 OF 48

TYPE OF WORK: TRENCHING / CONDUIT

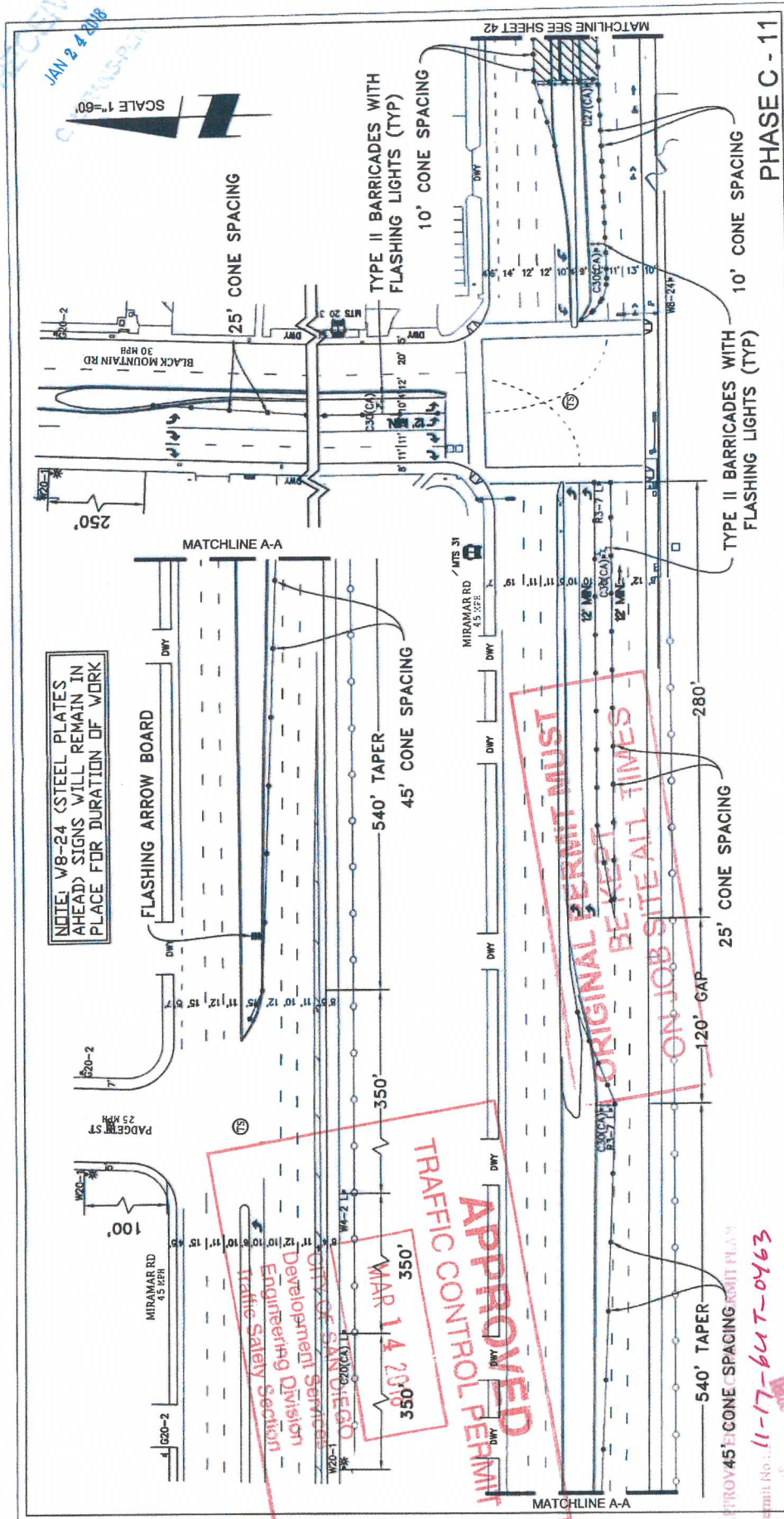
AIRX JOB#: X160218

MISC/POTHOLES#:

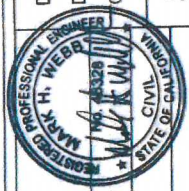
NV5

15000 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 855 385 0500 WWW.NV5.COM

Gail McMoran
President



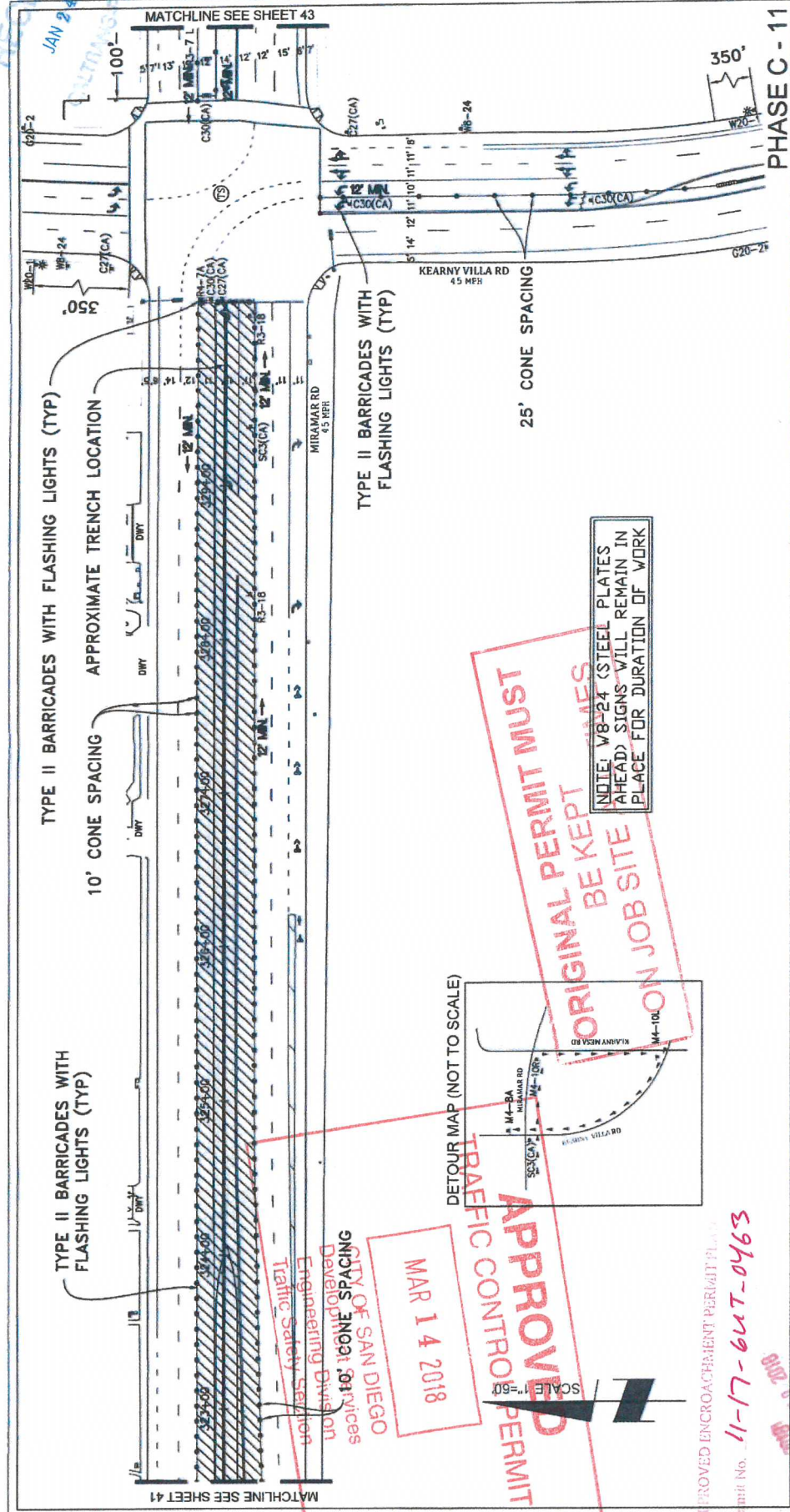
PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground		DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb	
AIRX JOB#: X160218 MISC/POTHOLE#:	THOMAS GRID#: 1209-F6 DRAWN FOR: CALTRANS	SHEET 41 OF 48	
TYPE OF WORK: TRENCHING / CONDUIT		PHASE C-11	



NV5

AIRX
 Gail McMoran
 President
 15002 AVENUE OF SCIENCE, SUITE 200
 SAN DIEGO, CA 92128
 P: 619 585 0500
 WWW.NV5.COM

Permit No: 11-17-647-0463
 APPROVED
 TRAFFIC CONTROL PERMIT
 MAR 14 2018
 CITY OF SAN DIEGO
 Engineering Division
 Development Services
 Traffic Safety Section



PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground		DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb	
AIRX JOB#: X160218 MISC/POTHLES#:		THOMAS GRID#: 1209-F8 DRAWN FOR: CALTRANS	
TYPE OF WORK: TRENCHING / CONDUIT		SHEET 42 OF 48	

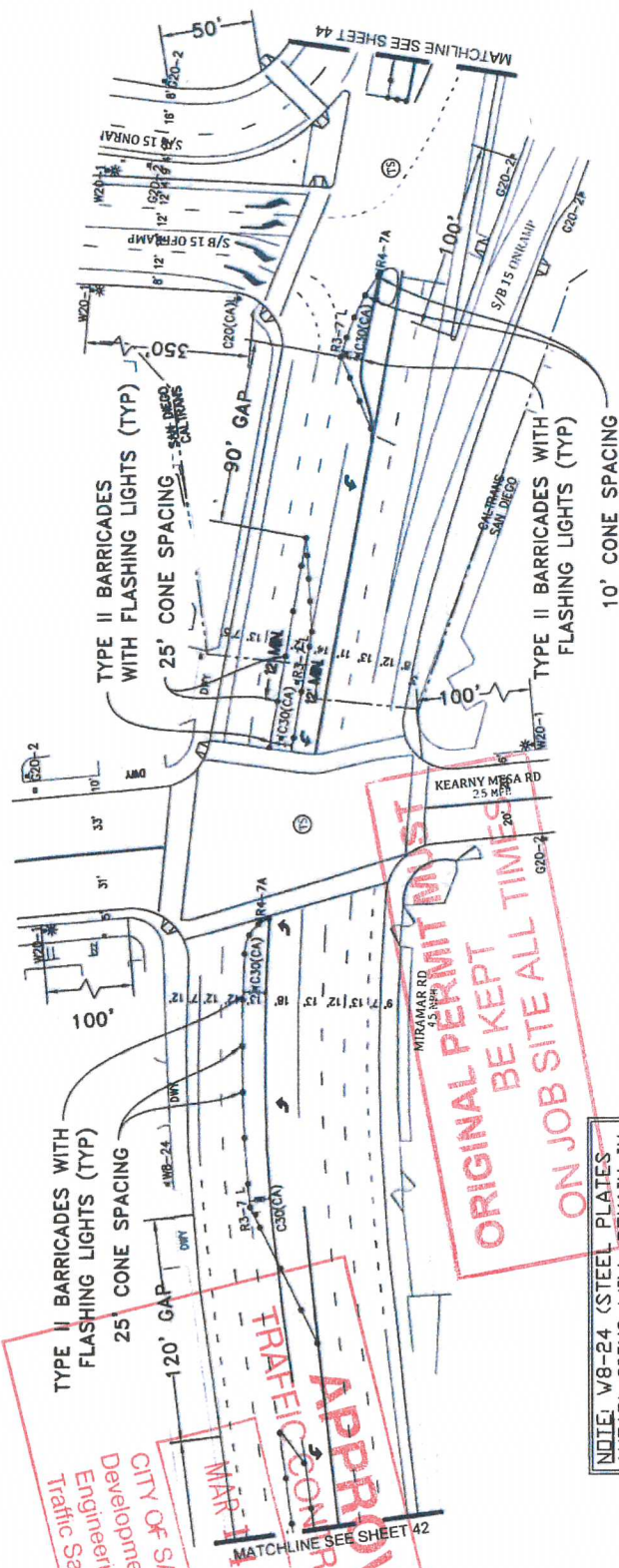


NV5
 1502 AVENUE OF SCIENCE, SUITE 200
 SAN DIEGO, CA 92128
 P: 858 385 0500 WWW.NV5.COM

AIRX
 Gail McMoran
 President
 15000 SANTEE PARKWAY SUITE C
 ESCROWADO, CA 92727
 PHONE (714) 483-2427
 CELL (714) 483-2728

RECEIVED
JAN 24 2018
CALTRANS

SCALE 1"=60'



PHASE C - 11

DATE: 1/22/2018
DESIGNED: Clint Jones
CHECKED BY: Mark Webb



SHEET 43 OF 48

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

AIRX JOB#: X160218

MISC/POTHOLE#: _____

TYPE OF WORK: TRENCHING / CONDUIT

NV5

1600 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 858.385.0500 WWW.NV5.COM

AIRX SURVEYORS, INC.
Gail McMoran
President
204 EAST EL NORTE AVENUE, SUITE C
ESCONDIDO, CA 92027
P: 760.941.8888
CELL: 760.411.5738

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

ORIGINAL PERMIT MUST
BE KEPT ALL TIMES
ON JOB SITE

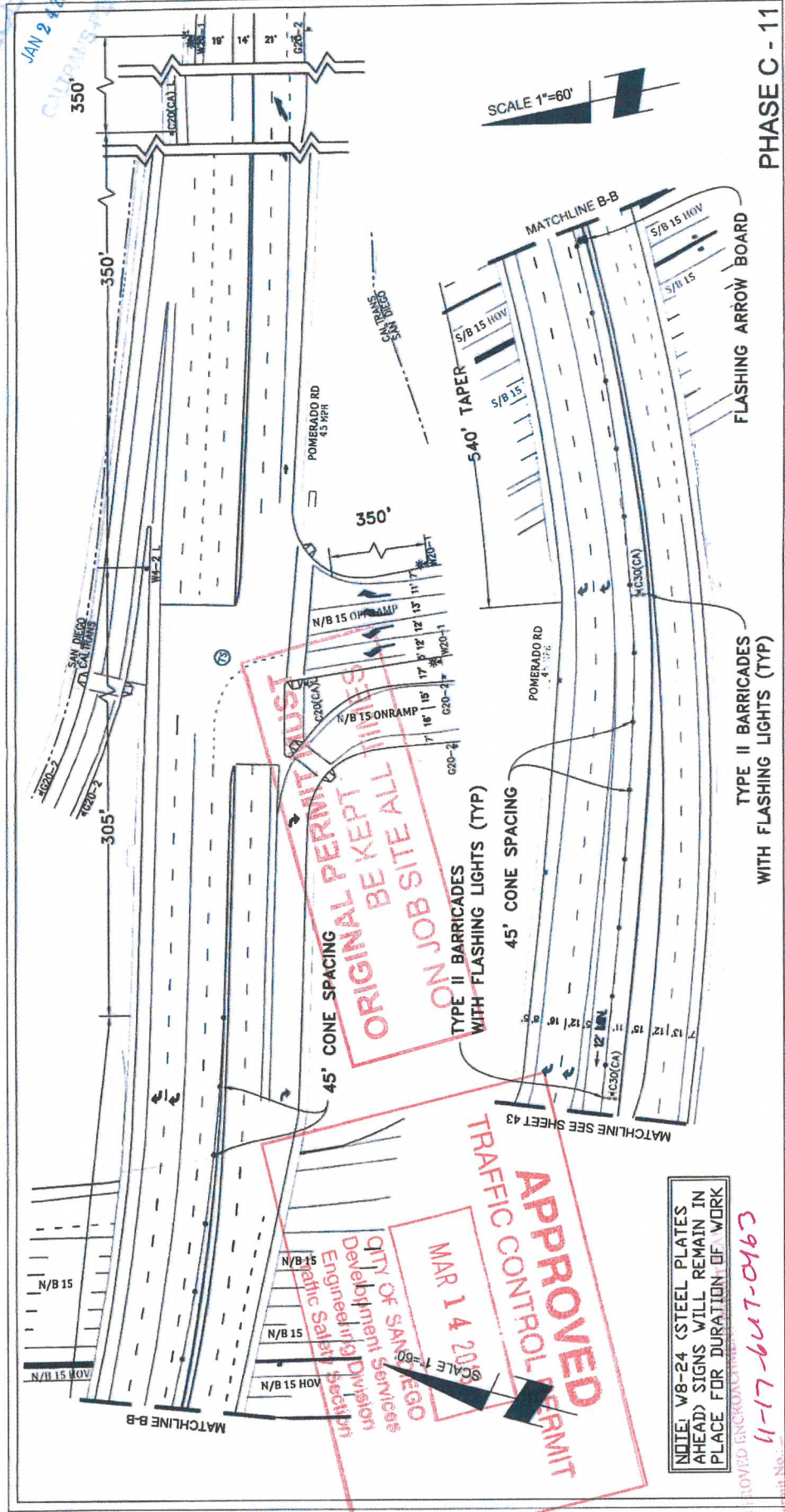
APPROVED
TRAFFIC CONTROL PERMIT

MAR 14 2018

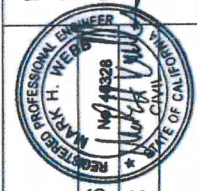
CITY OF SAN DIEGO
Development Services
Engineering Division
Traffic Safety Section

APPROVED ENCROACHMENT PERMIT
11-17-6415-0463

RECEIVED
JAN 24 2018
CALTRANS



PROJECT NAME: TL23071 - Sycamore Canyon Substation To Penasquitos Substation - 230 KV Underground		DATE: 1/22/2018 DESIGNED: Clint Jones CHECKED BY: Mark Webb	
AIRX JOB#: X160218	THOMAS GRID#: 1209-F6	SHEET 44 OF 48	
MISCPATHOLES#:	DRAWN FOR: CALTRANS		
TYPE OF WORK: TRENCHING / CONDUIT			



NV15

15092 AVENUE OF SCIENCE, SUITE 200
SAN DIEGO, CA 92128
P: 650 385 0500 WWW.NV5.COM

