

Civil Site Planning Environmental Engineering 133 Court Street Portsmouth, NH 03801-4413

February 22, 2022

Beverly Zendt, Planning Director Planning Department, City of Portsmouth 1 Junkins Avenue Portsmouth, NH 03801

Re: Conditional Use Permit – Inland Wetland Buffer "The Creek Farm" – Public Restrooms Tax Map 203, Lot 8 400 Little Harbor Road, Portsmouth, NH Altus Project #3950

Dear Ms. Zendt,

Welcome to Portsmouth. We look forward to working with you.

On behalf of the Applicant and Owner, the Society for the Protection of New Hampshire Forests (SPNH), Altus Engineering, Inc. is pleased to submit a Conditional Use Permit Application and request to Amend a Site Plan for impacts to the inland wetland buffer at the Carriage House site on the Creek Farm off of Little Harbor Road.

Included are the following hard copy attachments (the application itself has already been filed online):

- One full sized set of plans for the Planning Department
- Ten full sized set of plans for the Conservation Commission
- Letter of Authorization from the Applicant
- January 22, 2020 Wetland Report by Joseph Noel
- Ten Project Narrative and Criteria for a Conditional Use Permit

Please feel free to contact me directly if you have any questions or require any additional supporting documentation. Thank you for your time and consideration.

Sincerely. Eric D. Weinrieb. President

Enclosures

Ecopy: Jack Savage, SPNH Carl Murphy, SPNH Brian Murphy, Placework



Civil Site Planning Environmental Engineering

133 Court Street Portsmouth, NH 03801-4413

Project Narrative

Conditional Use Permit – Inland Wetland Buffer "Creek Farm" – Carriage House Public Restrooms Tax Map 203, Lot 8 400 Little Harbor Road, Portsmouth, NH Altus Project #3950

The Society for the Protection of New Hampshire Forests (SPNHF) is proposing to construct a public restroom building at Creek Farm adjacent to the recently renovated Carriage House. In 2020, The Planning Board granted a Conditional Use Permit to allow the construction of a replacement septic system for the Carriage House and to provide public restrooms for visitors to the grounds. The renovated building is intended and is used for various activities including youth summer programs but does not have an area that can be dedicated to public use.

The Carey Cottage is located at the opposite end of the site and is also not intended for public access. With many daily visitors walking the "Little Harbor Loop," public restrooms are a necessary amenity on the historic 30-acre parcel.

As SPNHF continues to revitalize the site, limitations inherent in the existing facilities have been identified that need to be addressed before the full potential of Creek Farm can be realized. The Carriage House was renovated when the septic system was replaced.

The lot is bounded to the south by the tidal portion of Sagamore Creek, the property also hosts several sections of freshwater wetland along with woodland and open field.

Conditional Use Permit Criteria for Approval

1. The land is reasonably suited to the use, activity, or alteration.

The proposed detached public restrooms need to be located close to the existing building for utility services and access from the Carriage House. The structure is proposed entirely within previously disturbed upland areas, within the footprint of a former shed. The area is primarily as lawn and is suitable for siting a new building. Runoff from the new building will be mitigated through stone drip edges and the naturally vegetated upland buffer.

2. There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity, or alteration.

There are no reasonable alternative areas on site for the modestly sized structure. Moving it further from the existing building to the north or east increases the length of the utility service connections to the parent building and increase the likelihood of encountering ledge during construction. Also moving it further away from the Carriage House increases the overall site disturbances. The location selected minimizes the sitework activities on the entire parcel. Moving the structure further away from the parent structure also creates more "dead space" between the buildings.

3. There will be no adverse impact on the wetland functional values of the site or surrounding properties.

The work required to construct the new public restrooms will not alter the functions and values of the nearest wetland. The new building will be over 81-feet from the wetland. The existing building is only 59-feet from the wetland. The recently approved garage on the abutting parcel is less than 30-feet from the same wetland system. The construction of a small structure that has stone drip edges to mitigate the roof runoff and is not subject to vehicles will have less of an impact than a driveway and garage in the buffer.

4. Alteration of the natural vegetative state or managed woodland will occur only to the extent necessary to achieve construction goals.

The proposed public restroom building is being proposed entirely within previously disturbed areas that is lawn with scrub growth. No natural or managed woodlands will be impacted. No temporary impacts are proposed within 75-feet of the existing wetland system.

5. The proposal is the alternative with the least adverse impact to areas and environments under the *jurisdiction of this section.*

The proposed design has been located as far as possible away from jurisdictional areas and as such has the least impact.

6. Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.

No temporary or permanent impacts are proposed within 75-feet of the wetland. The area temporarily impacted will be seeded with conservation seed mix and will not be fertilized after the turf is established.

JOSEPH W. NOEL P.O. BOX 174 SOUTH BERWICK, MAINE 03908 (207) 384-5587

CERTIFIED SOIL SCIENTIST * WETLAND SCIENTIST * LICENSED SITE EVALUATOR

January 22, 2020

Mr. Eric D. Weinrieb, P.E. Altus Engineering, Inc. 133 Court Street Portsmouth, New Hampshire 03801

RE: Partial Wetland Delineation, Creek Farm, Portsmouth, New Hampshire, JWN #95-445

Dear Eric:

On December 13, 2019, we met at the above-referenced site to delineate/extend the wetland boundaries on a portion of the property. Initial wetland work in 2019 was conducted on April 24, 2019 (refer to pink flagging designated as HOTL 1 thru 49). The second visit to delineate/extend the wetland flagging was conducted for the planning of a proposed new municipal water line (930+/- linear feet) to serve Creek Farm. You were on hand to designate the approximate proposed pathway of the water line and the areas that needed to be delineated.

The following is a summary of the flagging conducted on December 13, 2019.

Flagged Sequence Summary

A1 thru A8 pink and black striped flagging delineates a freshwater wetland southwest of the former "Carriage House" now unoccupied and used for storage.

B1 thru B20 pink and black striped flagging delineates a freshwater wetland north of Creek Farm and west of a Sagamore Creek tidal inlet that is separated by a culverted trail.

HOTL 50 thru 58 blue flagging delineates a tidal wetland and extends the HOTL line flagged on April 24, 2019.

Wetland Delineation Methods

To determine the wetland boundary, the methodologies in the U.S. Army Corps of Engineers document *Corps of Engineers Wetlands Delineation Manual* (1987) along with the required *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region*, (Version 2.0) were used. Wetlands were identified based on soils, vegetation, and wetland hydrology. Except in special cases, all three factors (hydric soils, hydrophytic

vegetation, and wetland hydrology) must be present for an area to classify as wetland. A predominance of wetland and upland vegetation was determined from visual estimates in the vegetative layers (herbaceous, shrub, sapling, and tree layers). Plant species indicator status was based on the U.S. Army Corps of Engineers publication *National Wetland Plant List* (2016).

Shallow soil observations were made using a hand auger to assess the soil morphological features and to examine for wetland hydrology. Hydric soil determinations were conducted in accordance with the United States Department of Agriculture, Natural Resources Conservation Service document *Field Indicators of Hydric Soils in the United States, Version 8.1* (2017) along with the manual *Field Indicators for Identifying Hydric Soils in New England* (Version 4, April 2019).

Findings

The water line is planned in uplands that are dominated by invasive plant species such as: asian bittersweet (*Celastrus orbiculatus*), japanese-knotweed (*Reynoutria japonica*), european buckthorn (*Rhamnus cathartica*), european barberry (*Berberis vulgaris*), japanese barberry (*Berberis thunbergii*), glossy false buckthorn (*Frangula alnus*), rambler rose (*Rosa multiflora*), honeysuckles (*Lonicera spp.*), norway maple (*Acer platanoides*), and black locust (*Robinia pseudoacacia*). These invasive plants are listed in the *New Hampshire Guide to Upland Invasive Species* (2011) or the NH Invasive Plant Species Watch List (April 24, 2019). In addition to the aforementioned invasive plants: eastern white pine (*Pinus strobus*), northern red oak (*Quercus rubra*), quaking aspen (*Populus tremuloides*), apple (*Malus sp.*), stag-horn sumac (*Rhus typhina*), sensitive fern (*Onoclea sensibilis*), and grape (*Vitis sp.*) were also noted. The water line will pass through an existing narrow culverted trail where the freshwater "B" flagged series drains to the tidal creek (i.e., wetlands separated by trail).

The upland soils are shallow to moderately deep to bedrock (i.e., ranging from 10 to 40 inches deep) with textures ranging from fine sandy loam to loamy sand. The hydric soils within the freshwater wetlands are primarily fine textured (i.e., very fine sandy loam or finer).

At the time fieldwork was conducted there was snow cover on the ground, thereby making strict application of the wetland delineation methodology difficult. Many of the herbaceous species had decomposed beyond the point of identification and were covered by snow. There appeared to be sufficient evidence of the shrub, sapling, and tree layers to delineate the wetland boundary with reasonable accuracy.

Please feel free to call with any questions or if you need additional information.

Sincerely,

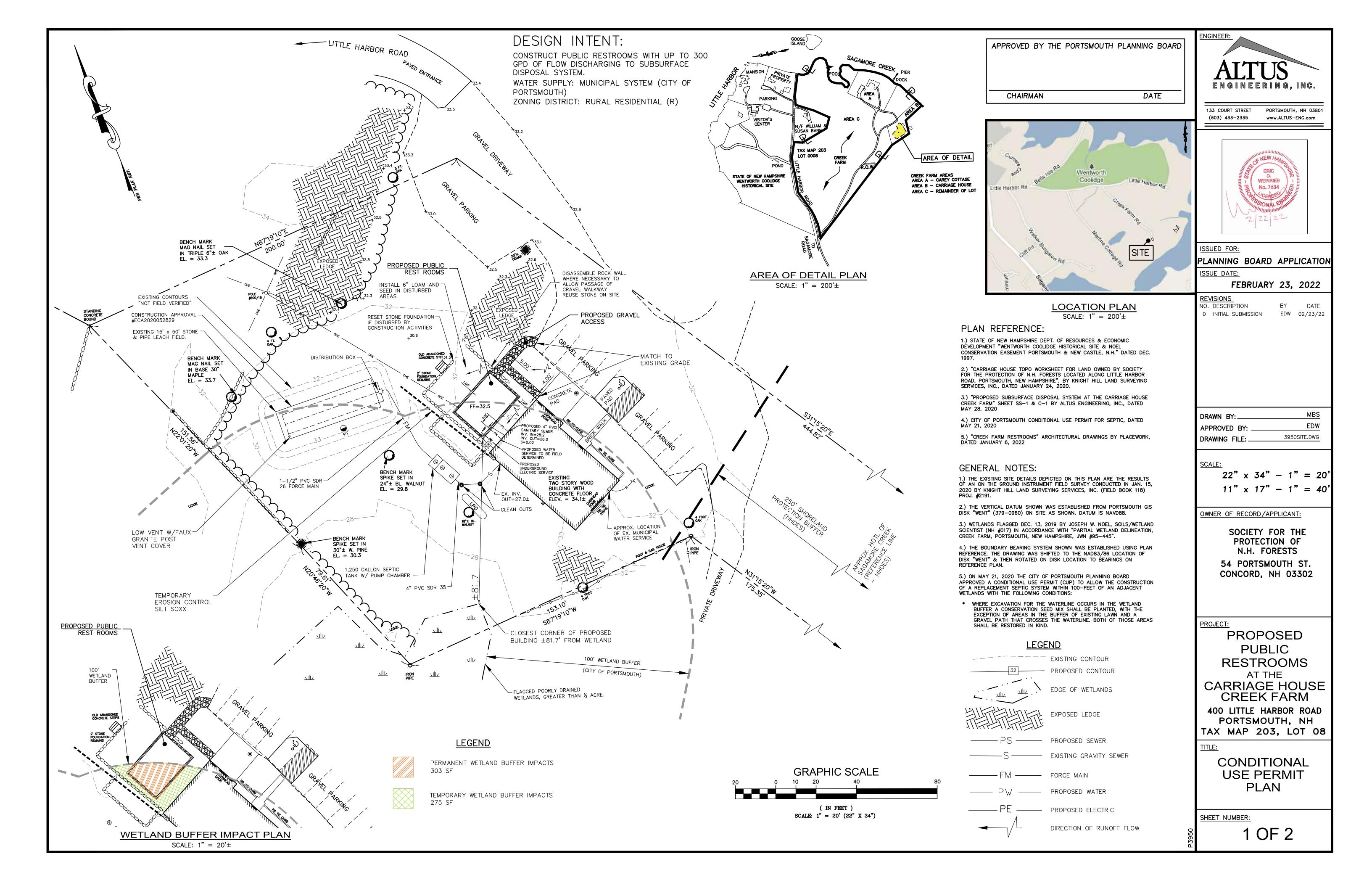
Jorph W. Noil

Joseph W. Noel New Hampshire Certified Wetland Scientist #086 New Hampshire Certified Soil Scientist #017





January 22, 2020 JWN #95-445 Page 2 of 2



SITE NOTES

- THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO CONSTRUCTION. ALL DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER FOR RESOLUTION.
- . COORDINATE ALL WORK AND GRADING WITHIN FIVE (5') FEET OF PROPOSED BUILDINGS WITH BUILDING CONTRACTOR AND ARCHITECTURAL DRAWINGS.

CONSTRUCTION NOTES

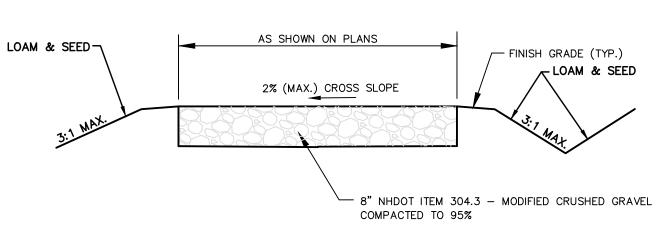
- DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED. THE LANDOWNER AND CONTRACTOR ARE RESPONSIBLE FOR COMPLYING WITH ALL LOCAL, STATE, AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACKS REQUIREMENTS REQUIRED UNDER THESE REGULATIONS. SEE PROJECT MANUAL
- APPENDICES FOR COPY OF PERMITS. 2. CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH AND NHDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
- ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE
- RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBMS) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
- PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES, AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL. IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES ARE SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN GROUND. THIS WILL LIKELY REQUIRE REMOVAL OF A FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS. THE FINAL SUBGRADE ELEVATION WOULD ALSO REQUIRE AN APPROPRIATE DEGREE OF INSULATION AGAINST FREEZING.
- IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AWAY FROM LEACH FIELDS, FINE LAWN AND BUILDINGS; AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
- 3. THE PROJECT WORK IS OUTSIDE THE 100-YEAR FLOOD ZONE. EXCAVATED MATERIAL NOT USED AS FILL MATERIAL ON SITE, SHALL ONLY BE PLACED IN
- UPLANDS AREA OUTSIDE OF THE 100 YEAR FLOOD ZONE. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION. VOIDS BETWEEN STONES AND CLUMPS OF MATERIAL SHALL BE FILLED WITH FINE MATERIALS.
- 10. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, SEED, MULCH, AND APPROPRIATE SOIL STABILIZATION TECHNIQUES.
- 1. CONTRACTOR SHALL CONTROL DUST BY SPRAYING WATER, SWEEPING PAVED SURFACES AND VEGETATION AND/OR MULCHING STOCKPILES.
- 12. FILL SPACED WITHIN FIVE (5) FEET OF THE OUTSIDE FOUNDATION WALLS SHALL MEET THE REQUIREMENTS OF THE STRUCTURAL ENGINEER'S DRAWINGS.
- 13. LOAM AND CONSERVATION SEED MIX IN WETLAND BUFFER AREAS, LAWN SEED MIX IN LAWN AREAS OR GRAVEL WHERE REQUIRED TO RESTORE TRAIL. 14. NO PESTICIDES OR FERTILIZERS ARE PROPOSED TO ASSIST IN ESTABLISHING VEGETATION.

GRADING NOTES

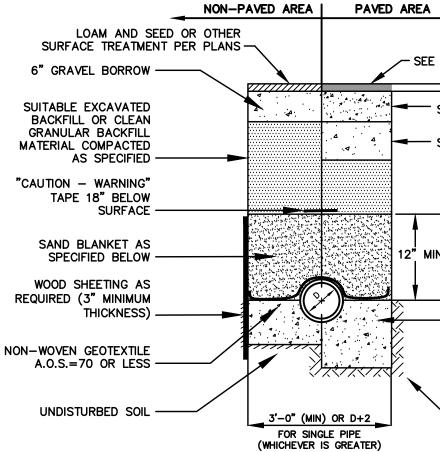
- WHERE PROPOSED GRADES MEET EXISTING GRADES, CONTRACTOR SHALL BLEND GRADES TO PROVIDE A SMOOTH TRANSITION BETWEEN EXISTING AND NEW WORK. PONDING AT TRANSITION AREAS WILL NOT BE ACCEPTED. ABRUPT RIDGES AT TOPS AND BOTTOM WILL NOT BE ACCEPTED.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS, STRUCTURES AND PLANTING BEDS. MAXIMUM SLOPE IN DISTURBED AREAS SHALL BE NO STEEPER THAN 3:1 (h:v). UNLESS OTHERWISE NOTED. WHERE SLOPES IN DISTURBED AREAS ARE
- STEEPER THAN 3:1, CONTRACTOR SHALL PROVIDE CURLEX II EROSION CONTROL BLANKET FROM AMERICAN EXCELSIOR COMPANY (800) 777-7645 OR APPROVED EQUAL UNLESS OTHERWISE NOTED. PITCH ALL WALKS AND PATIOS AWAY FROM BUILDINGS AT 1-1/2% MINIMUM;
- PITCH WITHIN 5 FEET OF STAIRS OR DOORS SHALL NOT EXCEED 2%.
- CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS.
- 6. ALL UNSUITABLE MATERIALS AND SURPLUS MATERIALS WHICH CAN NOT BE APPROPRIATELY WASTED ON SITE SHALL BE REMOVED AT NO ADDITIONAL COST TO THE OWNER.
- THE GRADING ON THE PLANS SHOWS THE GENERAL INTENT AND DIRECTION OF THE STORMWATER FLOW. CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY FIELD CONDITIONS THAT WILL IMPACT THE GRADING DESIGN SHOWN ON THIS PLAN FOR RESOLUTION.

UTILITY NOTES

- COORDINATE UTILITY WORK WITH UTILITY COMPANIES. 2. ALL ELECTRIC, CABLE, AND TELECOMMUNICATION SERVICES AND CONDUITS SHALL BE LOCATED UNDERGROUND WHERE SHOWN. UNDERGROUND UTILITIES INSTALLATIONS SHALL MEET THE MINIMUM REQUIREMENTS OF THE CITY OF PORTSMOUTH AND UTILITY COMPANIES. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING IN CABLES.
- ALL SEWER. DRAINAGE AND WATER INSTALLATIONS SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF THE PORTSMOUTH PUBLIC WORKS DEPARTMENT AND THE NHDES. THE MORE STRINGENT SPECIFICATION SHALL GOVERN. VERIFY LOCATION OF UTILITY BOXES WITH OWNER AND UTILITY COMPANIES.
- 5. ALL UTILITY STRUCTURES SHALL BE SET FLUSH WITH PROPOSED GRADE.



CRUSHED GRAVEL SIDEWALK

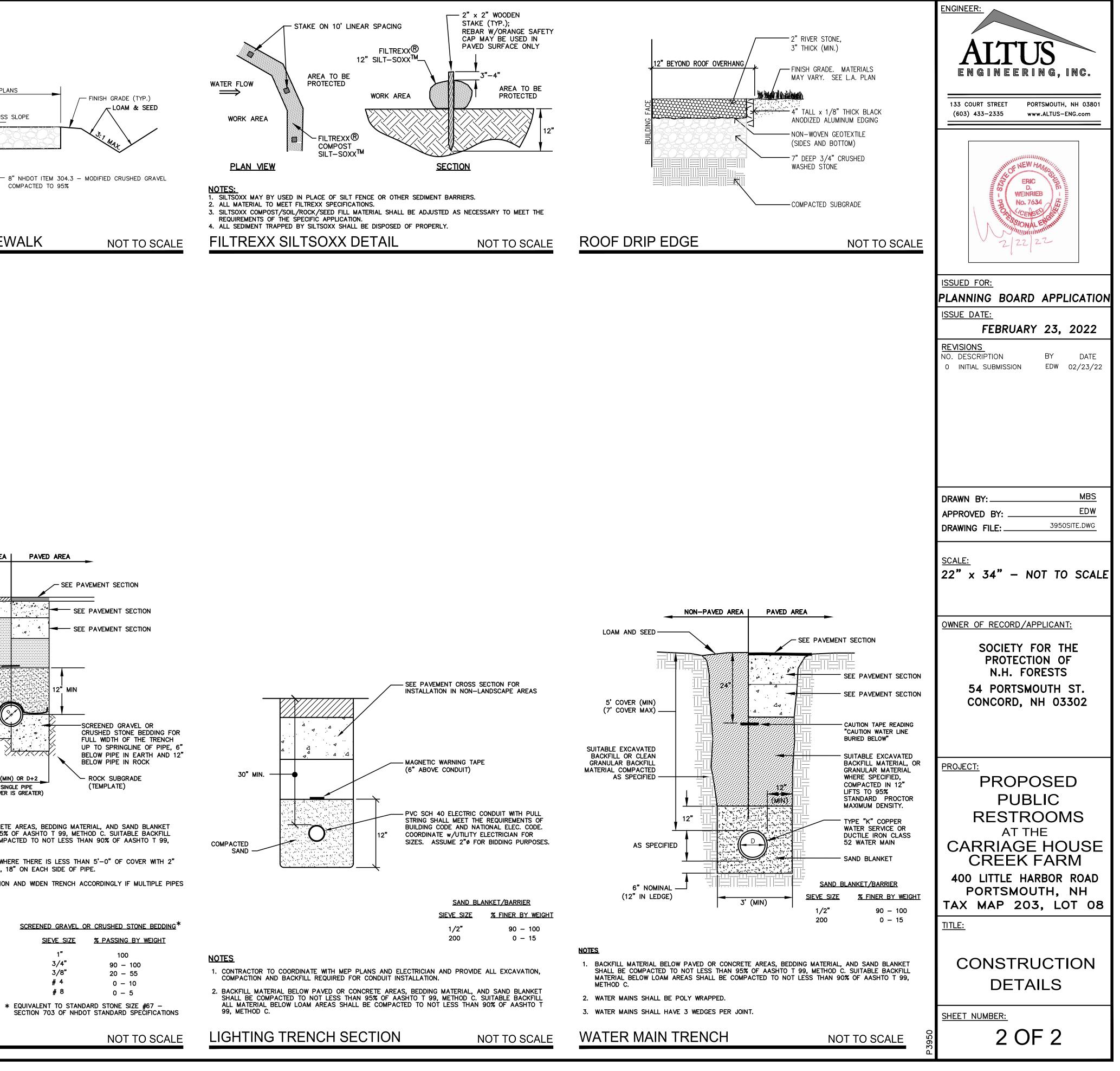


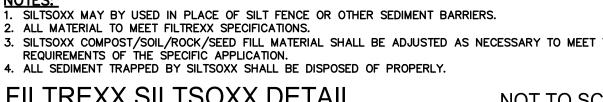
<u>NOTES</u>

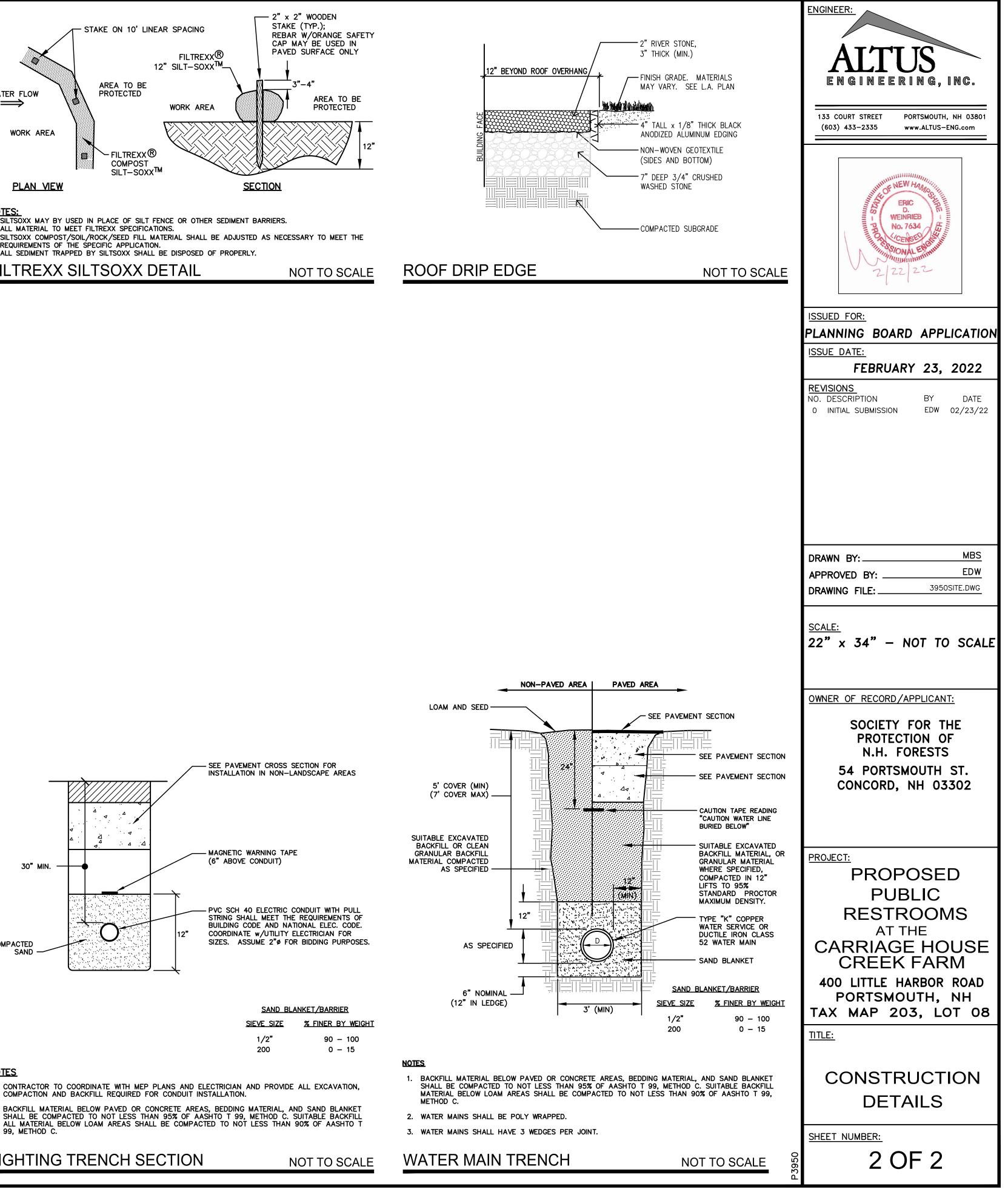
- 1. BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
- 2. INSULATE GRAVITY SEWER AND FORCEMAINS WHERE THERE IS LESS THAN 5'-0" OF COVER WITH 2" THICK CLOSED CELL RIGID BOARD INSULATION, 18" ON EACH SIDE OF PIPE.
- 3. MAINTAIN 12" MINIMUM HORIZONTAL SEPARATION AND WIDEN TRENCH ACCORDINGLY IF MULTIPLE PIPES ARE IN TRENCH.

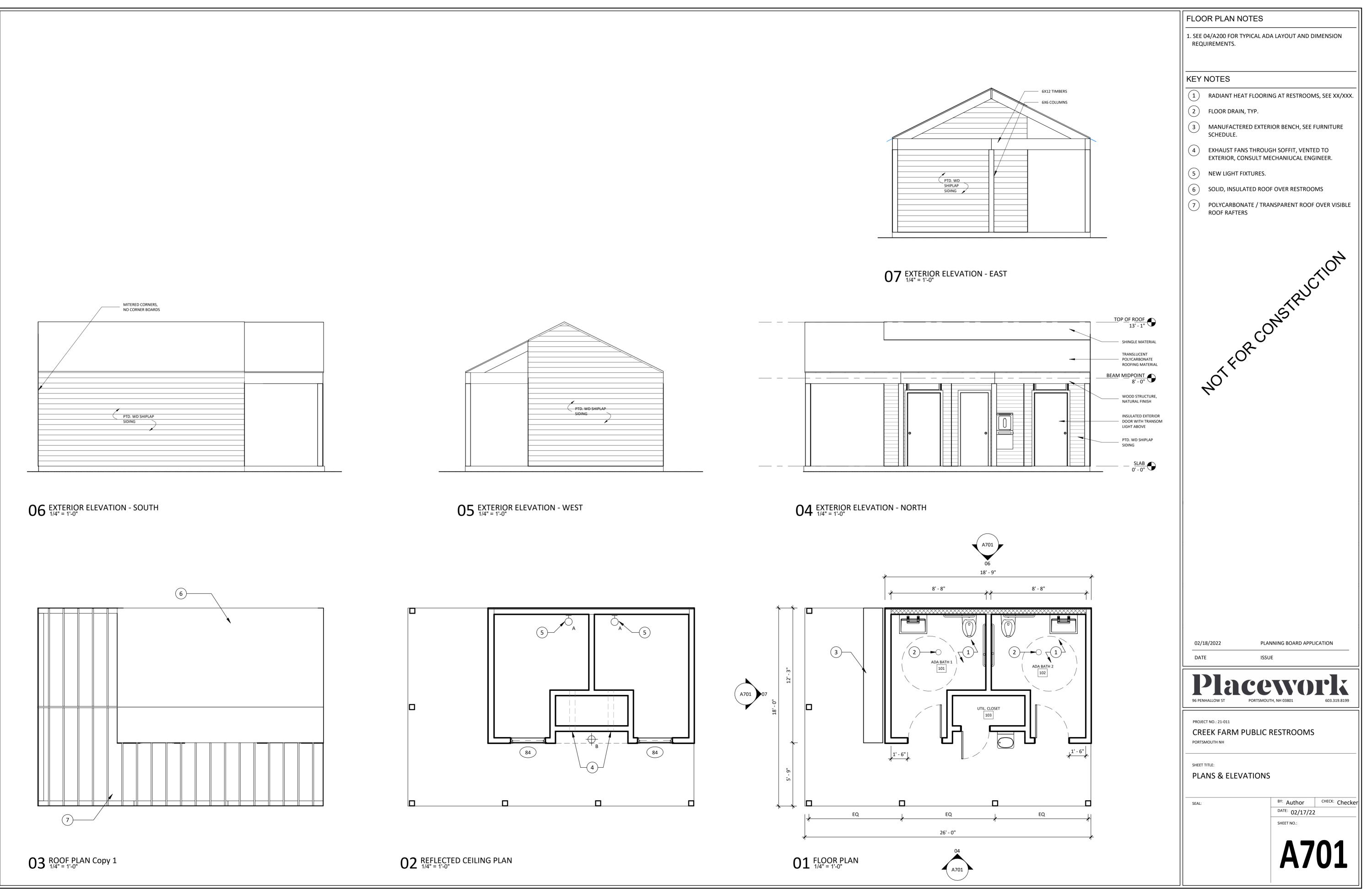
SAND BLANKET/BARRIER		SCREENE
<u>SIEVE SIZE</u>	% FINER BY WEIGHT	<u>SI</u>
1/2"	90 - 100	
200	0 — 15	

SEWER TRENCH









MITERED CORNERS, NO CORNER BOARDS	
PTD. WD SHIPLAP SIDING	

