

TankAnchor™

Installation Guide

Mailing: P.O. BOX 326
Montreal, MO 65591
MFG: 147 Opportunity Rd.
Camdenton, MO 65020

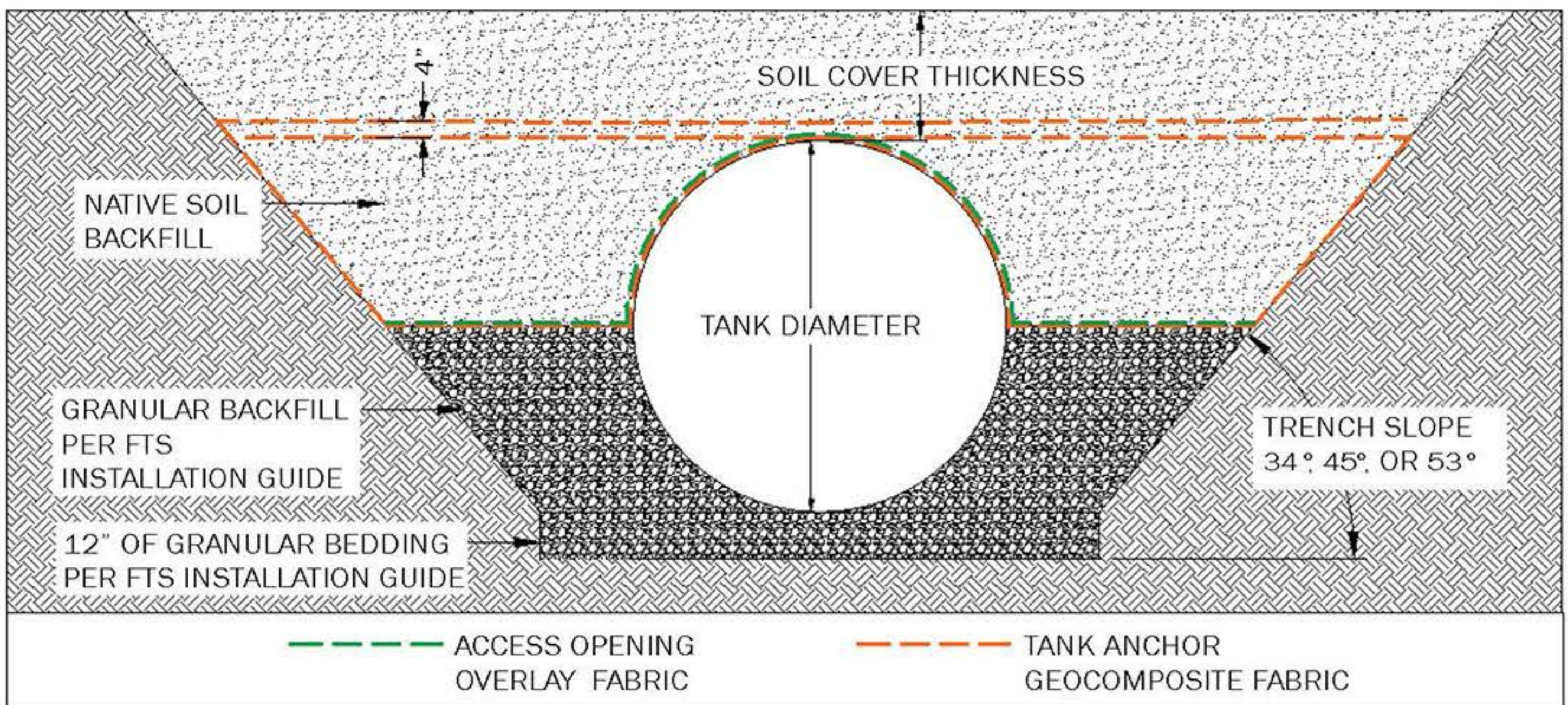
573-317-9620
www.fgtsolutions.com

Notes and Safety

1. This TankAnchor™ Installation Guide is a general scope of instructions to install TankAnchor™. Prior to any tank installation, review and understand the *Fiberglass Tank Solutions UST Installation Guide* for all tank install steps, procedures, and details.
2. Read and understand entire document prior to start of work.
3. Contact Fiberglass Tank Systems with any questions prior to start of work.
4. Follow all safety standards.
5. Tools needed:
 - Shovel
 - Tape measure
 - Sawzall
 - Razor knife
 - Tin snips
6. Install temporary protective covers over all access openings and fittings prior to backfill to eliminate bedding/backfill from entering tank.

SINGLE Tank Uplift Protection Reference Table

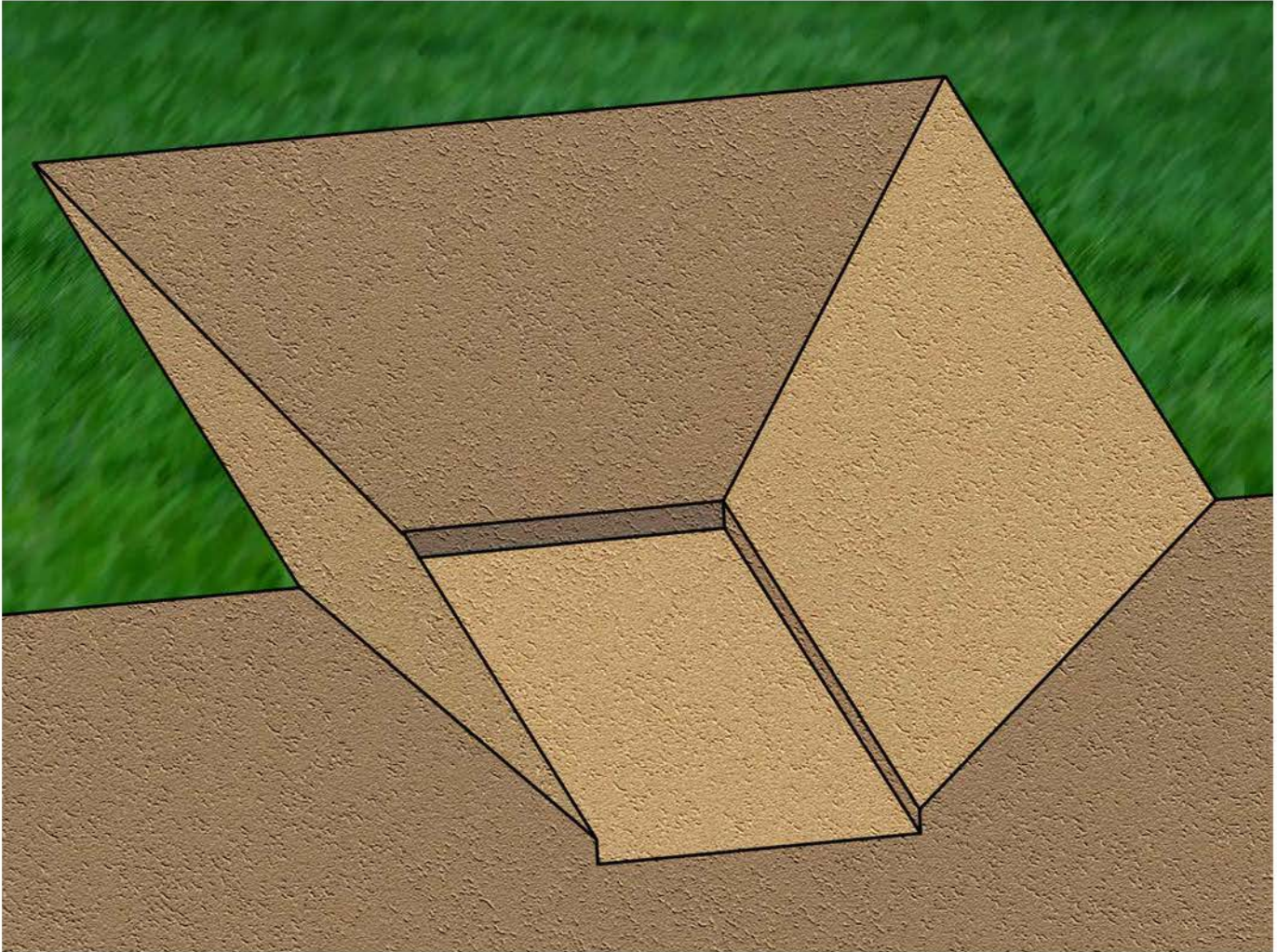
Tank Diameter (ft)	Tank Weight per Unit Length (lb/ft)	Trench Side Slope (degrees)	Minimum Soil Cover Thickness Required (ft.)	Bottom of Trench Width (ft.)	Rated Safety Factor
4	54	34	2.0	7.28	3.77
		45	2.0	7.28	3.16
		53	2.0	7.28	2.84
5	66	34	2.0	8.28	3.15
		45	2.0	8.28	2.60
		53	2.0	8.28	2.31
6	88	34	2.0	9.28	2.76
		45	2.0	9.28	2.25
		53	2.0	9.28	1.99
8	102	34	2.0	11.28	2.29
		45	2.0	11.28	1.83
		53	2.0	11.28	1.60
10	144	34	2.0	13.28	2.03
		45	2.5	12.17	1.65
		53	3.0	13.28	1.64
12	270	34	3.0	14.28	2.09
		45	3.0	15.28	1.71
		53	3.5	15.28	1.58



TankAnchor™ is engineered and calculated for a minimum of a 1.2 safety factor.

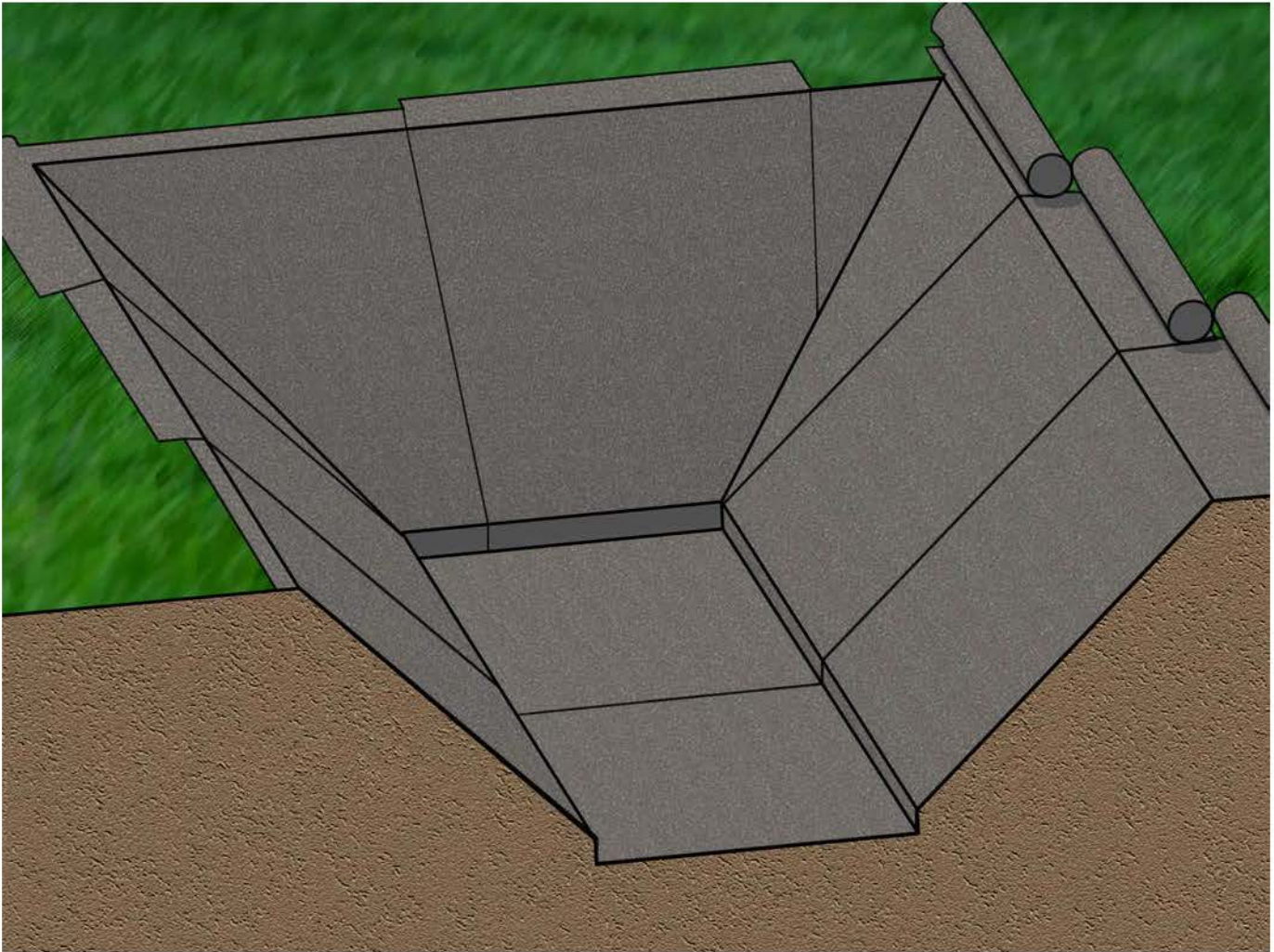
The values presented on this table are for estimate purposes and only valid for the listed soil conditions, tank sizes/ weights and trench geometries.

Step 1 - Excavate Tank Area



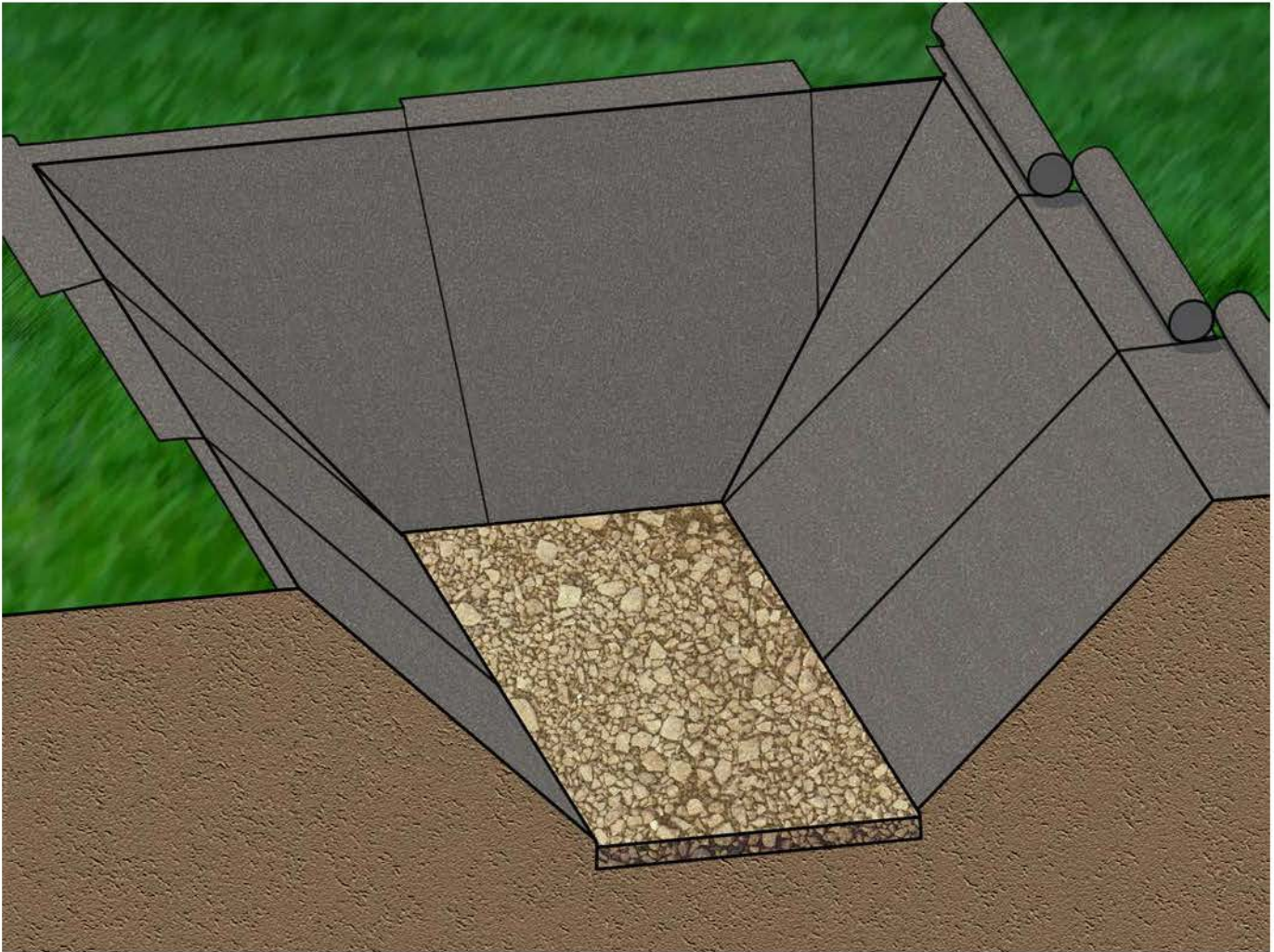
1. Excavate trench based on soil classification requirements, 34° , 45° , or 53° .

Step 2 - Soil Stabilization



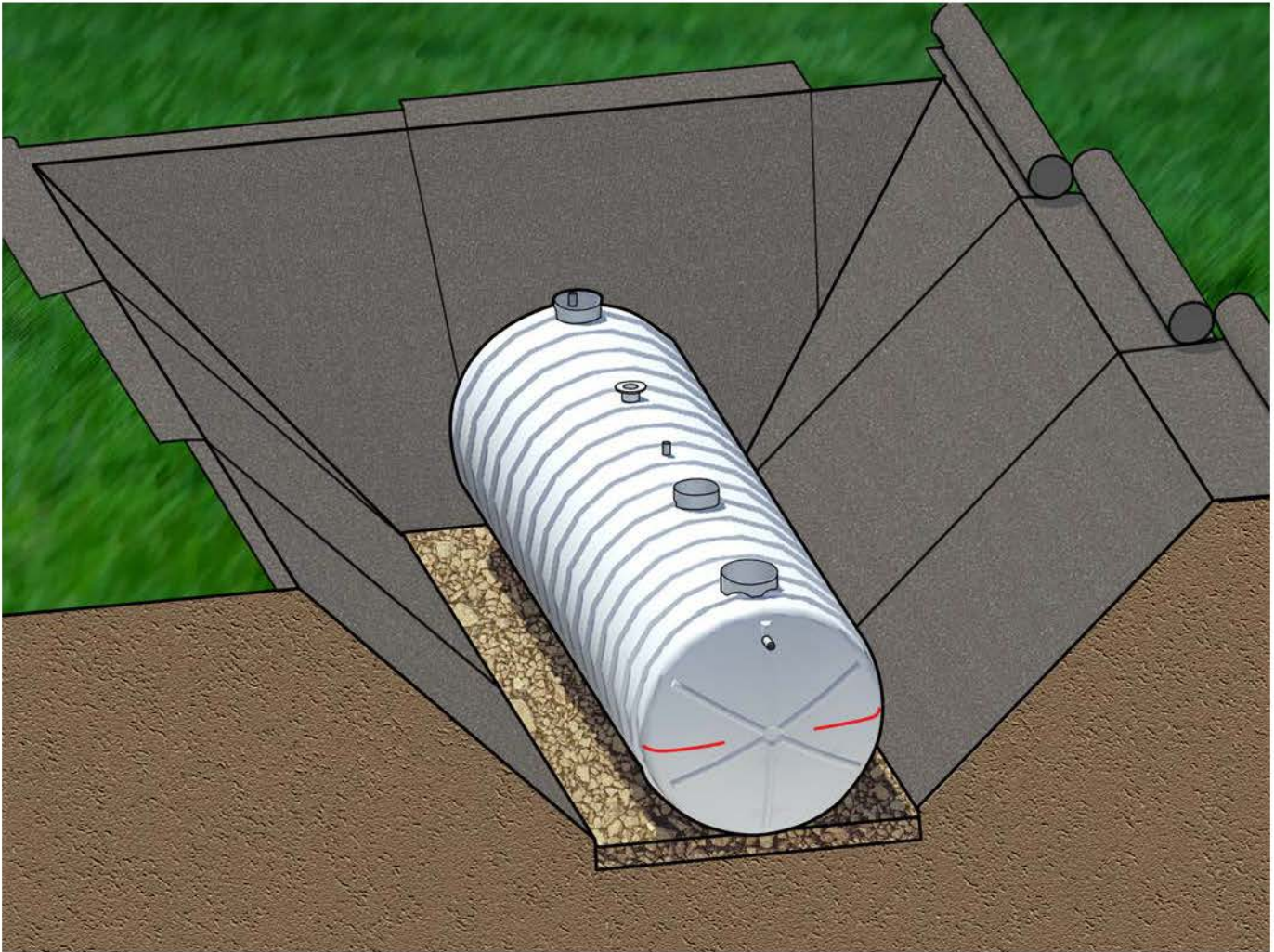
1. Install soil stabilization geofabric for soil & backfill separation as needed, based on geotechnical report.

Step 3 - Install Bedding



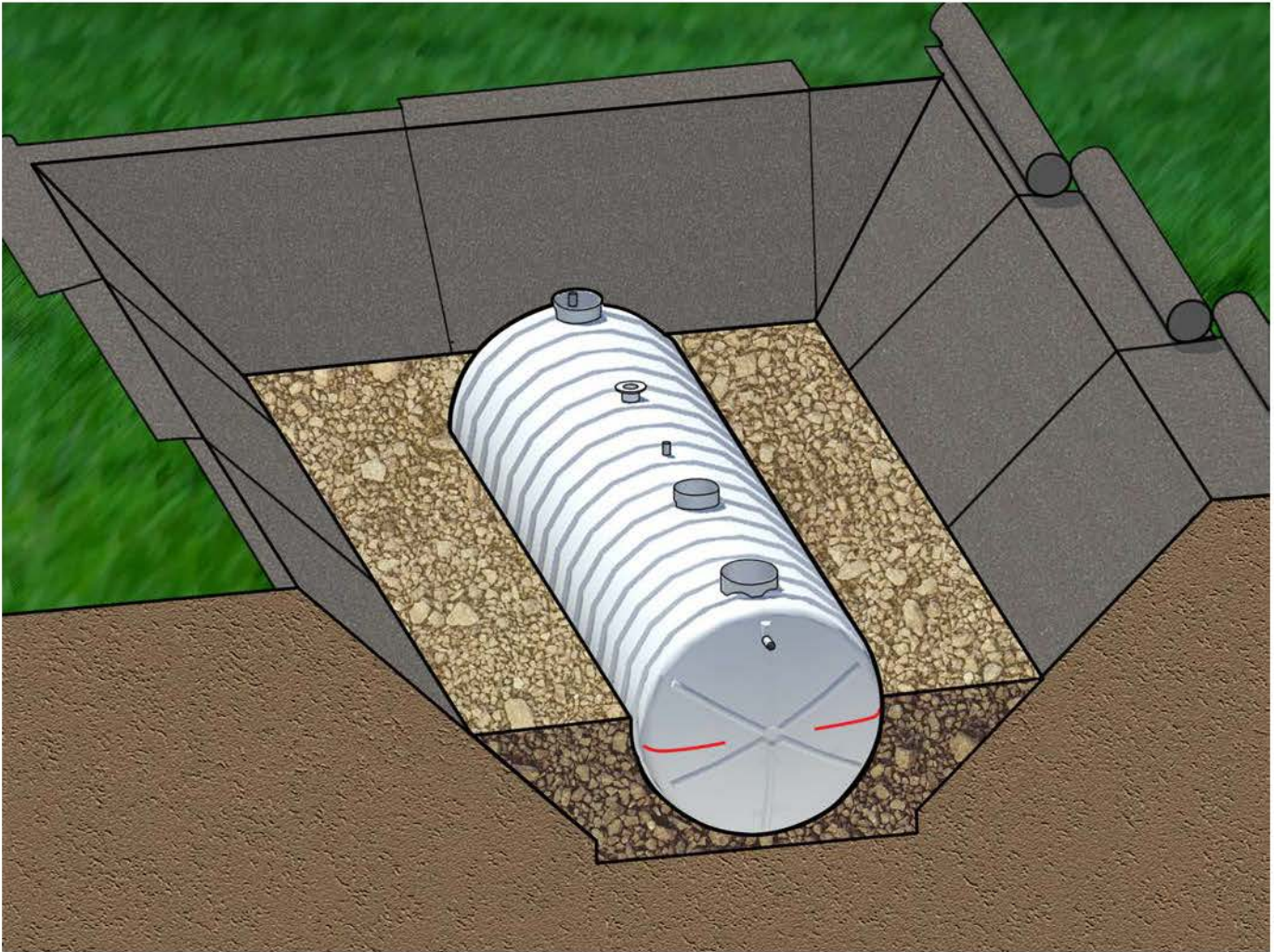
1. Install first 12" of specified backfill granular material as tank bedding. See FTS Installation Guide for bedding material specification type.

Step 4 - Install Tank



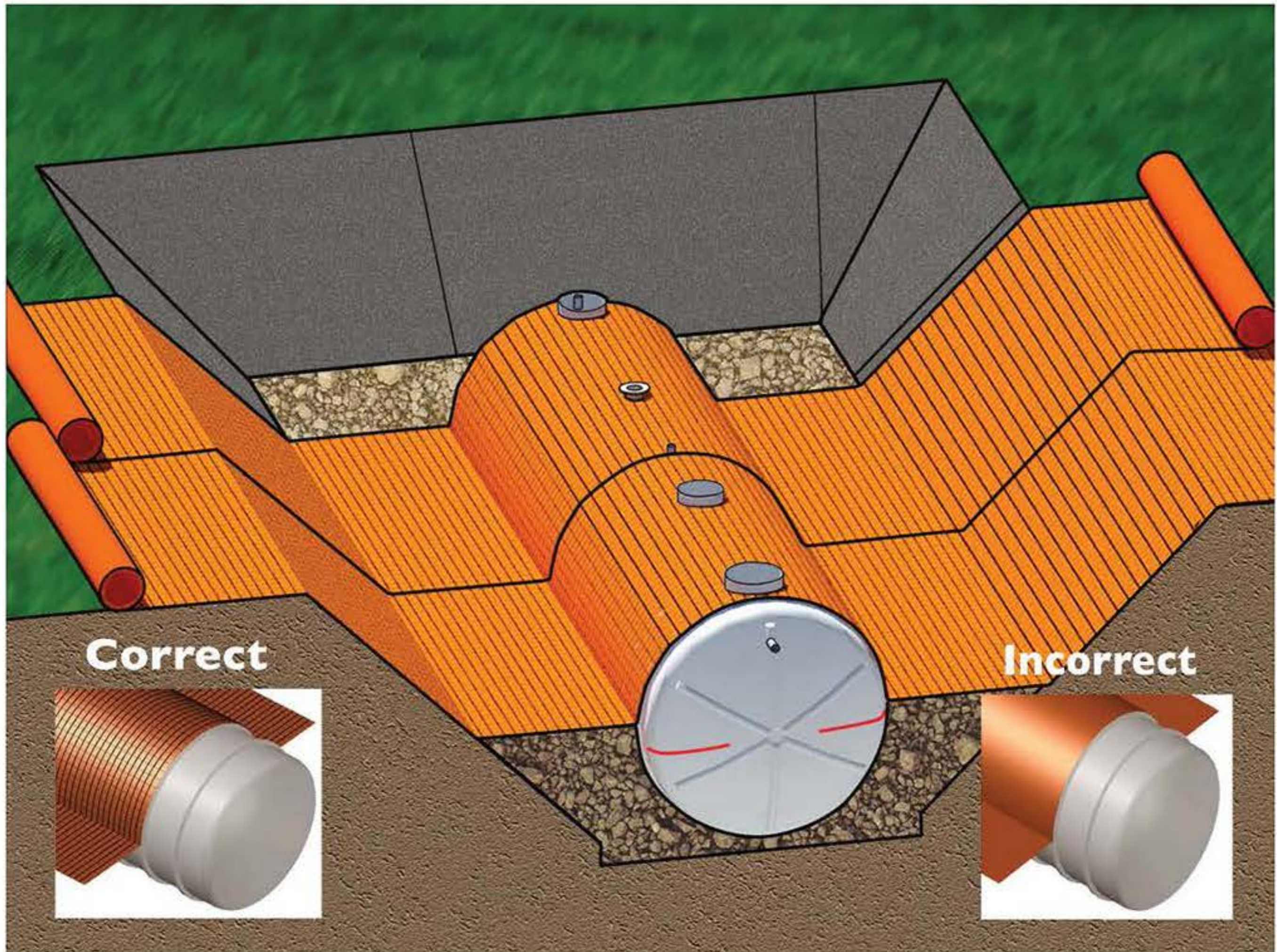
1. Center tank on 12" of specified bedding in excavation.
2. Install temporary protective covers over all access openings and fittings prior to backfill to eliminate bedding and backfill from entering the tank.

Step 5 - Install Backfill



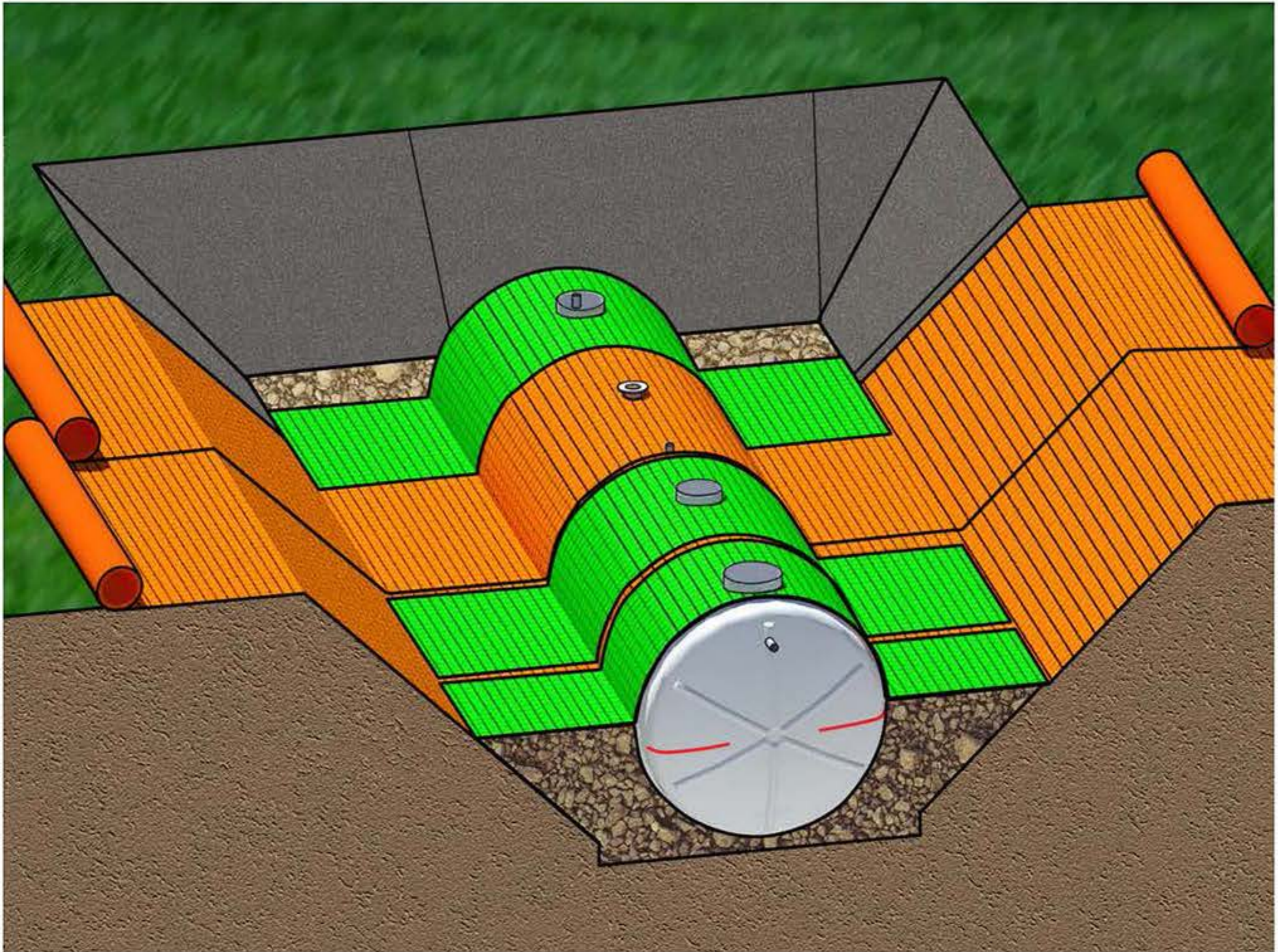
1. Begin backfilling in 12" lifts. Hand tamp under haunches of tank at 5:00 and 7:00 o'clock position to completely fill any voids under tank.
2. Backfill around tank to 3:00 and 9:00 o'clock positions.
3. Backfill material must meet the same requirements as Step 3. See FTS Installation Guide for backfill material specification type.

Step 6 - Install TankAnchor™



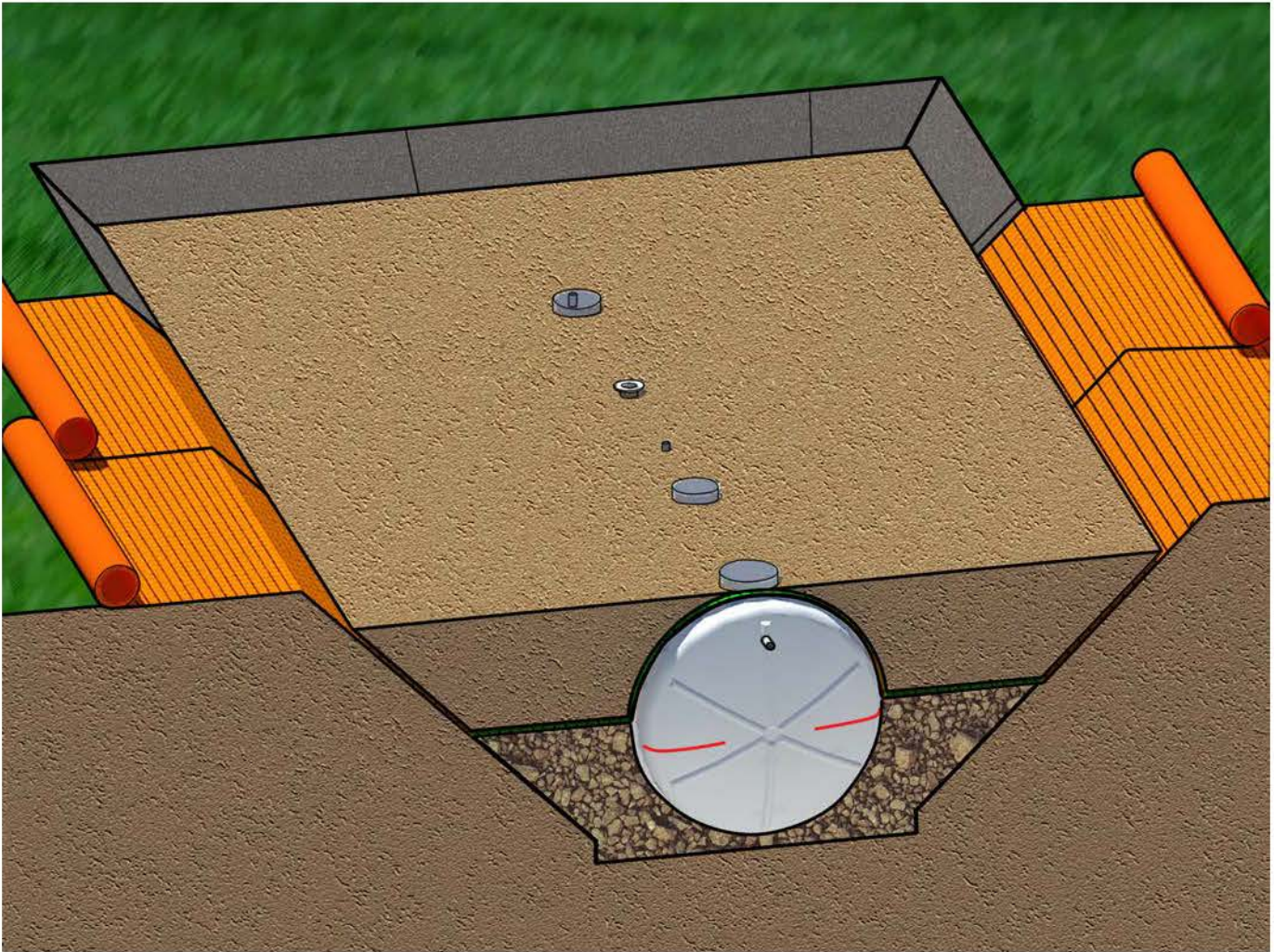
1. Review TankAnchor™ drawing and layout per project submittals.
2. Place TankAnchor™ with grid side facing up and fabric side laying down on the tank.
3. Cut holes in TankAnchor for fittings, access openings, and piping.
4. TankAnchor™ rolls come in 8.2' widths. Each horizontal fabric section requires a minimum 6" of overlap.

Step 7 - Install Opening Reinforcement



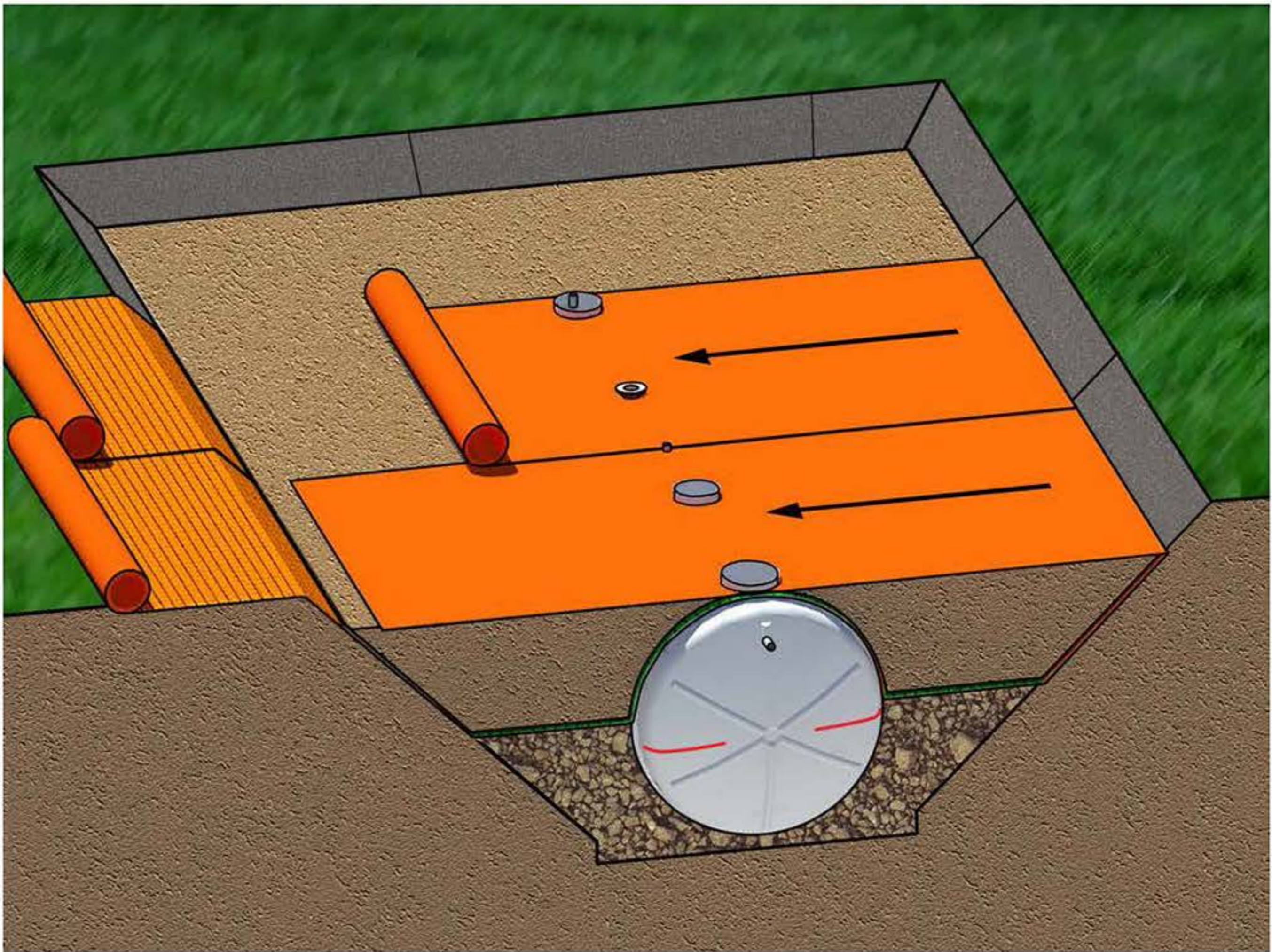
1. TankAnchor™ reinforcement layer is only required on fittings, manways, and access openings greater than 24" diameter.
2. Install access opening reinforcement up to the edges of the excavation only, at the 3:00 and 9:00 o'clock positions.
3. Cut holes in the TankAnchor™ reinforcement layer for any fittings, access openings, and piping.

Step 8 - Install Backfill



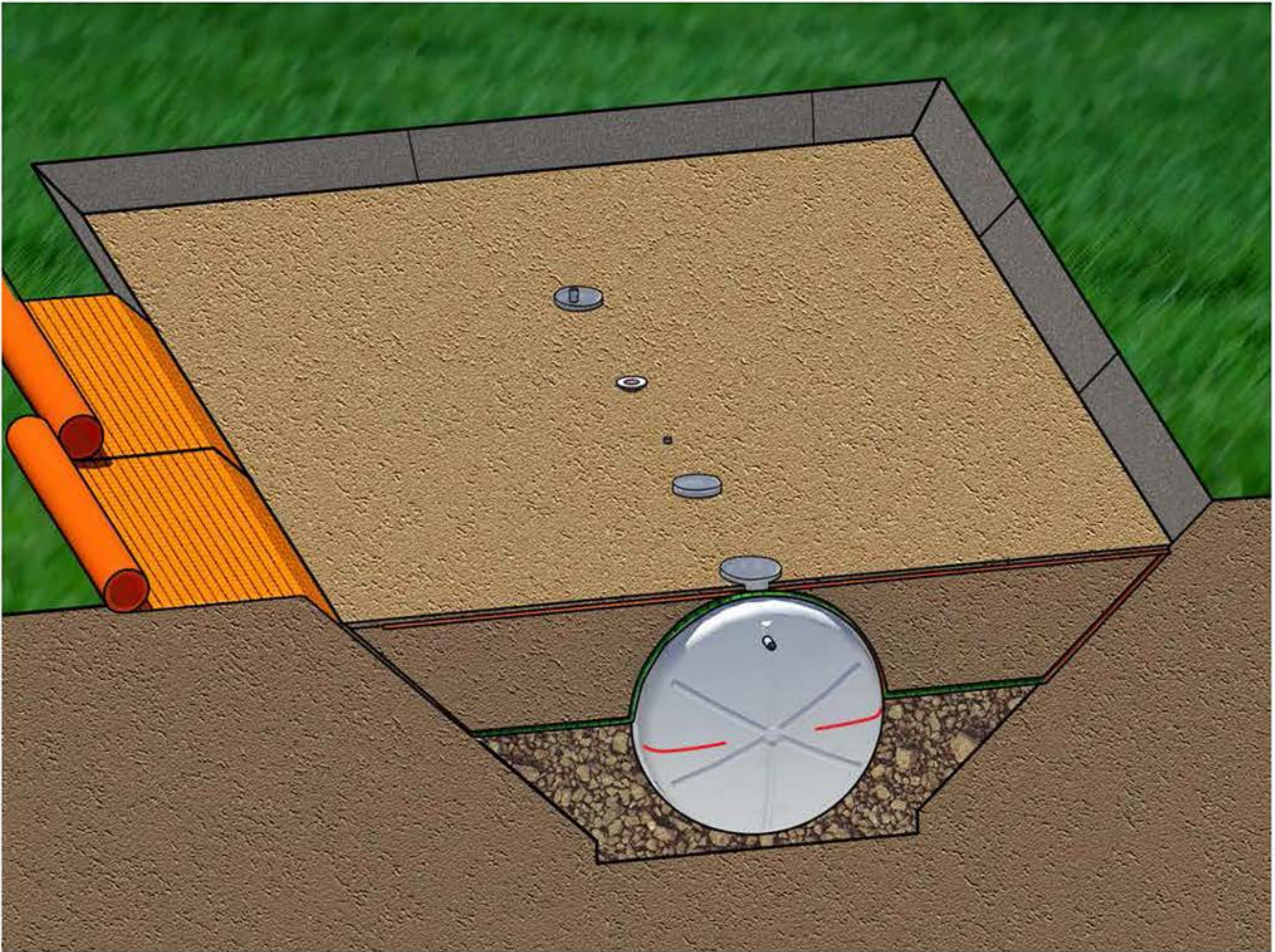
1. Backfill in lifts using granular backfill material or alternative backfill. See FTS Installation Guide for specified material.
2. Install backfill to crown of the tank.

Step 9 - Overlay TankAnchor™



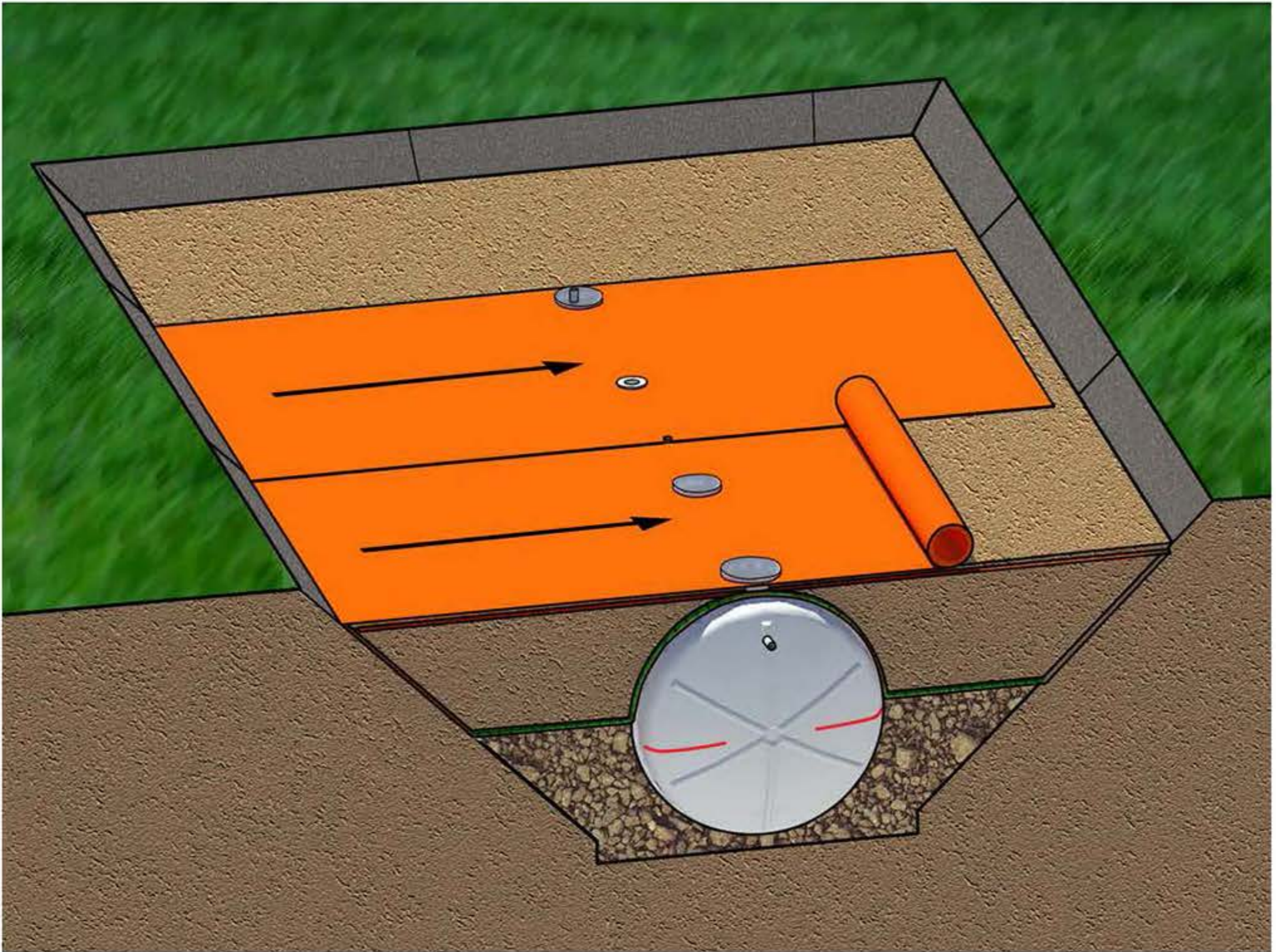
1. Rollout TankAnchor™ from side as shown.
2. Cut holes in the TankAnchor™ for any fittings, access openings, and piping.

Step 10 - Install 4" Backfill Lift



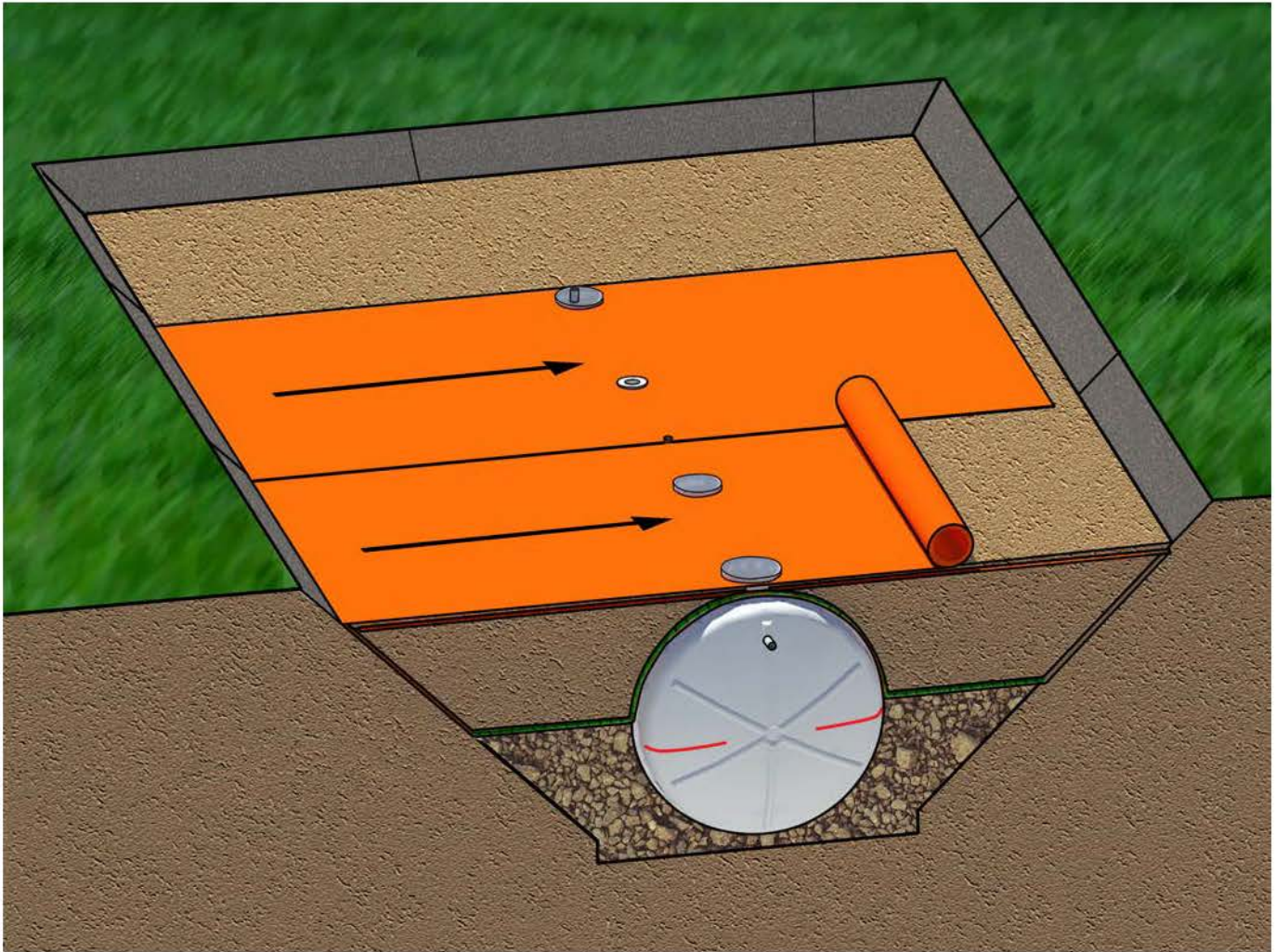
1. Backfill TankAnchor™ with 4" of specified backfill or alternate backfill. See FTS Installation Guide for specified backfill material.

Step 11 - Overlay TankAnchor™



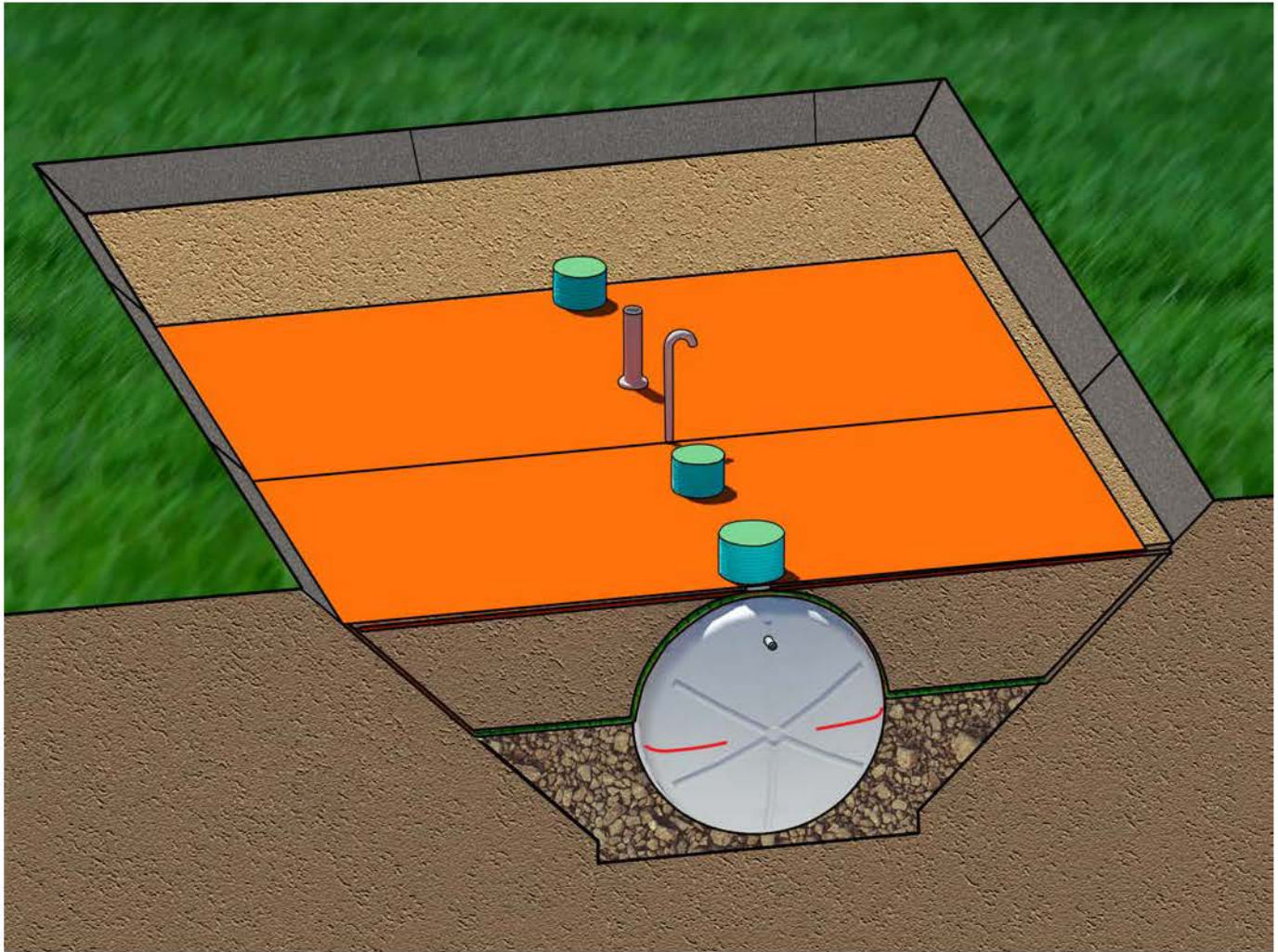
1. Rollout TankAnchor™ from the opposite side.
2. Cut holes in the TankAnchor™ for any fittings, access openings, and piping.

Step 11 - Overlay TankAnchor®



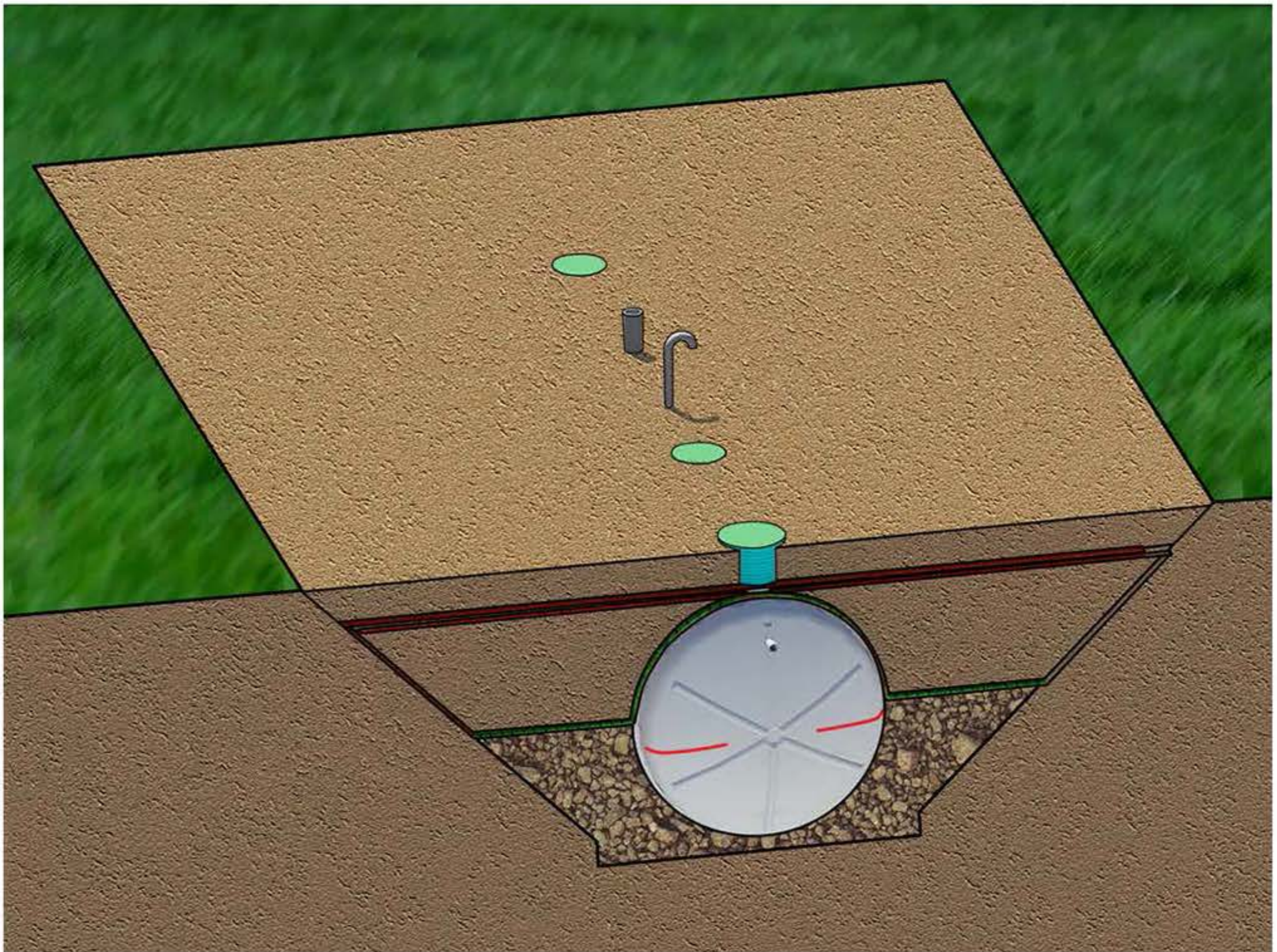
1. Rollout TankAnchor® from the opposite side.
2. Cut holes in the TankAnchor® for any fittings, access openings, and piping.

Step 12 - Install Fitting Connections and Risers



1. Install risers, manways, and fitting connections to finish grade.

Step 13 - Backfill to Finish Grade



1. Install select or alternative backfill to a minimum of 12" over top of final layer of TankAnchor™.
2. Use native soil or select backfill to finish grade.
3. Install manhole rings and finish grade traffic rated covers as needed.
4. Finish grade for pedestrian or H-20 loads.