

Select Fill Placement and System Installation

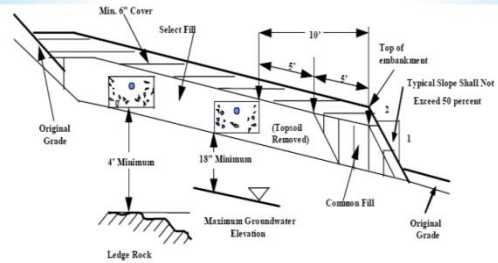
Pg. 36



Connecticut Department of Public Health
Keeping Connecticut Healthy



DPH Select Fill



MINIMUM SEPARATING DISTANCES ABOVE LEDGE ROCK AND GROUNDWATER

DPH Select Fill - Sieve Testing

When necessary, leaching systems may utilize select septic fill comprised of clean sand and gravel meeting the gradation specifications in the Technical Standards, unless otherwise approved by design engineer.



DPH Select Fill (page 36)

*Select fill: Select fill not in compliance with the noted gradation standards can only be approved by the design engineer if the material passing the #200 sieve doesn't exceed 6.0% based on wet sieve. PE accepting select fill that doesn't meet the gradation criteria must be design engineer

SIEVE SIZE	PERCENT PASSING	
	WET SIEVE	DRY SIEVE
#4	100	100
#10	70 - 100	70 - 100
#40	10 - 50 *	10 - 75
#100	0 - 20	0 - 5
#200	0 - 5	0 - 2.5

DPH Select Fill - Sieve Testing

Sieve Testing



5

DPH Select Fill

- * On-site sieve testing of select fill required for large systems (2000 GPD or greater)
- * On-site sieve testing for small systems (< 2000 GPD) is at the discretion of the local health department
- * Dry sieve tests are primarily used for screening purposes. Wet sieve test results supersede those of a dry sieve test

6



Select Fill

- *The select fill package extends 5 feet around the leaching system perimeter. The installer is responsible for placement of the select fill.
- *It is the installer's responsibility to properly compact select fill material to facilitate construction and to avoid settling.
- *Manufactured Fill: Annual submittals for all active quarries are due July 1st of each year for DPH approval.

7



Select Fill Placement

- *Licensed installer responsible for preparing the site with select fill
 - *Remove topsoil (strip)
 - *Scarify or rough/fluff up the soil interface
 - *Place fill using a tracked machine
- *Local health department typically conducts a strip and fill inspection

8



Staking Inspection

- *Some local health departments require a staking inspection
- *Stakes are placed around the perimeter of the proposed leaching system
- *System elevations may be labeled on the stakes
- *Limits of strip are reviewed and approved by the locals prior to stripping

9



Strip Inspection

- *Prior to select fill placement
 - *Measure striped area
 - *Verify scarification
 - *Look for signs of compaction or over excavation
 - *Photo document (if needed)
 - *Utilize Form #3 (Final Inspection Report)
 - *Review approved plan with installer

10



Compacted Strip Area

- *Identify damages
 - *Percolation tests can be conducted in damaged / impacted areas to evaluate extent of over-compaction
 - *System may need to be relocated or redesigned if an alternative location is not available
 - *Contact PE, if applicable

11



Fill Placement Inspection

- *Examine select fill
 - *May require sieve analysis
 - *2000 GPD system requires on-site sieve
 - *Fill being properly installed in 12" lifts
- *No use of tire equipment in strip area
 - *Tracked equipment properly cleaned (no chunks of top soil in the track)
- *Verify elevations
- *Use Form #3 (pg. 53)

12



*Strip, scarification and fill placement video.



System Inspection

- *Some local health departments require a mid-install system inspection
- *Tank placement
- *Leaching structures
- *Sewer line, pitch and length
- *Foundation drain outlet
- *Check stone
- *Elevation verification

14

The following pictures were taken by Peter Andrews and Joe Perry and are provided by Andrews Perry Construction

**ANDREWS
PERRY**
CONSTRUCTION INC.

Additional photographs can be found on their website.

<http://www.andrewsperryconstruction.com>

15



16



17



18



Fill must be compacted. A percolation test is required in the compacted fill if the leaching system is entirely within the select fill

19

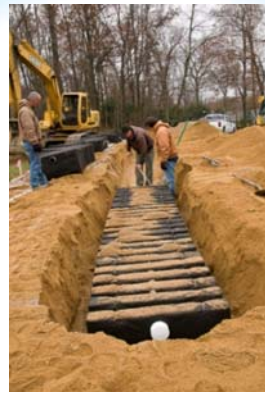


The trench is dug within the compacted fill area

20



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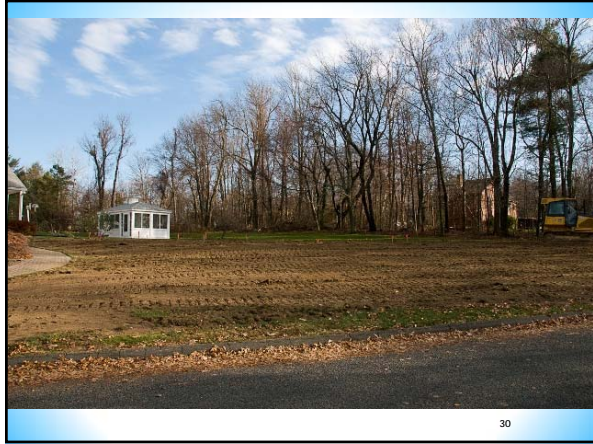
27



28



29



30