

LOCATION MAP SCALE: 1"=2000'±

ZONING DATA

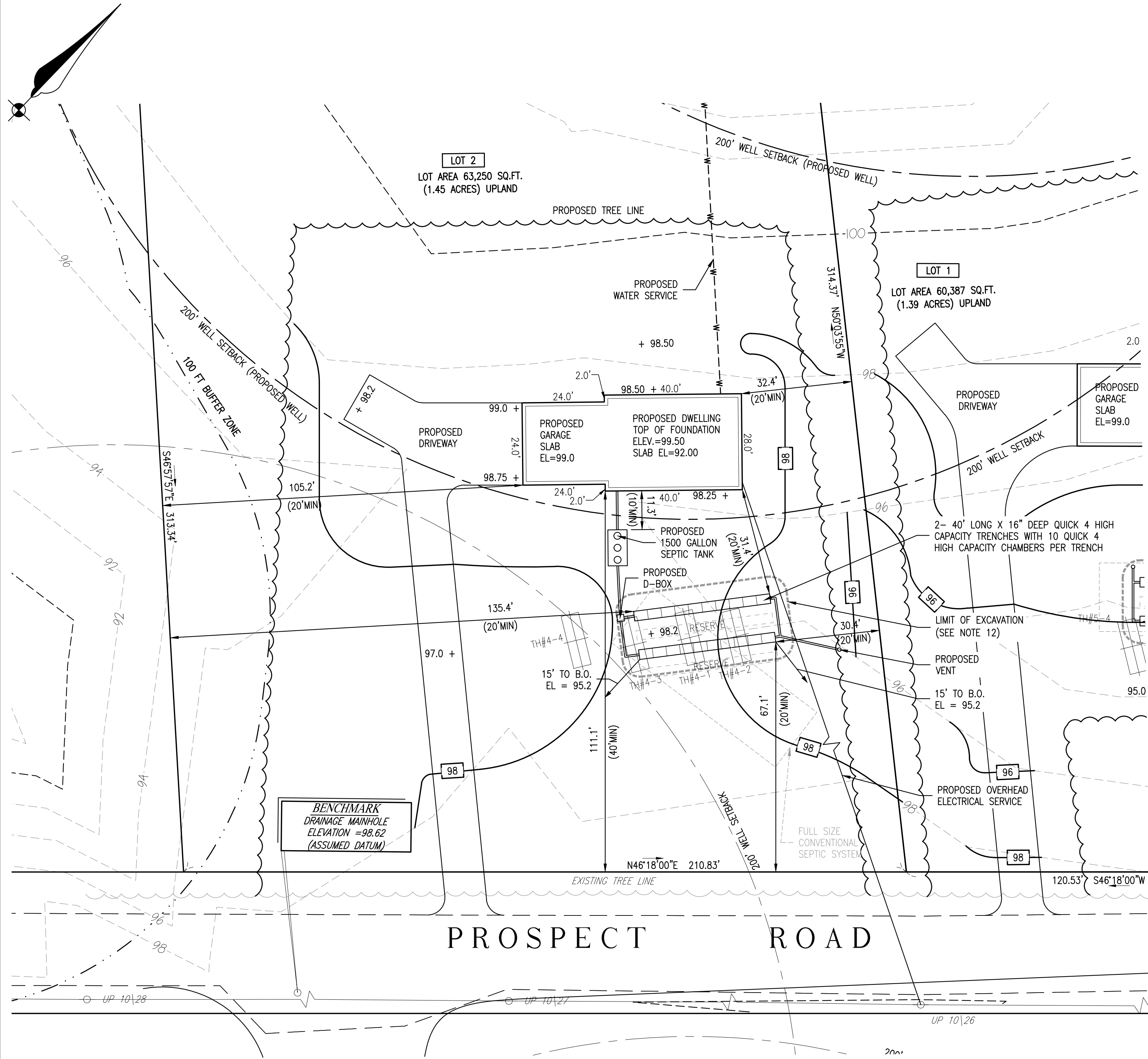
DISTRICT: AGRICULTURAL RESIDENTIAL	
MINIMUM REQUIREMENTS:	
LOT AREA	60,000 S.F.
LOT AREA CONTIG UPLAND	40,000 S.F.
LOT FRONTAGE	200 FT
FRONT YARD	40 FT
SIDE YARD	20 FT
REAR YARD	20 FT
RETREAT LOTS	
MINIMUM REQUIREMENTS:	
LOT AREA	120,000 S.F.
LOT AREA CONTIG UPLAND	48,000 S.F.
LOT FRONTAGE	100 FT
SIDE YARD	100 FT
REAR YARD	100 FT

NOTES:

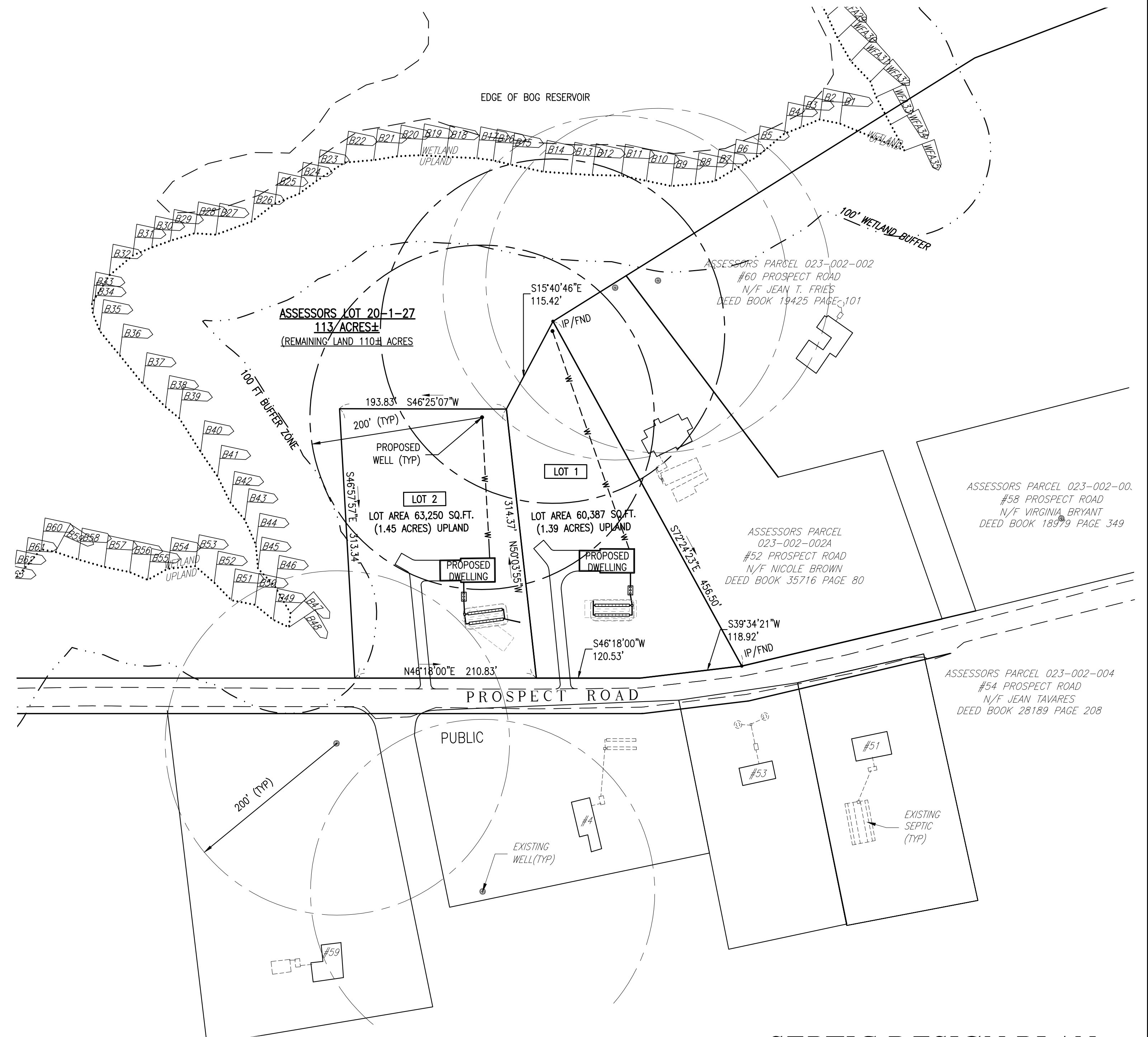
- LOCUS IS ZONED AGRICULTURAL RESIDENTIAL.
- THIS PLAN REPRESENTS A SUBDIVISION OF LOT 20 BLOCK 1 AS SHOWN ON THE PLYMPTON ASSESSORS MAP 27.
- THE PARCEL SHOWN ON THIS PLAN IS THE RESULT OF AN ON THE GROUND SURVEY PERFORMED BY GRADY CONSULTING, LLC ON JANUARY, 2018.
- THE WETLAND RESOURCE AREA SHOWN ON THIS PLAN WAS DELINEATED BY JOHN ZIMMER OF SOUTH RIVER ENVIRONMENTAL SERVICES ON NOVEMBER 30, 2017.

FLOOD NOTE:

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE X AS DEPICTED ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL No. 25023C 03374, WHICH BEARS AN EFFECTIVE DATE OF JULY 17, 2012.



Scale 1" = 20'



Scale 1" = 80'

SEPTIC DESIGN PLAN

ASSESSORS LOT 20-1-27
LOT 2 PROSPECT ROAD
PLYMPTON, MASSACHUSETTS

PREPARED FOR:
TOWN OF PLYMPTON
CONSERVATION COMMISSION
5 PALMER ROAD
PLYMPTON, MA 02367
781-585-2700

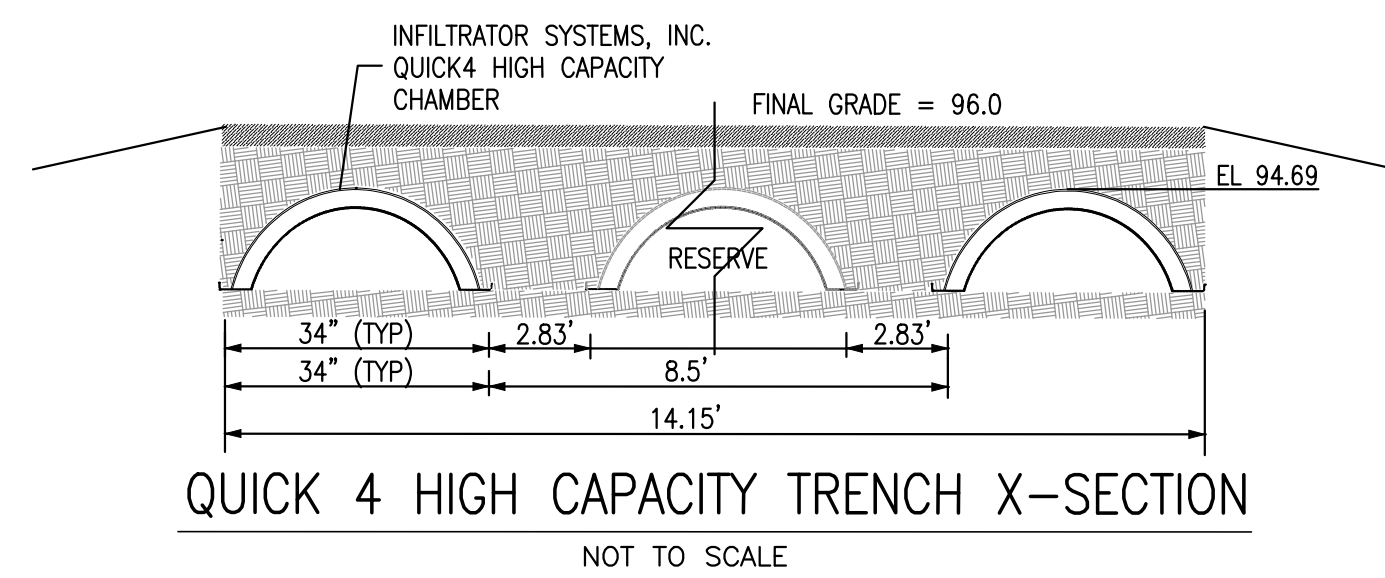
JANUARY 18, 2019
SCALE: AS NOTED
JOB No. 18-446



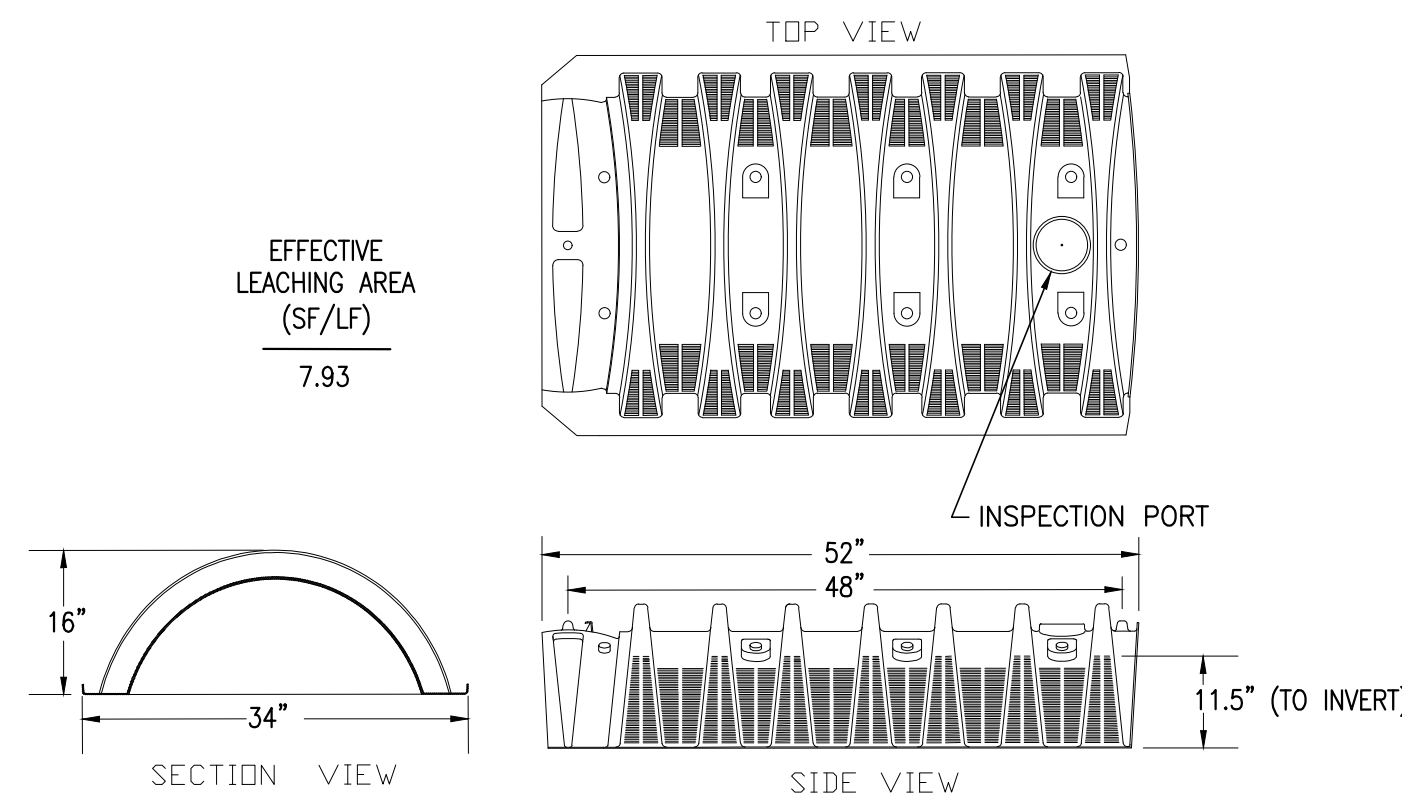
- #### PLAN REFERENCES
- PLAN BOOK 22 PAGE 650
 - PLAN BOOK 35 PAGE 614
 - PLAN BOOK 20 PAGE 577
 - PLAN BOOK 54 PAGE 147
 - PLAN BOOK 61 PAGE 1120

RECORD OWNER:
TOWN OF PLYMPTON
5 PALMER ROAD
PLYMPTON MA
DEED BOOK 50486 PAGE 153

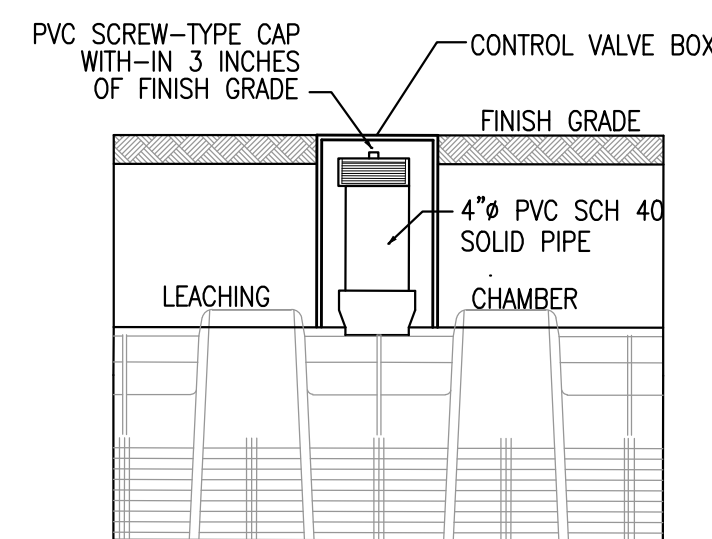
GRADY CONSULTING, L.L.C.
Civil Engineers, Land Surveyors &
Landscape Architects
71 Evergreen Street, Suite 1, Kingston, MA 02364
Phone (781) 585-2300 Fax (781) 585-2378



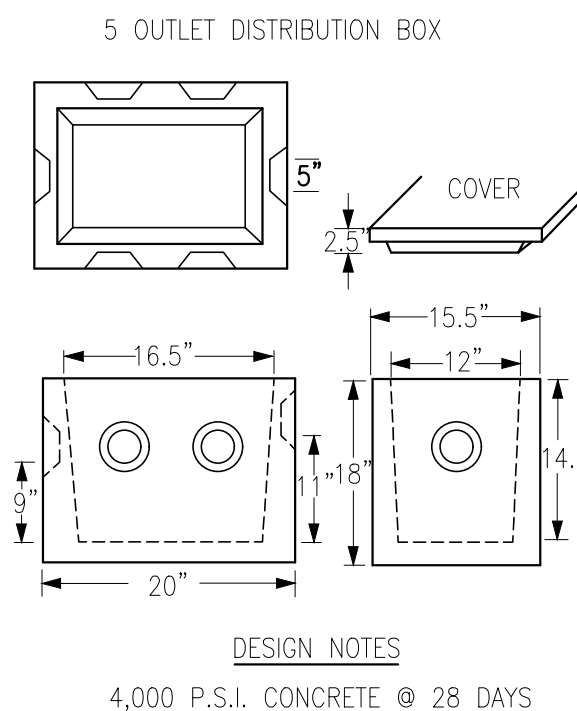
QUICK 4 HIGH CAPACITY TRENCH X-SECTION
NOT TO SCALE



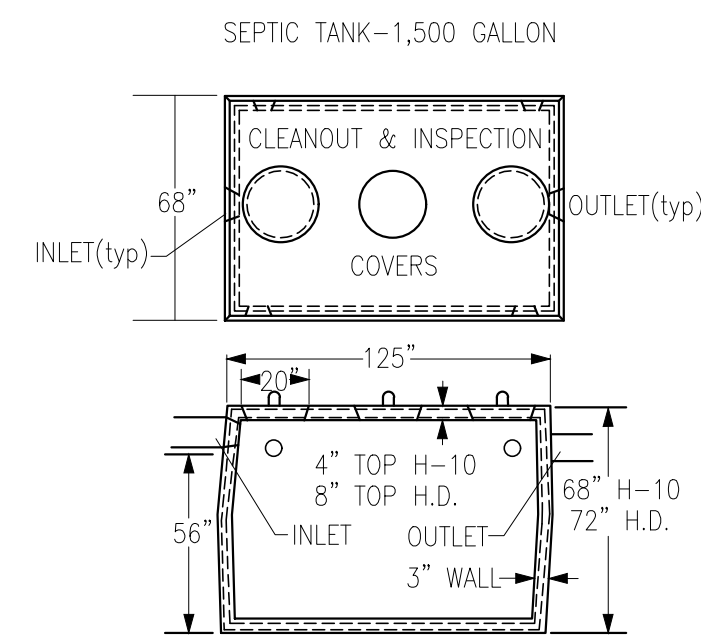
QUICK4 STANDARD CHAMBER DETAIL
NOT TO SCALE



INSPECTION PORT DETAIL
NOT TO SCALE

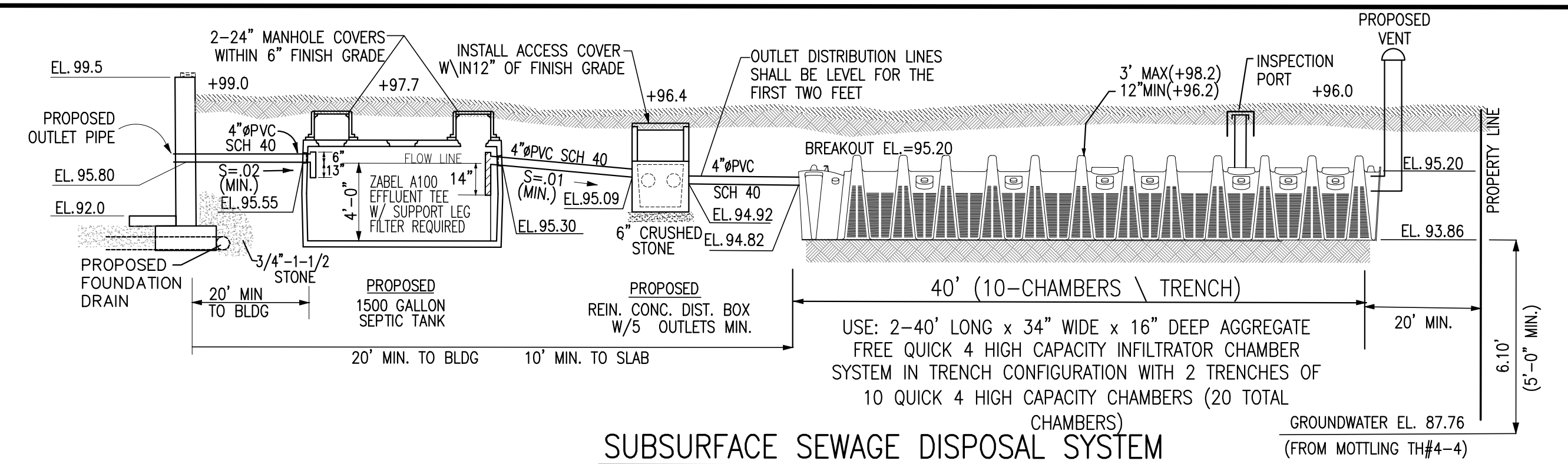


D-BOX DETAIL
(NOT TO SCALE)



- DESIGN NOTES
1. TOP & BOTTOM MATCHING KEY JOINT SEALED BUTYL RESIN AS SPECIFIED BY THE MANUFACTURER.
 2. TANK COMPLETELY REINFORCED.
 3. CONCRETE IS 4,000 P.S.I. @ 28 DAYS.
 4. AVAILABLE IN STANDARD, H-10, AND HEAVY DUTY TOP.

SEPTIC TANK DETAIL (MONOLITHIC)
(NOT TO SCALE)



SUBSURFACE SEWAGE DISPOSAL SYSTEM
(NOT TO SCALE)

SEPTIC DESIGN (NOT DESIGNED FOR GARBAGE GRINDER)

1. DESIGN DAILY FLOW: 4 BR. x 110 GPD = 440 GPD
 2. SEPTIC TANK: 440 GPD x 2 = 880 GAL. USE: 1500 GAL (MIN)
 3. LEACHING CHAMBERS: P.R. <2 MIN/IN CLASS I
- USE: 2-40' LONG x 34" WIDE x 16" DEEP LEACHING CHAMBER SYSTEM IN TRENCH CONFIGURATION WITH 20 - 4' LONG INFILTRATOR QUICK 4 HIGH CAPACITY LEACHING CHAMBERS IN 2 ROWS OF 10.
- TITLE V
(PER MODIFIED CERTIFICATION FOR GENERAL USE DESIGN STANDARD ITEM 6.)
EFFECTIVE LEACHING AREA = 7.93 SF/LF
PROPOSED AREA: 80 LF x 7.93 SF/LF = 634 S.F.
CAPACITY: 634 S.F. x 0.74 GPD/S.F. = 469 > 440 GPD(D.D.F.)

FULL SIZE CONVENTIONAL SEPTIC DESIGN-PER STANDARD CONDITIONS FOR ALTERNATIVE SOIL ABSORPTION SYSTEMS
LEACHING FIELD: P.R. = 2 MIN/IN CLASS II
USE: 1-30' LONG x 20" WIDE x 6" DEEP LEACHING FIELD
PROPOSED AREA: 30 x 20 = 600 S.F.
CAPACITY: 600 S.F. x 0.74 GPD/S.F. = 444 > 440 GPD(D.D.F.)

SEPTIC NOTES

1. PROPERTY LINE DATA FROM PLAN OF LAND BY GRADY CONSULTING LLC DATED JANUARY 2, 2019.
2. TOPOGRAPHIC SURVEY BY GRADY CONSULTING, L.L.C NOVEMBER, 2017.
3. SOILS TESTING BY KEVIN GRADY, GRADY CONSULTING L.L.C. WITNESSED BY ROBERT TINKHAM JANUARY 26 2018.
4. CALL DIG SAFE 1-888-344-7233 AT LEAST 4 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
5. NOTIFY TOWN AND GRADY CONSULTING PRIOR TO BACKFILLING OF SYSTEM.
6. NO KNOWN WELLS EXIST WITHIN 200' OF THE PROPOSED SYSTEM
7. THE SITE IS NOT LOCATED IN AN AQUIFER PROTECTION ZONE II.
8. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED (310 CMR 15.221(12)).
9. NO STREAMS, SURFACE & SUBSURFACE DRAINS AND WETLANDS EXIST WITHIN 100 FT OF THE PROPOSED SYSTEM, EXCEPT AS SHOWN.
10. THE SITE IS NOT LOCATED IN A FLOOD PLAIN DISTRICT.
11. NO KNOWN EASEMENTS ARE IN THE AREA OF THE PROPOSED SYSTEM.
12. NO ABUTTING FOUNDATIONS WITH 25' OF SAS
13. EXCAVATE ALL MATERIAL (A,B LAYERS) TO MEDIUM SAND C1 LAYER (24"), 5' AROUND SYSTEM. REPLACE WITH CLEAN COARSE SAND IN ACCORDANCE WITH 310 CMR 15.255 (3). EXCAVATION TO BE INSPECTED BY GRADY CONSULTING L.L.C. AND TOWN PRIOR TO SOIL REPLACEMENT

APPROXIMATE PERC SAND VOLUME = 50 x 24.15 x (95.2 - 94.0±) / 27 + 20% = 65± C.Y.

INFILTRATOR SYSTEM NOTES

THIS SYSTEM HAS BEEN DESIGNED IN ACCORDANCE WITH THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION MODIFIED CERTIFICATION FOR GENERAL USE, PURSUANT TO TITLE V, 310 CMR 15.000, REVISED JUNE 12, 2015 AND STANDARD CONDITIONS FOR ALTERNATIVE SOIL ABSORPTION SYSTEMS WITH GENERAL USE CERTIFICATION AND/OR APPROVED FOR REMEDIAL USE REVISED MARCH 5, 2018. A DISCLOSURE NOTICE IN THE DEED TO THE PROPERTY IS REQUIRED FOR SYSTEMS INSTALLED UNDER THE REMEDIAL USE APPROVAL.

NO STONE AROUND OR BELOW CHAMBERS IS REQUIRED.

BACKFILL CHAMBERS WITH ON SITE SAND SOIL OR CLEAN COARSE SAND IN ACCORDANCE WITH 310 CMR 15.255(3).

REQUIRED INSPECTIONS

1. AFTER EXCAVATION OF LEACHING AREA PRIOR TO INSTALLING SAND.
 2. AFTER SYSTEM CONSTRUCTION PRIOR TO BACKFILLING.
 3. AFTER FINAL GRADING IS COMPLETED.
- (ADDITIONAL INSPECTIONS MAY BE REQUIRED BY THE BOARD OF HEALTH)

SOIL LOGS

T.H.#4-1 EL. 96.31	T.H.#4-2 EL. 96.06	T.H.#4-3 EL. 96.72	T.H.#4-4 EL. 97.09
0'-8" A LOAM	0'-8" A LOAM	0'-6" A LOAM	0'-6" A LOAM
8'-24" B LOAMY SAND	8'-24" B LOAMY SAND	6'-24" B LOAMY SAND	6'-24" B LOAMY SAND
24'-84" C1 MEDIUM SAND	24'-84" C1 MEDIUM SAND	24'-74" C1 MEDIUM SAND	24'-74" C1 MEDIUM SAND
30'-48" C2 P.R.<2 MIN/IN	30'-48" C2 P.R.<2 MIN/IN	30'-54" C2 P.R.<2 MIN/IN	30'-54" C2 P.R.<2 MIN/IN
84'-126" C2 MEDIUM SAND	84'-126" C2 MEDIUM SAND	90'-144" C3 MEDIUM SAND	90'-144" C2 MEDIUM SAND
D= 10'-6" MOTTLING @ 9'-2" (EL.=87.14)	D= 10'-6" MOTTLING @ 9'-2" (EL.=86.89)	D= 12'-0" MOTTLING @ 9'-4" (EL.=87.39)	D= 12'-0" MOTTLING @ 9'-4" (EL.=87.76)



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ASSESSORS LOT 20-1-27
LOT 2 PROSPECT ROAD
PLYMPTON, MASSACHUSETTS

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5 PALMER ROAD
PLYMPTON, MA 02367
781-585-2700

JANUARY 17, 2019
SCALE: AS NOTED
JOB No. 18-446

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Civil Engineers, Land Surveyors & Landscape Architects
71 Evergreen Street, Suite 1, Kingston, MA 02364
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