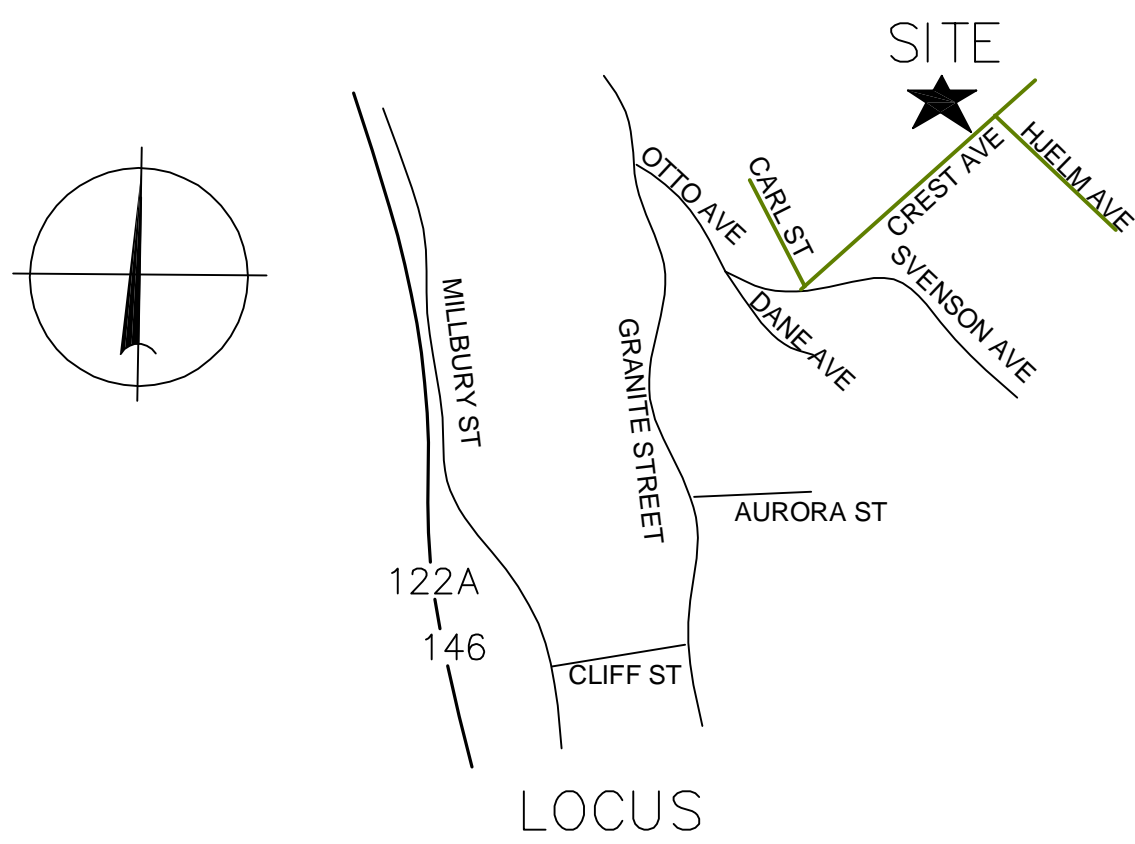


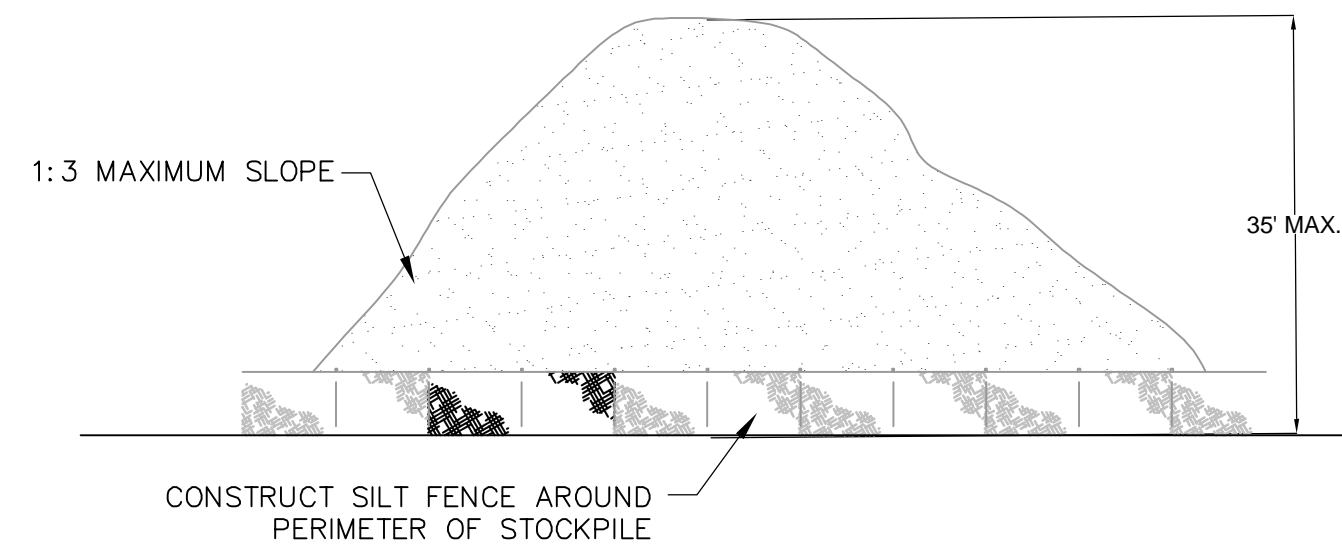
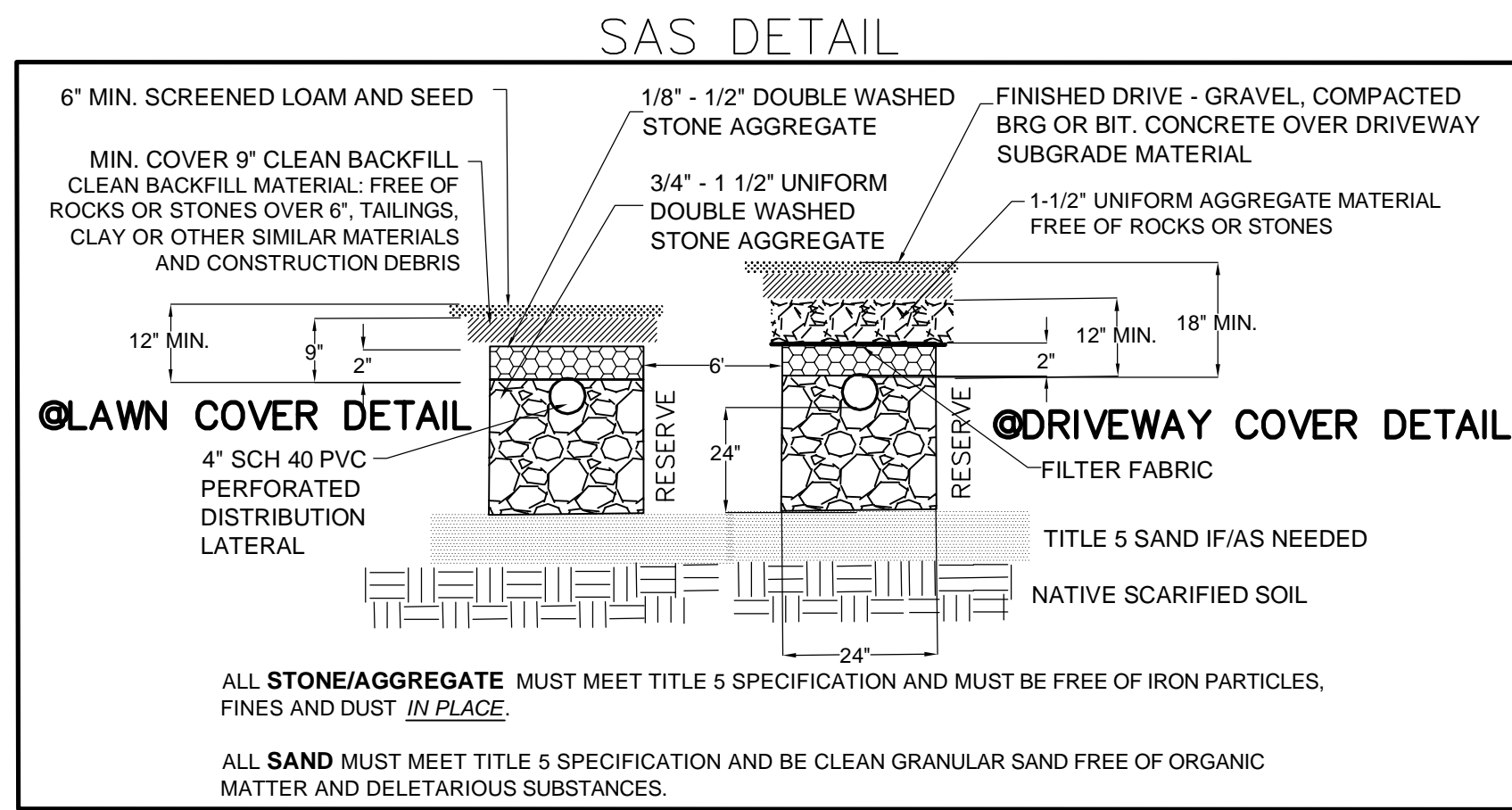
WORCESTER



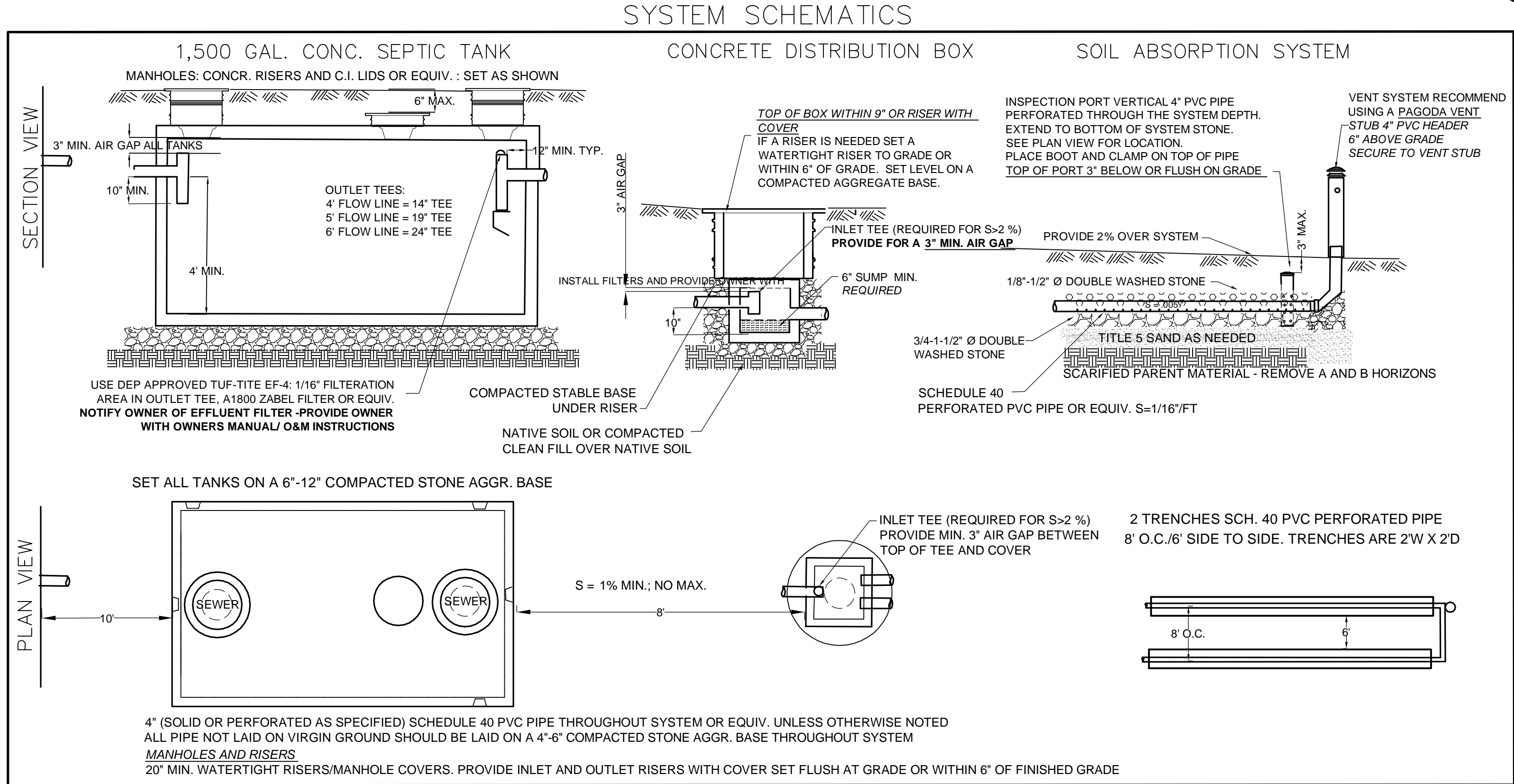
ZONE RS-7
 SINGLE FAMILY DWELLING
 MIN. LOT 7,000 S.F.
 MIN. FRONTAGE 65'
MIN. SETBACKS
 FRONT 20'
 SIDE 8'
 REAR 20'

CONSERVATION NOTES

1. THE 15' BUFFER ZONE (BZ) WILL NOT BE DISTURBED
2. NO STRUCTURES ARE PROPOSED IN THE 30' BZ
3. THE SEPTIC SYSTEMS IS >50' FROM A WETLAND
4. ENRTRNCHED SILT FENCE AND WATTLES AND PROPER ERSOION CONTROLS ARE PROPOSED
5. PERMANENT MARKERS ARE PROPOSED AND MAY ONLY BE INSTALLED ON THE OWNERS PROPERTY. THEY MAY CONSIST OF GRANITE OR CONCRETE POSTS OR METAL POSTS WITH TAGS. MARKERS AND LANGUAGE MAY BE SPECIFIED BY THE COMMISSION.



STOCK PILE DETAIL



PLAN REFERENCES

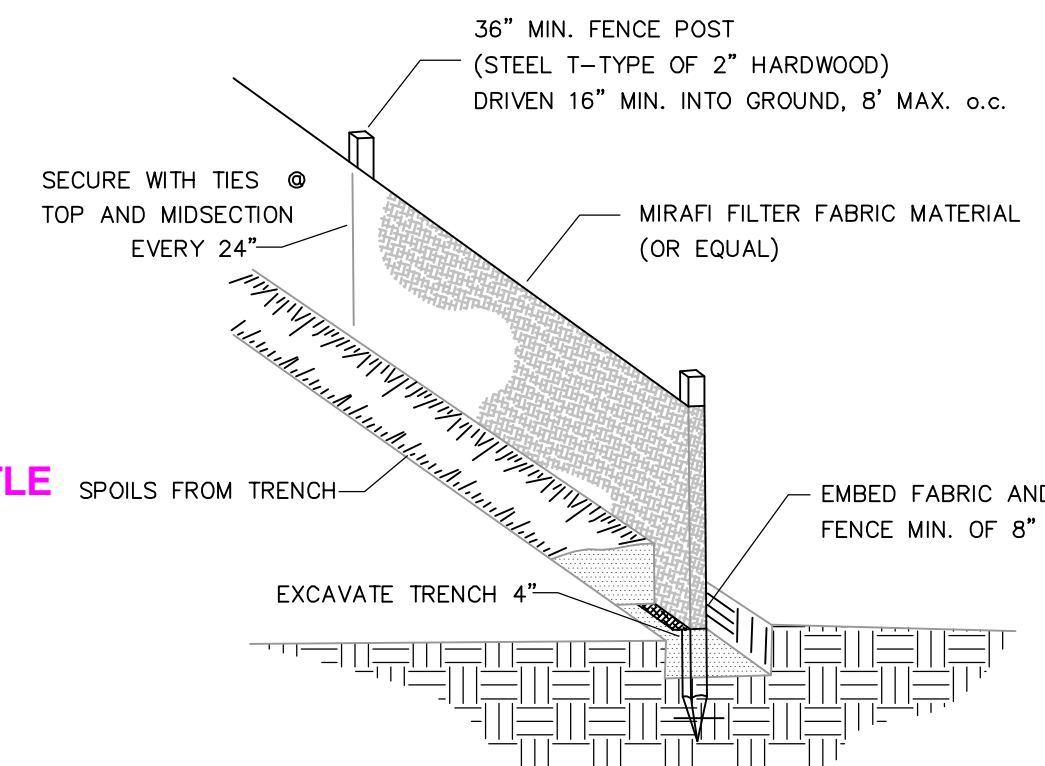
1. EXISTING CONDITIONS AND PLAN OF LAND 3 CREST AVE WORCESTER BY HS&T GROUP DATED 6-23 DWG NO. 5599
2. WETLAND DELINEATION BY DAVID CROSSMAN, PWS
3. WETLAND SURVEYED BY TRAVIS BROWN, TURNING POINT ENGINEERING/EASTLAND PARTNERS

NOTE TO CONTRACTOR: REQUIRED: BUILDING AND ALL SEPTIC SYSTEM COMPONENTS MUST BE STAKED OUT BY A REGISTERED LAND SURVEYOR

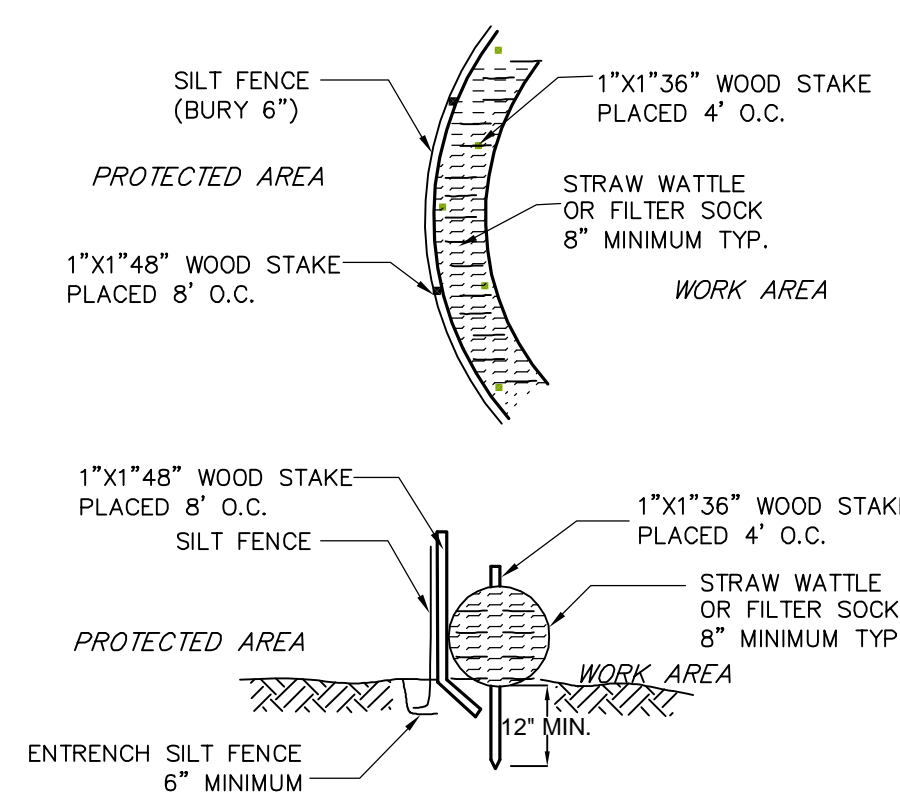
SOIL EVALUATION DATA & PERC TEST

SOIL EVALUATOR: LIZ DUPRE WITNESSED BY: CEDRIC RICHARDSON DATE: 5/18/23 APPLICANT: CHRIS HANSEN		PERCOLATION TEST DATA SOIL EVALUATOR: LIZ DUPRE WITNESSED BY: CEDRIC RICHARDSON DATE: 5/18/23	
TEST PIT # 1 EL. 584 +/- 0-40" FILL 40"-52" Ab FSL 10YR 3/2 52"-64" Bw SL 10YR 4/4 64"-76" C1 LS 10YR 5/4 76"-120" C2 LS 2.5Y 5/3	TEST PIT # 2 EL. 584 +/- 0-40" FILL 40"-48" Ab FSL 10YR 3/2 48"-55" Bw SL 10YR 4/6 55"-103" C LS 10YR 5/4	GROUND WATER ELEV (OBSERVED) N/A MOTTLING ELEV (OBSERVED) 88" REFUSAL ELEV N/A	GROUND WATER ELEV (OBSERVED) N/A MOTTLING ELEV (OBSERVED) 88" REFUSAL ELEV N/A
LIZ DUPRE, CERTIFIED MA SOIL EVALUATOR #SE22356		Perc#1 DEPTH: 75" FIELD RATE: 3 MPI DESIGN RATE: <5 MPI SOIL CLASSIFICATION: 1 L.T.A.R. 0.74 GPD/SF	

EROSION CONTROL BARRIERS

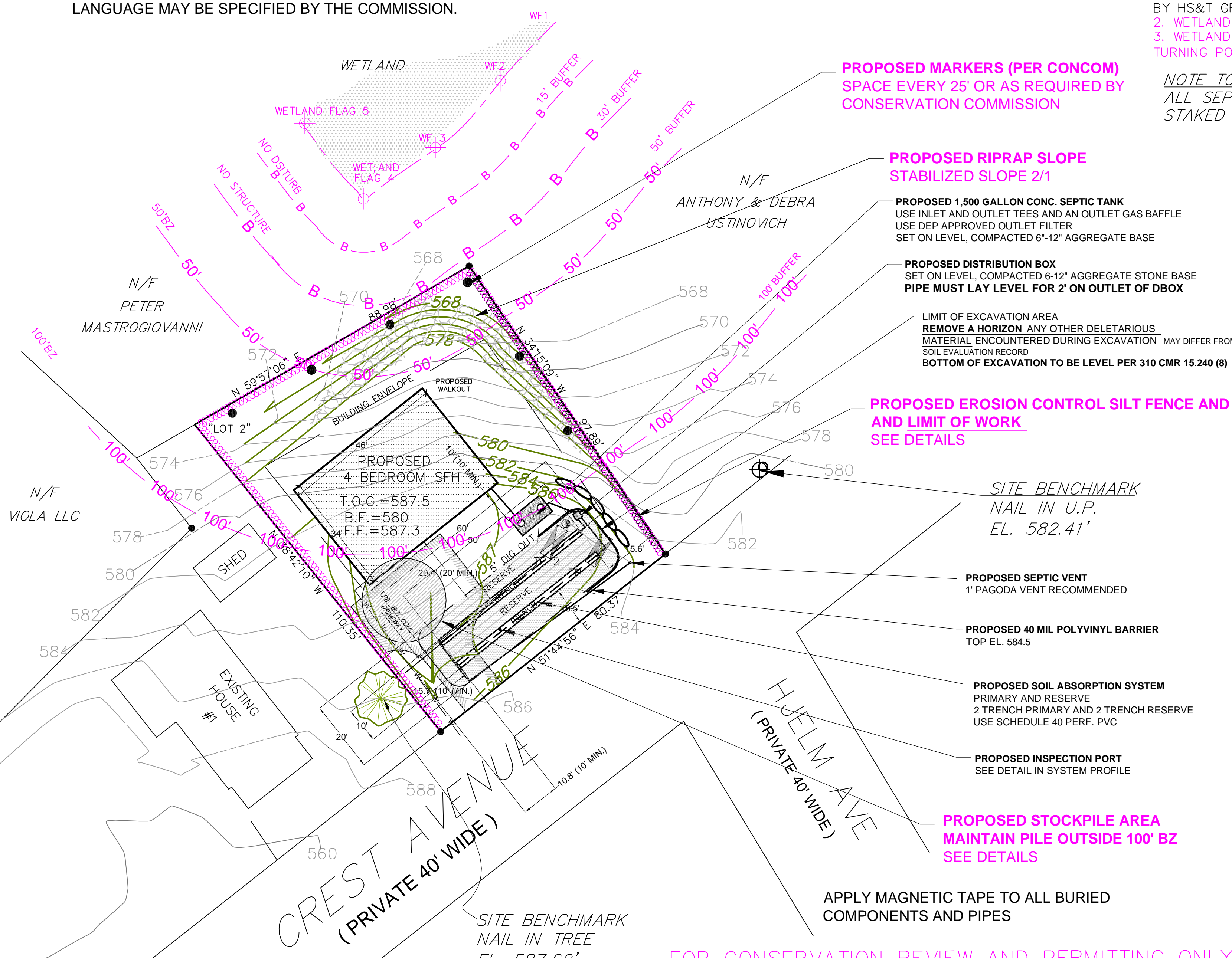


SILT FENCE AT STOCK PILE



WATTLE AND SILT FENCE TYP.
 100% BIODEGRADABLE BARRIER

"LOT 2"
 SIZE 8,778 S.F.



PROPOSED MARKERS (PER CONCOM)
 SPACE EVERY 25' OR AS REQUIRED BY CONSERVATION COMMISSION

PROPOSED RIPRAP SLOPE
 STABILIZED SLOPE 2/1

PROPOSED 1,500 GALLON CONC. SEPTIC TANK
 USE INLET AND OUTLET TEES AND AN OUTLET GAS BAFFLE
 USE DEP APPROVED OUTLET FILTER
 SET ON LEVEL, COMPACTED 6"-12" AGGREGATE BASE

PROPOSED DISTRIBUTION BOX
 SET ON LEVEL, COMPACTED 6"-12" AGGREGATE STONE BASE
PIPE MUST LAY LEVEL FOR 2' ON OUTLET OF DBOX

PROPOSED EROSION CONTROL SILT FENCE AND WATTLE
 AND LIMIT OF WORK
 SEE DETAILS

SITE BENCHMARK
 NAIL IN U.P.
 EL. 582.41'

PROPOSED SEPTIC VENT
 1" PAGODA VENT RECOMMENDED

PROPOSED 40 MIL POLYVINYL BARRIER
 TOP EL. 584.5

PROPOSED SOIL ABSORPTION SYSTEM
 PRIMARY AND RESERVE
 2 TRENCH PRIMARY AND 2 TRENCH RESERVE
 USE SCHEDULE 40 PERF. PVC

PROPOSED INSPECTION PORT
 SEE DETAIL IN SYSTEM PROFILE

PROPOSED STOCKPILE AREA
 MAINTAIN PILE OUTSIDE 100' BZ
 SEE DETAILS

APPLY MAGNETIC TAPE TO ALL BURIED COMPONENTS AND PIPES

FOR CONSERVATION REVIEW AND PERMITTING ONLY

APPLICANT
 DANIEL SOUSA
 9 HANNAHS WAY
 CHARLTON, MA 01507

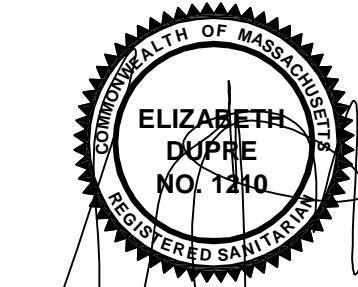
CONTACT
 DANIEL SOUSA
 508-723-2218

PROPOSED 4 BEDROOM SFH
 ASSESSOR MAP 45 BL 22 P 88
3 CREST AVENUE
WORCESTER, MASSACHUSETTS
PROPOSED SEPTIC SYSTEM DESIGN W/
RESOURCE AREA AND PROTECTION
MEASURES

CLEAR WATER ENVIRONMENTAL
 SEPTIC SYSTEM DESIGN | LAND PLANNING

Serving Greater MA Since 1999

87 Bartlett Road
 Kittery Point
 Maine 03905



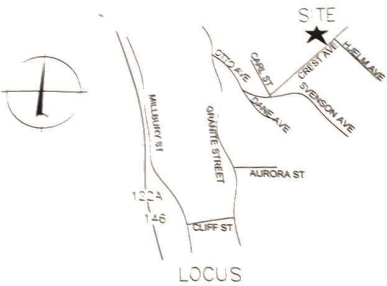
ELIZABETH DUPRE, CIVIL
 ENGINEER RS#1210

(508) 868-0838
 info@clearwater-env.com

0	10	20	40	60
SCALE 1"=20'				
UNLESS OTHERWISE NOTED				
DATE: OCTOBER 13, 2023				
DRAWN BY: ED-SDD	CHECKED BY: SDD-ED	APPROVED BY: ED		
DATE REVISION				
6-28-24 RESOURCE AREA				
DETAILS AND PROTECTION				

FOR CONSERVATION REVIEW SHEET: 1 OF 1

WORCESTER

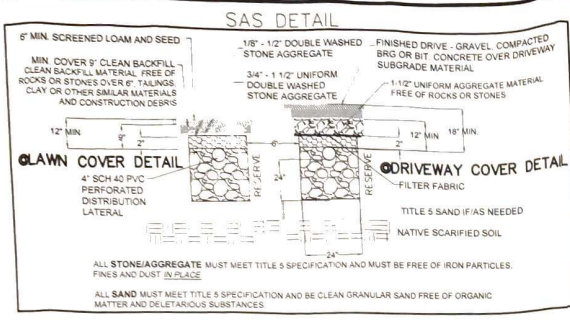


ZONE RS-7
SINGLE FAMILY DWELLING
MIN. LOT 7,000 S.F.
MIN. FRONTAGE 65'
MIN. SETBACKS
FRONT 20'
SIDE 8'
REAR 20'

NOTE TO CONTRACTOR: BUILDING AND ALL SEPTIC SYSTEM COMPONENTS MUST BE STAKED OUT BY THE REGISTERED LAND SURVEYOR

APPLY MAGNETIC TAPE TO ALL BURIED COMPONENTS AND PIPES

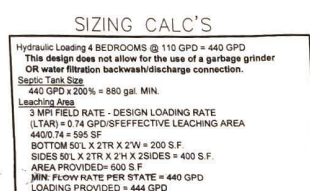
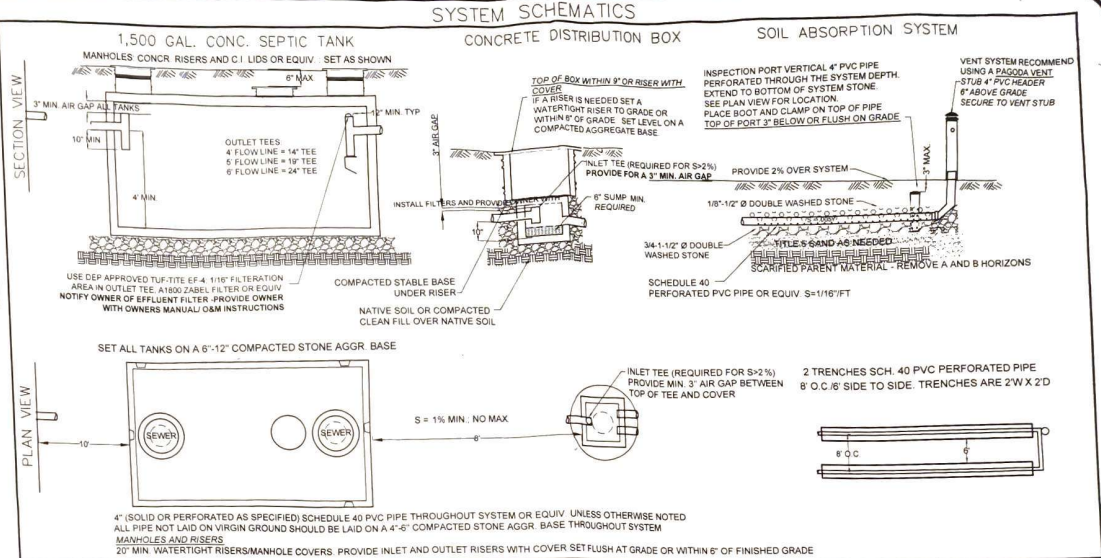
"LOT 2"
SIZE 8,778 S.F.



SCHEDULE OF ELEVATIONS

LOCATION	ELEVATION	FIN. GRADE
FOUNDATION INVERT OUT	585.0	
SEPTIC TANK INVERT IN	584.75	586.5 MIN.; 588.6 MAX.
SEPTIC TANK INVERT OUT	584.5	
PUMP CHAMBER INVERT IN		
PUMP CHAMBER INVERT OUT		
DISTRIBUTION BOX INVERT IN	584.3	
DISTRIBUTION BOX INVERT OUT	584.1	585.9 MIN.; 588.1 MAX.
SAS EXISTING CONTOURS	585 HIGH CONTOUR	
INVERT BEGINNING	583.95	
INVERT END	583.7	586.0 MIN. DRIVE 587.4 MAX. DRIVE
BOTTOM OF SAS	581.7	585.2 MIN. LAWN 587.4 MAX. LAWN
ESTIMATED SEASONAL HIGH WATER	577.67	
BREAKOUT AT 15'	584.45	

NOTE TO CONTRACTOR: REQUIRED: BUILDING AND ALL SEPTIC SYSTEM COMPONENTS MUST BE STAKED OUT BY A REGISTERED LAND SURVEYOR



SOIL EVALUATION DATA & PERC TEST

SOIL EVALUATOR: UZ DUPRE
WITNESSED BY: CEDRIC RICHARDSON
DATE: 10/18/23
APPLICANT: CHRIS HANSEN

TEST PIT # 1 EL. 584 +/-	TEST PIT # 2 EL. 584 +/-
0-40" FILL 40"-52" AS FS. 10PR 3/2 52"-64" BS. 10PR 4/4 64"-76" CLS 10PR 5/4 76"-120" CLS 2.5Y 5/3	0-40" FILL 40"-48" AS FS. 10PR 3/2 48"-55" BS. 10PR 4/4 55"-103" CLS 10PR 5/4
GROUND WATER ELEV (OBSERVED) N/A WITTLING ELEV (OBSERVED) 80" REFUSAL ELEV N/A	GROUND WATER ELEV (OBSERVED) N/A WITTLING ELEV (OBSERVED) 80" REFUSAL ELEV N/A

PERCOLATION TEST DATA

SOIL EVALUATOR: UZ DUPRE
WITNESSED BY: CEDRIC RICHARDSON
DATE: 10/18/23

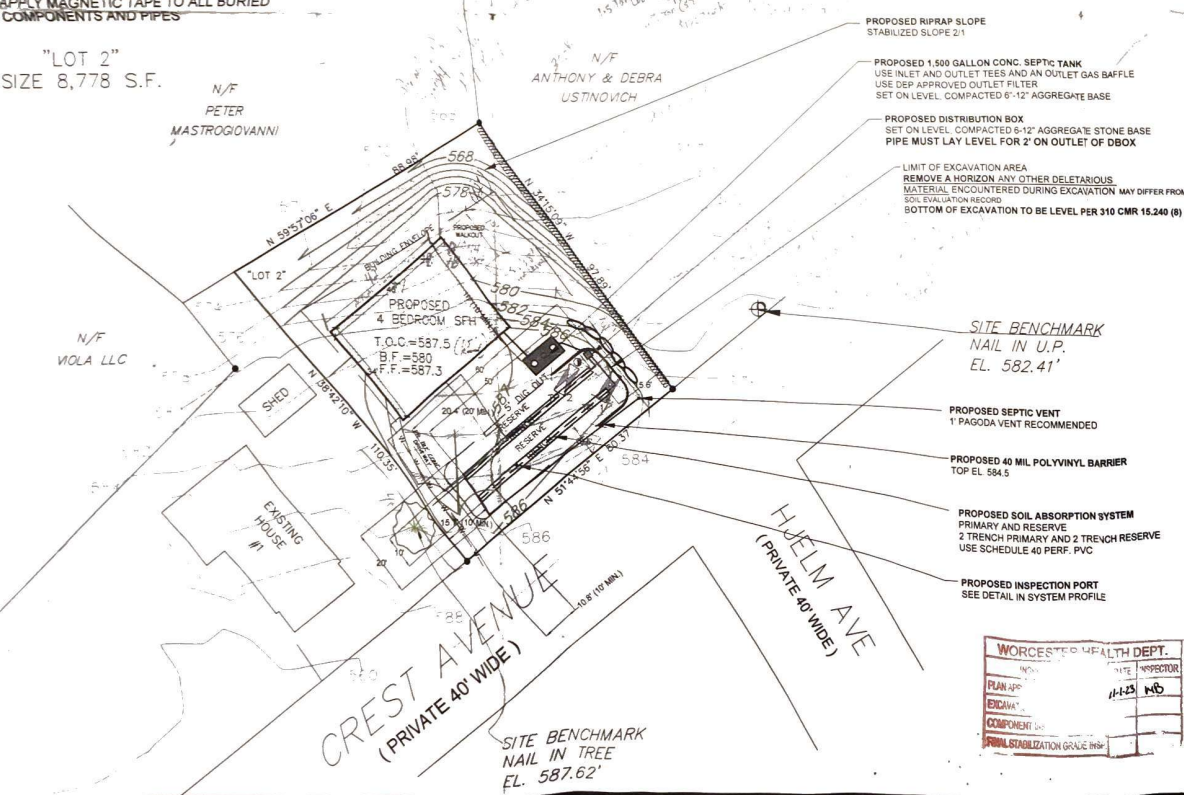
Per#1
DEPTH: 75"
FIELD RATE: 3 MPI
DESIGN RATE: <5 MPI
SOIL CLASSIFICATION: I
L.T.A.R. 0.74 GPD/SF

PLAN REFERENCE
PLAN OF LAND 3 CREST AVE WORCESTER
BY HS&T GROUP DATED 6-2-23 DWG NO. 5599

GENERAL NOTES

- REGULATIONS**
i. This design is in accordance with the latest edition of Commonwealth of Massachusetts regulations 310 CMR 15.000 Title 5, of the State Environmental Code and the requirements of the local Board of Health, unless noted.
ii. The contractor is responsible to comply with all inspections and material requirements of Title 5 and have a valid installer's license.
- CHANGES**
i. Variation from this plan shall be made only with the review and approval from the Engineer and BOH. CONTRACTOR IS REQUIRED TO FOLLOW THE PLAN AND TO MAINTAIN COMPLIANCE WITH REQUIREMENTS OF 310 CMR 15.000 TITLE 5.
ii. The Design Engineer is to be notified of any discrepancies.
- EXCAVATION & BACKFILLING**
i. In excavation of the disposal system distribution area care must be taken to not compact or smear the bottom or sides of the excavation.
ii. All work should be done in favorable weather conditions, but in NO case shall fill or store be placed on wet, smeared or frozen soils.
iii. It is the responsibility of the contractor to contact DIG SAFE before operating machinery on this property.
- GENERAL NOTES**
All known wells and wetlands and water courses within 100' of the septic system are shown or noted.
- INSPECTIONS**
The **CONTRACTOR** shall notify the **Engineer** and the local **Board of Health** at least 24 HOURS PRIOR TO STARTING and to coordinate the following inspections (unless otherwise notified):
1) At completion of the SAS excavation 2) completion of component installation. All pipes and components must be **VISIBLE, magnetic tape in place AND BREAKOUT GRADING IN PLACE** and 3) after backfilling system and components with final grade, with loam and stabilization complete.
- WARRANTY**
The Design Engineers warranty is that the system is designed according to Title 5 and Local Board of Health regulations unless otherwise noted, which would require a variance or local upgrade approval. The intent of this plan is for the septic system design proposal only (which may or may not include the siting of a well). No certification is made with regard to zoning, property line, structure placement or location or retaining walls. Owner is responsible for all permit applications, RLS or PE requirements or certifications and variance or local upgrade requests.

GARBAGE GRINDERS/DISPOSALS ARE PROHIBITED TO DISCHARGE TO THIS SYSTEM



WORCESTER HEALTH DEPT.

PLAN APP	DATE	INSPECTOR
EDICAN	11-13	MB
COMPONENT		
SMALL STABILIZATION GRADE INSH		

APPLICANT
C. R. HANSEN CONSTRUCTION INC
202 BERLIN ROAD
MARLBOROUGH, MA 01752

CONTACT
CHRIS HANSEN
774-245-9060

PROPOSED 4 BEDROOM SEH
ASSESSOR MAP 45 BL 22 P 88
34 CREST AVENUE
WORCESTER, MASSACHUSETTS
PROPOSED SEPTIC SYSTEM DESIGN

CLEAR WATER ENVIRONMENTAL
SEPTIC SYSTEM DESIGN | LAND PLANNING
Serving Greater MA since 1999
87 Bartlett Road
Kittery Point
Maine 03905

ELIZABETH DUPRE, CIVIL ENGINEER, RS#1210

SCALE 1"=20'
UNLESS OTHERWISE NOTED
DATE: OCTOBER 13, 2023

DRAWN BY: ED-SDD CHECKED BY: SDD-ED APPROVED BY: ED

"LOT 2" 3 CREST AVE SHEET 1 OF 1