

**Land Engineering
& Environmental Services, Inc.**

1 BRIDGEVIEW CIRCLE, SUITE 16
TYNGSBORO, MA 01879
TELEPHONE (978) 649-4642 / FAX (978) 649-0981

JOB 30 Mill Lane Littleton 72001

SHEET NO. 1 OF 1

CALCULATED BY TR DATE 8/29/23

CHECKED BY _____ DATE _____

SCALE STORMWATER CALCULATIONS

SOILS: NRCS Charlton/Hollis Rock Outcrop
Hydrolic Soil Group: A

Roof Area = 1832 ± SF

Pavement + Walkways = 960 ± SF

Recharge 0.5 inches

Roof = 1832 SF (0.5 in) = 76 CF

Pavement + Walkways = 960 ± SF (0.5 in) = 40 CF

Roof Recharge

2 - Cultec R-180 Chambers @ 42 CF/chamber

= 84 CF > 76 CF ✓

Driveway Recharge

Stone Infiltration Trench

39 ft × 2 ft × 1.5 ft = 117 CF

Vol = 117 CF (0.4) = 47 CF > 40 CF ✓

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JOB 30 Mill Lane Littleton 72201

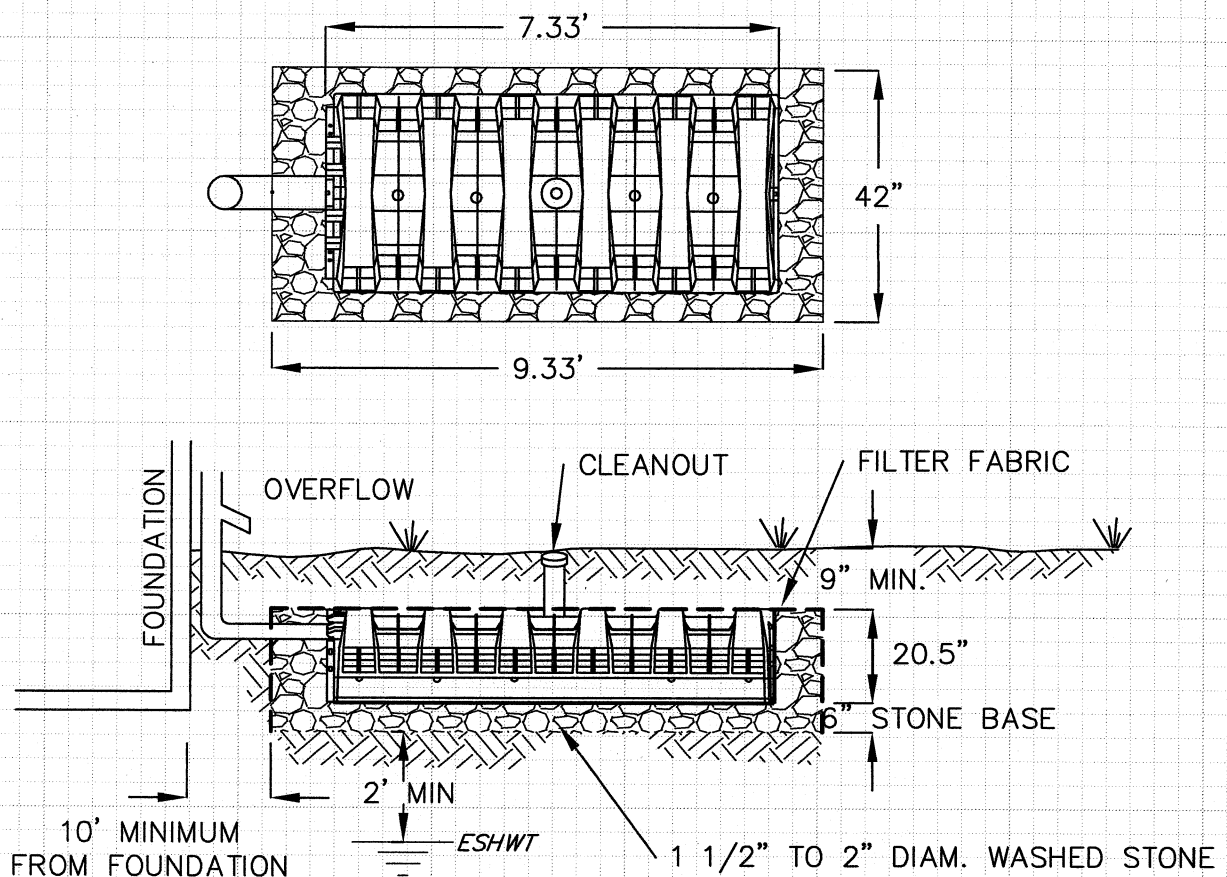
SHEET NO. 2 OF 2

CALCULATED BY [Signature] DATE 8/29/23

CHECKED BY _____ DATE _____

SCALE _____

1 Roof Recharge Detail



CULTEC RECHARGER 180 CHAMBER OR APPROVED EQUAL

MAINTAIN A MINIMUM OF TWO FEET OF SEPARATION
TO GROUNDWATER FROM THE BOTTOM OF THE STONE
AND A MINIMUM OF 9" COVER OVER CHAMBERS

72201

Prepared by {enter your company name here}

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Rainfall not specified

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Summary for Pond RR: roof recharge

[43] Hint: Has no inflow (Outflow=Zero)

Routing by Stor-Ind method

Peak Elev= 0.00' @ 0.00 hrs Surf.Area= 33 sf Storage= 0 cf

Plug-Flow detention time= (not calculated)

Center-of-Mass det. time= (not calculated)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	20 cf	3.50'W x 9.33'L x 2.20'H Prismatoid 72 cf Overall - 22 cf Embedded = 50 cf x 40.0% Voids
#2	0.50'	22 cf	Cultec R-180 Inside #1 Effective Size= 33.6"W x 20.0"H => 3.44 sf x 6.33'L = 21.8 cf Overall Size= 36.0"W x 20.5"H x 7.33'L with 1.00' Overlap
		42 cf	Total Available Storage