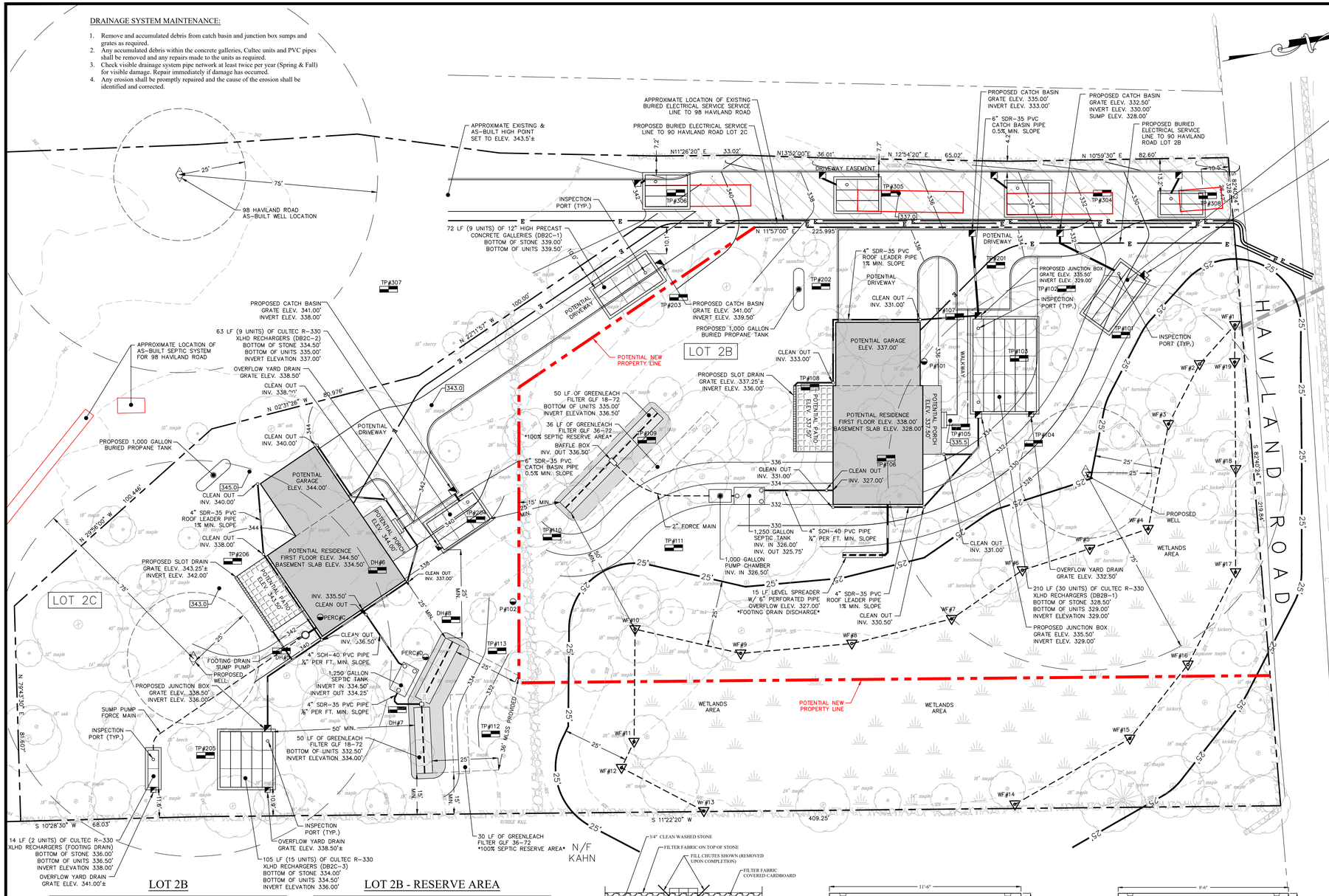
DRAINAGE SYSTEM MAINTENANCE:

1. Remove and accumulated debris from catch basin and junction box sumps and grates as required.
2. Any accumulated debris within the concrete galleries, Cultec units and PVC pipes shall be removed and any repairs made to the units as required.
3. Check visible drainage system pipe network at least twice per year (Spring & Fall) for visible damage. Repair immediately if damage has occurred.
4. Any erosion shall be promptly repaired and the cause of the erosion shall be identified and corrected.



LOT 2B

SEPTIC DESIGN NOTES GREENLEACH FILTER (GLF 18-72)
Proposed # of Bedrooms: 5
Percolation Rate: 1"/10 min. (Design Rate)
Effective Leaching Area Required: 660 sq. ft.
Effective Leaching Area Provided: (50LF)(14.1SF/LF)=705 SF
MLSS REQUIREMENTS:
RESTRICTIVE LAYER: [(TP#109 + TP#110)/2)+TP#111)/2
RESTRICTIVE LAYER: [((30"+56")/2)+40")/2 = 41.5"
SLOPE = 10.1-15.0%
HYDRAULIC FACTOR: 18
PERCOLATION FACTOR: 1.0 (1"/10MIN)
FLOW FACTOR: 2.0 (5-BEDROOM DESIGN)
MLSS: 18x1.0x2.0 = 36.0
MLSS PROVIDED: 50LF

LOT 2B - RESERVE AREA

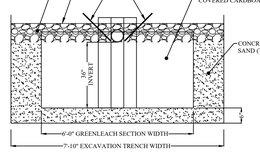
SEPTIC DESIGN NOTES GREENLEACH FILTER (GLF 36-72)
Proposed # of Bedrooms: 5
Percolation Rate: 1"/10 min. (Design Rate)
Effective Leaching Area Required: 660 sq. ft.
Effective Leaching Area Provided: (36LF)(26.2SF/LF)=943.2 SF
MLSS REQUIREMENTS:
RESTRICTIVE LAYER: [(TP#109 + TP#110)/2)+TP#111)/2
RESTRICTIVE LAYER: [((30"+56")/2)+40")/2 = 41.5"
SLOPE = 10.1-15.0%
HYDRAULIC FACTOR: 18
PERCOLATION FACTOR: 1.0 (1"/10MIN)
FLOW FACTOR: 2.0 (5-BEDROOM DESIGN)
MLSS: 18x1.0x2.0 = 36.0
MLSS PROVIDED: 36LF

LOT 2C

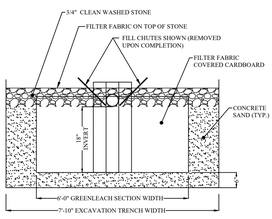
SEPTIC DESIGN NOTES GREENLEACH FILTER (GLF 18-72)
Proposed # of Bedrooms: 5
Percolation Rate: 1"/10 min. (Design Rate)
Effective Leaching Area Required: 660 sq. ft.
Effective Leaching Area Provided: (50LF)(14.1SF/LF)=705 SF
MLSS REQUIREMENTS:
RESTRICTIVE LAYER: [(DH#7+DH#8)/2)+((TP#112+TP#113)/2)]/2
RESTRICTIVE LAYER: [((60"+60")/2)+((60"+36")/2)]/2 = 54"
SLOPE = 10.1-15.0%
HYDRAULIC FACTOR: 14
PERCOLATION FACTOR: 1.0 (1"/10MIN)
FLOW FACTOR: 2.0 (5-BEDROOM DESIGN)
MLSS: 14x1.0x2.0 = 28.0
MLSS PROVIDED: 36LF

LOT 2C - RESERVE AREA

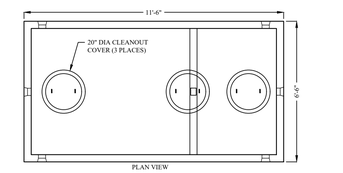
SEPTIC DESIGN NOTES GREENLEACH FILTER (GLF 36-72)
Proposed # of Bedrooms: 5
Percolation Rate: 1"/10 min. (Design Rate)
Effective Leaching Area Required: 660 sq. ft.
Effective Leaching Area Provided: (30LF)(26.2SF/LF)=786 SF
MLSS REQUIREMENTS:
RESTRICTIVE LAYER: [(DH#7+DH#8)/2)+((TP#112+TP#113)/2)]/2
RESTRICTIVE LAYER: [((60"+60")/2)+((60"+36")/2)]/2 = 54"
SLOPE = 10.1-15.0%
HYDRAULIC FACTOR: 14
PERCOLATION FACTOR: 1.0 (1"/10MIN)
FLOW FACTOR: 2.0 (5-BEDROOM DESIGN)
MLSS: 14x1.0x2.0 = 28.0
MLSS PROVIDED: 30LF

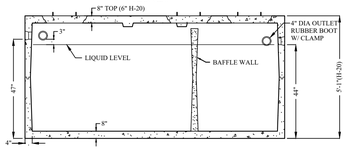


GREENLEACH FILTER - GLF 36.72
N.T.S.



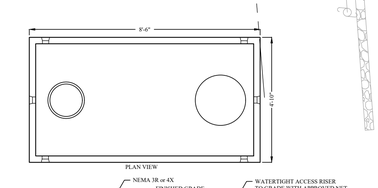
GREENLEACH FILTER - GLF 18.72
N.T.S.

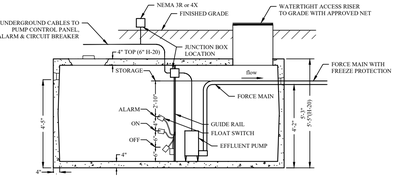




NOTES:
1. CONCRETE 4,000 PSI MINIMUM STRENGTH AFTER 28 DAYS
2. DESIGN CONFORMS WITH 310 CMR. 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS
3. ALL REINFORCEMENT PER ASTM C1227
4. TONGUE & GROOVE JOINT SEALED WITH BUTYL RESIN
5. TANKS ALSO AVAILABLE IN H-20 LOADING

1250 GALLON SEPTIC TANK
N.T.S.





NOTES:
1. CONCRETE 4,000 PSI MINIMUM STRENGTH AFTER 28 DAYS
2. DESIGN CONFORMS WITH 310 CMR. 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS
3. ALL REINFORCEMENT PER ASTM C1227
4. TONGUE & GROOVE JOINT SEALED WITH BUTYL RESIN
5. TANKS ALSO AVAILABLE IN H-20 LOADING

1000 GALLON PUMP CHAMBER
N.T.S.

PERCOLATION TEST DATA:

PERFORMED BY: SOUND VIEW ENGINEERS & LAND SURVEYORS, LLC
DATE: JULY 15, 2021

P#C

TIME	DEPTH TO WATER	PERC. RATE (MIN./INCH.)
12:25	12.75"	-
12:35	15.00"	4.4
12:45	16.50"	6.7
12:55	17.25"	13.3
1:05	18.00"	13.3
1:15	18.75"	13.3

P#D

TIME	DEPTH TO WATER	PERC. RATE (MIN./INCH.)
12:27	13.50"	-
12:37	19.50"	1.7
12:47	22.50"	3.3
12:57	24.75"	4.4
1:07	26.50"	5.7

DEEP TEST PIT LOG

CONDUCTED BY: FAIRFIELD COUNTY ENGINEERING L.L.C.
DATE CONDUCTED: MARCH 16, 2023

TEST PIT #304
00-04" TOPSOIL
04-26" BROWN SANDY LOAM
26-44" LIGHT BROWN GRAVEL & SILT
*MOTTLES @ 26"
*NO GROUND WATER
*NO LEDGE

TEST PIT #305
00-09" TOPSOIL
09-28" BROWN SANDY LOAM
28-47" TAN SAND & GRAVEL, STONES
*MOTTLES @ 28"
*NO GROUND WATER
*NO LEDGE

TEST PIT #306
00-08" TOPSOIL
08-35" BROWN SANDY LOAM
35-53" LIGHT BROWN GRAVEL & SILT
*MOTTLES @ 35"
*NO GROUND WATER
*NO LEDGE

TEST PIT #307
00-08" TOPSOIL
08-62" LIGHT BROWN GRAVEL & SILT
*NO MOTTLES
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 46"

DEEP TEST PIT LOG

CONDUCTED BY: FAIRFIELD COUNTY ENGINEERING L.L.C.
DATE CONDUCTED: MAY 23, 2023

TEST PIT #308
00-09" TOPSOIL
09-32" BROWN SILTY LOAM
32-49" LIGHT BROWN GRAVEL & SILT
*MOTTLES @ 32"
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 24"

DEEP TEST PIT LOG

CONDUCTED BY: SOUND VIEW ENGINEERS & LAND SURVEYORS, LLC
DATE CONDUCTED: JUNE 24, 2021

TEST PIT #5
00-04" TOPSOIL
04-32" ORANGE BROWN SANDY LOAM
32-76" TAN COARSE SAND & GRAVEL
*NO MOTTLES
*NO GROUND WATER
*LEDGE @ 76"
*NO ROOT

TEST PIT #6
00-08" TOPSOIL
08-40" ORANGE BROWN SANDY LOAM
40-60" TAN SAND & GRAVEL, STONES
*NO MOTTLES
*NO GROUND WATER
*LEDGE @ 60"
*NO ROOT

TEST PIT #7
00-04" TOPSOIL
04-32" ORANGE BROWN SANDY LOAM
32-76" TAN COARSE SAND & GRAVEL, STONES
*NO MOTTLES
*NO GROUND WATER
*LEDGE @ 68"
*NO ROOT

TEST PIT #8
00-06" TOPSOIL
06-48" ORANGE BROWN SANDY LOAM
48-72" TAN COARSE SAND & GRAVEL
*NO MOTTLES
*NO GROUND WATER
*LEDGE @ 72"
*NO ROOT

DEEP TEST PIT LOG

CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: NOVEMBER 20, 2024

TEST PIT #201
00-06" TOPSOIL & LEAF LITTER
06-28" ORANGE BROWN SILTY LOAM
28-64" OLIVE BROWN MOTTLED & COMPACTED FINE SAND & SILT
64-84" BROWN FINE TO MEDIUM SAND & SILT
*MOTTLES @ 28"
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 28"

TEST PIT #202
00-08" TOPSOIL & LEAF LITTER
08-22" ORANGE BROWN SILTY LOAM
22-48" TAN MOTTLED & COMPACTED FINE SAND & SILT
48-82" LIGHT BROWN FINE TO MEDIUM SAND & SILT W/ ANGULAR STONES
*MOTTLES @ 22"
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 22"

TEST PIT #203
00-06" TOPSOIL & LEAF LITTER
06-28" ORANGE BROWN SILTY LOAM
28-72" TAN MOTTLED & COMPACTED FINE SAND & SILT
72-104" LIGHT BROWN FINE SAND & SILT W/ ANGULAR STONES
*MOTTLES @ 28"
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 28"

TEST PIT #204
00-08" TOPSOIL & LEAF LITTER
08-60" ORANGE BROWN SILTY LOAM
60-86" TAN FINE TO MEDIUM SAND W/ A TRACE OF SILT
*NO MOTTLES
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 42"

TEST PIT #205
00-08" TOPSOIL & LEAF LITTER
08-42" ORANGE BROWN SILTY LOAM
42-82" TAN FINE SAND & SILT W/ LARGE ANGULAR STONES
*NO MOTTLES
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 42"

TEST PIT #206
00-08" TOPSOIL & LEAF LITTER
08-38" ORANGE BROWN SILTY LOAM
38-90" TAN FINE SAND & SILT W/ LARGE ANGULAR STONES
*NO MOTTLES
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 48"

PERCOLATION TEST DATA:

P#101
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: DECEMBER 08, 2023
DIAMETER: 8" SANITARIAN: N/A
DEPTH: 20" PRE SOAK TIME: 11:00

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
01:00	-	7.00"	-	-
01:10	10.0 MIN.	9.00"	2.00"	5.00
01:20	10.0 MIN.	10.00"	1.00"	10.00
01:30	10.0 MIN.	10.75"	0.75"	13.33
01:40	10.0 MIN.	11.25"	0.50"	20.00
01:50	10.0 MIN.	11.75"	0.50"	20.00
02:00	10.0 MIN.	12.25"	0.50"	20.00

P#102
PERFORMED BY: KOUSIDIS ENGINEERING, LLC
DATE: SEPTEMBER 22, 2023
DIAMETER: 10" SANITARIAN: N/A
DEPTH: 26" PRE SOAK TIME: 11:35

TIME	TIME INCREMENT	DEPTH TO WATER	DROP IN INCHES	PERC. RATE (MIN./INCH.)
01:05	-	5.50"	-	-
01:15	10.0 MIN.	11.50"	6.00"	1.67
01:25	10.0 MIN.	15.75"	4.25"	2.35
01:35	10.0 MIN.	18.75"	3.00"	3.33
01:45	10.0 MIN.	21.00"	2.50"	4.44
01:55	10.0 MIN.	23.00"	2.00"	5.00
02:05	10.0 MIN.	25.00"	2.00"	5.00

DEEP TEST PIT LOG

CONDUCTED BY: KOUSIDIS ENGINEERING, LLC
DATE CONDUCTED: DECEMBER 08, 2023
SANITARIAN: JOSHUA POLUR & PAMELA SOLIS

TEST PIT #101
00-10" TOPSOIL
10-24" TAN SILTY LOAM
24-34" TAN MOTTLED FINE SAND & SILT
34-72" BROWN SATURATED & SLIGHTLY COMPACTED FINE SAND & SILT
*MOTTLES @ 24"
*GROUND WATER WEEPING @ 24"
*NO LEDGE
*ROOTS TO 24"

TEST PIT #102
00-10" TOPSOIL
10-28" TAN SILTY LOAM
28-46" TAN MOTTLED FINE SAND & SILT
46-72" BROWN SATURATED & SLIGHTLY COMPACTED FINE SAND & SILT
*MOTTLES @ 28"
*GROUND WATER WEEPING @ 44"
*NO LEDGE
*ROOTS @ 28"

TEST PIT #103
00-10" TOPSOIL
10-24" TAN SILTY LOAM
24-34" TAN MOTTLED FINE SAND & SILT
34-72" BROWN SATURATED & SLIGHTLY COMPACTED FINE SAND & SILT
*MOTTLES @ 24"
*GROUND WATER WEEPING @ 34"
*NO LEDGE
*ROOTS @ 24"

TEST PIT #104
00-10" TOPSOIL
10-22" TAN SILTY LOAM
22-66" BROWN SATURATED & SLIGHTLY COMPACTED FINE SAND & SILT
*MOTTLES @ 22"
*GROUND WATER WEEPING @ 22"
*NO LEDGE
*ROOTS @ 22"

TEST PIT #105
00-08" TOPSOIL
08-22" TAN SILTY LOAM
22-80" BROWN SATURATED & SLIGHTLY COMPACTED FINE SAND & SILT
*MOTTLES @ 22"
*GROUND WATER WEEPING @ 28"
*NO LEDGE
*ROOTS @ 22"

TEST PIT #106
00-10" TOPSOIL
10-24" TAN SILTY LOAM
24-40" TAN MOTTLED FINE SAND & SILT
40-84" BROWN SATURATED & SLIGHTLY COMPACTED FINE SAND & SILT
*MOTTLES @ 24"
*GROUND WATER WEEPING @ 40"
*NO LEDGE
*ROOTS @ 24"

TEST PIT #107
00-10" TOPSOIL
10-28" TAN SILTY LOAM
28-88" BROWN SATURATED & SLIGHTLY COMPACTED FINE SAND & SILT
*MOTTLES @ 28"
*GROUND WATER @ 60"
*NO LEDGE
*ROOTS @ 28"

TEST PIT #108
00-08" TOPSOIL & LEAF LITTER
08-36" TAN SILTY LOAM
36-64" BROWN MOTTLED & COMPACTED FINE SAND & SILT
64-86" BROWN SATURATED FINE SAND & SILT
*MOTTLES @ 36"
*GROUND WATER @ 66"
*NO LEDGE
*ROOTS @ 36"

TEST PIT #109
00-04" TOPSOIL & LEAF LITTER
04-30" TAN SILTY LOAM
30-42" TAN MOTTLED & SLIGHTLY COMPACTED FINE SAND & SILT
42-70" OLIVE BROWN SLIGHTLY COMPACTED MEDIUM SAND & SILT
70-96" BROWN MEDIUM SAND & SILT
*MOTTLES @ 30"
*NO GROUND WATER
*NO LEDGE
*ROOTS @ 30"

TEST PIT #110
00-04" TOPSOIL & LEAF LITTER
04-26" ORANGE BROWN SILTY LOAM
26-56" TAN MEDIUM SAND & SILT
56-92" BROWN COMPACTED FINE TO MEDIUM SAND & SILT
*MOTTLES @ 56"
*NO GROUND WATER
*NO LEDGE
*ROOTS @ 56"

TEST PIT #111
00-12" TOPSOIL & LEAF LITTER
12-40" ORANGE BROWN SILTY LOAM
40-58" BROWN COMPACTED FINE SAND & SILT
58-84" BROWN SATURATED MEDIUM SAND & SILT
*MOTTLES @ 40"
*GROUND WATER @ 58"
*NO LEDGE
*ROOTS @ 40"

TEST PIT #112
00-10" TOPSOIL & LEAF LITTER
10-36" ORANGE BROWN SILTY LOAM
36-46" TAN COMPACTED FINE SAND & SILT
46-76" BROWN MODERATELY COMPACTED MEDIUM SAND & SILT
76-88" LIGHT BROWN SATURATED MEDIUM SAND & SILT
*MOTTLES @ 36"
*GROUND WATER WEEPING @ 76"
*NO LEDGE
*ROOTS @ 36"

TEST PIT #113
00-12" TOPSOIL
12-38" ORANGE BROWN SILTY LOAM
38-80" TAN COARSE SAND & COBBLES WITH TRACE SILT
80-90" BROWN SATURATED COARSE SAND & COBBLES WITH TRACE SILT
*NO MOTTLES
*GROUND WATER @ 80"
*NO LEDGE
*ROOTS @ 38"

REVISED: 01/30/2025 - Widened accessway to 18' and connected all lots to one common accessway per Engineering & EPB feedback.
REVISED: 01/07/2025 - Per comments from the City of Stamford Engineering Department, issued 12/17/2024.
REVISED: 12/10/2024 - Added accessway drainage & per comments from Engineering & Health Departments, issued 10/11/2024.
REVISED: 09/24/2024 - Amended grading scheme to remove slopes in excess of 25% per feedback from the City of Stamford P&Z.

SUBDIVISION FEASIBILITY PLAN

90 HAVILAND ROAD

STAMFORD, CT

Prepared for

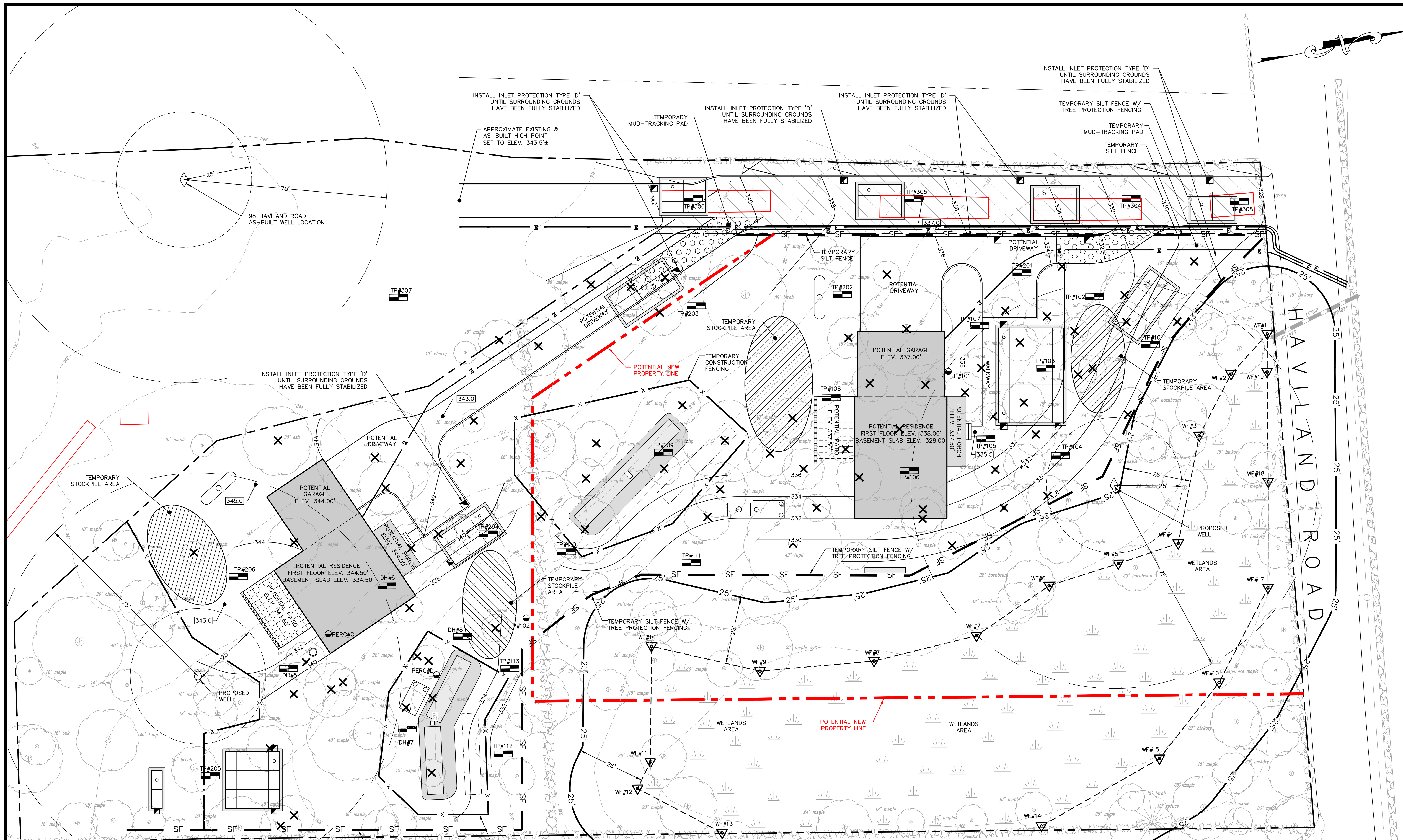
STEVE AIVALIS

STATE OF CONNECTICUT JOSHUA POLUR LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 20' (0 — 20 — 40)

DATED: 08/30/2024
JOB NO: SA24-1
SHEET NO: 1 of 3

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
1525 Black Rock Turnpike, Fairfield, CT 06825 P: 203-557-8943
E: jim@kousidisengineering.com Web: www.kousidisengineering.com



GENERAL NOTES:

1. ALL SURVEY DATA, BOUNDARY LINES AND TOPOGRAPHY, ARE FROM A "SITE ACCESS PLAN" PREPARED FOR RAY KAHN. AT 90 & 98 HAVILAND ROAD, STAMFORD, CT, PREPARED BY SOUND VIEW ENGINEERING & LAND SURVEYORS LLC, DATED NOVEMBER 09, 2021.
2. ALL CONSTRUCTION SHALL COMPLY WITH THE CITY OF STAMFORD REQUIREMENTS, THE STATE OF CONNECTICUT BASIC BUILDING CODE AND THE CONNECTICUT GUIDELINES FOR SOIL AND EROSION AND SEDIMENT CONTROL.
3. INFORMATION OF EXISTING UTILITIES HAS BEEN COMPILED FROM VARIOUS SOURCES INCLUDING UTILITY COMPANY RECORDS, MUNICIPAL RECORD MAPS AND FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES INCLUDING SERVICES.
4. THE PROPERTY WILL BE SERVICED BY WELL WATER AND PRIVATE SEPTIC SYSTEM. NO KNOWN SEPTIC SYSTEMS AND STORM DRAIN SYSTEMS WITHIN 50' OF THE PROPOSED SEPTIC SYSTEM. NO KNOWN WELLS ARE LOCATED WITHIN 75' OF THE PROPOSED SEPTIC SYSTEM.
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY EXCAVATION SAFEGUARDS, NECESSARY BARRICADES, FLAGMEN, ETC., FOR TRAFFIC CONTROL AND SITE SAFETY. ALL WORK SHALL BE DONE IN ACCORDANCE WITH OSHA REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH OSHA REQUIREMENTS.
6. REMOVE STUMPS AND BRUSH FROM SITE, OR CHIP AND USE DURING LANDSCAPING. DO NOT BURY STUMPS ON SITE.
7. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE PLANS UNLESS CHANGES HAVE BEEN APPROVED IN WRITING BY THE DESIGN ENGINEER PRIOR TO THE WORK BEING DONE.
8. ALL DISTURBED AREAS SHALL BE MULCHED AND SEEDED AS SOON AS POSSIBLE.
9. AREAS OF ASPHALT PAVEMENT THAT ARE DISTURBED BY THE CONSTRUCTION OF THIS PROJECT SHALL BE REPLACED IN ACCORDANCE WITH THE ASPHALT TRENCH REPAIR DETAIL. THE FINISHED GRADE OF ASPHALT PAVING SHALL BLEND TO EXISTING GRADE AND THE EDGE OF THE CONCRETE PAVEMENT SMOOTHLY WITH NO SLOPES EXCEEDING 4%.
10. A MINIMUM OF 6" OF CRUSHED STONE MUST BE INSTALLED UNDER ALL EXTERIOR PORCHES AND STAIRS.

EARTHWORK & GRADING:

11. GRADE AWAY FROM BUILDING WALLS AT 2% MINIMUM (TYPICAL).
12. PROPOSED EARTH SLOPES SHALL BE NO STEEPER THAN 5:1 (HORZ.:VERT.), UNLESS OTHERWISE DEPICTED ON SITE PLAN.
13. GENERAL FILL BEYOND PAVED AREAS SHALL BE FREE OF BRUSH RUBBISH, STUMPS. FILL SHALL BE PLACED IN LAYERS NOT TO EXCEED 8" IN THICKNESS. THE DRY DENSITY AFTER COMPACTION SHALL NOT BE LESS THAN 95 % OF THE STANDARD PROCTOR TEST AND DONE IN ACCORDANCE WITH THE REQUIREMENTS OF ASTM D698. AFTER COMPACTING, THE FILL SHALL BE 4" BELOW THE REQUIRED GRADE AS SHOWN ON THE PLAN.
14. AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, THE SUBGRADE SHALL BE LOOSENED BY SCARIFYING TO A DEPTH OF AT LEAST 2" TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.
15. FILL OR TOPSOIL SHALL NOT BE PLACED NOR COMPACTED WHILE IN A FROZEN OR MUDDY CONDITION OR WHILE SUBGRADE IS FROZEN.
16. ALL EXCESS MATERIALS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

STORM SEWER SYSTEMS:

17. ALL PIPE SHALL BE INSTALLED STRAIGHT AND AT THE VERTICAL AND HORIZONTAL ALIGNMENT SHOWN. NO 90° BENDS IN ALL PIPES.
18. MINIMUM COVER ON ALL PIPES SHALL BE TWO FEET (2') UNLESS OTHERWISE NOTED.
19. ALL POLY VINYL CHLORIDE PIPE (PVCP) SHALL BE SDR 35 WITH RUBBER JOINTS AND MEET THE REQUIREMENTS ASTM D3 AND D3212.
20. ALL AREA DRAINS SHALL HAVE A 2' SUMP.
21. CONTACT THE DESIGN ENGINEER THREE DAYS PRIOR TO EXCAVATING FOR THE INFILTRATION SYSTEM. DURING THE EXCAVATION, THE DESIGN ENGINEER MAY REVISE THE ELEVATIONS OF THE SYSTEM IF FIELD CONDITIONS DICTATE.
22. THE ENGINEER OF RECORD IS REQUIRED TO WITNESS THE INSTALLATION OF THE DRAINAGE SYSTEM PRIOR TO BACKFILLING.
23. DIRECT THE ENTIRE ROOF AREA AND THE DRIVEWAY INLET STRUCTURES TO THE PROPOSED DRAINAGE SYSTEMS AS DEPICTED.

SEDIMENT & EROSION CONTROLS:

24. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND SHALL HAVE THEM INSPECTED AND APPROVED BY THE SITE ENGINEER PRIOR TO ANY LAND DISTURBANCE. MINOR SEDIMENT CONTROL DEVICE LOCATION ADJUSTMENT MAY BE MADE IN THE FIELD WITH THE APPROVAL OF THE SITE ENGINEER.
25. THE CONTRACTOR SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURES WITHOUT PRIOR PERMISSION FROM THE SITE ENGINEER.
26. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC OR PRIVATE ROADS. ALL MATERIALS DEPOSITED ONTO SUCH ROADS SHALL BE REMOVED AS SOON AS POSSIBLE.
27. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN AN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIMES AS THEY REMOVED WITH PRIOR PERMISSION FROM THE SITE ENGINEER.
28. ALL DISTURBED AREAS WITH A SLOPE STEEPER THAN 3:1 SHALL BE STABILIZED WITH SOD OR SEED AND ANCHORED STRAW MULCH OR OTHER APPROVED STABILIZATION MEASURE, AS SOON AS POSSIBLE BUT NO LATER THAN 5 CALENDAR DAYS.
29. SEDIMENT TRAPS AND BASINS SHALL NOT BE CONSTRUCTED WITHIN 25' OF AN EXISTING FOUNDATION OR ONE THAT IS UNDER CONSTRUCTION.
30. SEDIMENT REMOVED FROM TRAPS, SILTATION FENCES OR BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS BUT NOT WITHIN A FLOODPLAIN, WETLANDS OR TREE-SAVE AREAS.
31. ALL WATER REMOVED FROM EXCAVATED AREAS SHALL BE PASSED THROUGH APPROVED DEWATERING PRACTICES OR PUMPED TO A SEDIMENT BASIN PRIOR TO DISCHARGE TO A FUNCTIONAL STORM DRAIN SYSTEM OR TO STABLE GROUND SURFACE.
32. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES THE CONTRACTOR SHALL STABILIZE AND HAVE ESTABLISHED PERMANENT STABILIZATION FOR ALL DISTURBED AREAS USING SOD OR AN APPROVED SIX MIXTURE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON MUST BE STABILIZED WITH PERMANENT GROWTH AS SOON AS POSSIBLE. WHEN PROPERTY IS BROUGHT TO FINISHED GRADES DURING THE WINTER MONTHS WHEN PERMANENT STABILIZATION IS IMPRACTICAL THEN AN APPROVED TEMPORARY STABILIZATION SHALL BE DONE UNTIL THE SPRING MONTHS WHERE PERMANENT STABILIZATION IS POSSIBLE

SEWAGE DISPOSAL SYSTEM NOTES:

1. THE PROPOSED SEWAGE DISPOSAL SYSTEMS SHALL CONFORM TO SECTIONS 19-13-B103A TO 19-13-B103F OF THE CONNECTICUT STATE HEALTH CODE.
2. THE PROPOSED SOIL LINES SHALL BE AS DEPICTED ON THE PLAN.
3. THE PROPOSED SEPTIC TANK SHALL BE A TWO-COMPARTMENT TANK. THE TANK SHALL BE WATERTIGHT AND BE SO CERTIFIED BY THE MANUFACTURER. THE SEPTIC TANK SHALL BE AS MANUFACTURED BY EASTERN PRECAST, OR EQUIVALENT AS APPROVED BY THE ENGINEER.
4. TO PREVENT LEAKAGE, THE CONTRACTOR SHALL MORTAR ALL INLET AND OUTLET PIPES FROM THE SEPTIC TANK AND DISTRIBUTION BOXES ONCE PIPES HAVE BEEN INSTALLED.
5. ALL SOLID EFFLUENT DISTRIBUTION PIPES SHALL BE 4" PVC PLASTIC PIPE (ASTM D3034) SDR-35 WITH RUBBER GASKET, BELL AND SPIGOT.
6. ALL PERFORATED EFFLUENT DISTRIBUTION PIPES SHALL BE 4" PERFORATED PVC PLASTIC PIPE (ASTM D2729) WITH BELL AND SPIGOT, NO GASKET.
7. ALL DISTRIBUTION BOXES SHALL BE AS MANUFACTURED BY EASTERN PRECAST OR AN APPROVED EQUAL.
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL STAKE THE AREA OF THE PROPOSED SEWAGE DISPOSAL SYSTEM AND THE ADJACENT PROPERTY LINES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE STAMFORD HEALTH DEPARTMENT WHEN STAKING HAS BEEN COMPLETED SO THAT AN INSPECTION OF THE STAKING CAN BE MADE.
9. AFTER THE SEWAGE DISPOSAL SYSTEM HAS BEEN INSTALLED ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION CONDITION OR GRADE AS SHOWN ON THE PLAN, TOPSOILED, FINE RAKED AND SEEDED.
10. THIS DESIGN CONFORMS TO APPLICABLE CODES AND ACCEPTED PRACTICE. NO OTHER WARRANTY IS EXPRESSED OR IMPLIED.
11. THE SEPTIC DESIGN DOES NOT ACCOUNT FOR LARGE TUBS WITH CAPACITY OVER 99 GALLONS.
12. THE RECORD ENGINEER MUST PREPARE THE "SEPTIC AS-BUILT PLAN", THUS THE ENGINEER MUST BE NOTIFIED TO INSPECT ALL ASPECTS OF THE NEW SEPTIC SYSTEM PREPARATION AND INSTALLATION.

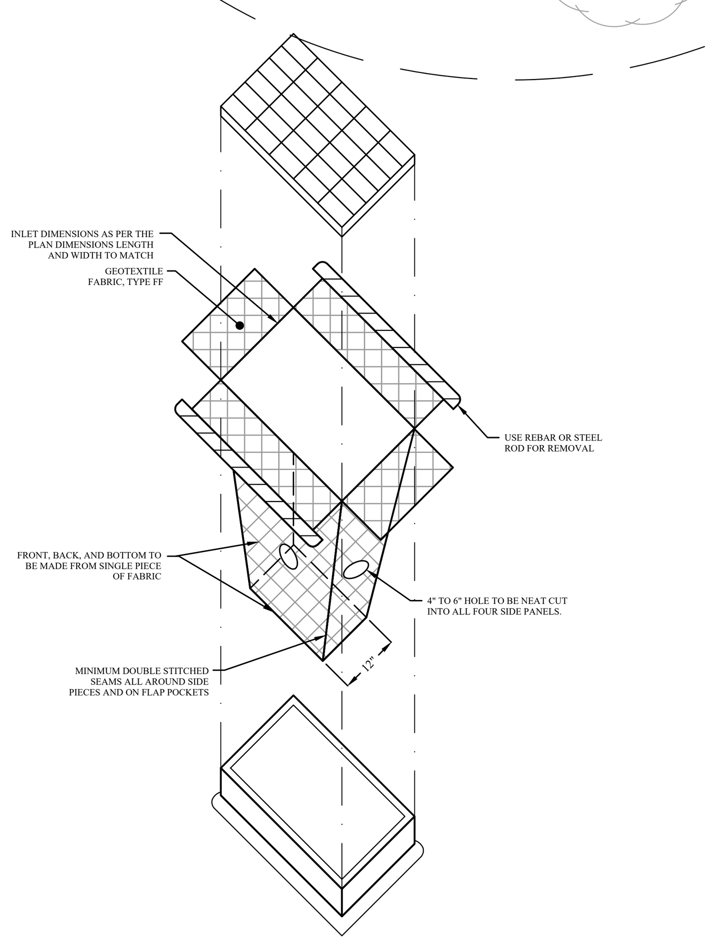
SELECT FILL NOTES:

1. SELECT FILL PLACED WITHIN AND ADJACENT TO LEACHING SYSTEM AREAS SHALL BE COMPRISED OF CLEAN SAND, OR SAND AND GRAVEL, FREE FROM ORGANIC MATTER AND FOREIGN SUBSTANCES. THE SELECT FILL SHALL MEET THE FOLLOWING REQUIREMENTS UNLESS OTHERWISE APPROVED BY THE DESIGN ENGINEER.
2. SELECT FILL EXCEEDING 6% PASSING THE #200 SIEVE BASED ON A WET SIEVE TEST CANNOT BE APPROVED BY THE DESIGN ENGINEER. THE SELECT FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN THE THREE (3) INCH SIEVE.
3. UP TO 45% OF THE DRY WEIGHT OF THE REPRESENTATIVE SAMPLE MAY BE RETAINED ON THE #4 SIEVE. NOTE: THIS IS THE GRAVEL PORTION OF THE SAMPLE.
4. THE MATERIAL THAT PASSES THE #4 SIEVE IS THEN REWEIGHED AND THE SIEVE ANALYSIS STARTED.
5. THE REMAINING SAMPLE SHALL MEET THE FOLLOWING GRADATION CRITERIA:

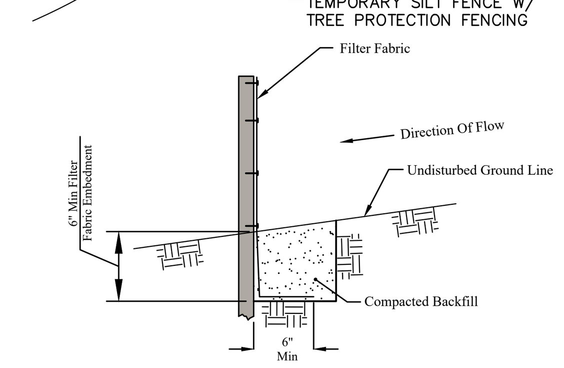
PERCENT PASSING SIEVE SIZE

	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

* PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND THE #200 SIEVE DOES NOT EXCEED 5%.
SELECT FILL THAT DOES NOT MEET THE DRY SIEVE GRADATION CRITERIA BUT MEETS THE WET SIEVE GRADATION CRITERIA IS ACCEPTABLE. SIEVE TESTING OF SELECT FILL IS REQUIRED FOR LARGE (2,000 GPD OR GREATER) SYSTEMS WHENEVER THE LEACHING SYSTEM IS LOCATED TOTALLY IN SELECT FILL. THE LOCAL DIRECTOR OF HEALTH MAY REQUIRE SIEVE TESTING OF SELECT FILL ON LESS THAN 2,000 GPD SEWAGE SYSTEMS IN ACCORDANCE WITH PHC SECTION 19-13-B103E (D) (6).



INLET PROTECTION TYPE D
N.T.S.



FILTER FABRIC FENCING
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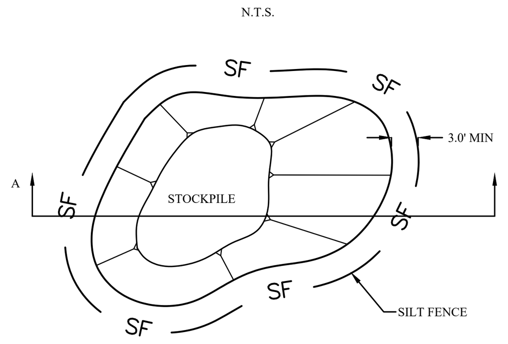
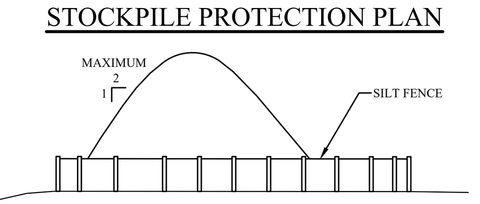
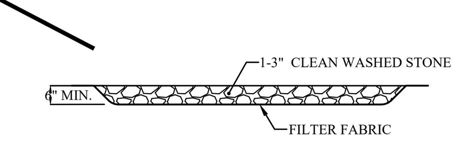


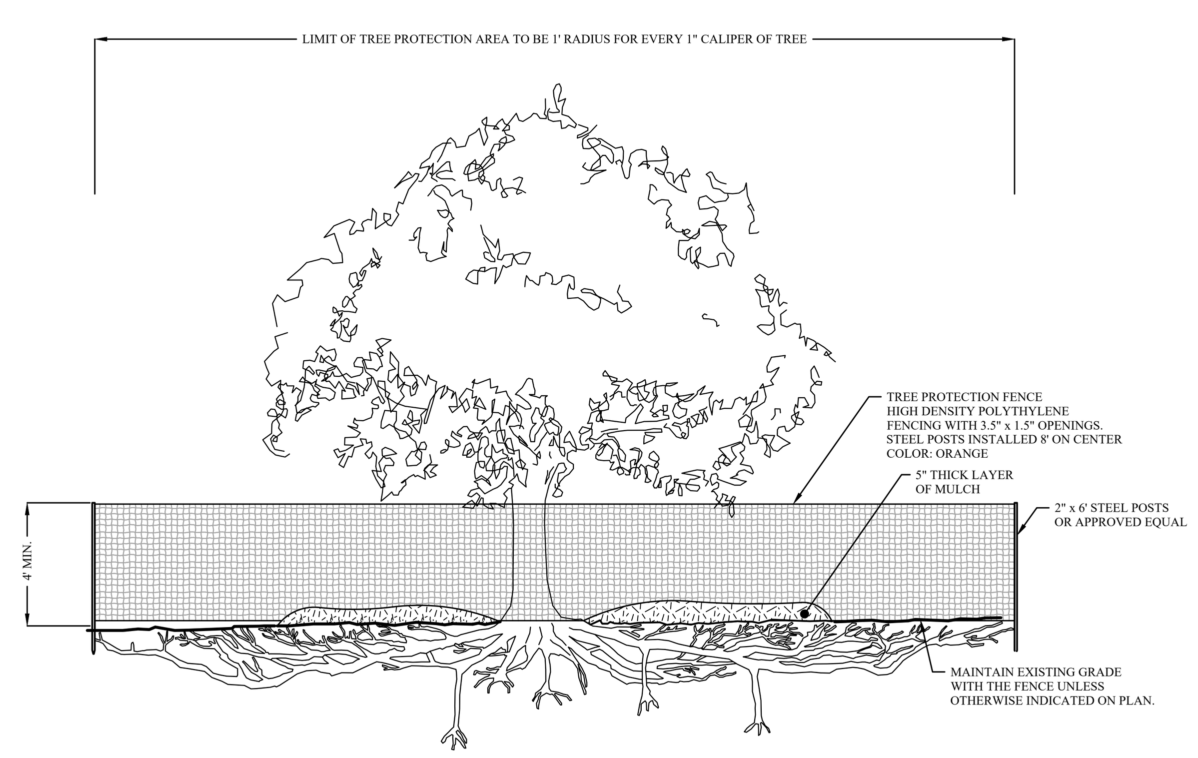
STOCKPILE PROTECTION PLAN



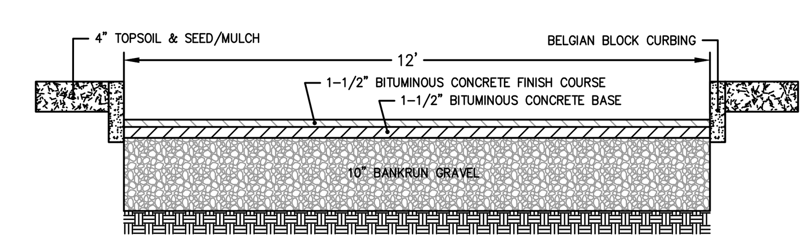
SECTION A
N.T.S



MUD-TRACKING PAD
N.T.S.



TREE PROTECTION
N.T.S.



DRIVEWAY CROSS-SECTION
N.T.S

CITY OF STAMFORD STANDARD NOTES:

1. A STREET OPENING PERMIT IS REQUIRED FOR ALL WORK WITHIN THE CITY OF STAMFORD RIGHT-OF-WAY.
2. ALL WORK WITHIN THE CITY OF STAMFORD RIGHT-OF-WAY SHALL BE CONSTRUCTED TO CITY OF STAMFORD REQUIREMENTS, THE STATE OF CONNECTICUT BASIC BUILDING CODE AND THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENTATION CONTROL.
3. THE ENGINEERING BUREAU OF THE CITY OF STAMFORD SHALL BE NOTIFIED THREE DAYS PRIOR TO ANY COMMENCEMENT OF CONSTRUCTION OR WORK WITHIN THE CITY OF STAMFORD RIGHT-OF-WAY.
4. TREES WITHIN THE CITY OF STAMFORD RIGHT-OF-WAY TO BE REMOVED SHALL BE POSTED IN ACCORDANCE WITH THE TREE ORDINANCE.
5. PRIOR TO ANY EXCAVATION THE CONTRACTOR AND/OR APPLICANT/OWNER, IN ACCORDANCE WITH PUBLIC ACT 77-350, SHALL BE REQUIRED TO CONTACT "CALL BEFORE YOU DIG" AT 1-800-922-4455 FOR MARK OUT OF UNDERGROUND UTILITIES.
6. ALL RETAINING WALLS THREE (3) FEET OR HIGHER MEASURED FROM FINISHED GRADE AT THE BOTTOM OF THE WALL TO FINISHED GRADE AT THE TOP OF THE WALL AND RETAINING WALLS SUPPORTING A SURCHARGE OR IMPOUNDING CLASS I, II OR III-A LIQUIDS ARE REQUIRED TO HAVE A BUILDING PERMIT. RETAINING WALLS SHALL BE DESIGNED AND INSPECTED DURING CONSTRUCTION BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, RETAINING WALLS SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT.
7. CERTIFICATION WILL BE REQUIRED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONNECTICUT THAT WORK HAS BEEN COMPLETED IN COMPLIANCE WITH THE APPROVED DRAWINGS.
8. A FINAL IMPROVEMENT LOCATION SURVEY WILL BE REQUIRED BY A PROFESSIONAL LAND SURVEYOR LICENSED IN THE STATE OF CONNECTICUT.
9. CONNECTION TO A CITY-OWNED STORM SEWER SHALL REQUIRE THE WAIVER COVERING STORM SEWER CONNECTION TO BE FILED WITH THE CITY OF STAMFORD ENGINEERING BUREAU.
10. GRANITE BLOCK OR OTHER DECORATIVE STONE OR BRICK, DEPRESSED CURB, DRIVEWAY APRON AND CURBING WITHIN THE CITY OF STAMFORD RIGHT-OF-WAY SHALL REQUIRE THE WAIVER COVERING GRANITE BLOCK DEPRESSED CURB AND DRIVEWAY APRONS TO BE FILED WITH THE CITY OF STAMFORD ENGINEERING BUREAU.
11. SEDIMENT AND EROSION CONTROLS SHALL BE MAINTAINED AND REPAIRED AS NECESSARY THROUGHOUT CONSTRUCTION UNTIL THE SITE IS STABILIZED.
12. TO OBTAIN A CERTIFICATE OF OCCUPANCY, SUBMITTAL MUST INCLUDE ALL ITEMS OUTLINED IN THE CHECKLIST FOR CERTIFICATE OF OCCUPANCY (APPENDIX D OF THE CITY OF STAMFORD DRAINAGE MANUAL).

REVISED: 01/30/2025 - Widened accessway to 18' and connected all lots to one common accessway per Engineering & EPB feedback.
REVISED: 01/07/2025 - Per comments from the City of Stamford Engineering Department, issued 12/17/2024.
REVISED: 12/10/2024 - Added accessway drainage & per comments from Engineering & Health Departments, issued 10/11/2024.
REVISED: 09/24/2024 - Amended grading scheme to remove slopes in excess of 25% per feedback from the City of Stamford P&Z.

SEDIMENT & EROSION CONTROLS PLAN

90 HAVILAND ROAD

STAMFORD, CT

Prepared for

STEVE AIVALIS

SCALE: 1" = 20' (0 20 40)

DATED: 08/30/2024
JOB NO: SA24-1
SHEET NO: 2 of 3

KOUSIDIS ENGINEERING, LLC
Land Development Consultants and Site Design
1525 Black Rock Turnpike, Fairfield, CT 06825 P: 203-557-8943
E: jim@kousidisengineering.com Web: www.kousidisengineering.com

NOTE: ALL CURBING BEHIND CATCH BASINS IN ACCESSWAY IS TO BE FLUSH WITH GRATE TOP TO ALLOW OVERFLOW TO DISCHARGE TO ADJACENT GRADE.

48 LF (6 UNITS) OF 18" HIGH PRECAST CONCRETE GALLERIES (DBA-4)
BOTTOM OF STONE 338.50'
BOTTOM OF UNITS 339.00'
INVERT ELEVATION 339.00'
NOTE: ALL EXISTING UNITS TO BE REMOVED & RESET TO NEW ELEVATIONS

48 LF (6 UNITS) OF 18" HIGH PRECAST CONCRETE GALLERIES (DBA-3)
BOTTOM OF STONE 335.20'
BOTTOM OF UNITS 335.70'
INVERT ELEVATION 335.70'
NOTE: SYSTEM ELEVATIONS FROM "BASIN 2 DRAINAGE/GRADING PLAN" PROVIDED BY FAIRFIELD COUNTY ENGINEERING L.L.C. DATED 03/20/2023, LAST REVISED 10/08/2024
TWO (2) EXISTING UNITS TO REMAIN; FOUR (4) UNITS TO BE REMOVED AND RESET TO NEW LOCATION

48 LF (6 UNITS) OF 18" HIGH PRECAST CONCRETE GALLERIES (DBA-2)
BOTTOM OF STONE 330.50'
BOTTOM OF UNITS 331.00'
INVERT ELEVATION 331.00'
NOTE: ALL EXISTING UNITS TO BE REMOVED & RESET TO NEW ELEVATIONS

32 LF (4 UNITS) OF 18" HIGH PRECAST CONCRETE GALLERIES (DBA-1)
BOTTOM OF STONE 326.00'
BOTTOM OF UNITS 326.50'
INVERT ELEVATION 326.50'
NOTE: ALL EXISTING UNITS TO BE REMOVED & RESET TO NEW ELEVATIONS

INSPECTION PORT (TYP.)

PROPOSED CATCH BASIN
GRATE ELEV. 342.00'
INVERT ELEV. 339.50'
SUMP ELEV. 337.50'

PROPOSED CATCH BASIN
GRATE ELEV. 337.75'
INVERT ELEV. 335.75'
SUMP ELEV. 333.50'

PROPOSED CATCH BASIN
GRATE ELEV. 334.75'
INVERT ELEV. 332.00'
SUMP ELEV. 330.00'

PROPOSED CATCH BASIN
GRATE ELEV. 329.00'
INVERT ELEV. 326.50'
SUMP ELEV. 324.50'

RECENTLY INSTALLED DRAINAGE SYSTEM

APPROXIMATE EXISTING & AS-BUILT HIGH POINT SET TO ELEV. 343.5'±

98 HAVILAND ROAD
AS-BUILT WELL LOCATION

HAVILAND ROAD

POTENTIAL NEW PROPERTY LINE

POTENTIAL DRIVEWAY

POTENTIAL GARAGE ELEV. 344.00'

POTENTIAL RESIDENCE FIRST FLOOR ELEV. 344.50' BASEMENT SLAB ELEV. 334.50'

POTENTIAL PATIO ELEV. 337.50'

POTENTIAL PORCH ELEV. 344.00'

POTENTIAL GARAGE ELEV. 337.00'

POTENTIAL RESIDENCE FIRST FLOOR ELEV. 338.00' BASEMENT SLAB ELEV. 328.00'

POTENTIAL PORCH ELEV. 337.50'

WALKWAY

PROPOSED WELL

WETLANDS AREA

TP#101 TP#102 TP#103 TP#104 TP#105 TP#106 TP#107 TP#108 TP#109 TP#110 TP#111 TP#112 TP#113 TP#201 TP#202 TP#203 TP#204 TP#205 TP#206 TP#207 TP#301 TP#302 TP#303 TP#304 TP#305 TP#306 TP#307 TP#308

DH#1 DH#2 DH#3 DH#4 DH#5 DH#6 DH#7 DH#8

PERC#A PERC#B PERC#C PERC#D

WF#1 WF#2 WF#3 WF#4 WF#5 WF#6 WF#7 WF#8 WF#9 WF#10 WF#11 WF#12 WF#13 WF#14 WF#15 WF#16 WF#17 WF#18 WF#19

343.0 345.0 337.0 335.5

RUBBLE WALL

DEEP TEST PIT LOG
CONDUCTED BY: FAIRFIELD COUNTY ENGINEERING L.L.C.
DATE CONDUCTED: MARCH 16, 2023

TEST PIT #304
00-04" TOPSOIL
04-26" BROWN SANDY LOAM
26-44" LIGHT BROWN GRAVEL & SILT
*MOTTLES @ 26"
*NO GROUND WATER
*NO LEDGE

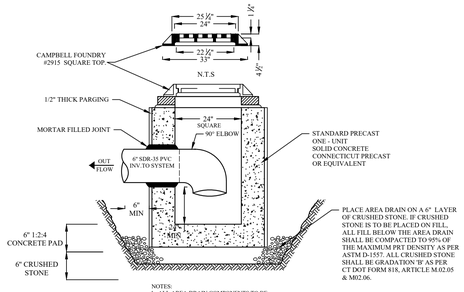
TEST PIT #305
00-09" TOPSOIL
09-28" BROWN SANDY LOAM
28-47" TAN SAND & GRAVEL, STONES
*MOTTLES @ 28"
*NO GROUND WATER
*NO LEDGE

TEST PIT #306
00-08" TOPSOIL
08-35" BROWN SANDY LOAM
35-53" LIGHT BROWN GRAVEL & SILT
*MOTTLES @ 35"
*NO GROUND WATER
*NO LEDGE

TEST PIT #307
00-08" TOPSOIL
08-62" LIGHT BROWN GRAVEL & SILT
*NO MOTTLES
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 46"

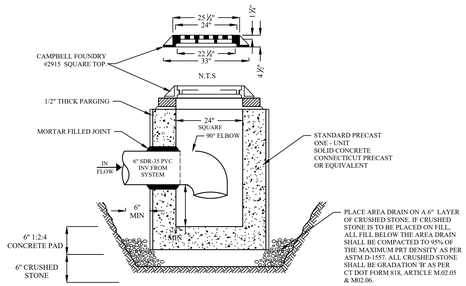
DEEP TEST PIT LOG
CONDUCTED BY: FAIRFIELD COUNTY ENGINEERING L.L.C.
DATE CONDUCTED: MAY 23, 2023

TEST PIT #308
00-09" TOPSOIL
09-32" BROWN SILTY LOAM
32-49" LIGHT BROWN GRAVEL & SILT
*MOTTLES @ 32"
*NO GROUND WATER
*NO LEDGE
*ROOTS TO 24"



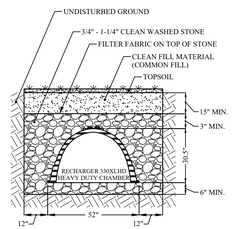
NOTES:
1. ALL AREA DRAIN COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
ALL JOINTS TO BE MORTARED.
AREA DRAINS SHALL CONFORM TO ASTM C478.
2. CONSTRUCTION & INSTALLATION OF THIS CATCH BASIN IS TO CONFORM TO CT DOT FORM 818 STANDARDS.

CATCH BASIN
N.T.S.



NOTES:
1. ALL AREA DRAIN COMPONENTS TO BE PRE-CAST REINFORCED CONCRETE, ABLE TO WITHSTAND THE APPLIED EARTH LOADS WITH AN H-20 TRUCK LOAD.
ALL JOINTS TO BE MORTARED.
AREA DRAINS SHALL CONFORM TO ASTM C478.
2. CONSTRUCTION & INSTALLATION OF THE OVERFLOW YARD DRAIN IS TO CONFORM TO CT DOT FORM 818 STANDARDS.

OVERFLOW YARD DRAIN
N.T.S.



CULTEC R-330XLHD RECHARGER
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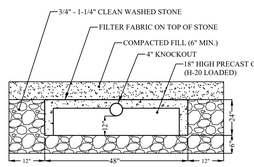

18" HIGH PRECAST GALLERY
(H-20 LOADED - DRAINAGE)
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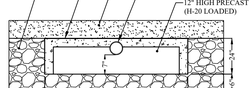

12" HIGH PRECAST GALLERY
(H-20 LOADED - DRAINAGE)
N.T.S.

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REVISED: 09/24/2024 - Amended grading scheme to remove slopes in excess of 25% per feedback from the City of Stamford P&Z.

ACCESSWAY DRAINAGE PLAN

90 HAVILAND ROAD

STAMFORD, CT

Prepared for

STEVE AIVALIS

STATE OF CONNECTICUT JIMMY KOUSIDIS LICENSED PROFESSIONAL ENGINEER

SCALE: 1" = 20'
0 20 40

DATED: 08/30/2024
JOB NO: SA24-1
SHEET NO: 3 of 3

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