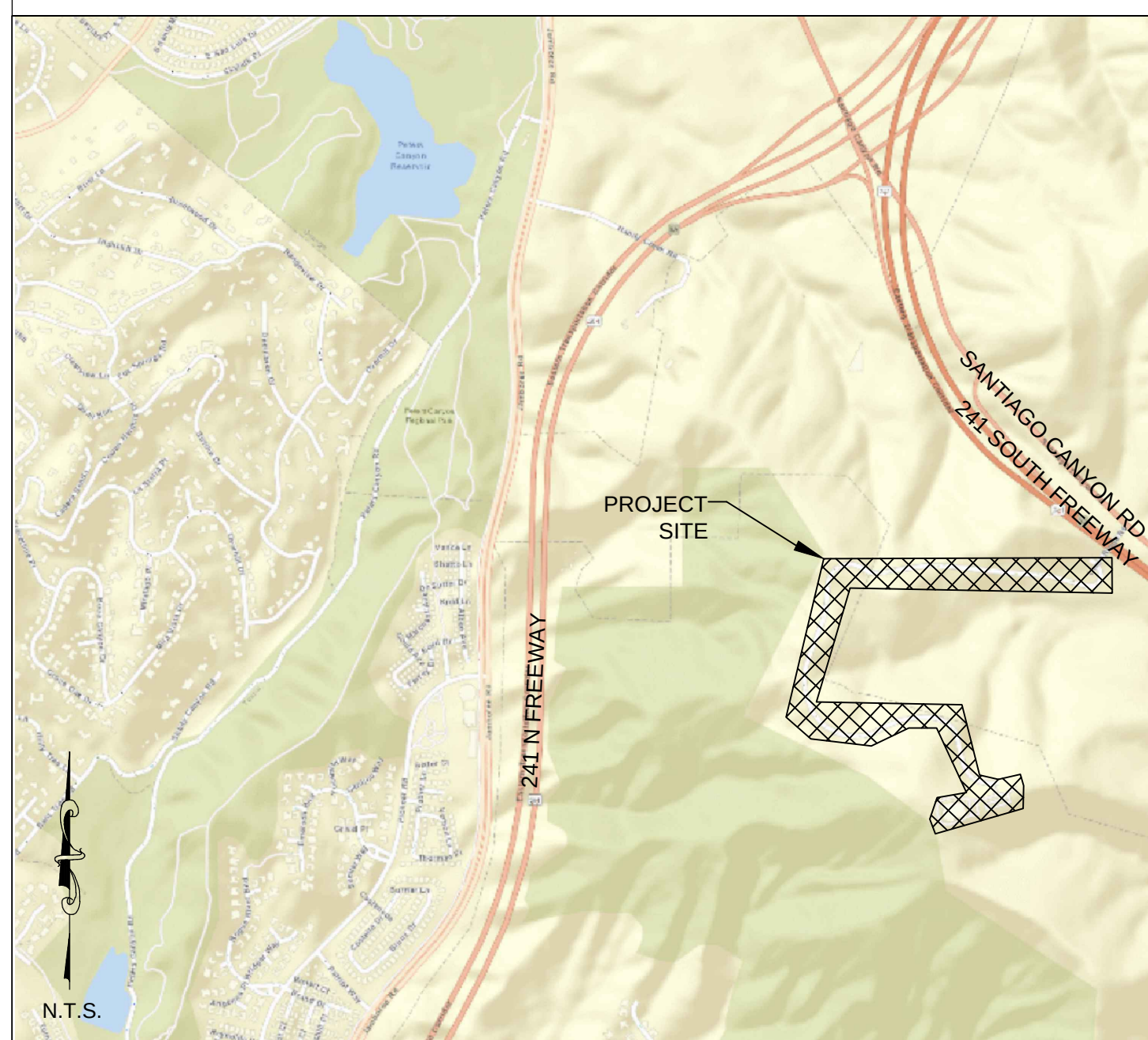




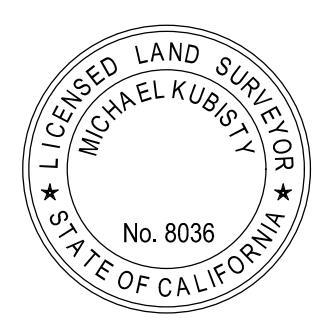
OC PUBLIC WORKS DEPARTMENT
SHANE SILSBY, DIRECTOR
KEVIN HILLS, COUNTY SURVEYOR
LOMA RIDGE ROAD REHABILITATION
LIMITS: FROM SANTIAGO CANYON ROAD TO EOC BUILDING



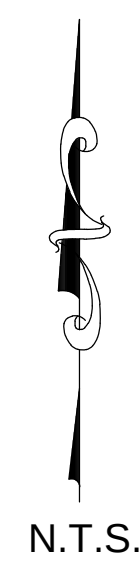
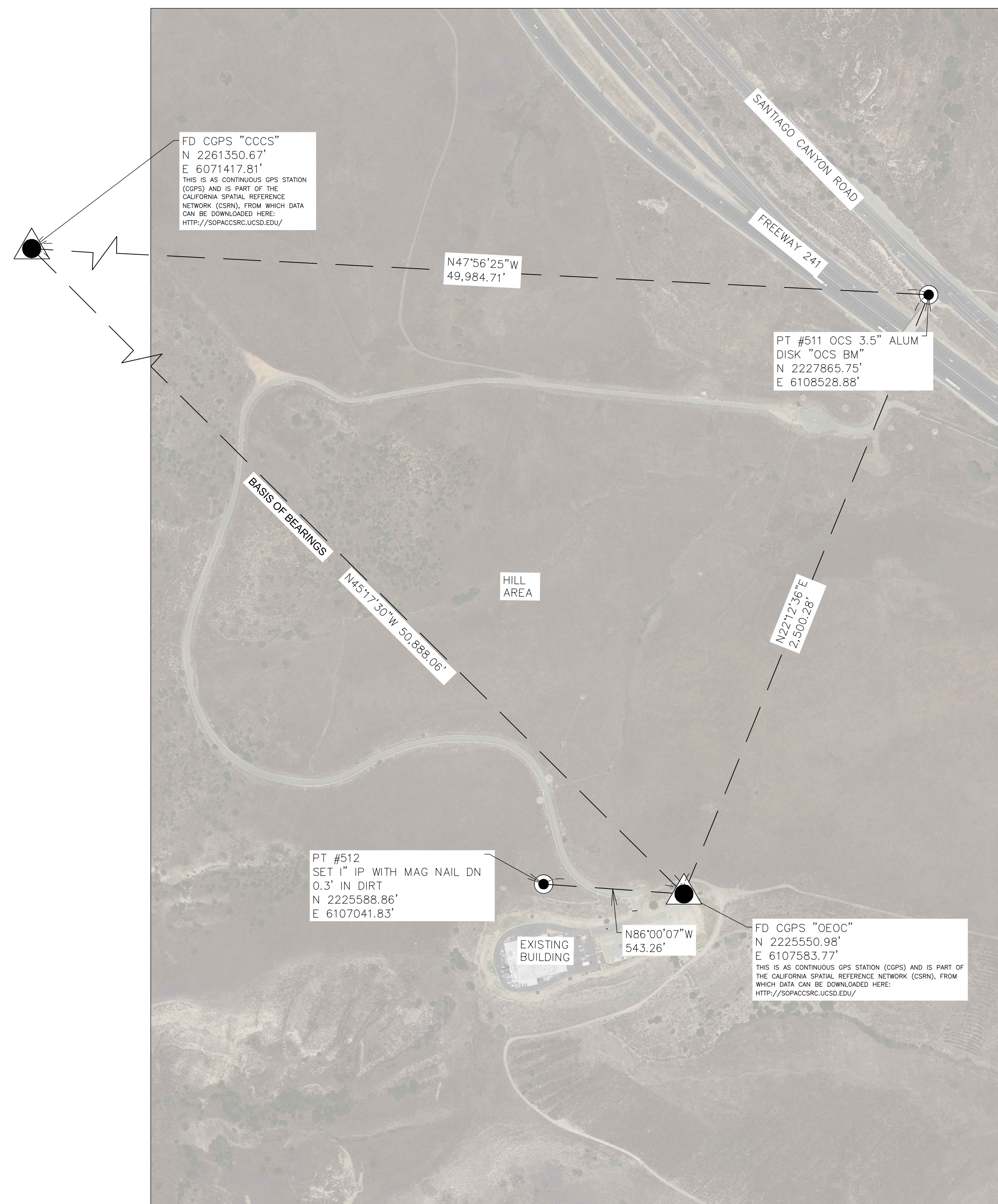
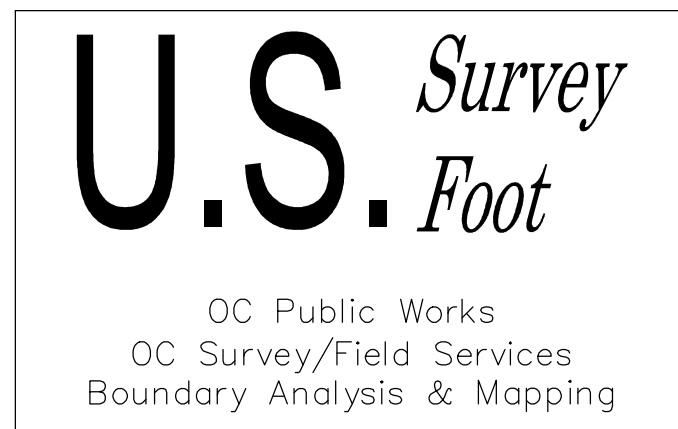
LOCATION MAP



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 31ST DAY OF DECEMBER, 2019.
Michael Kubisty
MICHAEL KUBISTY PLS SENIOR LAND SURVEYOR



DEPUTY COUNTY SURVEYOR'S STATEMENT:
THIS MAP HAS BEEN EXAMINED IN ACCORDANCE WITH THE PROFESSIONAL LAND SURVEYOR'S ACT; THIS 31ST DAY OF DECEMBER, 2019.
Waide Weaver
WAIDE WEAVER PLS DEPUTY COUNTY SURVEYOR



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) "CCCS" AND "OEOC", BEING N45°17'30"W AS DERIVED FROM THE COORDINATES ESTABLISHED BY THE CALIFORNIA SPATIAL REFERENCE CENTER (CSRC) ALONG WITH DATASHEETS ON FILE IN THE OFFICE OF ORANGE COUNTY SURVEYOR.

HORIZONTAL DATUM

COORDINATES SHOWN HEREON ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM (CCS83), ZONE VI, 1983 NORTH AMERICAN DATUM (2017.50 EPOCH O.C.S. G.P.S. ADJUSTMENT).
ALL DISTANCES SHOWN ARE GRID, UNLESS OTHERWISE NOTED.
MULTIPLY A GRID DISTANCE BY 1.000063854 TO OBTAIN GROUND DISTANCE. THE COMBINATION FACTOR WAS HELD AT POINT NUMBER 510 N=2226072.87' E=6105820.68'
ALL DISTANCES ARE BASED ON THE U.S. SURVEY FOOT.

VERTICAL DATUM

O.C.S. BM. 3D-158-99 ELEV. = 967.91' YEAR LEVELED: 2017
NAVD 1988 (O.C.S. 1995 ADJUSTMENT)
DESCRIPTION: DESCRIBED BY OCS 11/29/99-FOUND 3 3/4" OCS ALUMINUM BENCHMARK DISK STAMPED "3D-158-99" SET ON THE TOP NORTHWEST CORNER OF A 4.0 FT. BY 5.0 FT. DROP INLET. MONUMENT IS LOCATED NEAR THE NORTHWEST CORNER OF BRIDGE #55-958 (LOMAS RIDGE ROAD), WHICH IS ALSO THE ACCESS TO THE ORANGE COUNTY COMMUNICATIONS FACILITY ON LOMAS RIDGE. THIS BRIDGE IS 0.6 MILE SOUTHEASTERLY OF THE SANTIAGO CANYON ROAD OVER-CROSSING OF HIGHWAY 241, THE FOOTHILL CORRIDOR. IT IS ALSO 50 FT. SOUTHERLY OF THE CENTERLINE OF THE ROAD.

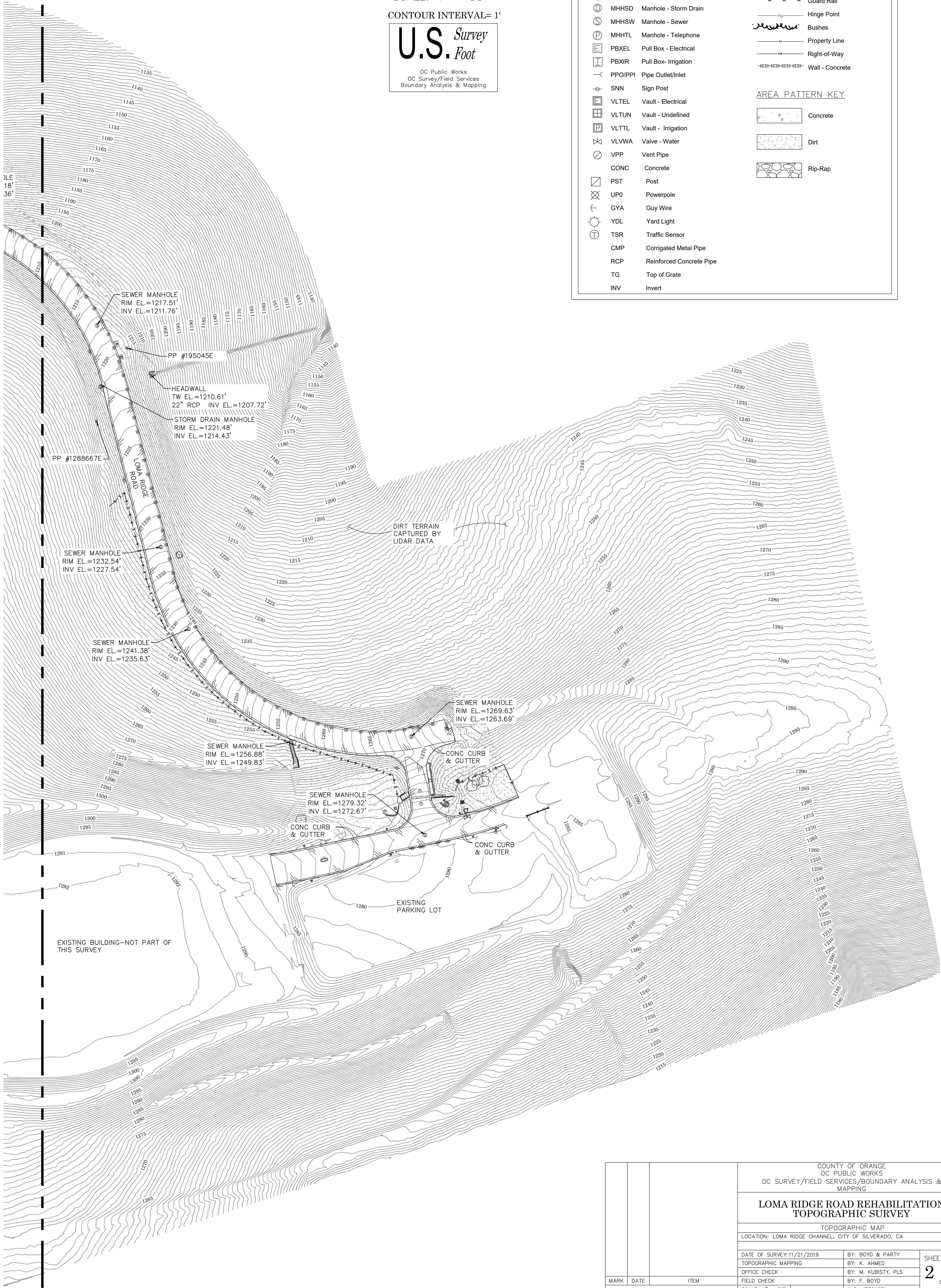
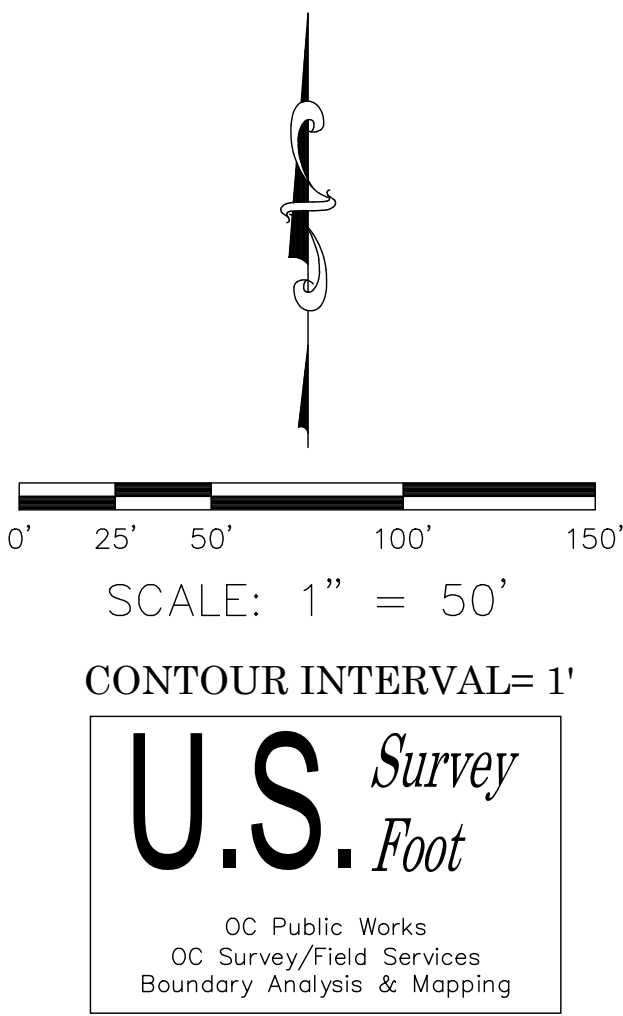
SHEET INDEX

SHEET NO.	DESCRIPTION
SHEET #1	TITLE SHEET
SHEET #2-8	TOPOGRAPHIC MAP

COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING			
LOMA RIDGE ROAD REHABILITATION TOPOGRAPHIC SURVEY			
TITLE SHEET			
PROJECT LIMITS: SANTIAGO CANYON ROAD TO EOC BUILDING			
FILE NO: 1920PW-IN0006			
DATE OF SURVEY: 12-10-2019	BY: BOYD & PARTY	SHEET NO. 1 of 8	
TOPOGRAPHIC MAPPING	BY: KARIM AHMED		
OFFICE CHECK	BY: M. KUBISTY, PLS		
FIELD CHECK	BY: F. BOYD		
SCALE: N.T.S.	WO#: EP21271		
REVISIONS		FILE: LOMA RIDGE_TOPOGRAPHICMAP_2019.DWG	

TOPOGRAPHIC MAPPING PROJECT

MATCHLINE - SEE SHEET 3



LEGEND

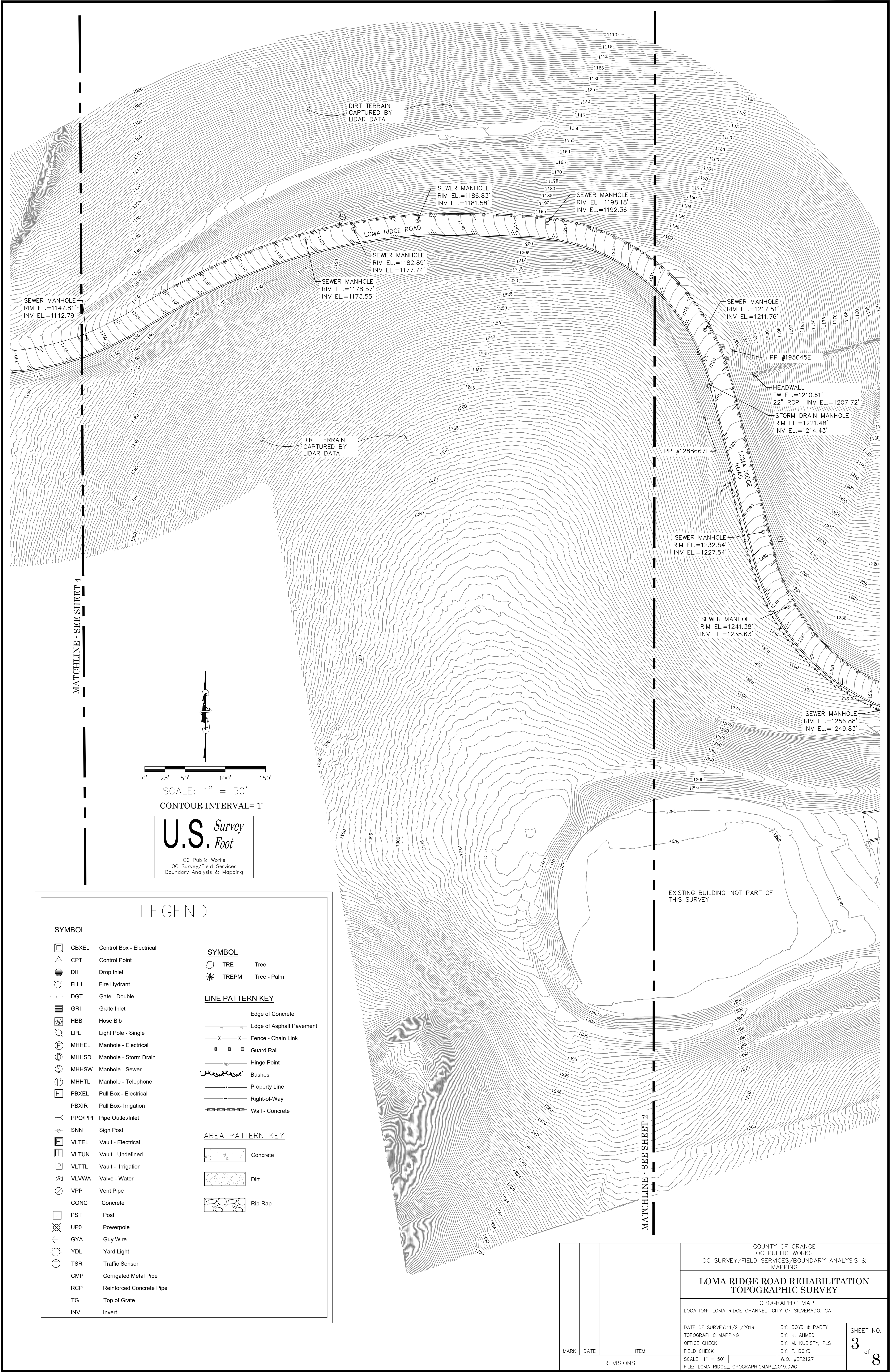
SYMBOL	
	Control Box - Electrical
	Control Point
	Drop Inlet
	Fire Hydrant
	Gate - Double
	Grate Inlet
	Hose Bib
	Light Pole - Single
	Manhole - Electrical
	Manhole - Storm Drain
	Manhole - Sewer
	Manhole - Telephone
	Pull Box - Electrical
	Pull Box- Irrigation
	Pipe Outlet/Inlet
	Sign Post
	Vault - Electrical
	Vault - Undefined
	Vault - Irrigation
	Valve - Water
	Vent Pipe
	Concrete
	Post
	Powerpole
	Guy Wire
	Yard Light
	Traffic Sensor
	Corrugated Metal Pipe
	Reinforced Concrete Pipe
	Top of Grate
	Invert

SYMBOL	
	Tree
	Tree - Palm

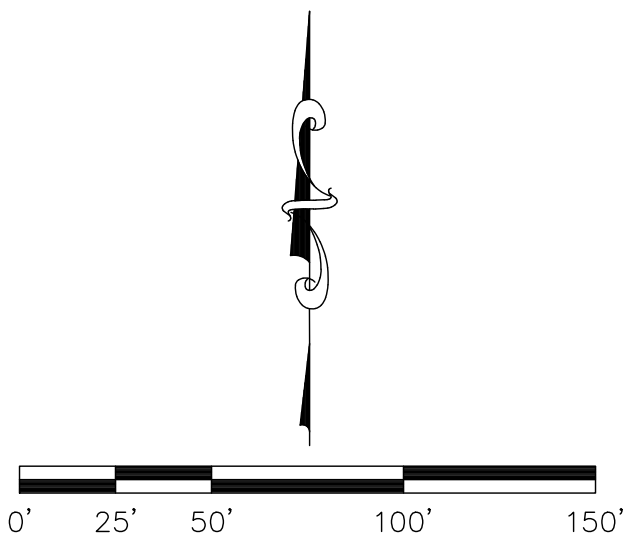
LINE PATTERN KEY	
	Edge of Concrete
	Edge of Asphalt Pavement
	Fence - Chain Link
	Guard Rail
	Hinge Point
	Bushes
	Property Line
	Right-of-Way
	Wall - Concrete

AREA PATTERN KEY	
	Concrete
	Dirt
	Rip-Rap

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
			LOMA RIDGE ROAD REHABILITATION TOPOGRAPHIC SURVEY	
			TOPOGRAPHIC MAP	
			LOCATION: LOMA RIDGE CHANNEL, CITY OF SILVERADO, CA	
DATE OF SURVEY: 11/21/2019		BY: BOYD & PARTY	SHEET NO. 2 of 8	
TOPOGRAPHIC MAPPING		BY: K. AHMED		
OFFICE CHECK		BY: M. KUBISTY, PLS		
FIELD CHECK		BY: F. BOYD		
SCALE: 1" = 50'		W.O. #EF21271		
REVISIONS			FILE: LOMA RIDGE_TOPOGRAPHICMAP_2019.DWG	



MATCHLINE - SEE SHEET 4



SCALE: 1" = 50'
CONTOUR INTERVAL= 1'

U.S. Survey
Foot

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

LEGEND

SYMBOL

	Control Box - Electrical
	Control Point
	Drop Inlet
	Fire Hydrant
	Gate - Double
	Grate Inlet
	Hose Bib
	Light Pole - Single
	Manhole - Electrical
	Manhole - Storm Drain
	Manhole - Sewer
	Manhole - Telephone
	Pull Box - Electrical
	Pull Box - Irrigation
	Pipe Outlet/Inlet
	Sign Post
	Vault - Electrical
	Vault - Undefined
	Vault - Irrigation
	Valve - Water
	Vent Pipe
	Concrete
	Post
	Powerpole
	Guy Wire
	Yard Light
	Traffic Sensor
	Corrugated Metal Pipe
	Reinforced Concrete Pipe
	Top of Grate
	Invert

SYMBOL

	Tree
	Tree - Palm

LINE PATTERN KEY

	Edge of Concrete
	Edge of Asphalt Pavement
	Fence - Chain Link
	Guard Rail
	Hinge Point
	Bushes
	Property Line
	Right-of-Way
	Wall - Concrete

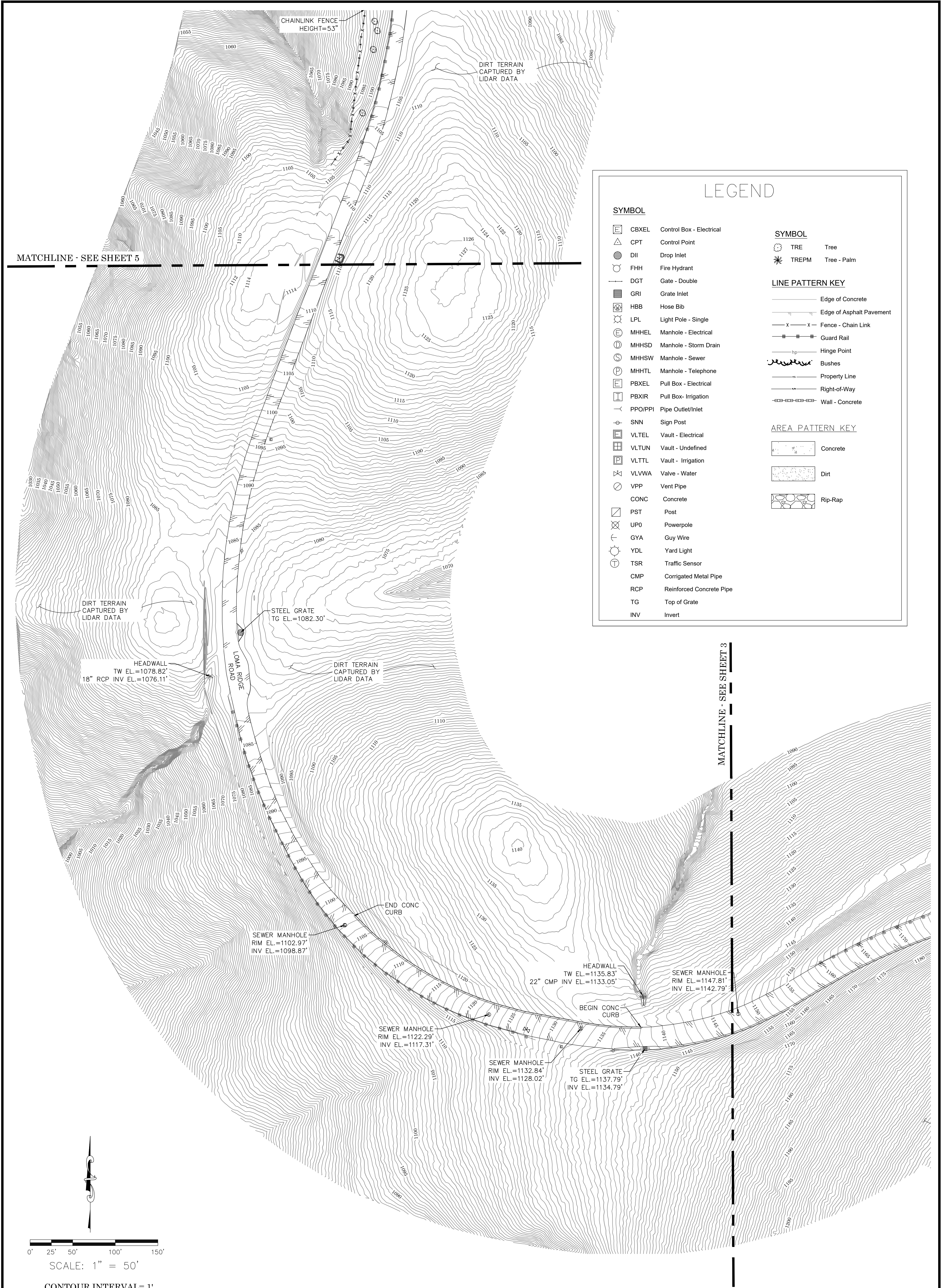
AREA PATTERN KEY

	Concrete
	Dirt
	Rip-Rap

EXISTING BUILDING--NOT PART OF
THIS SURVEY

MATCHLINE - SEE SHEET 2

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING				
			LOMA RIDGE ROAD REHABILITATION TOPOGRAPHIC SURVEY				
			TOPOGRAPHIC MAP				
			LOCATION: LOMA RIDGE CHANNEL, CITY OF SILVERADO, CA				
			DATE OF SURVEY: 11/21/2019		BY: BOYD & PARTY		SHEET NO. 3 of 8
			TOPOGRAPHIC MAPPING		BY: K. AHMED		
			OFFICE CHECK		BY: M. KUBISTY, PLS		
			FIELD CHECK		BY: F. BOYD		
			SCALE: 1" = 50'		W.O. #EF21271		
MARK	DATE	ITEM	FILE: LOMA RIDGE _TOPOGRAPHICMAP_2019.DWG				
REVISIONS							



LEGEND

SYMBOL

	Control Box - Electrical
	Control Point
	Drop Inlet
	Fire Hydrant
	Gate - Double
	Grate Inlet
	Hose Bib
	Light Pole - Single
	Manhole - Electrical
	Manhole - Storm Drain
	Manhole - Sewer
	Manhole - Telephone
	Pull Box - Electrical
	Pull Box - Irrigation
	Pipe Outlet/Inlet
	Sign Post
	Vault - Electrical
	Vault - Undefined
	Vault - Irrigation
	Valve - Water
	Vent Pipe
	Concrete
	Post
	Powerpole
	Guy Wire
	Yard Light
	Traffic Sensor
	Corrugated Metal Pipe
	Reinforced Concrete Pipe
	Top of Grate
	Invert

SYMBOL

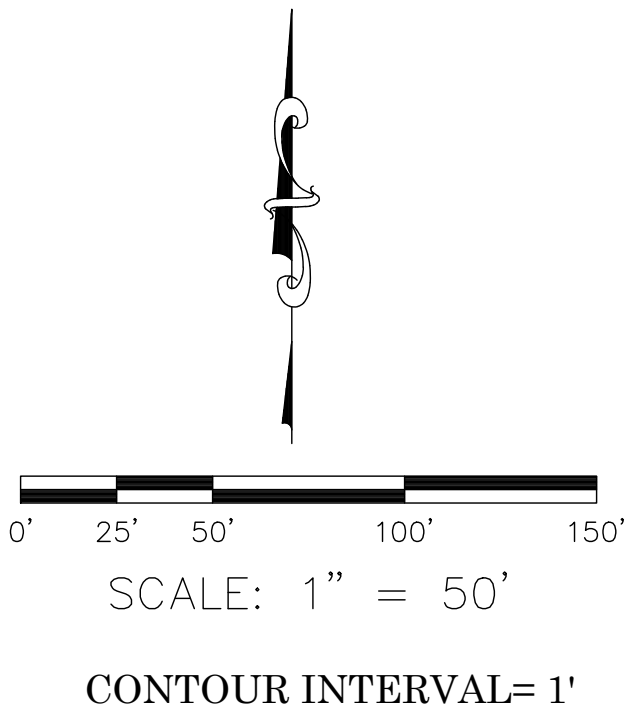
	Tree
	Tree - Palm

LINE PATTERN KEY

	Edge of Concrete
	Edge of Asphalt Pavement
	Fence - Chain Link
	Guard Rail
	Hinge Point
	Bushes
	Property Line
	Right-of-Way
	Wall - Concrete

AREA PATTERN KEY

	Concrete
	Dirt
	Rip-Rap



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				
			LOMA RIDGE ROAD REHABILITATION TOPOGRAPHIC SURVEY				
			TOPOGRAPHIC MAP				
			LOCATION: LOMA RIDGE CHANNEL, CITY OF SILVERADO, CA				
			DATE OF SURVEY:11/21/2019		BY: BOYD & PARTY		SHEET NO. 4 of 8
			TOPOGRAPHIC MAPPING		BY: K. AHMED		
OFFICE CHECK		BY: M. KUBISTY, PLS					
FIELD CHECK		BY: F. BOYD					
SCALE: 1" = 50'		W.O. #EF21271					
MARK	DATE	ITEM	REVISIONS				
		FILE: LOMA RIDGE_TOPOGRAPHICMAP_2019.DWG					

LEGEND

SYMBOL

	CBXEL	Control Box - Electrical
	CPT	Control Point
	DII	Drop Inlet
	FHH	Fire Hydrant
	DGT	Gate - Double
	GRI	Grate Inlet
	HBB	Hose Bib
	LPL	Light Pole - Single
	MHHEL	Manhole - Electrical
	MHHS	Manhole - Storm Drain
	MHHSW	Manhole - Sewer
	MHHTL	Manhole - Telephone
	PBXEL	Pull Box - Electrical
	PBXIR	Pull Box - Irrigation
	PPO/PPI	Pipe Outlet/Inlet
	SNN	Sign Post
	VLTEL	Vault - Electrical
	VLTUN	Vault - Undefined
	VLTTL	Vault - Irrigation
	VLVWA	Valve - Water
	VPP	Vent Pipe
	CONC	Concrete
	PST	Post
	UP0	Powerpole
	GYA	Guy Wire
	YDL	Yard Light
	TSR	Traffic Sensor
	CMP	Corrugated Metal Pipe
	RCP	Reinforced Concrete Pipe
	TG	Top of Grate
	INV	Invert

SYMBOL

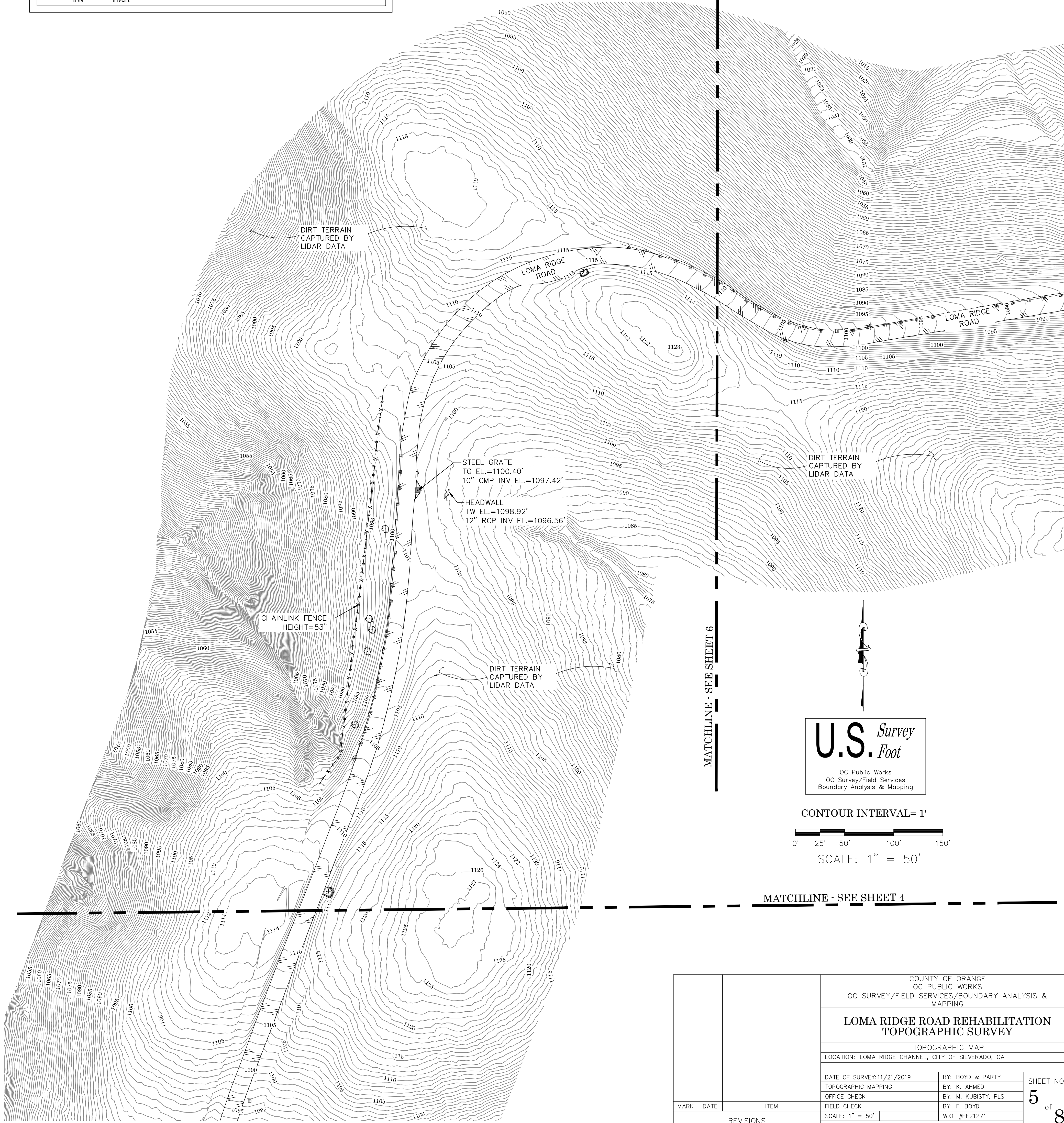
	TRE	Tree
	TREPM	Tree - Palm

LINE PATTERN KEY

	Edge of Concrete
	Edge of Asphalt Pavement
	Fence - Chain Link
	Guard Rail
	Hinge Point
	Bushes
	Property Line
	Right-of-Way
	Wall - Concrete

AREA PATTERN KEY

	Concrete
	Dirt
	Rip-Rap



MATCHLINE - SEE SHEET 6

MATCHLINE - SEE SHEET 4

U.S. Survey

Foot

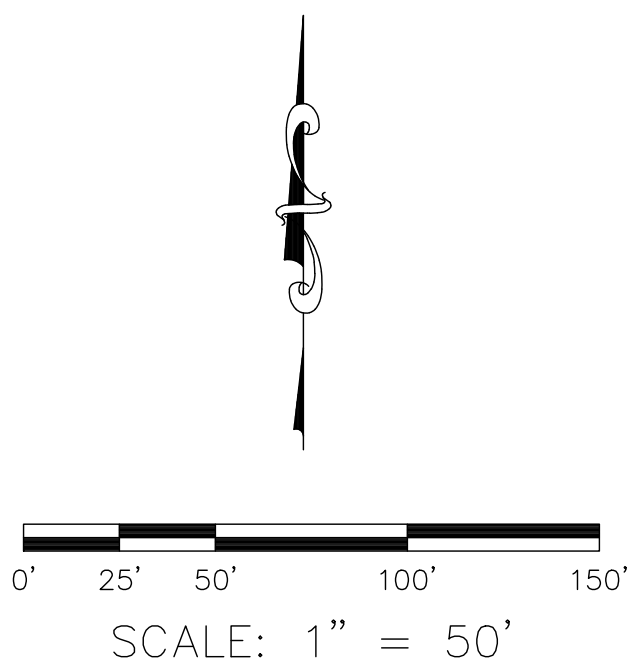
OC Public Works
OC Survey/Field Services
Boundary Analysis & Mapping

CONTOUR INTERVAL= 1'

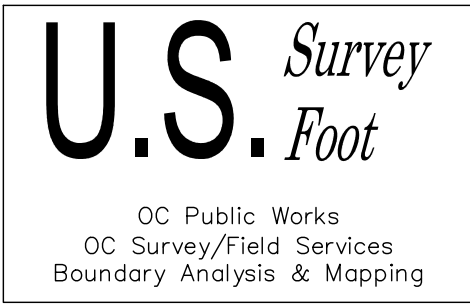


SCALE: 1" = 50'

			COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING		
			LOMA RIDGE ROAD REHABILITATION TOPOGRAPHIC SURVEY		
			TOPOGRAPHIC MAP		
			LOCATION: LOMA RIDGE CHANNEL, CITY OF SILVERADO, CA		
MARK	DATE	ITEM	DATE OF SURVEY:11/21/2019	BY: BOYD & PARTY	SHEET NO. 5 of 8
			TOPOGRAPHIC MAPPING	BY: K. AHMED	
			OFFICE CHECK	BY: M. KUBISTY, PLS	
			FIELD CHECK	BY: F. BOYD	
			SCALE: 1" = 50'	W.O. #EF21271	
REVISIONS			FILE: LOMA RIDGE_TOPOGRAPHICMAP_2019.DWG		



CONTOUR INTERVAL= 1'

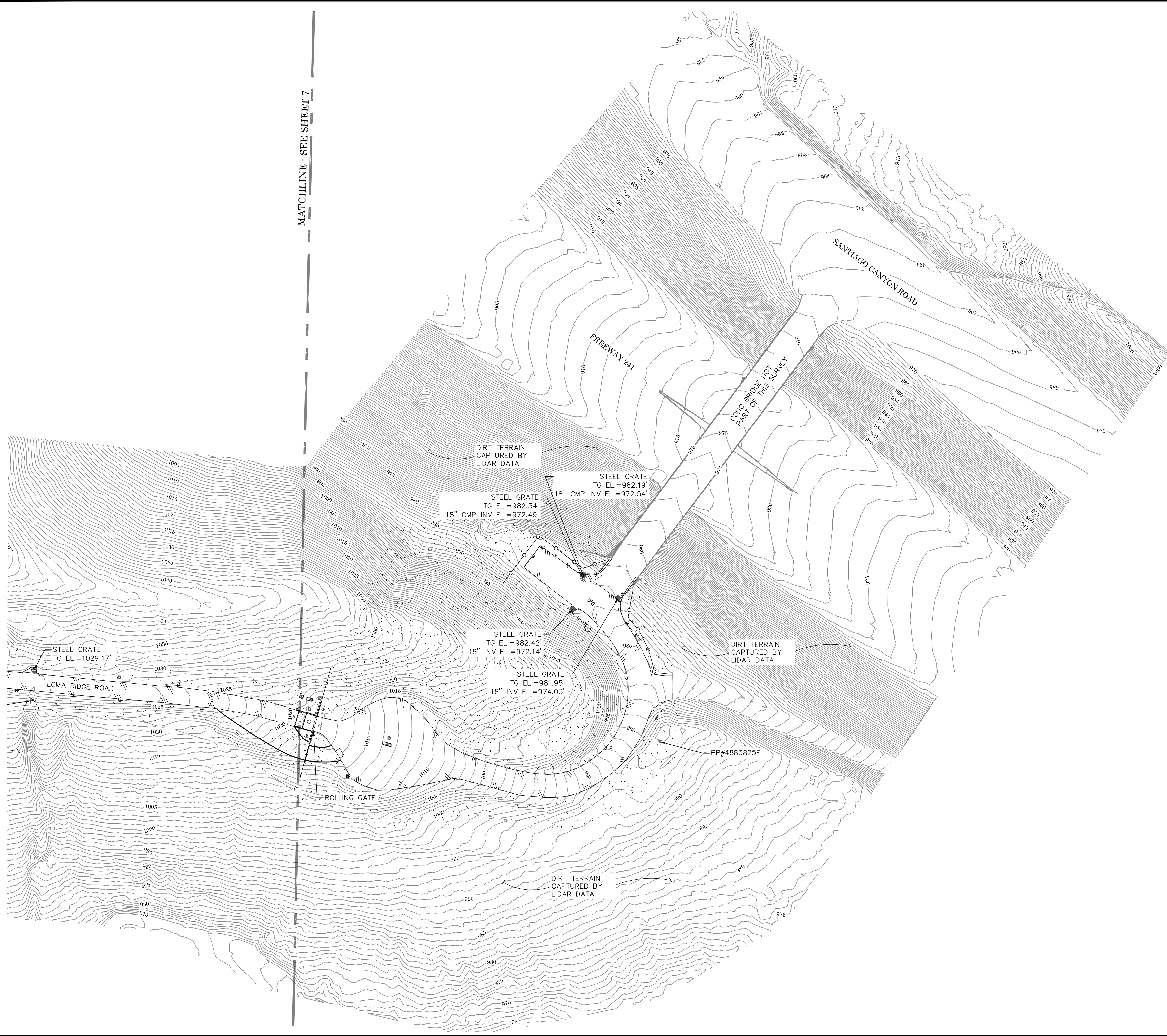


SYMBOL		SYMBOL	
	CBXEL Control Box - Electrical		TRE Tree
	CPT Control Point		TREPM Tree - Palm
	DII Drop Inlet	LINE PATTERN KEY	
	FHH Fire Hydrant		Edge of Concrete
	DGT Gate - Double		Edge of Asphalt Pavement
	GRI Grate Inlet		Fence - Chain Link
	HBB Hose Bib		Guard Rail
	LPL Light Pole - Single		Hinge Point
	MHHEL Manhole - Electrical		Bushes
	MHHSD Manhole - Storm Drain		Property Line
	MHHSW Manhole - Sewer		Right-of-Way
	MHHTL Manhole - Telephone		Wall - Concrete
	PBXEL Pull Box - Electrical	AREA PATTERN KEY	
	PBXIR Pull Box- Irrigation		Concrete
	PPO/PPI Pipe Outlet/Inlet		Dirt
	SNN Sign Post		Rip-Rap
	VLTEL Vault - Electrical		
	VLTUN Vault - Undefined		
	VLTTL Vault - Irrigation		
	VLVWA Valve - Water		
	VPP Vent Pipe		
	CONC Concrete		
	PST Post		
	UP0 Powerpole		
	GYA Guy Wire		
	YDL Yard Light		
	TSR Traffic Sensor		
	CMP Corrugated Metal Pipe		
	RCP Reinforced Concrete Pipe		
	TG Top of Grate		
	INV Invert		



		COUNTY OF ORANGE OC PUBLIC WORKS OC SURVEY/FIELD SERVICES/BOUNDARY ANALYSIS & MAPPING	
		LOMA RIDGE ROAD REHABILITATION TOPOGRAPHIC SURVEY	
		TOPOGRAPHIC MAP LOCATION: LOMA RIDGE CHANNEL, CITY OF SILVERADO, CA	
		DATE OF SURVEY:11/21/2019	BY: BOYD & PARTY
		TOPOGRAPHIC MAPPING	BY: K. AHMED
		OFFICE CHECK	BY: M. KUBISTY, PLS
		FIELD CHECK	BY: F. BOYD
		SCALE: 1" = 50'	W.O. #EF21271
		FILE: LOMA RIDGE_TOPOGRAPHICMAP_2019.DWG	
MARK	DATE	ITEM	SHEET NO.
REVISIONS			6 of 8

MATCHLINE - SEE SHEET 7



LEGEND

SYMBOL

	Control Box - Electrical
	Control Point
	Drop Inlet
	Fire Hydrant
	Gate - Double
	Grate Inlet
	Hose Bib
	Light Pole - Single
	Manhole - Electrical
	Manhole - Storm Drain
	Manhole - Sewer
	Manhole - Telephone
	Pull Box - Electrical
	Pull Box - Irrigation
	Pipe Outlet/Inlet
	Sign Post
	Vault - Electrical
	Vault - Undefined
	Vault - Irrigation
	Valve - Water
	Vent Pipe
	Concrete
	Post
	Powerpole
	Guy Wire
	Yard Light
	Traffic Sensor
	Corrugated Metal Pipe
	Reinforced Concrete Pipe
	Top of Grate
	Invert

SYMBOL

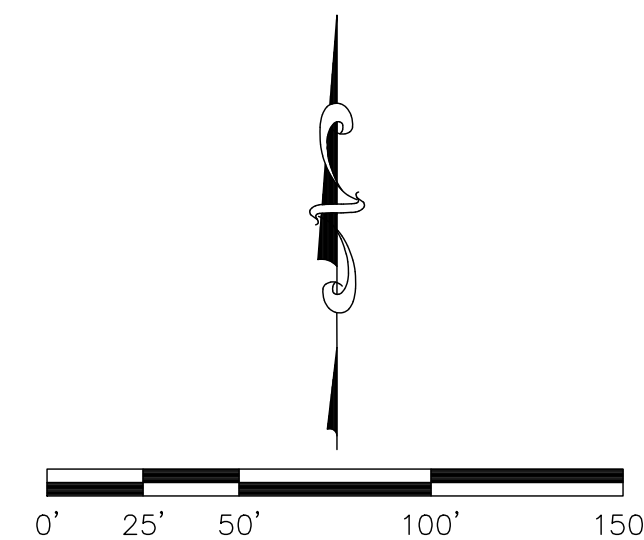
	Tree
	Tree - Palm

LINE PATTERN KEY

	Edge of Concrete
	Edge of Asphalt Pavement
	Fence - Chain Link
	Guard Rail
	Hinge Point
	Bushes
	Property Line
	Right-of-Way
	Wall - Concrete

AREA PATTERN KEY

	Concrete
	Dirt
	Rip-Rap



SCALE: 1" = 50'
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			
LOMA RIDGE ROAD REHABILITATION TOPOGRAPHIC SURVEY			
TOPOGRAPHIC MAP			
LOCATION: LOMA RIDGE CHANNEL, CITY OF SILVERADO, CA			
DATE OF SURVEY: 11/21/2019		BY: BOYD & PARTY	
TOPOGRAPHIC MAPPING		BY: K. AHMED	
OFFICE CHECK		BY: M. KUBISTY, PLS	
FIELD CHECK		BY: F. BOYD	
SCALE: 1" = 50'		W.O. #F21271	
FILE: LOMA RIDGE_TOPOGRAPHICMAP_2019.DWG			
MARK	DATE	ITEM	
REVISIONS			
			SHEET NO. 8 of 8