HIGHLAND FARMS, LP - PHASE 1A

FOR

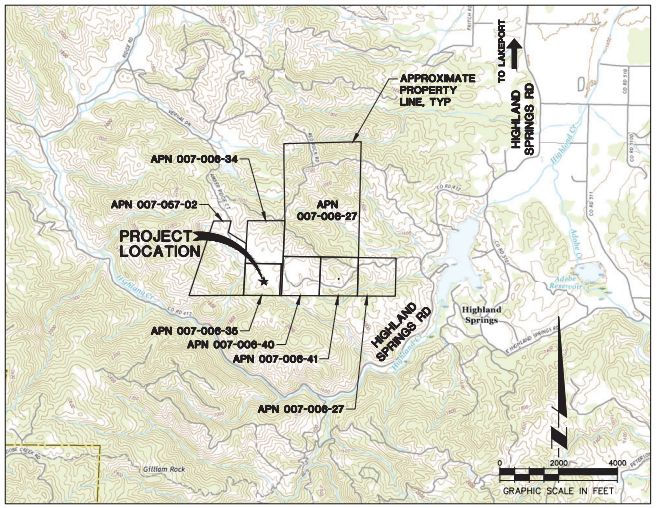
LAKE COUNTY DEVEOPEMENT CO.

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
SANTA ROSA, CALIFORNIA
(707) 527-0775

CONSER LAND SURVEYING
SURVEYOR
LAKEPORT, CALIFORNIA
(707) 263-5512



LOCATION MAP

LIST OF DRAWINGS

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 STATES AS: NORTH 00°41'36" WEST BETWEEN TWO BRASS CAP MONUMENTS ON THE WEST LINE OF SEC. 25, 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:	22.0 ACRES
CUT VOLUME:	96,790 CU. YDS.
FILL VOLUME:	29,540 CU. YDS.
NET VOLUME:	40,250 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

SUMMIT
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TITLE SHEET

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	C1.0
	1OF 13

ABBREVIATIONS

<	ANGLE	MAX	MAXIMUM
A.D.	ALGEBRAIC DIFFERENCE	MEG	MATCH EXISTING GRADE
℄	CENTERLINE	MFR	MANUFACTURER
ø	DIAMETER	MG	MILLION GALLON
℄	FLOWLINE	MH	MANHOLE
ℙ	PROPERTY LINE/ PLATE	MHWL	MAXIMUM HIGH WATER LINE
AB	AGGREGATE BASE	MIN	MINIMUM
AC	ASPHALT CONCRETE	MISC	MISCELLANEOUS
ACP	ASBESTOS CEMENT PIPE	MJ	MECHANICAL JOINT
AD	AREA DRAIN	(N)	NEW
ADDL	ADDITIONAL	N	NORTH
AFF	ABOVE FINISHED FLOOR	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
AGG	AGGREGATE		
AH	AHEAD	NIC	NOT IN CONTRACT
ALT	ALTERNATE	NOM	NOMINAL
ANSI	AMERICAN NATION STANDARDS INSTITUTE	NTS	NOT TO SCALE
ARCH	ARCHITECT/ ARCHITECTURAL	OC	ON CENTER
ASB	AGGREGATE SUBBASE	OD	OUTSIDE DIAMETER
AVG	AVERAGE	OF	OUTSIDE FACE
BC	BEGIN CURVE	OG	ORIGINAL GROUND
BK	BACK	OH	OVERHEAD
BLDG	BUILDING	OR	OVERFLOW RISER
BM	BENCHMARK	ORIG	ORIGINAL
BOF	BOTTOM OF FOOTING	OSD	OVERSIDE DRAIN
BOT	BOTTOM	PC	BEGINNING POINT OF CURVATURE
BRG	BEARING	PCC	PORTLAND CEMENT CONCRETE /POINT OF COMPOUND CURVE
BVC	BEGINNING VERTICAL CURVE		
BVCE	BEGINNING VERTICAL CURVE ELEVATION	PD	PLANTER DRAIN
BVCS	BEGINNING VERTICAL CURVE STATION	PI	POINT OF INTERSECTION/ TANGENT-TANGENT INTERSECTION
CB	CATCH BASIN		
CI	CURB INLET/ CAST IRON		
CIP	CAST IN PLACE/ CAST IRON PIPE	PIP	PROTECT IN PLACE
CIPCP	CAST IN PLACE CONCRETE PIPE	PIV	POST INDICATOR VALVE
CJ	CONTROL JOINT/ CONSTRUCTION JOINT	PP	POWER POLE
CKRD	CHECKERED	PRC	POINT OF REVERSE CURVATURE
CL	CLASS	PSD	PERFORATED SUBDRAIN
CLR	CLEAR	PT	POINT OF TANGENT/ PRESSURE TREATED
CMP	CORRUGATED METAL PIPE		
CO	CLEANOUT/ COUNTY	PUE	PUBLIC UTILITIES EASEMENT
COL	COLUMN	PVC	POLYVINYL CHLORIDE/ POINT OF VERTICAL CURVATURE
CONC	CONCRETE		
CONST	CONSTRUCTION	PVI	POINT OF VERTICAL INTERSECTION
CONT	CONTINUOUS	PW	PROCESS WASTEWATER
CPP	CENTRAL PRECAST PRODUCTS	R	RADIUS
CSP	CORRUGATED STEEL PIPE	RAD	RADIUS
CTR	CENTER	RC	RELATIVE COMPACTION
CV	CHECK VALVE	RCP	REINFORCED CONCRETE PIPE
D	DITCH DEPTH	RCW	RECYCLED WATER
DB	DRAINAGE BOX	RED	REDUCER/ REDUCING
DI	DROP INLET	REF	REFERENCE
DIA	DIAMETER	REINF	REINFORCING
DIAG	DIAGONAL	REQD	REQUIRED
DIM	DIMENSION	RT	RIGHT
DIP	DUCTILE IRON PIPE	R/W	RIGHT OF WAY
DIST	DISTANCE	RW	RAINWATER
DIV	DIVERSION	RWL	RAINWATER LEADER
DS	DOWNSPOUT	RWD	REDWOOD
DWG	DRAWING	QSP	QUALIFIED SWPPP PRACTITIONER
E	EAST/ ELECTRICAL	S	SOUTH/ SLOPE
(E)	EXISTING	SAD	SEE ARCHITECT'S DRAWINGS
EA	EACH	SB	SETBACK
EC	END CURVE	SCD	SEE CIVIL DRAWINGS
ECR	END CURB RETURN	SCH	SCHEDULE
EF	EACH FACE	SD	STORM DRAIN
EFL	EFFLUENT FEED LINE	SED	SEE ELECTRICAL DRAWINGS
EG	EXISTING GROUND/ EXISTING GRADE	SF	SQUARE FEET
EL	ELEVATION	SFPD	SEE FIRE PROTECTION DRAWINGS
ELEC	ELECTRICAL	SG	SUBGRADE
ELEV	ELEVATION	SHT	SHEET
EQ	EQUAL/ EQUATION	SIM	SIMILAR
EQPT	EQUIPMENT	SLAD	SEE LANDSCAPE ARCHITECT'S DRAWINGS
ES	EACH SIDE		
ETW	EDGE OF TRAVELED WAY	SMD	SEE MECHANICAL DRAWINGS
EVC	ENDING OF VERTICAL CURVE	SPEC	SPECIFICATION
EVCE	ENDING VERTICAL CURVE ELEVATION	SPD	SEE PLUMBING DRAWINGS
EVCS	ENDING VERTICAL CURVE STATION	SQ	SQUARE
EW	EACH WAY	SS	STAINLESS STEEL/ SANITARY SEWER
EXC	EXCAVATION/ EXCAVATE	SSD	SEE STRUCTURAL DRAWINGS/ SUBSURFACE DRAIN
EXIST	EXISTING		
EXP	EXPANSION JOINT	SSR	SEE SOILS REPORT
EXT	EXTERIOR	STA	STATION
FDC	FIRE DEPARTMENT CONNECTION	STD	STANDARD
FDN	FOUNDATION	STL	STEEL
FES	FLARED END SECTION	SWPPP	STORMWATER POLLUTION PREVENTION
FF	FINISH FLOOR		
FG	FINISH GRADE	SWM	STORMWATER MANAGEMENT
FH	FIRE HYDRANT	SWWD	SEE WASTEWATER DRAWINGS
FIN	FINISH/ FINISHED	SYM	SYMMETRICAL
FLGD	FLANGED	T	TANGENT/ TELEPHONE
FLR	FLOOR	TAN	TANGENT
FM	FORCE MAIN	TEL	TELEPHONE
FO	FACE OF	T&B	TOP AND BOTTOM
FOC	FACE OF CONCRETE/ COLUMN/CURB	TBM	TEMPORARY BENCH MARK
FOCC	FACE OF CONCRETE CURB	TC	TOP OF CONCRETE
FOW	FACE OF WALL	TCC	TOP OF CONCRETE CURB
FP	FIRE PROTECTION	TD	TRENCH DRAIN
FRL	FLUSH RETURN LINE	TG	TOP OF GRATE
FS	FINISH SURFACE	THK	THICK
FT	FOOT/ FEET	TOB	TOP OF BERM
FTG	FOOTING	TOE	TOE OF WALL
FUT	FUTURE	TOF	TOP OF FOOTING
G	GAS/ ROAD GRADIENT	TOW	TOP OF WALL
GALV	GALVANIZED	TP	TOP OF PAVEMENT
GB	GRADE BREAK	TRANS	TRANSITION
GP	GUARD POST	TYP	TYPICAL
GRD	GRADE	UC	UTILITY CHASE
GRND	GROUND	UG	UNDERGROUND
GV	GATE VALVE	UNO	UNLESS NOTED OTHERWISE
HB	HOSE BIBB	USP	UNDER SEPARATE PERMIT
HDPE	HIGH DENSITY POLYETHYLENE	VC	VERTICAL CURVE
HORIZ	HORIZONTAL	VERT	VERTICAL
HP	HIGH POINT	VIF	VERIFY IN FIELD
HT	HEIGHT	VSD	VINEYARD SUBDRAIN
HV DTY	HEAVY DUTY	W	WEST/ WATER
HW	HIGH WATER	W/	WITH
ID	INSIDE DIAMETER	W/O	WITHOUT
IE	INVERT ELEVATION	W(T)	TREATED WATER
IF	INSIDE FACE	W(W)	WATER FROM WELL
IN	INCH	WBD	WALL BACK DRAIN
INT	INTERIOR	WW	WASTEWATER
INV	INVERT	WWF	WELDED WIRE FABRIC
IP	IRON PIPE	XFMR	TRANSFORMER
IRR	IRRIGATION	YD	YARD
IW	INDUSTRIAL WASTE	YDS	YARDS
JB	JUNCTION BOX	Z	DITCH SIDE SLOPE
K	CURVE COEFFICIENT		
L	LENGTH		
LAT	LATERAL		
LF	LINEAL FOOT		
LP	LOW POINT		
LPG	LIQUID PROPANE GAS		
LS	LANDSCAPE		
LT	LEFT		
LT DTY	LIGHT DUTY		

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE AND/OR APPLICABLE COUNTY OF LAKE CODES, ORDINANCES, ZONING AND PLANNING LAWS, CALTRANS STANDARDS, AND THE PROJECT USE PERMIT CONDITIONS.
2. ALL WORK SHALL BE IN COMPLIANCE WITH ALL APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.) STANDARDS AS SET FORTH BY THE FEDERAL DEPARTMENT OF LABOR AND/OR THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL SECURE A TRENCH PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO EXCAVATION OF ANY TRENCH OVER FIVE FEET DEEP.
3. ALL ON-SITE SEWER, WATER AND GAS LINE CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA PLUMBING CODE, (C.P.C.) AND ALL APPLICABLE REGULATIONS OF THE COUNTY OF LAKE, AND COGNIZANT UTILITY COMPANIES.
4. THE DRAWINGS SHALL NOT BE SCALED. ALL WORK SHALL BE GOVERNED BY THE DIMENSIONS SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS SHOWN AND BRING DISCREPANCIES TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK.
5. DETAILS OF CONSTRUCTION NOT INDICATED OR NOTED SHALL BE CONSIDERED OF THE SAME CHARACTER SHOWN FOR SIMILAR OR EXISTING CONSTRUCTION.
6. THIS DRAWING DOES NOT REPRESENT A BOUNDARY SURVEY. PROPERTY LINES HAVE BEEN PLOTTED FOR INFORMATIONAL PURPOSES ONLY AND ARE APPROXIMATE.
7. CONTRACTOR SHALL SECURE LETTERS OF PERMISSION FROM ADJACENT LANDOWNERS BEFORE ENTERING SUCH PROPERTIES.
8. THE LOCAL JURISDICTION HAVING AUTHORITY SHALL BE NOTIFIED 72 HOURS PRIOR TO STARTING ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THE JURISDICTION HAVING AUTHORITY INFORMED OF THE CONSTRUCTION SCHEDULE.
9. CONTRACTOR SHALL PROVIDE 72 HOURS ADVANCE NOTICE TO THE ENGINEER FOR REQUESTED INSPECTIONS.
10. THE OWNER SHALL PROVIDE FOR NECESSARY MATERIAL AND SOILS TESTING AND OBSERVATION. THE CONTRACTOR SHALL PROVIDE 72 HOURS MINIMUM NOTICE PRIOR TO REQUIRED OBSERVATION OR TESTING.
11. THE LAKE COUNTY DEPARTMENT OF PLANNING, BUILDING & ENVIRONMENTAL SERVICES (PBES), DEPARTMENT OF PUBLIC WORKS, THE COUNTY FIRE DEPARTMENT, AND CALTRANS SHALL BE NOTIFIED 72 HOURS PRIOR TO STARTING ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THESE AGENCIES INFORMED OF THE CONSTRUCTION SCHEDULE.
12. CONTRACTOR SHALL CONTACT THE LAKE COUNTY ENGINEER'S OFFICE TO ARRANGE A PRE-PROJECT CONFERENCE FOR THE PURPOSE OF REVIEWING JOB REQUIREMENTS AND COUNTY PROCEDURES.
13. CONTRACTOR SHALL NOTIFY THE LAKE COUNTY ENGINEER AT LEAST 72 HOURS IN ADVANCE OF THE COMMENCEMENT OF ANY PART OF THE WORK.
14. MATERIALS AND WORKMANSHIP SHALL CONFORM TO ADOPTED LAKE COUNTY SUBDIVISION ROAD AND STREET STANDARDS AND CALTRANS STANDARDS.
15. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THE PLAN ARE BASED ON THE INFORMATION AVAILABLE; IN GENERAL THE EXISTING UTILITIES SHOWN ARE BASED ON SURVEY. HOWEVER, THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES MAY NOT HAVE BEEN INDICATED ON THESE DRAWINGS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE INFORMATION SHOWN, OR THE INADVERTENT OMISSION OF ANY SUCH INFORMATION. CONTRACTOR SHALL VERIFY LOCATION OF EXISTING UTILITIES; CONFLICTS AND/OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. UNLESS NOTED OTHERWISE, EXISTING UTILITIES SHALL BE PROTECTED AND MAINTAINED IN SERVICE BY THE CONTRACTOR. UTILITIES THAT INTERFERE WITH WORK TO BE PERFORMED UNDER THIS PROJECT SHALL BE PROTECTED AS REQUIRED IN ACCORDANCE WITH COUNTY OF LAKE, P.G.& E. AND AT&T REQUIREMENTS.

GENERAL/ CIVIL LEGEND

EXISTING

- (E/ELEC) — ELECTRICAL
- (FP) — FIRE PROTECTION
- (G) — GAS
- (IRR) — IRRIGATION
- (OH) — OVERHEAD POWERLINE
- (PW) — PROCESS WASTEWATER
- (SD) — STORM DRAIN
- (SS) — SANITARY SEWER
- (T/TEL) — TELEPHONE LINE
- (W) — WATER LINE
- LEACHLINE
- LEACHFIELD OUTLINE
- UG TANK OR SUMP
- MANHOLE OR SUMP
- CULVERT
- FH
- PIV, CV, FDC
- VALVE
- x15.25 — SPOT ELEVATION
- 70 — CONTOUR
- ℄/SWALE/DITCH
- VINEROW
- VINEYARD LIMITS
- FENCE
- PROPERTY LINE
- EASEMENT
- CP #, N, E, ELEV — CONTROL POINT

NEW

- (E/ELEC) — ELECTRICAL
- (FP) — FIRE PROTECTION
- (G) — GAS
- (IRR) — IRRIGATION
- (OH) — OVERHEAD POWERLINE
- (PW) — PROCESS WASTEWATER
- (SD) — STORM DRAIN
- (SS) — SANITARY SEWER
- (T/TEL) — TELEPHONE LINE
- (W) — WATER LINE
- LEACHLINE
- LEACHFIELD OUTLINE
- UG TANK OR SUMP
- MANHOLE OR SUMP
- CULVERT
- GRADE (2 HORIZ TO 1 VERT) — 2:1
- SLOPE (PERCENT) — 2% S=0.02
- ELEVATION — XX 232.00
- TOP OF CUT/BANK
- EMBANKMENT — 2:1
- TOE OF FILL
- GRADE BREAK
- 70 — CONTOUR
- ℄/SWALE/DITCH
- FENCE
- REMOVE OR ABANDON
- FH
- PIV, CV, FDC
- SPRINKLER RISER
- THRUSTBLOCK
- HOSE BIBB
- CONNECTION POINT
- CAP OR PLUG
- CLAY OR SLURRY CEMENT PLUG
- CHECK VALVE
- GATE VALVE
- BALL VALVE
- BUTTERFLY VALVE
- PLUG VALVE
- REDUCER/ENLARGER
- CLEANOUT
- DS — DOWNSPOUT
- DRAINAGE STRUCTURE
- ACCESSIBLE PARKING
- ACCESSIBLE PATH OF TRAVEL
- RIPRAP ENERGY DISSIPATOR
- OVERLAND RELEASE ROUTE

GENERAL NOTES (CONTINUED)

16. UNDERGROUND SERVICE ALERT (U.S.A.) – CALL TOLL FREE (800) 642-2444 AT LEAST 48 HOURS PRIOR TO EXCAVATION.
17. THE CONTRACTOR SHALL NOTIFY P.G.&E. AND AT&T PRIOR TO STARTING ANY WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING THESE UTILITY COMPANIES INFORMED OF THE CONSTRUCTION SCHEDULE.
18. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS AND INSPECTIONS FROM LAKE COUNTY. THE OWNER WILL MAKE APPLICATIONS AND PAY ALL PERMIT FEES.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING FACILITIES AND IMPROVEMENTS FROM DAMAGE RESULTING FROM CONSTRUCTION WORK. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
20. CONTRACTOR SHALL COORDINATE CONSTRUCTION WORK WITH EXISTING FACILITIES REQUIREMENTS & OPERATIONS. CONTRACTOR SHALL BE PREPARED TO PHASE PORTIONS OF THE WORK SO THAT IT DOES NOT INTERFERE WITH OR INHIBIT EXISTING FACILITY OPERATIONS.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ACCESS TO THE SITE AND ADJOINING OPERATIONS OPEN TO THE OWNERS AT ALL TIMES.
22. OBTAINING OF CONSTRUCTION WATER AND UTILITIES SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE(S).
23. WORK DONE WITHIN THE COUNTY RIGHT-OF-WAY SHALL BE DONE UNDER A COUNTY ENCROACHMENT PERMIT.
24. WORK DONE WITHIN THE STATE RIGHT-OF-WAY SHALL BE DONE UNDER A CALTRANS ENCROACHMENT PERMIT.
25. ALL EXISTING VALVE AND METER BOXES, MANHOLES AND CLEANOUTS SHALL BE RAISED TO NEW GRADE AS REQUIRED.
26. ALL EXISTING FENCES AND GATES AT THE SITE SHALL BE LOCATED, PROTECTED AND MAINTAINED AT ALL TIMES.
27. ON-SITE GRADING SHALL NOT INHIBIT OFF-SITE DRAINAGE.
28. THE SCREENED CONTOURS AND TOPOGRAPHIC INFORMATION ON THESE DRAWINGS REPRESENT THE APPROXIMATE SURFACE CONDITIONS TO BE FOUND AT THE PROJECT LOCATION AS OF FEBRUARY 2021. THIS INFORMATION HAS BEEN FURNISHED BY CONSER LAND SURVEYING. FOR THE BASIS OF ELEVATIONS, SEE "CONTROL" REFERENCE ON THIS DRAWING.
29. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR SOIL CONDITIONS IN THE AREA OF CONSTRUCTION OPERATIONS. ALL WORK SHALL CONFORM TO THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER.
30. SUBSTITUTIONS FOR MATERIALS OR EQUIPMENT INDICATED ON THE CONTRACT DRAWINGS SHALL BE REVIEWED BY THE ENGINEER. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR WORK AFFECTED BY SUCH CHANGES ACCOMPLISHED WITHOUT ENGINEER'S REVIEW.
31. AS THE RESPONSIBILITY FOR THE ENGINEERING DESIGN WORK DEPICTED ON THESE DRAWINGS RESTS WITH THE FIRM OF SUMMIT ENGINEERING, INC., NO CHANGES ARE TO BE MADE TO THE WORK DURING OR PRIOR TO CONSTRUCTION WITHOUT THE EXPRESSED WRITTEN PERMISSION OR ACKNOWLEDGMENT OF SUMMIT ENGINEERING, INC.
32. CONTRACTOR SHALL SALVAGE ALL EXISTING LANDSCAPING TREES THAT WOULD BE DISTURBED BY GRADING OPERATIONS AND COORDINATE RELOCATION.
33. REMOVE ONLY THOSE TREES THAT ARE NECESSARY TO CLEAR THE NEW CONSTRUCTION. NO TREE SHALL BE REMOVED WITHOUT PRIOR REVIEW WITH THE ENGINEER.
34. TREE BRANCHES SHALL BE PRUNED TO PROVIDE A MINIMUM VERTICAL CLEARANCE OF 16 FEET MEASURED FROM ROAD SUBGRADE. PAINT ALL BRANCH CUTS 4 INCHES IN DIAMETER AND LARGER WITH A TREE SEAL COMPOUND.
35. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, TOOLS AND OTHER SERVICES NECESSARY FOR PROPER EXECUTION OF THIS CONTRACT.
36. THE CONTRACTOR SHALL PROVIDE THE OWNER, AS A CONDITION OF COMPLETION AND RECEIPT OF FINAL PAYMENT, A WRITTEN GUARANTEE COVERING ALL MATERIALS AND WORKMANSHIP FURNISHED AND PERFORMED FOR THIS WORK AGAINST DEFECTS FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF FILING THE NOTICE OF COMPLETION.
37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR A DAILY RECORD OF "AS BUILT" CONDITIONS THAT DIFFER FROM THE ORIGINAL DRAWINGS. THE CONTRACTOR WILL BE PROVIDED WITH A SET OF REPRODUCIBLE DRAWINGS ON WHICH THE "AS BUILT" CONDITIONS SHALL BE RECORDED. THE "AS BUILT" DRAWING (SIGNED AND DATED) SHALL BE FURNISHED TO THE ENGINEER UPON COMPLETION OF THE WORK AND PRIOR TO FINAL PAYMENT.
38. CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING MONUMENTS AND OTHER SURVEY MARKERS. ANY AT-RISK MONUMENTS OR MARKERS SHALL BE IDENTIFIED BY A PRE-CONSTRUCTION CORNER RECORD SUBMITTED TO THE COUNTY SURVEYOR PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. PRE AND POST CONSTRUCTION CORNER RECORDS SHALL BE PREPARED AS NEEDED TO PERPETUATE MONUMENT LOCATIONS THAT ARE AT RISK DUE TO PROJECT ACTIVITIES. ALL WORK TO BE PERFORMED BY A LICENSED LAND SURVEYOR. MONUMENTS AND MARKERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED SUBJECT TO THE PROVISIONS OUTLINED ABOVE AT THE CONTRACTOR'S EXPENSE.

UTILITY STRUCTURE TABLE

NO.	MODEL NO.*	COVER/GRATE	REMARKS
DI #1	CB1818	HEAVY DUTY GRATE	2 SIDE INLETS
DI #2-6	CB1212	HEAVY DUTY GRATE	–
DI #7	CB1818	HEAVY DUTY GRATE	1 SIDE INLET
OR #1A, 1B	CB1818	LIGHT DUTY GRATE	–

*OLDCASTLE PRECAST CONCRETE GROUP MODEL NUMBER

NOTES:

1. GROUT FLOWLINE TRANSITION AND PIPE PENETRATIONS FOR ALL CONCRETE DRAINAGE STRUCTURES, SEE 2/C9.1
2. WHERE THE ADJACENT PAVED SURFACE IS SLOPING GREATER THAN 5%, THE TOP OF THE DRAINAGE STRUCTURE SHALL BE SLOPED TO MATCH THE ADJACENT GRADE.
3. ALL INLETS TO BE MARKED "NO DUMPING – DRAINS TO STREAM" AND "NO TIRE BASURA – DESAGUA AL ARROYO" OR EQUIVALENT SPANISH TRANSLATION.
4. COVER/GRATE CLASSIFICATION SHALL BE DESIGNED TO MEET ANSI A112.21.1M LOADING CLASSIFICATIONS IN A STATIC CONDITION.

UTILITY NOTES

1. ALL EXISTING UTILITIES TO REMAIN IN THE WORK AREA SHALL BE PROTECTED DURING CONSTRUCTION ACTIVITIES (UNO).
2. ALL WORK SHALL CONFORM TO THE LATEST APPLICABLE LAKE COUNTY CODES, ORDINANCES, ZONING AND PLANNING LAWS INCLUDING THE LATEST ADOPTED EDITION OF THE CALIFORNIA PLUMBING CODE.
3. SEE ELECTRICAL DRAWINGS FOR LOCATION OF POWER AND CONTROL UTILITIES. COORDINATE INSTALLATION OF THOSE UTILITIES WITH THOSE SHOWN HERE.
4. SEE PLUMBING/STRUCTURAL DRAWINGS FOR CONTINUATION OF UTILITY LINES INTO BUILDINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING LOCATION OF UTILITY CONNECTIONS TO STRUCTURES WITH ARCHITECTURAL, PLUMBING AND STRUCTURAL DRAWINGS.
5. WHERE POSSIBLE AND WHERE SEPARATION STANDARDS CAN BE MET, UTILITIES CAN BE INSTALLED IN COMMON TRENCHES. THE CONTRACTOR SHALL VERIFY BEDDING AND BACKFILL DETAILS WITH THE ENGINEER WHERE COMMON TRENCHING IS DESIRED.
6. CONTRACTOR SHALL EXPOSE, BY POTHOLING, AND VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES, INCLUDING STORM DRAINS, SANITARY SEWERS AND WATER LINES BEFORE ORDERING MATERIALS AND/OR CONSTRUCTING NEW FACILITIES.
7. ALL TRENCHES AND EXCAVATIONS SHALL BE CONSTRUCTED IN STRICT COMPLIANCE WITH THE APPLICABLE SECTIONS OF CALIFORNIA AND FEDERAL O.S.H.A. REQUIREMENTS AND OTHER APPLICABLE SAFETY ORDINANCES. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR TRENCH SHORING DESIGN AND INSTALLATION. SEE GENERAL NOTES.

PIPELINE DEPTH OF BURY:

A.	GRAVITY LINES	TO ELEV NOTED, 1.5' MIN IN LANDSCAPED AREAS 2.0' MIN IN ALL OTHER AREAS (UNO)
B.	FIRE PROTECTION/WATER	3' MINIMUM (UNO)
C.	FORCE MAINS	2.5' MINIMUM (UNO)
D.	GAS	2.5' MINIMUM (UNO)
E.	ELECTRIC	3' MINIMUM (UNO) SEE ELECTRICAL DRAWINGS

8. SLOPE FOR GRAVITY LINES (SD & PW) = 0.02 MIN (UNO), (SS) = 0.02 MIN (UNO)
9. GRAVITY PW, SS, SD LINES AND PRESSURE FORCE MAINS SHALL BE CONSTRUCTED USING MANUFACTURER'S STANDARD FITTINGS FOR THE PIPE SYSTEM SPECIFIED. FITTINGS USED SHALL PROVIDE FOR SMOOTH, UNIFORM TRANSITIONS IN SIZE, DIRECTION AND WHEN PIPES JOIN. THE USE OF 90° BENDS AND TEES WILL NOT BE ALLOWED UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
10. PVC WATER SYSTEM MAINS AND OTHER PRESSURE FORCE MAINS SHALL HAVE LOCATING WIRE INSTALLED IN THE TRENCH ABOVE THE PIPE.
11. CONTRACTOR SHALL COORDINATE LOCATION OF UTILITY TRENCH WITH STRUCTURAL DRAWINGS TO ENSURE THAT UTILITY TRENCHES ARE LOCATED OUTSIDE THE ZONE OF INFLUENCE.
12. ALL UTILITY CROSSINGS ARE TO HAVE A MINIMUM OF 6" SEPARATION AS MEASURED FROM THE OUTSIDE EDGE OF ALL PIPES. IF MINIMUM CROSSING SEPARATION CANNOT BE MET, CONSULT ENGINEER REGARDING REDUCED CLEARANCE OPTIONS INCLUDING CONCRETE ENCASEMENT OF CROSSING.
13. WHENEVER A PUBLIC WATER MAIN IS TO CROSS A SANITARY SEWAGE FORCE MAIN, THE PUBLIC WATER MAIN SHALL BE INSTALLED A MINIMUM OF 1 FOOT ABOVE THE SEWER LINE WHERE POSSIBLE AND SHALL BE OF DUCTILE IRON OR AWWA C-900 CLASS 200 PVC WITH NO JOINTS WITHIN 10 FEET ON EACH SIDE OF THE FORCE MAIN. IF THE PUBLIC WATER MAIN CROSSES A SEWER LINE CLOSER THAN 1 FOOT, THE WATER MAIN SHALL BE COMPLETELY ENCASED IN CLASS B CONCRETE FOR THE SAME DISTANCE SPECIFIED ABOVE.
14. THE HORIZONTAL DISTANCE BETWEEN PUBLIC PRESSURE WATER MAINS AND SANITARY SEWER LINES SHALL BE AT LEAST 10'.
15. IF THERE IS A SITUATION WHERE A SANITARY SEWER LINE MUST CROSS ABOVE A PUBLIC WATER LINE, THE DESIGN OF SUCH A CROSSING MUST CONFORM TO STATE AND LOCAL HEALTH LAWS AND BE APPROVED BY BOTH THE COUNTY PUBLIC HEALTH SERVICE DEPARTMENT AND STATE HEALTH DEPARTMENT.
16. NON-PUBLIC WATER (W), SEWER (SS) AND/OR PROCESS WASTE (PW) LINES MAY BE INSTALLED IN A COMMON TRENCH WHERE THE W LINE IS ABOVE THE SS OR PW LINES AND A MINIMUM OF 1 FOOT HORIZONTAL AND VERTICAL SEPARATION BETWEEN THE W AND SS OR PW LINES IS MAINTAINED. WHERE W AND SS OR PW LINES CROSS, THE SAME SEPARATION DISTANCES SHALL APPLY.
17. ALL FORCE MAINS ENTERING STRUCTURES AND/OR BOXES SHALL BE FITTED WITH A 45° BEND INSIDE THE BOX. THE FITTING SHALL BE PLACED SO THE OUTLET IS DIRECTED DOWNWARD.
18. SEE BUILDING PLANS FOR THE LOCATION OF DOWNSPOUTS AND/OR ROOF DRAIN STUB-OUTS. THESE DOWNSPOUTS AND/OR ROOF DRAIN STUB-OUTS SHALL BE CONNECTED TO THE ONSITE STORM DRAIN SYSTEM AS INDICATED. THE INTENT OF THIS PLAN IS TO CONVEY ROOF DRAINAGE FROM BUILDING CONNECTION POINTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF DOWNSPOUTS OR ROOF DRAIN STUB-OUTS PRIOR TO INSTALLING THE STORM DRAIN PIPING SHOWN ON THESE DRAWINGS. THE ROOF DRAIN SYSTEM SHALL BE CONSTRUCTED SO AS TO AVOID COLUMN FOOTINGS AND OTHER OBSTRUCTIONS.
19. WHERE A ROOF DRAIN IS SHOWN CONNECTING TO A DROP INLET, IT SHALL CONNECT AT 6" ABOVE THE INVERT ELEVATION OF THE DROP INLET IF POSSIBLE.
20. ALL TEES, BENDS, PLUGS, AND OTHER FITTINGS & APPURTENANCES ON ALL PRESSURE PIPING GREATER THAN 3" IN SIZE WITH MECHANICAL JOINT, PUSH ON OR OTHER FLEXIBLE FITTINGS SHALL BE ANCHORED BY THE USE OF THRUST BLOCKS, THRUST ANCHORS OR HARNESSES AS SHOWN ON THE DRAWINGS. THE BEARING PRESSURES OF THRUST BLOCKING ON THE SUPPORTING SOIL SHALL NOT EXCEED THAT ALLOWABLE FOR THE SOIL INVOLVED (SEE SOILS REPORT). REQUIRED THRUST BLOCK BEARING AREAS SHALL BE CALCULATED BY THE CONTRACTOR IN ACCORDANCE WITH THE DETAILS ON THE DRAWINGS AND NFPA STANDARDS.
21. ALL BURIED METAL VALVES AND FITTINGS REQUIRE PROTECTIVE COATINGS, SEE SPECIFICATIONS.
22. PIPE BEDDING AND BACKFILL FOR STORM DRAIN PIPE SHALL INCLUDE AN 12" THICK IMPERVIOUS CLAY OR SLURRY CEMENT PLUG COMPACTED IN THE TRENCH AND AROUND THE PIPE AT THE INLET AND OUTLET, AND AT 50 FOOT INTERVALS WHERE SLOPES EXCEED 10%. WHERE THE SLOPE OF OTHER UTILITY PIPES EXCEED 10%, THE SAME PLUG SHALL BE INSTALLED IN THE TRENCH AND AROUND THE PIPE AT THE BEGINNING AND END OF THE PIPE AND AT 50' INTERVALS BETWEEN.
23. ALL NON-STORM DRAIN UTILITIES ARE SHOWN FOR REFERENCE ONLY AND SHALL BE COVERED UNDER SEPARATE PERMIT(S).

SHEET NUMBERING GUIDE

SHEET No.	TYPICAL CONTENT
C1.X	TITLE 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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HIGHLAND FARMS, LP - PHASE 1A

GENERAL INFORMATION

2024-10-11	REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE: 2024-10-11
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SHEET C1.1
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LAKE COUNTY EROSION AND SEDIMENT CONTROL NOTES

1. EROSION & SEDIMENT CONTROL MEASURES AS INDICATED ON THE PLANS SHALL INCLUDE, BUT NOT BE LIMITED, TO THE FOLLOWING:

   A. STABILIZED CONSTRUCTION ENTRANCE AND EXITS TO REDUCE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

   B. EARTH BERMS TO DIVERT RUN-OFF AWAY FROM THE WORK AREA OR TO CONTAIN RUN-OFF WITHIN A SPECIFIED AREA.

   C. FIBER ROLLS OR SILT FENCES BELOW THE TOE OF EXPOSED AND ERODIBLE SLOPES, DOWNSLOPE OF EXPOSED SOIL AREAS, AND AS INDICATED ON THE PLANS.

   D. COBBLE OR RIPRAP PROTECTION FOR STORM DRAIN PIPE OUTLETS AND DRAINAGE DITCHES.

   E. ROCK OR FIBER ROLL CHECK DAMS TO REDUCE VELOCITY OF CONCENTRATED FLOW AND ENCOURAGE SEDIMENT SETTLING.

   F. EARTH BERM SEDIMENT TRAPS WITH ROCK FILTER OUTLET, TO ALLOW SEDIMENT IN COLLECTED SW TO SETTLE OUT AND BE FILTERED.

   G. DROP INLET GRAVEL FILTERS TO PROTECT STORM DRAIN INLETS THAT ARE SUBJECT TO RUN-OFF FROM CONSTRUCTION ACTIVITIES.

   H. PROTECTION OF CUT OR FILL SLOPES, BORROW AREAS AND SOIL STOCKPILE AREAS WITH IMPERMEABLE COVER IF OTHER MEASURES ARE NOT IN PLACE.

   I. 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.

   J. REVEGETATION

   1.1. MATERIALS: SEED MIX AS REQUIRED BY LAKE COUNTY:

   a. SEED SPECIES — % OF MIX

BLANDO BROME	40
ZORRO ANNUAL FESCUE	8
LANA 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 "V" 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

   K. OTHER STORMWATER MANAGEMENT MEASURES SHALL BE UTILIZED AS FIELD CONDITIONS REQUIRE.

2. REQUIREMENTS:

   A. 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.

   B. CONTRACTOR SHALL MINIMIZE DISTURBANCES OF EXISTING SOILS OUTSIDE OF THE LIMITS OF THE WORK AREA AND AS INDICATED ON PLAN.

   C. (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.

   D. 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.

   E. 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.

   F. 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.

   G. 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 MOUNDED TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA.

   H. 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.

3. MAINTENANCE

   A. 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)

   B. 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.

   C. 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.

   D. SEDIMENT IS TO BE REMOVED FROM SEDIMENT TRAPS WHEN SEDIMENT LEVEL REACHES 50% OF MAXIMUM.

   E. 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.

   F. 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.

4. REFERENCE LATEST EDITION OF BMP HANDBOOK FOR FURTHER DETAILS ON BMP'S.

5. 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.

6. SEE CONSTRUCTION SWPPP FOR INSTALLATION AND MAINTENANCE GUIDELINES (ONLY IF SWPPP WAS REQUIRED).

7. DUST CONTROL

   A. 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.

8. AIR QUALITY

   A. DURING ALL CONSTRUCTION ACTIVITIES THE PERMITTEE SHALL COMPLY WITH THE MOST CURRENT VERSION OF BAAQMD BASIC CONSTRUCTION BEST MANAGEMENT PRACTICES INCLUDING BUT NOT LIMITED TO THE FOLLOWING, AS APPLICABLE:

   8.1. POST A PUBLICLY VISIBLE SIGN WITH THE TELEPHONE NUMBER AND PERSON TO CONTACT AT THE LEAD AGENCY REGARDING DUST COMPLAINTS. THE BAAQMD'S PHONE NUMBER SHALL ALSO BE VISIBLE.

   8.2. WATER ALL EXPOSED SURFACES (E.G., PARKING AREAS, STAGING AREAS, SOIL PILES, GRADING AREAS, AND UNPAVED ACCESS ROADS) TWO TIMES PER DAY.

   8.3. COVER ALL HAUL TRUCKS TRANSPORTING SOIL, SAND, OR OTHER LOOSE MATERIAL OFF-SITE.

   8.4. 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.

   8.5. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MPH.

   8.6. ALL ROADWAYS, DRIVEWAYS, AND SIDEWALKS TO BE PAVED SHALL BE COMPLETED AS SOON AS POSSIBLE. BUILDING PADS SHALL BE LAID AS SOON AS POSSIBLE AFTER GRADING UNLESS SEEDING OR SOIL BINDERS ARE USED.

   8.7. IDLING 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.

   8.8. 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 BAAQMD'S JURISDICTION SHALL HAVE EITHER A CALIFORNIA AIR RESOURCES BOARD (ARB) REGISTRATION PORTABLE EQUIPMENT REGISTRATION PROGRAM (PERP) OR A BAAQMD PERMIT. FOR GENERAL INFORMATION REGARDING THE CERTIFIED VISIBLE EMISSIONS EVALUATOR OR THE REGISTRATION PROGRAM, VISIT THE ARB FAQ HTTP://WWW.ARB.CA.GOV/

9. 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 PERMITTEE SHALL CONTACT THE PBES DEPARTMENT FOR FURTHER GUIDANCE, WHICH WILL LIKELY INCLUDE THE REQUIREMENT FOR THE PERMITTEE 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 PERMITTEE 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:

1. PRECAST CONCRETE PARKING BARS: 36 INCH LONG; "FIBERAISED" OR APPROVED EQUAL. ADHESIVE SHALL BE SUITABLE FOR SECURING MATERIALS TO ASPHALT PAVING.

2. FENCING: 6 FEET HIGH CONSTRUCTED OF 8 FEET HEAVY DUTY "I" BAR POSTS AT 8 FEET ON CENTER, 4 FEET HIGH 6" X 6" GRID GALVANIZED 12 GAUGE MINIMUM FIELD FENCING WITH 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.

3. ROCK RIPRAP: ANGULAR AND WELL GRADED ROCKS WITH AN AVERAGE DIAMETER 6 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.

4. 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.

5. 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.

6. CONCRETE DITCH LINING: MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS, SECTION 72-4.

7. 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.

1. AGGREGATE BASE: ANGULAR, CRUSHED MATERIAL CONFORMING TO CLASS 2 REQUIREMENTS OF SECTION 26.

2. TACK COAT: DILUTED SS-1H ASPHALTIC EMULSION OR UNDILUTED RS-1 EMULSION IN CONFORMANCE WITH SECTION 94.

3. 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.

4. SEAL COAT: TYPE SS-1 ASPHALTIC EMULSION CONFORMING TO SECTION 94.

5. CRACK SEALING: PRIOR TO SEALING, CRACKS SHALL BE CLEANED OF DEBRI BY AIR BLASTING. SEALANT MATERIAL SHALL BE ASPHALT RUBBER CONFORMING TO CLATRANS SPECIFICATION SSP 37-400 HOT APPLIED, PLACED IN A FLUSH FILL METHOD AND FINISHED WITH A SQUEEGEE.

6. STRIPING PAINT: WATERBORNE TRAFFIC GRADE PAINT SPECIFICALLY FOR ASPHALTIC CONCRETE PAVEMENT SURFACES, CONFORMING TO STANDARD SPECIFICATION SECTION 84.

UTILITIES:

1. SLURRY CEMENT BEDDING AND BACKFILL: SLURRY CEMENT SHALL BE PER SECTION 90-2 OF THE CALTRANS STANDARD SPECIFICATIONS.

2. STORM DRAIN PIPING SHALL BE EITHER: ADS N-12 WT IB (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.

3. 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.

4. GATE VALVES SHALL BE AWWA C509 OR C515 NON-RISING STEM FOR SIZES OVER 2".

5. BURIED METAL VALVES AND FITTINGS SHALL BE COATED WITH A COAL TAR BASED PAINT SYSTEM AS FOLLOWS:

   A. PRIME COAT: CARBOLINE "BITUMASTIC 50"

   B. SECOND COAT: "BITUMASTIC 50" WITH 2 COATS OF CARBOLINE "BITUMASTIC 50"

6. 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.

7. 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.

8. DOWNSPOUT ADAPTER: ADAPTER SHALL BE AS MANUFACTURED BY NDS, INC.

9. SEE FIRE PROTECTION NOTES FOR FIRE PIPING/SPECIFICATIONS.

10. SEE UTILITY STRUCTURE TABLE FOR UTILITY STRUCTURE SPECIFICATIONS.

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HIGHLAND FARMS, LP - PHASE 1A

GENERAL INFORMATION

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PRELIMINARY
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SHEET	C1.2
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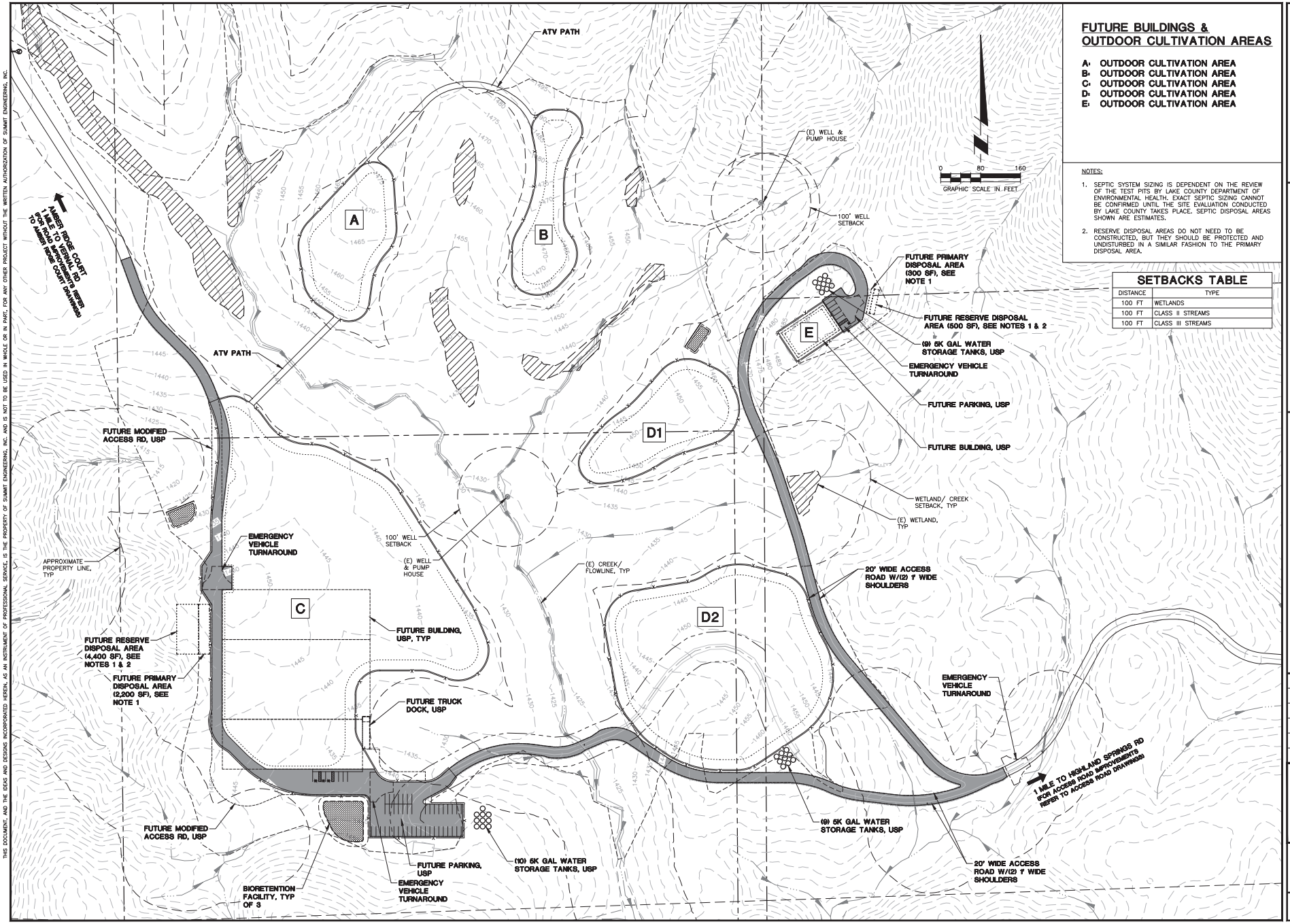

FUTURE BUILDINGS & OUTDOOR CULTIVATION AREAS

- **A:** OUTDOOR CULTIVATION AREA
- **B:** OUTDOOR CULTIVATION AREA
- **C:** OUTDOOR CULTIVATION AREA
- **D:** OUTDOOR CULTIVATION AREA
- **E:** OUTDOOR CULTIVATION AREA

NOTES:

1. 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.
2. 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
100 FT	CLASS III STREAMS

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HIGHLAND FARMS, LP - PHASE 1A

OVERALL SITE PLAN

2024-10-11	REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE:	2024-10-07
JOB NO:	2021038
SCALE:	AS SHOWN
DRAWN:	TAF
CHECKED:	JG
SHEET	C2.0
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FUTURE BUILDINGS & OUTDOOR CULTIVATION AREAS

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100 FT	CLASS II STREAMS
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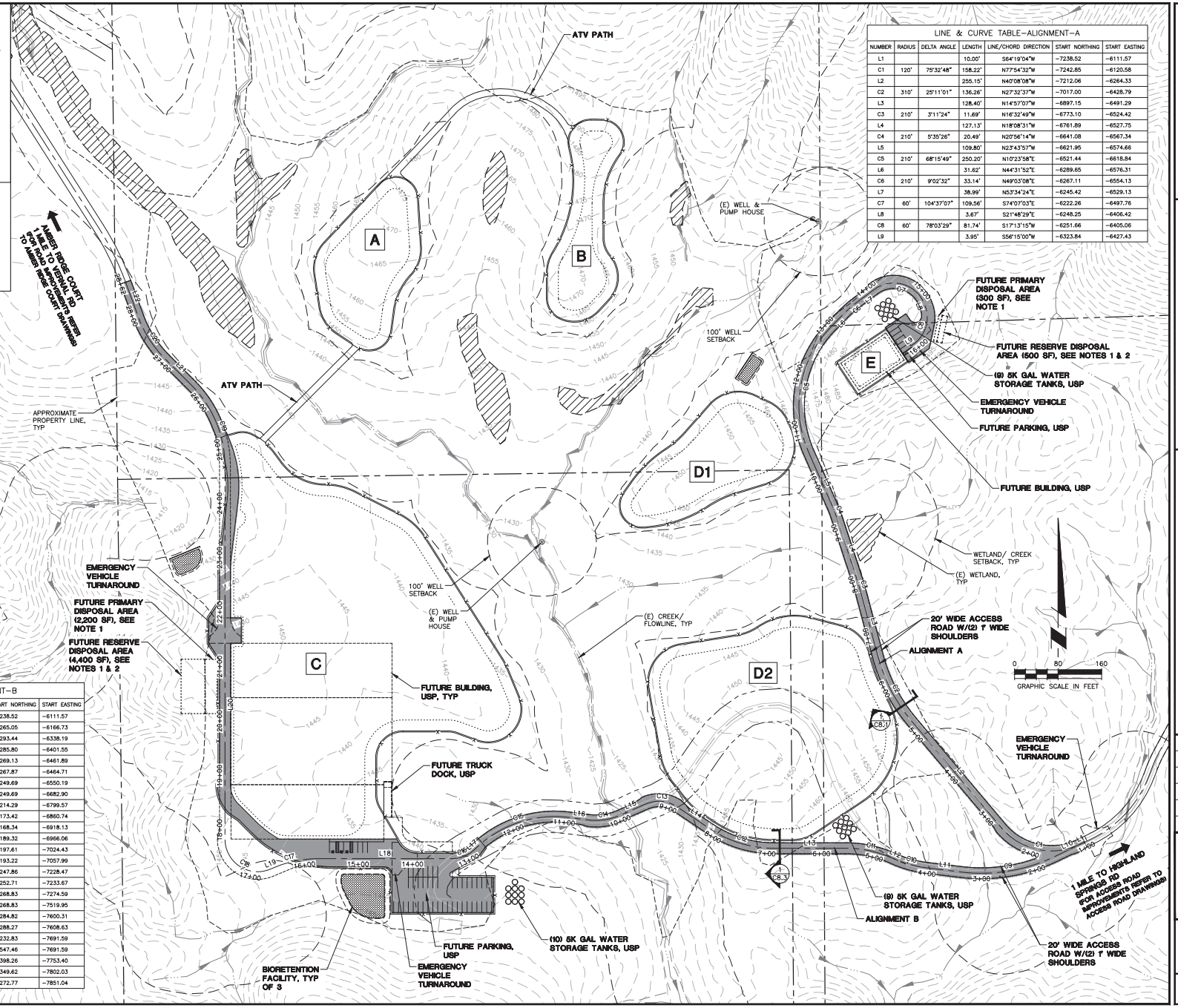

LINE & CURVE TABLE–ALIGNMENT–A

NUMBER	RADIUS	DELTA ANGLE	LENGTH	LINE/CHORD DIRECTION	START NORTHING	START EASTING
L1			10.00'	S64°19'04"W	−7238.52	−6111.57
C1	120'	75°32'48"	158.22'	N77°54'32"W	−7242.85	−6120.58
L2			255.15'	N40°08'08"W	−7212.06	−6264.33
C2	310'	25°11'01"	136.26'	N27°32'37"W	−7017.00	−6428.79
L3			128.40'	N14°57'07"W	−6897.15	−6491.29
C3	210'	3°11'24"	11.69'	N16°32'49"W	−6773.10	−6524.42
L4			127.13'	N18°08'31"W	−6761.89	−6527.75
C4	210'	5°35'26"	20.49'	N20°56'14"W	−6641.08	−6567.34
L5			109.80'	N23°43'57"W	−6621.95	−6574.66
C5	210'	68°15'49"	250.20'	N10°23'58"E	−6521.44	−6618.84
L6			31.62'	N44°31'52"E	−6289.65	−6576.31
C6	210'	9°02'32"	33.14'	N49°03'08"E	−6267.11	−6554.13
L7			38.99'	N53°34'24"E	−6245.42	−6529.13
C7	60'	104°37'07"	109.56'	S74°07'03"E	−6222.26	−6497.76
L8			3.67'	S21°48'29"E	−6248.25	−6406.42
C8	60'	78°03'29"	81.74'	S17°13'15"W	−6251.66	−6405.06
L9			3.95'	S56°15'00"W	−6323.84	−6427.43

LINE & CURVE TABLE–ALIGNMENT–B

NUMBER	RADIUS	DELTA ANGLE	LENGTH	LINE/CHORD DIRECTION	START NORTHING	START EASTING
L10			61.21'	S64°19'04"W	−7238.52	−6111.57
C9	310'	32°33'28"	176.15'	S80°35'46"W	−7265.05	−6166.73
L11			63.82'	N83°07'28"W	−7293.44	−6338.19
C10	210'	17°08'36"	62.83'	N74°33'10"W	−7285.80	−6401.55
L12			3.10'	N65°58'52"W	−7269.13	−6461.89
C11	210'	24°01'08"	88.03'	N77°59'26"W	−7267.87	−6464.71
L13			132.71'	N90°00'00"W	−7249.69	−6550.19
C12	210'	33°45'00"	123.70'	N73°07'30"W	−7249.69	−6682.90
L14			73.57'	N56°15'00"W	−7214.29	−6799.57
C13	60'	57°22'53"	60.09'	N84°56'26"W	−7173.42	−6860.74
L15			52.32'	S66°22'07"W	−7168.34	−6918.13
C14	110'	31°05'17"	59.68'	S81°54'46"W	−7189.32	−6966.06
L16			33.85'	N82°32'36"W	−7197.61	−7024.43
C15	210'	50°27'24"	184.93'	S72°13'42"W	−7193.22	−7057.99
L17			7.12'	S47°00'00"W	−7247.86	−7228.47
C16	60'	43°00'00"	45.03'	S68°30'00"W	−7252.71	−7233.67
L18			245.35'	N90°00'00"W	−7268.83	−7274.59
C17	210'	22°30'00"	82.47'	S78°45'00"W	−7268.83	−7519.95
L19			9.01'	S67°30'00"W	−7284.82	−7600.31
C18	60'	112°30'00"	117.81'	N56°15'00"W	−7288.27	−7608.63
L20			685.36'	N0°00'00"E	−7232.83	−7691.59
C19	211'	45°00'03"	165.72'	N22°30'01"W	−6547.46	−7691.59
L21			68.78'	N45°00'03"W	−6398.26	−7753.40
C20	211'	24°56'54"	91.88'	N32°31'36"W	−6349.62	−7802.03
L22			67.83'	N20°03'09"W	−6272.77	−7851.04

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LAKE COUNTY DEVEOPEMENT CO.
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LAKEPORT, CA 95453
APNS: 007-006-40, 36, 34, 27, 41 & 007-057-01 & 02

HIGHLAND FARMS, LP - PHASE 1A

LAYOUT & HORIZONTAL CONTROL PLAN

2024-10-11	REVISED GRADING PLANS

PRELIMINARY
NOT FOR CONSTRUCTION

DATE:	2024-10-07
JOB NO:	2021038
SCALE:	AS SHOWN
DRAWN:	TAF
CHECKED:	JG
SHEET	C3.0
	5 OF 13

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, 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 CONSTRUCTED BY CONTRACTOR. GRADING, PRIOR CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD. OVEREXCAVATION 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 GRADE TO DRAIN
18.	SWALE, SEE 10/C9.0
19.	CLEANOUT, SEE 1/C9.1
20.	CULVERT WING WALL, SEE 7/C9.1
21.	CAP & PLUG 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 3 & 4
25.	(E) FLOWLINE

NOTES:

1. SEE SHEET C1.1 FOR UTILITY STRUCTURE TABLE.
2. GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE.
3. OVER 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 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.
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.

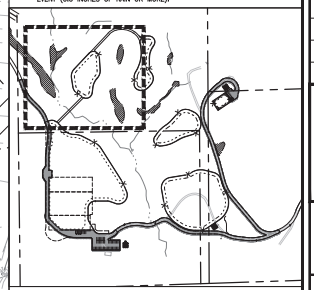
STORMWATER MANAGEMENT LEGEND

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, 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 8/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 5' 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 SUBGRADE, CONSTRUCT LOW POINTS IN DEPRESSED AREAS IN PREPARATION OF STORM EVENTS. USE TRASH PUMPS AND TEMPORARY HOSING TO DEWATER. 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).



KEY MAP

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LAKE COUNTY DEVEOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 95453
APNS: 007-008-40, 36, 34, 27, 41 & 007-067-01 & 02

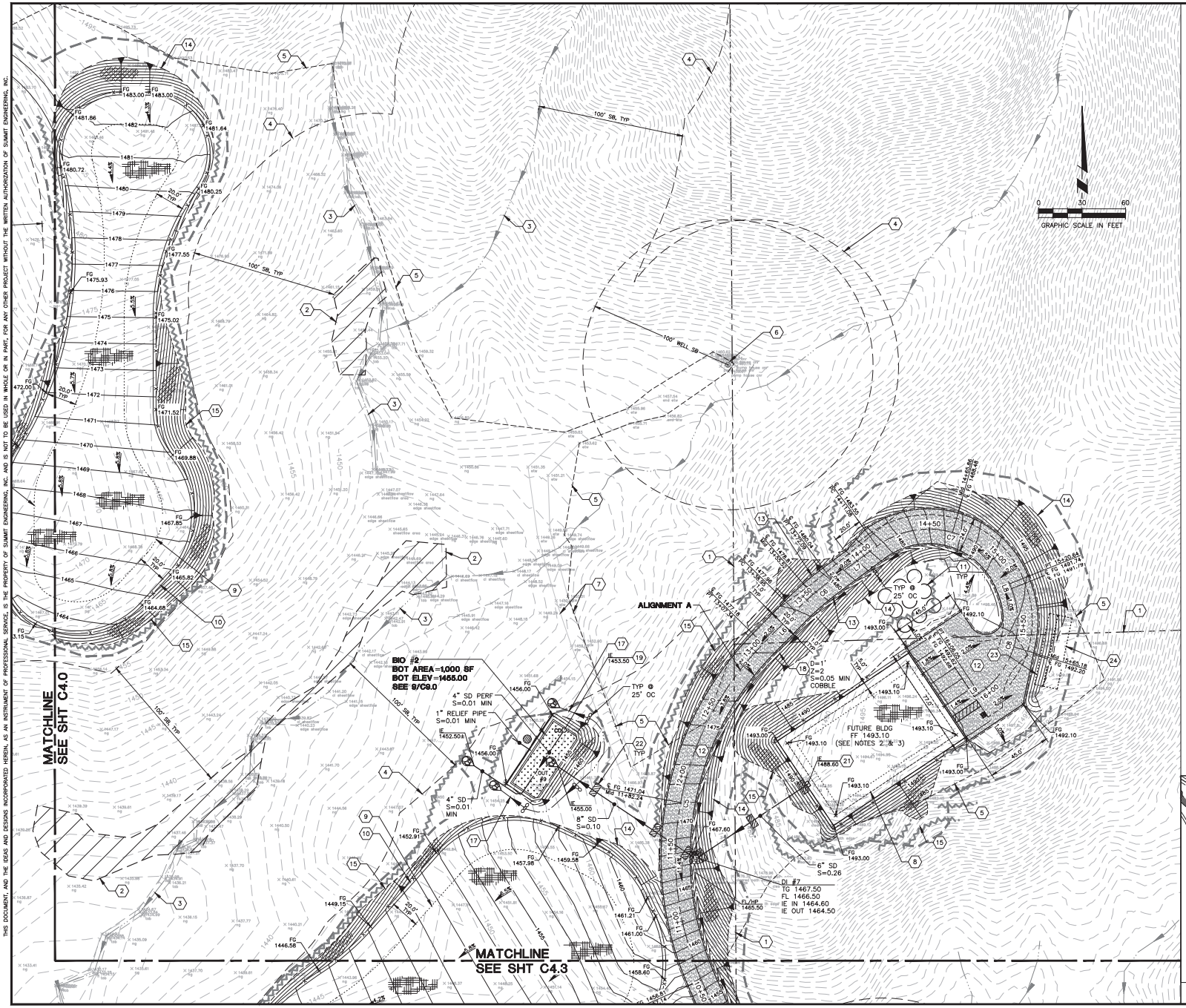
HIGHLAND FARMS, LP - PHASE 1A

GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN

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	C4.0
	6 OF 13



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, 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 CONSTRUCTED BY SCARIFICE LINEARTIC ASPHALT CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD. OVEREXCAVATION 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 GRADE TO DRAIN
18.	SWALE, SEE 10/C9.0
19.	CLEANOUT, SEE 1/C9.1
20.	CULVERT WING WALL, SEE 7/C9.1
21.	CAP & PLUG 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 3 & 5
25.	(E) FLOWLINE

NOTES:

1. SEE SHEET C1.1 FOR UTILITY STRUCTURE TABLE.
2. GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE.
3. OVER 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 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.
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.

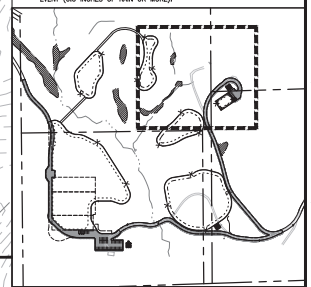
STORMWATER MANAGEMENT LEGEND

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, 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 8/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 5' 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 SUBGRADE, GRADE LOW POINTS IN DEPRESSED AREAS IN PREPARATION OF STORM EVENTS. USE TRASH PUMPS AND TEMPORARY HOSING TO DEWATER. 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).



KEY MAP

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LAKE COUNTY DEVEOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 95453
APNS: 007-006-40, 36, 34, 27, 41 & 007-057-01 & 02

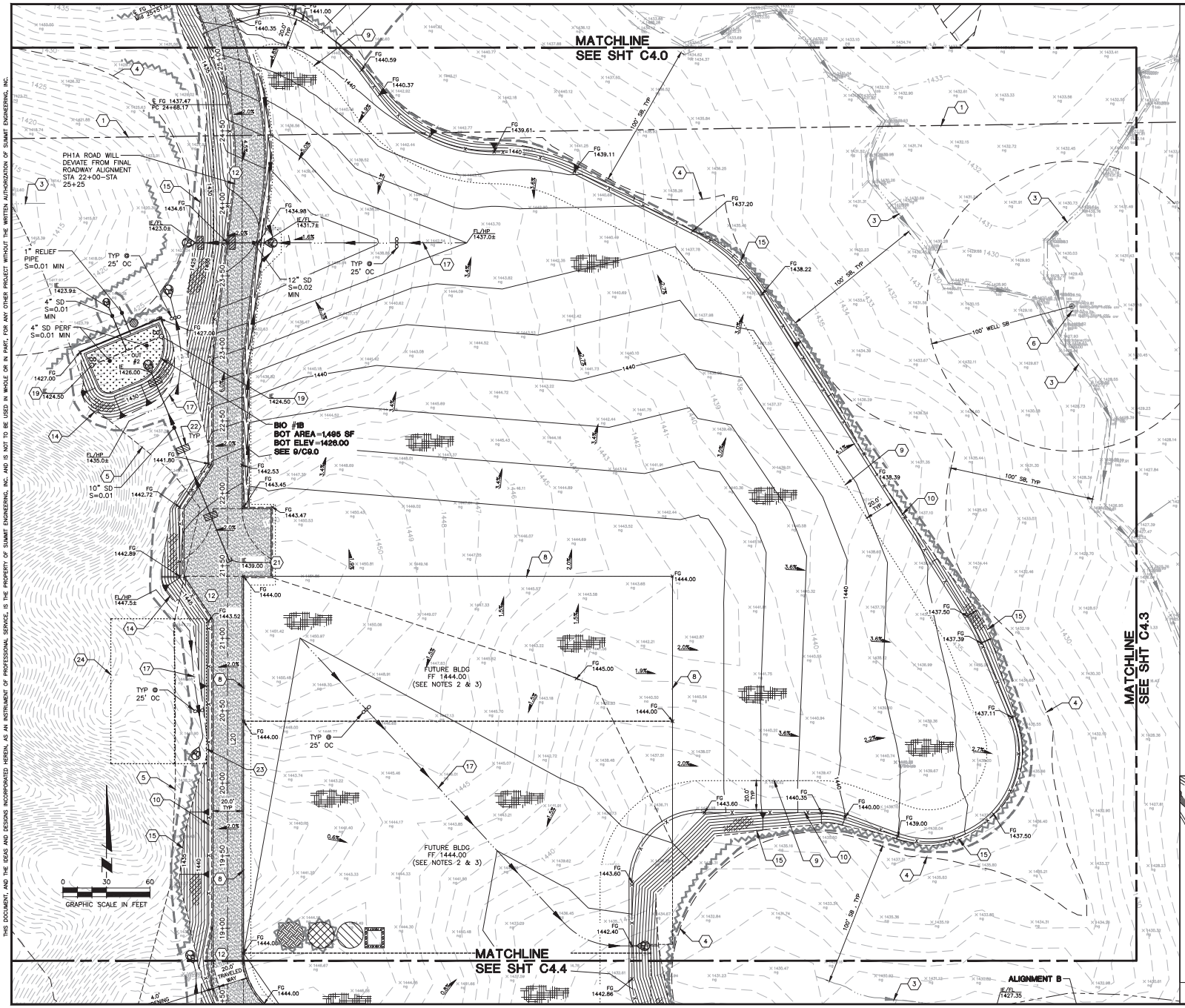
HIGHLAND FARMS, LP - PHASE 1A

GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN

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	C4.1
	7 OF 13



KEY NOTES

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2.	APPROXIMATE LIMITS OF (E) WETLAND, TYP
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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 14" CL 2 AGG BASE TO BE CONSTRUCTED BY SUFFICIENCE LINEARITY DURING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD. OVEREXCAVATION 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 GRADE TO DRAIN
18.	SWALE, SEE 10/C9.0
19.	CLEANOUT, SEE 1/C9.1
20.	CULVERT WING WALL, SEE 7/C9.1
21.	CAP & PLUG UTILITY, MARK LOCATION FOR FUTURE CONNECTION
22.	SLURRY CEMENT PLUG IN UTILITY TRENCH, TYP, SEE 4/C9.1, SEE UTILITY PLAN 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. SEE SHEET C1.1 FOR UTILITY STRUCTURE TABLE.
2. GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE.
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4. 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.
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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 EXPOSED 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 9/C9.0 (SEE 5/C9.1 FOR BIO #1A)	
SAMPLING LOCATION	
LIMITS OF CONSTRUCTION/ DISTURBANCE	

* REMOVE UPON COMPLETION OF CONSTRUCTION

STORMWATER MANAGEMENT NOTES:

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3. DURING OVER EXCAVATION AND UPON RESTORATION OF SURFACE TO SUBGRADE, GRADE LOW POINTS IN DEPRESSED AREAS IN PREPARATION OF STORM EVENTS. USE TRASH PUMPS AND TEMPORARY HOSING TO DEWATER. DIRECT DISCHARGE TO SPECIFIED DISCHARGE LOCATIONS.
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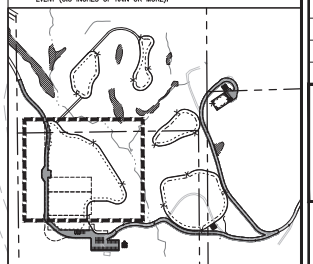
5. DISCHARGES SHALL COLLECT ONE SAMPLE AT EACH DISCHARGE POINT REPRESENTATIVE OF CONSTRUCTION ACTIVITY, OR A MINIMUM OF TWO (2) SAMPLES WHICH EVER IS GREATER, EACH DAY OF A QUALIFIED STORM EVENT (0.5 INCHES OF RAIN OR MORE).



KEY MAP

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LAKE COUNTY DEVEOPEMENT CO.
HIGHLAND SPRINGS ROAD
LAKEPORT, CA 95453
APNS: 007-006-40, 36, 34, 27, 41 & 007-057-01 & 02

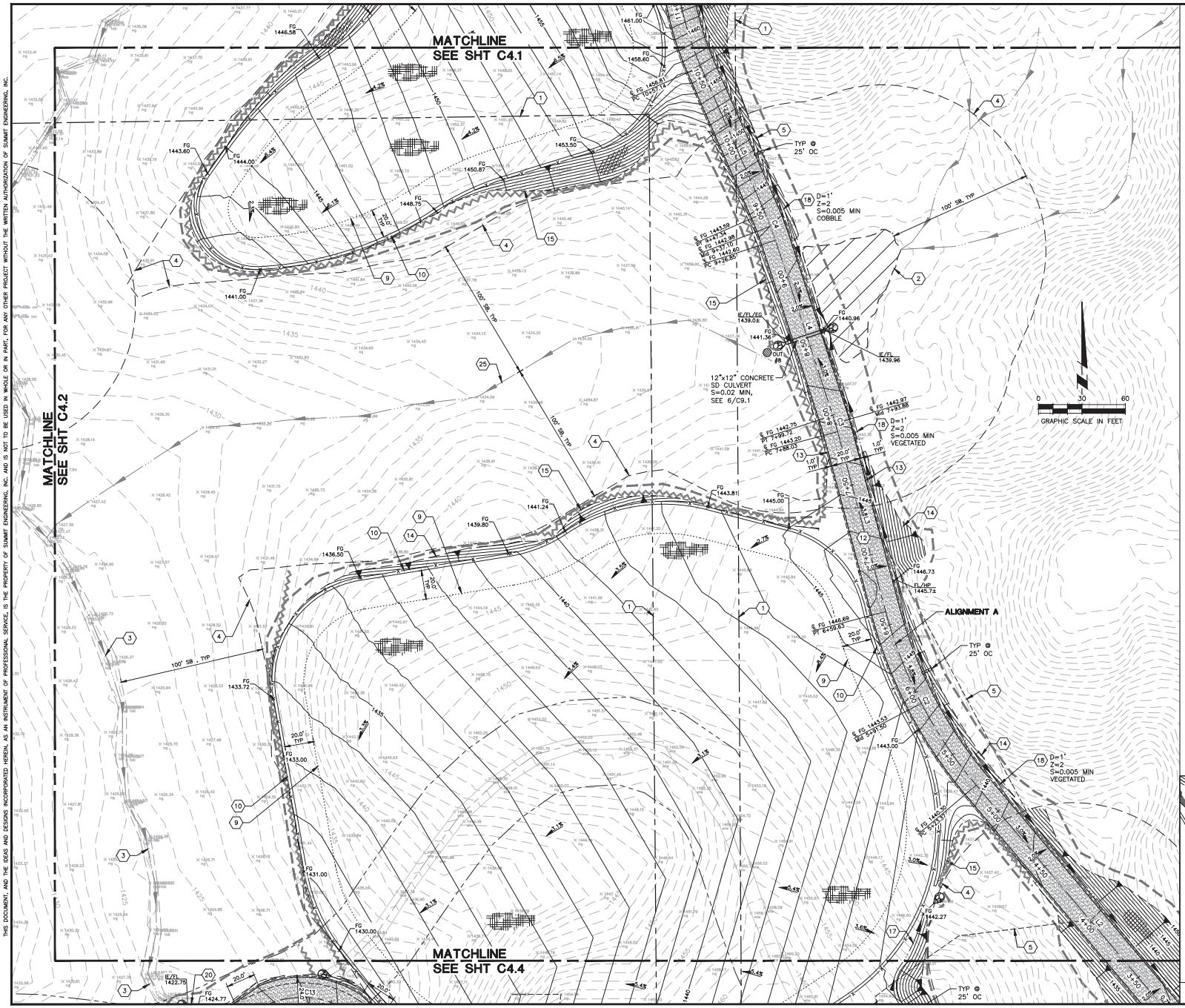
HIGHLAND FARMS, LP - PHASE 1A

GRADING, DRAINAGE & STORMWATER MANAGEMENT PLAN

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	C4.2
	8 OF 13



KEY NOTES

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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 CONSTRUCTED BY SUMMIT PRIOR TO ANY PAVING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD. OVEREXCAVATION 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 GRADE TO DRAIN
18.	SWALE, SEE 10/C9.0
19.	CLEANOUT, SEE 1/C9.1
20.	CULVERT WING WALL, SEE 7/C9.1
21.	CAP & PLUG UTILITY, MARK LOCATION FOR FUTURE CONNECTION
22.	SLURRY CEMENT PLUG IN UTILITY TRENCH, TYP, SEE 4/C9.1, SEE UTILITIES NOTES ON SHEET 1 FOR SIZING 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. SEE SHEET C1.1 FOR UTILITY STRUCTURE TABLE.
2. GRADE AREA WITHIN FUTURE BUILDING FOOTPRINT TO SLOPE AT 2% MIN FOR DRAINAGE.
3. OVER 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 PITS BY LAKE COUNTY DEPARTMENT OF ENVIRONMENTAL HEALTH. EXACT SEPTIC ZONING CANNOT BE CONFIRMED UNTIL THE SITE 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.

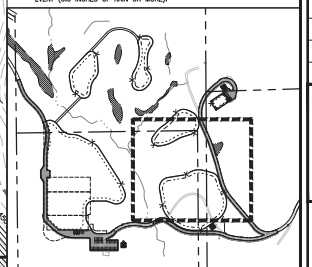
STORMWATER MANAGEMENT LEGEND

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, UNO, SEE 6/C9.0	
HATCHING REPRESENTS HYDROSEED OR STRAW MULCH OVER EXPOSED 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 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 5' 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 SUBGRADE, GRADE LOW POINTS IN DEPRESSED AREAS IN PREPARATION OF STORM EVENTS. USE TRASH PUMPS AND TEMPORARY HOSING TO DEWATER. 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).



KEY MAP

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LAKEPORT, CA 95453
APNs: 007-006-40, 36, 34, 27, 41 & 007-067-01 & 02

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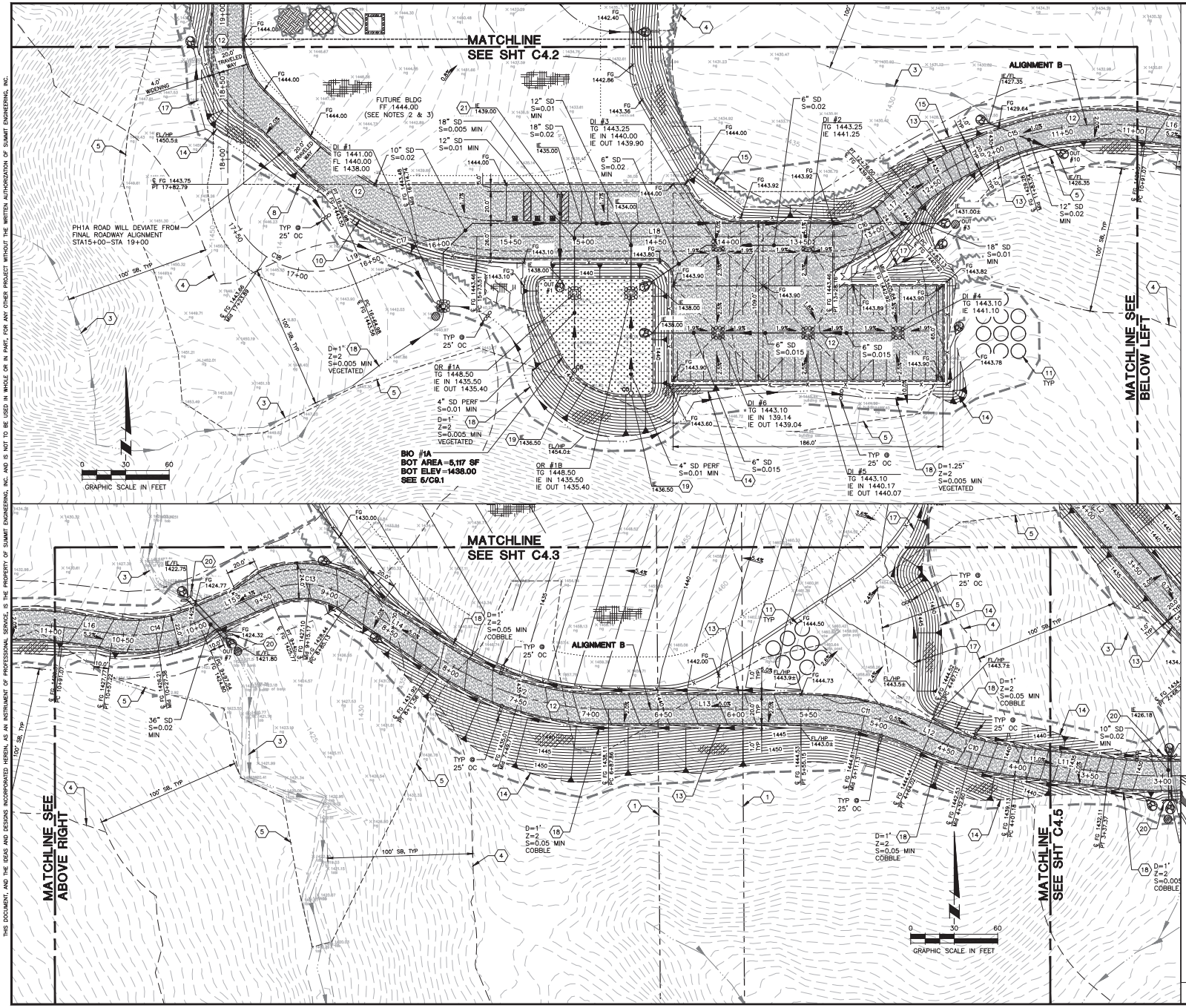
	9 OF 13



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, 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 CONSTRUCTED BY SUBCONTRACTOR DURING CONSTRUCTION FOR A MINIMUM 75,000 POUND VEHICLE LOAD. OVEREXCAVATION 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)
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17.	FLOWLINE GRADE TO DRAIN
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19.	CLEANOUT, SEE 1/C9.1
20.	CULVERT WING WALL, SEE 7/C9.1
21.	CAP & PLUG UTILITY, MARK LOCATION FOR FUTURE CONNECTION
22.	SLURRY CEMENT PLUG BY UTILITY TRENCH, TYP. SEE 4/C9.1, SEE UTILITY PLAN SHEETS FOR DETAILS AND PROVISIONS
23.	APPROXIMATE LIMITS OF FUTURE PRIMARY DISPOSAL AREA, SEE NOTE 4
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NOTES:

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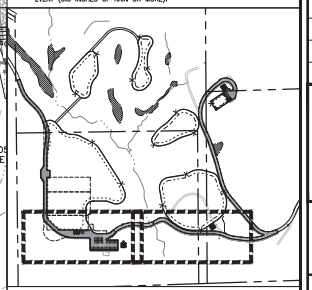

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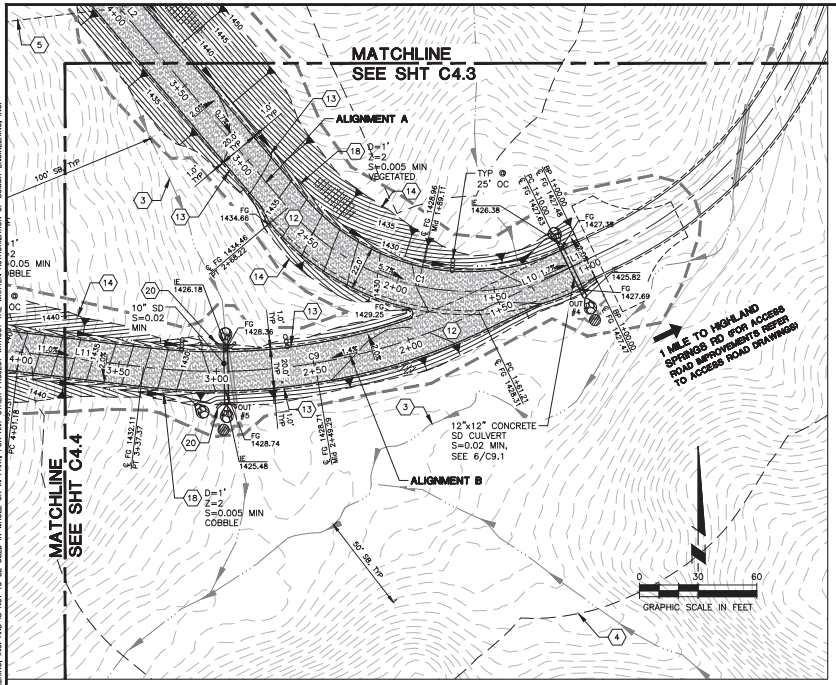

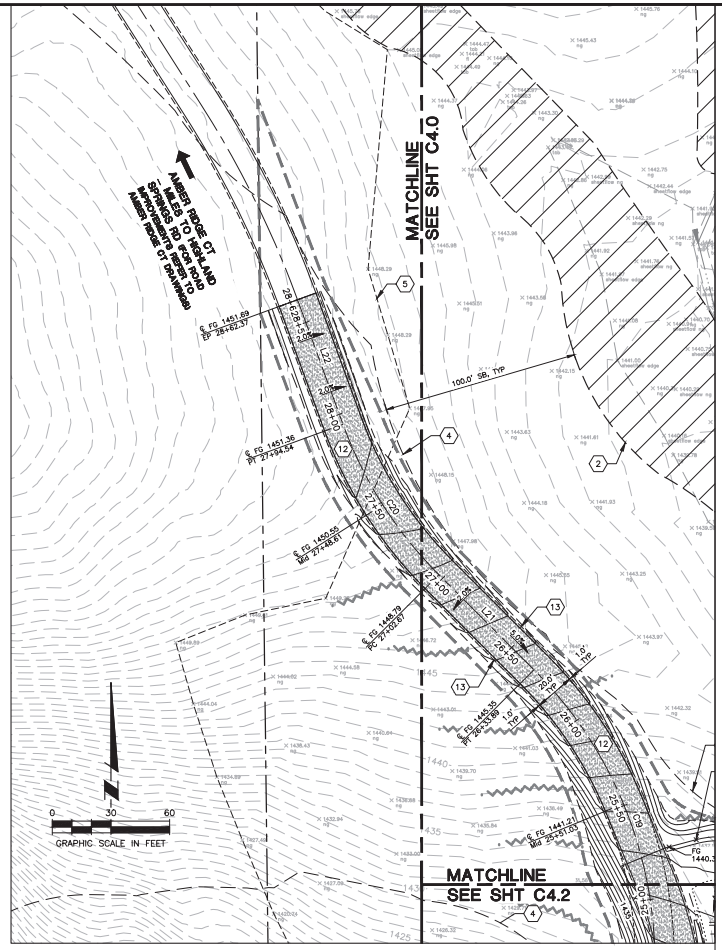

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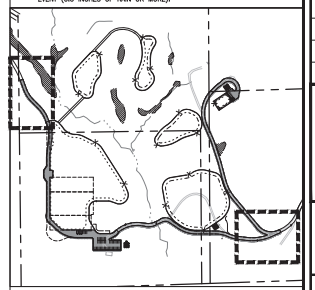

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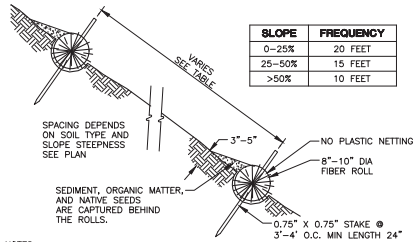
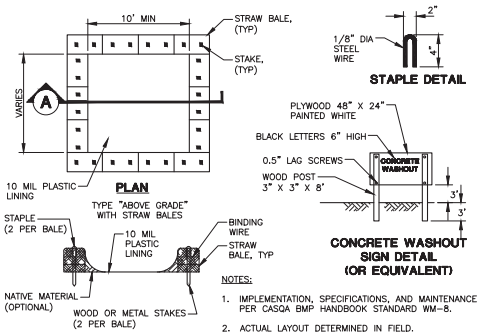


SLOPE	FREQUENCY
0–25%	20 FEET
25–50%	15 FEET
>50%	10 FEET

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.

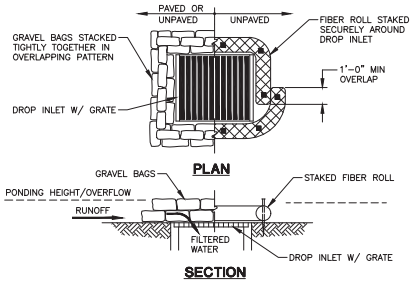
FIBER ROLL 1
NTS ER013



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.

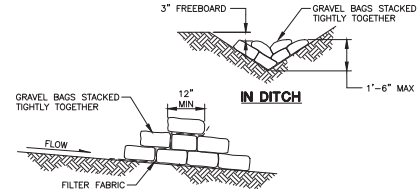
CONCRETE WASHOUT 2
NTS ER019



NOTES:

1. IMPLEMENTATION, SPECIFICATIONS, AND MAINTENANCE PER CASQA BMP HANDBOOK STANDARD SE–10.
2. THE TOP OF THE STRUCTURE (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

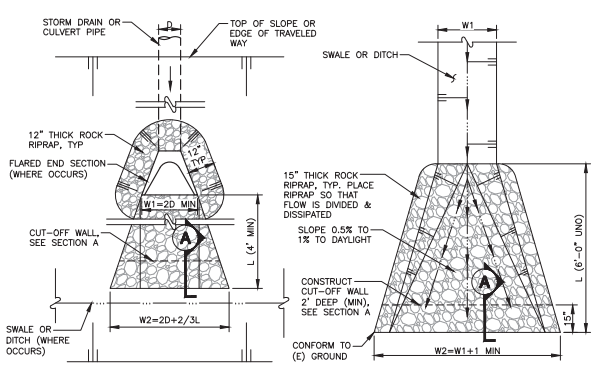
DROP INLET FIBER ROLL/ GRAVEL BAG FILTER 3
NTS ER023



NOTES:

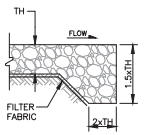
1. IMPLEMENTATION, SPECIFICATIONS AND MAINTENANCE PER CASQA BMP HANDBOOK STANDARD SE–4.
2. EACH GRAVEL–FILLED BAG SHOULD HAVE A LENGTH OF 18 ON., WIDTH OF 12IN., THICKNESS OF 3 IN., AND MASS OF APPROXIMATELY 33 LBS. BAG DIMENSIONS ARE NOMINAL, AND MAY VARY BASED ON LOCALLY AVAILABLE MATERIALS.
3. BAGS SHOULD BE WOVEN POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE FABRIC OR BURLAP, MINIMUM UNIT WEIGHT OF 4 OUNCES/YD^2, MULLEN BURST STRENGTH EXCEEDING 300 LB/IN^2 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.

GRAVEL BAG CHECK DAM 4
NTS ER022A



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

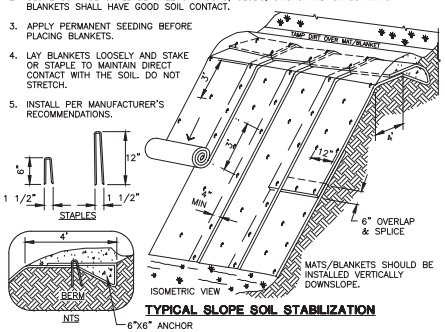
* SMALL PIPES AND CHANNELS (6–INCHES AND LESS) ARE NOT LISTED IN THE TABLE ABOVE, AND SHALL USE 6" COBBLE OR No. 3 BACKING.



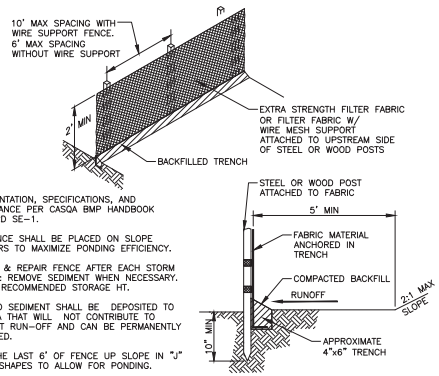
RIPRAP ENERGY DISSIPATOR 5
NTS DR002

NOTES:

1. IMPLEMENTATION, SPECIFICATIONS, AND MAINTENANCE PER CASQA BMP HANDBOOK STANDARD EC–7.
2. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS BLANKETS SHALL HAVE GOOD SOIL CONTACT.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
5. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



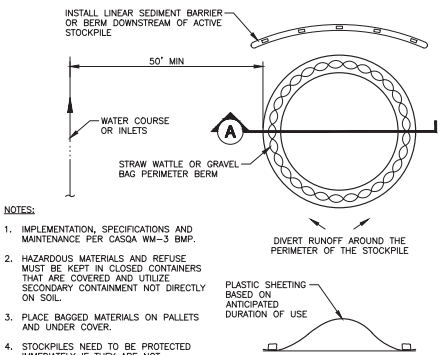
EROSION CONTROL MAT INSTALLATION 6
NTS ER015B



NOTES:

1. IMPLEMENTATION, SPECIFICATIONS, AND MAINTENANCE PER CASQA BMP HANDBOOK STANDARD SE–1.
2. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
3. INSPECT & REPAIR FENCE AFTER EACH STORM EVENT & REMOVE SEDIMENT WHEN NECESSARY. 9" MAX RECOMMENDED STORAGE HT.
4. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT RUN–OFF AND CAN BE PERMANENTLY STABILIZED.
5. TURN THE LAST 6' OF FENCE UP SLOPE IN "J" OR "L" SHAPES TO ALLOW FOR PONDING.

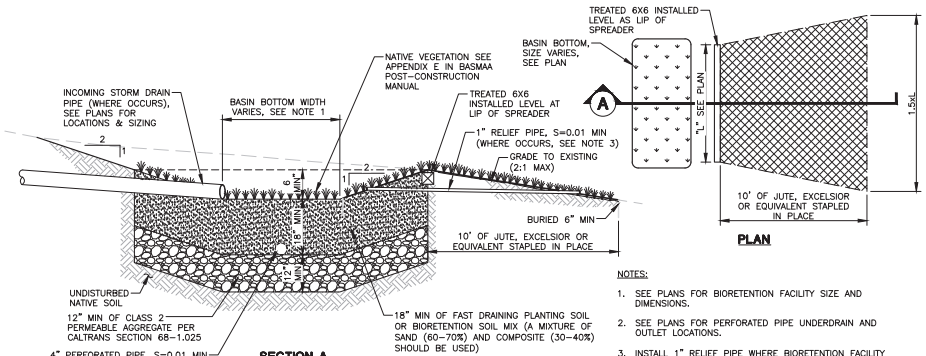
SILT FENCE 7
NTS ER002



NOTES:

1. IMPLEMENTATION, SPECIFICATIONS AND MAINTENANCE PER CASQA WM–3 BMP.
2. HAZARDOUS MATERIALS AND REFUSE MUST BE KEPT IN CLOSED CONTAINERS THAT ARE COVERED AND UTILIZE SECONDARY CONTAINMENT NOT DIRECTLY ON SOIL.
3. PLACE BAGGED MATERIALS ON PALLETS AND UNDER COVER.
4. STOCKPILES NEED TO BE PROTECTED IMMEDIATELY IF THEY ARE NOT SCHEDULED TO BE USED WITHIN 14 DAYS.

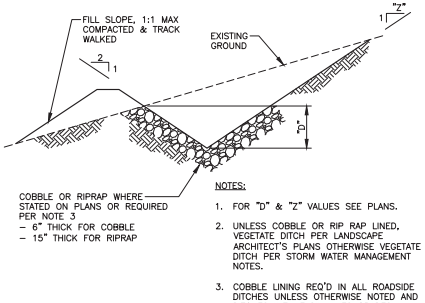
STOCKPILE BMP 8
NTS ER025



NOTES:

1. SEE PLANS FOR BIORETENTION FACILITY SIZE AND DIMENSIONS.
2. SEE PLANS FOR PERFORATED PIPE UNDERDRAIN AND OUTLET LOCATIONS.
3. INSTALL 1" RELIEF PIPE WHERE BIORETENTION FACILITY DEPTH EXCEEDS 6", SEE PLANS FOR LOCATIONS.

BIORETENTION FACILITY W/LEVEL SPREADER OUTLET 9
NTS



NOTES:

1. FOR "D" & "Z" VALUES SEE PLANS.
2. UNLESS COBBLE OR RIP RAP LINED, VEGETATE DITCH PER LANDSCAPE ARCHITECT'S PLANS OTHERWISE VEGETATE DITCH PER STORM WATER MANAGEMENT NOTES.
3. COBBLE LINING REQ'D IN ALL ROADSIDE DITCHES UNLESS OTHERWISE NOTED AND DITCHES WITH FLOW LINES GRADES GREATER THAN 5%.

"V" DITCH TYPICAL SECTION 10
NTS DR005

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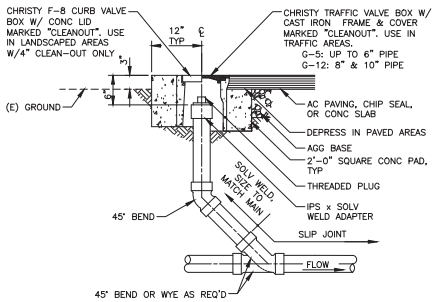
HIGHLAND FARMS, LP - PHASE 1A

DETAILS

	2024–10–11 REVISED GRADING PLANS

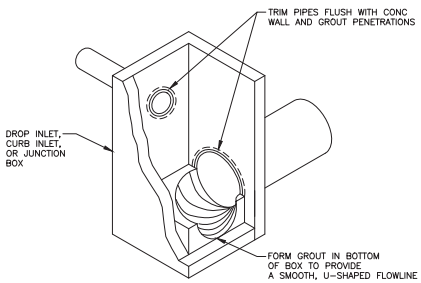
PRELIMINARY
NOT FOR CONSTRUCTION

DATE:	2024–10–03
JOB NO:	2021038
SCALE:	AS SHOWN
DRAWN:	TAF
CHECKED:	JG
SHEET	C9.0
	12 OF 13



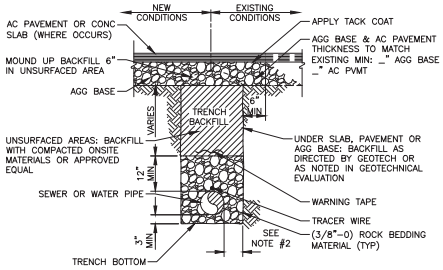
GRAVITY CLEANOUT TYPE "A"

NTS UG006A **1**



GROUTING FOR DRAINAGE STRUCTURE

NTS DR020 **2**

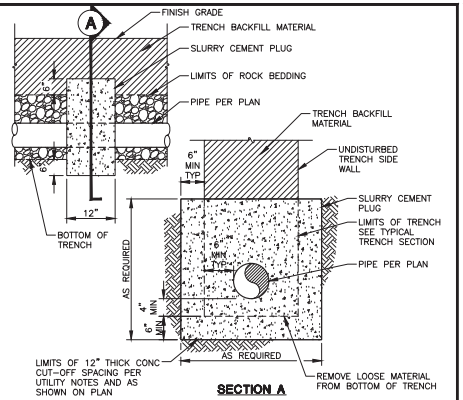


NOTES:

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

TYPICAL UTILITY PIPE TRENCH SECTION

NTS UG001B **3**

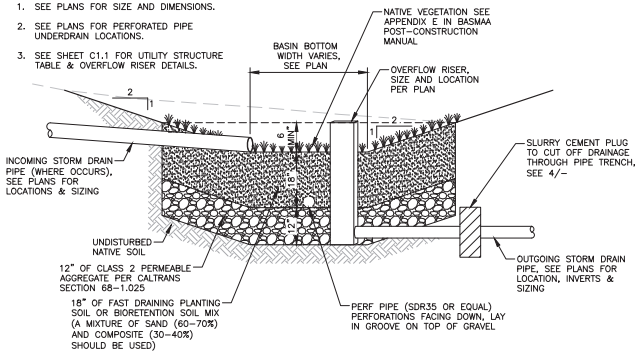


SLURRY CEMENT PLUG

NTS UG004 **4**

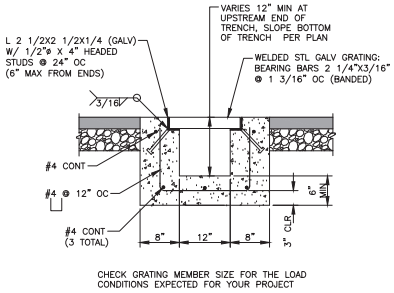
NOTES:

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)

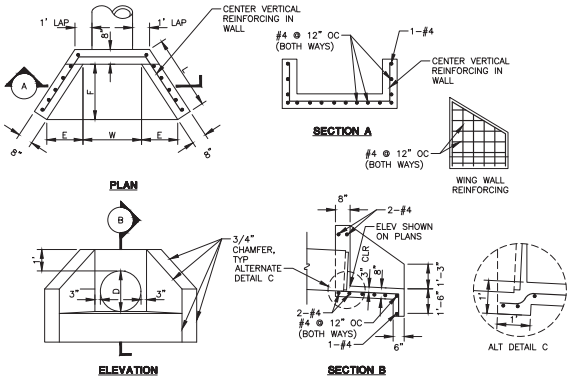
NTS **5**



CHECK GRATING MEMBER SIZE FOR THE LOAD CONDITIONS EXPECTED FOR YOUR PROJECT

CONCRETE CULVERT SECTION

NTS **6**



DIA OF PIPE	DIMENSIONS			SINGLE PIPE					DOUBLE PIPE				
					U TYPE		WING TYPE			U TYPE		WING TYPE	
	L	E	F	W	CONC. (CY)	STEEL (LBS)	CONC. (CY)	STEEL (LBS)	W	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	AS SHOWN ON PLANS	0.82	53	0.90	61
24"	3'-1 7/8"	1'-9"	2'-7 1/2"	2'-6"	0.79	47	0.93	60	5'-8"	1.22	73	1.36	86
30"	4'- 5/8"	2'-3"	3'-4 1/2"	3'	1.05	71	1.29	85	AS SHOWN ON PLANS	1.66	109	1.92	123
36"	4'-11 1/2"	2'-9"	4'-1 1/2"	3'-6"	1.33	88	1.69	114		2.19	136	2.55	162

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**

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