

Cover Page

CALCULATIONS (New VAULT):

Proposed Horse Boarding Barn
Toilet and Sink (Infrequent Use, Non-Occupied Structure)

Up to 8 Visitors per Day (Transient Visitors per Table 6-2)
Up to 2 Employees per Day (Factories and Plants per Table 6-2)

$Q = (8 \text{ People})(5 \text{ GPD}) + (2 \text{ Employees})(20 \text{ GPD})$
 $Q = 80 \text{ GPD}$

Safety Factor = 2

$Q = 160 \text{ GPD}$
(Actual Flow May be Highly Variable)

VAULT (HOLDING TANK):

Min. 500 Gallon Tank (per Regulation)
Holding Tank Size = Infiltrator CM-1060 Septic Tank
(Two-Compartment)

Set Alarm Float at Baffle from First to Second Compartment

NOTE TO OWNER:

A Vault (aka Holding Tank) is Not a Conventional "Septic System". Effluent Does NOT Leave the Tank via a Soil Treatment Area. Waste Must be Pumped from the Tank on a Regular Interval. A Licensed Pumper is Required to Pump the Tank.

Per County Regulations the Minimum Sizing is 2 Days or 500 GPD. This Design Complies with this Criteria.

The Frequency of Pumping is Influenced by the Actual Usage and Can Not be Predicted. Owner is Responsible for Scheduling All Pumping.

PIPE NOTES:

Provide 2.0% Min. Grade on Pipe to Septic Tank. Provide 2.0% Min. Grade on Pipe to the Soil Treatment Area.

All Bends Limited to 45 Degree Ells or Long Sweep Quarter Bends. Areas Under Driveways Shall Be Protected as Per El Paso County Health Department Regulations.

Building Sewer Clean-Outs Shall Be Installed within 5 FT of the Structure and at Intervals Not to Exceed 100' in Straight Runs and When the Cumulative Change in Direction Exceeds 135 Degrees.

Colorado Geo-Solutions has Provided this Design in Accordance with the Standards of Practice Common to the Area. However, as with All Underground Absorption Fields, Guarantee from Failure is Impossible. Even with Proper Installation, as Outlined for this Proposed Construction, There Can Remain Many Uncertainties, and Difficulties Can Still Arise in the Operation of the System in the Future. Proper Design, Construction, and Maintenance can Assist in Minimizing Uncertainties, but Cannot Entirely Eliminate Them. Homeowners Should be Advised of Maintenance and Special Considerations for Septic Systems. Homeowners are Encouraged to visit epa.gov/septic/how-care-your-septic-system for Information Related to Maintenance, Water Conservation, and Septic Do's and Don'ts. Due to the Possibility of Unknown Water Usage Factors, Colorado Geo-Solutions Provides No Warranty of this Design or Installation Against Failure or Damage of Any Type. Therefore, the Limits of Liability Extend Only to the Fee Rendered for the Professional Services Provided.

GENERAL NOTES:

All Work per El Paso County Board of Health Regulations Chapter 8: On-Site Wastewater Treatment Systems (OWTS) Criteria.

All Setbacks Shall Conform to El Paso County Regulations (See Table 7-1 in the Regulations for Additional Information). Contractor/Homeowner Must Verify All Setbacks and Obtain Utility Clearances Prior to Construction.

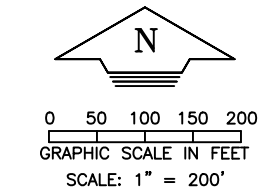
Contractor/Homeowner is Responsible for Permit. Contractor/Homeowner Must Obtain Approval of Engineered OWTS from the El Paso County Health Department.

All Bends Limited to 45 Degree Ells or Long Sweep Quarter Bends. Areas Under Driveways Shall Be Protected as Per El Paso County Health Department Regulations.

Building Sewer Clean-Outs Shall Be Installed within 50 FT of the Structure and at Intervals Not to Exceed 100 FT in Straight Runs, or at Intervals Not to Exceed 50 FT with Bends 45° or Greater.

TRAFFIC OVER TANK IS PROHIBITED.

Refer to Sheet 2 and 3 for Additional Details and Information.



VICINITY PLAN

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COLORADO LICENSED
DOUGLAS J. PRETZER
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6/2/26
PROFESSIONAL ENGINEER

Project: 26-0279	Project Address Tiffany & Jonathan Perez 2850 Mount Herman Road Tract 10, Panoramic Acres, Sch. No. 7122001003 El Paso County, Colorado
Sheet: 1 of 3	
Date: 2 June 2026	
Revised:	
Drawn by: DJP	
Checked by: DJP	

Existing OWTS for House
(Approximate Location Shown)

Drainage Catch Basin
(Min. 50 FT to Vault)

Proposed Water Line
(Min. 5 Ft from Sewer and
Min. 10 Ft from Vault)

4" Ø PVC Solid Pipe from House to Septic Tank. Install a Cleanout at House. Maintain Min. 2.0% Grade on Pipe to the Septic Tank. Sch. 40 PVC Required within 5' of Inlet and Outlet of Tanks. Exact Location of the Discharge Line from the House per Plumbing Design by Others.

Proposed Barn

New Driveway and Parking

Retaining Wall
(Min. 25 Ft to STA)

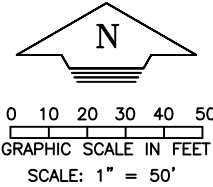
Infiltrator CM-1060 Vault (Holding Tank). Requires Regular Pumping. Max. 48" Cover. Risers to Grade with Secure Access Cover, Water Tight, Typ. All Septic Tank Access Locations). Exact Locations to be Field Determined.

Drainage Ditch (Min.
10 Ft from Vault)

Existing Driveway

Culvert Under Driveway

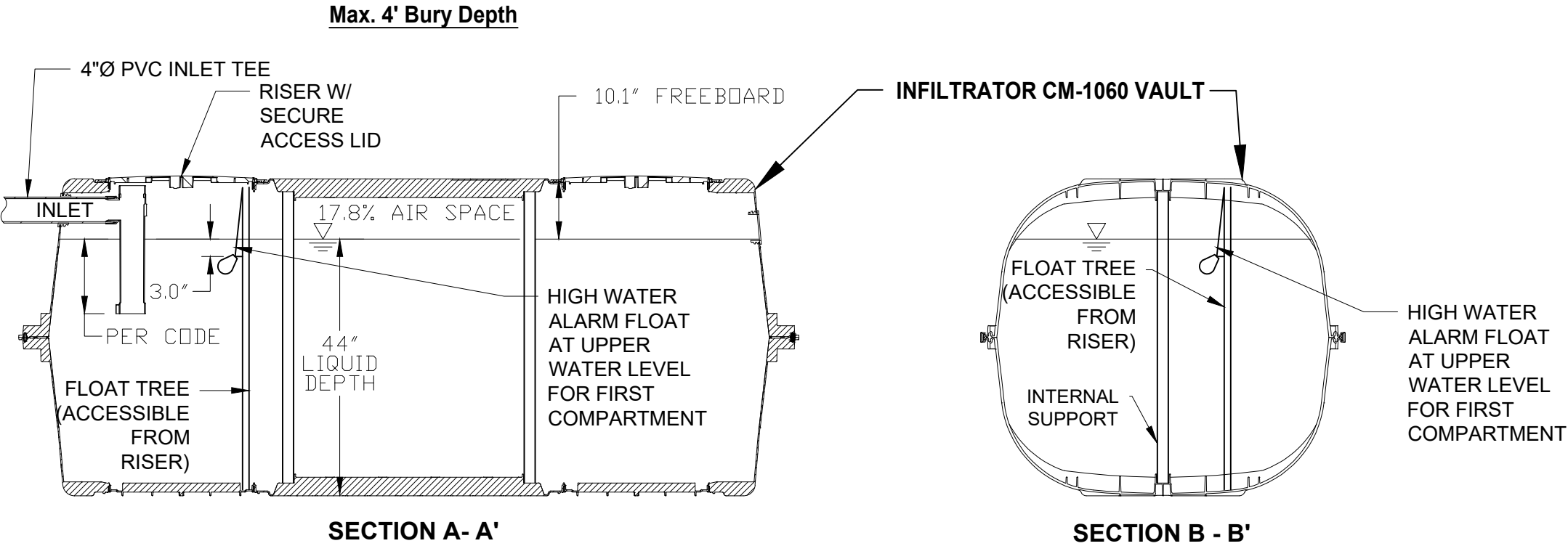
DETAILED SITE PLAN



Project: 26-0279	Project Address
Sheet: 2 of 3	Tiffany & Jonathan Perez
Date: 2 June 2026	2850 Mount Herman Road
Revised:	Tract 10, Panoramic Acres,
Drawn by: DJP	Sch. No. 7122001003
Checked by: DJP	El Paso County, Colorado

Electrical Code Requirements: All Electrical Work, Equipment, and Material Shall Comply with the Requirements of the Currently Applicable National Electrical Code as Designated by the State Electrical Board Rules and Regulations (3 CCR 710-1) on the Date of the Permit. The Electrical Installer Shall Contact the Electrical Inspector for the Location where the OWTS is Constructed. All Electrical Components Shall be Protected from Moisture and Corrosive Gases. Special Care Shall be Taken to Ensure the Electrical Requirements of Each Component Meet Manufacturer Specifications (i.e. Voltage and Amperage).

1. All Wire Splices Shall be Enclosed in the Splice Box/Alarm Panel. The Splice Box Shall be Placed in an Accessible Location Positioned Outside of the Tank Riser.
2. All Wires Shall be Spliced with Corrosion-Resistant, Watertight Connectors. **NO WIRE SPLICES ARE ALLOWED WITHIN THE VAULT OR RISER.**
3. Conduits Shall be Sealed to Prevent Gases from Entering the Electrical panel.
4. Alarm Shall be on a Dedicated Circuit.
5. The Branch Circuit Wire from the Building to the Control Panel Shall be a Minimum of 24" Below the Ground Surface. Lines Buried Less than 24" are Allowed, but Will be Required to be in Conduit or have Ground Fault Protection on the Circuit. Conduit from the Control Panel to the House is Strongly Recommended for All Wiring.
6. Conduit Risers for Physical Protection Must Extend Min. 18" Below Finish Grade.



TANK EXTERIOR	
LENGTH	134.2"
WIDTH	61.7"
HEIGHT	54.5"

LIQUID DEPTH	44.0"
INVERT DROP	3.0"
FREEBOARD	10.1"

TOTAL CAPACITY	1,309 GAL
WORKING VOLUME	1,111 GAL

Alarm Note:
Audible Alarm Required. Install High Water Alarm Float at the Baffle Between 1st and 2nd Compartment. Required to be Installed at 75% of Total Tank Capacity.

Vault (Holding Tank) Cross-Section

Not to Scale

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Project: 26-0280	Project Address Tiffany & Jonathan Perez 2850 Mount Herman Road Tract 10, Panoramic Acres, Sch. No. 7122001003 El Paso County, Colorado
Sheet: 3 of 3	
Date: 2 June 2026	
Revised:	
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