

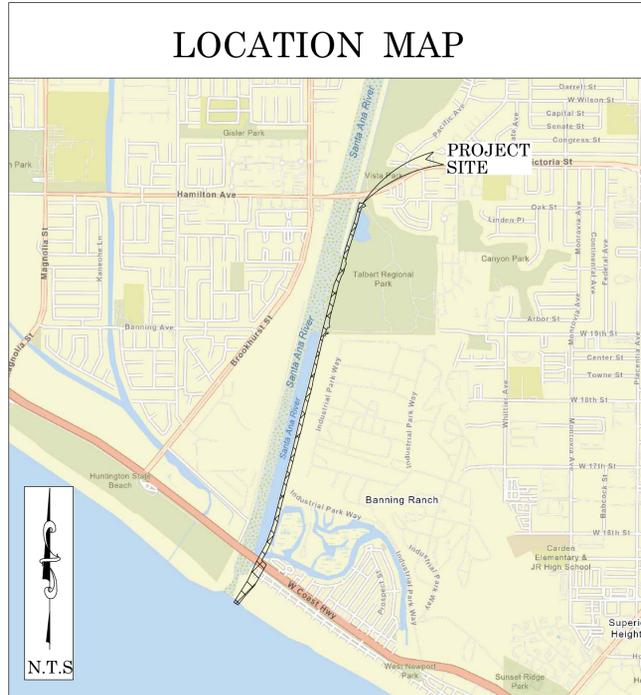


OC PUBLIC WORKS DEPARTMENT

KEVIN ONUMA, DIRECTOR OF PUBLIC WORKS

SANTA ANA RIVER (E01)

FENCE REHABILITATION



BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, NAD 83, OCS (2017.50) EPOCH ADJUSTMENT, AS DETERMINED LOCALLY BY A LINE BETWEEN CONTINUOUS GLOBAL POSITIONING STATIONS "TRAK" AND "FVPK" BEING NORTH 67°14'53.47" WEST AS DERIVED FROM THE COORDINATES PUBLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) ALONG WITH DATA SHEETS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR.

HORIZONTAL DATUM

COORDINATES SHOWN ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, NAD 83, OCS (2017.50) EPOCH ADJUSTMENT.

ALL DISTANCES SHOWN ARE GRID, UNLESS OTHERWISE NOTED. TO OBTAIN GROUND DISTANCES MULTIPLY GRID BY A COMBINED FACTOR OF 1.00002740.

THIS COMBINATION FACTOR WAS HELD AT: CP# 4115
N: 2177600.08 E: 6041681.25 EL: 10.77'

ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

VERTICAL DATUM

MEAN LOWER-LOW WATER (MLLW), PER NOAA TIDE STATION 9410580 - NEWPORT BAY ENTRANCE, TIDAL EPOCH 1983-2001.

OCS BM 1L-99-91 ELEV. = 24.742' YEAR LEVELED 2005 NAVD 88 (OCS 1995 ADJUSTMENT) + 0.18' = 24.922' MLLW

DESCRIPTION: FOUND 3 3/4" OCS ALUMINUM BENCHMARK DISK STAMPED "1L-99-91", SET IN THE WEST END OF A CONCRETE BRIDGE ABUTMENT. MONUMENT IS LOCATED IN THE NORTHWEST CORNER OF THE INTERSECTION OF PACIFIC COAST HIGHWAY AND THE SANTA ANA RIVER CROSSING, 52 FT. WESTERLY OF THE CENTERLINE OF PCH AND AT THE WESTERLY END OF THE NORTHERLY BRIDGE ABUTMENT. MONUMENT IS SET LEVEL WITH THE BIKE TRAIL.

NOTES

THE SURVEY INFORMATION SHOWN HEREON IS TO BE USED FOR TOPOGRAPHIC RELATIONSHIPS ONLY AND IS NOT INTENDED FOR LAND ACQUISITION OR BOUNDARY PURPOSES.

BOUNDARY AND RIGHT OF WAY HEREON WAS ESTABLISHED WITHOUT THE BENEFIT OF A TITLE REPORT, FURTHER INVESTIGATION MAY BE NECESSARY.

SHEET INDEX

SHEET NO.	DESCRIPTION
SHEET 1	TITLE SHEET
SHEET 2-18	TOPOGRAPHIC MAP

BASIS OF STATIONING

THE BASIS OF STATIONING FOR THE BEGINNING OF THE SANTA ANA RIVER ALIGNMENT SHOWN HEREON IS 6+50 PER RECORD DRAWINGS E01-101-29R.

PURPOSE OF SURVEY

THE PURPOSE OF THE SURVEY IS TO PROVIDE A TOPOGRAPHIC MAP FOR THIS PORTION OF THE SANTA ANA RIVER AND ADJACENT MARSH LANDS AND PROVIDE INFORMATION ON THE STORM DRAIN STRUCTURES WITHIN.

SENIOR LAND SURVEYOR'S CERTIFICATE:

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS' ACT, THIS 10 DAY OF NOVEMBER, 2025.

Michael Kubisty

MICHAEL KUBISTY, PLS. SENIOR LAND SURVEYOR



SENIOR LAND SURVEYOR'S CERTIFICATE:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYORS' ACT, THIS 10 DAY OF NOVEMBER, 2025.

Tate Loggreen

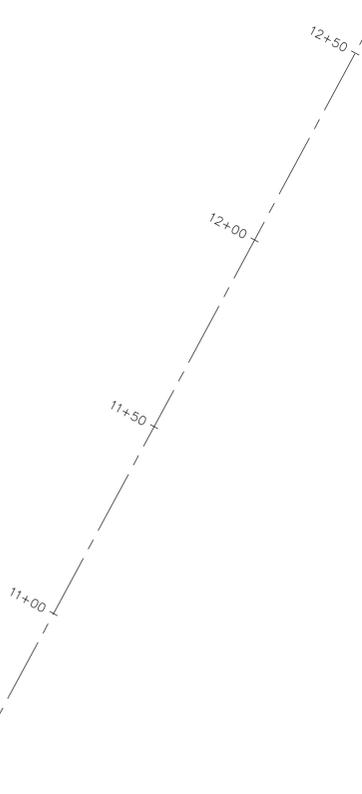
TATE LOGGREEN, PLS. SENIOR LAND SURVEYOR



TOPOGRAPHIC MAPPING PROJECT

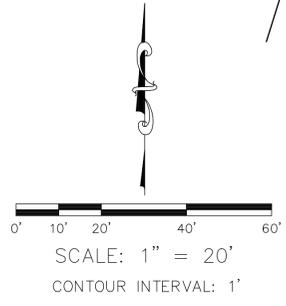
		COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION / SURVEY-FIELD SERVICES	
		SANTA ANA RIVER (E01) FENCE REHABILITATION	
		TITLE SHEET	
		PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK	
MARK	DATE	ITEM	SHEET NO.
			1
		REVISIONS	of 18
		DATE OF SURVEY: 06/09/2025 BY: E. HERTZ & CREW MAPPING BY: I. ISLAS OFFICE CHECK BY: M. KUBISTY, PLS. FIELD CHECK BY: E. HERTZ & CREW SCALE: N.T.S. W.O. #EF21489 FILE #2526PW-CM0006 FILE: AVO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG	

SEE SHEET 3

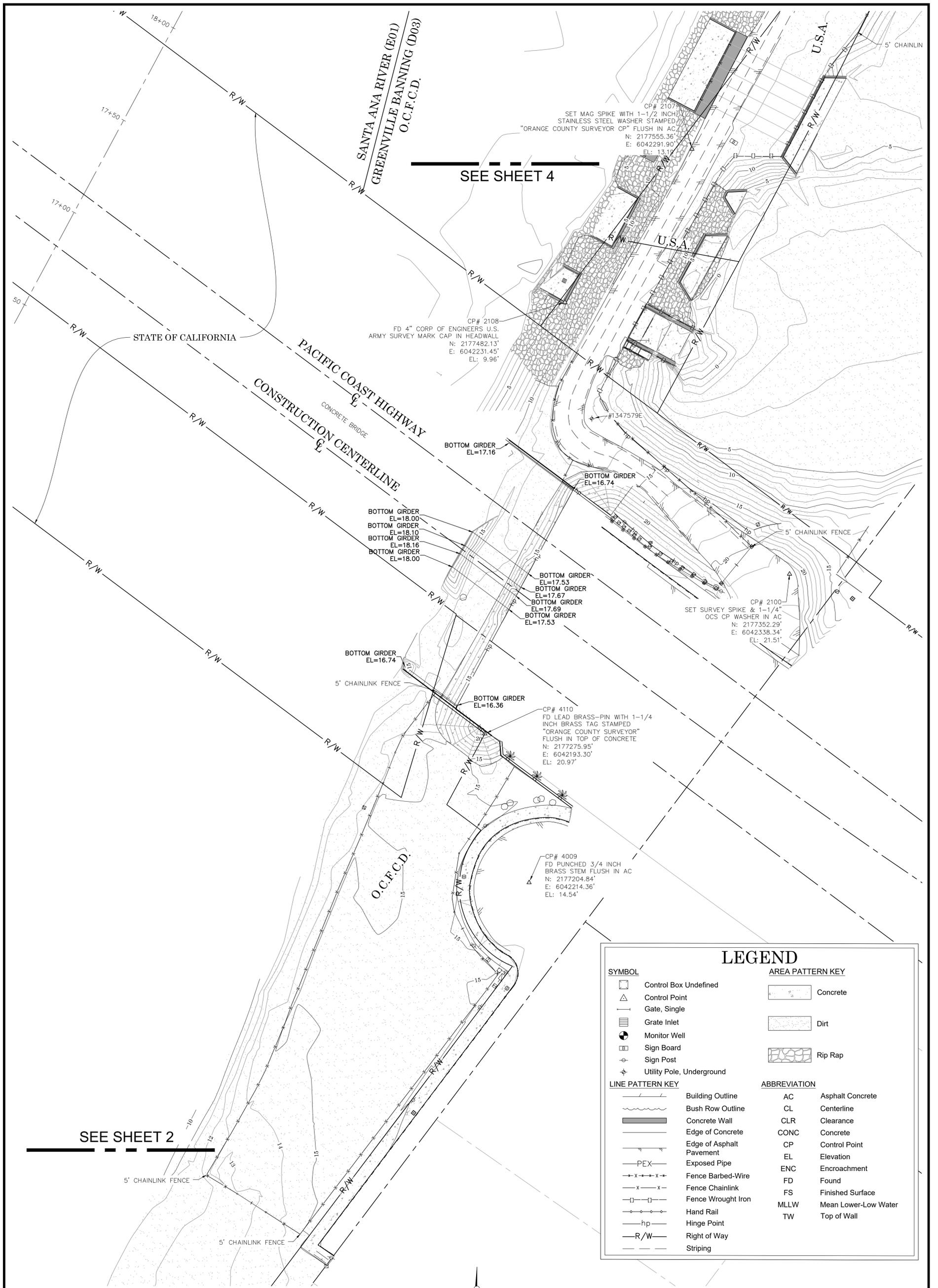


SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	Fence Barbed-Wire	ENC	Encroachment
	Fence Chainlink	FD	Found
	Fence Wrought Iron	FS	Finished Surface
	Hand Rail	MLLW	Mean Lower-Low Water
	Hinge Point	TW	Top of Wall
	Right of Way		
	Striping		

CP# 2118
 SET MAG NAIL WITH 1-1/4 INCH
 STAINLESS STEEL WASHER STAMPED
 "ORANGE COUNTY SURVEYOR CP 2118"
 FLUSH IN BEACH ROCK
 N: 2176687.91'
 E: 6041853.67'
 EL: 11.52'



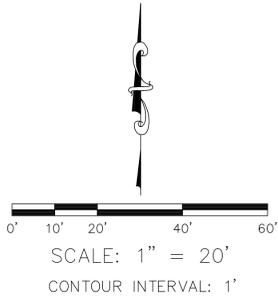
COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES		SHEET NO. 2 of 18
SANTA ANA RIVER (E01) FENCE REHABILITATION		
TITLE SHEET		
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK		
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO. 2 of 18
MAPPING	BY: I. ISLAS	
OFFICE CHECK	BY: M. KUBISTY, PLS	of 18
FIELD CHECK	BY: E. HERTZ & CREW	
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012
REVISIONS		
FILE: AVO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG		



SEE SHEET 4

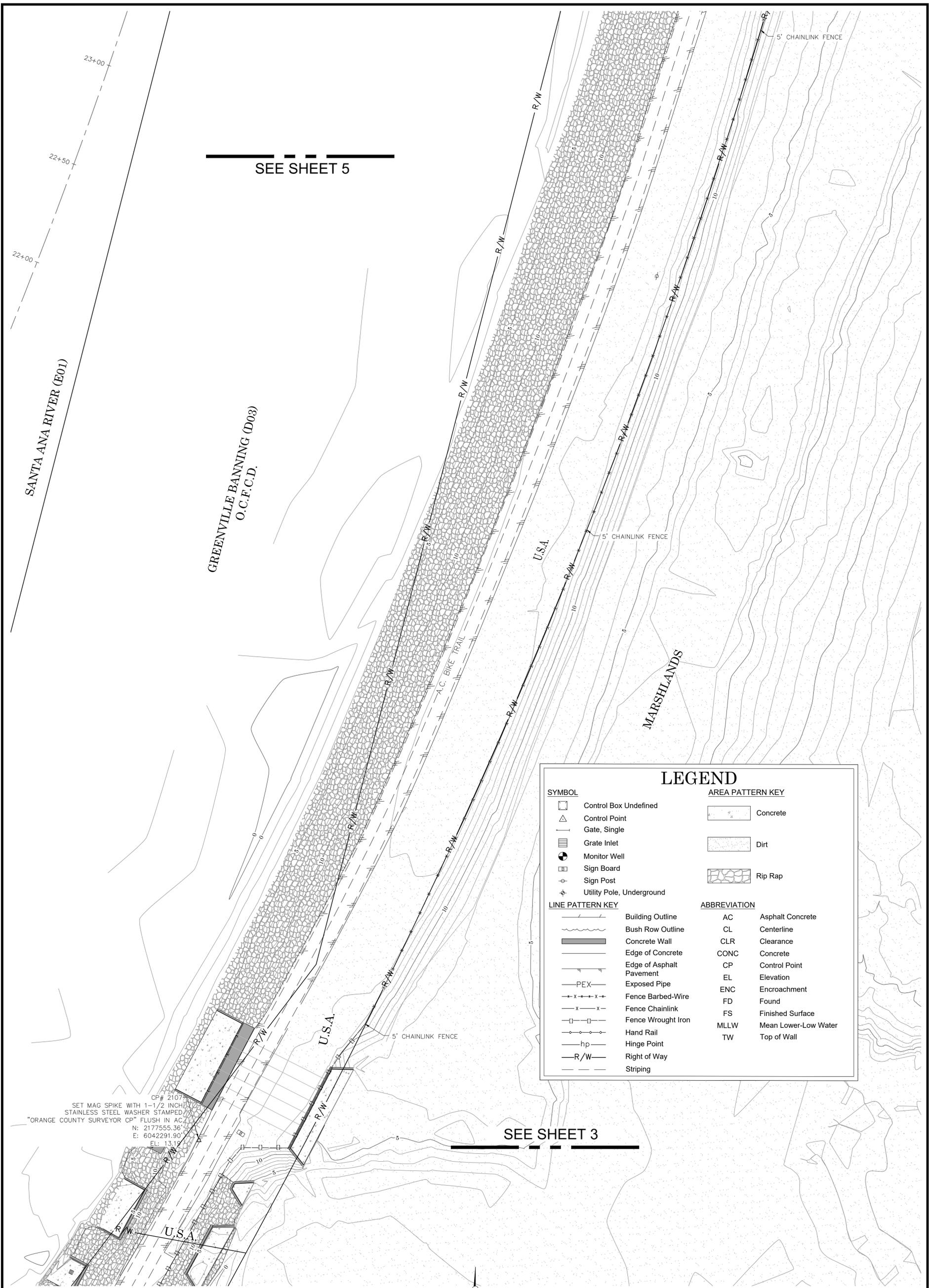
SEE SHEET 2

U.S. Survey Foot
 OC Public Works
 OC Survey/Field Services
 Boundary Analysis & Mapping



SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	PEX	ENC	Encroachment
	Fence Barbed-Wire	FD	Found
	Fence Chainlink	FS	Finished Surface
	Fence Wrought Iron	MLLW	Mean Lower-Low Water
	Hand Rail	TW	Top of Wall
	Hinge Point		
	Right of Way		
	Striping		

COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
SANTA ANA RIVER (E01) FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	3	
OFFICE CHECK	BY: M. KUBISTY, PLS	of	
FIELD CHECK	BY: E. HERTZ & CREW	18	
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012	
FILE: AVO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			

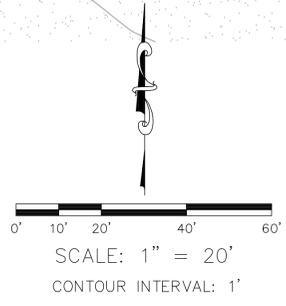


SEE SHEET 5

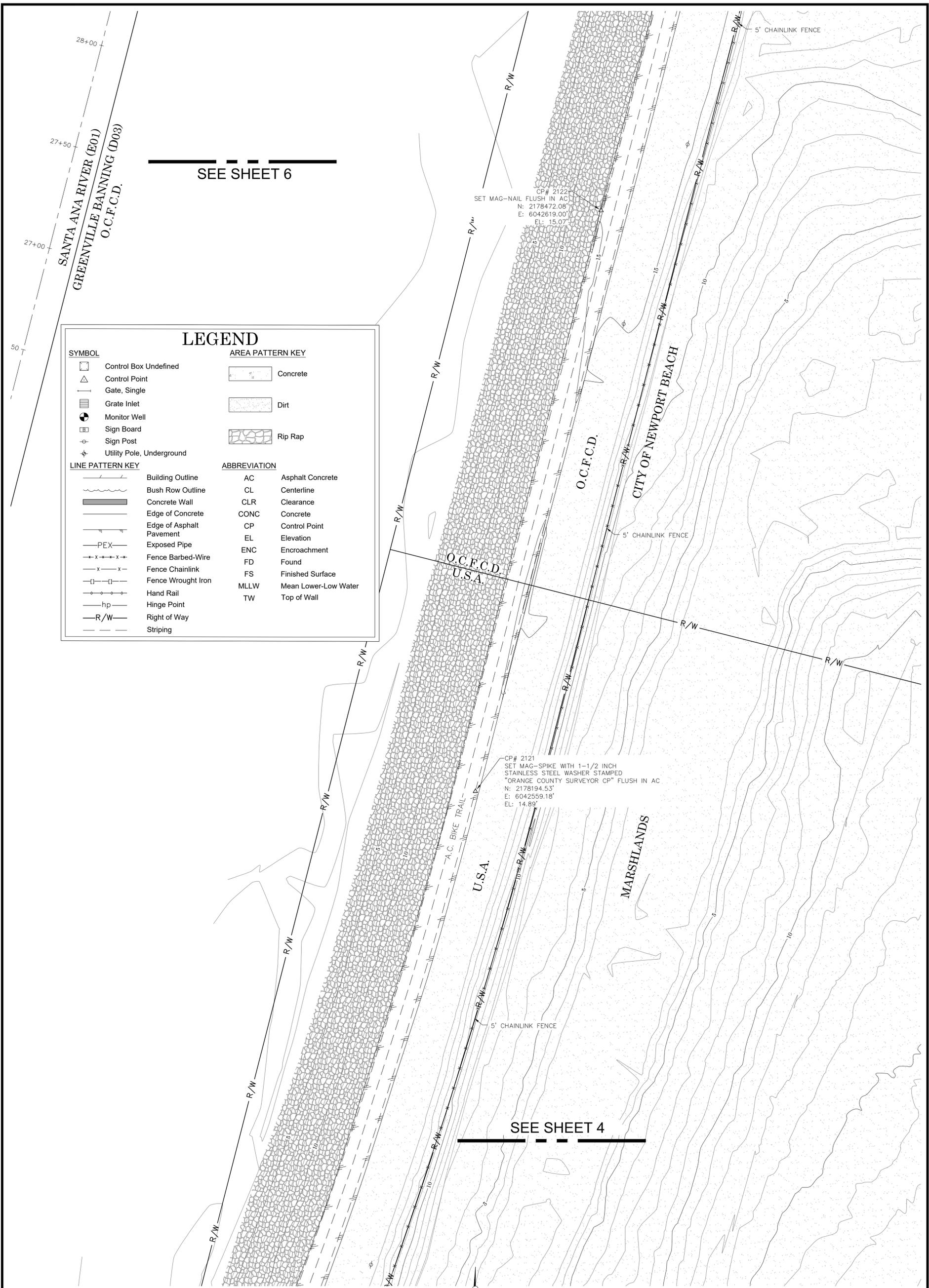
SEE SHEET 3

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	Fence Barbed-Wire	ENC	Encroachment
	Fence Chainlink	FD	Found
	Fence Wrought Iron	FS	Finished Surface
	Hand Rail	MLLW	Mean Lower-Low Water
	Hinge Point	TW	Top of Wall
	Right of Way		
	Striping		

CP# 2107
 SET MAG SPIKE WITH 1-1/2 INCH
 STAINLESS STEEL WASHER STAMPED
 "ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
 N: 2177555.36
 E: 6042291.90
 EL: 13.19



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
SANTA ANA RIVER (E01) FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	4	
OFFICE CHECK	BY: M. KUBISTY, PLS	of	
FIELD CHECK	BY: E. HERTZ & CREW	18	
SCALE: 1"=20'	W.O. #2425PW	FILE #2425PW-CM0012	
FILE: AWD TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			



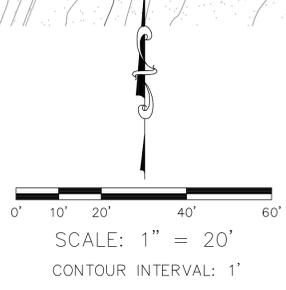
SEE SHEET 6

SEE SHEET 4

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	Fence Barbed-Wire	ENC	Encroachment
	Fence Chainlink	FD	Found
	Fence Wrought Iron	FS	Finished Surface
	Hand Rail	MLLW	Mean Lower-Low Water
	Hinge Point	TW	Top of Wall
	Right of Way		
	Striping		

CP# 2122
SET MAG-NAIL FLUSH IN AC
N: 2178472.08'
E: 6042619.00'
EL: 15.07'

CP# 2121
SET MAG-SPIKE WITH 1-1/2 INCH
STAINLESS STEEL WASHER STAMPED
"ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
N: 2178194.53'
E: 6042559.18'
EL: 14.89'



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
SANTA ANA RIVER (E01) FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	5 of 18	
OFFICE CHECK	BY: M. KUBISTY, PLS		
FIELD CHECK	BY: E. HERTZ & CREW		
SCALE: 1"=20'	W.O. #F21489	FILE #2425PW-CM0012	
FILE: AVO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			

SANTA ANA RIVER (E01)
 GREENVILLE BANNING (D03)
 O.C.F.C.D.

SEE SHEET 7

CP# 2109
 SET MAG-SPIKE WITH 1-1/2 INCH
 STAINLESS STEEL WASHER STAMPED
 "ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
 N: 2178986.23'
 E: 6042763.57'
 EL: 16.73'

CP# 2103
 SET SURVEY MARK-SPIKE WITH 1-1/2
 INCH STAINLESS STEEL WASHER STAMPED
 "ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
 N: 2178896.76'
 E: 6042740.15'
 EL: 16.37'

CP# 2122
 SET MAG-NAIL FLUSH IN AC
 N: 2178472.08'
 E: 6042619.00'
 EL: 15.07'

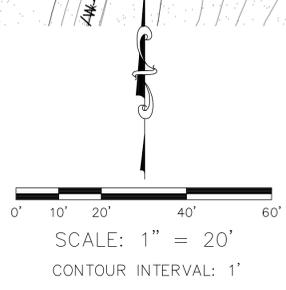
LEGEND

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	Fence Barbed-Wire	ENC	Encroachment
	Fence Chainlink	FD	Found
	Fence Wrought Iron	FS	Finished Surface
	Hand Rail	MLLW	Mean Lower-Low Water
	Hinge Point	TW	Top of Wall
	Right of Way		
	Striping		

32+50
 32+00
 31+50
 31+00

U.S.A.
 O.C.F.C.D.
 CITY OF NEWPORT BEACH

SEE SHEET 5



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	6 of 18	
OFFICE CHECK	BY: M. KUBISTY, PLS		
FIELD CHECK	BY: E. HERTZ & CREW		
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CMD012	
FILE: AVIO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			

SANTA ANA RIVER (E01)
GREENVILLE BANNING (D03)
O.C.F.C.D.

SEE SHEET 8

LEGEND

SYMBOL

- Control Box Undefined
- △ Control Point
- Gate, Single
- ▤ Grate Inlet
- ⊙ Monitor Well
- ▭ Sign Board
- ⊙ Sign Post
- ⊕ Utility Pole, Underground

AREA PATTERN KEY

- ▨ Concrete
- ▩ Dirt
- ▧ Rip Rap

LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- ▬ Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- PEX Exposed Pipe
- x—x—x— Fence Barbed-Wire
- x—x— Fence Chainlink
- |—|— Fence Wrought Iron
- Hand Rail
- hp— Hinge Point
- R/W— Right of Way
- Striping

ABBREVIATION

- AC Asphalt Concrete
- CL Centerline
- CLR Clearance
- CONC Concrete
- CP Control Point
- EL Elevation
- ENC Encroachment
- FD Found
- FS Finished Surface
- MLLW Mean Lower-Low Water
- TW Top of Wall

CP# 2109
SET MAG-SPIKE WITH 1-1/2 INCH
STAINLESS STEEL WASHER STAMPED
"ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
N: 2178986.23'
E: 6042763.57'
EL: 16.73'

CP# 2103
SET SURVEY MARK-SPIKE WITH 1-1/2
INCH STAINLESS STEEL WASHER STAMPED
"ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
N: 2178896.76'
E: 6042740.15'
EL: 16.37'

SEE SHEET 6

U.S. Survey Foot

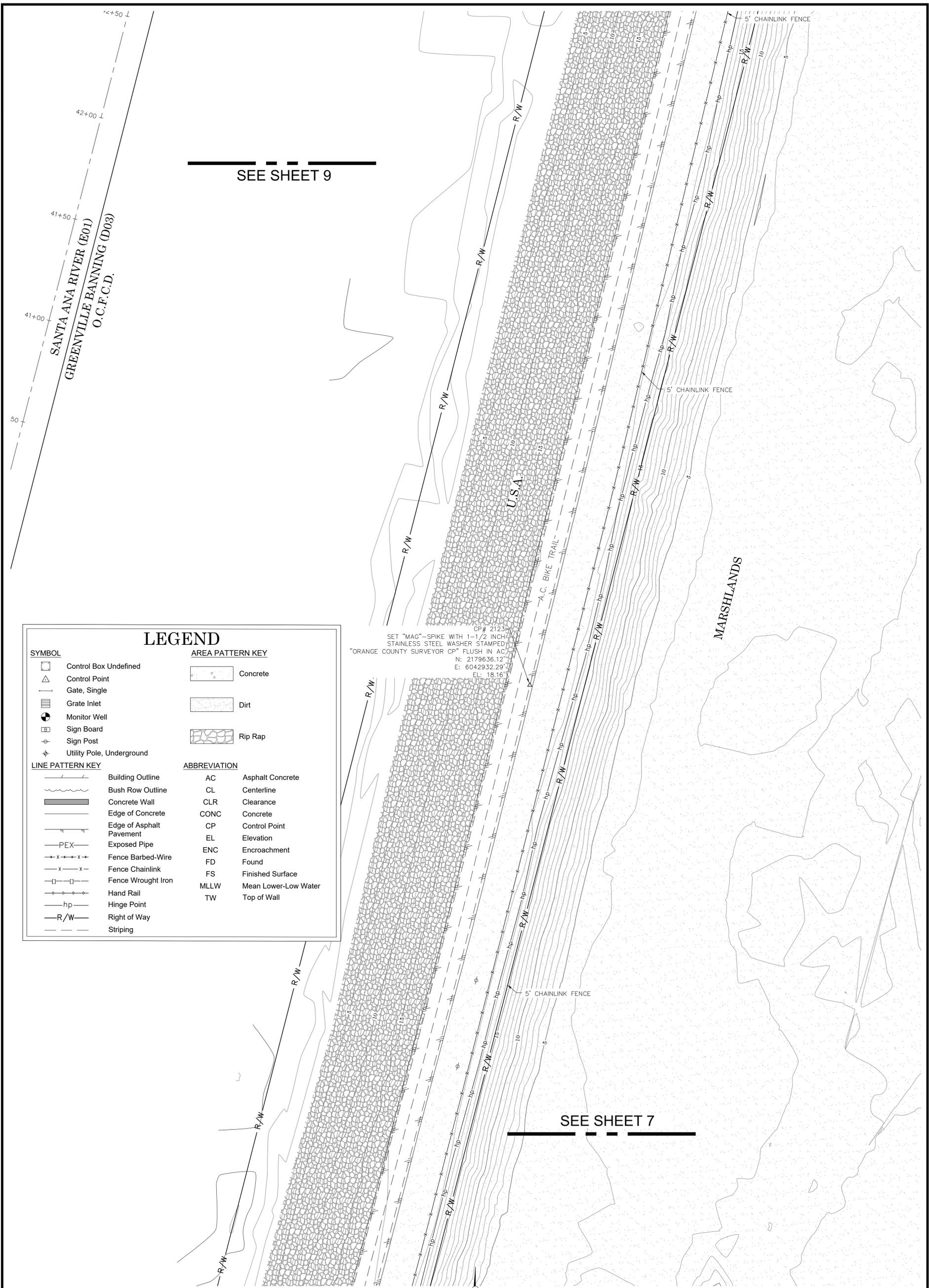
OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping



SCALE: 1" = 20'
CONTOUR INTERVAL: 1'

COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	7	
OFFICE CHECK	BY: M. KUBISTY, PLS	of	
FIELD CHECK	BY: E. HERTZ & CREW	18	
SCALE: 1"=20'	W.C. #EF21489	FILE #2425PW-CM0012	
FILE: AVIO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			

MARK	DATE	ITEM
REVISIONS		



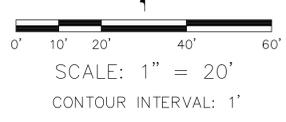
SEE SHEET 9

SEE SHEET 7

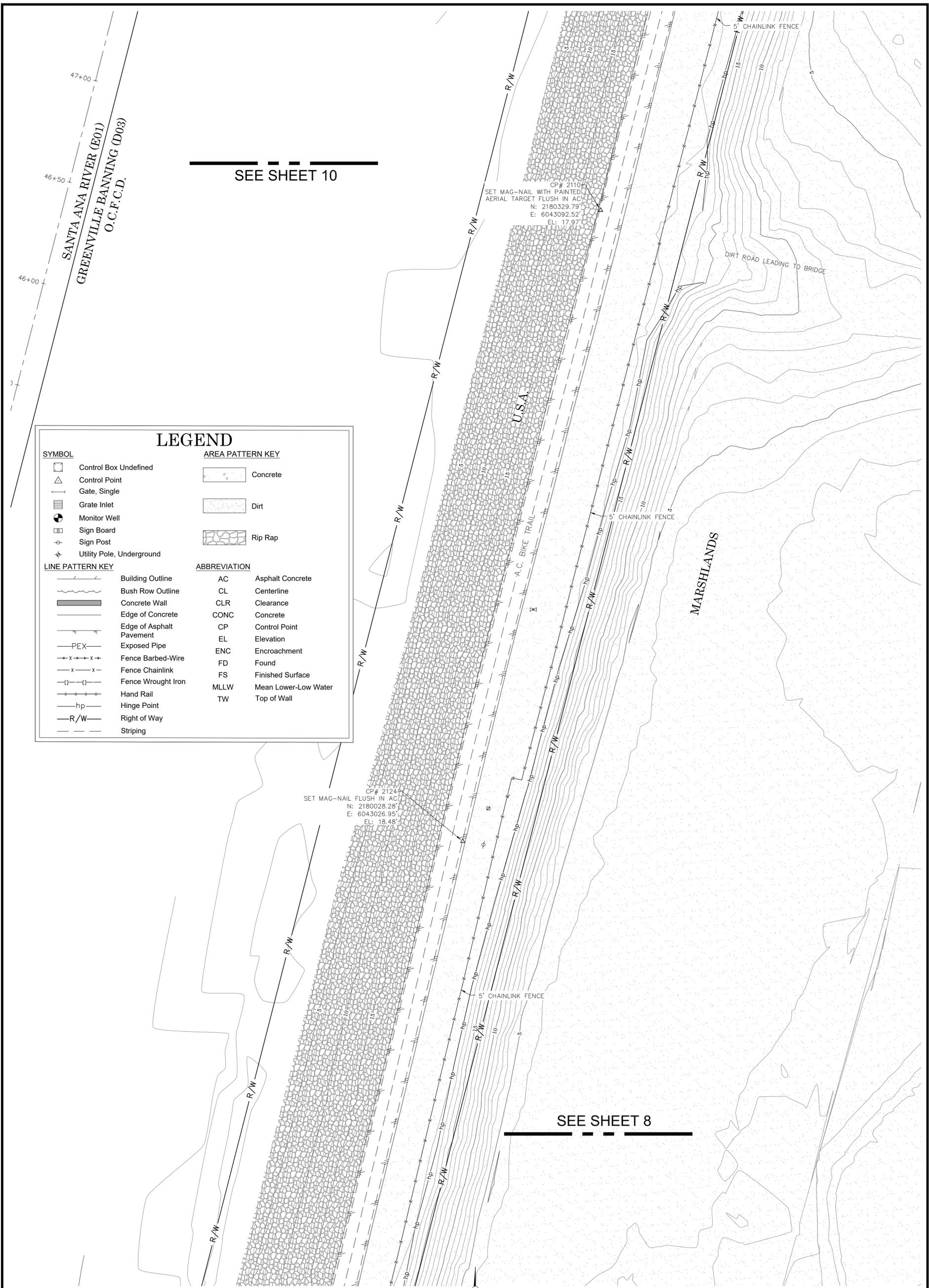
LEGEND

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	Fence Barbed-Wire	ENC	Encroachment
	Fence Chainlink	FD	Found
	Fence Wrought Iron	FS	Finished Surface
	Hand Rail	MLLW	Mean Lower-Low Water
	Hinge Point	TW	Top of Wall
	Right of Way		
	Striping		

CP # 2123
 SET "MAC"-SPIKE WITH 1-1/2 INCH
 STAINLESS STEEL WASHER STAMPED
 "ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
 N: 2179636.12
 E: 6042932.29
 EL: 18.16'



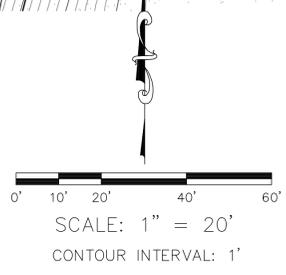
COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	8 of 18	
OFFICE CHECK	BY: M. KUBISTY, PLS		
FIELD CHECK	BY: E. HERTZ & CREW		
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012	
FILE: AVIO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			



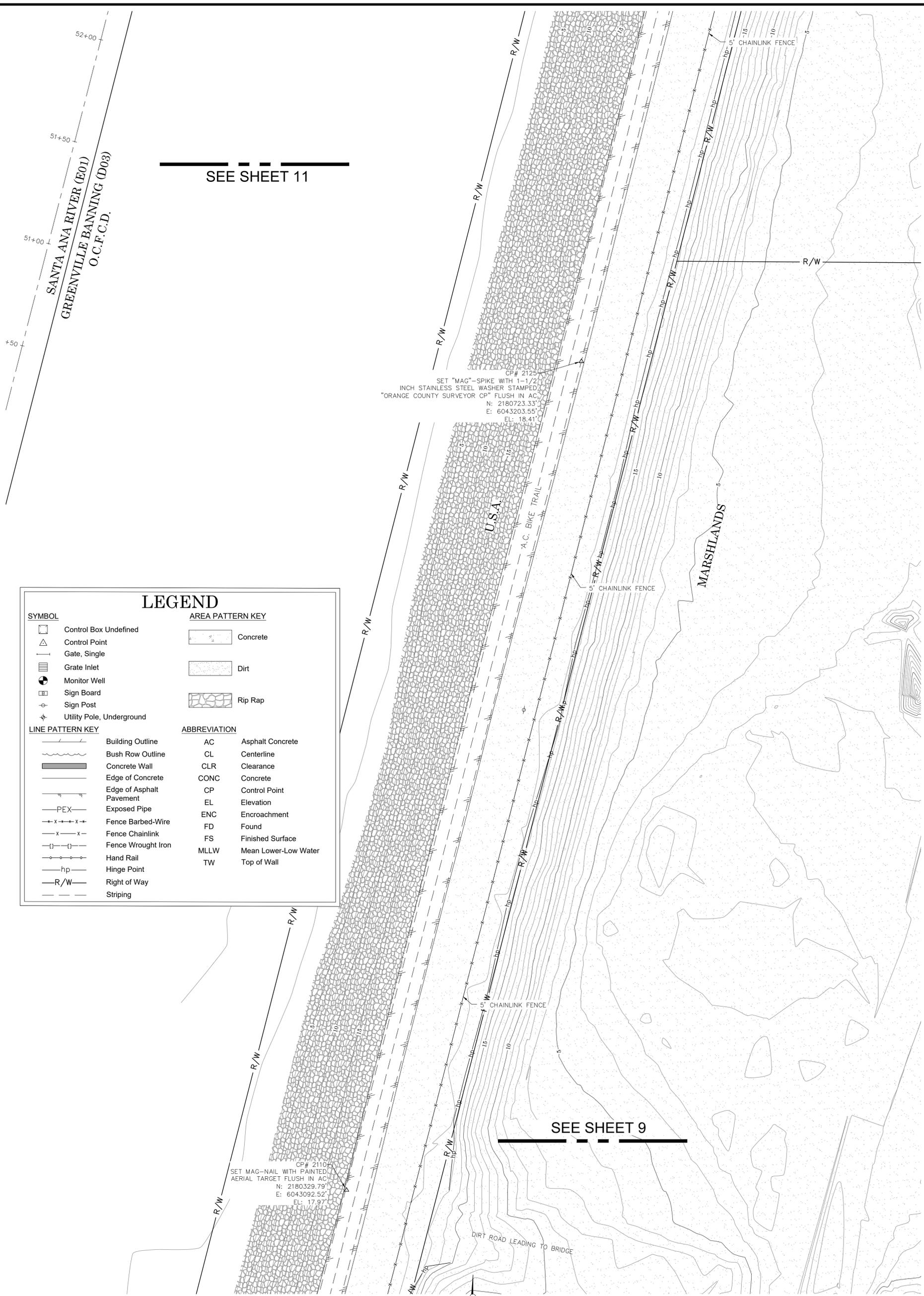
SEE SHEET 10

SEE SHEET 8

LEGEND	
SYMBOL	AREA PATTERN KEY
LINE PATTERN KEY	ABBREVIATION
	AC Asphalt Concrete
	CL Centerline
	CLR Clearance
	CONC Concrete
	CP Control Point
	EL Elevation
	ENC Encroachment
	FD Found
	FS Finished Surface
	MLLW Mean Lower-Low Water
	TW Top of Wall



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	9 of 18	
OFFICE CHECK	BY: M. KUBISTY, PLS		
FIELD CHECK	BY: E. HERTZ & CREW		
SCALE: 1"=20'	W.C. #EF21489	FILE #2425PW-CMD012	
FILE: AVIO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			

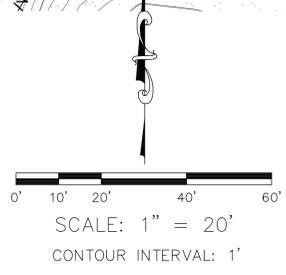


SEE SHEET 11

SEE SHEET 9

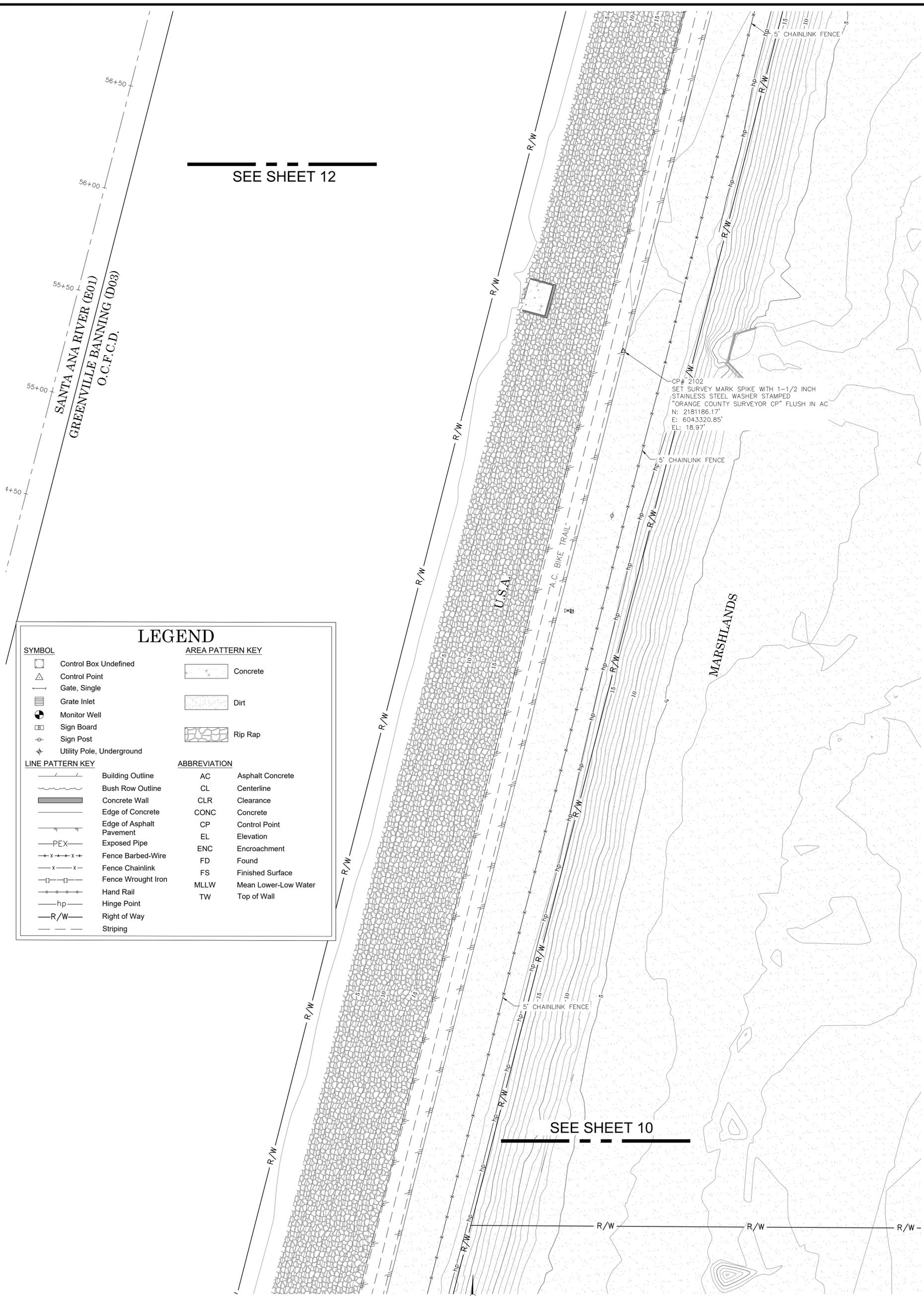
LEGEND

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	Fence Barbed-Wire	ENC	Encroachment
	Fence Chainlink	FD	Found
	Fence Wrought Iron	FS	Finished Surface
	Hand Rail	MLLW	Mean Lower-Low Water
	Hinge Point	TW	Top of Wall
	Right of Way		
	Striping		



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	10 of 18	
OFFICE CHECK	BY: M. KUBISTY, PLS		
FIELD CHECK	BY: E. HERTZ & CREW		
SCALE: 1"=20'	W.O. #2425PW	FILE #2425PW-CM0012	
FILE: AVIO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			
MARK	DATE	ITEM	REVISIONS

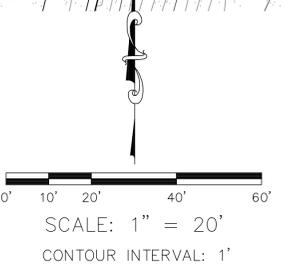
SEE SHEET 12



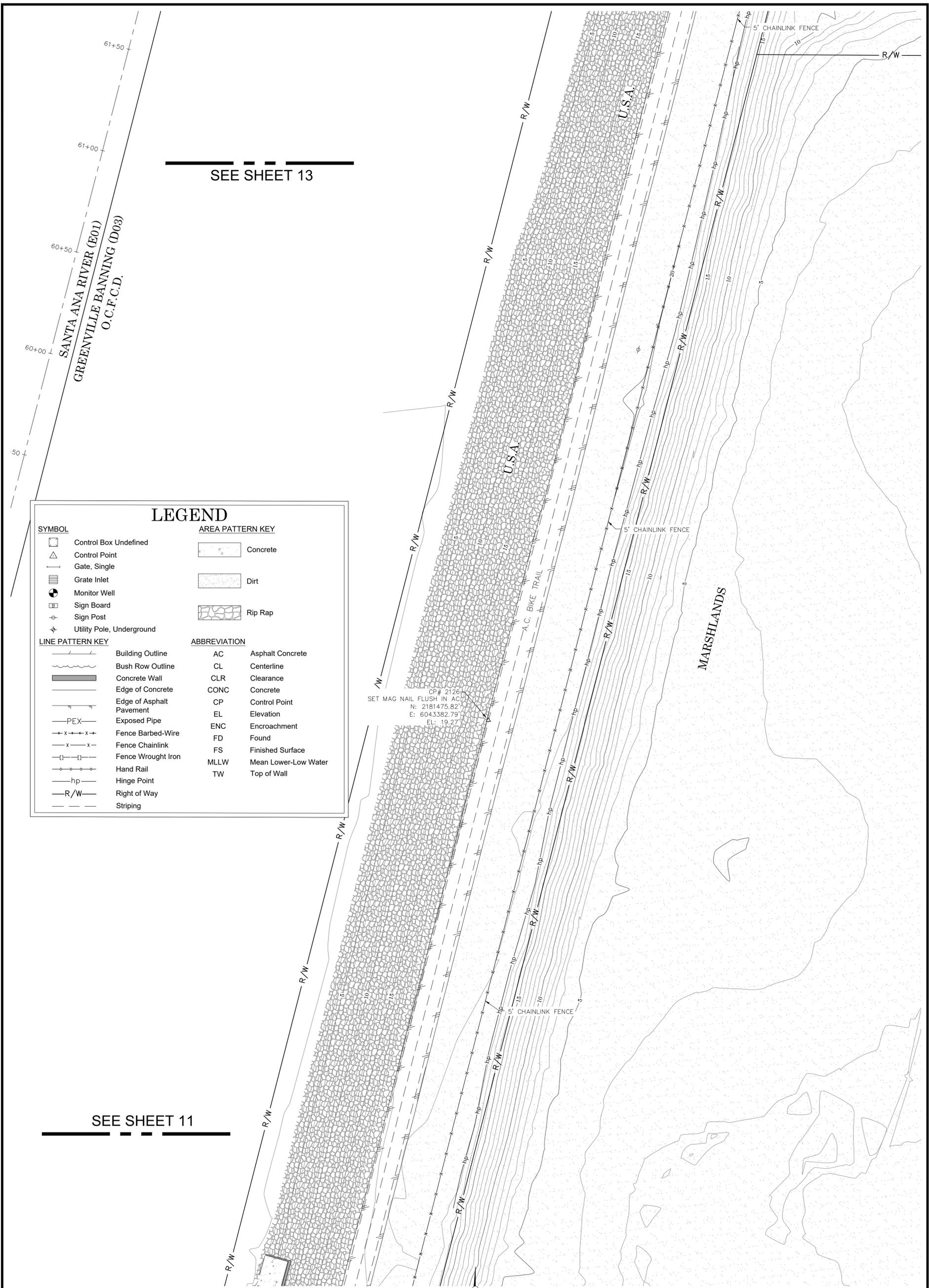
LEGEND

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	PEX	ENC	Encroachment
	Fence Barbed-Wire	FD	Found
	Fence Chainlink	FS	Finished Surface
	Fence Wrought Iron	MLLW	Mean Lower-Low Water
	Hand Rail	TW	Top of Wall
	Hinge Point		
	Right of Way		
	Striping		

SEE SHEET 10



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO. 11 of 18	
MAPPING	BY: I. ISLAS		
OFFICE CHECK	BY: M. KUBISTY, PLS		
FIELD CHECK	BY: E. HERTZ & CREW		
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012	
REVISIONS			
MARK	DATE	ITEM	



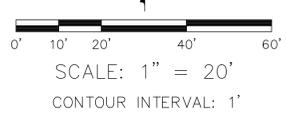
SEE SHEET 13

SEE SHEET 11

LEGEND

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	Fence Barbed-Wire	ENC	Encroachment
	Fence Chainlink	FD	Found
	Fence Wrought Iron	FS	Finished Surface
	Hand Rail	MLLW	Mean Lower-Low Water
	Hinge Point	TW	Top of Wall
	Right of Way		
	Striping		

CP # 2125
 SET MAG NAIL FLUSH IN AC
 N: 2181475.82'
 E: 6043382.79'
 EL: 19.27'



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
SANTA ANA RIVER (E01) FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	12	
OFFICE CHECK	BY: M. KUBISTY, PLS	of	
FIELD CHECK	BY: E. HERTZ & CREW	18	
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012	
FILE: AWD TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			
MARK	DATE	ITEM	REVISIONS

SANTA ANA RIVER (E01)
GREENVILLE BANNING (D03)
O.C.F.C.D.

SEE SHEET 14

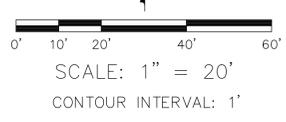
CP# 2127
SET "MAG"-SPIKE WITH 1-1/2 INCH
STAINLESS STEEL WASHER STAMPED
"ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
N: 2182205.87'
E: 6043581.50'
EL: 20.35'

LEGEND

SYMBOL		AREA PATTERN KEY	
	Control Box Undefined		Concrete
	Control Point		Dirt
	Gate, Single		Rip Rap
	Grate Inlet		
	Monitor Well		
	Sign Board		
	Sign Post		
	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
	Building Outline	AC	Asphalt Concrete
	Bush Row Outline	CL	Centerline
	Concrete Wall	CLR	Clearance
	Edge of Concrete	CONC	Concrete
	Edge of Asphalt Pavement	CP	Control Point
	Exposed Pipe	EL	Elevation
	Fence Barbed-Wire	ENC	Encroachment
	Fence Chainlink	FD	Found
	Fence Wrought Iron	FS	Finished Surface
	Hand Rail	MLLW	Mean Lower-Low Water
	Hinge Point	TW	Top of Wall
	Right of Way		
	Striping		

CP# 2101
SET "SURVEY MARK"-SPIKE
WITH 1-1/2 INCH STAINLESS STEEL WASHER
STAMPED "ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
N: 2181893.88'
E: 6043501.16'
EL: 20.23'

SEE SHEET 12



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
SANTA ANA RIVER (E01) FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	13	
OFFICE CHECK	BY: M. KUBISTY, PLS	of	
FIELD CHECK	BY: E. HERTZ & CREW	18	
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012	
FILE: AWD TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			

SANTA ANA RIVER (E01)
 GRENVILLE BANNING (D03)
 O.C.F.C.D.

SEE SHEET 15

LEGEND	
SYMBOL	AREA PATTERN KEY
LINE PATTERN KEY	ABBREVIATION
	AC Asphalt Concrete
	CL Centerline
	CLR Clearance
	CONC Concrete
	CP Control Point
	EL Elevation
	ENC Encroachment
	FD Found
	FS Finished Surface
	MLLW Mean Lower-Low Water
	TW Top of Wall

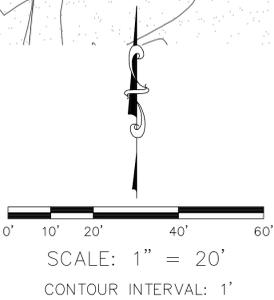
CP # 2129
 SET MAG NAIL FLUSH IN AC
 N: 2182444.18'
 E: 6043632.46'
 EL: 20.48'

CP # 2127
 SET "MAG"-SPIKE WITH 1-1/2 INCH
 STAINLESS STEEL WASHER STAMPED
 "ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
 N: 2182205.87'
 E: 6043581.50'
 EL: 20.35'

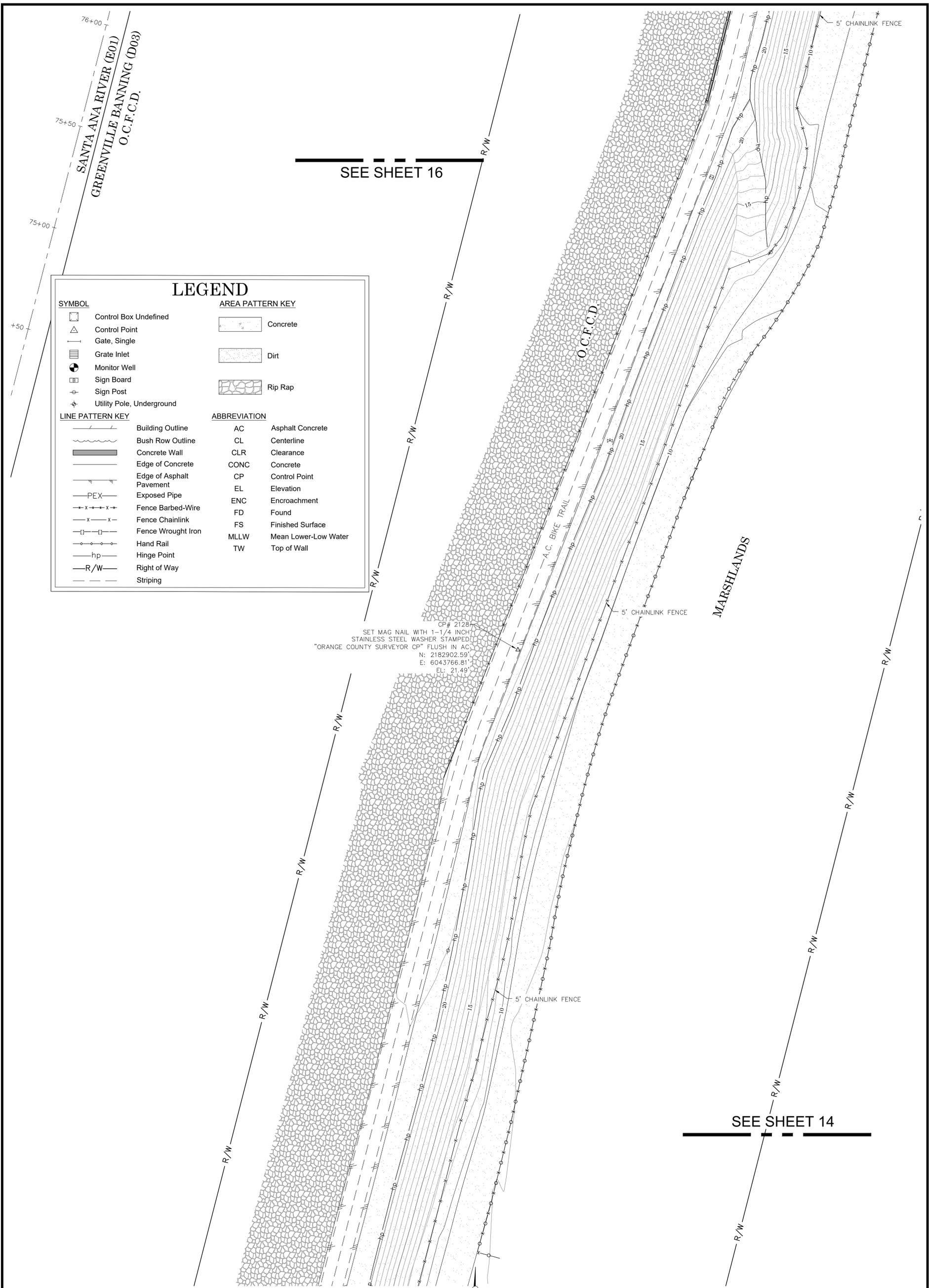
SEE SHEET 13

MARSHLANDS

O.C.F.C.D.



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
SANTA ANA RIVER (E01) FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	14	
OFFICE CHECK	BY: M. KUBISTY, PLS	of	
FIELD CHECK	BY: E. HERTZ & CREW	18	
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CMD012	
FILE: AWD TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			



SEE SHEET 16

SEE SHEET 14

LEGEND

SYMBOL

- Control Box Undefined
- Control Point
- Gate, Single
- Grate Inlet
- Monitor Well
- Sign Board
- Sign Post
- Utility Pole, Underground

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

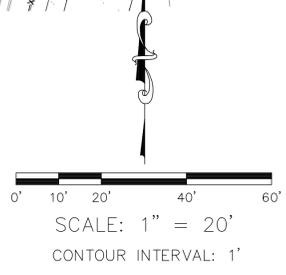
LINE PATTERN KEY

- Building Outline
- Bush Row Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Exposed Pipe
- Fence Barbed-Wire
- Fence Chainlink
- Fence Wrought Iron
- Hand Rail
- Hinge Point
- Right of Way
- Striping

ABBREVIATION

- | | |
|------|----------------------|
| AC | Asphalt Concrete |
| CL | Centerline |
| CLR | Clearance |
| CONC | Concrete |
| CP | Control Point |
| EL | Elevation |
| ENC | Encroachment |
| FD | Found |
| FS | Finished Surface |
| MLLW | Mean Lower-Low Water |
| TW | Top of Wall |

CP# 2128
 SET MAG NAIL WITH 1-1/4 INCH
 STAINLESS STEEL WASHER STAMPED
 "ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
 N: 2182902.59'
 E: 6043766.81'
 EL: 21.49'

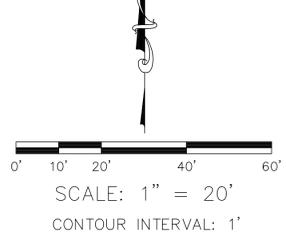
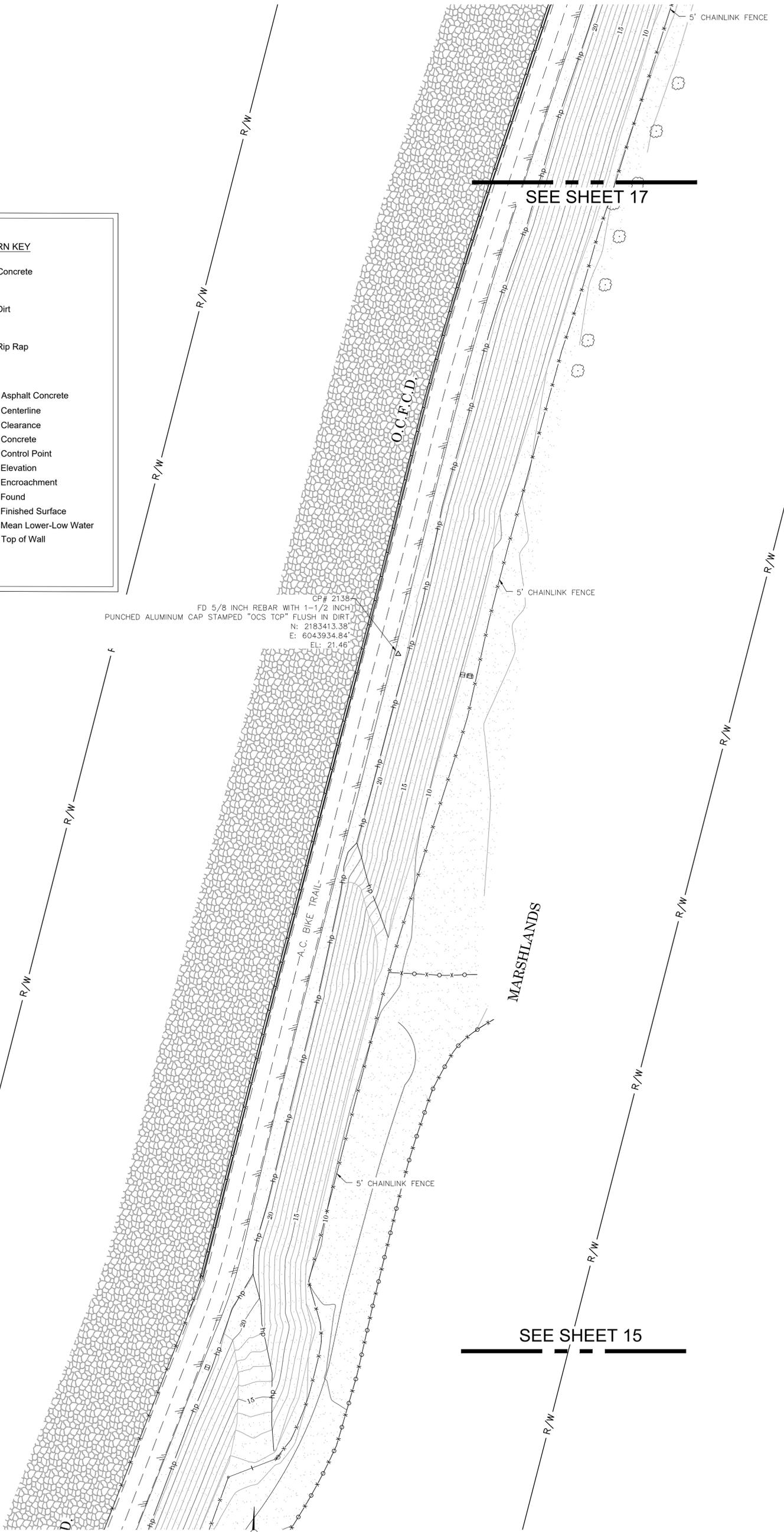


		COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES		SHEET NO. 15 of 18
		SANTA ANA RIVER (E01) FENCE REHABILITATION		
		TITLE SHEET		
		PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK		
		DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	
		MAPPING	BY: I. ISLAS	
		OFFICE CHECK	BY: M. KUBISTY, PLS	
		FIELD CHECK	BY: E. HERTZ & CREW	
		SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012
		FILE: AVO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG		
MARK	DATE	REVISIONS		

SANTA ANA RIVER (E01)
GREENVILLE BANNING (D03)
O.C.F.C.D.

LEGEND

SYMBOL	AREA PATTERN KEY
□ Control Box Undefined	Concrete
△ Control Point	Dirt
— Gate, Single	Rip Rap
▣ Grate Inlet	
⊙ Monitor Well	
▣ Sign Board	
⊙ Sign Post	
⊙ Utility Pole, Underground	
LINE PATTERN KEY	ABBREVIATION
— Building Outline	AC Asphalt Concrete
— Bush Row Outline	CL Centerline
— Concrete Wall	CLR Clearance
— Edge of Concrete	CONC Concrete
— Edge of Asphalt Pavement	CP Control Point
— Exposed Pipe	EL Elevation
— Fence Barbed-Wire	ENC Encroachment
— Fence Chainlink	FD Found
— Fence Wrought Iron	FS Finished Surface
— Hand Rail	MLLW Mean Lower-Low Water
— Hinge Point	TW Top of Wall
— R/W Right of Way	
— Striping	



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO. 16 of 18	
MAPPING	BY: I. ISLAS		
OFFICE CHECK	BY: M. KUBISTY, PLS	FILE # 2425PW-CM0012	
FIELD CHECK	BY: E. HERTZ & CREW		
SCALE: 1"=20'	W.O. #EF21489	FILE # 2425PW-CM0012	
REVISIONS			
FILE: AVIO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			

SANTA ANA RIVER (E01)
GREENVILLE BANNING (D03)
O.C.F.C.D.

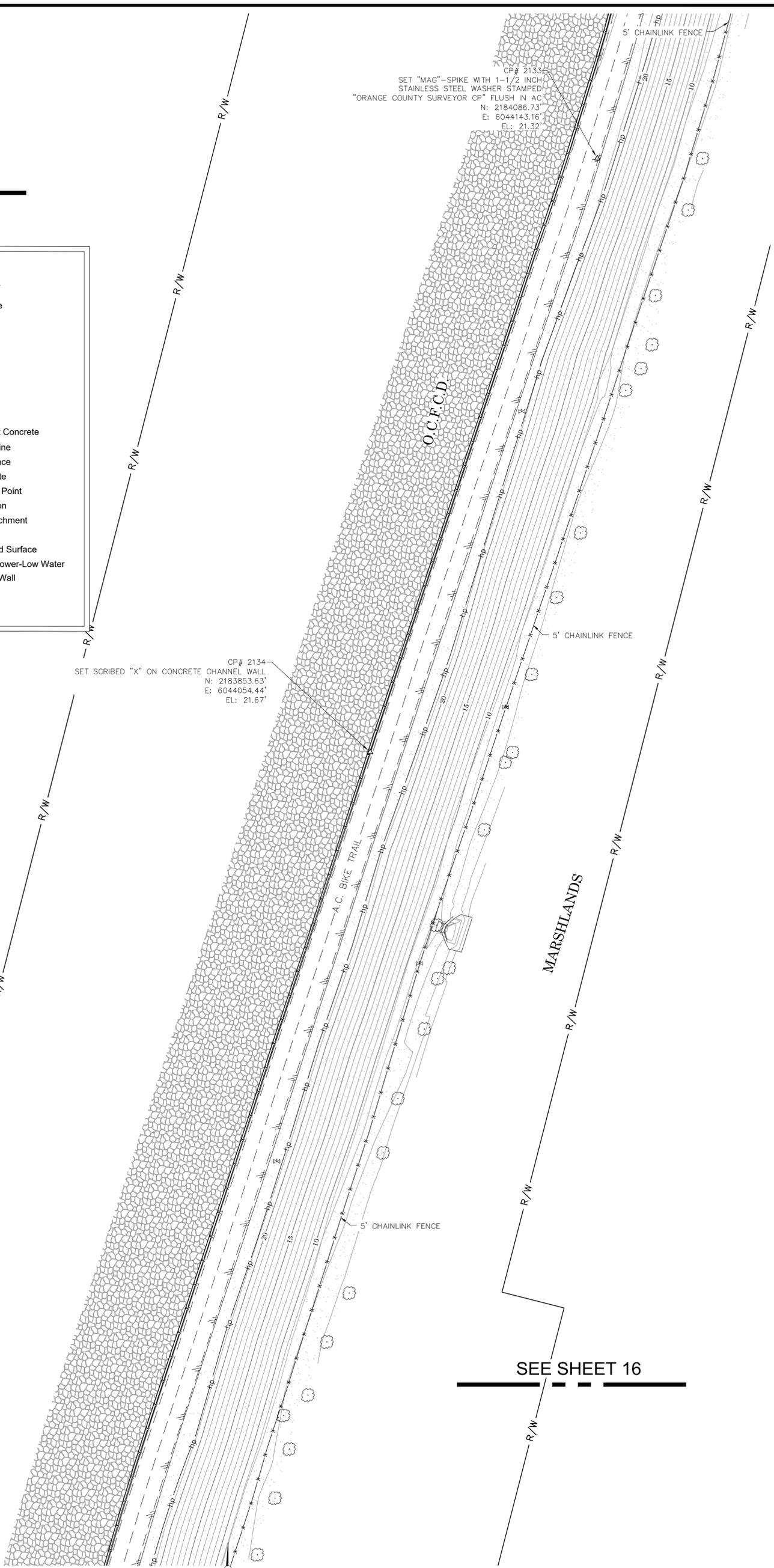
SEE SHEET 18

LEGEND

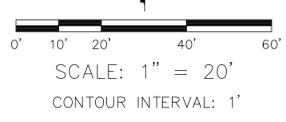
SYMBOL	DESCRIPTION	AREA PATTERN KEY	DESCRIPTION
[Symbol]	Control Box Undefined	[Pattern]	Concrete
[Symbol]	Control Point	[Pattern]	Dirt
[Symbol]	Gate, Single	[Pattern]	Rip Rap
[Symbol]	Grate Inlet		
[Symbol]	Monitor Well		
[Symbol]	Sign Board		
[Symbol]	Sign Post		
[Symbol]	Utility Pole, Underground		
LINE PATTERN KEY		ABBREVIATION	
[Symbol]	Building Outline	AC	Asphalt Concrete
[Symbol]	Bush Row Outline	CL	Centerline
[Symbol]	Concrete Wall	CLR	Clearance
[Symbol]	Edge of Concrete	CONC	Concrete
[Symbol]	Edge of Asphalt Pavement	CP	Control Point
[Symbol]	Exposed Pipe	EL	Elevation
[Symbol]	Fence Barbed-Wire	ENC	Encroachment
[Symbol]	Fence Chainlink	FD	Found
[Symbol]	Fence Wrought Iron	FS	Finished Surface
[Symbol]	Hand Rail	MLLW	Mean Lower-Low Water
[Symbol]	Hinge Point	TW	Top of Wall
[Symbol]	Right of Way		
[Symbol]	Striping		

CP# 2133
SET "MAG"-SPIKE WITH 1-1/2 INCH
STAINLESS STEEL WASHER STAMPED
"ORANGE COUNTY SURVEYOR CP"
N: 2184086.73'
E: 6044143.16'
EL: 21.32'

CP# 2134
SET SCRIBED "X" ON CONCRETE CHANNEL WALL
N: 2183853.63'
E: 6044054.44'
EL: 21.67'



SEE SHEET 16

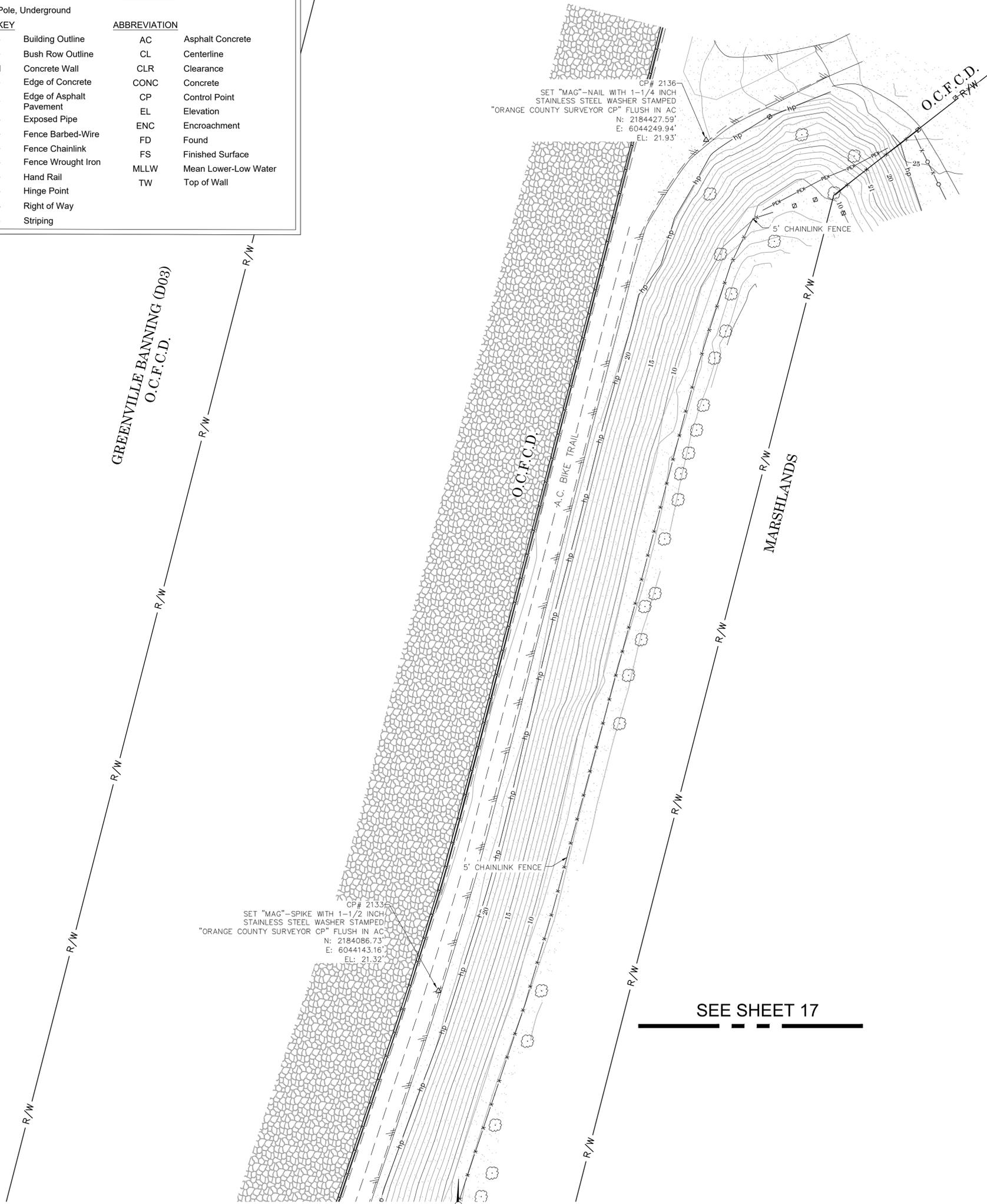


COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO.	
MAPPING	BY: I. ISLAS	17	
OFFICE CHECK	BY: M. KUBISTY, PLS	of	
FIELD CHECK	BY: E. HERTZ & CREW	18	
SCALE: 1"=20'	W.O. #EF21489	FILE #2425PW-CM0012	
FILE: AVIO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			

VICTORIA ST.
HAMILTON AVE.

LEGEND

SYMBOL	AREA PATTERN KEY
□ Control Box Undefined	Concrete
△ Control Point	Dirt
— Gate, Single	Rip Rap
▨ Grate Inlet	
⊙ Monitor Well	
▣ Sign Board	
⊙ Sign Post	
⊕ Utility Pole, Underground	
LINE PATTERN KEY	ABBREVIATION
— Building Outline	AC Asphalt Concrete
— Bush Row Outline	CL Centerline
— Concrete Wall	CLR Clearance
— Edge of Concrete	CONC Concrete
— Edge of Asphalt Pavement	CP Control Point
— PEX Exposed Pipe	EL Elevation
—x—x—x— Fence Barbed-Wire	ENC Encroachment
—x—x— Fence Chainlink	FD Found
— — — Fence Wrought Iron	FS Finished Surface
— Hand Rail	MLLW Mean Lower-Low Water
—hp— Hinge Point	TW Top of Wall
—R/W— Right of Way	
— Stripping	



GREENVILLE BANNING (D03)
O.C.F.C.D.

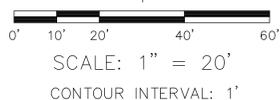
O.C.F.C.D.

MARSHLANDS

CP # 2133
SET "MAG"-SPIKE WITH 1-1/2 INCH
STAINLESS STEEL WASHER STAMPED
"ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
N: 2184086.73'
E: 6044143.16'
EL: 21.32'

CP # 2136
SET "MAG"-NAIL WITH 1-1/4 INCH
STAINLESS STEEL WASHER STAMPED
"ORANGE COUNTY SURVEYOR CP" FLUSH IN AC
N: 2184427.59'
E: 6044249.94'
EL: 21.93'

SEE SHEET 17



COUNTY OF ORANGE OC PUBLIC WORKS OC CONSTRUCTION/ SURVEY-FIELD SERVICES			
AVIO TIDE GATES FENCE REHABILITATION			
TITLE SHEET			
PROJECT LIMITS: FROM PACIFIC COAST HIGHWAY TO TALBERT REGIONAL PARK			
DATE OF SURVEY: 06/09/2025	BY: E. HERTZ & CREW	SHEET NO. 18 of 18	
MAPPING	BY: I. ISLAS		
OFFICE CHECK	BY: M. KUBISTY, PLS	FILE # 2425PW-CM0012	
FIELD CHECK	BY: E. HERTZ & CREW		
SCALE: 1"=20'	W.O. #EF21489	FILE # 2425PW-CM0012	
REVISIONS			
FILE: AVIO TIDE GATES FENCE RELOCATION_TOPO_2025.DWG			