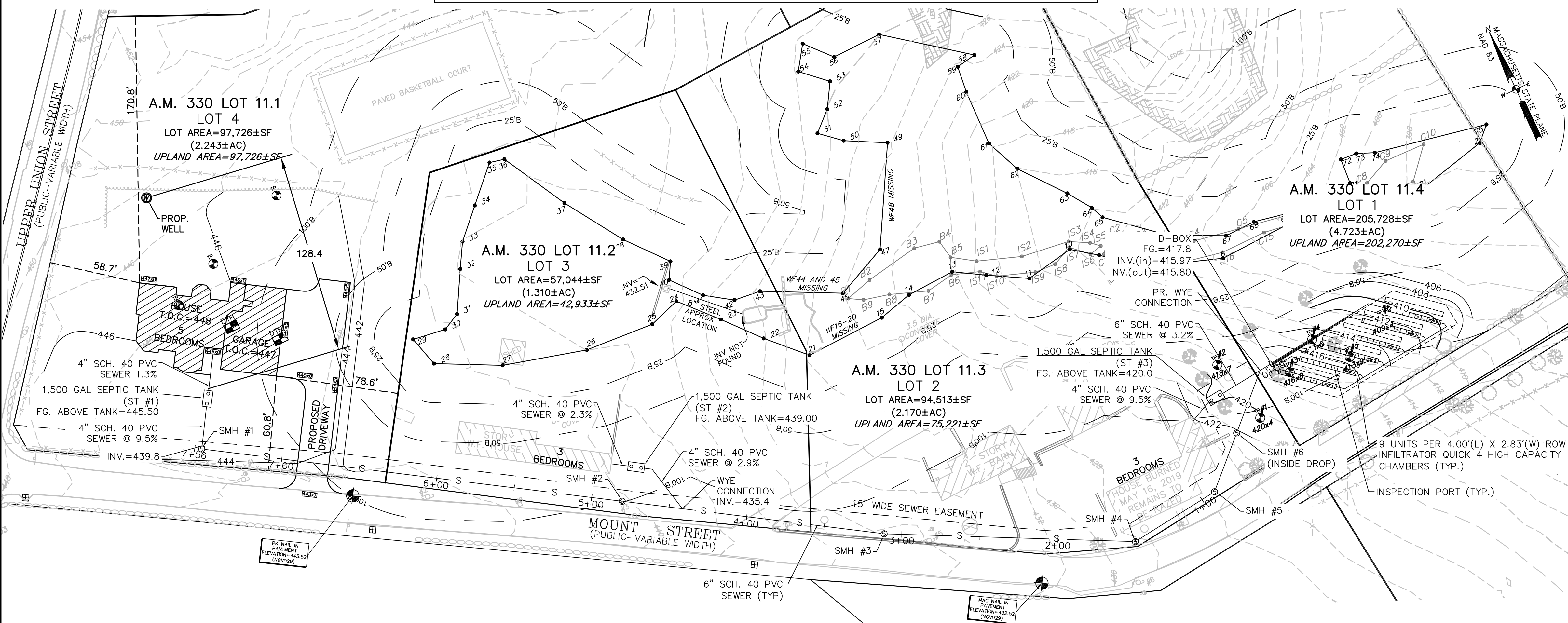
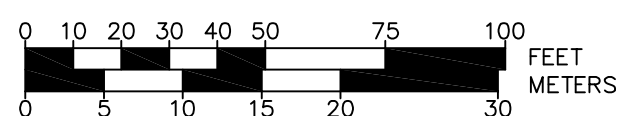


SEPTIC SYSTEM EXCAVATION SHALL BE INSPECTED BY DESIGN ENGINEER PRIOR TO FOUNDATION CONSTRUCTION



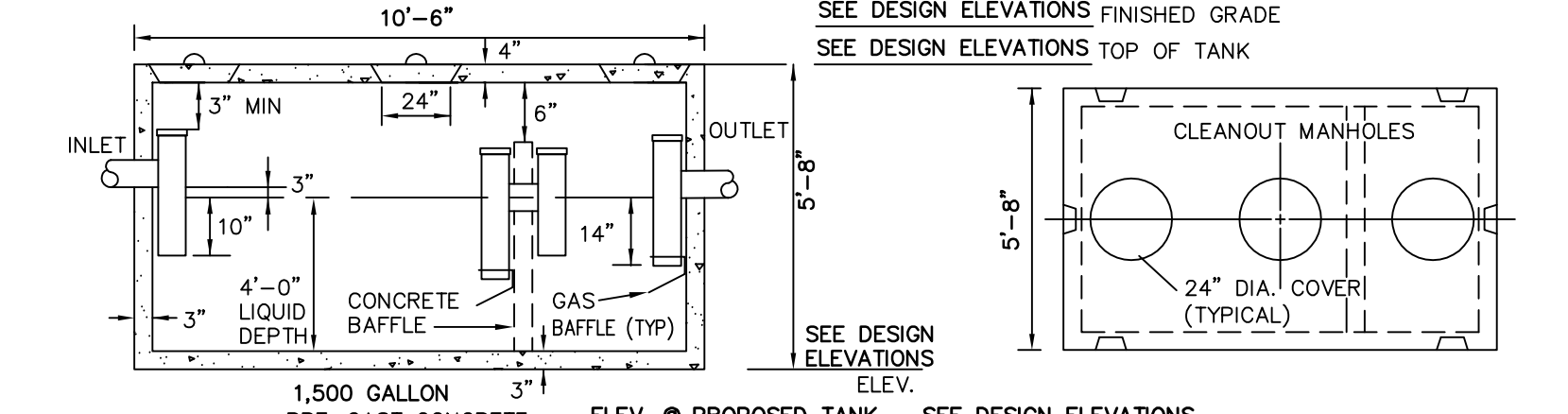
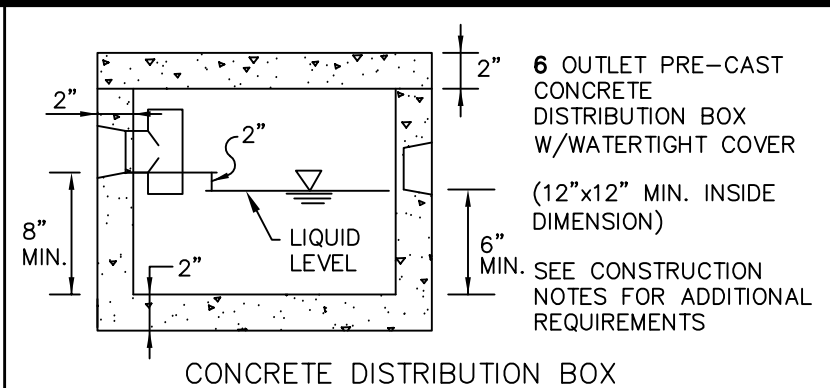
- NOTE:
- DURING THE COMPILATION OF THIS PLAN THE LOCATION OF THE EXISTING WELLS FOR LOTS 2 AND 3 HAVE NOT BEEN IDENTIFIED AND WILL NEED TO BE FIELD VERIFIED PRIOR TO START OF CONSTRUCTION.
  - FOR MAIN SEWER RIM AND INVERT INFORMATION SEE SHEET 2, "SEPTIC PLAN AND PROFILE".

GRAPHIC SCALE: 1"=40'

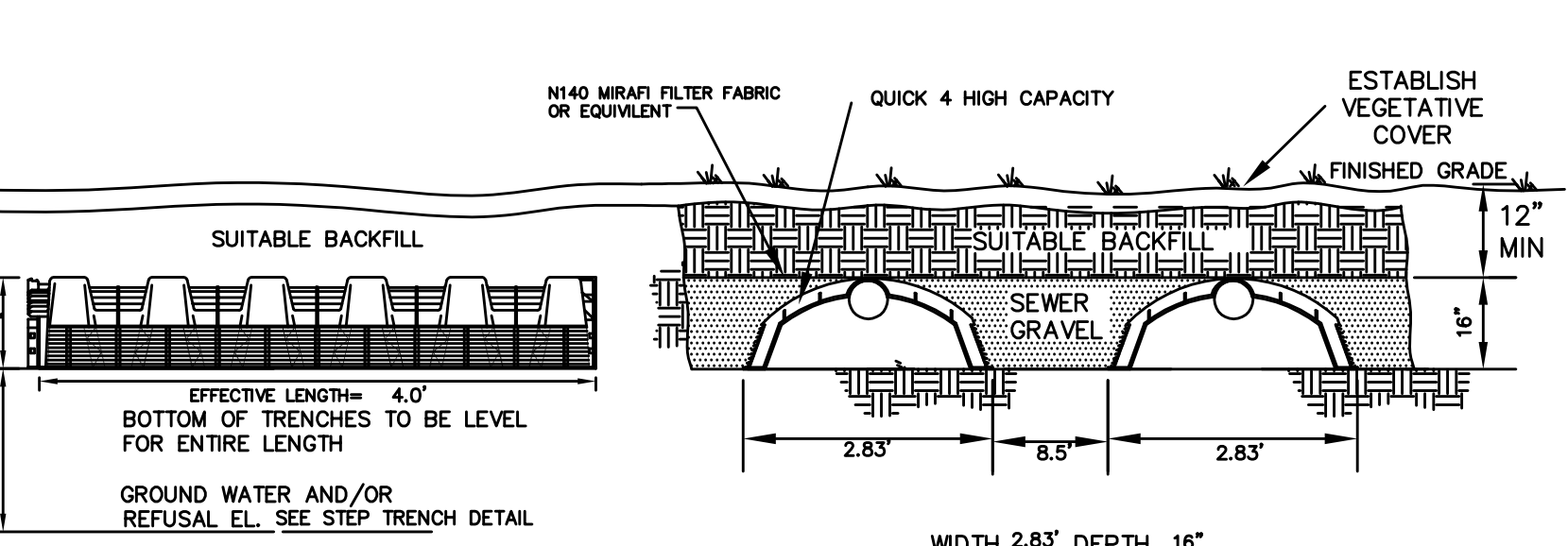


MINIMUM ZONING REQUIREMENTS

ZONING DISTRICT	RURAL RESIDENTIAL I
AREA	40,000 SF
FRONT YARD SETBACK	40'
SIDE YARD SETBACK	40'
REAR YARD SETBACK	40'



- NOTES:
- TANK TO CONFORM WITH ASTM STANDARD C1227.
  - CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS (TANK TO BE H-20 RATED).
  - HORIZONTAL JOINTS TO BE SEALED WITH BUTYL RUBBER.
  - INSTALL CORROSION RESISTANT GAS BAFFLES BY TUF-TITE, OR EQUIVALENT APPROVED BY THE ENGINEER, ON OUTLET TEE.
  - ACTUAL DIMENSIONS MAY VARY ACCORDING TO MANUFACTURER. COORDINATE DIMENSIONS AND FINISH GRADES WITH TANK SUPPLIER.
  - BUOYANCY CALCULATIONS REQUIRED FOR SEPTIC TANKS INSTALLED IN GROUNDWATER.
  - SEE CONSTRUCTION NOTES FOR ADDITIONAL REQUIREMENTS.



CROSS SECTION NOT TO SCALE

SEPTIC TANK DESIGN ELEVATIONS

SEPTIC TANK - ST #1		SEPTIC TANK - ST #2		SEPTIC TANK - ST #3	
TOP OF FOUNDATION	448.00	TOP OF FOUNDATION	440.50	TOP OF FOUNDATION	423.00
SLAB ELEVATION	440.50	SLAB ELEVATION	439.75	SLAB ELEVATION	421.85
INV. AT HSE	443.00	INV. AT HSE	437.00	INV. AT HSE	418.85
INV. AT SEPTIC TANK INLET	442.65	INV. AT SEPTIC TANK INLET	436.75	INV. AT SEPTIC TANK INLET	417.35
INV. AT SEPTIC TANK OUTLET	442.40	INV. AT SEPTIC TANK OUTLET	436.50	INV. AT SEPTIC TANK OUTLET	417.10

CONVENTIONAL FACILITY DESIGN CRITERIA

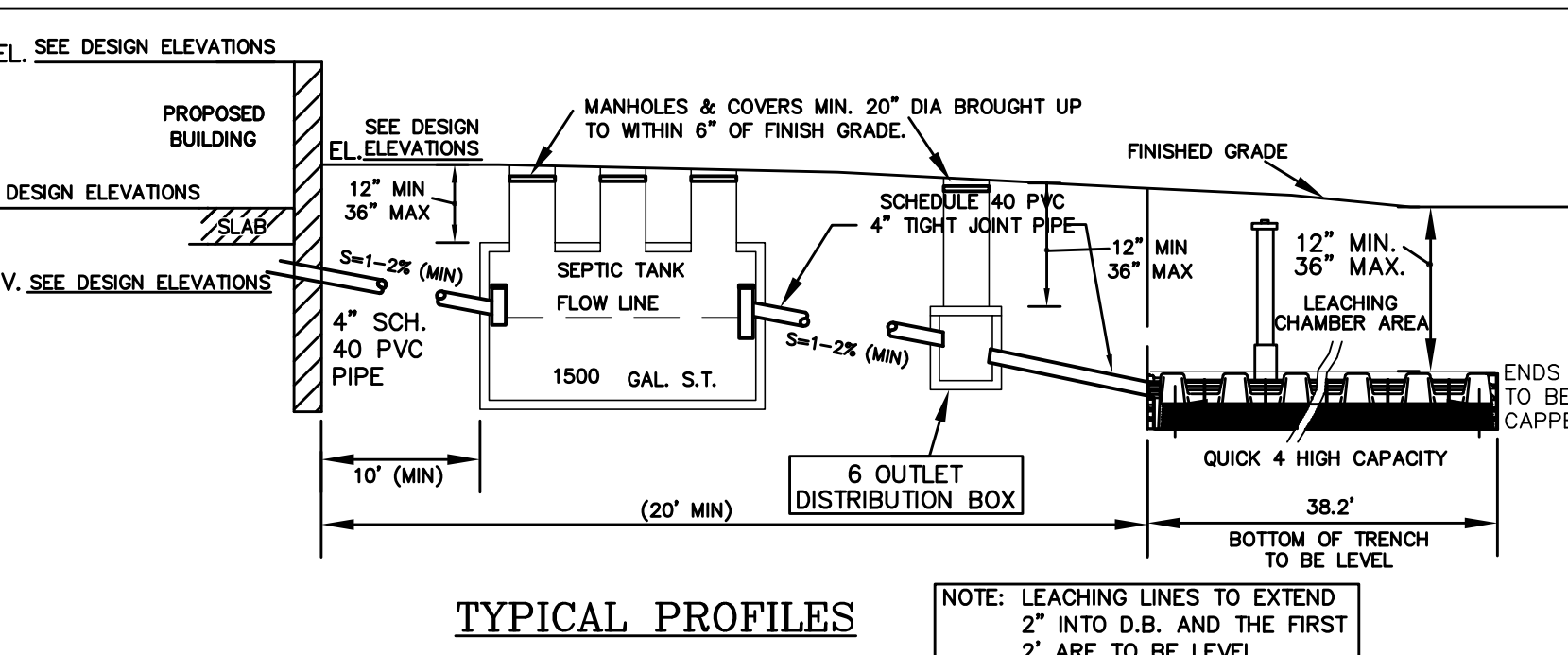
DESIGN FLOW:  
11 BEDROOMS x 110 GAL/DAY = 1,210 GPD

LEACHING AREA 6.83 SF/LF (2.83+2+2)

1,635.1 SF / 6.83 SF/LF = 239.4 LF REQ'D

239.4 LF / 6 TRENCHES = 39.9 LF/TRENCH

239.4 LF x 6.83 SF/LF = 1,635.1 SF



TYPICAL PROFILES

DEEP TESTS TAKEN 7/29/22 BY MAH PERC. TESTS TAKEN 7/29/22 BY MAH

WITNESSED STEVEN DONATELLI WITNESSED STEVEN DONATELLI

SOIL EVALUATOR MIKE HASSETT SOIL EVALUATOR MIKE HASSETT

TP #	Ap S.L.	PERC.	WATER	N/A	TP #	Ap S.L.	PERC.	WATER	N/A
420.4	10YR3/2	0"-4"	84"	N/A	416.8	10YR3/2	0"-6"	90"	N/A
420.	10YR5/6	4"-24"	34"	38%	416.2	10YR5/6	6"-20"	24"	30%
418.4	10YR5/6	24"-84"	CLASS 1	SOILS	414.8	10YR5/6	24"-90"	CLASS 1	SOILS
413.4	LSM/BWML	2.5Y5/4			409.3	LSM/BWML	2.5Y5/4		
		PERC. 4 MIN./INCH			407.0	LSM/BWML	2.5Y5/4		
		PERC. 5 MIN./INCH			406.4	LSM/BWML	2.5Y5/4		
		PERC. 5 MIN./INCH							

STEP TRENCH

	R1	R2	R3	R4	R5	R6
BREAKOUT ELEVATION	415.83	414.03	412.48	411.53	409.73	407.63
ELEV. TOP OF INFILTRATOR	415.50	413.70	412.15	411.20	409.40	407.30
INV. BEGIN TRENCH	414.50	412.70	411.15	410.20	408.40	406.30
ELEV. BOTTOM TRENCH/	410.00	408.20	406.65	405.70	403.90	401.80
GROUND WATER AND/OR REFUSAL ELEVATION						

DISTRIBUTION BOX DESIGN ELEVATIONS

INV. AT DIST. BOX INLET	415.80
INV. AT DIST. BOX OUTLET	415.60
TOP OF CHAMBER/BREAKOUT EL.	*
INV. AT CHAMBER INLET	*
BOTTOM OF CHAMBER	*
ELEV. OF REFUSAL	90" BELOW EXISTING GRADE

\*SEE STEPPED TRENCH DETAIL

LEACHING FACILITY DESIGN CRITERIA

TITLE V

PERC. DESIGN RATE = 5 MIN./INCH

DESIGN FLOW = 11 x 110 = 1,210 GPD

EL.L.R. = PERC. RATE FACTOR = 0.74 GPD/SF

QUICK 4 HIGH CAPACITY

EFFECTIVE LEACHING AREA = 7.93 SF/FT

CHAMBER LENGTH = 4 FT

REQUIRED FLOW AREA = 11 x 110 = 1,210 GPD

AREA =  $(1,210 / 0.74) = 1,635.1$  SF CONVENTIONAL

CHECK EQUIVALENT LENGTH OF INFILTRATOR =  $981.1 / 4.75 = 206.5$  LF

# UNITS =  $206.5$  LF / 4 LF/UNIT = 51.6 UNITS

PROVIDED # UNITS = 6 ROWS X 9 UNITS = 54 UNITS

EQUIV. LENGTH =  $(54 \text{ UNITS} \times 4 \text{ FT}) + (12 \text{ ENDCAPS} \times 2) = 230.4$  FT

AREA PROVIDED =  $230.4 \times 7.93 = 1,827.1$  SF

FLOW =  $1,827.1 \times 0.74 = 1,352.0$  GPD

\*EFFLUENT LOADING AREA (E.L.A.) REDUCTION ALLOWED PER STANDARD CONDITIONS FOR ALTERNATIVE SOIL ABSORPTION SYSTEMS WITH GENERAL USE CERTIFICATION AND/OR APPROVED FOR REMEDIAL USE.

UTILITIES ARE PLOTTED AS A COMPILATION OF RECORD DOCUMENTS, MARKINGS AND OTHER OBSERVED EVIDENCE TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES AND SHOULD BE CONSIDERED APPROXIMATE. LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY COMPLETELY AND RELIABLY DEPICTED. ADDITIONAL UTILITIES, NOT EVIDENCED BY RECORD DOCUMENTS OR OBSERVED PHYSICAL EVIDENCE, MAY EXIST. CONTRACTORS (IN ACCORDANCE WITH MASS.G.L. CHAPTER 82 SECTION 40 AS AMENDED) MUST CONTACT ALL UTILITY COMPANIES BEFORE EXCAVATING AND DRILLING AND CALL DIALSAFE AT 1(888)DIG-SAFE(7233).

THE BUILDING OFFSETS AS SHOWN ON THIS PLAN ARE NOT TO BE USED FOR THE ESTABLISHMENT OF PROPERTY LINES OR FOR THE ESTABLISHMENT OF ANY PROPOSED CONSTRUCTION UNLESS SAID CONSTRUCTION IS SHOWN HEREON.

THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE AND PURPOSE FOR THE PARTY STATED HEREON AND SHALL NOT BE USED BY ANY THIRD PARTY WITHOUT THE EXPRESSED WRITTEN PERMISSION OF GUERRIERE & HALON, INC.

CONSTRUCTION ON THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.

LEGEND

SEPTIC TANK	S.T.
DISTRIBUTION BOX	D.B.
PUMP CHAMBER	P.C.
LEACHING TRENCH	L-1
EXISTING CONTOURS	— 420 —
PROPOSED CONTOURS	— 420 —
EXISTING ELEVATIONS	100.0
PROPOSED ELEVATIONS	100.0
EDGE OF WETLANDS	— 100 —
BENCHMARK	B.M.
PUBLIC WATER	W
GAS SERVICE	C
PERC TEST HOLE	⊕
DEEP TEST HOLE	⊕
PRIVATE WATER SUPPLY	⊕
TOP OF CONCRETE	TOC

CONSTRUCTION NOTES:

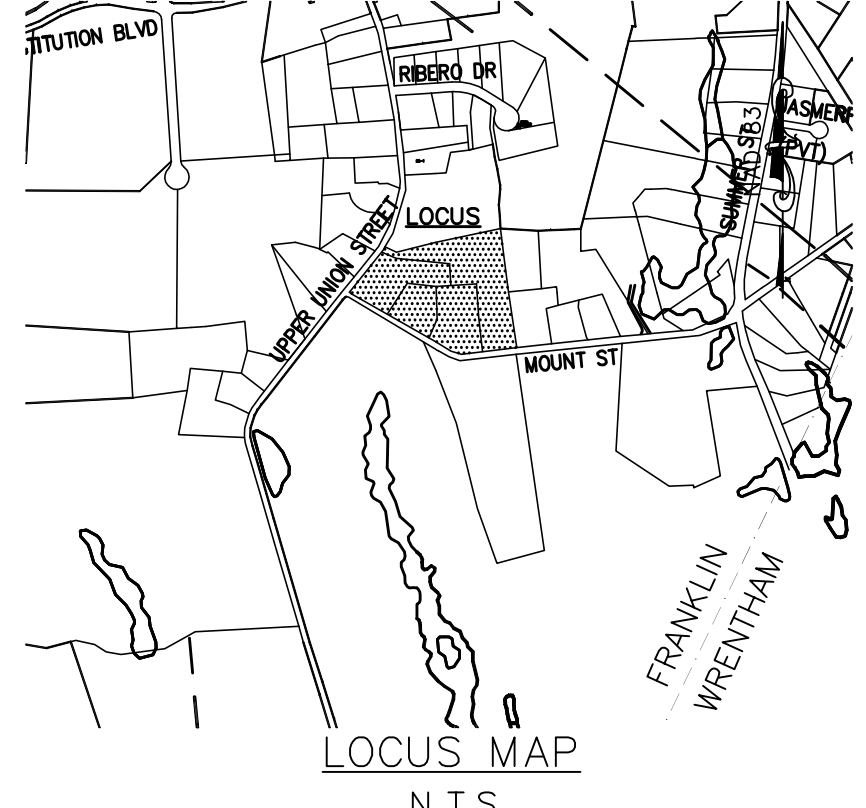
- SEPTIC TANK(S) AND DISTRIBUTION BOX(ES) SHALL BE INSTALLED LEVEL AND TRUE TO GRADE ON A 6" BED OF CRUSHED STONE. BASE SHALL BE STABLE, LEVEL AND MECHANICALLY COMPACTED TO THE SATISFACTION OF THE ENGINEER. IN FILL, PROPER COMPACTION IS REQUIRED TO ENSURE STABILITY AND TO PREVENT SETTLING.
- FILL SHALL BE PLACED WITH A MAXIMUM LIFT THICKNESS OF 6" AND COMPACTED BY DOZER TO THE SATISFACTION OF THE ENGINEER. NO COMPACTION OF SEWER GRAVEL IS PERMITTED.
- IF THE DESIGN OF THE LEACHING AREA CALLS FOR A 5-FOOT EXCAVATION AREA, EXTEND TRENCH EXCAVATION 5 FEET LATERALLY IN ALL DIRECTIONS AND TO THE DEPTH OF NATURALLY OCCURRING PERVIOUS MATERIAL. THE ENTIRE EXCAVATION SHALL THEN BE BACKFILLED WITH MATERIAL TO AN ELEVATION 1-FOOT ABOVE THE INVERTS OF THE RESPECTIVE TRENCHES.
- ALL UNUSED KNOCKOUTS IN SEPTIC TANK(S) AND DISTRIBUTION BOX(ES) SHALL BE SEALED WITH HYDRAULIC CEMENT.
- MAXIMUM COVER OVER ANY COMPONENT OF THE SEPTIC SYSTEM NOT TO EXCEED 36".
- MINIMUM COVER OVER ANY COMPONENT OF THE SEPTIC SYSTEM TO BE 9" PRIOR TO PLACEMENT OF TOPSOIL.
- SYSTEM IS TO BE FLAGGED OFF WITH CAUTION TAPE AFTER BACKFILLING.
- SEPTIC SYSTEM EXCAVATION SHALL BE INSPECTED BY DESIGN ENGINEER PRIOR TO FOUNDATION CONSTRUCTION.

DESIGN NOTES:

- THE INSTALLATION OF PROPOSED SYSTEM SHALL BE DONE IN CONFORMANCE WITH LOCAL AND STATE BOARD OF HEALTH REGULATIONS
- NO PORTION OF THIS SYSTEM SHALL BE ALTERED WITHOUT APPROVAL FROM THE BOARD OF HEALTH AND THE DESIGN ENGINEER.
- THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE DISPOSAL.
- ELEVATIONS REFERS TO 1988 NAVD DATUM.
- ALL INSPECTIONS NECESSARY FOR THE CERTIFICATION OF THE SEPTIC SYSTEM AND THE PREPARATION OF AN AS-BUILT PLAN ARE TO BE PERFORMED BY THE DESIGN ENGINEER.
- THE DESIGN INCLUDES A 11 BEDROOM SEPTIC SYSTEM AND IS NOT PROPOSED IN A NITROGEN SENSITIVE AREA.

CONSTRUCTION NOTES:

- SEPTIC TANK(S) AND DISTRIBUTION BOX(ES) SHALL BE INSTALLED LEVEL AND TRUE TO GRADE ON A 6" BED OF CRUSHED STONE. BASE SHALL BE STABLE, LEVEL AND MECHANICALLY COMPACTED TO THE SATISFACTION OF THE ENGINEER. IN FILL, PROPER COMPACTION IS REQUIRED TO ENSURE STABILITY AND TO PREVENT SETTLING.
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- MAXIMUM COVER OVER ANY COMPONENT OF THE SEPTIC SYSTEM NOT TO EXCEED 36".
- MINIMUM COVER OVER ANY COMPONENT OF THE SEPTIC SYSTEM TO BE 9" PRIOR TO PLACEMENT OF TOPSOIL.
- SYSTEM IS TO BE FLAGGED OFF WITH CAUTION TAPE AFTER BACKFILLING.
- SEPTIC SYSTEM EXCAVATION SHALL BE INSPECTED BY DESIGN ENGINEER PRIOR TO FOUNDATION CONSTRUCTION.



SIGNATURE P.L.S.

DATE

9-28-2022

SITE DEVELOPMENT & FACILITIES PLAN FOR LOTS 1, 2, 3, AND 4, 3 MOUNT STREET IN FRANKLIN, MASSACHUSETTS

DATE: SEPTEMBER 28, 2022 SCALE: AS NOTED

REVISOR: DESCRIPTION:

OWNER/APPLICANT: DONNA ADELSTEIN - THREE CHIMNEY FARMS, LLC

ADDRESS: 67 HAMMOND ROAD, CLINTON, CT 06413

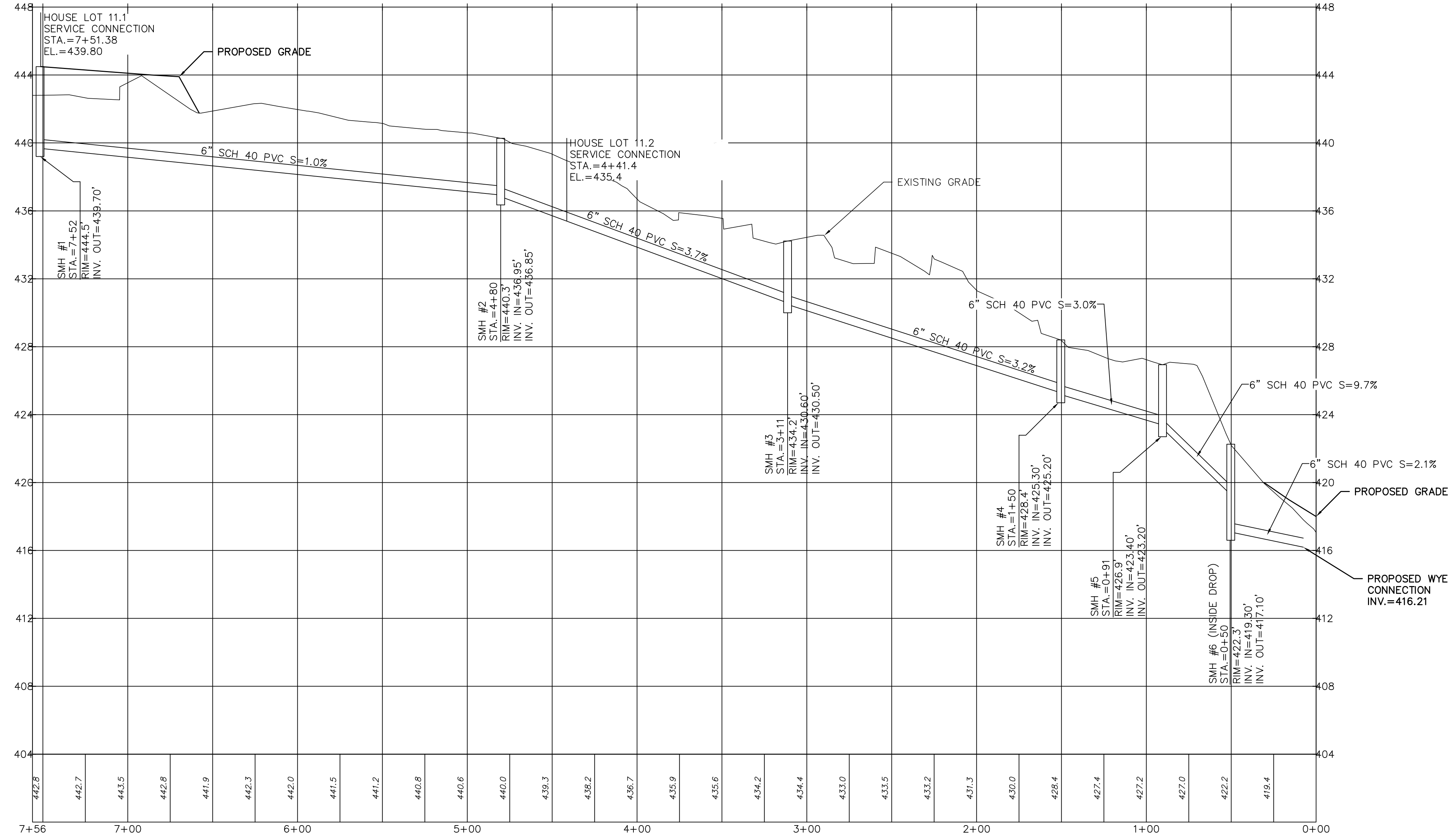
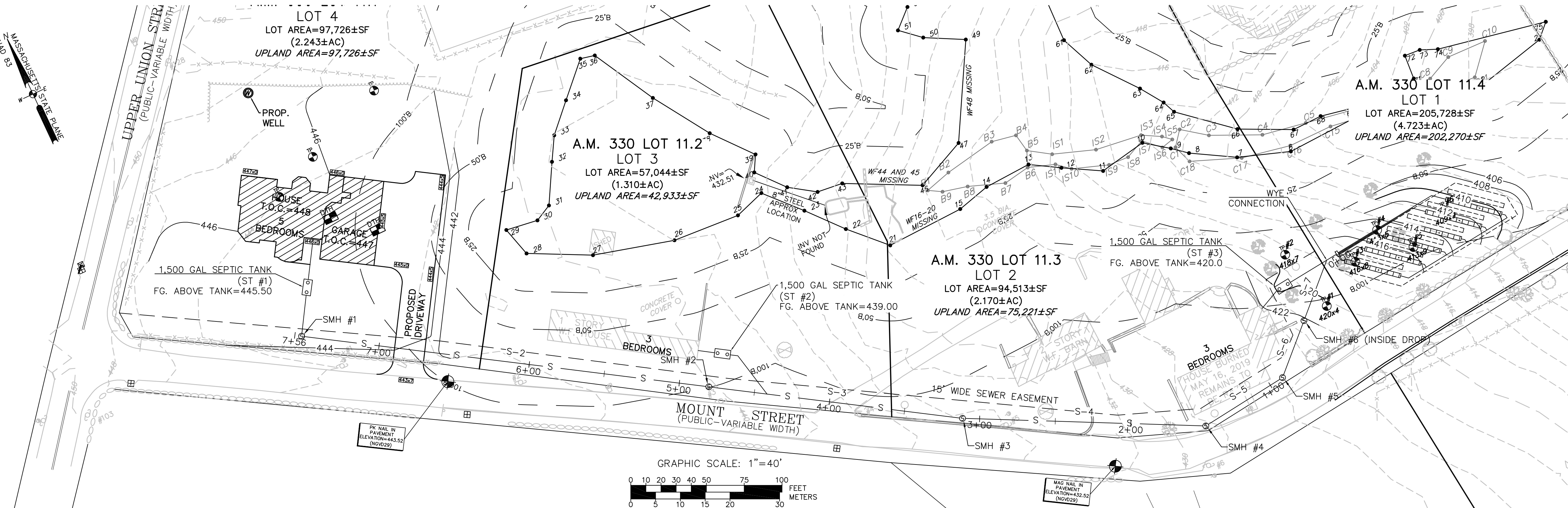
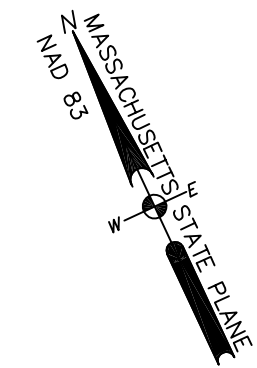
Guerriere & Halon, Inc. ENGINEERING & LAND SURVEYING

55 WEST CENTRAL STREET, FRANKLIN, MA 02038 (508) 528-3221 FAX: (508) 528-7921 WWW.GANDHENGINEERING.COM

F-4420

SHEET 1 OF 3 DES. BY: KKP





SEWER MAIN  
0+00 TO 7+56.09  
SCALE: 1"=40' HORIZONTAL  
1"=4' VERTICAL

SITE DEVELOPMENT & FACILITIES PLAN  
FOR  
LOTS 1, 2, 3, AND 4, 3 MOUNT STREET  
IN  
FRANKLIN, MASSACHUSETTS  
DATE: SEPTEMBER 28, 2022 SCALE: 1" = 40'  
REVISED: DESCRIPTION:

OWNER/APPLICANT: DONNA ADELSTEIN - THREE CHIMNEY FARMS, LLC  
ADDRESS: 67 HAMMOND ROAD, CLINTON, CT 06413

SIGNATURE P.L.S.  
DATE

ROBERT J. DUFF  
No. 40707  
CIVIL  
PROFESSIONAL ENGINEER

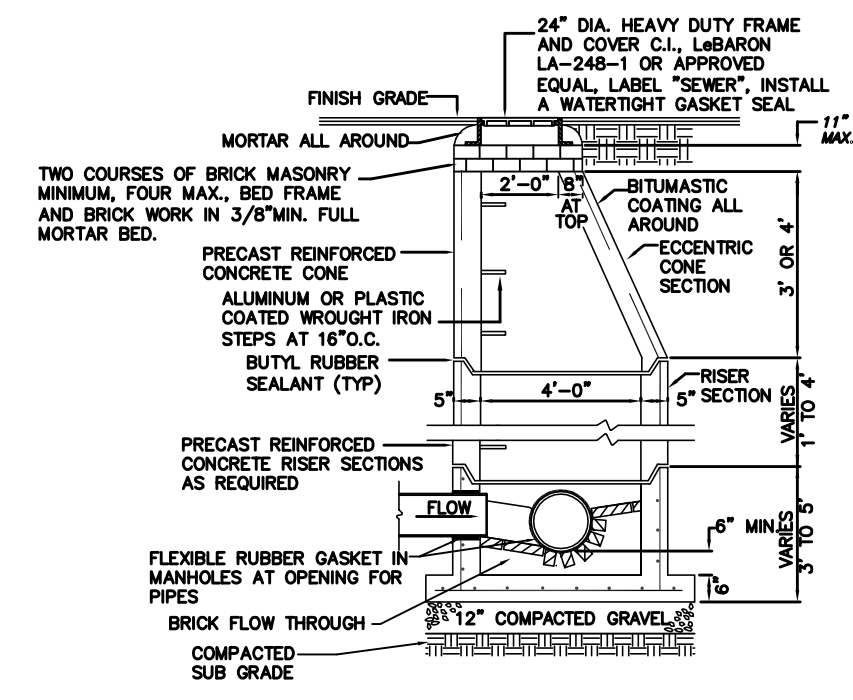
SIGNATURE P.L.S.  
9.28.2022  
DATE

Guerriere & Halon, Inc.  
ENGINEERING & LAND SURVEYING  
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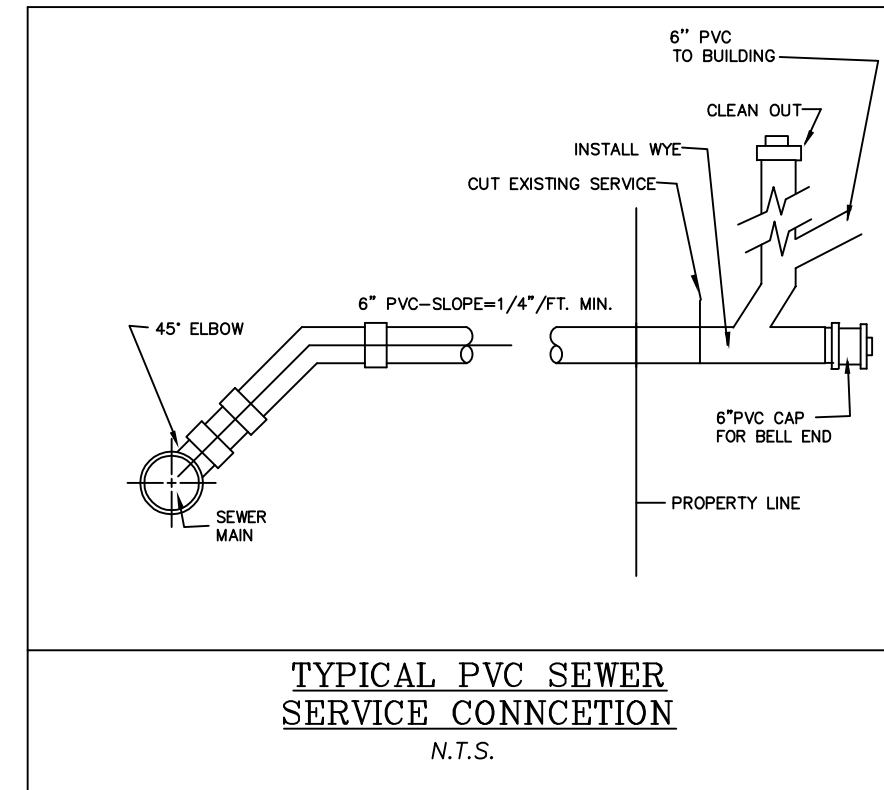
SHEET 2 OF 3  
DES. BY: KKP



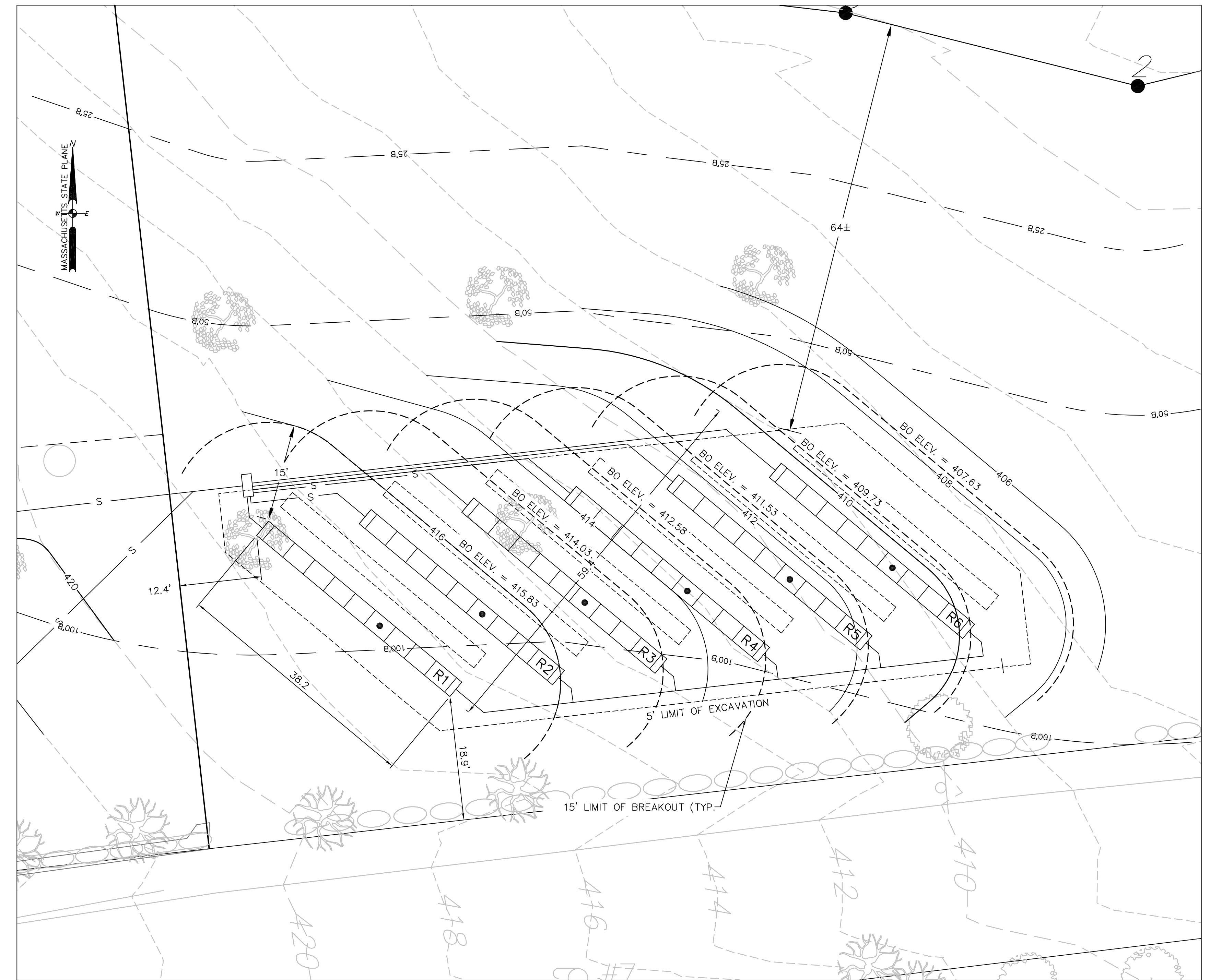


**TYP. PRECAST CONCRETE MANHOLE SANITARY**

N.T.S.  
NOTE: ALL STRUCTURES SHALL BE SUITABLE FOR H-20 LOADING AND SHALL MEET THE REQUIREMENTS OF ASTM C478.

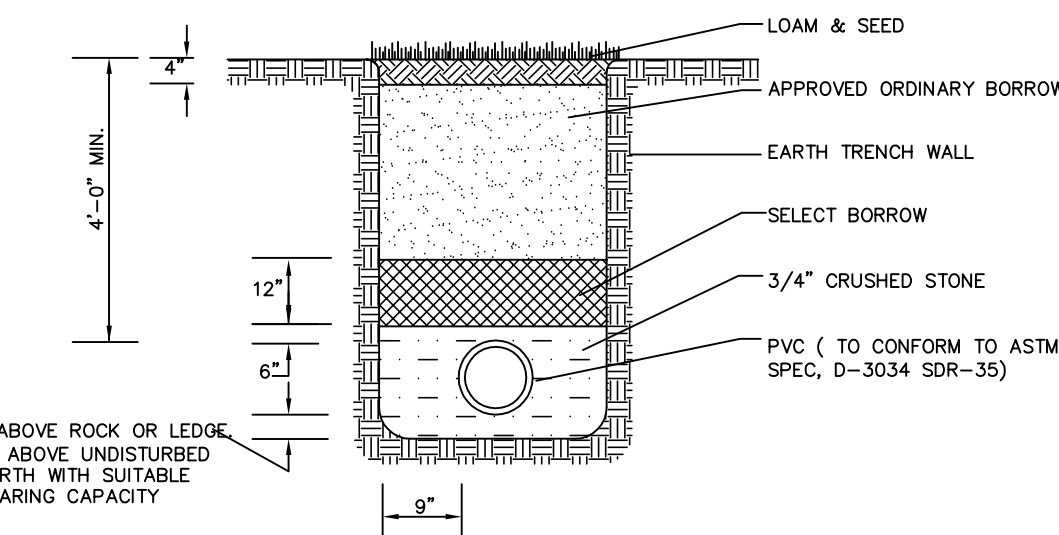


**TYPICAL PVC SEWER SERVICE CONNECTION**  
N.T.S.



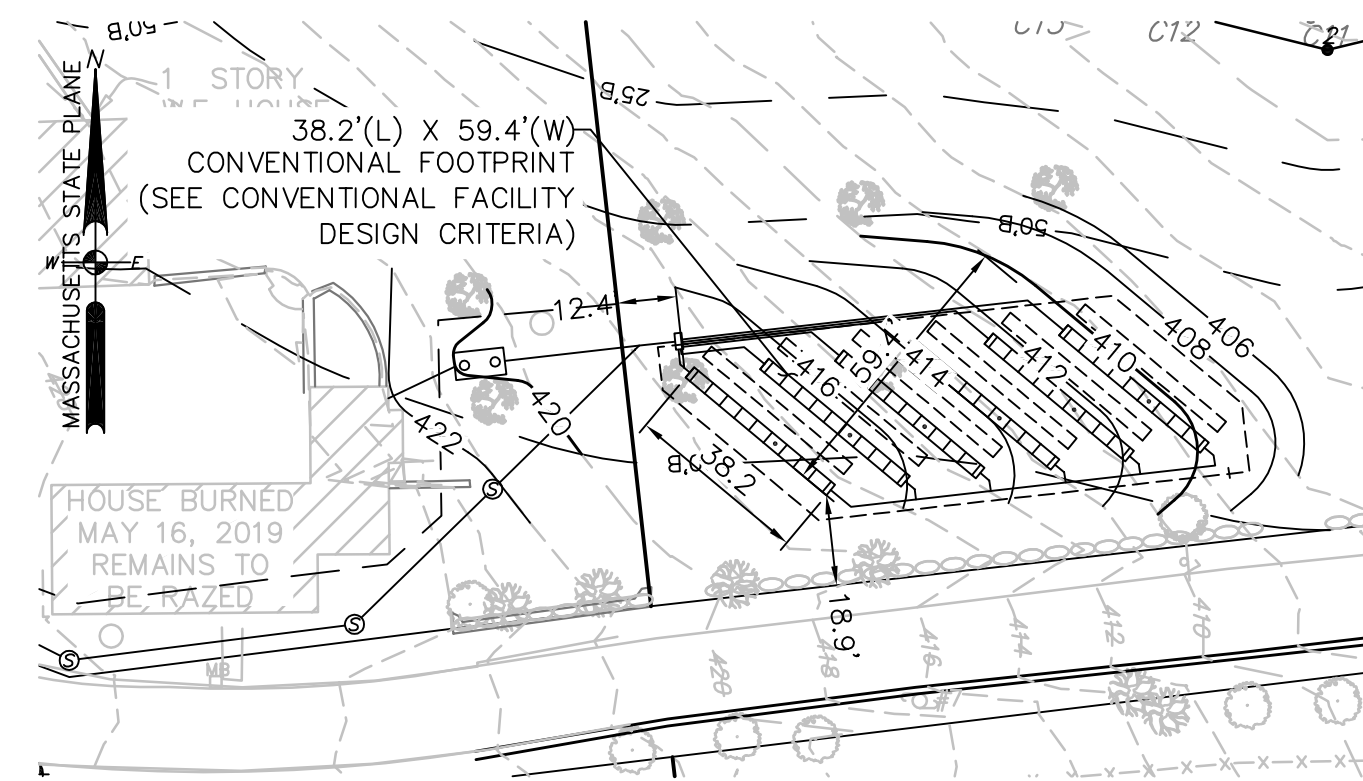
	R1	R2	R3	R4	R5	R6
BREAKOUT ELEVATION	415.83	414.03	412.48	411.53	409.73	407.63
ELEV. TOP OF INFILTRATOR	415.83	414.03	412.48	411.53	409.73	407.63

**SOIL ABSORPTION SYSTEM LAYOUT**  
SCALE: 1" = 10'

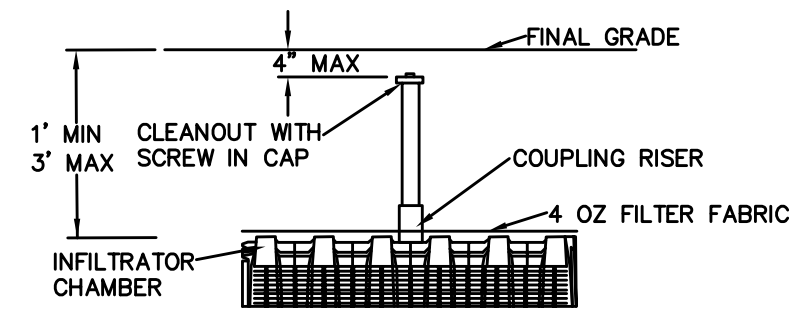


**TYPICAL P.V.C. TRENCH SECTION**

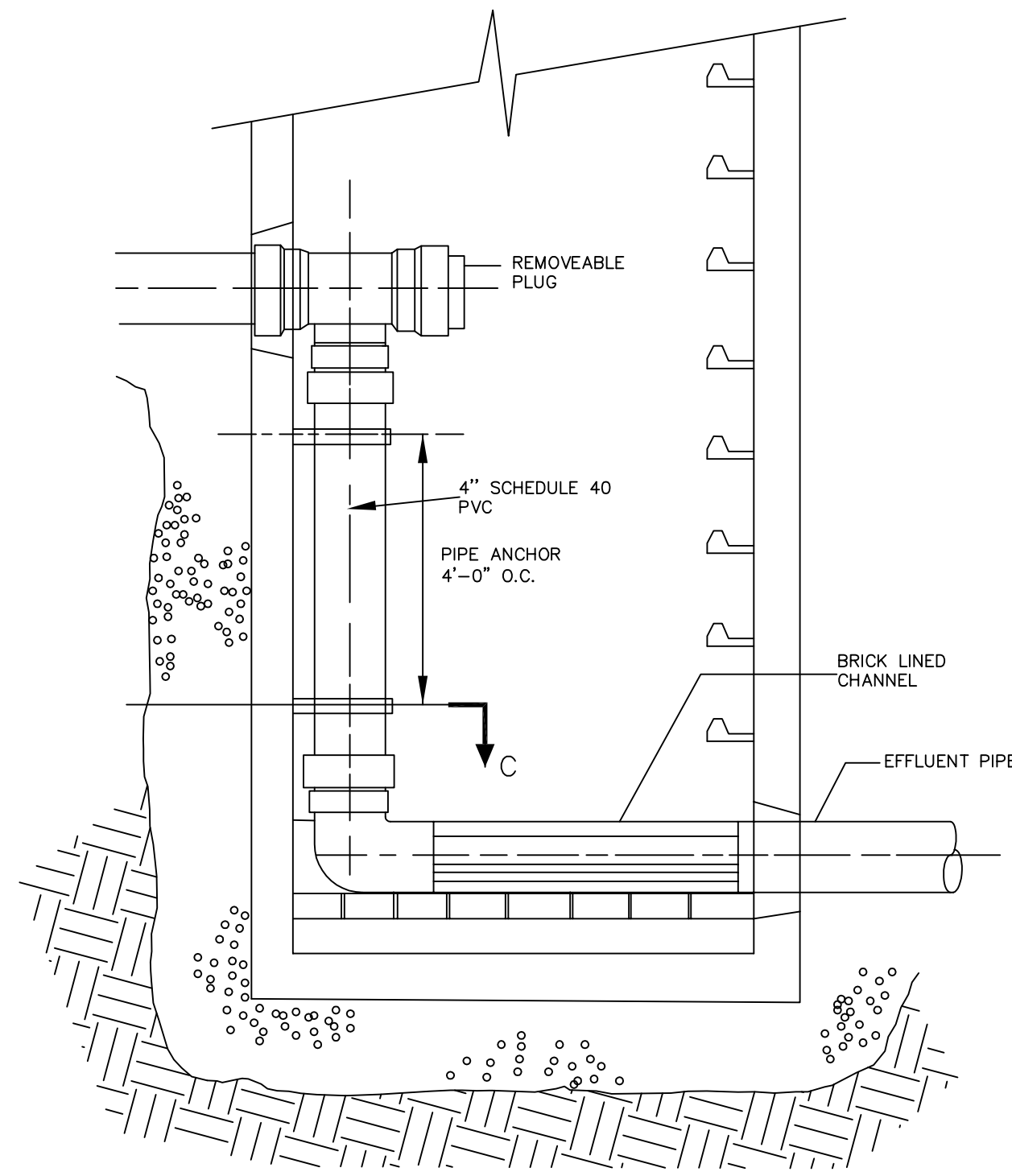
NOT TO SCALE



**CONVENTIONAL SYSTEM LAYOUT**  
SCALE: 1" = 40'



**INSPECTION PORT**  
NOT TO SCALE



**P.V.C. DROP CONNECTION**

NOTE: 5"-0" DIAMETER MANHOLES SHALL BE USED AT ALL DROP MANHOLE CONNECTIONS.

**SITE DEVELOPMENT & FACILITIES PLAN**  
FOR  
LOTS 1, 2, 3, AND 4, 3 MOUNT STREET  
IN  
FRANKLIN, MASSACHUSETTS

DATE: SEPTEMBER 28, 2022 SCALE: AS NOTED  
REVISED: DESCRIPTION:

OWNER/APPLICANT: DONNA ADELSTEIN - THREE CHIMNEY FARMS, LLC  
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SIGNATURE P.L.S.  
DATE

ROBERT J. DUFF  
No. 40707  
CIVIL  
REGISTERED ENGINEER

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SHEET 3 OF 3  
DES. BY: KKP