

GRADING AND DRAINAGE PLANS FOR:

5173 CANADA ROAD – CARTER LIVESTOCK

GILROY (SANTA CLARA COUNTY), CALIFORNIA

CONTACT INFORMATION:

PROPERTY OWNER: STEVE CARTER
CARTER LIVESTOCK
7565 PRESTWICK CT.
GILROY, CA 95020

CIVIL ENGINEER: STEVE CALCAGNO, P.E.
CONTACT: STEPHEN STROUP
KIER & WRIGHT CIVIL ENGINEERS & SURVEYORS, INC.
2850 COLLIER CANYON ROAD
LIVERMORE, CA 94551
925-245-8788
925-245-8796 FAX
sstroup@kierwright.com

GEOTECHNICAL ENGINEER: GEORGE J. BARNETT
EARTH SYSTEMS PACIFIC
400 PARK CENTER DRIVE, SUITE 1
HOLLISTER, CA 95023

GRADING NOTES

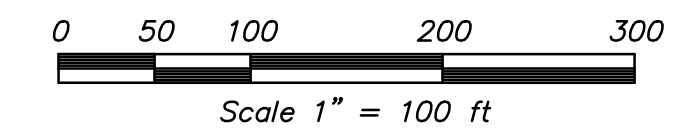
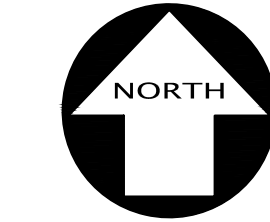
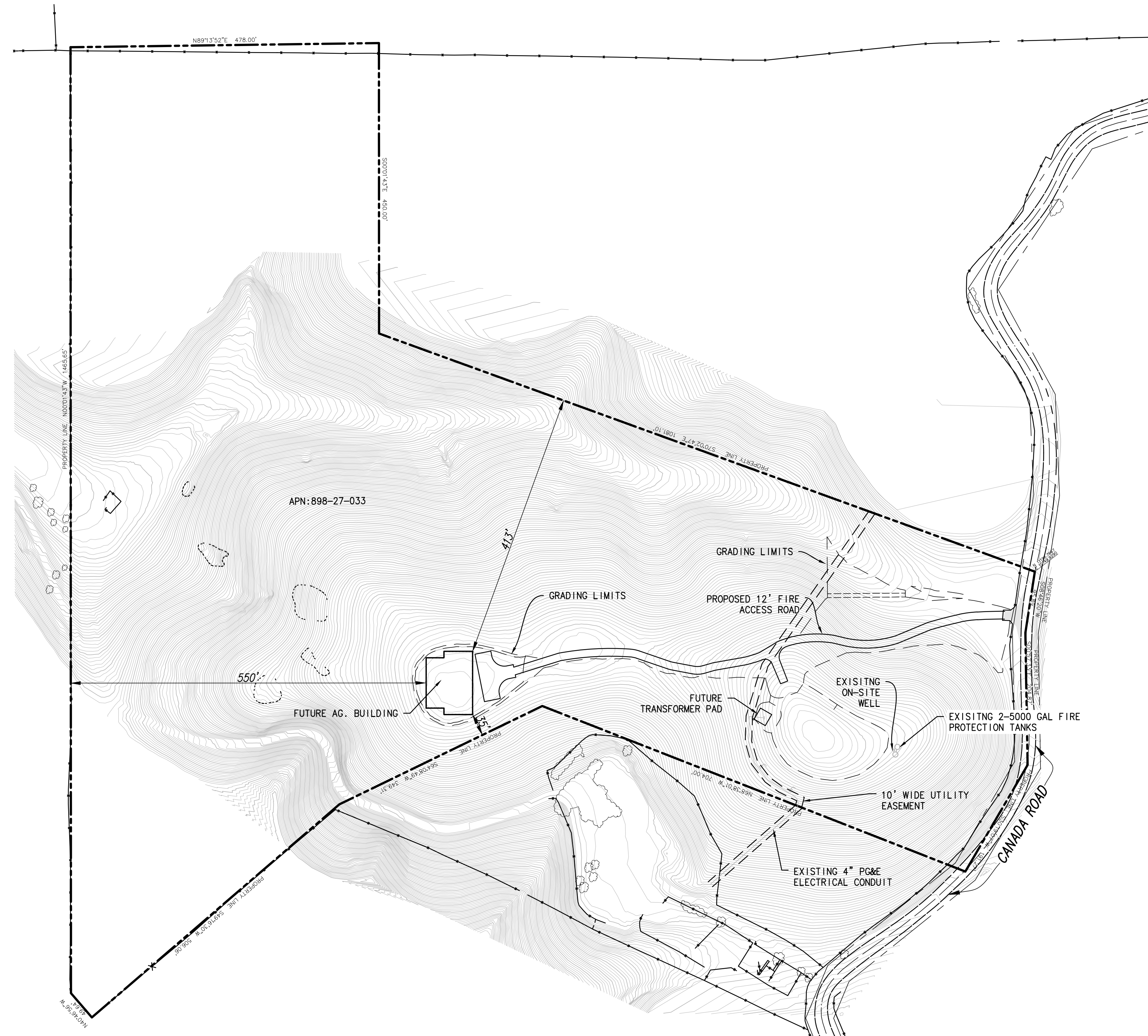
- ALL GRADING SHALL BE DONE IN ACCORDANCE WITH RECOMMENDATIONS IN THE GEOTECHNICAL INVESTIGATION PREPARED FOR THIS SITE BY EARTH SYSTEMS PACIFIC, DATED NOVEMBER 10TH, 2003, FILE NO. 0311-526.SER.
- CONTRACTOR SHALL DETERMINE HIS OWN EARTH QUANTITIES AND BASE HIS BID ACCORDINGLY.
- COMPACTION TO BE DETERMINED USING GEOTECHNICAL INVESTIGATION PREPARED FOR THIS SITE.
- THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE IMPROVEMENT PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES; HOWEVER, THE ENGINEER CAN NOT ASSUME RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THEIR DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED, BUT ARE NOT SHOWN ON THESE DRAWINGS.
- CONTRACTOR SHALL UNCOVER AND EXPOSE ALL EXISTING UTILITY AND SEWER LINES WHERE THEY ARE TO BE CROSSED, ABOVE OR BELOW, BY THE NEW FACILITY BEING CONSTRUCTED IN ORDER TO VERIFY THE GRADE AND TO ASSURE THAT THERE IS SUFFICIENT CLEARANCE. PIPE SHALL NOT BE STRUNG NOR TRENCHING COMMENCED UNTIL ALL CROSSINGS HAVE BEEN VERIFIED FOR CLEARANCE. IF THE CONTRACTOR FAILS TO FOLLOW THIS PROCEDURE, HE WILL BE SOLELY RESPONSIBLE FOR ANY EXTRA WORK OR MATERIAL REQUIRED IF MODIFICATIONS TO THE DESIGN ARE NECESSARY.
- THE CONTRACTOR SHALL SET HIS STRING OR WIRE THROUGH AT LEAST THREE GRADE STAKES TO VERIFY GRADE. IF THE STAKES DO NOT PRODUCE A UNIFORM GRADE, NOTIFY THE ENGINEER IMMEDIATELY AND HAVE THE GRADES CHECKED PRIOR TO THE TRENCHING OR PLACEMENT OF CONCRETE.
- ANY ADJUSTMENTS TO GRADES TO ACHIEVE EARTHWORK BALANCE SHALL BE MADE ONLY WITH APPROVAL OF THE ENGINEER.

EROSION & SEDIMENT CONTROL MEASURES

- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE EFFECTIVE FOR THE DURATION OF CONSTRUCTION.
- THE CONTRACTOR SHALL PLACE 3"-6" COARSE AGGREGATE AS A GRAVEL ROADWAY (12" MIN. THICK FOR THE FULL WIDTH AND 50 FEET LONG) AT EACH D/W ENTRANCE TO SITE. ANY MUD THAT IS TRACKED ONTO PUBLIC STREETS SHALL BE REMOVED THAT SAME DAY AND AS REQUIRED BY THE COUNTY.
- ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED AND CHANGES TO THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF THE COUNTY.
- ALL PAVED AREAS SHALL BE KEPT CLEAR OF EARTH MATERIAL AND DEBRIS. THE SITE SHALL BE MAINTAINED SO AS TO MINIMIZE SEDIMENT-LADEN RUN-OFF TO ANY STORM DRAINAGE SYSTEM.
- THIS PLAN COVERS ONLY THE FIRST WINTER FOLLOWING GRADING. PLANS ARE TO BE RESUBMITTED FOR COUNTY APPROVAL PRIOR TO THE SEPTEMBER FIRST OF EACH SUBSEQUENT YEAR UNTIL THE SITE IMPROVEMENTS ARE ACCEPTED BY THE COUNTY.
- ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY.
- SEDIMENT BASINS, IF USED, SHALL BE CLEANED OUT WHENEVER SEDIMENT REACHES THE SEDIMENT CLEANOUT LEVEL INDICATED ON THE PLANS.
- BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE QSP.
- ALL CUT AND FILL SLOPES ARE TO BE PROTECTED TO PREVENT OVERBANK FLOW.
- INLETS WHICH ARE NOT USED IN CONJUNCTION WITH ROCK BARRIER BAGS OR SEDIMENT BASINS SHOULD BE COVERED, OR OTHERWISE ADJUSTED TO PREVENT INFLOW, UNLESS THE AREA DRAINED IS UNDISTURBED OR STABILIZED.
- THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO ANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF THE ENGINEER.
- DETAILS FOR THE CONSTRUCTION OF FACILITIES ARE SHOWN ON C2.
- THIS PLAN IS INTENDED TO BE USED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST CURRENT. SEE SHEET C1 AND C2 FOR OTHER INFORMATION.

PROJECT DESCRIPTION

THE PROPOSED PROJECT WILL CONSIST OF A FIRE/ALL WEATHER ACCESS ROAD MADE UP OF 12" OF AGGREGATE BASE FROM CANADA ROAD TO A FUTURE PREFABRICATED METAL BUILDING, INTENDED FOR AGRICULTURAL USE. THE SITES SURROUNDING AREA IS RURAL RESIDENTIAL AND AGRICULTURAL. THE TOPOGRAPHY OF THE SITE CONSISTS OF TWO KNOLLS, BOTH WITH GENTLE TO MODERATE INCLINED SLOPES. THE GRADING DESIGN ENSURES THAT PUBLIC SAFETY AND HEALTH ARE NOT AT DANGER, AND SUSTAINABILITY FOR THE EXISTING AND PROPOSED WATERCOURSES. THE GRADING DESIGN WILL BE COMPLETED BY UTILIZING THE CUT SOIL AS FILL. THE LIMITS OF GRADING CONFORM TO THE EXISTING TOPOGRAPHY AS SHOWN ON SHEET C1. THE GRADING DESIGN CONFORMS TO THE GENERAL AND SPECIFIC PLAN POLICIES AND THE "GUIDELINES FOR GRADING AND HILLSIDE DEVELOPMENT" AND OTHER APPLICABLE GUIDELINES ADOPTED BY THE COUNTY.



SHEET INDEX

SHEET	DESCRIPTION
CIVIL	
CV	COVER SHEET
C1	GRADING & DRAINAGE PLAN
C2	EROSION CONTROL PLAN
C3	SECTIONS AND DETAILS
C4	PLAN AND PROFILE
1	AG EXEMPT BUILDING SITE PLAN

LEGEND

PROPOSED	EXISTING	DESCRIPTION
[Symbol]	[Symbol]	ASPHALT BERM
[Symbol]	[Symbol]	BLOCK/RETAINING WALL
[Symbol]	[Symbol]	BUILDING LINE
[Symbol]	[Symbol]	FLUSH CONCRETE CURB
[Symbol]	[Symbol]	CONCRETE CURB
[Symbol]	[Symbol]	CONCRETE CURB CUT
[Symbol]	[Symbol]	CONCRETE CURB & GUTTER
[Symbol]	[Symbol]	CONTOUR LINE
[Symbol]	[Symbol]	DRIVEWAY
[Symbol]	[Symbol]	EDGE OF PAVEMENT
[Symbol]	[Symbol]	FENCE LINE
[Symbol]	[Symbol]	GRADE BREAK LINE
[Symbol]	[Symbol]	LOT LINE
[Symbol]	[Symbol]	MONUMENT/MONUMENT LINE
[Symbol]	[Symbol]	PERFORATED STORM DRAIN PIPE
[Symbol]	[Symbol]	PROPERTY LINE
[Symbol]	[Symbol]	RIDGE LINE
[Symbol]	[Symbol]	RAINWATER LEADER
[Symbol]	[Symbol]	SIDEWALK
[Symbol]	[Symbol]	STORM DRAIN-MANHOLE & CATCH BASIN
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[Symbol]	[Symbol]	CATCH BASIN
[Symbol]	[Symbol]	CLEANOUT TO GRADE
[Symbol]	[Symbol]	CONCRETE
[Symbol]	[Symbol]	DOOR
[Symbol]	[Symbol]	DOWN SPOUT
[Symbol]	[Symbol]	DUCTILE IRON PIPE
[Symbol]	[Symbol]	EASEMENT
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[Symbol]	[Symbol]	FACE OF WALL
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[Symbol]	[Symbol]	TOP OF WALL
[Symbol]	[Symbol]	TRANSFORMER
[Symbol]	[Symbol]	TRASH ENCLOSURE

BY	REVISION	NO.	DATE
SBV			
2022.11.30	1ST AE SUBMITTAL		

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2850 Collier Canyon Road
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COVER SHEET
OF
5173 CANADA ROAD
FOR
CARTER LIVESTOCK

GILROY, CALIFORNIA

DATE	OCTOBER, 2024
SCALE	1"=100'
DESIGNER	SS
JOB NO.	A15702
SHEET	CV
OF	5 SHEETS

FOR GRADING ONLY

Know what's below.
Call before you dig.



EARTHWORK SUMMARY

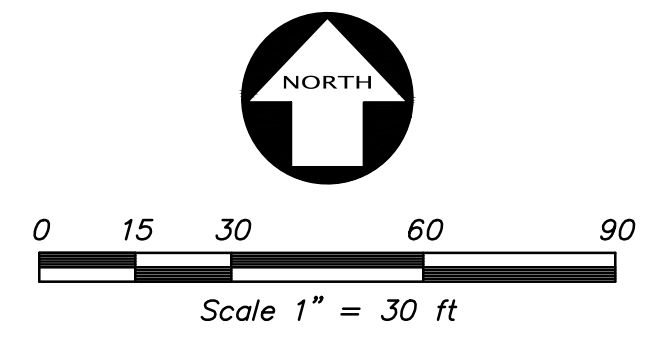
CUT: 4,700 CY
 FILL: 4,400 CY
 NET: 300 CY (CUT)

MAX. CUT DEPTH = 2 FT
 MAX. FILL DEPTH = 6 FT

NOTE:
 THE EARTHWORK QUANTITIES LISTED ON THESE PLANS ARE STATED ONLY FOR CALCULATION OF GRADING. THESE QUANTITIES DO NOT INCLUDE TRENCH SPOILS, SHRINK OR SWELL FROM COMPACTING EFFORTS OR OTHER VARIABLES. THE CONTRACTOR SHALL DETERMINE HIS OWN EARTHWORK QUANTITIES AND BASE HIS BID ACCORDINGLY.

AREA OF DISTURBANCE = 1.78 ACRES

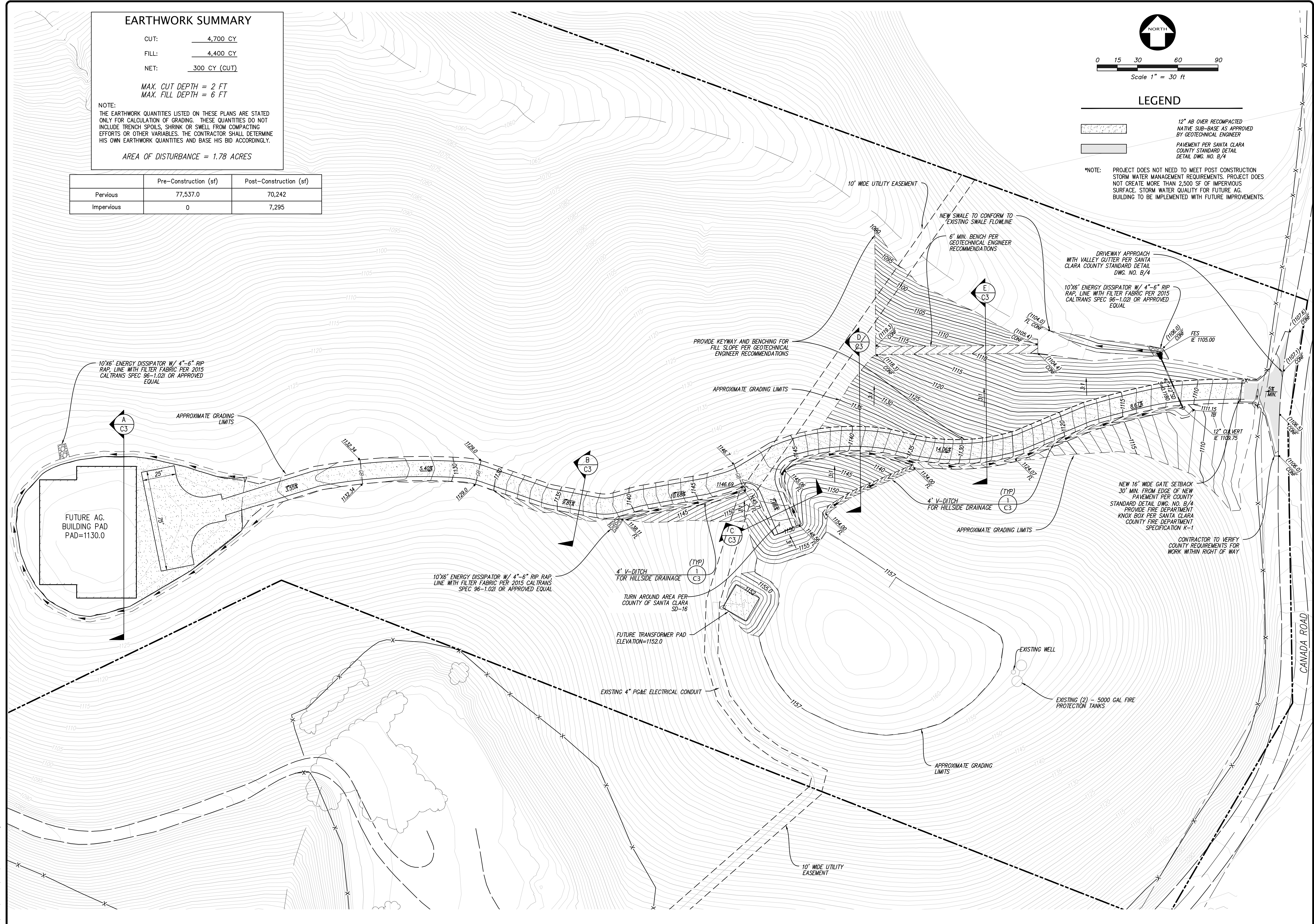
	Pre-Construction (sf)	Post-Construction (sf)
Pervious	77,537.0	70,242
Impervious	0	7,295



LEGEND

- 12" AB OVER RECOMPACTED NATIVE SUB-BASE AS APPROVED BY GEOTECHNICAL ENGINEER
- PAVEMENT PER SANTA CLARA COUNTY STANDARD DETAIL DETAIL DWG. NO. B/4

*NOTE: PROJECT DOES NOT NEED TO MEET POST CONSTRUCTION STORM WATER MANAGEMENT REQUIREMENTS. PROJECT DOES NOT CREATE MORE THAN 2,500 SF OF IMPERVIOUS SURFACE. STORM WATER QUALITY FOR FUTURE AG BUILDING TO BE IMPLEMENTED WITH FUTURE IMPROVEMENTS.



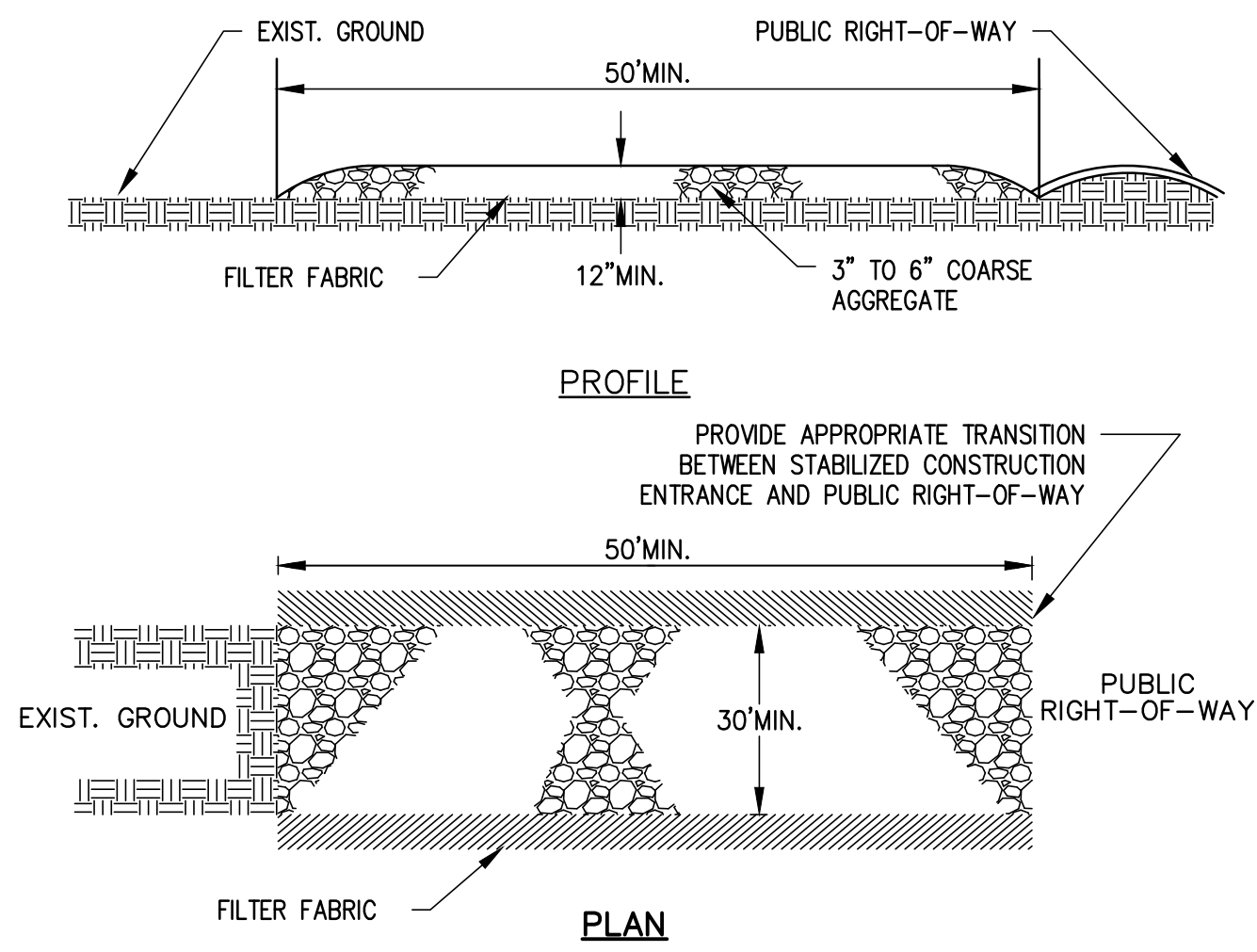
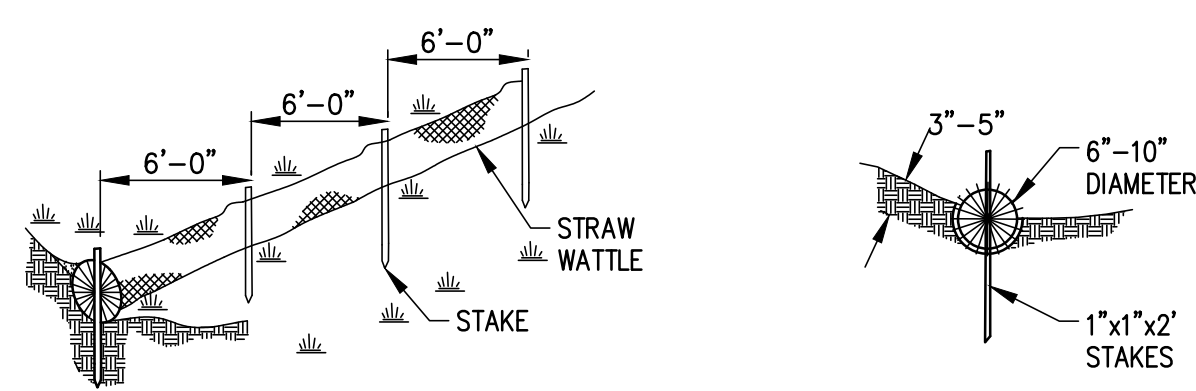
BY		REVISION		NO.		NO.		NO.	
BY	NO.	REVISION	NO.	NO.	NO.	NO.	NO.	NO.	NO.

GRADING & DRAINAGE PLAN
 OF
5173 CANADA ROAD
 FOR
CARTER LIVESTOCK

GILROY, CALIFORNIA

KIER & WRIGHT
 CIVIL ENGINEERS & SURVEYORS, INC.
 2850 Collier Canyon Road
 Livermore, California 94551
 Phone (925) 245-8788
 Fax (925) 245-8796

DATE: OCTOBER, 2024
 SCALE: 1" = 30'
 DESIGNER: SS
 JOB NO.: A15702
 SHEET: **C1**
 OF 5 SHEETS



NOTE:

1. STRAW WATTLES ARE TUBES MADE FROM STRAW BOUND W/BIO-DEGRADABLE NETTING. THEY ARE APPROX. 6"-10" DIA AND 20-30 FT LONG.
2. STRAW WATTLES TRAP SEDIMENT AND REDUCE SHEET AND HILL EROSION BY REDUCING SLOPE GRADIENT, INCREASING INFILTRATION RATES AND BY PRODUCING A FAVORABLE ENVIRONMENT FOR PLANT ESTABLISHMENT.
3. STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE WATTLE IN A TRENCH 3"-5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND WATTLE.

STRAW WATTLE SEDIMENT TRAP/FILTER

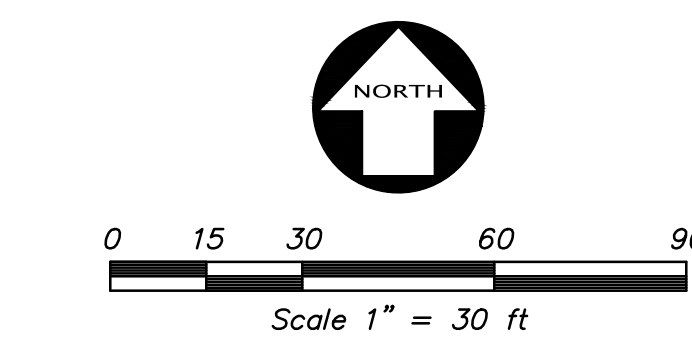
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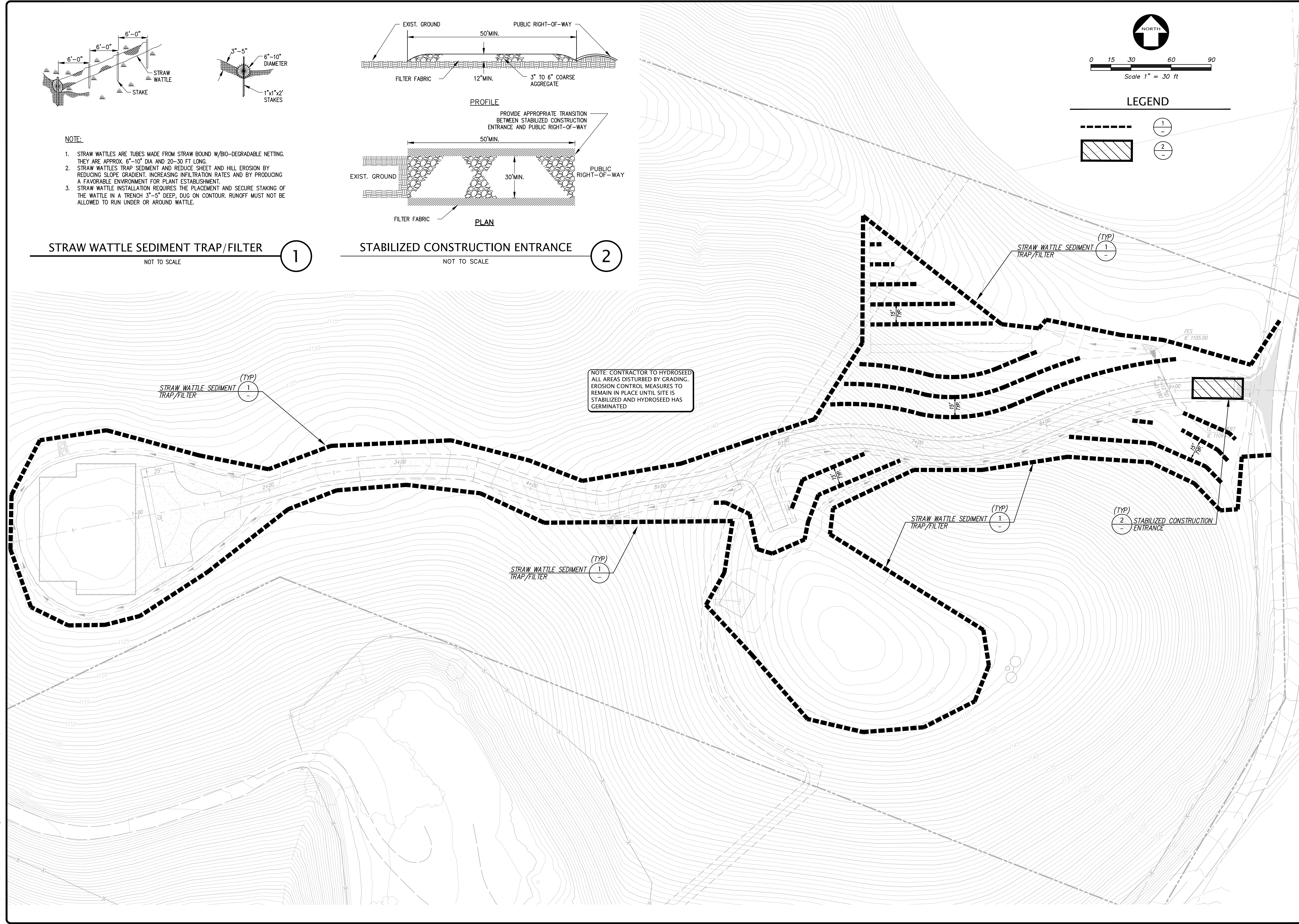
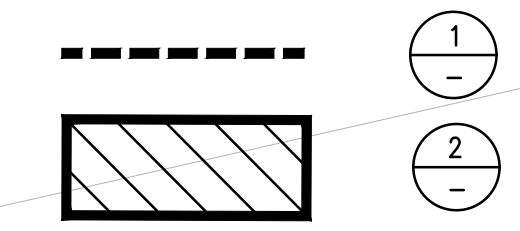
STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

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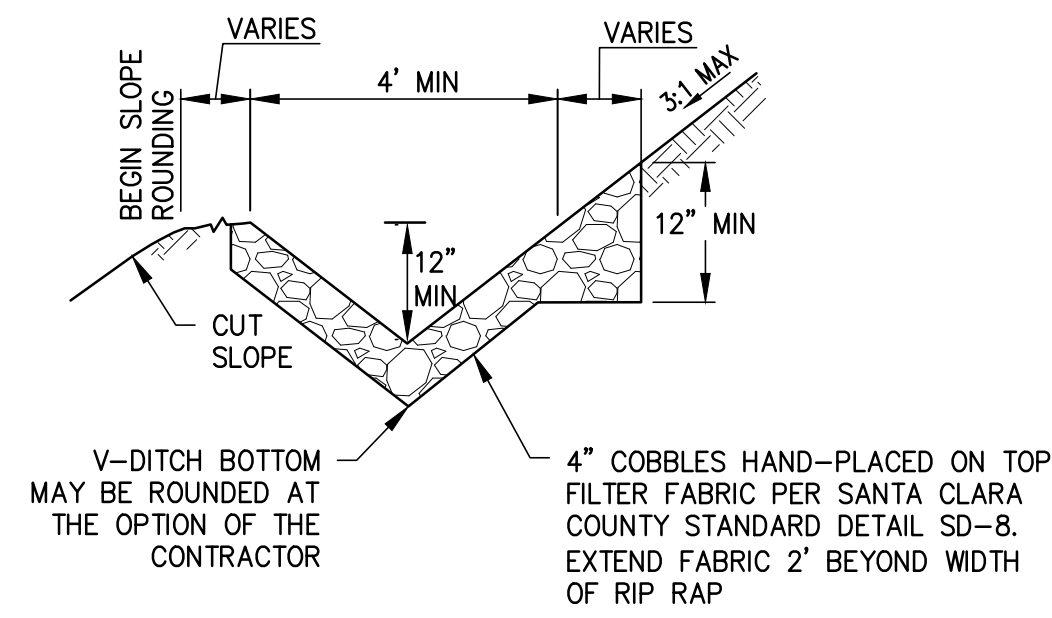


LEGEND



BY		REVISION	
NO.		NO.	
NO.	2022.11.30 - 1ST AE SUBMITTAL	NO.	
EROSION CONTROL PLAN OF 5173 CANADA ROAD FOR CARTER LIVESTOCK GILROY, CALIFORNIA			
DATE	OCTOBER, 2024	SHEET	C2
SCALE	1" = 30'	DESIGNER	SS
JOB NO.	A15702	OF	5 SHEETS

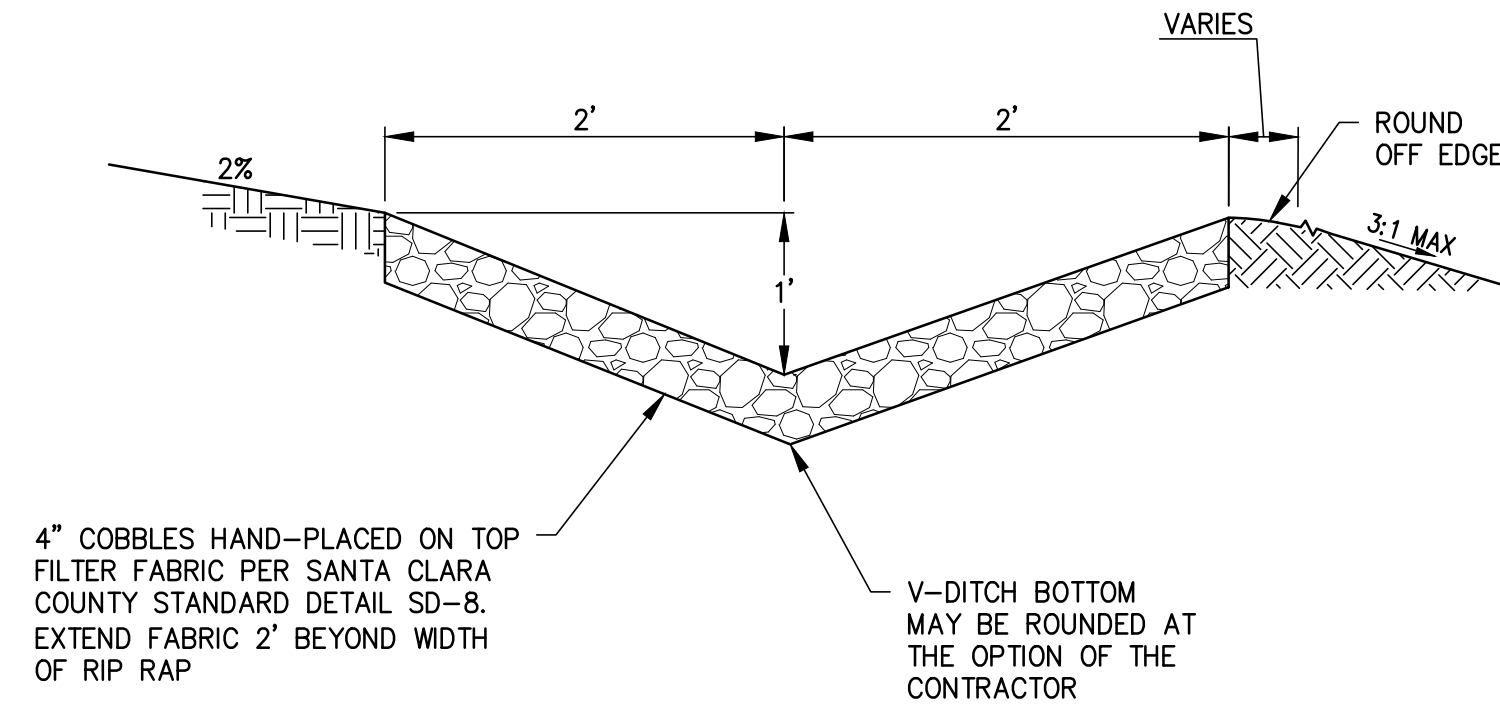
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V- DITCH
NOT TO SCALE

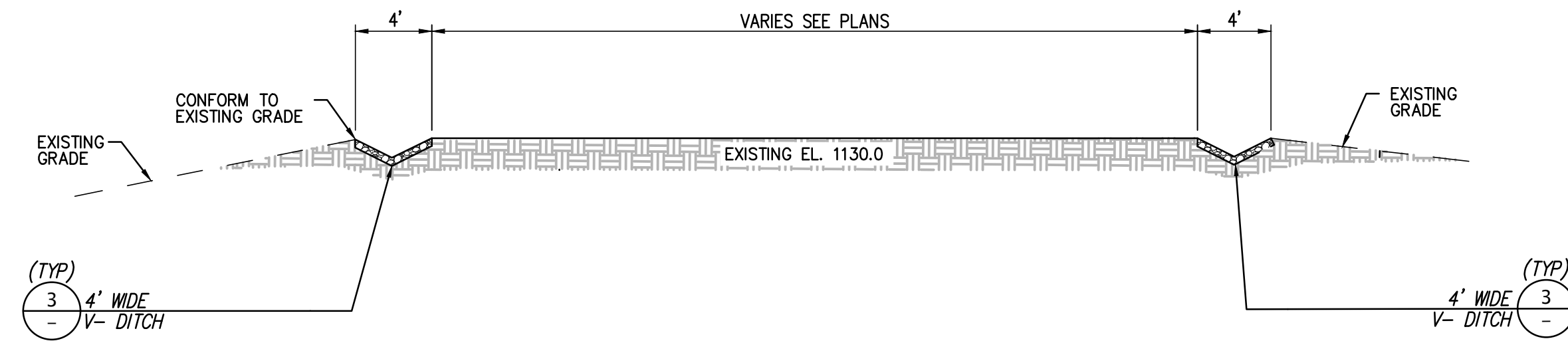
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- NOTES
1. LONGITUDINAL SLOPE OF LINED DITCH SHALL BE 2% MINIMUM.
 2. OVER SLOPE DOWN DITCHES SHALL EMPLOY 12" THICKENED EDGE AT BOTH SIDES OF DITCH



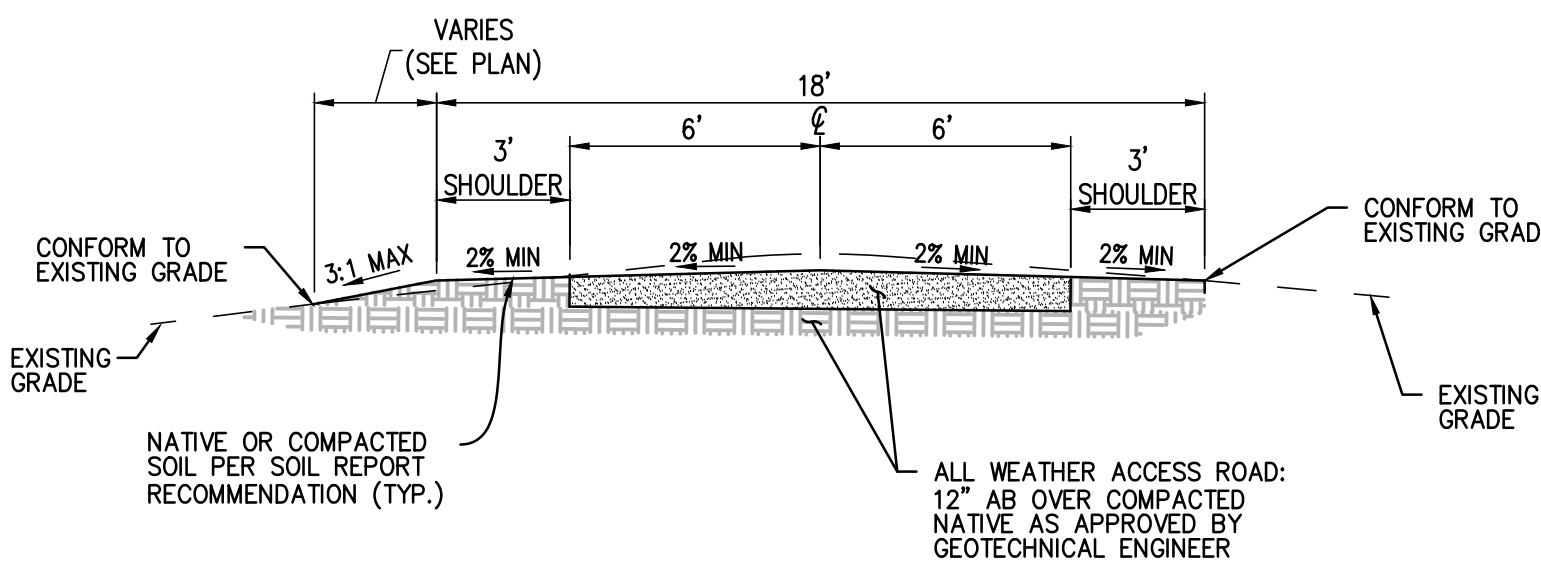
V- DITCH
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3



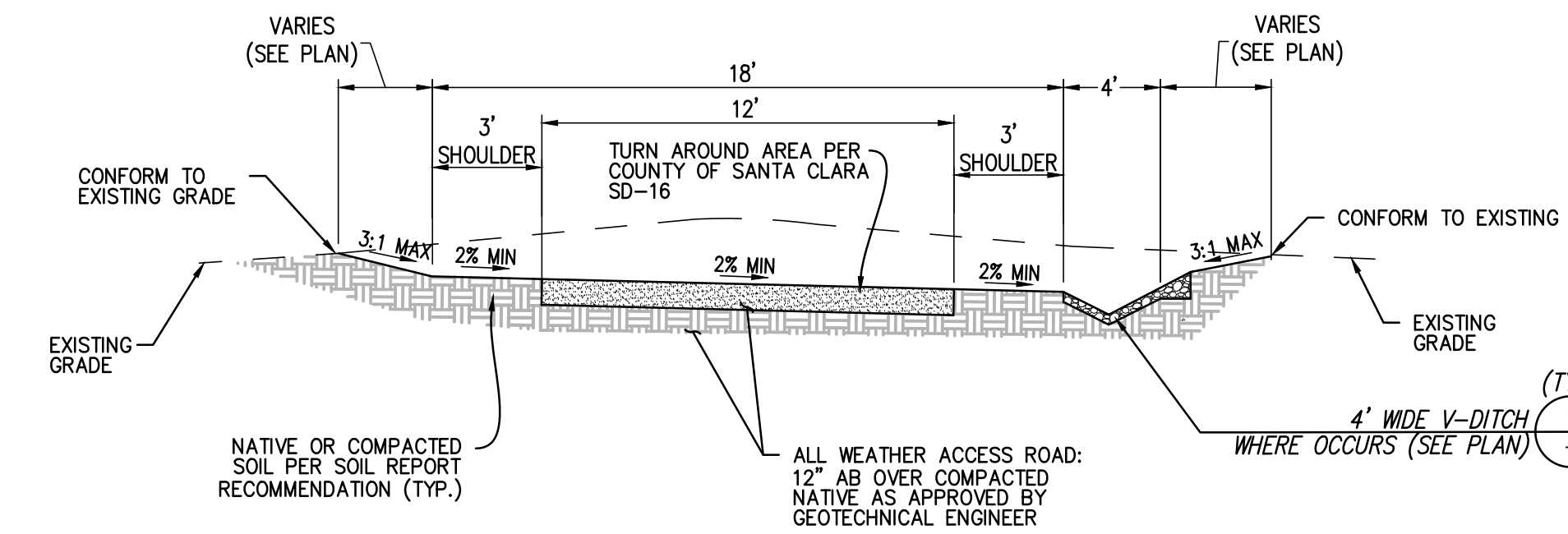
SECTION A
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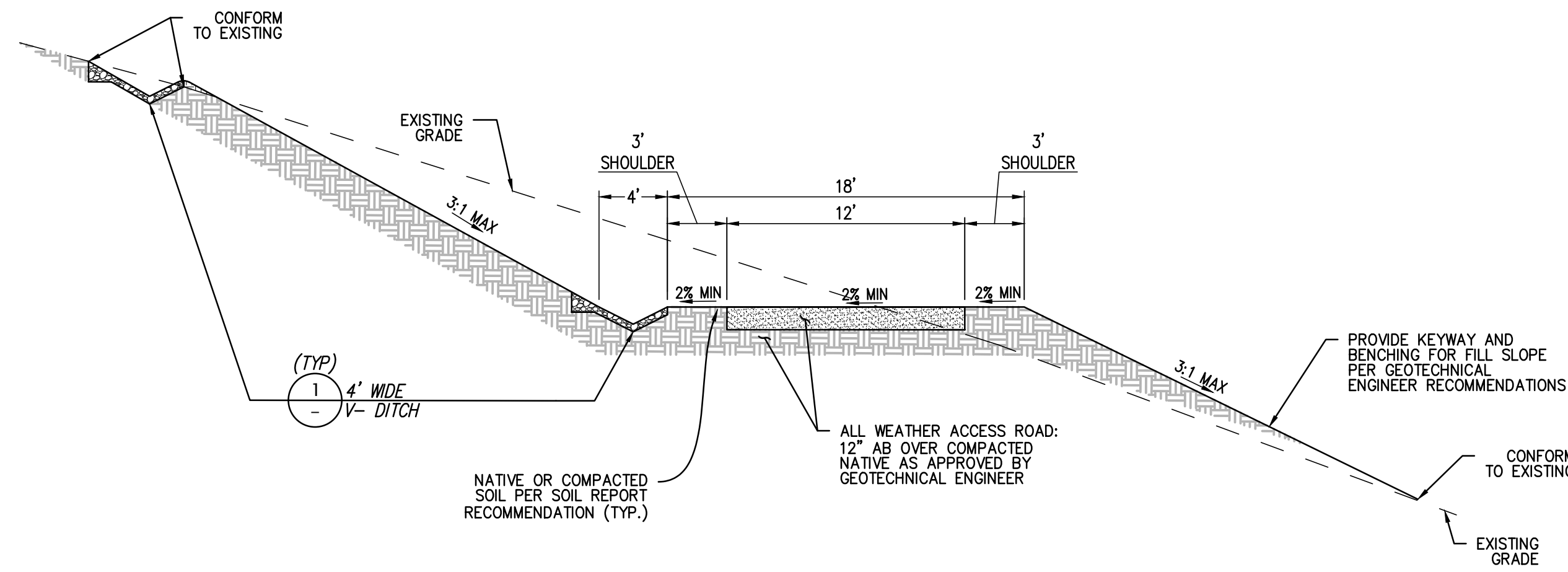
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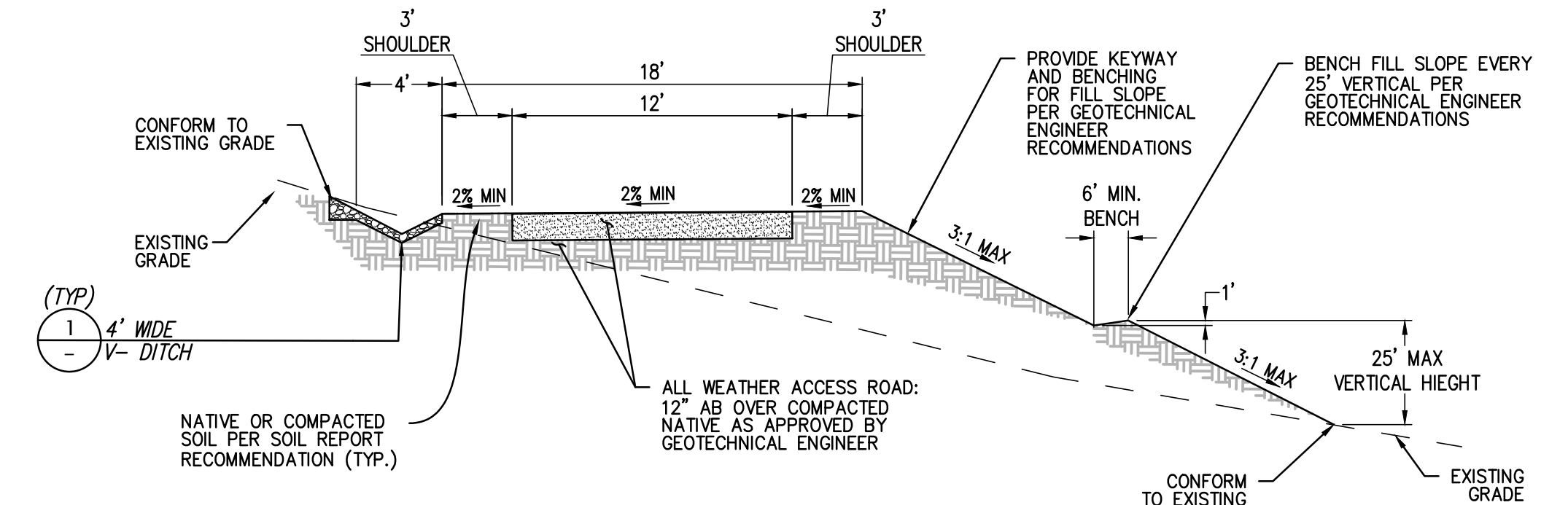
SECTION C
NOT TO SCALE

C



SECTION D
NOT TO SCALE

D



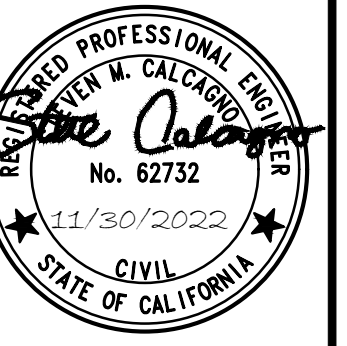
SECTION E
NOT TO SCALE

E

NOT USED
NOT TO SCALE

2

NO.	BY	REVISION
1	SS	2022.11.30 - 1ST AE SUBMITTAL

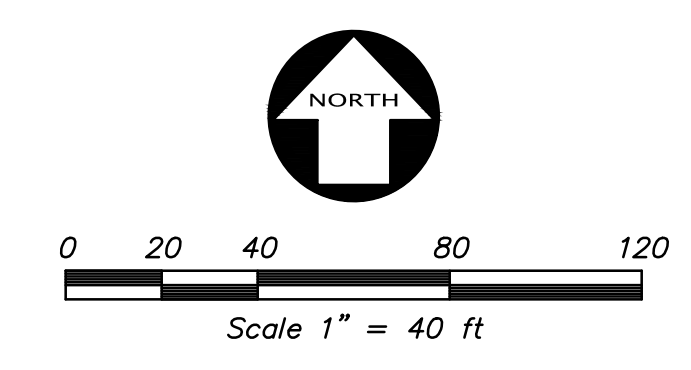
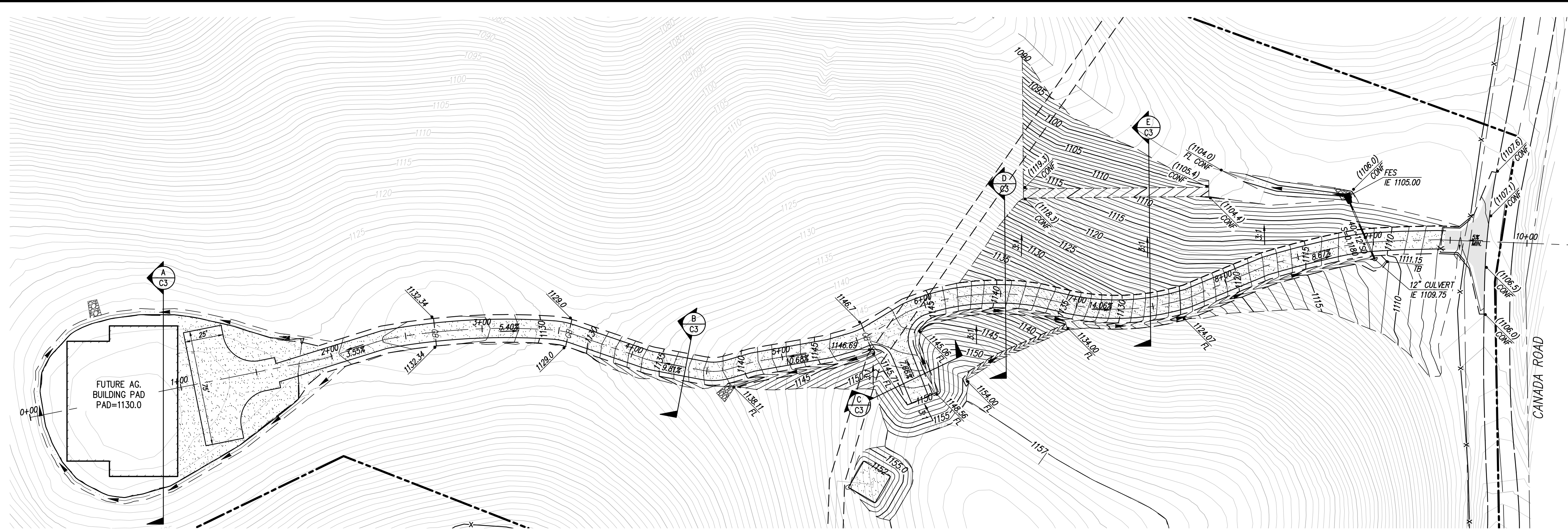


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SECTIONS AND DETAILS
OF
5173 CANADA ROAD
FOR
CARTER LIVESTOCK
GILROY, CALIFORNIA

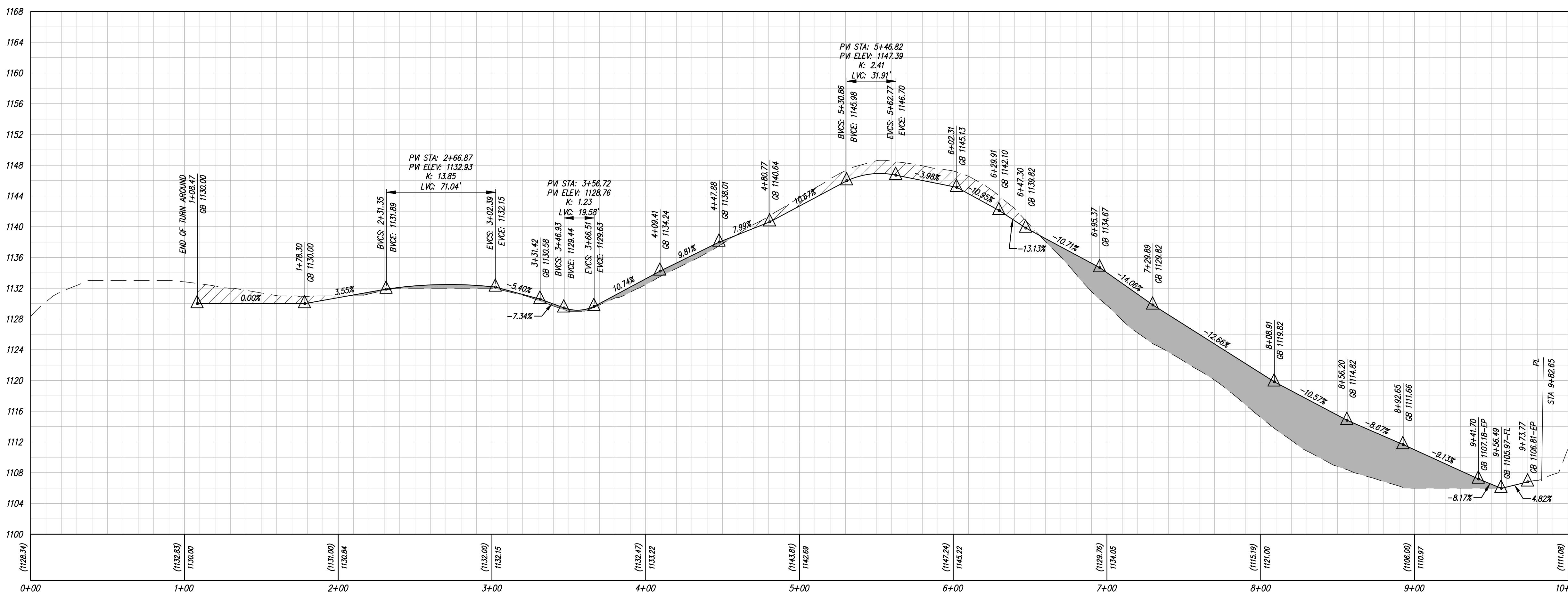
DATE	OCTOBER, 2024
SCALE	AS SHOWN
DESIGNER	SS
JOB NO.	A15702
SHEET	C3
OF	5 SHEETS

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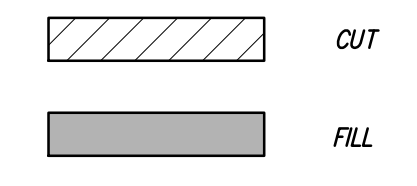


LEGEND

PROPOSED	EXISTING	DESCRIPTION
[Symbol]	[Symbol]	ASPHALT BERM
[Symbol]	[Symbol]	BLOCK RETAINING WALL
[Symbol]	[Symbol]	BUILDING LINE
[Symbol]	[Symbol]	CENTER LINE
[Symbol]	[Symbol]	CONCRETE CURB
[Symbol]	[Symbol]	CONCRETE CURB CUT
[Symbol]	[Symbol]	CONCRETE CURB & GUTTER
[Symbol]	[Symbol]	CONTOUR LINE
[Symbol]	[Symbol]	DRIVEWAY
[Symbol]	[Symbol]	EDGE OF PAVEMENT
[Symbol]	[Symbol]	FLUSH CONCRETE CURB
[Symbol]	[Symbol]	FENCE LINE
[Symbol]	[Symbol]	GRADE BREAK LINE
[Symbol]	[Symbol]	GUARD RAIL
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[Symbol]	[Symbol]	MONUMENT/MONUMENT LINE
[Symbol]	[Symbol]	PERFORATED STORM DRAIN PIPE
[Symbol]	[Symbol]	PROPERTY LINE
[Symbol]	[Symbol]	RAINWATER LEADER
[Symbol]	[Symbol]	RIDGE LINE
[Symbol]	[Symbol]	SIDEWALK
[Symbol]	[Symbol]	STORM DRAIN-MANHOLE & CATCH BASIN
[Symbol]	[Symbol]	THRU CURB DRAIN
[Symbol]	[Symbol]	SPOT ELEVATION
[Symbol]	[Symbol]	TRANSFORMER
[Symbol]	[Symbol]	TRAFFIC SIGN
[Symbol]	[Symbol]	TREE
[Symbol]	[Symbol]	UTILITY BOX
[Symbol]	[Symbol]	AREA DRAIN
[Symbol]	[Symbol]	BEGINNING VERTICAL CURVE ELEVATION
[Symbol]	[Symbol]	END VERTICAL CURVE ELEVATION
[Symbol]	[Symbol]	END VERTICAL CURVE STATION
[Symbol]	[Symbol]	EDGE OF WALK
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[Symbol]	[Symbol]	POINT OF CONNECTION
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[Symbol]	[Symbol]	STREET LIGHT
[Symbol]	[Symbol]	STORM DRAIN JUNCTION BOX
[Symbol]	[Symbol]	STORM DRAIN MANHOLE
[Symbol]	[Symbol]	SWALE
[Symbol]	[Symbol]	TOP OF BERM
[Symbol]	[Symbol]	TOP OF CURB
[Symbol]	[Symbol]	TOP OF WALL
[Symbol]	[Symbol]	TRANSFORMER
[Symbol]	[Symbol]	TRASH ENCLOSURE



PROFILE
 1" = 1' HORIZ.
 1" = 0' VERT.



BY		REVISION							
NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY	NO.
1	2022.11.30	SS	1	2022.11.30	SS	1	2022.11.30	SS	1
KIER & WRIGHT CIVIL ENGINEERS & SURVEYORS, INC. 2850 Collier Canyon Road Livermore, California 94551 Phone (925) 245-8788 Fax (925) 245-8796									
PLAN AND PROFILE OF 5173 CANADA ROAD FOR CARTER LIVESTOCK GILROY, CALIFORNIA									
DATE: OCTOBER, 2024 SCALE: 1" = 40' DESIGNER: SS JOB NO.: A15702 SHEET: C4 OF 5 SHEETS									

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PROJECT SCOPE & RATIONALE:

This project is for a future new 3 BR residence. A conventional design was selected due to sufficient area w/ slope less than 20% and acceptable depth to potential groundwater. The percolation test, witnessed by DEH, was conducted in the approximate area proposed for drainfields. No holes are excluded since precise locations are unknown and this is more conservative for sizing.

SOIL PROFILE RESULTS CONVENTIONAL SYSTEMS

SR #: 514387 DATE OF INSPECTION: 9/24/2010
 APN #: 898-27-033 OWNER:
 APPLICANT: Carter
 SITE ADDRESS: 5173 Canada Rd Gilroy
 CONDUCTED BY: [Signature] CHECKED BY: J. Camp

HOLE #	Soil Profile	Remarks
HOLE # SP1	1.0' - 1.5' Fractured sandstone 1.5' - 2.0' Very dense silty clay 2.0' - 2.5' Silty sandy clay 2.5' - 3.0' Silty clay - looser fractured sandstone 3.0' - 3.5' Increasing fractured sandstone 3.5' - 4.0' Terminate @ 11' per consultant 4.0' - 4.5' No signs of groundwater	
HOLE # SP2	1.0' - 1.5' Same 1.5' - 2.0' Same 2.0' - 2.5' Silty sandy clay less sandstone 2.5' - 3.0' Same 3.0' - 3.5' Terminate @ 11 1/2' per consultant 3.5' - 4.0' No signs of groundwater	

COMMENTS:
 (5) perc hole from Nov. 2000 located - 5ft depth. Hole constructed per spec standards. Remaining 7 perc holes from 2000 not visible.

Environmental Concepts

	A	B	C	D	E	F	G	H	I	
1	OWNER/APPLICANT: J. Edwards Co.	FILE #00-SCL-080								
2		SITE LOCATION: 4141 Canada Rd, Gilroy (PARCEL 2)								
3		APN: 898-27-18								
4		DATE: 11/28/09								
5										
6										
7	Hole #	Stabilized Rate (MPI)	Adjusted Rate (MPI)	Factor is 1.4						
8	P1	11/9/00	248.00	347.20						
9	P2	*	120.00	168.00						
10	P3	*	24.00	33.60						
11	P4	*	24.00	33.60						
12	P5	*	33.14	46.40						
13	P6	*	82.87	116.24						
14	P7	11/22/00	10.91	15.27						
15	P8	*	22.55	31.57						
16	P9	*	62.00	86.80						
17										
18	AVERAGE (7 TESTS)			51.85						
19										
20										
21	DRAINFIELD REQUIREMENTS (typ. 4 bedrooms) =									

The average of all 9 perc test holes is used for the design since the precise hole locations are unknown.
AVERAGE DESIGN PERCOLATION RATE = 98 MPI

INFILTRATIVE AREA CALCULATIONS & SPECIFICATIONS

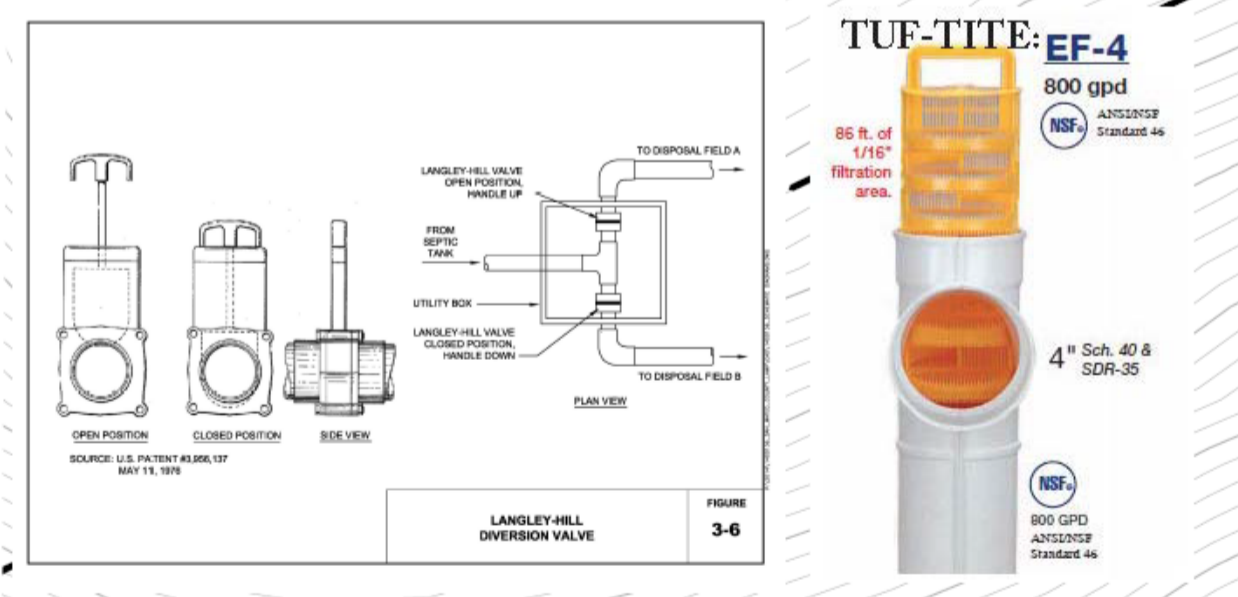
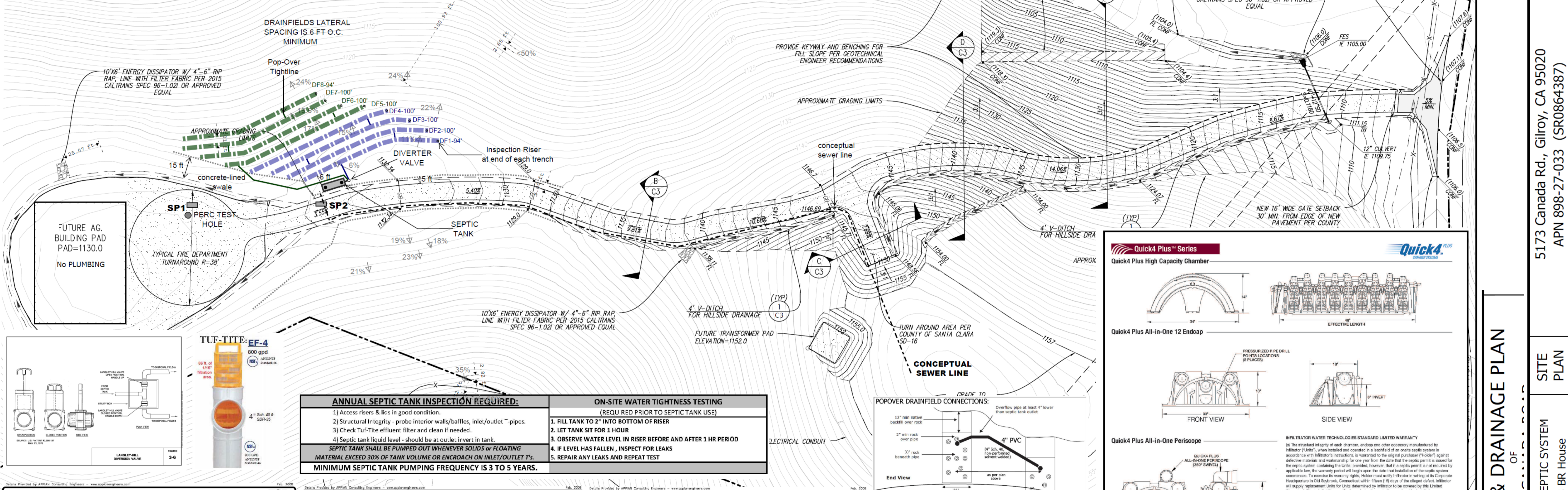
TYPE OF SEPTIC SYSTEM: Conventional Gravity Flow with Infiltration Chambers

DESIGN CALCULATIONS:	DRAINFIELD TRENCH SPECIFICATIONS:
Average Percolation Rate: 98 MPI (HOLES 1-9)	Drainfield Dimensions: 3 ft width x 6 ft depth
Design Application Rate: 0.2 gal/sq. ft./day	High Cap Chamber Height: 1.2 ft
Peak Wastewater Flow: 450 gpd (3BR)	Slope in Drainfield Area: < 20%
Required Infiltrative Area: 2,250 ft² (450 gpd/0.2 gpd/ft²)	Horizontal Drainfield Spacing: 6 ft o.c. (minimum)
Infiltrative Area per Linear Ft Trench: 4 sq. ft.	Depth to GW Below Trenches: 5 1/2 ft (SP2)
Trench Length (each side DV): 563 ft (2,250 ft²/4 ft²)	Required Depth to GW: 5 ft
Reduced length for chambers: 394 ft (563 - 0.3x563)	

DV=Diverter Valve

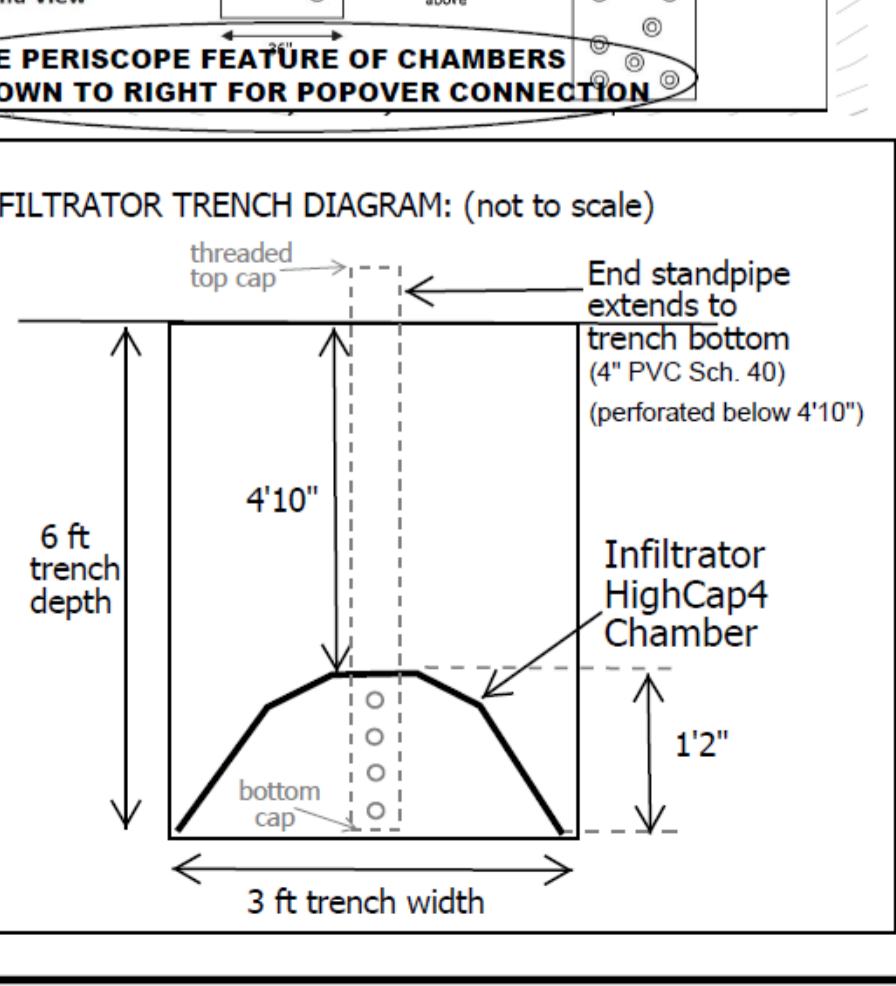
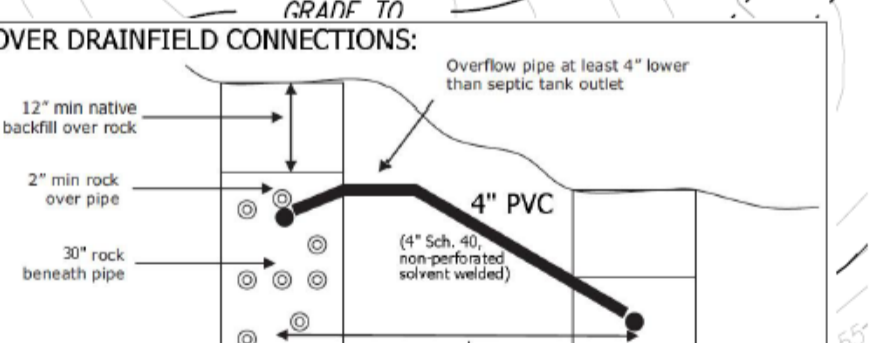
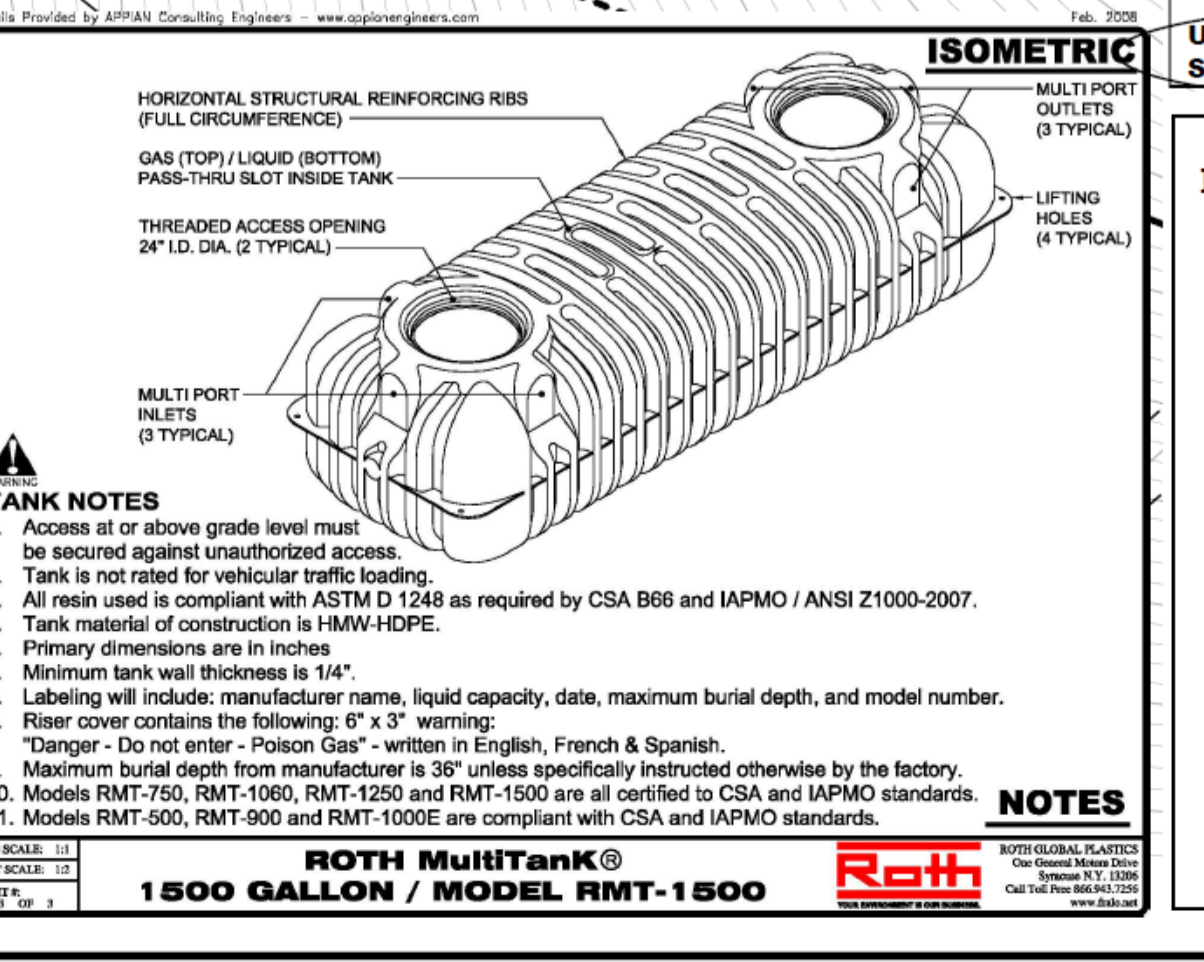
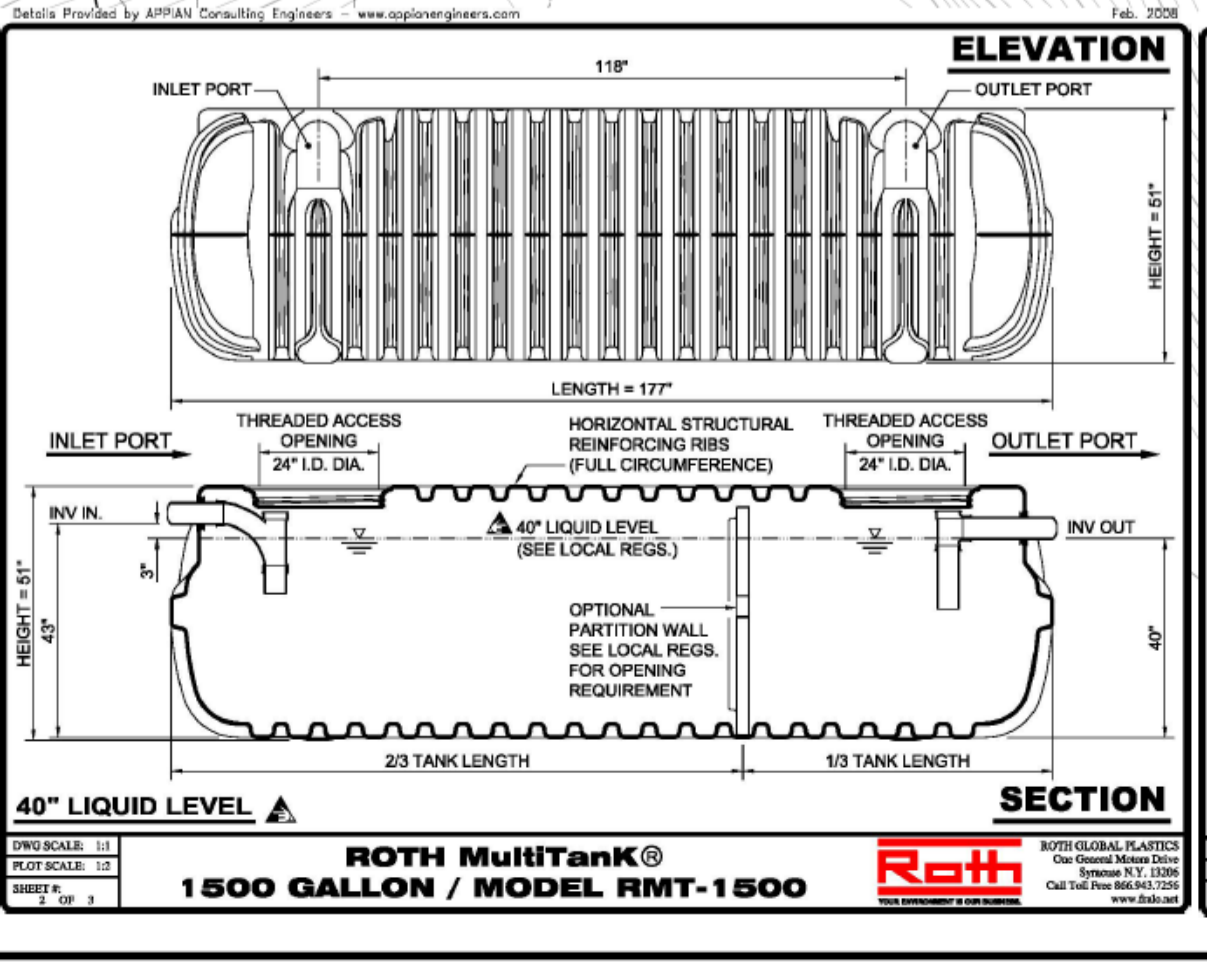
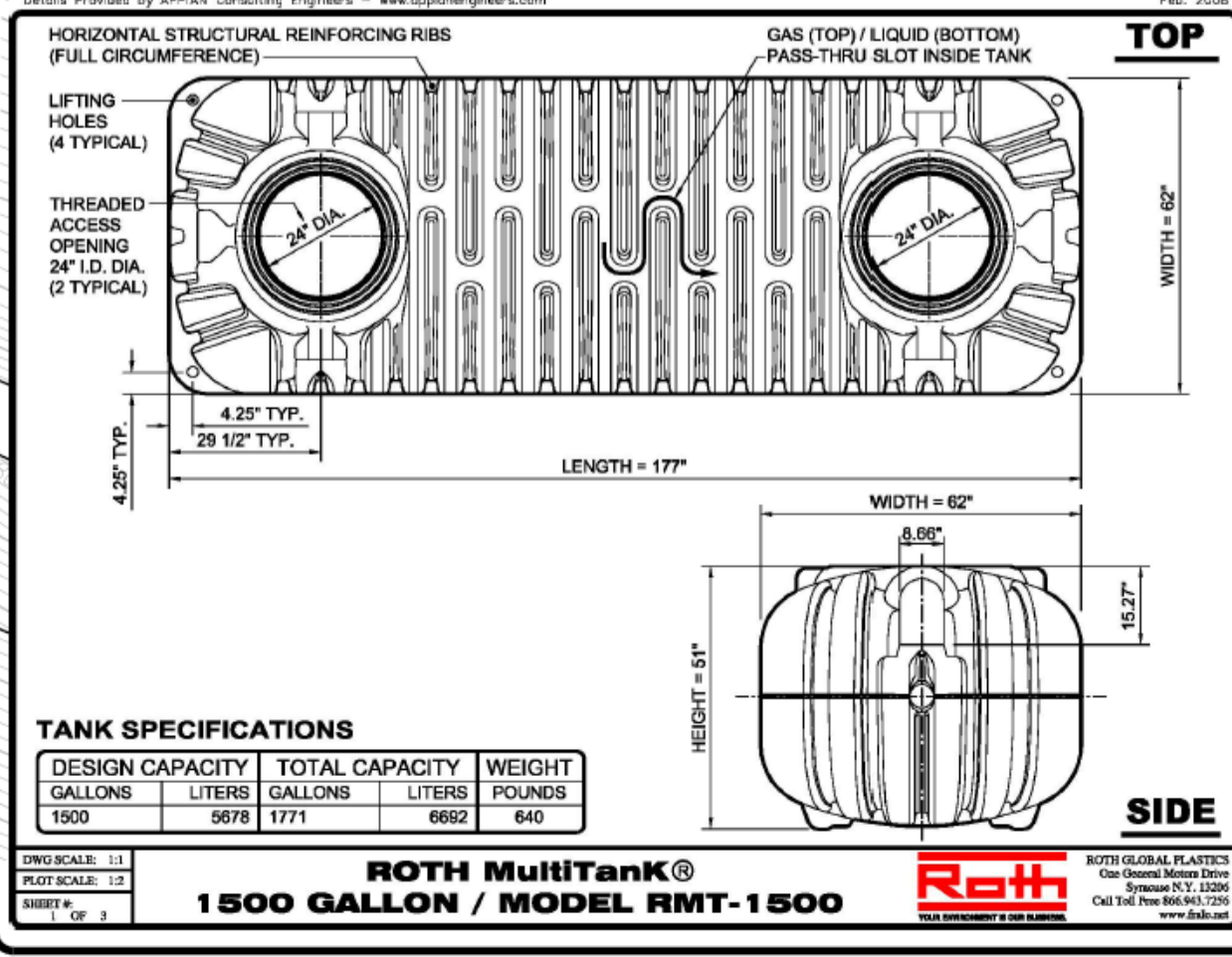
Elevations, Pipe Runs & Slopes

Feature	Invert Elevation (ft)	Pipe Length to Feature (ft)	Slope of Pipe Run (%)	Burial Depth
Future House FF	1157.00	—	—	—
Septic Tank Inlet	1127.25	500	6.0	3.0 ft
Septic Tank Outlet	1127.00	—	—	(to top of tank)
DF 1 drainpipe - Side A	1126.60	15	2.7	4.9 ft
DF 5 drainpipe - Side B	1122.60	85	5.2	4.9 ft



- ANNUAL SEPTIC TANK INSPECTION REQUIRED:**
- 1) Access risers & lids in good condition.
 - 2) Structural Integrity - probe interior walls/baffles, inlet/outlet T-pipes.
 - 3) Check Tuf-Tite effluent filter and clean if needed.
 - 4) Septic tank liquid level - should be at outlet invert in tank.
- SEPTIC TANK SHALL BE PUMPED OUT WHENEVER SOLIDS OR FLOATING MATERIAL EXCEED 30% OF TANK VOLUME OR ENCRUST ON INLET/OUTLET T'S.**
- MINIMUM SEPTIC TANK PUMPING FREQUENCY IS 3 TO 5 YEARS.**

- ON-SITE WATER TIGHTNESS TESTING (REQUIRED PRIOR TO SEPTIC TANK USE)**
1. FILL TANK TO 2" INTO BOTTOM OF RISER
 2. LET TANK SIT FOR 1 HOUR
 3. OBSERVE WATER LEVEL IN RISER BEFORE AND AFTER 1 HR PERIOD
 4. IF LEVEL HAS FALLEN, INSPECT FOR LEAKS
 5. REPAIR ANY LEAKS AND REPEAT TEST



Quick4 Plus Series

Quick4 Plus High Capacity Chamber

Quick4 Plus All-in-One 12 Endcap

Quick4 Plus All-in-One Periscope

INFILTRATOR WATER TECHNOLOGIES STANDARD LIMITED WARRANTY

(a) The structural integrity of each chamber, endcap and other accessory manufactured by Infiltrator ("Units"), when installed and operated in a household of an on-site septic system in accordance with Infiltrator's instructions, is warranted to the original purchaser ("Holder") against defective materials and workmanship for one year from the date that the septic permit is issued for the septic system containing the Units, provided however, that a septic permit is not required by applicable law, the warranty period will begin upon the date that installation of the septic system commences. To exercise its warranty rights, Holder must notify Infiltrator in writing of its Corporate Headquarters in Oak Springs, Connecticut within 180 days of the alleged defect. Infiltrator will supply replacement Units for Units determined by Infiltrator to be covered by the Limited Warranty. Infiltrator's liability specifically excludes the cost of removal and/or installation of the Units.

(b) THE LIMITED WARRANTY AND REMEDIES IN SUPPLEMENTARY ARE EXCLUSIVE. THERE ARE NO OTHER WARRANTIES WITH RESPECT TO THE UNITS, INCLUDING NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

(c) This Limited Warranty shall be void if any part of the chamber system is manufactured by anyone other than Infiltrator. The Limited Warranty does not extend to incidental, consequential, special or indirect damages. Infiltrator shall not be liable for purchase or liquidated damages, including loss of production and profits, labor and materials, overhead costs, or other losses or expenses incurred by the Holder or any third party. Specifically excluded from Limited Warranty coverage are damages to the Units due to ordinary wear and tear, alteration, accident, misuse, abuse or neglect of the Units; the Units being subjected to vehicle traffic or other conditions which are not permitted by the installation instructions; failure to maintain the septic system ground cover set forth in the installation instructions; the placement of improper materials into the system containing the Units; failure of the Units or the septic system due to improper siting or improper sizing, excessive water usage, improper grease disposal, or improper operation; or any other event not caused by Infiltrator. The Limited Warranty shall be void if the Holder fails to comply with all of the terms set forth in the Limited Warranty. Further, no event shall Infiltrator be responsible for any loss or damage to the Holder, the Units, or any third party resulting from installation or operation, or from any product liability claim of Holder or third party. For this Limited Warranty to apply, the Units must be installed in accordance with all site conditions required by state and local codes, all other applicable laws, and Infiltrator's installation instructions.

(d) No representative of Infiltrator has the authority to change or extend this Limited Warranty. No warranty applies to any party other than the original Holder.

The above represents the Standard Limited Warranty offered by Infiltrator. A limited number of states and counties have different warranty requirements. Any purchaser of Units should contact Infiltrator's Corporate Headquarters in Oak Springs, Connecticut, prior to such purchase, to obtain a copy of the applicable warranty, and should carefully read that warranty prior to the purchase of Units.

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Contact Infiltrator Water Technologies' Technical Services Department for assistance at 1-800-221-4436

GRADING & DRAINAGE PLAN