

MAP 7-1  
LOT 7 #III  
N/F  
HOPKINS, DOUGLAS J.  
& HEATHER C.

REVISED LIMIT OF DISTURBANCE  
(D.E.M. JOINT PERMIT APPROVAL - 10/11/23  
OWTS # 2232-0215, FWW # 22-0455)

MAP 7-1  
LOT 6  
1.57 AC  
68,389 SF  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: AUG 19 2024 FILE # 22-0455  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

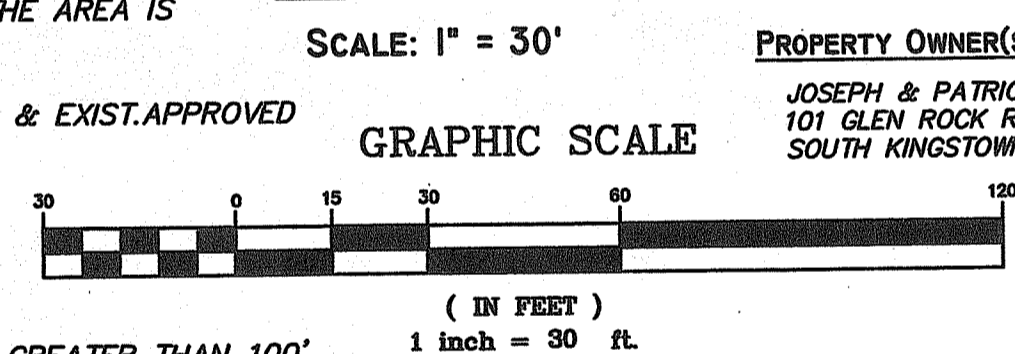
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: AUG 19 2024 FILE # 22-0455  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS  
SPECIFIED IN THE LETTER OF APPROVAL  
DATED: AUG 19 2024 FILE # 22-0455  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

DEM  
FWW APPROVAL  
APPLICATION # 22-0455  
APPROVED - 10/11/23

DEM  
OWTS APPROVAL  
APPLICATION # 2232-0215  
APPROVED - 10/11/23  
C.O.C. - 5/30/24

**PLAN VIEW**  
SCALE: 1" = 30'



PROPERTY OWNER(S) OF RECORD  
JOSEPH & PATRICIA O'BRIEN  
101 GLEN ROCK ROAD  
SOUTH KINGSTOWN, RI 02879

**STORMWATER MANAGEMENT NOTES**

- THE SEASONAL HIGH GROUND WATER TABLE IS 5.0' (T.H.1.) SOIL IN THE AREA IS DETERMINED TO BE A SILT/GRAVELLY MIX WITH CONSIDERABLE LEDGE. REF. SOIL EVAL. PROFILE APPL. #0082-0656 DATED 8/3/11. REFER: 1) EXIST. APPROVED OWTS APPL. #2232-0215. DATED 10/9/23. & EXIST. APPROVED FWW PPL. #22-0655. (JOINT APPL.)
- SEPARATION BETWEEN OWTS SYSTEMS & SURROUNDING WELLS IS GREATER THAN 100'. THE WATER QUALITY VOLUME (WQV) = FIRST 1" OF RUN OFF OF RAINWATER OFF IMPERVIOUS SURFACES.
- THE SIZE & QUANTITY OF THE DRAINAGE EXFILTRATION AREA IS DETERMINED BY THE S.F. OF IMPERVIOUS SURFACES. THIS AREA IS A PRE-CALCULATED SIZE, BASED ON THE PROPOSED DRAINAGE AREA, SOIL TEXTURE & DEPTH.
- THE TOTAL PROP. PERVIOUS DRAINAGE AREA IS CALCULATED TO BE 652 SF. ±, IN TWO DISTINCTLY SEPARATE AREAS:
- A. PROP. DRAINAGE SYSTEM: FRONT (KITCHEN/BEDRM/ENTRY ADDITION=300.19<sup>±</sup> SF) (2) 6" DEEP RAINGARDENS  
D.A. A&B (INVERTS 1,2,3,4) = 2 176(200) SF x 6" DEEP = 50 SF (2) SURFACE AREA (SA)
- B. PROP. DRAINAGE SYSTEM: REAR (GREAT ROOM/BATH/ENTRY/GARAGE ADDITION=352± SF) 1 12" DP. TRENCH D.A. C. (INVERTS 5&6.)  
400 SF x 12" DEEP = 85 SF SURFACE AREA (SA)  
L. 12.9' x W. 6.6' x D. 12"
- THE TRENCH (THE OUTSIDE EDGE OF THE PROPOSED GARAGE ENTRY,) IS 10'+ FROM THE GARAGE FOUNDATION & 17'+ FROM THE OWTS SYSTEM.
- THE BOTTOM OF EXFILTRATION PRACTICES MUST BE SEPARATED BY 2.0' MIN. VERTICALLY FROM THE SHGW. THE BOTTOM OF THE PROP. PRACTICES ARE 42" /> ABOVE THE SHGW.
- THE WATER QUALITY VOLUME (WQV) = FIRST 1" OF RUN OFF OF RAINWATER FROM IMPERVIOUS SURFACES.
- REFERENCE: "SECTION 2.7 L, P.53 (250-RICR-150-10-8) OF THE RICRMP, & RULE (250-RICR-8-16-STANDARD 10) OF THE RIDEM STORMWATER DESIGN & INSTALLATION 7.16 OF THE DEM RULES (stormwater design)."
- THE EXISTING/PROPOSED DRIVEWAY/GARAGE ENTRY WILL COMPRISE 3-6" OF PEA GRAVEL/SIM. OVER A 6-8" GRAVEL/SAND BASE OVER NATIVE SOIL. STORMWATER FLOWS FROM THE GRADE AND INVERTS WILL BE INFILTRATED INTO THE PERVIOUS DRIVEWAY AND PROPOSED DRAINAGE TRENCH., AND PROPOSED RAINGARDENS.
- THE PROPOSED FOUNDATIONS WILL INCLUDE 12-16" WIDE CRUSHED STONE/SAND AROUND THE PERIMETER.
- REFERENCE: FRESHWATER WETLANDS PERMIT - RIDEM APPLICATION NO. 22-0455. REF. RULE 3.7 UNDER THE R.I. FRESHWATER WETLANDS ACT. R.I. GEN. LAWS #2-1-18 ET SEQ.

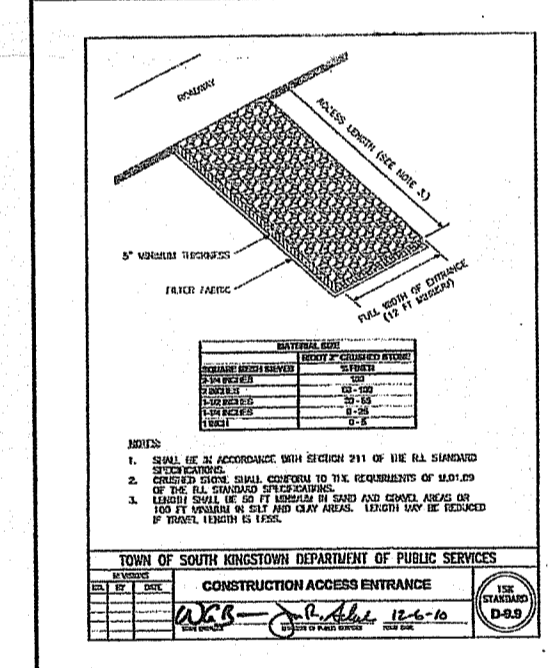
**RAIN GARDEN PLANT LIST**

- PREFERRED PLANT SPECIES TO BE DETERMINED BY R.L.A. @ TIME OF CONSTRUCTION
- |                        |                        |
|------------------------|------------------------|
| ALNUS INCANA           | SPECKLED ALDER(S)      |
| AMELANCHIER CANADENSIS | SERVICEBERRY(S)        |
| BAPTISIA TINCTORIA     | WILD INDIGO(P)         |
| CAREX STRICTA          | BROAD LEAVED SEDGE (G) |
| CAREX PLATYPHYLLA      | TUSSOCK SEDGE (G)      |
| HAMAMELIS VERNALIS     | VERNAL WITCHHAZEL(S)   |
| ILEX GLABRA            | INKBERRY(S)            |
| PRUNUS SEROTINA        | BLACK CHERRY(T)        |
| MYRICA PENSILVANICA    | SMALL BAYBERRY(S)      |
| VIBURNUM DENTATUM      | SMOOTH ARROWWOOD(S)    |

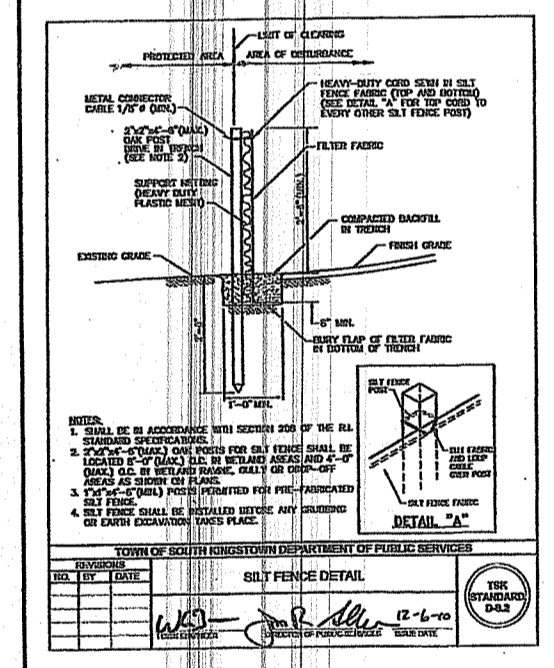
ROBERT C. SCHULTZ JR.  
No. 9242  
REGISTERED PROFESSIONAL ENGINEER

**GENERAL NOTES:**

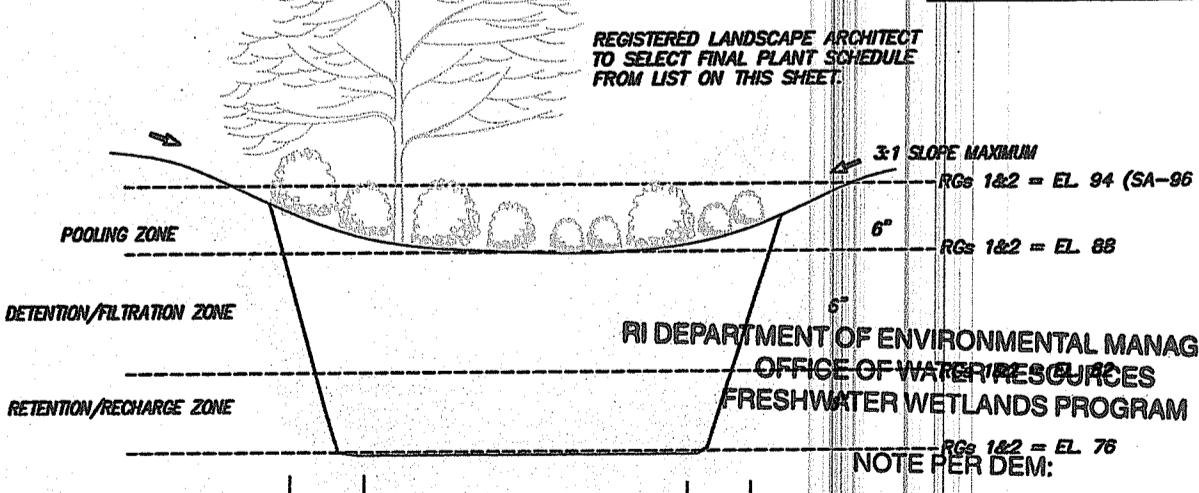
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY & ALL PERMITS REQUIRED BY THE STATE & THE MUNICIPALITY IN WHICH WORK IS BEING PERFORMED PRIOR TO START OF WORK.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DOCUMENT EXISTING CONDITIONS OF SURROUNDING PROPERTIES & TO MAINTAIN THE INTEGRITY OF SAME. ANY DAMAGE TO & THE COST OF REPAIRS OF UTILITIES, ROADWAYS, STRUCTURES & SURROUNDING PROPERTY SHALL BE FULLY BORNE BY THE CONTRACTOR.
- ALL WORKMANSHIP & MATERIALS SHALL MEET OR EXCEED THE LATEST STANDARDS OF THE MUNICIPALITY, AND THE LATEST STATE STANDARDS & SPECIFICATIONS PUBLISHED FOR ROAD & BRIDGE CONSTRUCTION.
- CONTACT DIG-SAFE & UTILITY COMPANIES FOR EXACT ON-SITE LOCATION OF EXISTING UNDERGROUND UTILITIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR SHALL OBTAIN REQUIRED INSPECTION SCHEDULE OF THE MUNICIPALITY, UTILITY COMPANIES & ALL OTHER REQUIRED PARTIES & SHALL STRICTLY ADHERE TO THOSE REQUIREMENTS.
- ALL CONTRACTORS SHALL ADHERE TO ALL CONDITIONS OF CONSTRUCTION APPROVALS & SHALL KEEP A COPY OF ALL APPROVALS ON-SITE DURING CONSTRUCTION. CONTRACTOR SHALL READ ALL APPROVALS PRIOR TO START OF CONSTRUCTION & SHALL CLARIFY ANY QUESTIONS BEFOREHAND.
- THE EXISTING HOUSE IS SERVICED BY A PRIVATE WELL WATER SUPPLY.
- MAXIMUM EXISTING SLOPE GRADE WITHIN L.O.D. = 1-6%±.
- THE TOTAL AREA OF SOIL DISTURBANCE ASSOCIATED WITH THE PROJECT IS 10,980 S.F. ± THE PROPOSED RESIDENTIAL CONSTRUCTION SITE WILL BE SURROUNDED BY TEMPORARY SILT FENCE BARRIERS TO PREVENT SIGNIFICANT IMPACT OR EROSION AND DEPOSITION ALONG ABUTTING ROADS. CLEARING OF NATIVE/NATURAL BRUSH IS RELATIVELY LIMITED TO THE AREA BOUNDED BY THE LIMITS OF SOIL DISTURBANCE. REFER TO THE EROSION CONTROL NOTES.
- THE CONSTRUCTION ACCESS ENTRY FROM GLEN ROCK ROAD IS OVER THE EXISTING PAVED DRIVEWAY TO A PROPOSED GRAVEL DRIVEWAY. WHEN ALL CONSTRUCTION IS COMPLETED, THE STONE DRIVEWAY EXTENSION WILL BE RECONFIGURED FROM THE EXISTING AND RE-GRADED TO BE PART OF THE EXISTING STONE DRIVEWAY. THE PROPOSED 2-3" DEEP CRUSHED STONE EXTENSION, LAID OVER A 6" BED OF GRAVEL/SAND, WILL PROVIDE ADDITIONAL PERVIOUS NATURAL DRAINAGE FOR STORMWATER CONTROL.
- THE STOCKPILE AREA OF 122 SF ± ON THE SITE IS FOR CONSTRUCTION AND RELATED DEBRIS.
- THE UTILITIES SHOWN HEREON ARE THE RESULT OF FIELD LOCATIONS OF VISIBLE STRUCTURES, ACQUIRED AT THE TIME OF FIELD SURVEY & RECORD PLANS ACQUIRED FROM THE UTILITY COMPANIES. WE ACCEPT NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. CALL DIG-SAFE PRIOR TO START OF CONSTRUCTION FOR EXACT UTILITY LOCATIONS
- CALL SOUTH KINGSTOWN DEPT. OF PUBLIC SERVICES @ (401)789-9331x2250 FOR UTILITY MARKOUTS INCLUDING BUT NOT LIMITED TO: SANITARY SEWERS, TOWN WATER SUPPLY, & STORM DRAINS.



**CONSTRUCTION ACCESS PAD**

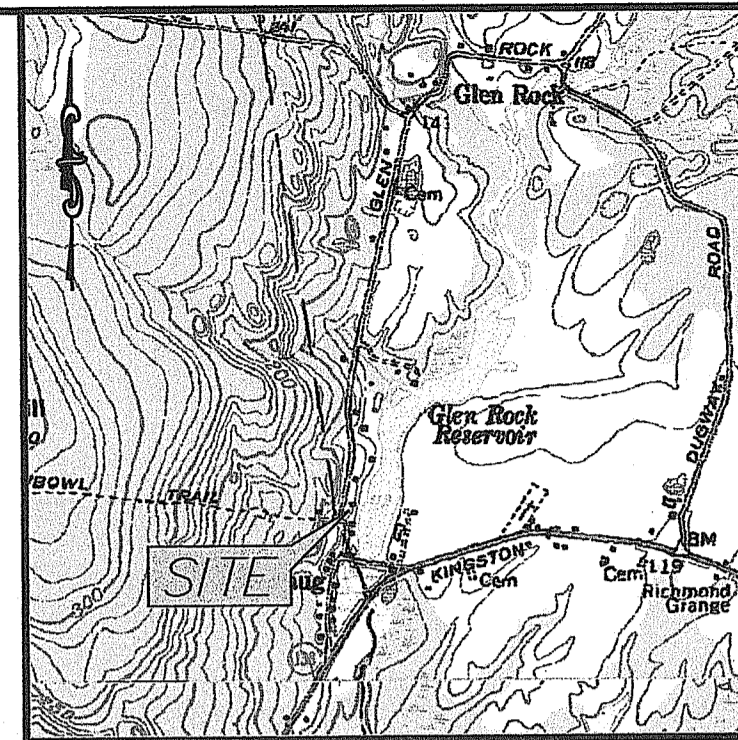


**SILT FENCE**



**RAIN GARDEN DETAIL**  
NOTE: PER DEM.

- RAIN GARDEN NOTES**
- THE PROPOSED RAIN GARDEN SHALL BE PREPARED WITH 6" OF LOAM AND MULCH.
  - BELOW THE LOAM AND SEED SHALL BE 6" OF CLEAN 1.5-2" STONE.
  - THE RAIN GARDEN SHALL BE PLANTED WITH NATIVE SPECIES CONDUCIVE TO POOLING CONDITIONS SUCH AS THOSE INDICATED ON THE UNIVERSITY OF RHODE ISLAND WEBSITE (<http://www.uri.edu/ce/healthylandscapes/raingarden.htm>). SEE RLA PLAN FOR DETAILS.
  - PLANTINGS MAY REQUIRE WATERING IN THE FIRST YEAR DURING DRY PERIODS TO ENSURE THAT THEY ARE PROPERLY ESTABLISHED IN THE RAIN GARDEN. ANY PLANTINGS THAT DO NOT SURVIVE THE FIRST GROWING SEASON SHALL BE REPLACED.
  - FUTURE MAINTENANCE SHALL BE THAT OF A TYPICAL RESIDENTIAL LANDSCAPED BED. PERIODIC WEEDING AND THINNING OR PRUNING SHALL BE REQUIRED AS NECESSARY.



**LOCUS MAP** N.T.S.

**LEGEND**

- EXISTING CONTOUR
- PROPOSED CONTOUR
- ROAD EDGE
- PROPERTY LINE
- ABUTTERS PROPERTY LINE
- EXIST. WATERLINE
- UTILITY POLE
- EXISTING WELL
- TEST HOLE LOCATION
- LOD-SILT FENCE
- WETLANDS (SETBACKS)
- WETLANDS BOUNDARY FLAGS
- STONE WALL

**SOIL EROSION & SEDIMENT CONTROL SITE PLAN FOR PROPOSED ADDITION-I**

PREPARED FOR:  
**JAMES J. O'BRIEN**  
180 MIDDLE RD  
EAST GREENWICH RI 02818

FOR PROPERTY LOCATED ON:  
**101 GLEN ROCK ROAD**  
WEST KINGSTON

IN THE TOWN OF:  
**SOUTH KINGSTOWN, RHODE ISLAND**  
MAP 7-1 / 7-4, LOT 6  
R 40 ZONING

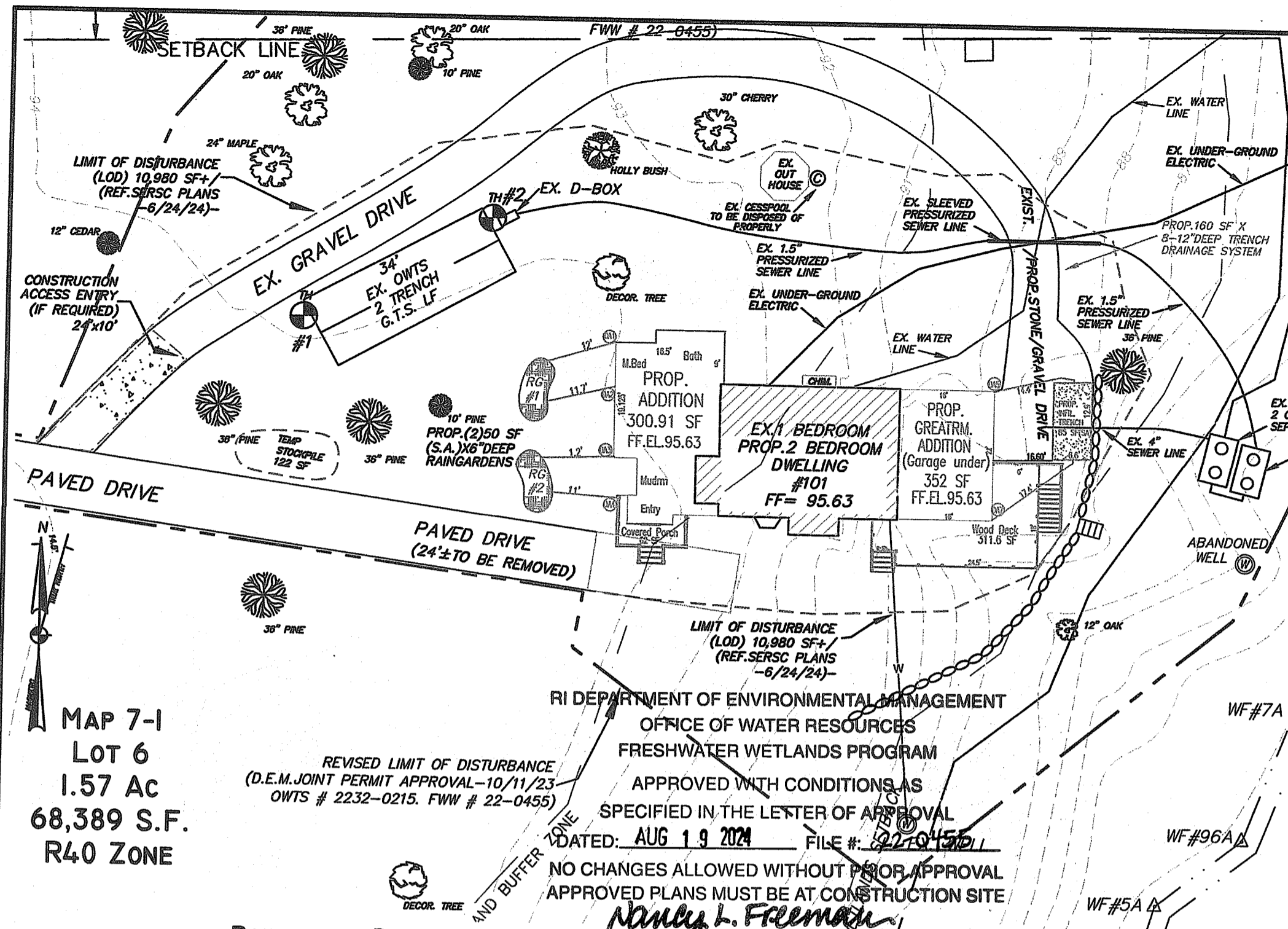
#	DATE	DESCRIPTION	BY
6	6/21/24	SERSC Rev. TOSK ENG.	ZMD
5	6/14/24	SERSC-WQV-reTOSK ENG.	ZMD
4	6/4/24	SERSC PLAN-FOUNDATIONS	ZMD
3	5/30/24	REVISE OWTS LOCATION	AHH
2	3/12/24	ADD ADDITIONAL FTPRINT	ZMD
1	3/3/23	ADD ADDITION	ZMD
#	DATE	DESCRIPTION	BY

DRAWN BY: ZRD/AHH DATE: APRIL 2022

CHECKED BY: RCS Jr DRAWING #: 8466001

JOB #: 8466001 SHEET: 1 OF 2

ENVIRONMENTAL INGENIUM, INC.  
AUG 03 2024  
CIVIL ENGINEERING  
Office of SURVEYING  
CAD DRAFTING

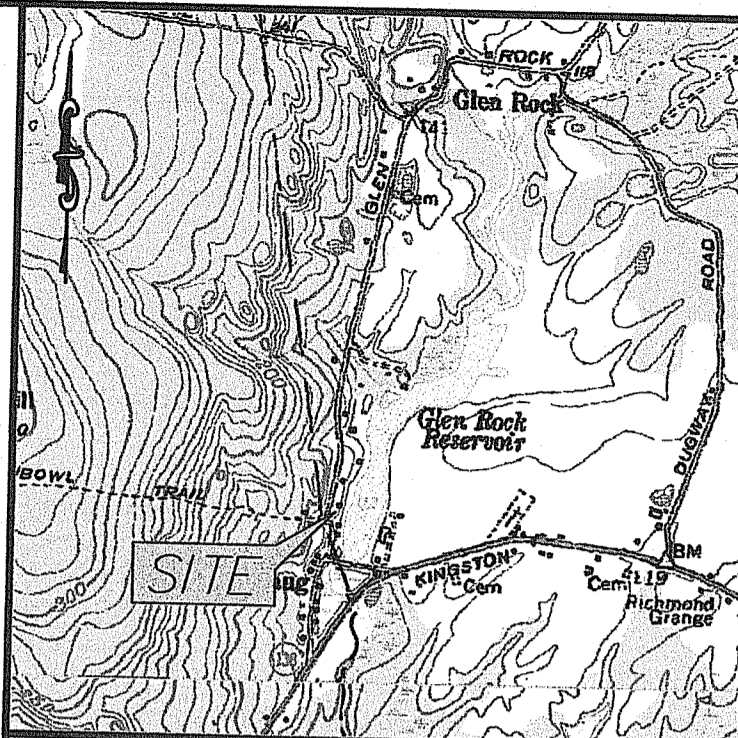


### R40 ZONING DATA

PRINCIPAL BUILDING DETAIL	REQUIRED	EXIST.	PROP.	ACCESSORY	
	REQUIRED	EXIST.	PROP.	REQU.	EXIST. PROP.
LOT FRONTAGE:	150'	210'			
LOT AREA:	40,000 SF	68,389 SF			
MAXIMUM BLDG COVERAGE:	20%	.18%	0.095%		
COVERAGE (SF)	13,677.80	789.47	652.91	445.34	
SETBACKS				(ROOFED AREAS)	
FRONT:	40'	>40'	>40'	NA	NA
CNR SIDE:	NA	NA	NA	NA	NA
SIDE:	20'	>20'	>20'	6'	6'
REAR:	40'	>40'	>40'	6'	6'
HEIGHT:	35'	<35'	<35'		

**DEM**  
OWTS APPROVAL  
APPLICATION # 2232-0215  
APPROVED - 10/11/23  
C.C.C. - 5/30/24

**DEM**  
FWW APPROVAL  
APPLICATION # 22-0455  
APPROVED - 10/11/23



### LOCUS MAP N.T.S.

### LEGEND

- 21 --- EXISTING CONTOUR
- (21) PROPOSED CONTOUR
- ROAD EDGE
- PROPERTY LINE
- ABUTTERS PROPERTY LINE
- W --- EXIST. WATERLINE
- U.P. 24 --- UTILITY POLE
- ⊙ --- EXISTING WELL
- ⊕ --- TEST HOLE LOCATION
- LOD-SILT FENCE
- WF#2 --- WETLANDS(SETBACKS)
- WF#2 --- WETLANDS BOUNDARY FLAGS
- STONE WALL

MAP 7-1  
LOT 6  
1.57 AC  
68,389 S.F.  
R40 ZONE

RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS AS SPECIFIED IN THE LETTER OF APPROVAL DATED: AUG 19 2024 FILE # 22-015211  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Nancy L. Freeman*

### PLANTING & EROSION CONTROL

**EROSION CONTROL PROGRAM:**  
PRIOR TO START OF CONSTRUCTION, STRAWBALES, SILT FENCES & ALL OTHER SPECIFIED EROSION CONTROL FENCES SHALL BE IN PLACE. CRITICAL AREAS SUCH AS WETLAND AREAS, SLOPES & STREAMS SHALL BE PROTECTED AS PER PLAN AND, IN THE PRESENCE OF WETLANDS, THE CONDITIONS OF THE ASSENT ORDER SHALL BE ADHERED TO. THE CONTRACTOR SHALL BE REQUIRED TO ESTABLISH AND FULLY MAINTAIN ALL REQUIRED EROSION AND SEDIMENTATION CONTROLS.

**SEDIMENTATION CONTROL PROGRAM:**  
ALL EXPOSED SLOPES, SHALL RECEIVE TEMPORARY SEDIMENTATION & EROSION CONTROLS. THIS WILL INCLUDE LOAM & SEEDING, MULCHING, HAY MATS, ETC. TO STABILIZE THE AREA. ALL DRAINAGE STRUCTURES SHALL BE SURROUNDED BY STRAWBALES/SILT FENCES TO PREVENT INFILTRATION OF SEDIMENTS. SHOULD SEDIMENTS ENTER A CRITICAL AREA (WETLAND, BUFFER ZONE, ABUTTING PROPERTY) THE CONTRACTOR SHALL IMMEDIATELY CLEAN & RESTORE THE EFFECTED AREA. AFTER CONSTRUCTION, ALL DISTURBED SOILS SHALL BE GRADED SMOOTH TO A SLOPE OF 3:1/LESS AND RE-VEGETATED WITH NATIVE/SITE SUITABLE VEGETATION IMMEDIATELY AFTER CONSTRUCTION, OR TEMPORARILY STABILIZED WITH MULCH, JUTE MATTING OR SIMILAR MEANS UNTIL SEASONAL RE-VEGETATION IS POSSIBLE. ANY EXISTING NATURAL AND/OR NATIVE SHRUBS AS NOTED ON THE SITE PLAN WILL REMAIN.

### SOIL STABILIZATION & PLANTING PROGRAM

**ACCEPTABLE PLANTING MATERIALS:**  
LOAM- THE MATERIAL TO BE FURNISHED SHALL CONSIST OF LOOSE, FRIABLE, SANDY LOAM OR LOAM TOPSOIL FREE OF A MIXTURE OF SUBSOIL, REFUSE STUMPS, ROOTS, ROCKS, BRUSH, WEEDS & OTHER MATERIAL WHICH WILL PREVENT THE FORMATION OF A SUITABLE SEED BED. SEED MIXTURES- ALL LEGUME SEED SHALL BE INOCULATED WITH 24 HOURS BEFORE MIXING & PLANTING WITH THE APPROPRIATE INOCULUM FOR EACH VARIETY. ALL INOCULA SHALL BE FRESH & SHALL BE USED WITHIN THE DATE LIMIT PRESCRIBED BY THE MANUFACTURER.

**FOR RELATIVELY FLAT SLOPES MIX:**

	% BY WEIGHT
RED FESCUE-CHEWINGS PENNLAWN OR CREEPING KENTUCKY BLUEGRASS	70
COLONIAL BENTGRASS (ASTORIA OR EXETER) PERENNIAL RYEGRASS	15
***SEEDING RATE = 100 LBS PER ACRE***	5
	10

**FOR STEEP SLOPES 3:1 OR GREATER MIX:**

	% BY WEIGHT
RED FESCUE-CHEWINGS PENNLAWN OR CREEPING PERENNIAL RYEGRASS	75
COLONIAL BENTGRASS (ASTORIA OR EXETER) BIRDSFOOT TREFLOID (EMPIRE)	5
***SEEDING RATE = 100 LBS PER ACRE***	15

RI Environmental Management  
AUG 19 2024  
Office of Water Resources

**FOR SOD WATERWAYS, DRAINAGE DITCHES & DRAINAGE BASINS MIX:**

	% BY WEIGHT
CREEPING RED FESCUE	50
TALL FESCUE OR REED CANARY GRASS	50
***USE REED CANARY GRASS WHERE MOWING IS NOT REQUIRED***	

THE ACCEPTED PLANTING SEASON SHALL BE BETWEEN APRIL 1ST AND OCTOBER 15. THE CONTRACTOR SHOULD COORDINATE ON ALL DISTURBED AREAS. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR (4) INCHES OF LOAM ON AREAS UP TO 10% IN GRADE. ALL AREAS OVER 10% SHALL RECEIVE A MINIMUM OF SIX (6) INCHES.

REFERENCE IS HEREBY MADE TO THE RHODE ISLAND SOIL EROSION & SEDIMENT CONTROL HANDBOOK PUBLISHED BY THE SOIL CONSERVATION SERVICE. THE GUIDELINES SHOWN THEREIN SHOULD BE INCORPORATED INTO THE CONSTRUCTION PRACTICES ON SITE.

### RAINGARDEN DETAILS

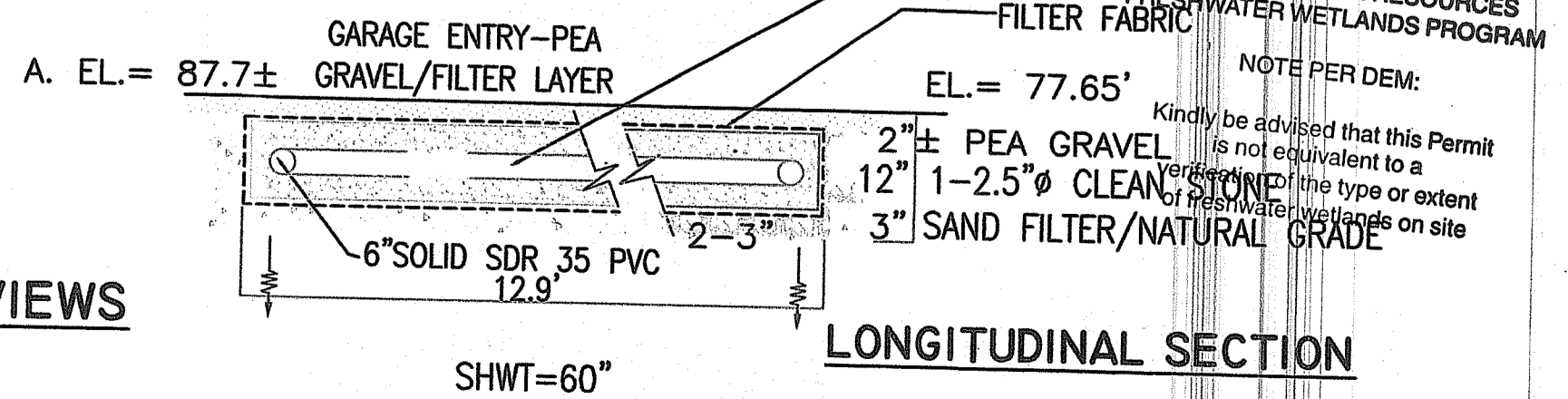
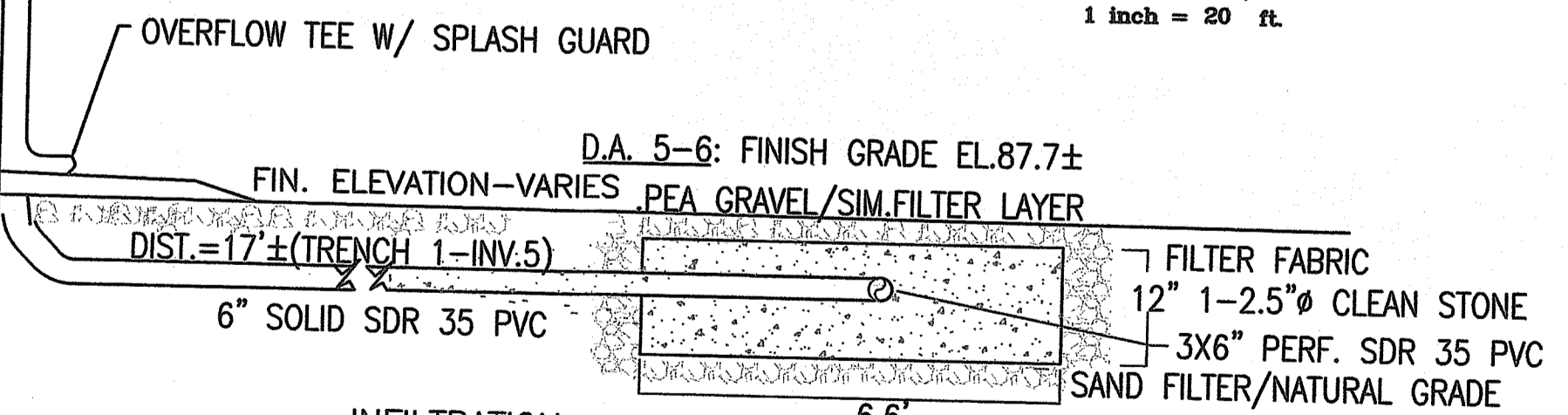
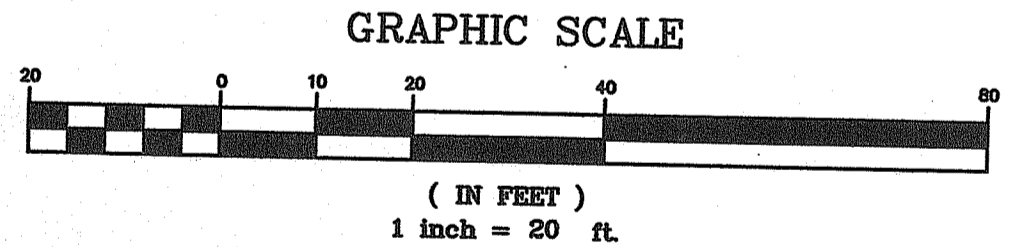
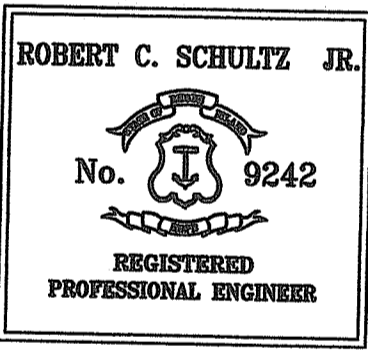
INVERT -HOUSE	INVERT ELEVATION	DISTANCE	RAINGARDEN AREA ELEVATION	DRAINAGE AREA (SF)	TOTAL SF REQU'D.	RAIN GARDEN DEPTH	SURFACE AREA PROV.
DA 1-A1	94	12'	RG 1	300.19 (400)	150 SF (200 SF)	6"	50 SF
A2	93.9	11.7'	94.7		150 SF (200 SF)	6"	50 SF
DA 2-A3	94.25	12'	RG 2	300.19 (400)	150 SF (200 SF)	6"	50 SF
A4	94.25	11'	94.5		150 SF (200 SF)	6"	50 SF

### INFILTRATION TRENCH DETAILS

INVERT -HOUSE	INVERT ELEVATION	DISTANCE	TRENCH ELEVATION	DRAINAGE AREA (SF)	TRENCH DEPTH	TRENCH SIZE-LxW	SURFACE AREA PROV.
5.	88.5	14.40'	87.7	352 (400)	12"	6.6'x12.9'	85 SF
6.	87.3	17.4'	87.2				

### PLAN VIEW

SCALE: 1" = 20'



### INFILTRATION TRENCH VIEWS NOT TO SCALE

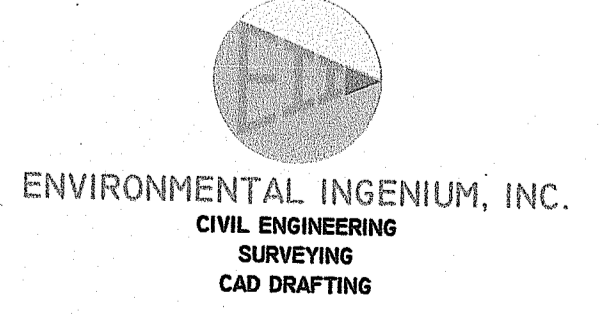
### LONGITUDINAL SECTION

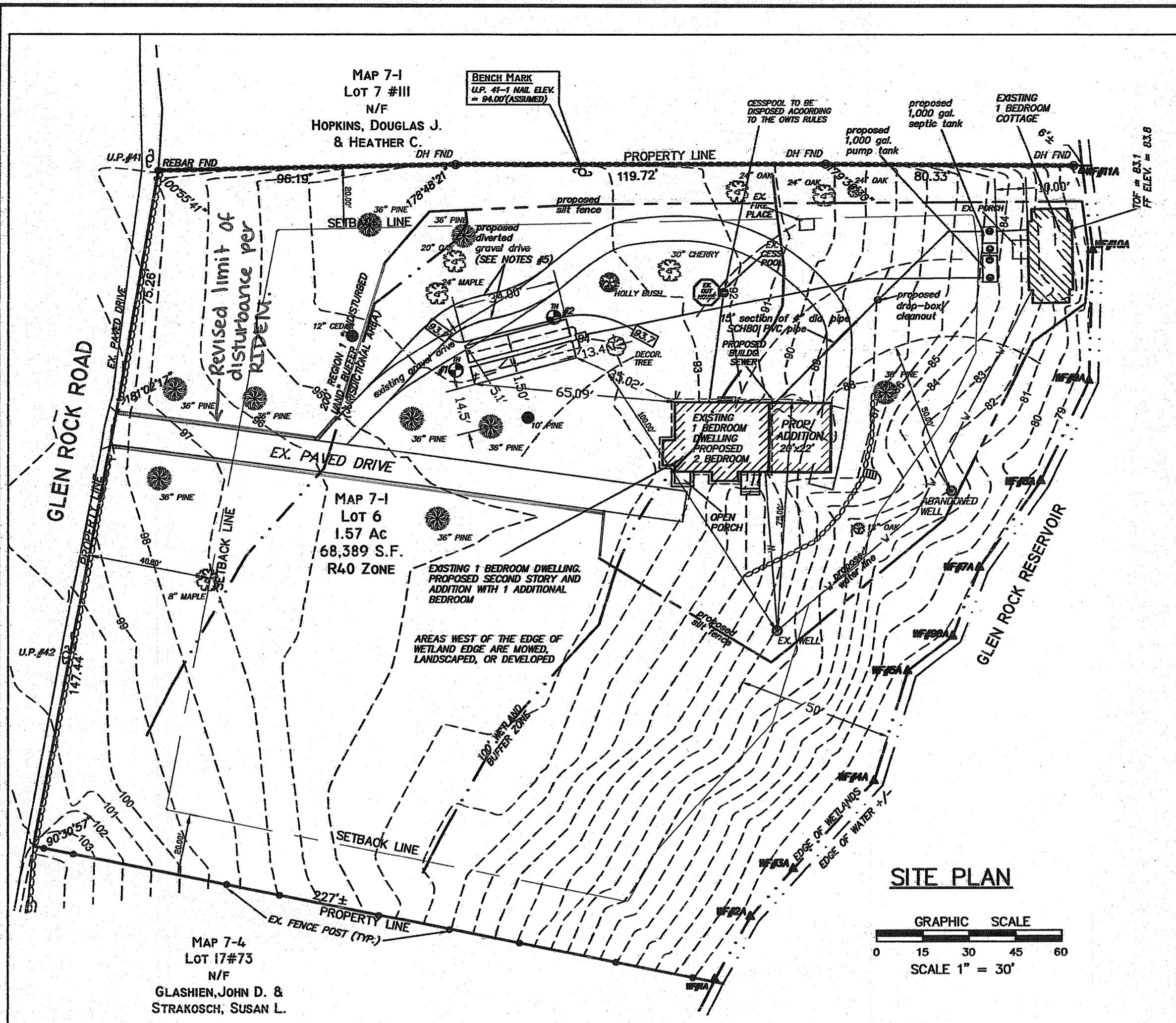
### SOIL EROSION & SEDIMENT CONTROL DETAIL PLAN-2 FOR PROPOSED ADDITION

PREPARED FOR:  
**JAMES J. O'BRIEN**  
180 MIDDLE RD  
EAST GREENWICH RI 02818  
FOR PROPERTY LOCATED ON:  
**101 GLEN ROCK ROAD**  
WEST KINGSTON  
IN THE TOWN OF:  
**SOUTH KINGSTOWN, RHODE ISLAND**  
MAP 7-1 / 7-4, LOT 6  
R 40 ZONING

#	DATE	DESCRIPTION	BY
6	6/21/24	SERSC Rev.TOSK ENG.	ZMD
5	6/14/24	SERSC-WQV-reTOSK ENG.	ZMD
4	6/4/24	SERSC PLAN-FOUNDATIONS	ZMD
3	5/30/24	REVISE OWTS LOCATION	AHH
2	3/12/24	ADD ADDITIONAL FTPRINT	ZMD
1	3/3/23	ADD ADDITION	ZMD
#	DATE	DESCRIPTION	BY

DRAWN BY: ZRD/AHH DATE: APRIL 2022  
CHECKED BY: RCS Jr DRAWING #: 8466001  
JOB #: 8466001 SHEET: 2 OF 2



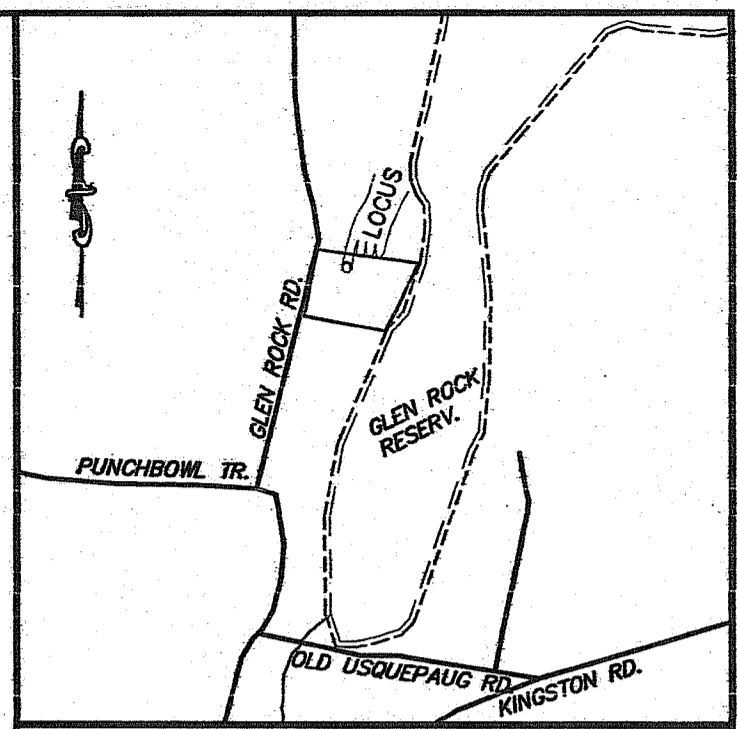


**NOTES**

- 1.) SITE IS NOT LOCATED WITHIN AN IDENTIFIED FLOOD ZONE ACCORDING TO FLOOD INSURANCE RATE MAP FOR THE WASHINGTON COUNTY COMMUNITY PANEL NUMBER 44009C0090J. MAP EFFECTIVE DATE APRIL 3, 2020.
- 2.) SUBJECT SITE DOES NOT LIE WITHIN A NATURAL HERITAGE AREA. SUBJECT SITE DOES NOT LIE WITHIN A CRITICAL RESOURCE AREA.
- 3.) THE DESIGN SHALL BE IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS OF 250-RICR-150-10-6 TITLE 250 - DEPARTMENT OF ENVIRONMENTAL MANAGEMENT CHAPTER 150 - WATER RESOURCES SUBCHAPTER 10 - WASTEWATER & STORMWATER PART 6 - RULES ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF ONSITE WASTEWATER TREATMENT SYSTEMS.  
  
PLANS DETAIL THE LOCATION IF ANY OF ALL WATERCOURSES AND DRAINS WITHIN TWO HUNDRED FEET (200') OF THE PROPOSED OWTS.
- 4.) THE PROPERTY OWNER IS RESPONSIBLE FOR PROPERLY OPERATING AND MAINTAINING THE OWTS, INCLUDING BUT NOT LIMITED TO:  
A. ENSURE THAT THE OWTS IS USED ONLY FOR WASTEWATER IN AMOUNTS THAT DO NOT EXCEED THE DESIGN FLOW;  
i. DO NOT FLUSH DISPOSABLE DIAPERS, SANITARY NAPKINS, OR OTHER SIMILAR ITEMS DOWN THE TOILET.  
ii. USE EXTREME CARE IN DISPOSING OF HOUSEHOLD CHEMICALS. MANY HOUSEHOLD CHEMICALS CAN UPSET THE OPERATION OF SEPTIC SYSTEMS, AND SOME MAY POLLUTE DRINKING WATER SUPPLIES.  
iii. DO NOT USE ACIDS OR ORGANIC SOLVENTS TO ATTEMPT TO UNCLOG SEPTIC SYSTEMS: USE OF SUCH CHEMICALS IS PROHIBITED BY OWTS REGULATIONS.  
B. PROPERLY MAINTAIN THE OWTS, INCLUDING BUT NOT LIMITED TO INSPECTION OF THE OWTS OR PUMPING OF THE SEPTIC TANK AS NEEDED (RECOMMEND - 3 YEAR MAXIMUM);  
C. PROTECT THE OWTS FROM PHYSICAL DISTURBANCE AND ENSURE ALL ACCESS OPENING COVERS ARE SECURED AND MAINTAINED. ENSURE THAT TREES AND SHRUBS ARE NOT GROWING WITHIN THE AREA OF THE LEACHFIELD AND TEN FEET (10') OF THE LEACHFIELD.
- 5.) FOR CRUSHED STONE DRIVEWAY CONSTRUCTION, THE CRUSHED STONE USED MUST BE 3/4 INCH TO 1-1/2 INCH DIAMETER, WASHED, ANGULAR CRUSHED STONE INSTALLED TO A MINIMUM DEPTH OF 3 INCHES. THE GRADE OF THE FINISHED DRIVEWAY SHALL NOT BE HIGHER THAN THE ADJACENT GROUND ELEVATION.

**CLASS III DESIGNER NOTES**

- A. THE INSTALLER IS REQUIRED TO NOTIFY THIS DESIGNER OF INTENTION TO START CONSTRUCTION OR GRADING OF THIS SITE 10 (TEN) DAYS PRIOR TO START OF SITE WORK. THE INSTALLER'S TELEPHONE NUMBER & LICENSE NUMBER SHALL BE FURNISHED TO THIS DESIGNER FOR COORDINATION OF PROPOSED WORK.
- B. SITE LAYOUT & REQUIREMENTS TO BE MADE BY THIS DESIGNER ARE AS FOLLOWS:  
1. STAKEOUT OF LEACHING FIELD.  
2. AND ALL ADDITIONAL CIRCLED TERMS OF APPROVAL AS STATED ON APPROVED OWTS APPLICATION.
- C. THE APPLICANT AND THE INSTALLER ARE RESPONSIBLE FOR ANY AND ALL CHANGES IN THE SHOWN DESIGN & INCLUDE THE FOLLOWING:  
1. NEW APPLICATIONS AS REQUIRED BY DEM GUIDELINES.  
2. AS-BUILT LOCATIONS, REQUIRED PLANS & ALL ASSOCIATED COSTS.  
3. COMMUNICATION OR COORDINATION WITH THIS DESIGNER & STAFF.
- D. THE INSTALLER IS TO PROVIDE DESIGNER W/ MATERIALS RECEIPTS FOR ALL CONSTRUCTION MATERIALS PRIOR TO DESIGNER ISSUING CERTIFICATE OF CONSTRUCTION.
- E. THE ABOVE ARE MINIMUM REQUIREMENTS & SHALL BE REVISED AS THIS DESIGNER DEEMS NECESSARY FOR PROPER FUNCTIONING OF THE SHOWN DESIGN.



**LEGEND**

- 21 — EXISTING CONTOUR
- ⊕ PROPOSED CONTOUR
- ROAD EDGE
- PROPERTY LINE
- - - ABUTTERS PROPERTY LINE
- W EXIST. WATERLINE
- U.P. 24' UTILITY POLE
- ⊙ EXISTING WELL
- ⊙ TEST HOLE LOCATION
- ⊖ STONE WALL

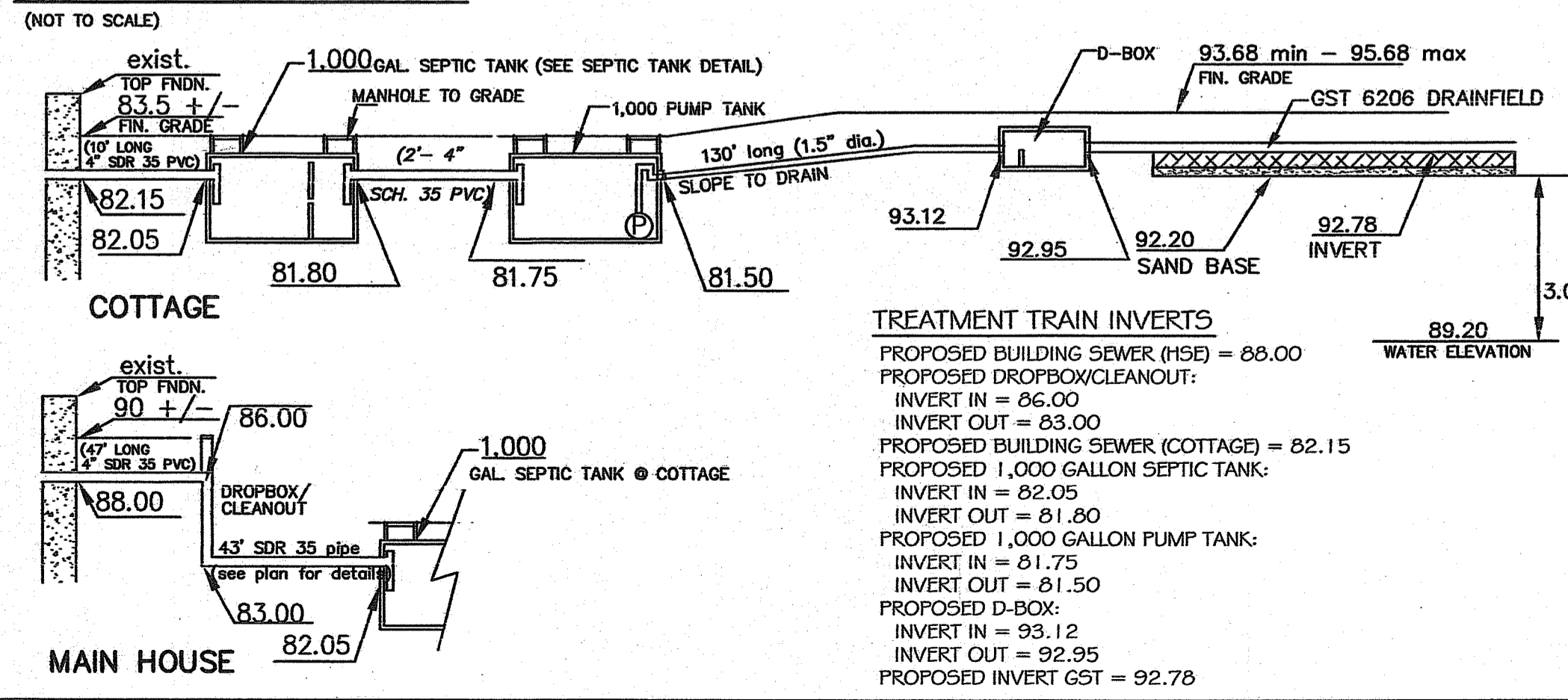
**SITE PLAN FOR PROPOSED REMODEL**

PREPARED FOR:  
**JAMES J. O'BRIEN**  
180 MIDDLE RD  
EAST GREENWICH RI 02818

FOR PROPERTY LOCATED ON:  
**101 GLEN ROCK ROAD**  
WEST KINGSTON

IN THE TOWN OF:  
**SOUTH KINGSTOWN, RHODE ISLAND**  
MAP 7-1 / 7-4, LOT 6  
R 40 ZONING

**TYPICAL SYSTEM PROFILE**

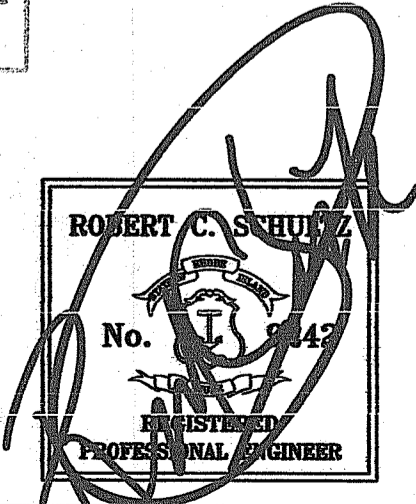


**R40 ZONING DATA**

PRINCIPAL BUILDING DETAIL	REQUIRED	EXIST.	PROP.	ACCESSORY	
				REQU.	EXIST. PROP.
LOT FRONTAGE:	150'	210'			
LOT AREA:	40,000 SF	68,389 SF			
MAXIMUM LOT COVERAGE:	20%	17.61%	17.61%		
SETBACKS					
FRONT:	40'	XXX'	XXX'	NA	
CNR SIDE:	NA	XXX'	XXX'	NA	
SIDE:	20'	XXX'	XXX'	6'	
REAR:	40'	XXX'	XXX'	6'	
HEIGHT:	35'				

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
OWTS & FRESHWATER WETLANDS  
JOINT PERMIT APPROVAL

OWTS# 2232-0215 FORM# 22-0455  
APPROVED: [Signature] DATE 10/11/23  
No Changes Allowed Without RIDEM Approval  
Approved Plans/Permit Must Be Kept at Construction Site



#	DATE	DESCRIPTION	BY
1	9/21/23	PER RIDEM	EPS

DRAWN BY: ZRD/AHH DATE: JULY 21, 2023  
CHECKED BY: WGII DRAWING #: 84660018466001  
JOB #: 8466001 SHEET: 1 OF 2

**ENVIRONMENTAL PLANNING & SURVEYING, INC.**  
CIVIL ENGINEERING  
SURVEYING  
CAD DRAFTING

52 DUGWAY BRIDGE RD., WEST KINGSTON, RI 02892 (401) 789-3628

**DRAINFIELD DESIGN**

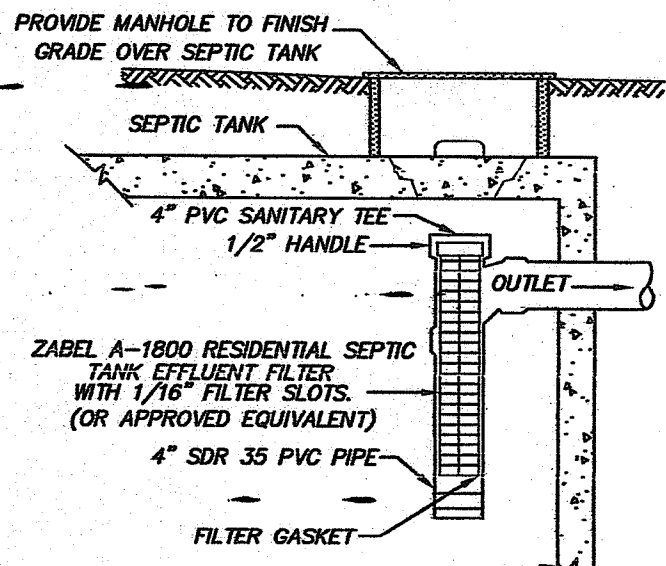
APPROVED ESHWT = 60"  
USING GST 6206:

MAX. EXIST. GROUND ELEV. @ DRAINFIELD = 94.2  
SHWT: 94.2 - 5.00' = 89.2  
MIN. GST BASE: 89.2 + 3.0' = 92.2  
DESIGN BASE OF GST: 92.2  
DESIGN INVERT: 92.78  
TOP OF 4" PIPE: 93.18  
MINIMUM COVER 93.68  
MAXIMUM COVER 95.68

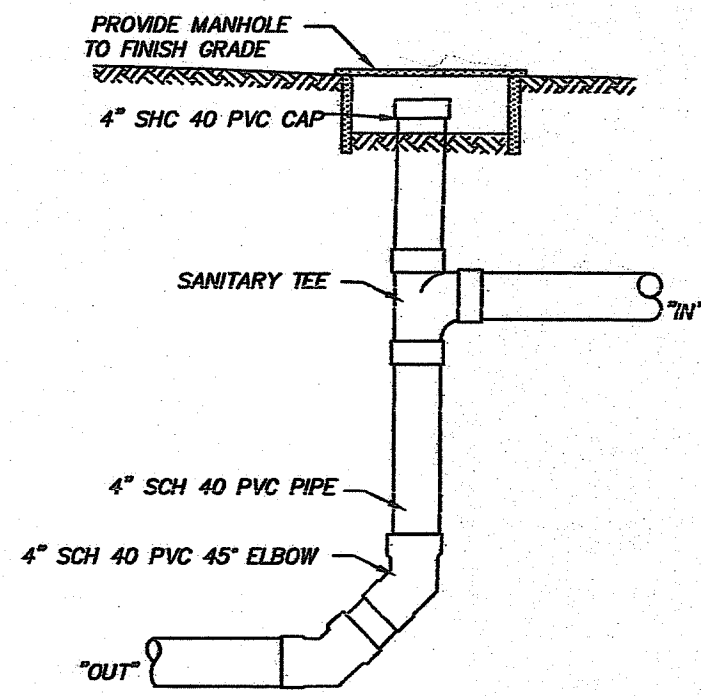
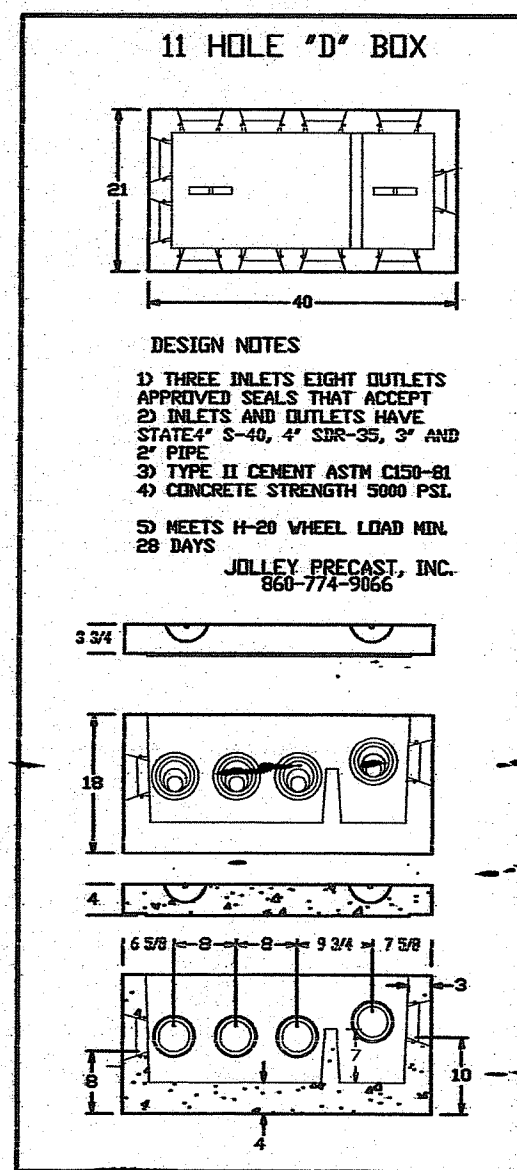
MOST RESTRICTIVE SOIL CATEGORY IS "7" WITHIN 5' OF BASE OF DRAINFIELD  
(DESIGN ON 0.52 GAL/S.F./DAY)

PROPOSED 3 BEDROOM TOTAL  
3 BED \* 115 GAL/BED/DAY = 345 GAL/DAY  
345 GAL/DAY / 0.52 GAL/S.F./DAY = 663.5 S.F. REQUIRED  
GST 6206 DRAINFIELD:  
663.5 S.F. / 10.3 S.F./L.F. = 64.4 L.F. (USE 68 L.F.)

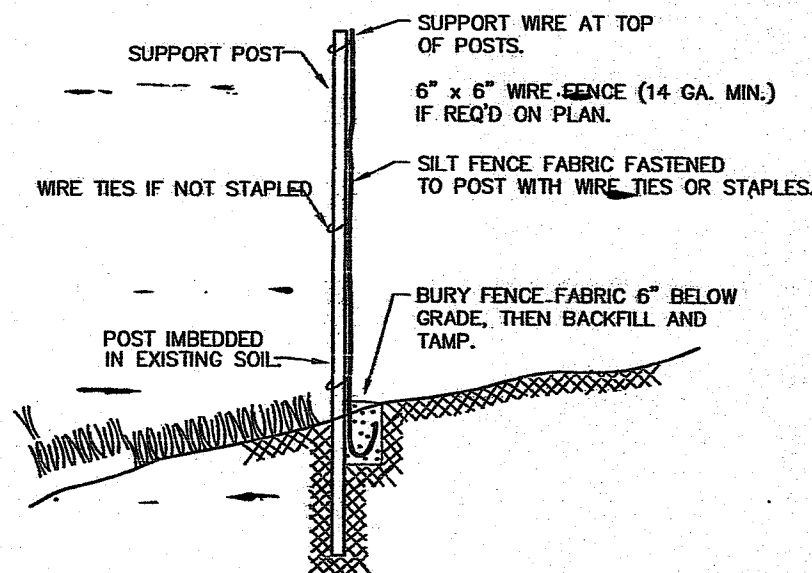
TOTAL AREA PROVIDED =  
[(2 X 34 L.F. X 10.3 S.F./L.F.) = 700.4 S.F. (> 663.5 S.F. REQUIRED)]



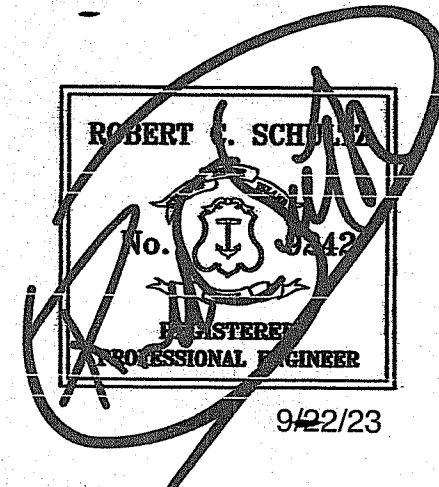
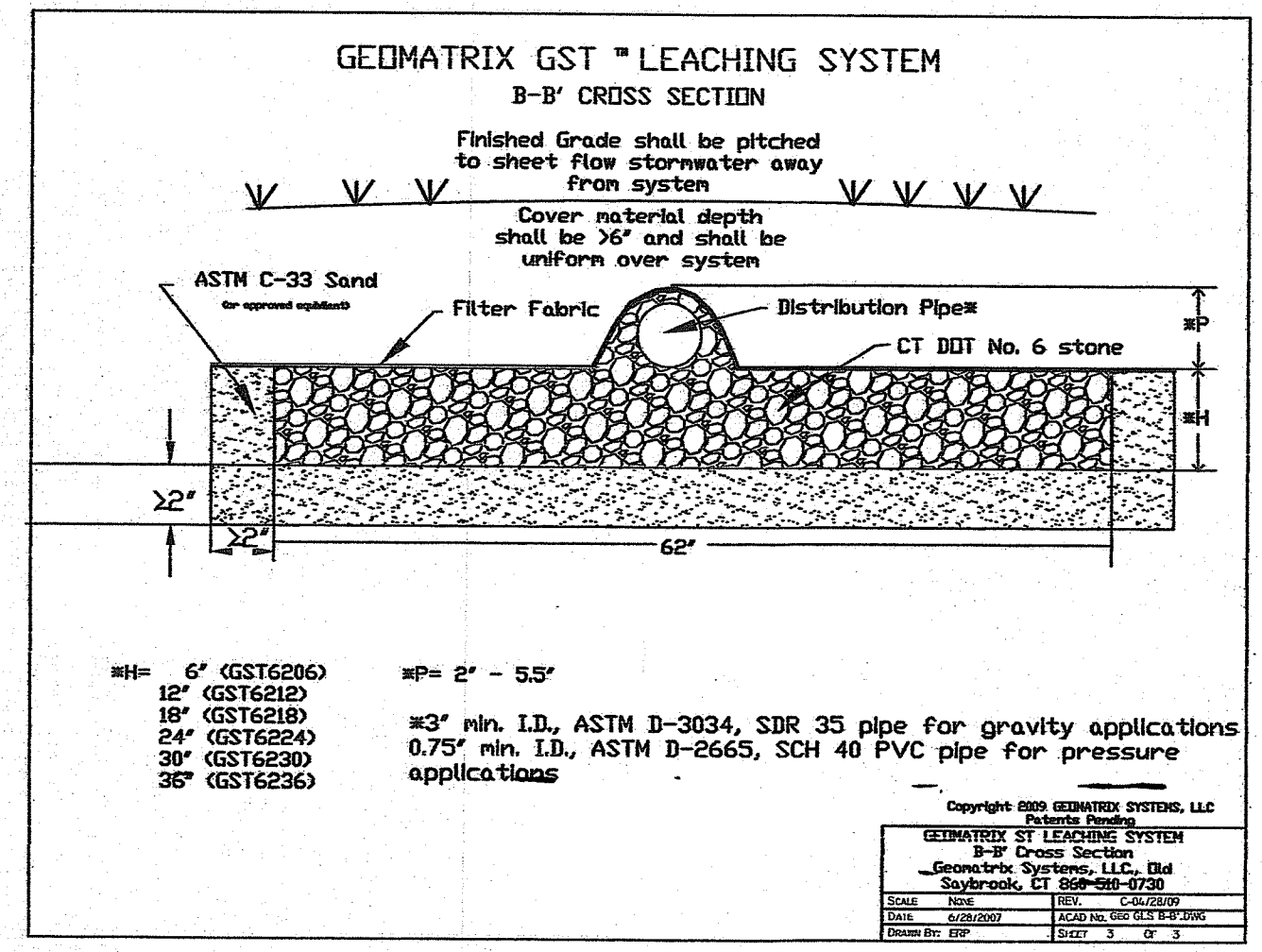
**SEPTIC TANK FILTER**  
- NOT TO SCALE



**DROP BOX & CLEAN-OUT**  
NOT TO SCALE



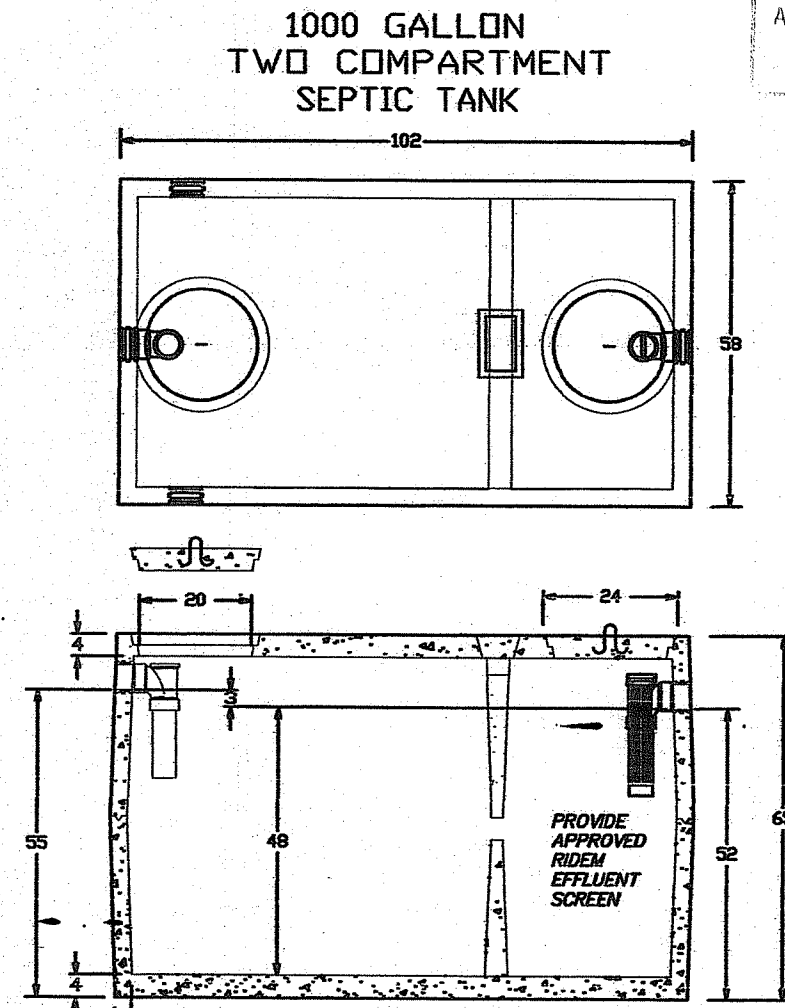
**SILT FENCE DETAIL**  
SCALE: NONE



**PUMP AND CONTROLS:**  
PUMP SHALL BE ORENCO SYSTEMS MODEL PFEF40-B OR APPROVED EQUIVALENT.  
CONTROL PANEL SHALL BE ORENCO SYSTEMS S-SERIES SIMPLEX CONTROL PANEL, MODEL S1 ETMCT (OR APPROVED EQUIVALENT).

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
OWTS & FRESHWATER WETLANDS  
JOINT PERMIT APPROVAL

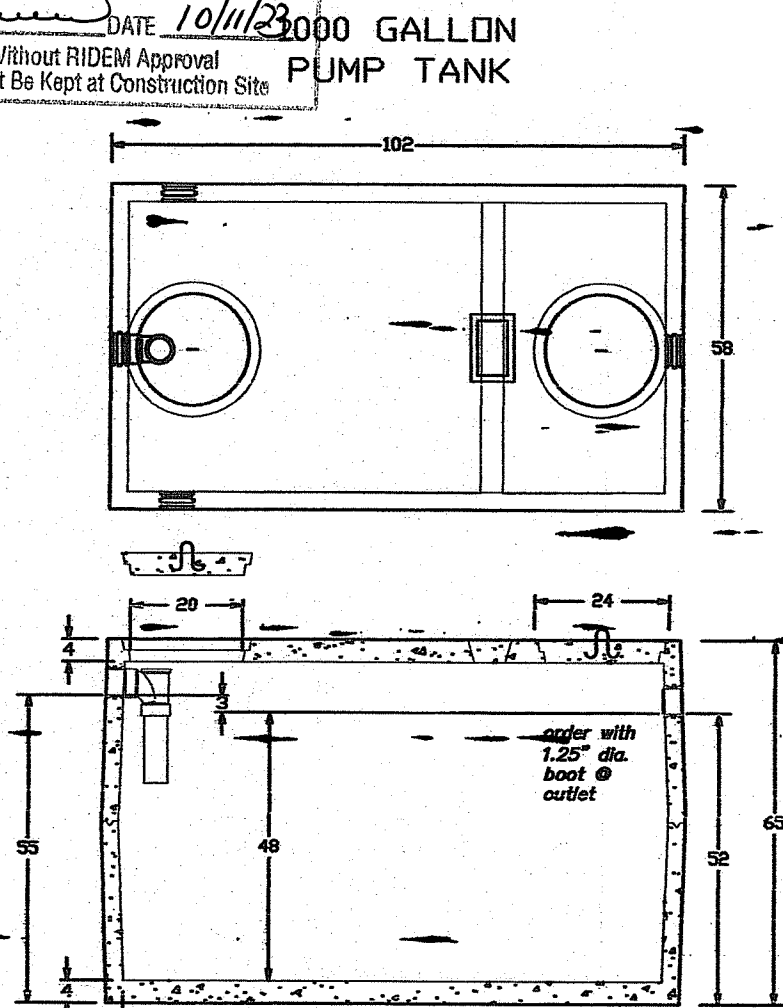
OWTS# 2232-0215 PERMIT# 22-0455  
APPROVED: [Signature] DATE: 10/11/23  
No Changes Allowed Without RIDEM Approval  
Approved Plans/Permit Must Be Kept at Construction Site



**DESIGN NOTES**

- 1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT
- 2) ALL INLETS AND OUTLETS HAVE STATE APPROVED SEALS
- 3) AVAILABLE OUTLET FILTER SHOWING
- 4) MEETS ASTM C 1227-97A
- 5) CONCRETE STRENGTH 5000 PSL MIN. 28 DAYS

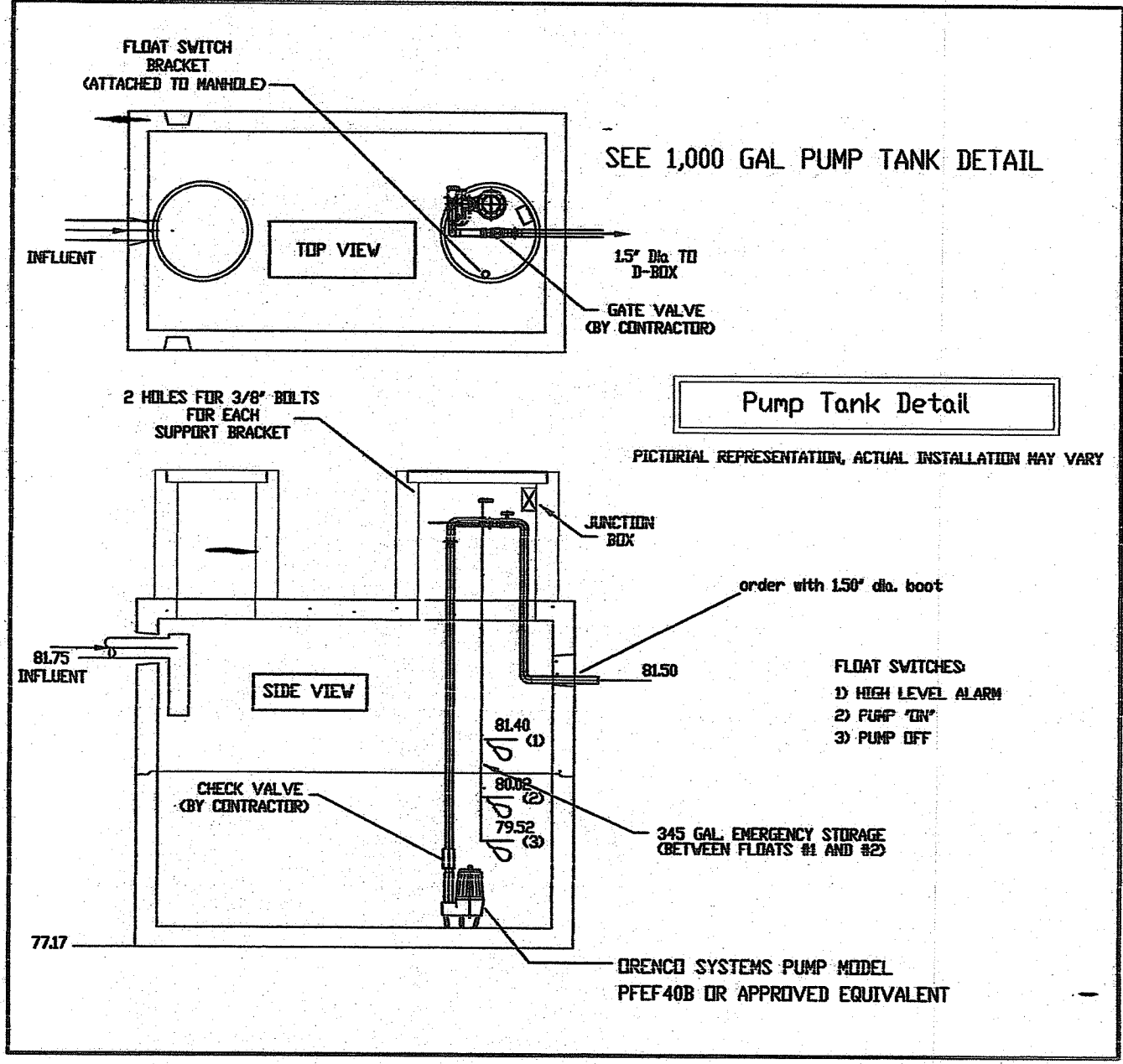
JOLLEY PRECAST, INC.  
860-774-9066



**DESIGN NOTES**

- 1) ALL JOINTS SEALED WITH BUTYL RUBBER SEALANT
- 2) ALL INLETS AND OUTLETS HAVE STATE APPROVED SEALS
- 3) AVAILABLE OUTLET FILTER SHOWING
- 4) MEETS ASTM C 1227-97A
- 5) CONCRETE STRENGTH 5000 PSL MIN. 28 DAYS

JOLLEY PRECAST, INC.  
860-774-9066



**SITE PLAN FOR PROPOSED REMODEL**

PREPARED FOR:  
**JAMES J. O'BRIEN**  
180 MIDDLE RD  
EAST GREENWICH RI 02818

FOR PROPERTY LOCATED ON:  
101 GLEN ROCK ROAD  
WEST KINGSTON

IN THE TOWN OF:  
SOUTH KINGSTOWN, RHODE ISLAND  
MAP 7-1 / 7-4, LOT 6  
R 40 ZONING

#	DATE	DESCRIPTION	BY
1	9/21/23	PER RIDEM	EPS

DRAWN BY: ZRD/AHH DATE: JULY 21, 2023  
CHECKED BY: WGM DRAWING #: 84660018466001  
JOB #: 8466001 SHEET: 2 OF 2



**ENVIRONMENTAL PLANNING & SURVEYING, INC.**  
CIVIL ENGINEERING  
SURVEYING  
CAD DRAFTING