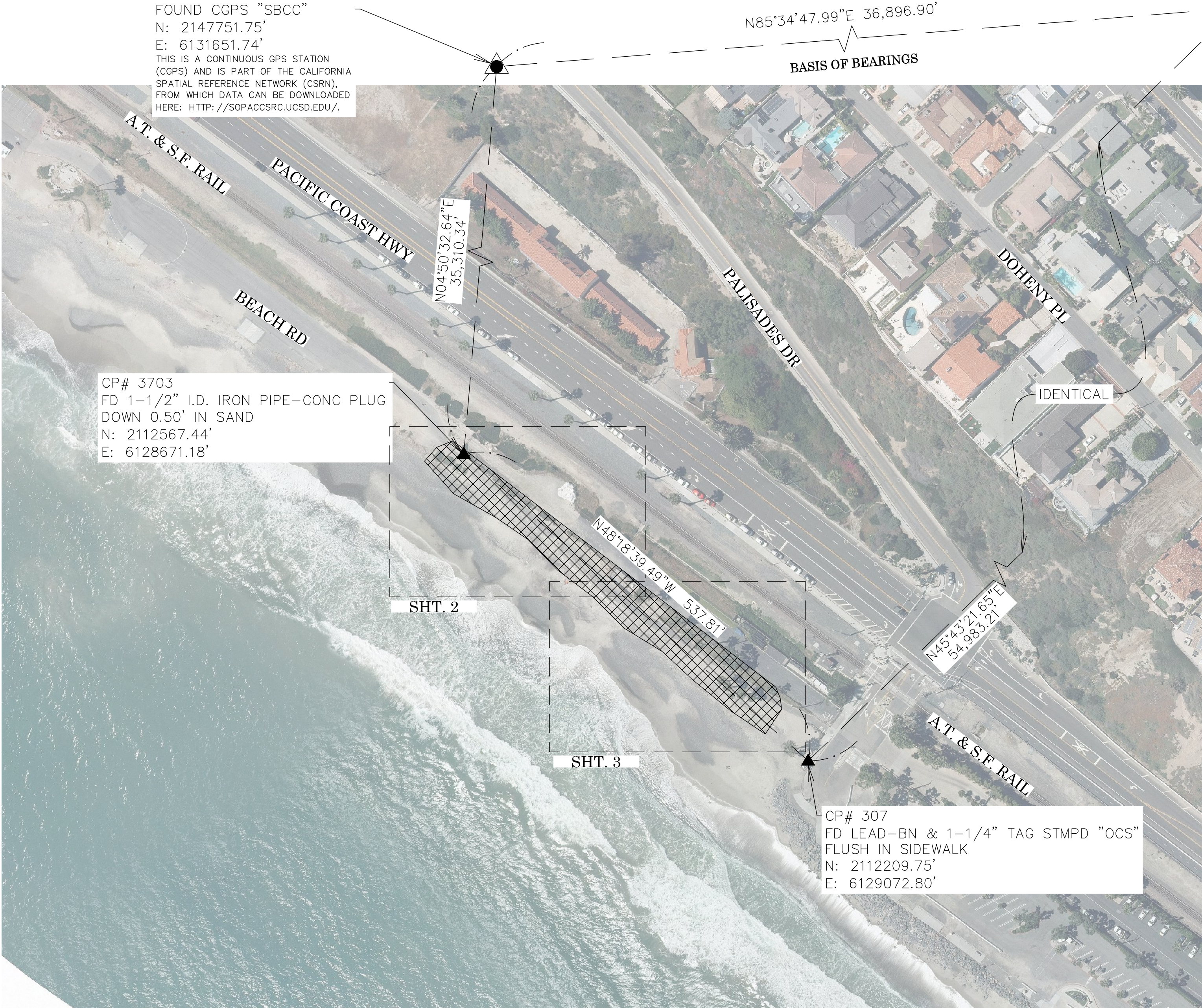
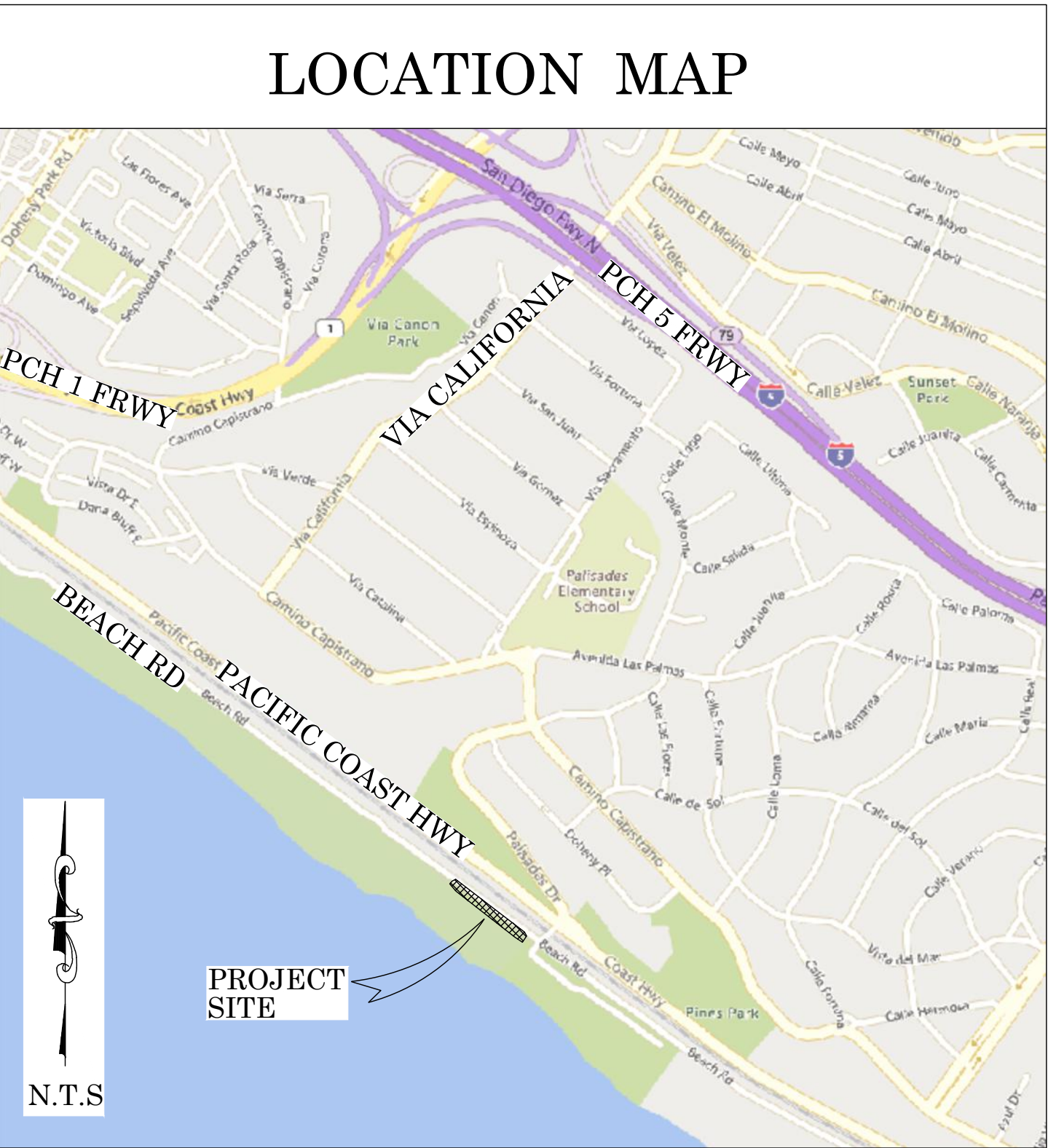




OC PUBLIC WORKS DEPARTMENT  
JAMES TREADAWAY, DIRECTOR OF PUBLIC WORKS  
KEVIN HILLS, COUNTY SURVEYOR  
CAPISTRANO BEACH COASTAL REPAIR



PHASE 1 AS-BUILT SURVEY



FOUND CGPS "P471"  
N: 2150595.47'  
E: 6168438.89'  
THIS IS A CONTINUOUS GPS STATION  
(CGPS) AND IS PART OF THE CALIFORNIA  
SPATIAL REFERENCE NETWORK (CSRN),  
FROM WHICH DATA CAN BE DOWNLOADED  
HERE: [HTTP://SOPACC SRC.UCSD.EDU/](http://sopaccsrc.ucsd.edu/).

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 CGPS STATIONS (SBCC) AND (P471) BEING NORTH 85°34'47" EAST 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 1.00003920.

THIS COMBINATION FACTOR WAS HELD AT: CP# 307  
N: 2112209.75' E: 6129072.80' EL: 15.74'

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

VERTICAL DATUM

MEAN LOWER-LOW WATER (MLLW)

ELEVATIONS SHOWN ARE DERIVED BY A CONVERSION FROM NGVD29 TO MLLW. THAT CONVERSION BEING 2.52' FROM BM 3B-50-68 TO TIDAL STATION 9410580.

THE COUNTY WIDE VERTICAL DIFFERENCE AVERAGE OF 2.34' BETWEEN NGVD29 AND NAVD88 ALONG WITH THE NAVD88 ADJUSTMENT OF 0.18' FROM TIDAL STATION 9410580, EPOCH 1983-2001 WAS USED TO DETERMINE THE CONVERSION.

O.C.S. BM. 3B-50-68 ELEV. = 14.707' NGVD29 YEAR LEVELED: 1989

ADJUSTMENT= 14.707'+2.52'=17.227' MLLW

DESCRIPTION: FOUND 3-3/4" OCS ALUMINUM BENCHMARK DISK STAMPED "3B-50-68", SET IN THE SOUTHERLY END OF A CONCRETE HEADWALL FOR A 24" CULVERT. MONUMENT IS LOCATED ALONG THE SOUTHWESTERLY SIDE OF PACIFIC COAST HIGHWAY, 0.55 MILES SOUTHWESTERLY OF THE CENTERLINE OF DEL OBISPO, 0.05 MILES NORTHERLY ALONG PCH FROM A PEDESTRIAN BRIDGE AND 40.4' WESTERLY OF THE CENTERLINE OF PCH. MONUMENT IS SET LEVEL WITH THE TOP OF THE WALL.

NOTES

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

SHEET INDEX

SHEET	NO.	DESCRIPTION
SHEET	1	TITLE SHEET
SHEETS	2-3	TOPOGRAPHIC MAP
SHEET	4	SAND CUBE EXHIBIT

PURPOSE OF SURVEY

THE PURPOSE OF THE SURVEY IS TO PROVIDE AN AS-BUILT SURVEY SHOWING THE BEACH SURFACE POST-CONSTRUCTION OF THE CAPO BEACH STORM DRAIN EMERGENCY REPAIR EMERGENCY COASTAL PERMIT G-5-19-0036, DATED AUGUST 12, 2019.

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 SURVEYOR'S ACT; THIS 6 DAY OF SEPTEMBER, 2022.

ELLIOTT MEDINA, PLS. SENIOR LAND SURVEYOR



SENIOR LAND SURVEYOR'S CERTIFICATE:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT; THIS 6 DAY OF SEPTEMBER, 2022.

JESOM MORENO, PLS. SENIOR LAND SURVEYOR



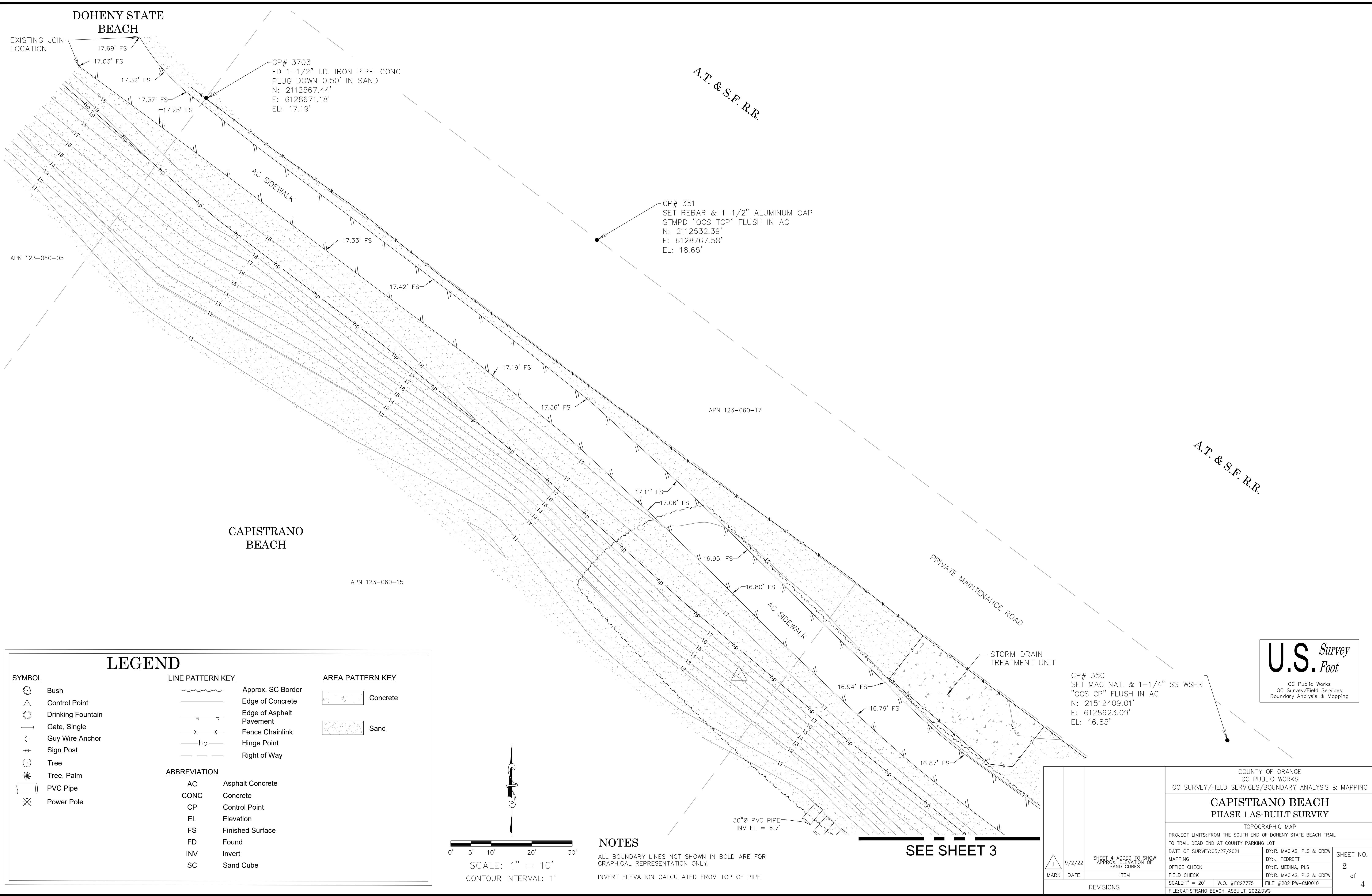
U.S. Survey  
Foot

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

TOPOGRAPHIC MAPPING PROJECT

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
CAPISTRANO BEACH PHASE 1 AS-BUILT SURVEY			
TITLE SHEET			
PROJECT LIMITS: FROM THE SOUTH END OF DOHENY STATE BEACH TRAIL			
TO TRAIL DEAD END AT COUNTY PARKING LOT			
DATE OF SURVEY: 05/27/2021		BY: R. MACIAS, PLS & CREW	
MAPPING		BY: J. PEDRETTI	
OFFICE CHECK		BY: E. MEDINA, PLS	
FIELD CHECK		BY: R. MACIAS, PLS & CREW	
SCALE: N.T.S.		W.O. #EC27775	FILE #2021PW-CM0010
FILE: CAPISTRANO BEACH_AS_BUILT_2022.DWG			
REVISIONS			
MARK	DATE	ITEM	SHEET NO.
1	9/2/22	SHEET 4 ADDED TO SHOW APPROX. ELEVATION OF SAND CUBES	1 of 4





### LEGEND

**SYMBOL**

- Bush
- Control Point
- Drinking Fountain
- Gate, Single
- Guy Wire Anchor
- Sign Post
- Tree
- Tree, Palm
- PVC Pipe
- Power Pole

**LINE PATTERN KEY**

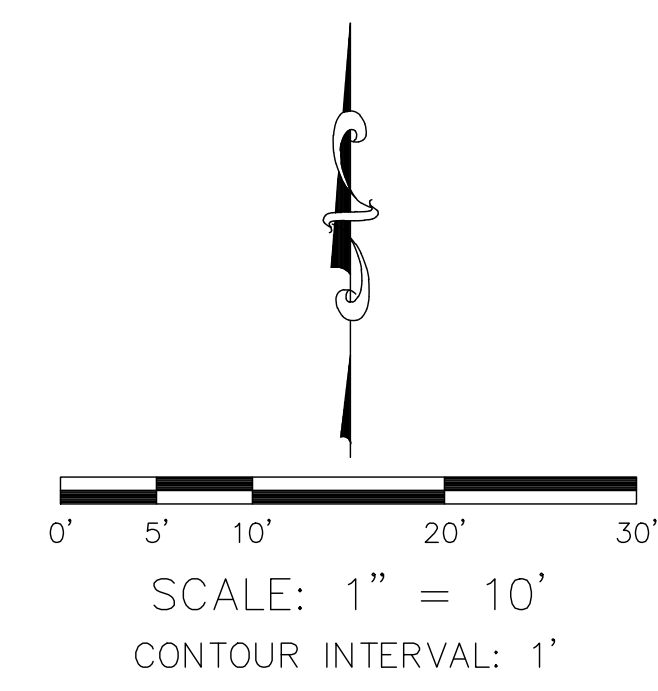
- Approx. SC Border
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence Chainlink
- Hinge Point
- Right of Way

**AREA PATTERN KEY**

- Concrete
- Sand

**ABBREVIATION**

AC	Asphalt Concrete
CONC	Concrete
CP	Control Point
EL	Elevation
FS	Finished Surface
FD	Found
INV	Invert
SC	Sand Cube



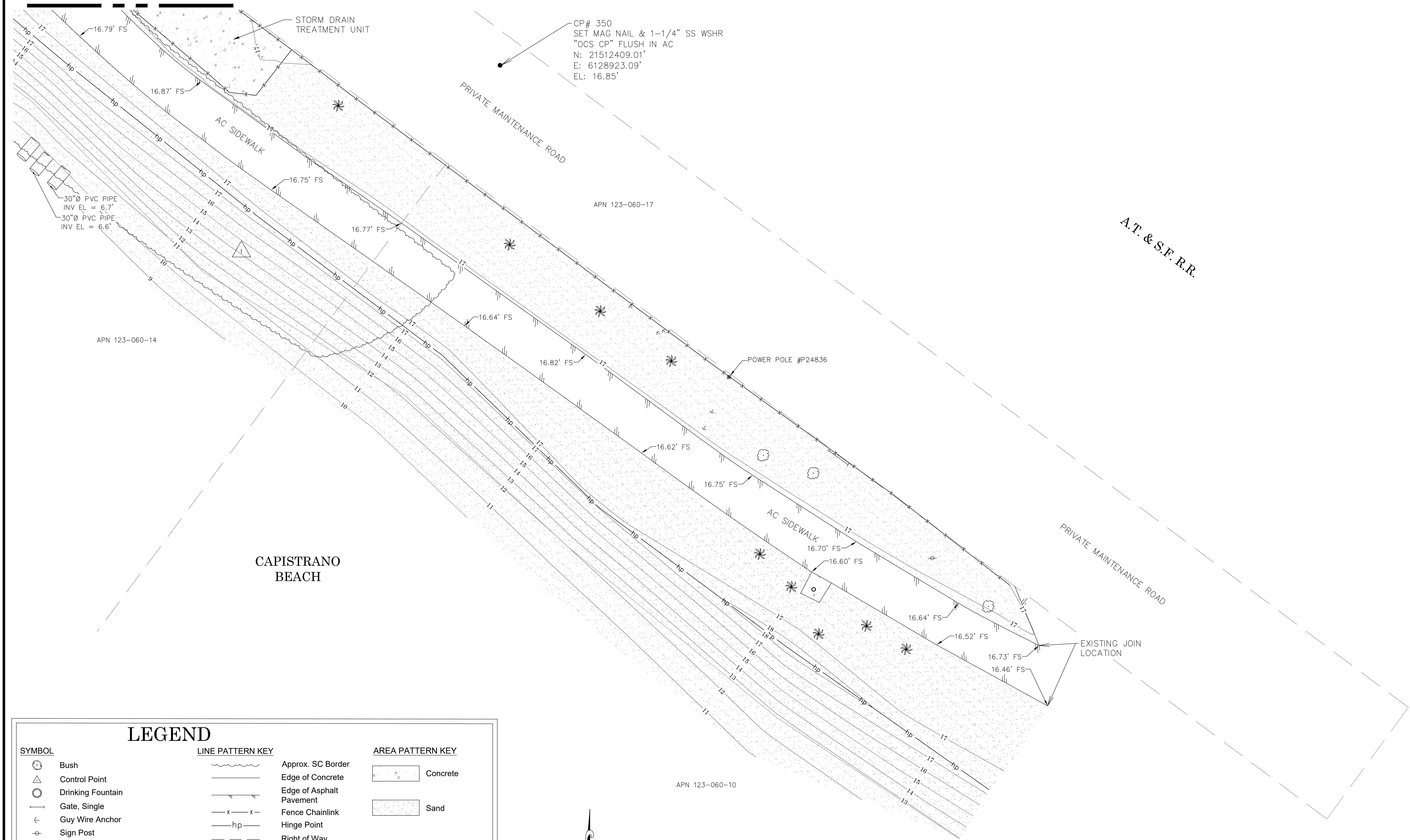
**NOTES**

ALL BOUNDARY LINES NOT SHOWN IN BOLD ARE FOR GRAPHICAL REPRESENTATION ONLY.

INVERT ELEVATION CALCULATED FROM TOP OF PIPE

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
CAPISTRANO BEACH PHASE 1 AS-BUILT SURVEY			
TOPOGRAPHIC MAP			
PROJECT LIMITS: FROM THE SOUTH END OF DOHENY STATE BEACH TRAIL TO TRAIL DEAD END AT COUNTY PARKING LOT			
DATE OF SURVEY: 05/27/2021	BY: R. MACIAS, PLS & CREW	SHEET NO. 2 of 4	
MAPPING	BY: J. PEDRETTI		
OFFICE CHECK	BY: E. MEDINA, PLS		
FIELD CHECK	BY: R. MACIAS, PLS & CREW		
SCALE: 1" = 20'	W.O. #EC27775	FILE #2021PW-CM0010	
FILE: CAPISTRANO_BEACH_AS_BUILT_2022.DWG			
REVISIONS			

SEE SHEET 2



SYMBOL

- Bush
- Control Point
- Drinking Fountain
- Gate, Single
- Guy Wire Anchor
- Sign Post
- Tree
- Tree, Palm
- PVC Pipe
- Power Pole

LINE PATTERN KEY

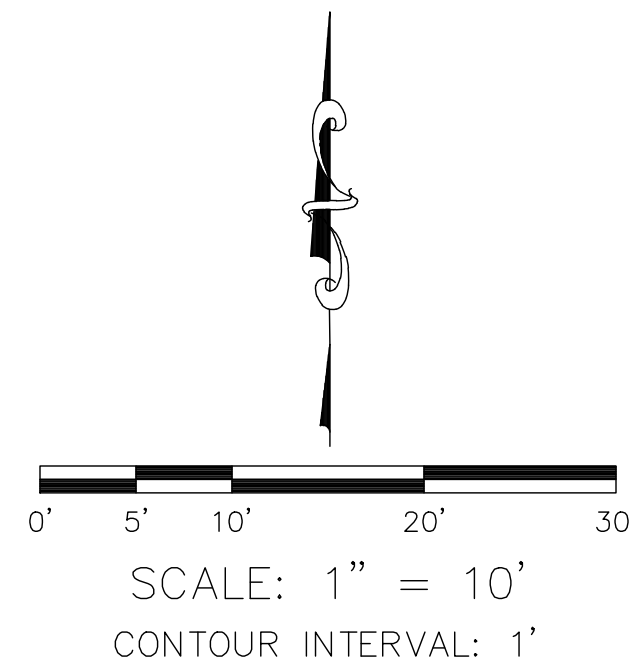
- Approx. SC Border
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence Chainlink
- Hinge Point
- Right of Way

AREA PATTERN KEY

- Concrete
- Sand

ABBREVIATION

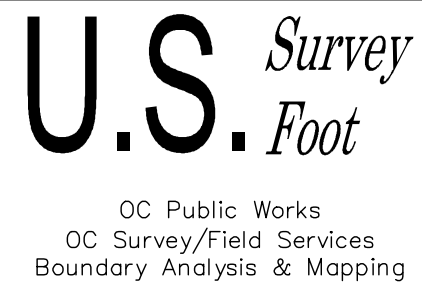
- AC Asphalt Concrete
- CONC Concrete
- CP Control Point
- EL Elevation
- FS Finished Surface
- FD Found
- INV Invert
- SC Sand Cube



NOTES

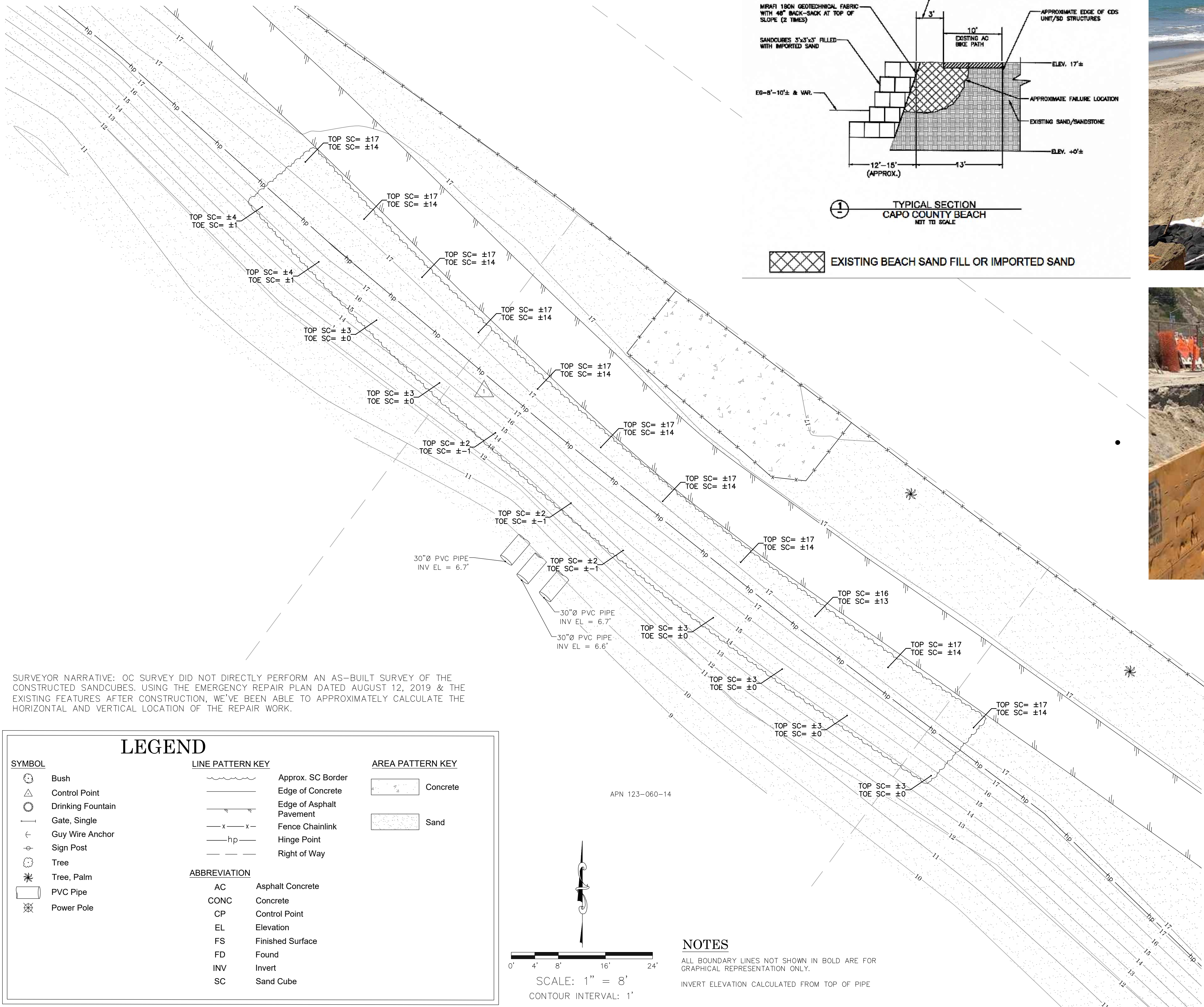
ALL BOUNDARY LINES NOT SHOWN IN BOLD ARE FOR GRAPHICAL REPRESENTATION ONLY.  
INVERT ELEVATION CALCULATED FROM TOP OF PIPE

CP# 307  
FD LEAD-BN & 1-1/4" TAG STMPD  
"OCS" FLUSH IN SIDEWALK  
N: 2112209.75'  
E: 6129072.80'  
EL: 15.74'



<div><div></div><div>1</div></div>	9/2/22	SHEET 4 ADDED TO SHOW APPROX. ELEVATION OF SAND CUBES	COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			CAPISTRANO BEACH PHASE 1 AS-BUILT SURVEY			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: FROM THE SOUTH END OF DOHENY STATE BEACH TRAIL TO TRAIL DEAD END AT COUNTY PARKING LOT			
			DATE OF SURVEY: 05/27/2021		BY: R. MACIAS, PLS & CREW	
			MAPPING		BY: J. PEDRETTI	
			OFFICE CHECK		BY: E. MEDINA, PLS	
			FIELD CHECK		BY: R. MACIAS, PLS & CREW	
			SCALE: 1" = 20'		W.O. #EC27775	
			FILE: CAPISTRANO BEACH_ASBLT_2022.DWG		FILE #2021PW-CM0010	
MARK		DATE		ITEM		SHEET NO.  3 of 4
REVISIONS						





SURVEYOR NARRATIVE: OC SURVEY DID NOT DIRECTLY PERFORM AN AS-BUILT SURVEY OF THE CONSTRUCTED SANDCUBES. USING THE EMERGENCY REPAIR PLAN DATED AUGUST 12, 2019 & THE EXISTING FEATURES AFTER CONSTRUCTION, WE'VE BEEN ABLE TO APPROXIMATELY CALCULATE THE HORIZONTAL AND VERTICAL LOCATION OF THE REPAIR WORK.

**LEGEND**

**SYMBOL**

- Bush
- Control Point
- Drinking Fountain
- Gate, Single
- Guy Wire Anchor
- Sign Post
- Tree
- Tree, Palm
- PVC Pipe
- Power Pole

**LINE PATTERN KEY**

- Approx. SC Border
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence Chainlink
- Hinge Point
- Right of Way

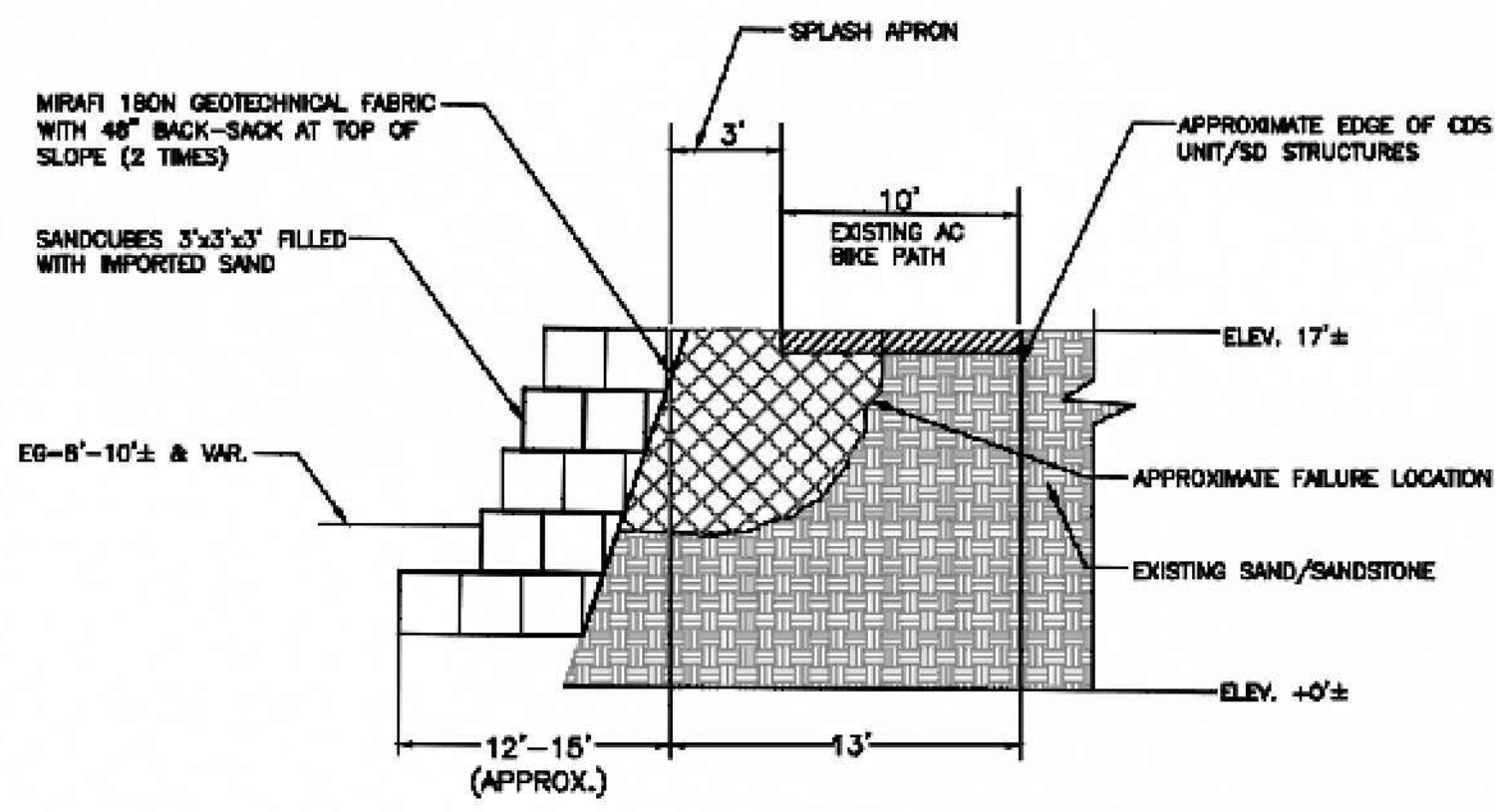
**AREA PATTERN KEY**

- Concrete
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**ABBREVIATION**

- AC Asphalt Concrete
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- CP Control Point
- EL Elevation
- FS Finished Surface
- FD Found
- INV Invert
- SC Sand Cube

**NOTES**  
ALL BOUNDARY LINES NOT SHOWN IN BOLD ARE FOR GRAPHICAL REPRESENTATION ONLY.  
INVERT ELEVATION CALCULATED FROM TOP OF PIPE



TYPICAL SECTION  
CAPO COUNTY BEACH  
NOT TO SCALE

EXISTING BEACH SAND FILL OR IMPORTED SAND



APN 123-060-17

APN 123-060-14

**U.S. Survey**  
Foot

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

<div><div>1</div><div>MARK</div></div>	<div>9/2/22</div> <div>DATE</div>	<div>SHEET 4 ADDED TO SHOW APPROX. ELEVATION OF SAND CUBES</div> <div>ITEM</div>	COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			CAPISTRANO BEACH PHASE 1 AS-BUILT SURVEY		
			TOPOGRAPHIC MAP		
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			DATE OF SURVEY: 05/27/2021		BY: R. MACIAS, PLS & CREW
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			SCALE: 1" = 20'		W.O. #EC27775
			FILE: CAPISTRANO_BEACH_AS_BUILT_2022.DWG		FILE #2021PW-CM0010
REVISIONS			SHEET NO. 4 of 4		