

HIGHLAND FARMS, LP - PHASE 1B

FOR

LAKE COUNTY DEVELOPEMENT CO.

HIGHLAND SPRINGS ROAD

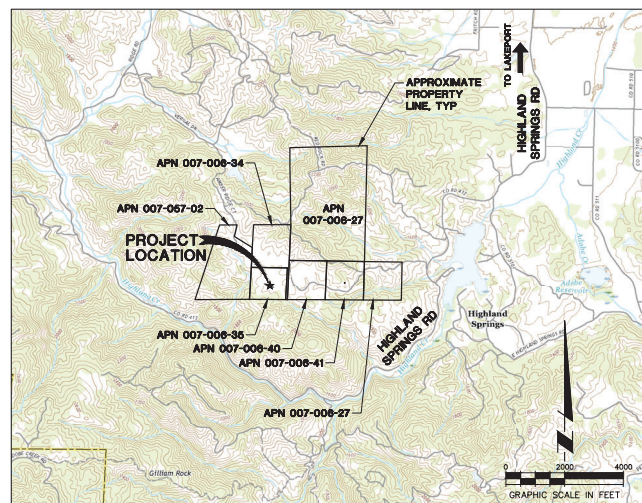
LAKEPORT, CA 95453

APNS: 007-006-40, 35, 34, 27, 41 & 007-057-01 & 02

PROJECT TEAM

SUMMIT ENGINEERING, INC.
CIVIL & WASTEWATER ENGINEERING
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CONSER LAND SURVEYING
SURVEYOR
LAKEPORT, CALIFORNIA
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LOCATION MAP

CONTROL

1. VERTICAL DATUM OF THIS MAP IS BASED ON THE MAP OF TOPOGRAPHY OF HIGHLAND FARMS DRAWN BY CONSER LAND SURVEYING, DATED FEBRUARY 2021 AND IS STATED AS ASSUMED.
2. HORIZONTAL DATUM OF THIS MAP IS BASED ON THE CONTROL POINTS ESTABLISHED BY CONSER LAND SURVEYING ON THE ORIGINAL MAP OF TOPOGRAPHY OF HIGHLAND FARMS, DATED FEBRUARY 2021. THE BASIS OF BEARINGS IS STATED AS:
NORTH 00°41'36" WEST BETWEEN TWO BRASS CAP MONUMENTS ON THE WEST LINE OF SEC. 26, T. 13 N., R. 10 W., M.D.B.M. AS SHOWN ON BOOK 21, OF PARCEL MAPS AT PAGES 9-41, INCLUSIVE.

EARTHWORK

VALUES ARE FOR PERMITTING ONLY AND ARE NOT TO BE USED FOR BIDDING. CONTRACTOR SHALL PERFORM THEIR OWN EARTHWORK CALCULATIONS.

DISTURBED AREA: 24.0 ACRES
CUT VOLUME: 99,600 CU. YDS.
FILL VOLUME: 39,350 CU. YDS.
NET VOLUME: 60,250 CU. YDS. (CUT)

PURPOSE OF PROJECT

THIS PROJECT WILL MAKE THE FOLLOWING IMPROVEMENTS, GRADING, DRAINAGE AND ACCESS FOR CANNABIS CULTIVATION.

OWNER/PERMITEE

AUTUMN KARCEY
371 LAKEPORT BLVD. #174
LAKEPORT, CA 95453
530 379-8588

LIST OF DRAWINGS

- C1.0 TITLE SHEET
- C1.1 GENERAL INFORMATION
- C1.2 GENERAL INFORMATION
- C2.0 OVERALL SITE PLAN
- C3.0 LAYOUT & HORIZONTAL CONTROL PLAN
- C4.0 GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN
- C4.1 GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN
- C4.2 GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN
- C4.3 GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN
- C4.4 GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN
- C4.5 GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN
- C7.0 PROFILES - ALIGNMENT A
- C7.1 PROFILES - ALIGNMENT B
- C8.0 SECTIONS - ALIGNMENT A
- C8.1 SECTIONS - ALIGNMENT A
- C8.2 SECTIONS - ALIGNMENT B
- C8.3 SECTIONS - ALIGNMENT B
- C9.0 DETAILS
- C9.1 DETAILS



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TITLE SHEET

2022-01-11	PERMIT SUBMITTAL
2024-10-11	REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2021-07-23
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET

C1.0
1 OF 19

MAX MAXIMUM
 MEG MATCH EXISTING GRADE
 MF MANUFACTURER
 MG MILLION GALLON
 MH MANHOLE
 MHW MAXIMUM HIGH WATER LINE
 MN MINIMUM
 MISC MISCELLANEOUS
 MJ MECHANICAL JOINT
 N NEW
 N NORTH
 NFPA NATIONAL FIRE PROTECTION ASSOCIATION
 NIC NOT IN CONTRACT
 NIS NOMINAL
 NTS NOT TO SCALE
 OC ON CENTER
 OFS OUTSIDE DIAMETER
 OFS OUTSIDE OF
 OG ORIGINAL GROUND
 OH OVERHEAD
 OR OVERFLOW RISER
 ORG ORIGINAL
 OSD OVERSIDE DRAIN
 OS BEGINNING POINT OF CURVATURE
 PCC PORTLAND CEMENT CONCRETE / POINT OF CURVATURE
 PDC PLASTER DRAIN
 PI POINT OF INTERSECTION / POINT OF INTERSECTION
 PIP PROTECT IN PLACE
 PIV PIVOT TANGENT VALVE
 PW POWER POLE
 PRC POINT OF REVERSE CURVATURE
 PS REINFORCED SUBDRAIN
 PTE POINT OF TANGENT / PRESSURE TREATED
 PUE PUBLIC UTILITIES EASEMENT
 PVC POLYVINYL CHLORIDE / POINT OF VERTICAL INTERSECTION
 PVI POINT OF VERTICAL INTERSECTION
 PW PROCESS WASTEWATER
 R RADIUS
 RC RELATIVE COMPACTION
 RCW REINFORCED CONCRETE PIPE
 RCW RECYCLED WATER
 RED REDUCERY / REDUCING
 REF REFERENCE
 REINF REINFORCING
 REQ REQUIRED
 RT RIGHT
 R/W RIGHT OF WAY
 RW RAINWATER
 RWL RAINWATER LEADER
 RWD REDWOOD
 RQS QUALITY SWPPP PRACTITIONER SOUTH / SLOPE
 SAD SEE ARCHITECT'S DRAWINGS
 SB SCHEDULE
 SCD SEE CIVIL DRAWINGS
 SCH SCHEDULE
 SD STORM DRAIN
 SED SEE ELECTRICAL DRAWINGS
 SF SQUARE FEET
 SFPD SEE FIRE PROTECTION DRAWINGS
 SG SUBGRADE
 SHT SHEET
 SIM SIMILAR
 SLD SEE LANDSCAPE ARCHITECT'S DRAWINGS
 SMO SEE MECHANICAL DRAWINGS
 SPIC SPECIAL INQUIRY
 SPD SEE PLUMBING DRAWINGS
 SQ SQUARE
 SS STAINLESS STEEL / SANITARY SEWER
 SSD SEE STRUCTURAL DRAWINGS / SUBSURFACE DRAIN
 SSR SEE SOILS RETENTION
 STA STATION
 STD STANDARD
 STL STEEL
 SWPPP STORMWATER POLLUTION PREVENTION PLAN
 SWP STORMWATER MANAGEMENT
 SYM SYMBOL
 SYM SYMMETRICAL
 T TANGENT / TELEPHONE
 TAN TANGENT
 TEL TELEPHONE
 T&B TOP AND BOTTOM
 T&B TEMPORARY BENCH MARK
 TC TOP OF CONCRETE
 TCC TOP OF CONCRETE CURB
 TDB TOP OF DRAIN
 TGO TOP OF GRATE
 TH THICK
 TOB TOP OF BERM
 TOE TOP OF WALL
 TOF TOP OF FOOTING
 TOR TOP OF RISING
 TOW TOP OF WALL
 TP TOP OF PAVEMENT
 TRANS TRANSITION
 TYP TYPICAL
 U UTILITY CHASE
 UN UNDEGROUND
 UNO UNLESS NOTED OTHERWISE
 UG UNDER SEPARATE PERMIT
 VC VERTICAL CURVE
 VERT VERTICAL
 VF VERTICY IN FIELD
 VSD VINEYARD SUBDRAIN
 W WEST / WATER
 W/W WITH
 W/O WITHOUT
 WC() TREATED
 WEL WATER FROM WELL
 WBD WALL BACK DRAIN
 WW WASTEWATER
 WWF WELDED WIRE FABRIC
 XFMR TRANSFORMER
 YD YARD
 YDS YARDS
 Z DITCH SIDE SLOPE

EXISTING


	ELECTRICAL		CULVERT
	FIRE PROTECTION		FH, CV, FDC
	GAS		VALVE
	IRRIGATION		SPOT ELEVATION
	OVERHEAD POWERLINE		CONTOUR
	PROCESS WASTEWATER		E/SWALE/DITCH
	STORM DRAIN		VINEROW
	SANITARY SEWER		VINYARD LIMITS
	TELEPHONE LINE		FENCE
	WATER LINE		PROPERTY LINE
	LEACHLINE		EASEMENT
	LEACHLINE OUTLINE		
	UG TANK OR SUMP		CONTROL POINT
	MANHOLE OR SUMP		

NEW

	ELECTRICAL		CULVERT
	FIRE PROTECTION		SLOPE
	GAS		GRADE (2 TO 1 VERT)
	IRRIGATION		ELEVATION
	OVERHEAD POWERLINE		TOE OF CUT/BANK
	PROCESS WASTEWATER		EMBANKMENT
	STORM DRAIN		TOE OF FILL
	SANITARY SEWER		GRADE BREAK
	TELEPHONE LINE		CONTOUR
	WATER LINE		E/SWALE/DITCH
	LEACHLINE		FENCE
	LEACHLINE OUTLINE		REMOVE OR ABANDON
	UG TANK OR SUMP		
	MANHOLE OR SUMP		

	FH		CHECK VALVE		DRAINAGE STRUCTURE
	FH, CV, FDC		GATE VALVE		ACCESSIBLE PARKING
	SPRINKLER RISER		BALL VALVE		ACCESSIBLE PATH OF TRAVEL
	THRUSTBLOCK		BUTTERFLY VALVE		RIPPAP ENERGY DISSIPATOR
	HOSE BIBB		PLUG VALVE		OVERLAND RELEASE ROUTE
	CONNECTION POINT		REDUCER/ENLARGER		
	CAP OR PLUG		CLEANOUT		
	CLAY OR SLURRY CEMENT PLUG		DOWNSPOUT		

SHEET No.	TITLE CONTENT
C1.X	TYPICAL SHEET, NOTES & GENERAL INFORMATION SHEETS
C2.X	OVERALL, SITE PLANS, EXISTING CONDITIONS AND DEMOLITION PLANS
C3.X	LAYOUT AND HORIZONTAL CONTROL PLANS
C4.X	GRADING PLANS (OR COMBINED PLANS)
C5.X	UTILITY PLANS
C6.X	STORMWATER MANAGEMENT PLANS
C7.X	PROFILE DRAWINGS
C8.X	SECTIONS
C9.X	DETAILS

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DATE: 2021-07-23 JOB NO: 2021039 SCALE: AS SHOWN DRAWN: TAF CHECKED: JG		
SHEET <div style="font-size: 2em; font-weight: bold;">C1.1</div>		

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LAKE COUNTY EROSION AND SEDIMENT CONTROL NOTES

- EROSION & SEDIMENT CONTROL MEASURES AS INDICATED ON THE PLANS SHALL INCLUDE, BUT NOT BE LIMITED, TO THE FOLLOWING:
 - STABILIZED CONSTRUCTION ENTRANCE AND EXITS TO REDUCE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.
 - EARTH BERMS TO DIVERT RUN-OFF AWAY FROM THE WORK AREA OR TO CONTAIN RUN-OFF WITHIN A SPECIFIED AREA.
 - FIBER ROLLS OR SILT FENCES BELOW THE TOE OF EXPOSED AND ERODIBLE SLOPES, DOWNSLOPE OF EXPOSED SOIL AREAS, AND AS INDICATED ON THE PLANS.
 - COBBLE OR RIPRAP PROTECTION FOR STORM DRAIN PIPE OUTLETS AND DRAINAGE DITCHES.
 - ROCK OR FIBER ROLL CHECK DAMS TO REDUCE VELOCITY OF CONCENTRATED FLOW AND ENCOURAGE SEDIMENT SETTLING.
 - EARTH BERM SEDIMENT TRAPS WITH ROCK FILTER OUTLET, TO ALLOW SEDIMENT IN COLLECTED SW TO SETTLE OUT AND BE FILTERED.
 - DROP INLET GRAVEL FILTERS TO PROTECT STORM DRAIN INLETS THAT ARE SUBJECT TO RUN-OFF FROM CONSTRUCTION ACTIVITIES.
 - PROTECTION OF CUT OR FILL SLOPES, BORROW AREAS AND SOIL STOCKPILE AREAS WITH IMPERMEABLE COVER IF OTHER MEASURES ARE NOT IN PLACE.
 - MOISTURE CONDITIONING AND TRACKWALKING OF ALL FILL SLOPES AND HORIZONTAL SURFACES DISTURBED BY CONSTRUCTION OPERATIONS WITH A HEAVY BULLDOZER TO PROVIDE A FIRM AND UNIFORMLY ROUGHENED SURFACE, FREE OF LOOSE MATERIAL.
 - REVEGETATION
 - 1.1. MATERIALS: SEED MIX AS REQUIRED BY LAKE COUNTY:

a. SEED SPECIES	% OF MIX
BLANDO BROME	40
ZORRO ANNUAL FESCUE	8
LAMA VETCH	12
ROSE CLOVER	15
CRIMSON CLOVER	15
SUB CLOVER	10

APPLIED AT A RATE OF 37 LBS/ACRE
 - b. MULCH FIBER HYDROSEED 750 LBS/ACRE
 - c. FERTILIZER OPTIONS

12-12-12	400 LBS/ACRE
15-15-15	300 LBS/ACRE
16-20-20	300 LBS/ACRE
 - d. STRAW (80% COVERAGE) 4000 LBS/ACRE
 - 1.2. APPLICATIONS:
 - a. STRAW MULCH AND HYDROSEED
COMBINED APPLICATION OF SEED, FERTILIZER AND STRAW SHALL BE APPLIED TO ALL CUT AND FILL SLOPES AND DISTURBED AREAS WITH SLOPES GREATER THAN 15%.

EXCEPTIONS
-- INTERIOR SLOPES OF PONDS AND WETLAND CELLS
-- INTERIOR SLOPES OF "Y" DITCHES
-- LANDSCAPED AREA TO BE ESTABLISHED PRIOR TO OCTOBER 15TH
 - b. HYDROMULCH
COMBINED APPLICATION OF SEED, MULCH FIBER AND FERTILIZER ON ALL DISTURBED AREAS WITH SLOPES LESS THAN 15%.

EXCEPTIONS
-- BUILDING PAD
-- TOP OF DIKE
-- INTERIOR OF PONDS
-- ROADWAY SURFACES
 - OTHER STORMWATER MANAGEMENT MEASURES SHALL BE UTILIZED AS FIELD CONDITIONS REQUIRE.
- REQUIREMENTS:
 - CONTRACTOR SHALL INSTALL BEST MANAGEMENT PRACTICES (BMP'S) WITH THE INTENT OF PREVENTING SEDIMENT OR OTHER CONTAMINANTS FROM LEAVING THE SITE AND ENTERING DRAINAGE WAYS.
 - CONTRACTOR SHALL MINIMIZE DISTURBANCES OF EXISTING SOILS OUTSIDE OF THE LIMITS OF THE WORK AREA AND AS INDICATED ON PLAN.
 - (IF SWPPP IS REQUIRED) A NOTICE OF INTENT SHALL BE FILED BY THE OWNER FOR THIS PROJECT PER NPDES REQUIREMENTS. CONTRACTOR SHALL COMPLY WITH ALL NPDES GENERAL PERMIT NO. CAS000002 AND SWPPP REQUIREMENTS.
 - INSTALLATION OF ALL BMP'S SHALL BE COMPLETED PRIOR TO OCTOBER 15TH OR BEFORE THE START OF CONSTRUCTION IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN. ALL BMP'S SHALL BE MAINTAINED FOR THE ENTIRE PERIOD BETWEEN OCTOBER 15TH AND APRIL 15TH OF EACH YEAR WHERE CONSTRUCTION ACTIVITY OCCURS ON THE SITE.
 - WHEN TEMPORARY MEASURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, THE MEASURES CAN BE REMOVED AND ANY SEDIMENT DEPOSITS DISPOSED OF ACCORDING TO LOCAL, STATE AND FEDERAL ORDINANCES. DISPOSAL OR REUSE OF SEDIMENT ON-SITE AS FILL MUST HAVE THE APPROVAL OF THE SOILS ENGINEER.
 - STORMWATER MANAGEMENT MEASURES SHOWN ON THE PLAN THAT INTERFERE WITH THE WORK MAY BE RELOCATED OR MODIFIED WITH APPROVAL OF LOCAL GOVERNING AGENCY AND/OR ENGINEER.
 - AFTER UTILITY TRENCHES ARE BACKFILLED AND COMPACTED AND PRIOR TO PERMANENT RESURFACING, THE SURFACES OVER THE UTILITY TRENCH SHALL BE SURFACED WITH TEMPORARY ASPHALT PAVING OR BE MOUND TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA.
 - INSTALLATION OF GRAVEL ROADWAYS, WALKWAYS, OR OTHER MEASURES SHALL BE UTILIZED IN ADDITION TO WATER OR OTHER DUST PALLIATIVES TO CONTROL AND PREVENT BLOWING DUST OR MINIMIZE THE CREATION OF DUST.
- MAINTENANCE
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF BMP'S AT ALL TIMES DURING THE CONSTRUCTION PERIOD. ALL BMP'S SHALL BE INSPECTED AND REPAIRED AS REQUIRED AT THE END OF EACH WORKING DAY.

LAKE COUNTY EROSION AND SEDIMENT CONTROL NOTES (CONTINUED)

- AFTER THE FIRST HEAVY RAIN OF THE SEASON, THE BMP'S SHALL BE INSPECTED FOR DEFICIENCIES. FIBER ROLLS, DITCHES, ROCK RIPRAP OR OTHER BMP'S WILL BE ADDED AS NECESSARY TO ENSURE THAT WATER POLLUTION IS MINIMIZED TO THE MAXIMUM EXTENT PRACTICAL.
- AFTER HEAVY RAINS, THE SITE SHALL BE INSPECTED FOR EXCESSIVE EROSION AND ERODED AREAS REPAIRED AS REQUIRED BY ADDING RIPRAP OR COBBLE TO PREVENT FURTHER EROSION.
- SEDIMENT IS TO BE REMOVED FROM SEDIMENT TRAPS WHEN SEDIMENT LEVEL REACHES 50% OF MAXIMUM.
- DURING THE RAINY SEASON, ALL PAVED SURFACES SHALL BE MAINTAINED FREE OF EARTH MATERIAL AND DEBRIS. WHEN THE WORK REQUIRES THAT MATERIALS BE PLACED UPON PAVED SURFACES, APPROPRIATE MEASURES SHALL BE TAKEN TO PROTECT THE MATERIAL FROM ERODING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP OF MUD AND DEBRIS CARRIED ONTO SURROUNDING PROPERTIES, STREETS AND ROADS AS A RESULT OF CONSTRUCTION ACTIVITY ON THE SITE TO THE SATISFACTION OF THE LOCAL GOVERNING AGENCY. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THAT SAME DAY.
- REFERENCE LATEST EDITION OF BMP HANDBOOK FOR FURTHER DETAILS ON BMP'S.
- THIS PLAN WILL NOT COVER ALL THE SITUATIONS THAT MAY ARISE DURING CONSTRUCTION. ADJUSTMENTS TO THE PLAN MAY BE MADE AS CONDITIONS WARRANT WITH APPROVAL OF THE LOCAL GOVERNING AGENCY.
- SEE CONSTRUCTION SWPPP FOR INSTALLATION AND MAINTENANCE GUIDELINES (ONLY IF SWPPP WAS REQUIRED).
- DUST CONTROL
 - WATER AND/OR DUST PALLIATIVES SHALL BE APPLIED IN SUFFICIENT QUANTITIES DURING GRADING AND OTHER GROUND DISTURBING ACTIVITIES ON-SITE TO MINIMIZE THE AMOUNT OF DUST PRODUCED. OUTDOOR CONSTRUCTION ACTIVITIES SHALL NOT OCCUR WHEN AVERAGE WIND SPEEDS EXCEED 20 MPH.
 - AIR QUALITY
 - dURING ALL CONSTRUCTION ACTIVITIES THE PERMITEE SHALL COMPLY WITH THE MOST CURRENT VERSION OF BAQMD BASIC CONSTRUCTION BEST MANAGEMENT PRACTICES INCLUDING BUT NOT LIMITED TO THE FOLLOWING, AS APPLICABLE:
 - POST A PUBLICLY VISIBLE SIGN WITH THE TELEPHONE NUMBER AND PERSON TO CONTACT AT THE LEAD AGENCY REGARDING DUST COMPLAINTS. THE BAQMD'S PHONE NUMBER SHALL ALSO BE VISIBLE.
 - WATER ALL EXPOSED SURFACES (E.G., PARKING AREAS, STAGING AREAS, SOIL PILES, GRADING AREAS, AND UNPAVED ACCESS ROADS) TWO TIMES PER DAY.
 - COVER ALL HAIL TRUCKS TRANSPORTING SOIL, SAND, OR OTHER LOOSE MATERIAL OFF-SITE.
 - REMOVE ALL VISIBLE MUD OR DIRT TRACED ONTO ADJACENT PUBLIC ROADS BY USING WET POWER VACUUM STREET SWEEPERS AT LEAST ONCE PER DAY. THE USE OF DRY POWER SWEEPING IS PROHIBITED.
 - ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MPH.
 - ALL ROADWAYS, DRIVEWAYS, AND SIDEWALKS TO BE PAVED SHALL BE COMPLETED AS SOON AS POSSIBLE. BUILDING PADS SHALL BE LAD AS SOON AS POSSIBLE AFTER GRADING UNLESS SEEDING OR SOIL BINDERS ARE USED.
 - DURING TIMES SHALL BE MINIMIZED EITHER BY SHUTTING OFF EQUIPMENT WHEN NOT IN USE OR REDUCING THE MAXIMUM IDLING TIME TO FIVE (5) MINUTES (AS REQUIRED BY STATE REGULATIONS). CLEAR SIGNAGE SHALL BE PROVIDED FOR CONSTRUCTION WORKERS AT ALL ACCESS POINTS.
 - ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED VISIBLE EMISSIONS EVALUATOR. ANY PORTABLE ENGINES GREATER THAN 50 HORSEPOWER OR ASSOCIATED EQUIPMENT OPERATED WITHIN THE BAQMD'S JURISDICTION SHALL HAVE EITHER A CALIFORNIA AIR RESOURCES BOARD (ARB) REGISTRATION PORTABLE EQUIPMENT REGISTRATION PROGRAM (PERP) OR A BAQMD PERMIT. FOR GENERAL INFORMATION REGARDING THE CERTIFIED VISIBLE EMISSIONS EVALUATOR OR THE REGISTRATION PROGRAM, VISIT THE ARB FAQ HTTP://WWW.ARB.CA.GOV/
 - ARCHEOLOGICAL FINDING
 - a. IN THE EVENT THAT ARCHEOLOGICAL ARTIFACTS OR HUMAN REMAINS ARE DISCOVERED DURING CONSTRUCTION, WORK SHALL CEASE IN A 50-FOOT RADIUS SURROUNDING THE AREA OF DISCOVERY. THE PERMITEE SHALL CONTACT THE PDES DEPARTMENT FOR FURTHER GUIDANCE, WHICH WILL LIKELY INCLUDE THE REQUIREMENT FOR THE PERMITEE TO HIRE A QUALIFIED PROFESSIONAL TO ANALYZE THE ARTIFACTS ENCOUNTERED AND TO DETERMINE IF ADDITIONAL MEASURES ARE REQUIRED. IF HUMAN REMAINS ARE ENCOUNTERED DURING PROJECT DEVELOPMENT, ALL WORK IN THE VICINITY MUST BE HALTED, AND THE LAKE COUNTY CORONER INFORMED. SO THAT THE CORONER CAN DETERMINE IF AN INVESTIGATION OF THE CAUSE OF DEATH IS REQUIRED, AND IF THE REMAINS ARE OF NATIVE AMERICAN ORIGIN. IF THE REMAINS ARE OF NATIVE AMERICAN ORIGIN, THE PERMITEE SHALL COMPLY WITH THE REQUIREMENTS OF PUBLIC RESOURCES CODE SECTION 5097.98.

MATERIAL SPECIFICATIONS

EROSION AND SEDIMENT CONTROL:

ALL MATERIALS AND COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF THE RWQCB FIELD MANUAL, THE CASQA STORMWATER BEST MANAGEMENT PRACTICES HANDBOOK, SWPPP, THESE SPECIFICATIONS AND AS INDICATED ON THE CONSTRUCTION DRAWINGS.

SITEWORK:

- PRECAST CONCRETE PARKING BARS: 36 INCH LONG; "FIBERASSED" OR APPROVED EQUAL. ADHESIVE SHALL BE SUITABLE FOR SECURING MATERIALS TO ASPHALT PAVING.
- FENCING: 6 FEET HIGH CONSTRUCTED OF 8 FEET HEAVY DUTY "T" BAR POSTS AT 8 FEET ON CENTER, 4 FEET HIGH 6" X 6" GRID GALVANIZED 12 GAUGE MINIMUM FIELD FENCING WITH 3 2" STRANDS OF BARBED WIRE ATTACHED TO THE TOP AT O.C. CORNER POSTS, GATE POSTS AND BRACE PANELS CONSTRUCTED OF METAL CONFORMING TO CALTRANS STANDARD DRAWINGS A85 AND A86 AS INDICATED ON THE DRAWINGS, OR MATCH EXISTING WHERE APPLICABLE.
- ROCK RIPRAP: ANGULAR AND WELL GRADED ROCKS WITH AN AVERAGE DIAMETER 8 TO 15 INCHES WITH APPROXIMATELY 50 PERCENT BY WEIGHT BEING SMALLER THAN 12 INCHES IN DIAMETER, UNLESS OTHERWISE NOTED ON DRAWINGS. MINIMUM APPARENT SPECIFIC GRAVITY OF 2.5; MINIMUM DURABILITY INDEX OF 50. ROCK ENCOUNTERED DURING SITE GRADING MAY BE UTILIZED AS APPROVED BY THE ENGINEER.
- COBBLE: ANGULAR AND WELL GRADED ROCKS WITH AN AVERAGE DIAMETER OF 2 TO 6 INCHES WITH APPROXIMATELY 50 PERCENT BY WEIGHT BEING SMALLER THAN 4 INCHES IN DIAMETER. ROCK ENCOUNTERED DURING EXCAVATION MAY BE UTILIZED AS APPROVED BY THE ENGINEER.
- GROUT: ONE PART OF PORTLAND CEMENT AND THREE PARTS SAND THOROUGHLY MIXED WITH WATER TO PRODUCE GROUT HAVING A THICK CREAMY CONSISTENCY. THE MINIMUM AMOUNT OF WATER SHOULD BE USED TO PREVENT EXCESS SHRINKAGE OF THE GROUT AFTER PLACEMENT. CEMENT SHALL CONFORM TO THE REQUIREMENTS OF AASHTO C150; SAND SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M45.
- CONCRETE DITCH LINING: MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 72-4.
- FILTER FABRIC: NONWOVEN POLYPROPYLENE; "MIRAFI 140N" BY TENCATE GEOSYNTHETICS NORTH AMERICA, OR EQUAL.

PAVING AND SURFACING:

ALL MATERIALS AND WORK SHALL BE IN CONFORMANCE WITH THE CALTRANS STANDARD SPECIFICATIONS, THE FOLLOWING REFERENCE PERTAIN TO THAT DOCUMENT.

- AGGREGATE BASE: ANGULAR, CRUSHED MATERIAL CONFORMING TO CLASS 2 REQUIREMENTS OF SECTION 26.
- TAKE COAT: DILUTED SS-LH ASPHALTIC EMULSION OR UNDLUTED RS-1 EMULSION IN CONFORMANCE WITH SECTION 94.
- ASPHALT PAVING: TYPE A ASPHALTIC CONCRETE WITH MEDIUM GRADED AGGREGATE (1/2" MAX SIZE) IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 39, ASPHALT BINDER TO BE MIXED WITH AGGREGATE SHALL MEET PERFORMANCE SPECIFICATION PG 64-16 IN CONFORMANCE WITH SECTION 92.
- SEAL COAT: TYPE SS-1 ASPHALTIC EMULSION CONFORMING TO SECTION 94.
- CRACK SEALING: PRIOR TO SEALING, CRACKS SHALL BE CLEANED OF DEBRIS BY AIR BLASTING. SEALANT MATERIAL SHALL BE ASPHALT RUBBER CONFORMING TO CALTRANS SPECIFICATION SSP 37-400 HOT APPLIED, PLACED IN A FLUSH FILL METHOD AND FINISHED WITH A SQUEEGEE.
- STRIPING PAINT: WATERBORNE TRAFFIC GRADE PAINT SPECIFICALLY FOR ASPHALTIC CONCRETE PAVEMENT SURFACES, CONFORMING TO STANDARD SPECIFICATION SECTION 84.

UTILITIES:

- SLURRY CEMENT BEDDING AND BACKFILL: SLURRY CEMENT SHALL BE PER SECTION 90-2 OF THE CALTRANS STANDARD SPECIFICATIONS.
- STORM DRAIN PIPING SHALL BE EITHER: ADS N-12 WT 18 (OR EQUAL) HIGH DENSITY POLYETHYLENE FOR SIZES 4"-36", OR PVC SEWER PIPE WITH RUBBER GASKETS AND FITTINGS CONFORMING TO ASTM D-3034, SDR 35 FOR SIZES 6" AND LARGER.
- UNDER SLABS AND FUTURE BUILDING AREAS PIPES SHALL BE SOLVENT WELDED AND MAY BE EITHER PVC DRAIN WASTE AND VENT PIPE FITTINGS SCHEDULE 40 CONFORMING TO ASTM D2665 OR PVC SCHEDULE 40 PIPE CONFORMING TO D1785.
- GATE VALVES SHALL BE AWWA C509 OR C515 NON-RISING STEM FOR SIZES OVER 2".
- BURIED METAL VALVES AND FITTINGS SHALL BE COATED WITH A COAL TAR BASED PAINT SYSTEM AS FOLLOWS:
 - PRIME COAT: CARBOLINE "BITUMASTIC 50"
 - SECOND COAT: "BITUMASTIC 50" WITH 2 COATS OF CARBOLINE "BITUMASTIC 50"
- UTILITY CHASES: POLYVINYL CHLORIDE (PVC) PIPE, SOLVENT WELD, CLASS 200, CONFORMING TO ASTM D2241, SCHEDULE 40 PVC SOLVENT WELD CONFORMING TO ASTM D1785; SIZES AS INDICATED ON THE DRAWINGS.
- CLEANOUTS: MATERIALS FOR CLEANOUTS SHALL BE IN ACCORDANCE WITH THE CURRENT CALIFORNIA PLUMBING CODE AND THE DETAILS ON THE DRAWINGS. CLEANOUT RISERS SHALL BE OF THE SAME MATERIAL AS THE ADJACENT PIPE LINE.
- DOWNSPOUT ADAPTER: ADAPTER SHALL BE AS MANUFACTURED BY NDS, INC.
- SEE FIRE PROTECTION NOTES FOR FIRE PIPING/SPECIFICATIONS.
- SEE UTILITY STRUCTURE TABLE FOR UTILITY STRUCTURE SPECIFICATIONS.



LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 96453
APNS: 007-008-40, 35, 34, 27, 41 & 007-007-01 & 02

HIGHLAND FARMS, LP - PHASE 1B
GENERAL INFORMATION

2022-01-11	PERMIT SUBMITTAL
2024-10-11	REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE:	2021-07-23
JOB NO:	2021038
SCALE:	AS SHOWN
DRAWN:	TAF
CHECKED:	JG
SHEET	C1.2

1 OF 19

FUTURE BUILDINGS & OUTDOOR CULTIVATION AREAS

- A. OUTDOOR CULTIVATION AREA
- B. OUTDOOR CULTIVATION AREA
- C. OUTDOOR CULTIVATION AREA
- D. OUTDOOR CULTIVATION AREA
- E. OUTDOOR CULTIVATION AREA

NOTES:

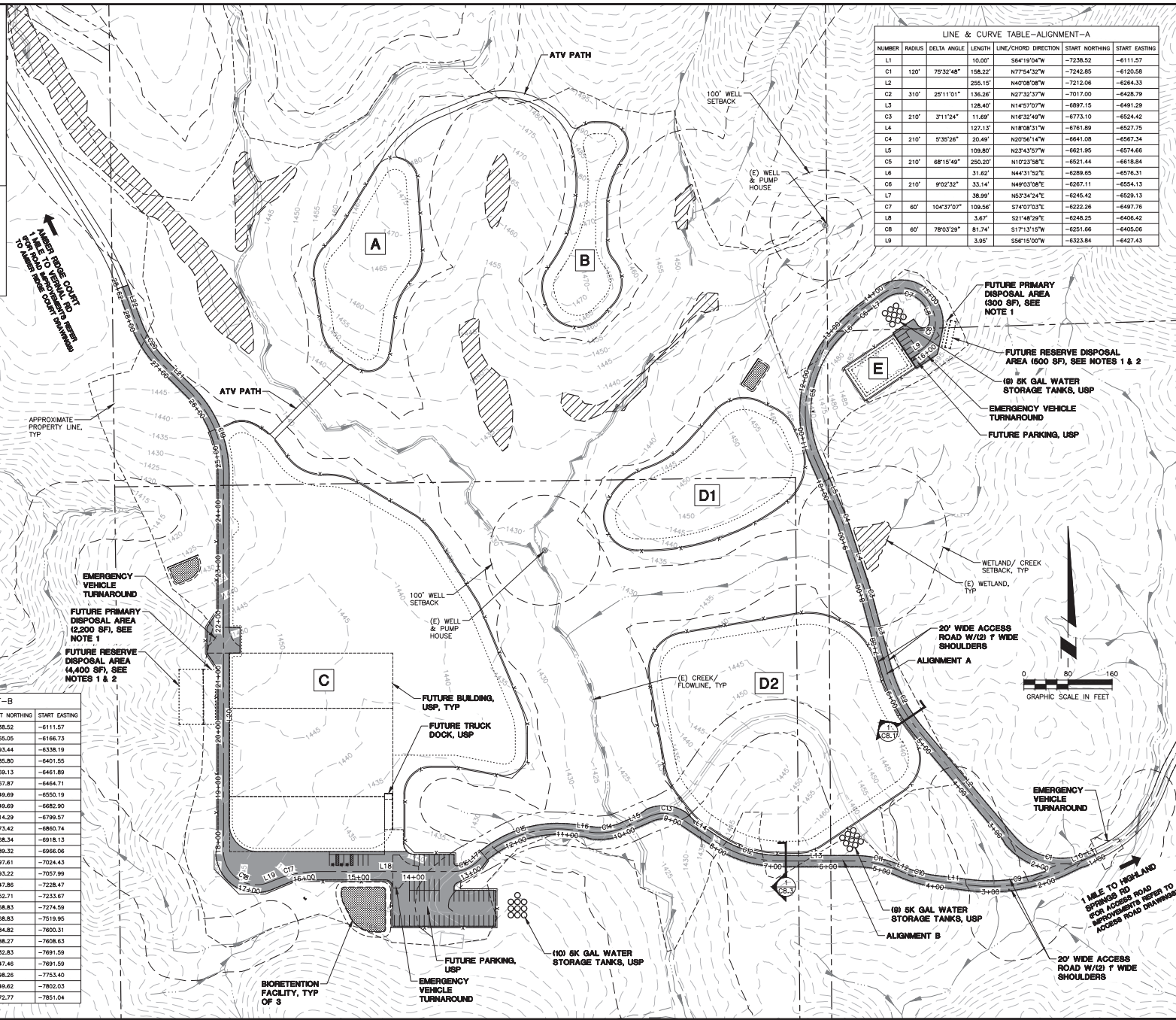
- SEPTIC SYSTEM SIZING IS DEPENDENT ON THE REVIEW OF THE TEST PITS BY LAKE COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. EXACT SEPTIC SIZING CANNOT BE CONFIRMED UNTIL THE SITE EVALUATION CONDUCTED BY LAKE COUNTY TAKES PLACE. SEPTIC DISPOSAL AREAS SHOWN ARE ESTIMATES.
- RESERVE DISPOSAL AREAS DO NOT NEED TO BE CONSTRUCTED, BUT THEY SHOULD BE PROTECTED AND UNDISTURBED IN A SIMILAR FASHION TO THE PRIMARY DISPOSAL AREA.

SETBACKS TABLE

DISTANCE	TYPE
100 FT	WETLANDS
100 FT	CLASS II STREAMS
50 FT	CLASS III STREAMS

NUMBER	RADIUS	DELTA ANGLE	LENGTH	LINE/CHORD DIRECTION	START NORTHING	START EASTING
L10		61.21°	564'19"04"W	-7238.52	-8111.57	
C1	310'	32°33'28"	176.15'	S80°35'48"W	-7265.05	-8166.73
L11		63.82°	N83°07'28"W	-7293.44	-8338.19	
C10	210'	17°08'36"	62.83'	N74°33'10"W	-7285.80	-8401.55
L12		3.10°	N65°58'52"W	-7269.13	-8461.89	
C11	210'	24°01'08"	88.03'	N77°59'26"W	-7267.87	-8464.71
L13		132.71°	N60°00'00"W	-7249.69	-8550.19	
C12	210'	33°45'00"	123.70'	N73°07'30"W	-7249.69	-8682.90
L14		73.57°	N56°15'00"W	-7214.29	-8799.57	
C13	60'	57°22'53"	60.09'	N84°56'26"W	-7173.42	-8860.74
L15		52.32°	S66°22'07"W	-7168.34	-8918.13	
C14	110'	31°05'17"	59.68'	S81°54'46"W	-7189.32	-8966.06
L16		33.85°	N82°32'36"W	-7197.61	-9024.43	
C15	210'	50°27'24"	184.83'	S72°14'42"W	-7188.32	-9057.99
L17		7.12°	S47°00'00"W	-7247.86	-9228.47	
C16	60'	43°00'00"	45.03'	S68°30'00"W	-7252.71	-9233.67
L18		245.30°	N60°00'00"W	-7268.83	-9274.59	
C17	210'	22°30'00"	82.47'	S78°45'00"W	-7268.83	-9319.95
L19		9.01°	S67°30'00"W	-7284.82	-9360.31	
C18	60'	112°30'00"	117.81'	N56°15'00"W	-7288.27	-9408.63
L20		685.38°	N07°00'00"E	-7232.83	-9491.59	
C19	211'	45°00'03"	165.72'	N22°30'01"W	-8547.46	-9691.59
L21		68.78°	N45°00'03"W	-8398.26	-9753.40	
C20	211'	24°56'54"	91.88'	N32°31'36"W	-8349.62	-9802.03
L22		67.83°	N20°03'09"W	-8272.77	-9851.04	

NUMBER	RADIUS	DELTA ANGLE	LENGTH	LINE/CHORD DIRECTION	START NORTHING	START EASTING
L1		10.00°	564'19"04"W	-7238.52	-8111.57	
C1	120'	79°32'48"	158.22'	N77°54'32"W	-7242.85	-8120.56
L2		255.15°	N40°08'08"W	-7212.06	-8264.33	
C2	310'	25°11'01"	136.26'	N27°32'37"W	-7017.00	-8428.79
L3		128.40°	N14°57'07"W	-6897.15	-8491.29	
C3	210'	3°11'24"	11.89'	N16°32'49"W	-6773.10	-8524.42
L4		127.13°	N16°08'51"W	-6761.89	-8527.75	
C4	210'	9°35'26"	20.40'	N25°51'47"W	-6641.28	-8587.34
L5		109.80°	N23°43'57"W	-6421.96	-8574.66	
C5	210'	68°15'49"	250.20'	N10°23'58"E	-6521.44	-8618.84
L6		31.82°	N44°31'52"E	-6289.65	-8576.31	
C6	210'	9°02'32"	33.14'	N49°03'08"E	-6267.11	-8554.13
L7		38.99°	N53°34'24"E	-6245.42	-8529.13	
C7	60'	104°33'07"	109.56'	S74°07'03"E	-6222.26	-8497.76
L8		3.67°	S21°48'29"E	-6248.25	-8406.42	
C8	60'	78°03'29"	81.74'	S17°13'15"W	-6251.66	-8405.06
L9		3.95°	S56°15'00"W	-6323.84	-8427.43	



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LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 95453
APNS: 007-008-40, 35, 34, 27, 41 & 007-007-01 & 02

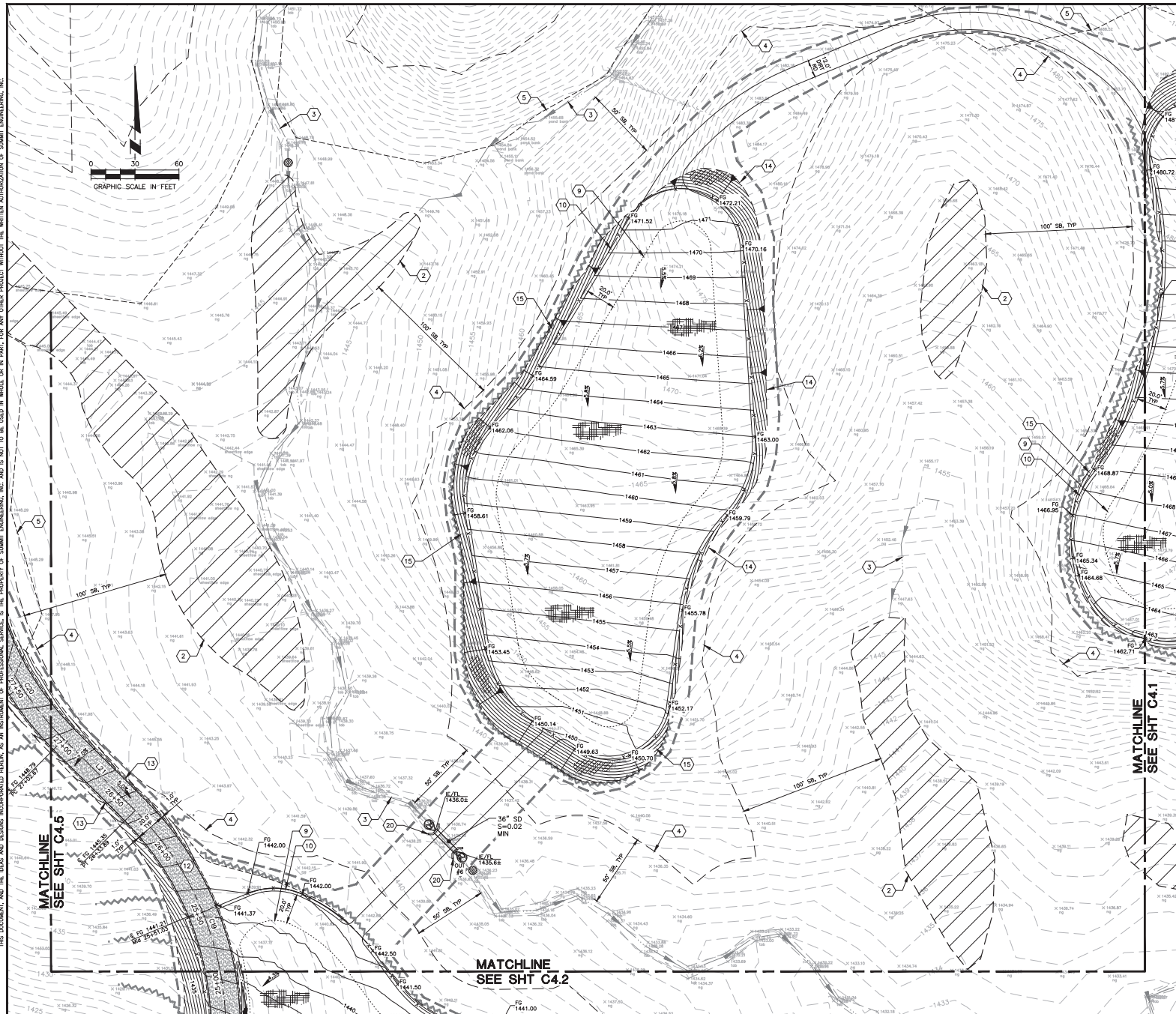
HIGHLAND FARMS, LP - PHASE 1B
LAYOUT & HORIZONTAL CONTROL PLAN

2022-01-11 PERMIT SUBMITTAL
2024-10-11 REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2024-10-11
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET: **C3.0** OF 19

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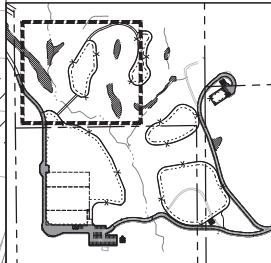
KEY NOTES	
#	DESCRIPTION
1.	APPROXIMATE PROPERTY LINE, TYP
2.	APPROXIMATE LIMITS OF (E) WETLAND, TYP
3.	(E) CREEK, TYP
4.	100' WETLAND SETBACK OR 50' CREEK TOP OF BANK SETBACK, UNO
5.	APPROXIMATE LIMITS OF GROUND TOPOGRAPHY, TYP
6.	(E) WELL & PUMP HOUSE, TYP
7.	(E) DIRT ACCESS ROAD TO HUMAN
8.	APPROXIMATE LIMITS OF FUTURE BUILDING, USP, TYP
9.	APPROXIMATE LIMITS OF FUTURE OUTDOOR CULTIVATION AREA, TYP
10.	FENCING, TYP, COORDINATE WITH OWNER
11.	FUTURE WATER TANK, USP
12.	HATCH REPRESENTS LIMITS OF 12" CL 2 AGG BASE, TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD, OVERSIGHT AND RECOMPACTION PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS
13.	1" WIDE CL 2 AGG BASE SHOULDER
14.	TOP OF CUT, TYP (2:1 UNO)
15.	TOE OF FILL, TYP (2:1 UNO)
16.	CONFORM TO EXISTING
17.	FLOWLINE GRACE TO DRAIN
18.	SWALE, SEE 10/C9.0
19.	CLEANOUT, SEE 10/C8.1
20.	CULVERT WING WALL, SEE /C9.1
21.	CAP & PLUS UTILITY MARK LOCATION FOR FUTURE CONNECTION
22.	SLURRY CEMENT PLUG IN UTILITY TRENCH, TYP, SEE 4/C8.1, SEE UTILITY NOTES ON SHEET C1.1 FOR SPACING AND FREQUENCY
23.	APPROXIMATE LIMITS OF FUTURE PRIMARY DISPOSAL AREA, SEE NOTE 4
24.	APPROXIMATE LIMITS OF FUTURE RESERVE DISPOSAL AREA, SEE NOTES 4 & 5
25.	(E) FLOWLINE

- NOTES:
1. SHEET C1.1 FOR UTILITY STRUCTURE TABLE.
 2. GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE.
 3. SOIL EXCAVATION AND RECOMPACTION SHOULD BE DONE IN THE BUILDING AREAS PER RECOMMENDATIONS BY A GEOTECHNICAL ENGINEER.
 4. SEPTIC SYSTEM SIZING IS DEPENDENT ON THE REVIEW OF THE TEST LOGS BY LAKE COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. EVALUATION CONDUCTED BY LAKE COUNTY TAKES PLACE. SEPTIC DISPOSAL AREAS SHOWN ARE ESTIMATES.
 5. RESERVE DISPOSAL AREAS DO NOT NEED TO BE CONSTRUCTED, BUT THEY SHOULD BE PROTECTED AND UNDISTURBED IN A SIMILAR FASHION TO THE PRIMARY DISPOSAL AREA.

STORMWATER MANAGEMENT LEGEND

DESCRIPTION	SYMBOL
FIBER ROLL FOR SPACING FREQUENCY AND INSTALLATION NOTES, SEE 1/C9.0	
CONCRETE WASHOUT, SEE 2/C9.0	
STORM DRAIN INLET PROTECTION, SEE 3/C9.0	
GRAVEL BAG CHECK DAM, SEE 4/C9.0	
RIPRAP ENERGY DISSIPATOR, SEE 5/C9.0	
HATCHING REPRESENTS EROSION CONTROL BLANKET OVER HYDROSEED ON ALL CUT/FILL SLOPES STEEPER THAN 3:1 OR LESS, UNO	
HATCHING REPRESENTS HYDROSEED OR STRAW MULCH OVER HYDROSEED DISTURBED AREAS WITH SLOPES OF 3:1 OR LESS, UNO	
SILT FENCE, SEE 7/C9.0	
VEHICLE & EQUIPMENT MANAGEMENT/ FUELING LOCATION	
MATERIAL & WASTE MANAGEMENT, SEE 8/C9.0	
TEMPORARY STOCKPILE LOCATION, SEE 8/C9.0	
BIORETENTION FACILITY, SEE 8/C9.0 (SEE 5/C9.1 FOR BIO #1A)	
SAMPLING LOCATION	
LIMITS OF CONSTRUCTION/ DISTURBANCE	
* REMOVE UPON COMPLETION OF CONSTRUCTION	

- STORMWATER MANAGEMENT NOTES:
1. SOIL WILL BE DISTURBED (BOTH CUT AND FILL) WITHIN THE LIMITS OF CONSTRUCTION.
 2. ACTIVE AREAS OF SOIL DISTURBANCE WILL OCCUR WITHIN THE LIMITS OF CONSTRUCTION/DISTURBANCE. THESE LIMITS ARE SET 1' OUTSIDE OF PERMANENT AREAS OF SOIL DISTURBANCE TO ACCOUNT FOR TEMPORARY AREAS OF SOIL DISTURBANCE DURING CONSTRUCTION.
 3. DURING OVER EXCAVATION AND UPON RESTORATION OF SURFACE TO EXISTING GRADE, FIVE POINTS IN EXPOSED AREA IN PREPARATION OF STORM EVENTS, USE TRASH PUMPS AND TEMPORARY PILING TO DENOTE, DIRECT DRAINAGE TO SPECIFIED DRAINAGE LOCATIONS.
 4. DISTURBED SOILS TO BE STABILIZED PRIOR TO RAIN EVENT AND AT THE COMPLETION OF CONSTRUCTION AS REQUIRED BY SMP.
 5. ENGINEERED SHALL COLLECT ONE SAMPLE AT EACH DISCHARGE POINT REPRESENTATIVE OF CONSTRUCTION ACTIVITY, OR A MINIMUM OF TWO (2) SAMPLES WHICH EVER IS GREATER, LATELY DAY OF A QUALIFIED STORM EVENT (0.5 INCHES OF RAIN OR MORE).



KEY MAP



LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 96453
APNS: 007-008-40, 35, 34, 27, 41 & 007-007-01 & 02

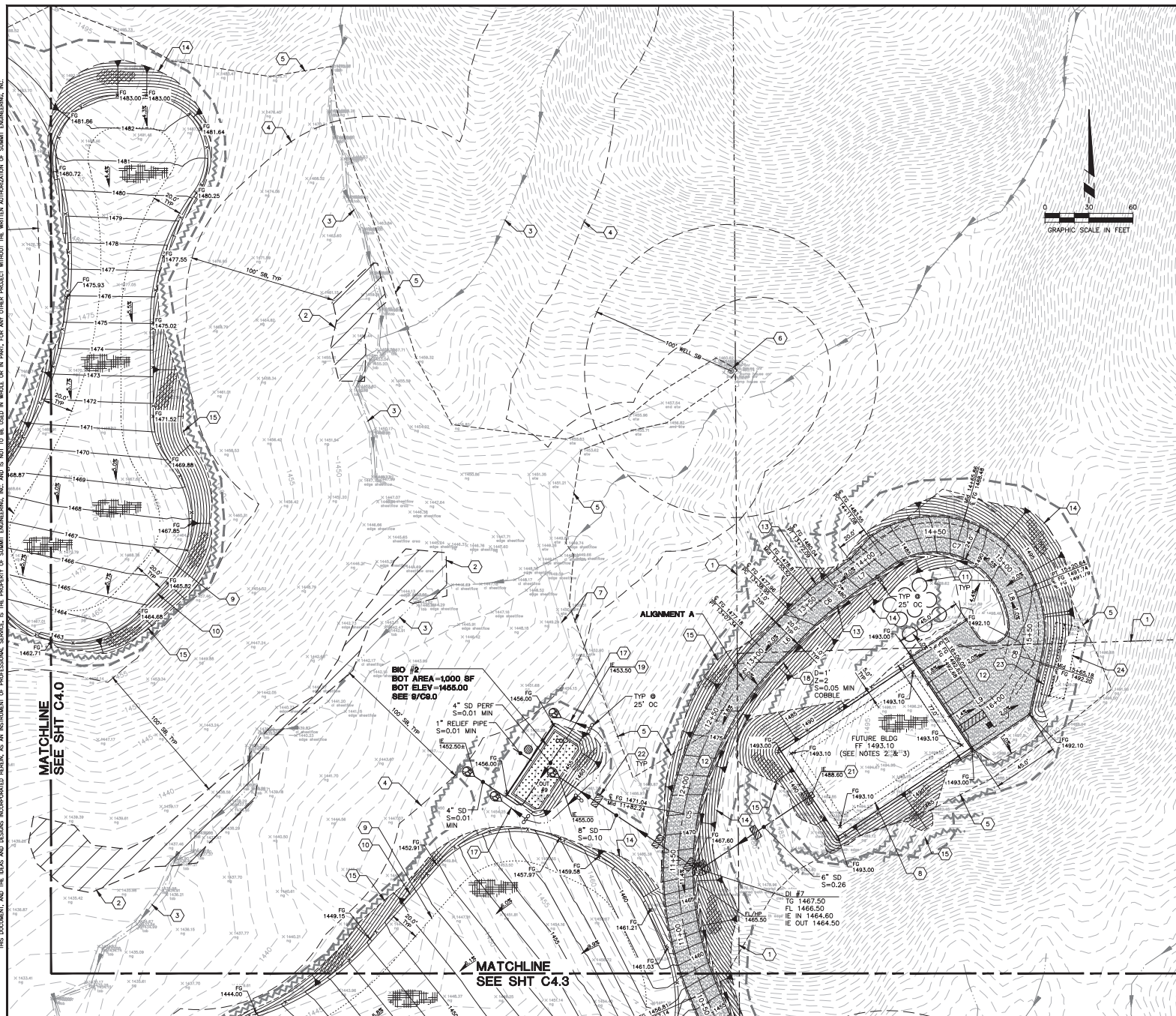
HIGHLAND FARMS, LP - PHASE 1B
GRADING, DRAINAGE & STORMWATER
MANAGEMENT PLAN

2022-01-11
PERMIT SUBMITTAL
2024-10-11
REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2024-08-29
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET: C4.0
5 OF 19

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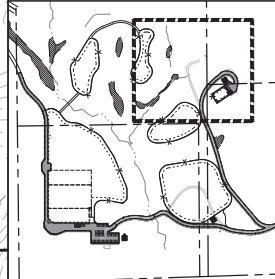


KEY NOTES	
#	DESCRIPTION
1.	APPROXIMATE PROPERTY LINE, TYP
2.	APPROXIMATE LIMITS OF (E) WETLAND, TYP
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4.	100' WETLAND SETBACK OR 50' CREEK TOP OF BANK SETBACK, UNO
5.	APPROXIMATE LIMITS OF GROUND TOPOGRAPHY, TYP
6.	(E) WELL & PUMP HOUSE, PIP
7.	(E) DIRT ACCESS ROAD TO REMAIN
8.	APPROXIMATE LIMITS OF FUTURE BUILDING, USP, TYP
9.	APPROXIMATE LIMITS OF FUTURE OUTDOOR CULTIVATION AREA, TYP
10.	FENCING, TYP, COORDINATE WITH OWNER
11.	FUTURE WATER TANK, USP
12.	HATCH REPRESENTS LIMITS OF 12" CL 2 AGG BASE, TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD, OVERCROWDING AND RECOMPACTION PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS
13.	1" WIDE CL 2 AGG BASE SHOULDER
14.	TOP OF CUT, TYP (2:1 UNO)
15.	TOE OF FILL, TYP (2:1 UNO)
16.	CONFORM TO EXISTING
17.	FLOWLINE GRACE TO DRAIN
18.	SWALE, SEE 10/C9.0
19.	CLEANOUT, SEE 10/C9.1
20.	CULVERT WING WALL, SEE /C9.1
21.	CAP & PLUS UTILITY MARK LOCATION FOR FUTURE CONNECTION
22.	SLURRY CEMENT PLUG IN UTILITY TRENCH, TYP, SEE 4/C9.1, SEE UTILITY NOTES ON SHEET C.1.1 FOR SPACING AND FREQUENCY
23.	APPROXIMATE LIMITS OF FUTURE PRIMARY DISPOSAL AREA, SEE NOTE 4
24.	APPROXIMATE LIMITS OF FUTURE RESERVE DISPOSAL AREA, SEE NOTES 4 & 5
25.	(E) FLOWLINE

- INDEX:
- SEE SHEET C.1.1 FOR UTILITY STRUCTURE TABLE.
 - GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE.
 - SOIL EXCAVATION AND RECOMPACTION SHOULD BE DONE IN THE BUILDING AREAS PER RECOMMENDATIONS BY A GEOTECHNICAL ENGINEER.
 - SEPTIC SYSTEM SIZING IS DEPENDENT ON THE REVIEW OF THE TEST LOGS BY LAKE COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. EVALUATION CONDUCTED BY LAKE COUNTY TAKES PLACE. SEPTIC DISPOSAL AREAS SHOWN ARE ESTIMATES.
 - RESERVE DISPOSAL AREAS DO NOT NEED TO BE CONSTRUCTED, BUT THEY SHOULD BE PROTECTED AND UNDISTURBED IN A SIMILAR FASHION TO THE PRIMARY DISPOSAL AREA.

STORMWATER MANAGEMENT LEGEND	
DESCRIPTION	SYMBOL
FIBER ROLL, FOR SPACING FREQUENCY AND INSTALLATION NOTES, SEE 1/C9.0	
CONCRETE WASHOUT, SEE 2/C9.0	
STORM DRAIN INLET PROTECTION, SEE 3/C9.0	
GRAVEL BAG CHECK DAM, SEE 4/C9.0	
RIPRAP ENERGY DISSIPATOR, SEE 5/C9.0	
HATCHING REPRESENTS EROSION CONTROL BLANKET OVER HYDROSEED ON ALL CUT/FILL SLOPES STEEPER THAN 3:1 OR LESS, UNO	
HATCHING REPRESENTS HYDROSEED OR STORM MULCH OVER HYDROSEED DISTURBED AREAS WITH SLOPES OF 3:1 OR LESS, UNO	
SILT FENCE, SEE 7/C9.0	
VEHICLE & EQUIPMENT MANAGEMENT/ FUELING LOCATION	
MATERIAL & WASTE MANAGEMENT, SEE 8/C9.0	
TEMPORARY STOCKPILE LOCATION, SEE 9/C9.0	
BIORETENTION FACILITY, SEE 9/C9.0 (SEE 5/C9.1 FOR BIO #1A)	
SAMPLING LOCATION	
LIMITS OF CONSTRUCTION/ DISTURBANCE	
* REMOVE UPON COMPLETION OF CONSTRUCTION	

- STORMWATER MANAGEMENT NOTES:
- SOIL WILL BE DISTURBED (BOTH CUT AND FILL) WITHIN THE LIMITS OF CONSTRUCTION.
 - ACTIVE AREAS OF SOIL DISTURBANCE WILL OCCUR WITHIN THE LIMITS OF CONSTRUCTION/DISTURBANCE. THESE LIMITS ARE SET TO OUTLINE OF PERMANENT AREAS OF SOIL DISTURBANCE TO ACCOUNT FOR TEMPORARY AREAS OF SOIL DISTURBANCE DURING CONSTRUCTION.
 - DURING OVER EXCAVATION AND UPON RESTORATION OF SURFACE TO EXISTING, SURVEY FOR POINTS IN EXPOSED AREAS IN PREPARATION OF STORM EVENTS. USE TRAIL PUMPS AND TEMPORARY PUMPING TO DEMONSTRATE DISTANCE TO SPECIFIED DISCHARGE LOCATIONS.
 - DISTURBED SOILS TO BE STABILIZED PRIOR TO RAIN EVENT AND AT THE COMPLETION OF CONSTRUCTION ACTIVITY, OR A MINIMUM OF TWO (2) SAMPLES WHICH EVER IS GREATER, ONE SAMPLE PER DAY OF A CALIBRATED STORM EVENT (0.5 INCHES OF RAIN OR MORE).
 - DISCHARGER SHALL COLLECT ONE SAMPLE PER DAY DISCHARGE POINT REPRESENTATIVE OF CONSTRUCTION ACTIVITY, OR A MINIMUM OF TWO (2) SAMPLES WHICH EVER IS GREATER, ONE SAMPLE PER DAY OF A CALIBRATED STORM EVENT (0.5 INCHES OF RAIN OR MORE).



SUMMIT
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LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 95453
APNS: 007-008-40, 35, 34, 27, 41 & 007-007-01 & 02

HIGHLAND FARMS, LP - PHASE 1B

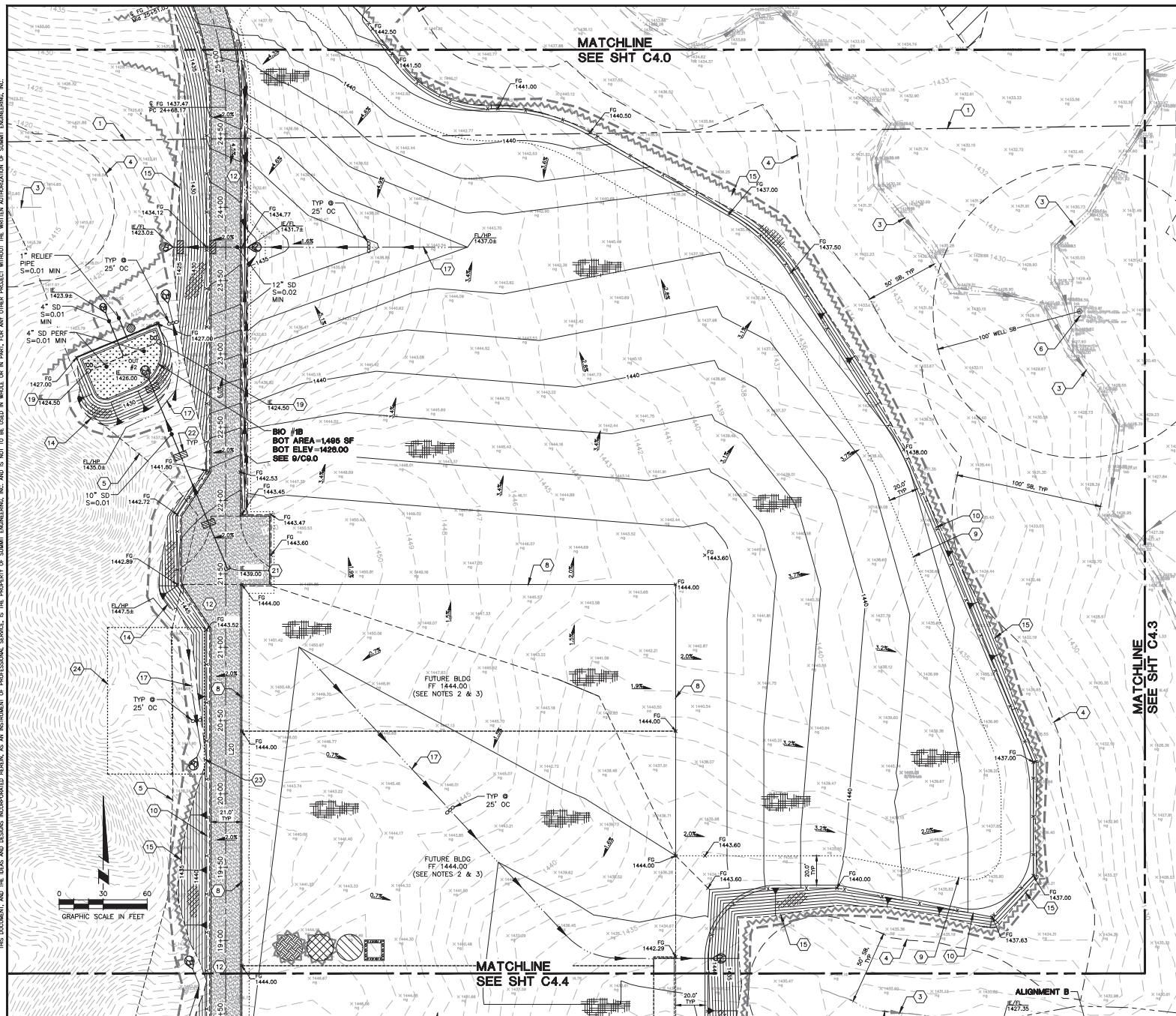
**GRADING, DRAINAGE & STORMWATER
MANAGEMENT PLAN**

2022-01-11
PERMIT SUBMITTAL
2024-10-11
REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2024-08-29
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET: **C4.1**
7 OF 19

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KEY NOTES

1. APPROXIMATE PROPERTY LINE, TYP

2. APPROXIMATE LIMITS OF (E) WETLAND, TYP

3. (E) CREEK, TYP

4. 100' WETLAND SETBACK OR 50' CREEK TOP OF BANK SETBACK, UNO

5. APPROXIMATE LIMITS OF GROUND TOPOGRAPHY, TYP

6. (E) WELL & PUMP HOUSE, TYP

7. (E) DIRT ACCESS ROAD TO REMAIN

8. APPROXIMATE LIMITS OF FUTURE BUILDING, USP, TYP

9. APPROXIMATE LIMITS OF FUTURE OUTDOOR CULTIVATION AREA, TYP

10. FENCING, TYP, COORDINATE WITH OWNER

11. FUTURE WATER TANK, TYP

12. HATCH REPRESENTS LIMITS OF 12" CL 2 AGG BASE, TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD, OVERCROWDING AND RECOMPACTION PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS

13. 1" WIDE CL 2 AGG BASE SHOULDER

14. TOP OF CUT, TYP (2:1 UNO)

15. TIDE OF FILL, TYP (2:1 UNO)

16. CONFORM TO EXISTING

17. FLOWLINE GRACE TO DRAIN

18. CHANNEL, SEE 10/C9.0

19. CLEANOUT, SEE 10/C8.1

20. CULVERT WING WALL, SEE /C9.1

21. CAP & PLUS UTILITY MARK LOCATION FOR FUTURE CONNECTION

22. SLURRY CEMENT PILE IN UTILITY TRENCH, TYP, SEE 4/C8.1, SEE UTILITY NOTES ON SHEET C1.1 FOR SPACING AND FREQUENCY

23. APPROXIMATE LIMITS OF FUTURE PRIMARY DISPOSAL AREA, SEE NOTE 4

24. APPROXIMATE LIMITS OF FUTURE RESERVE DISPOSAL AREA, SEE NOTES 4 & 5

25. (E) FLOWLINE

INDEX

1. SEE SHEET C1.1 FOR UTILITY STRUCTURE TABLE

2. GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE

3. EXCAVATION AND RECOMPACTION SHOULD BE DONE IN THE BUILDING AREAS PER RECOMMENDATIONS BY A GEOTECHNICAL ENGINEER

4. SEPTIC SYSTEM SIZING IS DEPENDENT ON THE REVIEW OF THE TEST LOGS BY LAKE COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. SEPTIC SYSTEM SIZING SHALL BE CONFIRMED UNTIL THE SEPTIC EVALUATION CONDUCTED BY LAKE COUNTY TAKES PLACE. SEPTIC DISPOSAL AREAS ARE ESTIMATES

5. RESERVE DISPOSAL AREAS DO NOT NEED TO BE CONSTRUCTED, BUT THEY SHOULD BE PROTECTED AND UNDISTURBED IN A SIMILAR FASHION TO THE PRIMARY DISPOSAL AREA

STORMWATER MANAGEMENT LEGEND

DESCRIPTION	SYMBOL
FIBER ROLL, FOR SPACING FREQUENCY AND INSTALLATION NOTES, SEE 10/C9.0	
CONCRETE WASHOUT, SEE 2/C9.0	
STORM DRAIN INLET PROTECTION, SEE 3/C9.0	
GRASS BAG CHECK DAM, SEE 4/C9.0	
RIPRAP ENERGY DISSIPATOR, SEE 5/C9.0	
HATCHING REPRESENTS EROSION CONTROL BLANKET OVER HYDROSEED ON ALL CUT/FILL SLOPES STEEPER THAN 3:1 OR LESS, UNO	
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SILT FENCE, SEE 7/C9.0	
VEHICLE & EQUIPMENT MANAGEMENT/ FUELING LOCATION	
MATERIAL & WASTE MANAGEMENT, SEE 8/C9.0	
TEMPORARY STOCKPILE LOCATION, SEE 9/C9.0	
BIORETENTION FACILITY, SEE 9/C9.0 (SEE 5/C9.1 FOR BIO #1A)	
SAMPLING LOCATION	
LIMITS OF CONSTRUCTION/ DISTURBANCE	
* REMOVE UPON COMPLETION OF CONSTRUCTION	

DEMATERIA MANAGEMENT NOTES

1. SOIL WILL BE DISTURBED (BOTH CUT AND FILL) WITHIN THE LIMITS OF CONSTRUCTION

2. ACTIVE AREAS OF SOIL DISTURBANCE WILL OCCUR WITHIN THE LIMITS OF CONSTRUCTION/DISTURBANCE. THESE LIMITS ARE SET 1' OUTSIDE OF PERMANENT AREAS OF SOIL DISTURBANCE TO ACCOUNT FOR TEMPORARY AREAS OF SOIL DISTURBANCE DURING CONSTRUCTION

3. DURING EXCAVATION AND UPON RESTORATION OF SURFACE TO EXISTING, CARE FOR POINTS IN EXPOSED AREAS IN PREPARATION OF STORM EVENTS. USE TRASH PUMPS AND TEMPORARY PUMPING TO DENATURE, DIRECT DRAINAGE TO SPECIFIED DRAINAGE LOCATIONS

4. DISTURBED SOILS TO BE STABILIZED PRIOR TO RAIN EVENT AND AT THE COMPLETION OF CONSTRUCTION AS REQUIRED BY SWPPP

5. DEMONSTRATION SHALL COLLECT ONE SAMPLE AT EACH DISCHARGE POINT REPRESENTATIVE OF CONSTRUCTION ACTIVITY, OR A MINIMUM OF TWO (2) SAMPLES WHICH HAVE THE GREATEST VARIATION OF A QUALIFIED STORM EVENT (0.5 INCHES OF RAIN OR MORE)

KEY MAP

SUMMIT
ENGINEERING, INC.
305 W. Chagrin Ave., Suite 201 - Shaker Square, OH 44120
440-455-0725 • www.summit-eng.com

LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 96453
APNS: 007-008-40, 35, 34, 27, 41 & 007-007-01 & 02

HIGHLAND FARMS, LP - PHASE 1B

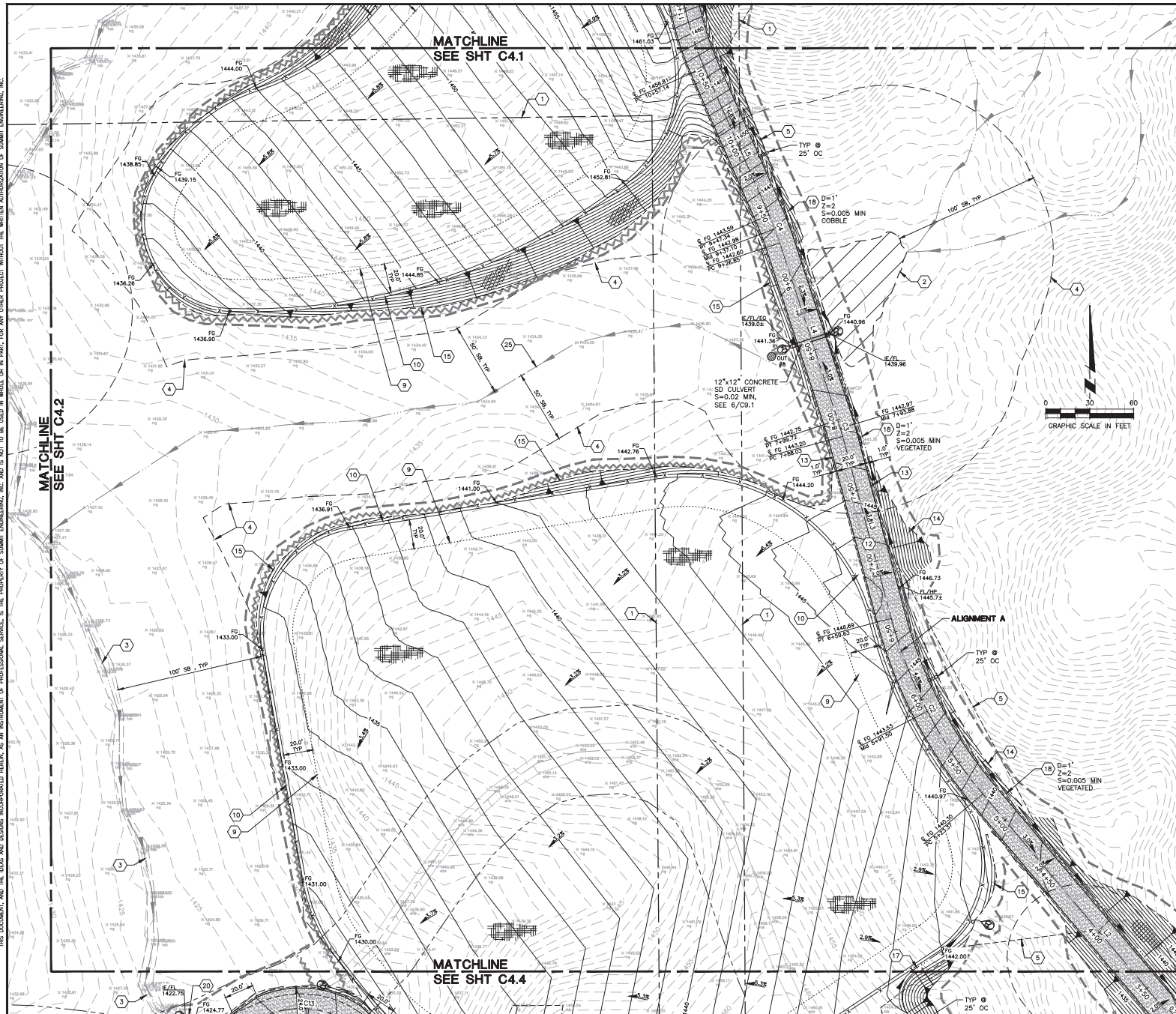
GRADING, DRAINAGE & STORMWATER
MANAGEMENT PLAN

2022-01-11
PERMIT SUBMITTAL
2024-10-11
REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2024-08-29
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET: **C4.2**
OF 19

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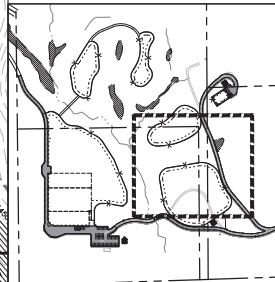
KEY NOTES	
#	DESCRIPTION
1.	APPROXIMATE PROPERTY LINE, TYP
2.	APPROXIMATE LIMITS OF (E) WETLAND, TYP
3.	(E) CREEK, TYP
4.	100' WETLAND SETBACK OR 50' CREEK TOP OF BANK SETBACK, UNO
5.	APPROXIMATE LIMITS OF GROUND TOPOGRAPHY, TYP
6.	(E) WELL & PUMP HOUSE, TYP
7.	(E) DIRT ACCESS ROAD TO REMAIN
8.	APPROXIMATE LIMITS OF FUTURE BUILDING, USP, TYP
9.	APPROXIMATE LIMITS OF FUTURE OUTDOOR CULTIVATION AREA, TYP
10.	FENCING, TYP, COORDINATE WITH OWNER
11.	FUTURE WATER TANK, USP
12.	HATCH REPRESENTS LIMITS OF 12" CL 2 AGG BASE, TO BE CONFORMED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD, OVERCROWDING AND RECOMPACTION PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS
13.	1" WIDE CL 2 AGG BASE SHOULDER
14.	TOP OF CUT, TYP (2:1 UNO)
15.	TOE OF FILL, TYP (2:1 UNO)
16.	CONFORM TO EXISTING
17.	FLOWLINE GRACE TO DRAIN
18.	SWALE, SEE 10/C9.0
19.	CLEANOUT, SEE 10/C9.1
20.	CULVERT WING WALL, SEE /C9.1
21.	CAP & PLUS UTILITY MARK LOCATION FOR FUTURE CONNECTION
22.	SLURRY CEMENT PLUG IN UTILITY TRENCH, TYP, SEE 4/C9.1, SEE UTILITY NOTES ON SHEET C1.1 FOR SPACING AND FREQUENCY
23.	APPROXIMATE LIMITS OF FUTURE PRIMARY DISPOSAL AREA, SEE NOTE 4
24.	APPROXIMATE LIMITS OF FUTURE RESERVE DISPOSAL AREA, SEE NOTES 4 & 5
25.	(E) FLOWLINE

- NOTES:
- SEE SHEET C1.1 FOR UTILITY STRUCTURE TABLE.
 - GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE.
 - SOIL EXCAVATION AND RECOMPACTION SHOULD BE DONE IN THE BUILDING AREAS PER RECOMMENDATION BY A GEOTECHNICAL ENGINEER.
 - SEPTIC SYSTEM SIZING IS DEPENDENT ON THE REVIEW OF THE TEST LOGS & LAND USE DETERMINATION OF ENVIRONMENTAL HEALTH EVALUATION CONDUCTED BY LAKE COUNTY RURAL PLANNING. SEPTIC DISPOSAL AREAS SHOWN ARE ESTIMATED.
 - RESERVE DISPOSAL AREAS DO NOT NEED TO BE CONSTRUCTED, BUT THEY SHOULD BE PROTECTED AND UNDISTURBED IN A SIMILAR FASHION TO THE PRIMARY DISPOSAL AREA.

STORMWATER MANAGEMENT LEGEND

DESCRIPTION	SYMBOL
FIBER ROLL, FOR SPACING FREQUENCY AND INSTALLATION NOTES, SEE 1/C9.0	
CONCRETE WASHOUT, SEE 2/C9.0	
STORM DRAIN INLET PROTECTION, SEE 3/C9.0	
GRAVEL BAG CHECK DAM, SEE 4/C9.0	
RIPRAP ENERGY DISSIPATOR, SEE 5/C9.0	
HATCHING REPRESENTS EROSION CONTROL BLANKET OVER HYDROSEED ON ALL CUT/FILL SLOPES STEEPER THAN 3:1, UNO, SEE 6/C9.0	
HATCHING REPRESENTS HYDROSEED OR STRAW MULCH OVER HYDROSEED DISTURBED AREAS WITH SLOPES OF 3:1 OR LESS, UNO	
SILT FENCE, SEE 7/C9.0	
VEHICLE & EQUIPMENT MANAGEMENT/ FUELING LOCATION	
MATERIAL & WASTE MANAGEMENT, SEE 8/C9.0	
TEMPORARY STOCKPILE LOCATION, SEE 9/C9.0	
BIORETENTION FACILITY, SEE 8/C9.0 (SEE 5/C9.1 FOR BIO #1A)	
SAMPLING LOCATION	
LIMITS OF CONSTRUCTION/ DISTURBANCE	

- * REMOVE UPON COMPLETION OF CONSTRUCTION
- STORMWATER MANAGEMENT NOTES:
- SOIL WILL BE DISTURBED (BOTH CUT AND FILL) WITHIN THE LIMITS OF CONSTRUCTION.
 - ACTIVE AREAS OF SOIL DISTURBANCE WILL OCCUR WITHIN THE LIMITS OF CONSTRUCTION/DISTURBANCE. THESE LIMITS ARE SET TO OUTLINE OF PERMANENT AREAS OF SOIL DISTURBANCE TO ACCOUNT FOR TEMPORARY AREAS OF SOIL DISTURBANCE DURING CONSTRUCTION.
 - DURING OVER EXCAVATION AND UPON RESTORATION OF SURFACE TO EXISTING, CARE FOR POINTS IN DISTURBED AREAS IN PREPARATION OF STORM EVENTS. USE TRASH PUMPS AND TEMPORARY DRAINAGE TO DRAINAGE, DIRECT DRAINAGE TO SPECIFIED DRAINAGE LOCATIONS.
 - DISTURBED SOILS TO BE STABILIZED PRIOR TO RAIN EVENT AND AT THE COMPLETION OF CONSTRUCTION AS REQUIRED BY SWPPP.
 - ENGINEER SHALL COLLECT ONE SWAMP #1 ENDORSEMENT POINT REPRESENTATIVE OF CONSTRUCTION ACTIVITY, OR A MINIMUM OF TWO (2) SAMPLES WHICH EVER IS GREATER, ONE DAY OF A QUALIFIED STORM EVENT (0.5 INCHES OF RAIN OR MORE).



KEY MAP



LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 96463
APNS: 007-008-40, 35, 34, 27, 41 & 007-007-01 & 02

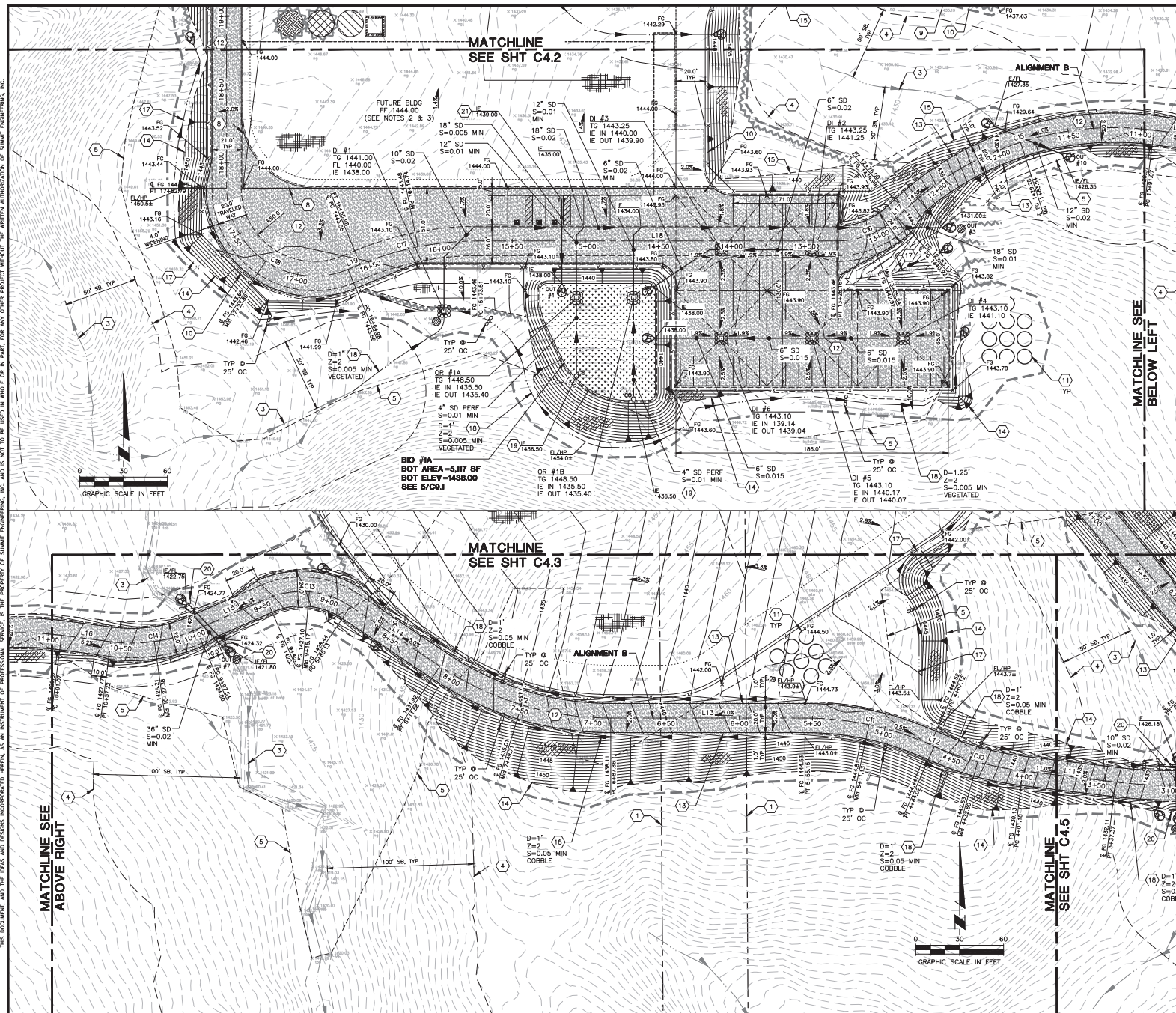
HIGHLAND FARMS, LP - PHASE 1B
GRADING, DRAINAGE & STORMWATER
MANAGEMENT PLAN

2022-01-11
PERMIT SUBMITTAL
2024-10-11
REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2024-08-29
JOB NO: 2021038
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CHECKED: JG
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KEY NOTES

1. APPROXIMATE PROPERTY LINE, TYP

2. APPROXIMATE SETBACK OF (E) WETLAND, TYP

3. (E) CREEK, TYP

4. 100' WETLAND SETBACK OR 50' CREEK TOP OF BANK SETBACK, UNO

5. APPROXIMATE LIMITS OF FUTURE BUILDING, USP, TYP

6. (E) WELL & PUMP HOUSE, PP

7. (E) DIRT ACCESS ROAD TO REMAIN

8. APPROXIMATE LIMITS OF FUTURE OUTDOOR CULTIVATION AREA, TYP

9. FENCING, TYP, COORDINATE WITH OWNER

10. FUTURE WATER MAIN, TYP

11. HATCH REPRESENTS LIMITS OF 12" CL 2 AGG BASE, TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD, OVERSIGHT AND RECOMPACTION PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS

12. 1" WIDE CL 2 AGG BASE SHOULDER

13. TOP OF CUT, TYP (2:1 UNO)

14. TOE OF FILL, TYP (2:1 UNO)

15. CONFORM TO EXISTING

16. FLOWLINE GRADE TO DRAIN

17. SLOPE, SEE 10%/0.9

18. CULVERT WING WALL, SEE C/9.1

19. CIP & PLUS UTILITY MARK LOCATION FOR FUTURE CONNECTION

20. SLURRY CEMENT PLUG IN UTILITY TRENCH, TYP, SEE 4/C3.1, SEE UTILITY NOTES ON SHEET C1.1 FOR SPACING AND FREQUENCY

21. APPROXIMATE LIMITS OF FUTURE PRIMARY DISPOSAL AREA, SEE NOTE 4

22. APPROXIMATE LIMITS OF FUTURE RESERVE DISPOSAL AREA, SEE NOTES 4 & 5

23. (E) FLOWLINE

STORMWATER MANAGEMENT LEGEND

DESCRIPTION	SYMBOL
FIBER ROLL FOR SPACING FREQUENCY AND INSTALLATION NOTES, SEE 1/C3.0.1	[Symbol]
CONCRETE WASHOUT, SEE 2/C3.0.1	[Symbol]
STORM DRAIN INLET PROTECTION, SEE 3/C3.0.1	[Symbol]
GRANUL BAG CHECK DAM, SEE 4/C3.0.1	[Symbol]
RIPRAP ENERGY DISSIPATOR, SEE 5/C3.0.1	[Symbol]
HATCHING REPRESENTS EROSION CONTROL BLANKET OVER HYDROSEED ON ALL CUT/FILL SLOPES STEEPER THAN 3:1 OR LESS, UNO	[Symbol]
HATCHING REPRESENTS HYDROSEED OR STRAW MULCH OVER HYDROSEED DISTURBED AREAS WITH SLOPES OF 3:1 OR LESS, UNO	[Symbol]
SILT FENCE, SEE 7/C3.0.1	[Symbol]
VEHICLE & EQUIPMENT MANAGEMENT/ FUELING LOCATION	[Symbol]
MATERIAL & WASTE MANAGEMENT, SEE 8/C3.0.1	[Symbol]
TEMPORARY STOCKPILE LOCATION, SEE 9/C3.0.1	[Symbol]
BIORETENTION FACILITY, SEE 10/C3.0.1 (SEE 5/C3.0.1 FOR BIO #1A)	[Symbol]
SAMPLING LOCATION	[Symbol]
LIMITS OF CONSTRUCTION/ DISTURBANCE	[Symbol]

REMOVE UPON COMPLETION OF CONSTRUCTION

STORMWATER MANAGEMENT NOTES:

1. SOIL WILL BE DISTURBED (BOTH CUT AND FILL) WITHIN THE LIMITS OF CONSTRUCTION

2. ACTIVE AREAS OF SOIL DISTURBANCE WILL OCCUR WITHIN THE LIMITS OF CONSTRUCTION/DISTURBANCE. THESE LIMITS ARE SET BY OUTLINE OF PERMANENT AREAS OF SOIL DISTURBANCE TO ACCOUNT FOR TEMPORARY AREAS OF SOIL DISTURBANCE DURING CONSTRUCTION

3. DURING EXCAVATION AND UPON RESTORATION OF SURFACE TO EXISTING GRADE, FILL POINTS IN DISTURBED AREAS IN PREPARATION OF STORM DRAINAGE, USE TRASH PUMPS AND TEMPORARY DRAINAGE TO DRAINAGE, SURFACES DISPERSE TO SPOILED SPECIFIED LOCATIONS

4. DISTURBED SOILS TO BE STABILIZED PRIOR TO RAIN EVENT AND AT THE COMPLETION OF CONSTRUCTION AS REQUIRED BY DPT

5. DISCHARGE POINT SHALL COLLECT ONE SAMPLE AT EACH DISCHARGE POINT REPRESENTATIVE OF CONSTRUCTION ACTIVITY, OR A MINIMUM OF TWO (2) SAMPLES, WHICH ARE 5' GREATER, MINIMUM, DAY OF A QUALIFIED STORM EVENT (0.5 INCHES OF RAIN OR MORE)

KEY MAP

SUMMIT
Summit Engineering, Inc.
255 W. Chagrin Ave., Suite 201 - Shaker Square, OH 44120
216.492.4252 - www.summit-eng.com

LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 95453
APNS: 007-006-40, 35, 34, 27, 41 & 007-057-01 & 02

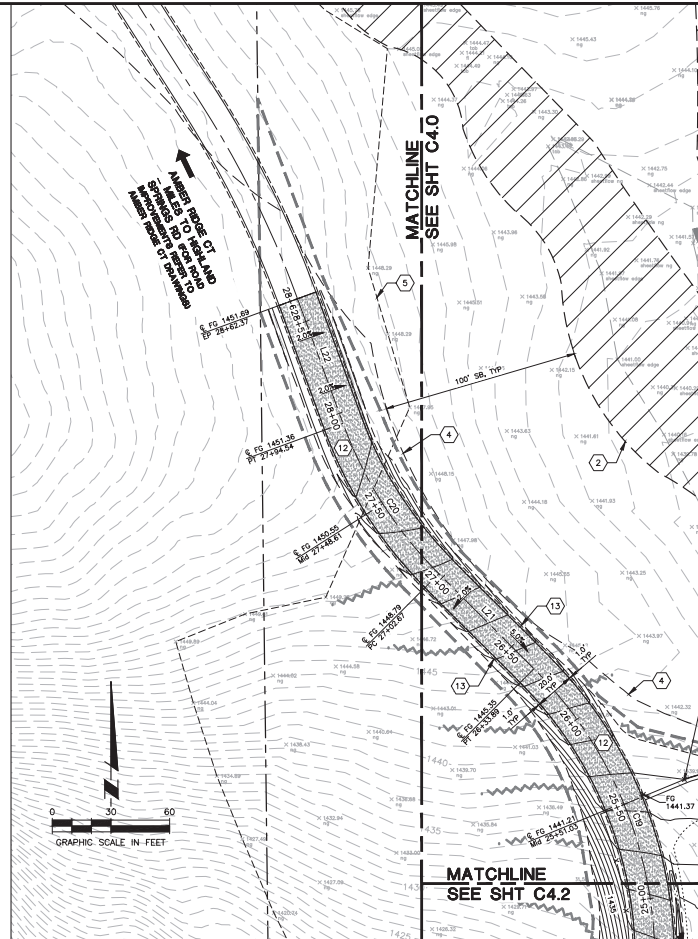
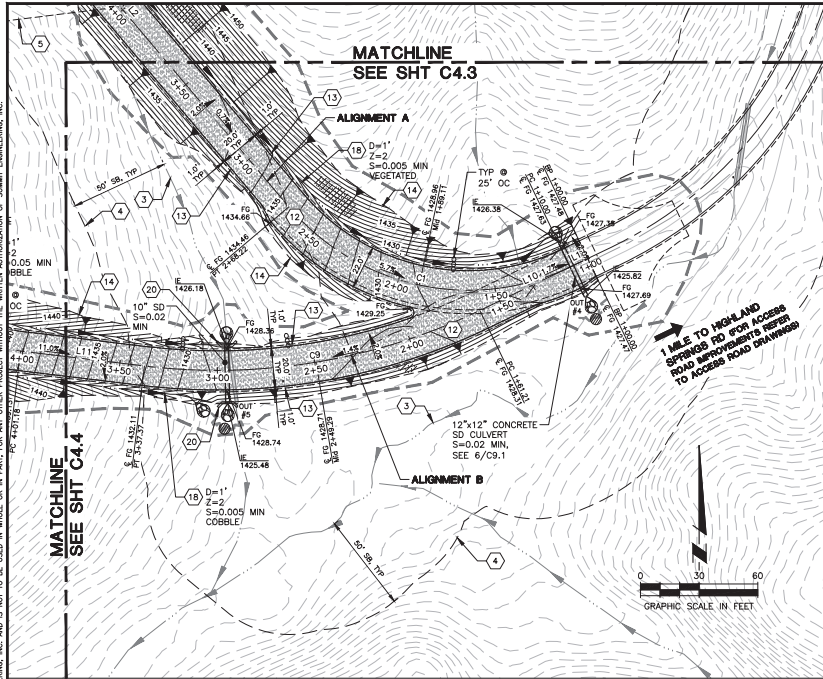
HIGHLAND FARMS, LP - PHASE 1B

GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2024-08-29
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET: **C4.4**
10 OF 19

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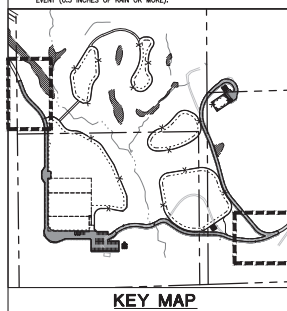


DESCRIPTION
1. APPROXIMATE PROPERTY LINE, TYP
2. APPROXIMATE LIMITS OF (E) WETLAND, TYP
3. (E) CREEK, TYP
4. 100' WETLAND SETBACK OR 50' CREEK TOP OF BANK SETBACK, UNO
5. APPROXIMATE LIMITS OF GROUND TOPOGRAPHY, TYP
6. (E) WELL & PUMP HOUSE, TYP
7. (E) DIRT ACCESS ROAD TO REMAIN
8. APPROXIMATE LIMITS OF FUTURE BUILDING, USP, TYP
9. APPROXIMATE LIMITS OF FUTURE OUTDOOR CULTIVATION AREA, TYP
10. FENCING, TYP, COORDINATE WITH OWNER
11. FUTURE WATER TANK, UNO
12. MATCH REPRESENTS LIMITS OF 12" CL 2 AGG BASE, TO BE CONFIRMED BY GEOTECHNICAL ENGINEER DURING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD, OVERSIGHT AND RECOMPACTION PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS
13. 1" WIDE CL 2 AGG BASE SHOULDER
14. TOP OF CUT, TYP (2:1 UNO)
15. TIDE OF FILL, TYP (2:1 UNO)
16. CONFORM TO EXISTING
17. FLOWLINE GRACE TO DRAIN
18. SWALE, SEE 10/C9.0
19. CLEANSUIT, SEE 1/C9.1
20. CULVERT WING WALL, SEE /C9.1
21. CARP & PLUS UTILITY MARK LOCATION FOR FUTURE CONNECTION
22. SLURRY CEMENT FILL IN UTILITY TRENCH, TYP, SEE 4/C9.1, SEE UTILITY NOTES ON SHEET C1.1 FOR SPACING AND FREQUENCY
23. APPROXIMATE LIMITS OF FUTURE PRIMARY DISPOSAL AREA, SEE NOTE 4
24. APPROXIMATE LIMITS OF FUTURE RESERVE DISPOSAL AREA, SEE NOTES 4 & 5
25. (E) FLOWLINE

- NOTES:**
1. SHEET C1.1 FOR UTILITY STRUCTURE TABLE.
 2. GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE.
 3. SEPTIC SYSTEM SIZING IS DEPENDENT ON THE REVIEW OF THE TEST LOGS BY LAKE COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH EVALUATION CONDUCTED BY LAKE COUNTY TAKES PLACE. SEPTIC EVALUATION AREAS TO BE CONFIRMED UNTIL THE SOIL EVALUATION AREAS ARE ESTIMATED.
 4. RESERVE DISPOSAL AREAS DO NOT NEED TO BE CONSTRUCTED, BUT THEY SHOULD BE PROTECTED AND UNDISTURBED IN A SIMILAR FASHION TO THE FUTURE DISPOSAL AREA.

DESCRIPTION	SYMBOL
FIBER ROLL, FOR SPACING FREQUENCY AND INSTALLATION NOTES, SEE 1/C9.0*	
CONCRETE WASHOUT, SEE 2/C9.0*	
STORM DRAIN INLET PROTECTION, SEE 3/C9.0*	
GRAVEL BAG CHECK DAM, SEE 4/C9.0*	
RIPRAP ENERGY DISSIPATOR, SEE 5/C9.0	
HATCHING REPRESENTS EROSION CONTROL BLANKET OVER HYDROSEED ON ALL CUT/FILL SLOPES STEEPER THAN 3:1, UNO, SEE 6/C9.0	
HATCHING REPRESENTS HYDROSEED OR STRAW MULCH OVER HYDROSEED DISTURBED AREAS WITH SLOPES OF 3:1 OR LESS, UNO	
SILT FENCE, SEE 7/C9.0*	
VEHICLE & EQUIPMENT MANAGEMENT/ FUELING LOCATION	
MATERIAL & WASTE MANAGEMENT, SEE 8/C9.0*	
TEMPORARY STOCKPILE LOCATION, SEE 9/C9.0*	
BIORETENTION FACILITY, SEE 9/C9.0 (SEE 5/C9.1 FOR BIO #1A)	
SAMPLING LOCATION	
LIMITS OF CONSTRUCTION/ DISTURBANCE	

- * REMOVE UPON COMPLETION OF CONSTRUCTION**
- STORMWATER MANAGEMENT NOTES:**
1. SOIL WILL BE DISTURBED (BOTH CUT AND FILL) WITHIN THE LIMITS OF CONSTRUCTION.
 2. ACTIVE AREAS OF SOIL DISTURBANCE WILL OCCUR WITHIN THE LIMITS OF CONSTRUCTION/DISTURBANCE. THESE LIMITS ARE SET BY OUTLINE OF PERMANENT AREAS OF SOIL DISTURBANCE TO ACCOUNT FOR TEMPORARY AREAS OF SOIL DISTURBANCE DURING CONSTRUCTION.
 3. DURING OVER EXCAVATION AND UPON RESTORATION OF SURFACE TO EXISTING, BARE LOW POINTS IN EXPOSED AREAS IN PREPARATION OF STORM EVENTS, USE TRASH PUMPS AND TEMPORARY PUMPS TO DEMONSTRATE, DIRECT DISCHARGE TO SPECIFIED DISCHARGE LOCATIONS.
 4. DISTURBED SOILS TO BE STABILIZED PRIOR TO RAIN EVENT AND AT THE COMPLETION OF CONSTRUCTION AS REQUIRED BY SWPPP.
 5. DISCHARGES SHALL COLLECT ONE SAMPLE AT EACH DISCHARGE POINT REPRESENTATIVE OF CONSTRUCTION ACTIVITY, OR A MINIMUM OF TWO (2) SAMPLES WHICH EVER IS GREATER, EACH DAY OF A QUALIFIED STORM EVENT (0.5 INCHES OF RAIN OR MORE).



SUMMIT
Summit Engineering, Inc.
305 W. College Ave., Suite 201 - Shasta County, CA 96041
916-455-4975 • www.summit-eng.com

LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 96453
APNS: 007-008-40, 35, 34, 27, 41 & 007-007-01 & 02

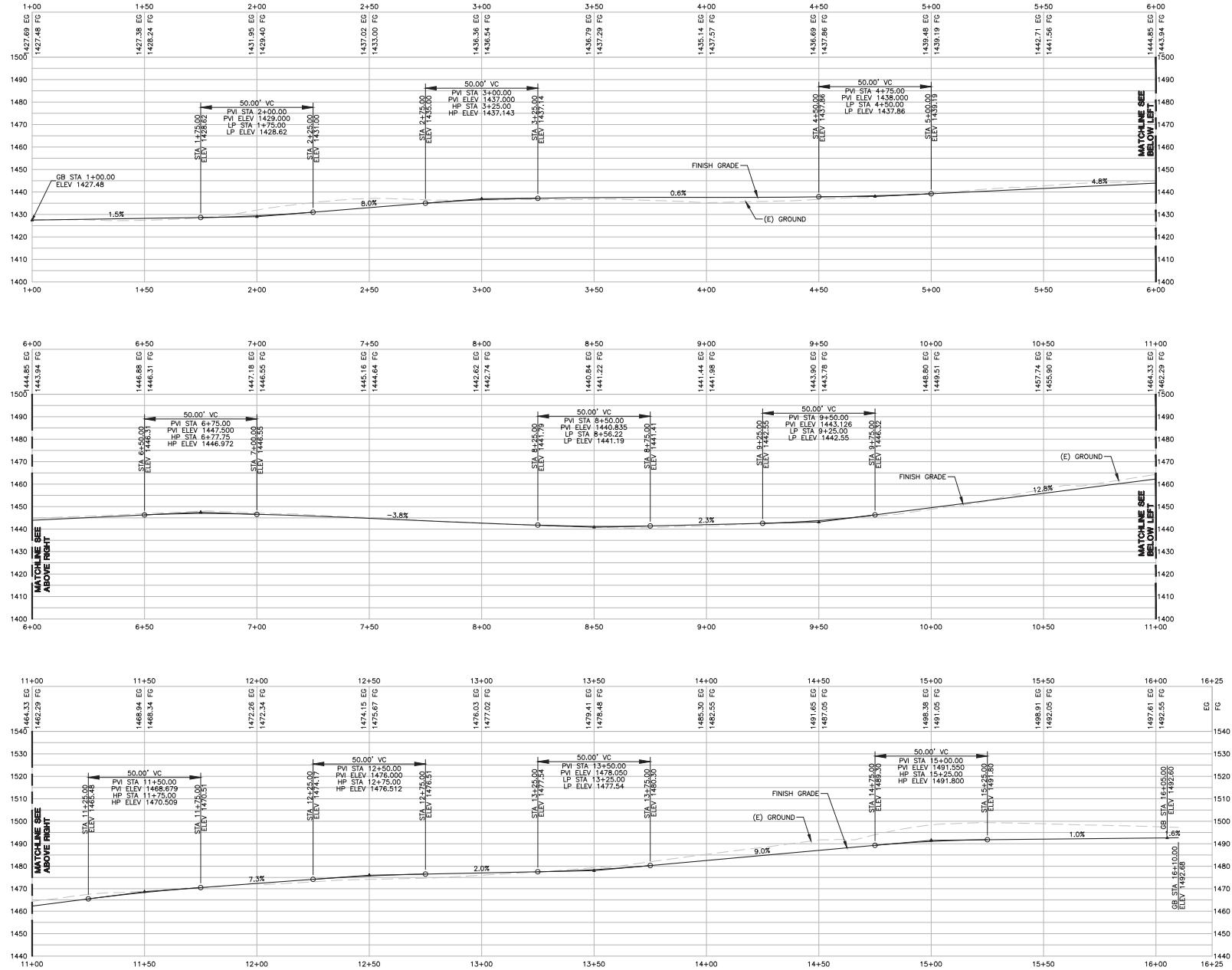
HIGHLAND FARMS, LP - PHASE 1B

GRADING, DRAINAGE & STORMWATER
MANAGEMENT PLAN

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2024-08-29
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET: **C4.5**
11/07/19

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PROFILES - ALIGNMENT A
SCALE: 1"=20' HORIZ
1"=20' VERT

P:\2021\2021038 LAKE COUNTY CULTIVATION\CAD\CIVIL\HIGHLAND FARMS\PHASE 1B\21038-HF-C7.0-C7.1-PROFILES.DWG

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LAKE COUNTY DEVELOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 96453
APNS: 007-008-40, 35, 34, 27, 41 & 007-087-01 & 02

HIGHLAND FARMS, LP - PHASE 1B
PROFILES - ALIGNMENT A

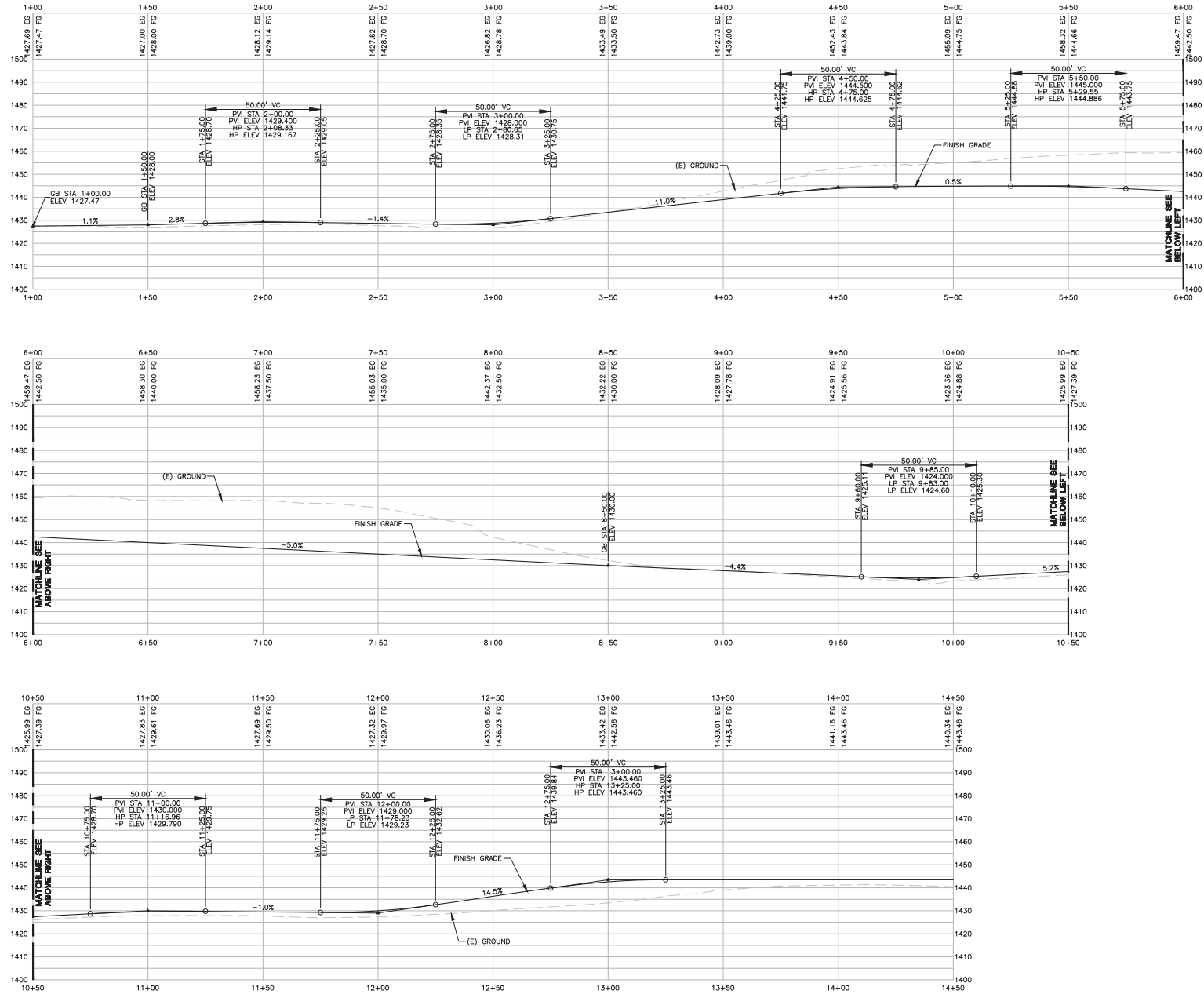
2022-01-11
PERMIT SUBMITTAL
2024-10-11
REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2021-07-23
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET

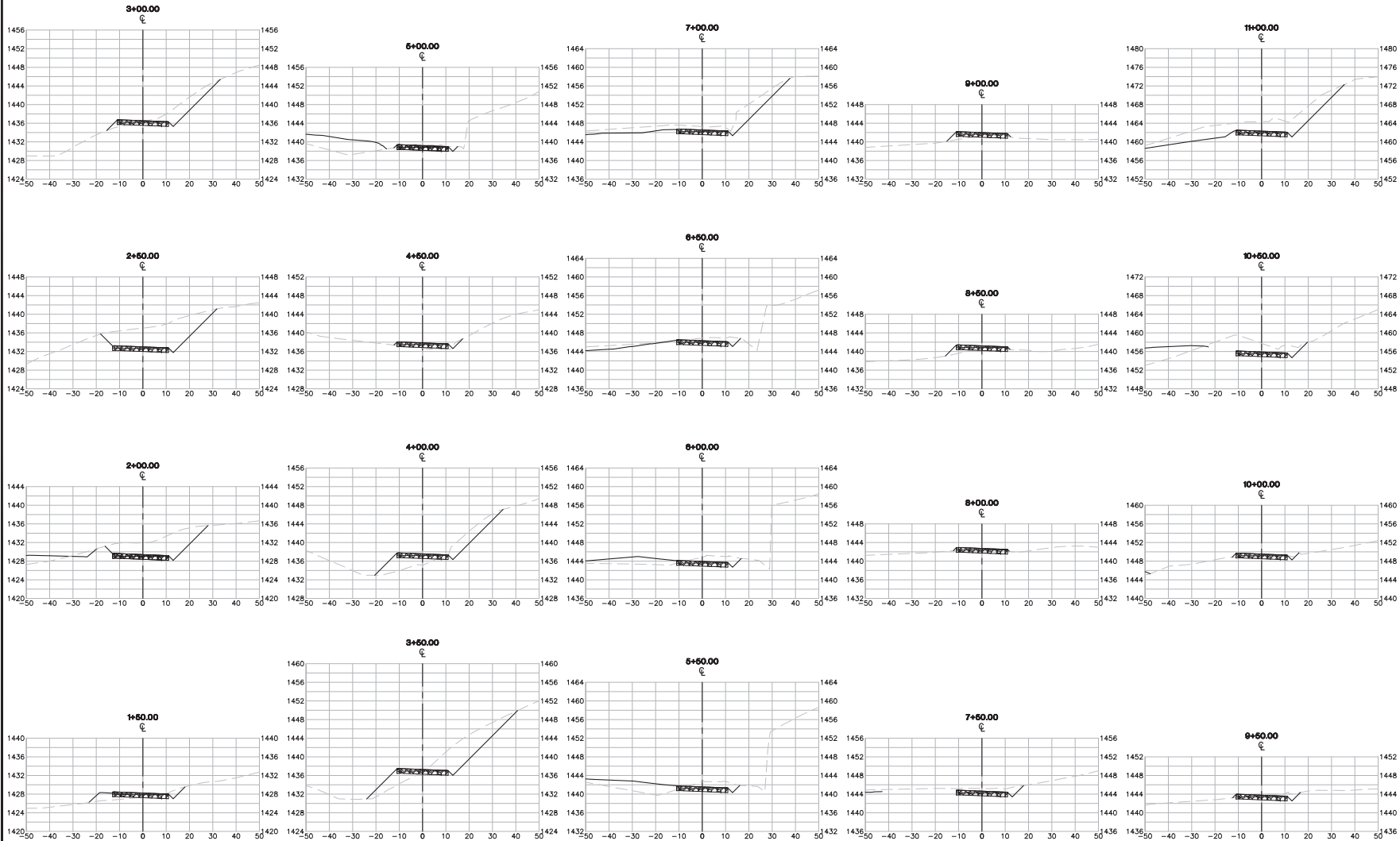
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12 OF 19

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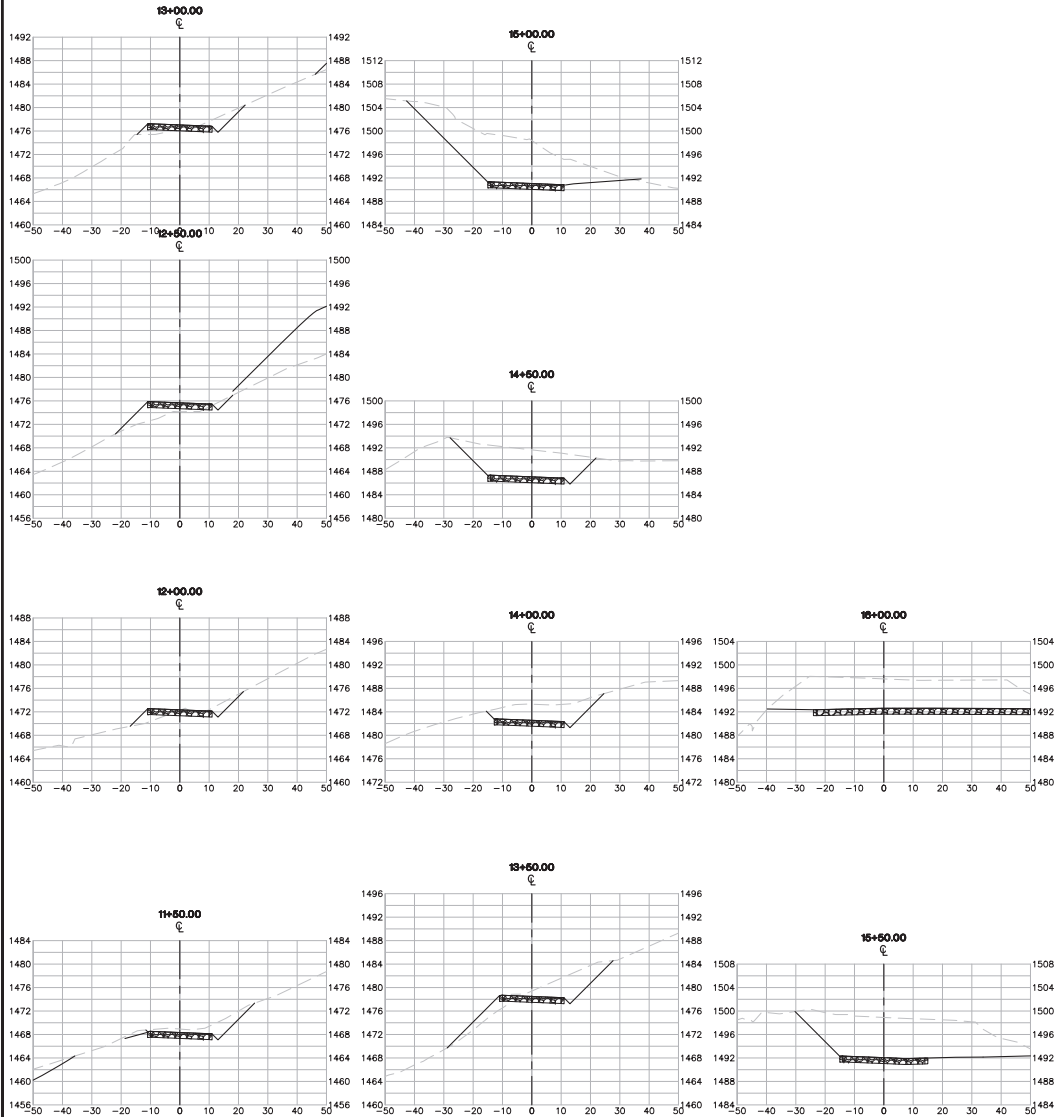
PROFILES - ALIGNMENT B
SCALE: 1"=20' HORIZ
1"=20' VERT

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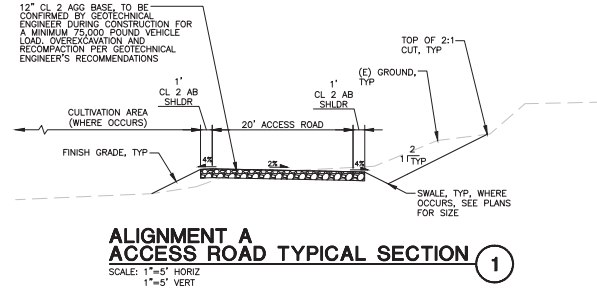


CROSS SECTIONS - ALIGNMENT A
SCALE: 1"=20' HORIZ
1"=10' VERT

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CROSS SECTIONS - ALIGNMENT A
SCALE: 1"=20' HORIZ
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LAKE COUNTY DEVELOPEMENT CO.
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LAKEPORT, CA 96453
APNS: 007-008-40, 35, 34, 27, 41 & 007-067-01 & 02

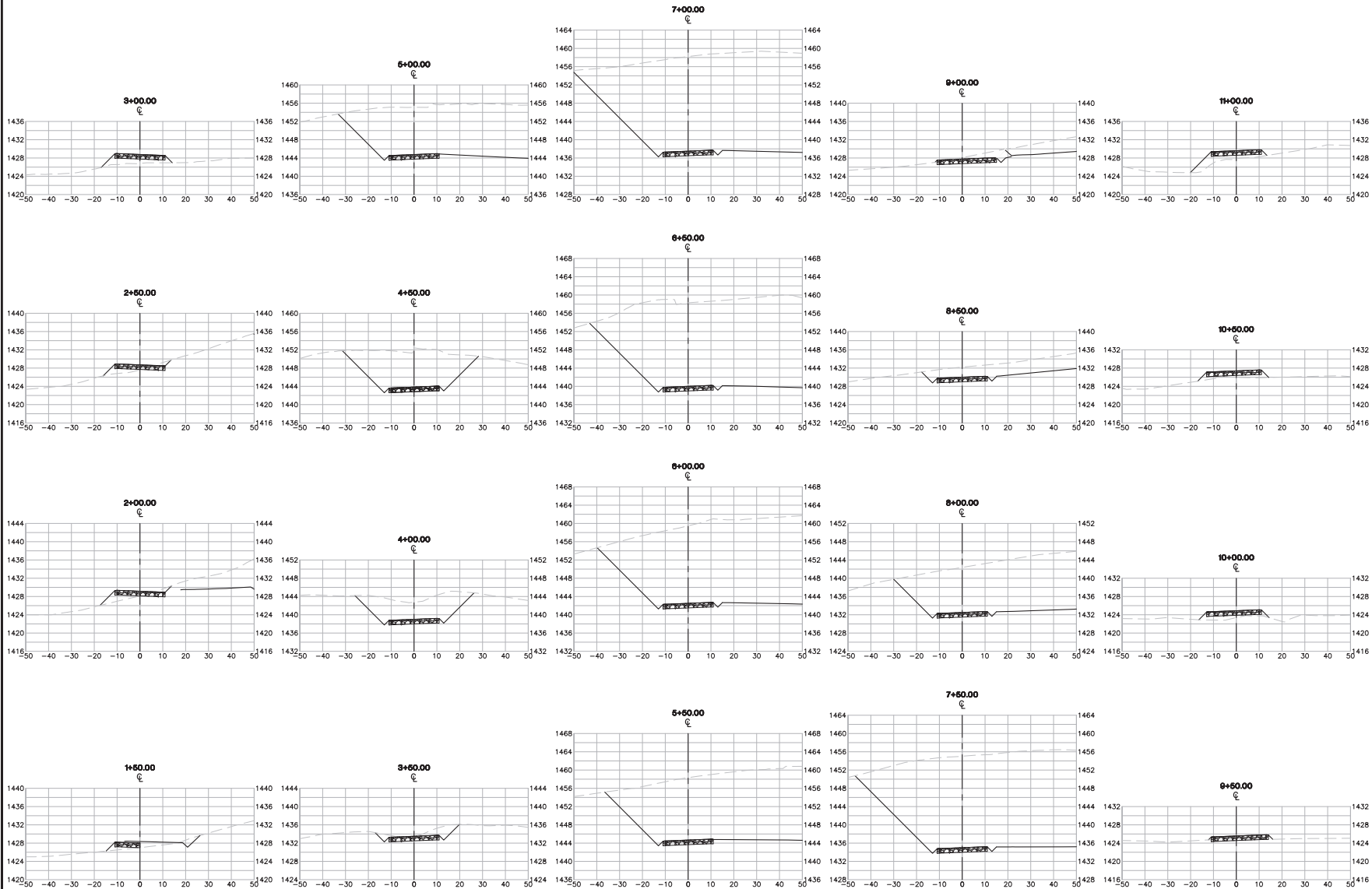
HIGHLAND FARMS, LP - PHASE 1B
SECTIONS - ALIGNMENT A

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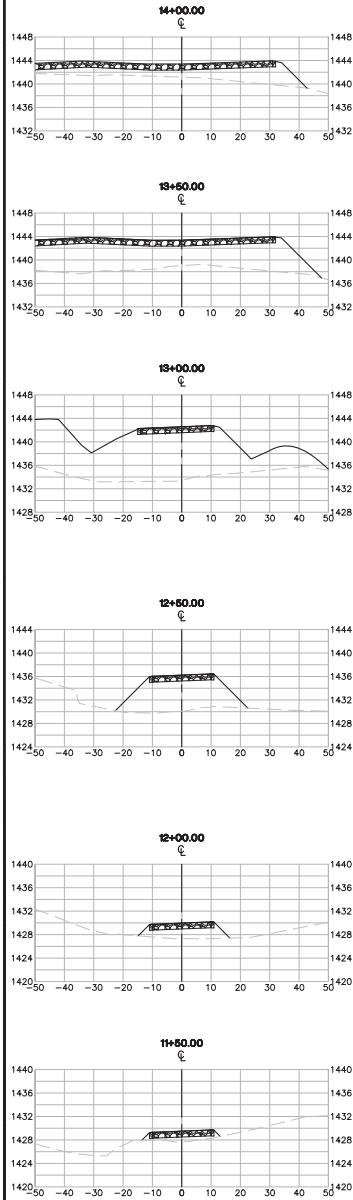
DATE: 2021-07-20
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C8.1
13 OF 19

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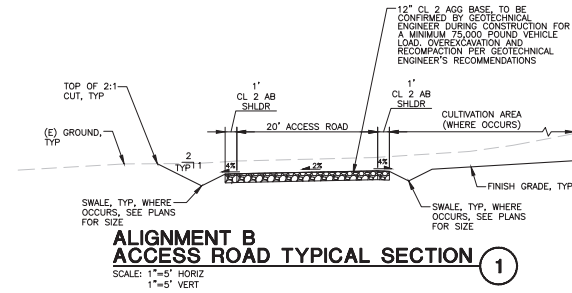


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LAKE COUNTY DEVELOPMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 96453

APNS: 007-008-40, 35, 34, 27, 41 & 007-067-01 & 02

HIGHLAND FARMS, LP - PHASE 1B

SECTIONS - ALIGNMENT B

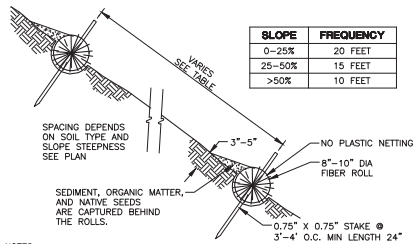
2022-01-11
PERMIT SUBMITTAL
2024-10-11
REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2021-07-20
JOB NO: 2021038
SCALE: AS SHOWN
DRAWN: TAF
CHECKED: JG
SHEET

C8.3
17 OF 19

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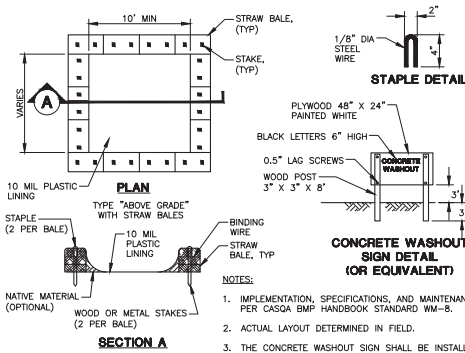


- NOTES:
1. IMPLEMENTATION, SPECIFICATIONS, AND MAINTENANCE PER CASQA BMP HANDBOOK STANDARD SE-5.
 2. FIBER ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH. TRENCH DEPTH SHOULD BE 1/4 TO 1/3 OF THE THICKNESS OF THE ROLL, AND THE WIDTH SHOULD EQUAL THE ROLL DIAMETER, IN ORDER TO PROVIDE AREA TO BACKFILL THE TRENCH. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL.
 3. ENDS OF ADJACENT ROLLS SHALL OVERLAP 1' MINIMUM.
 4. FIBER ROLLS MUST BE PLACED ALONG SLOPE CONTOURS.
 5. EXPOSED SLOPES SHALL HAVE FIBER ROLLS INSTALLED ALONG THE TOE OF SLOPE, AT GRADE BREAKS, AND IN ACCORDANCE WITH THE TABLE ABOVE.
 6. FIBER ROLLS SHALL NOT BE PLACED ALONG THE TOP OF CUT SLOPES UPHILL OF THE GRADE BREAK.

FIBER ROLL

ER013

1



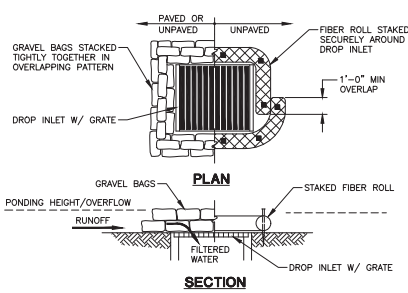
CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)

- NOTES:
1. IMPLEMENTATION, SPECIFICATIONS, AND MAINTENANCE PER CASQA BMP HANDBOOK STANDARD WM-8.
 2. ACTUAL LAYOUT DETERMINED IN FIELD.
 3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FT OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
 4. TIGHTLY STACKED GRAVEL BAGS CAN BE SUBSTITUTED FOR STRAW BALES.

CONCRETE WASHOUT

ER019

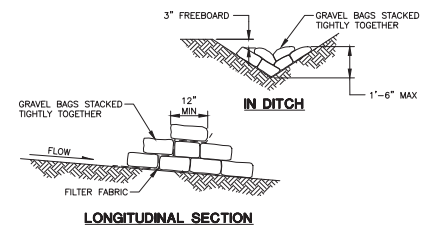
2



DROP INLET FIBER ROLL/ GRAVEL BAG FILTER

ER023

3

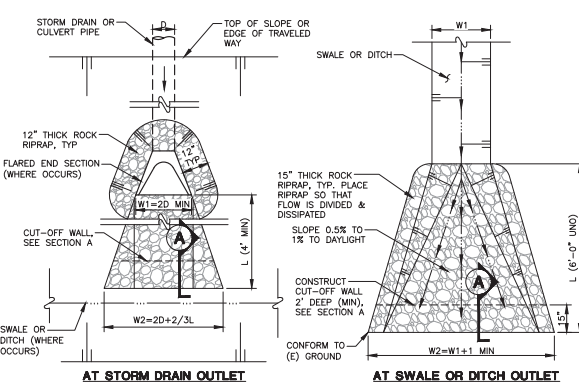


GRAVEL BAG CHECK DAM

ER024

4

- NOTES:
1. IMPLEMENTATION, SPECIFICATIONS AND MAINTENANCE PER CASQA BMP HANDBOOK STANDARD SE-4.
 2. EACH GRAVEL-FILLED BAG SHOULD HAVE A LENGTH OF 18 IN., WIDTH OF 12IN., THICKNESS OF 3 IN., AND MASS OF APPROXIMATELY 33 LBS. BAG DIMENSIONS ARE NOMINAL, AND MAY VARY BASED ON LOCALLY AVAILABLE MATERIALS.
 3. BAGS SHOULD BE WOVEN POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE FABRIC OR BURLAP, MINIMUM UNIT WEIGHT OF 4 OUNCES/YD², MULLEN BURST STRENGTH EXCEEDING 300 LB/HP IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D3786, AND ULTRAVIOLET STABILITY EXCEEDING 70% IN CONFORMANCE WITH THE REQUIREMENTS IN ASTM DESIGNATION D4355.
 4. FILL MATERIAL SHOULD BE NON-COHESIVE, CLASS 3 (CALTRANS STANDARD SPECIFICATION, SECTION 25) OR SIMILAR PERMEABLE MATERIAL FREE FROM CLAY AND DELETERIOUS MATERIAL, SUCH AS RECYCLED CONCRETE OR ASPHALT.



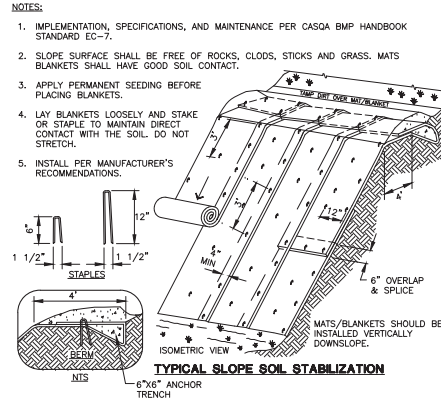
RIPRAP ENERGY DISSIPATOR

ER002

5

OUTLET TABLE			
OUT #	L	TH	ROCK SIZE
1	6'	1.5'	No. 3
2	6'	1.5'	No. 3
3	6'	1.5'	No. 3
4	6'	1.5'	No. 3
5	6'	1.5'	No. 3
6	9'	2.6'	Light
7	12'	3.7'	Half Ton
8	6'	1.5'	No. 3
9	6'	1.5'	No. 3
10	6'	1.5'	No. 3

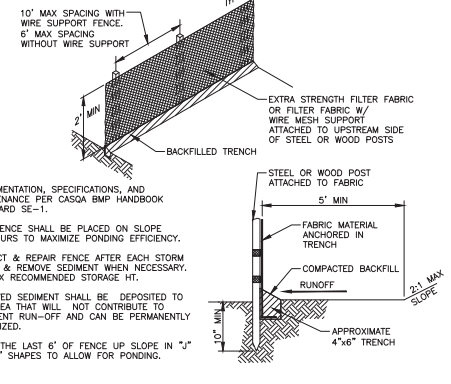
SECTION A



EROSION CONTROL MAT INSTALLATION

ER015B

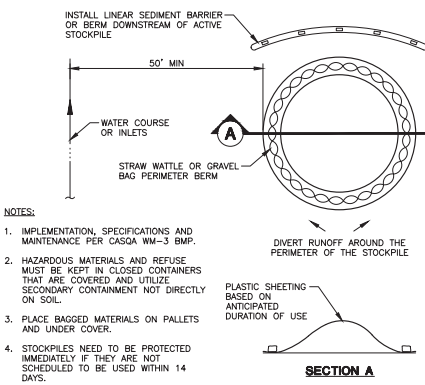
6



SILT FENCE

ER002

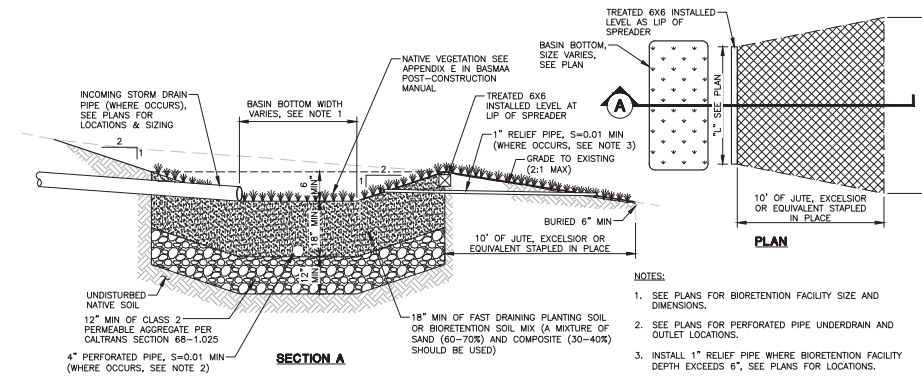
7



STOCKPILE BMP

ER025

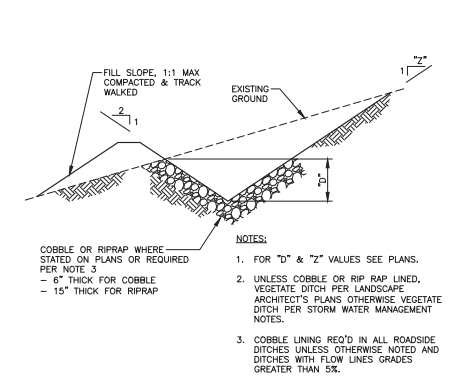
8



BIORETENTION FACILITY W/LEVEL SPREADER OUTLET

ER025

9

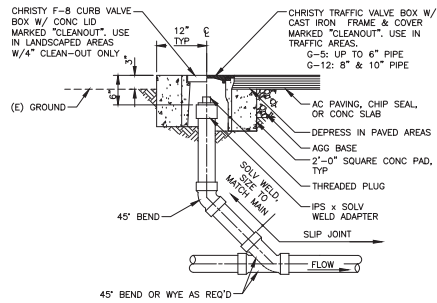


V-DITCH TYPICAL SECTION

ER005

10

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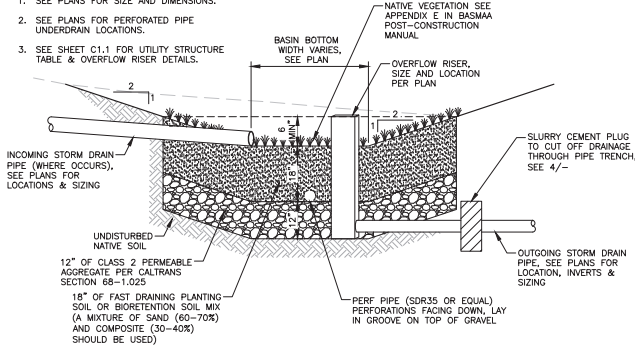


**GRAVITY CLEANOUT
TYPE 'A'**

NTS UG006A 1

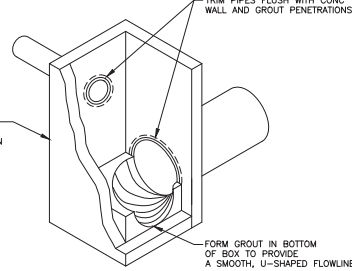
NOTES:

1. SEE PLANS FOR SIZE AND DIMENSIONS.
2. SEE PLANS FOR PERFORATED PIPE UNDERDRAIN LOCATIONS.
3. SEE SHEET C1.1 FOR UTILITY STRUCTURE TABLE & OVERFLOW RISER DETAILS.



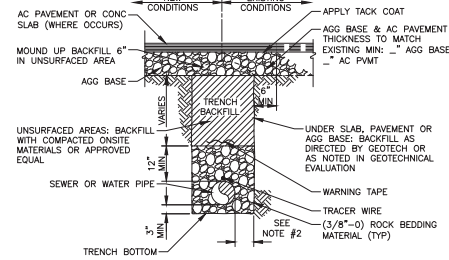
**BIORETENTION FACILITY
W/OVERFLOW RISER OUTLET (BIO #1A)**

NTS 5



**GROUTING FOR
DRAINAGE STRUCTURE**

NTS DR020 2

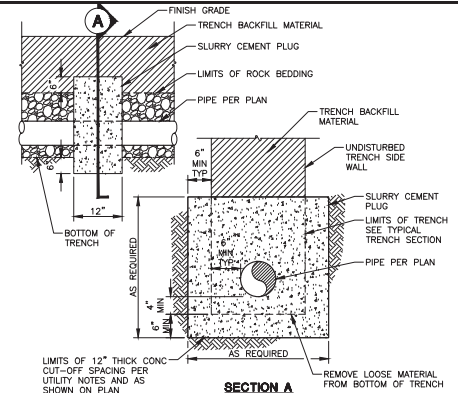


**TYPICAL UTILITY PIPE
TRENCH SECTION**

NTS UG001B 3

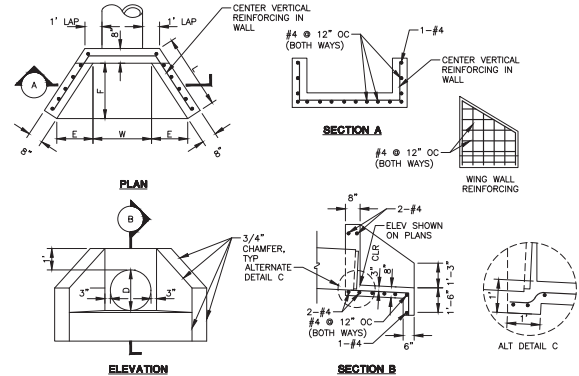
NOTES:

1. WHEN TRENCH BOTTOM IS UNSTABLE, OVER EXCAVATE AND INSTALL ADDITIONAL BEDDING MATERIAL AS INDICATED IN SPECS.
2. PIPE DIAMETER 18" OR LESS: 6" MIN, 9" MAX.
PIPE DIAMETER GREATER THAN 18": 9" MIN, 12" MAX.
3. WITH MULTIPLE PIPES, PROVIDE 3" MIN HORIZONTAL SEPARATION



**SECTION A
SLURRY CEMENT PLUG**

NTS UG004 4



PLAN

ELEVATION

SECTION B

DIA OF PIPE	DIMENSIONS			SINGLE PIPE				DOUBLE PIPE			
	L	E	F	W	U TYPE		WING TYPE	U TYPE		WING TYPE	
					CONC. (CY)	STEEL (LBS)		CONC. (CY)	STEEL (LBS)		
18"	2'-3 1/8"	1'-3"	1'-10 1/2"	2'	0.55	35	0.63	43	0.82	53	0.90
24"	3'-1 7/8"	1'-9"	2'-7 1/2"	2'-6"	0.79	47	0.93	60	1.22	73	1.36
30"	4'-5/8"	2'-3"	3'-4 1/2"	3'	1.05	71	1.29	85	1.66	109	1.92
36"	4'-11 1/2"	2'-9"	4'-1 1/2"	3'-6"	1.33	88	1.69	114	2.19	136	2.55

NOTES:

1. CONCRETE SHALL BE 560-C-3250.
2. EXPOSED CORNERS TO BE 3/4" CHAMFERED.
3. MULTIPLE PIPES TO BE SET A DISTANCE OF D/2, WITH A 1" MINIMUM BETWEEN OUTSIDE DIAMETERS OF PIPES.
4. TOP OF HEADWALL SHALL BE PLACED APPROXIMATELY PARALLEL TO PROFILE GRADE WHEN THE GRADE IS 3% OR MORE.
5. SKEWED PIPES: DIMENSION W TO BE INCREASED IN WIDTH OR LENGTH DUE TO SKEW OR MULTIPLE PIPES.
6. FOR PIPE WALL THICKNESS GREATER THAN 3" USE ALTERNATE DETAIL C

WING HEADWALL

NTS 7