

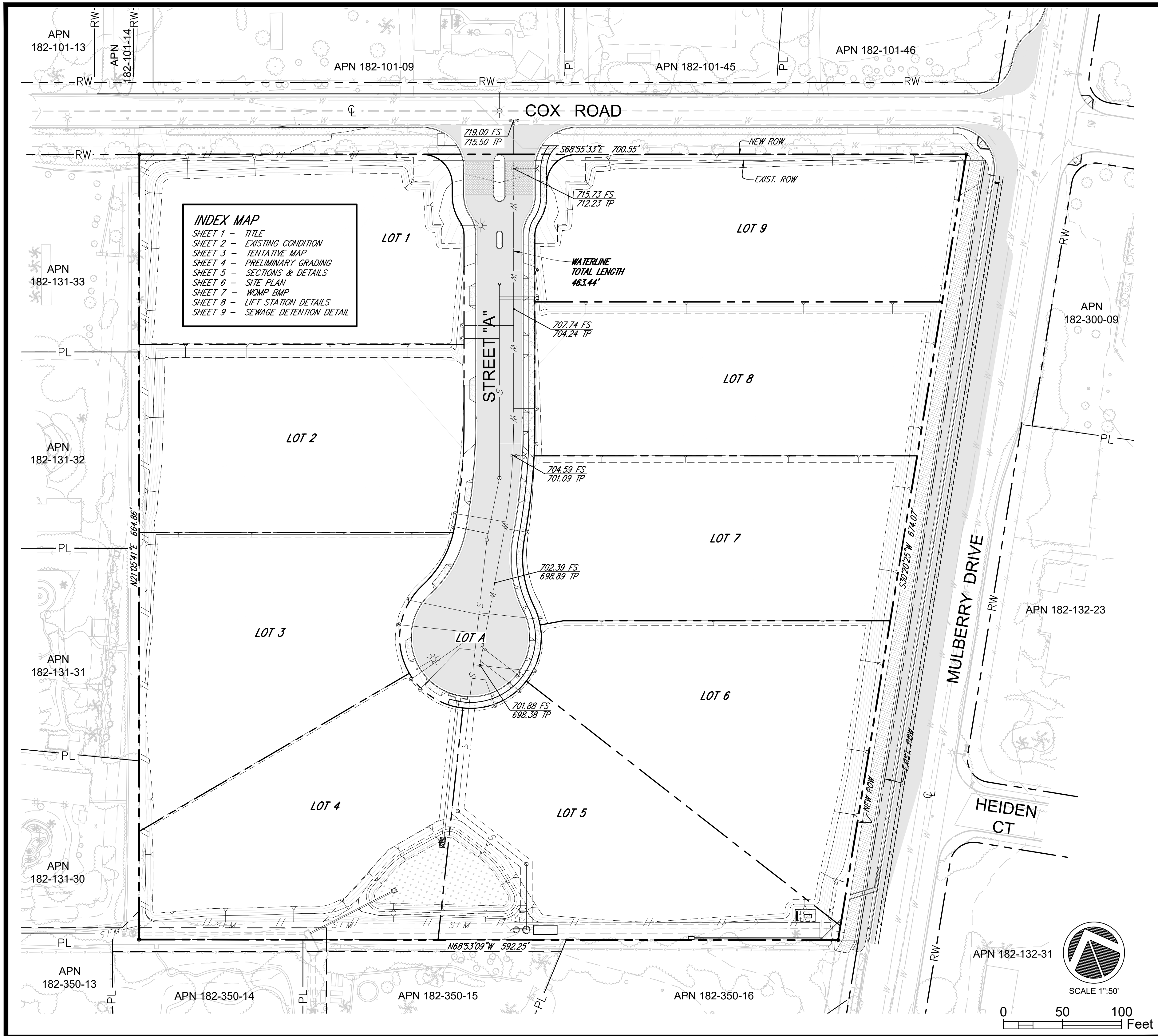


ATTACHMENT D

MITIGATED NEGATIVE DECLARATION

APPENDIX A

PROJECT PLANS



INDEX MAP
 SHEET 1 - TITLE
 SHEET 2 - EXISTING CONDITION
 SHEET 3 - TENTATIVE MAP
 SHEET 4 - PRELIMINARY GRADING
 SHEET 5 - SECTIONS & DETAILS
 SHEET 6 - SITE PLAN
 SHEET 7 - WOMP BMP
 SHEET 8 - LIFT STATION DETAILS
 SHEET 9 - SEWAGE DETENTION DETAIL

OWNER'S CERTIFICATE

I (WE) HEREBY CERTIFY THAT I (WE) AM (ARE) THE RECORD OWNER(S) OF THE PROPERTY SHOWN ON THE TENTATIVE SUBDIVISION MAP AND THAT SAID MAP SHOWS MY (OUR) ENTIRE CONTIGUOUS OWNERSHIP (EXCLUDING SUBDIVISION LOTS). I (WE) UNDERSTAND THAT PROPERTY IS CONSIDERED AS CONTIGUOUS EVEN IF IT IS SEPARATED BY ROAD, STREET, UTILITY EASEMENTS OR RAILROAD RIGHT-OF-WAY.

OWNER'S NAME
 COX FAMILY TRUST & CAROLE ANN COX WALLACE TRUST

APPLICANT'S NAME
 MANNING HOMES
 20151 SW BIRCH STREET, SUITE 150
 NEWPORT BEACH, CA 92660

OWNER DATE: _____ APPLICANT DATE: _____

DATE PREPARED
 OCTOBER 2021

SURVEYOR OF WORK
 EXCEL ENGINEERING
 440 STATE PLACE ESCONDIDO,
 CA 92029 (760) 745-8118



Michael D. Levin
 MICHAEL D. LEVIN PLS# 6896

ENGINEER OF WORK
 EXCEL ENGINEERING
 440 STATE PLACE ESCONDIDO,
 CA 92029 (760) 745-8118



Robert D. Dentino
 ROBERT D. DENTINO RCE# 45629

ASSESSOR'S PARCEL NO.
 182-131-14-00

LAND AREA
 10.05 ACRES

ZONING
 EXISTING: A-1 AGRICULTURAL
 PROPOSED: A-1 AGRICULTURAL

SITE ADDRESS
 SW CORNER OF COX ROAD & MULBERRY DR,
 SAN MARCOS, CA 92069

LOT INFORMATION
 EXISTING: 1 LOT
 PROPOSED: 9 SINGLE FAMILY RESIDENTIAL LOTS & 1 HOA LOT (PRIVATE STREET - LOT A)

OVERHEAD LINES STATEMENT
 OVERHEAD LINES ALONG MULBERRY ARE REQUIRED TO BE UNDERGROUND AS PART OF THIS PROJECT. EXISTING INFRASTRUCTURE AFFECTED BY THIS PROJECT ARE TO BE UNDERGROUND AS NEEDED.

EARTHWORK STATEMENT
 PRISMOIDAL METHOD WAS USED TO CALCULATE THE EARTHWORK VOLUME SHOWN HERE. SEE TABLE BELOW FOR DETAILS. THE GRADING PROPOSED FOR THIS PROJECT IS AS SHOWN ON SHEETS 4 OF THIS PLAN SET.

CUT = 19,000 CY
 FILL = 19,000 CY
 IMPORT = 0 CY

FIRE DISTRICT
 CITY OF SAN MARCOS
SCHOOL DISTRICT
 SAN MARCOS UNIFIED
SEWER DISTRICT
 VALLECITOS WATER DISTRICT
WATER DISTRICT
 VALLECITOS WATER DISTRICT
LEGAL ACCESS
 COX ROAD & MULBERRY DRIVE

FEMA ZONE
 AS SHOWN ON FEMA PANEL 792 OF 2375; MAP 06073C0792G, DATED MAY 16, 2012, THIS PROJECT IS IN ZONE X - "AREA OF MINIMAL FLOOD HAZARD".
WQTR / HYDROLOGY STUDY
 STUDY BY EXCEL ENGINEERING & DATED OCTOBER 2021

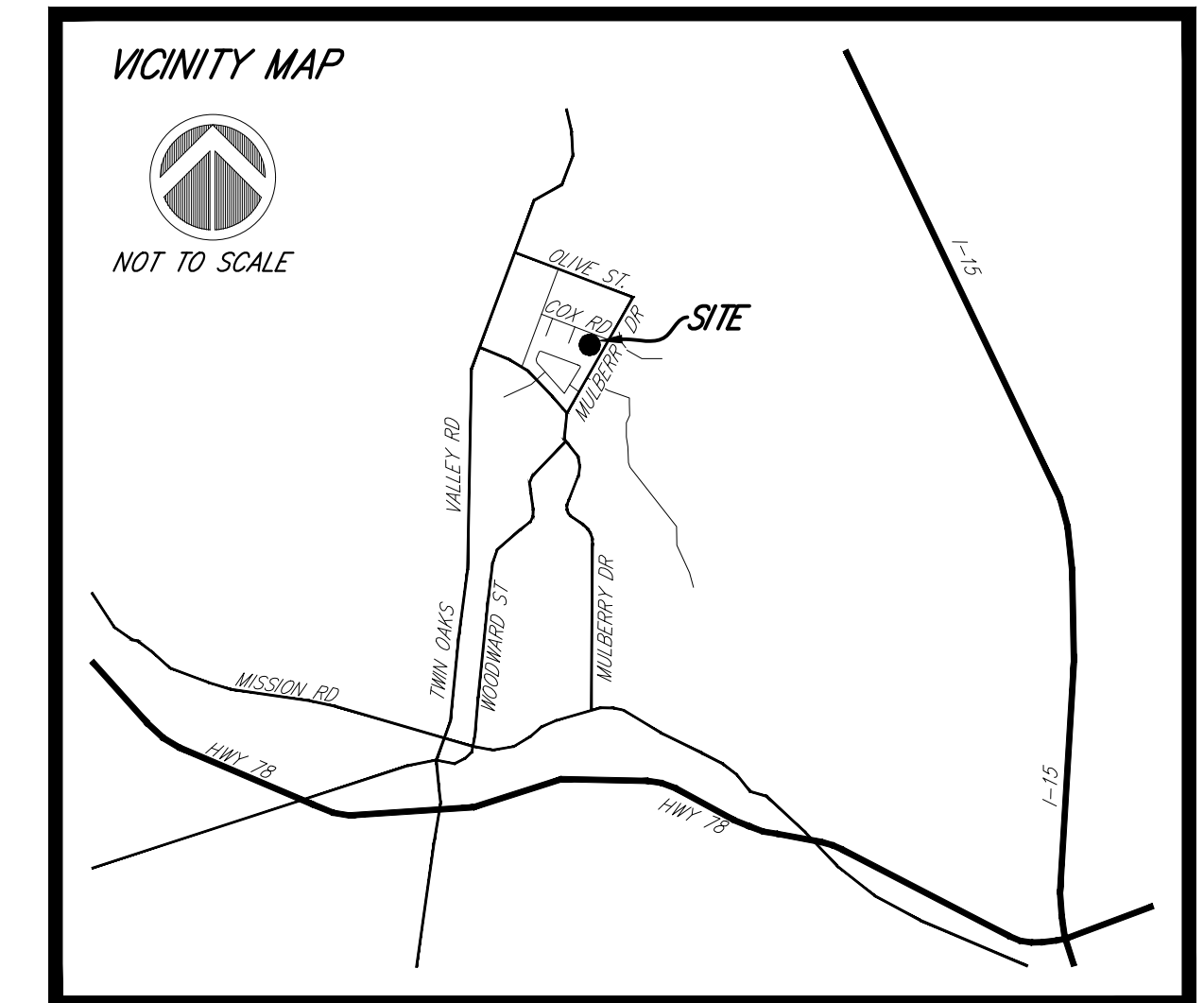
LEGAL DESCRIPTION
 LOT 5 AND THE SOUTHEASTERLY 70.05 FEET OF LOT 4, BLOCK 33, OF RANCHO LOS VALLECITOS DE SAN MARCOS, IN THE CITY OF SAN MARCOS, COUNTY OF SAN DIEGO, STATE OF CALIFORNIA, ACCORDING TO MAP THEREOF NO. 806, FILED IN THE OFFICE OF THE COUNTY RECORDER OF SAN DIEGO COUNTY, DECEMBER 21, 1895.

PROJECT BENCHMARK
 THE BENCHMARK FOR THIS PROJECT IS THE CITY OF SAN MARCOS "CP-007", BEING A 2" BRASS DISK STAMPED "CITY OF SAN MARCOS SURVEY CONTROL N45 L56310 2018 CP-007", LOCATED AT THE NORTHEAST CORNER OF THE INTERSECTION OF NORTH TWIN OAKS VALLEY ROAD AND LA CIENEGA ROAD, SET FLUSH WITH BACK OF SIDEWALK PER ROS 23721.

ELEVATION: 677.98 DATUM: NAVD88

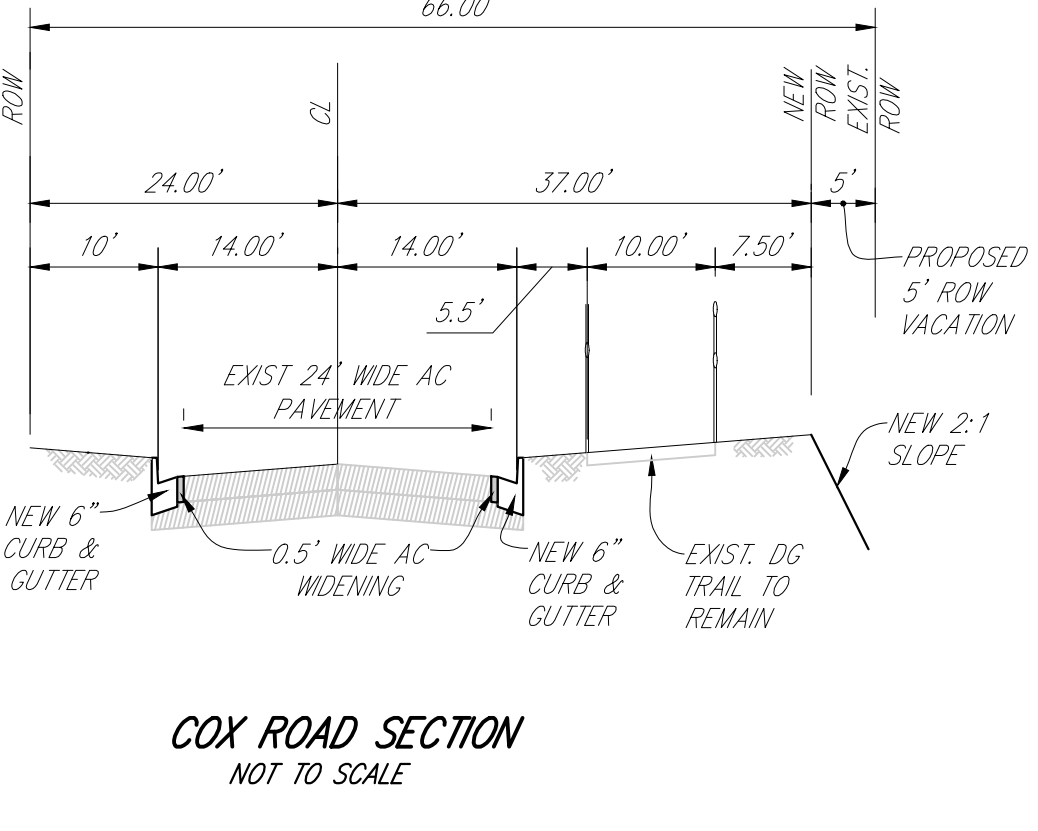
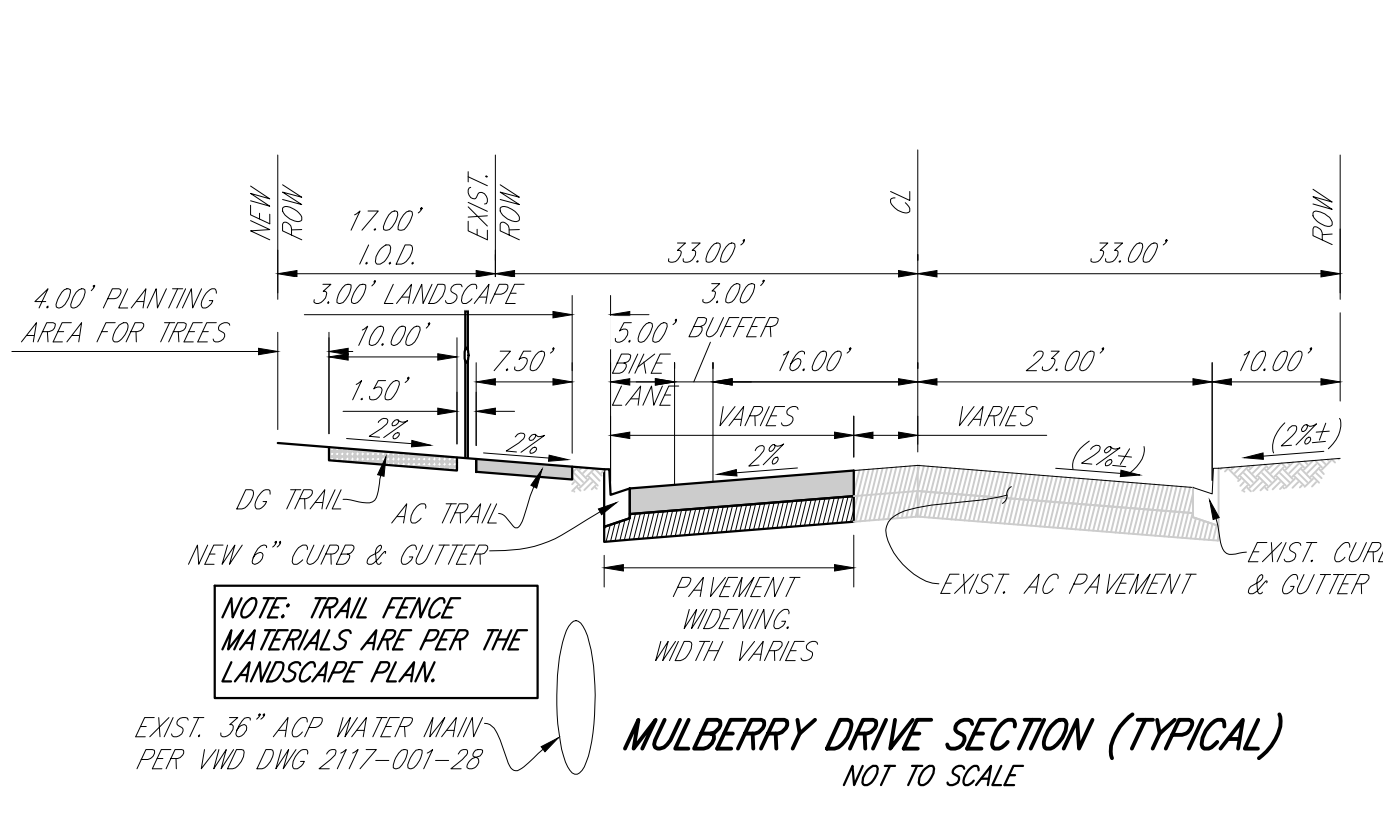
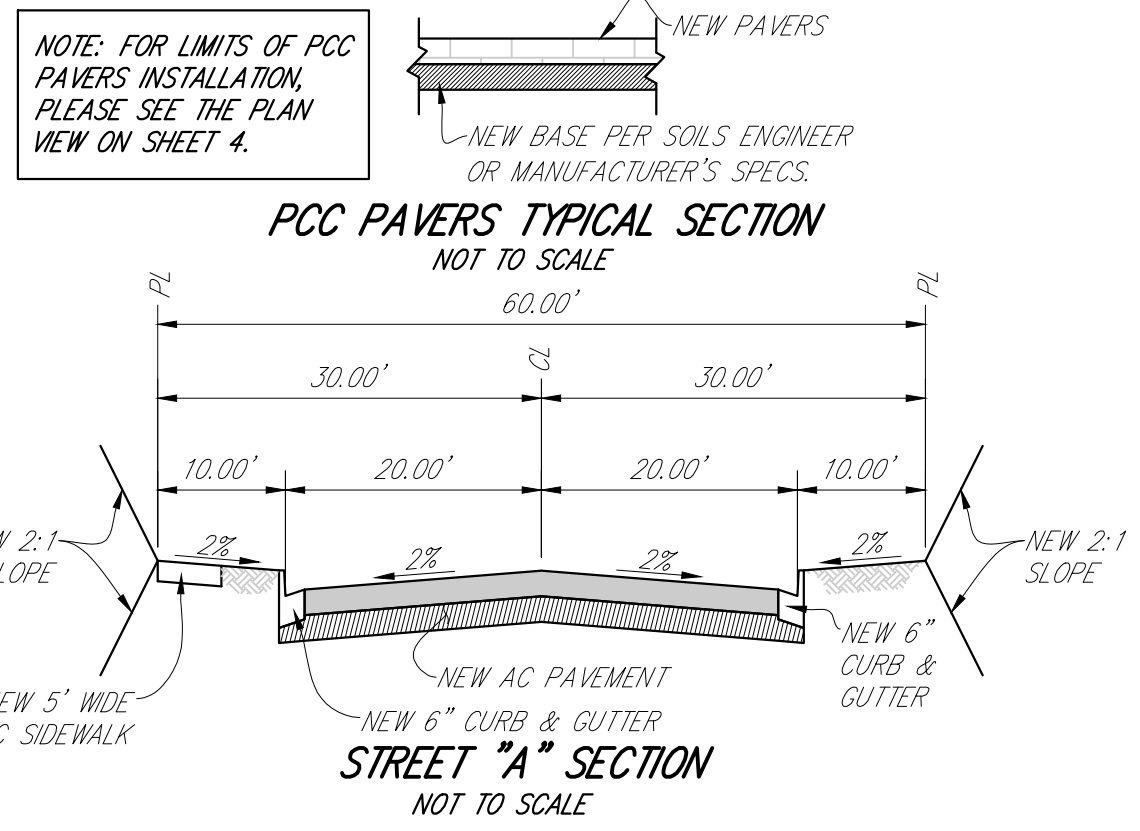
BASIS OF BEARINGS
 THE BASIS OF BEARINGS FOR THIS PROJECT IS THE CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE VI, (EPOCH 2017.50) AS DETERMINED LOCALLY BETWEEN CITY OF SAN MARCOS CONTROL POINTS "CP-007" AND "CP-004", BEING NORTH 37° 31' 48" WEST PER ROS 23721.

SOURCE OF TOPOGRAPHY
 THE EXISTING TOPOGRAPHY SHOWN HEREON IS FROM AN AERIAL TOPOGRAPHY FLOWN BY AEROTECH MAPPING, INC (DATE FLOWN: 08/26/2021), AND SUPPLEMENTAL FIELD DATA SURVEYED BY EXCEL ENGINEERING. DATES OF FIELD SURVEY 08/24/2021 & 09/03/2021.

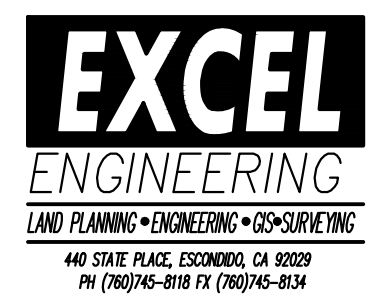


EARTHWORK CALCULATION DETAIL					
LINE ID	ITEM DESCRIPTION	AREA (SF)	SECTION/LENGTH (FT)	VOL (CY)	ROUNDED
1	RAW CUT			16503.59	16,510.00
2	STREET A	24,852.06	1.08	997.15	1,000.00
3	MULBERRY WIDENING	14,877.86	0.75	413.27	420.00
4	WQ BIO BASIN A (4 FT DEEP)	4,253.24	5.00	787.64	790.00
5	WQ BIO BASIN B (4 FT DEEP)	1,504.46	5.00	278.60	280.00
6	TOTAL CUT			18,980.26	19,000.00
7					
8	RAW FILL			16,815.08	16,820.00
9	SHRINKAGE FROM SOILS ENGINEER PG 11, 5% TO 15% (APPLIED TO RAW CUT)	16,503.59	0.15	2,475.54	2,480.00
10	TOTAL FILL			19,290.62	19,300.00
11	IMPORT (EXPECTED TO BE GENERATED FROM FOUNDATIONS & THE USE OF EXISTING ON-SITE MATERIALS)			-310.36	-300.00
12	FOR PERMITTING PURPOSES, SAY EARTHWORK IS BALANCE AT (CY)			19,000.00	

SHEET 1 OF 9 SHEETS
 TITLE



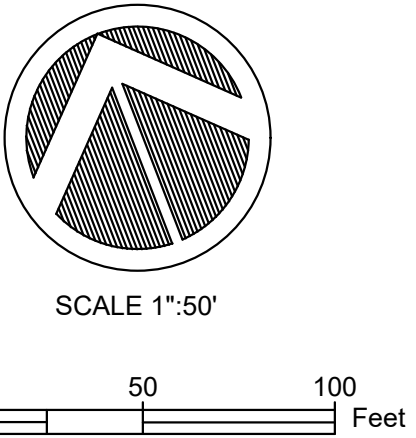
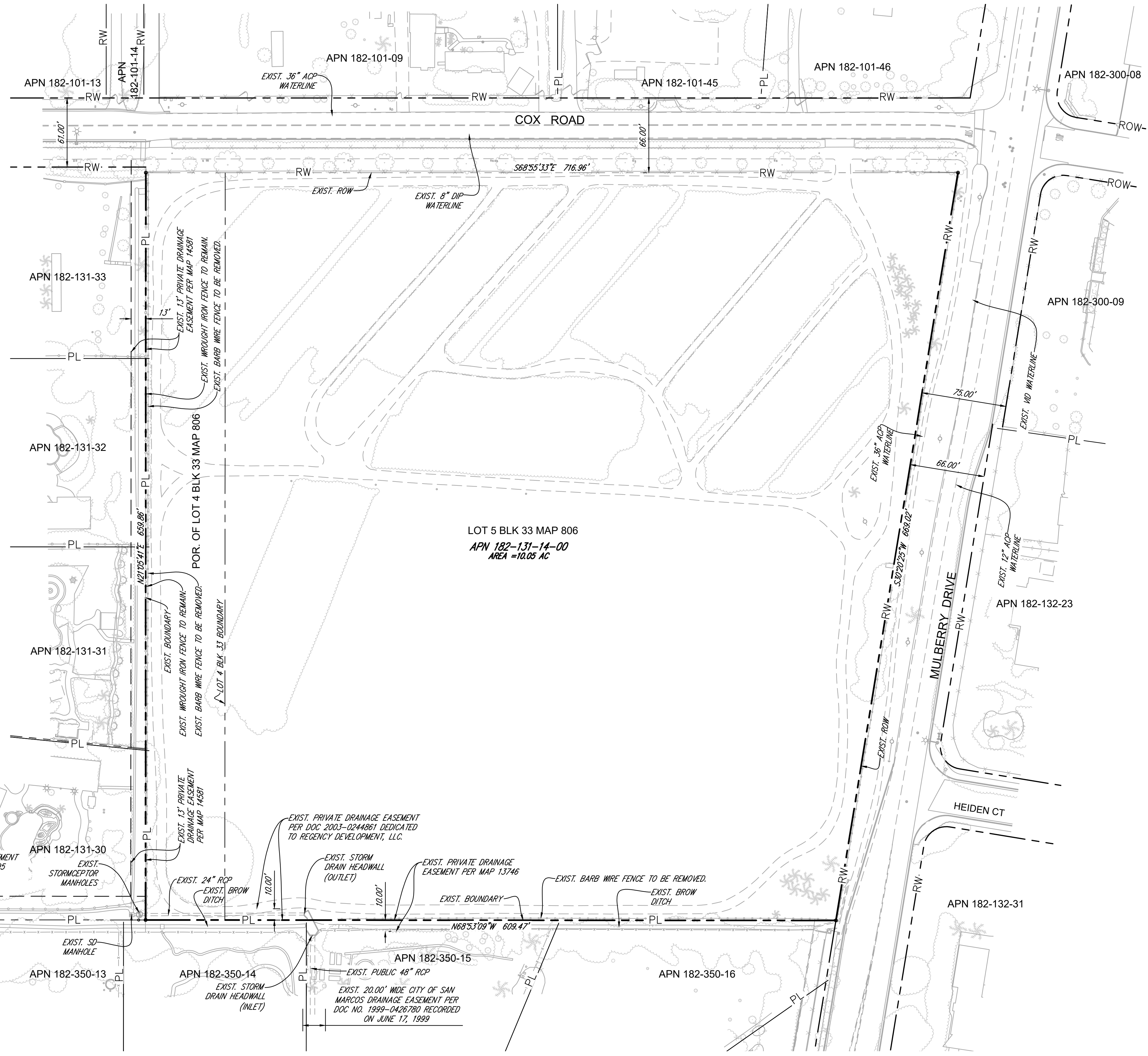
DATE	REMARKS
12/2021	PLANNING SUBMITTAL



MANNING HOMES
 APN 182-131-14-00
 COX ROAD / MULBERRY DR, SAN MARCOS CA
 TSM21-0004

K:\21\21054\Engineering\TM\031\TM\21054_TITLE.dwg 11/26/2024 5:04 PM ORIGINAL PLOT SIZE: -----

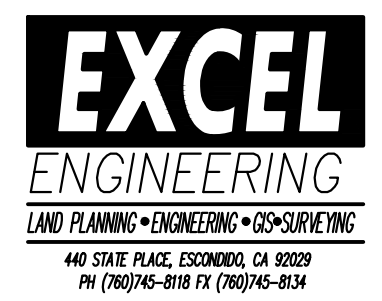
NON-PLOTTABLE EASEMENT NOTE
 AN EASEMENT FOR PUBLIC UTILITIES & INCIDENTAL PURPOSES GRANTED TO SDG&E & RECORDED IN BOOK 1109, PAGE 335 OF DEEDS EXIST BUT IS NOT PLOTTABLE.
 THE CITY WILL REQUIRE PRIOR TO GRADING PERMIT ISSUANCE A QUITCLAIM LETTER FROM SDG&E.



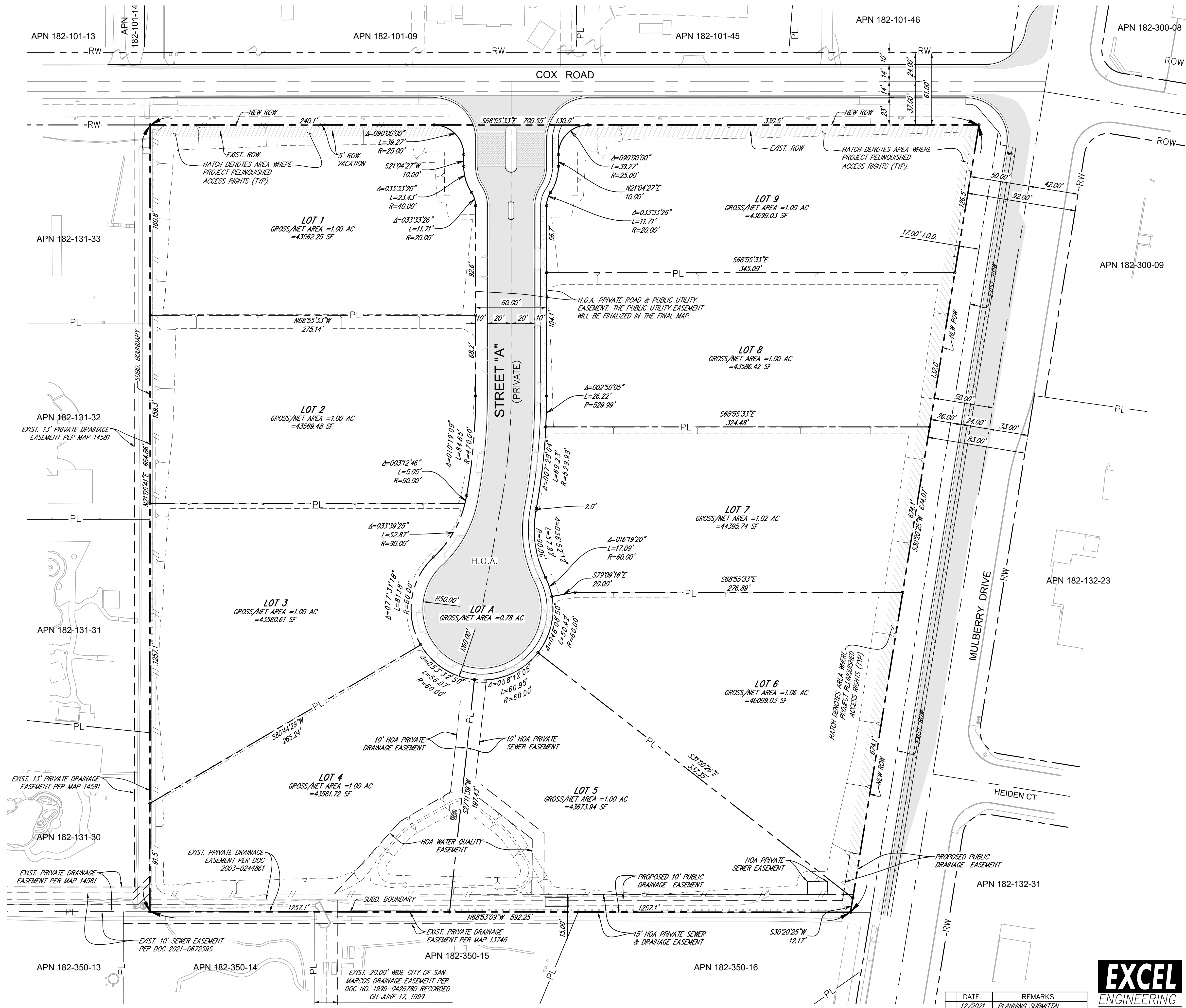
SHEET 2 OF 9 SHEETS
 EXISTING CONDITION

MANNING HOMES
 APN 182-131-14-00
 COX ROAD / MULBERRY DR, SAN MARCOS CA
 TSM21-0004

DATE	REMARKS
12/2021	PLANNING SUBMITTAL



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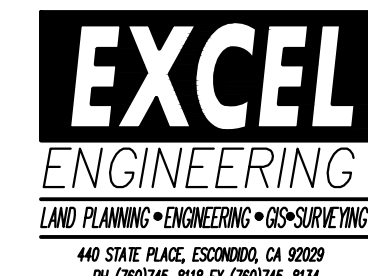


FOR STREET SECTIONS SEE SHEET 5.

NOTE: ALL PRIVATE EASEMENTS & LOT "A" WILL BE GRANTED TO THE HOMEOWNERS' ASSOCIATION (H.O.A.)

SHEET 3 OF 9 SHEETS
TENTATIVE MAP

MANNING HOMES
 APN 182-131-14-00
 COX ROAD / MULBERRY DR, SAN MARCOS CA
 TSM21-0004



DATE	REMARKS
12/2021	PLANNING SUBMITTAL



SCALE 1"=40'
0 40 80 Feet

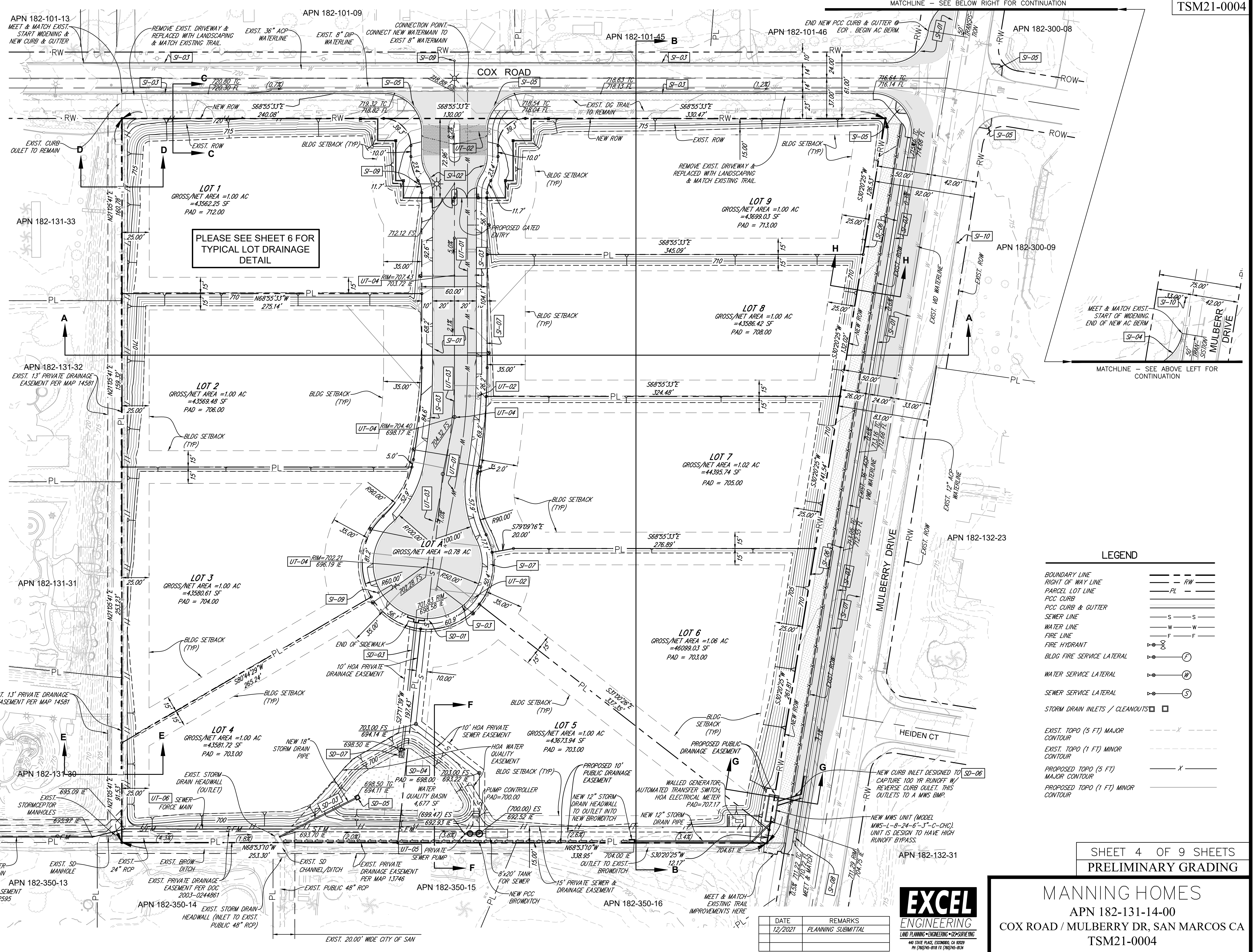
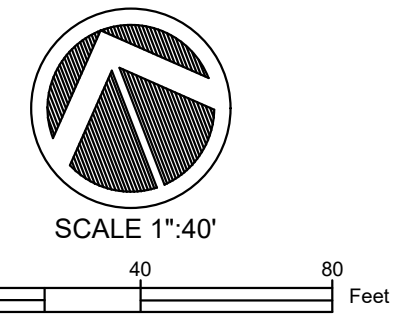
CONSTRUCTION NOTES

- SURFACE IMPROVEMENTS**
- SI-01 AC PAVEMENT
 - SI-02 PCC DECORATIVE PAVEMENT
 - SI-03 6" PCC CURB & GUTTER
 - SI-04 6" AC BERM
 - SI-05 PCC RAMP: SEE SHEET 5 FOR DETAILS
 - SI-06 DG & AC TRAIL PER CITY STANDARDS
 - SI-07 5' WIDE PCC SIDEWALK
 - SI-08 8' WIDE PCC DRIVEWAY FOR MAINTENANCE ACCESS: SEE SHEET 5
 - SI-09 INSTALL STREET LIGHT PER CITY STANDARD
 - SI-10 INSTALL SOLAR SPEED FEEDBACK SIGN. LOCATION & SPECS WILL BE FINALIZED ON THE CONSTRUCTION DOCUMENT.
- UTILITY IMPROVEMENTS**
- UT-01 WATERLINE MAIN
 - UT-02 FIRE HYDRANT
 - UT-03 6" PVC PRIVATE SEWER MAIN
 - UT-04 PRIVATE SEWER MANHOLE/CLEANOUT
 - UT-05 PRIVATE DUPLEX SEWAGE LIFT STATION
 - UT-06 PRIVATE SEWER FORCE MAIN
- STORM DRAIN / WATER QUALITY IMPROVEMENTS**
- SD-01 STORM DRAIN INLET
 - SD-02 STORM DRAIN BOX/CLEANOUT
 - SD-03 STORM DRAIN PIPE
 - SD-04 WATER QUALITY BASIN. SEE DETAILS ON SHEET 7
 - SD-05 WATER QUALITY OUTLET CONTROL STRUCTURE. SEE DETAILS ON SHEET 7
 - SD-06 REVERSE CURB OUTLET
 - SD-07 RIPRAP

FOR STREET SECTIONS SEE SHEET 1

PLEASE SEE SHEET 5 FOR SECTION PROFILE VIEWS

PLEASE SEE SHEET 5 FOR SEWER FORCE MAIN PROFILE

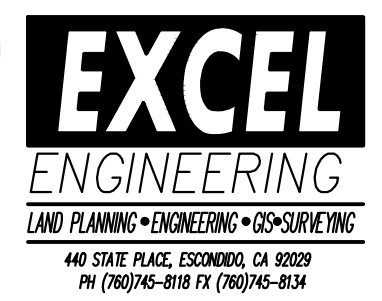


LEGEND

- BOUNDARY LINE ---
- RIGHT OF WAY LINE --- RW ---
- PARCEL LOT LINE --- PL ---
- PCC CURB ---
- PCC CURB & GUTTER ---
- SEWER LINE --- S ---
- WATER LINE --- W ---
- FIRE LINE --- F ---
- FIRE HYDRANT ---
- BLDG FIRE SERVICE LATERAL ---
- WATER SERVICE LATERAL ---
- SEWER SERVICE LATERAL ---
- STORM DRAIN INLETS / CLEANOUTS ---
- EXIST. TOPO (5 FT) MAJOR CONTOUR ---
- EXIST. TOPO (1 FT) MINOR CONTOUR ---
- PROPOSED TOPO (5 FT) MAJOR CONTOUR ---
- PROPOSED TOPO (1 FT) MINOR CONTOUR ---

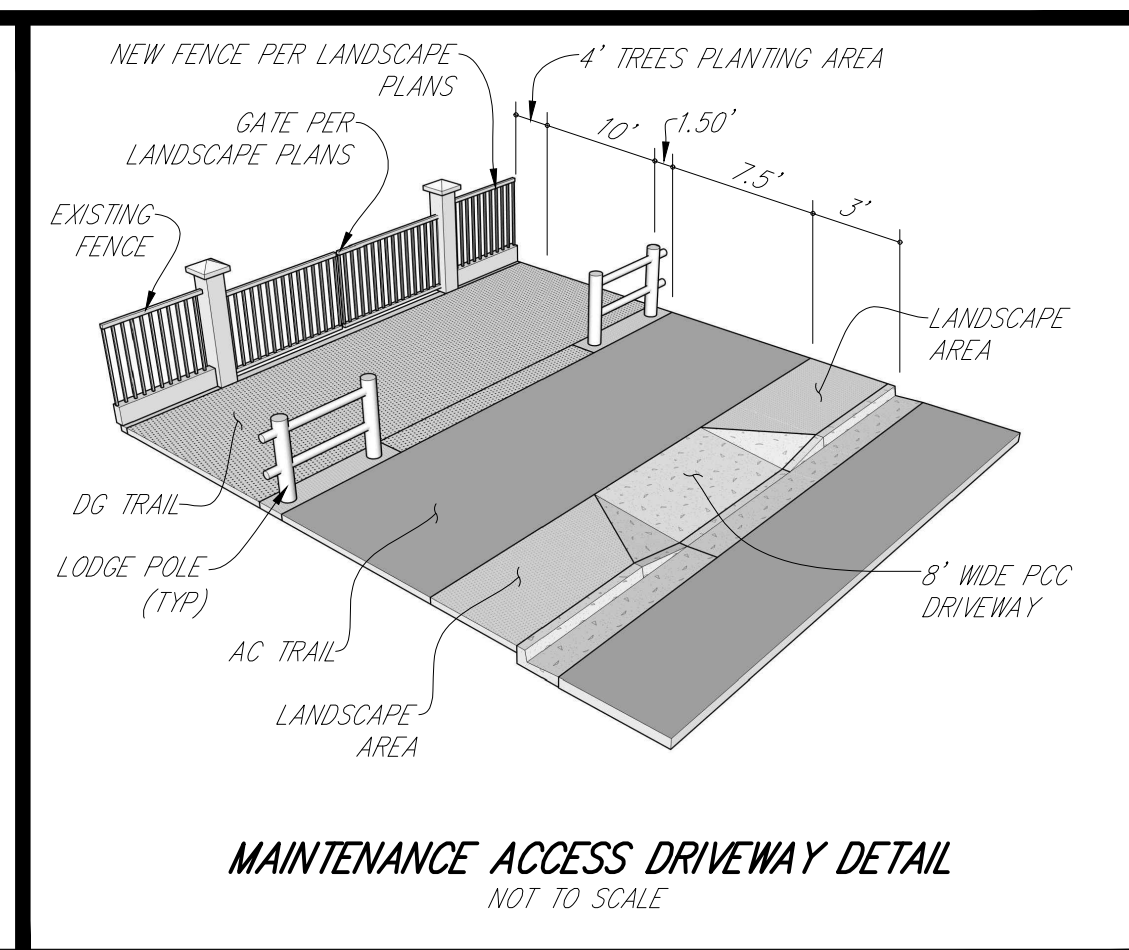
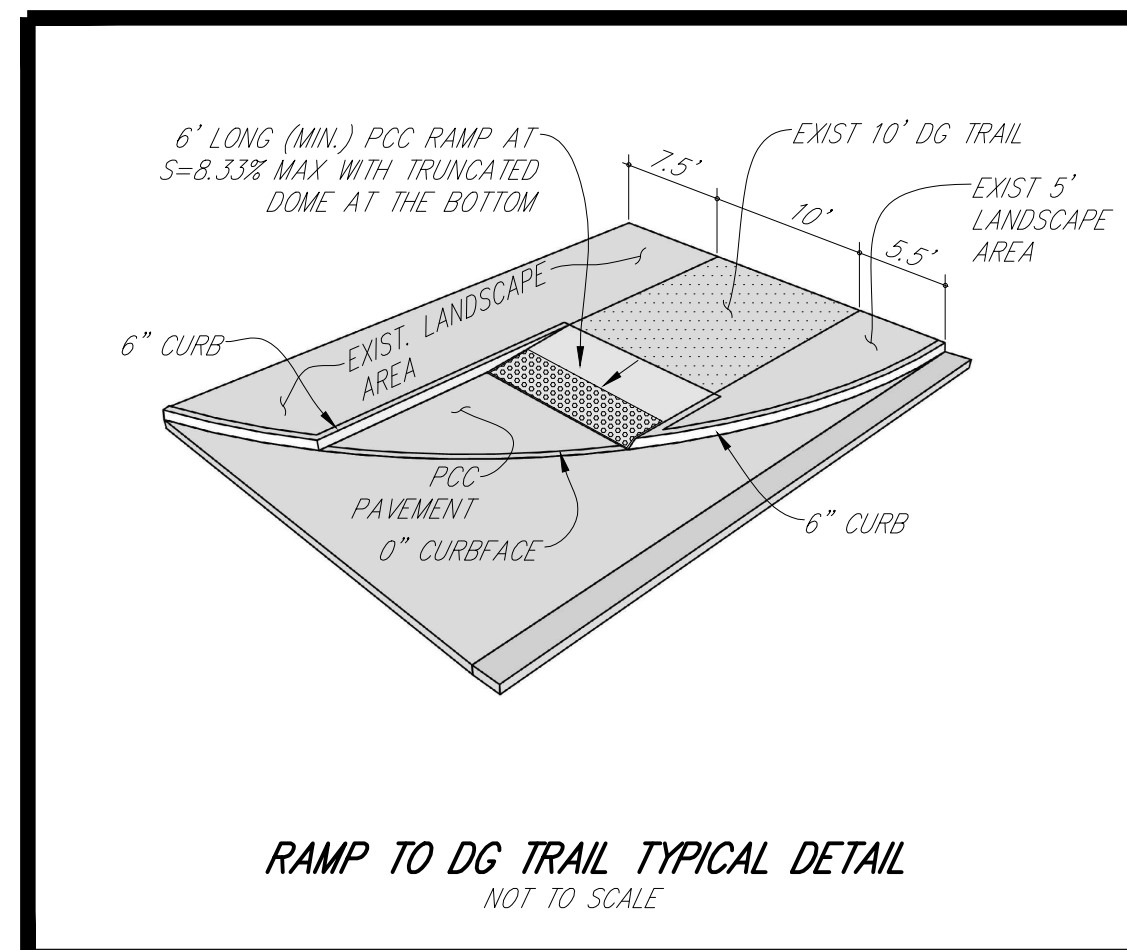
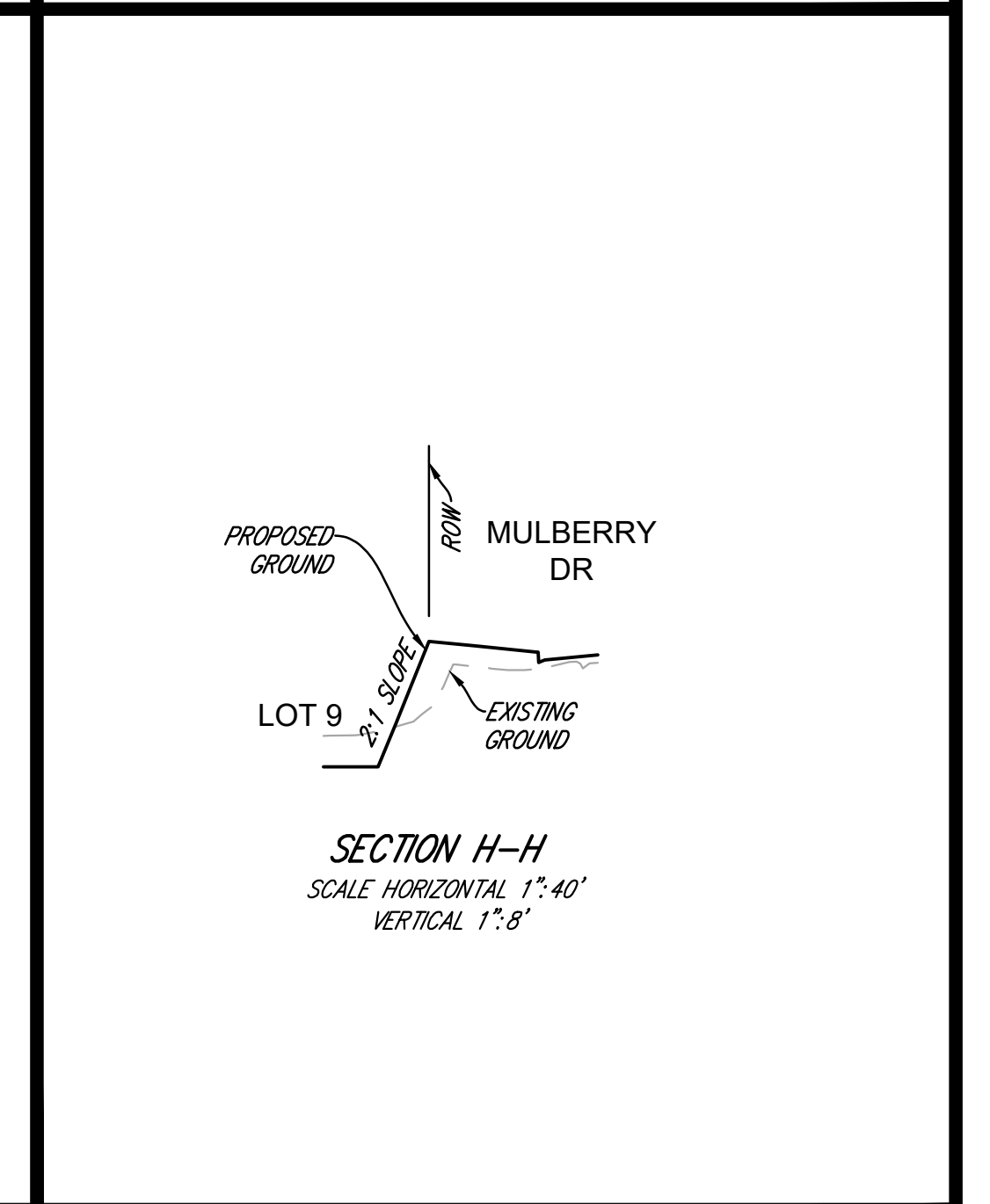
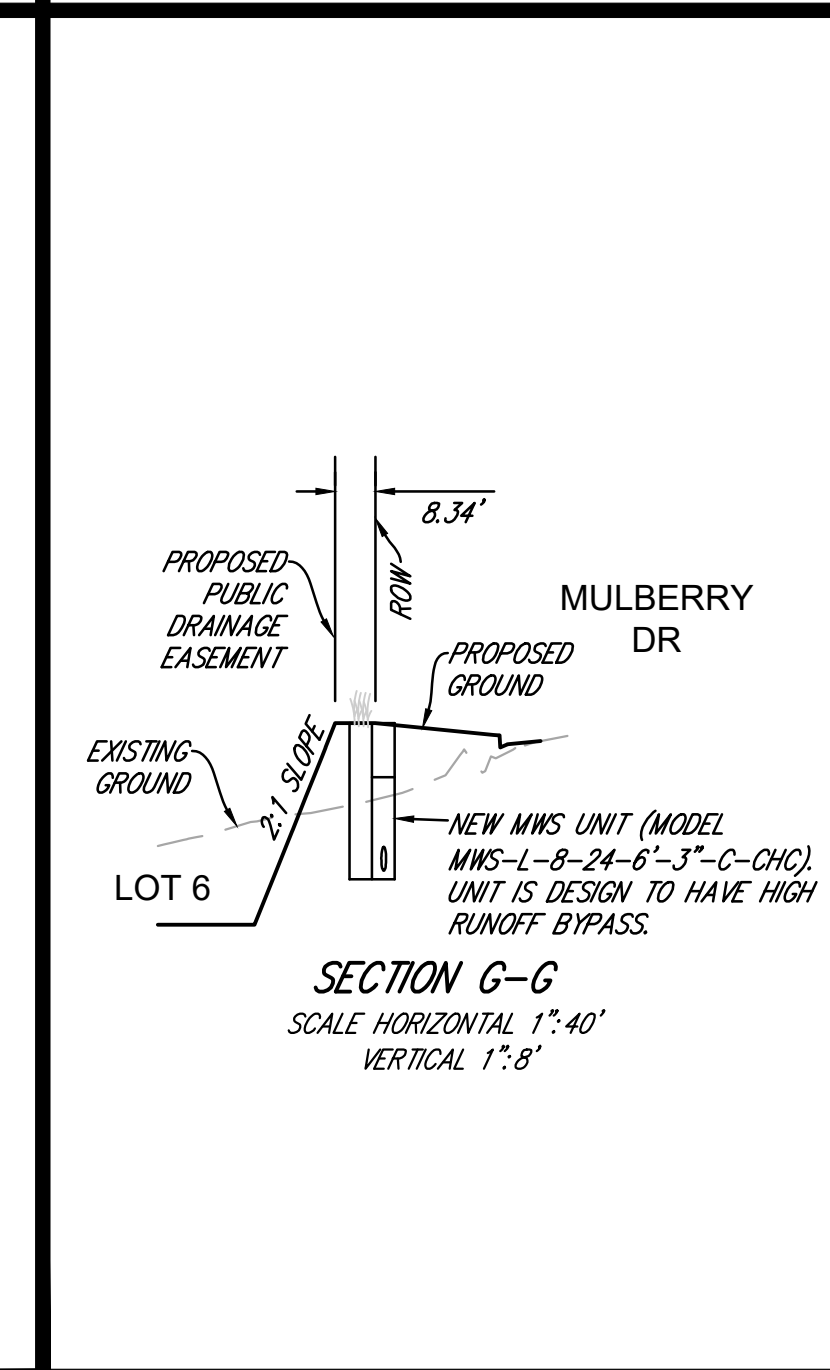
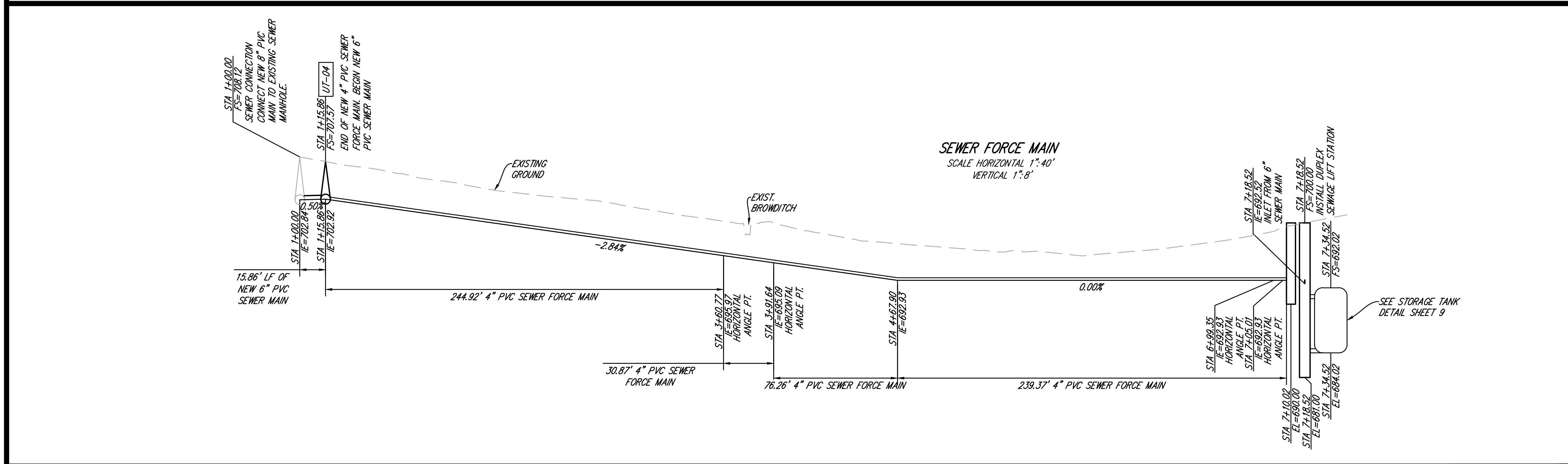
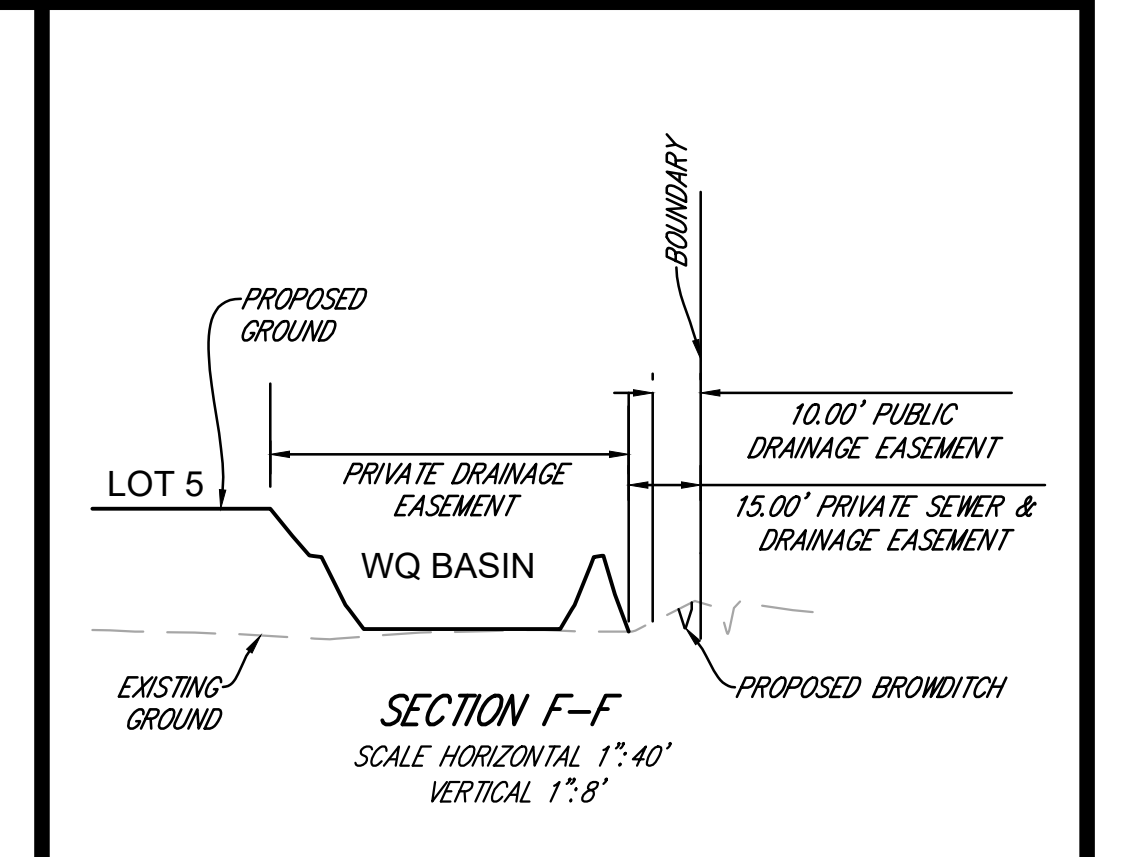
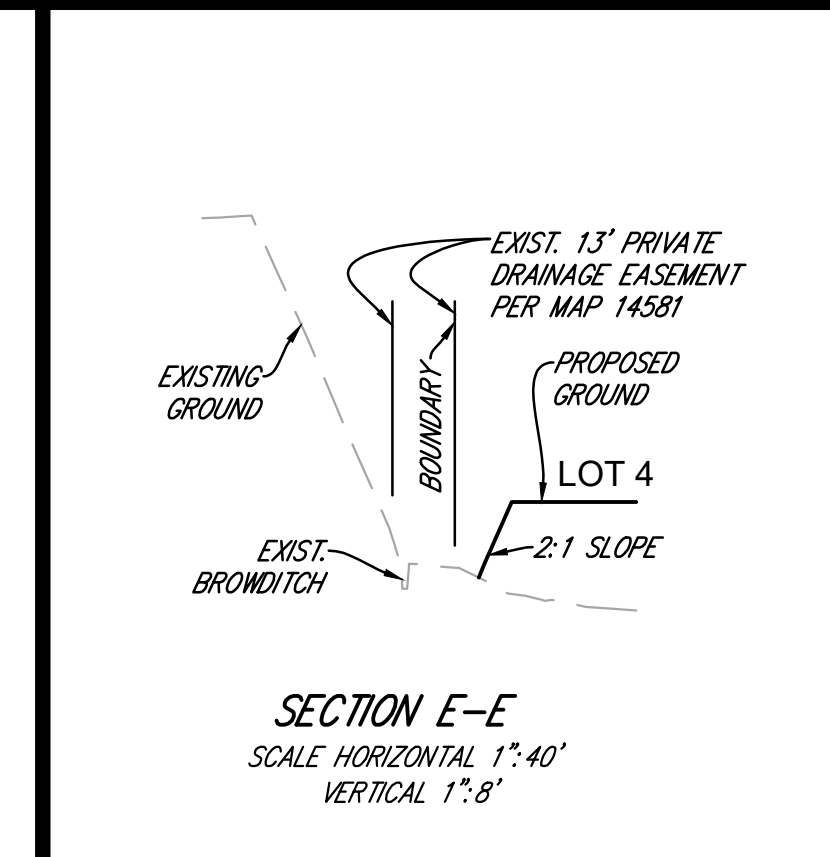
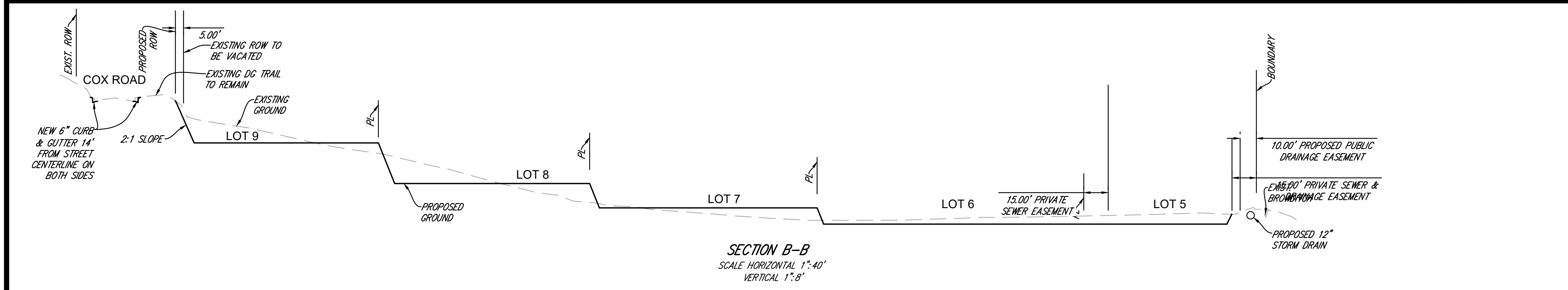
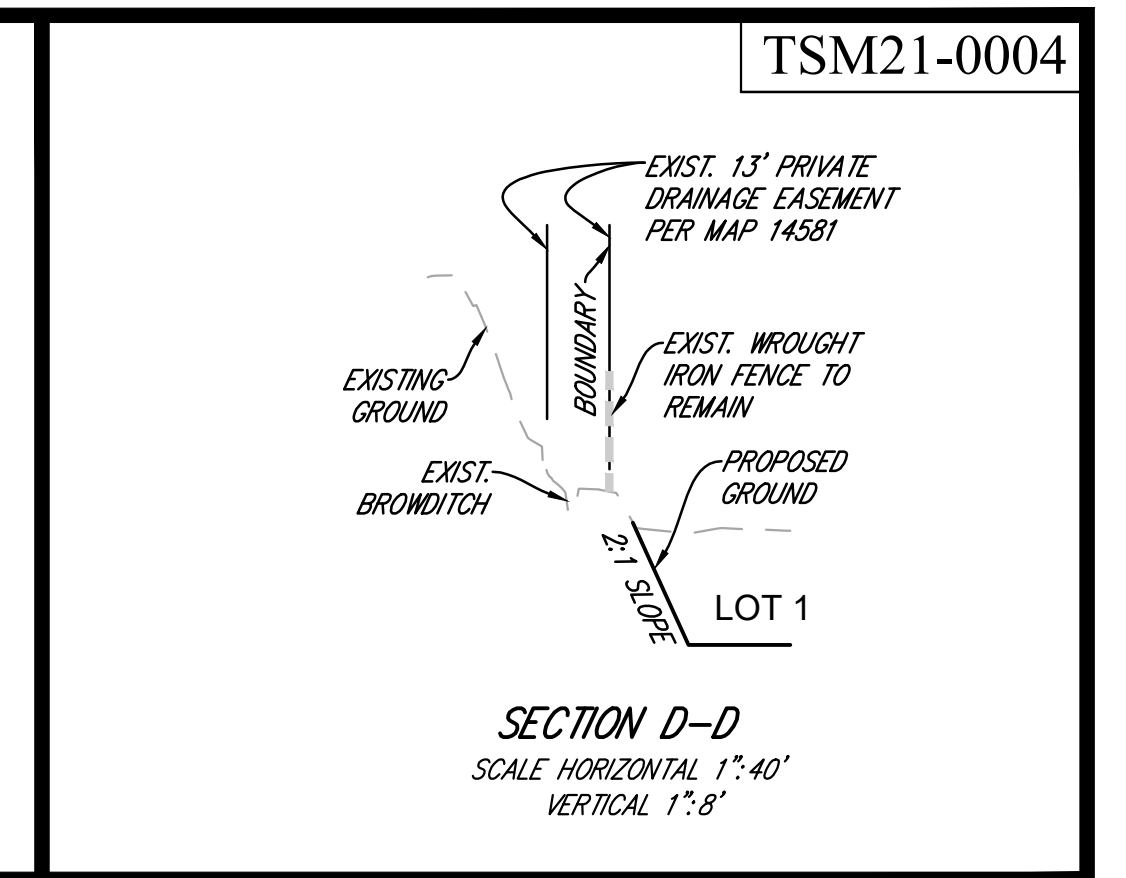
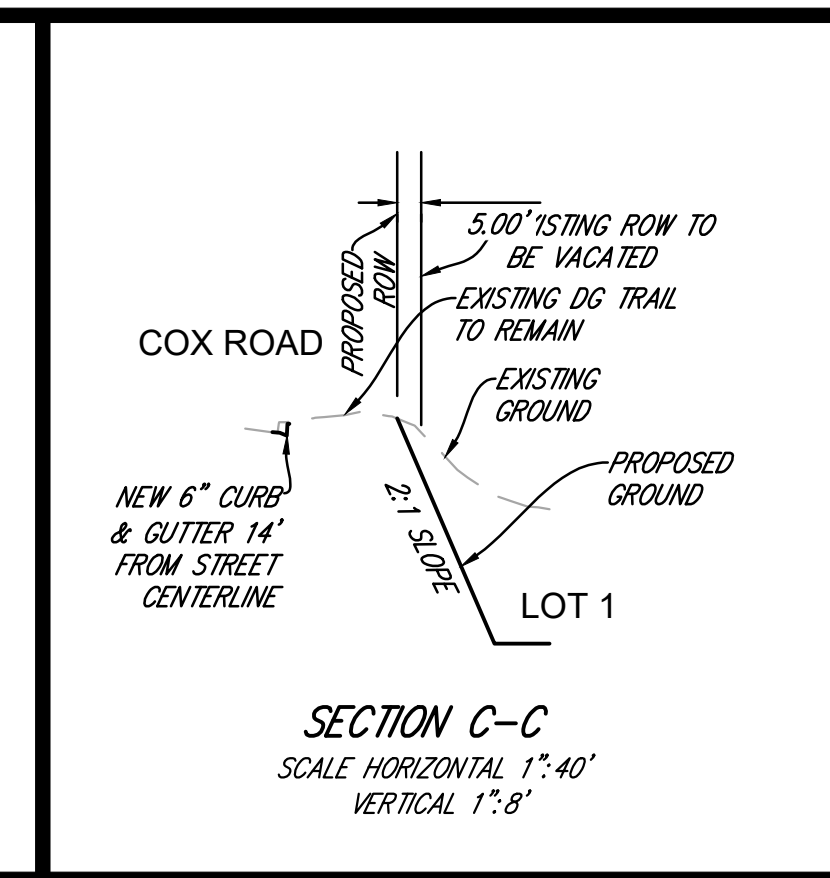
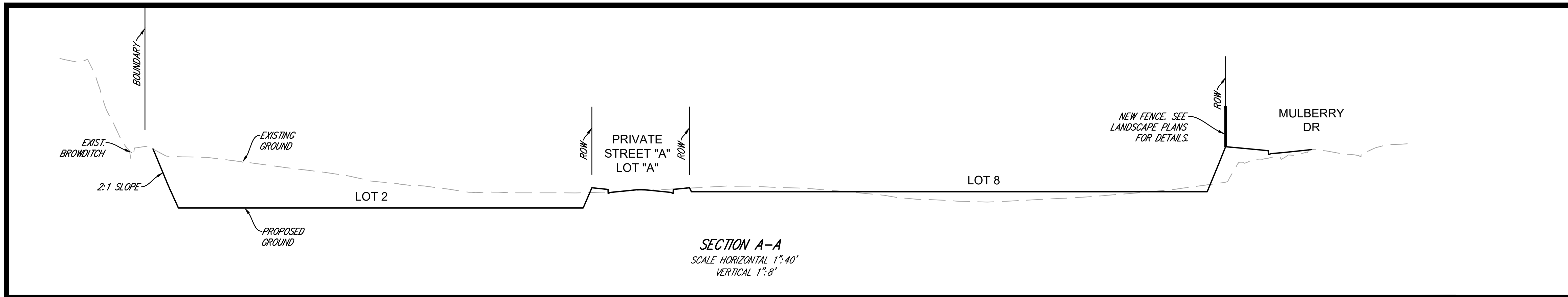
SHEET 4 OF 9 SHEETS
PRELIMINARY GRADING

MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-0004



DATE	REMARKS
12/2021	PLANNING SUBMITTAL

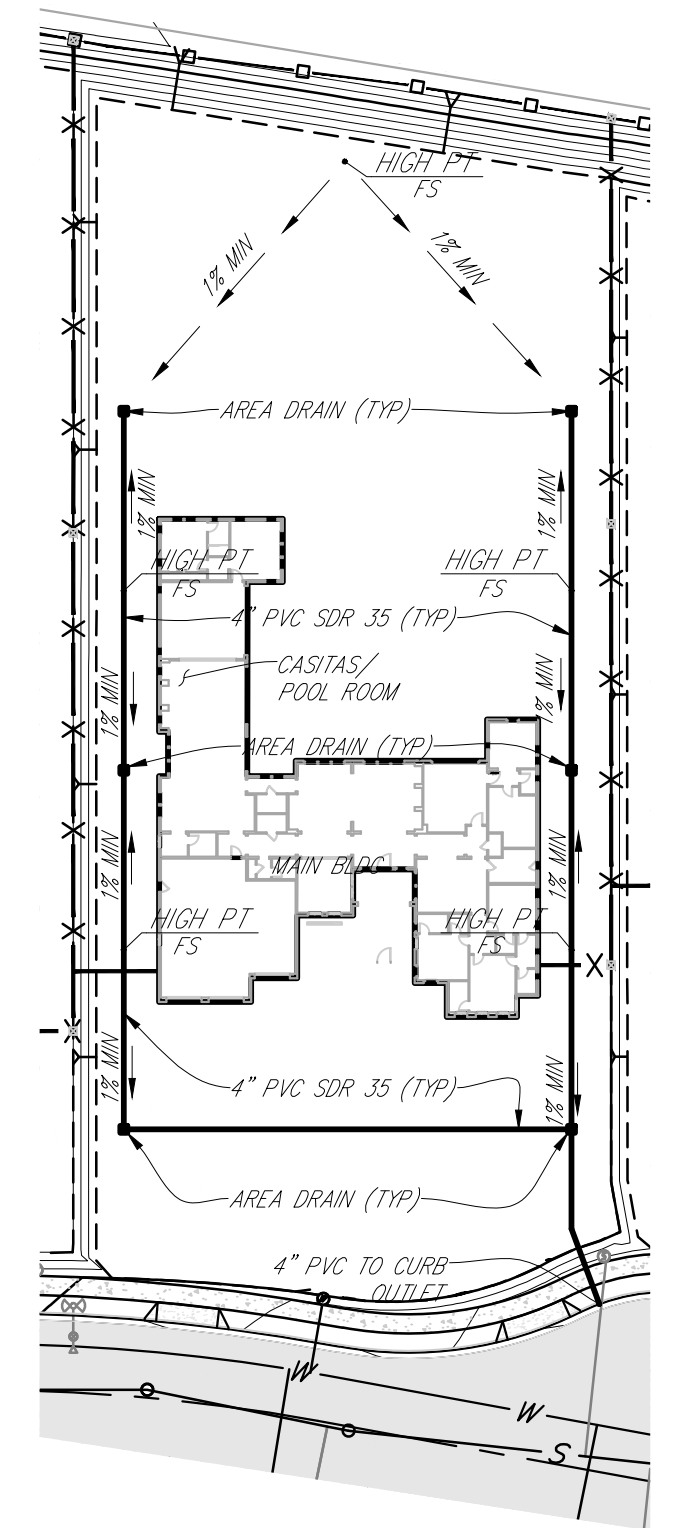
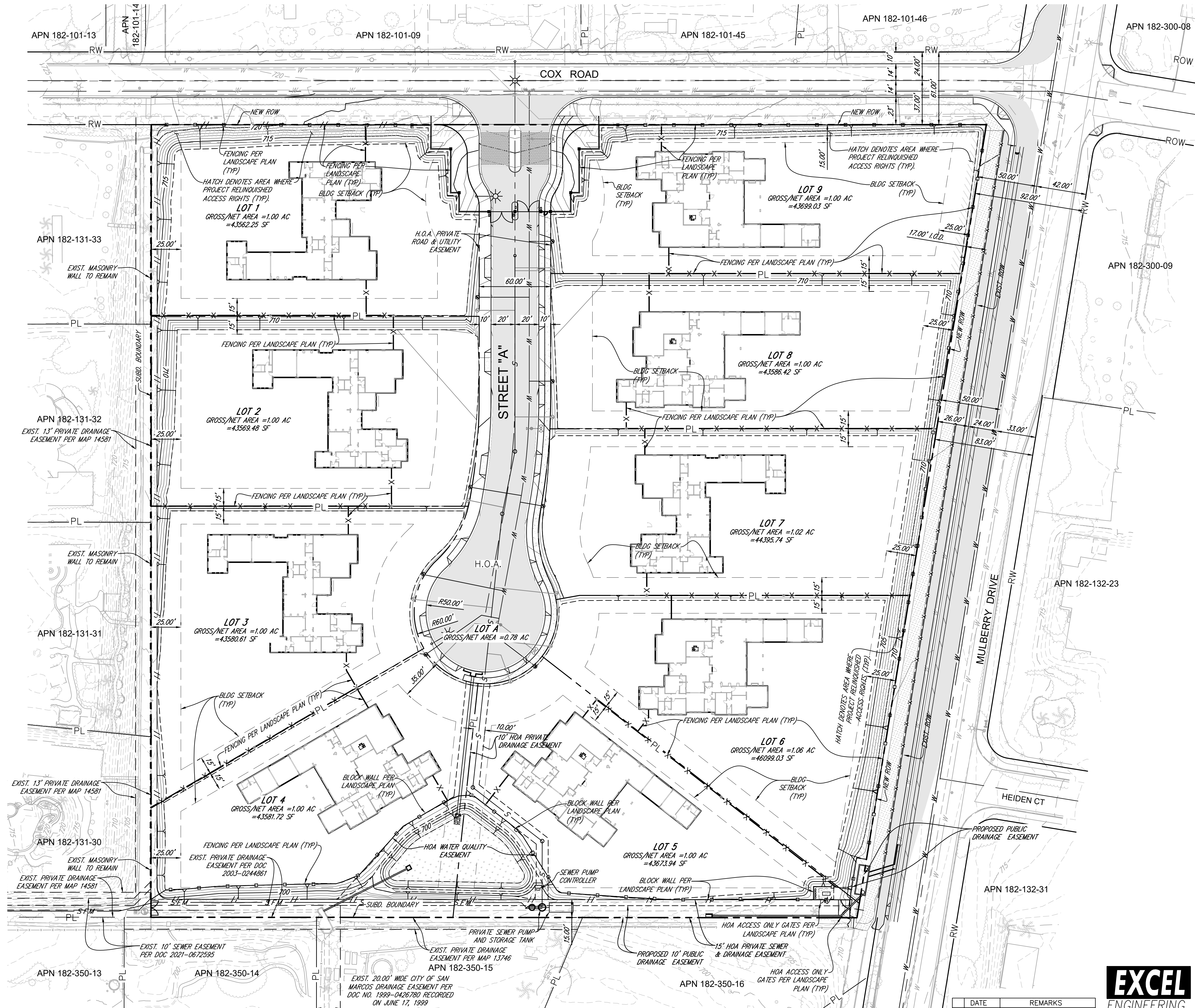
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DATE	REMARKS
12/2021	PLANNING SUBMITTAL



MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-0004



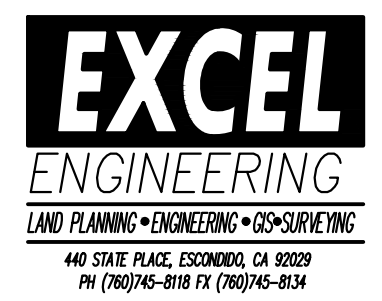
TYPICAL LOT DRAINAGE
NOT TO SCALE

NOTE: THE BUILDING FOOTPRINTS, LOCATION OF LOT DRIVEWAY APRONS SHOWN HERE ARE SUBJECT TO CHANGE. EXACT FOOTPRINTS & LOCATION WILL BE PART OF THE CONSTRUCTION DOCUMENT APPROVAL PROCESS.

NOTE: FENCES, BLOCK WALLS, & GATES ARE PER THE LANDSCAPE PLANS. THEY ARE SHOWN HERE FOR REFERENCE ONLY.

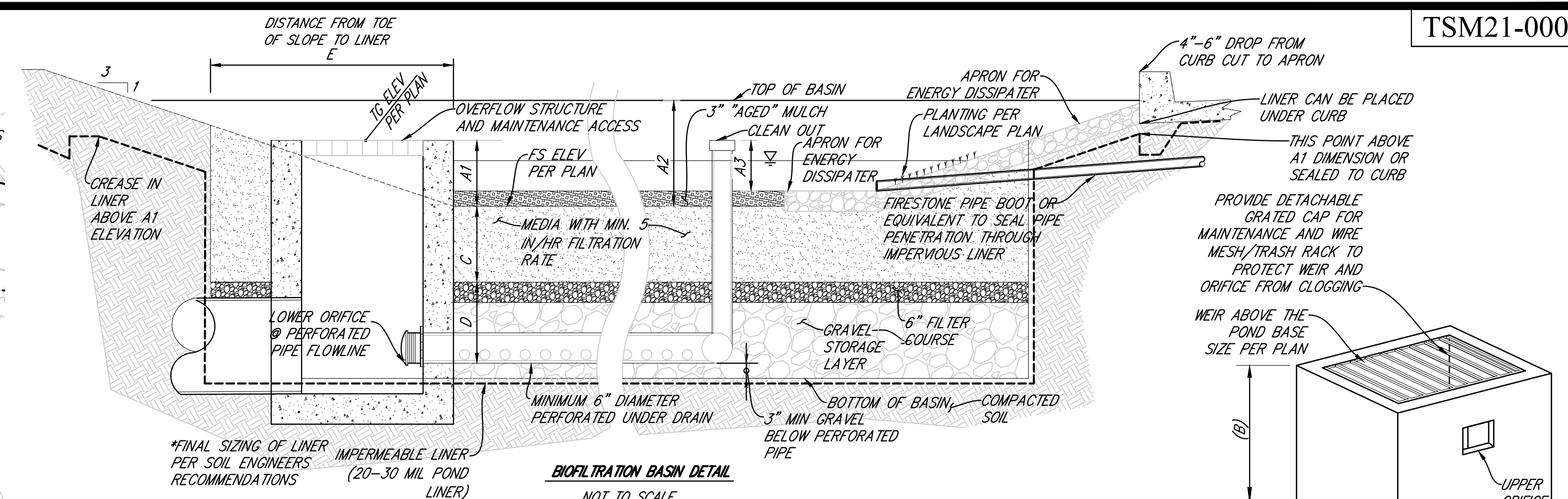
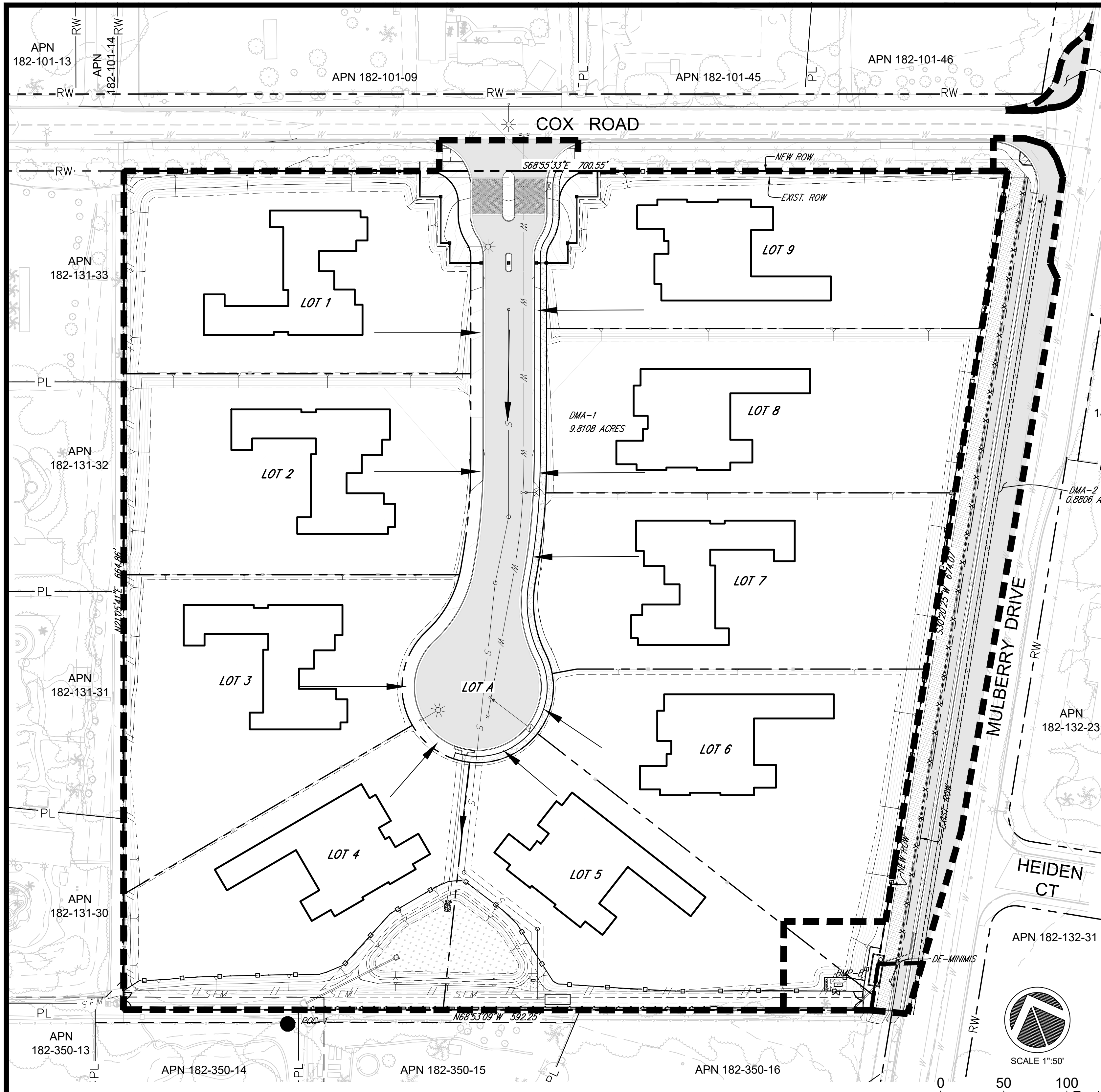
SHEET 6 OF 9 SHEETS
SITE PLAN

MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-004



DATE	REMARKS
12/2021	PLANNING SUBMITTAL

K: 12/12/2024 [Engineering] TM 031 TM 21054 SITE PLAN.dwg 11/26/2024 12:42 PM ORIGINAL PLOT SIZE: -----



STRUCTURAL BIO-BASIN SUMMARY TABLE

DMA NAME	DMA TYPE	BMP NAME	TYPE OF BMP	EFFECTIVE AREA (SQFT)	A1 (INCH) WATER QUALITY	A2 (INCH) TOP OF BASIN	A3 (INCH) CLEAN OUT	A4 (INCH) TOP OF RISER	B (INCH) UPPER ORIFICE	C (INCH) MEDIA	D (INCH) GRAVEL	E (INCH) OFFSET	BOX RISER OVERFLOW STRUCTURE SIZE (INCHES)	ORIFICE DIAMETER UPPER (INCH)	ORIFICE DIAMETER LOWER (INCH)	IMPERMEABLE LINER ?	SOIL MIX LAYER
DMA-1	DRAINS TO BMP	BMP-A	BIOFILTRATION	4677	6	36	6	12	3	21	60	47	24X24	3	2	YES	GRAVEL LAYER
DMA-2	DRAINS TO BMP	BMP-B	PROPRIETARY BIOFILTRATION (MWS)	FLOW-THROUGH 0.796 CFS	-	-	-	-	-	-	-	-	-	N/A	2.75	-	-

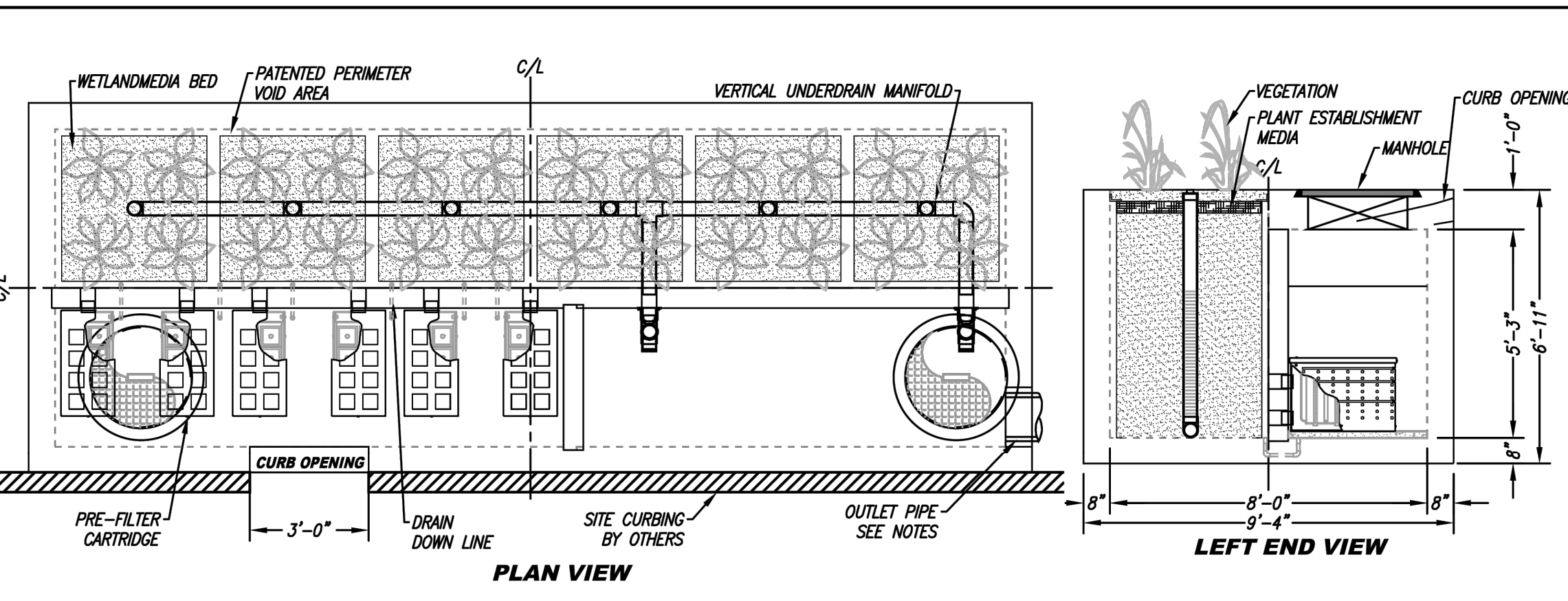
NOTE: FREEBOARD = A2-A1

DMA-ID	IMPERVIOUS (SQFT)	PERVIOUS (SQFT)	TOTAL (SQFT)
DMA-1	93,228.58	334,129.62	427,358.20
DMA-2	19,329.64	17,782.56	37,112.20
DMA-3	1,136.75	0.00	1,136.75
DE-MINIMIS	502.34	733.98	1,236.32

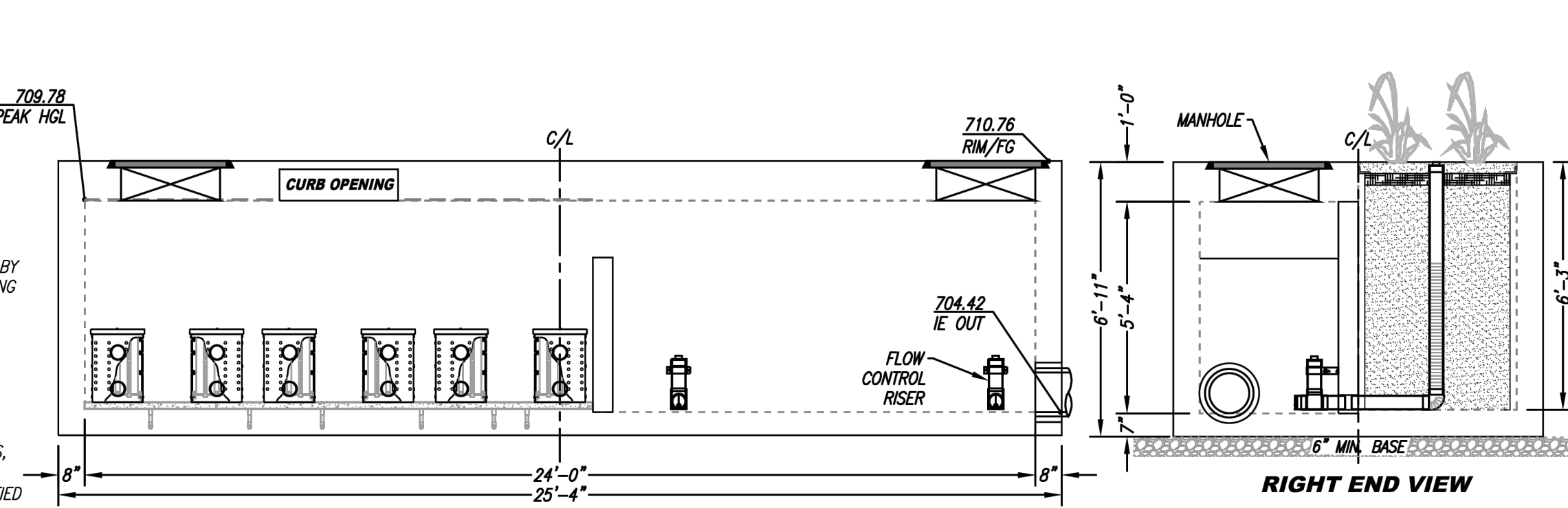


SITE SPECIFIC DATA

PROJECT NUMBER	15258
PROJECT NAME	MANNING HOMES
PROJECT LOCATION	SAN MARCOS, CA
STRUCTURE ID	----
TREATMENT REQUIRED	
VOLUME BASED (CF)	N/A
FLOW BASED (CFS)	0.796
TREATMENT HGL AVAILABLE (FT)	N/A
PEAK BYPASS REQUIRED (CFS) - IF APPLICABLE	21.00
PIPE DATA	I.E. MATERIAL DIAMETER
INLET PIPE 1	N/A N/A N/A
INLET PIPE 2	N/A N/A N/A
OUTLET PIPE	704.42 RCP 12
PRETREATMENT	BIOFILTRATION DISCHARGE
RIM ELEVATION	710.76 710.76 710.76
SURFACE LOAD	PEDESTRIAN N/A PEDESTRIAN
FRAME & COVER	#30\"/>



- INSTALLATION NOTES
- CONTRACTOR TO PROVIDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS REQUIRED TO OFFLOAD AND INSTALL THE SYSTEM AND ADJUSTMENTS IN ACCORDANCE WITH THIS DRAWING AND THE MANUFACTURER'S SPECIFICATIONS, UNLESS OTHERWISE STATED IN MANUFACTURER'S CONTRACT.
 - UNIT MUST BE INSTALLED ON LEVEL BASE. MANUFACTURER RECOMMENDS A MINIMUM 6\"/>



INTERNAL BYPASS DISCLOSURE:

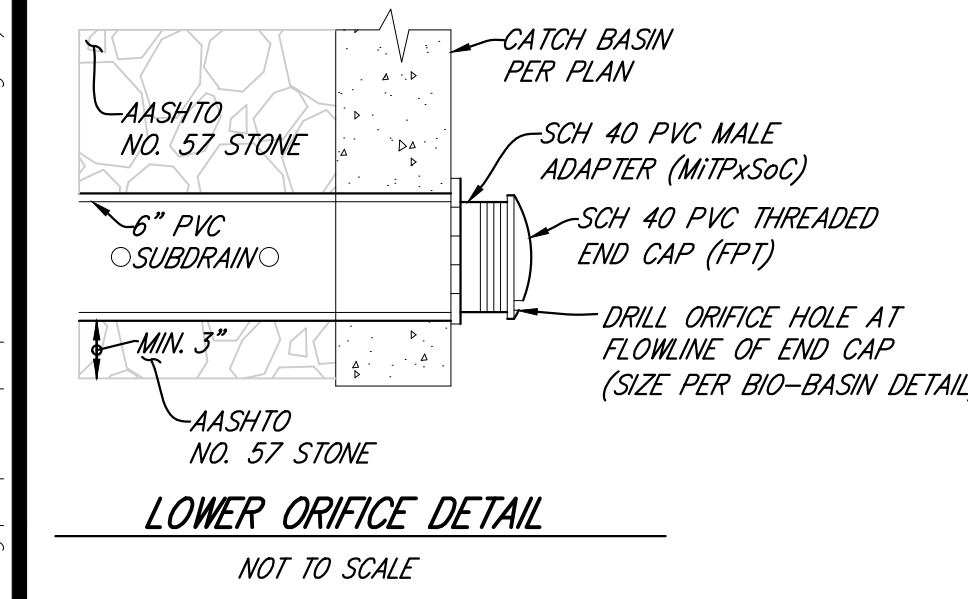
THE DESIGN AND CAPACITY OF THE PEAK CONVEYANCE METHOD TO BE REVIEWED AND APPROVED BY THE ENGINEER OF RECORD. HGL(S) AT PEAK FLOW SHALL BE ASSESSED TO ENSURE NO UPSTREAM FLOODING. PEAK HGL AND BYPASS CAPACITY SHOWN ON DRAWING ARE USED FOR GUIDANCE ONLY.

TREATMENT FLOW (CFS)	0.796
OPERATING HEAD (FT)	3.9
PRETREATMENT LOADING RATE (GPM/SF)	2.3
WETLAND MEDIA LOADING RATE (GPM/SF)	1.0

WETLANDS PROPRIETARY AND CONFIDENTIAL: THE INFORMATION CONTAINED IN THIS DOCUMENT IS THE SOLE PROPERTY OF FORTERRA AND ITS COMPANIES. THIS DOCUMENT, IN WHOLE OR IN PART, THEREOF, MAY BE USED, REPRODUCED OR MOVED IN ANY MANNER WITHOUT THE WRITTEN CONSENT OF FORTERRA.

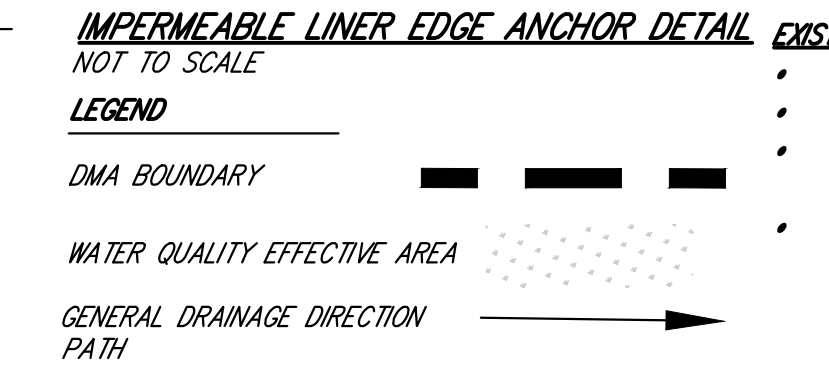
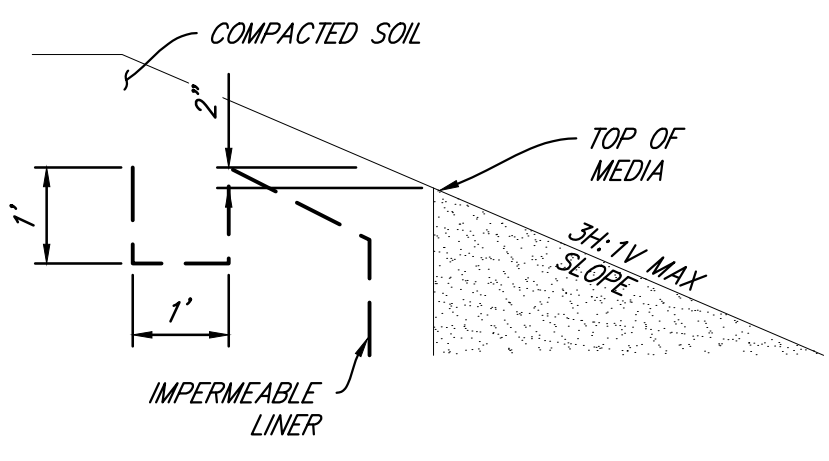
BioClean A Forterra Company

MWS-L-8-24-6'-3\"/>



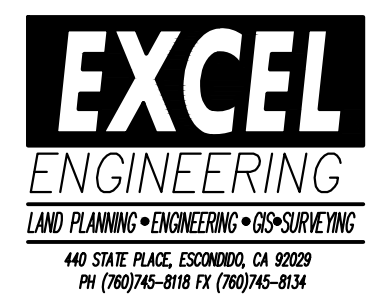
DETAIL "NO DUMPING" AT CATCH BASINS

NOTE: ALL CATCH BASINS WITH GRATES SHALL BE STENCILED WITH CITY REQUIRED ITEM PER ABOVE DETAIL (OAS MANUFACTURING #500 OR EQUIVALENT).



- EXISTING SITE FEATURES:
- THE APPROXIMATE DEPTH TO GROUNDWATER IS GREATER THAN 20 FEET.
 - THERE ARE NO NATURAL HYDROLOGIC FEATURES ON THE SITE.
 - THE SITE PROPOSES TO CONNECT TO THE EXISTING PUBLIC STORM DRAIN SYSTEM LOCATED IN THE SOUTH EDGE OF THE SITE.
 - BASED ON WATERSHED MAPPING OF POTENTIAL CRITICAL COARSE SEDIMENT YIELD AREAS (CCSYA), THERE ARE NO CCSYA LOCATED WITHIN THE PROJECT BOUNDARY OR TRIBUTARY TO THE RUNOFF BYPASSED AROUND THE SITE.

DATE	REMARKS
12/2021	PLANNING SUBMITTAL



SHEET 7 OF 9 SHEETS
PRELIMINARY WQMP BMP

MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA
TSM21-0004

K:\21\21054\Engineering\TM\031\TM\21054_MWMP-BMP.dwg 11/29/2024 12:52 PM ORIGINAL PLOT SIZE: 11x17

PACKAGE DUPLEX PUMP LIFT STATION - MANUFACTURED BY PACIFIC SOUTHWEST INDUSTRIES

COX AND MULBERRY ROAD - SAN MARCOS

Furnish and install complete pre-packaged duplex Lift Station model #PSI-MAN080723 as manufactured by Pacific Southwest Industries (National phone # 800-358-9095)

This pre-packaged Lift Station shall incorporate a quick removal system manufactured by the pump manufacturer. The pump(s) shall be guided to the discharge base elbow by a single or double guide rail and shall be stainless steel and shall extend from the discharge base elbow to the upper guide bracket mounted on 1-5/8" x 1-5/8" channel strut just below the basin cover. Stainless steel lifting chain or cable shall be supplied and properly installed to remove the pump from the wet well. The internal discharge piping shall be completely pre-plumbed with pressure rated schedule 40 or 80 PVC pipe as indicated and extend 12" beyond the wet well and valve vault side wall for contractor connection to the force main piping. The pump(s) discharge piping shall have a check and ball valve installed on each pump discharge. The Lift Station shall include control panel and level control floats. The control panel shall be suitable for surface mounting or free standing on a leg kit if the site conditions require it.

OPERATING CONDITIONS:

The submersible pump shall be capable of handling residential and commercial sewage and grinding it to a fine slurry, enabling it to be pumped over long distances.

CONSTRUCTION:

Each centrifugal sewage grinder pump shall be the Certified LGH/ LGV-Series pumps as manufactured by Liberty Pumps, Bergen NY. The casting enclosing the motor shall be constructed of class 30 cast iron. The motor housing shall be oil-filled to dissipate heat. Air-filled motors shall not be considered equal since they do not properly dissipate heat from the motor. Mating parts shall be machined and sealed with a Buna-N O-ring. All fasteners exposed to the process fluid shall be stainless steel. The motor shall be protected on the top side with a sealed cast iron cord entry plate, which is potted to prevent water from entering through the cord. The motor shall be protected on the lower side with a dual mechanical seal arrangement and an oil-filled intermediate chamber. The upper (inner) seal shall be a two-piece mechanical seal with a Graphite Impregnated Carbon rotating and a silicon carbide stationary face. The lower (outer) seal shall be a two-piece mechanical seal with silicon carbide faces. The upper and lower bearings shall be sized to properly withstand radial and thrust loads produced throughout the full operating range of the pump.

POWER AND CONTROL CORD:

The submersible pump shall be supplied with 35, 50, or 100 feet of a multi-conductor cord of type W. These type W power cords carry a voltage rating of 600 V, a temperature rating of 90°C, have oil-resistant insulation, are wet-in and weather-resistant, UL listed, and CSA approved. The power cord shall be sized for the rated full load amps of the pump for continuous duty in accordance with the NEC. A separate type SCOW control cord of equal length shall also exit the pump. The cord entries to the pump shall be protected via two sealing methods. The cords first pass through a Buna-N compression grommet that seals against the outer jacket of the cable. The Buna-N grommet also doubles as a strain relief. Each individual conductor then continues into a chamber that is filled with epoxy potting compound. The epoxy potting compound seals each individual conductor and protects against any intrusion of liquid into the motor cavity in the event of wicking. The power and control cord leads shall be connected to the motor leads via a terminal block.

MOTOR :

The motor shall be oil-filled, inverter duty, Class H insulated, NEMA A design, and rated for continuous duty. Since air-filled motors are not capable of dissipating heat efficiently, they shall not be considered equal. The mid chamber design utilizing MidTherm™ Cooling technology shall allow for oil in the motor chamber to reject heat to the pumped media and provide cooling to the motor. This motor design shall provide significantly reduced operating temperatures. Pumps requiring an auxiliary cooling means shall not be considered equal. The motor shall be constructed to meet IE3 Premium Efficiency standards in accordance with NEMA MG1. The copper stator windings shall be insulated with moisture-resistant Class H insulation materials, rated for 180°C per NEMA MG1 1.66. The maximum continuous temperature of pumped liquids shall be 40°C. The winding operating temperature rated horsepower and service factor shall be a maximum of 125°C @ 40°C ambient. Motor shall have UL approved thermostats mounted directly on the stator windings. Motor shall have three thermostats, one on each phase. The thermostat leads of the control cord shall be connected to a motor control relay in the control panel. Motor service factor shall be 1.0 under normal conditions and 1.0 when operated on a Variable Frequency Drive (VFD) per MG1 standard. Motor shall have a voltage tolerance of ±10% from nominal. Motor shall meet the requirements of NEMA MG1 Part 30 and 31 for operation on Pulse Width Modulation type VFD with inverter duty rated magnet wire and insulation. Motor shall be capable of handling up to 15 evenly spaced starts per hour without overheating.

BEARINGS AND SHAFT:

The shaft shall be supported by two ball bearings. The top bearing shall be a deep groove radial contact ball bearing and the lower bearing shall be a double row angular contact ball bearing designed to handle the radial and axial forces incurred by pumping. The lower bearing shall be positively retained by a threaded bearing retaining nut, which eliminates any axial movement or rotation of the outer bearing race. Both bearings shall be permanently lubricated by the oil that fills the motor housing. Pump designs requiring scheduled bearing maintenance shall not be considered equal. Pumps with single row lower bearings or sleeve bearings shall not be considered equal. The bearing system shall be sized to provide a minimum of 100,000 hours B10 bearing life throughout the operating range of the pump. Pumps that only provide a 50,000-hour B10 bearing life shall not be considered equal. The motor shaft shall be made of 416 stainless steel. The motor shaft shall be constructed from a single piece of stainless steel. Spin welded shafts shall not be considered equal. The shaft shall be designed to withstand the maximum torque and radial loads present during start-up and normal operation. Shafts of carbon steel or chrome-plated shafts shall not be considered equal.

SEALS:

The pump shall have two shaft seals separated by an oil chamber. Pumps utilizing single seal technology shall not be considered equal. A leak detection probe shall be positioned in the oil chamber and shall allow for continuous monitoring for lower (outer) seal failure. The lower seal shall be a two-piece design that is easily serviceable. Shaft seals shall not require scheduled maintenance. The upper (inner) seal shall be Graphite Impregnated Carbon on silicon carbide and the lower seal shall be silicon carbide on silicon carbide. Both seals shall include stainless steel housings and Viton elastomers. Lower seals shall be optionally available in tungsten carbide.

CUTTER MECHANISM:

The cutter and plate shall consist of hardened 440 stainless steel with a Rockwell C hardness of 55-60. The stationary cutter plate shall have specially designed orifices through it, which enable the slurry to flow through the pump housing at an equalized pressure and velocity. The stationary cutter plate shall feature patented V-Slice® Cutter Technology. This superior cutting system consists of V shapes to maximize cutting action and arc shape exclusion slots to outwardly eject debris from under the rotary cutter. The rotary cutter shall have four blades and be designed with a recessed area behind the cutting edge to prevent the accumulation and binding of any material between rotary cutter and the stationary cutter plate. The cutter shall be capable of over 400,000 cuts per minute. The cutting system shall incorporate close tolerances for optimum performance. Ring or radial cutters, or those that grind on the outside circumference of shall not be considered equal.

QUICK REMOVAL SYSTEM:

The pumping unit(s) shall be equipped with a quick removal system (QRS). The construction shall be such that the pump(s) will automatically connect to the discharge piping when lowered into place on the discharge connector. There shall be no need for personnel to enter the wet well to accomplish installation or removal of the pump(s). The pumping unit(s) shall be fitted with stainless steel lifting chain(s) of sufficient length and strength to permit the raising and lowering of the unit(s). The chain(s) shall be fastened at the top of the structure near the access opening. The need for a protective coating shall not be required. A sliding guide bracket shall be an integral part of the pumping unit and the pump casing shall have a machined connection with a bracket to connect with the discharge connection. Sealing of the pumping unit to the discharge connection shall be accomplished by a single linear downward motion of the pump with the entire weight of the pumping unit guided by a pawl, thereby wedging the pumping unit tightly against the discharge connector. No portion of the pump shall bear directly on the floor of the sump, nor shall a rotary motion of the pump be required for sealing. All fasteners meeting the pumpage shall be stainless steel. Two corrosion resistant guide pipes shall be furnished and installed for each pump to permit raising and lowering of the pump.

FIBERGLASS WET WELL:

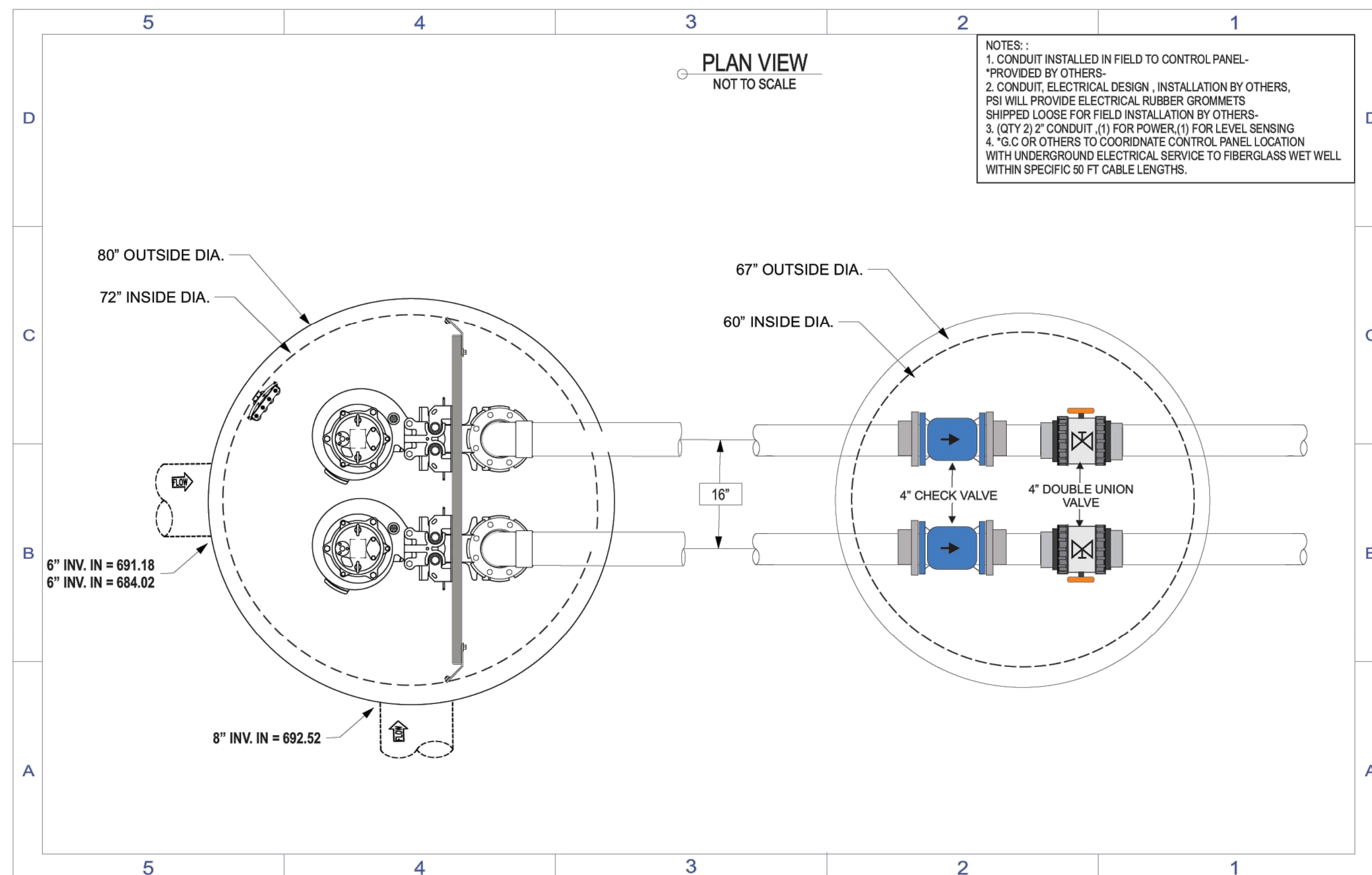
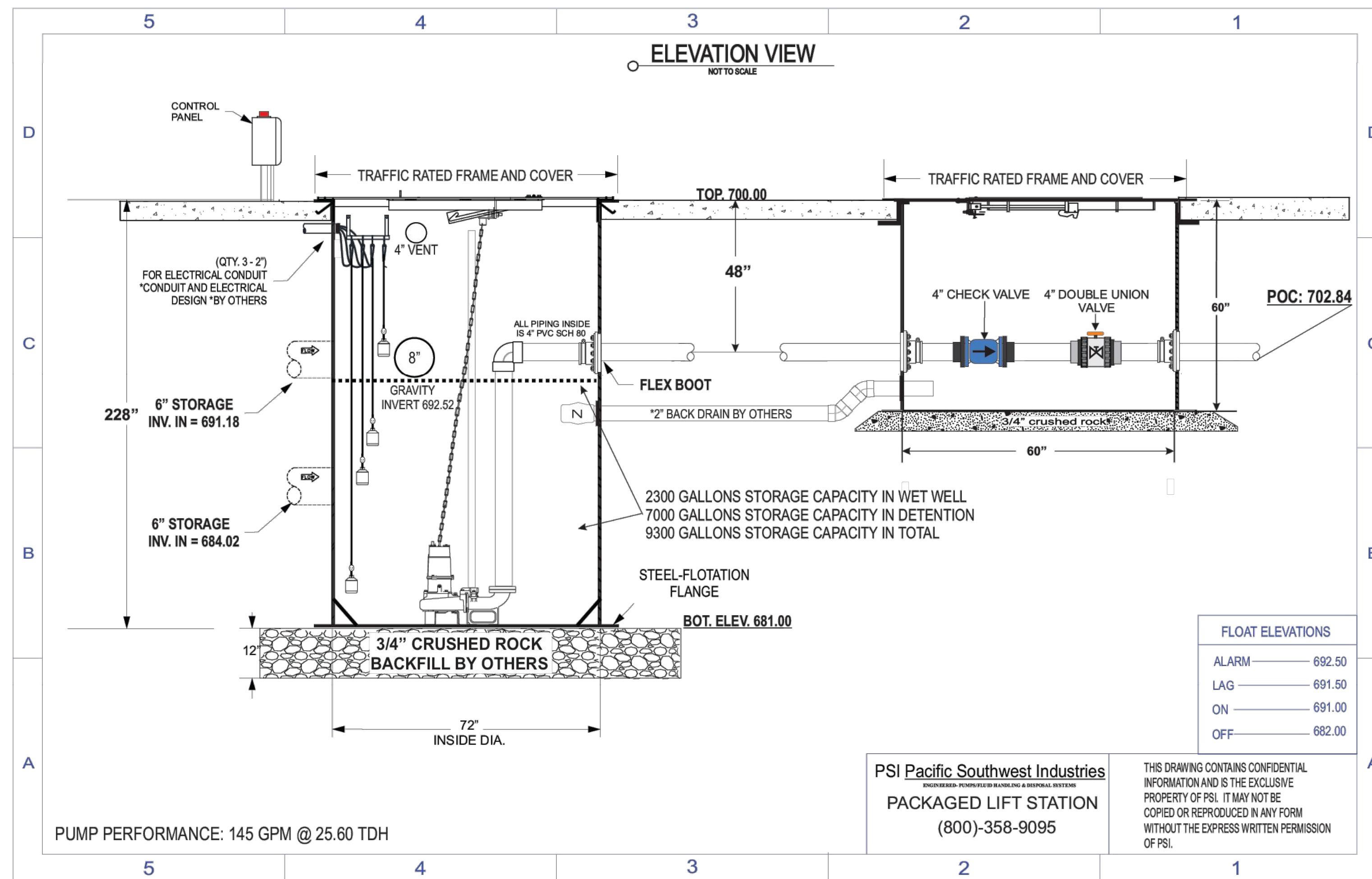
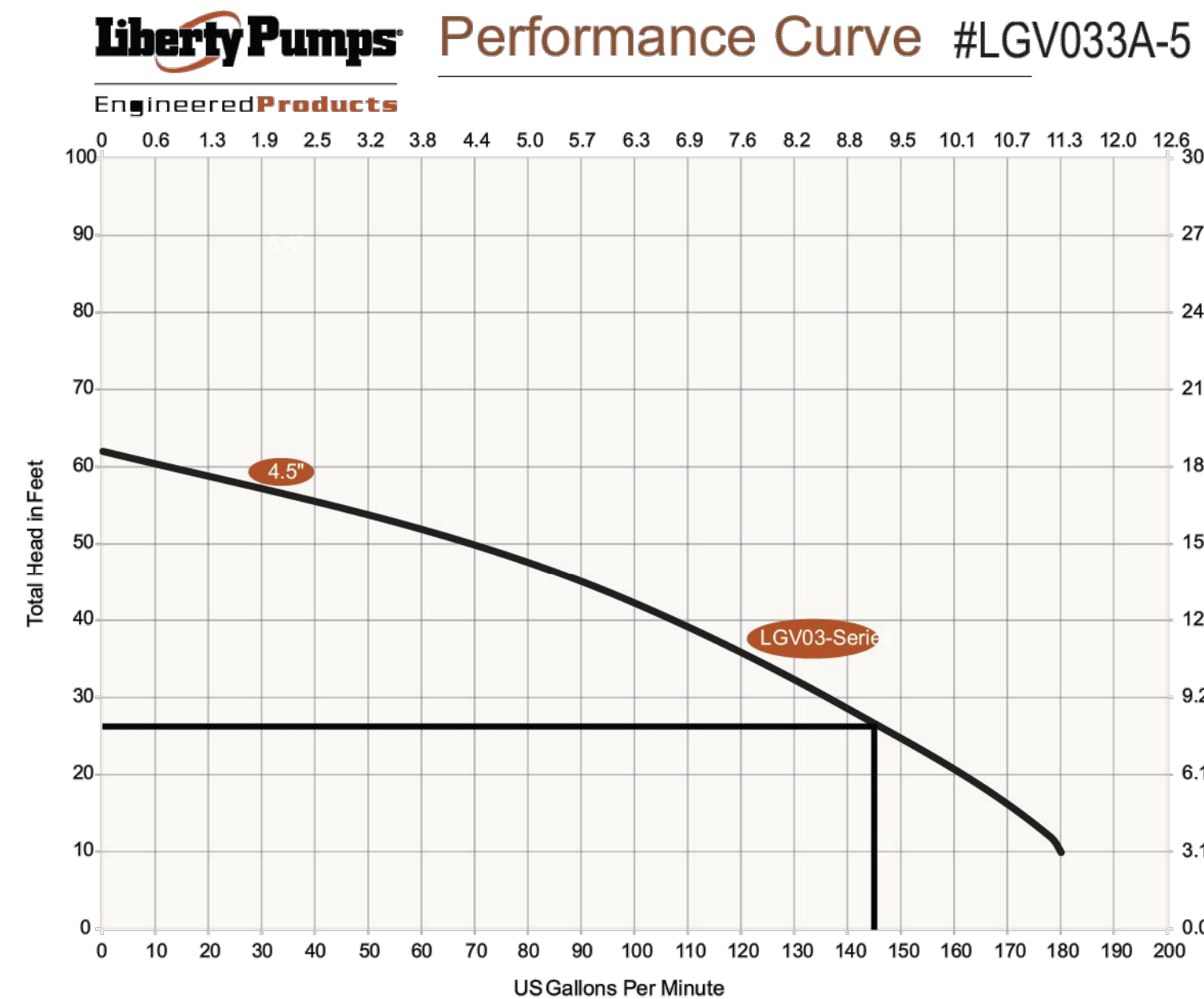
The fiberglass wet well with an anti-floatation flange shall have the proper diameter and depth below the lowest inlet to promote proper cycling while maintaining the rim at grade. The fiberglass wet well shall be manufactured using a process that is filament wound and/or chopped spray. The wet well shall be constructed with an anti floatation flange. Lifting lugs shall be required for those wet wells 48 inches in diameter and larger for setting of the wet well. The laminate shall have a Barcol hardness of at least 90% of the resin manufacturer's minimum specified hardness for cured resin on both the interior and exterior surfaces. The minimum wall thickness of the wet well shall not be less than 1/4". Stainless steel studs will be encapsulated in the bottom of the wet well to allow the mounting of the quick removal system. The top rim flange will be a minimum of 2" wide to allow for the installation of the pedestrian rated aluminum cover to the rim flange or shall be rimless if the cover is specified for H2O off street locations. The wet well shall be provided with "unseal" fittings that can be installed in the field to insure proper elevation of the inlet, vent, and electrical on the side of the wet well. The wet well will house 2 - swing check valves, and 2 - shut off valves.

DUPLEX ALTERNATING CONTROL PANEL:

The duplex control panel, as a minimum, shall include the appropriate enclosure type for the environment it is to be installed in and should include the following: Motor starters, motor circuit protectors or variable frequency drives (VFD), pump run indicator(s), operation selector switch(es), high water alarm and light, silence switch, dry contact for alarm, numbered terminals for all incoming power, pump motor(s) and level controls. The control panel shall be UL listed 508 or 913.

HAZEN-WILLIAMS EQUATION/HEAD LOSS IN WATER PIPE	
$(f) = 0.2083 (100 / c)^{1.852} q^{1.852} / dh^{4.8655}$	
c=	150 HDPE / PVC
q=	145 GPM
dh=	4" SCH 40 = 4.03
FRICION LOSS PER 100 FT f=	1.12
Velocity (ft/s) =	3.65

LIFT STATION PROFILE & CALCULATIONS			
4" SCH 40 = 4.03 SCH 80 = 3.83			
4" PVC PIPE	(QTY) 400	x	1 FT
4" PVC 90 ELBOW	(QTY) 1	x	10.1 FT
4" PVC 45 BEND	(QTY) 4	x	5.1 FT
4" PVC TEE	(QTY) 0	x	26.8 FT
4" BALL VALVE	(QTY) 1	x	2.7 FT
4" CHECK VALVE	(QTY) 1	x	22 FT
TOTAL EQUIVALENT LENGTH	455.2 FT		
FRICION LOSS PER 100 FT 4" PVC	145 GPM	1.1 FT	PER 100 FT
FRICION LOSS 4"	455.2 / 100	x	1.1 FT
TOTAL DYNAMIC HEAD			
4" FRICION LOSS	5.11 FT		
STATIC HEAD	+ 20.50 FT		
PERFORMANCE	145 GPM @ 25.61 FT TDH THROUGH 4" PVC LINE		



LIFT STATION DETAILS

NOTE: VERIFY ALL ELEVATIONS PRIOR TO FABRICATION. OTHERS TO VERIFY ALL INLET/OUTLET ORIENTATIONS PRIOR TO FABRICATION AND INSTALLATION. *ALL PIPE OPENINGS AND SEALING SHALL BE COMPLETED IN FIELD BY OTHERS.

PSI Pacific Southwest Industries
ENGINEERED- PUMPS/FLUID HANDLING & DISPOSAL SYSTEMS
18841 COLLIER , LAKE ELSINORE, CA 92530 PH: 800-358-9095

Description	Date
FIRST DRAFT	10/24/24

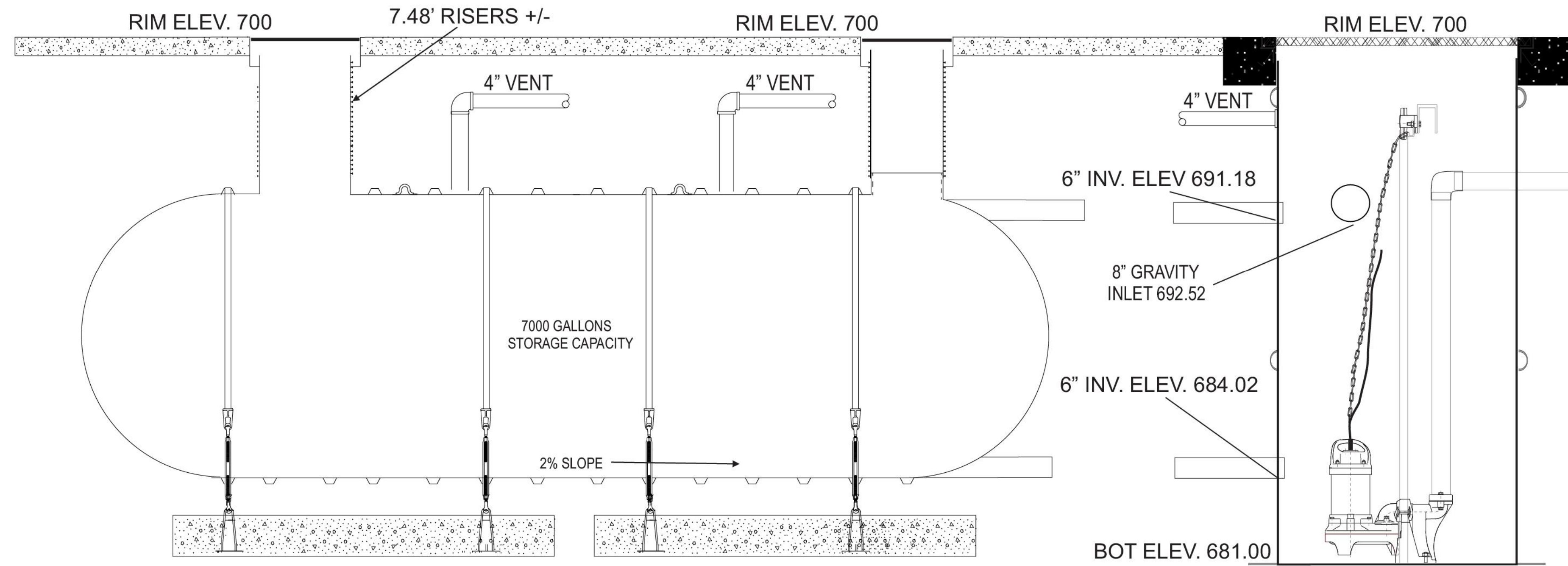
No.	Date
1	10/24/24

Date:	Scale:	Sheet No.
10/24/24	NTS	1 OF 1
Drawn by:	DM	OR
Checked by:		

LIFT STATION DETAILS
COX AND MULBERRY ROAD
SAN MARCOS

LSD-1

SIDE PROFILE

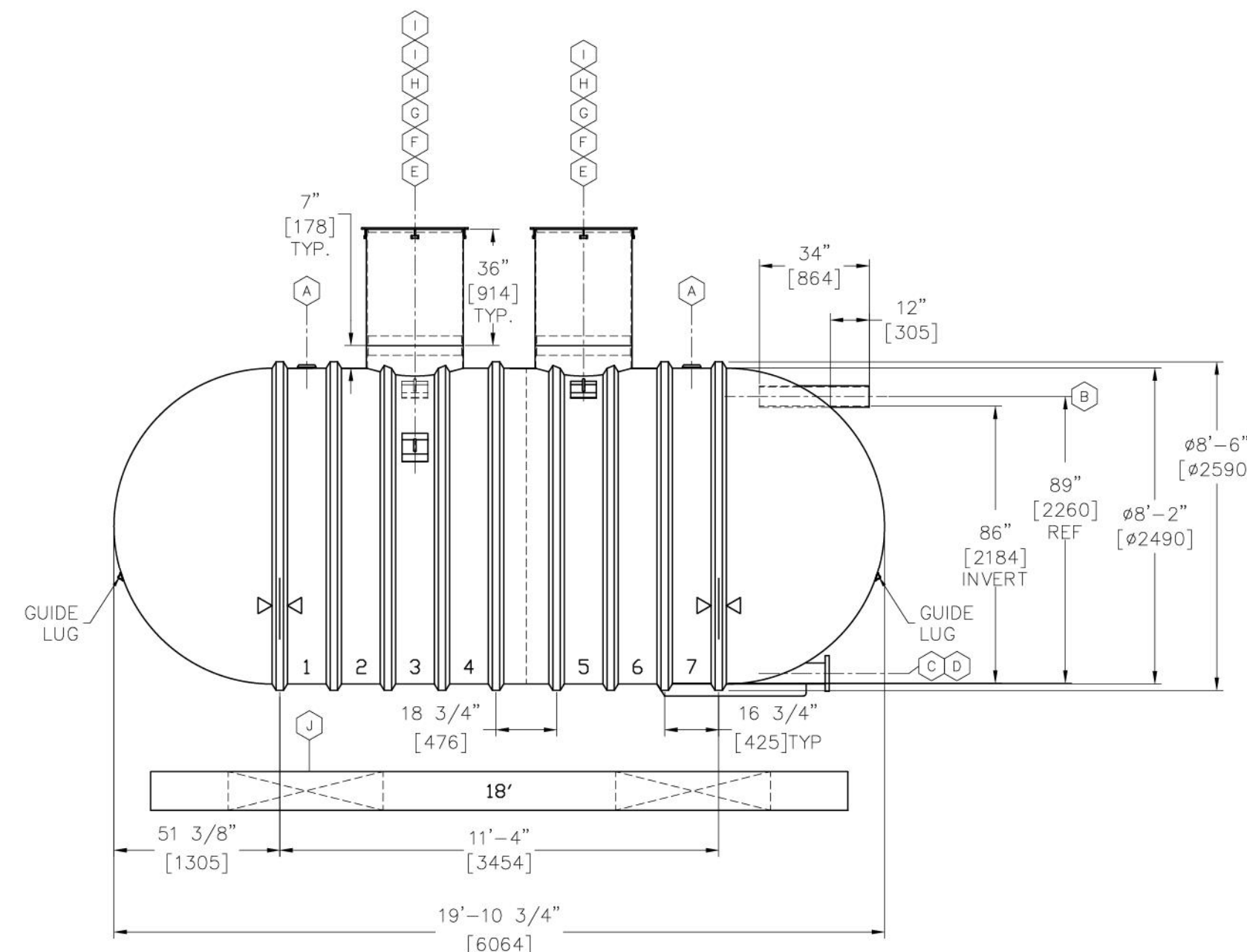


8 FT DIAMETER TANK X 19.5 FT LONG

DPLX PUMP SYSTEM
SEE LSD-1

NOTES:

1. ALL DIMENSIONS SHOWN ARE IN FEET/INCHES. DIMENSIONS IN BRACKETS ARE IN mm.
2. DRAWING EXPIRATION: DRAWING VALID FOR SIX (6) MONTHS FROM DATE OF LAST REVISION. XERXES RESERVES THE RIGHT TO REVIEW AND UPDATE.
3. ONLY MATERIALS THAT HAVE BEEN TESTED AND APPROVED BY XERXES SHOULD BE USED FOR FIELD BONDING OF CONTAINMENT SUMP OR ACCESS RISER COMPONENTS.
4. INVERT DIMENSION FROM TANK I.D.
5. ROTATE SHIPMENT ON TRAILER TO AVOID COMPONENT DAMAGE.
6. NOMINAL TANK WEIGHT: 2,400 lbs. [1,100 kg]



CUSTOMER DESIGNATION:
COX MULBERRY

REVISION DESCRIPTION	
00	ISSUED FOR CONSTRUCTION

XERXES

PROPERTY AND CONFIDENTIALITY: THE INFORMATION CONTAINED HEREIN IS THE PROPERTY OF XERXES. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION AND AUTHORIZATION OF XERXES.

DATE: 10-31-24
DRAWN BY: DAVID HOLMES
CHECKED BY: DAVID HOLMES

PROJECT: 2024-008087
SHEET: 9 OF 9

ITEM	QTY	DESCRIPTION	PART NO.
A	2	4"NPT SERVICE FITTING	C310021
B	1	6"DIA SCH 40 PVC HORIZONTAL PIPE	C600176
C	1	6"DIA FRP FLANGED & GUSSETED TANGENTIAL NOZZLE	C600048
D	1	FLANGE BOTTOM SUPPORT	C600055
E	2	29 1/2" I.D. FIBERGLASS ACCESS OPENING WITH 29 3/8" O.D. ALIGNMENT RING	-
F	2	30"DIA (29 1/2" I.D.) x 36" HIGH ORENCO FRP ACCESS RISER (SUPPLIED BY XERXES, SHIPPED LOOSE)	-

G	2	30"DIA ORENCO FLD SERIES FRP ACCESS LID WITH GASKET (SUPPLIED BY XERXES, SHIPPED LOOSE)	FLD30G
H	2	1 GAL FIELD LAMINATION KIT	C810011
I	3	LIFTING LUG (10" x 8") 36", 36", 25"	C340009
J	2	18" PREFABRICATED CONCRETE DEADMEN KIT	-
K	2	HOLD DOWN STRAP LOCATION	-

SEWAGE DETENTION DETAIL

PSI pacific southwest industries
ENGINEERED - PUMPS/FLUID HANDLING & DISPOSAL SYSTEMS
18541 COLLIER AVE., LAKE ELSINORE, CA 92530 PH: 800 358-9095

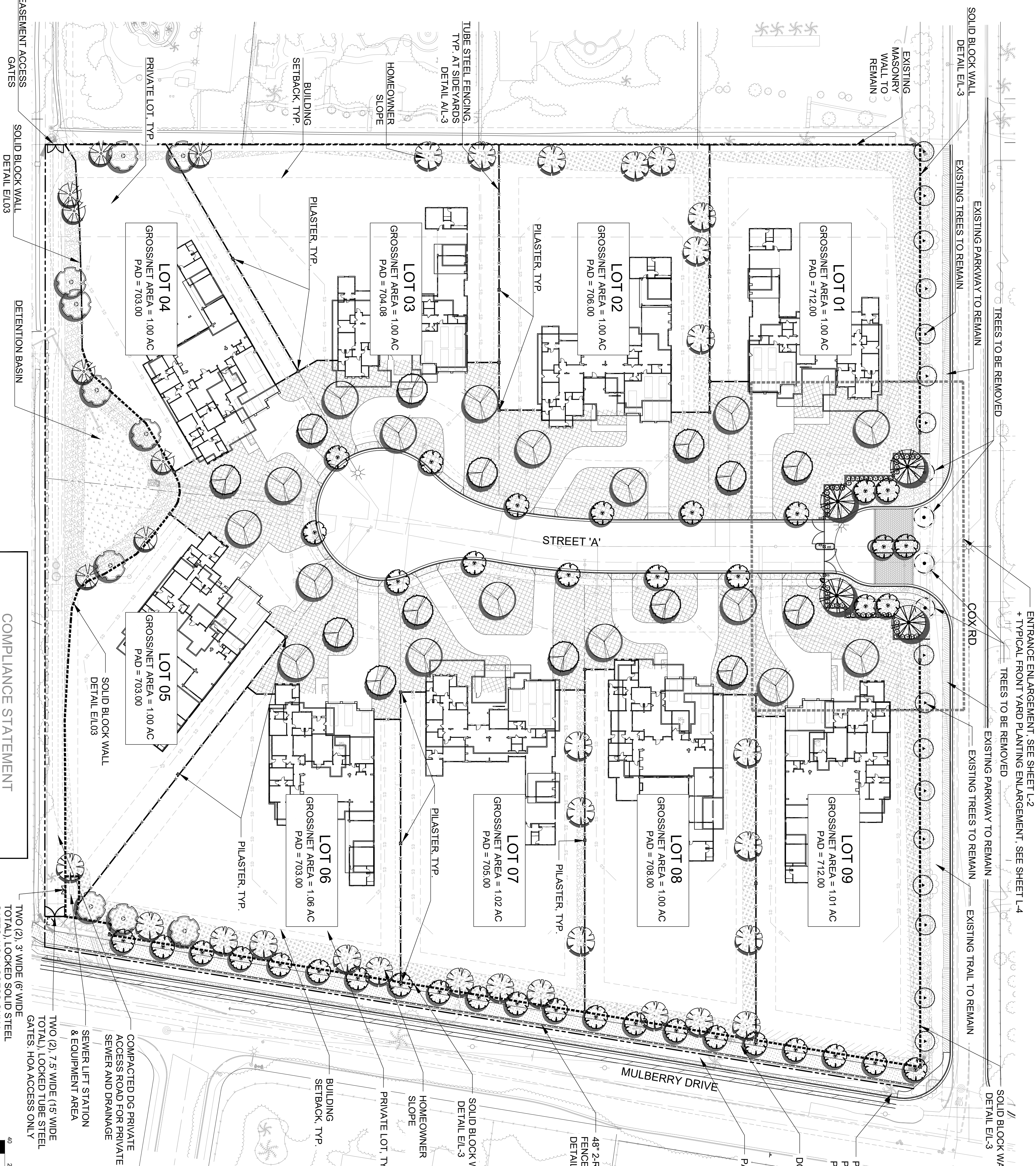
No.	Date	Description
1	10/24/24	ELEVATION CHANGES

LIFT STATION DETAILS
COX AND MULBERRY
SAN MARCOS, CA

Date: 10/24/24
Drawn by: OR
Checked by: SR

Scale: NTS
Sheet No.: 1 OF 1

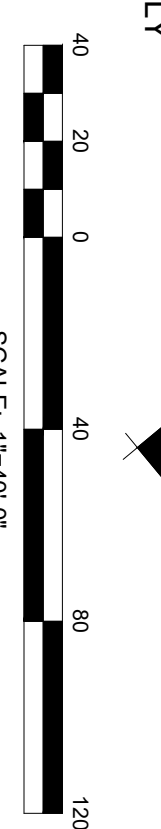
LSD-2



ENTRANCE ENLARGEMENT, SEE SHEET L-2
 * TYPICAL FRONT YARD PLANTING ENLARGEMENT, SEE SHEET L-4
 TREES TO BE REMOVED
 TREES TO REMAIN

COMPLIANCE STATEMENT
 I AGREE TO COMPLY WITH THE REQUIREMENTS OF THE WATER EFFICIENT LANDSCAPE REGULATIONS AND SUBMIT A COMPLETE LANDSCAPE DOCUMENTATION PACKAGE.
 8/19/24 DATE
 REGISTRATION NO. 3603 EXP. 02-2025

TWO (2) 3' WIDE (6' WIDE TOTAL), LOCKED SOLID STEEL GATES, HOA ACCESS ONLY
 TWO (2) 7.5' WIDE (15' WIDE TOTAL), LOCKED TUBE STEEL GATES, HOA ACCESS ONLY



DESIGN INTENT STATEMENT

THE LANDSCAPE DESIGN INTENT OF THIS PROJECT IS TO PROVIDE PLANT MATERIAL THAT ACCENTS AND FRAMES THE ARCHITECTURE AND ENHANCES THE PEDESTRIAN SCALE OF THE PROJECT. STREET TREES ARE CONSISTENT WITH SURROUNDING AREAS AND WILL BE USED TO PROVIDE CONTINUITY THROUGHOUT THE ADJACENT COMMUNITY. THE PLANT MATERIALS THAT HAVE BEEN SELECTED WERE DONE SO FOR THEIR LOW WATER USE QUALITIES. ADDITIONALLY, THE IRRIGATION SYSTEM WILL BE DESIGNED IN COMPLIANCE WITH THE CITY OF SAN MARCOS WATER EFFICIENT LANDSCAPE ORDINANCE. IT WILL USE A RAIN SENSING CONTROLLER AND BE ADJUSTABLE SO AS NOT TO WASTE WATER THROUGH RUNOFF OR OVERSPRAY.

PLANTING NOTES

- NO STRUCTURES OR LANDSCAPING THAT WOULD INHIBIT VEHICULAR ACCESS SHALL BE INSTALLED IN OR OVER ANY SEWER ACCESS EASEMENT.

MULCH
 ALL REQUIRED PLANTING AREAS SHALL BE COVERED WITH MULCH TO A DEPTH OF 4 INCHES, EXCLUDING SLOPES REQUIRING REVEGETATION AND AREAS PLANTED WITH GROUND COVER. ALL EXPOSED SOIL AREAS WITHOUT VEGETATION SHALL ALSO BE MULCHED TO THIS MINIMUM DEPTH.

NOTE:
 TREE ROOT BARRIERS SHALL BE INSTALLED WHERE TREES ARE PLACED WITHIN 10 FEET OF PUBLIC IMPROVEMENTS INCLUDING WALKS, CURBS, OR STREET PAVEMENTS OR WHERE NEW PUBLIC IMPROVEMENTS ARE PLACED ADJACENT TO EXISTING TREES. THE ROOT BARRIER WILL NOT WRAP AROUND THE ROOT BALL.

IRRIGATION - AN AUTOMATIC, ELECTRICALLY CONTROLLED IRRIGATION SYSTEM SHALL BE PROVIDED AS REQUIRED FOR PROPER IRRIGATION, DEVELOPMENT, AND MAINTENANCE OF THE VEGETATION IN A HEALTHY, DISEASE-RESISTANT CONDITION. THE DESIGN OF THE SYSTEM SHALL PROVIDE ADEQUATE SUPPORT FOR THE VEGETATION SELECTED. ALL PROPOSED IRRIGATION SYSTEMS WILL USE AN APPROVED RAIN SENSOR SHUTOFF DEVICE. THE INTENDED IRRIGATION SYSTEM WILL BE A DRIP SYSTEM.

THE EXISTING LANDSCAPING ALONG COX RD. & PROPOSED LANDSCAPING ON MULBERRY DR. SHALL BE MAINTAINED BY THE CITY CFD. ON SITE LANDSCAPING SHALL BE MAINTAINED BY EITHER THE HOMEOWNER OR PROJECT HOA.

ALL LANDSCAPE AND IRRIGATION SHALL CONFORM TO THE CITY OF SAN MARCOS LANDSCAPE REGULATIONS, LANDSCAPE STANDARDS AND WATER EFFICIENT LANDSCAPE ORDINANCE. THE CORE SUB-AREA DESIGN MANUAL, AND ALL OTHER STATE STANDARDS.

MINIMUM TREE SEPARATION DISTANCE

- TRAFFIC SIGNALS (STOP SIGN) - 20 FEET
- UNDERGROUND UTILITY LINES - 5 FEET (10' FOR SEWER) ABOVE GROUND UTILITY STRUCTURES - 10 FEET
- DRIVEWAY (ENTRIES) - 10 FEET
- INTERSECTIONS (INTERSECTING CURB LINES OF TWO STREETS) - 25 FEET

ADDITIONAL NOTES

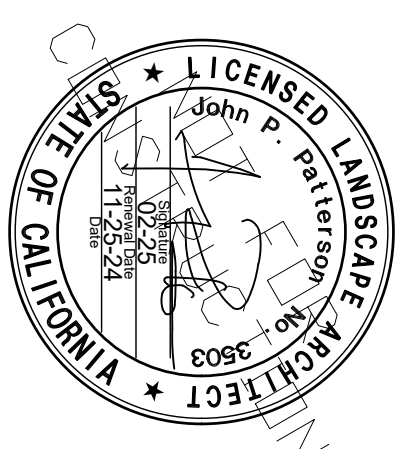
- LANDSCAPE PLANS SHALL BE DESIGNED TO COMPLY WITH THE CITY OF SAN MARCOS WATER EFFICIENCY LANDSCAPE ORDINANCE (WELDO) CHAPTER 20.330
- TOTAL S.F. OF PROPOSED HOA LANDSCAPE AREA: 21,612 S.F.

gmp
 LANDSCAPE ARCHITECTURE & PLANNING
 3176 Linderoad Ave
 Suite 102
 Carlsbad, CA 92010
 gmpdesign.com
 T 858 558 8977

CONCEPT PLAN

DATE	REMARKS
07/20/20	PLANNING SUBMITTAL

EXCEL ENGINEERING
 LAND PLANNING, ARCHITECTURE, CONSTRUCTION
 9670/10/16/2017/10/16/2017



MANNING HOMES
 APN 182-131-14-00
 COX ROAD / MULBERRY DR, SAN MARCOS CA

SHEET 01 OF 5 SHEETS
 TITLE SHEET

REVISIONS	DATE
1ST SUB.	12-01-21
2ND SUB.	03-07-22
3RD SUB.	08-19-24

GMP JOB NO. 21-066
 SCALE SEE SHEET

L-1

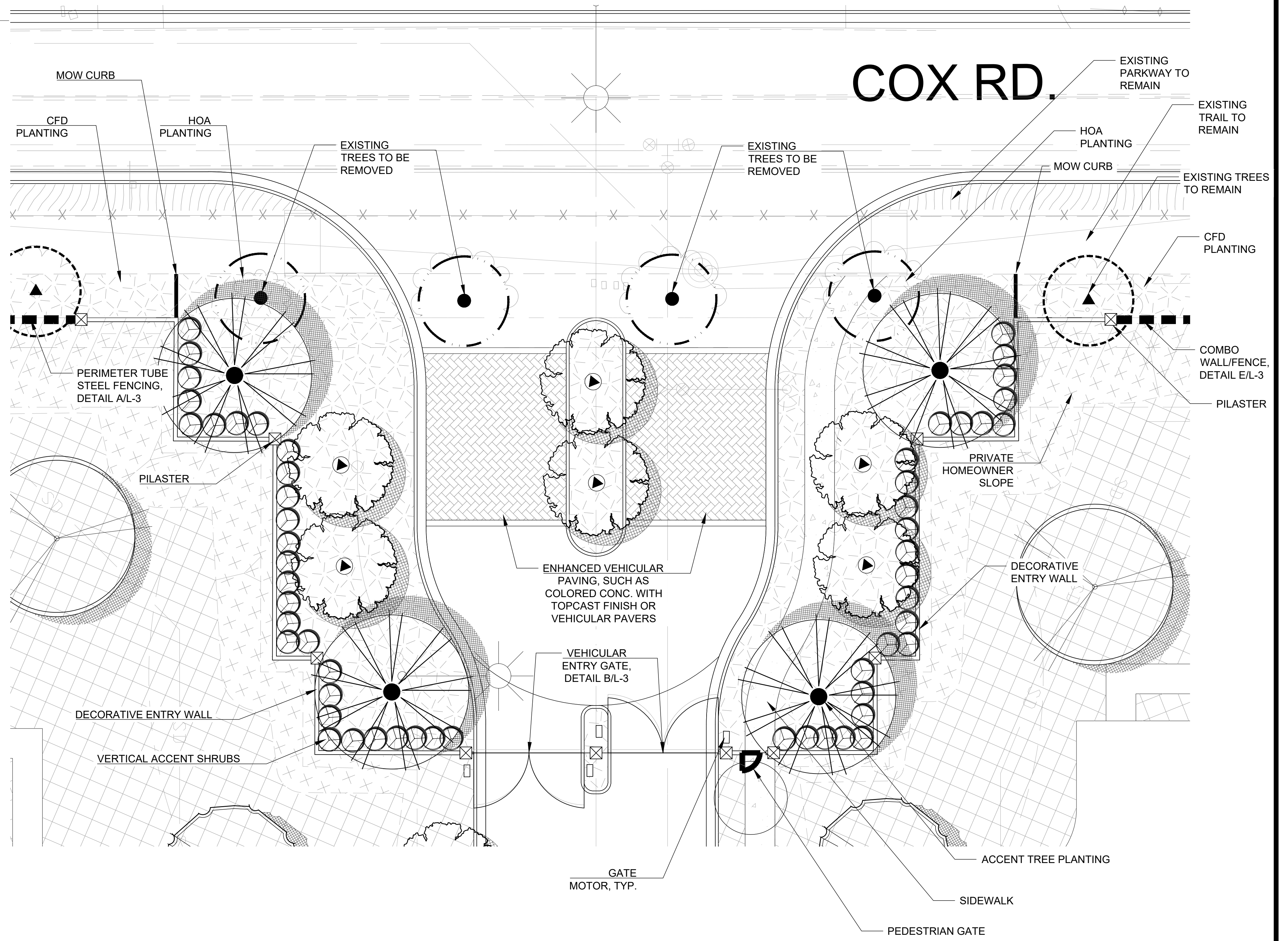
PLANTING LEGEND

CFD TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS
	EXISTING TREE TO REMAIN	-	-	-
	EXISTING TREE TO BE REMOVED	-	-	-
	LAGERSTROEMIA INDICA	CRAPE MYRTLE	24" BOX	M
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	24" BOX	M

HOA TREES	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS
	LAGERSTROEMIA INDICA	CRAPE MYRTLE	24" BOX	M
	LAURUS NOBILIS	BAY LAUREL	24" BOX	M
	OLEA EUROPEA WILSONII	FRUITLESS OLIVE	24" BOX	L
	PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	24" BOX	M
	PISTACIA CHINENSIS	CHINESE PISTACHE	24" BOX	M
	PITOSPORUM TENUIFOLIUM SILVER SHEEN	SILVER SHEEN KOHUHU	15 GAL	M
	QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX	L
	TRISTANIA CONFERTA	BRISBANE BOX	24" BOX	M

GROUND COVER SUCH AS:	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING
	CAREX TUMULICOLA (BASIN PLANTING)	BERKELEY SEDGE	1 GAL	L	24" O.C.
	BACCHARIS PILULARIS	DWARF COYOTE BRUSH	FLAT	L	12" o.c.
	TRACHELOSPERMUM JASMINOIDES	CHINESE STAR JASMINE	1 GAL	M	18" O.C.

SHRUBS SUCH AS:	BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS
	BUXUS MICROPHYLLA	BOXWOOD	5 GAL	M
	CISTUS X PURPUREUS	ORCHID ROCK ROSE	5 GAL	L
	CALLISTEMON LITTLE JOHN	LITTLE JOHN BOTTLE BRUSH	5 GAL	L
	DIANELLA LITTLE REV	LITTLE REV FLAX LILY	5 GAL	L
	ENCELIA CALIFORNICA	CALIFORNIA SUNFLOWER	5 GAL	L
	FESTUCA SISKIYOU BLUE	SISKIYOU BLUE FESCUE	1 GAL	L
	HETEROMELES ARBUTIFOLIA	TOYON	5 GAL	L
	JUNCUS PATENS	CALIFORNIA GREY RUSH	1 GAL	L
	LANTANA X NEW GOLD	LANTANA	5 GAL	L
	LIGUSTRUM JAPONICUM	PRIVET	5 GAL	M
	MUHLENBERGIA RIGENS	DEER GRASS	5 GAL	L
	MUHLENBERGIA CAPILLARIS	PINK MUHLY	5 GAL	L
	NERIUM OLEANDER	OLEANDER	5 GAL	L
	PENNISSETUM SETACEUM PURPUREA	PURPLE FOUNTAIN GRASS	1 GAL	L
	PIITOSPORUM TOBIRA	MOCK ORANGE	5 GAL	M
	RHAPHIOLEPSIS INDICA DEEP PINK	PINK INDIAN HAWTHORNE	5 GAL	M
	ROSA X ICEBERG	ICEBERG ROSE	5 GAL	M
	ROSMARIUNUS OFFICINALIS	ROSEMARY	5 GAL	L
	SALVIA LEUCANTHA	MEXICAN SAGE	5 GAL	L
	WESTRINGIA FRUTICOSA	COAST ROSEMARY	5 GAL	L
	XYLOSMA CONGESTA	SHINY XYLOSMA	5 GAL	M

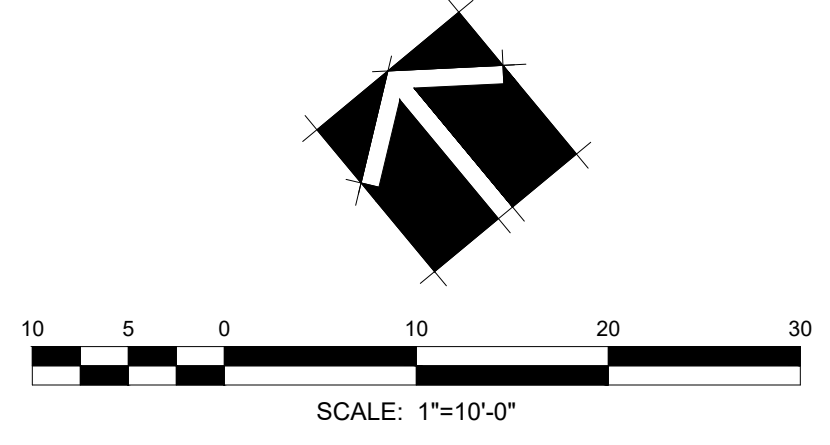


FOR HOMEOWNER PLANTING LEGEND, PLEASE SEE SHEET L-4

L-2

REVISIONS	DATE
1ST SUB.	12-01-21
2ND SUB.	03-07-22
3RD SUB.	08-19-24
GMP JOB NO.	21-066
SCALE	SEE SHEET

SHEET 02 OF 5 SHEETS
TITLE SHEET

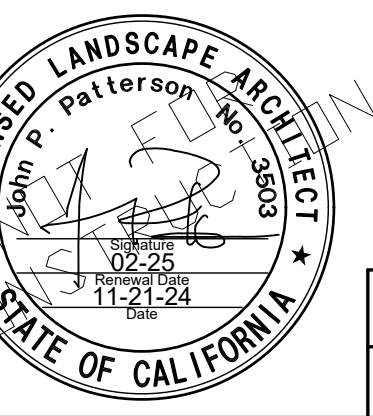


gmp
3176 Lionshead Ave
Suite 102
Carlsbad, CA 92010
gmplandarch.com
T 858 558 8977

CONCEPT PLAN

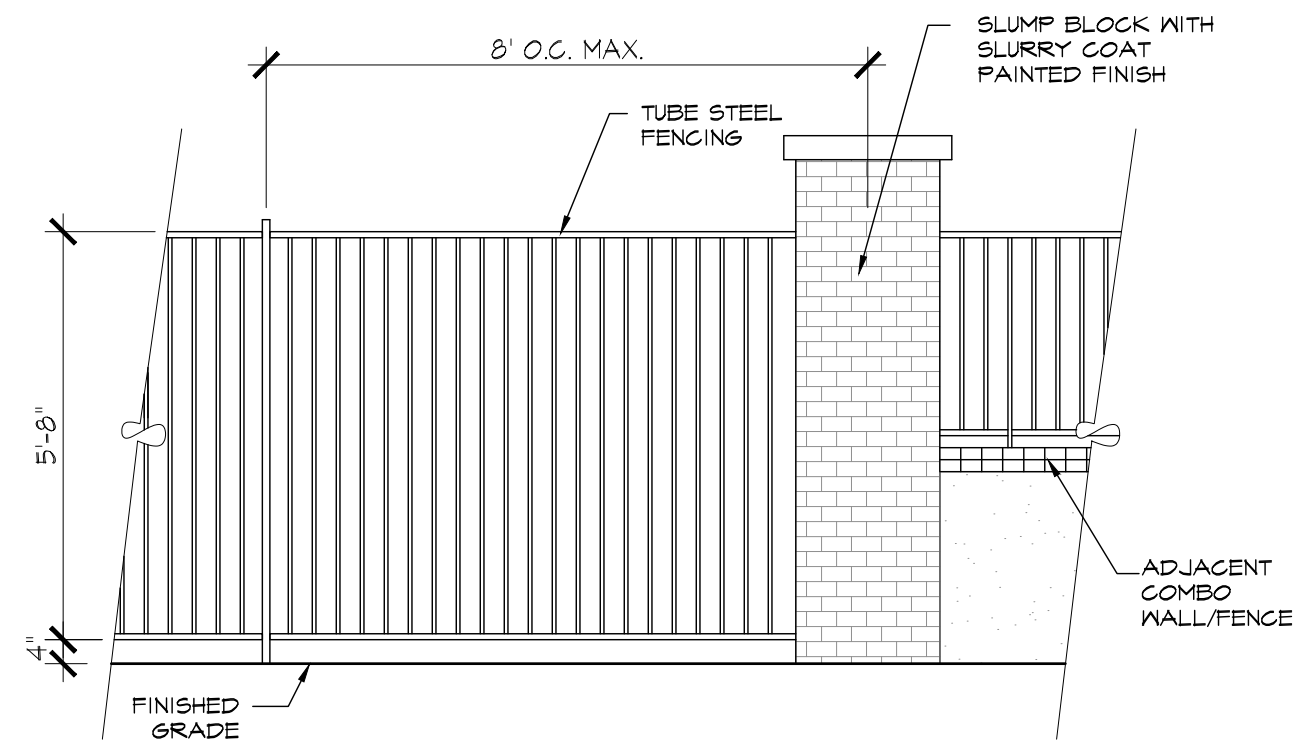
DATE	REMARKS
01/01/01	PLANNING SUBMITTAL

EXCEL ENGINEERING
LAND PLANNING • ENGINEERING • SURVEYING
440 STATE PLACE, COVINGTON, CA 95923
PH (925) 455-8118 FX (925) 455-8154

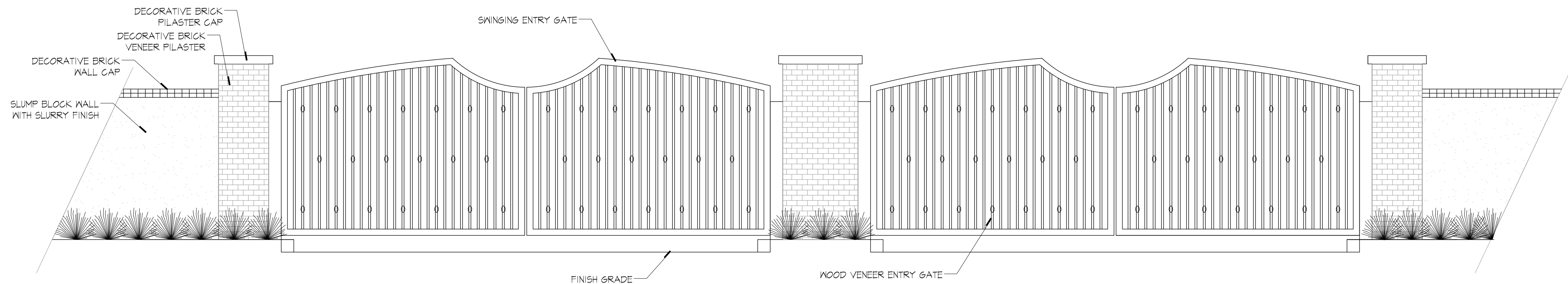


MANNING HOMES
APN 182-131-14-00
COX ROAD / MULBERRY DR, SAN MARCOS CA

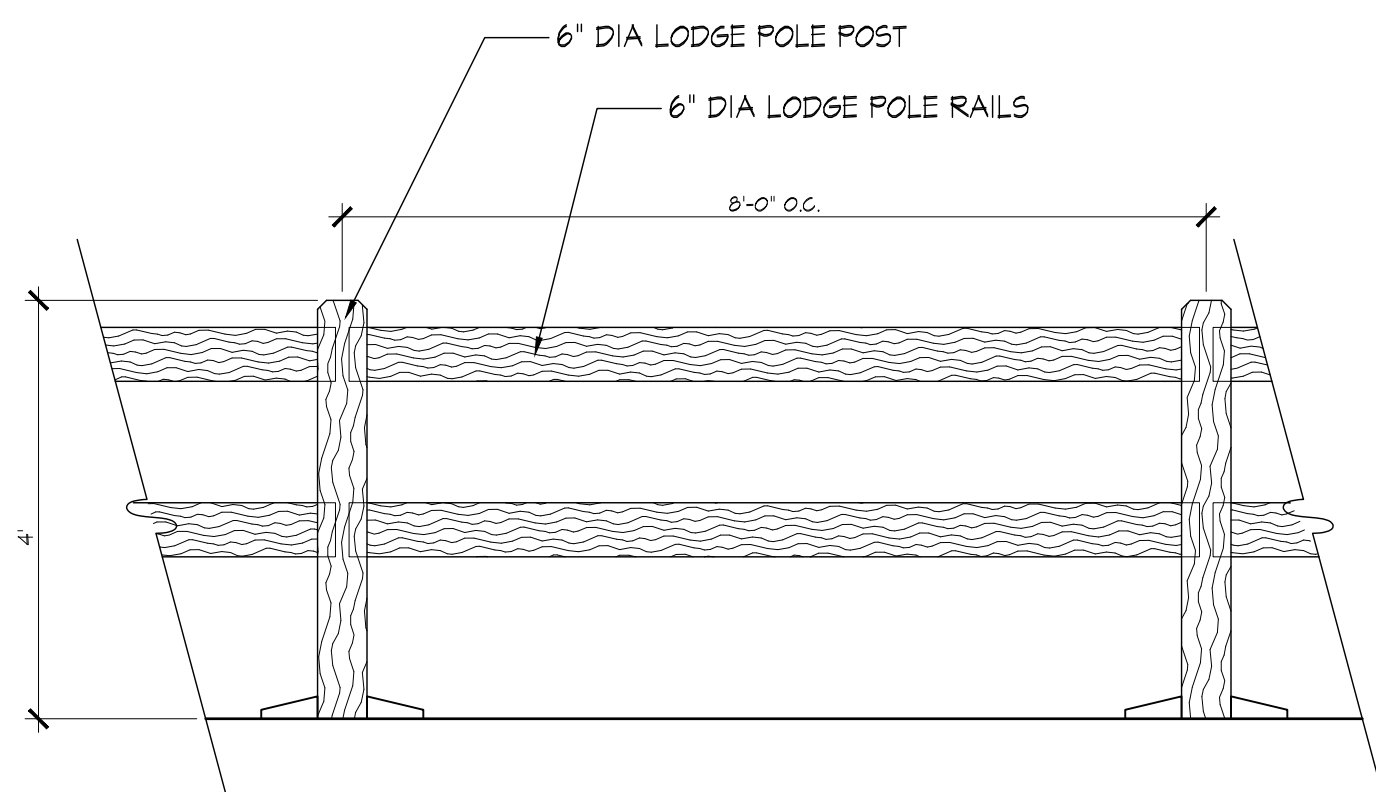
G:\21-PROJECTS\21-066-00\LandArch\Concept\21-066 Cox & Mulberry Concept.dwg 11/21/2024 5:36 PM ORIGINAL PLOT SIZE: -----



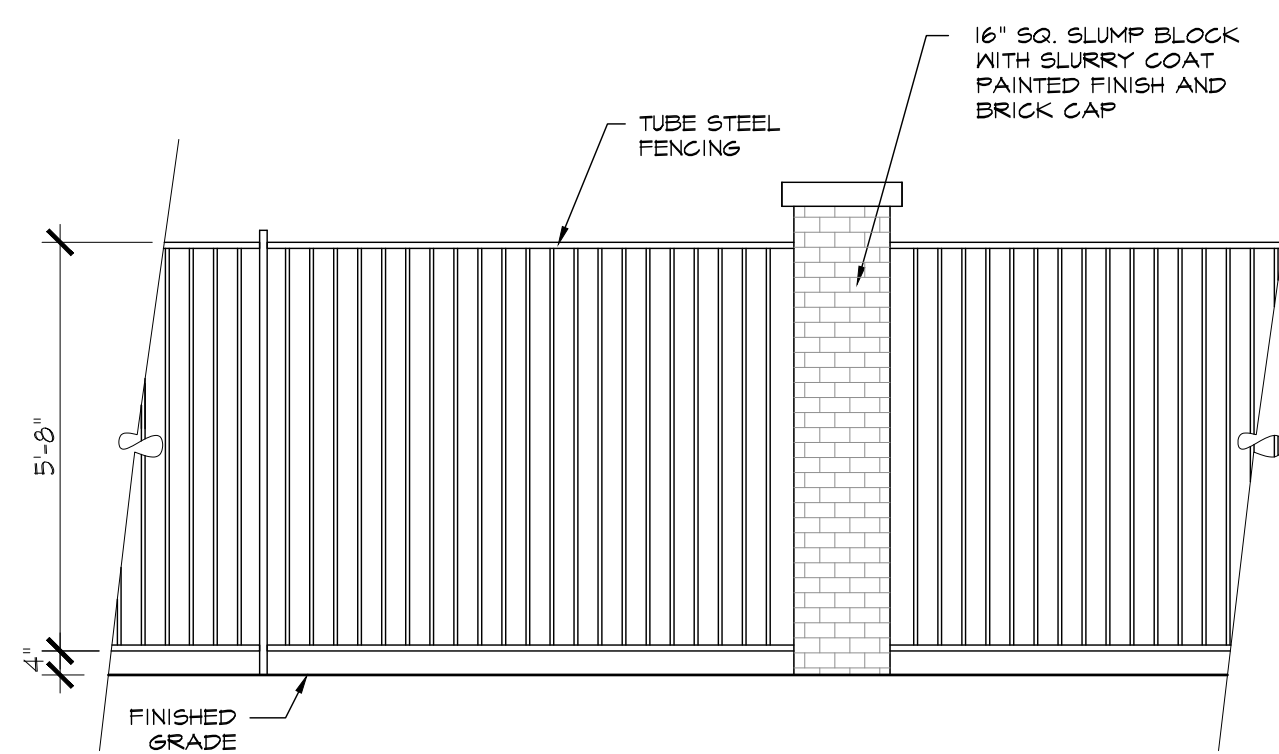
A TUBE STEEL FENCING



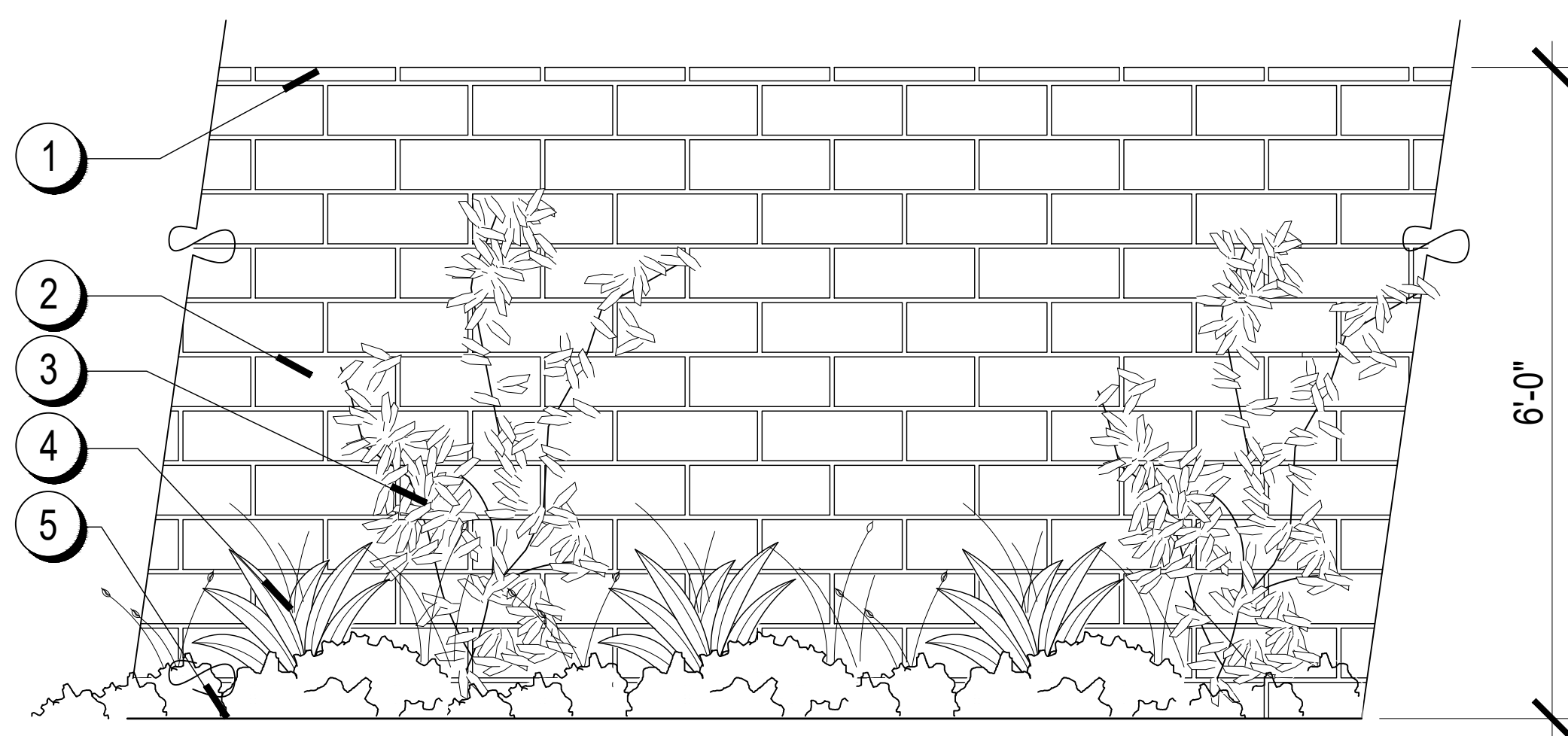
B PROJECT ENTRY GATE ELEVATION ^{N.T.S.}



C 48" 2-RAIL FENCE CFD PARKWAY



D SIDERYARD FENCING AND PILASTER



- DETAIL LEGEND**
- 1 CHAMFER RECISSION BLOCK CAP
 - 2 SLUMP BLOCK WALL
 - 3 SCREENING VINE
 - 4 SCREENING SHRUBS
 - 5 FINISH GRADE

E MASONRY WALL

HOA

WATER EFFICIENT LANDSCAPE WORKSHEET

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.

Reference Evapotranspiration (Eto) **49.7**

Hydrozone # / Planting Description ^a	Plant Factor (PF)	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU) ^d
Regular Landscape Areas							
MODERATE/DRIP	.5	DRIP	.81	.61	12,911	7,875	242,682
LOW/DRIP	.3	DRIP	.81	.37	11,286	4,175	47,600
MODERATE/SPRAY	.5	SPRAY	.75	.66	4,243	2,800	56,944
					Totals	28,440	14,850
Special Landscape Areas							
					1		
					1		
					1		
					Totals	(C)	(D)
						ETWU Total	347,226
						Maximum Allowed Water Allowance (MAWA)^e	367,242

^aHydrozone #/Planting Description
E.g. 1.) front lawn
2.) low water use plantings
3.) medium water use planting

^bIrrigation Method
overhead spray
or drip

^cIrrigation Efficiency
0.75 for spray head
0.81 for drip

^dETWU (Annual Gallons Required) = Eto x 0.62 x ETAF x Area
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.

^eMAWA (Annual Gallons Allowed) = (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)]
where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet, SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Area	11,005
Total Area	21,672
Average ETAF	.51

Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.

YEARLY Eto = 49.7
ETAF = .41
(.5 PF and .81 IE)

LOT #	LOT (SF)	LANDSCAPE (SF)	BLDG/ HARDSCAPE (SF)	FRONT YARD (SF)	TOTAL MAWA FOR LOT (GAL/YEAR)	FRONT YARD MAWA FOR LOT (GAL/YEAR)	REMAINING MAWA (GAL/YEAR)
1	43,562.25	35,537	8,025	9,828	448,965	124,164	324,801
2	43,569.48	33,034	10,535	9,656	417,343	121,991	295,352
3	43,580.61	33,498	10,083	6,364	423,205	80,401	342,804
4	43,581.72	34,860	8,722	5,387	440,412	68,058	372,354
5	43,673.94	34,700	8,974	7,238	438,391	91,443	346,948
6	46,099.03	36,775	9,324	7,808	464,606	98,644	365,962
7	44,395.74	34,029	10,367	8,053	429,914	101,740	328,174
8	43,586.42	33,698	9,888	7,466	425,732	94,324	331,408
9	43,699.03	34,275	9,424	8,022	433,021	101,348	331,674

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L-3

REVISIONS

1ST SUB.	12-01-21
2ND SUB.	03-07-22
3RD SUB.	08-19-24

GMP JOB NO. 21-066
SCALE SEE SHEET



SHEET 03 OF 5 SHEETS
TITLE SHEET

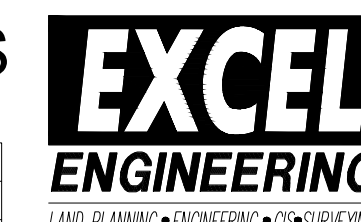


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LANDSCAPE
ARCHITECTURE
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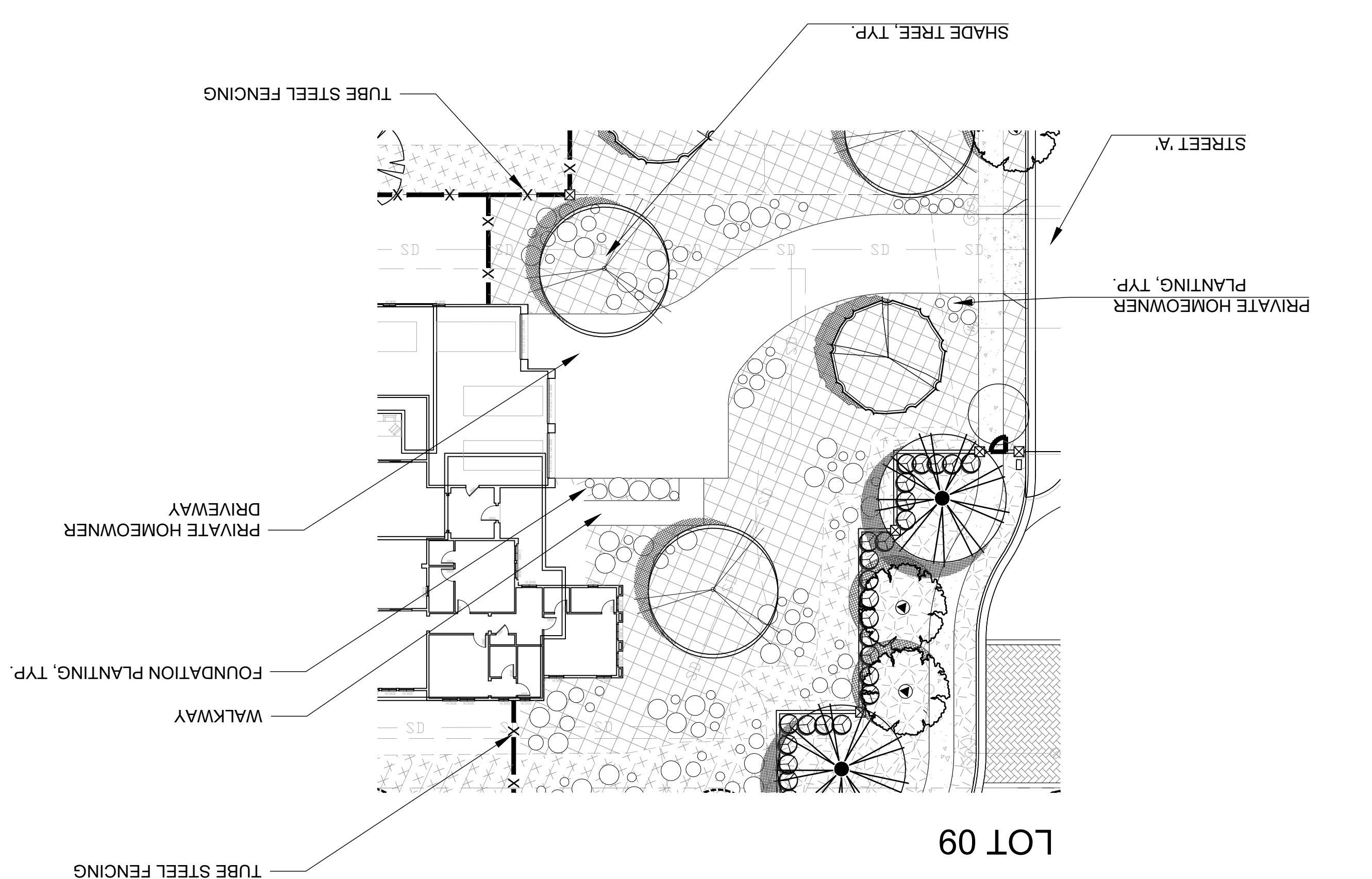
CONCEPT DETAILS

DATE	REMARKS
01/01/01	PLANNING SUBMITTAL

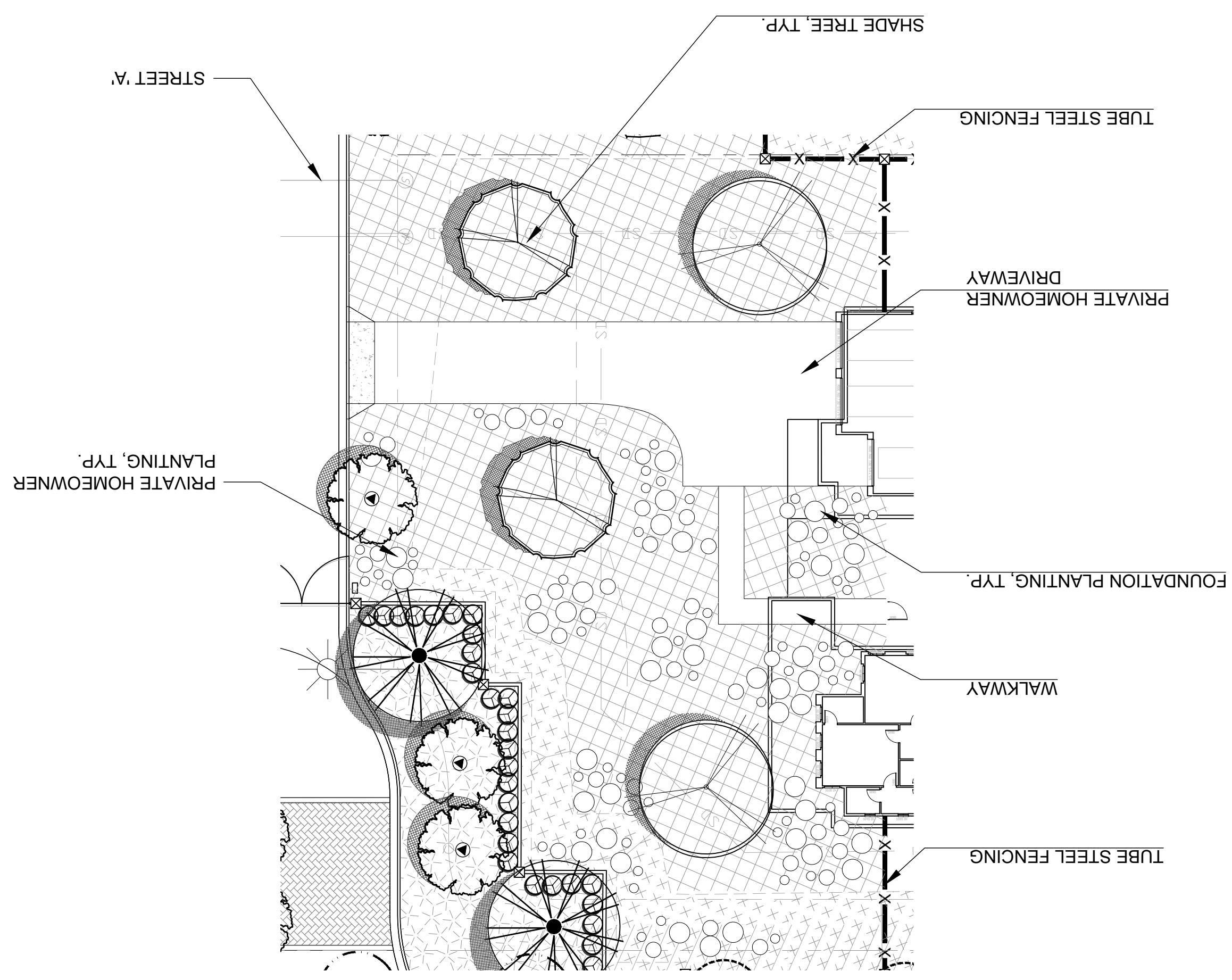


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LOT 09



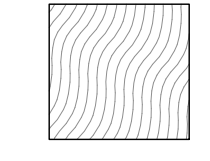
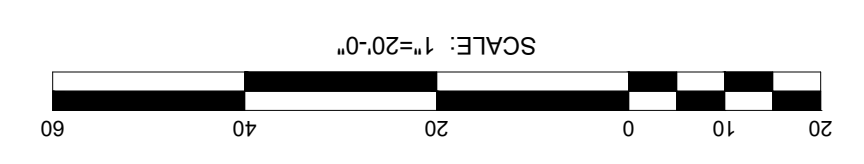
LOT 01

EXAMPLE
TYPICAL
FRONT YARD
LAYOUT

gmp
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3176 Lighthouse Ave

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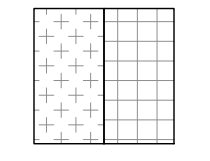
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SAN MARCOS, CA 92069
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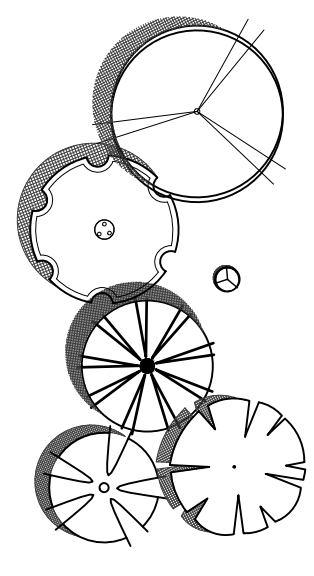
CFD



SHRUBS
SUCH AS:



GROUND COVER
SUCH AS:



TREES

HOMEOWNER

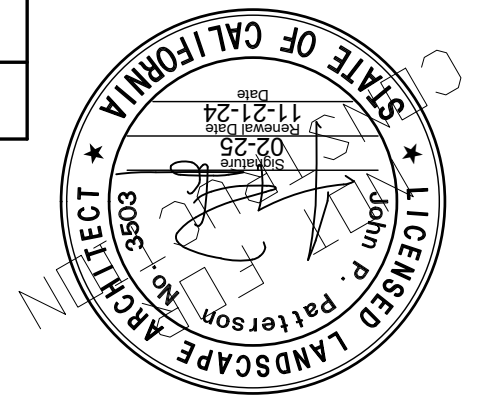
BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS	SPACING	EXISTING TO REMAIN
LAGERSTROEMIA INDICA	CRAPE MYRTLE	24" BOX	M		
LAURUS NOBILIS	BAY LAUREL	24" BOX	M		
OLEA EUROPEA WILSONII	FRUITLESS OLIVE	24" BOX	L		
PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	24" BOX	M		
PISTACIA CHINENSIS	CHINESE PISTACHE	24" BOX	M		
PITTIOSPORUM TENUIFOLIUM SILVER SHEEN	SILVER SHEEN KOHUU	15 GAL	M		
QUERCUS AGRIFOLIA	COAST LIVE OAK	24" BOX	L		
TRISTANIA CONFERTA	BRISBANE BOX	24" BOX	M		
MYOPORUM PARVIFOLIUM	MYOPORUM	1 GAL	L	18" O.C.	
ROSMARINUS OFFICINALIS PROSTRATUS	DWARF ROSEMARY	FLAT	L	18" O.C.	
CISTUS X PURPUREUS	ORCHID ROCK ROSE	5 GAL	L		
CALLISTEMON LITTLE JOHN	LITTLE JOHN BOTTLE BRUSH	5 GAL	L		
DIANELLA LITTLE REV	LITTLE REV FLAX LILY	5 GAL	L		
ENCELIA CALIFORNICA	CALIFORNIA SUNFLOWER	5 GAL	L		
FESTUCA SISKIYOU BLUE	SISKIYOU BLUE FESCUE	1 GAL	L		
HETEROMELES ARBUTIFOLIA	TOYON	5 GAL	L		
JUNCUS PATENS	CALIFORNIA GREY RUSH	1 GAL	L		
LANTANA X NEW GOLD	LANTANA	5 GAL	L		
MUHLENBERGIA RIGENS	DEER GRASS	5 GAL	L		
MUHLENBERGIA CAPILLARIS	PINK MUHLY	5 GAL	L		
NERIUM OLEANDER	OLEANDER	5 GAL	L		
ROSMARINUS OFFICINALIS	ROSEMARY	5 GAL	L		
SALVIA LEUCANTHA	MEXICAN SAGE	5 GAL	L		
WESTRINGIA FRUTICOSA	COAST ROSEMARY	5 GAL	L		

TITLE SHEET
SHEET 04 OF 5 SHEETS

REVISIONS

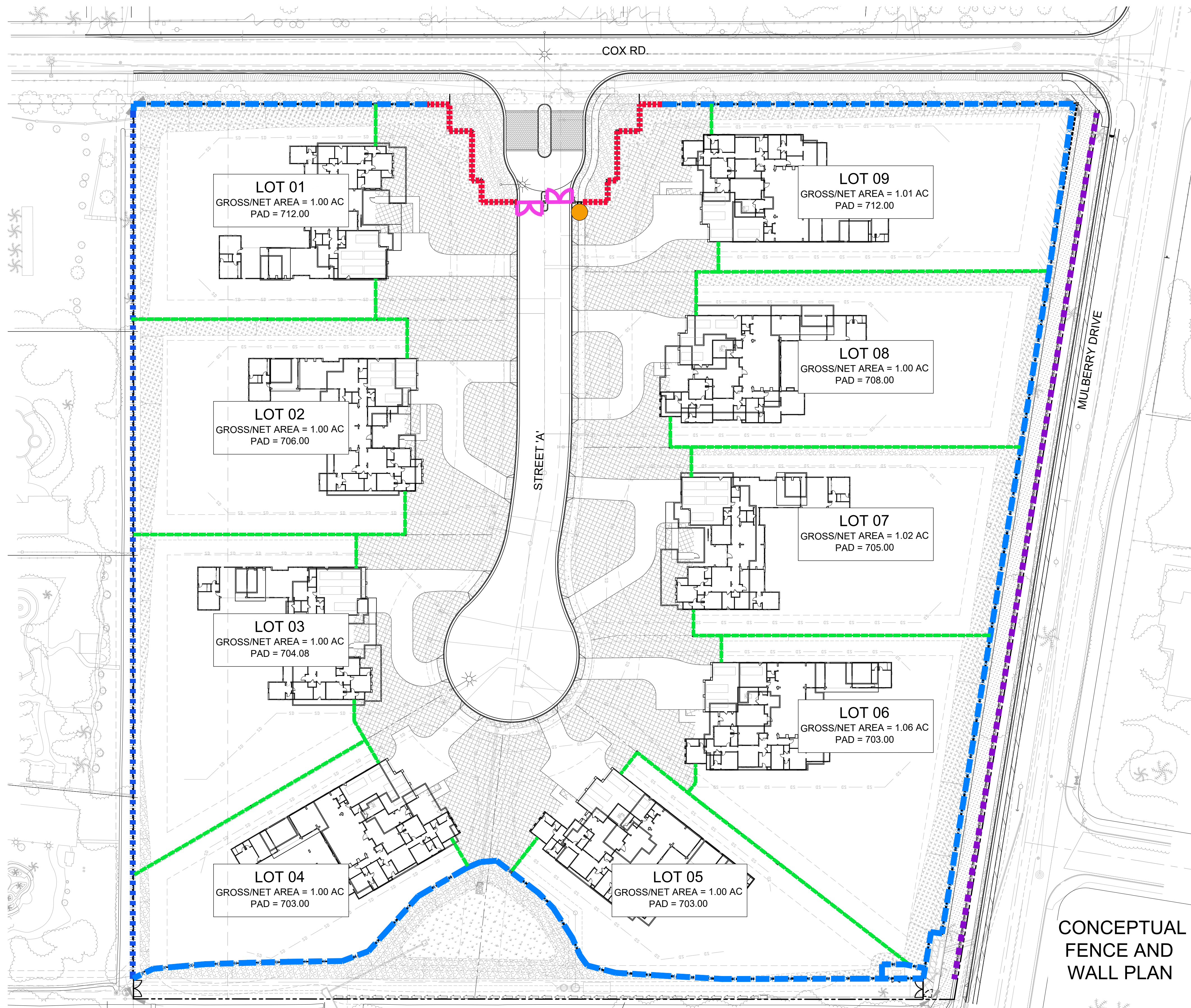
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2ND SUB.	03-07-22	
3RD SUB.	08-19-24	

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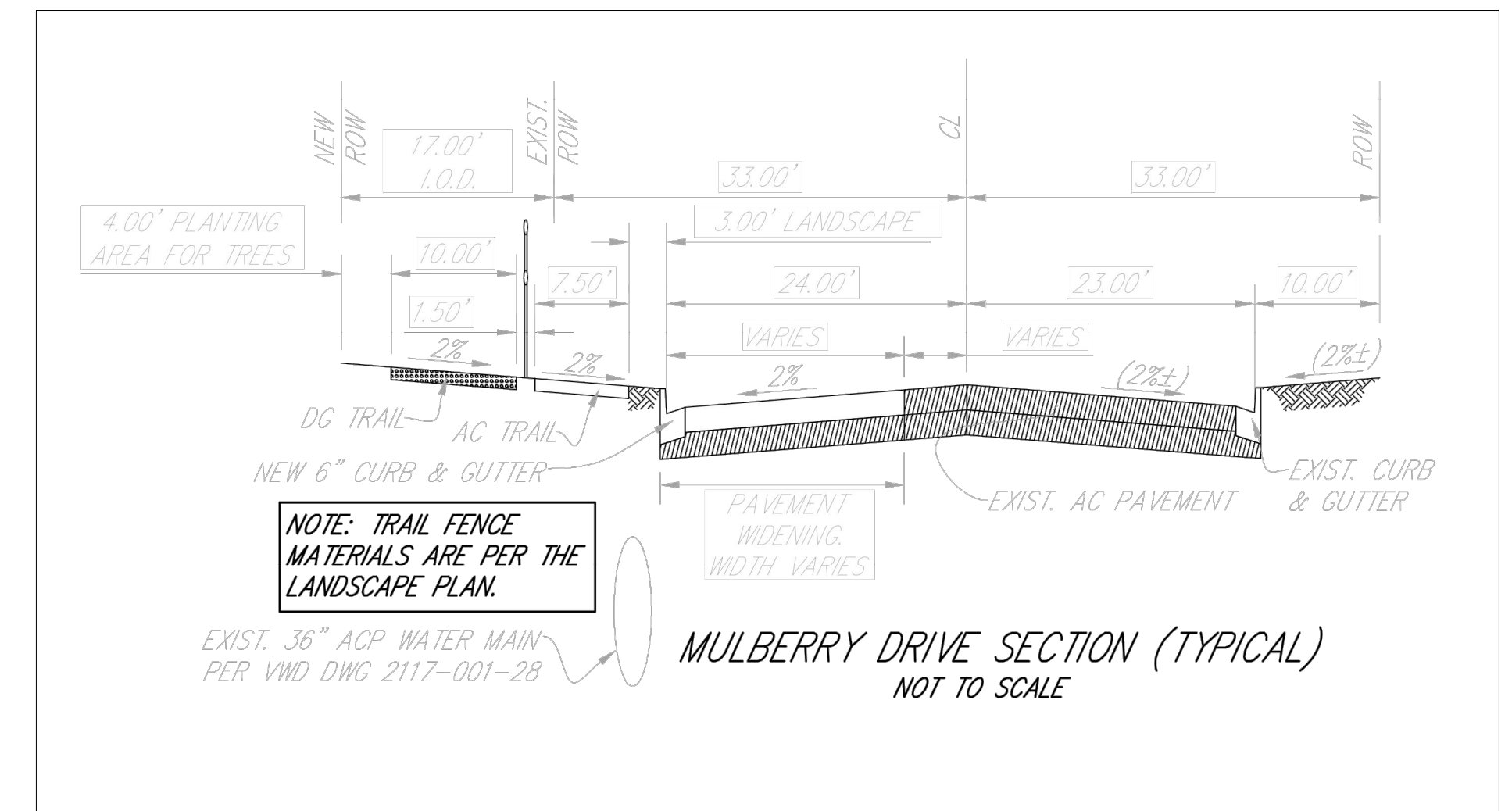
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L-4



CONCEPTUAL FENCE AND WALL LEGEND

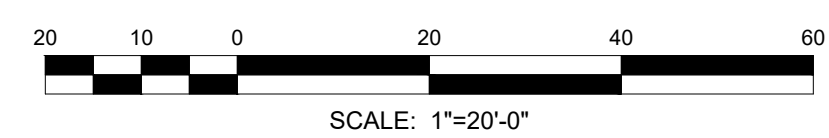
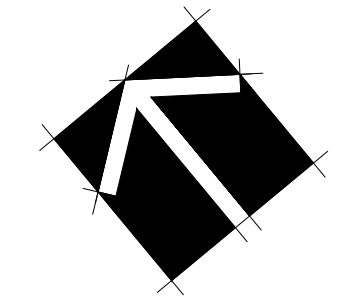
- ENTRY WALL
- ■ ■ ■ ■ 6" MASONRY WALL WITH CAP
- 5'-8" TUBE STEEL RESIDENTIAL FENCE
- 48" 2-RAIL CFD PARKWAY FENCING
- EXISTING FENCING TO REMAIN
- VEHICULAR ENTRY GATE
- PEDESTRIAN GATE



CROSS SECTION SHOWN FOR REFERENCE: FOR ADDITIONAL INFORMATION PLEASE REFER TO CIVIL ENGINEERS PLANS

L-5

CONCEPTUAL FENCE AND WALL PLAN



REVISIONS

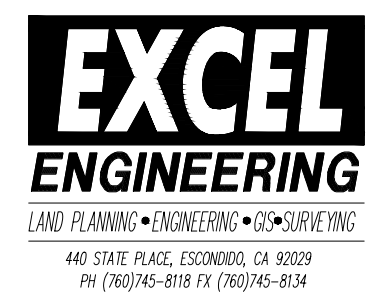
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SHEET 05 OF 5 SHEETS
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