CALIFORNIA COASTAL COMMISSION
SOUTH COAST DISTRICT OFFICE
301 E. OCEAN BLVD., SUITE 300
LONG BEACH, CA 90802-4830
(562) 590-5071

Th13d

5-23-0397 (City of San Clemente)
November 16, 2023

EXHIBITS

Exhibit 1 – Vicinity Map and Project Site

Exhibit 2 – Project Plans

Exhibit 3 – City Sewer Run

Exhibit 4 – Storm Drain Restoration (In-Kind) Alternative

Exhibit 5 – Storm Drain Realignment Alternative

Exhibit 6 – Existing Sewer Lift Station Rehabilitation Alternative

Exhibit 7 – Sewer Lift Station Relocation (For a Single Lift Station) Alternative

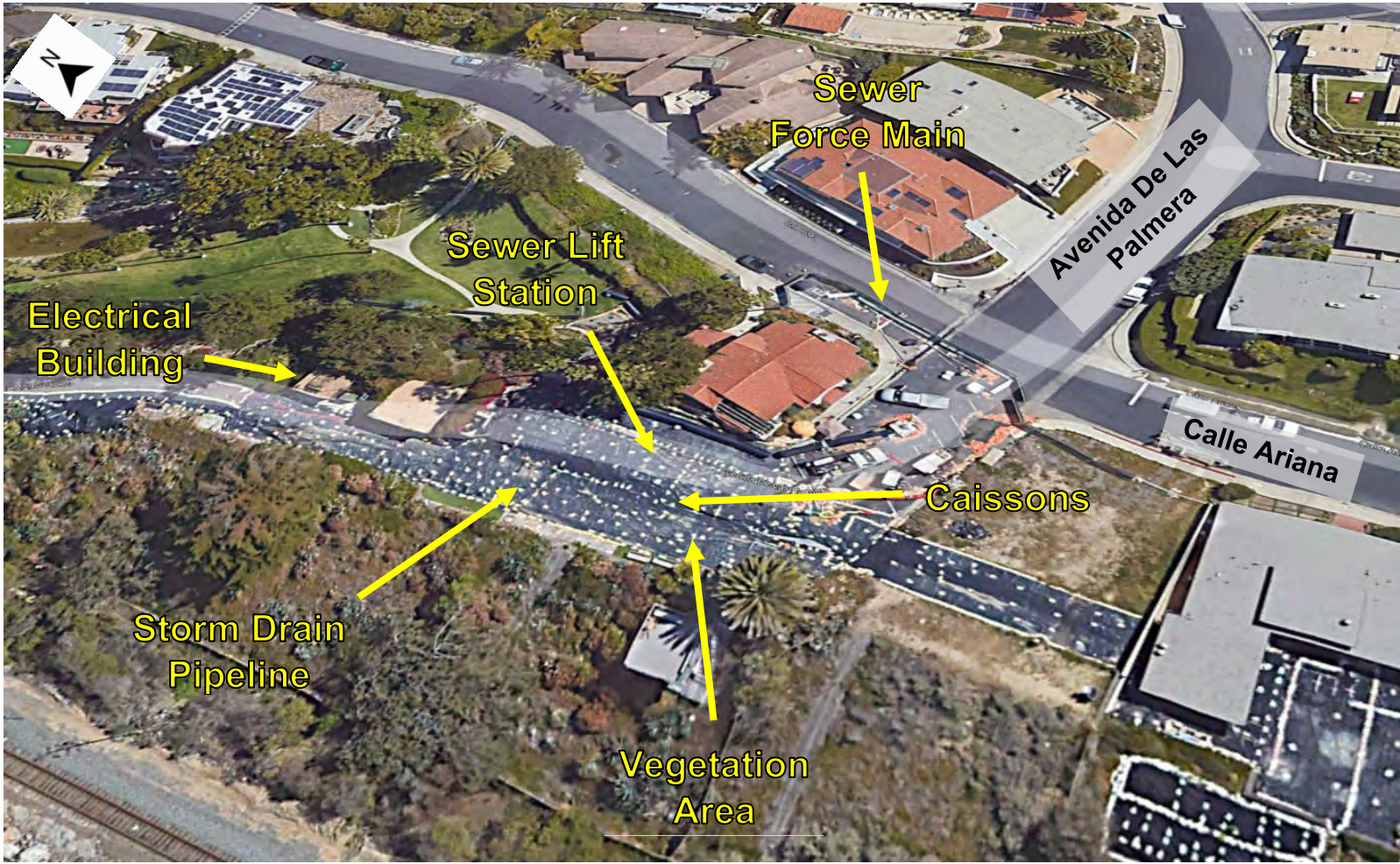
Exhibit 8 – Sewer Lift Station Relocation (For Two Lift Stations) Alternative

Exhibit 9 – Coastal Hazards Figures with "Hold the Line"

Exhibit 10 – Coastal Hazards Figures without "Hold the Line"

California Coastal Commission
5-23-0397
Exhibit 1
Page 1 of 3


N
Railroad Tracks
Project Site
Avenida De Las Palmera
Calle Ariana
OCTA ECDP Tieback Wall
OCTA ECDP Revetment



California Coastal Commission
5-23-0397
Exhibit 1
Page 3 of 3

CITY OF SAN CLEMENTE

CYPRUS SHORE

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

PROJECT NOS. 12004 AND 12210

GENERAL NOTES

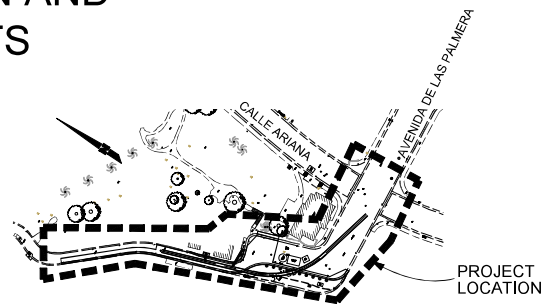
1. ALL WORK SHALL CONFORM TO THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF SAN CLEMENTE, ORANGE COUNTY PUBLIC FACILITIES & RESOURCES DEPARTMENT (PF&RD), AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTIONS, LATEST EDITION. ALL WORK SHALL BE SUBJECT TO THE CITY ENGINEER'S ACCEPTANCE AS A CONDITION OF COMPLETION OF WORK BY THE CONTRACTOR.
2. ALL UNDERGROUND UTILITIES SHALL BE INSTALLED PRIOR TO SURFACING OF THE STREETS.
3. ALL MONUMENTS SHALL BE SET IN ACCORDANCE WITH THE RECORDED TRACT MAP AND THE REQUIREMENTS OF THE CITY ENGINEER.
4. THE STRUCTURAL SECTIONS SHALL BE RECOMMENDED BY A GEOTECHNICAL REPORT AND SUBMITTED TO THE CITY OF SAN CLEMENTE FOR APPROVAL UPON COMPLETION OF ROUGH GRADING. MINIMUM STRUCTURAL SECTION SHALL BE 4" A.C. OVER 7" A.B.
5. ALL EXISTING STRUCTURES AND SUBSTRUCTURES SHOWN ON THESE PLANS ARE FROM AVAILABLE RECORDS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF SAID STRUCTURES AND SUBSTRUCTURES AND PROTECT THEM IN PLACE WHETHER OR NOT SHOWN ON THESE PLANS.
6. GUTTERS WITH LESS THAN 2% GRADE SHALL BE WATER CHECKED DURING FINISHING TO AVOID PONDING.
7. CURB ALIGNMENT AND GRADE SHALL NOT DEVIATE FROM PLANS MORE THAN 0.02' WITHIN A 5' INTERVAL.
8. WORKING HOURS FROM 8:00 AM TO 4:30 PM, MONDAY THROUGH FRIDAY, EXCEPT CITY HOLIDAYS, SHALL BE MAINTAINED. ANY EXCEPTIONS SHALL BE PER CITY ENGINEER'S APPROVAL.
9. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE 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 CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
10. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AND SHALL REPORT ALL DISCREPANCIES TO THE CITY ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
11. CONTRACTOR SHALL PROVIDE A SLURRY SEAL OF EMULSIFIED ASPHALT GRADE SS-1H APPLIED AT THE RATE OF 0.1 TO 0.2 GALLON PER SQUARE YARD AS REQUIRED BY THE CITY ENGINEER.
12. APPROVED SOIL STERILANT IS REQUIRED UNDER ALL NEW ASPHALT PAVEMENTS PRIOR TO PLACEMENT.
13. CONTRACTOR SHALL PROVIDE CRUSHED AGGREGATE BASE AS SPECIFIED IN SECTION 200-2.2 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION, WHENEVER A.B. OR UNTREATED BASE MATERIAL IS INDICATED, UNLESS OTHERWISE WAIVED IN WRITING BY THE CITY ENGINEER.
14. DESIGN ENGINEER SHALL CERTIFY ALL LINES AND GRADES PER APPROVED PLANS.
15. CONSTRUCTION SITES SHALL BE MAINTAINED IN SUCH CONDITION THAT AN ANTICIPATED STORM DOES NOT CARRY WASTES OR POLLUTANTS OFF THE SITE.

    DISCHARGES OF MATERIAL OTHER THAN STORMWATER ARE ALLOWED ONLY WHEN NECESSARY FOR PERFORMANCE AND COMPLETION OF CONSTRUCTION PRACTICES AND WHERE THEY DO NOT: CAUSE OR CONTRIBUTE TO A VIOLATION OF ANY WATER QUALITY STANDARD; CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR NUISANCE; OR CONTAIN A HAZARDOUS SUBSTANCE IN A QUANTITY REPORTABLE UNDER FEDERAL REGULATIONS 40 CFR PARTS 117 AND 302.

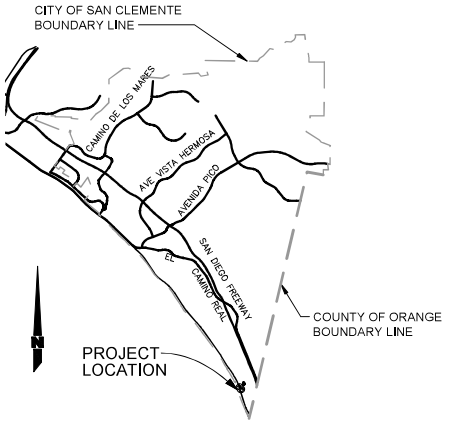
    POTENTIAL POLLUTANTS INCLUDE BUT ARE NOT LIMITED TO: SOLID OR LIQUID CHEMICAL SPILLS; WASTES FROM PAINTS, STAINS, SEALANTS, GLUES, LIMES, PESTICIDES, HERBICIDES, WOOD PRESERVATIVES AND SOLVENTS; ASBESTOS FIBERS, PAINT FLAKES OR STUCCO FRAGMENTS; FUELS; OILS; LUBRICANTS; AND HYDRAULIC, RADIATOR OR BATTERY FLUIDS; FERTILIZERS; VEHICLE/EQUIPMENT WASH WATER AND CONCRETE WASH WATER; CONCRETE, DETERGENT OR FLOATABLE WASTES; WASTES FROM ANY ENGINE/EQUIPMENT STEAM CLEANING OR CHEMICAL DEGREASING; AND SUPERCHLORINATED POTABLE WATER LINE FLUSHINGS.

    DURING CONSTRUCTION, DISPOSAL OF SUCH MATERIALS SHOULD OCCUR IN A SPECIFIED AND CONTROLLED TEMPORARY AREA ON-SITE, PHYSICALLY SEPARATED FROM POTENTIAL STORM WATER RUN-OFF, WITH ULTIMATE DISPOSAL IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.
16. DEWATERING ON CONTAMINATED GROUNDWATER, OR DISCHARGING CONTAMINATED SOILS VIA SURFACE EROSION IS PROHIBITED. DEWATERING OF NON-CONTAMINATED GROUNDWATER REQIRES A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT FROM THE RESPECTIVE STATE REGIONAL WATER QUALITY CONTROL BOARD.

SHEET INDEX



LOCATION MAP
NTS



VICINITY MAP
NTS

NOTICE TO CONTRACTOR

NOTIFY THE FOLLOWING COMPANIES 48 HOURS PRIOR TO CONSTRUCTION FOR UTILITY RELOCATIONS AND ADJUST TO GRADES:

1.	UNDERGROUND SERVICE ALERT	1 (800) 277-2600
2.	AT&T	1 (619) 200-7896
3.	SAN DIEGO GAS & ELECTRIC	1 (858) 547-3335
4.	SOUTHERN CALIFORNIA GAS COMPANY	1 (714) 634-5067
5.	COX COMMUNICATIONS	1 (949) 546-2754
6.	SOUTH COAST WATER	1 (949) 499-4555

DIGALERT
DIAL TOLL FREE
811
AT LEAST TWO DAYS BEFORE YOU DIG
UNDERGROUND SERVICE ALERT OF SOUTHERN CALIFORNIA

ACCEPTANCE OF PLANS/SPECIFICATIONS

THE CITY OF SAN CLEMENTE HEREBY ACCEPTS THESE PLANS/ SPECIFICATIONS FOR CONSTRUCTION, AS BEING IN GENERAL COMPLIANCE WITH APPLICABLE STATUTES, CODES, STANDARDS OR GUIDELINES. RESPONSIBILITY FOR THE COMPLETENESS AND ACCURACY OF THE PLANS/ SPECIFICATIONS AND RELATED DESIGNS, AND CONFORMANCE TO APPLICABLE STATUTES, CODES, STANDARDS OR GUIDELINES, RESIDES WITH THE ENGINEER AND ENGINEERING FIRM OF RECORD.

KIEL KOGER, P.E. — DATE
PUBLIC WORKS DIRECTOR / CITY ENGINEER
CITY OF SAN CLEMENTE

NOTE:
CONTRACTOR SHALL PROVIDE EROSION CONTROL TO THE SATISFACTION OF THE ENGINEER.

NOTE:
SURVEY MONUMENTS SHALL BE PRESERVED AND REFERENCED BEFORE CONSTRUCTION AND REPLACED AFTER CONSTRUCTION PURSUANT TO SECTION 8771 OF THE BUSINESS PROFESSIONS CODE.

ABBREVIATIONS

AB	AGGREGATE BASE	LP	LOW POINT
AC	ASPHALT CONCRETE	LT; L	LEFT
AVE	AVENUE	MAX	MAXIMUM
BW	BACK OF WALL	MH	MANHOLE
BC	BEGIN CURVE	N'LY	NORTHERLY
BCR	BEGIN CURB RETURN	NO	NUMBER
BLVD	BOULEVARD	OCSD	ORANGE COUNTY SANITATION DISTRICT
CB	CATCH BASIN	PCC	PORTLAND CEMENT CONCRETE; POINT OF COMPOUND CURVE
C&G	CURB & GUTTER	PRC	POINT OF REVERSE CURVE
CF	CURB FACE	PROP	PROPOSED
CL	CENTER LINE	RCB	REINFORCED CONCRETE BOX
CLR	CLEAR	RPM	REFLECTIVE PAVEMENT MARKER
COA	CITY OF ANAHEIM	RT; R	RIGHT
COO	CITY OF ORANGE	R/W	RIGHT OF WAY
CONST	CONSTRUCTION	S'LY	SOUTHERLY
CONT	CONTINUOUS	SCE	SOUTHERN CALIFORNIA EDISON
DIA	DIAMETER	SCG	SOUTHERN CALIFORNIA GAS
EC	END CURVE	SD	STORM DRAIN
ECR	END CURB RETURN	SPPWC	STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION
EP	EDGE OF PAVEMENT	SS	SANITARY SEWER
EXIST; EX	EXISTING	ST	STREET
E'LY	EASTERLY	STD	STANDARD
FH	FIRE HYDRANT	TC	TOP OF CURB
FL	FLOW LINE	TYP	TYPICAL
FS	FINISH SURFACE	W'LY	WESTERLY
GB	GRADE BREAK	PT	ANGLE POINT
LOC	LENGTH OF CURVE		
LOL	LAYOUT LINE, LENGTH OF LINE		

90% SUBMITTAL

REGISTERED PROFESSIONAL ENGINEER — RICK KREUZER — No. 42407 — Exp. 3-31-24 — CIVIL — STATE OF CALIFORNIA

PREPARED BY:
KREUZER CONSULTING GROUP
18872 MacArthur Blvd, Suite 210
Irvine, CA. 92612
714-656-0160
R.C.E. NO. 42407 — DATE

REVISIONS					REFERENCES	APPROVALS			
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ENGINEERING SCALE : AS SHOWN — DATE:
DRAWN BY : DSJ — DESIGNED BY : RK — 08/2023
CHECKED BY : RK — 08/2023
APPROVED :
KIEL KOGER, RCE 63974 — DATE
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

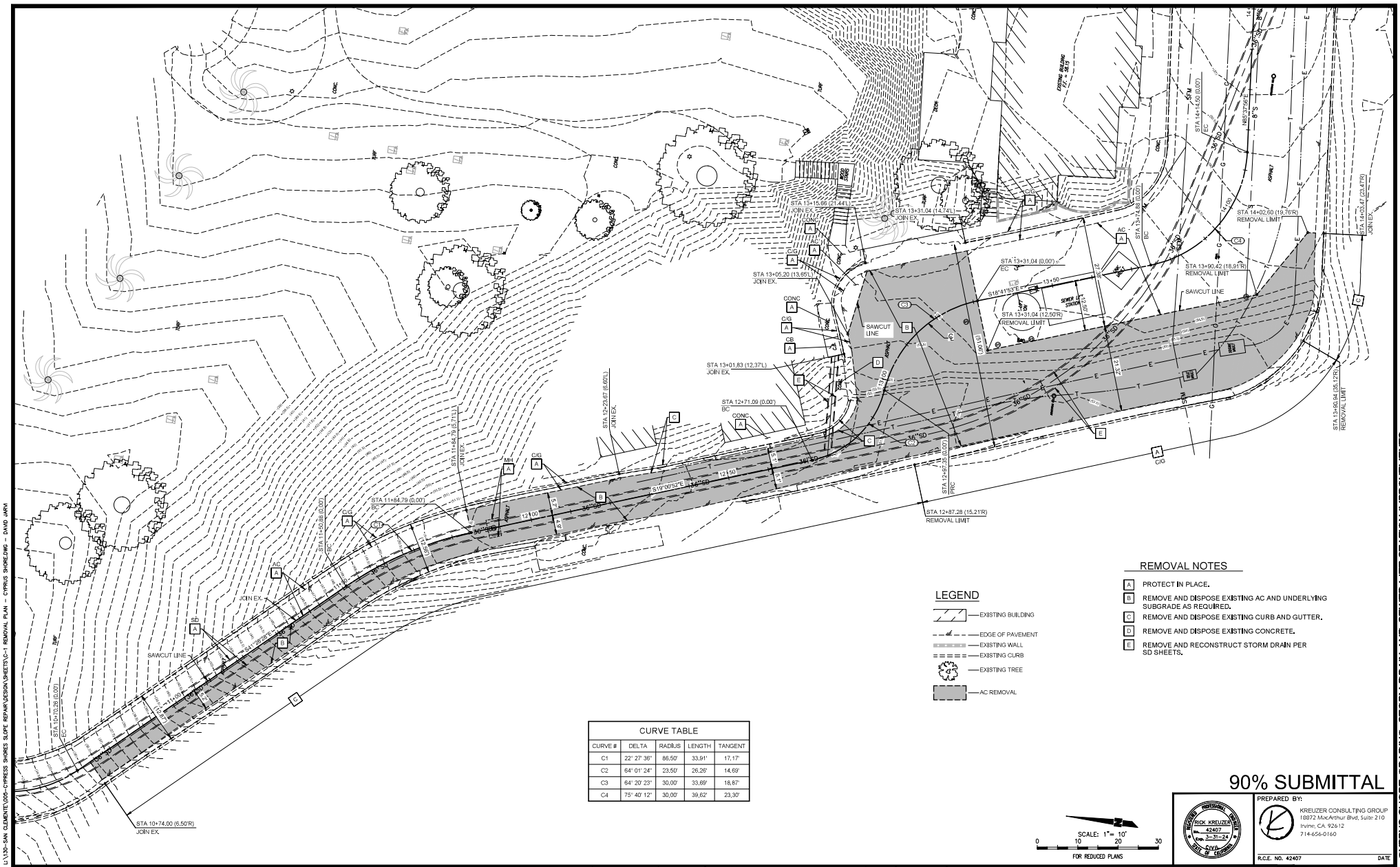
CITY OF SAN CLEMENTE CALIFORNIA

TITLE SHEET
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS
CITY OF SAN CLEMENTE

DRAWING NO:
SHEET NO: 1 OF —

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

8/7/2023 11:43:36 AM – L:\130-SAN CLEMENTE\005-CYPRESS SHORES SLOPE REPAIR\DESIGN\SHEETS\01-STTL- CYPRUS SHORE.DWG – DAVID JARVI



CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
C1	22° 27' 36"	86.50'	33.91'	17.17'
C2	64° 01' 24"	23.50'	26.26'	14.69'
C3	64° 20' 23"	30.00'	33.69'	18.87'
C4	75° 40' 12"	30.00'	39.62'	23.30'

90% SUBMITTAL

SCALE: 1"= 10'
0 10 20 30
FOR REDUCED PLANS

REGISTERED PROFESSIONAL ENGINEER
RICK KREUZER
No. 42407
Exp. 3-31-24
CIVIL
STATE OF CALIFORNIA

PREPARED BY:
KREUZER CONSULTING GROUP
18872 MacArthur Blvd, Suite 210
Irvine, CA. 92612
714-656-0160

R.C.E. NO. 42407 DATE

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

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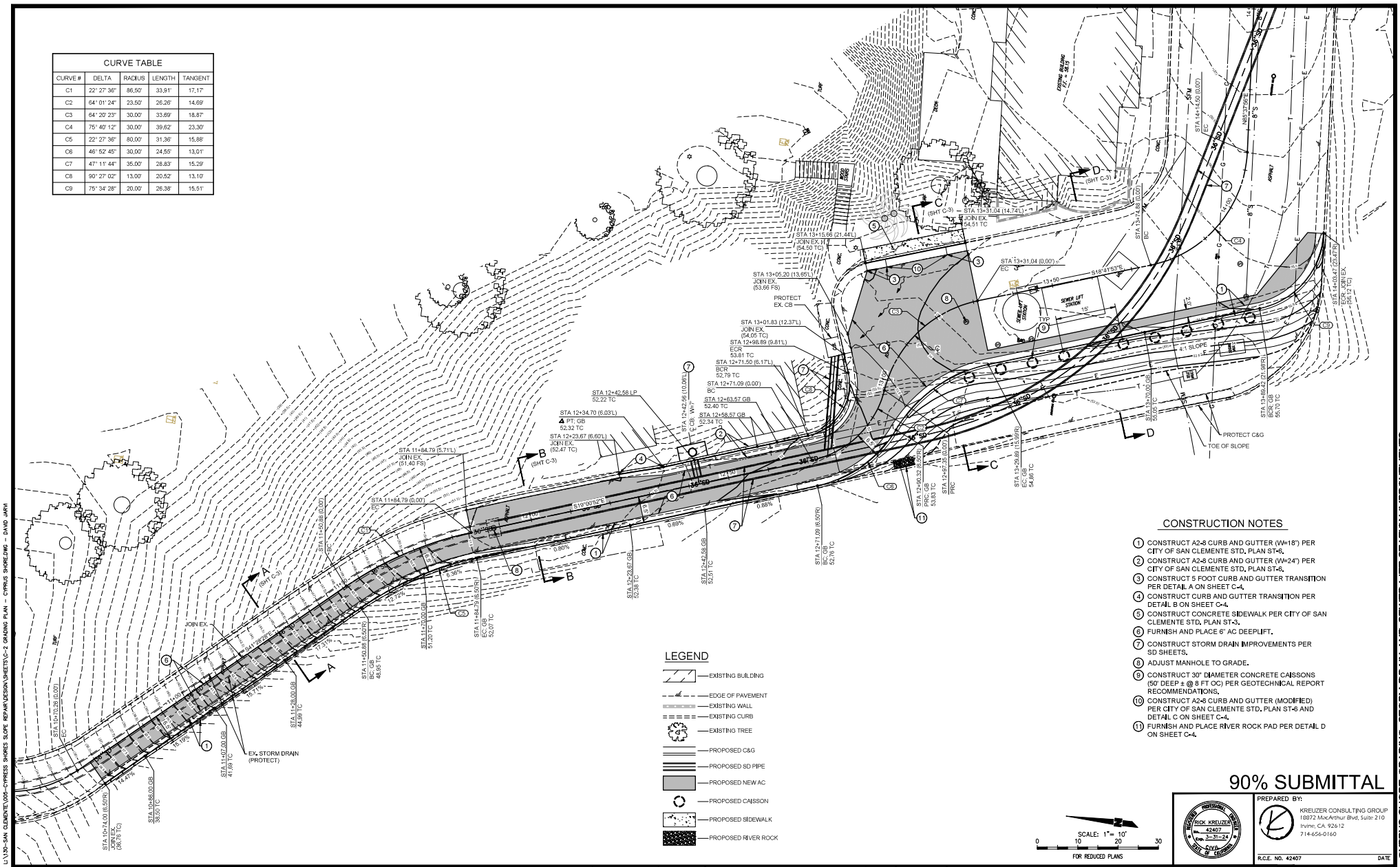
CHECKED BY : RK 08/2023
APPROVED :
KIEL KOGER, RCE 63974 DATE
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

CITY OF SAN CLEMENTE CALIFORNIA

REMOVAL PLAN
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS
CITY OF SAN CLEMENTE

DRAWING NO:
SHEET NO: OF

8/2/2023 4:21:16 PM – L:\100-SAN CLEMENTE\005-CYPRESS SHORES SLOPE REPAIR\DESIGN\SHEETS\C-1 REMOVAL PLAN – CYPRUS SHORE.DWG – DAVID JARVI



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APPROVED :			
KIEL KOGER, RCE 63974 PUBLIC WORKS DIRECTOR/ CITY ENGINEER			DATE

GRADING PLAN
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS
CITY OF SAN CLEMENTE

DRAWING NO:
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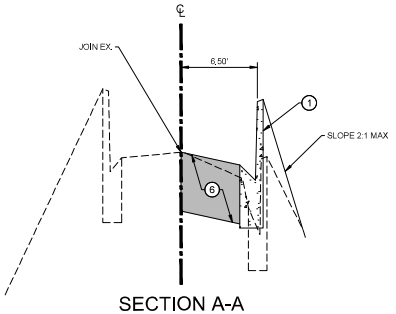

SECTION A-A
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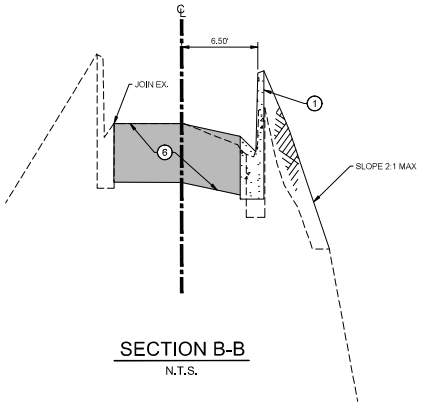
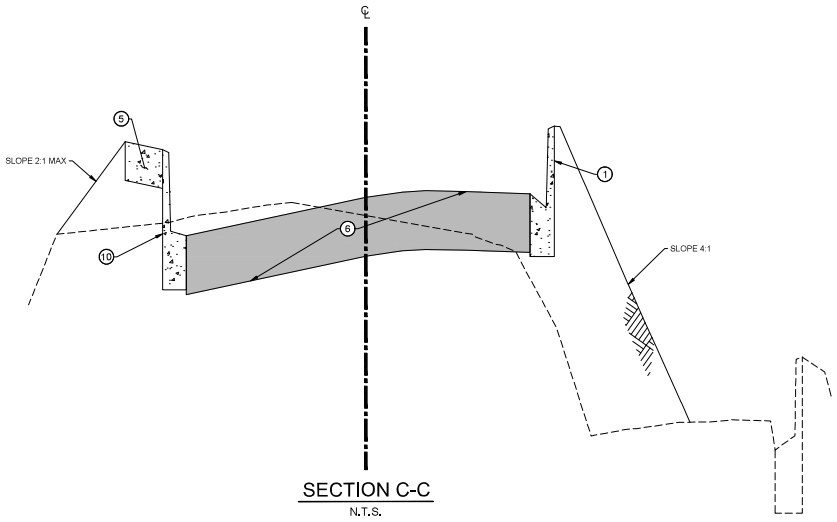


SECTION B-B
N.T.S.

CONSTRUCTION NOTES

1. CONSTRUCT A2-8 CURB AND GUTTER (W=18") PER CITY OF SAN CLEMENTE STD. PLAN ST-6.
5. CONSTRUCT CONCRETE SIDEWALK PER CITY OF SAN CLEMENTE STD. PLAN ST-3.
6. FURNISH AND PLACE 6" AC DEEPLIFT.
10. CONSTRUCT A2-8 CURB AND GUTTER (MODIFIED) PER CITY OF SAN CLEMENTE STD. PLAN ST-6 AND DETAIL C ON SHEET C-4.



SECTION C-C
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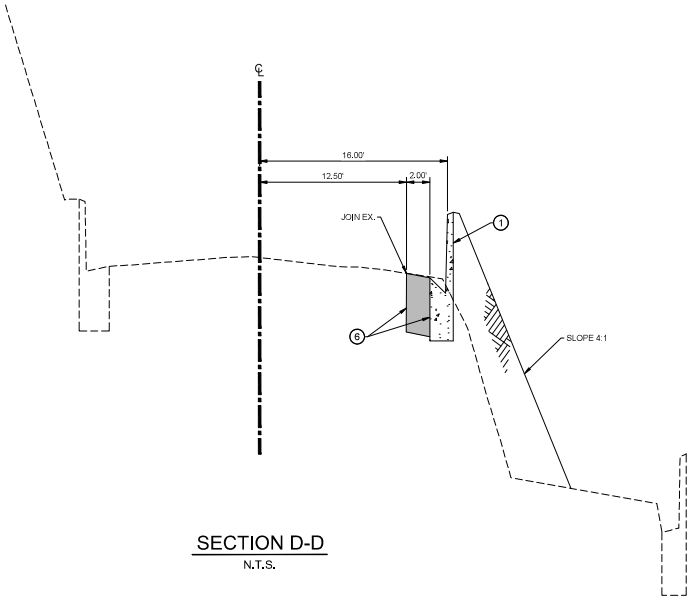

SECTION D-D
N.T.S.

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714-656-0160

RICK KREUZER 42407 Exp. 3-31-24 Civil STATE OF CALIFORNIA

R.C.E. NO. 42407 DATE

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

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KIEL KOGER, RCE 63974 DATE
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

CITY OF SAN CLEMENTE CALIFORNIA

GRADING SECTIONS

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

CITY OF SAN CLEMENTE

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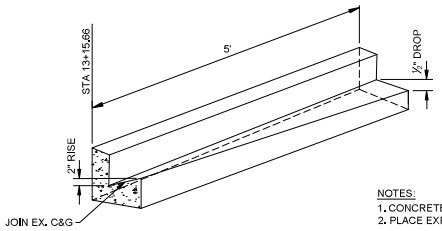
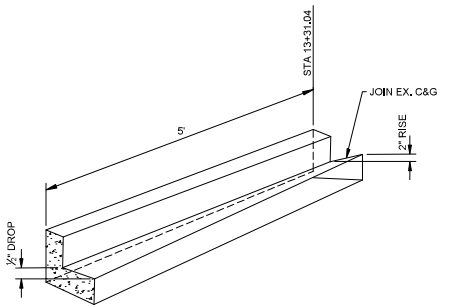
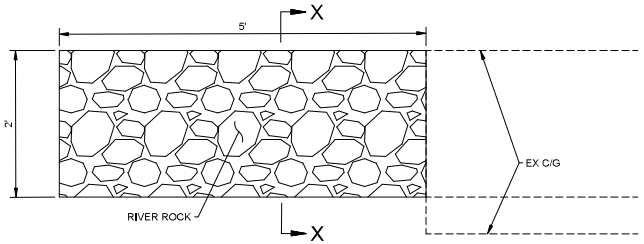
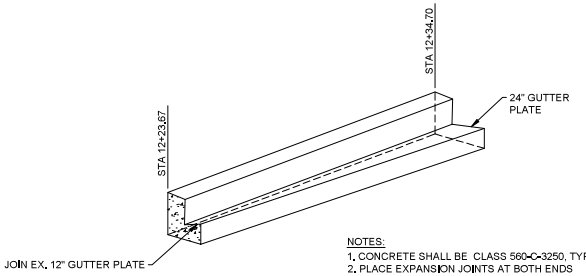




NOTES:
1. CONCRETE SHALL BE CLASS 560-C-3250, TYPE V.
2. PLACE EXPANSION JOINTS AT BOTH ENDS

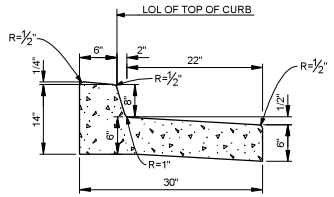
CURB AND GUTTER TRANSITIONS (A)
NTS





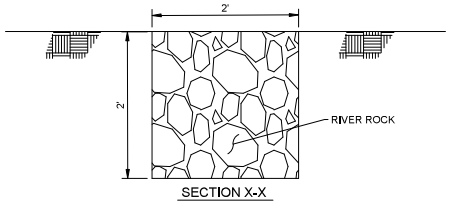
NOTES:
1. CONCRETE SHALL BE CLASS 560-C-3250, TYPE V.
2. PLACE EXPANSION JOINTS AT BOTH ENDS

CURB AND GUTTER TRANSITIONS (B)
NTS



NOTES:
1. SEE CITY STD. ST-6 FOR CONSTRUCTION NOTES.

TYPE A2-8 CURB AND GUTTER (MODIFIED) (C)
NTS



SECTION X-X

RIVER ROCK PAD (D)
NTS

90% SUBMITTAL

PREPARED BY:
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CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

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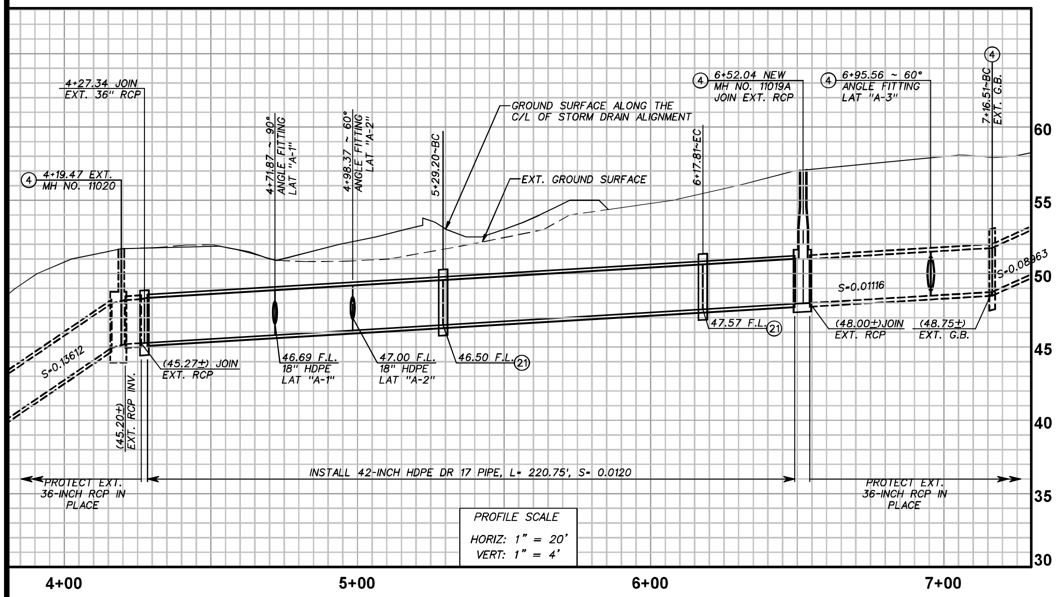
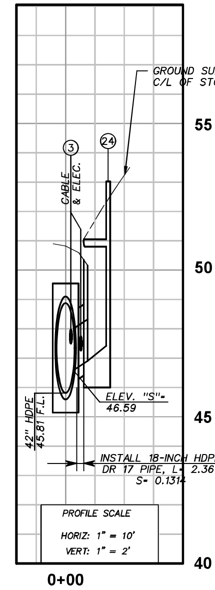
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

GRADING DETAILS
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS
CITY OF SAN CLEMENTE

DRAWING NO:
SHEET NO: OF



LINE "A"



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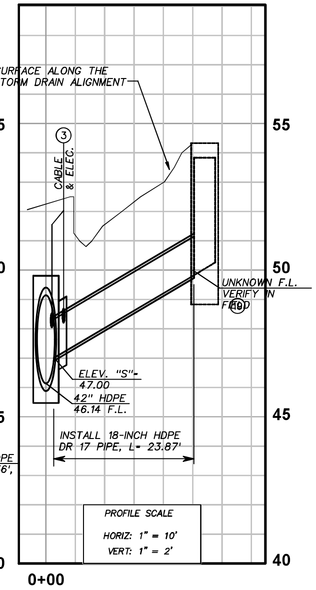
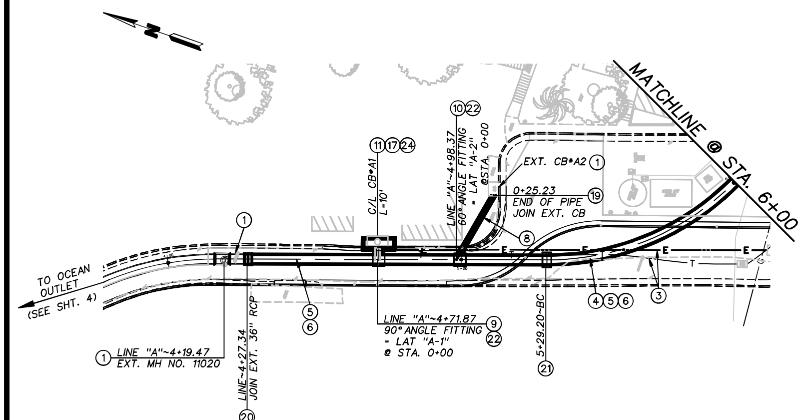


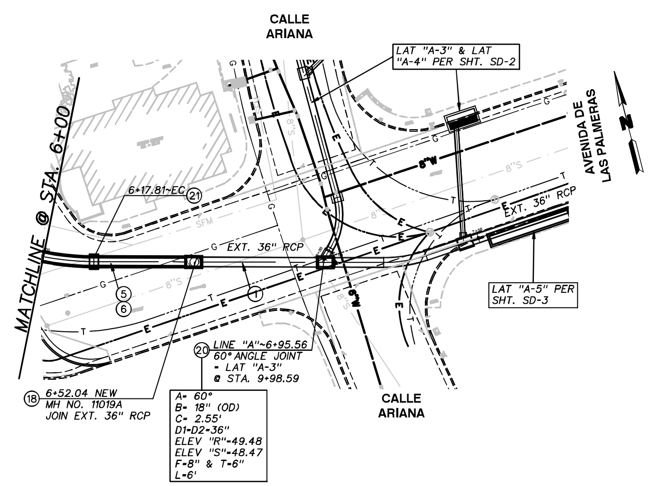
LAT "A-2"

CONSTRUCTION NOTES:

1. PROTECT EXISTING STORM DRAIN SYSTEM IN PLACE INCLUDING PIPE LINE, CATCH BASIN AND MANHOLE.
2. PROTECT EXISTING FACILITY/UTILITY, SIDEWALK, DRIVEWAY, LANDSCAPING, HARDSCAPING, CURB AND GUTTER, AND CROSS-GUTTER IN PLACE, UNLESS OTHERWISE SPECIFIED.
3. COORDINATE WITH THE RESPECTIVE UTILITY OWNERS FOR PROTECTION IN PLACE OR RELOCATION OF THEIR FACILITY/UTILITY.
4. REMOVE AND REPLACE LANDSCAPING/HARDSCAPING, STREET/TRAFFIC SIGN, STRIPING, MARKERS, CURB & GUTTER, AND SIDEWALK TO THE NEAREST JOINT IN KIND AND IN PLACE.
5. REMOVE AND DISPOSE OF EXISTING CONFLICTING STORM DRAIN.
6. CONSTRUCT 42-INCH HDPE, DR 17 PIPE.
8. CONSTRUCT 18-INCH HDPE, DR 17 PIPE.
9. INSTALL HDPE 90° TEE JOINT FITTING FOR 42-INCH TO 18-INCH HDPE PIPES.
10. INSTALL HDPE 60° TEE JOINT FITTING FOR 42-INCH TO 18-INCH HDPE PIPES.
11. CONSTRUCT CURB OPENING CATCH BASIN, W=10' & H=4" PER SPPWC STD. PLAN NO. 300-4.
17. CONSTRUCT LOCAL DEPRESSIONS AT CATCH BASINS PER SPPWC STD. PLAN NO. 313-4.
18. CONSTRUCT MANHOLE - PIPE TO PIPE PER SPPWC STD. PLAN NO. 322-3 (F=7" MIN.) AND WITH PRESSURE MANHOLE SHAFT AND PRESSURE PLATE DETAIL 36-INCH WITHOUT REDUCER PER SPPWC STD. PLAN NO. 329-2.
19. CONSTRUCT PIPE CONNECTIONS TO EXISTING STORM DRAINS PER SPPWC STD. PLAN NO. 335-2.
20. CONSTRUCT TRANSITION STRUCTURE PIPE TO PIPE PER SPPWC STD. PLAN NO. 340-2 (F=7" MIN., T=6" MIN.).
21. CONSTRUCT CONCRETE COLLAR ON STORM DRAIN PIPE PER SPPWC STD. PLAN NO. 380-4 (L=18" & T=9" MIN.).
22. CONSTRUCT MODIFIED JUNCTION STRUCTURE - PIPE TO PIPE AT HDPE TEE JOINT FITTING WITH 8" THICKNESS AROUND MAIN LINE WITH T=6" AROUND LATERAL AND C=2' PER SPPWC STD. PLAN NO. 331-3. CONCRETE CRADLE LENGTH, L=4' AT CENTER OF FITTING, CLASS 560-C-3250 WITH RE-BAR AS SHOWN ON STD. PLAN.
24. EXTEND CATCH BASIN WALLS 6 INCHES ABOVE FINISHED GRADE.



BEACH PATH ~ LINE "A"



BEACH PATH ~ LINE "A"

SCALE IN FEET
1 inch = 20 ft

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

PREPARED BY:
AKM CONSULTING ENGINEERS
553 WALD
IRVINE, CA. 92618
(949) 753-7333

R.C.E. NO. C038983 | DATE

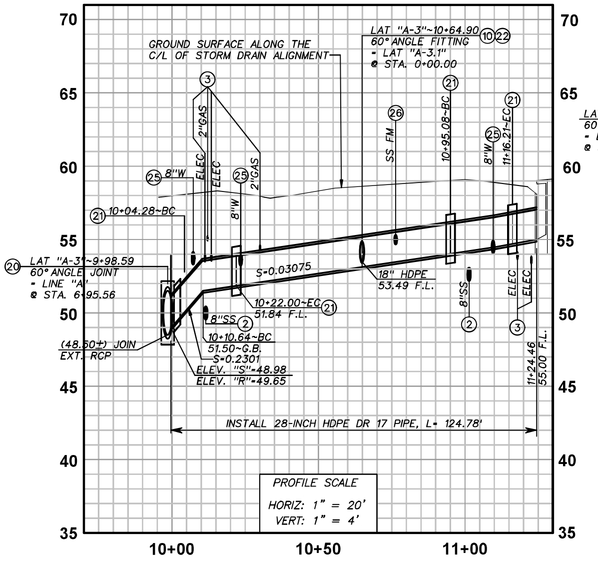
REV.	DATE:	DESCRIPTION	BY:	APP'VD:

REVISIONS | REFERENCES | APPROVALS (DATE: | BY: | SIGNATURE: | TITLE)

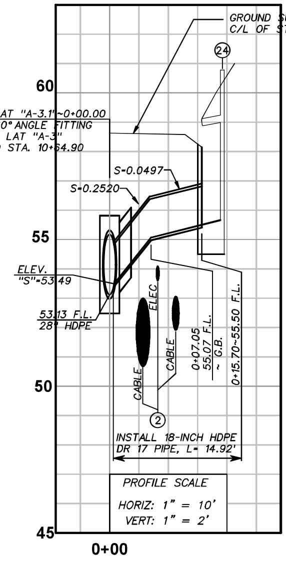
ENGINEERING SCALE : AS SHOWN
DRAWN BY : R. U. | DESIGNED BY : M. Y. | DATE: 08/2023
CHECKED BY : N. M. | 08/2023
APPROVED :
KIEL KOGER, RCE 63974 — DATE
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

STORM DRAIN WITHIN BEACH PATH
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS
CITY OF SAN CLEMENTE
DRAWING NO:

California Coastal Commission
5-23-0397
Exhibit 2
Page 6 of 12



LAT "A-3"



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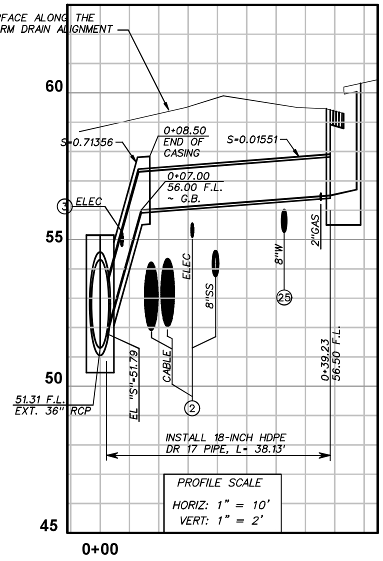

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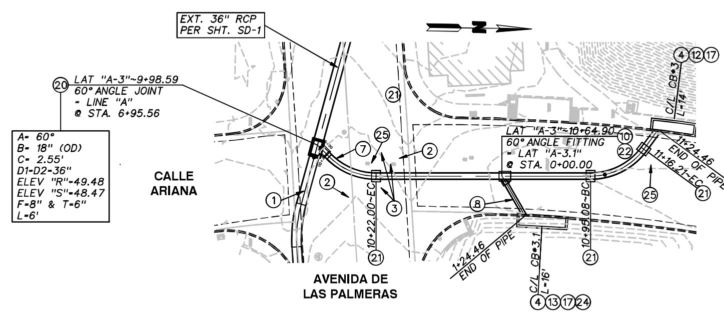
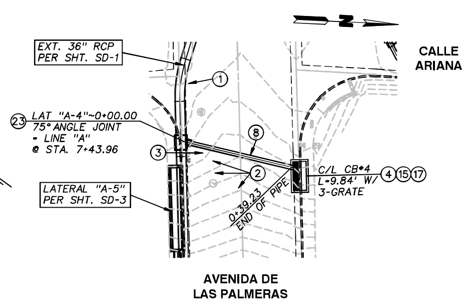


CALLE ARIANA ~ LATERAL "A-3" & "A-3.1"



AVENIDA DE LAS PALMERAS LATERAL "A-4"

CONSTRUCTION NOTES:

1. PROTECT EXISTING STORM DRAIN SYSTEM IN PLACE INCLUDING PIPE LINE, CATCH BASIN AND MANHOLE.
2. PROTECT EXISTING FACILITY/UTILITY, SIDEWALK, DRIVEWAY, LANDSCAPING, HARDSCAPING, CURB AND GUTTER, AND CROSS-GUTTER IN PLACE, UNLESS OTHERWISE SPECIFIED.
3. COORDINATE WITH THE RESPECTIVE UTILITY OWNERS FOR PROTECTION IN PLACE OR RELOCATION OF THEIR FACILITY/UTILITY.
4. REMOVE AND REPLACE LANDSCAPING/HARDSCAPING, STREET/TRAFFIC SIGN, STRIPING, MARKERS, CURB & GUTTER, AND SIDEWALK TO THE NEAREST JOINT IN KIND AND IN PLACE.
7. CONSTRUCT 28-INCH HDPE, DR 17 PIPE.
8. CONSTRUCT 18-INCH HDPE, DR 17 PIPE.
10. INSTALL HDPE 60° TEE JOINT FITTING FOR 42-INCH TO 18-INCH HDPE PIPES.
12. CONSTRUCT CURB OPENING CATCH BASIN, W=14' & H=4" PER SPPWC STD. PLAN NO. 300-4.
13. CONSTRUCT CURB OPENING CATCH BASIN, W=16' & H=4" PER SPPWC STD. PLAN NO. 300-4.
15. CONSTRUCT CURB OPENING CATCH BASIN, W=9.84' & H=4" WITH 3-GRATE PER SPPWC STD. PLAN NO. 301-4.
17. CONSTRUCT LOCAL DEPRESSIONS AT CATCH BASINS PER SPPWC STD. PLAN NO. 313-4.
20. CONSTRUCT TRANSITION STRUCTURE PIPE TO PIPE PER SPPWC STD. PLAN NO. 340-2 (F=7" MIN., T=6" MIN.).
21. CONSTRUCT CONCRETE COLLAR ON STORM DRAIN PIPE PER SPPWC STD. PLAN NO. 380-4 (L=18" & T=9" MIN.).
22. CONSTRUCT MODIFIED JUNCTION STRUCTURE - PIPE TO PIPE AT HDPE TEE JOINT FITTING WITH 8" THICKNESS AROUND MAIN LINE WITH T=6" AROUND LATERAL AND C=2' PER SPPWC STD. PLAN NO. 331-3. CONCRETE CRADLE LENGTH, L=4' AT CENTER OF FITTING, CLASS 560-C-3250 WITH RE-BAR AS SHOWN ON STD. PLAN.
23. CORE DRILL EXISTING STORM DRAIN FOR PIPE CONNECTIONS TO EXISTING STORM DRAINS PER SPPWC STD. PLAN NO. 335-2 AND CONSTRUCT MODIFIED JUNCTION STRUCTURE - PIPE TO PIPE AT HDPE TEE JOINT FITTING WITH 8" THICKNESS AROUND MAIN LINE WITH T=6" AROUND LATERAL AND C=2' PER SPPWC STD. PLAN NO. 331-3. CONCRETE CRADLE LENGTH, L=4' AT CENTER OF FITTING, CLASS 560-C-3250 WITH RE-BAR AS SHOWN ON STD. PLAN.
24. EXTEND CATCH BASIN WALLS 6 INCHES ABOVE FINISHED GRADE.
25. REMOVE AND RE-CONSTRUCT CONFLICTING WATER LINE PER CITY APPROVAL.
26. REMOVE AND DISPOSE OF EXISTING CONFLICTING SEWER FORCE MAIN AND RE-CONSTRUCT NEW SEWER FORCE MAIN PER CITY APPROVAL.

20 10 0 20 40
SCALE IN FEET
1 inch = 20 ft

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

PREPARED BY: AKM CONSULTING ENGINEERS, 553 WALD, IRVINE, CA. 92618, (949) 753-7333
R.C.E. NO. C038983 DATE

REV.	DATE:	DESCRIPTION	BY:	APP'VD:		DATE:	BY:	SIGNATURE:	TITLE
REVISIONS					REFERENCES	APPROVALS			

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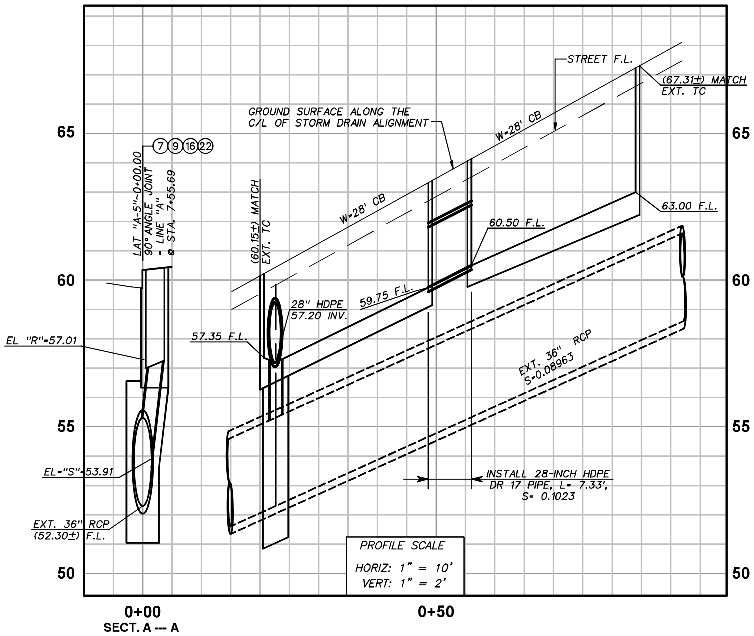
CHECKED BY : N. M. — 08/2023
APPROVED :
KIEL KOGER, RCE 63974 — DATE
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

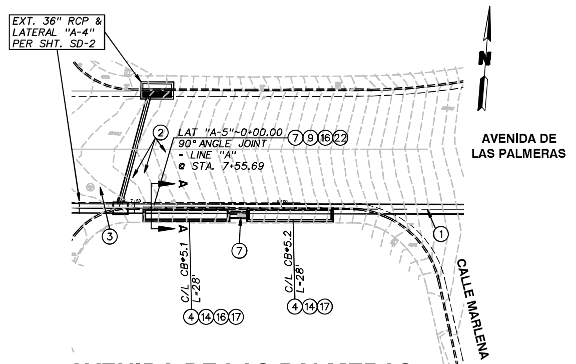
STORM DRAIN WITHIN CALLE ARIANA
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS
CITY OF SAN CLEMENTE
DRAWING NO: SD-2

8/2/2023 2:59:28 PM - H:\0100 SAN CLEMENTE\1766 CYPRUS SHORES\STORM DRAIN\02_PNP_SHT_02.DWG - RAFAEL URIBE

California Coastal Commission
5-23-0397
Exhibit 2
Page 7 of 12



LAT "A-5"



AVENIDA DE LAS PALMERAS LATERAL "A-5"

CONSTRUCTION NOTES:

(1)—PROTECT EXISTING STORM DRAIN SYSTEM IN PLACE INCLUDING PIPE LINE, CATCH BASIN AND MANHOLE.

(2)—PROTECT EXISTING FACILITY/UTILITY, SIDEWALK, DRIVEWAY, LANDSCAPING, HARDSCAPING, CURB AND GUTTER, AND CROSS-GUTTER IN PLACE, UNLESS OTHERWISE SPECIFIED.

(3)—COORDINATE WITH THE RESPECTIVE UTILITY OWNERS FOR PROTECTION IN PLACE OR RELOCATION OF THEIR FACILITY/UTILITY.

(4)—REMOVE AND REPLACE LANDSCAPING/HARDSCAPING, STREET/TRAFFIC SIGN, STRIPING, MARKERS, CURB & GUTTER, AND SIDEWALK TO THE NEAREST JOINT IN KIND AND IN PLACE.

(7)—CONSTRUCT 28-INCH HDPE, DR 17 PIPE.

(9)—INSTALL HDPE 90° TEE JOINT FITTING FOR 42-INCH TO 18-INCH HDPE PIPES.

(14)—CONSTRUCT CURB OPENING CATCH BASIN, W=28' & H=4" PER SPPWC STD. PLAN NO. 300-4.

(16)—CONSTRUCT MONOLITHIC CATCH BASIN CONNECTION PER SPPWC STD. PLAN NO. 308-3.

(17)—CONSTRUCT LOCAL DEPRESSIONS AT CATCH BASINS PER SPPWC STD. PLAN NO. 313-4.

(22)—CONSTRUCT MODIFIED JUNCTION STRUCTURE - PIPE TO PIPE AT HDPE TEE JOINT FITTING WITH 8" THICKNESS AROUND MAIN LINE WITH T=6" AROUND LATERAL AND C=2' PER SPPWC STD. PLAN NO. 331-3. CONCRETE CRADLE LENGTH, L=4' AT CENTER OF FITTING, CLASS 560-C-3250 WITH RE-BAR AS SHOWN ON STD. PLAN.

GENERAL NOTES TO CONTRACTOR:

1. THE CONTRACTOR MUST HORIZONTALLY AND VERTICALLY VERIFY ALL OF THE EXISTING UTILITIES CROSSING AT THE PROPOSED STORM DRAIN PRIOR TO WORKING ON THE PROJECT.

2. TRENCH BACKFILL AND COMPACTION

BEDDING MATERIAL USED WITHIN THE PIPE ZONE SHOULD CONFORM TO THE REQUIREMENTS OF THE CURRENT GREENBOOK, THE CITY OF SAN CLEMENTE SPECIFICATIONS, AND TH PIPE MANUFACTURER. WHERE APPLICABLE, SAND HAVING A SAND EQUIVALENT (SE) OF 20 OR GREATER (PER CALTRANS TEST METHOD [CTM] 217) MAY BE USED TO BED AND SHADE THE PIPES WITHIN THE BEDDING ZONE. SAND BACKFILL SHOULD BE DENSIFIED BY JETTING OR FLOODING AND THEN TAMPED TO ENSURE ADEQUATE COMPACTION. BEDDING SAND SHOULD BE FROM A NATURAL SOURCE, MANUFACTURED SAND FROM RECYCLED MATERIAL IS NOT SUITABLE FOR JETTING. THE ONSITE SOILS MAY GENERALLY BE CONSIDERED SUITABLE AS TRENCH BACKFILL (ZONE DEFINED AS 12 INCHES ABOVE THE PIPE TO SUBGRADE), PROVIDED THE SOILS ARE SCREENED OF ROCKS GREATER THAN 6 INCHES IN MAXIMUM DIMENSION, CONSTRUCTION DEBRIS AND ORGANIC MATERIAL. TRENCH BACKFILL SHOULD BE COMPACTED IN UNIFORM LIFTS BY MECHANICAL MEANS TO AT LEAST 90 PERCENT RELATIVE COMPACTION (PER ASTM D1557). IF GAP-GRADED $^{6}/_{64}$-INCH ROCK IS USED FOR BACKFILL (AROUND STORM DRAIN, ETC.) IT WILL REQUIRE COMPACTION. ROCK SHALL BE PLACED IN THIN LIFTS (TYPICALLY NOT EXCEEDING 6 INCHES) AND MECHANICALLY COMPACTED WITH OBSERVATION BY GEOTECHNICAL CONSULTANT. BACKFILL ROCK SHALL MEET THE REQUIREMENTS OF ASTM D2321. GAP-GRADED ROCK SHOULD BE WRAPPED IN FILTER FABRIC (MIRAFI 140N OR APPROVED ALTERNATIVE) TO PREVENT THE MIGRATION OF FINES INTO THE ROCK BACKFILL.

IN BACKFILL AREAS WHERE MECHANICAL COMPACTION OF TRENCH BACKFILL IS IMPRACTICAL DUE TO SPACE CONSTRAINTS OR AS AN ALTERNATIVE TO CONVENTIONAL TRENCH BACKFILL, TYPICALLY SAND-CEMENT SLURRY MAY BE USED. THE SLURRY SHOULD GENERALLY CONTAIN ABOUT ONE SACK OF CEMENT PER CUBIC YARD. WHEN SET, SUCH A MIX TYPICALLY HAS THE CONSISTENCY OF COMPACTED SOIL.

THE STORM DRAIN TRENCH BOTTOMS SHALL BE STABILIZED BY OVER DIGGING THE TRENCH BOTTOM TO REACH SUITABLE SUBGRADE AND BACKFILLING THE TRENCH BOTTOM (BELOW THE PIPE ZONE) WITH AGGREGATE BASE (AB) PER THE CITY OF SAN CLEMENTE SPECIFICATIONS. AS AN ALTERNATIVE TO AGGREGATE BASE, $^{6}/_{64}$-INCH CRUSHED ROCK MAY ALSO BE USED. BASED ON OUR EXPERIENCE WITH SIMILAR PROJECTS AND THE ANTICIPATED SITE CONDITIONS, IT WOULD BE PRUDENT TO ASSUME A MINIMUM THICKNESS OF 2 FEET OF COMPACTED CRUSHED ROCK/AB BELOW THE STORM DRAIN TRENCH PIPE ZONE. THE ACTUAL THICKNESS OF CRUSHED ROCK/AB REQUIRED TO STABILIZE THE TRENCH EXCAVATION BOTTOM SHALL BE DETERMINED IN THE FIELD BASED ON THE ACTUAL CONDITIONS AND EQUIPMENT USED. DEEPER OVER DIGGING AND BACKFILLING WITH CRUSHED ROCK/AB MAY BE REQUIRED.

AGGREGATE BASE MATERIAL SHOULD BE COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION AT OR SLIGHTLY ABOVE OPTIMUM MOISTURE CONTENT PER ASTM D1557. SUBGRADE BELOW AGGREGATE BASE SHOULD BE COMPACTED TO AT LEAST 90 PERCENT RELATIVE COMPACTION PER ASTM D1557 AT NEAR-OPTIMUM MOISTURE CONTENT (GENERALLY WITHIN OPTIMUM AND 2 PERCENT ABOVE OPTIMUM MOISTURE CONTENT).

A REPRESENTATIVE FROM LGC GEOTECHNICAL SHOULD OBSERVE, PROBE, AND TEST BACKFILL TO VERIFY COMPLIANCE WITH THE PROJECT RECOMMENDATIONS.

20 10 0 20 40
SCALE IN FEET
1 inch = 20 ft

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

PREPARED BY:
AKM CONSULTING ENGINEERS
553 WALD
IRVINE, CA. 92618
(949) 753-7333

R.C.E. NO. C038983 DATE

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REVISIONS					REFERENCES	APPROVALS			

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DRAWN BY : R. U. DESIGNED BY : M. y. 08/2023
CHECKED BY : N. M. 08/2023
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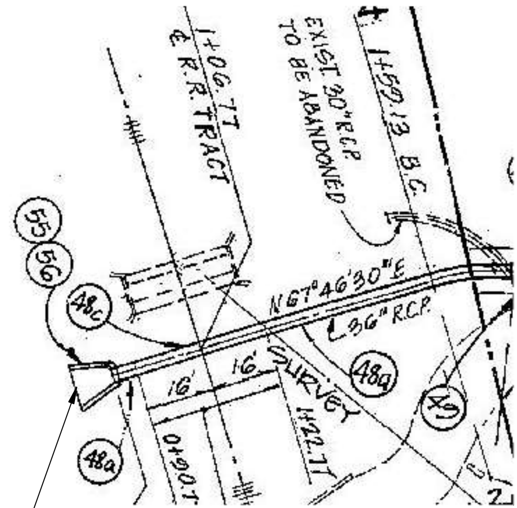
KIEL KOGER, RCE 63974 DATE
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

STORM DRAIN WITHIN AVENIDA DE LAS PALMERAS
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS
CITY OF SAN CLEMENTE
DRAWING NO:

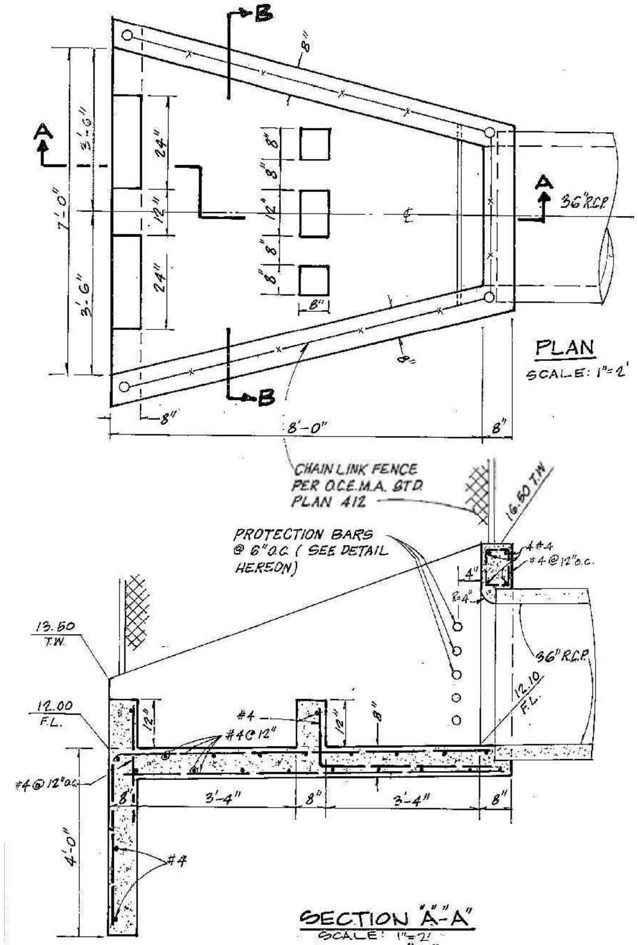
California Coastal Commission
5-23-0397
Exhibit 2
Page 8 of 12

CONSTRUCTION NOTES:

(27) REMOVE EXISTING DAMAGED OUTLET STRUCTURE AND RECONSTRUCT NEW OUTLET STRUCTURE PER CITY AS-BUILT FOR TRACT NO. 10225, SHEET 13 OF 22, AS DEPICTED HEREIN.



EXISTING DAMAGED OUTLET STRUCTURE AT OCEAN OUTLET (27)



OUTLET HEADWALL DETAILS (55)

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

PREPARED BY: AKM CONSULTING ENGINEERS, 553 WALD, IRVINE, CA. 92618, (949) 753-7333

R.C.E. NO. C038983 DATE

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CHECKED BY : N. M. 08/2023

APPROVED :

KIEL KOGER, RCE 63974 DATE
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

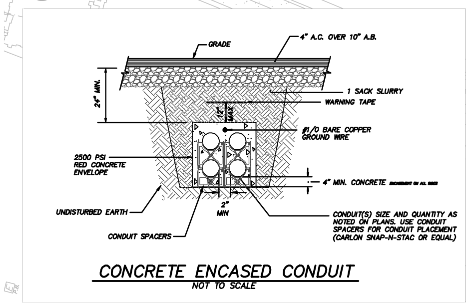
STORM DRAIN OUTLET

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

CITY OF SAN CLEMENTE

DRAWING NO: SD-4

California Coastal Commission
5-23-0397
Exhibit 2
Page 9 of 12



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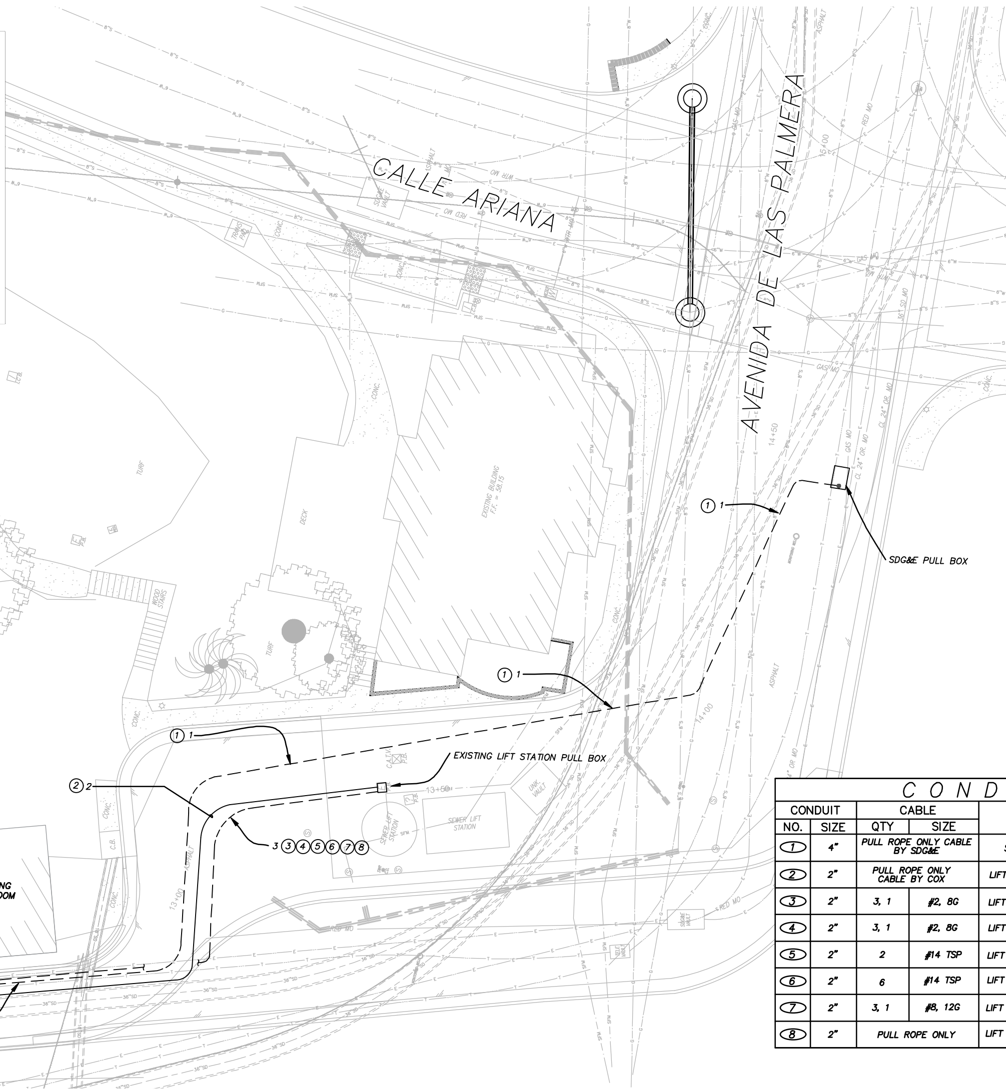

CONSTRUCTION NOTES:

1. CONSTRUCT 4" CONDUIT WITH PULL ROPES AND PULL BOXES PER NEC & SDG&E REQUIREMENTS.
2. CONSTRUCT 2" COX SERVICE CONDUIT AND PULL BOXES FROM EXISTING LIFT STATION PULL BOX TO EXISTING ELECTRICAL BUILDING. PROVIDE CONDUIT SEALS AT EXISTING PULL BOX.
3. CONSTRUCT CONCRETE ENCASED 6 NEW 2" CONDUITS WITH PULL BOXES AND PULL ROPES. PROVIDE CONDUIT SEALS. TERMINATE CONDUITS IN A PULL BOX FOR FUTURE EXTENSIONS.

SHEET NOTE:

1. ALL ELECTRICAL WORK SHALL COMLPY WITH NEC AND SDG&E REQUIREMENTS, INCLUDING TRENCH WORK.
2. ALIGNMENTS SHOWN ARE SCHEMATIC CONTRACTOR SHALL SUBMIT CONDUIT ALIGNMENTS, INCLUDING PULL BOXES FOR REVIEW AND APPROVAL BY SDG&E AND CITY OF SAN CLEMENTE

CONDUIT SCHEDULE

CONDUIT		CABLE		FROM	TO	REMARKS
NO.	SIZE	QTY	SIZE			
1	4"	PULL ROPE ONLY CABLE BY SDG&E		SDG&E PULL BOX	NEW SDG&E TRANSFORMER PAD	LIFT STATION ELECTRICAL SERVICE
2	2"	PULL ROPE ONLY CABLE BY COX		LIFT STATION PULL BOX	NEW PULL BOX AT EXISTING ELECTRICAL ROOM	FOR CONNECTION TO FUTURE SCADA PANEL IN EXISTING ELECTRICAL ROOM
3	2"	3, 1	#2, 8G	LIFT STATION PULL BOX	NEW PULL BOX AT EXISTING ELECTRICAL ROOM	FOR CONNECTION TO FUTURE MCC IN EXISTING ELECTRICAL ROOM-P1 STARTER
4	2"	3, 1	#2, 8G	LIFT STATION PULL BOX	NEW PULL BOX AT EXISTING ELECTRICAL ROOM	FOR CONNECTION TO FUTURE MCC IN EXISTING ELECTRICAL ROOM-P2 STARTER
5	2"	2	#14 TSP	LIFT STATION PULL BOX	NEW PULL BOX AT EXISTING ELECTRICAL ROOM	FOR CONNECTION TO FUTURE PLC PANEL IN EXISTING ELECTRICAL ROOM-FLOW
6	2"	6	#14 TSP	LIFT STATION PULL BOX	NEW PULL BOX AT EXISTING ELECTRICAL ROOM	FOR CONNECTION TO FUTURE PLC PANEL IN EXISTING ELECTRICAL ROOM-LEVEL, LIMIT,SWITCHES
7	2"	3, 1	#8, 12G	LIFT STATION PULL BOX	NEW PULL BOX AT EXISTING ELECTRICAL ROOM	FOR CONNECTION TO FUTURE MCC IN EXISTING ELECTRICAL ROOM-POWER TO LIGHTS, RECEPTACLES
8	2"	PULL ROPE ONLY		LIFT STATION PULL BOX	NEW PULL BOX AT EXISTING ELECTRICAL ROOM	SPARE

REGISTERED PROFESSIONAL ENGINEER OMER ZEKI KAYIRAN No. 29330 Exp. 3/31/25 CIVIL STATE OF CALIFORNIA

PREPARED BY:
AKM CONSULTING ENGINEERS
553 WALD
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(949) 753-7333
R.C.E. NO. 29330

OCTOBER 12, 2023
DATE

REV.	DATE:	DESCRIPTION	BY:	APP'VD:

REVISIONS

REFERENCES

DATE	BY	SIGNATURE	TITLE

APPROVALS

(SEE SHEET T-1 OF 14)

APPROVALS

SEWER LIFT STATION SITE AND CONDUIT PLAN

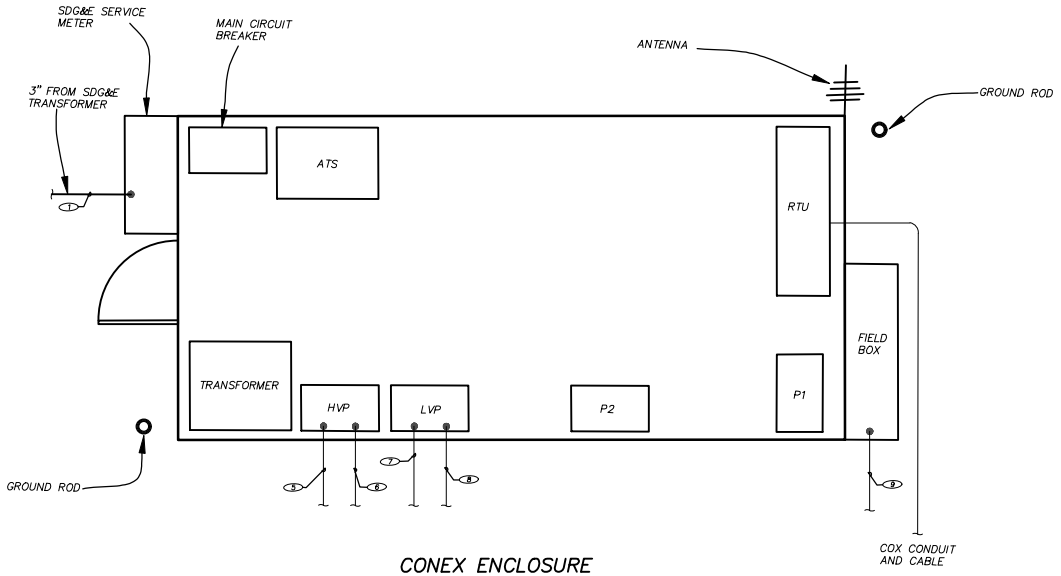
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

CITY OF SAN CLEMENTE

DRAWING NO:

OF 14

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS



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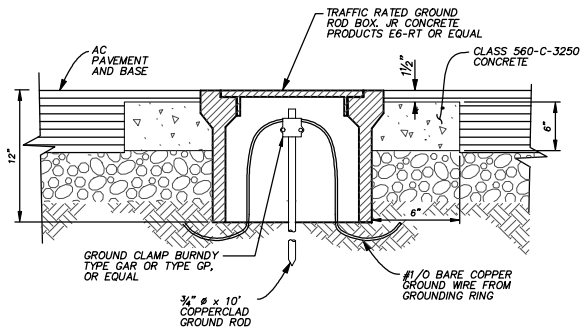

GROUND ROD AND WELL DETAIL

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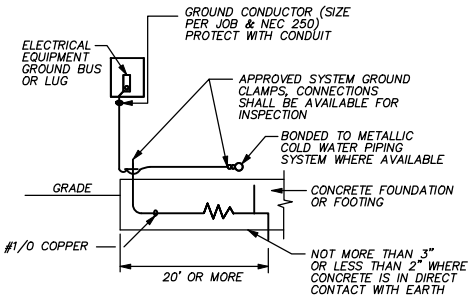

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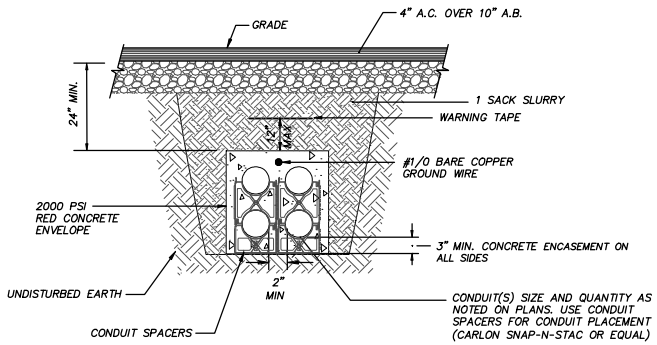

CONCRETE ENCASED CONDUIT

NOT TO SCALE

PREPARED BY:

AKM CONSULTING ENGINEERS
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IRVINE, CA. 92618
(949) 753-7333

R.C.E. NO. _____ DATE

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

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CHECKED BY : 08/2023
APPROVED :

KIEL KOGER, RCE 63974 DATE
PUBLIC WORKS DIRECTOR/ CITY ENGINEER

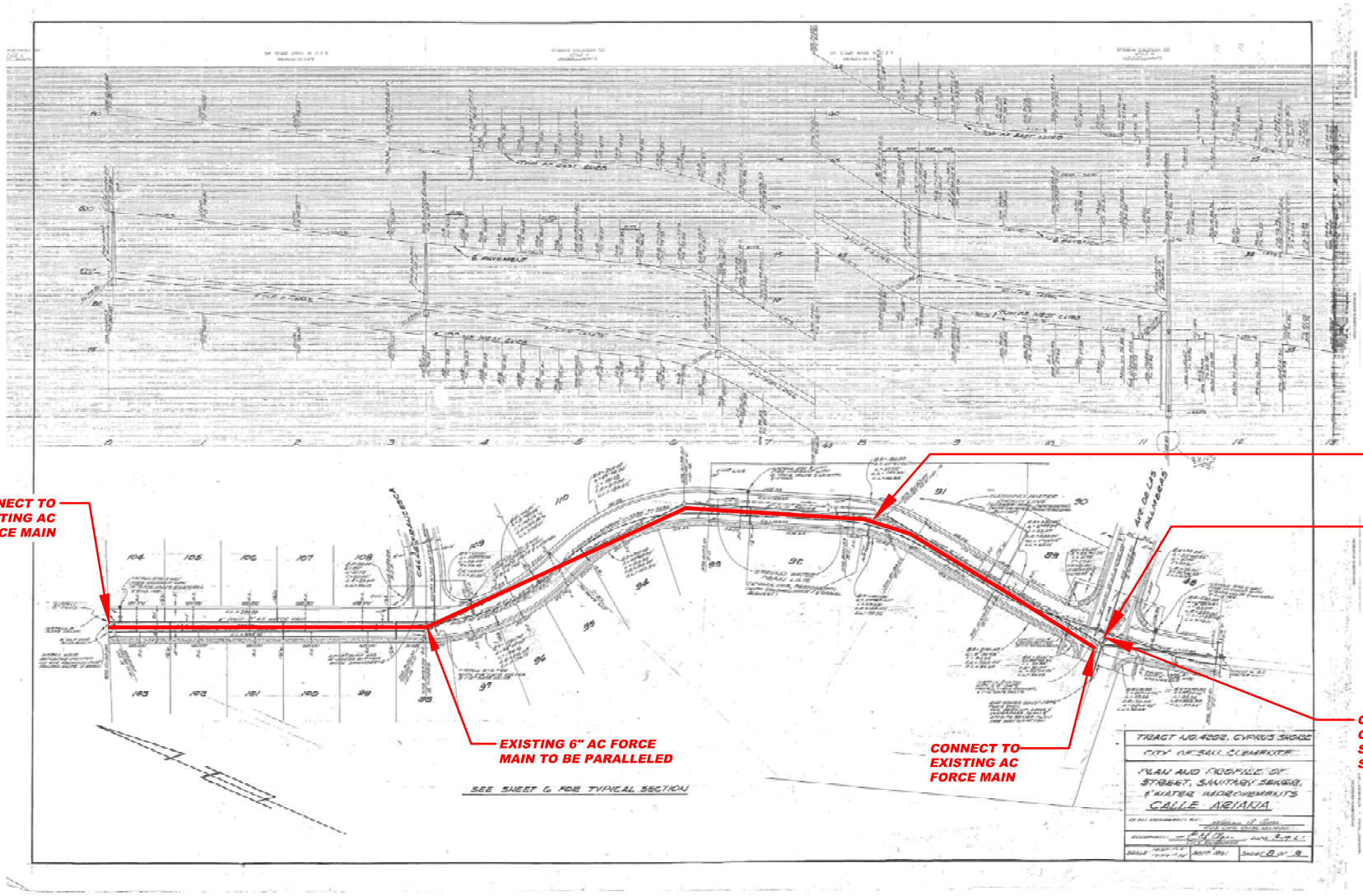
CONEX ENCLOSURE AND DETAIL

CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

CITY OF SAN CLEMENTE

DRAWING NO:

SHEET OF



CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS

PREPARED BY:
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(949) 753-7333
October 12, 2023
R.C.E. NO. 29330 DATE

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REFERENCES

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APPROVALS			

(SEE SHEET T-1 OF 14)
APPROVALS

FUTURE PARALLEL 6" SEWER FORCEMAIN
CYPRUS SHORE GRADING, STORM DRAIN AND SEWER LIFT STATION IMPROVEMENTS
CITY OF SAN CLEMENTE

DRAWING NO:
SHEET 14 OF 14

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City of San Clemente

910 Calle Negocio, Suite 100
San Clemente, CA 92673
Tel: (949) 361-3600
Fax: (949) 361-8316

LOCATION MAP

Cyprus Shore Sewer Run

S:\cu\public\CMMS\GIS\Users Files\Jake Ohana\Miscellaneous Requests\Dave R\Cyprus Shores Sewer\Sewer Run from LS to WRP\Sewer Run_Zoomed.mxd

City of San Clemente

910 Calle Negocio, Suite 100
San Clemente, CA 92673
Tel: (949) 361-3600
Fax: (949) 361-8316

LOCATION MAP

Cyprus Shore Sewer Run

S:\cu\public\CMMS\GIS\Users Files\Jake Ohana\Miscellaneous Requests\Dave R\Cyprus Shores Sewer\Sewer Run from LS to WRP\Sewer Run_Zoomed.mxd

City of San Clemente

910 Calle Negocio, Suite 100
San Clemente, CA 92673
Tel: (949) 361-3600
Fax: (949) 361-8316

LOCATION MAP

Cyprus Shore Sewer Run

Figure 5: Storm Drain Restoration (in-kind)

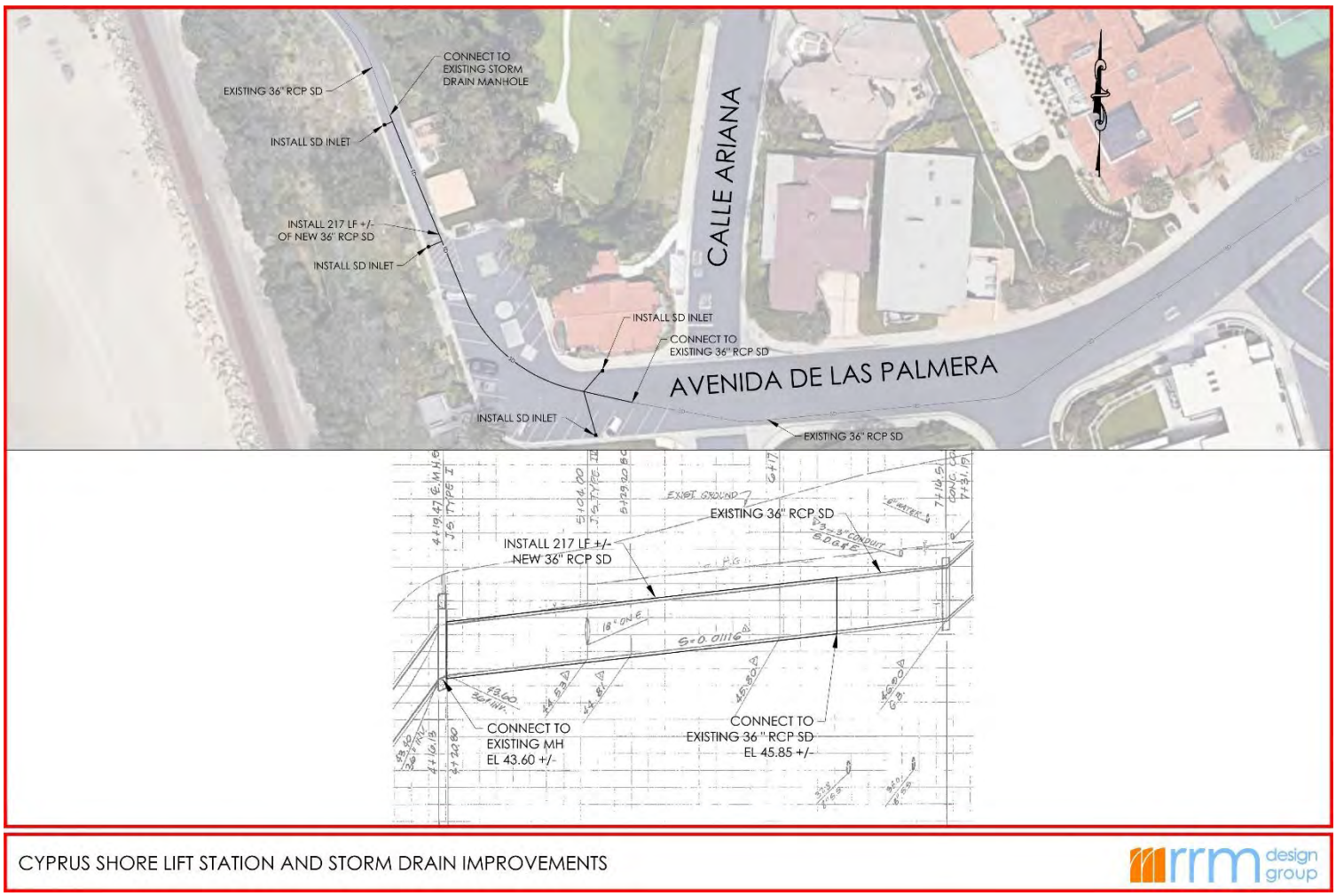
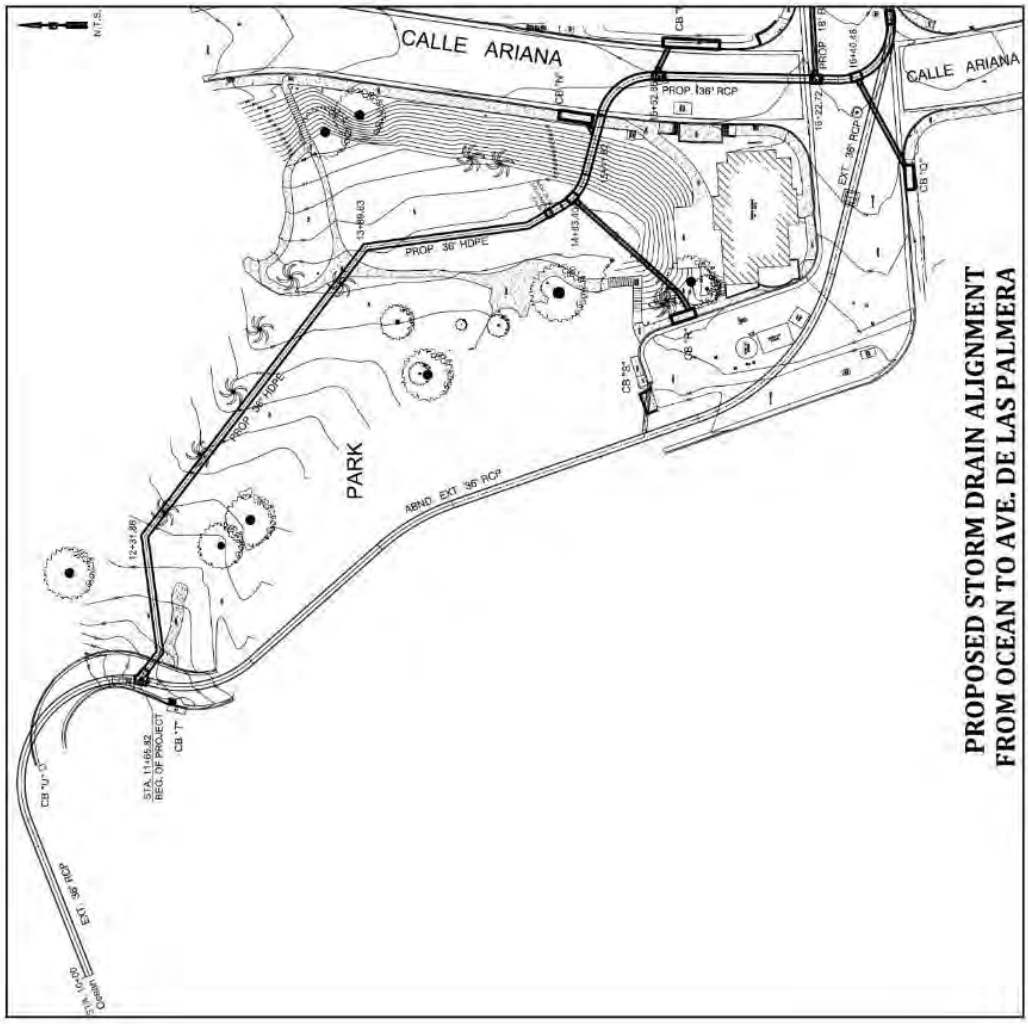


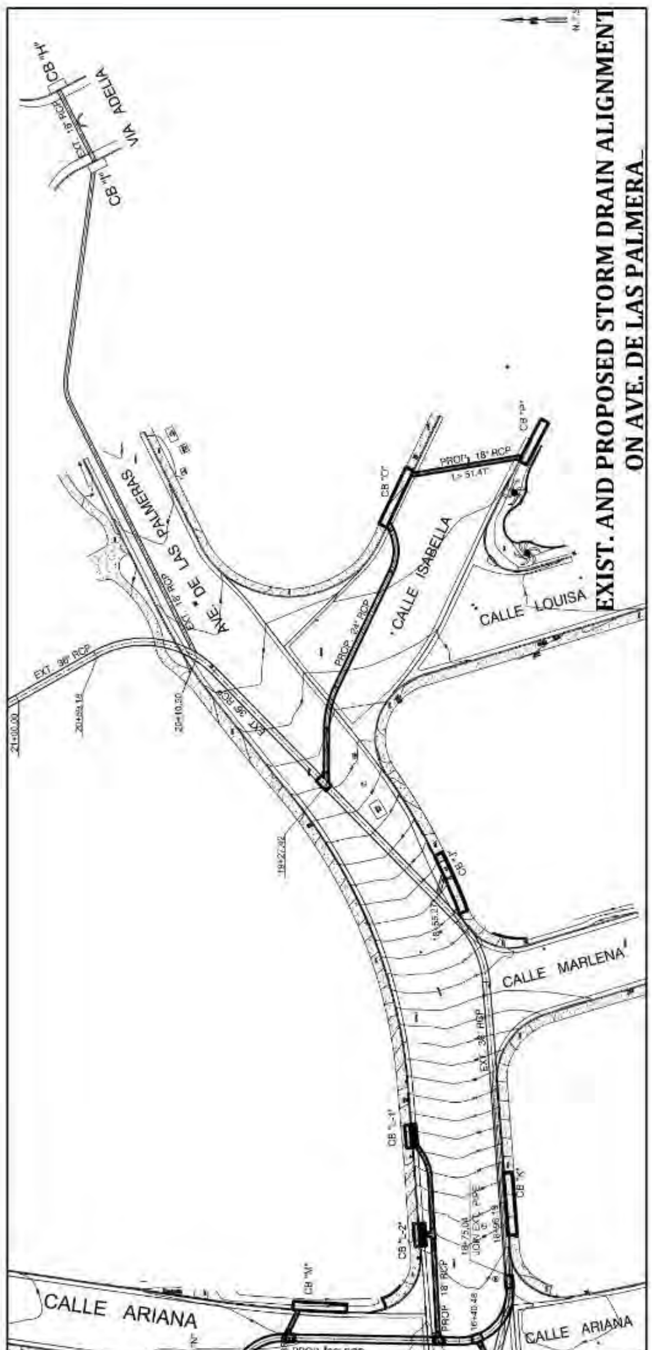
Figure 6: Storm Drain Realignment

CYPRUS SHORE STORM DRAIN RELOCATION PROJECT

The following exhibits provide an overview of the proposed realignment:



CYPRUS SHORE STORM DRAIN RELOCATION PROJECT



California Coastal Commission
5-23-0397
Exhibit 5
Page 2 of 2

Figure 7: Existing Sewer Lift Station Rehabilitation

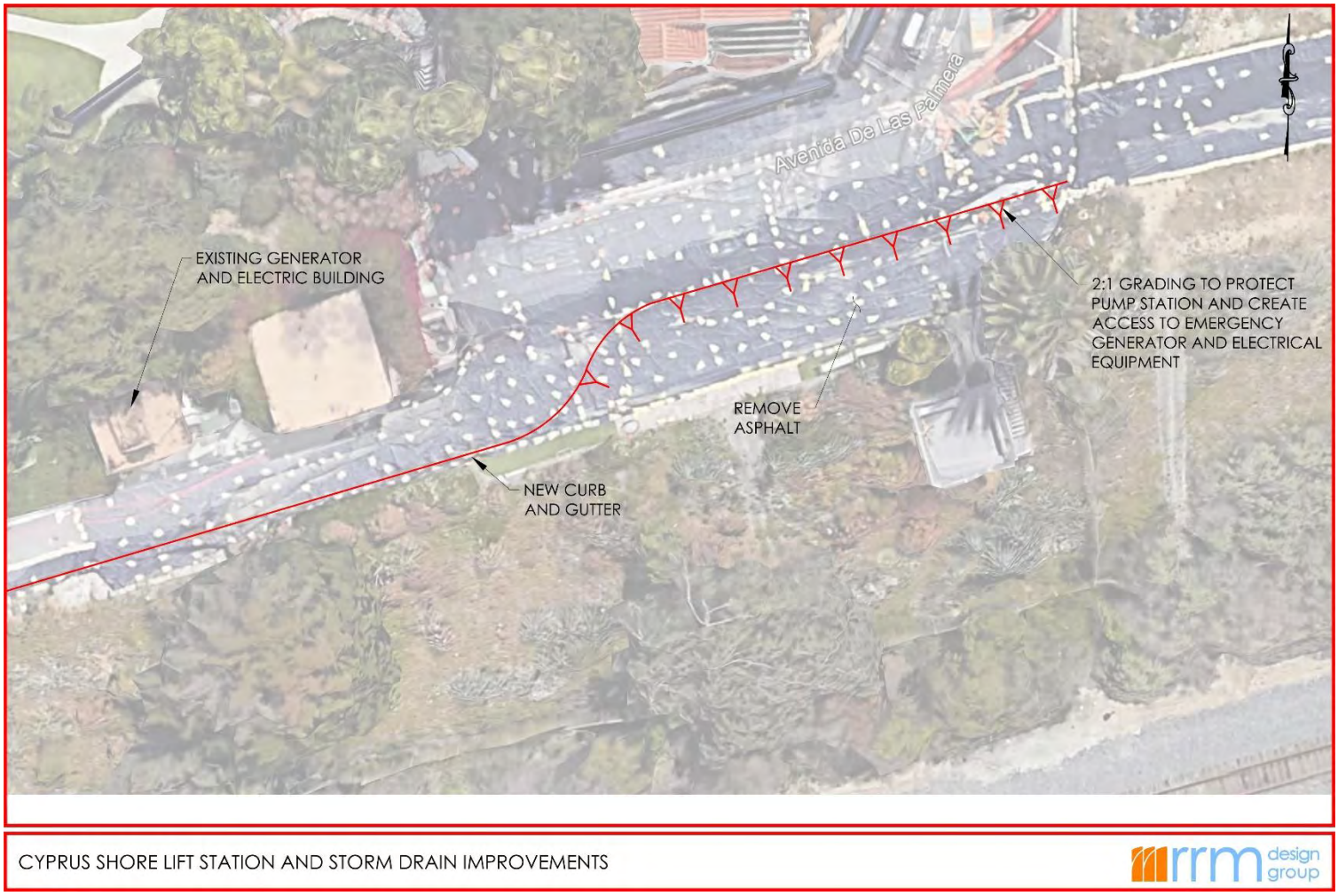
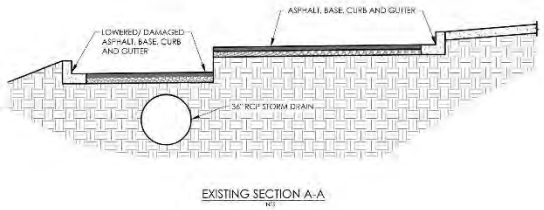
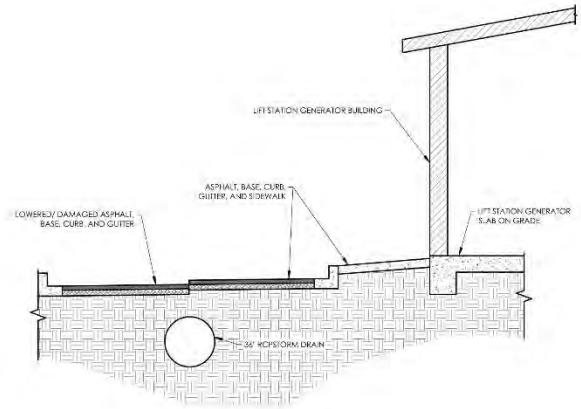


Figure 7a: Existing Conditions



EXISTING SECTION A-A



EXISTING SECTION B-B

CYPRUS SHORE LIFT STATION AND STORM DRAIN IMPROVEMENTS

rrm design group

Figure 7b: Proposed Conditions

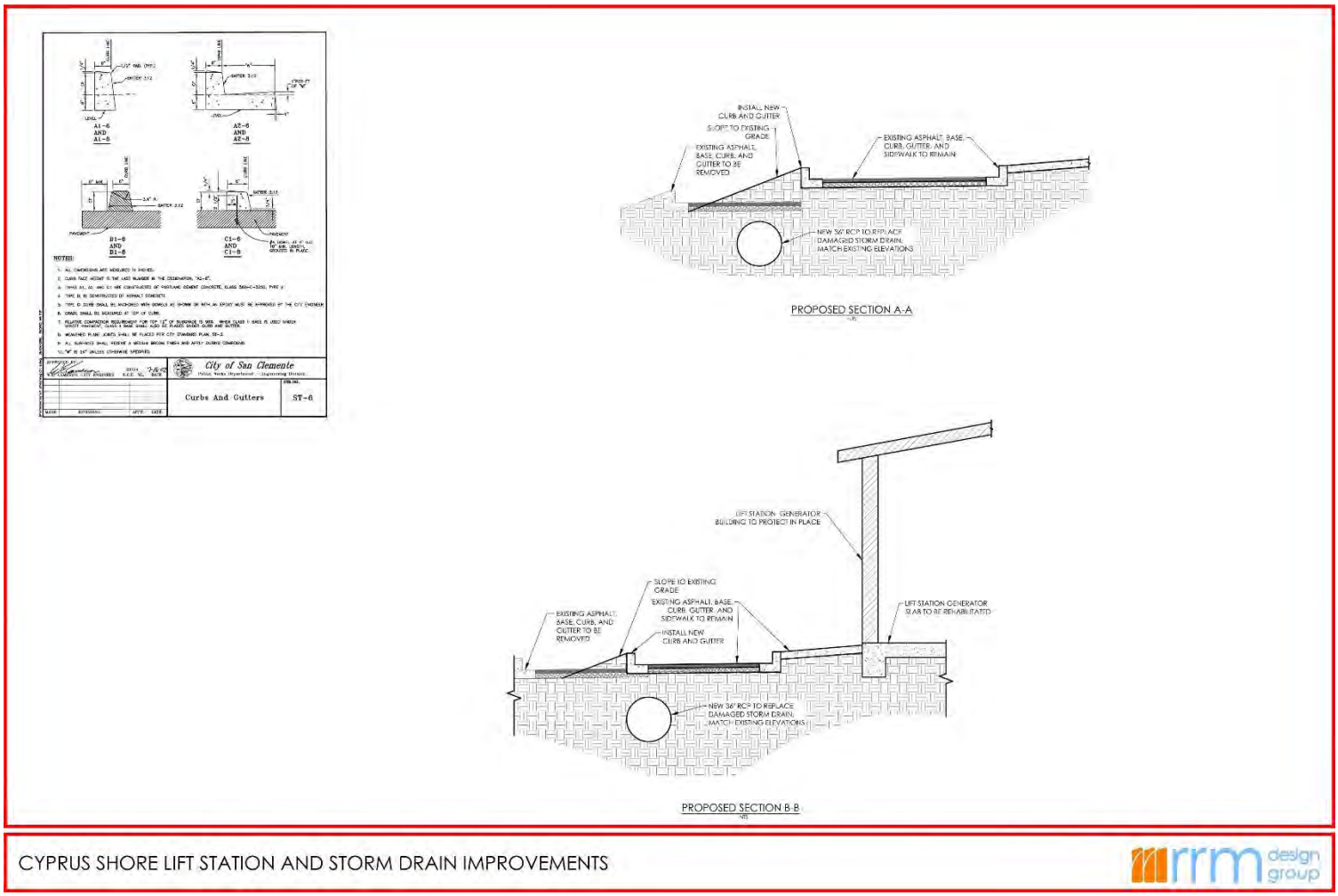


Figure 8a: Sewer Lift Station Relocation (for a single lift station)

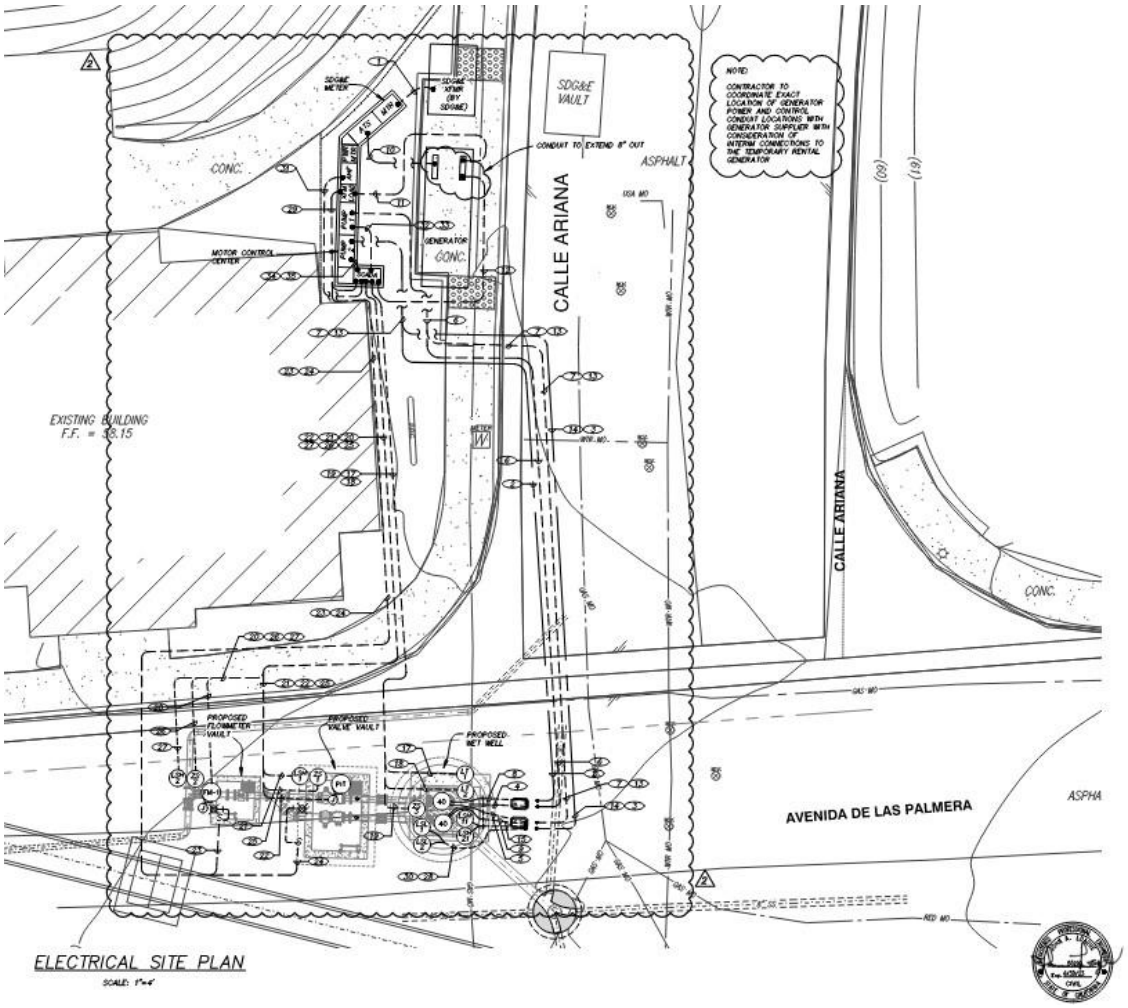
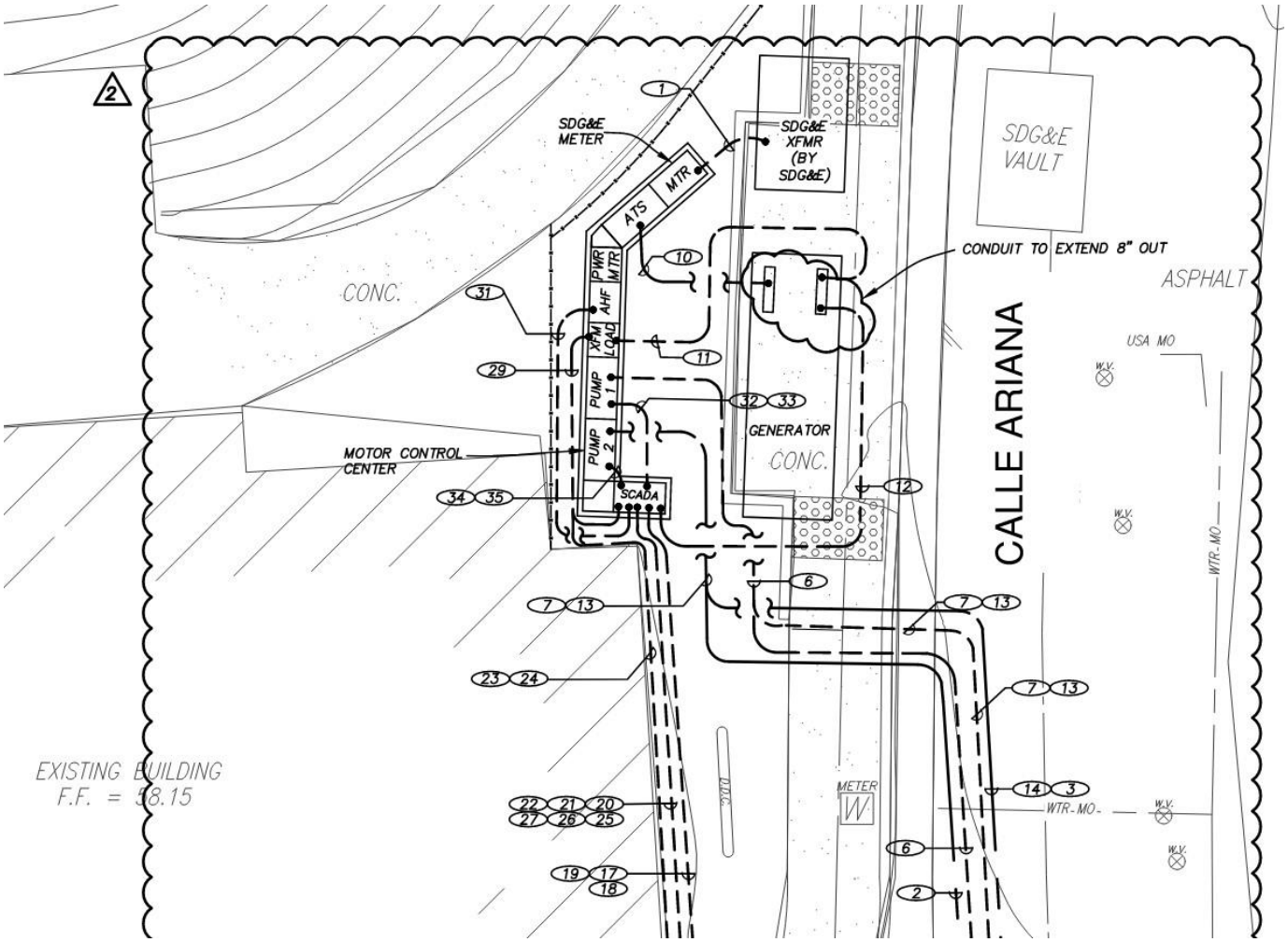


Figure 8b: Single Sewer Lift Station Relocation Electrical Site Plan



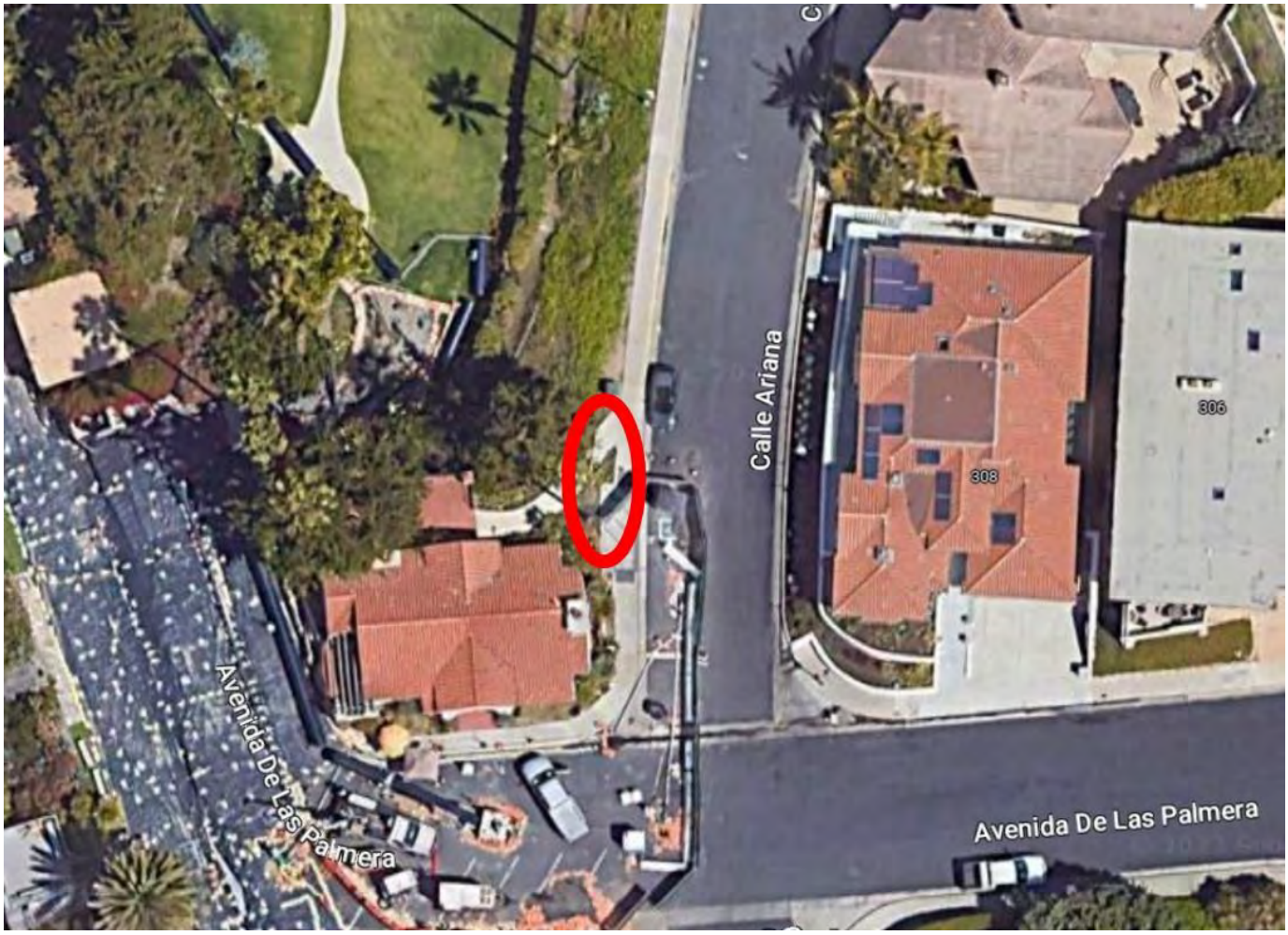

Calle Ariana
306
308
Avenida De Las Palmera
Avenida De Las Palmera

Figure 9: Sewer Lift Station Relocation (for two lift stations)

Exhibit 9 - Coastal Hazards Figures with "Hold the Line"

Figure 1 - Project site with no sea level rise and no coastal storm event

Exhibit 9 - Coastal Hazards Figures with "Hold the Line"

Figure 2 - Project site with 0.8 ft. of sea level rise and no coastal storm event

Exhibit 9 - Coastal Hazards Figures with "Hold the Line"

Figure 3 - Project site with 0.8 ft. of sea level rise and a 100 year storm event

Exhibit 9 - Coastal Hazards Figures with "Hold the Line"

Figure 4 - Project site with 3.3 ft. of sea level rise and no coastal storm event

Exhibit 9 - Coastal Hazards Figures with "Hold the Line"

Figure 5 - Project site with 3.3 ft. of sea level rise and a 100 year storm event

Exhibit 9 - Coastal Hazards Figures with "Hold the Line"

Figure 6 - Project site with 6.6 ft. of sea level rise and no coastal storm event

Exhibit 9 - Coastal Hazards Figures with "Hold the Line"

Figure 7 - Project site with 6.6 ft. of sea level rise and a 100 year storm event

Exhibit 10 - Coastal Hazards Figures without "Hold the Line"

Figure 1 - Project site shoreline position with 0.8 ft. of sea level rise

Exhibit 10 - Coastal Hazards Figures without "Hold the Line"

Figure 2 - Project site cliff retreat with 0.8 ft. of sea level rise

Exhibit 10 - Coastal Hazards Figures without "Hold the Line"

Figure 3 - Project site shoreline position with 3.3 ft. of sea level rise

Exhibit 10 - Coastal Hazards Figures without "Hold the Line"

Figure 4 - Project site cliff retreat with 3.3 ft. of sea level rise

Exhibit 10 - Coastal Hazards Figures without "Hold the Line"

Figure 5 - Project site shoreline position with 6.6 ft. of sea level rise

Exhibit 10 - Coastal Hazards Figures without "Hold the Line"

Figure 6 - Project site cliff retreat with 6.6 ft. of sea level rise