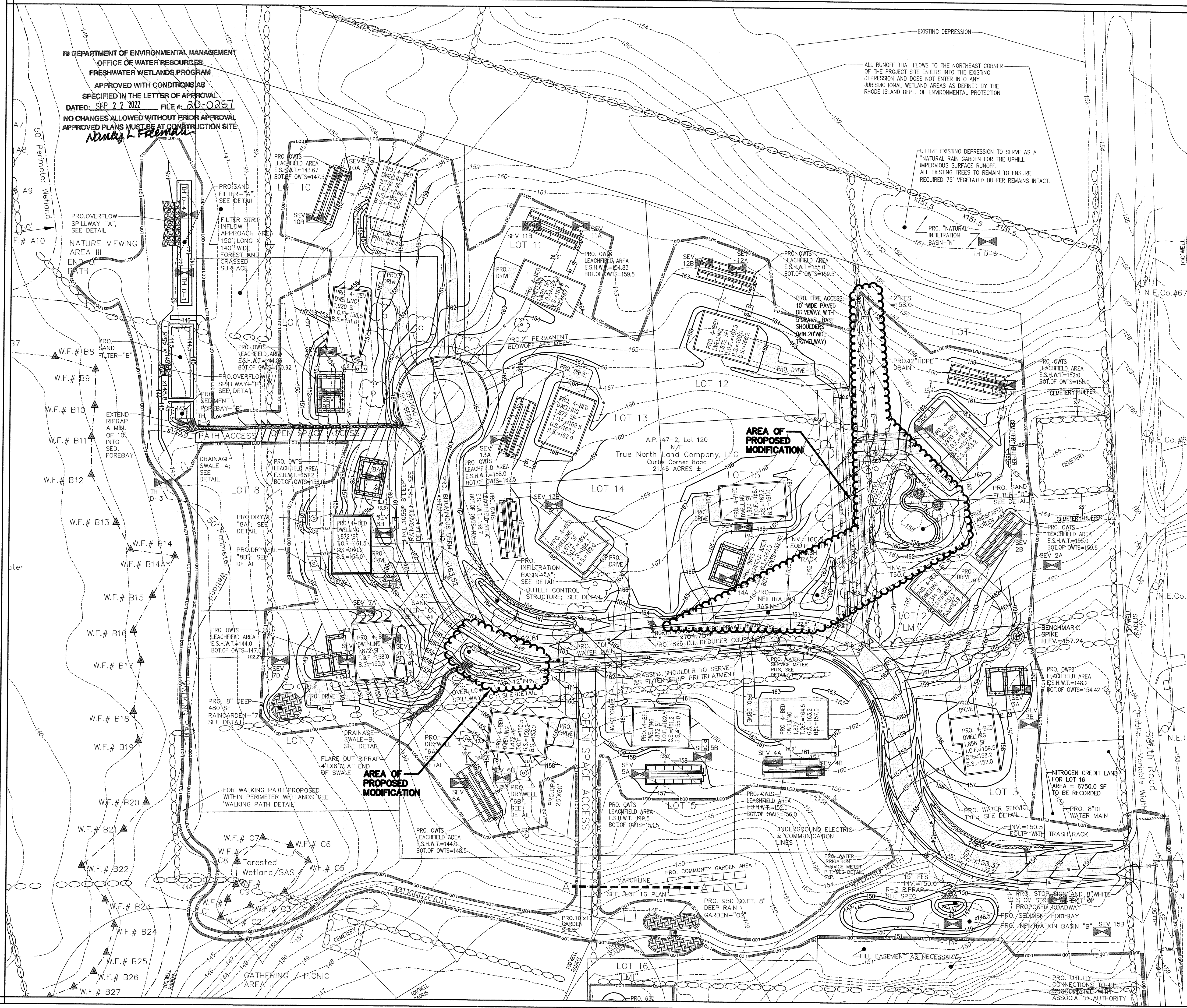


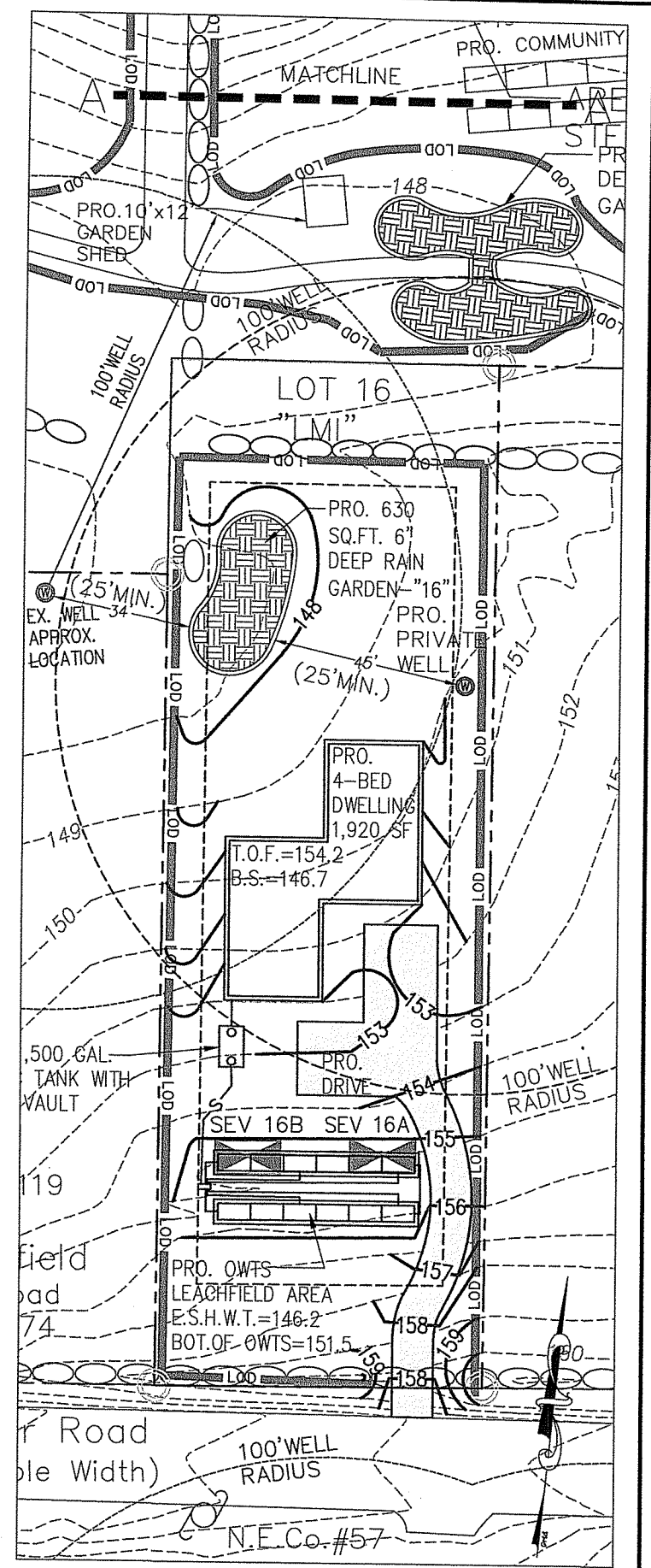
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS AS  
 SPECIFIED IN THE LETTER OF APPROVAL  
 DATED: SEP 22 2022 FILE # 20-0257  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*David L. Felton*



ALL RUNOFF THAT FLOWS TO THE NORTHEAST CORNER OF THE PROJECT SITE ENTERS INTO THE EXISTING DEPRESSION AND DOES NOT ENTER INTO ANY JURISDICTIONAL WETLAND AREAS AS DEFINED BY THE RHODE ISLAND DEPT. OF ENVIRONMENTAL PROTECTION.

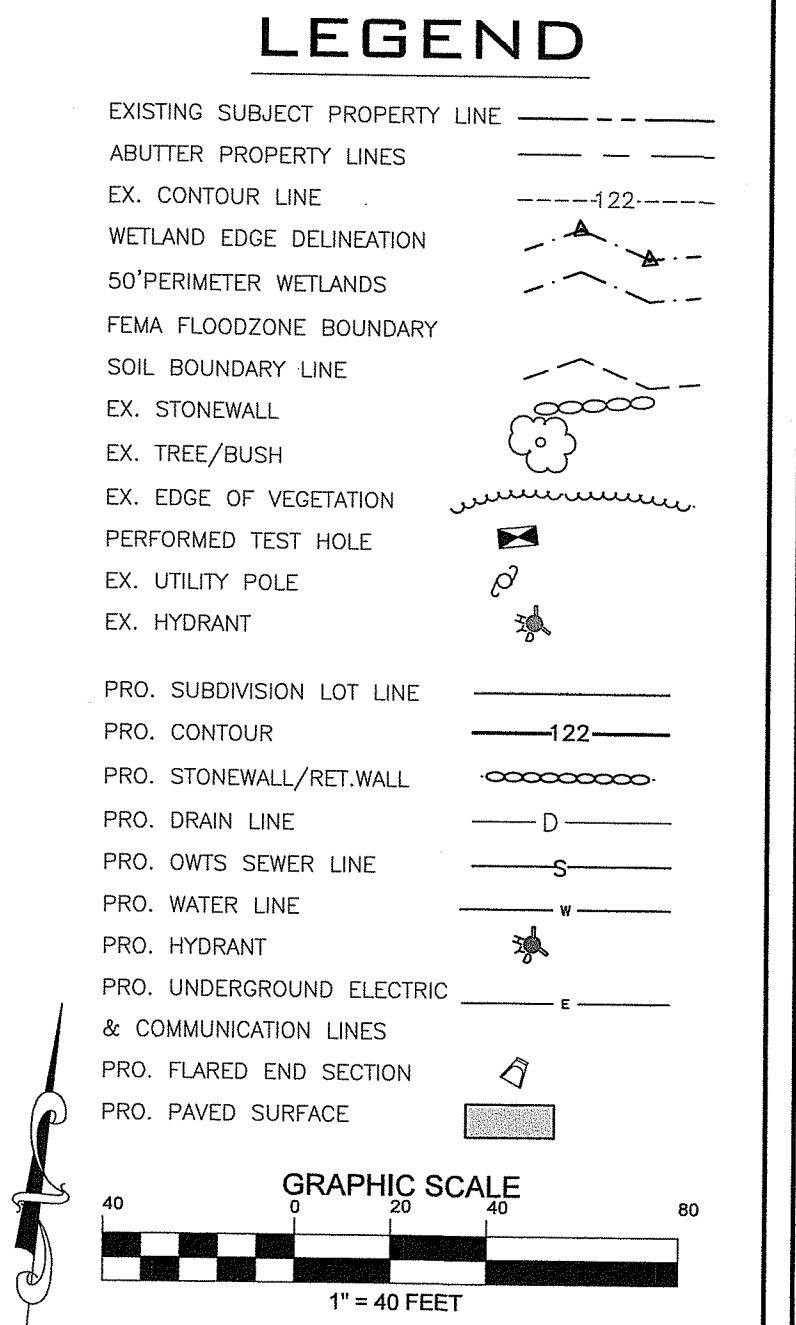
UTILIZE EXISTING DEPRESSION TO SERVE AS A NATURAL RAIN GARDEN FOR THE UPHILL IMPERVIOUS SURFACE RUNOFF. ALL EXISTING TREES TO REMAIN TO ENSURE REQUIRED 75' VEGETATED BUFFER REMAINS INTACT.



LOT 16 PLAN  
 SCALE: 1" = 40'

PLAN REFERENCES:  
 1. THIS PLAN MODIFIES A PLAN OF THE ORIGINAL DEM FRESHWATER WETLAND PERMIT #20-0257. PROPERTY LINES, TOPOGRAPHY, AND EXISTING CONDITIONS OBTAINED FROM SAID PLAN, WHICH IS TITLED 'RI DEM FWMP & SUBDIVISION SUITABILITY APPLICATION PLAN NORTH WOODS SUBDIVISION PROPOSED GRADING & UTILITIES PLAN A.P. 47-2, LOT 120 SOUTH KINGSTOWN, RHODE ISLAND,' LATEST REVISION 1-11-21.

GENERAL NOTES:  
 1. ALL EXISTING WATERCOURSES WITHIN 200 FEET OF THE SUBJECT PROPERTY ARE SHOWN ON THE PLANS. THERE ARE NO PUBLIC WELLS WITHIN 500' OF THE SUBJECT PROPERTY AS PER THE RIDEM ENVIRONMENTAL RESOURCE MAP.  
 2. ALL EXISTING AND PROPOSED PRIVATE WELLS WITHIN 200' OF ANY PROPOSED OWTS ARE SHOWN ON THE PLANS, AND ALL PROPOSED OWTS MEET THE REQUIRED SETBACK DISTANCES AS PER RULE 6.23 E. ALL PROPOSED WELLS MEET THE REQUIRED SETBACK DISTANCES AS PER RULE 6.23 E TO ANY EXISTING AND/OR PROPOSED OWTS.

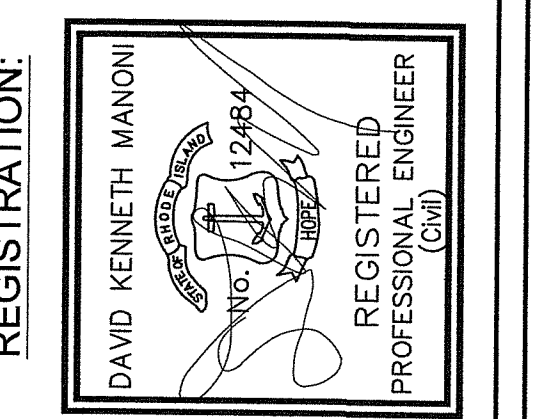


ISSUED FOR PERMITTING ONLY,  
 NOT FOR CONSTRUCTION

RIDEM PERMIT MODIFICATION PLAN  
 NORTH WOODS SUBDIVISION  
 PROPOSED GRADING & UTILITIES PLAN  
 A.P. 47-2, LOT 120  
 SOUTH KINGSTOWN, RHODE ISLAND  
 SCALE: AS SHOWN DATE: 07/29/22 SHEET 1 of 2

REVISIONS:

NO.	DATE	DESCRIPTION	BY



**GROUND BREAKING**  
**DESIGNS, LLC**  
 CIVIL ENGINEERING SOLUTIONS

90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 ● PHONE: (401) 622-2932



# RI DEM FWWP & SUBDIVISION SUITABILITY APPLICATION PLAN

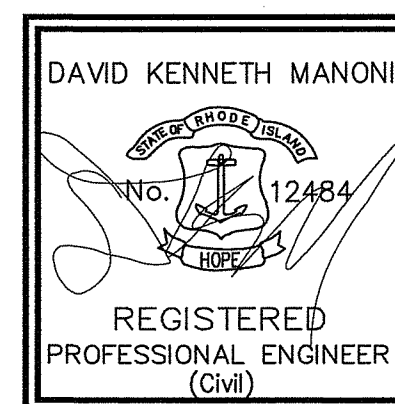
FOR

## NORTH WOODS SUBDIVISION

A.P. 47-2, LOT 120  
CURTIS CORNER ROAD  
SOUTH KINGSTOWN, RHODE ISLAND

OWNER / APPLICANT:  
TRUE NORTH LAND COMPANY LLC  
11 KNIGHT ST. UNIT E9  
WARWICK, RI 02886

DATE: NOVEMBER 5, 2020  
REVISED: JANUARY 11, 2021



**GROUNDBREAKING  
DESIGNS, LLC**  
CIVIL ENGINEERING SOLUTIONS

90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 ☎ PHONE: (401) 622-2932



**LOCUS MAP**  
1" = 400'

### LIST OF DRAWINGS

1. TITLE SHEET
2. EXISTING CONDITIONS MAP
3. PROPOSED SITE LAYOUT PLAN
4. PROPOSED GRADING & UTILITIES PLAN
5. ROADWAY PROFILE PLAN
6. SOIL EROSION & SEDIMENT CONTROL PLAN
7. DETAIL SHEET - 1
8. DETAIL SHEET - 2

ATTACHMENT: "CONCEPTUAL MASTER PLAN FLEXIBLE DESIGN RESIDENTIAL PROJECT (FDRP) NORTH WOODS MAJOR SUBDIVISION PLAN PROPOSED LOT GEOMETRY" BY FONTAINE LAND SURVEYING, LLC

### PROJECT DATA

ASSESSORS REFERENCE:

A.P. 47-2, LOT 120

### REFERENCES

1. PROPERTY LINE INFORMATION OBTAINED FROM SURVEY PLANS TITLED "CONCEPTUAL MASTER PLAN FLEXIBLE DESIGN RESIDENTIAL PROJECT (FDRP) NORTH WOODS MAJOR SUBDIVISION PLAN EXISTING CONDITIONS A.P. 47-2, LOT 120 CURTIS CORNER ROAD SOUTH KINGSTOWN, RHODE ISLAND PREPARED FOR: TRUE NORTH LAND COMPANY" PREPARED BY FONTAINE LAND SURVEYING, LLC.
2. SUBJECT PROPERTY TOPOGRAPHY IS A PRODUCT OF AEROTECH CORP.
3. EXISTING 2-FOOT CONTOURS OUTSIDE OF SURVEYED AREA OBTAINED FROM RIGIS LIDAR DATA.
4. AERIAL IMAGERY OBTAINED FROM RIGIS IMAGERY RESOURCES.

### GENERAL NOTES

1. ALL PLANS AND IMPROVEMENTS CONFORM TO ALL EXISTING AND AMENDED STANDARDS OF THE STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS, BOARD OF REGISTRATION OF PROFESSIONAL ENGINEERS AND BOARD OF REGISTRATION OF LAND SURVEYORS.
2. ONLY PLANS STAMPED ISSUED FOR CONSTRUCTION SHALL BE USED FOR CONSTRUCTION.
3. THE LOCATION AND ELEVATION FOR ALL EXISTING UTILITIES SHALL BE CONSIDERED APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ANY CROSSINGS OF PROPOSED UTILITIES AND EXISTING UTILITIES. ANY DISCREPANCIES IN THE LOCATION OF ANY UTILITY SHOWN OR ENCOUNTERED DURING CONSTRUCTION SHALL BE REPORTED TO GROUNDBREAKING DESIGNS, LLC, (401) 622-2932.
4. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-800-344-7233) A MINIMUM OF 72 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
5. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN THE INTEGRITY OF ALL EXISTING UTILITIES, STRUCTURES, AND ADJUTING PROPERTIES. THE COST OF ANY REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE BORNE BY THE CONTRACTOR.
6. ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH MUTCD 2009 LATEST REVISION.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL

DATED Mar 11, 2021 FILE # 20-0257  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

Environmental Management

MAR 11 2021

*Wendy L. Freeman*

Office of Water Resources

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NOT FOR CONSTRUCTION



**NOTES:**

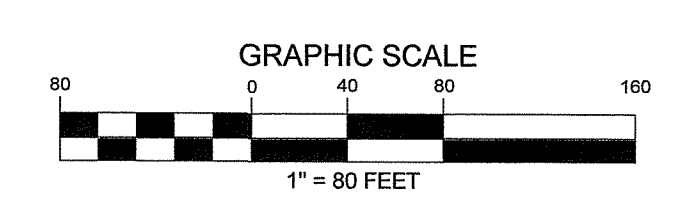
1. PROPERTY LINE INFORMATION OBTAINED FROM SURVEY PLANS TITLED "CONCEPTUAL MASTER PLAN FLEXIBLE DESIGN RESIDENTIAL PROJECT (FRP) NORTH WOODS MAJOR SUBDIVISION PLAN EXISTING CONDITIONS A.P. 47-2, LOT 120 CURTIS CORNER ROAD SOUTH KINGSTOWN, RHODE ISLAND PREPARED FOR: TRUE NORTH LAND COMPANY" PREPARED BY FONTAINE LAND SURVEYING, LLC.
2. SUBJECT PROPERTY TOPOGRAPHY IS A PRODUCT OF AEROTECH CORP.
3. EXISTING 2-FOOT CONTOURS OUTSIDE OF SURVEYED AREA OBTAINED FROM RIGIS LIDAR DATA.
4. CONTOURS ARE BASED ON VERTICAL DATUM NAVD 88.
5. AERIAL IMAGERY OBTAINED FROM RIGIS IMAGERY RESOURCES.
6. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. (PLEASE CONTACT DIGSAFE PRIOR TO CONSTRUCTION @ 1-888-344-7233.)
7. PROJECT SITE IS LOCATED OUTSIDE OF ALL FLOODZONES AS SHOWN ON F.E.M.A. FLOOD INSURANCE RATE MAPS # 4409C0185J AND # 4409C0184K FOR THE TOWN OF SOUTH KINGSTOWN, RHODE ISLAND, WASHINGTON COUNTY, HAVING AN EFFECTIVE DATE OF APRIL 3 2020.
8. WETLANDS SHOWN HEREON DELINEATED BY NATURAL RESOURCE SERVICES, INC. AND FIELD LOCATED BY FONTAINE LAND SURVEYING, LLC.
9. SOIL EVALUATIONS PERFORMED BY ONSITE WASTEWATER INITIATIVE, LLC AND GROUND BREAKING DESIGNS, LLC.
10. SITE IS NOT LOCATED WITHIN RIDEM NATURAL HERITAGE AREA
11. SITE IS NOT LOCATED WITHIN TOWN OF SOUTH KINGSTOWN GROUNDWATER PROTECTION OVERLAY DISTRICT.
12. SITE IS NOT WITHIN A TMDL WATERSHED AS DEFINED BY RIDEM AND TOWN OF SOUTH KINGSTOWN.
13. SITE IS NOT LOCATED WITHIN AN OWTS CRITICAL RESOURCE AREA AS DEFINED BY RIDEM.
14. SITE IS NOT LOCATED WITHIN A DRINKING WATER SUPPLY WATERSHED AS DEFINED BY RIDEM.
15. SITE DOES NOT CONTAIN AREAS CONTAINING PRIME AGRICULTURAL SOILS OR FARMLAND
16. AT THIS TIME THERE IS NO ACTIVE AGRICULTURAL USE ON SITE.
17. TO MY KNOWLEDGE THERE ARE NO BUILDINGS ON SITE THAT ARE LISTED ON THE NATIONAL HISTORIC REGISTER OF HISTORIC PLACES HOWEVER THERE ARE TWO HISTORIC CEMETERIES AS SHOWN HEREON.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED May 16, 2021 FILE # 20-0257  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*Daryl L. Freeman*

**LEGEND**

- EXISTING SUBJECT PROPERTY LINE
- ABUTTER PROPERTY LINES
- EX. CONTOUR LINE
- WETLAND EDGE DELINEATION
- 50' PERIMETER WETLANDS
- FEMA FLOODZONE BOUNDARY
- SOIL BOUNDARY LINE
- EX. STONEWALL
- EX. TREE/BUSH
- EX. EDGE OF VEGETATION
- PERFORMED TEST HOLE
- EX. UTILITY POLE
- EX. HYDRANT
- PRO. SUBDIVISION LOT LINE
- PRO. CONTOUR
- PRO. STONEWALL/RET.WALL
- PRO. DRAIN LINE
- PRO. OWTS SEWER LINE
- PRO. WATER LINE
- PRO. HYDRANT
- PRO. UNDERGROUND ELECTRIC & COMMUNICATION LINES
- PRO. FLARED END SECTION
- PRO. PAVED SURFACE



ISSUED FOR PERMITTING ONLY,  
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RIDEM FWMP & SUBDIVISION SUITABILITY APPLICATION PLAN  
NORTH WOODS SUBDIVISION

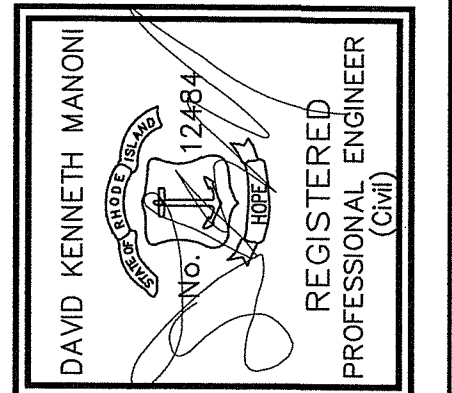
**EXISTING CONDITIONS MAP**

A.P. 47-2, LOT 120  
SOUTH KINGSTOWN, RHODE ISLAND  
SCALE: AS SHOWN DATE: 10/30/20 SHEET 2 of 8

**REVISIONS:**

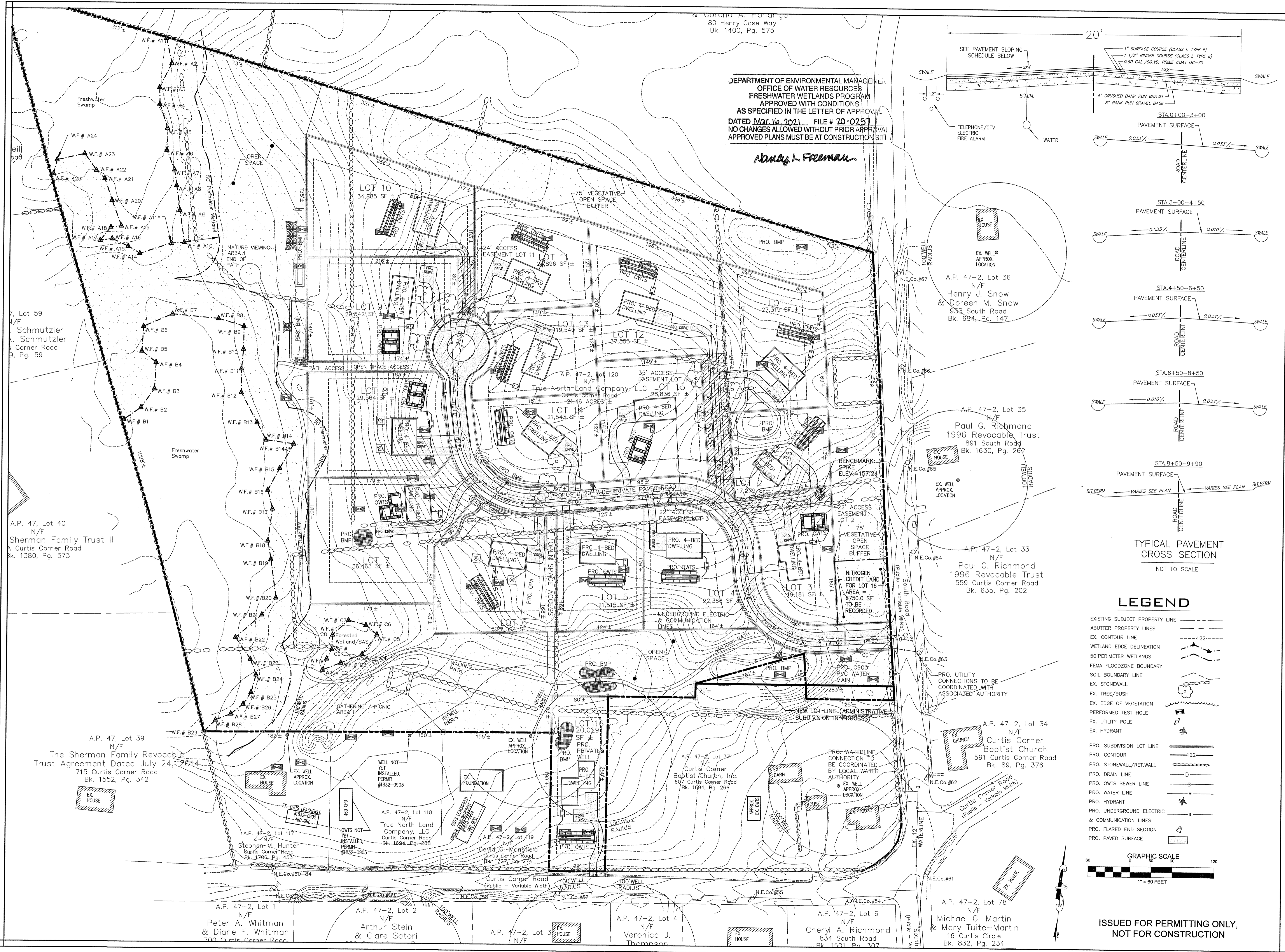
NO.	DATE	DESCRIPTION	BY
1.	1-11-21	DEM COMMENTS	DKM

**REGISTRATION:**



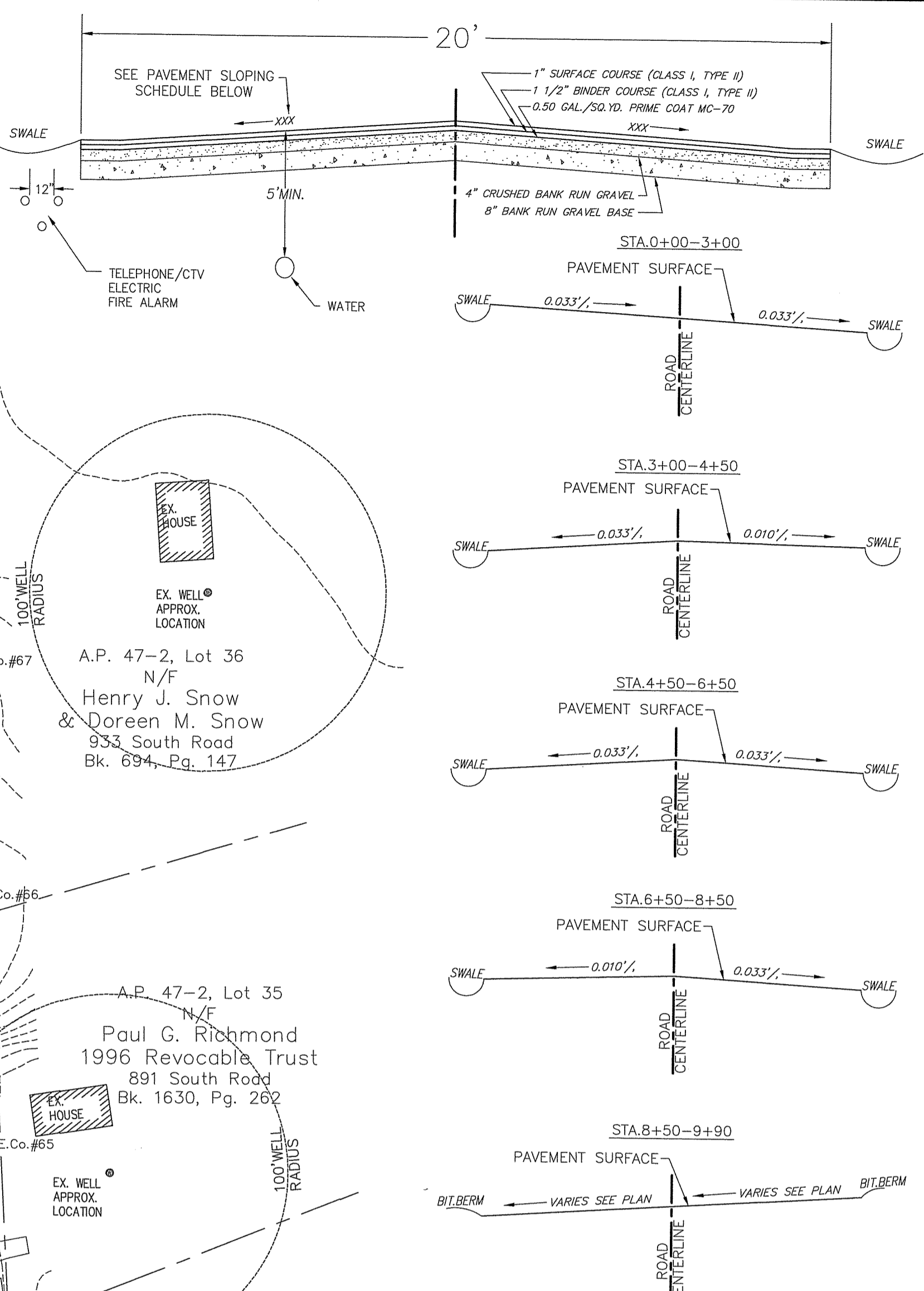
**GROUND BREAKING**  
**DESIGNS, LLC**  
CIVIL ENGINEERING SOLUTIONS

90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 ☎ PHONE: (401) 622-2932



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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 FRESHWATER WETLANDS PROGRAM  
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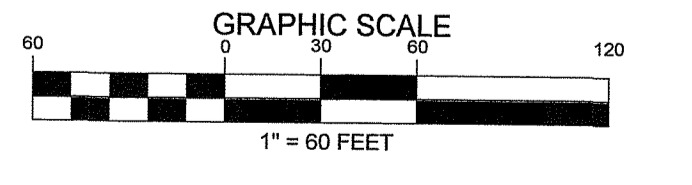
*Nancy L. Freeman*



TYPICAL PAVEMENT CROSS SECTION  
 NOT TO SCALE

**LEGEND**

- EXISTING SUBJECT PROPERTY LINE
- ADJUTTER PROPERTY LINES
- EX. CONTOUR LINE
- WETLAND EDGE DELINEATION
- 50' PERIMETER WETLANDS
- FEMA FLOODZONE BOUNDARY
- SOIL BOUNDARY LINE
- EX. STONEWALL
- EX. TREE/BUSH
- EX. EDGE OF VEGETATION
- PERFORMED TEST HOLE
- EX. UTILITY POLE
- EX. HYDRANT
- PRO. SUBDIVISION LOT LINE
- PRO. CONTOUR
- PRO. STONEWALL/RET. WALL
- PRO. DRAIN LINE
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- PRO. WATER LINE
- PRO. HYDRANT
- PRO. UNDERGROUND ELECTRIC & COMMUNICATION LINES
- PRO. FLARED END SECTION
- PRO. PAVED SURFACE

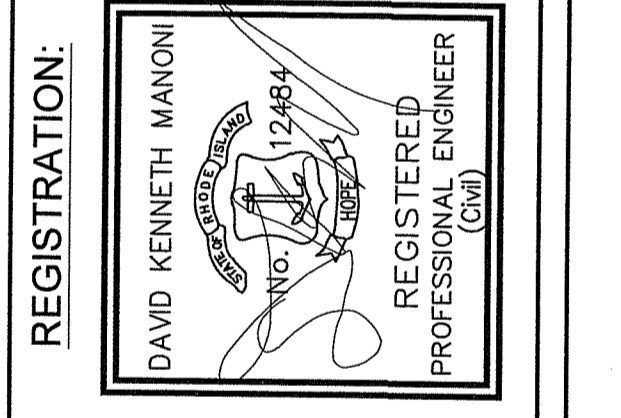


ISSUED FOR PERMITTING ONLY,  
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RI DEM FWWP & SUBDIVISION SUITABILITY APPLICATION PLAN  
**NORTH WOODS SUBDIVISION**  
**PROPOSED SITE LAYOUT PLAN**  
 A.P. 47-2, LOT 120  
 SOUTH KINGSTOWN, RHODE ISLAND  
 SCALE: AS SHOWN DATE: 10/30/20 SHEET 3 OF 8

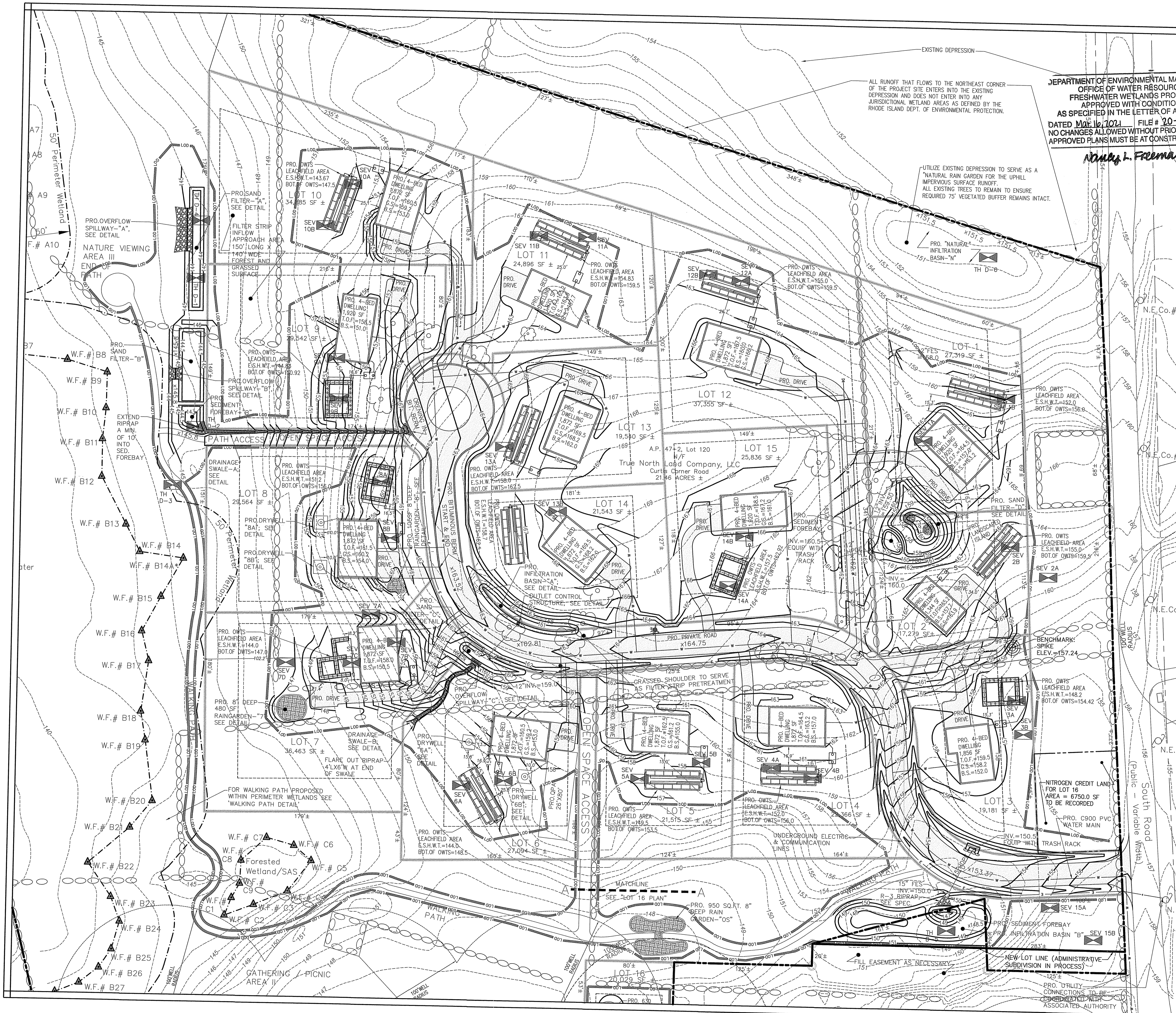
REVISIONS:

NO.	DATE	DESCRIPTION	BY
1.	1-11-21	DEM COMMENTS	DAW



**GROUND BREAKING**  
**DESIGNS, LLC**  
 CIVIL ENGINEERING SOLUTIONS

90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 • PHONE: (401) 622-2932

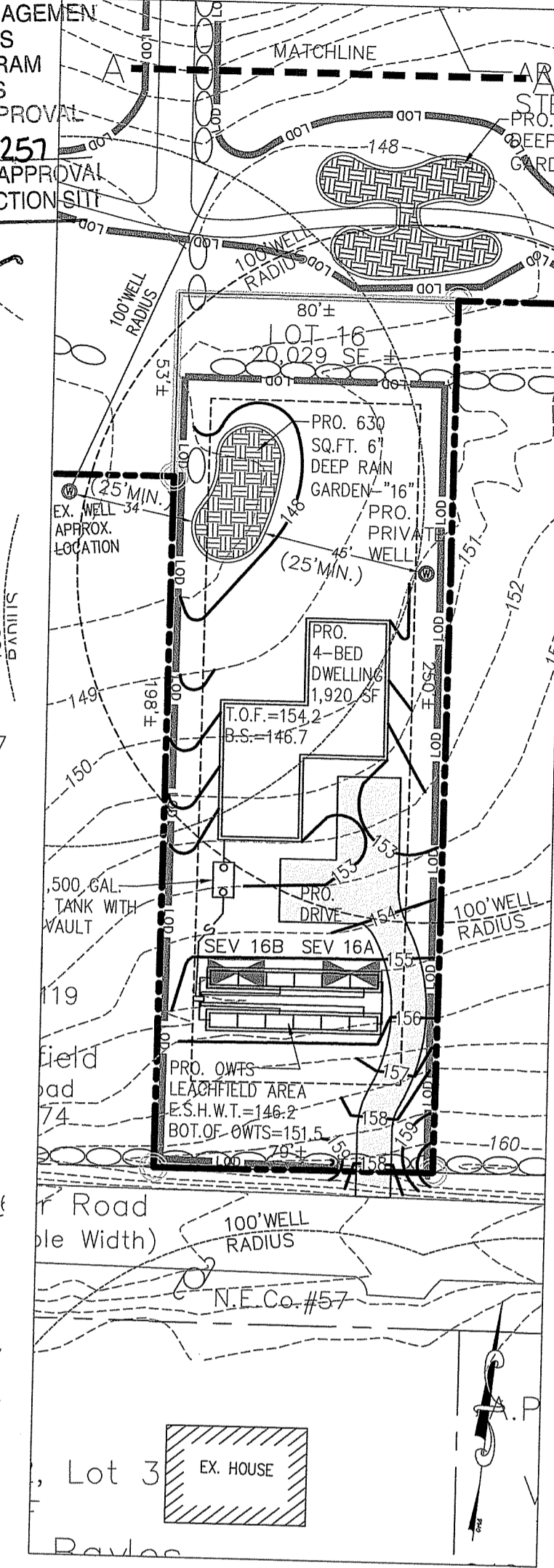


ALL RUNOFF THAT FLOWS TO THE NORTHEAST CORNER OF THE PROJECT SITE ENTERS INTO THE EXISTING DEPRESSION AND DOES NOT ENTER INTO ANY JURISDICTIONAL WETLAND AREAS AS DEFINED BY THE RHODE ISLAND DEPT. OF ENVIRONMENTAL PROTECTION.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
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DATED Mar 16, 2021 FILE # 20-0257  
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*Nancy L. Freeman*

UTILIZE EXISTING DEPRESSION TO SERVE AS A "NATURAL" RAIN GARDEN FOR THE UPHILL IMPERVIOUS SURFACE RUNOFF. ALL EXISTING TREES TO REMAIN TO ENSURE REQUIRED 75' VEGETATED BUFFER REMAINS INTACT.

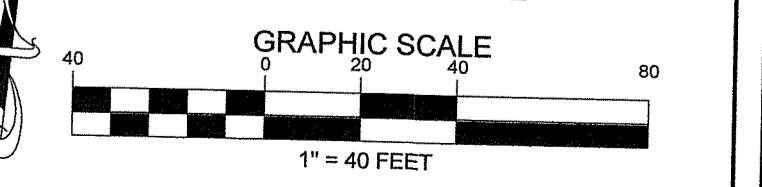


**LOT 16 PLAN**  
SCALE: 1" = 40'

- GENERAL NOTES:**
- ALL EXISTING WATERCOURSES WITHIN 200 FEET OF THE SUBJECT PROPERTY ARE SHOWN ON THE PLANS. THERE ARE NO PUBLIC WELLS WITHIN 500' OF THE SUBJECT PROPERTY AS PER THE RIDEM ENVIRONMENTAL RESOURCE MAP.
  - ALL EXISTING AND PROPOSED PRIVATE WELLS WITHIN 200' OF ANY PROPOSED OWTS ARE SHOWN ON THE PLANS, AND ALL PROPOSED OWTS MEET THE REQUIRED SETBACK DISTANCES AS PER RULE 6.23 E. ALL PROPOSED WELLS MEET THE REQUIRED SETBACK DISTANCES AS PER RULE 6.23 E TO ANY EXISTING AND/OR PROPOSED OWTS.

**LEGEND**

- EXISTING SUBJECT PROPERTY LINE
- ADJUTER PROPERTY LINES
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RI DEM FWMP & SUBDIVISION SUITABILITY APPLICATION PLAN  
**NORTH WOODS SUBDIVISION**  
**PROPOSED GRADING & UTILITIES PLAN**  
A.P. 47-2, LOT 120  
SOUTH KINGSTOWN, RHODE ISLAND  
SCALE: AS SHOWN DATE: 10/30/20 SHEET 4 of 8

**REVISIONS:**

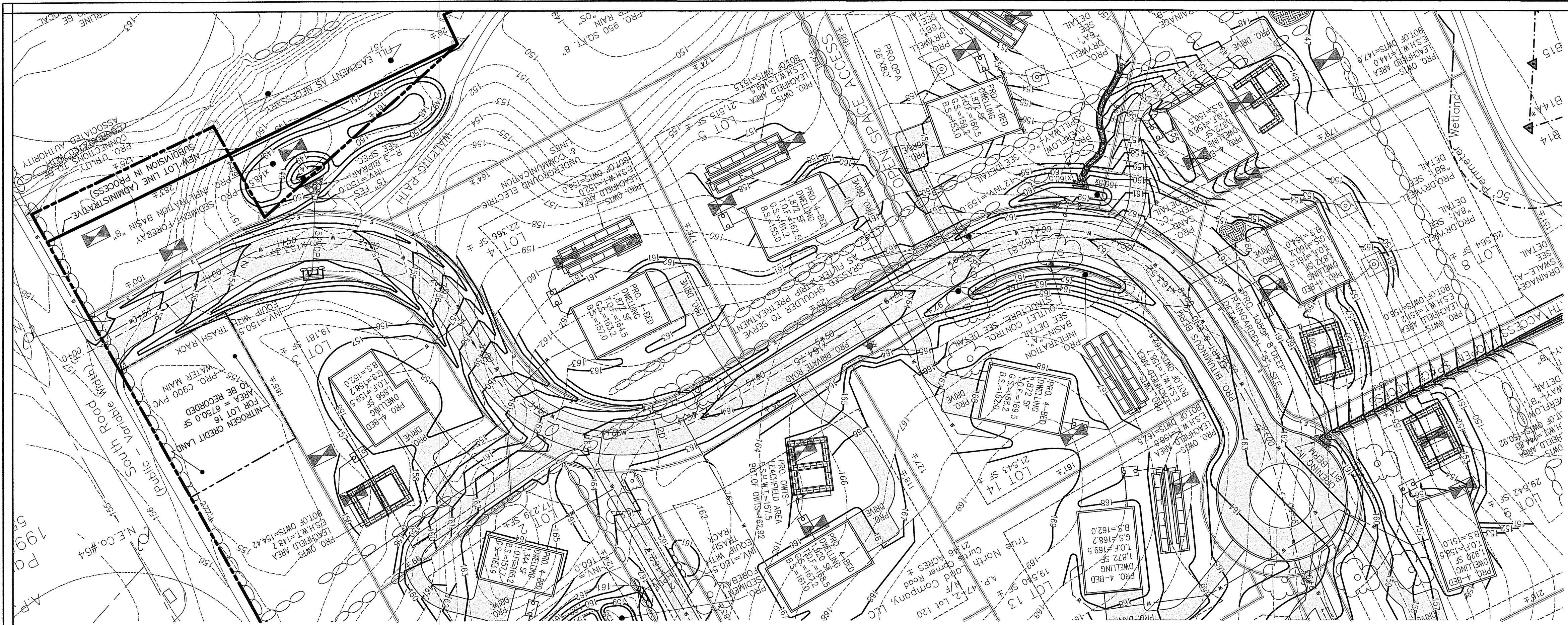
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1.	1-17-21	DEM COMMENTS	DKM

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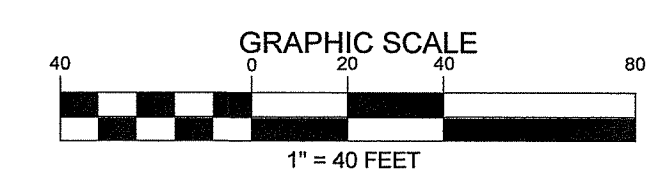
DAVID KENNETH MANONI  
No. 12964  
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

**GROUND BREAKING**  
**DESIGNS, LLC**  
CIVIL ENGINEERING SOLUTIONS

90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 ☎ PHONE: (401) 622-2932



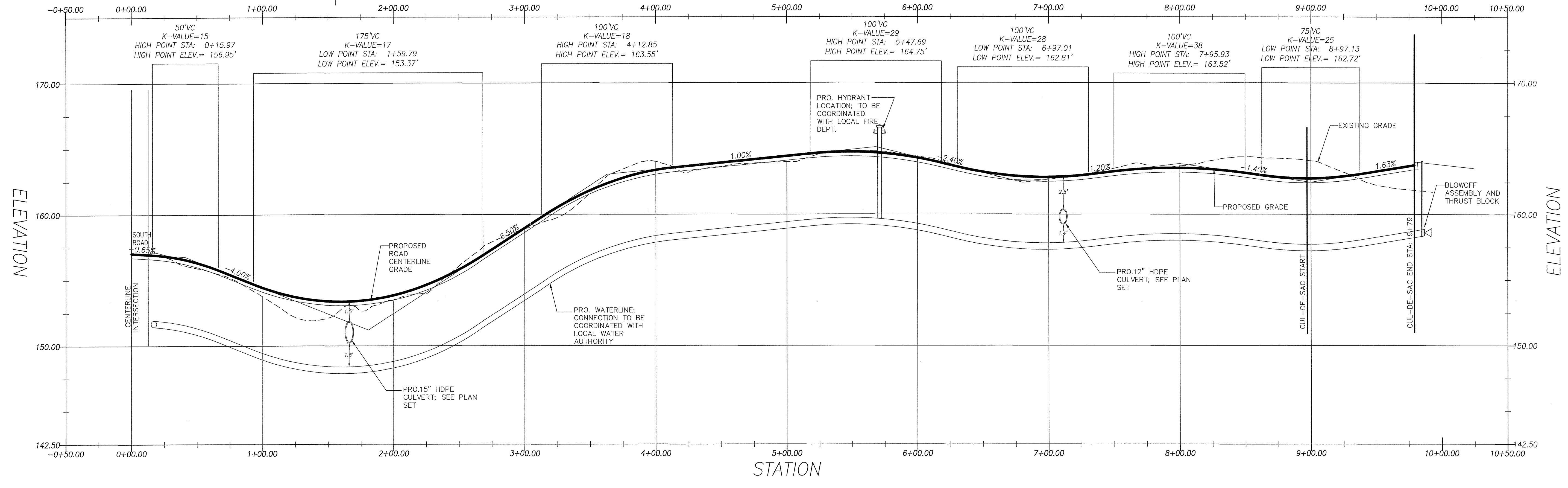
- ### LEGEND
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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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*David L. Freeman*

### PROFILE



HORIZONTAL SCALE: 1"=40'  
 VERTICAL SCALE: 1"=4'

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RI DEM FWMP & SUBDIVISION SUITABILITY APPLICATION PLAN  
**NORTH WOODS SUBDIVISION**  
**ROADWAY PROFILE PLAN**  
 A.P. 47-2, LOT 120  
 SOUTH KINGSTOWN, RHODE ISLAND  
 SCALE: AS SHOWN DATE: 10/30/20 SHEET 5 of 8

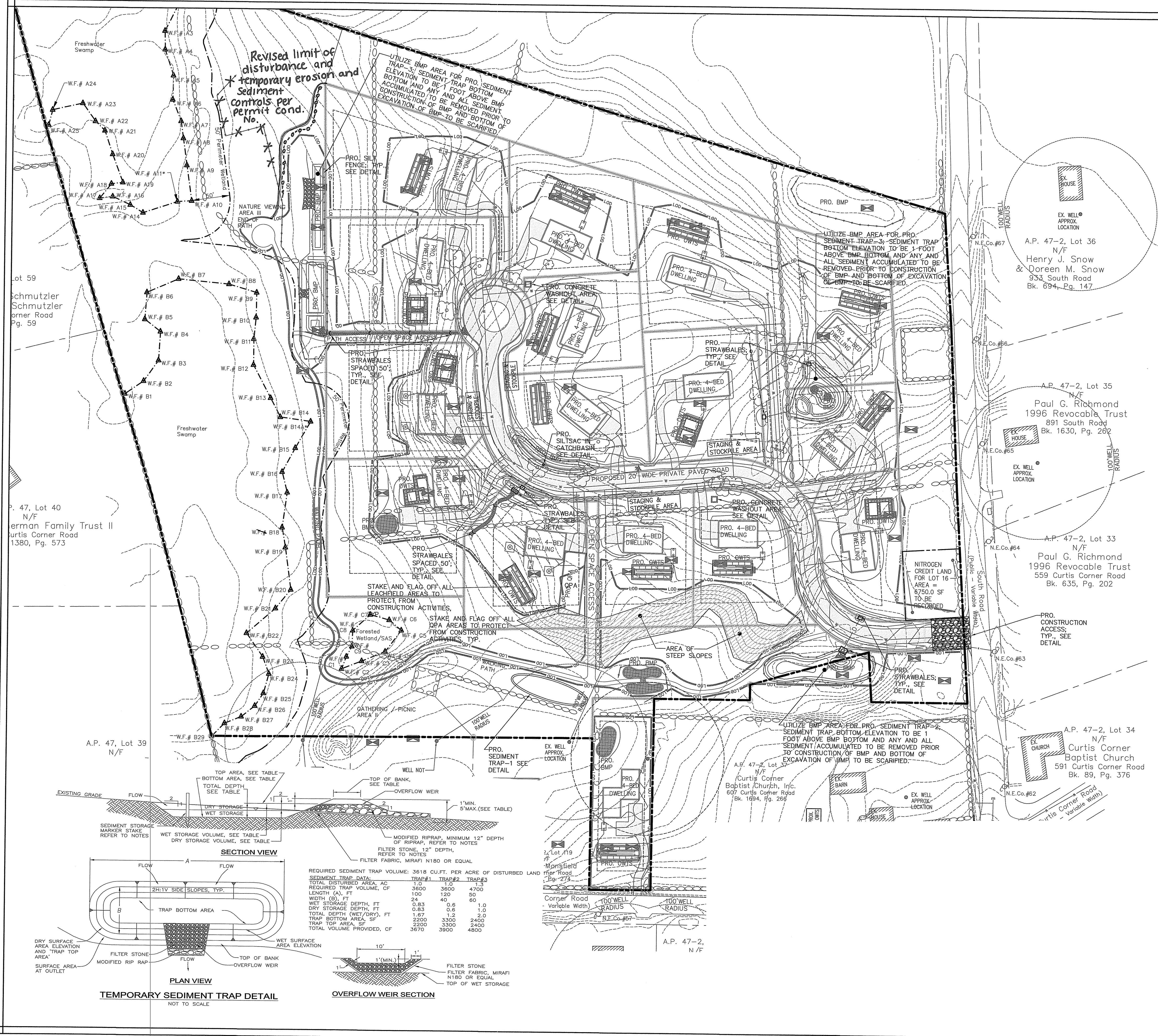
REVISIONS:

NO.	DATE	DESCRIPTION	BY
1.	1-11-21	DEM COMMENTS	DKM



**GROUND BREAKING**  
**DESIGNS, LLC**  
 CIVIL ENGINEERING SOLUTIONS  
 90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 ☎ PHONE: (401) 622-2932

JOB NO.: 20.010



**QPA NOTES:**

- CONSTRUCTION VEHICLES SHALL AVOID DRIVING OVER QPA AREAS TO THE MAXIMUM EXTENT POSSIBLE.
- IF QPA SOILS ARE COMPACTED, THEN THE SOIL MUST BE SUITABLE AMENDED, TILLED, AND RE-VEGETATED ONCE CONSTRUCTION IS COMPLETE TO RESTORE INFILTRATION CAPACITY.
- THE SLOPE OF THE QPA MUST BE LESS THAN OR EQUAL TO 5.0%.
- THE QPA MUST BE INSPECTED YEARLY TO ENSURE NO BUILD-UP OF SEDIMENT. IF THERE IS ACCUMULATION OF SEDIMENT, THEN THE SEDIMENT SHALL BE REMOVED AND THE QPA SHALL BE RESTORED.

**SESC NOTES:**

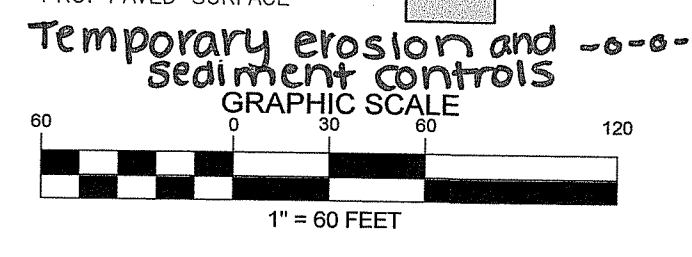
- AREAS ON SITE WHERE SOILS ARE COMPACTED UNNECESSARILY SHALL BE TILLED OR SCARIFIED IN ORDER TO RESTORE INFILTRATION CAPACITY. IN AREAS WHERE INFILTRATING STORMWATER TREATMENT PRACTICES ARE LOCATED, COMPACTED SOILS MUST BE AMENDED SUCH THAT THEY WILL COMPLY WITH THE DESIGN INFILTRATION RATES ESTABLISHED IN THE RI STORMWATER DESIGN AND INFILTRATION STANDARDS MANUAL.
- ALL MATERIAL STOCKPILES THAT EXIST FOR AN EXTENDED PERIOD OF TIME SHALL BE SEEDED TO PREVENT EROSION.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
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*Nancy L. Freeman*

**LEGEND**

- EXISTING SUBJECT PROPERTY LINE
- ADJUTTER PROPERTY LINES
- EX. CONTOUR LINE
- WETLAND EDGE DELINEATION
- 50' PERIMETER WETLANDS
- FEMA FLOODZONE BOUNDARY
- SOIL BOUNDARY LINE
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- EX. TREE/BUSH
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- PRO. SUBDIVISION LOT LINE
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- PRO. OWTS SEWER LINE
- PRO. WATER LINE
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- PRO. UNDERGROUND ELECTRIC & COMMUNICATION LINES
- PRO. FLARED END SECTION
- PRO. PAVED SURFACE

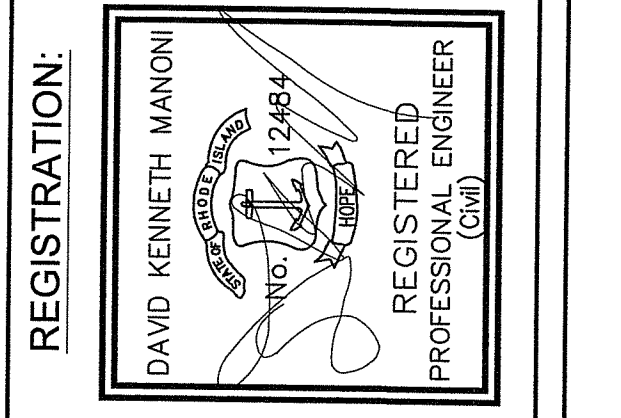


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RI DEM FWWP & SUBDIVISION SUITABILITY APPLICATION PLAN  
**NORTH WOODS SUBDIVISION**  
**SOIL EROSION & SEDIMENT CONTROL PLAN**  
A.P. 47-2, LOT 120  
SOUTH KINGSTOWN, RHODE ISLAND  
SCALE: AS SHOWN DATE: 10/30/20 SHEET 6 of 8

REVISIONS:

NO.	DATE	DESCRIPTION	BY
1.	1-17-21	DEM COMMENTS	DKW



**GROUND BREAKING**  
**DESIGNS, LLC**  
CIVIL ENGINEERING SOLUTIONS  
90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 PHONE: (401) 622-2932

**TEMPORARY SEDIMENT TRAP DETAIL**  
NOT TO SCALE

REQUIRED SEDIMENT TRAP VOLUME: 3618 CU.FT. PER ACRE OF DISTURBED LAND

SEDIMENT TRAP DATA	TRAP#1	TRAP#2	TRAP#3
TOTAL DISTURBED AREA, AC	1.0	1.0	1.3
REQUIRED TRAP VOLUME, CF	3600	3600	4700
LENGTH (A), FT	100	120	50
WIDTH (D), FT	24	40	60
WET STORAGE DEPTH, FT	0.83	0.6	1.0
DRY STORAGE DEPTH, FT	0.83	0.6	1.0
TOTAL DEPTH (WET/DRY), FT	1.67	1.2	2.0
TOTAL TRAP AREA, SF	2200	3300	2400
TRAP TOP AREA, SF	2200	3300	2400
TOTAL VOLUME PROVIDED, CF	3670	3900	4800

**SECTION VIEW**  
TOP AREA, SEE TABLE  
BOTTOM AREA, SEE TABLE  
TOTAL DEPTH, SEE TABLE  
FLOW  
DRY STORAGE  
WET STORAGE  
SEDIMENT STORAGE  
MARKER STAKE  
REFER TO NOTES  
WET STORAGE VOLUME, SEE TABLE  
DRY STORAGE VOLUME, SEE TABLE  
2H:1V SIDE SLOPES, TYP.  
TRAP BOTTOM AREA  
FLOW  
FILTER STONE  
MODIFIED RIP RAP  
WET SURFACE AREA ELEVATION  
TOP OF BANK  
OVERFLOW WEIR  
SURFACE AREA AT OUTLET

**OVERFLOW WEIR SECTION**  
TOP OF BANK, SEE TABLE  
OVERFLOW WEIR  
1" MIN. 5" MAX. (SEE TABLE)  
MODIFIED RIPRAP, MINIMUM 12" DEPTH OF RIPRAP, REFER TO NOTES  
FILTER STONE, 12" DEPTH, REFER TO NOTES  
FILTER FABRIC, MIRAFI N180 OR EQUAL

**GENERAL EROSION CONTROL NOTES:**

- THE STATE OF RHODE ISLAND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AMENDED AUG. 2013, AND THE RHODE ISLAND STANDARD DETAILS ARE MADE A PART HEREOF AS FULLY AND COMPLETELY AS IF ATTACHED HERETO. THE 2013 STANDARD SPECIFICATIONS MAY BE OBTAINED AT THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION WEB PAGE.
- LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND THE CONTRACTOR SHALL CHECK AND VERIFY LOCATIONS OF ALL EXISTING UTILITIES BOTH UNDERGROUND AND OVERHEAD. ANY DAMAGE TO EXISTING UTILITIES AS SHOWN OR NOT SHOWN ON THE PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. COSTS OF SUCH DAMAGE SHALL BE BORNE BY THE CONTRACTOR. NO EXCAVATION SHALL BE DONE UNTIL ALL INVOLVED UTILITY COMPANIES ARE NOTIFIED 48-HOURS IN ADVANCE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY DIG-SAFE (1-800-344-7233) A MINIMUM OF 48 WORKING HOURS, EXCLUDING WEEKENDS AND HOLIDAYS, PRIOR TO THE START OF ANY EXCAVATION AND/OR BLASTING WORK. THE NAME OF THE COMPANY PERFORMING THE EXCAVATION AND/OR BLASTING WORK MUST BE SUPPLIED TO DIG-SAFE, IF IT IS DIFFERENT FROM THE CALLER.
- IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN ANY AND ALL PERMITS REQUIRED BY, BUT NOT LIMITED TO, THE STATE OF RHODE ISLAND, THE FEDERAL GOVERNMENT, LOCAL (TOWN/CITY) GOVERNMENT AND ALL INDIVIDUAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL TEMPORARY SEDIMENTATION AND EROSION CONTROLS. ALL MATERIAL FOR CLEAN AND FREE OF MATTER WHICH COULD POLLUTE ANY DOWN STREAM WATERCOURSE.
- FILL MATERIAL SHALL BE COMPACTED IN ONE FOOT (MAXIMUM) LIFTS TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557 (MODIFIED PROCTOR TEST).
- ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ALL AREAS NOT TO BE DEVELOPED THAT ARE COMPACTED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED BY TILLING THE TOP 12" OF SOIL.

- EXTREME CARE SHALL BE EXERCISED AS TO PREVENT ANY MATERIALS FROM ENTERING THE ROADWAYS, ROADWAY DRAINAGE SYSTEMS, ADJACENT PROPERTY, WETLANDS, PERIMETER WETLANDS, AND RIVERBANK WETLANDS.
- STAKED STRAW BALES AND/OR SILT FENCE SHALL BE INSTALLED WHERE SHOWN ON THE PLAN AND AS REQUIRED TO PREVENT SEDIMENTATION INTO PERIMETER AND RIVERBANK WETLANDS.
- DENUDED SLOPES SHALL NOT BE UNATTENDED OR EXPOSED FOR MORE THAN 2 WEEKS OF TIME OR FOR THE INACTIVE WINTER SEASON.
- ALL DISTURBED SOILS EXPOSED PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY SUCH AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION, AS DETERMINED BY THE RESIDENT ENGINEER OR ENVIRONMENTAL INSPECTOR, BY NOVEMBER 15 OF ANY CALENDAR YEAR, MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING OR STRAW MULCH, IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE R.I. SOIL EROSION AND SEDIMENT CONTROL HANDBOOK OR AS DIRECTED BY THE RESIDENT ENGINEER OR INSPECTOR. IF WORK CONTINUES WITHIN ANY OF THESE AREAS DURING THE PERIOD FROM OCTOBER 15 THROUGH APRIL 15, CARE MUST BE TAKEN TO ENSURE THAT ONLY THE AREA REQUIRED FOR THAT DAY'S WORK IS EXPOSED, AND ALL ERODIBLE SOIL MUST BE RESTABILIZED WITHIN 5 WORKING DAYS. ANY WORK TO CORRECT PROBLEMS RESULTING FROM FAILURE TO COMPLY WITH THIS PROVISION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THERE WILL BE NO SEPARATE PAYMENT FOR THIS PROVISION; IT SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION OPERATIONS. STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN 2 WEEKS OF FINAL GRADING.
- PREPARE TEMPORARY SEEDING AREA, PROVIDE AND PLANT SEED IN ACCORDANCE WITH "RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK" AS PREPARED BY THE RHODE ISLAND STATE CONSERVATION COMMITTEE, REVISED 2014, (AS REVISED).

**SEED MIX:**

ANNUAL RYE GRASS	1.5 LBS/1,000 SQ. FT.
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- TEMPORARY TREATMENTS TO STABILIZE EXPOSED SOILS SHALL CONSIST OF STRAW OR FIBER MULCH OR PROTECTIVE COVERS, SUCH AS A MAT OR FIBER LINING (BURLAP, JUTE, FIBERGLASS NETTING, EXCELSIOR BLANKETS). THEY SHALL BE INCORPORATED INTO THE WORK WHEN SOILS ARE EXPOSED FOR TWO WEEKS OR MORE OR AS ORDERED BY THE RESIDENT ENGINEER OR OWNER AT NO ADDITIONAL COST.
- STRAW APPLICATIONS SHALL BE IN THE AMOUNT OF 4,000 LBS/ACRE.
- ALL NEW STRAW BALES OR TEMPORARY PROTECTION SHALL REMAIN IN PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED AND POTENTIAL SEDIMENTATION SOURCES ARE REMOVED.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EROSION CONTROL MAINTENANCE AND SHALL INSPECT/REPLACE AS NEEDED.
- ADDITIONAL STRAW BALES/SILT FENCE OR OTHER TREATMENTS SHALL BE PROVIDED AS DIRECTED BY ENGINEER, RIDEM OR LOCAL REPRESENTATIVES AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL INSPECT THE SOIL EROSION CONTROL DEVICES AFTER EVERY RAIN STORM EVENT AND EVERY 7 DAYS (WHICH EVER COMES FIRST). ANY SOIL MIGRATION PAST THE DEVICES SHALL BE REMOVED AND THE SOIL EROSION CONTROL DEVICES SHALL BE RE-EVALUATED TO PREVENT SOIL EROSION. ALL ACCUMULATED SEDIMENT IN FRONT OF THE DEVICES SHALL BE REMOVED AFTER EVERY RAIN STORM EVENT.
- ALL DISTURBED SOIL AREAS SHALL BE PROTECTED AGAINST SOIL EROSION BY PLACEMENT OF STRAW BALES AND/OR SILT FENCE ON THE DOWN GRADIENT SIDE OF THE DISTURBED AREA(S). SHOULD THE VOLUME AND/OR RATE OF STORMWATER RUNOFF BE TOO GREAT FOR A SINGLE DEVICE, THEN MULTIPLE DEVICES ARE REQUIRED SUCH AS SILT FENCE BACKED-UP WITH STRAW BALES. THESE ADDITIONAL DEVICES ARE NOT SHOWN ON THE PLAN BUT SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- AT THE END OF THE PROJECT CONSTRUCTION ALL SEDIMENT IN MANHOLE SUMPS AND WITHIN ANY DRAINAGE STRUCTURE OR BMP SHALL BE REMOVED.

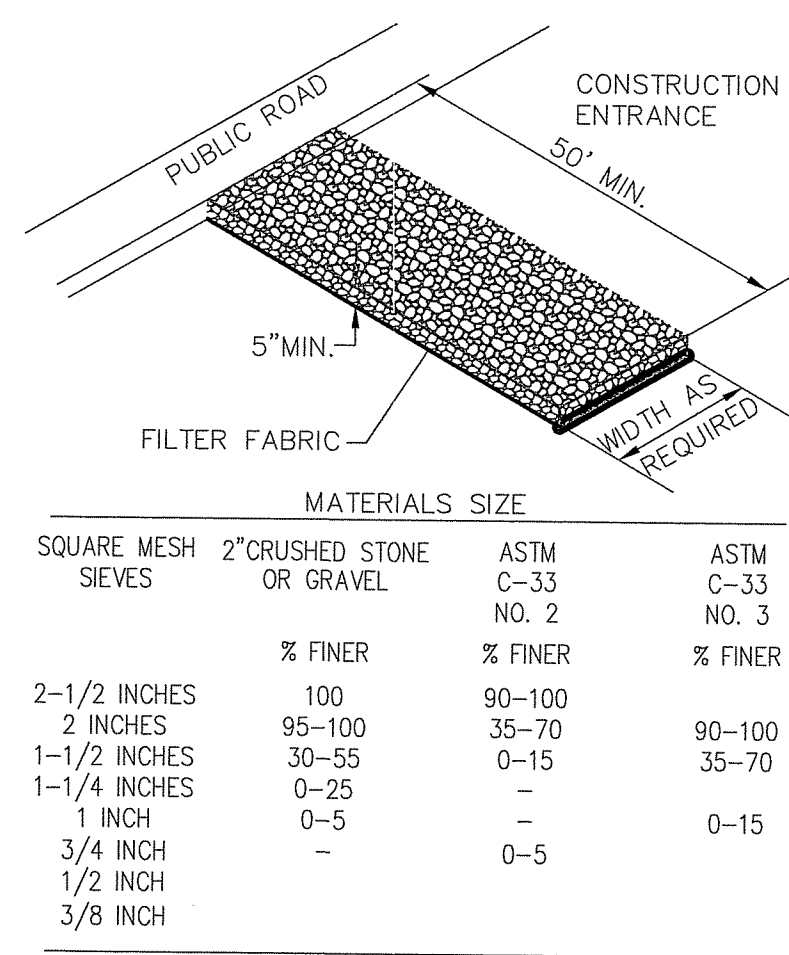
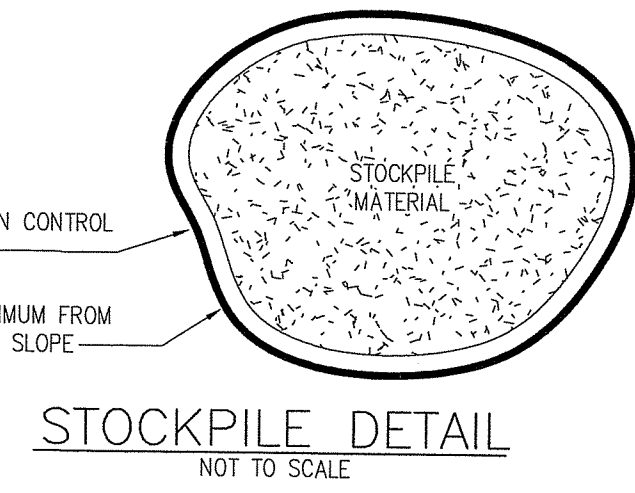
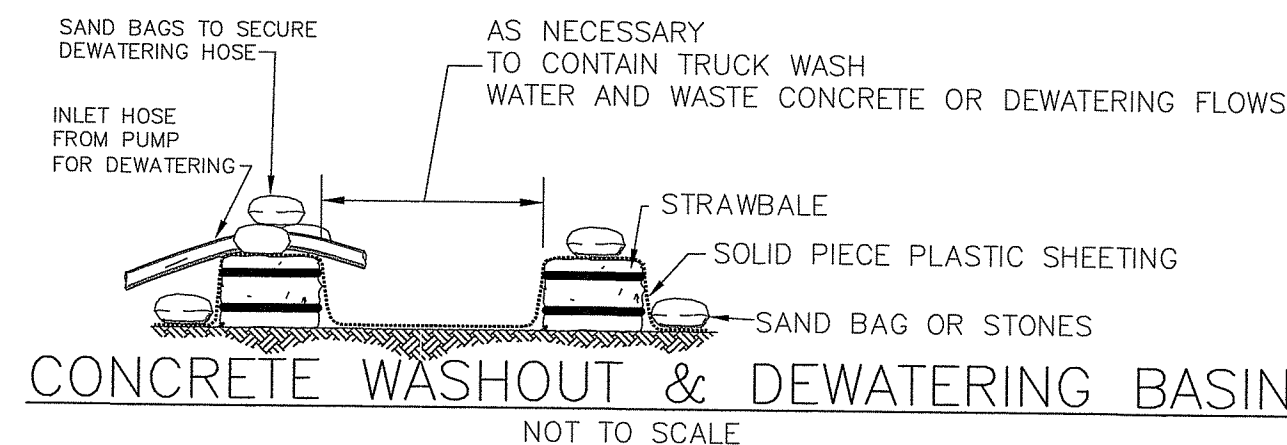
**SEQUENCE AND STAGING OF LAND DISTURBING ACTIVITIES:**

- CONTRACTOR TO REFER TO RIDEM RIPDES SOIL EROSION AND SEDIMENT CONTROL (SESC) REPORT AS WELL AS THESE DRAWINGS.
- SURVEY AND STAKE LIMIT OF DISTURBANCE FOR PLACEMENT OF SEDIMENTATION CONTROL DEVICES.
- PLACE PERIMETER SEDIMENTATION CONTROL DEVICES. SEE DETAILS. IN NO CASE SHALL THE LIMIT OF WORK EXTEND BEYOND THE SEDIMENTATION CONTROL DEVICES.
- CONSTRUCT CONSTRUCTION ENTRANCE DEVICES LOCATED ALONG SOUTH ROAD, SEE DETAIL.
- CLEAR AND GRUB AREA WITHIN THE LIMIT OF DISTURBANCE.
- CONSTRUCT TEMPORARY SEDIMENT TRAPS.
- CLEAR AND ROUGH GRADE ROADS AND BUILDING SITES.
- INSTALL AND COMPACT GRAVEL BASE COURSE FOR ROADS.
- EXCAVATE AND POUR BUILDING FOUNDATIONS.
- CONSTRUCT UTILITIES (SEPTIC, WATER, DRAINAGE, ETC...)
- POUR BITUMINOUS CONCRETE BASE COURSE.
- FINISH REMAINDER OF CONSTRUCTION AND PAVE BITUMINOUS CONCRETE SURFACE COURSE.
- REMOVE TEMPORARY SOIL EROSION DEVICES.
- CLEAN OUT ALL DRAINAGE BASINS AND STRUCTURES AS NEEDED. REMOVE AND DISPOSE ALL ACCUMULATED SEDIMENT IN A SUITABLE AREA.

- REFERENCE IS MADE TO APPENDIX G 'POLLUTION PREVENTION AND SOURCE CONTROLS' OF THE RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AMENDED 2015. THIS DOCUMENT SHALL BE REFERENCED WHEN IMPLEMENTING THE POLLUTION PREVENTION TECHNIQUES. A BRIEF SUMMARY OF THE TECHNIQUES IS PROVIDED BELOW, REFER TO THE ABOVE REFERENCE FOR ALL TECHNIQUES TO BE IMPLEMENTED.
- SOLID WASTE CONTAINMENT:**  
A. OWNER TO PROVIDE TRASH CONTAINER. CONTAINER TO HAVE A COVER TO PREVENT TRASH FROM BLOWING OUT.  
B. SWEEP STREET/PARKING AREA ANNUALLY.
- HAZARDOUS MATERIALS CONTAINMENT:**  
A. CONTRACTOR TO STORE ALL HAZARDOUS MATERIALS INSIDE STORAGE LOCKERS OR OTHER APPROVED METHODS WHICH HAVE SECONDARY CONTAINMENT SYSTEMS.  
B. SECONDARY CONTAINMENT MUST BE INCLUDED WHEREVER SPILLS MIGHT OCCUR (E.G. FUELING AND HAZARDOUS MATERIAL TRANSFER AND LOADING AREAS).
- ROADS AND PARKING AREA MANAGEMENT:**  
A. SWEEP STREET/PARKING AREA ANNUALLY.  
B. USE DEICING CHEMICALS AND SAND JUDICIOUSLY SINCE THEY CAUSE WATER QUALITY PROBLEMS. PROVIDE AND SPREAD IN ACCORDANCE WITH APPENDIX G RECOMMENDATIONS.  
C. PLOW SNOW AND STORE ACCUMULATED SNOW PILES AWAY FROM SAND FILTER SYSTEM AND SEDIMENT FOREBAY.  
\* DEBRIS SHOULD BE CLEANED FROM THE SITE PRIOR USING THE SITE FOR SNOW DISPOSAL.  
\* DEBRIS SHOULD BE CLEARED FROM THE SITE AND PROPERLY DISPOSED OF AT THE END OF THE SNOW SEASON.  
D. ONLY USE ASPHALT BASED SEALANTS WHEN SEALING THE PAVEMENTS. DO NOT USE COAL-TAR BASED SEALANTS SINCE THESE ARE MORE TOXIC.
- SEPTIC SYSTEM:**  
A. NO SEPTIC SYSTEMS PROPOSED.
- LAWN, GARDEN AND LANDSCAPE MANAGEMENT:**  
A. **LAWN CONVERSION** - REDUCE THE AMOUNT OF LAWN BY REPLANTING LAWN WITH GARDEN BEDS CONTAINING FLOWERS/SHRUBS. LAWNS REQUIRE MORE MAINTENANCE THAN FLOWER BEDS.  
B. **SOIL BUILDING** - MAINTAIN A HEALTHY LAWN BY TESTING SOIL FOR PH, FERTILITY, COMPACTION, TEXTURE, AND EARTH WORM CONTENT.  
C. **GRASS SELECTION** - SELECT DROUGHT TOLERANT GRASS SPECIES. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.  
D. **MOWING AND TRIMMING** - KEEP GRASS HEIGHT HIGH SUCH AS 2 TO 3 INCHES IN HEIGHT. THIS WILL REDUCE WEED GROWTH.  
E. **FERTILIZATION** - MINIMIZE FERTILIZATION, FERTILIZE NO MORE THAN TWICE A YEAR. APPLY CAREFULLY SO FERTILIZER DOES NOT SPREAD ON IMPERVIOUS SURFACES. REFRAIN FROM THE USE OF PHOSPHATE BASED FERTILIZERS. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.  
F. **WEED MANAGEMENT** - NEVER USE CHEMICAL HERBICIDES TO ELIMINATE OR CONTROL WEEDS. OWNER SHALL REMOVE WEEDS BY PULLING OR DIGGING OUT. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.  
G. **PEST MANAGEMENT** - LIMIT PESTICIDE USE. CHOOSE PESTICIDES THAT POSE THE LEAST RISK TO HUMAN HEALTH AND THE ENVIRONMENT. REFER TO APPENDIX G FOR ADDITIONAL INFORMATION.  
H. **SENSIBLE IRRIGATION** - WATER NO MORE THAN 1" PER WEEK. USE DROUGHT-RESISTANT GRASSES. CUT GRASS AT 2-3 INCHES.

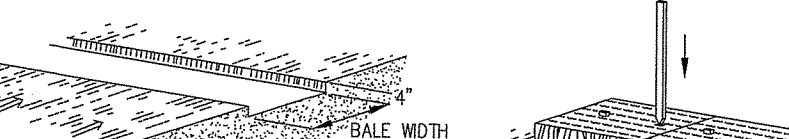
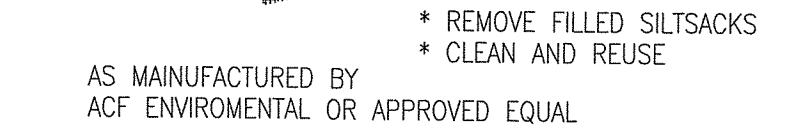
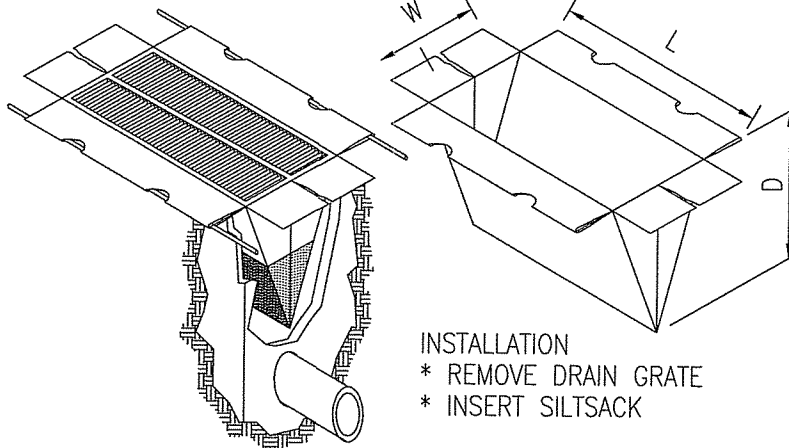
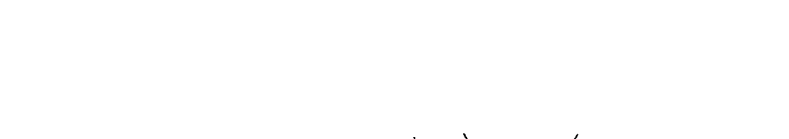
**SEDIMENTATION CONTROL PROGRAM:**

- EXTREME CARE SHALL BE EXERCISED SO AS TO PREVENT ANY UNSUITABLE MATERIAL FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.
- DURING CONSTRUCTION, THE CONTRACTOR AND/OR DEVELOPER SHALL BE RESPONSIBLE FOR MAINTAINING DRAINAGE AND RUN-OFF FLOW DURING STORMS.
- SEDIMENTATION CONTROL DEVICES SHALL BE INSPECTED CLOSELY AND MAINTAINED PROMPTLY AFTER EACH RAINFALL.
- CARE SHALL BE TAKEN SO AS NOT TO PLACE "REMOVED SEDIMENTS" WITHIN THE PATH OF EXISTING, NEWLY CREATED (BOTH TEMPORARY AND PERMANENT) OR PROPOSED WATERCOURSES OR THOSE AREAS SUBJECT TO STORMWATER FLOWAGE.
- ADDITIONAL STRAW BALES OR SANDBAGS SHALL BE LOCATED AS CONDITIONS WARRANT OR AS DIRECTED BY THE ENGINEER.
- SEDIMENTATION TRAPS SHALL BE PROVIDED AT ALL DRAINAGE STRUCTURES DURING CONSTRUCTION (SILT SACS, STRAW BALES, TEMPORARY DITCHES, ETC).
- EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AT THE SITE PRIOR TO THE START OF CONSTRUCTION AND BE PROPERLY MAINTAINED UNTIL ALL DISTURBED AREAS ARE STABILIZED INCLUDING:  
7.1. THE INSTALLATION OF AN EROSION CONTROL FENCE IN ALL LOCATIONS SHOWN ON THE APPROVED SITE PLANS AND WHERE OTHERWISE NECESSARY TO PREVENT SEDIMENTS FROM ENTERING DOWNSTREAM WATERCOURSES AND STORMWATER DRAINAGE SYSTEMS.  
7.2. ALL DISTURBED AREAS ARE TO BE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER PRIOR TO THE COMPLETION OF THE PROJECT. AREAS EXPOSED FOR EXTENDED PERIODS ARE TO BE COMPLETELY COVERED WITH SPREAD STRAW MULCH.  
7.3. CATCH BASINS WILL BE PROTECTED WITH SILT SACS & STRAW BALES. FILTERS THROUGHOUT THE CONSTRUCTION PERIOD AND UNTIL ALL DISTURBED AREAS ARE THOROUGHLY STABILIZED. SUMPS ARE TO BE CLEANED IMMEDIATELY FOLLOWING INSTALLATION OF PERMANENT PAVEMENT. OUTFALLS ARE TO BE PROTECTED BY STRAW BALE FILTERS UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH APPROVED GROUND COVER.  
7.5. ALL CONTROL MEASURES WILL BE MAINTAINED IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD.
- THE LIMITS OF ALL CLEARING, GRADING AND DISTURBANCE SHALL BE KEPT TO A MINIMUM WITHIN THE PROPOSED AREA OF CONSTRUCTION. ALL AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE SHALL REMAIN TOTALLY UNDISTURBED.
- UPON COMPLETION OF CONSTRUCTION OF SITE IMPROVEMENTS AND THE STORMWATER DRAINAGE SYSTEM, ALL CATCH BASINS AND STORM DRAIN PIPING SHALL BE CLEANED OF SEDIMENT. SEDIMENT FOREBAY AND SAND FILTER SHALL BE CLEANED OF SEDIMENT TO THE DESIGN GRADES INDICATED.
- AT NO TIME DURING CONSTRUCTION SHALL THE SUBGRADE OF THE SITE BE SUCH THAT SURFACE RUNOFF WILL BE PERMITTED TO DIRECTLY ENTER ANY DRAINAGE STRUCTURE. A TEMPORARY DEPRESSED AREA AROUND THE STRUCTURE SHALL BE INCORPORATED AS A SEDIMENTATION TRAP. THE MOUTH OF THE TRAP SHALL BE LINED WITH STRAW BALES AROUND THE COMPLETE PERIMETER. DURING ALL PRELIMINARY STAGES, THE TOP OF THE STRUCTURE SHALL ALWAYS BE HIGHER THAN THE SUBGRADE.
- STRAW BALE EROSION CHECKS SHALL BE MAINTAINED AROUND ALL CATCH BASINS UNTIL ALL UPGRADIENT DISTURBED AREAS ARE STABILIZED BY PAVEMENT OR VEGETATION.
- ALL COMPONENTS OF THE DRAINAGE SYSTEM MUST BE CLEANED OF SEDIMENT BY THE PLACER OR HIS REPRESENTATIVE IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED.
- INSPECT TEMPORARY DIVERSIONS AND THEIR COMPONENTS ONCE A WEEK AND AFTER EVERY RAINFALL. DAMAGE CAUSED BY CONSTRUCTION TRAFFIC OR OTHER ACTIVITY SHOULD BE REPAIRED BEFORE THE END OF EACH WORKING DAY.
- CHECK DAMS SHALL BE INSTALLED EVERY 300 FEET FOR SLOPES OF 1% OR LESS, EVERY 200 FEET FOR SLOPES OF 2%, EVERY 150 FEET FOR SLOPES OF 3% TO 5%, AND EVERY 100 FEET FOR SLOPES OF 5% OR GREATER.
- CHECK DAMS SHALL BE INSTALLED EVERY 20 FEET ALONG THE PROPOSED SWALE.
- SEDIMENTS SHOULD BE REMOVED FROM THE CHECK DAM WHEN IT REACHES ONE-HALF THE DAM HEIGHT.



NOTE: STABILIZATION PAD TO BE IN CONFORMANCE WITH STANDARDS SET FORTH IN THE "RHODE ISLAND GUIDELINES FOR SOIL & SEDIMENT CONTROL".

**CONSTRUCTION ACCESS**



NOTES:  
1. EXISTING TREES TO REMAIN UNDISTURBED WHEN CREATING THE PATH, ALIGN PATH TO GO AROUND EXISTING TREES.  
2. NO GRADING PROPOSED IN PERIMETER WETLANDS AND RIVERBANK WETLANDS.  
3. WIDTH OF WALKING PATH TO BE 6 FEET AND HAVE A PERVIOUS SURFACE COMPOSED OF BARK MULCH OR WOOD CHIPS.  
4. SELECTIVE THINNING OF SHRUBS ABOVE PATH MAY BE NECESSARY AND SHOULD BE LIMITED TO PATH WIDTH (6 FOOT WIDE PATH) TO A HEIGHT OF 7 FEET.

**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED MAY 16, 2021 FILE # 20-0757  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE!**

*Nancy J. Freeman*

ISSUED FOR PERMITTING ONLY,  
NOT FOR CONSTRUCTION

**EROSION CONTROL AND SOIL STABILIZATION PROGRAM:**

- ALL STRAW BALES OR TEMPORARY PROTECTION SHALL REMAIN IN-PLACE UNTIL AN ACCEPTABLE STAND OF GRASS OR APPROVED GROUND COVER IS ESTABLISHED.
- THE TOPSOIL SHALL HAVE A SANDY LOAM TEXTURE RELATIVELY FREE OF SUBSOIL MATERIAL, STONES, ROOTS, SOIL, TREE LIMBS, TRASH OR CONSTRUCTION DEBRIS AND SHALL CONFORM WITH RHODE ISLAND STANDARD SPECIFICATION M.20.01, AS AMENDED.
- THE SEED MIX SHALL BE INOCULATED WITHIN 24-HOURS BEFORE MIXING AND PLANTING, WITH APPROPRIATE INOCULUM FOR EACH VARIETY.
- THE DESIGN MIX UTILIZED IN ALL DISTURBED AREAS TO BE SEEDED SHALL BE COMPRISED OF THE FOLLOWING:

TYPE	% BY WEIGHT	SEEDING DATE
CREeping RED FESCUE	70	APRIL 1 - JUNE 15
ASTORIA BENTGRASS	5	AUGUST 15 - OCT.
BIRDFOOT TREFEOL	15	
PERENNIAL RYEGRASS	10	

APPLICATION RATE: 100 LBS/ACRE  
LIMING AND FERTILIZATION AS REQUIRED TO COMPLIMENT OR UPGRADE EXISTING CONDITIONS.

- ANY AREAS THAT DO NOT DEVELOP WITHIN THE PERIOD OF ONE YEAR SHALL BE REPAIRED AND/OR RESEEDED.
- THE NORMAL ACCEPTABLE SEASONAL SEEDING DATES ARE APRIL 1ST THROUGH OCTOBER 15TH.
- STABILIZATION OF ONE FORM OR ANOTHER AS DESCRIBED ABOVE SHALL BE ACHIEVED WITHIN FIFTEEN (15) DAYS OF FINAL GRADING. STOCKPILES OF TOPSOIL AND EARTH MATERIALS SHALL NOT BE LOCATED NEAR WATERWAYS. THEY SHALL HAVE SIDE SLOPES NO GREATER THAN 2:1 AND STOCKPILES SHALL ALSO BE SEEDED AND/OR STABILIZED. THE STOCKPILES SHALL BE SURROUNDED BY STACKED STRAW BALES AND/OR SILT FENCE.
- ON SLOPES STEEPER THAN 30% MULCH APPLICATIONS SHALL BE TACKED DOWN BY "CRIMPING" OR "TRACKING".
- TREES TO BE RETAINED SHALL BE FENCED OR ROPED OFF TO PROTECT THEM FROM CONSTRUCTION EQUIPMENT.
- ALL PROPOSED PLANTINGS MUST BE ACCOMPLISHED AS EARLY AS POSSIBLE UPON COMPLETION OF GRADING AND CONSTRUCTION, AND AT LEAST PRIOR TO ANY ON-SITE OCCUPANCY.
- PLANTINGS SHALL BE MAINTAINED BY THE PROPERTY OWNER TO ENSURE SURVIVAL.
- SHOULD ANY OR ALL OF THE PROPOSED PLANTS FAIL TO SURVIVE AT LEAST ONE (1) FULL GROWING SEASON FROM THE TIME THEY HAVE BEEN PLANTED, THE OWNER SHALL BE FULLY RESPONSIBLE FOR REPLACING AND MAINTAINING THE SAME PLANT SPECIES FOR ONE (1) ADDITIONAL GROWING SEASON.
- ALL DISTURBED AREAS MUST BE SEEDED OR PLANTED WITHIN THE CONSTRUCTION SEASON.
- TEMPORARY SEEDING MUST BE DONE WITHIN ONE (1) MONTH AFTER DISTURBANCE.
- ALL DISTURBED AREAS MUST BE PERMANENTLY SEEDED OR PLANTED BEFORE OCTOBER 15TH, IF NOT THEY MUST BE TEMPORARILY SEEDED. SLOPES CONSTRUCTED AT, OR STEEPER THAN, 15% SHALL HAVE TEMPORARY EROSION CONTROL MATTING UTILIZED AS A SUPPORTIVE METHOD IN ADDITION TO THE METHODS DESCRIBED ABOVE UNLESS IN THE CASE WHERE PERMANENT TURF REINFORCEMENT MATS ARE INSTALLED IMMEDIATELY UPON CONSTRUCTION OF THE SLOPE. IN NO CASE SHALL STEEP SLOPES BE LEFT UNPROTECTED.
- ALL PROPOSED INLETS AND OUTLETS SHALL BE PROTECTED WITH TURF REINFORCEMENT AS PROPOSED ON THE PLANS AND/OR STRAW BALE INLET AND OUTLET PROTECTION DEVICES. SEE DETAILS.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS AND PROCEDURES SET FORTH IN THE TOWN ZONING ORDINANCES, RHODE ISLAND STORMWATER DESIGN AND INSTALLATION STANDARDS MANUAL, AMENDED MARCH 2015 AS PREPARED BY THE RIDEM AND CRMC, AND RHODE ISLAND EROSION AND SEDIMENT CONTROL HANDBOOK AS PREPARED BY RHODE ISLAND STATE CONSERVATION COMMITTEE, REVISED 2014, (AS REVISED).

RI DEM FWP & SUBDIVISION SUITABILITY APPLICATION PLAN  
NORTH WOODS SUBDIVISION

DETAIL SHEET - 1

A.P. 47-2, LOT 120

SOUTH KINGSTOWN, RHODE ISLAND

SCALE: AS SHOWN DATE: 10/30/20

JOB NO.: 20.010

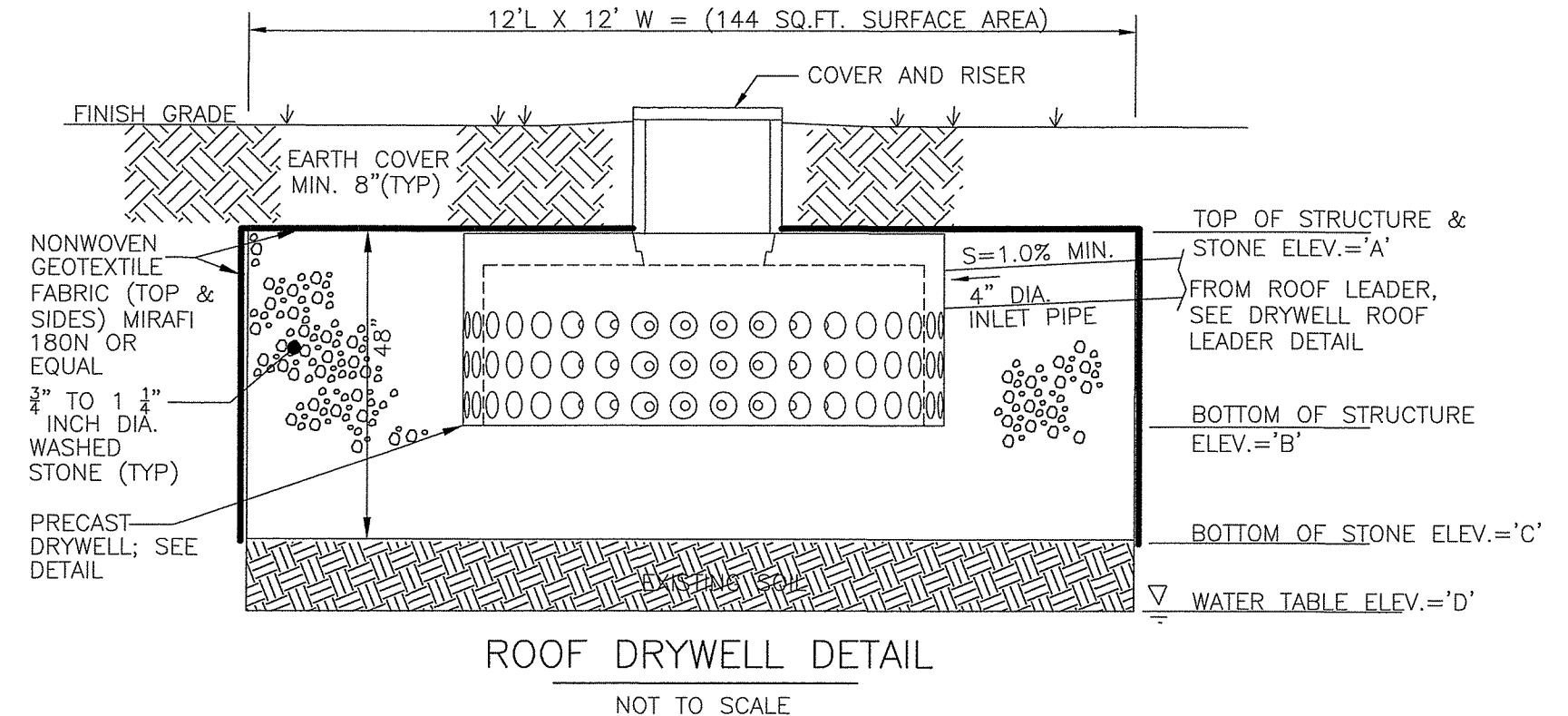
REVISIONS:

NO.	DATE	DESCRIPTION	BY	CHK
1.	1-11-21	DEM COMMENTS		

REGISTRATION:  
DAVID KENNETH MANONI  
REGISTERED PROFESSIONAL ENGINEER (CIVIL)

**GROUND BREAKING  
DESIGNS, LLC**  
CIVIL ENGINEERING SOLUTIONS

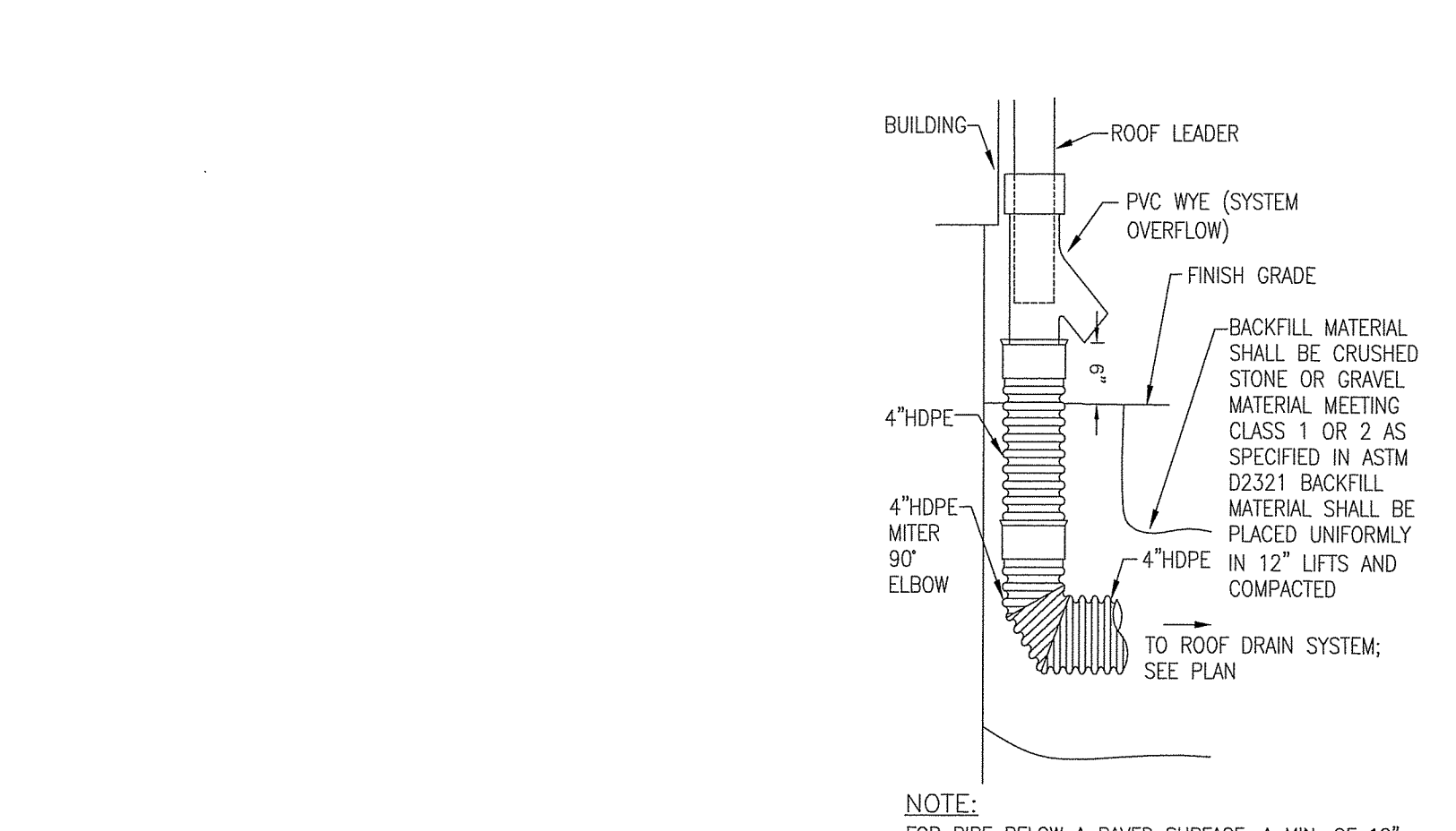
90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 ☎ PHONE: (401) 622-2932



**TYPICAL NOTES:**  
 1. CRUSHED STONE SHALL BE CLEAN WITH NO FINES.  
 2. CRUSHED STONE SHALL BE WRAPPED WITH FABRIC ON TOP & SIDES.  
 3. SCARIFY BOTTOM PRIOR TO PLACEMENT OF STONE.  
 4. PIPE ROOF RUNOFF FROM DOWNSPOUTS (WHERE INDICATED) TO DRYWELL TO MAXIMUM EXTENT POSSIBLE.  
 5. DO NOT ALLOW SEDIMENT LADEN RUNOFF TO ENTER DRYWELL.  
 6. 4" PIPE SHALL BE HDPE OR APPROVED EQUAL, MINIMUM SLOPE = 1.0% (1/8" PER FOOT).

**DIMENSION/ELEVATION SCHEDULE:**

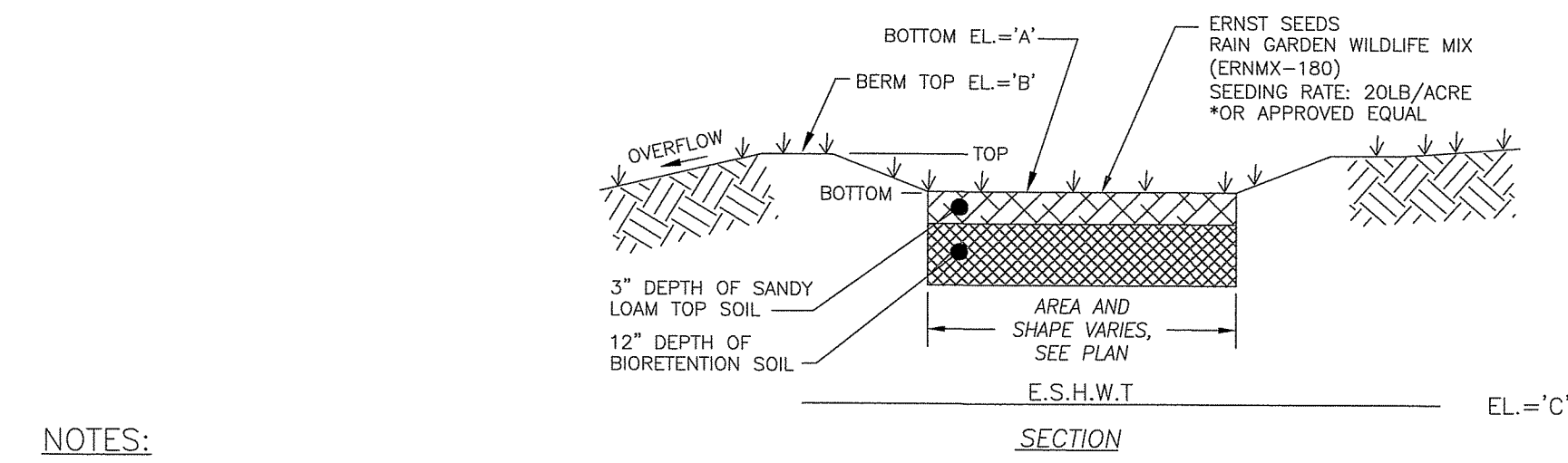
DRYWELL 'BA'	DRYWELL 'BB'	DRYWELL 'CA'	DRYWELL 'CB'
'A' = 151.0'	'A' = 149.5'	'A' = 152.0'	'A' = 155.0'
'B' = 148.6'	'B' = 147.1'	'B' = 149.6'	'B' = 152.6'
'C' = 147.0'	'C' = 145.5'	'C' = 148.0'	'C' = 151.0'
'D' = 144.0'	'D' = 142.5'	'D' = 145.0'	'D' = 148.0'



**NOTE:**  
 FOR PIPE BELOW A PAVED SURFACE: A MIN. OF 12" OF BACKFILL MATERIAL IS REQUIRED ABOVE THE TOP OF THE PIPE CROWN MEASURED FROM THE BOTTOM OF THE PAVEMENT.

**PRECAST DRYWELL DETAIL**  
 NOT TO SCALE

**DRYWELL ROOF LEADER DETAIL**  
 NOT TO SCALE



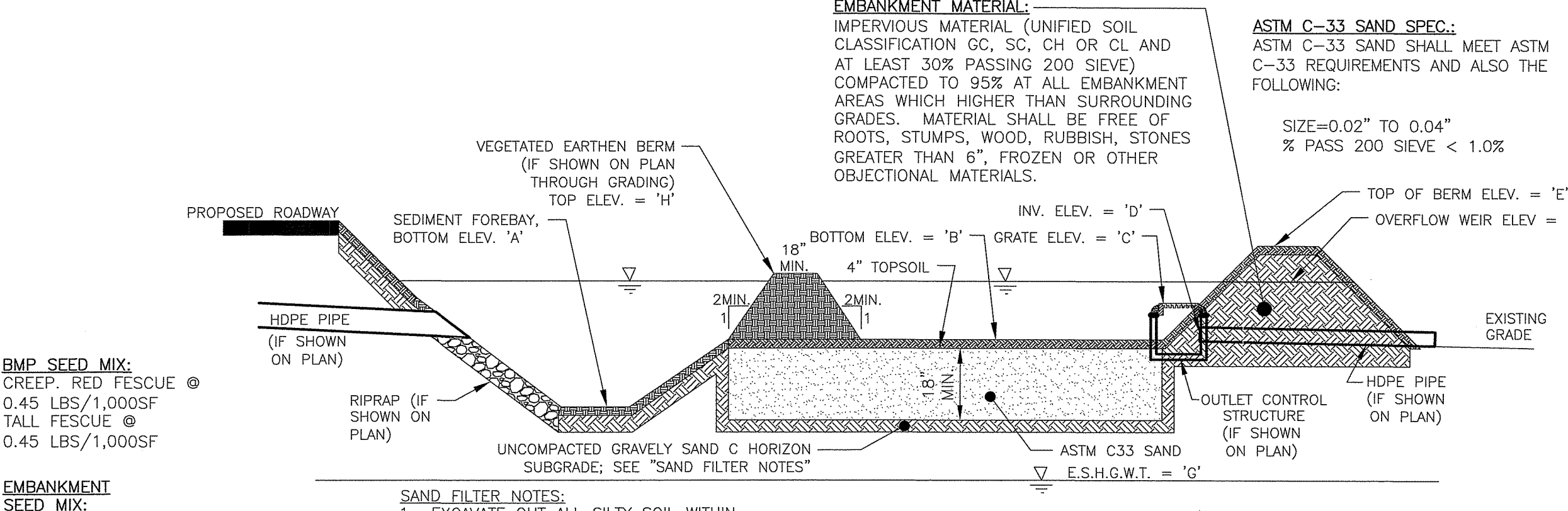
**NOTES:**  
 1. DO NOT COMPACT SOILS IN RAIN GARDEN AREA. TILL BOTTOM OF RAIN GARDEN PRIOR TO PLACEMENT OF SANDY LOAM TOPSOIL AND BIORETENTION SOIL TO PROMOTE GOOD INFILTRATION RATES.  
 2. FINE GRADE RAIN GARDEN SO IT HOLDS REQUIRED DEPTH OF RUNOFF PRIOR TO OVERFLOWING.  
 3. DIRECT DRIVEWAY AREAS (TO THE MAXIMUM EXTENT POSSIBLE) TO FLOW INTO RAIN GARDEN.  
 4. BIORETENTION SOIL MIX (BY VOLUME):  
 SAND 85 TO 88%  
 SILT 0 TO 12%  
 CLAY 0 TO 2%  
 ORGANIC MATTER 3 TO 5%  
 5. THE BIORETENTION SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OTHER WOODY MATERIAL OVER 1" IN DIAMETER, OR BRUSH/SEEDS FROM NOXIOUS WEEDS. PLACEMENT OF THE SOIL SHOULD BE IN LISTS OF 6 INCHES, LOOSELY COMPACTED (TAMPED LIGHTLY WITH A BACKHOE BUCKET).

**ELEVATION SCHEDULE:**

	RAIN GARDEN "7"	RAIN GARDEN "8"	RAIN GARDEN "OS"	RAIN GARDEN "16"
ELEV. 'A'	147.00	158.33	147.33	147.00
ELEV. 'B'	147.67	159.00	148.00	147.50
ELEV. 'C'	144.00	151.00	144.00	144.00

RAIN GARDENS "7", "8", "OS", & "16" ALL FULLY INFILTRATE THE 1.2" STORM EVENT AND OVERFLOW AT GREATER STORM EVENTS.  
 RAIN GARDEN "N" FULLY INFILTRATES RUNOFF FROM STORMS UP TO AND INCLUDING THE 2-YR, TYPE III, 24-HOUR STORM EVENT AND OVERFLOWS AT GREATER STORM EVENTS.

**RAIN GARDEN DETAIL**  
 NOT TO SCALE



**BMP SEED MIX:**  
 CREEP RED FESCUE @ 0.45 LBS/1,000SF  
 TALL FESCUE @ 0.45 LBS/1,000SF

**EMBANKMENT SEED MIX:**  
 RED FESCUE @ 1.75 LBS/1,000SF  
 COLONIAL BENTGRASS, 'EXETER' @ 0.11 LBS/1,000SF  
 PERENNIAL RYEGRASS @ 0.11 LBS/1,000SF  
 BIRDSFOOT TREFOIL, 'EMPIRE' @ 0.35 LBS/1,000SF  
 \* USE INOCULATED SEED

**SAND FILTER DETAIL**  
 NOT TO SCALE

**SAND FILTER DIMENSION/ELEVATION SCHEDULE:**

SAND FILTER-A		SAND FILTER-C	
'A' = N/A	'A' = N/A	'A' = N/A	'A' = N/A
'B' = 144.0'	'B' = 159.0'	'B' = 158.0'	'B' = 158.0'
'C' = N/A	'C' = N/A	'C' = N/A	'C' = N/A
'D' = N/A	'D' = N/A	'D' = N/A	'D' = N/A
'E' = 145.75'	'E' = 160.5'	'E' = 160.5'	'E' = 160.5'
'F' = 144.75'	'F' = 160.0'	'F' = 160.0'	'F' = 160.0'
'G' = 141.0'	'G' = 152.0'	'G' = 152.0'	'G' = 152.0'
'H' = N/A	'H' = N/A	'H' = N/A	'H' = N/A
WQF = 144.02'	WQF = 159.04'	WQF = 159.04'	WQF = 159.04'
1YR = 144.68'	1YR = 159.21'	1YR = 159.21'	1YR = 159.21'
10YR = 144.84'	10YR = 160.10'	10YR = 160.10'	10YR = 160.10'
100YR = 144.92'	100YR = 160.22'	100YR = 160.22'	100YR = 160.22'

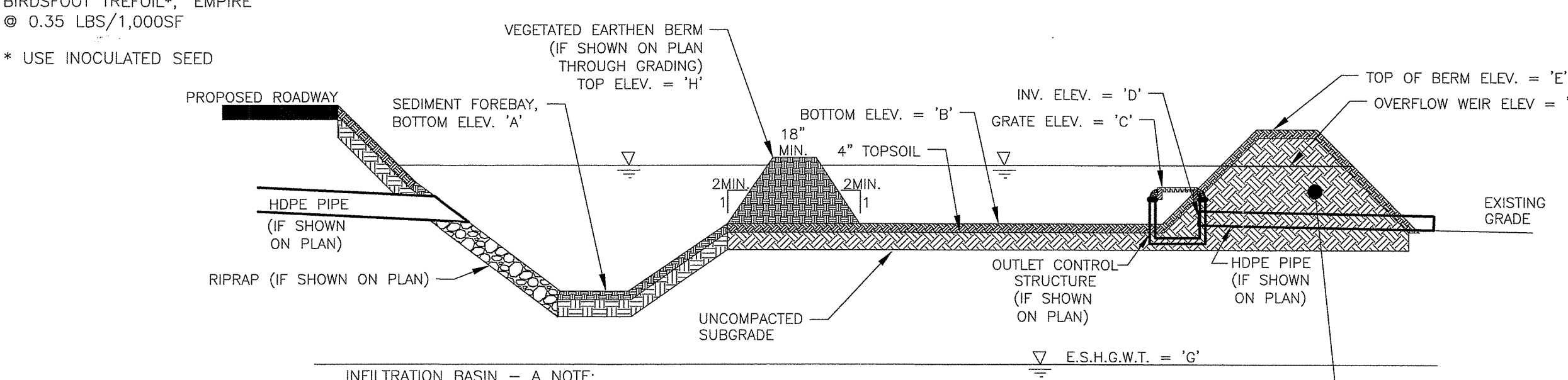
**SAND FILTER-B**  
 'A' = 145.0'  
 'B' = 158.0'  
 'C' = N/A  
 'D' = N/A  
 'E' = 145.8'  
 'F' = 145.0'  
 'G' = 141.5'  
 'H' = 145.5'  
 WQF = 143.48'  
 1YR = 144.27'  
 10YR = 145.11'  
 100YR = 145.34'

**SAND FILTER-D**  
 'A' = 158.0'  
 'B' = 158.0'  
 'C' = N/A  
 'D' = N/A  
 'E' = 162.50'  
 'F' = N/A  
 'G' = N/A  
 'H' = 159.0'  
 WQF = 158.04'  
 1YR = 158.25'  
 10YR = 159.24'  
 100YR = 160.22'

**INFILTRATION BASIN DIMENSION/ELEVATION SCHEDULE:**

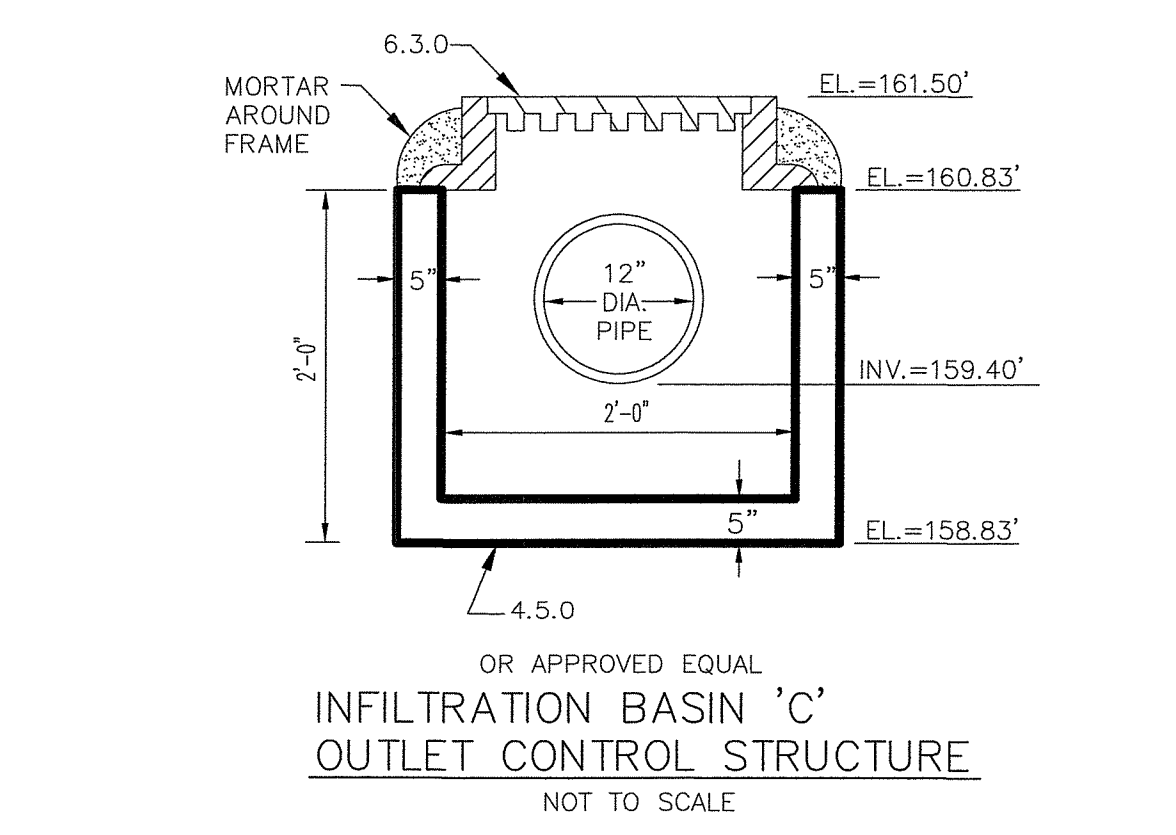
INFILTRATION BASIN-A		INFILTRATION BASIN-B		INFILTRATION BASIN-N	
'A' = N/A	WQF = 161.12'	'A' = N/A	WQF = 148.22'	'A' = N/A	WQF = 151.01'
'B' = 161.0'	1YR = 161.52'	'B' = 148.0'	1YR = 148.97'	'B' = 151.0'	1YR = 151.14'
'C' = 161.5'	10YR = 161.55'	'C' = N/A	10YR = 150.05'	'C' = N/A	10YR = 151.56'
'D' = 159.4'	100YR = 161.61'	'D' = N/A	100YR = 150.49'	'D' = N/A	100YR = 151.67'
'E' = 162.5'		'E' = 151.0'		'E' = 153.0'	
'F' = 162.5'		'F' = 150.0'		'F' = 141.5'	
'G' = N/A		'G' = 149.0'		'G' = 147.5'	
'H' = N/A		'H' = N/A		'H' = N/A	

**INFILTRATION BASIN DETAIL**  
 NOT TO SCALE



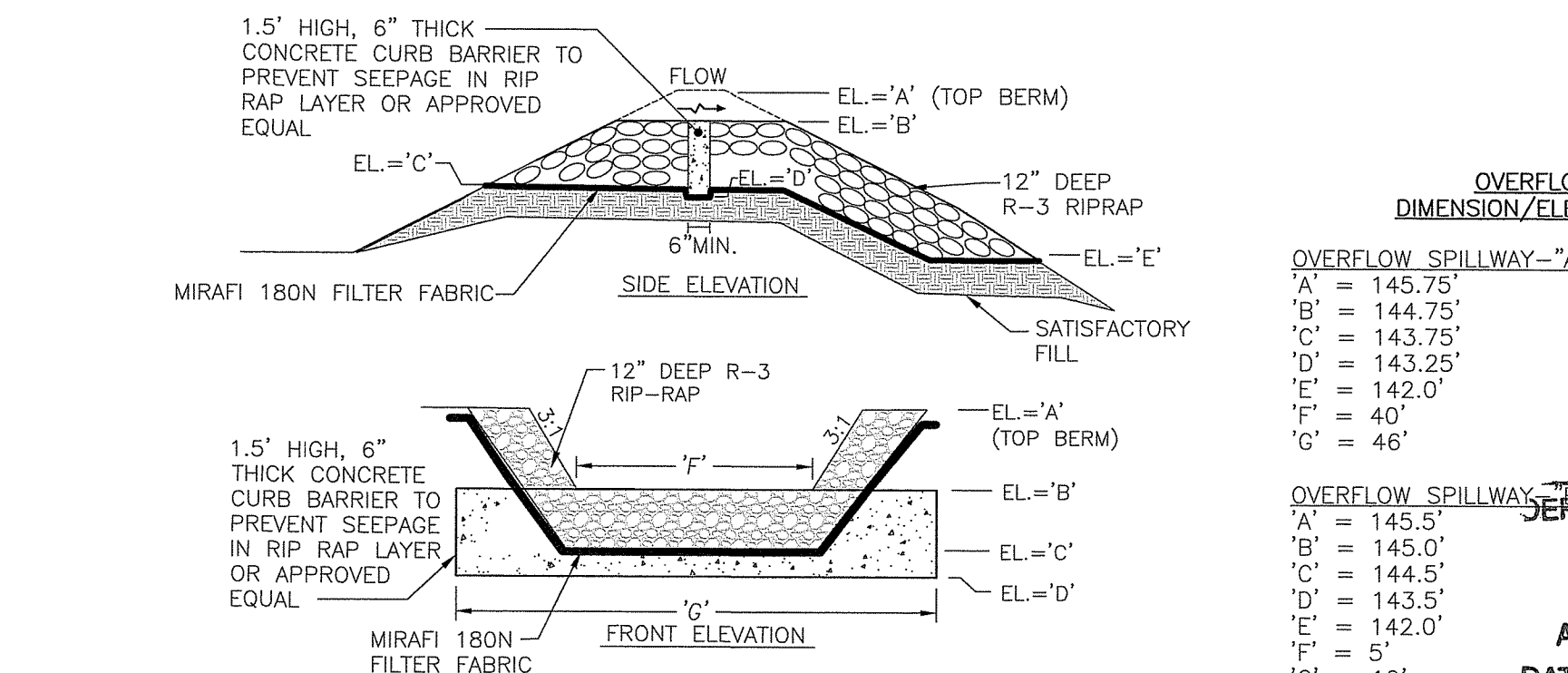
**INFILTRATION BASIN - A NOTE:**  
 1. EXCAVATE OUT ALL SILTY SOIL WITHIN BOTTOM OF INFILTRATION BASIN - A AND DIG DOWN TO THE SAND C-HORIZON SUBGRADE. BRING UP WITH MEET ASTM-C33 SAND AND/OR SEPTIC GRAVEL AS NECESSARY TO MEET DESIGN ELEVATION REQUIREMENTS.

**EMBANKMENT MATERIAL:**  
 IMPERVIOUS MATERIAL (UNIFIED SOIL CLASSIFICATION GC, SC, CH OR CL AND AT LEAST 30% PASSING 200 SIEVE) COMPACTED TO 95% AT ALL EMBANKMENT AREAS WHICH HIGHER THAN SURROUNDING GRADES. MATERIAL SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", FROZEN OR OTHER OBJECTIONAL MATERIALS.



**INFILTRATION BASIN 'C' OUTLET CONTROL STRUCTURE**  
 NOT TO SCALE

Missing or invalid reference  
 File: ... \Details\RIDOT\_Std\_Details.pdf  
 Sheet: 52



**OVERFLOW SPILLWAY**  
 NOT TO SCALE

**DRAINAGE SWALE - "A"**  
 USE R-4 RIPRAP OR GREATER  
 'A' = 1'  
 'B' = 1'

FLOW DEPTH	VELOCITY
WQV 0.07'	3.06 FPS
1-YR 0.15'	4.69 FPS
10-YR 0.27'	6.57 FPS
100-YR 0.44'	8.44 FPS

**DRAINAGE SWALE - "B"**  
 USE R-3 RIPRAP OR GREATER  
 'A' = 2'  
 'B' = 1'

FLOW DEPTH	VELOCITY
WQV 0.00'	0.00 FPS
1-YR 0.00'	0.00 FPS
10-YR 0.08'	4.08 FPS
100-YR 0.16'	6.06 FPS

**DRAINAGE SWALE DETAIL**  
 NOT TO SCALE

**TESTHOLE DATA**

SEV 1A	SEV 2A	SEV 3A	SEV 4A	SEV 5A	SEV 6A	SEV 7A	SEV 7C
DEPTH TEXTURE 0-39" SIL 39-96" S	DEPTH TEXTURE 0-50" SIL 50-102" G,COS	DEPTH TEXTURE 0-77" SIL 77-96" G,COS	DEPTH TEXTURE 0-52" SIL 52-96" G,COS	DEPTH TEXTURE 0-61" SIL 61-108" G,COS	DEPTH TEXTURE 0-44" SIL 44-102" G,COS	DEPTH TEXTURE 0-34" SIL 34-102" G,COS	DEPTH TEXTURE 0-42" SIL 42-120" CB,LS
E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 108" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 72" NO REFUSAL
SEV 1B	SEV 2B	SEV 3B	SEV 4B	SEV 5B	SEV 6B	SEV 7B	SEV 7D
DEPTH TEXTURE 0-19" SIL 19-96" S	DEPTH TEXTURE 0-57" SIL 57-102" G,COS	DEPTH TEXTURE 0-21" SIL 21-51" SL/LS 51-108" G,COS	DEPTH TEXTURE 0-31" SIL 31-96" G,COS	DEPTH TEXTURE 0-57" SIL 57-96" G,COS	DEPTH TEXTURE 0-7" SIL 7-30" SIL 30-102" G,COS	DEPTH TEXTURE 0-49" SIL 49-102" G,COS	DEPTH TEXTURE 0-30" SIL 30-40" G,SL 40-96" G,LS
E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 108" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 30" NO REFUSAL
SEV 8A	SEV 9A	SEV 10A	SEV 11A	SEV 12A	SEV 13A	SEV 14A	SEV 15A
DEPTH TEXTURE 0-31" SIL 31-96" G,COS	DEPTH TEXTURE 0-55" SIL 55-98" G,COS	DEPTH TEXTURE 0-24" SIL 24-100" G,COS	DEPTH TEXTURE 0-41" SIL 41-102" G,COS	DEPTH TEXTURE 0-57" SIL 57-102" G,COS	DEPTH TEXTURE 0-41" SIL 41-102" G,COS	DEPTH TEXTURE 0-30" SIL 30-102" G,COS	DEPTH TEXTURE 0-34" SIL 34-96" G,COS
E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 98" NO REFUSAL	E.S.H.G.W.T. = 100" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL
SEV 8B	SEV 9B	SEV 10B	SEV 11B	SEV 12B	SEV 13B	SEV 14B	SEV 15B
DEPTH TEXTURE 0-36" SIL 36-102" G,COS	DEPTH TEXTURE 0-75" SIL 75-100" G,COS	DEPTH TEXTURE 0-84" SIL 84-108" G,COS	DEPTH TEXTURE 0-35" SIL 35-98" G,COS	DEPTH TEXTURE 0-65" SIL 65-96" G,COS	DEPTH TEXTURE 0-28" SIL 28-96" G,COS	DEPTH TEXTURE 0-27" SIL 27-63" SL/SIL 63-96" G,COS	DEPTH TEXTURE 0-32" SIL 32-96" G,LS
E.S.H.G.W.T. = 102" NO REFUSAL	E.S.H.G.W.T. = 100" NO REFUSAL	E.S.H.G.W.T. = 108" NO REFUSAL	E.S.H.G.W.T. = 98" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL
D-1	D-2	D-3	D-4	D-5	D-6	SEV 16A	SEV 16B
DEPTH TEXTURE 0-22" FSL 22-42" G,FSL 42-72" G,S	DEPTH TEXTURE 0-60" FSL 60-84" G,S	DEPTH TEXTURE 0-18" SIL 18-36" FSL 36-72" G,FSL	DEPTH TEXTURE 0-42" FSL 42-96" ST,S	DEPTH TEXTURE 0-54" FSL 54-84" G,S	DEPTH TEXTURE 0-30" HTM 30-42" G,S	DEPTH TEXTURE 10-0" HTM 0-11" LS 7-108" CB,LS	DEPTH TEXTURE 27-0" HTM 0-11" LS 11-108" G,LS
E.S.H.G.W.T. = 48" NO REFUSAL	E.S.H.G.W.T. = 30" NO REFUSAL	E.S.H.G.W.T. = 18" NO REFUSAL	E.S.H.G.W.T. = 48" NO REFUSAL	E.S.H.G.W.T. = 60" NO REFUSAL	E.S.H.G.W.T. = 42" (ASSUMED AT BOTTOM OF HOLE) NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL	E.S.H.G.W.T. = 96" NO REFUSAL

ISSUED FOR PERMITTING ONLY,  
 NOT FOR CONSTRUCTION

**GROUND BREAKING**  
**DESIGNS, LLC**  
 CIVIL ENGINEERING SOLUTIONS

90 HIGHLAND AVE., SOUTH KINGSTOWN, RI 02879 ☎ PHONE: (401) 622-2982

**REGISTRATION:**  
 DAVID KENNETH MANON  
 REGISTERED PROFESSIONAL ENGINEER  
 (Civil)

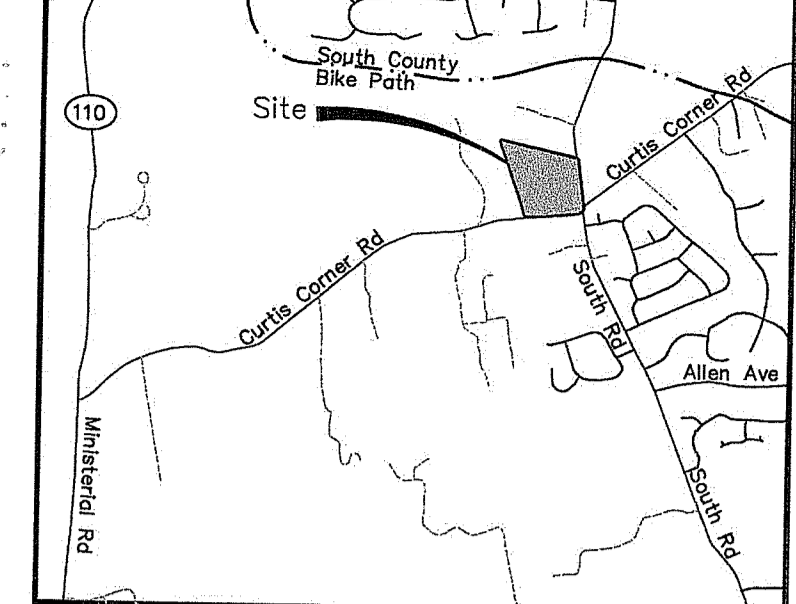
**REVISIONS:**

NO.	DATE	DESCRIPTION	BY	CHK
1.	1-11-21			

**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**  
 OFFICE OF WATER RESOURCES  
 FRESHWATER WETLANDS PROGRAM  
 APPROVED WITH CONDITIONS  
 AS SPECIFIED IN THE LETTER OF APPROVAL  
 DATED Mar 16, 2021 FILE # 20-0257  
 NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
 APPROVED PLANS MUST BE AT CONSTRUCTION SITE

*David L. Freeman*

**REDEM FWMP & SUBDIVISION SUITABILITY APPLICATION PLAN**  
**NORTH WOODS SUBDIVISION**  
**DETAIL SHEET - 2**  
 A.P. 47-2, LOT 120  
 SOUTH KINGSTOWN, RHODE ISLAND  
 SCALE: AS SHOWN DATE: 10/30/20 SHEET 8 of 8



Locus  
Not to Scale

Notes:

- The underground utilities shown have been located from field survey information and existing drawings. The Surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The Surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from information available. The Surveyor has not physically located the underground utilities. (Please contact DIGSAFE prior to construction @ 1-888-344-7233.)
- Project site is located within Zones A & Zone X (Areas determined to be outside the 0.2% annual chance floodplain) as shown on F.E.M.A. Flood Insurance rate map # 4409010185H for the Town of South Kingstown, Rhode Island, Washington County, having an effective date of October 18, 2010.
- Topography shown hereon a product of Aerotech Corp.
- Wetlands shown hereon delineated by Natural Resource Services, Inc. and field located by Fontaine Land Surveying, LLC.
- Soil evaluations performed by Onsite Wastewater Initiative, LLC.
- Site is Not located within RIDEM Natural Heritage Area
- Site is Not located within Town of South Kingstown Groundwater Protection Overlay District.
- Site is Not within a TMDL Watershed as defined by RIDEM and Town of South Kingstown.
- Site is Not located within an OWTS Critical Resource Area as defined by RIDEM.
- Site is Not located within a Drinking Water Supply Watershed as defined by RIDEM.
- Site does Not contain areas containing prime agricultural soils or farmland soils
- At this time there is No active agricultural use on site.
- To my knowledge there are no buildings on the National Historic Register of Historic Places however there are two historic cemeteries as shown hereon.

References:

- Plan of Land for Judith DeFeo, South Road & Curtis Corner Road, South Kingstown, Rhode Island Dated 3-18-06, Scale: 1"=80' Prepared by: Sheldon Survey, Inc. supplied by client.
- Final Plan Case Farm in the Town of South Kingstown, Rhode Island Platted For Jonathan & Kimberly Gilbert 968 South Road, Wakefield, RI 02879 Oct. 1993, Scale: 1"=50' Prepared by: Jackson Surveying on file in the Town of South Kingstown Land Records Plot Book 24, Page 25.
- Final Genesee Acres - Phase II a Residential Compound, Assessor's Plat 487, Lot 41, South Kingstown, Rhode Island, Owners George E. & Nancy Herman Scale: 1"=40' Dated: Revised Final Plat Jun 1996, Prepared by: James P. Lawless, R.L.S., P.E. on file in the Town of South Kingstown Land Records Plat C96-164.

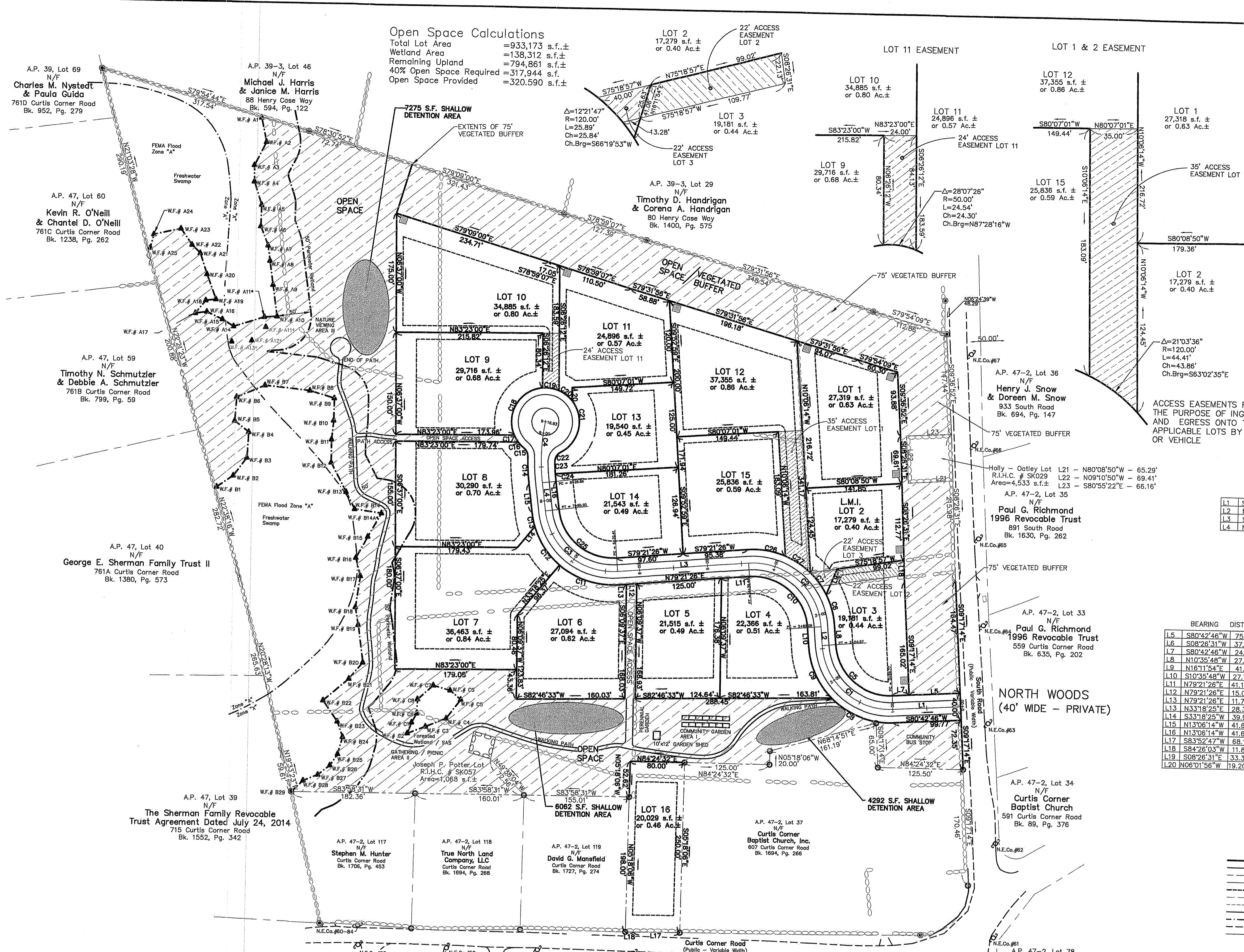
Certification:

This survey has been conducted and the plan has been prepared pursuant to 435-RICR-00-00-1.9 of the Rules and Regulations adopted by the Rhode Island State Board of Registration for Professional Land Surveyors on April 28, 2018, as follows:

Survey Type:  
Comprehensive Boundary Survey - Class I  
Data Accumulation Survey - Planimetric - Class III

The purpose for the conduct of the survey and for the preparation of the plan is as follows:  
To perform a Comprehensive Boundary Survey along with inclusion of Planimetric Features for the purpose of preparing a "Major Subdivision - Lot Geometry Plan".

By: *Michael A. Fontaine* Date: 11-6-2020  
Michael A. Fontaine, PLS - License No. LS-1956 - C.O.A. No. LS-A553



Open Space Calculations  
Total Lot Area = 933,173 s.f. ±  
Wetland Area = 138,312 s.f. ±  
Remaining Upland = 794,861 s.f. ±  
40% Open Space Required = 317,944 s.f. ±  
Open Space Provided = 320,590 s.f. ±

Street Index

South Road  
Curtis Corner Road

Owner/Applicant

True North Land Co., LLC  
11 Knight Street  
Unit E9  
Warwick, RI 02886

Parcel Data

Deed Book 1694, Page 268  
Lot Area: 933,173 s.f. ±  
or 21.42 Acres ±

Zoning Data

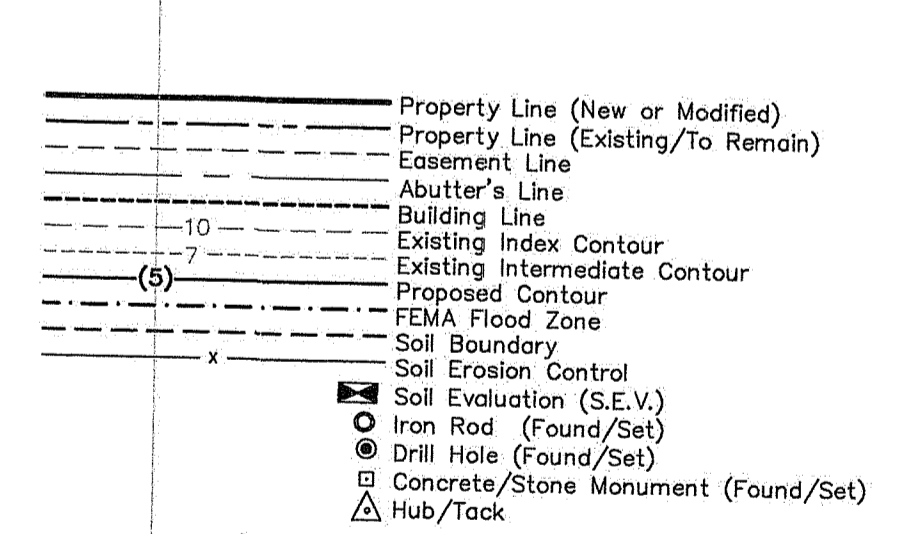
R-30 Zone \*  
\* As a Flexible Design Residential Project (FDRP) the following R10 dimensional requirement would apply:  
Max. Building Coverage: 25%  
Min. Front Yard: 25'  
Min. Cor. Side Yard: 20'  
Min. Side Yard: 10'  
Min. Rear Yard: 30'  
Max. Bldg. Height: 35'

NORTH WOODS  
(PRIVATE - 40' WIDE)  
& ROADWAY GEOMETRY

BEARING	DISTANCE	DELTA	RADIUS	ARC
L1	S80°42'46"W	89.77'		
L2	N10°35'48"W	27.72'		
L3	S79°21'26"W	192.97'		
L4	N13°06'14"W	41.66'		

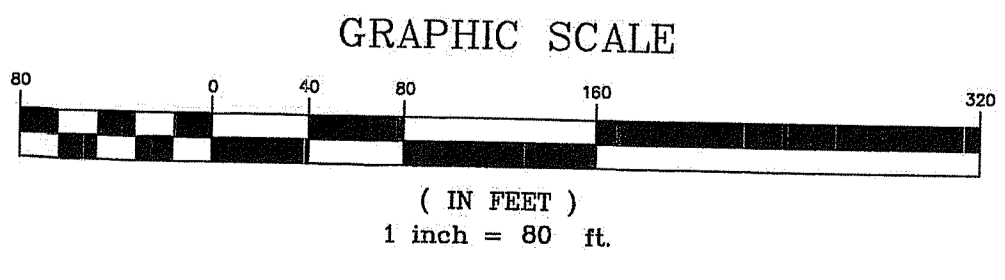
BEARING	DISTANCE	DELTA	RADIUS	ARC
C1	S80°42'46"W	89.77'	100.00'	154.79'
C2	N10°35'48"W	27.72'	100.00'	152.16'
C3	S79°21'26"W	192.97'	100.00'	152.78'
C4	N13°06'14"W	41.66'	285.43'	89.97'

BEARING	DISTANCE	DELTA	RADIUS	ARC	CHORD	CH BEARING
L5	S80°42'46"W	75.00'				
L6	S08°28'31"W	37.21'				
L7	S80°42'46"W	24.77'				
L8	N10°35'48"W	27.72'				
L9	N18°11'54"E	41.06'				
L10	S10°35'48"W	27.72'				
L11	N79°21'26"E	41.18'				
L12	N79°21'26"E	15.05'				
L13	N79°21'26"E	11.75'				
L14	N33°18'25"E	28.33'				
L15	S33°18'25"W	39.82'				
L16	N13°06'14"W	41.66'				
L17	S83°52'47"W	68.15'				
L18	S84°28'03"W	11.85'				
L19	S08°28'31"E	33.38'				
L20	N08°01'56"W	19.20'				



DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF WATER RESOURCES  
FRESHWATER WETLANDS PROGRAM  
APPROVED WITH CONDITIONS  
AS SPECIFIED IN THE LETTER OF APPROVAL  
DATED Mar 16, 2021 FILE # 20-0251  
NO CHANGES ALLOWED WITHOUT PRIOR APPROVAL  
APPROVED PLANS MUST BE AT CONSTRUCTION SITE!

CONCEPTUAL MASTER PLAN  
FLEXIBLE DESIGN RESIDENTIAL PROJECT (FDRP)  
NORTH WOODS MAJOR SUBDIVISION PLAN  
PROPOSED LOT GEOMETRY  
A.P. 47-2, Lot 120  
607 Curtis Corner Road  
South Kingstown, Rhode Island  
Prepared For: True North Land Company, LLC



No.	Revision:	By:	Date:
1	Revise Text Height/ Road Width	MAF	2/26/2020
2	Revise Title/ Zoning Data Block	MAF	3/18/2020
3	Revise Roadway location and lots	MAF	6/7/2020
4	Revise Lots 5, 8 & 9 Add Garden Shed and Open Space Access (2)	MAF	6/12/2020
5	Increase Buffer, Revise Lots, Relocate Path, add Buffer signs	MAF	7/29/2020



Michael A. Fontaine, PLS  
593 Green Hill Beach Road  
South Kingstown, RI 02879  
ghb593@verizon.net  
(401)793-6777  
Scale: 1"=80'  
Date: 1-30-2020  
Drawn By: MAF  
Checked By: MAF  
Job #: 17-055  
Map #: 17-055  
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