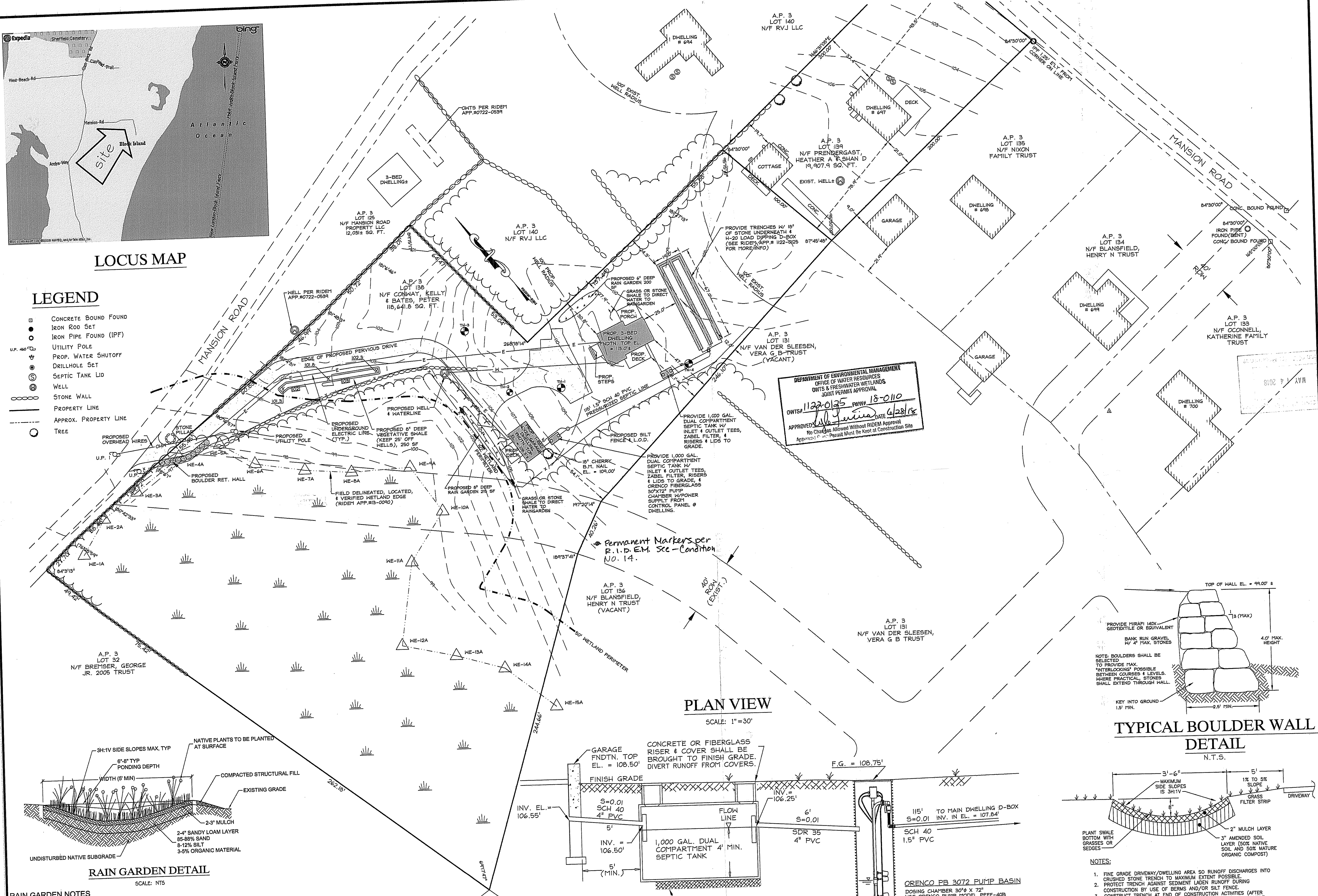


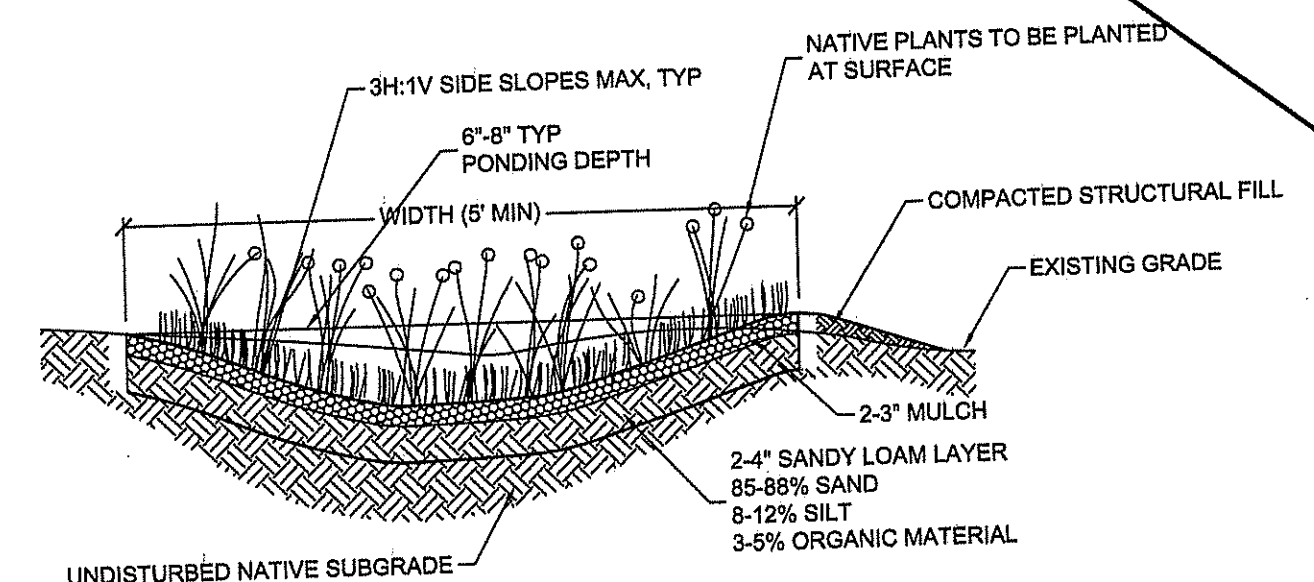
LOCUS MAP

**LEGEND**

- CONCRETE BOUND FOUND
- IRON ROD SET
- IRON PIPE FOUND (IPF)
- UTILITY POLE
- PROP. WATER SHUTOFF
- DRILLHOLE SET
- SEPTIC TANK LID
- WELL
- STONE WALL
- PROPERTY LINE
- APPROX. PROPERTY LINE
- TREE



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



**RAIN GARDEN DETAIL**  
SCALE: NTS

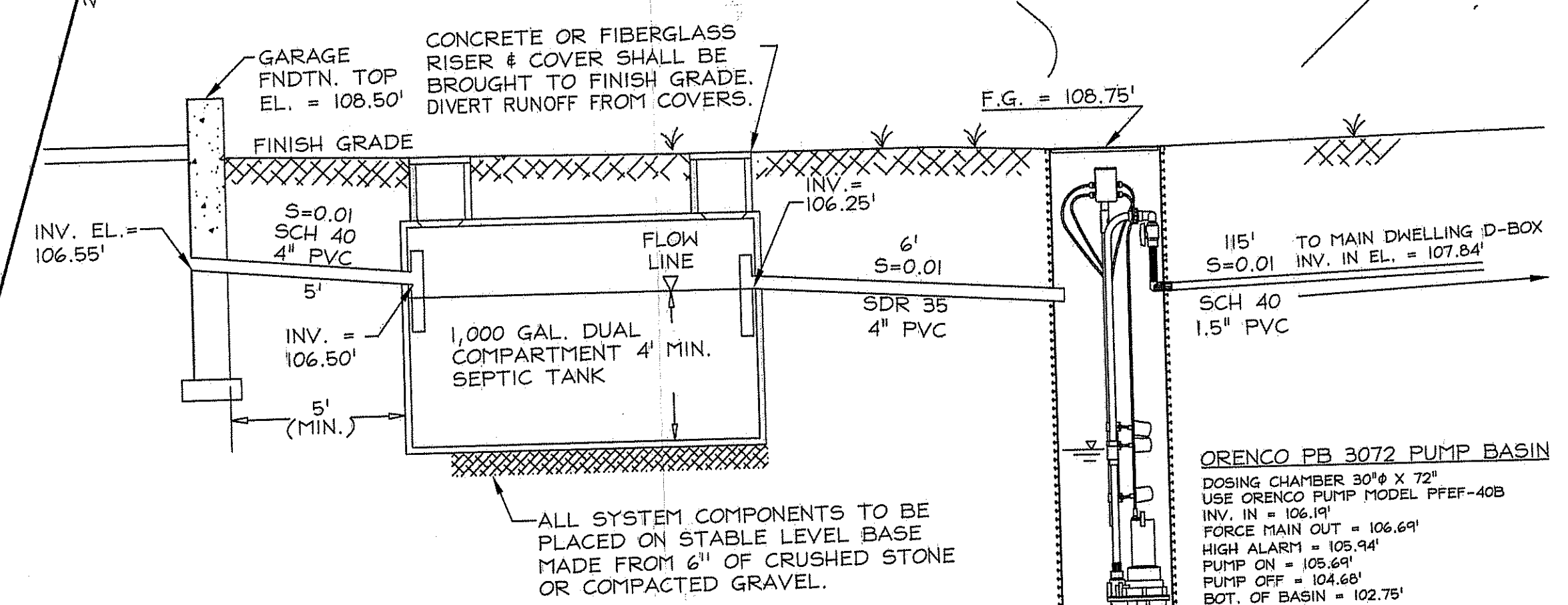
**RAIN GARDEN NOTES**

DESIGN NOTES:

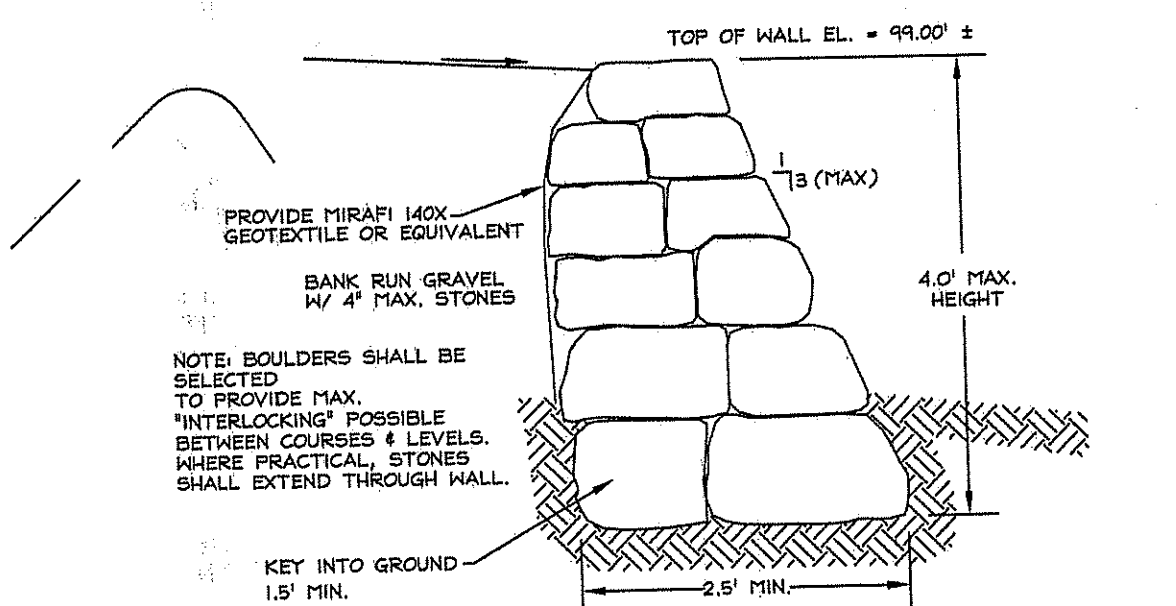
- PLANTINGS - NATIVE PLANTS ARE PREFERRED, BECAUSE NON-NATIVE AND INVASIVE SPECIES CAN REPRODUCE DOWNSTREAM TO DAMAGE HABITAT AND CHANGE HYDROLOGY. IF NON-NATIVES ARE CHOSEN, BE SURE THAT THEY WILL NOT DAMAGE DOWNSTREAM WATERWAYS.

CONSTRUCTION NOTES:

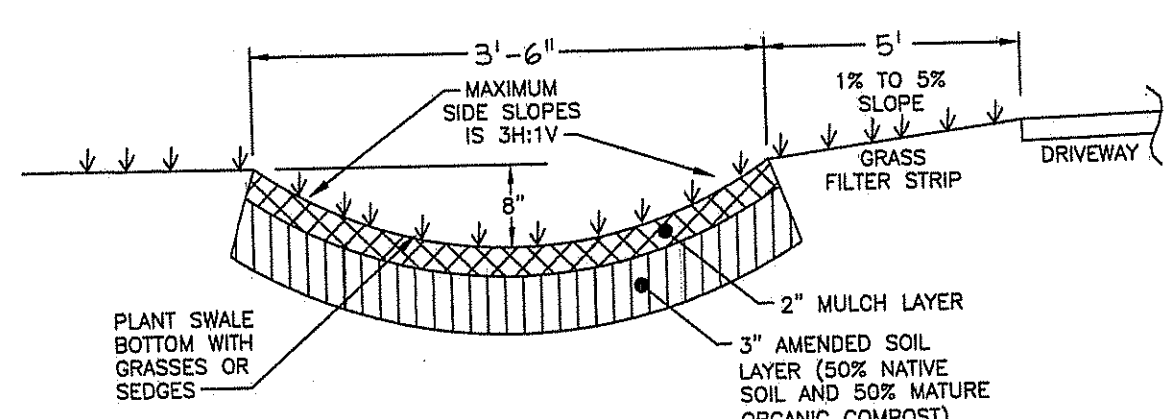
- CONVEY WATER TO THE RAIN GARDEN VIA SHALLOW, GRASSED OR STONED, CONVEYANCE SWALES.
- BUILD AND VEGETATE RAIN GARDEN AS EARLY AS POSSIBLE TO ESTABLISH PLANTINGS BEFORE DIRECTING STORMWATER RUNOFF TO IT OR DIVERT STORMWATER AROUND FACILITY.
- THE AREA OF THE RAIN GARDEN SHALL BE FENCED OFF FROM THE FIRST DAY OF EARTH MOVING UNTIL PROJECT COMPLETION TO PREVENT COMPACTION OF THE SUBGRADE, DIRT TRACKING ONTO ANY LAYER OF THE FACILITY, AND STOCKPILING OF CONSTRUCTION MATERIALS THAT MAY CLOG THE SURFACE.
- DURING EXCAVATION OF NATIVE SOILS TO THE BOTTOM OF THE FACILITY, RAINFALL MAY CAUSE FINES TO CLOG THE SURFACE OF THE FACILITY. IF THIS OCCURS DURING CONSTRUCTION, HAND RAKE THE SURFACE TO A DEPTH OF 3" TO RESTORE INFILTRATION CAPACITY.
- STONE SHALL BE PLACED AT THE ENTRANCE TO THE RAIN GARDEN TO MINIMIZE EROSION AND FILTER THE STORMWATER RUNOFF.



**TYPICAL PROFILE OF SYSTEM FROM GARAGE DWELLING**



**TYPICAL BOULDER WALL DETAIL**  
N.T.S.



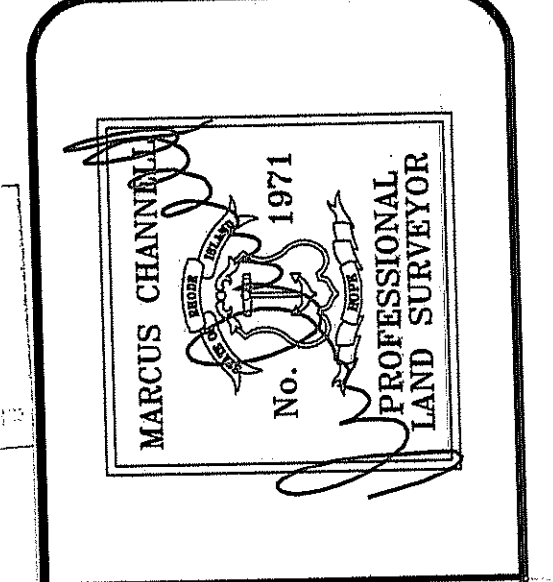
**VEGETATIVE SWALE DETAIL**  
NOT TO SCALE

- NOTES:**
- FINE GRADE DRIVEWAY/DWELLING AREA SO RUNOFF DISCHARGES INTO CRUSHED STONE TRENCH TO MAXIMUM EXTENT POSSIBLE.
  - PROTECT TRENCH AGAINST SEDIMENT LADEN RUNOFF DURING CONSTRUCTION BY USE OF BERMS AND/OR SILT FENCE.
  - CONSTRUCT TRENCH AT END OF CONSTRUCTION ACTIVITIES (AFTER DRIVEWAY IS CONSTRUCTED AND WHEN DWELLING IS NEAR COMPLETE).
  - KEEP SWALES 25 FEET AWAY FROM DRINKING WATER WELLS.
  - MAXIMUM LONGITUDINAL SLOPE OF SWALE SHALL BE 4%.
  - A MAXIMUM PONDING DEPTH OF 1 FOOT SHOULD BE MAINTAINED AT THE LONGITUDINAL MIDPOINT OF THE VEGETATED SWALE AND A MAXIMUM DEPTH OF 18 INCHES AT THE END POINT.

**NEW ONSITE WASTEWATER TREATMENT SYSTEM RE-DESIGN**

A.P. 3, LOT 138  
MANSION ROAD  
NEW SHOREHAM, RHODE ISLAND

Prepared For:  
KELLY CONWAY & PETER BATES



**ATLAS LAND SURVEYING, LLC**  
PROPERTY & CONSTRUCTION SURVEYING & MAPPING

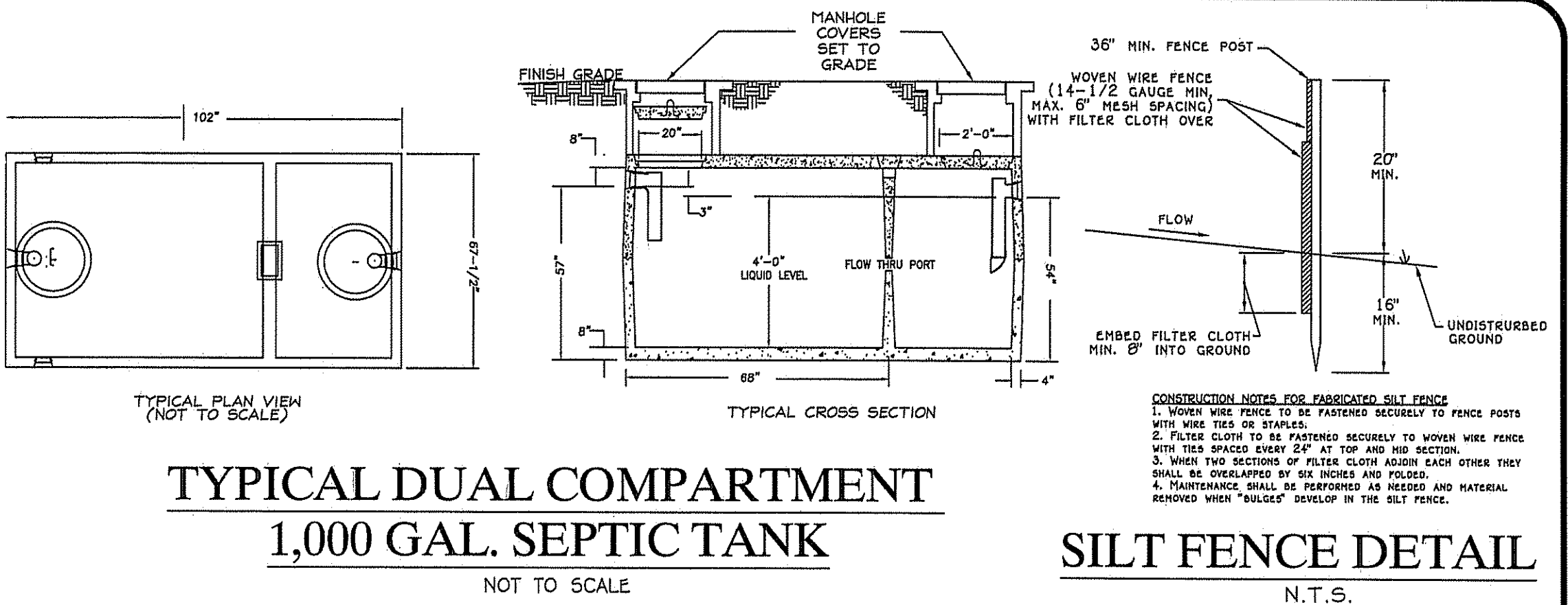
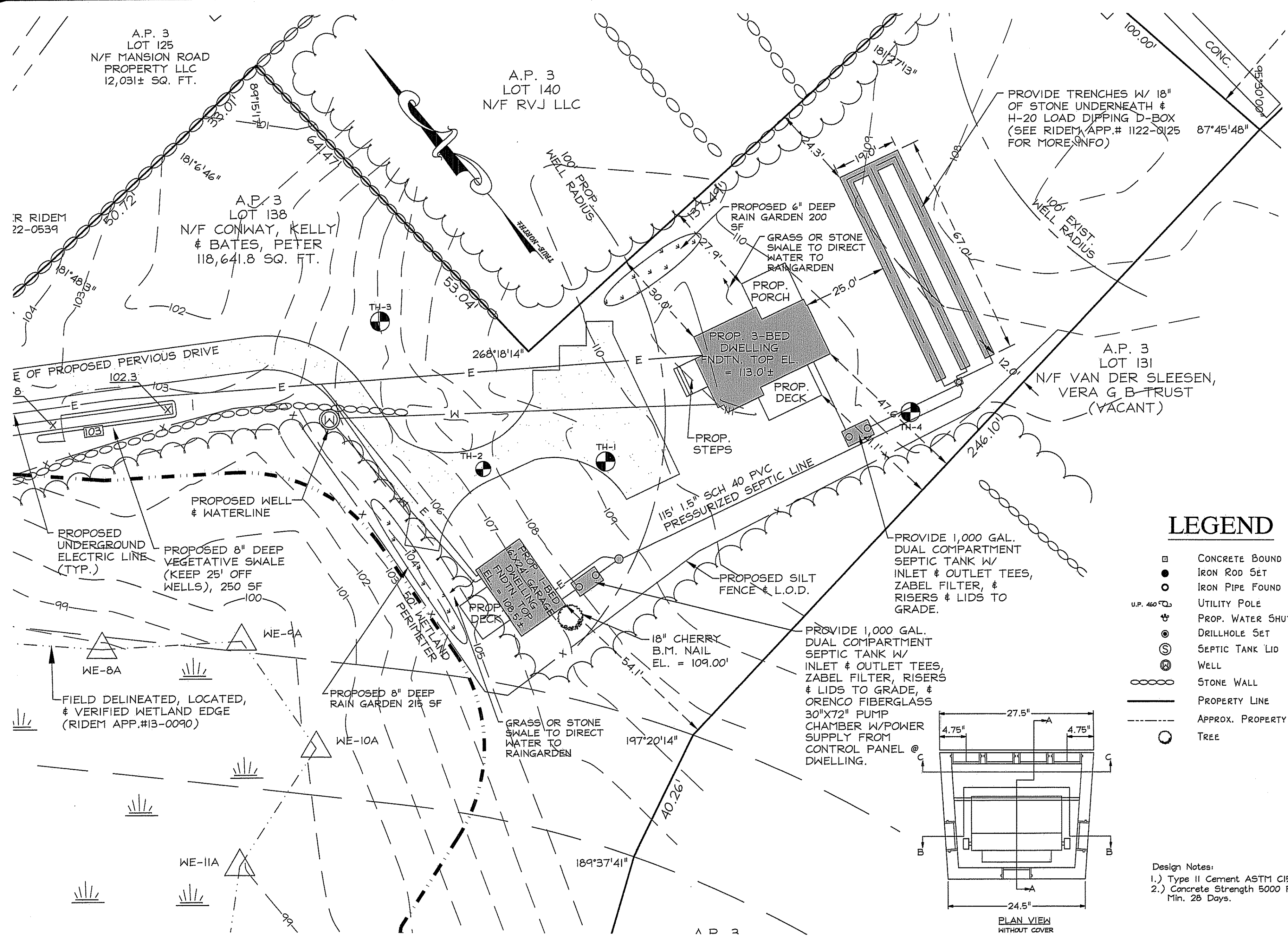
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WWW.ATLASLANDSURVEYING.COM

REVISION: JULY 2015  
JULY 2016  
APRIL 2018

DATE: 13 APRIL 2018  
DRAWN BY: KRC  
SCALE: 1" = 30'

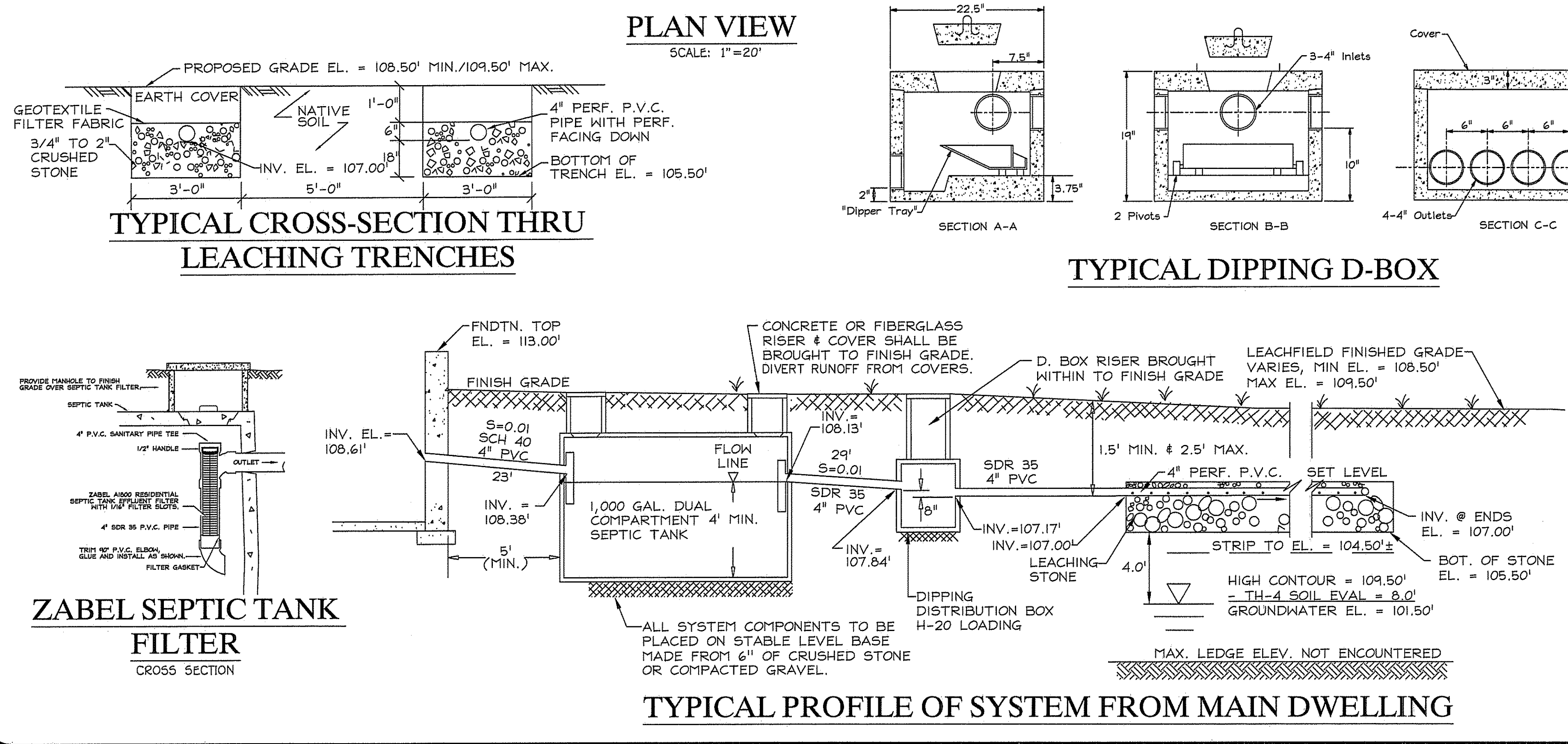
SHEET  
1  
OF 1 SHEETS 2

JOB NO.  
DWG. NO.



**OWTS GENERAL NOTES:**

- THE SUBJECT PROPERTY "IS NOT" LOCATED WITHIN THE RHODE ISLAND COASTAL RESOURCES (CRMC) JURISDICTIONAL LIMITS.
- ALL PRIVATE AND PUBLIC DRINKING WATER LINES WITHIN 50 FEET OF THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM (OWTS) ARE SHOWN, UNLESS OTHERWISE NOTED ON SITE PLAN.
- THERE ARE NO PUBLIC SEWERS AVAILABLE TO THE PROPERTY WITHIN 200 FEET UNLESS NOTED ON SITE PLAN.
- ALL EXISTING AND PROPOSED PRIVATE DRINKING WATER WELLS WITHIN THE REQUIRED SETBACKS OF THE PROPOSED OWTS LEACHFIELD ARE SHOWN AS REQUIRED BY REGULATION TABLE 22.5 INCLUDING THE ADDITIONAL 100' LIMIT.
- ALL EXISTING AND PROPOSED WELLS SERVING NON-POTABLE USES WITHIN 100 FEET OF THE OWTS ARE SHOWN, UNLESS OTHERWISE NOTED ON THE SITE PLAN.
- ALL EXISTING AND PROPOSED PUBLIC DRINKING WATER WELLS WITHIN 500 FEET OF THE PROPOSED OWTS ARE SHOWN, UNLESS OTHERWISE NOTED ON THE SITE PLAN. THE CONSTRUCTION DETERMINATION OF SAID WELLS IS IDENTIFIED ON THE SITE PLAN, UNLESS OTHERWISE NOTED.
- ALL WATERCOURSES, WETLANDS, AND DRAINS WITHIN 200 FEET OF THE PROPOSED OWTS ARE SHOWN, UNLESS OTHERWISE NOTED ON SITE PLAN.
- ALL STORM AND SUBSURFACE DRAINS WITHIN 200 FEET OF THE PROPOSED OWTS ARE SHOWN, UNLESS OTHERWISE NOTED ON SITE PLAN. THE ULTIMATE DISCHARGE OF SAID DRAINS ARE IDENTIFIED ON THE SITE PLANS.
- THE OWTS "IS NOT" LOCATED WITHIN THE WATERSHED OF A PUBLIC WATER SUPPLY OR OTHER CRITICAL RESOURCE AREA AS IDENTIFIED IN REGULATION RULE No. 38.
- ALL EXISTING OWTS ON ABUTTING PROPERTIES WITHIN 200 FEET OF A PROPOSED WELL TO SERVICE THE SUBJECT PROPERTY ARE IDENTIFIED ON THE SITE PLAN, UNLESS OTHERWISE NOTED.
- THE SUBJECT PROPERTY IS NOT LOCATED WITHIN AN IDENTIFIED FLOOD ZONE. THE SUBJECT OWTS IS LOCATED OUTSIDE OF THE 100 YEAR FLOOD PLAIN.
- IF A PROPOSED WELL IS REQUIRED TO SERVICE THE WATER REQUIREMENTS FOR THE SUBJECT PROPERTY, SAID WELL "DOES NOT" REQUIRE A VARIANCE FROM RIDEM'S "RULES AND REGULATIONS GOVERNING THE ENFORCEMENT OF CHAPTER 46-13.2 RELATING TO THE DRILLING OF DRINKING WATER WELLS".
- OWTS DESIGN DATA:
  - TOTAL NUMBER OF PROPOSED ROOMS IN DWELLING NOT TO EXCEED 10, PER TABLE 21.2 - 4 BED DESIGN
  - 4 BEDROOM DESIGN X 115 GALLONS PER BEDROOM - TOTAL DESIGN FLOW = 460 GPD
  - BASED ON THE SITE SOIL EVALUATION, THE MOST RESTRICTIVE SOIL DESIGN CATEGORY IS 5.
  - THE SOIL APPLICATION RATE = 0.52 GALS/SQ FT/DAY
  - TOTAL REQUIRED LEACHING AREA = 884.61 SQUARE FEET
  - TOTAL PROVIDED LEACHING AREA = 886.20 SQUARE FEET
  - LEACHFIELD: 19'W X 67'L, TRENCHES W/18" OF STONE UNDERNEATH PROVIDED
- OWTS GENERAL CONSTRUCTION NOTES:
  - ALL PIPING SHALL BE 4"Ø PVC SDR 35 OR EQUIVALENT, UNLESS OTHERWISE NOTED
  - ALL PIPE SLOPES SHALL BE A MINIMUM OF 1% AND A MAXIMUM OF 5%, REFER TO THE PROFILE
  - THE SEPTIC TANK SHALL BE A TWO-COMPARTMENT TANK WITH THE CAPACITY AS STATED ON THE SITE PLAN
  - THE SEPTIC TANK INLET SHALL EXTEND 1' BELOW THE FLOW LINE AND THE OUTLET TEE SHALL EXTEND 1/3 THE DEPTH BELOW THE FLOW LINE.
  - THE OUTLET TEE SHALL BE FITTED WITH A ZABEL EFFLUENT FILTER OR EQUIVALENT, REFER TO PLAN DETAIL FOR DESIGNED MAKE AND MODEL, UNLESS OTHERWISE NOTED.
  - THE SEPTIC TANK SHALL BE FITTED WITH TWO ACCESS MANHOLE RISERS NOT LESS THAN 24"Ø
  - THE D-BOX SHALL HAVE A MINIMUM OF 3 SQUARE FEET OF BOTTOM AREA AND BE CAPABLE OF CARRYING A MINIMUM 300 PSF LOAD WITH MINIMAL SIDEWALL DEFLECTION.
  - LEACHFIELD STONE, IF USED, SHALL BE 3/4" TO 2" DOUBLE WASHED STONE, FREE OF ALL DEBRIS.
  - SURFACE GRADES WITHIN 10 FEET OF THE LEACHFIELD SHALL NOT BE LOWER THAN ELEVATION 107.00'. AT THE 10 FEET DISTANCE FROM THE LEACHFIELD, THE SLOPE SHALL BE A MINIMUM OF 3H:1V TO MATCH INTO EXISTING GRADES.
  - THE LEACHFIELD AND THE AREA WITHIN 10 FEET FOR THE LEACHFIELD SHALL BE STRIPPED OF ALL TREES, BRUSH, STUMPS AND BOULDERS. THE SIDES AND BOTTOM OF THE EXCAVATION SHALL NOT BE COMPACTED OR SMEARED AND THE BOTTOM SHALL BE SCARIFIED PRIOR TO LEACHFIELD PLACEMENT.
  - REFER TO THE SITE PLAN FOR LEACHFIELD STRIP REQUIREMENTS.
  - THE FINISH GRADE OVER THE SEPTIC TANK SHALL BE GRADED TO DIVERT SURFACE WATER RUNOFF AWAY FROM THE TANK.
  - IF A DRIVEWAY OR PAVEMENT IS TO BE LOCATED NEAR THE PROPOSED OWTS, A FENCE OR CURBING SHALL BE INSTALLED AROUND THE SYSTEM IN THE AREA OF THE PAVEMENT TO PREVENT VEHICULAR TRAFFIC FROM DRIVING ONTO THE SYSTEM.
  - CONTRACTOR TO SUPPLY DESIGNER W/ COPIES OF ALL MATERIALS PURCHASED FOR INSTALLATION PRIOR TO ISSUANCE OF CERTIFICATE OF CONSTRUCTION TO RIDEM.
- THIS PLAN IS NOT A PROPERTY SURVEY & IS ONLY INTENDED TO REPRESENT APPROXIMATE PROPERTY BOUNDS. THESE PLANS ARE SOLELY INTENDED FOR THE PURPOSE OF DESIGN, APPROVAL, & INSTALLATION OF THE OWTS SYSTEM.
- GENERAL OWNER NOTES:
  - FOOD/GARBAGE GRINDERS INSIDE DWELLING AND DISPOSAL OF GREASES, OILS, AND OR FATS ARE PROHIBITED.
  - VEHICLE PARKING OR TRAFFIC OVER THE OWTS COMPONENTS IS PROHIBITED.
  - BACKWASH WATER FROM A WATER TREATMENT SYSTEM WAS NOT TAKEN INTO CONSIDERATION WITH THE DESIGN OF THIS OWTS. WATER TREATMENT SYSTEM DISCHARGE TO THIS OWTS IS PROHIBITED.
  - THE SEPTIC TANK SHALL BE PUMPED AT NO LESS THAN 2 YEAR INTERVALS. THE EFFLUENT ZABEL FILTER SHALL BE CLEANED NO LESS THAN ONCE ANNUALLY.
- REFERENCE RIDEM WETLANDS APP.# 13-0090 & OWTS APP.# 1122-0125 APPROVALS FOR MORE INFO.
- EXISTING CONTOURS TO REMAIN THE SAME IF NO PROPOSED CONTOURS ARE SHOWN ON THIS PLAN.
- INTERIOR STONE WALLS, NOT DEPICTING PROPERTY LINE, TO BE DISMANTLED INSIDE OF THE L.O.D. OR WHERE THEY INTERFERE WITH PROPOSED ACTIVITY.



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- PROP. WATER SHUTOFF
- DRILLHOLE SET
- SEPTIC TANK LID
- WELL
- STONE WALL
- PROPERTY LINE
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- TREE

Design Notes:  
 1.) Type II Cement ASTM C150-81  
 2.) Concrete Strength 5000 PSI.  
 Min. 28 Days.

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**NEW ONSITE WASTEWATER TREATMENT SYSTEM RE-DESIGN**

A.P. 3, LOT 138  
MANSION ROAD  
NEW SHOREHAM, RHODE ISLAND  
Prepared For:  
KELLY CONWAY & PETER BATES

MARCUS CHANNING  
No. 1871  
PROFESSIONAL  
LAND SURVEYOR

**ATLAS LAND SURVEYING, LLC**  
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