

STREET IMPROVEMENT PLAN FOR: SAN MIGUEL FIRE STATION #18

IMPROVEMENT PLAN NOTES

- A PERMIT SHALL BE OBTAINED FROM THE COUNTY DEPARTMENT OF PUBLIC WORKS FOR ANY WORK WITHIN THE STREET RIGHT-OF-WAY.
- THE STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH SAN DIEGO COUNTY STANDARDS AND AS APPROVED BY THE MATERIALS LABORATORY.
- APPROVAL OF THESE IMPROVEMENT PLANS AS SHOWN DOES NOT CONSTITUTE THE APPROVAL OF ANY CONSTRUCTION OUTSIDE THE PROJECT BOUNDARY.
- ALL UNDERGROUND UTILITIES WITHIN THE STREET RIGHT-OF-WAY SHALL BE CONSTRUCTED, CONNECTED, AND TESTED PRIOR TO CONSTRUCTION OF DIKE, CURB, CROSS GUTTER, AND PAVING. THE EXISTENCE AND LOCATION OF EXISTING UNDERGROUND FACILITIES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO OTHER EXISTING FACILITIES EXCEPT AS SHOWN ON THESE PLANS. HOWEVER, THE CONTRACTOR IS REQUIRED TO TAKE PRECAUTIONARY MEASURES TO PROTECT ANY EXISTING FACILITY SHOWN HEREON AND ANY OTHER WHICH IS NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
- LOCATION AND ELEVATION OF IMPROVEMENTS TO BE MET BY WORK TO BE DONE SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK. CONTRACTOR WILL MAKE FACILITIES SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT REVISIONS TO PLANS IF REVISIONS ARE NECESSARY BECAUSE OF ACTUAL LOCATION OF EXISTING FACILITIES.
- THE CONTRACTOR SHALL NOTIFY THE SAN DIEGO GAS & ELECTRICAL COMPANY PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND SHALL COORDINATE HIS/HER WORK WITH COMPANY REPRESENTATIVES.
NOTICE: ALL ELECTRICAL AND GAS SERVICES WITHIN THIS PROJECT ARE "UNDERGROUND INSTALLATIONS". FOR LOCATION OF ELECTRICAL CABLES AND GAS PIPING AND APPURTENANCES CONTACT THE SAN DIEGO GAS & ELECTRICAL COMPANY. TEL: 1(800)411-7343
- THE CONTRACTOR SHALL NOTIFY THE AT&T TELEPHONE COMPANY PRIOR TO STARTING WORK NEAR COMPANY FACILITIES AND SHALL COORDINATE HIS/HER WORK WITH COMPANY REPRESENTATIVES.
NOTICE: ALL TELEPHONE SERVICES WITHIN THIS PROJECT ARE "UNDERGROUND INSTALLATIONS." FOR LOCATION OF CABLE AND APPURTENANCES CONTACT THE AT&T TELEPHONE COMPANY. TEL: 1(800)924-9420
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CONTACT THE UTILITY AGENCIES, ADVISE THEM OF THE PROPOSED IMPROVEMENTS, AND BARE THE COST OF RELOCATIONS, IF NEEDED.
- ALL TELEVISION SERVICES WITHIN THIS PROJECT ARE "UNDERGROUND INSTALLATIONS". FOR LOCATION OF CABLES AND APPURTENANCES CONTACT AT&T COMPANY AT 1(800)288-2020.
- POWER SOURCES AND RUNS SERVING STREET LIGHTS SHALL BE SHOWN ON THE "RECORDED PLAN" IMPROVEMENT DRAWINGS. ALL POWER SOURCES SHALL BE LOCATED WITHIN THE DEDICATED RIGHT-OF-WAY, OR WITHIN EASEMENTS DEDICATED TO THE COUNTY OF SAN DIEGO.
- NO PAVING SHALL BE DONE UNTIL EXISTING POWER POLES ARE RELOCATED OUTSIDE THE AREAS TO BE PAVED.
- PRIVATE ROAD IMPROVEMENTS SHOWN HEREON ARE FOR INFORMATION ONLY. COUNTY OFFICIALS SIGNATURE HEREON DOES NOT CONSTITUTE APPROVAL OR RESPONSIBILITY OF ANY KIND FOR THE DESIGN OR CONSTRUCTION OF THESE PRIVATE IMPROVEMENTS. (IF APPLICABLE)
- ALL SIGNS TO BE ALUMINUM WITH 3M HIGH INTENSITY TYPE REFLECTIVE FACE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF ANY STRIPING, PAVEMENT MARKERS, OR LEGENDS OBLITERATED BY THE CONSTRUCTION OF THIS PROJECT.
- ALL NEW STRIPING AND SANDBLASTING OF REDUNDANT STRIPING SHALL BE DONE BY CONTRACTOR.
- ALL CUT AND FILL SLOPES THREE FEET (3') HIGH CREATED BY GRADING FOR STREETS AND DRIVEWAYS SHALL BE HYDROSEEDED WITH SAN DIEGO COUNTY APPROVED HYDROSEED MIXTURE. HYDROSEEDED SLOPES SHALL BE IRRIGATED BY WATER TRUCK UNTIL THE MIXTURE GERMINATES AND 70% GROWTH IS ESTABLISHED.
- ASPHALT CONCRETE SURFACING MATERIAL SHALL BE HAND-RAKED AND COMPACTED TO FORM SMOOTH TAPERED CONNECTIONS ALONG ALL EDGES INCLUDING THOSE EDGES ADJACENT TO SOIL. THE EDGES OF ASPHALT CONCRETE SHALL BE HAND-RAKED AT 45 DEGREES OR FLATTER SO AS TO PROVIDE A SMOOTH TRANSITION NEXT TO EXISTING SOIL, INCLUDING THOSE AREAS SCHEDULED FOR SHOULDER BACKING. THE ABOVE SHALL BE DONE TO THE SATISFACTION OF THE DIRECTOR OF PUBLIC WORKS.
- CONTRACTOR SHALL APPLY FOR A TRAFFIC CONTROL PERMIT TWO WEEKS PRIOR TO COMMENCEMENT OF WORK. NO WORK SHALL COMMENCE UNTIL ISSUANCE OF SAID PERMIT. FOR INFORMATION CALL 1(858)694-3863. THE TRAFFIC CONTROL PERMIT SHALL REQUIRE SPECIFICATIONS FOR THE INFORMATIONAL SIGNS.
- STREET IMPROVEMENTS AND DRAINAGE STRUCTURES SHALL BE CONSTRUCTED ACCORDING TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND THE COUNTY OF SAN DIEGO SPECIAL PROVISIONS AND SPECIFICATIONS FOR THE IMPROVEMENT OF NEW STREETS.
- FINAL ACCEPTANCE OF THE TO-BE PUBLICLY MAINTAINED STORM DRAIN LINES WILL BE SUBJECT TO INTERNAL CLOSED CIRCUIT TELEVISION (CCTV) INSPECTION BY A CCTV CONTRACTOR. THE PERMITEE/CONTRACTOR WILL BE RESPONSIBLE TO SCHEDULE AND PAY FOR THE COST OF INSPECTION. ONCE CCTV INSPECTION IS COMPLETE, IT SHALL BE SUBMITTED TO DPW INSPECTOR FOR REVIEW AND FINAL APPROVAL. CCTV INSPECTION SHALL MEET THE REQUIREMENTS SET FORTH IN DLI-LD-H.

SURVEY CONTROL STATEMENT:

BASIS OF COORDINATES

THE BASIS OF COORDINATES FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, (CCS 83), ZONE 6, EPOCH 1991.35 AND IS DETERMINED BY G.P.S. MEASUREMENT REFERENCING G.P.S. STATION NO. 1055 AND G.P.S. STATION NO. 1054 PER RECORD OF SURVEY MAP NO. 11252.

BENCHMARK

THE BENCHMARK FOR THIS SURVEY IS THE WELL MONUMENT AT THE CENTERLINE INTERSECTION OF RIOS CANYON ROAD AND MOUNTAIN VIEW ROAD PER RECORD OF SURVEY MAP 11252.

ELEVATION = 1377.47 FEET ; M.S.L. DATUM

PROJECT CONTROL

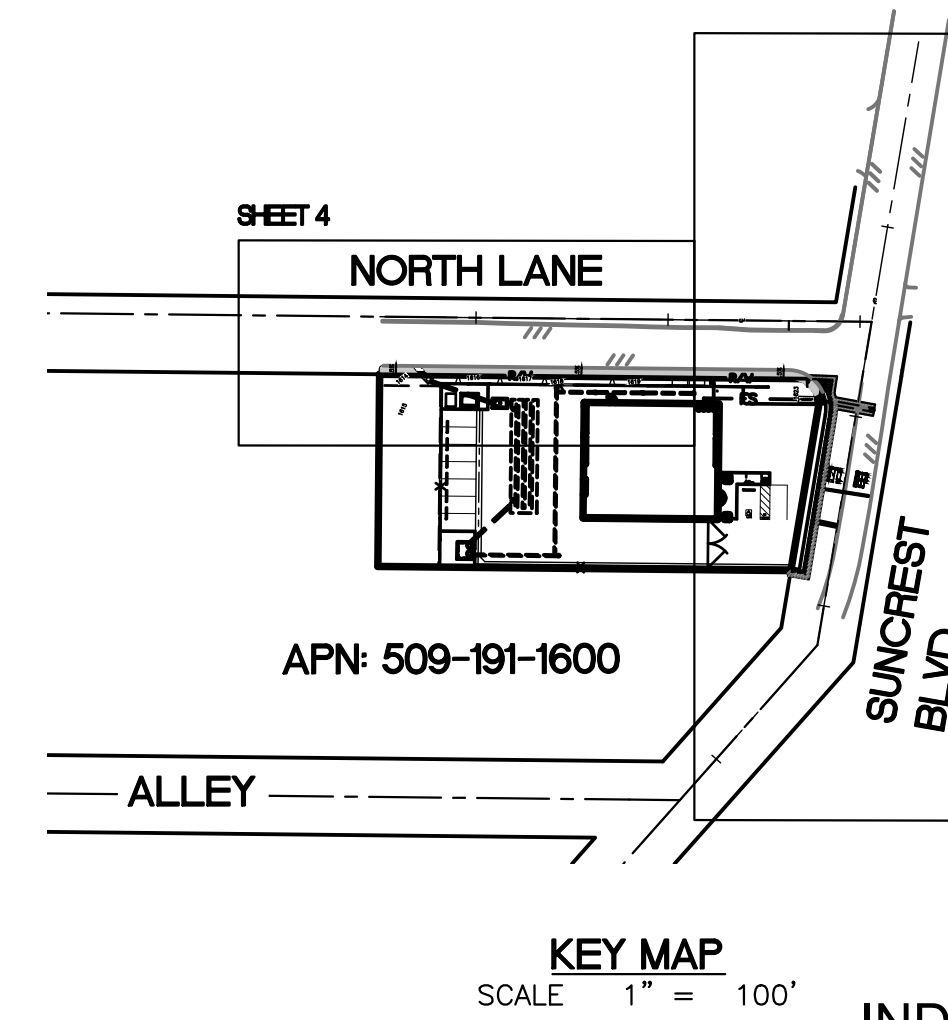
POINT: 201 N 1874060.4614 E 6373136.1947 ELEV 1626.35
 POINT: 202 N 1874060.2302 E 6373156.3953 ELEV 1626.96

MONUMENTATION GENERAL NOTE

THE CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PROTECT ALL SURVEY CONTROL MONUMENTS, WHETHER SHOWN ON THESE PLANS OR NOT, WITHIN THE PROJECT AREA. ALL SURVEY MONUMENTS, WHETHER FOR HORIZONTAL OR VERTICAL CONTROL, THAT WILL OR COULD BE DISTURBED OR REMOVED BY THE CONTRACTOR, OR HIS EMPLOYEES, AGENTS, SUBCONTRACTORS, CONSULTANT OR LICENSEES, SHALL BE LOCATED PRIOR TO BEING DISTURBED OR REMOVED AND REPLACED OR RESET, IN ACCORDANCE WITH THE CALIFORNIA BUSINESS AND PROFESSIONS CODE SECTION 8771(b), AT THE CONTRACTORS SOLE EXPENSE, UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER AUTHORIZED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA. IN ADDITION, A RECORD OF SURVEY OR CORNER RECORD, AS APPLICABLE, SHALL BE FILED AND/OR RECORDED, IN ACCORDANCE WITH THE PROVISIONS OF SAID CODE.

REMARKS

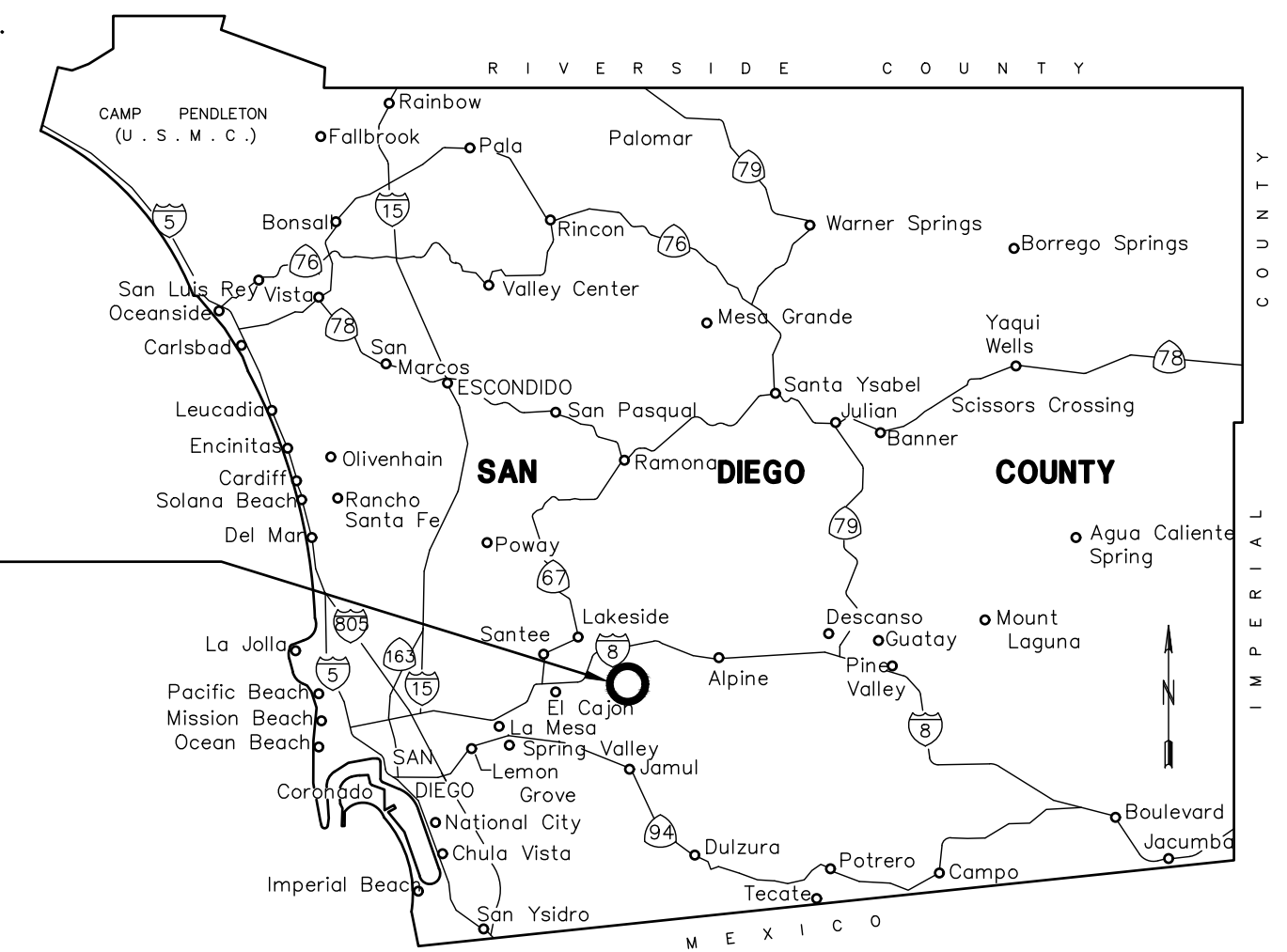
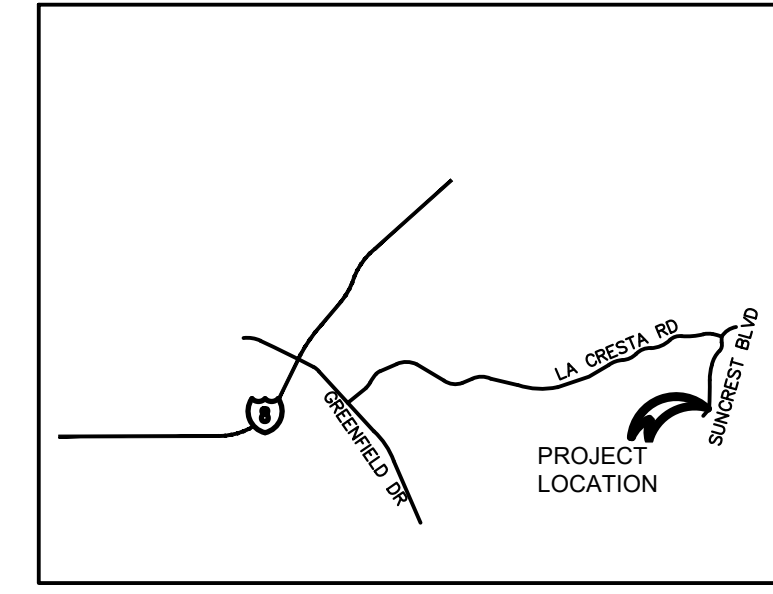
THESE PLANS ARE BASED ON US CUSTOMARY (ENGLISH) UNITS. ALL DISTANCES ARE EXPRESSED IN FEET (FT) OR INCHES (IN) UNLESS OTHERWISE NOTED



VICINITY MAP

THE NEAREST STREET INTERSECTION IS ON THE NORTHEASTERN CORNER OF THE PROJECT SITE AT NORTH LANE AND SUNCREST BOULEVARD.

SEE PAGE 1253 SECTION 3-J OF THE THOMAS GUIDE.



INDEX OF SHEETS

No.	Description
1	TITLE SHEET
2	GENERAL NOTES & REFERENCES
3	IMPROVEMENT PLAN
4	IMPROVEMENT PLAN
5	SIGNAGE & STRIPING PLAN

PROPOSED STD/DETAIL

6" FIRE SERVICE (PRIVATE)	WF-05	
GATE VALVE	WF-05	
TRENCH RESURFACING	SDCDS/DS-22	
CONCRETE PAVEMENT (PRIVATE)		
2" GRIND AND OVERLAY	2/SHT 4	
SAWCUT		
ASPHALT PAVEMENT	3/SHT 4	
ROADWAY STRIPING	CALTRANS A24G LIMIT LINE	
PAVEMENT MARKINGS	CALTRANS A24E	
GRAVITY RETAINING WALL (PRIVATE)		
CURB OUTLET	SDRSD/D-25	
FLASHING BEACON	1/SHT 5	

KEEP CLEAR

UTILITY ALERT NOTE:

ATTENTION IS DIRECTED TO THE POSSIBLE EXISTENCE OF UNDERGROUND UTILITY FACILITIES NOT KNOWN OR IN A LOCATION DIFFERENT FROM THAT WHICH IS SHOWN ON THE PLANS OR IN THE SPECIAL PROVISIONS. THE CONTRACTOR SHALL TAKE STEPS TO ASCERTAIN THE EXACT LOCATION OF ALL UNDERGROUND FACILITIES PRIOR TO PERFORMING WORK THAT MAY DAMAGE SUCH FACILITIES OR INTERFERE WITH THEIR SERVICE. FORTY-EIGHT HOURS BEFORE EXCAVATING, THE CONTRACTOR SHALL VERIFY THE LOCATION OF UNDERGROUND FACILITIES BY CONTACTING UNDERGROUND SERVICE ALERT AT TELEPHONE 1-800-422-4133.

THE CONTRACTOR MUST ALSO INDIVIDUALLY CONTACT OPERATORS OF GRAVITY SEWER SYSTEMS AND CERTAIN OTHER UTILITIES, WHO ARE NOT MEMBERS OF UNDERGROUND SERVICE ALERT.

LEGEND

EXISTING

CONTROL		HV-1 1350.00 V-1 1350.00
EDGE OF PAVEMENT		EDP
FENCE		
INDEX CONTOUR		1350
INTER CONTOUR		1340
TREES		
SINGLE TREE		
VALVE		
WATER PIPE		
GAS PIPE		
ELECTRIC BURIED		
STORM DRAIN PIPE		
EX. SEWER MAIN		
EXIST. SEWER MANHOLE		
EXIST. STORM DRAIN MANHOLE		
SIGN		
POWER POLE		
GUY WIRE		
PROPERTY LINE		
RIGHT-OF-WAY		
ROAD CENTER LINE		
EXIST. ROADWAY STRIPING		
EXIST. WATER METER		
DAYLIGHT LINE		

WORK TO BE DONE

GRADING AND DRAINAGE WORK CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS, THE CURRENT SAN DIEGO AREA REGIONAL STANDARD DRAWINGS, THE REGIONAL STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREENBOOK) AND THE SAN DIEGO COUNTY GRADING ORDINANCE.

- INSTALLATION OF AC PAVEMENT, AC DIKE, CONCRETE CURB, AND CONCRETE DRIVEWAY
- INSTALLATION OF 6" FIRE SERVICE LINE
- INSTALLATION OF PAVEMENT MARKINGS
- INSTALLATION OF ADVANCE SIGNALING SYSTEM

PROJECT STANDARD SPECIFICATIONS

- STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION "GREEN BOOK" (CURRENT EDITION), INCLUDING THE REGIONAL SUPPLEMENT AMENDMENT (CURRENT EDITION).
- STANDARD SPECIFICATIONS FOR STORM DRAIN CONSTRUCTION OF THE COUNTY OF SAN DIEGO.
- WATER AGENCIES' STANDARD - STANDARD SPECIFICATIONS FOR POTABLE WATER, RECYCLED WATER AND SEWER FACILITIES (CURRENT EDITION).
- STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS (CURRENT EDITION).
- CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD) (CURRENT EDITION).
- COUNTY OF SAN DIEGO STREET LIGHTING SPECIFICATIONS (SEPTEMBER 2021).

PROJECT STANDARD DRAWINGS

- SAN DIEGO COUNTY DESIGN STANDARDS (OCTOBER 2012) (DS).
- SAN DIEGO REGIONAL STANDARD DRAWINGS (2021) (RSD).
- WATER AGENCIES' STANDARDS - STANDARD DRAWINGS (CURRENT EDITION).
- STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLAN (2018) (CP).
- GREEN STREETS STANDARD DRAWINGS, COUNTY OF SAN DIEGO PUBLIC WORK (MARCH 2021).

RECORD PLAN

BY: _____ DATE: _____
 R.C.E. _____
 EXPIRES: _____

SAN MIGUEL FIRE PROTECTION DISTRICT

APPROVAL: _____
 DATE: _____

OWNERS CERTIFICATE

IT IS AGREED THAT FIELD CONDITIONS MAY REQUIRE CHANGES TO THESE PLANS.

IT FURTHER AGREED THAT THE OWNER (DEVELOPER) SHALL HAVE A REGISTERED CIVIL ENGINEER MAKE SUCH CHANGES, ALTERATIONS OR ADDITIONS TO THESE PLANS WHICH THE DIRECTOR OF PLANNING & DEVELOPMENT SERVICES DETERMINES ARE NECESSARY AND DESIRABLE FOR THE PROPER COMPLETIONS OF THE IMPROVEMENTS.

ASSESSORS PARCEL NO.: 388-260-020-00
 NAME: SAN MIGUEL FIRE & RESCUE
 ADDRESS: 2850 VIA ORANGE WAY, SPRING VALLEY, CA 91978
 PHONE: (619) 670-0500
 BY: _____ DATE: _____

OWNER'S / PERMITEE'S

NAME: SAN MIGUEL FIRE DISTRICT
 ADDRESS: 2850 VIA ORANGE WAY
 SPRING VALLEY, CA 91978
 TELEPHONE NO: (619) 670-0500
 SHORT LEGAL DESCRIPTION: A PORTION OF SECTION 3, TOWNSHIP 16, RANGE 1 EAST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT.
 A.P.N. NO: 509-191-16-00
 SITE ADDRESS: 1811 SUNCREST BLVD. EL CAJON, CA 92021

Nasland Civil Engineering
 Surveying
 Land Planning
 121-138.1
 T (858) 292-7770
 4740 Ruffner Street
 San Diego, CA 92111
 nasland.com

DECLARATION OF RESPONSIBLE CHARGE

I HEREBY DECLARE THAT I AM THE ENGINEER OF WORK FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 8703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.
 I UNDERSTAND THAT THE CHECK OF PROJECT DRAWINGS AND SPECIFICATIONS BY THE COUNTY OF SAN DIEGO AND HELIX WATER DISTRICT IS CONFINED TO REVIEW ONLY AND DOES NOT RELIEVE ME, AS ENGINEER OF WORK, OF MY RESPONSIBILITIES FOR PROJECT DESIGN
 BY: _____ DATE: _____
 RCE NO: _____ EXPIRES: _____

PDS ENVIRONMENTAL REVIEW

APPROVED FOR COMPLIANCE WITH THE ENVIRONMENTAL REVIEW.
 APPROVED BY: _____ DATE: _____

COUNTY APPROVED CHANGES

NO.	DESCRIPTION:	APPROVED BY:	DATE:

PERMITS

LANDSCAPE PERMIT NO. _____
 WDI/NOI NO. _____ SWPPP RISK LEVEL 1
 GRADING PLAN NO. _____
 WATER QUALITY CERTIFICATION NO. _____
BENCH MARK
 DESCRIPTION: C/L MON BRASS DISC SET IN CONC. BELOW SURFACE.
 LOCATION: APPROX 187 FT NLY OF INT WITH PEPPER DRIVE.
 RECORD FROM: RECORD OF SURVEY 11252
 ELEVATION: 1377.47 DATUM: M.S.L.

IMPROVEMENT PLANS

SHEET 1 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 5 SHEETS
 TITLE SHEET FOR:
SAN MIGUEL FIRE STATION #18 IMPROVEMENTS
 CALIFORNIA COORDINATE INDEX 230-1809
 APPROVED DIRECTOR OF PUBLIC WORKS BY: _____
 ENGINEER OF WORK: JARRETT J. LINN R.C.E. 84231

DISABLED ACCESS NOTES

1. ALL GRADES SHOWN ON THIS PLAN WERE DESIGNED AT OR BELOW MAXIMUMS ALLOWED BY THE CALIFORNIA BUILDING CODE (C.B.C.) AND THE AMERICANS WITH DISABILITY ACT ACCESS GUIDE (A.D.A.A.G.) IN ORDER TO ALLOW FOR CONSTRUCTION TOLERANCES. IT IS CONTRACTORS' RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH A.D.A.A.G. AND 2013 C.B.C. AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE ENGINEER NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
2. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO C.B.C. AND A.D.A.A.G. ACCESS FOR THIS PROJECT. SINCE THE CODE DOES NOT ALLOW FOR CONSTRUCTION TOLERANCE, ANY CONSTRUCTION THAT EXCEEDS MAXIMUM OR MINIMUM DIMENSIONS AND SLOPES AS CALLED OUT BY C.B.C. AND A.D.A.A.G. ARE SUBJECT TO REJECTION BY THE COUNTY AND MAY BE REQUIRED TO BE REMOVED AND REPLACED.
3. SINCE THE CIVIL ENGINEER OR SURVEYOR CAN NOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUB-CONTRACTORS DURING GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF A.D.A.A.G. RELATED ITEMS BY THE COUNTY, ANY OTHER AUTHORITY, OR OTHER AFFECTED PARTIES.

ABBREVIATIONS

AB	ANCHOR BLOCK	PP	POWER POLE
AC	ASPHALT CONCRETE	PCR	POINT OF CURB RETURN
ACP	ASBESTOS CEMENT PIPE	PVC	POLYVINYL CHLORIDE
B.O.	BLOW OFF	RCP	REINFORCED CONCRETE PIPE
C	CENTERLINE	RSD	REGIONAL STANDARD
OMP	CORRUGATED METAL PIPE	DRAWING	
CPP	CORRUGATED POLYETHYLENE	R/W	RIGHT OF WAY
PIPE		SD	STORM DRAIN
DI	DUCTILE IRON	SDCO	STORM DRAIN CLEAN OUT
EL, ELEV	ELEVATION	STA	STATION
EOP	EDGE OF PAVEMENT	TB	THRUST BLOCK
EX, EXIST	EXISTING	TC	TOP OF CURB ELEVATION
FL	FLOW LINE ELEVATION	TP	TOP OF PIPE
FS	FINISH SURFACE ELEVATION	TYP	TYPICAL
HDPE	HIGH DENSITY POLYETHYLENE	VCP	VITRIFIED CLAY PIPE
HWD	HELIX WATER DISTRICT		
IE	INVERT ELEVATION		
MH	MANHOLE		
MRC	MULLER RESONANCE COMPACTION		
OVHD	OVER HEAD		
PCC	PORTLAND CEMENT CONCRETE		

SPECIAL NOTES

- THE FOLLOWING NOTES ARE PROVIDED TO GIVE DIRECTIONS TO THE CONTRACTOR BY THE ENGINEER OF WORK.
1. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTORS SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER, ENGINEER AND GEOLOGIST HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN THE CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROPERTY, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
 2. CONTRACTOR SHALL REMOVE AND REPLACE, TO THE SATISFACTION OF THE OWNER, ALL DESTROYED OR DAMAGED SURFACE IMPROVEMENTS WITH IMPROVEMENTS EQUAL OR SUPERIOR.
 3. DURING CONSTRUCTION THE CONTRACTOR SHALL PROPERLY GRADE ALL EXCAVATED SURFACES TO PROVIDE POSITIVE DRAINAGE AND PREVENT PONDING OF WATER. HE SHALL CONTROL SURFACE WATER TO AVOID DAMAGE TO ADJOINING PROPERTIES OR TO FINISHED WORK ON THE SITE.
 4. ALL WORK NEEDING MATERIALS TESTING REQUIRES THAT THE CONTRACTOR NOTIFY THE APPROPRIATE PERSONNEL BY NOON THE DAY BEFORE THE WORK IS SCHEDULED TO BEGIN TO ARRANGE FOR TESTING.
 5. WORK PERFORMED WITHOUT BENEFIT OF TESTING AND/OR INSPECTION SHALL BE SUBJECT TO REJECTION AND REMOVAL.
 6. THE EXISTENCE AND LOCATION OF UTILITY STRUCTURES AND FACILITIES SHOWN ON THE CONSTRUCTION PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. ATTENTION IS CALLED TO THE POSSIBLE EXISTENCE OF OTHER UTILITY FACILITIES OR STRUCTURES NOT KNOWN OR IN A LOCATION DIFFERENT FROM THAT SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN ON THE PLANS AND ANY OTHER EXISTING FACILITIES OR STRUCTURES THAT MAY NOT BE SHOWN.
 7. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING FACILITIES (ABOVEGROUND AND UNDERGROUND) WITHIN THE PROJECT SITE SUFFICIENTLY AHEAD OF CONSTRUCTION TO PERMIT THE REVISION OF THE CONSTRUCTION PLANS IF IT IS FOUND THE ACTUAL LOCATIONS ARE IN CONFLICT WITH THE PROPOSED WORK.
 8. THE ENGINEER OF WORK WILL NOT ENFORCE SAFETY MEASURES OR REGULATIONS. THE CONTRACTOR SHALL DESIGN, CONSTRUCT, AND MAINTAIN ALL SAFETY DEVICES INCLUDING SHORING, AND SHALL BE SOLELY RESPONSIBLE FOR CONFORMING TO ALL LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS, LAWS, AND REGULATIONS. **CAUTION:** THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

SILTATION AND SEDIMENT CONTROL MEASURES NOTES

1. THE SEDIMENT BASINS SHALL BE PROVIDED AT THE LOWER END OF EVERY DRAINAGE AREA PRODUCING SEDIMENT RUNOFF. THE BASINS SHALL BE MAINTAINED AND CLEANED TO DESIGN CONTOURS AFTER EVERY RUNOFF PRODUCING STORM. THE BASINS SHOULD BE SEMI-PERMANENT STRUCTURES THAT WOULD REMAIN UNTIL SOIL STABILIZING VEGETATION HAS BECOME WELL ESTABLISHED ON ALL ERODIBLE SLOPES.
2. SEDIMENTATION BASINS MAY NOT BE REMOVED OR MADE INOPERATIVE WITHOUT PRIOR APPROVAL OF THE COUNTY ENGINEER.
3. SEWER OR STORM DRAIN TRENCHES THAT ARE CUT THROUGH BASIN DIKES OR BASIN INLET DIKES SHALL BE PLUGGED WITH SANDBAGS FROM TOP OF PIPE TO TOP OF DIKE.
4. ALL UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS WITH A DOUBLE ROW OF SANDBAGS WITH A TOP ELEVATION TWO SANDBAGS BELOW THE GRADED SURFACE OF THE STREET. SANDBAGS ARE TO BE PLACED WITH LAPPED COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG BLOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE BUT NOT TO EXCEED THE FOLLOWING:

GRADE OF THE STREET	INTERVAL
LESS THAN 2%	AS REQUIRED
2% TO 4%	100 FEET
4% TO 10%	50 FEET
OVER 10%	25 FEET

5. AFTER SEWER UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDLED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET.
6. ALL BUILDING PADS SHOULD BE SLOPED TOWARDS THE DRIVEWAYS AND VELOCITY CHECK DAMS PROVIDED AT THE BASE OF ALL DRIVEWAYS DRAINING INTO THE STREET.
7. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:

GRADE OF CHANNEL	INTERVALS BETWEEN CHECK DAMS
LESS THAN 3%	100 FEET
3% TO 6%	50 FEET
OVER 6%	25 FEET

8. PROVIDE A SANDBAG SILT BASIN OR TRAP BY EVERY STORM DRAIN INLET TO PREVENT SEDIMENT FROM ENTERING DRAIN SYSTEM.
9. SANDBAGS AND FILL MATERIAL SHALL BE STOCKPILED AT INTERVALS, READY FOR USE WHEN REQUIRED.
10. ALL EROSION CONTROL DEVICES WITHIN THE DEVELOPMENT SHOULD BE MAINTAINED DURING AND AFTER EVERY RUNOFF PRODUCING STORM, IF POSSIBLE, MAINTENANCE CREWS WOULD BE REQUIRED TO HAVE ACCESS TO ALL AREAS

BMP STENCIL PLACEMENT NOTES

1. ALL STORM DRAIN INLETS AND CATCH BASINS WITHIN THE PROJECT AREA SHALL HAVE A STENCIL OR TILE PLACED WITH PROHIBITIVE LANGUAGE(SUCH AS: "NO DUMPING- 1 LIVE IN <<NAME RECEIVED WATER >>") AND/OR GRAPHICAL ICONS TO DISCOURAGE ILLEGAL DUMPING.
2. SIGNS AND PROHIBITIVE LANGUAGE AND/OR GRAPHICAL ICONS, WHICH PROHIBIT ILLEGAL DUMPING, MUST BE POSTED AT PUBLIC ACCESS POINTS ALONG CHANNELS AND CREEKS WITHIN THE PROJECT AREA.
3. LEGIBILITY OF STENCILS, TILES, AND SIGNS MUST BE MAINTAINED AND TILES MUST BE PLACED FLUSH WITH THE TOP OF CONCRETE TO REDUCE TRIPPING BY PEDESTRIANS.

ADVISORY NOTE ON STORM WATER OBLIGATIONS

THE ACTIVITIES SHOWN ON THESE PLANS ARE SUBJECT TO ENFORCEMENT UNDER PERMITS FROM THE STATE WATER RESOURCES CONTROL BOARD AND SAN DIEGO REGIONAL WATER CONTROL BOARD AND MUST ALSO COMPLY WITH THE REQUIREMENT OF THE SAN DIEGO COUNTY MUNICIPAL STORM WATER PERMIT. THIS INCLUDES REQUIREMENTS FOR MATERIALS AND WASTE CONTROL, EROSION CONTROL, AND SEDIMENT CONTROL ON PROJECT CONSTRUCTION SITES. THE PERMITTEES OF OPERATIONS SHOWN ON THESE PLANS ARE OBLIGATED TO INSURE COMPLIANCE WITH ALL APPLICABLE STORM WATER REGULATIONS AT ALL TIMES.

NOTE:
THE PROPERTY OWNER IS AWARE OF THE COUNTY WATER CONSERVATION IN LANDSCAPING ORDINANCE AND WILL PROCESS LANDSCAPE AND IRRIGATION PLANS IN ACCORDANCE WITH ORDINANCE NO. 10032 AND SUBMIT A LANDSCAPE CERTIFICATE OF COMPLETION WITHIN 10 DAYS AFTER INSTALLATION, VERIFYING THAT THE LANDSCAPING AND IRRIGATION WERE INSTALLED PER THE APPROVED LANDSCAPE PLAN, PRIOR TO RECORD PLAN APPROVAL.

	PLANS	BY	DATE
	DESIGNED	JW / GS	
	CHECKED	JL	
NASLAND ENGINEERING 4740 RUFFNER STREET SAN DIEGO, CALIFORNIA 92111 (858) 292-7770			
REGISTERED ENGINEER		DATE	

COUNTY APPROVED CHANGES			
NO.	DESCRIPTION:	APPROVED BY:	DATE:

IT IS THE CONTRACTORS RESPONSIBILITY TO FIELD VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION. IF A CONFLICT EXISTS BETWEEN WHAT IS SHOWN ON THESE DRAWINGS AND WHAT EXISTS IN THE FIELD REQUIRING DESIGN CHANGES IN ORDER FOR CONSTRUCTION TO PROCEED, NOTIFY THE ENGINEER IMMEDIATELY.

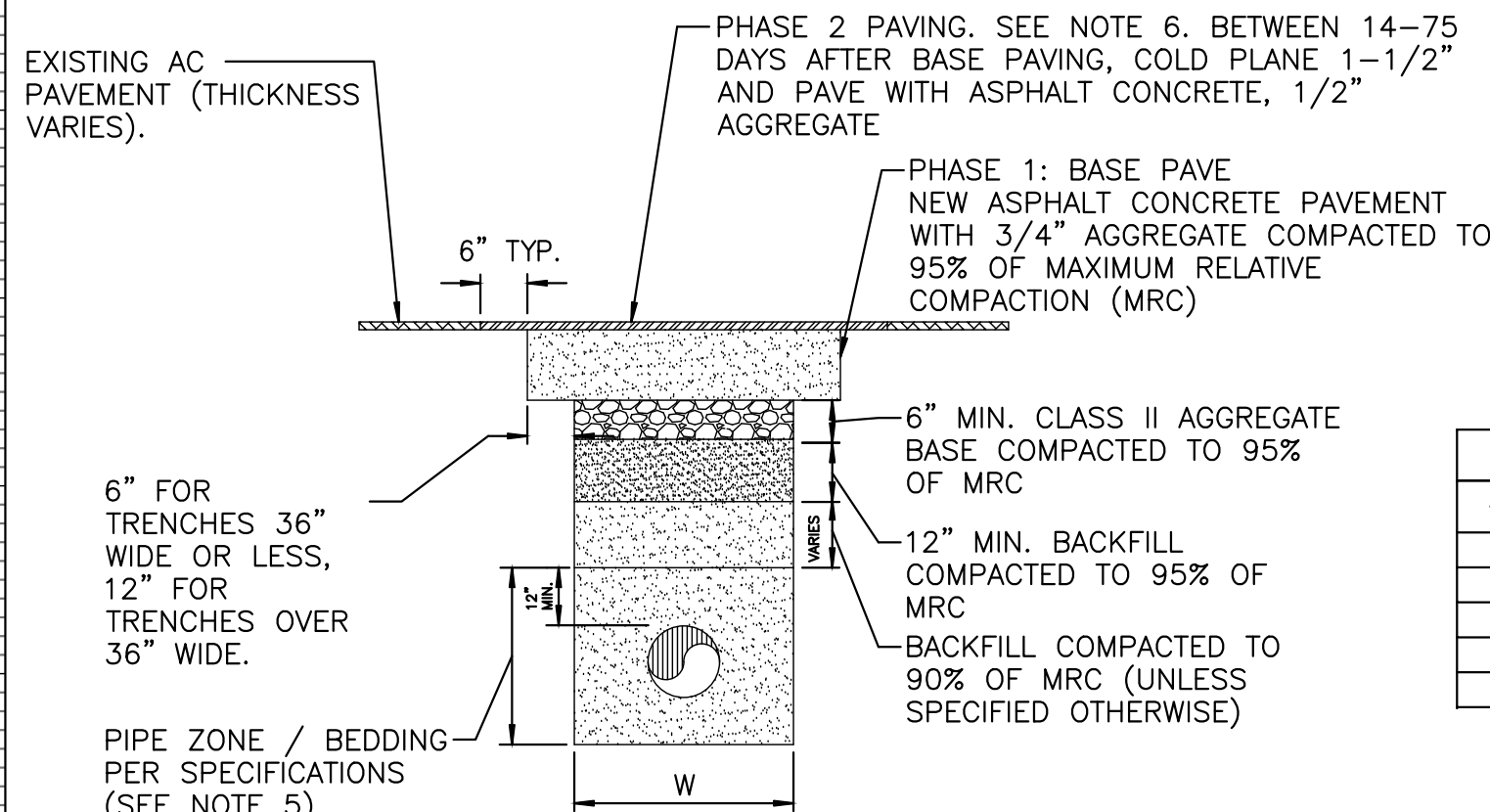
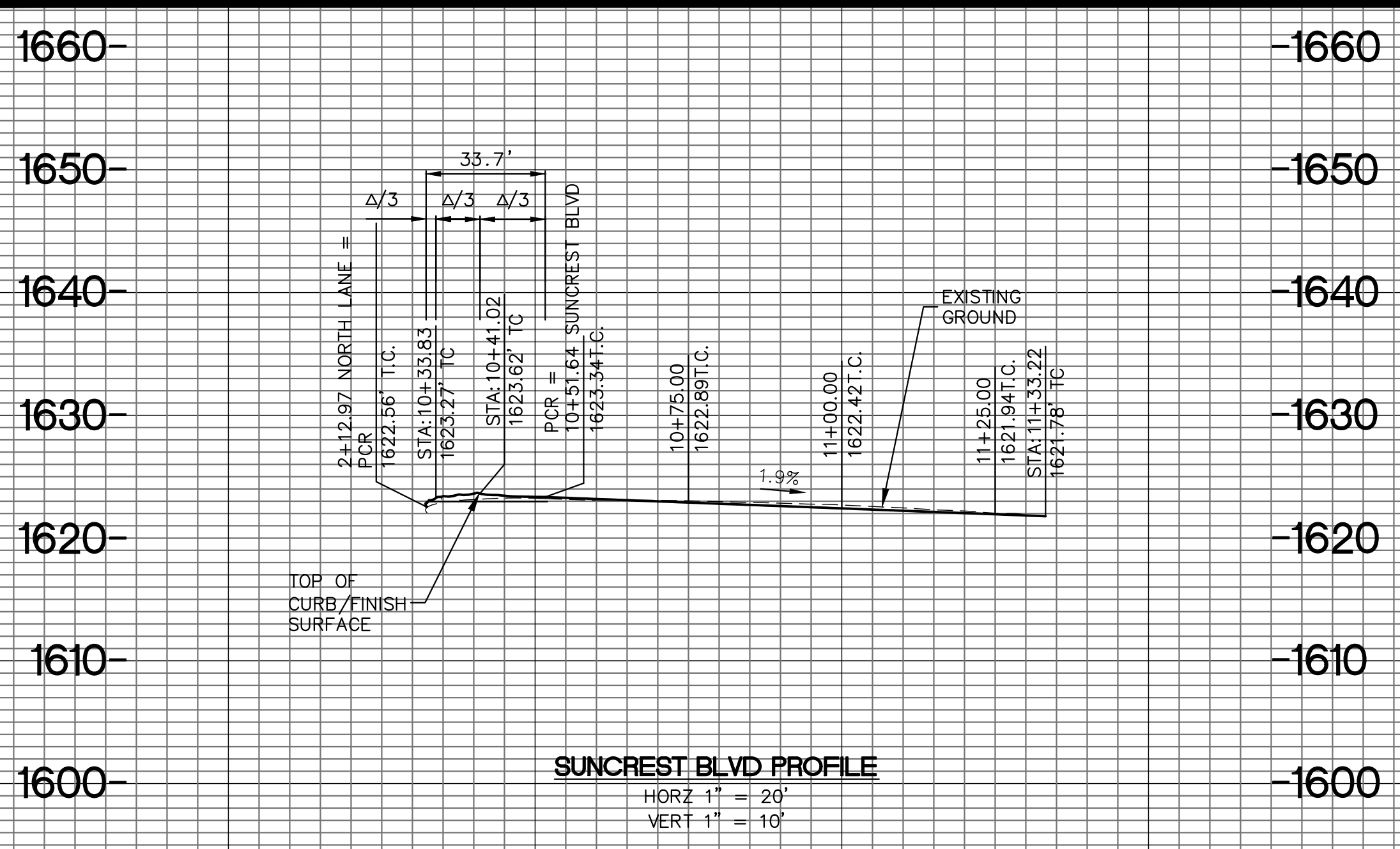


Nasland
Civil Engineering
Surveying
Land Planning
T (858) 292-7770
4740 Ruffner Street
San Diego, CA 92111
nasland.com

THE PAVEMENT STRUCTURAL SECTION SHALL BE IN ACCORDANCE WITH THE SAN DIEGO COUNTY STANDARDS AND AS APPROVED BY THE MATERIALS LABORATORY.

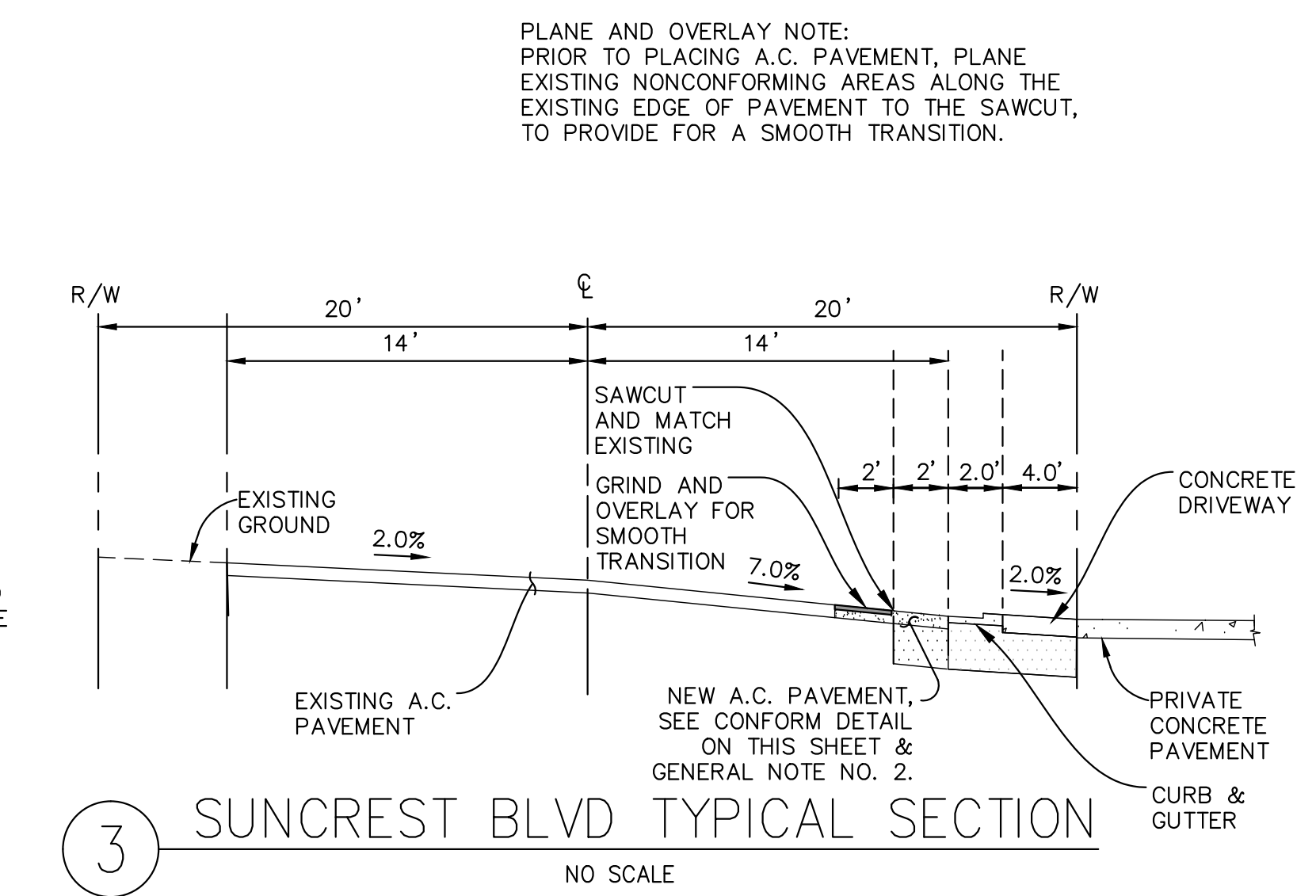
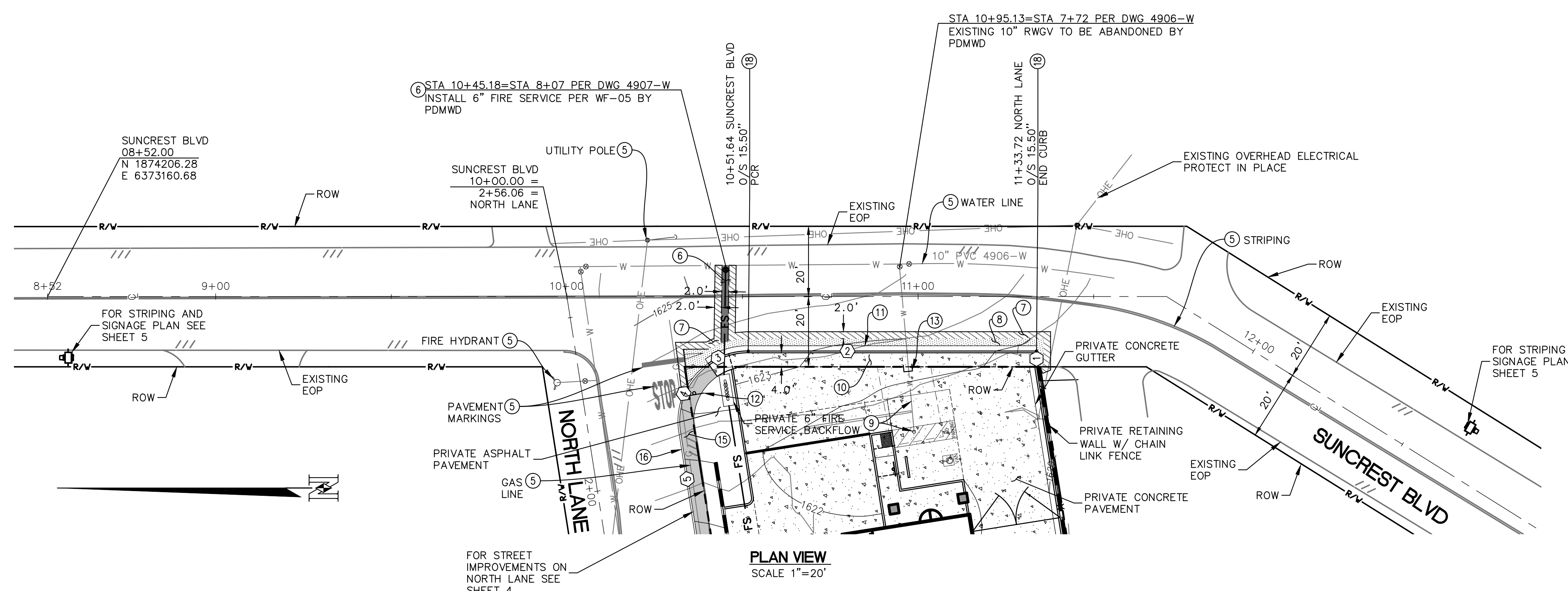
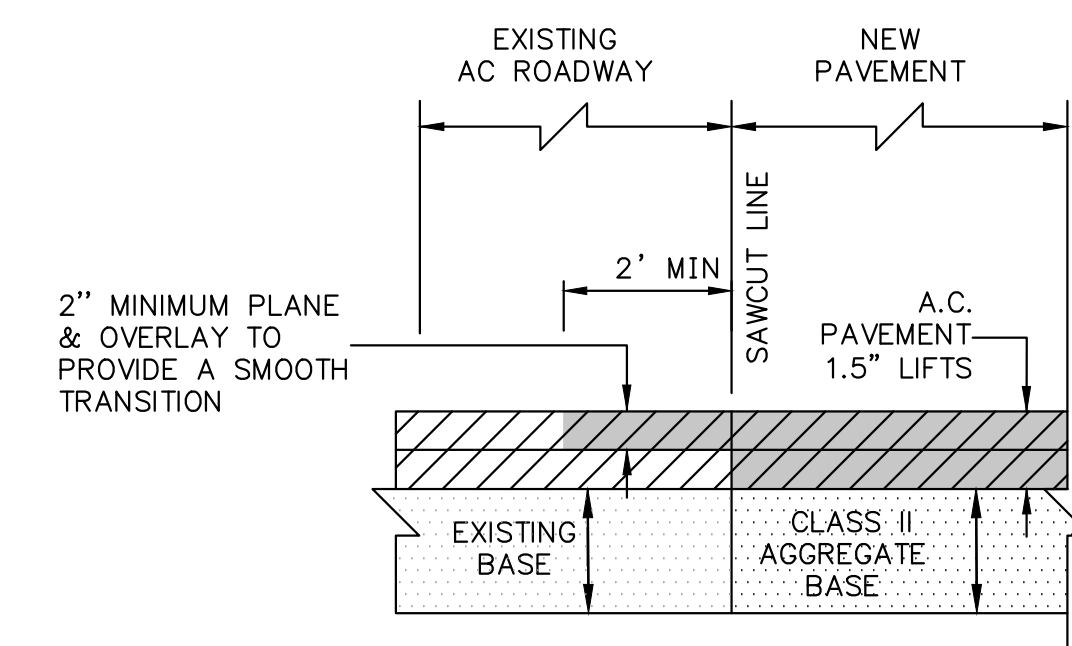
IMPROVEMENT PLANS		
SHEET 2	COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS	5 SHEETS
GENERAL NOTES AND REFERENCES FOR: SAN MIGUEL FIRE STATION # 18 IMPROVEMENTS		
CALIFORNIA COORDINATE INDEX 238-1785		
APPROVED DIRECTOR OF PUBLIC WORKS	ENGINEER OF WORK JARRETT J. LINN R.C.E. 84231	

NASLAND ENGINEERING 858-292-7770



NO	BEARING/DELTA	RADIUS	LENGTH	NOTE
1	N 80°28'06" W	--	4.46'	6" PCC CURB
2	N 09°31'54" E	--	82.08'	6" PCC CURB & GUTTER
3	S 34°40'48" W	20.00'	12.11'	6" PCC CURB & GUTTER
4	S 64°15'36" W	20.00'	22.43'	AC BERM
5	N 89°24'27" W	--	190.83'	AC BERM

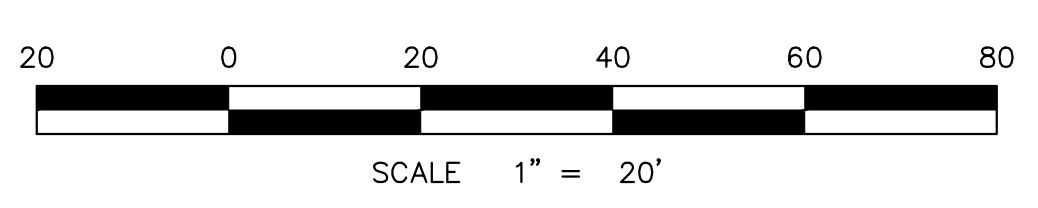
- CONSTRUCTION NOTES**
- PROTECT IN PLACE. DESCRIPTION PER PLAN.
 - INSTALL 6" FIRE SERVICE PER W.A.S. WF-05 BY PDMWD. RESURFACE PER SDCDS DS-22.
 - 2" GRIND AND OVERLAY PER DETAIL 2 ON SHEET 3.
 - PROPOSED ASPHALT PAVEMENT PER DETAIL 3 ON SHEET 3.
 - EXISTING STANDPIPE AND FIRE SERVICE TO BE REMOVED.
 - INSTALL MODIFIED TYPE D DRIVEWAY PER SDRSD G-14.
 - INSTALL CURB & GUTTER PER SDRSD G-02.
 - RELOCATE STOP SIGN TO NEW LOCATION SHOWN ON PLANS.
 - CUT AND PLUG EXISTING FIRE SERVICE BY PDMWD.
 - INSTALL AC WALKWAY PER DETAIL 1 ON SHEET 4.
 - INSTALL 6" AC DIKE PER SDRSD G-05.



RECORD PLAN

BY: _____ NAME _____ DATE: _____
 R.C.E. _____
 EXPIRES: _____

NO.	DESCRIPTION:	APPROVED BY:	DATE:



Nasland Civil Engineering
 Surveying
 Land Planning
 T (858) 292-7770
 4740 Ruffner Street
 San Diego, CA 92111
 nasland.com

IMPROVEMENT PLANS

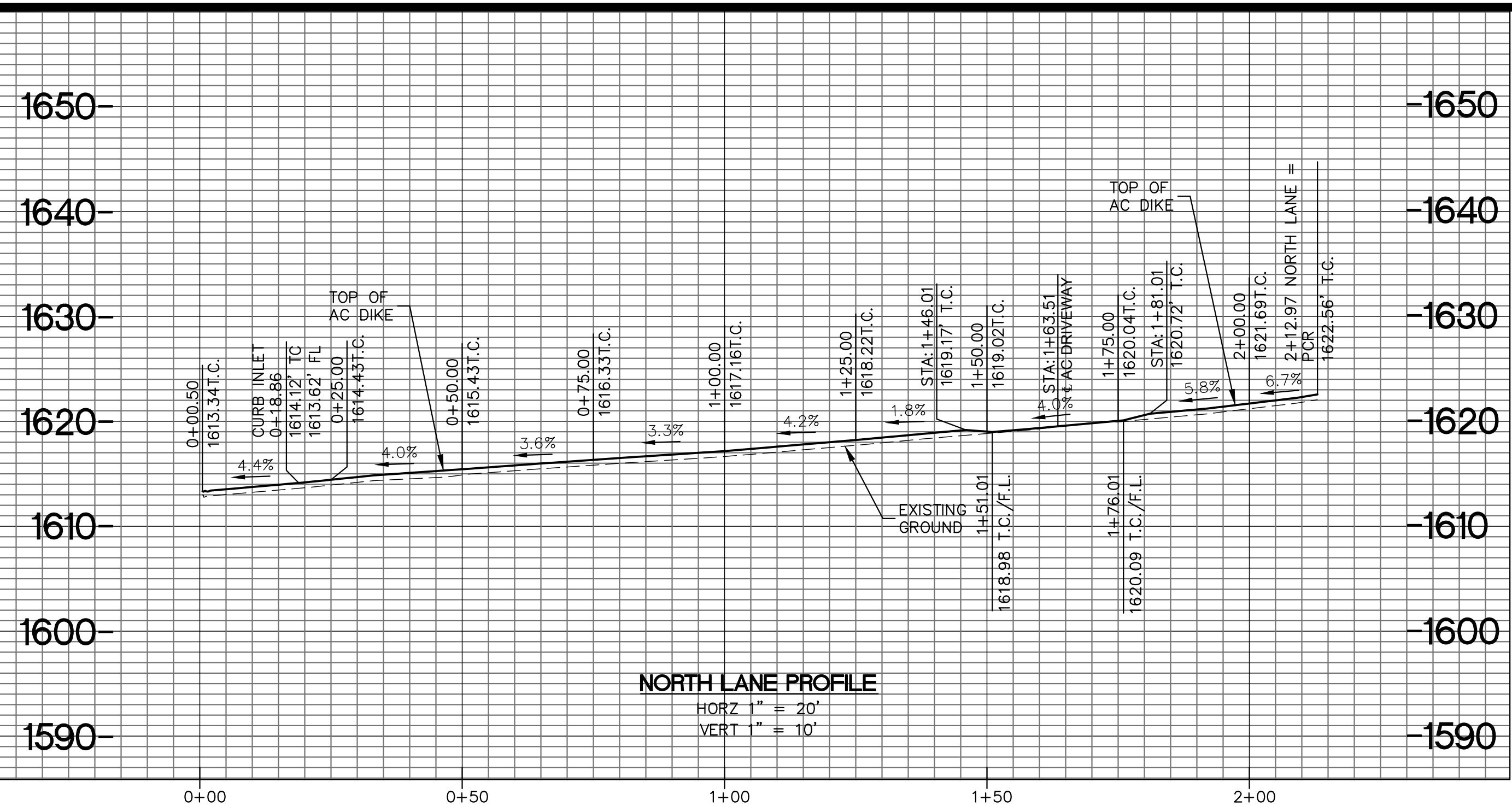
SHEET 3 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 5 SHEETS

IMPROVEMENT PLAN FOR:
SAN MIGUEL FIRE STATION # 18 IMPROVEMENTS

CALIFORNIA COORDINATE INDEX 238-1785

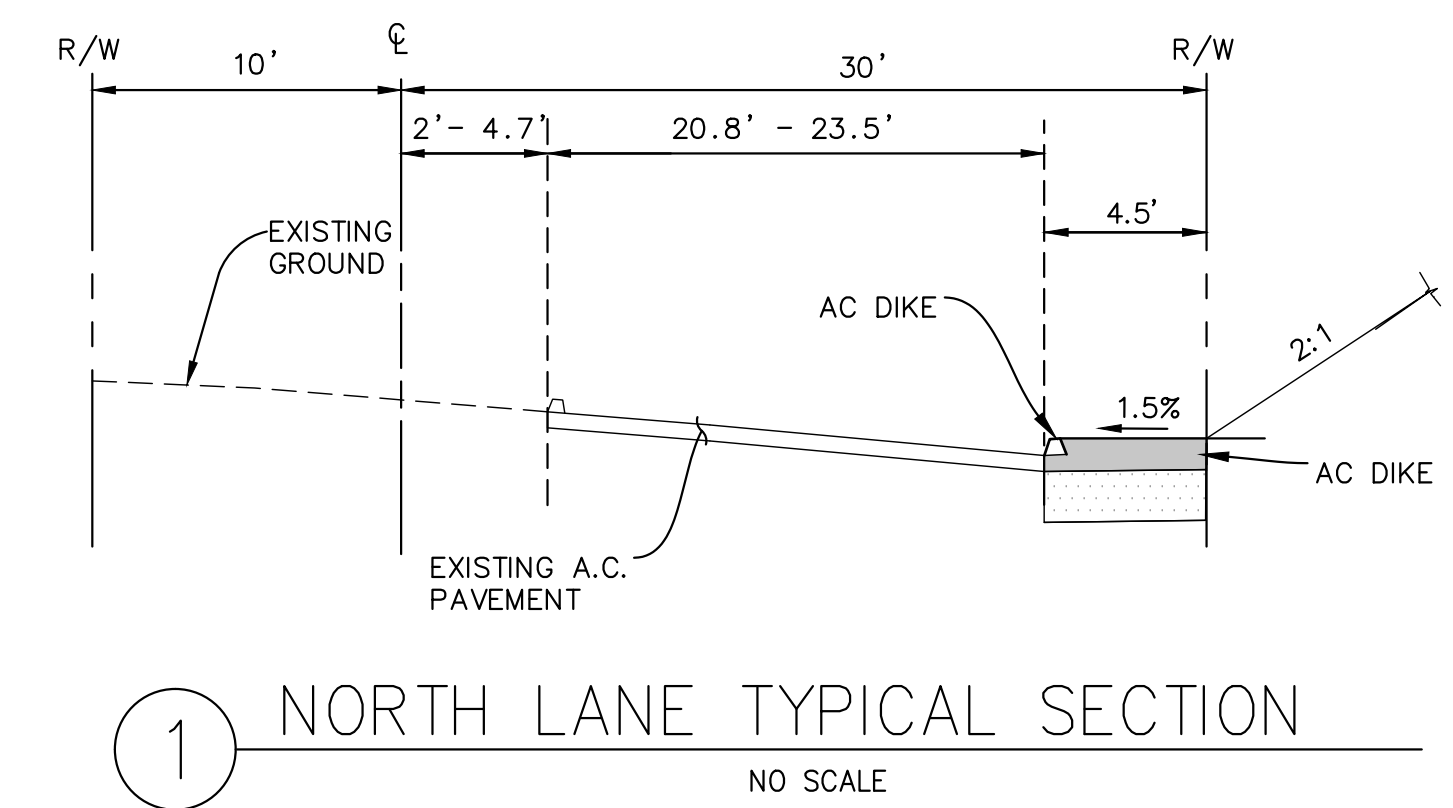
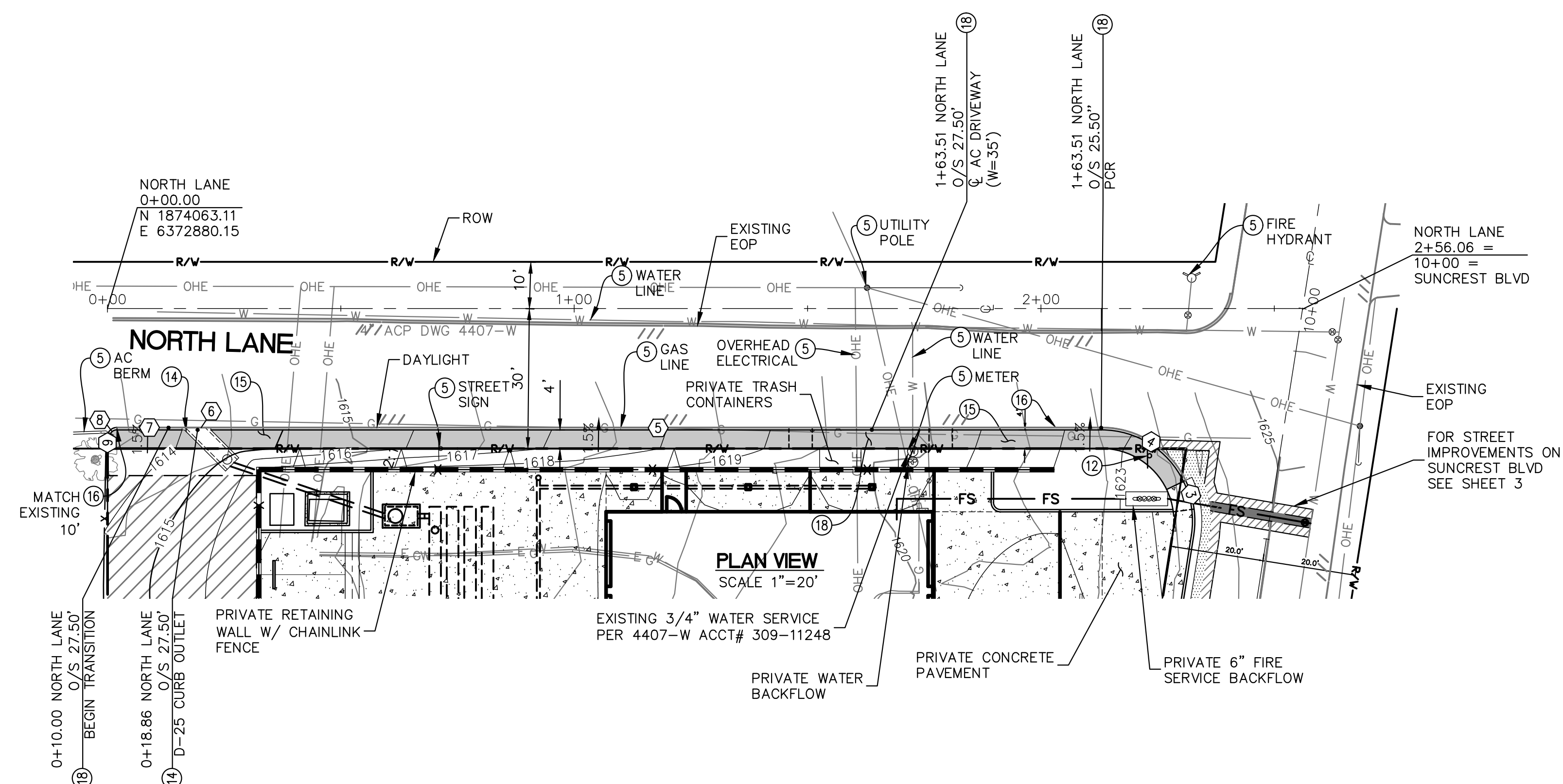
APPROVED DIRECTOR OF PUBLIC WORKS BY: _____ ENGINEER OF WORK BY: JARRETT J. LINN R.C.E. 84231

	PLANS	BY	DATE
	DESIGNED	JW / GS	
	CHECKED	JL	
NASLAND ENGINEERING 4740 RUFFNER STREET SAN DIEGO, CALIFORNIA 92111 (858) 292-7770			
REGISTERED ENGINEER		DATE	



- CONSTRUCTION NOTES**
- ⑤ PROTECT IN PLACE. DESCRIPTION PER PLAN.
 - ⑫ RELOCATE STOP SIGN TO NEW LOCATION SHOWN ON PLANS.
 - ⑭ INSTALL CURB OUTLET PER SDRSD D-25.
 - ⑮ INSTALL AC WALKWAY PER DETAIL 1 ON SHEET 4.
 - ⑯ INSTALL 6" AC DIKE PER SDRSD G-05.
 - ⑰ INSTALL AC DRIVEWAY PER SDRSD G-14G (W=35').

ID	BEARING/DELTA	RADIUS	LENGTH	NOTE
3	34°40'48"	20.00'	12.11'	6" PCC CURB & GUTTER
4	64°15'36"	20.00'	22.43'	AC BERM
5	N 89°24'27" W	--	190.83'	AC BERM
6	N 89°24'27" W	--	6.16'	CURB OUTLET
7	N 89°24'27" W	--	13.99'	AC BERM
8	90°00'00"	2.00'	3.14'	AC BERM
9	N 00°35'33" E	--	2.50'	AC BERM



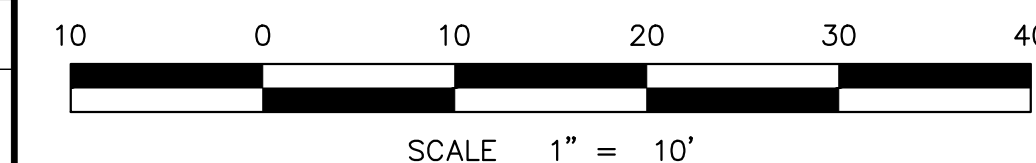
RECORD PLAN

BY: _____ NAME _____ DATE: _____

R.C.E. _____

EXPIRES: _____

NO.	DESCRIPTION:	APPROVED BY:	DATE:



Nasland Civil Engineering
 Surveying
 Land Planning

T (858) 292-7770
 4740 Ruffner Street
 San Diego, CA 92111
 nasland.com

IMPROVEMENT PLANS

SHEET 4 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 5 SHEETS

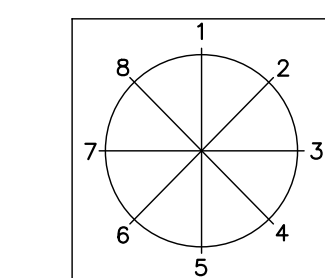
IMPROVEMENT PLAN FOR:
SAN MIGUEL FIRE STATION # 18 IMPROVEMENTS

CALIFORNIA COORDINATE INDEX 238-1785

APPROVED DIRECTOR OF PUBLIC WORKS BY: _____

ENGINEER OF WORK BY: JARRETT J. LINN R.C.E. 84231

NEW POLE AND EQUIPMENT SCHEDULE					
LOCATION	STANDARD		FOUNDATION DETAIL ES-7J	BEACON LOCATION	DESCRIPTION
	TYPE	HGT			
(A)	15-FBS	14'	2'6" x 6'6" DEEP	4	SOLAR POWERED DUAL FLASHING BEACON PER DETAIL A
(B)	15-FBS	14'	2'6" x 6'6" DEEP	7	SOLAR POWERED DUAL FLASHING BEACON PER DETAIL A



PUSH BUTTON LOCATION DETAIL

CONSTRUCTION NOTES

- (17) FURNISH AND INSTALL A SOLAR POWERED EMERGENCY VEHICLE WARNING SYSTEM WITH TWO FLASHING BEACONS. SEE DETAIL "A" AND POLE AND EQUIPMENT SCHEDULE ON THIS SHEET.
- (18) FURNISH AND INSTALL A SOLAR POWERED EMERGENCY VEHICLE WARNING SYSTEM WITH TWO FLASHING BEACONS. SEE DETAIL "A" AND POLE AND EQUIPMENT SCHEDULE ON THIS SHEET.
- (20) REPLACE 12" SOLID WHITE LIMIT LINE PER CALTRANS A24G.
- (21) REPLACE THERMOPLASTIC PAVEMENT MARKINGS PER CALTRANS A24E.

STANDARD SPECIFICATIONS

- 1. STANDARD SPECIFICATIONS FOR THE PUBLIC WORKS CONSTRUCTION (GREENBOOK), LATEST EDITION.
- 2. CALIFORNIA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2014.
- 3. CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S. CUSTOMARY STANDARD SPECIFICATIONS, LATEST EDITION.

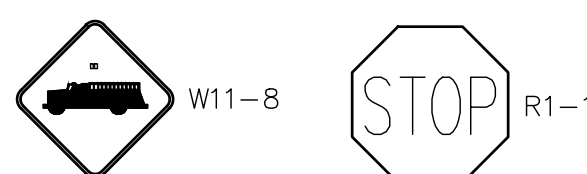
STANDARD DRAWINGS

- 1. STANDARD SPECIFICATIONS FOR THE PUBLIC WORKS CONSTRUCTION (GREENBOOK), LATEST EDITION.
- 2. CALIFORNIA DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2014.
- 3. CALIFORNIA DEPARTMENT OF TRANSPORTATION U.S. CUSTOMARY STANDARD SPECIFICATIONS, LATEST EDITION.

GENERAL NOTES

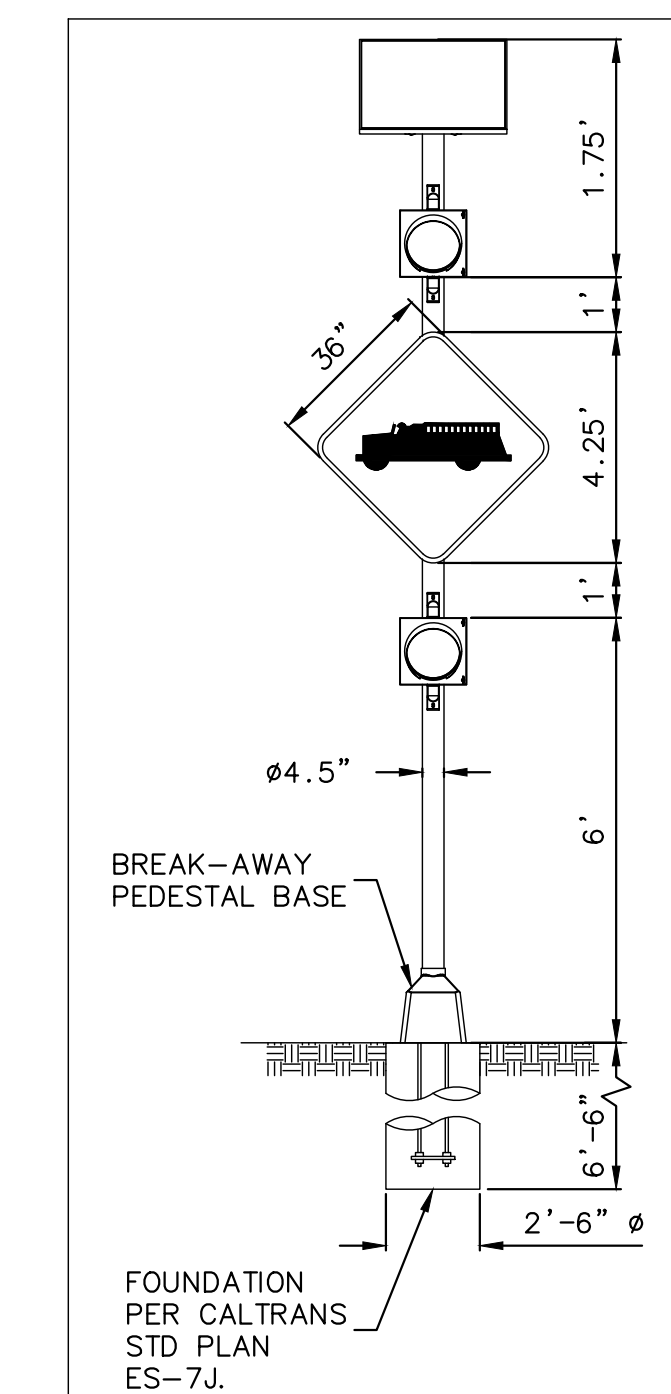
- 1. THE CONTRACTOR SHALL CONFIGURE THE PPBS TO WIRELESSLY COMMUNICATE AND ACTIVATE THE RRFB AT THIS INTERSECTION.
- 2. THE CONTRACTOR SHALL COORDINATE WITH THE COUNTY TO DETERMINE THE LENGTH OF EACH ACTUATED FLASHING PHASE. THE DURATION SHALL COMPLY WITH THE CAMUTCD AND THE COUNTY STANDARDS.
- 3. COORDINATE EXACT POLE LOCATION WITH THE COUNTY PRIOR TO INSTALLATION. FINAL POLE LOCATION SHALL BE A MINIMUM OF 2.5' BEHIND THE BACK OF CURB.

SIGNS (THIS SHEET ONLY)



STRIPING LEGEND

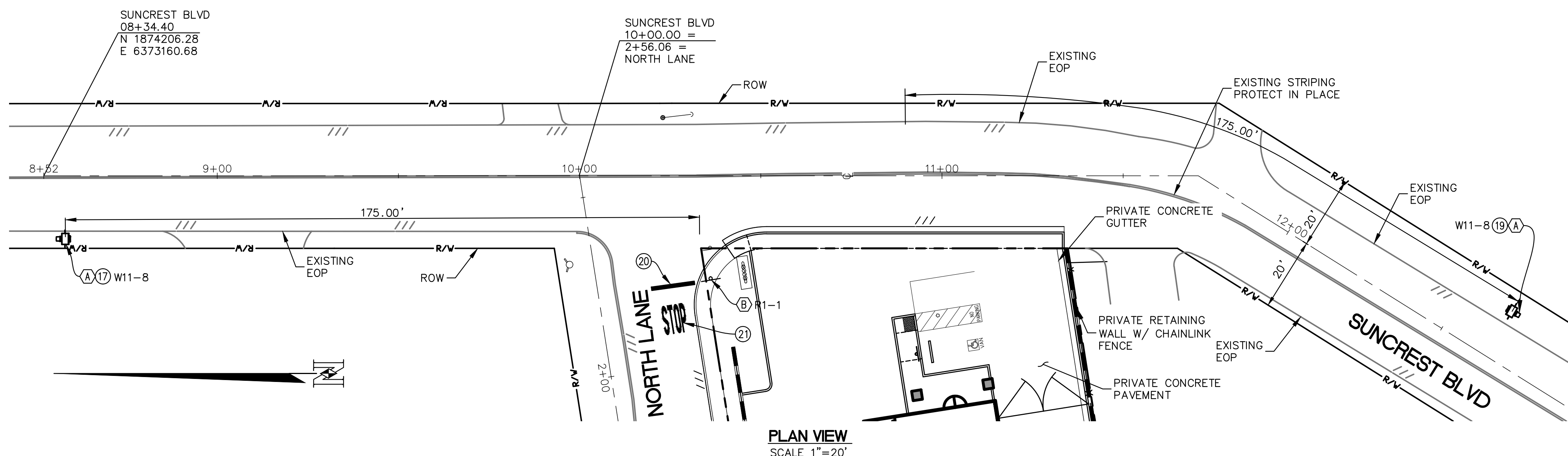
KEY ITEM	STD. DWG OR DETAIL	QUANTITY	SYMBOL
(20) 12" SOLID WHITE LIMIT LINE	CALTRANS A24G-LIMIT LINE	12 LF	
(21) WORDS (THERMOPLASTIC)	CALTRANS A24D-STOP	1 EA	STOP



ELEVATION VIEW
NOT TO SCALE
DETAIL "A" (17) (18)

NOTES:

- 1. BEACONS: EACH POLE SHALL HAVE TWO 12" LED YELLOW PIXELATED BEACONS WITH YELLOW HOUSING AND BLACK BACK PLATES. MODEL R247-G FROM CARMANAH OR APPROVED EQUAL.
- 2. POLE: TYPE 15FBS STANDARD CALTRANS POLE WITH BREAK AWAY BASE OR APPROVED EQUAL.
- 3. SIGN: 36"x36" W11-8 SIGN MOUNTED PER CALTRANS STANDARD RS4.
- 4. CABINET: ALUMINUM POLE MOUNTED LOCKING CABINET UL LISTED NEMA 3R.
- 5. SOLAR PANEL: 50W TOP MOUNTED SOLAR PANEL.
- 6. BATTERIES: DUAL 12V AGM BATTERIES (55AMP HOURS).
- 7. ACTIVATION METHODS: REMOTE TRANSMITTERS OR MOMENTARY PUSH BUTTON PER R838 CONTROLLER BY CARMANAH OR APPROVED EQUAL.



PLAN VIEW
SCALE 1"=20'

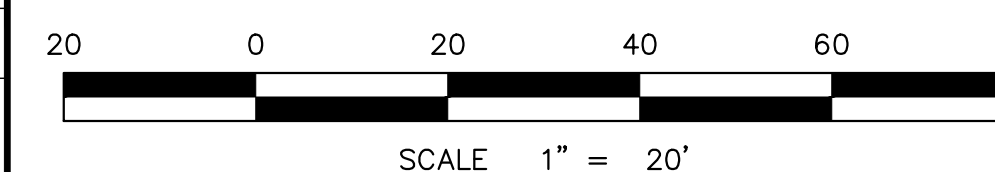
RECORD PLAN

BY: _____ NAME _____ DATE: _____

R.C.E. _____

EXPIRES: _____

COUNTY APPROVED CHANGES			
NO.	DESCRIPTION:	APPROVED BY:	DATE:



IMPROVEMENT PLANS

SHEET 5 COUNTY OF SAN DIEGO DEPARTMENT OF PUBLIC WORKS 5 SHEETS

STRIPING AND SIGNAGE PLAN FOR:
SAN MIGUEL FIRE STATION # 18 IMPROVEMENTS

CALIFORNIA COORDINATE INDEX 238-1785

APPROVED DIRECTOR OF PUBLIC WORKS BY: _____

ENGINEER OF WORK BY: JARRETT J. LINN R.C.E. 84231