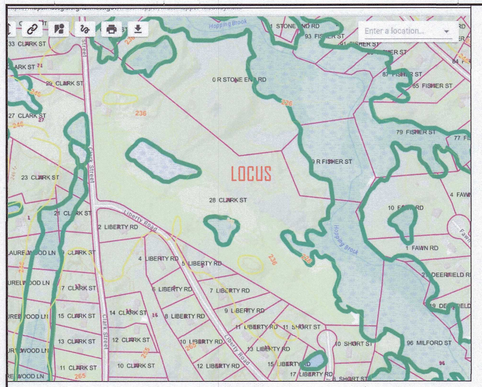
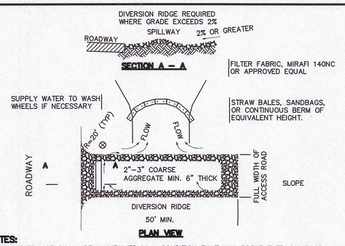


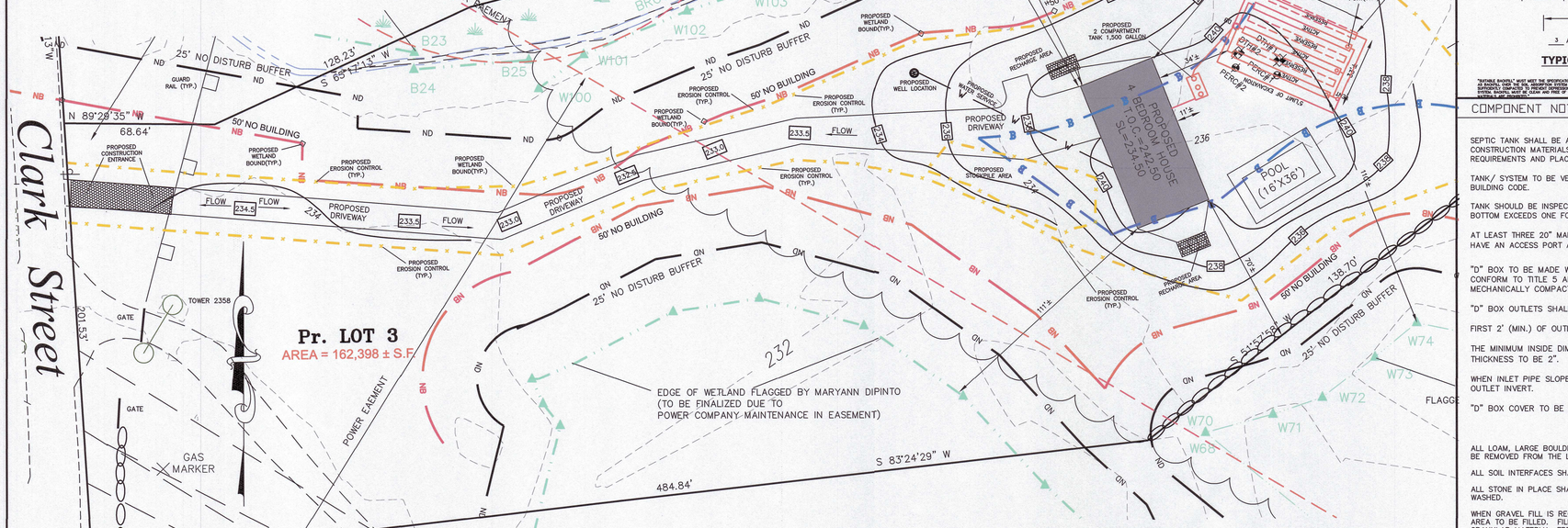
LOCUS MAP

DIVERSION RIDGE REQUIRED WHERE GRADE EXCEEDS 2% SPILLWAY

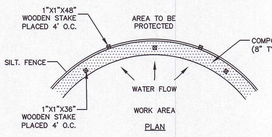


PLAN VIEW

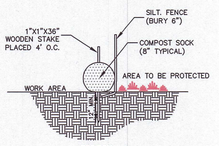
NOTES:
[1] THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
[2] WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
[3] WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
[4] USE SANDBAGS, STRAW BALES OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED.



Pr. LOT 3
AREA = 162,398 ± S.F.



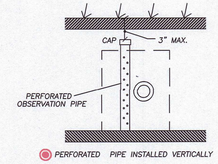
PLAN



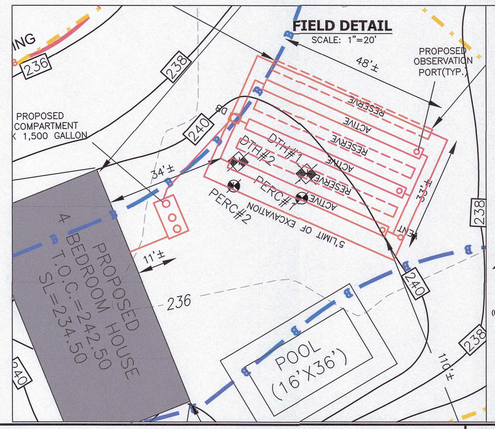
SECTION

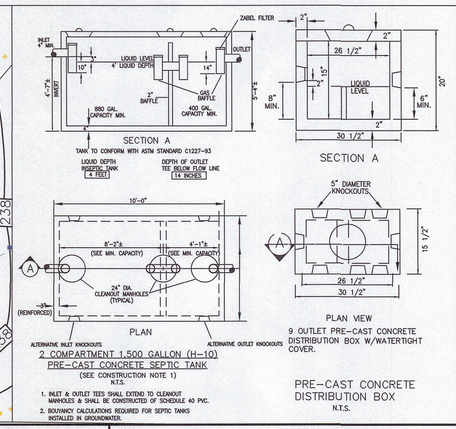
EROSION CONTROL BARRIER (ECB)
NOT TO SCALE

COMMONWEALTH OF MASSACHUSETTS
MICHAEL DEAN CIVIL No. 46255 REGISTERED PROFESSIONAL ENGINEER
5.22.25



OBSERVATION WELL

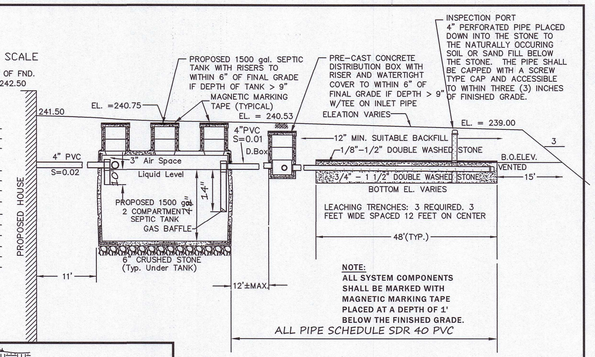




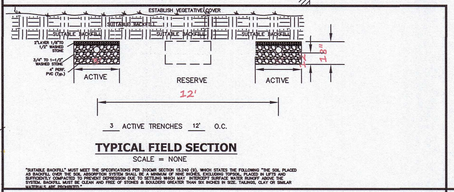
2 COMPARTMENT 1,500 GALLON (H-10)
PRE-CAST CONCRETE SEPTIC TANK
(SEE CONSTRUCTION NOTE 1)
N.T.S.

PRE-CAST CONCRETE DISTRIBUTION BOX
N.T.S.

NO SCALE



SYSTEM PROFILE



TYPICAL FIELD SECTION
SCALE = NONE

"SUITABLE BACKFILL" MUST MEET THE SPECIFICATIONS FOR SYSTEM SECTION 15.255 (2). WHICH STATES THE FOLLOWING "THE SOIL PLACED IMMEDIATELY OVER AND AROUND THE DISTRIBUTION PIPE SHALL BE FREE OF ROCKS, BOULDERS, STUMPS, FROZEN LUMPS AND OTHER OBJECTS LARGER THAN TWO INCHES IN DIAMETER. NO SOIL SHALL BE PLACED WHEN IT IS SO WET OR IN SUCH A CONDITION THAT UNDUE COMPACTION OR OTHER SOIL DAMAGE WILL OCCUR. THE SOIL COVERING THE SYSTEM (BACKFILL MUST BE CLEAN AND FREE OF STONES & BOULDERS GREATER THAN SIX INCHES IN SIZE. TRASHING, CLAY OR SIMILAR MATERIALS ARE PROHIBITED.

COMPONENT NOTES

SEPTIC TANK

SEPTIC TANK SHALL BE A PRECAST, REINFORCED CONCRETE TANK MADE WATERTIGHT. CONSTRUCTION MATERIALS AND DIMENSIONS SHALL CONFORM TO TITLE 5 AND AASHTO HS 10 REQUIREMENTS AND PLACED ON A STABLE MECHANICALLY COMPACTED LEVEL BASE.

TANK/ SYSTEM TO BE VENTED THROUGH THE BUILDING PLUMBING SYSTEM AS REQUIRED BY BUILDING CODE.

TANK SHOULD BE INSPECTED, MAINTAINED AND BE PUMPED OUT WHEN SLUDGE DEPTH IN THE BOTTOM EXCEEDS ONE FOURTH OF THE TOTAL LIQUID DEPTH.

AT LEAST THREE 20" MANHOLES SHALL BE PROVIDED. AT LEAST ONE OF THE MANHOLES SHALL HAVE AN ACCESS PORT ACCESSIBLE TO WITHIN 6" OF FINISH GRADE.

"D" BOX

"D" BOX TO BE MADE WATERTIGHT. CONSTRUCTION MATERIALS AND DIMENSIONS SHALL CONFORM TO TITLE 5 AND AASHTO HS 10 REQUIREMENTS AND PLACED ON A STABLE MECHANICALLY COMPACTED LEVEL BASE.

"D" BOX OUTLETS SHALL BE INSTALLED LEVEL ("BUILT UP" INVERTS, NOT PERMITTED.

FIRST 2' (MIN.) OF OUTLETS SHALL BE INSTALLED LEVEL TO EQUALIZE FLOW.

THE MINIMUM INSIDE DIMENSIONS OF THE "D" BOX TO BE 12" AND THE MINIMUM WALL THICKNESS TO BE 2".

WHEN INLET PIPE SLOPE EXCEEDS 8%–PVC INLET TEE REQUIRED. CUT LOW END 1" ABOVE OUTLET INVERT.

"D" BOX COVER TO BE SEALED WITH BITUMEN.

LEACH AREA

ALL LOAM, LARGE BOULDERS OR FOREIGN MATERIAL ENCOUNTERED DURING EXCAVATION ARE TO BE REMOVED FROM THE LEACHING AREA.

ALL SOIL INTERFACES SHALL BE SCARIFIED PRIOR TO THE PLACEMENT OF STONE.

ALL STONE IN PLACE SHALL BE DURABLE, FREE FROM IRON, FINES AND DUST AND DOUBLE WASHED.

WHEN GRAVEL FILL IS REQUIRED, ALL LOAM AND ORGANIC MATERIAL SHALL BE REMOVED FROM AREA TO BE FILLED. FILL SHALL BE COMPACTED TO MINIMIZE SETTLEMENT AND SHALL BE CLEAN GRANULAR MATERIAL, FREE FROM FINES AND ORGANIC MATERIALS, AND SHALL BE IN ACCORDANCE WITH 310 CMR 15.255(3).

ALL DISTURBED AREAS ARE TO BE LOAMED, SEEDED AND MAINTAINED TO PREVENT EROSION.

AREAS ABOVE THE SOIL ABSORPTION SYSTEM SHALL REMAIN PERVIOUS UNLESS UNAVOIDABLE. IN SUCH CASES THE SYSTEM SHALL BE VENTED.

SYSTEM IN FILL ☐ REQUIRED ☒ NOT REQUIRED

IF ANY PORTION OF THE PROPOSED LEACHING AREA IS LOCATED ABOVE EXISTING GRADE OR WITHIN TOPSOIL, SUBSOIL, PEAT OR OTHER UNSUITABLE OR IMPERVIOUS SOIL LAYER, THEN THE PLACEMENT OF FILL IS REQUIRED. PRIOR TO THE PLACEMENT OF FILL, ALL UNSUITABLE OR IMPERMEABLE SOILS SHALL BE EXCAVATED TO A MINIMUM OF FIVE FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE SOIL ABSORPTION SYSTEM TO THE DEPTH OF NATURALLY OCCURRING PERVIOUS MATERIAL. FILL MATERIAL SHALL BE SELECT, ON-SITE OR IMPORTED SOIL, CONSISTING OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES. MIXTURES AND LAYERS OF DIFFERENT SOIL CLASSES SHALL NOT BE USED. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES. A SIEVE ANALYSIS USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE OF THE FILL. UP TO 45% BY WEIGHT OF THE FILL SAMPLE MAY BE RETAINED IN THE #4 SIEVE. SIEVE ANALYSES SHALL ALSO BE PERFORMED ON THE FRACTION OF FILL SAMPLE PASSING THE #4 SIEVE. SUCH ANALYSES MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS:

	EFFECTIVE PARTICLE SIZE	% THAT MUST PASS SIEVE
# 4	4.75 MM	100%
# 50	0.30 MM	10%–100%
#100	0.15 MM	0%–20%
#200	0.075 MM	0%–5%

DESIGN CRITERIA: SINGLE FAMILY HOUSE

DESIGN FLOW FOR 4 BEDROOMS
4 Bedrooms x 100 gal./bedroom/day= 440 gallons/day

THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL. THE USE OF GARBAGE DISPOSALS IS NOT RECOMMENDED WITH SUBSURFACE DISPOSAL FACILITIES.
USE: 3 LINE 3'W X 1'D X 48'L. 5 OUTLET D.B.
Septic Tank Design: 440 GPD x 2 = 880 Gal. (1,500 Gal. Min.)

LEACHING FACILITY DESIGN CRITERIA

DESIGN FLOW FOR 4 BEDROOMS
4 Bedrooms x 110 gal./bedroom/day= 440 gallons/day

440 GPD/0.74= 596 S.F. REQUIRED

Soil: Class I. Loamy Sand, Effluent Loading Rate: 0.74 GPD/SF.
(a) Number of Trenches = 3.
(b) Trench Width = 3'.
(c) Trench Length = 48'.
(d) Stone Depth= 1'.
Sidewall Area=(3)X(48')X(1')X(2 Sides): 288 sf X 0.74 GPD/SF=213.1 GPD
Bottom Area = (3) X (3') X (48') : 432 Sf X 0.74 GPD/SF = 319.7 GPD.
Total : Area = 720 SF X 0.74 = 532 GPD.

This system is not designed to accommodate a garbage disposal. The use of garbage disposals is not recommended with subsurface disposal facilities.

GENERAL NOTES

1. SYSTEM IS DESIGNED TO ACCOMMODATE SANITARY SEWAGE ASSOCIATED WITH NORMAL DOMESTIC USE AND CONSISTING OF WATER CARRIED PUTRESIBLE WASTE ONLY.
2. ALL COMPONENTS OF THE SEWAGE DISPOSAL SYSTEM SHALL BE COVERED BY A MAXIMUM OF 36" OF CLEAN BACKFILL MATERIAL, FREE OF STONES AND BOULDERS GREATER THAN 6" IN SIZE.
3. OWNER SHALL VERIFY EFFECTIVE ZONING REGULATIONS PRIOR TO CONSTRUCTION.
4. PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON DATE OF TOPOGRAPHY, AND THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. IS NOT INTENDED OR IMPLIED.
5. ALL PIPING SHALL BE LAID TRUE TO LINE, GRADE AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
6. THERE ARE NO EXISTING WELLS WITHIN 100' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM. (50' OF THE SEPTIC TANK.)
7. THERE ARE NO WELLS WITHIN 100' OF PROPOSED LEACH FIELD. LOT TO BE SERVICED BY TOWN WATER.
8. ALL KNOWN WELLS WITHIN 200' OF THE PROPOSED PRIMARY AND EXPANSION LEACH AREAS ARE SHOWN.
9. THE DESIGN ENGINEER SHALL BE NOTIFIED PROMPTLY OF ANY PLAN DEFICIENCIES FOUND DUE TO UNFORESEEN SUBSURFACE CONDITIONS OR OTHER REASONS THAT MIGHT AFFECT THE FUNCTION OF THIS DESIGNED SYSTEM.
10. DEVIATIONS IN DESIGN OR CONSTRUCTION FROM THIS PLAN OR ANY OF THE CONDITIONS RELATING TO THE USE OR MAINTENANCE OF THE PROPOSED SYSTEM SHALL BE DEEMED TO VOID ANY CERTIFICATION OR REPRESENTATION MADE RELATIVE TO THIS SUBSURFACE SEWAGE DISPOSAL SYSTEM.
11. CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY EXCAVATION. 1-888-DIG-SAFE (344-7233)
12. PRIOR TO ANY CONSTRUCTION A BENCHMARK SHALL BE SET WITHIN 50–75' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM.
13. CONSTRUCTION TO CONFORM WITH TITLE 5 OF MA STATE ENVIRONMENTAL CODE (310 CMR 15.000) AND BOH REQUIREMENTS FOR TOWN OF NATICK, MA.
14. HYDRAULIC CEMENT TO BE USED ON ALL OUTLET OF SEPTIC TANK AND D–BOX.
15. NO HEAVY MACHINERY IS ALLOWED TO PASS OVER LEACHING AREA OR OTHER SEPTIC COMPONENTS ONCE INSTALLED.
16. SYSTEM SHOULD NOT BE BACKFILLED UNTIL INSPECTED BY NATICK BOARD OF HEALTH AND THE DESIGN ENGINEER.
17. WATER SOFTENERS ARE NOT TO BE CONNECTED TO PROPOSED SEPTIC SYSTEM.
18. ONCE SEPTIC SYSTEM COMPONENTS ARE INSTALLED THEY SHALL BE MARKED WITH MAGNETIC TAPE.

ZONING: AR-I AGRICULTURAL RES. 1

LOT SIZE	REQ'D.	PLAN
AREA:	44,000	162,398
FRONTAGE:	180'	201.53'
SETBACKS		
STREET:	35'	463'
SIDE LINE:	15'	70'
REAR:	15'	140'

MUNICIPALITY: MEDWAY

SEWAGE DISPOSAL SYSTEM
FOR: STREET 28 CLARK STREET
ASSESSOR'S MAP 35 19 PARCEL (LOT 3)
TOWN: MEDWAY, MASSACHUSETTS
DESIGNED FOR
28 CLARK STREET LLC
390 SOUTH MAIN STREET, HOPEDALE, MA 01747
SCALE: 1" = 30' MAY 15, 2025

D&L Design Group
Civil Engineering & Land Surveying
115 Water Street • Milford, MA 01757
P:(508) 408-2577
www.dandldesigngroup.com

PROJECT NO. J-093 DRAWING J010-SEPTICDES SHEET 1 OF 1

SCOPE OF WORK

THE CONTRACTORS SCOPE OF WORK INCLUDES BUT IS NOT LIMITED TO:
1. ALL LABORS AND MATERIALS TO INSTALL THE SEWAGE DISPOSAL SHOWN, COMPLETE AND PLACED IN SERVICE.
2. INSURING ALL PERMITS HAVE BEEN OBTAINED.
3. PERFORMING ALL WORK IN ACCORDANCE WITH TITLE 5.
4. ANY MEASURES TO PROTECT THE WETLAND, IF ANY.
5. TIMELY EXECUTION OF THE WORK.

MAINTENANCE NOTE

THE STATE ENVIRONMENTAL CODE, STATES: "SEPTIC TANKS SHOULD BE INSPECTED AND CLEANED AT LEAST ANNUALLY."

NO PERMANENT STRUCTURES ARE TO BE ERECTED IN THE RESERVE AREA.

DO NOT PLANT TREES OVER OR NEAR THE FIELD. AVOID VEHICULAR TRAFFIC OVER SYSTEM.

SOIL LOGS DATE: 6/27/24

TEST PIT #5 235.50

0–7	Ap	S.L.	10YR4/4	234.92
7–24	Bw	S.L.	10YR6/6	233.50
24–96	C	C.S.	2.5Y5/4	227.50

84" TO WEEPING – 228.50
84" TO STANDING – 228.50
50" TO MOTTLES – 221.33

TEST PIT #6 235.00

0–8	Ap	S.L.	10YR4/4	234.33
8–26	Bw	S.L.	10YR6/6	232.92
26–92	C1	F.S.	2.5Y5/4	227.33

54" TO MOTTLES – 230.50
75" TO WEEPING – 228.75
75" TO STAND WATER – 228.75

SOIL TESTING

DATE: 6/27/25
PERFORMED BY:
PETER LAVOIE, SE1332
WITNESSED BY:
DEREK KERK
RESULT:
PERC TEST 3: 3(18–33")
PERC TEST 4: 3(18–34")

ADDITIONAL NOTES

DIG SAFE NOTE:

UTILITIES ARE PLOTTED FROM FIELD LOCATION AND ANY RECORD INFORMATION AVAILABLE, AND SHOULD BE CONSIDERED APPROXIMATE. OTHER UTILITIES MAY EXIST WHICH ARE NOT EVIDENT OR FOR WHICH RECORD INFORMATION WAS NOT AVAILABLE. CONTRACTORS (IN ACCORDANCE WITH MASS.G.L. CHAPTER 82 SECTION 40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING. ALSO, CALL "DIG–SAFE" AT 1(888)344–7233 1(888)DIG–SAFE.

EXISTING LINES OTHER THAN THOSE INDICATED ON THESE DRAWINGS MAY BE ON THE SITE. THE CONTRACTOR IS WARNED TO PROCEED WITH CAUTION WITH ALL WORK, ESPECIALLY EXCAVATION WORK, AND TO MAKE ALL POSSIBLE INVESTIGATIONS AS TO POSSIBLE UNMARKED UTILITY LINES.

REVISIONS

Rev	Date	Description	Check	Made