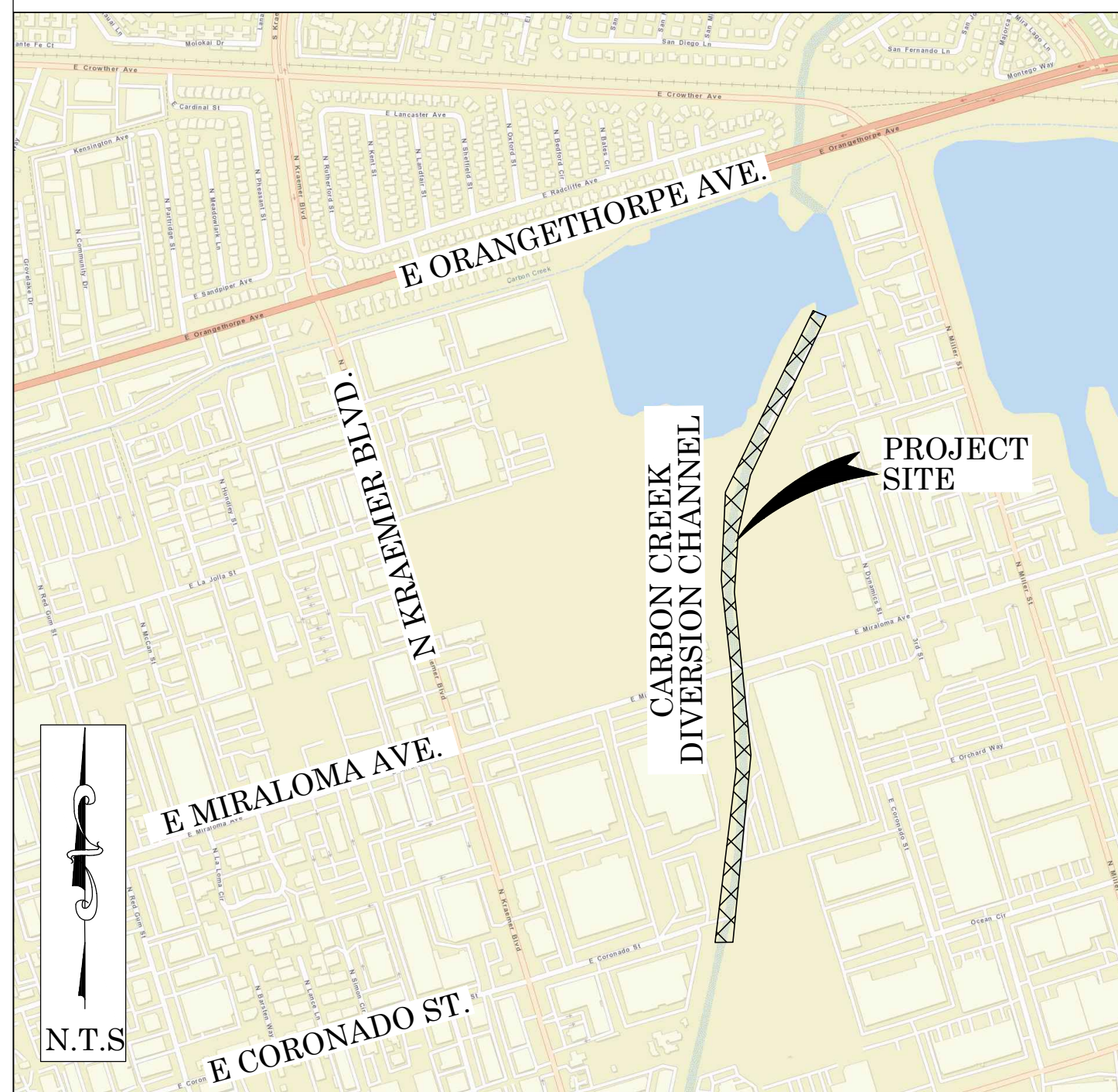




OC PUBLIC WORKS DEPARTMENT
JAMES TREADAWAY, DIRECTOR OF PUBLIC WORKS
KEVIN HILLS, COUNTY SURVEYOR
CARBON CREEK DIVERSION CHANNEL (E02)



LOCATION MAP



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 2 DAY OF SEPTEMBER, 2021.

Jesom Moreno

JESOM MORENO, PLS. SENIOR LAND SURVEYOR

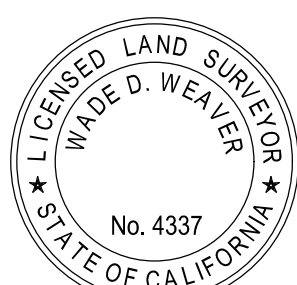


DEPUTY COUNTY SURVEYOR'S STATEMENT:

THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT; THIS 2 DAY OF SEPTEMBER, 2021.

Wade Weaver

WADE WEAVER, PLS. DEPUTY COUNTY SURVEYOR



U.S. Survey
Foot

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

FOUND CGPS "SACY"
N: 2218015.22'
E: 6061433.13'
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://SOPACCSRC.UCSD.EDU/](http://sopaccsrc.ucsd.edu/).

N80°43'39"E 46,762.51'
BASIS OF BEARING

FOUND CGPS "OEOC"
N: 2225550.04'
E: 6107584.61'
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://SOPACCSRC.UCSD.EDU/](http://sopaccsrc.ucsd.edu/).

TOPOGRAPHIC MAPPING PROJECT

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, NAD 83, OCS (2007.00) EPOCH ADJUSTMENT, AS DETERMINED LOCALLY BY A LINE BETWEEN CONTINUOUS GLOBAL POSITIONING STATIONS CGPS STATIONS (SACY) AND (OEOC) BEING NORTH 80°43'39" 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 (2007.00) EPOCH ADJUSTMENT.
ALL DISTANCES SHOWN ARE GRID, UNLESS OTHERWISE NOTED. TO OBTAIN GROUND DISTANCES MULTIPLY GRID BY A COMBINED FACTOR OF 1.00000987.
THIS COMBINATION FACTOR WAS HELD AT: CP# 101
N: 2258568.71' E: 6074326.17' EL: 225.18'
ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

VERTICAL DATUM

O.C.S. BM. IL-103-06 ELEV. = 235.018' YEAR LEVELED: 2006
NAVD 1988 (O.C.S. 1995 ADJUSTMENT)
DESCRIPTION: DESCRIBED BY OCS 2006 - FOUND 4" OCS ALUMINUM BENCHMARK DISK STAMPED "IL-103-06", SET IN THE NORTHWEST CORNER OF A 5.0 FT. BY 4.0 FT. CONCRETE CATCH BASIN. MONUMENT IS LOCATED IN THE SOUTHEAST PORTION OF THE INTERSECTION OF GLASSSELL ST. BRIDGE OVERCROSSING OF THE SANTA ANA RIVER, AT THE SOUTHEASTERLY CORNER OF THE BRIDGE, 47 FT. EAST OF THE CENTERLINE OF GLASSSELL ST. MONUMENT IS SET LEVEL WITH THE SIDEWALK.

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 2-7	TOPOGRAPHIC MAP

PURPOSE OF SURVEY

THE PURPOSE OF THE SURVEY IS TO PROVIDE A TOPOGRAPHIC MAP FOR THIS PORTION OF THE CARBON CREEK DIVERSION CHANNEL (E02)

BASIS OF STATIONING

STATIONING WAS DERIVED FROM RECORD AS-BUILT PLANS E01-101-6A DATED MARCH, 1970 AND E02-701-1-A DATED SEPTEMBER, 1960 BETWEEN STATIONS 35+15.53 TO 126+00.43

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING				
			CARBON CREEK DIVERSION CHANNEL (E02) TOPOGRAPHIC MAP				
			TITLE SHEET				
			PROJECT LIMITS: E. CORONADO ST. N'ELY ALONG CARBON CREEK DIVERSION CHANNEL TO MILLER BASIN S'LY OF ORANGETHORPE AVE.				
			DATE OF SURVEY: 08/04/2021		BY: E. HERTZ & CREW		SHEET NO. 1 of 7
			MAPPING		BY: R. BELTRAN		
			OFFICE CHECK		BY: J. MORENO, PLS		
			FIELD CHECK		BY: E. HERTZ & CREW		
			SCALE: N.T.S.		W.O. #EF21249	FILE #2021PW-ENG00005	
			FILE: CARBON CREEK DIVERSION CHANNEL		TOPO_2021.DWG		
REVISIONS							
MARK	DATE	ITEM					

SEE SHEET 4

CP# 22008
1 INCH IP AND 1 1/4 INCH STEEL WASHER
WITH BRASS NAIL STAMPED "OCS CP"
DOWN 0.30FT IN DIRT
N: 2259720.74'
E: 6074456.09'
EL: 225.72'

APN345-101-30
3190 E MIRALOMA AVE

18"Ø EXPOSED CMP
INV EL = 217.74'
HEADWALL
EL.=225.09
18"Ø CMP
INV EL = 222.47'
#10595_D

APN345-081-16
3320 E MIRALOMA AVE

SOFFIT EL=224.43'
CONCRETE ACCESS BRIDGE
SOFFIT EL=224.49'
#10594_D
SOFFIT EL=224.65'
SOFFIT EL=224.36'
#10600_D

APN345-101-30
3190 E MIRALOMA AVE

HEADWALL
EL.=217.43'
18"Ø RCP
INV EL = 214.76'
#10593_D

SEE SHEET 2

LEGEND

SYMBOL

- Control Box Electrical
- Control Point
- Gate, Double
- Gate, Single
- Guy Wire Anchor
- Pipe Inlet/Outlet
- Post
- Rock/Boulder
- Sign Post
- Tree, Palm
- Utility Pole, Underground
- Valve Water
- Valve Undefined
- Vault Cable TV
- Vault Undefined
- Vent Pipe

AREA PATTERN KEY

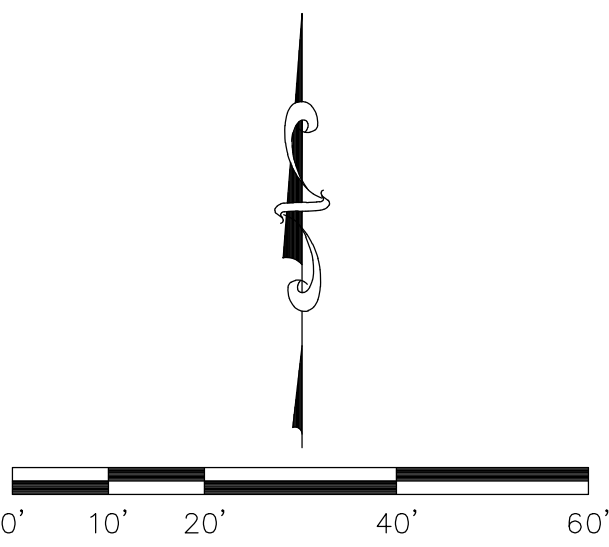
- Concrete
- Dirt
- Rip Rap

LINE PATTERN KEY

- Block Wall
- Building Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence Chainlink
- Flowline
- Grade Line
- Hand Rail
- Hinge Point
- Parcel Line
- Pipe Exposed

ABBREVIATION

- AC Asphalt Concrete
- CONC Concrete
- CP Control Point
- CMP Corrugated Metal Pipe
- FL Flowline
- FD Found
- INV Invert
- RCP Reinforced Concrete Pipe
- TW Top of Wall



SCALE: 1" = 20'

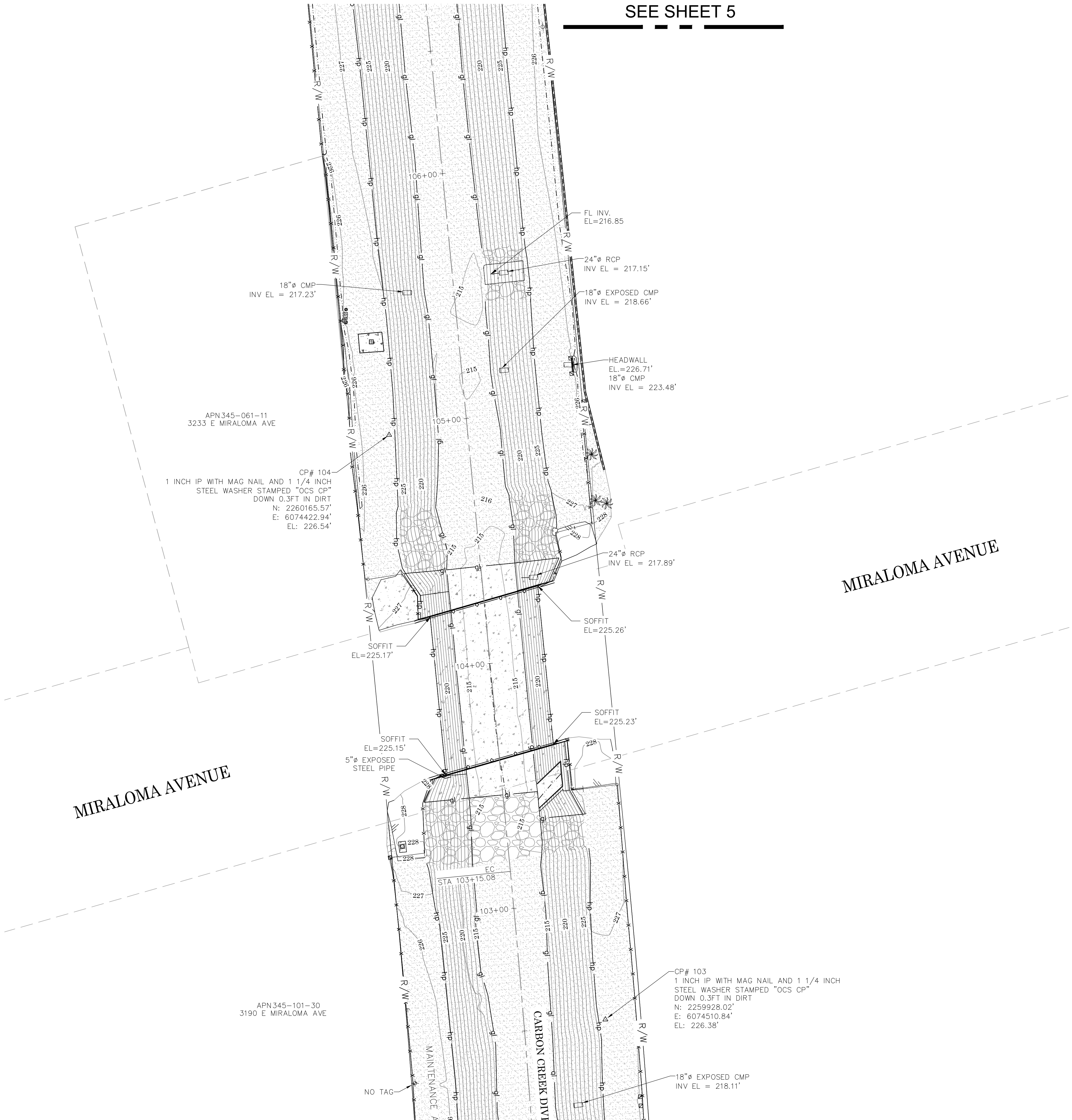
CONTOUR INTERVAL: 1'

U.S. Survey Foot

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

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			CARBON CREEK DIVERSION CHANNEL (E02) TOPOGRAPHIC MAP			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: E.CORONADO ST. N.E'LY ALONG CARBON CREEK DIVERSION CHANNEL TO MILLER BASIN S'LY OF ORANGETHORPE AVE.			
			DATE OF SURVEY:08/04/2021	BY:E. HERTZ & CREW	SHEET NO. 3 of 7	
			MAPPING	BY:R. BELTRAN		
			OFFICE CHECK	BY:J. MORENO, PLS		
			FIELD CHECK	BY:E. HERTZ & CREW		
MARK	DATE	ITEM	SCALE:1" = 20'	W.O. #EF21249	FILE #2021PW-ENG0005	
		REVISIONS			FILE:CARBON CREEK DIVERSION CHANNEL_TOPO_2021.DWG	

SEE SHEET 5

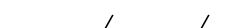
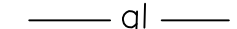
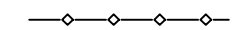


MIRALOMA AVENUE

MIRALOMA AVENUE

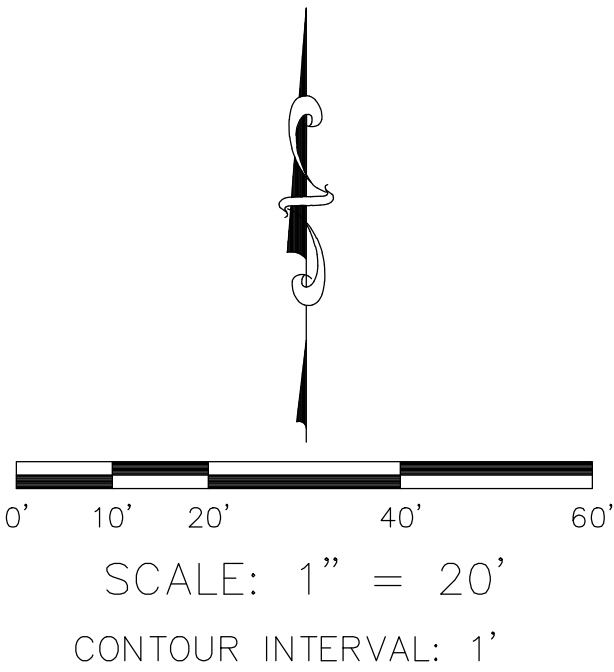
SEE SHEET 3

LEGEND

SYMBOL		LINE PATTERN KEY	
	Control Box Electrical		Block Wall
	Control Point		Building Outline
	Gate, Double		Concrete Wall
	Gate, Single		Edge of Concrete
	Guy Wire Anchor		Edge of Asphalt Pavement
	Pipe Inlet/Outlet		Fence Chainlink
	Post		Flowline
	Rock/Boulder		Grade Line
	Sign Post		Hand Rail
	Tree, Palm		Hinge Point
	Utility Pole, Underground		Parcel Line
	Valve Water		Pipe Exposed
	Valve Undefined		
	Vault Cable TV		
	Vault Undefined		
	Vent Pipe		

AREA PATTERN KEY	
	Concrete
	Dirt

ABBREVIATION	
AC	Asphalt Concrete
CONC	Concrete
CP	Control Point
CMP	Corrugated Metal Pipe
FL	Flowline
FD	Found
INV	Invert
RCP	Reinforced Concrete Pipe
TW	Top of Wall



U.S. Survey
Foot

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

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			CARBON CREEK DIVERSION CHANNEL (E02) TOPOGRAPHIC MAP			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: E.CORONADO ST. N'ELY ALONG CARBON CREEK DIVERSION CHANNEL TO MILLER BASIN S'LY OF ORANGETHORPE AVE.			
			DATE OF SURVEY:08/04/2021	BY:E. HERTZ & CREW	SHEET NO. 4 of 7	
			MAPPING	BY:R. BELTRAN		
			OFFICE CHECK	BY:J. MORENO, PLS		
			FIELD CHECK	BY:E. HERTZ & CREW		
MARK	DATE	ITEM	SCALE:1" = 20'	W.O. #EF21249	FILE #2021PW-ENG0005	
		REVISIONS			FILE:CARBON CREEK DIVERSION CHANNEL_TOPO_2021.DWG	

SEE SHEET 6

LEGEND

SYMBOL

- Control Box Electrical
- Control Point
- Gate, Double
- Gate, Single
- Guy Wire Anchor
- Pipe Inlet/Outlet
- Post
- Rock/Boulder
- Sign Post
- Tree, Palm
- Utility Pole, Underground
- Valve Water
- Valve Undefined
- Vault Cable TV
- Vault Undefined
- Vent Pipe

LINE PATTERN KEY

- Block Wall
- Building Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence Chainlink
- Flowline
- Grade Line
- Hand Rail
- Hinge Point
- Parcel Line
- Pipe Exposed

AREA PATTERN KEY

- Concrete
- Dirt
- Rip Rap

ABBREVIATION

- AC Asphalt Concrete
- CONC Concrete
- CP Control Point
- CMP Corrugated Metal Pipe
- FL Flowline
- FD Found
- INV Invert
- RCP Reinforced Concrete Pipe
- TW Top of Wall

CP# 105
1 INCH IP WITH MAG NAIL AND 1 1/4 INCH
STEEL WASHER STAMPED "OCS CP"
DOWN 0.3FT IN DIRT
N: 2260763.26'
E: 6074388.88'
EL: 227.84'

FL INV.
EL=221.42'
24"Ø CMP
INV EL = 220.89'

24"Ø EXPOSED CMP
INV EL = 218.84'
18"Ø CMP
INV EL = 218.40'
FL INV.
EL=225.18'
18"Ø CMP
INV EL = 224.60'

FL INV.
EL=217.48'
24"Ø RCP
INV EL = 217.78'

CP# 107
1 INCH IP WITH MAG NAIL AND 1 1/4 INCH
STEEL WASHER STAMPED "OCS CP"
DOWN 0.5FT IN DIRT
N: 2260525.91'
E: 6074454.84'
EL: 226.11'

APN 345-061-10

APN 345-061-06
3261 E MIRALOMA AVE

SEE SHEET 4



0' 10' 20' 40' 60'

SCALE: 1" = 20'

CONTOUR INTERVAL: 1'

U.S. Survey
Foot

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

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
CARBON CREEK DIVERSION CHANNEL (E02) TOPOGRAPHIC MAP	
TOPOGRAPHIC MAP PROJECT LIMITS: E.CORONADO ST. N.E'LY ALONG CARBON CREEK DIVERSION CHANNEL TO MILLER BASIN S'LY OF ORANGETHORPE AVE.	
DATE OF SURVEY: 08/04/2021	BY: E. HERTZ & CREW
MAPPING	BY: R. BELTRAN
OFFICE CHECK	BY: J. MORENO, PLS
FIELD CHECK	BY: E. HERTZ & CREW
SCALE: 1" = 20'	W.O. #EF21249
FILE: CARBON CREEK DIVERSION CHANNEL_TOPO_2021.DWG	FILE #2021PW-ENG0005

SHEET NO.
5
of
7

SEE SHEET 7

LEGEND

SYMBOL

- Control Box Electrical
- Control Point
- Gate, Double
- Gate, Single
- Guy Wire Anchor
- Pipe Inlet/Outlet
- Post
- Rock/Boulder
- Sign Post
- Tree, Palm
- Utility Pole, Underground
- Valve Water
- Valve Undefined
- Vault Cable TV
- Vault Undefined
- Vent Pipe

LINE PATTERN KEY

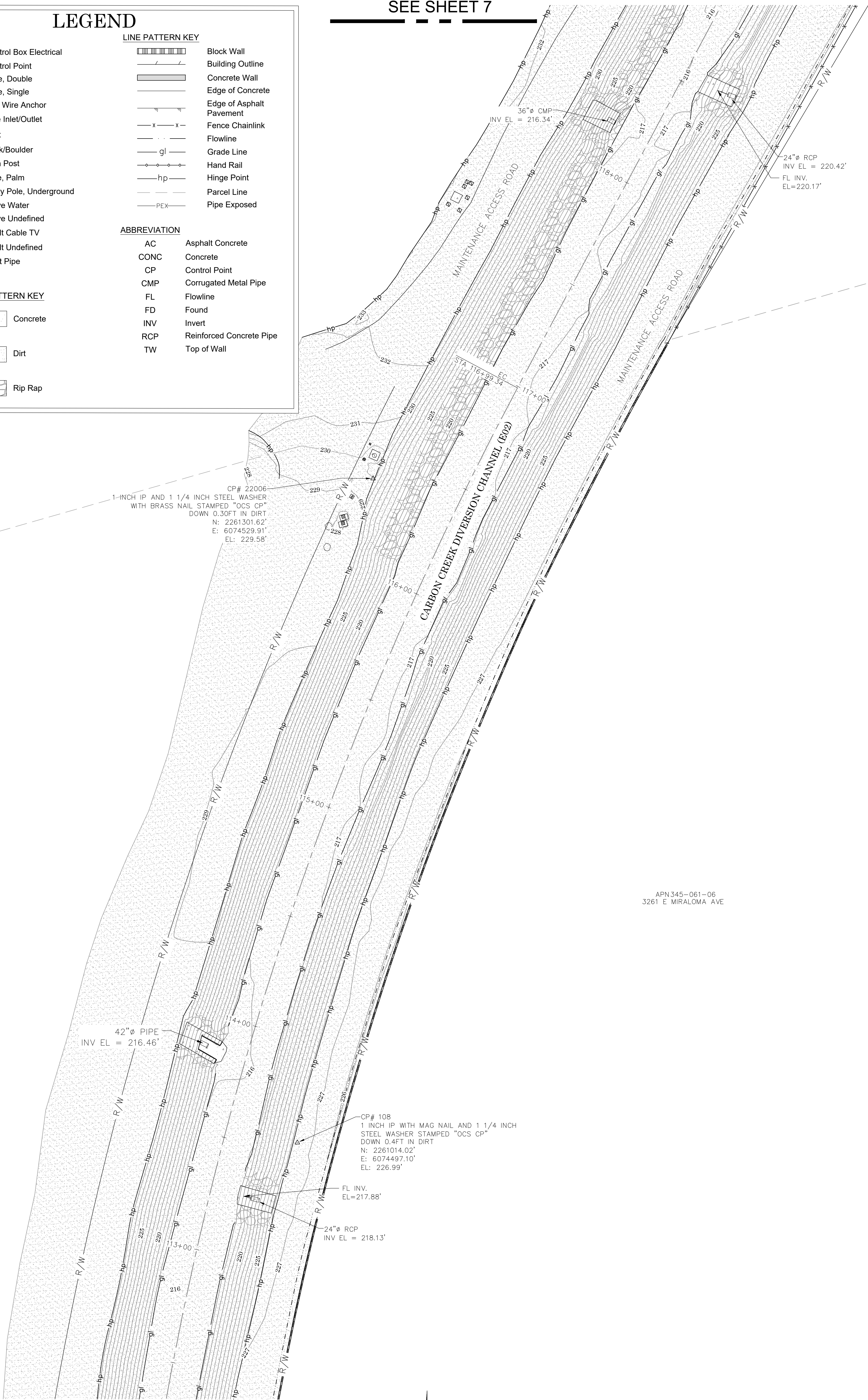
- Block Wall
- Building Outline
- Concrete Wall
- Edge of Concrete
- Edge of Asphalt Pavement
- Fence Chainlink
- Flowline
- Grade Line
- Hand Rail
- Hinge Point
- Parcel Line
- Pipe Exposed

ABBREVIATION

- AC Asphalt Concrete
- CONC Concrete
- CP Control Point
- CMP Corrugated Metal Pipe
- FL Flowline
- FD Found
- INV Invert
- RCP Reinforced Concrete Pipe
- TW Top of Wall

AREA PATTERN KEY

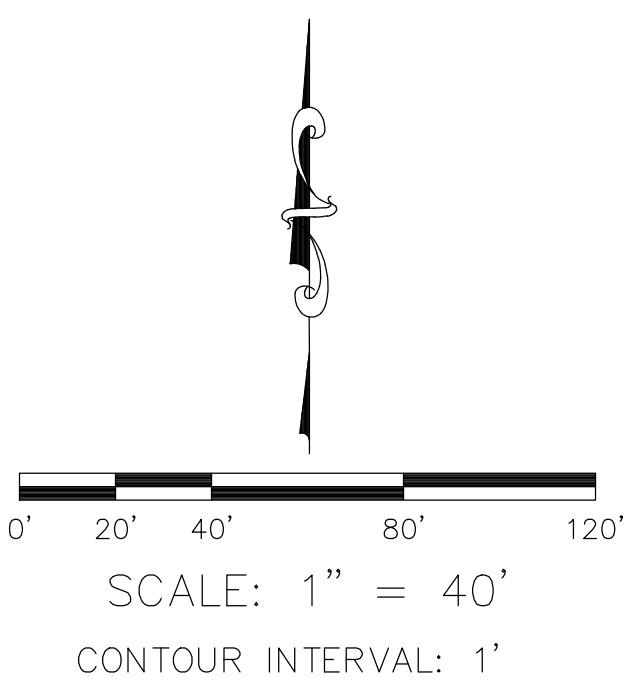
- Concrete
- Dirt
- Rip Rap



SEE SHEET 5

U.S. Survey Foot

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



			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			CARBON CREEK DIVERSION CHANNEL (E02) TOPOGRAPHIC MAP			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: E. CORONADO ST. N.E.L.Y. ALONG CARBON CREEK DIVERSION CHANNEL TO MILLER BASIN S'LY OF ORANGETHORPE AVE.			
			DATE OF SURVEY: 08/04/2021	BY: E. HERTZ & CREW	SHEET NO. 6 of 7	
			MAPPING	BY: R. BELTRAN		
			OFFICE CHECK	BY: J. MORENO, PLS		
			FIELD CHECK	BY: E. HERTZ & CREW		
MARK	DATE	ITEM	SCALE: 1" = 20'	W.O. #EF21249	FILE #2021PW-ENG0005	
REVISIONS			FILE: CARBON CREEK DIVERSION CHANNEL_TOPO_2021.DWG			

LEGEND

SYMBOL

Control Box Electrical

Control Point

Gate, Double

Gate, Single

Guy Wire Anchor

Pipe Inlet/Outlet

Post

Rock/Boulder

Sign Post

Tree, Palm

Utility Pole, Underground

Valve Water

Valve Undefined

Vault Cable TV

Vault Undefined

Vent Pipe

LINE PATTERN KEY

Block Wall

Building Outline

Concrete Wall

Edge of Concrete

Edge of Asphalt Pavement

Fence Chainlink

Flowline

Grade Line

Hand Rail

Hinge Point

Parcel Line

Pipe Exposed

ABBREVIATION

AC

Asphalt Concrete

CONC

Concrete

CP

Control Point

CMP

Corrugated Metal Pipe

FL

Flowline

FD

Found

INV

Invert

RCP

Reinforced Concrete Pipe

TW

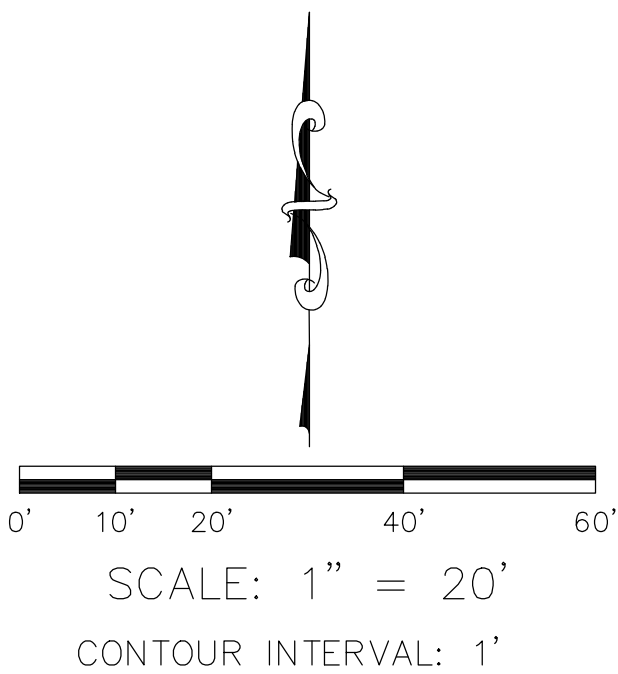
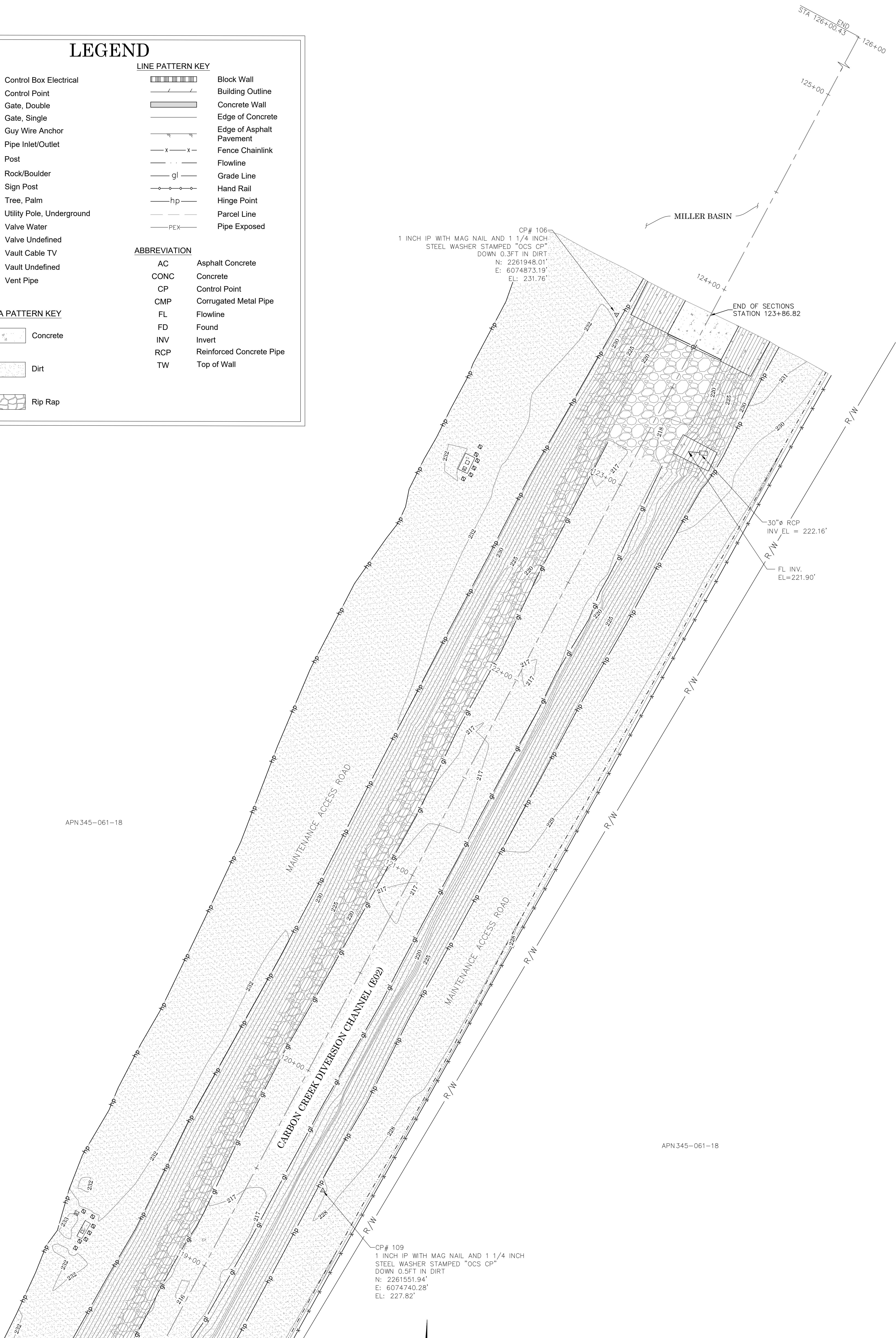
Top of Wall

AREA PATTERN KEY

Concrete

Dirt

Rip Rap



			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
			CARBON CREEK DIVERSION CHANNEL (E02) TOPOGRAPHIC MAP			
			TOPOGRAPHIC MAP			
			PROJECT LIMITS: E.CORONADO ST. N'E'LY ALONG CARBON CREEK DIVERSION CHANNEL TO MILLER BASIN S'LY OF ORANGETHORPE AVE.			
			DATE OF SURVEY:08/04/2021		BY:E. HERTZ & CREW	
			MAPPING		BY:R. BELTRAN	
			OFFICE CHECK		BY:J. MORENO, PLS	
			FIELD CHECK		BY:E. HERTZ & CREW	
MARK	DATE	ITEM	SCALE:1" = 20'		W.O. #EF21249	
		REVISIONS			FILE #2021PW-ENG0005	
					FILE:CARBON CREEK DIVERSION CHANNEL_TOPO_2021.DWG	

SHEET NO.	7	of	7