



City of Portsmouth, New Hampshire

Site Plan Application Checklist

This site plan application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. The checklist is required to be completed and uploaded to the Site Plan application in the City's online permitting system. A pre-application conference with a member of the planning department is strongly encouraged as additional project information may be required depending on the size and scope. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all site plan review requirements. Please refer to the Site Plan review regulations for full details.

Applicant Responsibilities (Section 2.5.2): Applicable fees are due upon application submittal along with required attachments. The application shall be complete as submitted and provide adequate information for evaluation of the proposed site development. Waiver requests must be submitted in writing with appropriate justification.

Name of Applicant: Gary Dodds Date Submitted: 5-19-2025

Application # (in City's online permitting): CU-24-225

Site Address: 294 Lincoln Ave Portsmouth Map: 13D Lot: 24

Application Requirements

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	Complete <u>application</u> form submitted via the City's web-based permitting program (2.5.2.1(2.5.2.3A))		N/A
<input checked="" type="checkbox"/>	All application documents, plans, supporting documentation and other materials uploaded to the application form in viewpoint in digital Portable Document Format (PDF). One hard copy of all plans and materials shall be submitted to the Planning Department by the published deadline. (2.5.2.8)		N/A

Site Plan Review Application Required Information

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	Statement that lists and describes "green" building components and systems. (2.5.3.1B)	<u>SEE Attached Sheet</u>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Existing and proposed gross floor area and dimensions of all buildings and statement of uses and floor area for each floor. (2.5.3.1C)		N/A
<input checked="" type="checkbox"/>	Tax map and lot number, and current zoning of all parcels under Site Plan Review. (2.5.3.1D)		N/A

Site Plan Review Application Required Information

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
✓ <input checked="" type="checkbox"/>	Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. (2.5.3.1E)		N/A
✓ <input checked="" type="checkbox"/>	Names and addresses (including Tax Map and Lot number and zoning districts) of all direct abutting property owners (including properties located across abutting streets) and holders of existing conservation, preservation or agricultural preservation restrictions affecting the subject property. (2.5.3.1F)		N/A
✓ <input checked="" type="checkbox"/>	Names, addresses and telephone numbers of all professionals involved in the site plan design. (2.5.3.1G)		N/A
✓ <input checked="" type="checkbox"/>	List of reference plans. (2.5.3.1H)		N/A
✓ <input checked="" type="checkbox"/>	List of names and contact information of all public or private utilities servicing the site. (2.5.3.1I)		N/A

Site Plan Specifications

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
✓ <input checked="" type="checkbox"/>	Full size plans shall not be larger than 22 inches by 34 inches with match lines as required, unless approved by the Planning Director.. (2.5.4.1A)	Required on all plan sheets	N/A
✓ <input checked="" type="checkbox"/>	Scale: Not less than 1 inch = 60 feet and a graphic bar scale shall be included on all plans. (2.5.4.1B)	Required on all plan sheets	N/A
✓ <input checked="" type="checkbox"/>	GIS data should be referenced to the coordinate system New Hampshire State Plane, NAD83 (1996), with units in feet. (2.5.4.1C)		N/A
✓ <input checked="" type="checkbox"/>	Plans shall be drawn to scale and stamped by a NH licensed civil engineer. (2.5.4.1D)	Required on all plan sheets	N/A
✓ <input checked="" type="checkbox"/>	Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. (2.5.4.1E)		N/A
✓ <input checked="" type="checkbox"/>	Title (name of development project), north point, scale, legend. (2.5.4.2A)		N/A
✓ <input checked="" type="checkbox"/>	Date plans first submitted, date and explanation of revisions. (2.5.4.2B)		N/A
✓ <input checked="" type="checkbox"/>	Individual plan sheet title that clearly describes the information that is displayed. (2.5.4.2C)	Required on all plan sheets	N/A
✓ <input checked="" type="checkbox"/>	Source and date of data displayed on the plan. (2.5.4.2D)		N/A

Site Plan Specifications – Required Exhibits and Data

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	1. Existing Conditions: (2.5.4.3A) <ul style="list-style-type: none"> • Surveyed plan of site showing existing natural and built features; • Existing building footprints and gross floor area; • Existing parking areas and number of parking spaces provided; • Zoning district boundaries; • Existing, required, and proposed dimensional zoning requirements including building and open space coverage, yards and/or setbacks, and dwelling units per acre; • Existing impervious and disturbed areas; • Limits and type of existing vegetation; • Wetland delineation, wetland function and value assessment (including vernal pools); • SFHA, 100-year flood elevation line and BFE data, as required. 	SEE Attached	
<input checked="" type="checkbox"/>	2. Buildings and Structures: (2.5.4.3B) <ul style="list-style-type: none"> • Plan view: Use, size, dimensions, footings, overhangs, 1st fl. elevation; • Elevations: Height, massing, placement, materials, lighting, façade treatments; • Total Floor Area; • Number of Usable Floors; • Gross floor area by floor and use. 	Photos Plans SEE Attached	
<input checked="" type="checkbox"/>	3. Access and Circulation: (2.5.4.3C) <ul style="list-style-type: none"> • Location/width of access ways within site; • Location of curbing, right of ways, edge of pavement and sidewalks; • Location, type, size and design of traffic signing (pavement markings); • Names/layout of existing abutting streets; • Driveway curb cuts for abutting prop. and public roads; • If subdivision; Names of all roads, right of way lines and easements noted; • AASHTO truck turning templates, description of minimum vehicle allowed being a WB-50 (unless otherwise approved by TAC). 	SEE Attached	no signage needed not sub. NO curb cut truck turning N/A
<input checked="" type="checkbox"/>	4. Parking and Loading: (2.5.4.3D) <ul style="list-style-type: none"> • Location of off street parking/loading areas, landscaped areas/buffers; • Parking Calculations (# required and the # provided). 	SEE Attached	
<input checked="" type="checkbox"/>	5. Water Infrastructure: (2.5.4.3E) <ul style="list-style-type: none"> • Size, type and location of water mains, shut-offs, hydrants & Engineering data; • Location of wells and monitoring wells (include protective radii). 	SEE Attached	✓
<input checked="" type="checkbox"/>	6. Sewer Infrastructure: (2.5.4.3F) <ul style="list-style-type: none"> • Size, type and location of sanitary sewage facilities & Engineering data, including any onsite temporary facilities during construction period. 	SEE Attached	✓

<input checked="" type="checkbox"/>	7. Utilities: (2.5.4.3G) <ul style="list-style-type: none"> The size, type and location of all above & below ground utilities; Size type and location of generator pads, transformers and other fixtures. 	SEE Attached	
<input checked="" type="checkbox"/>	8. Solid Waste Facilities: (2.5.4.3H) <ul style="list-style-type: none"> The size, type and location of solid waste facilities. 		
<input checked="" type="checkbox"/>	9. Storm water Management: (2.5.4.3I) <ul style="list-style-type: none"> The location, elevation and layout of all storm-water drainage. The location of onsite snow storage areas and/or proposed off-site snow removal provisions. Location and containment measures for any salt storage facilities Location of proposed temporary and permanent material storage locations and distance from wetlands, water bodies, and stormwater structures. 		
<input checked="" type="checkbox"/>	10. Outdoor Lighting: (2.5.4.3J) <ul style="list-style-type: none"> Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and photometric plan. 	SEE Attached	✓
<input type="checkbox"/>	11. Indicate where dark sky friendly lighting measures have been implemented. (10.1)		
<input checked="" type="checkbox"/>	12. Landscaping: (2.5.4.3K) <ul style="list-style-type: none"> Identify all undisturbed area, existing vegetation and that which is to be retained; Location of any irrigation system and water source. 	SEE Attached	
<input checked="" type="checkbox"/>	13. Contours and Elevation: (2.5.4.3L) <ul style="list-style-type: none"> Existing/Proposed contours (2 foot minimum) and finished grade elevations. 	ON PLAN	
<input checked="" type="checkbox"/>	14. Open Space: (2.5.4.3M) <ul style="list-style-type: none"> Type, extent and location of all existing/proposed open space. 	ON PLAN	
<input checked="" type="checkbox"/>	15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)	SUPPLIED	
<input checked="" type="checkbox"/>	16. Character/Civic District (All following information shall be included): (2.5.4.3P) <ul style="list-style-type: none"> Applicable Building Height (10.5A21.20 & 10.5A43.30); ✓ Applicable Special Requirements (10.5A21.30); N/A Proposed building form/type (10.5A43); wood ✓ Proposed community space (10.5A46). N/A 	SEE Attached	
<input checked="" type="checkbox"/>	17. Special Flood Hazard Areas (2.5.4.3Q) <ul style="list-style-type: none"> The proposed development is consistent with the need to minimize flood damage; All public utilities and facilities are located and construction to minimize or eliminate flood damage; Adequate drainage is provided so as to reduce exposure to flood hazards. 	N/A	

Other Required Information

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input checked="" type="checkbox"/>	Traffic Impact Study or Trip Generation Report, as required. (3.2.1-2)	SEE Attached	waived
<input type="checkbox"/>	Indicate where Low Impact Development Design practices have been incorporated. (7.1)	SEE Attached	waived
<input type="checkbox"/>	Indicate whether the proposed development is located in a wellhead protection or aquifer protection area. Such determination shall be approved by the Director of the Dept. of Public Works. (7.3.1)	N/A/A	
<input checked="" type="checkbox"/>	Stormwater Management and Erosion Control Plan. (7.4)	SEE Attached	waived
<input type="checkbox"/>	Inspection and Maintenance Plan (7.6.5)	SEE Attached	waived

Final Site Plan Approval Required Information

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	All local approvals, permits, easements and licenses required, including but not limited to: <ul style="list-style-type: none"> • Waivers; • Driveway permits; • Special exceptions; • Variances granted; • Easements; • Licenses. (2.5.3.2A)		
<input type="checkbox"/>	Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to: <ul style="list-style-type: none"> • Calculations relating to stormwater runoff; • Information on composition and quantity of water demand and wastewater generated; • Information on air, water or land pollutants to be discharged, including standards, quantity, treatment and/or controls; • Estimates of traffic generation and counts pre- and post- construction; • Estimates of noise generation; • A Stormwater Management and Erosion Control Plan; • Endangered species and archaeological / historical studies; • Wetland and water body (coastal and inland) delineations; • Environmental impact studies. (2.5.3.2B)		waived garage
<input type="checkbox"/>	A document from each of the required private utility service providers indicating approval of the proposed site plan and indicating an ability to provide all required private utilities to the site. (2.5.3.2D)		waived

Final Site Plan Approval Required Information

<input checked="" type="checkbox"/>	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
<input type="checkbox"/>	A list of any required state and federal permit applications required for the project and the status of same. (2.5.3.2E)	N/A	waiver
<input type="checkbox"/>	A note shall be provided on the Site Plan stating: "All conditions on this Plan shall remain in effect in perpetuity pursuant to the requirements of the Site Plan Review Regulations." (2.5.4.2E)		N/A
<input type="checkbox"/>	For site plans that involve land designated as "Special Flood Hazard Areas" (SFHA) by the National Flood Insurance Program (NFIP) confirmation that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. (2.5.4.2F)	N/A	waiver
✓ <input type="checkbox"/>	Plan sheets submitted for recording shall include the following notes: a. "This Site Plan shall be recorded in the Rockingham County Registry of Deeds." b. "All improvements shown on this Site Plan shall be constructed and maintained in accordance with the Plan by the property owner and all future property owners. No changes shall be made to this Site Plan without the express approval of the Portsmouth Planning Director." (2.13.3)		N/A

Applicant's Signature: _____

Date: _____

Chandler Construction
K & D Concrete Services
8025 South Willow Street
Manchester NH

Estimated site work at 294 Lincoln Avenue,
Portsmouth

Streetscape Properties, LLC
Gary Dodds
294 Lincoln Avenue, Portsmouth NH

Per Altus Engineering plan for all site work
at 294 Lincoln Avenue Portsmouth, NH

Excavation, drainage installation, foundation
installation

\$55,000

Per review for TAC Committee and
City of Portsmouth Planning Board

Respectfully Submitted
Gary Dodds

Waiver 2.5.3

b.Green building components

Best practices in using green building components.

Landscaping - Rain water will be captured off roof to minimize water usage for landscape.

Energy efficient lighting - All exterior lighting is photo sensitive and use LED bulbs for minimal power usage.

Windows- New energy efficient windows throughout garage and office. Double pane, argon gas high efficiency Simonton windows.

Plumbing - best practices for using environmentally friendly products for plumbing and wastewater to be implemented.

Building designed with high ceilings to utilize fresh air rather than A/C components. where applicable fans can be utilized.

e. Water Infrastructure

Waiver for water infrastructure

Utilizing existing 3/4 water line within the main house to supply water for the bathroom in the office area.

f.Sewer infrastructure

Waiver - tying into the existing sewer line on subject property.

Only one bathroom will be added.

j. Outdoor lighting

Waiver - Minimal amount of lighting to be placed on exterior of building to coincide with harmony of neighborhood. Motion sensors to be used to provide appropriate light for garage usage.

Waiver 2.15.3

Construction management and mitigation plan

Given the size and scope of project being only a garage for the current building tenants.

The building has been rental property for over 30 years with the same long-term tenants. This is not a new residential building or development.

Waiver 2.16.3

As-built plan waiver

The plans that have been submitted will be adhered to; plans have already been certified and engineered by Altus Engineering. The scope of the project is small.

Waiver 3.2.1-2

Waiver for traffic impact study

There is no change in occupancy. The traffic pattern has not changed. There will be no cars backing out into the street.

Waiver 7.1

There is no change to impact on usage of the property.

Waiver 7.6.5

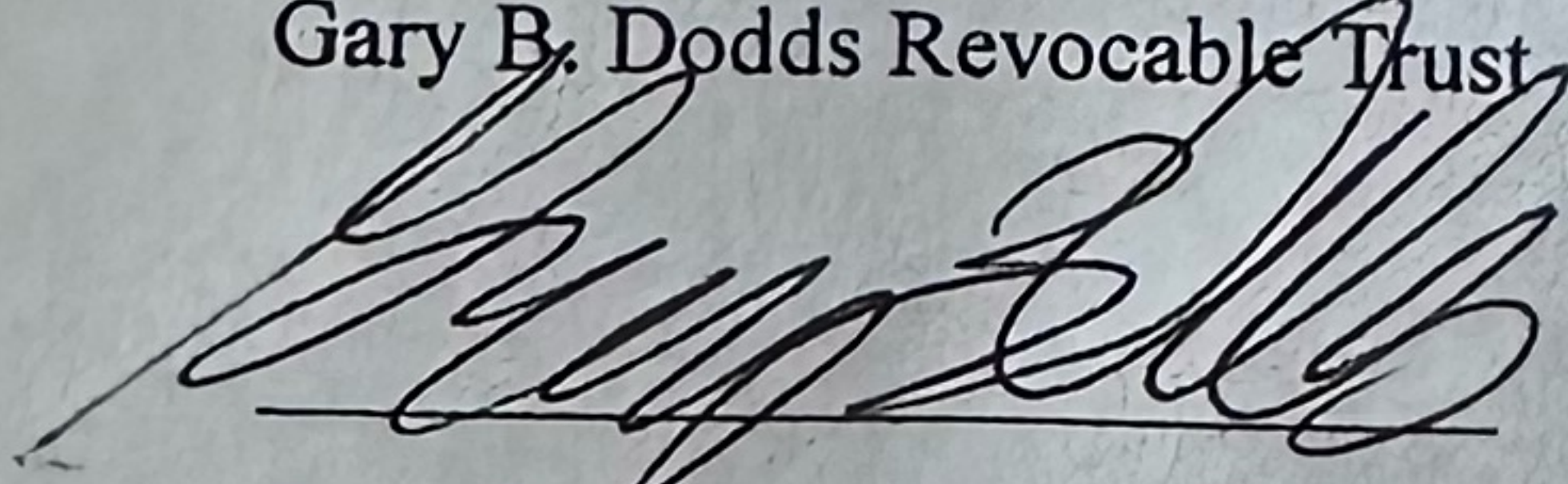
Inspection and maintenance plan

Project is very small. Minimal amount of maintenance needed for a garage.

Letter of Authorization

Gary B. Dodds Revocable Trust and Gary B. Dodds, Trustee, record owner of the property located at 294 Lincon Avenue, Tax Map 130, Lot 024, Portsmouth, NH (the "Property"), hereby authorize Altus Engineering, LLC of Portsmouth, NH to represent us as the Owner and Applicant in all matters concerning the engineering and related permitting for said Property. This authorization shall include any signatures required for Federal, State and Municipal permit applications. This Letter of Authorization shall be valid until expressly revoked in writing.

Gary B. Dodds Revocable Trust



Gary B. Dodds
Trustee

Date

12-17-24

DRAINAGE ANALYSIS

FOR

GARAGE CONSTRUCTION

**294 Lincoln Avenue
Portsmouth, NH**

May 19, 2025



Gary B. Dodds Revocable Trust

300 Sagamore Road
Rye, NH 03870

Prepared By:

Altus Engineering

133 Court Street
Portsmouth, NH 03801
Phone: (603) 433-2335



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Section 1

Narrative

PROJECT DESCRIPTION

The Gary B. Dodds Revocable Trust is proposing to construct an attached garage at the property located at 294 Lincoln Avenue. The ± 0.22 -acre parcel is identified as Tax Map 130, Lot 024 and is located in the General Residence A (GRA) zone. The lot is located at the corner of Lincoln Avenue and Miller Avenue Access to the property is located on both Lincoln Avenue and Miller Avenue. The existing property consists of a 2.5 story wood framed house, a carport/shed and a detached garage.

The proposal includes the construction of a new 4-bay attached garage ($\pm 1,320$ S.F.) and new driveways.

The new stormwater infrastructure will include one new 6' diameter leaching catch basin that will have an overflow to the City's existing drainage system on Lincoln Avenue. Additionally, a drip strip will be installed around most of the proposed garage to capture runoff from the roof. Gutters and roof leaders will be installed to capture and direct runoff to the catch basin and drip strip. This proposed stormwater management system will reduce peak flows leaving the site.

Site Soils

A site-specific soil survey (SSSS) was not required for the project. The United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) web soil survey indicates that soil is uniformly urban-land across the entirety of the site, hydrologic soil group A.

Pre-Development (Existing Conditions)

All runoff from the property flows in a southeasterly direction toward Miller Avenue. The property is bounded by Lincoln Avenue to the north, Miller Avenue to the east, and residential properties to the south and west. The southern portion of the lot is encumbered with an access easement for the abutter's driveway. There is no existing stormwater infrastructure located on the property. Approximately half of the existing property is developed, consisting of the house, detached garage, carport/shed and the driveway. The remainder of the property is mostly lawn with some small areas of gravel and sidewalk.

The site hydrology is characterized by one sub-catchments as delineated on the accompanying "Pre-Development Watershed and Soils Plan". Site runoff was analyzed at one point of analysis (POA). POA 1 captures the entire site and is located at the southeasterly corner of the parcel.

Post-Development (Proposed Conditions)

The post-development conditions were analyzed at the same discharge point as the pre-development conditions. The post-development watersheds are delineated on the accompanying “Post-Development Watershed and Soils Plan”. Modifications to the delineated areas and associated ground cover were made to sub-catchments to account for the improvements to the property.

As shown on the attached Post-Development Watershed and Soils Plan, the site was divided into three post-development sub-catchment areas, identified as sub-catchments 1.1, 1.2 and 1R.

Site topography, existing features, proposed site improvements, proposed grading, drainage and erosion control measures are shown on the accompanying plan set. Recommended erosion control measures are based upon the December 2008 edition of the “*New Hampshire Stormwater Manual Volumes 1 through 3*” prepared by NHDES and Comprehensive Environmental, Inc. as amended.

CALCULATION METHODS

The drainage study was completed using the USDA SCS TR-20 Method within the HydroCAD Stormwater Modeling System. Reservoir routing was performed with the Dynamic Storage Indication method with automated calculation of tailwater conditions. A Type III 24-hour rainfall distribution was utilized in analyzing the data for the 2, 10, 25 and 50 year - 24-hour storm events using rainfall data provided by the Northeast Regional Climate Center (NRCC). As the project site lies within a Coastal and Great Bay Community identified by NHDES Alteration of Terrain, all rainfall amounts were increased by 15% to account for potential future increases in rainfall due to climate change. A time span of 0 to 30 hours was analyzed at 0.01-hour increments. Design infiltration rates used in the analysis were calculated from the SSSNNE publication *Ksat for New Hampshire Soils* using the average of the lowest rates in the C-horizon of the soil subtypes comprising the in-situ material divided by two.

Disclaimer

Altus Engineering notes that stormwater modeling is limited in its capacity to precisely predict peak rates of runoff and flood elevations. Results should not be considered to represent actual storm events due to the number of variables and assumptions involved in the modeling effort. Surface roughness coefficients (n), entrance loss coefficients (ke), velocity factors (kv) and times of concentration (Tc) are based on subjective field observations and engineering judgment using available data. For design purposes, curve numbers (Cn) describe the average conditions. However, curve numbers will vary from storm to storm depending on the antecedent runoff conditions (ARC) including saturation and frozen ground. Also, higher water elevations than predicted by modeling could occur if drainage channels, closed drain systems or culverts are not maintained and/or become blocked by debris before and/or during a storm event as this will impact flow capacity of the structures. Structures should be re-evaluated if future changes occur within relevant drainage areas in order to assess any required design modifications.

Drainage Analysis

A complete summary of the drainage model is included in the appendix of this report. **Table 1** below compares pre- and post-development peak rates at the Point of Analysis identified on the plans for the 2, 10, 25 and 50-year storm events:

**Table 1 - Stormwater Modeling Summary
Peak Q (cfs) for Type III 24-Hour Storm Events**

	2-Year Storm	10-Year Storm	25-Year Storm	50-Year Storm
	(3.69-inch)	(5.60-inch)	(7.10-inch)	(8.50-inch)
POA 1				
PRE	0.20	0.54	0.83	1.13
POST	0.12	0.53	0.80	1.03
CHANGE	-0.08	-0.01	-0.03	-0.10

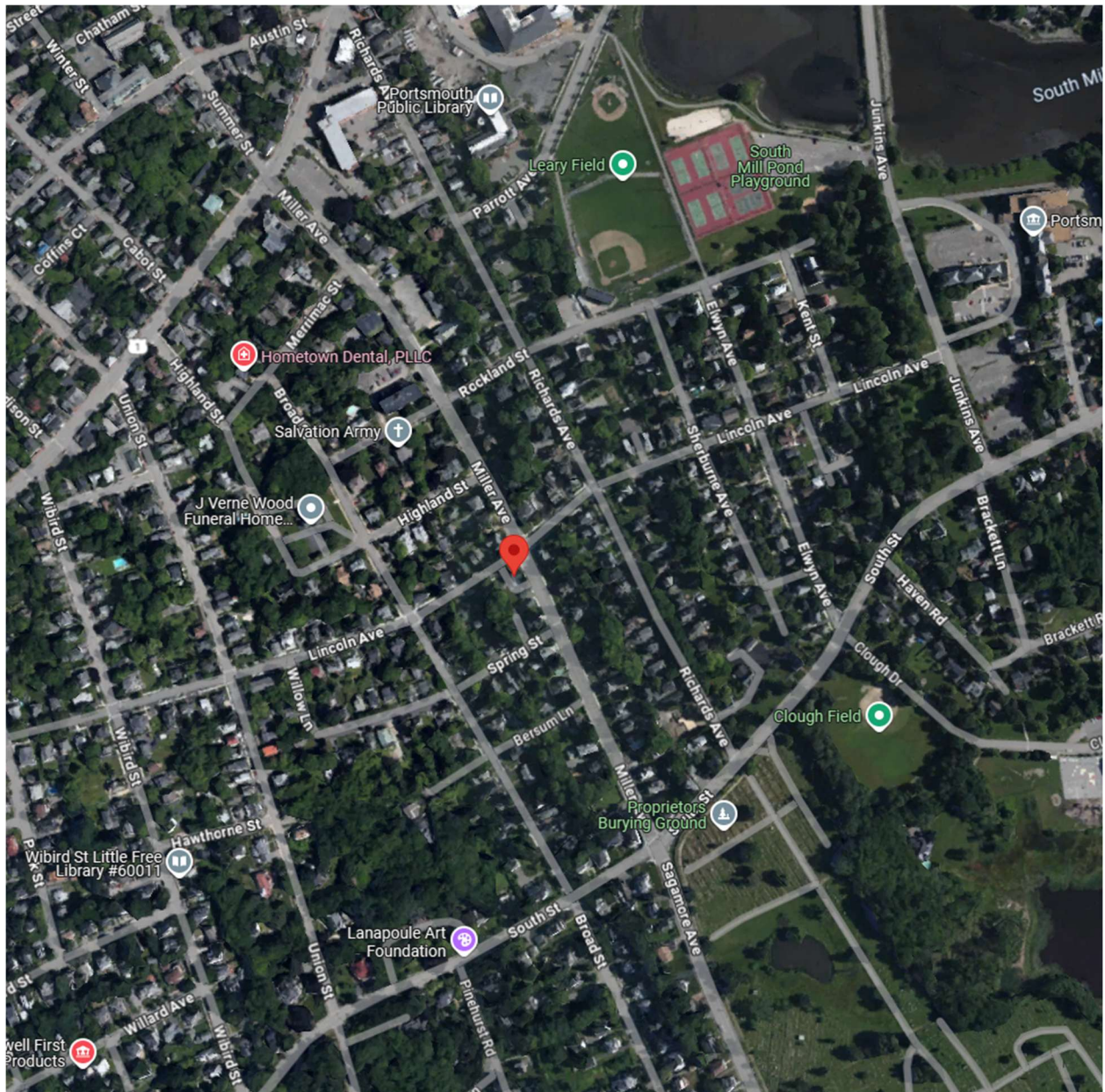
As the above table demonstrates, the proposed peak rates of runoff at the point of analysis will match or be decreased from the existing conditions for all analyzed storm events.

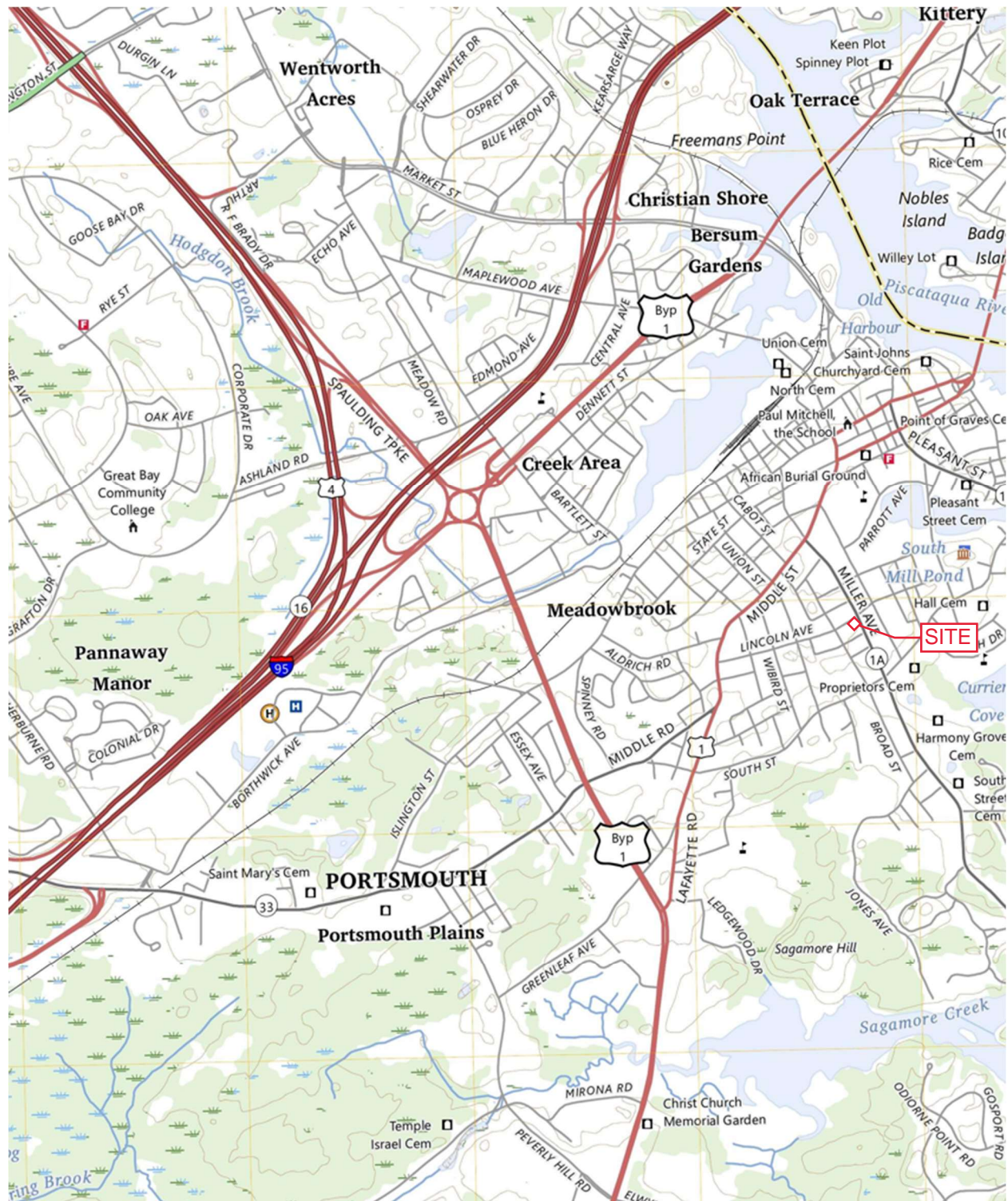
CONCLUSION

This proposed site development of property located at 294 Lincoln Avenue in Portsmouth, New Hampshire will have minimal adverse effect on abutting properties and infrastructure as a result of stormwater runoff or siltation. Post-construction peak rates of runoff from the site will be at or lower than the existing conditions for all analyzed storm events. Appropriate steps will be taken to properly mitigate erosion and sedimentation through the use of temporary and permanent Best Management Practices for sediment and erosion control.

Section 2

Aerial Photo and USGS Map





Section 3

Drainage Calculations

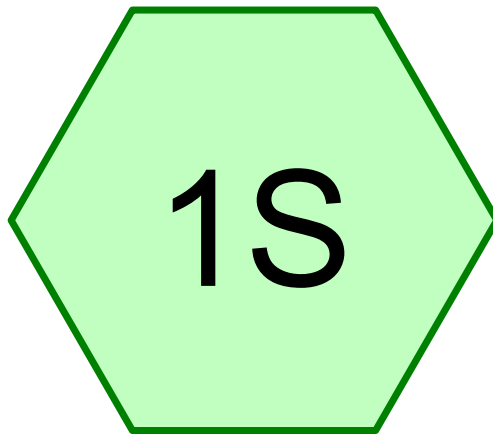
Pre-Development

2-Year, 24-Hour Summary

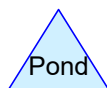
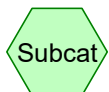
10-Year, 24-Hour Complete

25-Year, 24-Hour Summary

50-Year, 24-Hour Summary



294 Lincoln Avenue



Routing Diagram for 5548-PRE

Prepared by Altus Engineering, Printed 5/19/2025
HydroCAD® 10.00-26 s/n 01222 © 2020 HydroCAD Software Solutions LLC

5548-PRE*Type III 24-hr 2-YEAR Rainfall=3.69"*

Prepared by Altus Engineering

Printed 5/19/2025

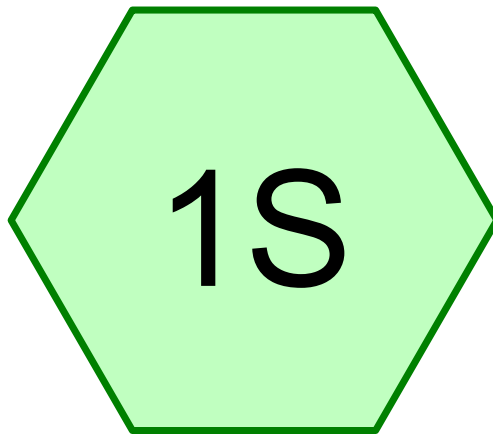
HydroCAD® 10.00-26 s/n 01222 © 2020 HydroCAD Software Solutions LLC

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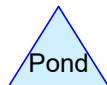
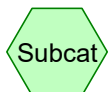
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: 294 Lincoln AvenueRunoff Area=9,686 sf 46.41% Impervious Runoff Depth=0.91"
Flow Length=119' Tc=6.0 min CN=66 Runoff=0.20 cfs 0.017 af**Total Runoff Area = 0.222 ac Runoff Volume = 0.017 af Average Runoff Depth = 0.91"**
53.59% Pervious = 0.119 ac 46.41% Impervious = 0.103 ac



294 Lincoln Avenue



Routing Diagram for 5548-PRE

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5548-PRE

Prepared by Altus Engineering

Printed 5/19/2025

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.119	39	>75% Grass cover, Good, HSG A (1S)
0.056	98	Paved parking, HSG A (1S)
0.047	98	Roofs, HSG A (1S)
0.222	66	TOTAL AREA

5548-PRE

Prepared by Altus Engineering

Printed 5/19/2025

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.222	HSG A	1S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.222		TOTAL AREA

5548-PRE*Type III 24-hr 10-YEAR Rainfall=5.60"*

Prepared by Altus Engineering

Printed 5/19/2025

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: 294 Lincoln AvenueRunoff Area=9,686 sf 46.41% Impervious Runoff Depth=2.15"
Flow Length=119' Tc=6.0 min CN=66 Runoff=0.54 cfs 0.040 af**Total Runoff Area = 0.222 ac Runoff Volume = 0.040 af Average Runoff Depth = 2.15"**
53.59% Pervious = 0.119 ac 46.41% Impervious = 0.103 ac

5548-PRE

Prepared by Altus Engineering

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Type III 24-hr 10-YEAR Rainfall=5.60"

Printed 5/19/2025

Summary for Subcatchment 1S: 294 Lincoln Avenue

Runoff = 0.54 cfs @ 12.10 hrs, Volume= 0.040 af, Depth= 2.15"

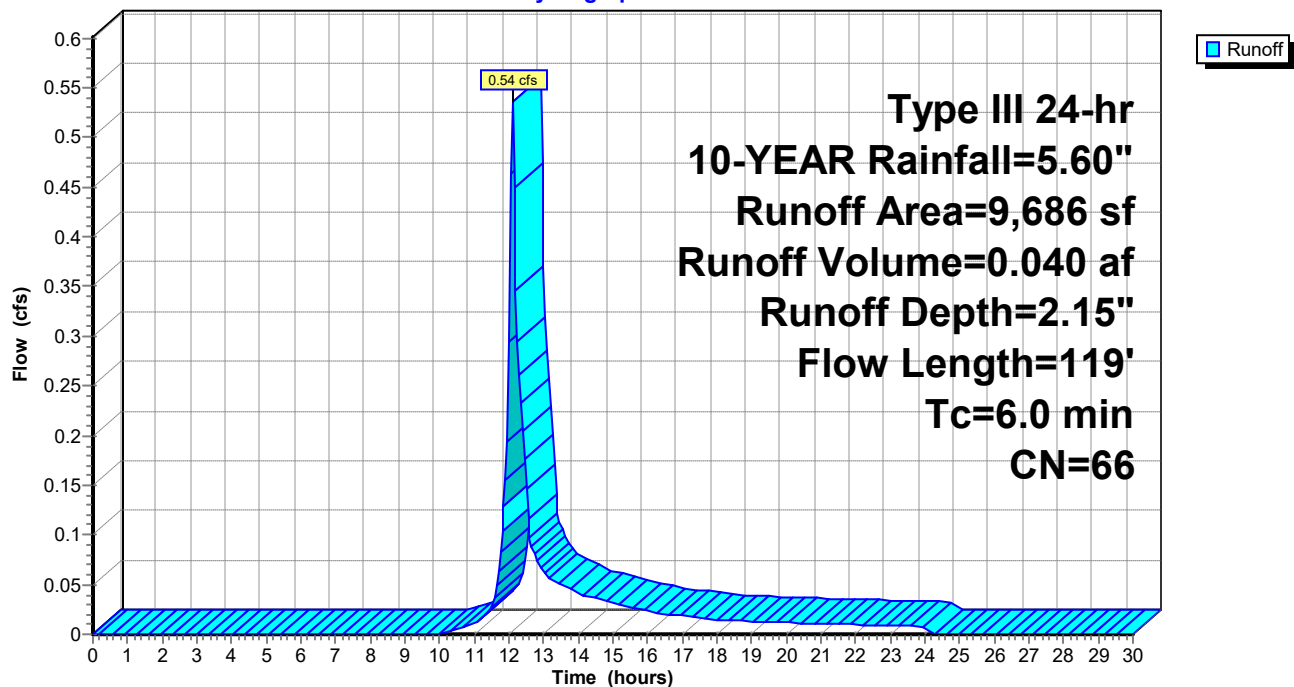
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YEAR Rainfall=5.60"

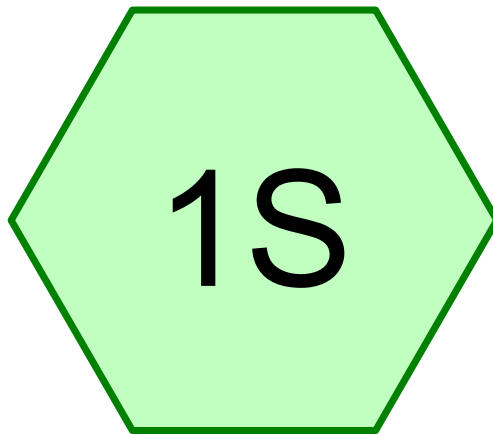
Area (sf)	CN	Description
2,057	98	Roofs, HSG A
2,438	98	Paved parking, HSG A
5,191	39	>75% Grass cover, Good, HSG A
9,686	66	Weighted Average
5,191		53.59% Pervious Area
4,495		46.41% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	21	0.0476	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.21"
0.7	58	0.0345	1.30		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.1	26	0.0577	3.87		Shallow Concentrated Flow, Unpaved Kv= 16.1 fps
0.0	14	0.0714	5.42		Shallow Concentrated Flow, Paved Kv= 20.3 fps
2.8	119	Total, Increased to minimum Tc = 6.0 min			

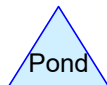
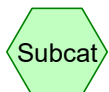
Subcatchment 1S: 294 Lincoln Avenue

Hydrograph





294 Lincoln Avenue



5548-PRE*Type III 24-hr 25-YEAR Rainfall=7.10"*

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Printed 5/19/2025

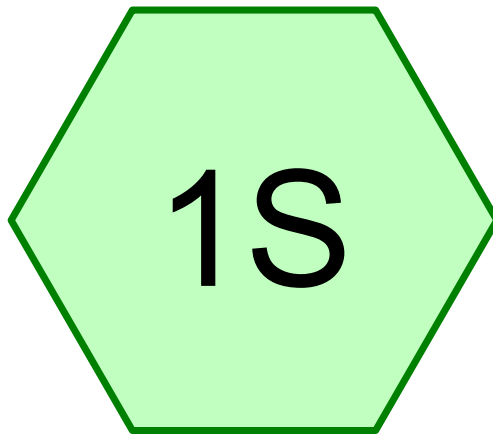
HydroCAD® 10.00-26 s/n 01222 © 2020 HydroCAD Software Solutions LLC

Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points

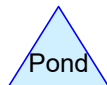
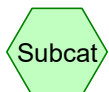
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: 294 Lincoln AvenueRunoff Area=9,686 sf 46.41% Impervious Runoff Depth=3.28"
Flow Length=119' Tc=6.0 min CN=66 Runoff=0.83 cfs 0.061 af**Total Runoff Area = 0.222 ac Runoff Volume = 0.061 af Average Runoff Depth = 3.28"**
53.59% Pervious = 0.119 ac 46.41% Impervious = 0.103 ac



294 Lincoln Avenue



5548-PRE*Type III 24-hr 50-YEAR Rainfall=8.50"*

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: 294 Lincoln AvenueRunoff Area=9,686 sf 46.41% Impervious Runoff Depth=4.42"
Flow Length=119' Tc=6.0 min CN=66 Runoff=1.13 cfs 0.082 af**Total Runoff Area = 0.222 ac Runoff Volume = 0.082 af Average Runoff Depth = 4.42"**
53.59% Pervious = 0.119 ac 46.41% Impervious = 0.103 ac

Section 4

Drainage Calculations

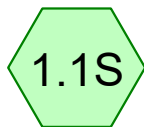
Post-Development

2-Year, 24-Hour Summary

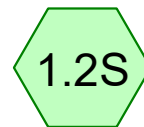
10-Year, 24-Hour Complete

25-Year, 24-Hour Summary

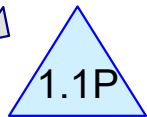
50-Year, 24-Hour Summary



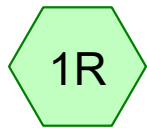
Lincoln Avenue
Driveway Area



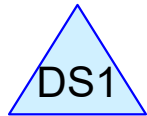
Miller Avenue Driveway
Area



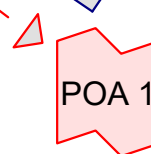
Infiltration CB



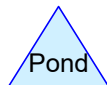
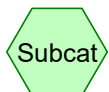
Half of Proposed Roof



Drip Strip



Lincoln/Miller Avenue
(City Drainage System)



Routing Diagram for 5548-POST

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5548-POST*Type III 24-hr 2-YEAR Rainfall=3.69"*

Prepared by Altus Engineering

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.1S: Lincoln Avenue Runoff Area=4,231 sf 66.56% Impervious Runoff Depth=1.64"
Flow Length=42' Tc=6.0 min CN=78 Runoff=0.18 cfs 0.013 af

Subcatchment 1.2S: Miller Avenue Runoff Area=4,511 sf 37.35% Impervious Runoff Depth=0.66"
Flow Length=116' Tc=6.0 min CN=61 Runoff=0.06 cfs 0.006 af

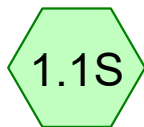
Subcatchment 1R: Half of Proposed Roof Runoff Area=944 sf 80.51% Impervious Runoff Depth=2.35"
Tc=6.0 min CN=87 Runoff=0.06 cfs 0.004 af

Pond 1.1P: Infiltration CB Peak Elev=18.99' Storage=167 cf Inflow=0.18 cfs 0.013 af
Discarded=0.02 cfs 0.012 af Secondary=0.08 cfs 0.001 af Outflow=0.10 cfs 0.013 af

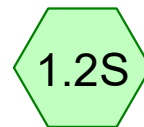
Pond DS1: Drip Strip Peak Elev=0.25' Storage=18 cf Inflow=0.06 cfs 0.004 af
Outflow=0.03 cfs 0.004 af

Link POA 1: Lincoln/Miller Avenue (City Drainage System) Inflow=0.12 cfs 0.007 af
Primary=0.12 cfs 0.007 af

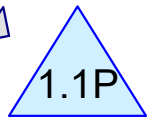
Total Runoff Area = 0.222 ac Runoff Volume = 0.023 af Average Runoff Depth = 1.25"
45.68% Pervious = 0.102 ac 54.32% Impervious = 0.121 ac



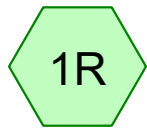
Lincoln Avenue
Driveway Area



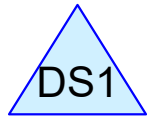
Miller Avenue Driveway
Area



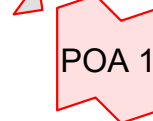
Infiltration CB



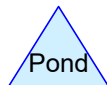
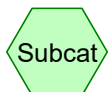
Half of Proposed Roof



Drip Strip



Lincoln/Miller Avenue
(City Drainage System)



Routing Diagram for 5548-POST

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Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.102	39	>75% Grass cover, Good, HSG A (1.1S, 1.2S, 1R)
0.057	98	Paved parking, HSG A (1.1S, 1.2S)
0.064	98	Roofs, HSG A (1.1S, 1.2S, 1R)
0.222	71	TOTAL AREA

5548-POST

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Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.222	HSG A	1.1S, 1.2S, 1R
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
0.222		TOTAL AREA

5548-POST*Type III 24-hr 10-YEAR Rainfall=5.60"*

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.1S: Lincoln Avenue Runoff Area=4,231 sf 66.56% Impervious Runoff Depth=3.23"
Flow Length=42' Tc=6.0 min CN=78 Runoff=0.36 cfs 0.026 af

Subcatchment 1.2S: Miller Avenue Runoff Area=4,511 sf 37.35% Impervious Runoff Depth=1.74"
Flow Length=116' Tc=6.0 min CN=61 Runoff=0.20 cfs 0.015 af

Subcatchment 1R: Half of Proposed Roof Runoff Area=944 sf 80.51% Impervious Runoff Depth=4.14"
Tc=6.0 min CN=87 Runoff=0.10 cfs 0.007 af

Pond 1.1P: Infiltration CB Peak Elev=19.23' Storage=176 cf Inflow=0.36 cfs 0.026 af
Discarded=0.03 cfs 0.017 af Secondary=0.33 cfs 0.009 af Outflow=0.36 cfs 0.026 af

Pond DS1: Drip Strip Peak Elev=0.81' Storage=60 cf Inflow=0.10 cfs 0.007 af
Outflow=0.03 cfs 0.007 af

Link POA 1: Lincoln/Miller Avenue (City Drainage System) Inflow=0.53 cfs 0.024 af
Primary=0.53 cfs 0.024 af

Total Runoff Area = 0.222 ac Runoff Volume = 0.049 af Average Runoff Depth = 2.62"
45.68% Pervious = 0.102 ac 54.32% Impervious = 0.121 ac

5548-POST

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Type III 24-hr 10-YEAR Rainfall=5.60"

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Summary for Subcatchment 1.1S: Lincoln Avenue Driveway Area

Runoff = 0.36 cfs @ 12.09 hrs, Volume= 0.026 af, Depth= 3.23"

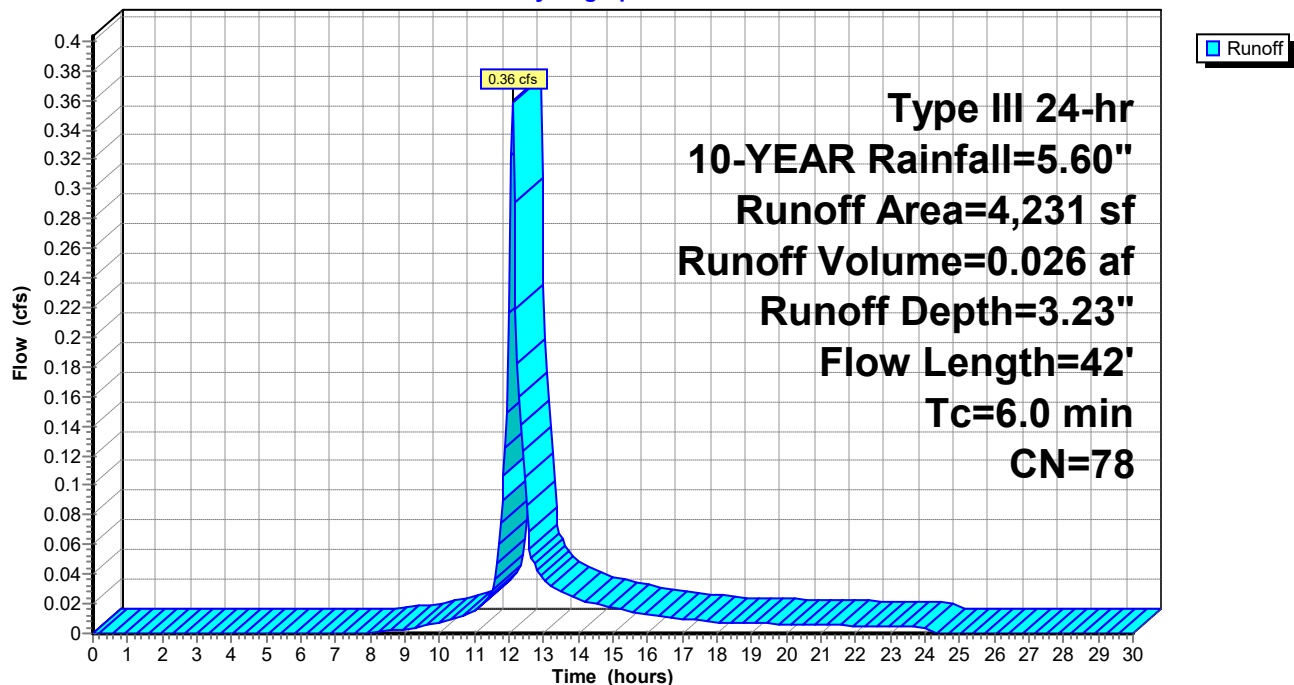
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YEAR Rainfall=5.60"

Area (sf)	CN	Description
1,262	98	Roofs, HSG A
1,554	98	Paved parking, HSG A
1,415	39	>75% Grass cover, Good, HSG A
4,231	78	Weighted Average
1,415		33.44% Pervious Area
2,816		66.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	15	0.1000	0.22		Sheet Flow, Grass: Short n= 0.150 P2= 3.21"
0.1	27	0.0259	3.27		Shallow Concentrated Flow, Paved Kv= 20.3 fps
1.2	42	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 1.1S: Lincoln Avenue Driveway Area

Hydrograph



5548-POST

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Type III 24-hr 10-YEAR Rainfall=5.60"

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Summary for Subcatchment 1.2S: Miller Avenue Driveway Area

Runoff = 0.20 cfs @ 12.10 hrs, Volume= 0.015 af, Depth= 1.74"

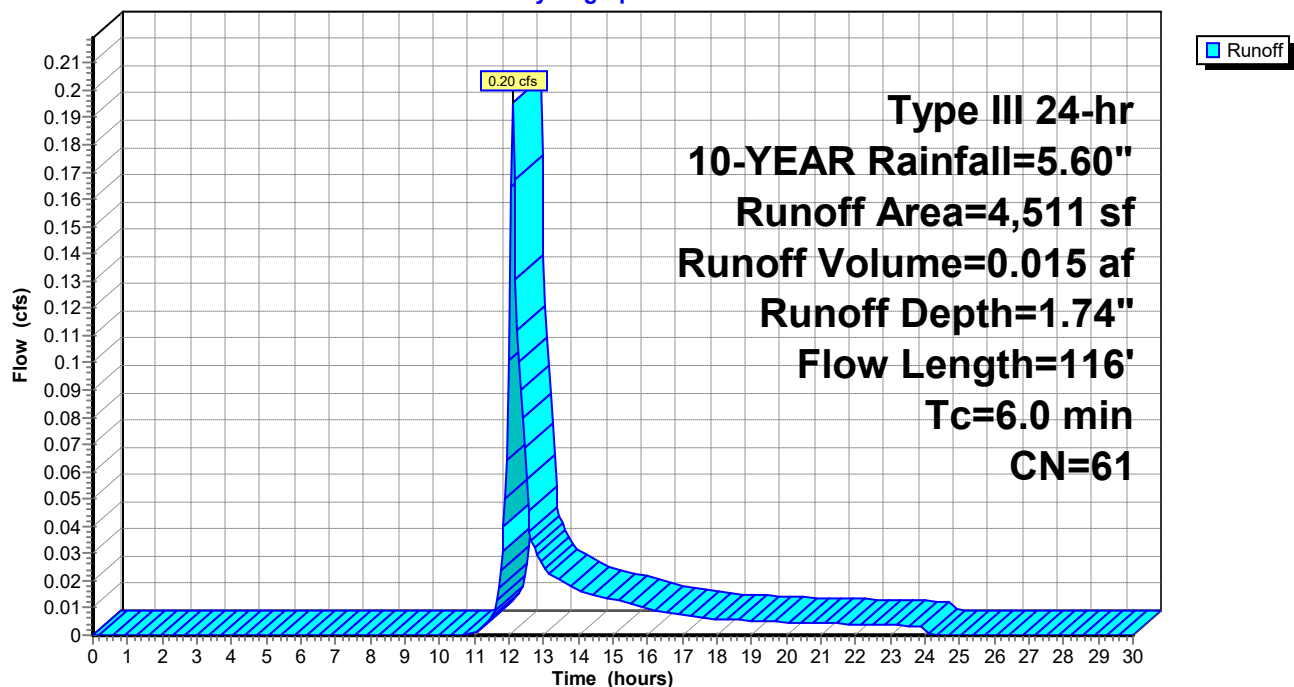
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YEAR Rainfall=5.60"

Area (sf)	CN	Description
762	98	Roofs, HSG A
923	98	Paved parking, HSG A
2,826	39	>75% Grass cover, Good, HSG A
4,511	61	Weighted Average
2,826		62.65% Pervious Area
1,685		37.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	32	0.0156	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 3.21"
0.5	47	0.0489	1.55		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.1	37	0.0595	4.95		Shallow Concentrated Flow, Paved Kv= 20.3 fps
4.9	116	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 1.2S: Miller Avenue Driveway Area

Hydrograph



5548-POST

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Type III 24-hr 10-YEAR Rainfall=5.60"

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Summary for Subcatchment 1R: Half of Proposed Roof

Runoff = 0.10 cfs @ 12.09 hrs, Volume= 0.007 af, Depth= 4.14"

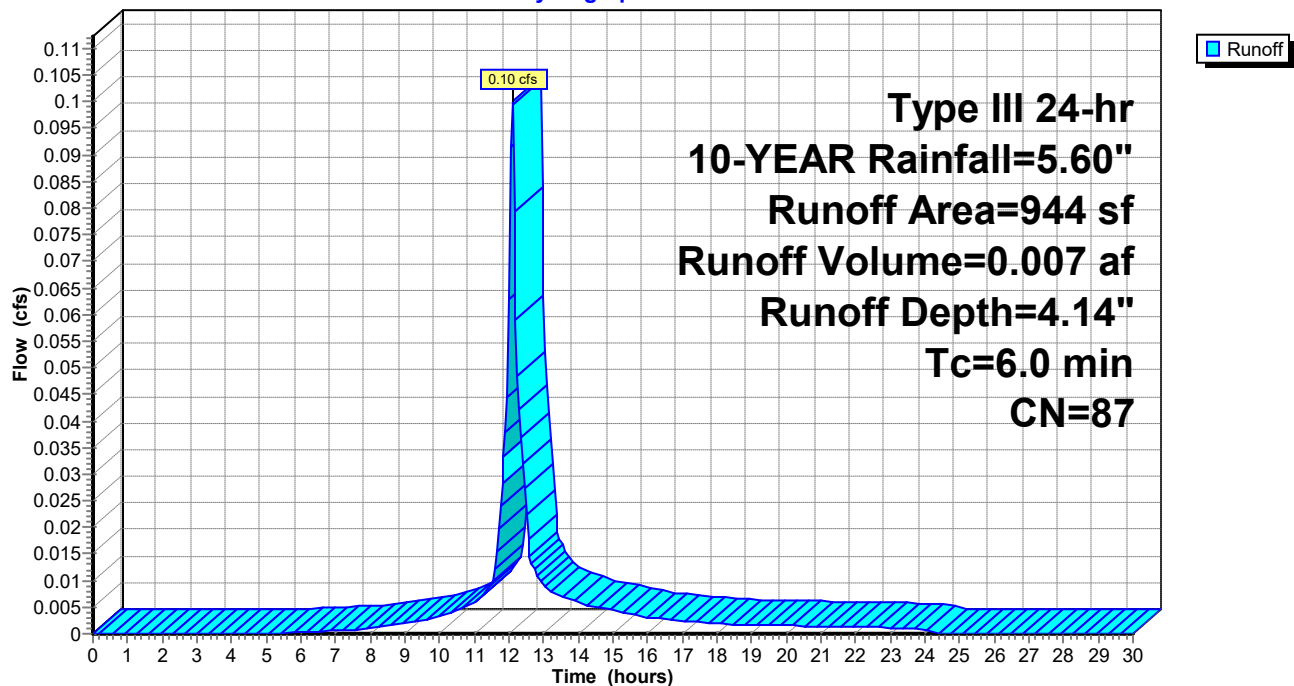
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YEAR Rainfall=5.60"

Area (sf)	CN	Description
760	98	Roofs, HSG A
184	39	>75% Grass cover, Good, HSG A
944	87	Weighted Average
184		19.49% Pervious Area
760		80.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 1R: Half of Proposed Roof

Hydrograph



5548-POST

Type III 24-hr 10-YEAR Rainfall=5.60"

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Summary for Pond 1.1P: Infiltration CB

Inflow Area = 0.097 ac, 66.56% Impervious, Inflow Depth = 3.23" for 10-YEAR event
 Inflow = 0.36 cfs @ 12.09 hrs, Volume= 0.026 af
 Outflow = 0.36 cfs @ 12.10 hrs, Volume= 0.026 af, Atten= 1%, Lag= 0.5 min
 Discarded = 0.03 cfs @ 12.10 hrs, Volume= 0.017 af
 Secondary = 0.33 cfs @ 12.10 hrs, Volume= 0.009 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Peak Elev= 19.23' @ 12.10 hrs Surf.Area= 50 sf Storage= 176 cf

Flood Elev= 21.80' Surf.Area= 100 sf Storage= 264 cf

Plug-Flow detention time= 52.1 min calculated for 0.026 af (100% of inflow)

Center-of-Mass det. time= 52.1 min (874.2 - 822.1)

Volume	Invert	Avail.Storage	Storage Description
#1	14.00'	76 cf	8' Dia. Stone Around CB (Conic) Listed below (Recalc) 372 cf Overall - 181 cf Embedded = 191 cf x 40.0% Voids
#2	15.00'	181 cf	6' CB Structure (Conic) Listed below (Recalc) Inside #1
#3	21.60'	51 cf	Storage Above Rim of CB (Conic) Listed below (Recalc)
		308 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
14.00	50	0	0	50
21.30	50	365	365	233
21.60	4	7	372	279

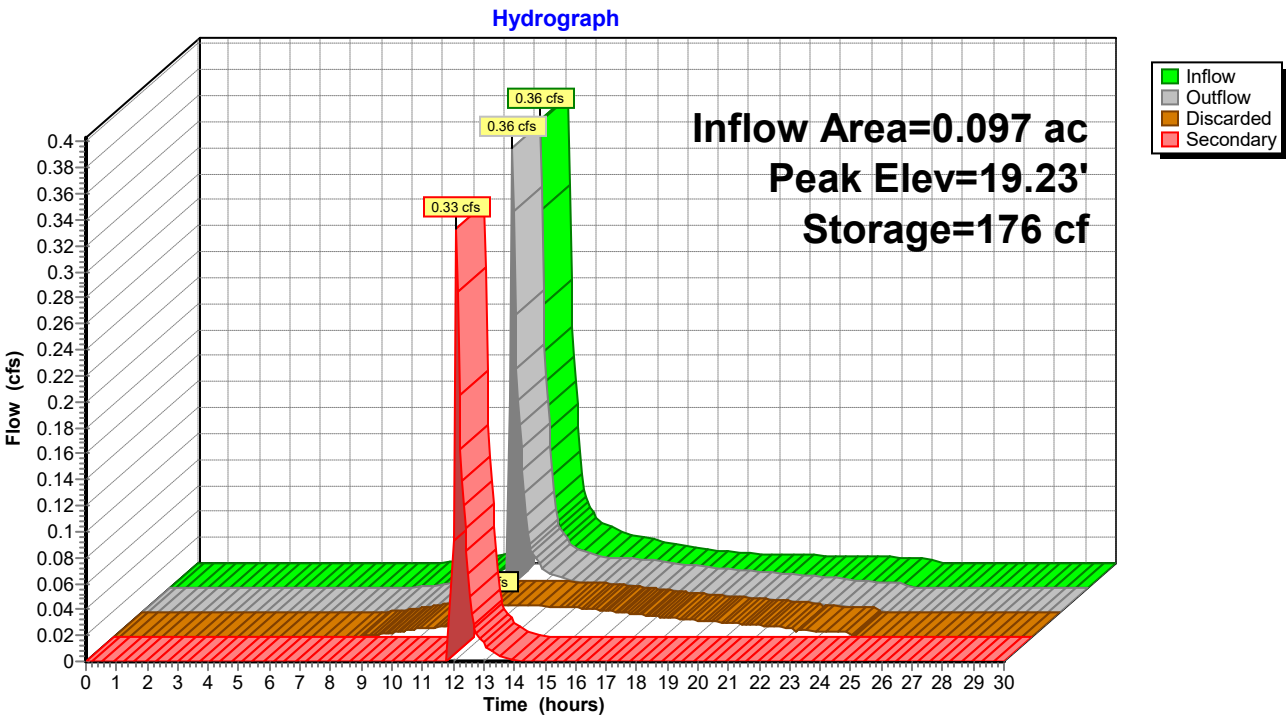
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
15.00	28	0	0	28
21.30	28	176	176	146
21.60	4	4	181	170

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
21.60	0	0	0	0
22.00	384	51	51	384

Device	Routing	Invert	Outlet Devices
#1	Discarded	14.00'	6.000 in/hr Exfiltration over Wetted area Phase-In= 0.01'
#2	Secondary	18.80'	6.0" Round Culvert L= 49.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 18.80' / 18.50' S= 0.0061 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.20 sf

Discarded OutFlow Max=0.03 cfs @ 12.10 hrs HW=19.23' (Free Discharge)↑**1=Exfiltration** (Exfiltration Controls 0.03 cfs)**Secondary OutFlow** Max=0.33 cfs @ 12.10 hrs HW=19.23' TW=0.00' (Dynamic Tailwater)↑**2=Culvert** (Barrel Controls 0.33 cfs @ 2.48 fps)

Pond 1.1P: Infiltration CB



5548-POST

Type III 24-hr 10-YEAR Rainfall=5.60"

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Summary for Pond DS1: Drip Strip

Inflow Area = 0.022 ac, 80.51% Impervious, Inflow Depth = 4.14" for 10-YEAR event
 Inflow = 0.10 cfs @ 12.09 hrs, Volume= 0.007 af
 Outflow = 0.03 cfs @ 12.41 hrs, Volume= 0.007 af, Atten= 69%, Lag= 19.3 min
 Discarded = 0.03 cfs @ 12.41 hrs, Volume= 0.007 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs
 Peak Elev= 0.81' @ 12.41 hrs Surf.Area= 184 sf Storage= 60 cf

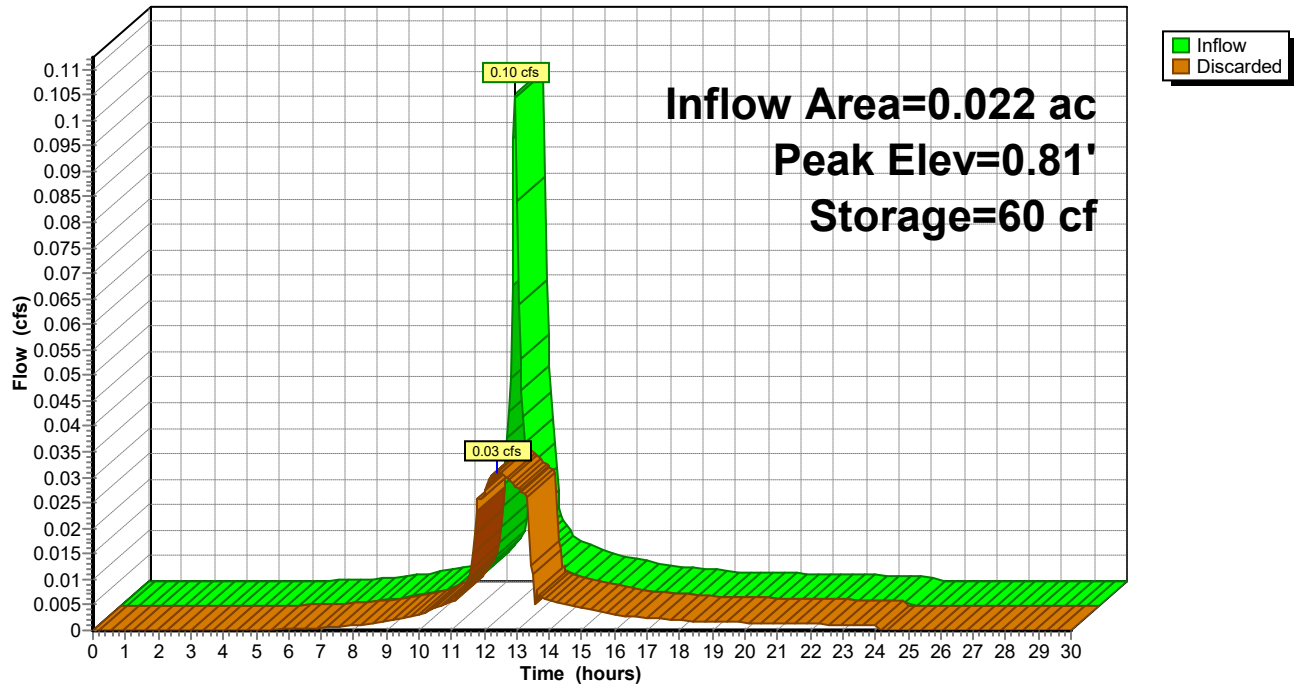
Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 9.9 min (807.0 - 797.1)

Volume	Invert	Avail.Storage	Storage Description
#1	0.00'	294 cf	Custom Stage Data (Conic) Listed below (Recalc) 736 cf Overall x 40.0% Voids

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
0.00	184	0	0	184
4.00	184	736	736	376

Device	Routing	Invert	Outlet Devices
#1	Discarded	0.00'	6.000 in/hr Exfiltration over Wetted area Phase-In= 0.01'

Discarded OutFlow Max=0.03 cfs @ 12.41 hrs HW=0.81' (Free Discharge)
 ↑ **1=Exfiltration** (Exfiltration Controls 0.03 cfs)

Pond DS1: Drip Strip**Hydrograph**

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Type III 24-hr 10-YEAR Rainfall=5.60"

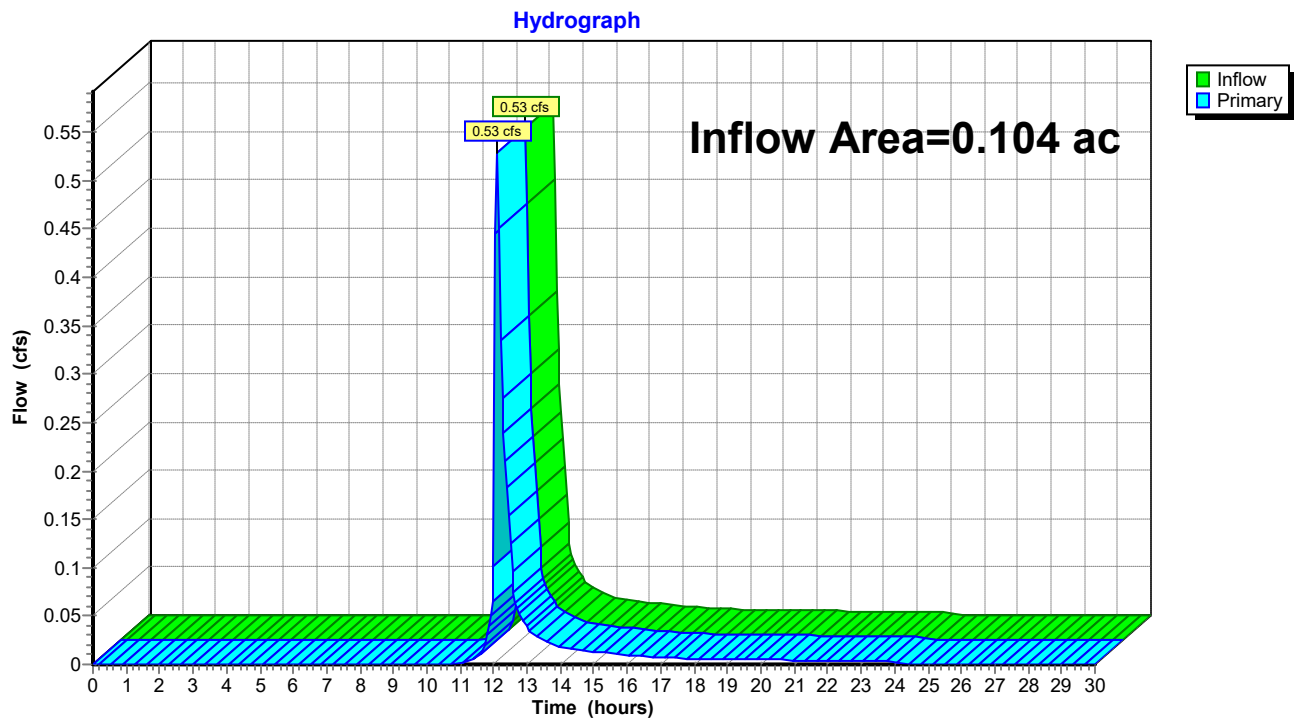
Printed 5/19/2025

Summary for Link POA 1: Lincoln/Miller Avenue (City Drainage System)

Inflow Area = 0.104 ac, 37.35% Impervious, Inflow Depth = 2.76" for 10-YEAR event
Inflow = 0.53 cfs @ 12.10 hrs, Volume= 0.024 af
Primary = 0.53 cfs @ 12.10 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min

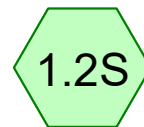
Primary outflow = Inflow, Time Span= 0.00-30.00 hrs, dt= 0.05 hrs

Link POA 1: Lincoln/Miller Avenue (City Drainage System)

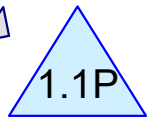




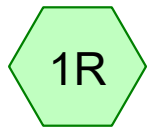
Lincoln Avenue
Driveway Area



Miller Avenue Driveway
Area



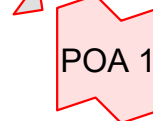
Infiltration CB



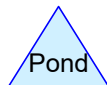
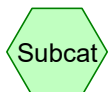
Half of Proposed Roof



Drip Strip



Lincoln/Miller Avenue
(City Drainage System)



Routing Diagram for 5548-POST

Prepared by Altus Engineering, Printed 5/19/2025
HydroCAD® 10.00-26 s/n 01222 © 2020 HydroCAD Software Solutions LLC

5548-POST*Type III 24-hr 25-YEAR Rainfall=7.10"*

Prepared by Altus Engineering

Printed 5/19/2025

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.1S: Lincoln Avenue Runoff Area=4,231 sf 66.56% Impervious Runoff Depth=4.57"
Flow Length=42' Tc=6.0 min CN=78 Runoff=0.51 cfs 0.037 af

Subcatchment 1.2S: Miller Avenue Runoff Area=4,511 sf 37.35% Impervious Runoff Depth=2.77"
Flow Length=116' Tc=6.0 min CN=61 Runoff=0.32 cfs 0.024 af

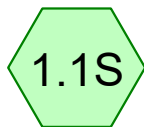
Subcatchment 1R: Half of Proposed Roof Runoff Area=944 sf 80.51% Impervious Runoff Depth=5.58"
Tc=6.0 min CN=87 Runoff=0.13 cfs 0.010 af

Pond 1.1P: Infiltration CB Peak Elev=19.37' Storage=181 cf Inflow=0.51 cfs 0.037 af
Discarded=0.03 cfs 0.021 af Secondary=0.48 cfs 0.016 af Outflow=0.50 cfs 0.037 af

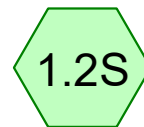
Pond DS1: Drip Strip Peak Elev=1.33' Storage=98 cf Inflow=0.13 cfs 0.010 af
Outflow=0.03 cfs 0.010 af

Link POA 1: Lincoln/Miller Avenue (City Drainage System) Inflow=0.80 cfs 0.040 af
Primary=0.80 cfs 0.040 af

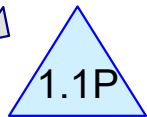
Total Runoff Area = 0.222 ac Runoff Volume = 0.071 af Average Runoff Depth = 3.83"
45.68% Pervious = 0.102 ac 54.32% Impervious = 0.121 ac



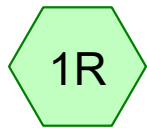
Lincoln Avenue
Driveway Area



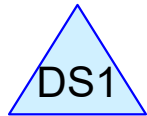
Miller Avenue Driveway
Area



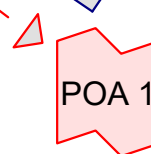
Infiltration CB



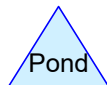
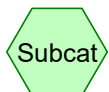
Half of Proposed Roof



Drip Strip



Lincoln/Miller Avenue
(City Drainage System)



Routing Diagram for 5548-POST

Prepared by Altus Engineering, Printed 5/19/2025
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5548-POST*Type III 24-hr 50-YEAR Rainfall=8.50"*

Prepared by Altus Engineering

Printed 5/19/2025

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Time span=0.00-30.00 hrs, dt=0.05 hrs, 601 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1.1S: Lincoln Avenue Runoff Area=4,231 sf 66.56% Impervious Runoff Depth=5.85"
Flow Length=42' Tc=6.0 min CN=78 Runoff=0.64 cfs 0.047 af

Subcatchment 1.2S: Miller Avenue Runoff Area=4,511 sf 37.35% Impervious Runoff Depth=3.83"
Flow Length=116' Tc=6.0 min CN=61 Runoff=0.45 cfs 0.033 af

Subcatchment 1R: Half of Proposed Roof Runoff Area=944 sf 80.51% Impervious Runoff Depth=6.94"
Tc=6.0 min CN=87 Runoff=0.16 cfs 0.013 af

Pond 1.1P: Infiltration CB Peak Elev=19.66' Storage=191 cf Inflow=0.64 cfs 0.047 af
Discarded=0.03 cfs 0.023 af Secondary=0.58 cfs 0.024 af Outflow=0.61 cfs 0.047 af

Pond DS1: Drip Strip Peak Elev=1.85' Storage=136 cf Inflow=0.16 cfs 0.013 af
Outflow=0.04 cfs 0.013 af

Link POA 1: Lincoln/Miller Avenue (City Drainage System) Inflow=1.03 cfs 0.057 af
Primary=1.03 cfs 0.057 af

Total Runoff Area = 0.222 ac Runoff Volume = 0.093 af Average Runoff Depth = 5.02"
45.68% Pervious = 0.102 ac 54.32% Impervious = 0.121 ac

Section 5

Precipitation Table

Extreme Precipitation Tables

Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

Metadata for Point	
Smoothing	Yes
State	
Location	
Latitude	43.068 degrees North
Longitude	70.759 degrees West
Elevation	0 feet
Date/Time	Mon May 12 2025 11:46:29 GMT-0400 (Eastern Daylight Time)

Add 15% to each storm

2 year - 3.69 inches

10 year - 5.60 inches

25 year - 7.10 inches

50 year - 8.50 inches

100 year - 10.18 inches

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.26	0.40	0.50	0.65	0.81	1.04	1yr	0.70	0.98	1.21	1.56	2.03	2.66	2.92	1yr	2.35	2.81	3.22	3.94	4.55	1yr
2yr	0.32	0.50	0.62	0.81	1.02	1.30	2yr	0.88	1.18	1.52	1.94	2.49	3.21	3.57	2yr	2.84	3.43	3.94	4.68	5.33	2yr
5yr	0.37	0.58	0.73	0.98	1.25	1.61	5yr	1.08	1.47	1.89	2.43	3.14	4.07	4.58	5yr	3.60	4.40	5.04	5.94	6.70	5yr
10yr	0.41	0.65	0.82	1.12	1.45	1.89	10yr	1.25	1.73	2.23	2.89	3.75	4.87	5.53	10yr	4.31	5.32	6.09	7.11	7.98	10yr
25yr	0.48	0.76	0.97	1.34	1.77	2.34	25yr	1.53	2.14	2.78	3.63	4.74	6.17	7.10	25yr	5.46	6.83	7.80	9.03	10.05	25yr
50yr	0.54	0.86	1.10	1.54	2.07	2.76	50yr	1.79	2.53	3.29	4.32	5.66	7.39	8.58	50yr	6.54	8.25	9.42	10.81	11.98	50yr
100yr	0.60	0.97	1.25	1.77	2.42	3.26	100yr	2.09	2.98	3.90	5.16	6.77	8.85	10.38	100yr	7.83	9.98	11.38	12.96	14.27	100yr
200yr	0.67	1.10	1.43	2.05	2.82	3.83	200yr	2.44	3.52	4.62	6.13	8.08	10.61	12.55	200yr	9.39	12.07	13.76	15.55	17.02	200yr
500yr	0.80	1.31	1.71	2.48	3.48	4.76	500yr	3.00	4.38	5.76	7.70	10.22	13.48	16.14	500yr	11.93	15.52	17.67	19.78	21.49	500yr

Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.23	0.36	0.44	0.59	0.72	0.88	1yr	0.63	0.86	0.92	1.33	1.68	2.24	2.49	1yr	1.98	2.40	2.87	3.18	3.90	1yr
2yr	0.31	0.49	0.60	0.81	1.00	1.19	2yr	0.86	1.16	1.37	1.82	2.34	3.06	3.45	2yr	2.71	3.32	3.82	4.55	5.08	2yr
5yr	0.35	0.54	0.67	0.92	1.17	1.40	5yr	1.01	1.37	1.61	2.12	2.73	3.79	4.19	5yr	3.35	4.03	4.72	5.53	6.24	5yr
10yr	0.39	0.59	0.73	1.03	1.33	1.60	10yr	1.14	1.56	1.80	2.39	3.06	4.37	4.86	10yr	3.87	4.67	5.44	6.41	7.20	10yr
25yr	0.44	0.67	0.83	1.19	1.56	1.90	25yr	1.35	1.86	2.10	2.75	3.53	4.72	5.89	25yr	4.18	5.66	6.65	7.79	8.68	25yr
50yr	0.48	0.73	0.91	1.31	1.76	2.17	50yr	1.52	2.12	2.35	3.07	3.93	5.33	6.80	50yr	4.72	6.54	7.72	9.04	10.02	50yr
100yr	0.54	0.81	1.01	1.47	2.01	2.47	100yr	1.73	2.41	2.63	3.41	4.35	6.00	7.85	100yr	5.31	7.55	8.98	10.51	11.56	100yr
200yr	0.59	0.89	1.13	1.63	2.28	2.81	200yr	1.96	2.75	2.93	3.78	4.79	6.72	9.06	200yr	5.95	8.71	10.42	12.22	13.37	200yr
500yr	0.68	1.02	1.31	1.90	2.71	3.36	500yr	2.34	3.29	3.41	4.31	5.45	7.82	10.94	500yr	6.92	10.52	12.69	14.96	16.19	500yr

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.28	0.44	0.54	0.72	0.89	1.08	1yr	0.77	1.06	1.26	1.74	2.21	2.98	3.16	1yr	2.64	3.04	3.58	4.37	5.04	1yr
2yr	0.34	0.52	0.64	0.86	1.07	1.27	2yr	0.92	1.24	1.48	1.96	2.51	3.42	3.70	2yr	3.03	3.56	4.09	4.84	5.63	2yr
5yr	0.40	0.62	0.77	1.05	1.34	1.62	5yr	1.15	1.58	1.88	2.53	3.25	4.34	4.96	5yr	3.84	4.77	5.38	6.37	7.16	5yr
10yr	0.47	0.72	0.89	1.25	1.61	1.98	10yr	1.39	1.93	2.28	3.11	3.95	5.34	6.20	10yr	4.72	5.96	6.82	7.84	8.75	10yr
25yr	0.58	0.88	1.09	1.56	2.05	2.57	25yr	1.77	2.51	2.95	4.07	5.15	7.78	8.34	25yr	6.88	8.02	9.15	10.34	11.41	25yr
50yr	0.67	1.02	1.27	1.83	2.46	3.13	50yr	2.12	3.06	3.60	5.00	6.32	9.74	10.46	50yr	8.62	10.06	11.44	12.72	13.96	50yr
100yr	0.79	1.19	1.49	2.16	2.96	3.81	100yr	2.55	3.72	4.37	6.16	7.76	12.18	13.10	100yr	10.78	12.60	14.31	15.69	17.09	100yr
200yr	0.92	1.39	1.76	2.55	3.56	4.65	200yr	3.07	4.55	5.34	7.58	9.54	15.28	16.44	200yr	13.53	15.81	17.92	19.35	20.92	200yr
500yr	1.15	1.71	2.19	3.19	4.53	6.04	500yr	3.91	5.90	6.93	10.02	12.56	20.65	22.20	500yr	18.27	21.34	24.13	25.51	27.34	500yr

Section 6

NRCS Soils Report



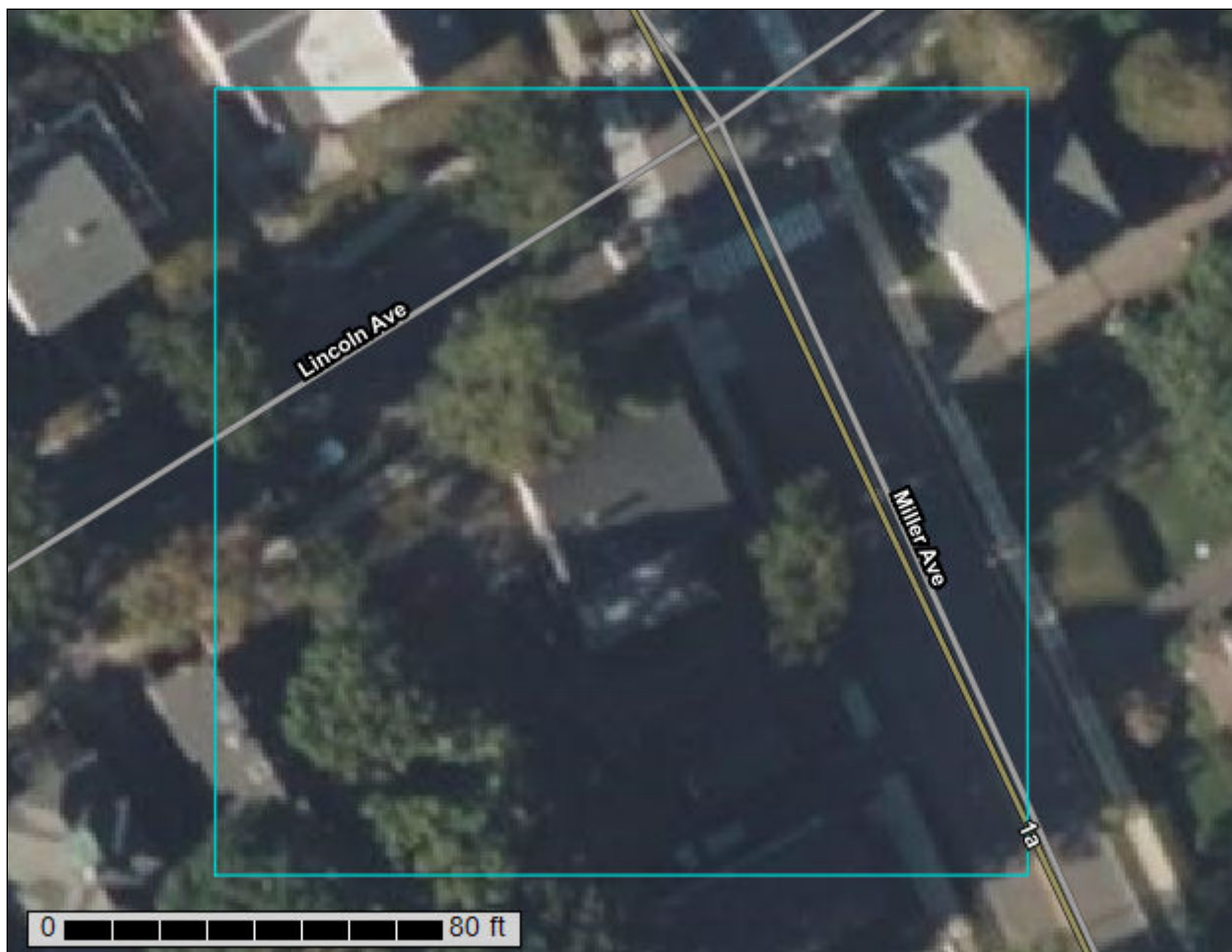
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Rockingham County, New Hampshire



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop


 Saline Spot

 Sandy Spot

 Severely Eroded Spot


 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Rockingham County, New Hampshire

Survey Area Data: Version 27, Sep 3, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
799	Urban land-Canton complex, 3 to 15 percent slopes	0.7	100.0%
Totals for Area of Interest		0.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Rockingham County, New Hampshire

799—Urban land-Canton complex, 3 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9cq0
Elevation: 0 to 1,000 feet
Mean annual precipitation: 42 to 46 inches
Mean annual air temperature: 45 to 48 degrees F
Frost-free period: 120 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Urban land: 55 percent
Canton and similar soils: 20 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Canton

Setting

Parent material: Till

Typical profile

H1 - 0 to 5 inches: gravelly fine sandy loam
H2 - 5 to 21 inches: gravelly fine sandy loam
H3 - 21 to 60 inches: loamy sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: A
Ecological site: F144AY034CT - Well Drained Till Uplands
Hydric soil rating: No

Minor Components

Udorthents

Percent of map unit: 5 percent
Hydric soil rating: No

Boxford and eldridge

Percent of map unit: 4 percent
Hydric soil rating: No

Squamscott and scitico

Percent of map unit: 4 percent

Landform: Marine terraces

Hydric soil rating: Yes

Scituate and newfields

Percent of map unit: 4 percent

Hydric soil rating: No

Chatfield

Percent of map unit: 4 percent

Hydric soil rating: No

Walpole

Percent of map unit: 4 percent

Landform: Depressions

Hydric soil rating: Yes

Section 7

Stormwater Operations & Maintenance Plan Inspection Form Stormwater Management Plan

STORMWATER INSPECTION AND MAINTENANCE MANUAL

Garage Construction

Tax Map 130, Lot 024

OWNER:

City of Portsmouth
Public Works Department
680 Peverly Hill Road
Portsmouth, NH 03801

Proper inspection, maintenance, and repair are key elements in maintaining a successful stormwater management program on a developed property. Routine inspections ensure permit compliance and reduce the potential for deterioration of infrastructure or reduced water quality. The following responsible parties shall be in charge of managing the stormwater facilities:

RESPONSIBLE PARTIES:

Owner: City of Portsmouth Public Works Department (603) 427-1530
Name Company Phone

Inspection: City of Portsmouth Public Works Department (603) 427-1530
Name Company Phone

Maintenance: City of Portsmouth Public Works Department (603) 427-1530
Name Company Phone

NOTES:

Written inspection forms and maintenance logs shall be completed yearly by a qualified inspector retained the owner or assigns. Reports shall be submitted to the Portsmouth Public Works Department on or before January 31st of each year and a copy retained at the site's administrative office.

Photographs of each stormwater BMP are to be taken at each inspection and submitted with the annual inspection reports.

Inspection and maintenance responsibilities shall transfer to any future property owner(s).

This manual shall be updated as needed to reflect any changes related to any transfer of ownership and/or any delegation of inspection and maintenance responsibilities to another entity

CULVERTS AND DRAINAGE PIPES

Function – Drainage pipes convey stormwater away from buildings, walkways, and parking areas and to closed drainage systems.

Maintenance

- Drainage pipes shall be inspected semi-annually, or more often as needed, for accumulation of debris and structural integrity. Leaves and other debris shall be removed from the inlet and outlet to insure the functionality of drainage structures. Debris shall be disposed of on site where it will not concentrate back at the drainage structures or at a solid waste disposal facility.

LEACHING CATCH BASINS AND DRAIN MANHOLES

Function – Leaching catch basins allow for the infiltration of and provide treatment to runoff.

Maintenance

- Inspect annually and after significant rainfall events.
- If an infiltration-based practice does not completely drain within 72-hours following a rainfall event, then a qualified professional shall be retained to assess the condition of the facility to determine measures required to restore its filtration and/or infiltration function(s), including but not limited to removal of accumulated sediments and/or replacement or reconstruction of the structure.
- Remove any obstructions, litter and accumulated sediment or debris as warranted but no less than once a year.

LANDSCAPED AREAS - FERTILIZER MANAGEMENT

Function – Fertilizer management involves controlling the rate, timing and method of fertilizer application so that the nutrients are taken up by the plants thereby reducing the chance of polluting the surface and ground waters. Fertilizer management can be effective in reducing the amounts of phosphorus and nitrogen in runoff from landscaped areas, particularly lawns.

Maintenance

- Have the soil tested by your landscaper or local Soil Conservation Service for nutrient requirements and follow the recommendations.
- Do not apply fertilizer to frozen ground.
- Clean up any fertilizer spills.
- Do not allow fertilizer to be broadcast into water bodies.
- When fertilizing a lawn, water thoroughly, but do not create a situation where water runs off the surface of the lawn.

LANDSCAPED AREAS - LITTER CONTROL

Function – Landscaped areas tend to filter debris and contaminants that may block drainage systems and pollute the surface and ground waters.

Maintenance

- Litter Control and lawn maintenance involves removing litter such as trash, leaves, lawn clippings, pet waste, oil and chemicals from streets, parking lots, and lawns before materials are transported into surface waters.
- Litter control shall be implemented as part of the grounds maintenance program.

CONTROL OF INVASIVE PLANTS

Function – Invasive plants are introduced, alien, or non-native plants, which have been moved by people from their native habitat to a new area. Some exotic plants are imported for human use such as landscaping, erosion control, or food crops. They also can arrive as "hitchhikers" among shipments of other plants, seeds, packing materials, or fresh produce. Some exotic plants become invasive and cause harm by:

- becoming weedy and overgrown;
- killing established shade trees;
- obstructing pipes and drainage systems;
- forming dense beds in water;
- lowering water levels in lakes, streams, and wetlands;
- destroying natural communities;
- promoting erosion on stream banks and hillsides; and
- resisting control except by hazardous chemical.

Maintenance

During maintenance activities, check for the presence of invasive plants and remove in a safe manner as described in the attached "Methods for Disposing Non-Native Invasive Plants" prepared by the UNH Cooperative Extension.

GENERAL CLEAN UP

- Upon completion of the project, the contractor shall remove all temporary stormwater structures (i.e., temporary stone check dams, silt fence, temporary diversion swales, catch basin inlet filter, etc.). Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed to conform to the existing grade, prepared, and seeded. Remove any sediment in catch basins and clean drainpipes that may have accumulated during construction.
- Once in operation, all paved areas of the site should be swept at least once annually at the end of winter/early spring prior to significant spring rains.

APPENDIX

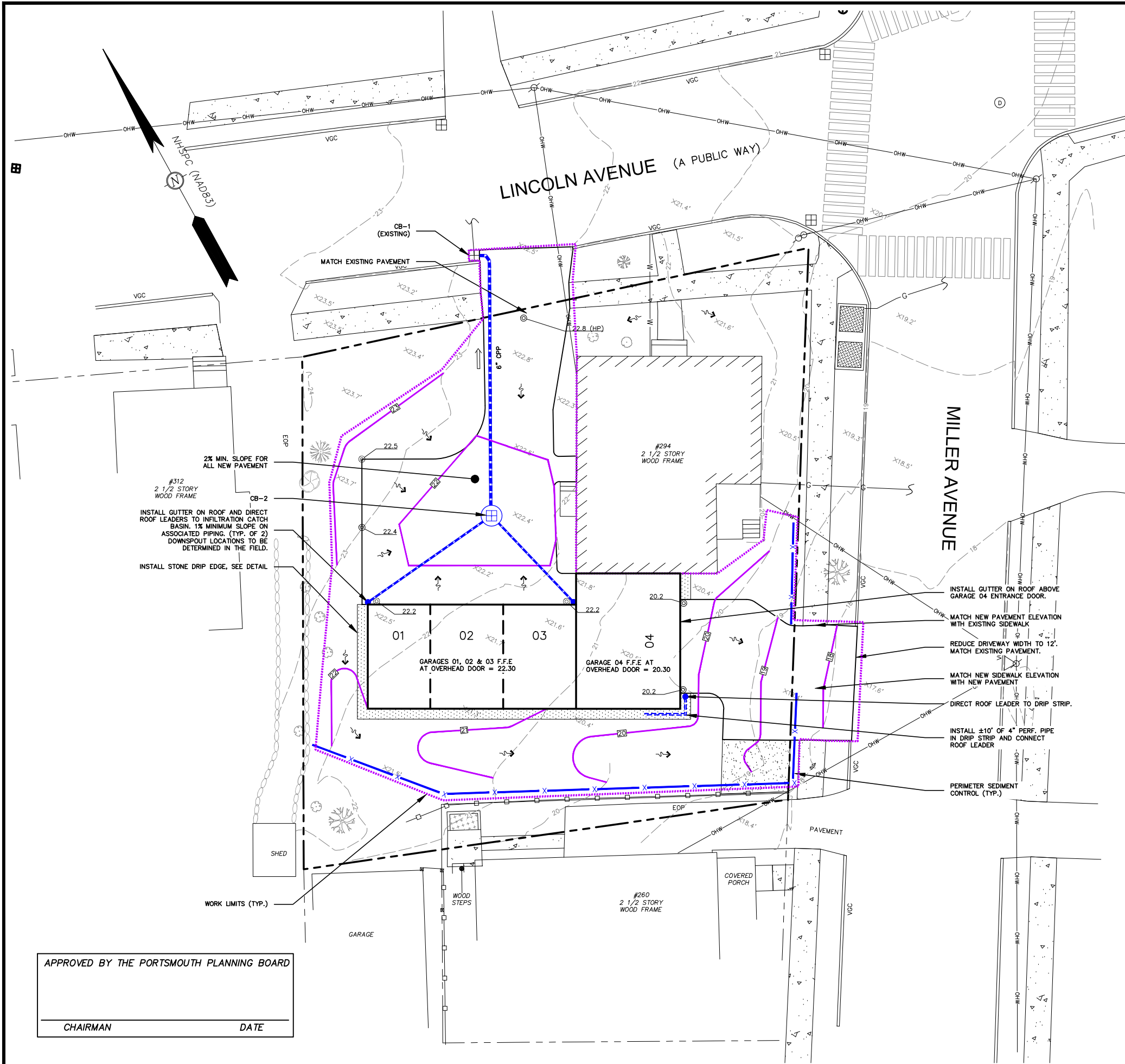
- A. Stormwater System Operations and Maintenance Report
- B. Grading, Drainage & Erosion Control Plan

STORM WATER SYSTEM OPERATION AND MAINTENANCE REPORT

General Information		
Project Name		
Owner		
Inspector's Name(s)		
Inspector's Contact Information		
Date of Inspection	Start Time:	End Time:
Type of Inspection: <input type="checkbox"/> Annual Report <input type="checkbox"/> Post-storm event <input type="checkbox"/> Due to a discharge of significant amounts of sediment		
Notes:		

General Site Questions and Discharges of Significant Amounts of Sediment			
Subject	Status	Notes	
<i>A discharge of significant amounts of sediment may be indicated by (but is not limited to) observations of the following. Note whether any are observed during this inspection:</i>			
<i>Notes/ Action taken:</i>			
1	Do the current site conditions reflect the attached site plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Is the site permanently stabilized, temporary erosion and sediment controls are removed, and stormwater discharges from construction activity are eliminated?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Is there evidence of the discharge of significant amounts of sediment to surface waters, or conveyance systems leading to surface waters?	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Permit Coverage and Plans				
#	BMP/Facility	Inspected	Corrective Action Needed and Notes	Date Corrected
	Leaching Catch Basins	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Drainage Pipes	<input type="checkbox"/> Yes <input type="checkbox"/> No		
	Site Vegetation	<input type="checkbox"/> Yes <input type="checkbox"/> No		



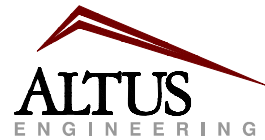
DRAINAGE SCHEDULE

CB-1
RIM: 22.48
IN: 18.50 (CORE NEW 6" CONNECTION FROM CB-2)
OUT: 17.80 (EXISTING)

CB-2
6" DIA. INFILTRATION CATCH BASIN (SEE DETAIL)
RIM: 21.60
OUT: 18.80 (6" CPP)
L=±49' S=0.006 1/1'

NOTES

- THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHOWN HEREON AREA APPROXIMATE AND ARE BASED ON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE. CATCH BASINS, MANHOLES, WATER GATES, ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY PROVIDERS AND GOVERNMENTAL AGENCIES. AS SUCH, THEY ARE NOT INCLUSIVE. AS OTHER UTILITIES AND UNDERGROUND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS MAY EXIST, THE ENGINEER, SURVEYOR AND OWNER ACCEPT NO RESPONSIBILITY FOR POTENTIAL INACCURACIES IN THE PLAN AND/OR UNFORESEEN CONDITIONS. THE CONTRACTOR SHALL NOTIFY, IN WRITING, SAID AGENCIES, UTILITY PROVIDERS, CITY OF PORTSMOUTH DPW AND OWNER'S AUTHORIZED REPRESENTATIVE AND CALL DIG SAFE AT 1 (800) DIG-SAFE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION WORK.
- PRIOR TO CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING AND PROPOSED STORMWATER AND UTILITY LINES. CONFLICTS SHALL BE ANTICIPATED AND ALL EXISTING LINES TO BE RETAINED SHALL BE PROTECTED. ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED AND, IF CONFLICTS SHALL BE RESOLVED WITH THE INVOLVEMENT OF THE ENGINEER, DPW AND APPROPRIATE UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.
- ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS SHALL BE COORDINATED WITH THE PORTSMOUTH POLICE DEPARTMENT AND DPW AT LEAST TWO WEEKS PRIOR TO COMMENCING RELATED CONSTRUCTION.
- ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH AND NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, BEDDING, BACKFILL & COMPACTION FOR ALL UTILITY TRENCHING IN ADDITION TO ALL CONDUIT INSTALLATION AND COORDINATION OF ALL REQUIRED INSPECTIONS.
- ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL OSHA AND CITY REGULATIONS.
- FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE ARCHITECT, CONTRACTOR, APPROPRIATE UTILITY COMPANIES AND THE PORTSMOUTH DPW.
- WATER: PORTSMOUTH DPW WATER DIVISION, DOUG SPARKS, (603) 427-1409.
- SEWER: PORTSMOUTH DPW SEWER DIVISION, DOUG SPARKS, (603) 427-1409.
- TELECOMMUNICATIONS: CONSOLIDATED, JOE CONSIDINE, (603) 427-5525.
- CABLE: COMCAST, MIKE COLLINS, (603) 679-5695, EXT. 1037.
- ELECTRICAL: EVERSOURCE, JOSHUA LAHAIE, (603) 332-7551.
- GAS: UNITIL, DAVID BEAULIEU, (603) 294-5144
- DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.
- WHERE WATER LINES CROSS, RUN ADJACENT TO OR ARE WITHIN 5' OF STORM DRAINAGE PIPES OR STRUCTURES, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR FROST PROTECTION.
- CONTRACTOR SHALL PROVIDE DPW WITH DETAILS OF TEMPORARY & PERMANENT GROUNDWATER DEWATERING DESIGN IF NECESSARY.
- SEE SHEET C-1 FOR LEGEND.
- ALL UTILITIES FOR THE PROPOSED GARAGE WILL BE CONNECTED TO THE EXISTING BUILDING INTERNALLY.



133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com



NOT FOR CONSTRUCTION

ISSUED FOR: TAC SUBMISSION

ISSUE DATE: MAY 19, 2025

REVISIONS		
NO.	DESCRIPTION	BY DATE
0	INITIAL	PMJ 05/19/25

DRAWN BY: PMJ
APPROVED BY: EDW
DRAWING FILE: 5548-SITE.dwg

SCALE:
22" x 34" - 1" = 10'
11" x 17" - 1" = 20'

OWNER:
GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

APPLICANT:
GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

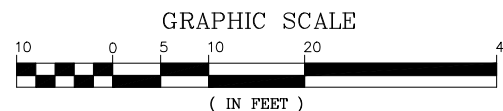
PROJECT:
GARAGE
CONSTRUCTION
TAX MAP 130 LOT 024
294 LINCOLN AVENUE
PORTSMOUTH, NH
03801

TITLE:
GRADING, DRAINAGE
& EROSION CONTROL
PLAN

SHEET NUMBER:
C-3

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN DATE



Section 8

Watershed Plans

Pre-Development Watershed and Soils Plan

Post-Development Watershed and Soils Plan



LEGEND

- PROPERTY LINE
- WETLAND BOUNDARY
- EXISTING CONTOUR
- PROPOSED CONTOUR
- WATERSHED BOUNDARY
- Tc PATH
- REACH PATH
- PROPOSED TREE CLEARING LIMIT
- STREAM
- PROPOSED GROUND SLOPE DIRECTION
- SCS SOIL BOUNDARY
- SCS SOIL DESIGNATION
- SOILS - HSG A
- SOILS - HSG B
- SOILS - HSG C
- SOILS - HSG D
- SOILS - IMPERVIOUS
- SOILS - WATER
- SUBCATCHMENT/POND/REACH
- POINT OF ANALYSIS

ALTUS
ENGINEERING

133 Court Street
(603) 433-2335

Portsmouth, NH 03801
www.altus-eng.com

ERIC D. WEINRIEB
No. 7634
PROFESSIONAL ENGINEER
5/19/25

NOT FOR CONSTRUCTION

ISSUED FOR: TAC SUBMISSION

ISSUE DATE: MAY 19, 2025

NO.	DESCRIPTION	BY	DATE
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APPROVED BY: EDW
DRAWING FILE: 5548-SITE.dwg

SCALE:
22" x 34" - 1" = 10'
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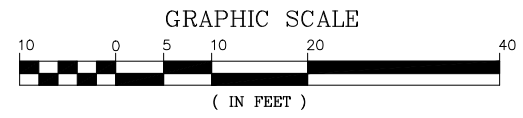
OWNER:
GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

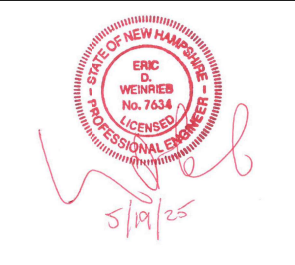
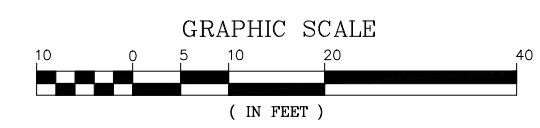
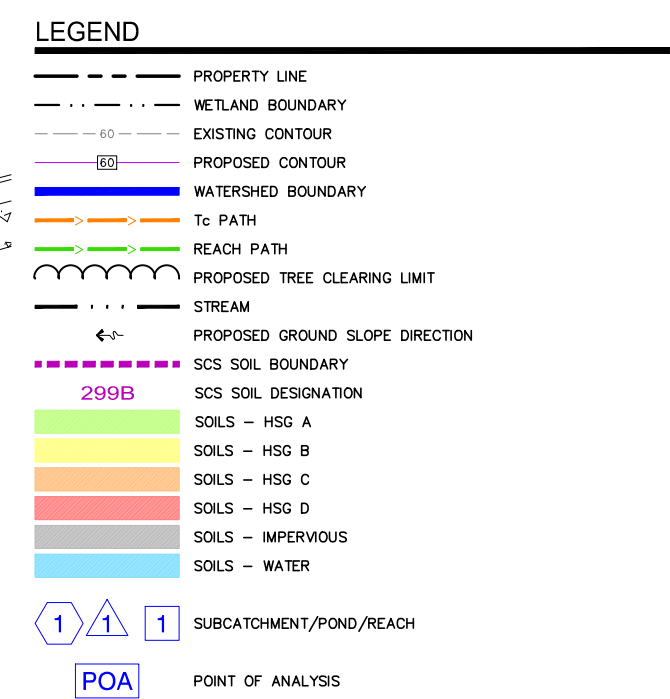
APPLICANT:
GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

PROJECT:
**GARAGE
CONSTRUCTION**
TAX MAP 130 LOT 024
294 LINCOLN AVENUE
PORTSMOUTH, NH
03801

TITLE:
**PRE-DEVELOPMENT
WATERSHED AND
SOILS PLAN**

SHEET NUMBER:
WS-1





<u>REVISIONS</u>		BY	DATE
NO.	DESCRIPTION		
0	INITIAL	PMJ	05/19/25

SCALE:

$22'' \times 34'' - 1'' = 10'$

$11'' \times 17'' - 1'' = 20'$

APPLICANT:

GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

TITLE:

**POST-DEVELOPMENT
WATERSHED AND
SOILS PLAN**

SHEET NUMBER:

WS-2

9:07

◀ Mail



Portsmouth ▼



Specifications



Dimensions: H 12 in, W 6.5 in, D 7.7 in



Sconce Type

Number of Lights

Lantern

1 Light

[See Similar Items](#)

[See Similar Items](#)

Fixture Material

Outdoor Lighting



Home



Shop



Gary



Store Mode



Cart



About This Product

Update your exterior lighting experience with the LNC new arrival black wall light with a motion sensor. Feature the classic minimalist design in a black finish, with the clear glass shade, this wall lantern creates a modern flair to your decor. Constructed with an advanced motion sensor, which can adjust the time and brightness of the lighting when someone moves near the light. This outdoor wall sconce can be a perfect lighting fixture to brighten your space and make your life more convenient and efficient.

- Modern design: minimalist outlook with clear glass shade, finished in black, the wall sconce gives off a sense of high-end modern vibe
- Smart exterior wall light: equipped with a sensitive motion sensor, this wall sconce can auto-turn on at dusk and auto-turn off at the dawn, greatly saving electric energy
- Wide application: this dusk-to-dawn wall light is ideal for entranceways, garbage, porch, patio, etc.
- Light fixture dimension: 6.5 in. W x 7.7 in. D x 12 in. H; backplate dimension: 4.5 in. W x 1 in. D x 6.5 in. H
- Bulb requirement: the modern black wall sconce works with 1 x E26 base maximum 60-Watt (bulb not included); compatible with Incandescent bulb and Max 20-Watt equivalent LED dimmable bulb; Note that while the fixture can't be manually dimmed



Home



Shop



Gary



Store Mode



Cart

9:07

◀ Mail

Portsmouth ▼



- 3 Sensing Modes: The modern wall lantern features 3 sensor modes including Text mode, Auto mode, Manual mode
- Motion Sensor: The motion sensor wall sconce can detect movement up to 35 ft. away across a range of 220°. In auto mode, brightness maintains at 40% for all night (but turns off about 1 minute after being exposed to daylight). When someone moves near the light, the LED indicator flashes 3 times, and brightness immediately increases to 100%, but back to 40% without motion detection about 1 minute after)
- Easy installation: including all necessary mounting hardware and detailed instruction for an easy and quick assembly
- Warranty: 2-year limited warranty to guarantee your complete satisfaction with your purchase
- [Click here for more information on Electronic Recycling Programs](#)
- [Return Policy](#)

Product Information

Internet # 325203415

Model # LMRZUMA278AS8C

UPC Code # 810129313253

Additional Resources

[Shop All LNC](#)

From the Manufacturer



Home



Shop



Gary



Store Mode



Cart

9:08

◀ Mail



Portsmouth ▼



Dimensions

Mounting Plate Height (in.)	6.5 in
-----------------------------	--------

Mounting Plate Width (in.)	4.5 in
----------------------------	--------

Product Depth (in.)	7.7 in
---------------------	--------

Product Height (in.)	12 in
----------------------	-------

Product Width (in.)	6.5 in
---------------------	--------

Details

Compatible Bulb Type	Eco-Incandescent, Incandescent, LED
----------------------	-------------------------------------

Damp/Wet Rating	Wet Rated
-----------------	-----------

Detection Range (ft.)	35
-----------------------	----

Durability	Rust Resistant, Weather Resistant
------------	-----------------------------------

Exterior Lighting Product Type	Sconce
--------------------------------	--------

Fixture Color/Finish	Black-Clear Glass
----------------------	-------------------

Fixture Material	Metal
------------------	-------

Glass Type	Clear Glass
------------	-------------



Home



Shop



Gary



Store Mode



Cart

9:08

◀ Mail



Portsmouth ▼



Fixture Material

Metal

[See Similar Items](#)

Outdoor Lighting Features

Dimmable

Dusk to Dawn

Motion Sensing

Damp/Wet Rating

Wet Rated

[See Similar Items](#)

Power Source

Hardwired

[See Similar Items](#)

Light Direction

Down

[See Similar Items](#)

Dimensions

**Mounting Plate
Height (in)**

6.5 in



Home



Shop



Gary



Store Mode



Cart

GARAGE CONSTRUCTION

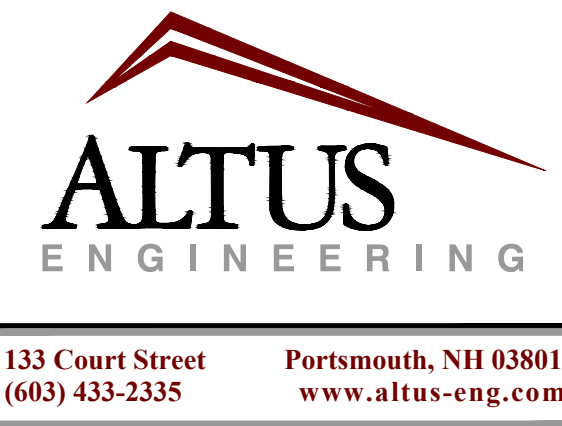
294 Lincoln Avenue
Portsmouth, NH

Tax Map 130, Lot 024
ISSUED FOR TAC

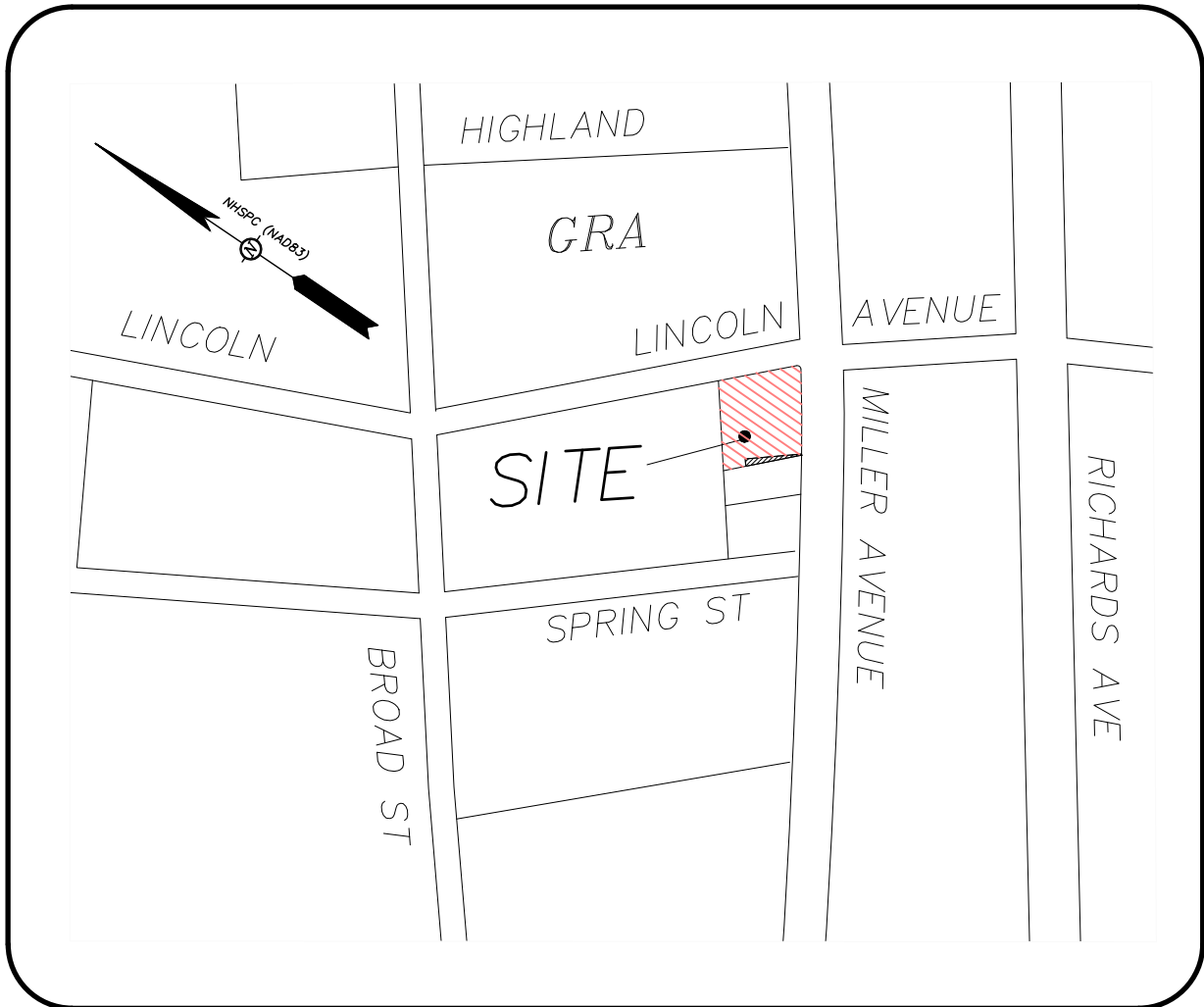
Plan Issue Date:
May 19, 2025

Owner/Applicant:
Gary B. Dodds Revocable Trust
Gary B. Dodds Trustee
300 Sagamore Road
Rye, NH 03870

Civil Engineer:



Surveyor:

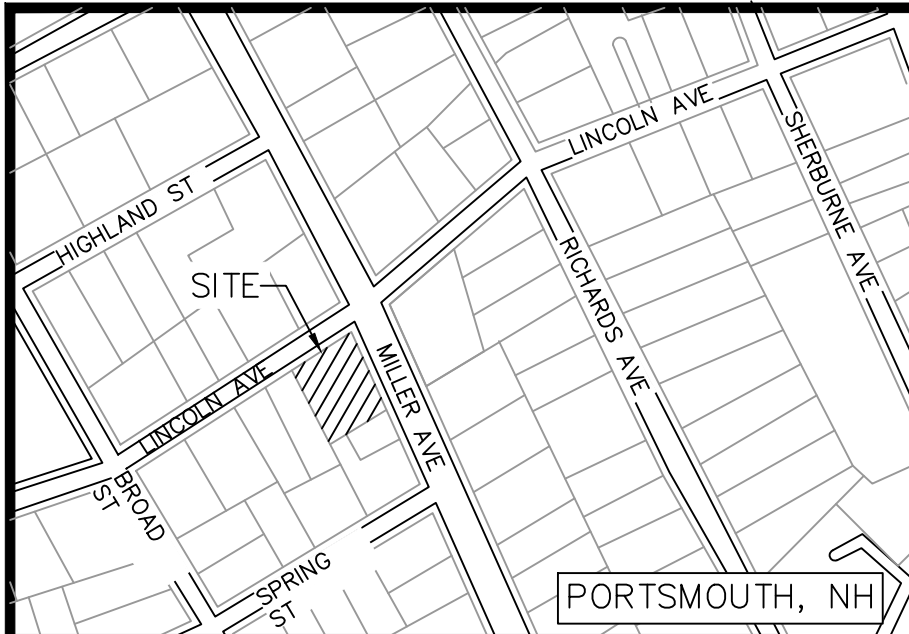


LOCUS NOT TO SCALE

Sheet Index			
Title	Sheet No.:	Rev.	Date
Existing Conditions Plan (by JVA)	S-1	0	04/18/25
Site Preparation Plan	C-1	0	05/19/25
Site Plan	C-2	0	05/19/25
Grading, Drainage & Erosion Control Plan	C-3	0	05/19/25
Landscape Plan (by Homeowner)	L-1	0	05/19/25
Detail Sheet	D-1	0	05/19/25
Detail Sheet	D-2	0	05/19/25
Entry Level Plan (REEDesign)	1 of 4	0	12/16/24
Upper Level Plan (REEDesign)	2 of 4	0	12/16/24
South and East Exterior Elevations (REEDesign)	3 of 4	0	12/16/24
North and West Exterior Elevations (REEDesign)	4 of 4	0	12/16/24

Permit Summary	Received
Portsmouth Zoning Board of Adjustment	01/28/25
Portsmouth Site Plan Review	Pending

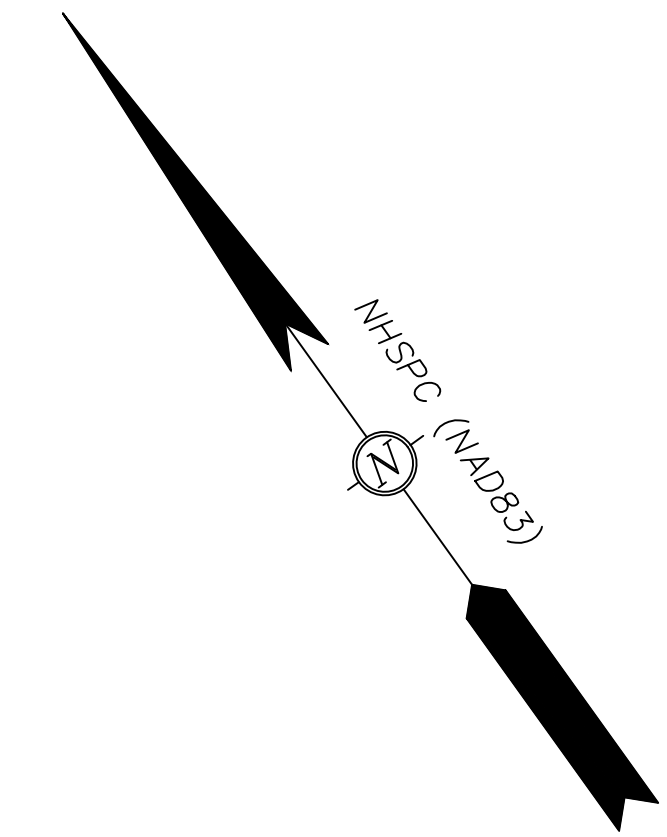
\\Altus\Altusworking\Working\Shared Files\Altus Documents\5500-5549\5548 294 Lincoln Dodds\Received\RECEIVED_JVA\2025.5.7 - JVA Contours\24-2010_EXISTING



LOCUS (N.T.S.)

LEGEND:

- IRON ROD FOUND
- IRON PIPE FOUND
- IRON ROD SET w/CAP
- SPOT GRADE
- STONEWALL
- WALK SIGNAL
- ELECTRIC METER
- U-POLE
- SIGN
- GUY POLE
- CONIFEROUS TREE
- STUMP
- MAPLE TREE
- HEMLOCK TREE
- LANDSCAPING
- CRUSHED STONE
- CONCRETE
- VGC = VERTICAL GRANITE CURB
- EOP = EDGE OF PAVEMENT
- OVERHEAD WIRES
- WOOD STOCKADE FENCE
- VINYL FENCE



REFERENCE PLANS:

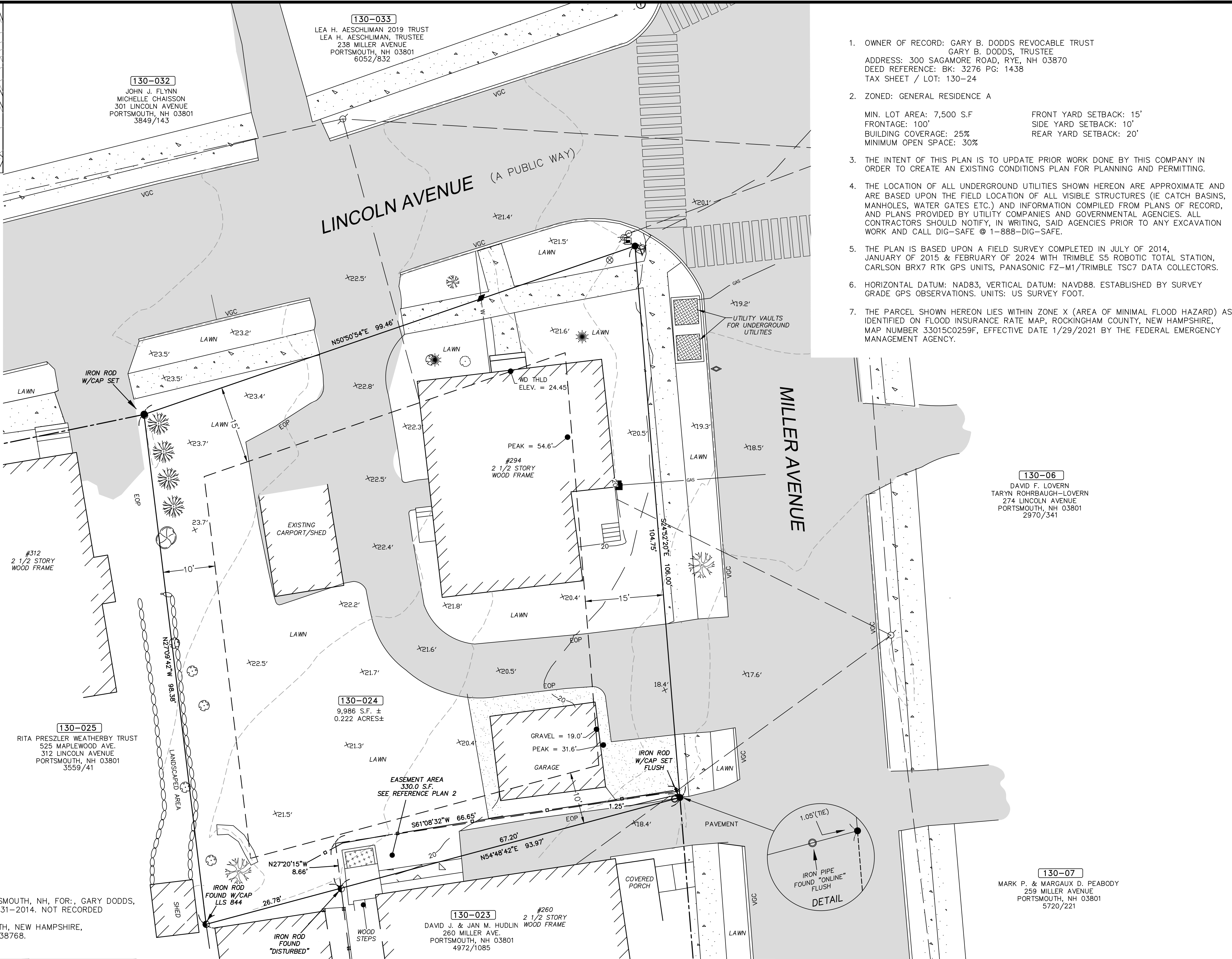
- MONUMENTATION SKETCH, 294 LINCOLN AVE., PORTSMOUTH, NH, FOR: GARY DODDS, BY JAMES VERRA AND ASSOCIATES, INC. DATED 7-31-2014. NOT RECORDED
- EASEMENT PLAN, 294 LINCOLN AVENUE, PORTSMOUTH, NEW HAMPSHIRE, DATED 2-12-2013. RECORDED AS RCRD PLAN #C-38768.

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS AN ERROR OF CLOSURE OF GREATER ACCURACY THAN ONE PART IN FIFTEEN THOUSAND (1:15,000)*

LICENSED LAND SURVEYOR

DATE



- OWNER OF RECORD: GARY B. DODDS REVOCABLE TRUST
GARY B. DODDS, TRUSTEE
ADDRESS: 300 SAGAMORE ROAD, RYE, NH 03870
DEED REFERENCE: BK: 3276 PG: 1438
TAX SHEET / LOT: 130-24
- ZONED: GENERAL RESIDENCE A
- MIN. LOT AREA: 7,500 S.F.
FRONTAGE: 100'
BUILDING COVERAGE: 25%
MINIMUM OPEN SPACE: 30%
- FRONT YARD SETBACK: 15'
SIDE YARD SETBACK: 10'
REAR YARD SETBACK: 20'
- THE INTENT OF THIS PLAN IS TO UPDATE PRIOR WORK DONE BY THIS COMPANY IN ORDER TO CREATE AN EXISTING CONDITIONS PLAN FOR PLANNING AND PERMITTING.
- THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS OF RECORD, AND PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENTAL AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE.
- THE PLAN IS BASED UPON A FIELD SURVEY COMPLETED IN JULY OF 2014, JANUARY OF 2015 & FEBRUARY OF 2024 WITH TRIMBLE S5 ROBOTIC TOTAL STATION, CARLSON BRX7 RTK GPS UNITS, PANASONIC FZ-M1/TRIMBLE TSC7 DATA COLLECTORS.
- HORIZONTAL DATUM: NAD83, VERTICAL DATUM: NAVD88. ESTABLISHED BY SURVEY GRADE GPS OBSERVATIONS. UNITS: US SURVEY FOOT.
- THE PARCEL SHOWN HEREON LIES WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0259F, EFFECTIVE DATE 1/29/2021 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

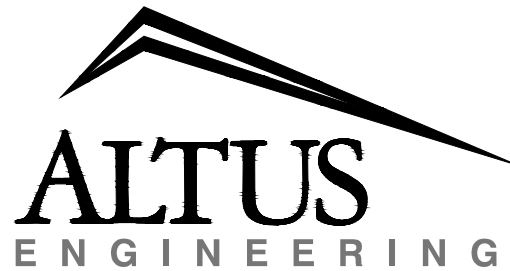
SURVEYOR:



101 SHATTUCK WAY, SUITE 8,
NEWINGTON, N.H., 03801-7876
603-436-3557

JOB NO: 24-2010

ENGINEER:



133 Court Street
(603) 433-2335
Portsmouth, NH 03801
www.altus-eng.com

ISSUED FOR:

ENGINEERING REVIEW

ISSUE DATE:

4/18/25

REVISIONS

NO. DESCRIPTION BY DATE

1

DRAWN BY: REL/GTD

APPROVED BY: RMF

DRAWING FILE:

SCALE:

22" x 34" - 1" = 10'

11" x 17" - 1" = 20'

APPLICANT:

GARY B. DODDS
REVOCABLE TRUST
300 SAGAMORE ROAD
RYE, NEW HAMPSHIRE 03870

OWNER:

GARY B. DODDS
REVOCABLE TRUST
300 SAGAMORE ROAD
RYE, NEW HAMPSHIRE 03870

PROJECT:

294 LINCOLN
AVENUE
TAX MAP 130, LOT 24
294 LINCOLN AVENUE
PORTSMOUTH, NH

TITLE:

EXISTING
CONDITIONS
PLAN

SHEET NUMBER:

S-1

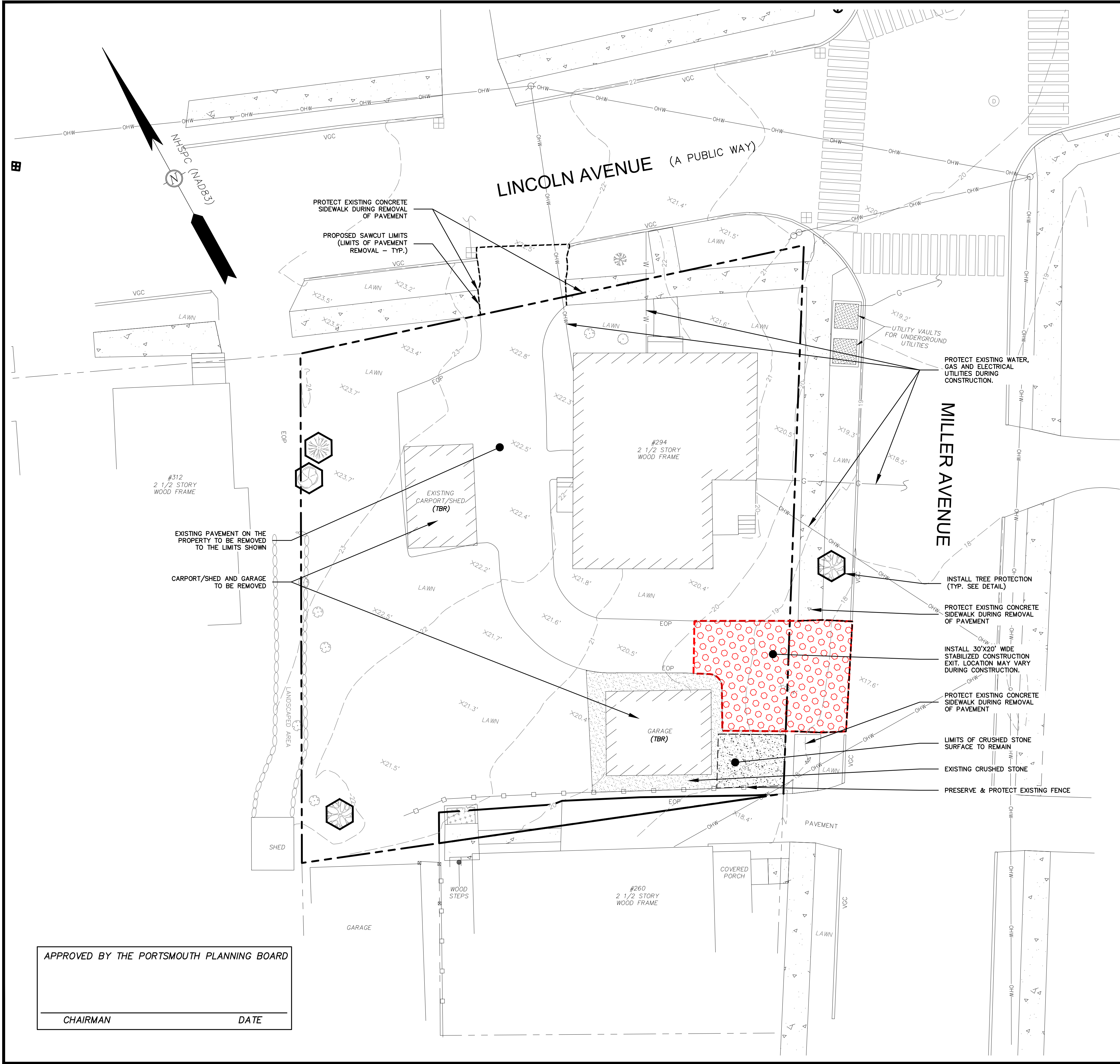
ALTUS JOB#

GRAPHIC SCALE



(IN FEET)

1 inch = ft.

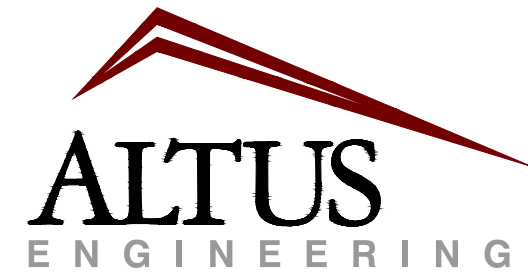
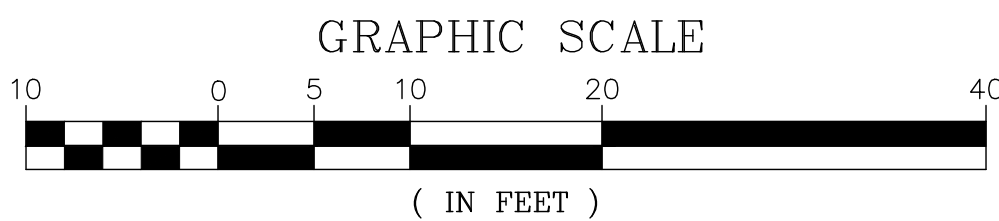


DEMOLITION NOTES

- CITY DEMOLITION PERMIT REQUIRED PRIOR TO ANY DEMOLITION ACTIVITIES. CONTRACTOR IS NOTIFIED THAT THIS PERMIT PROCESS MAY REQUIRE A 30-DAY LEAD TIME.
- CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES SCHEDULED TO REMAIN
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY NOTIFICATION OF ALL PARTIES, CORPORATIONS, COMPANIES, INDIVIDUALS AND STATE AND LOCAL AUTHORITIES OWNING AND/OR HAVING JURISDICTION OVER ANY UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES WHETHER OR NOT SAID UTILITIES ARE SUBJECT TO DEMOLITION, RELOCATION, MODIFICATION AND/OR CONSTRUCTION.
- ALL UTILITY DISCONNECTIONS, DEMOLITIONS AND RELOCATIONS SHALL BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES, PORTSMOUTH DPW AND ADJUTING PROPERTY OWNERS. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING.
- WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, HANDHOLES, ECT. SHALL BE ADJUSTED TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.
- SEE EROSION CONTROL PLANS FOR EROSION AND SEDIMENT CONTROL MEASURES THAT SHALL BE IN PLACE PRIOR TO DEMOLITION ACTIVITIES. SEE GRADING PLAN AND DETAIL SHEETS FOR ADDITIONAL NOTES ON EROSION CONTROL.
- ALL MATERIALS SCHEDULED FOR DEMOLITION REMOVAL ON PRIVATE PROPERTY SHALL BECOME PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.
- ALL MATERIAL SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS AND CODES.
- WATER: PORTSMOUTH DPW WATER DIVISION, DOUG SPARKS, (603) 427-1409.
- SEWER: PORTSMOUTH DPW SEWER DIVISION, DOUG SPARKS, (603) 427-1409.
- TELECOMMUNICATIONS: CONSOLIDATED, JOE CONSIDINE, (603) 427-5525.
- CABLE: COMCAST, MIKE COLLINS, (603) 679-5695, EXT. 1037.
- ELECTRICAL: EVERSOURCE, JOSHUA LAHAIE, (603) 332-7551.
- GAS: UNITIL, DAVID BEAULIEU, (603) 294-5144
- NO BURNING SHALL BE PERMITTED PER LOCAL REGULATIONS.
- HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- SHOULD GROUNDWATER BE ENCOUNTERED DURING EXCAVATION, APPROPRIATE BEST MANAGEMENT PRACTICES SHALL BE EMPLOYED TO ENSURE SEDIMENT LADEN WATER IS NOT DISCHARGED INTO THE CITY DRAINAGE SYSTEM. A DISCHARGE PERMIT SHALL BE OBTAINED PRIOR TO DISCHARGING GROUNDWATER IF GROUNDWATER IS ENCOUNTERED.
- THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR THE DEMOLITION OF EXISTING SITE FEATURES. UNLESS OTHERWISE NOTED TO REMAIN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL BUILDINGS, PAVEMENT, CONCRETE, CURBING, SIGNS, POLES, UTILITIES, FENCES, VEGETATION AND OTHER EXISTING FEATURES AS NECESSARY TO FULLY CONSTRUCT THE PROJECT.
- CONTRACTOR SHALL SAFELY SECURE THE SITE AND WORK LIMITS.
- TREES TO REMAIN SHALL BE CLEARLY MARKED TO BE PROTECTED PRIOR TO COMMENCING SITEWORK.

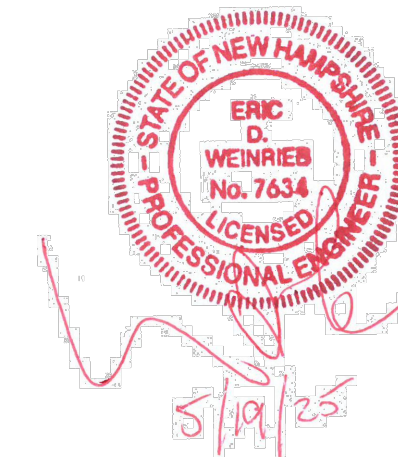
LEGEND

- PROPERTY LINE
- BUILDING SETBACK
- EXISTING PAVEMENT/CURB
- PROP. PAVEMENT/VERTICAL OR SLOPED GRANITE CURB
- EXISTING/PROPOSED STOCKADE FENCE
- EXISTING/PROPOSED CHAINLINK FENCE
- EXISTING CONTOUR
- PROPOSED CONTOUR/INTERMEDIATE CONTOUR
- PROPOSED SPOT GRADE/TOP & BOTTOM OF WALL
- EXISTING WATER/CURB STOP/VALVE/HYDRANT
- EXISTING SEWER/MANHOLE
- EXISTING GAS/VALVE
- EXIST. OVERHEAD/UNDERGROUND UTILITIES/POLE
- EXISTING DRAINAGE/CB/DMH
- PROPOSED DRAINAGE (HARD PIPE)/CB/DCB/DMH/FES
- PROPOSED CATCH BASIN INLET PROTECTION
- PROPOSED DRAINAGE (PERFORATED PIPE)/CLEANOUT
- CORRUGATED PLASTIC PIPE/FLARED END SECTION/HEADWALL
- PROPOSED GROUND SLOPE/APPROX. GRADE/STONE CHECK DAM
- SILTENCE/SEDIMENT BARRIER/CONST. FENCE
- STABILIZED CONSTRUCTION EXIT
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED SAWCUT
- PROPOSED STONE DRIPEDGE
- TESTPIT OR BORING/PERC. TEST/BENCHMARK



133 Court Street
(603) 433-2335

Portsmouth, NH 03801
www.altus-eng.com



NOT FOR CONSTRUCTION

ISSUED FOR:

TAC SUBMISSION

ISSUE DATE:

MAY 19, 2025

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL	PMJ	05/19/25

DRAWN BY: _____ PMJ

APPROVED BY: _____ EDW

DRAWING FILE: _____ 5548-SITE.dwg

SCALE:

22" x 34" - 1" = 10'

11" x 17" - 1" = 20'

OWNER:

GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

APPLICANT:

GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

PROJECT:

**GARAGE
CONSTRUCTION**
TAX MAP 130 LOT 024

294 LINCOLN AVENUE
PORTSMOUTH, NH
03801

TITLE:

**SITE PREPARATION
PLAN**

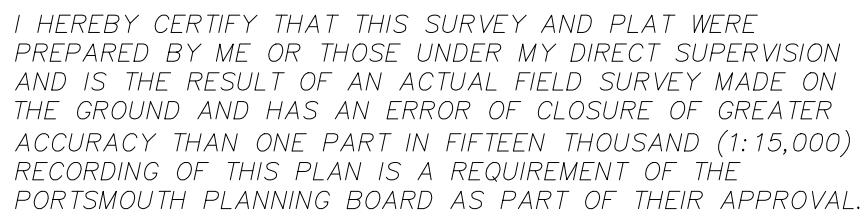
SHEET NUMBER:

C-1

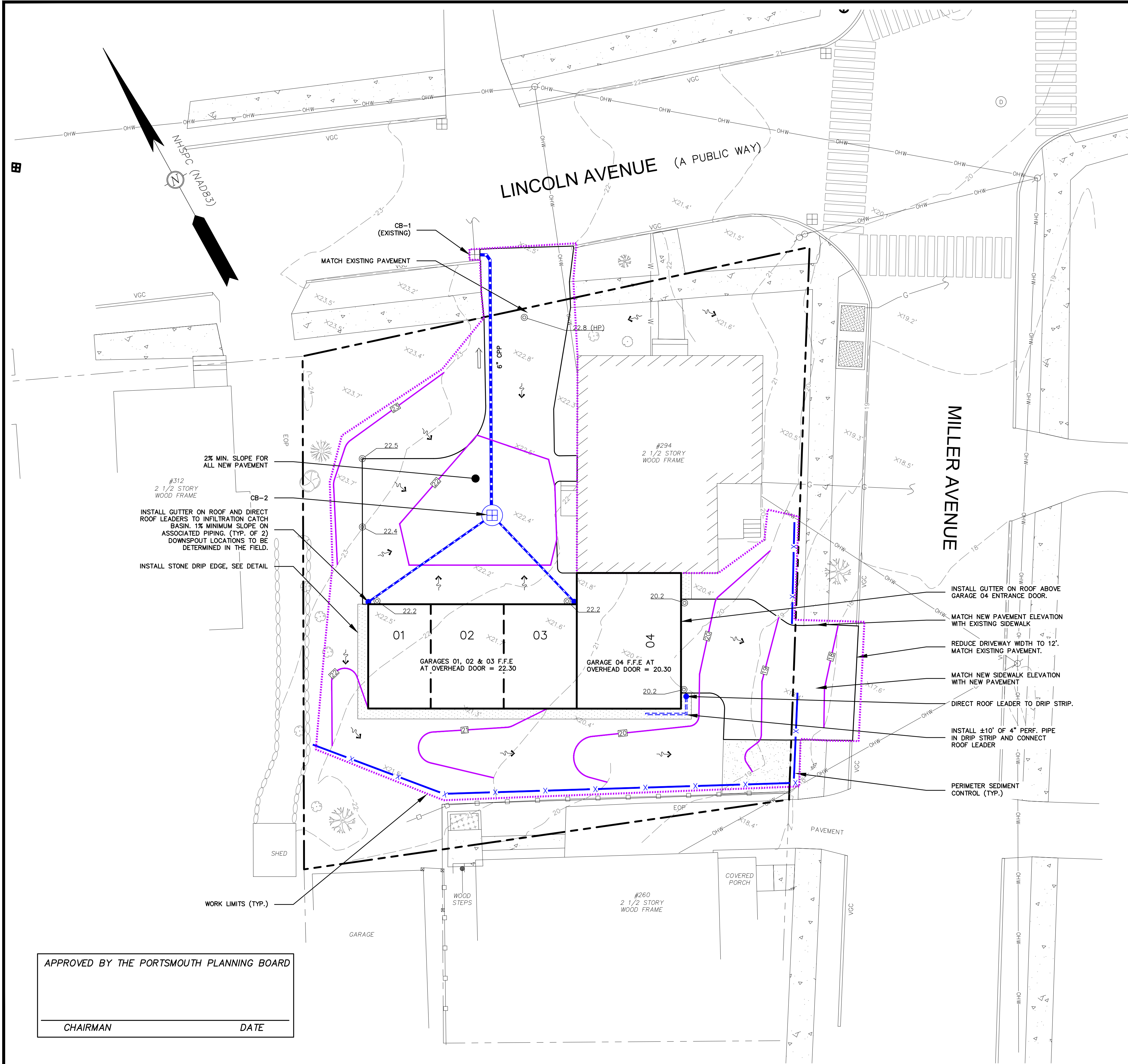
APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN

DATE



DATE _____



DRAINAGE SCHEDULE

CB-1
RIM: 22.48
IN: 18.50 (CORE NEW 6" CONNECTION FROM CB-2)
OUT: 17.80 (EXISTING)

CB-2
6" DIA. INFILTRATION CATCH BASIN (SEE DETAIL)
RIM: 21.60
OUT: 18.80 (6" CPP)
L=±49' S=0.006 '/

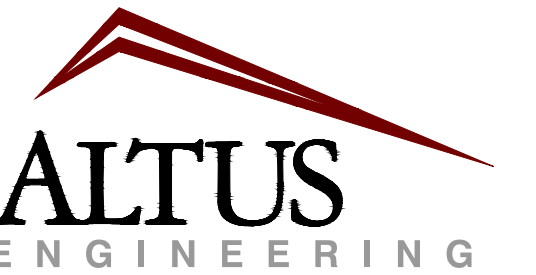
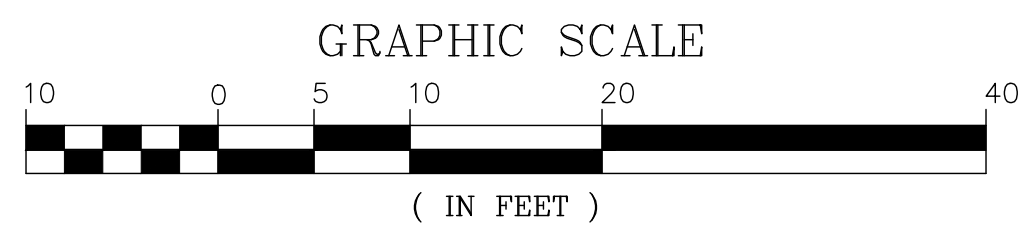
NOTES

- THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES SHOWN HEREON AREA APPROXIMATE AND ARE BASED ON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE. CATCH BASINS, MANHOLES, WATER GATES, ETC.) AND INFORMATION COMPILED FROM PLANS PROVIDED BY UTILITY PROVIDERS AND GOVERNMENTAL AGENCIES. AS SUCH, THEY ARE NOT INCLUSIVE. AS OTHER UTILITIES AND UNDERGROUND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS MAY EXIST, THE ENGINEER, SURVEYOR AND OWNER ACCEPT NO RESPONSIBILITY FOR POTENTIAL INACCURACIES IN THE PLAN AND/OR UNFORESEEN CONDITIONS. THE CONTRACTOR SHALL NOTIFY, IN WRITING, SAID AGENCIES, UTILITY PROVIDERS, CITY OF PORTSMOUTH DPW AND OWNER'S AUTHORIZED REPRESENTATIVE AND CALL DIG SAFE AT 1 (800) DIG-SAFE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION WORK.
- PRIOR TO CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING AND PROPOSED STORMWATER AND UTILITY LINES. CONFLICTS SHALL BE ANTICIPATED AND ALL EXISTING LINES TO BE RETAINED SHALL BE PROTECTED. ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED AND, IF CONFLICTS SHALL BE RESOLVED WITH THE INVOLVEMENT OF THE ENGINEER, DPW AND APPROPRIATE UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.
- ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS SHALL BE COORDINATED WITH THE PORTSMOUTH POLICE DEPARTMENT AND DPW AT LEAST TWO WEEKS PRIOR TO COMMENCING RELATED CONSTRUCTION.
- ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH AND NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, BEDDING, BACKFILL & COMPACTION FOR ALL UTILITY TRENCHING IN ADDITION TO ALL CONDUIT INSTALLATION AND COORDINATION OF ALL REQUIRED INSPECTIONS.
- ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL OSHA AND CITY REGULATIONS.
- FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE ARCHITECT, CONTRACTOR, APPROPRIATE UTILITY COMPANIES AND THE PORTSMOUTH DPW.
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- DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.
- WHERE WATER LINES CROSS, RUN ADJACENT TO OR ARE WITHIN 5' OF STORM DRAINAGE PIPES OR STRUCTURES, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR FROST PROTECTION.
- CONTRACTOR SHALL PROVIDE DPW WITH DETAILS OF TEMPORARY & PERMANENT GROUNDWATER DEWATERING DESIGN IF NECESSARY.
- SEE SHEET C-1 FOR LEGEND.
- ALL UTILITIES FOR THE PROPOSED GARAGE WILL BE CONNECTED TO THE EXISTING BUILDING INTERNALLY.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN

DATE



133 Court Street
(603) 433-2335

Portsmouth, NH 03801
www.altus-eng.com



NOT FOR CONSTRUCTION

ISSUED FOR: TAC SUBMISSION

ISSUE DATE: MAY 19, 2025

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL	PMJ	05/19/25

DRAWN BY: PMJ

APPROVED BY: EDW

DRAWING FILE: 5548-SITE.dwg

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RYE, NH 03870

PROJECT:

GARAGE
CONSTRUCTION
TAX MAP 130 LOT 024

294 LINCOLN AVENUE
PORTSMOUTH, NH
03801





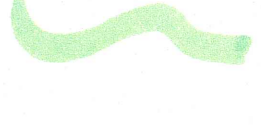
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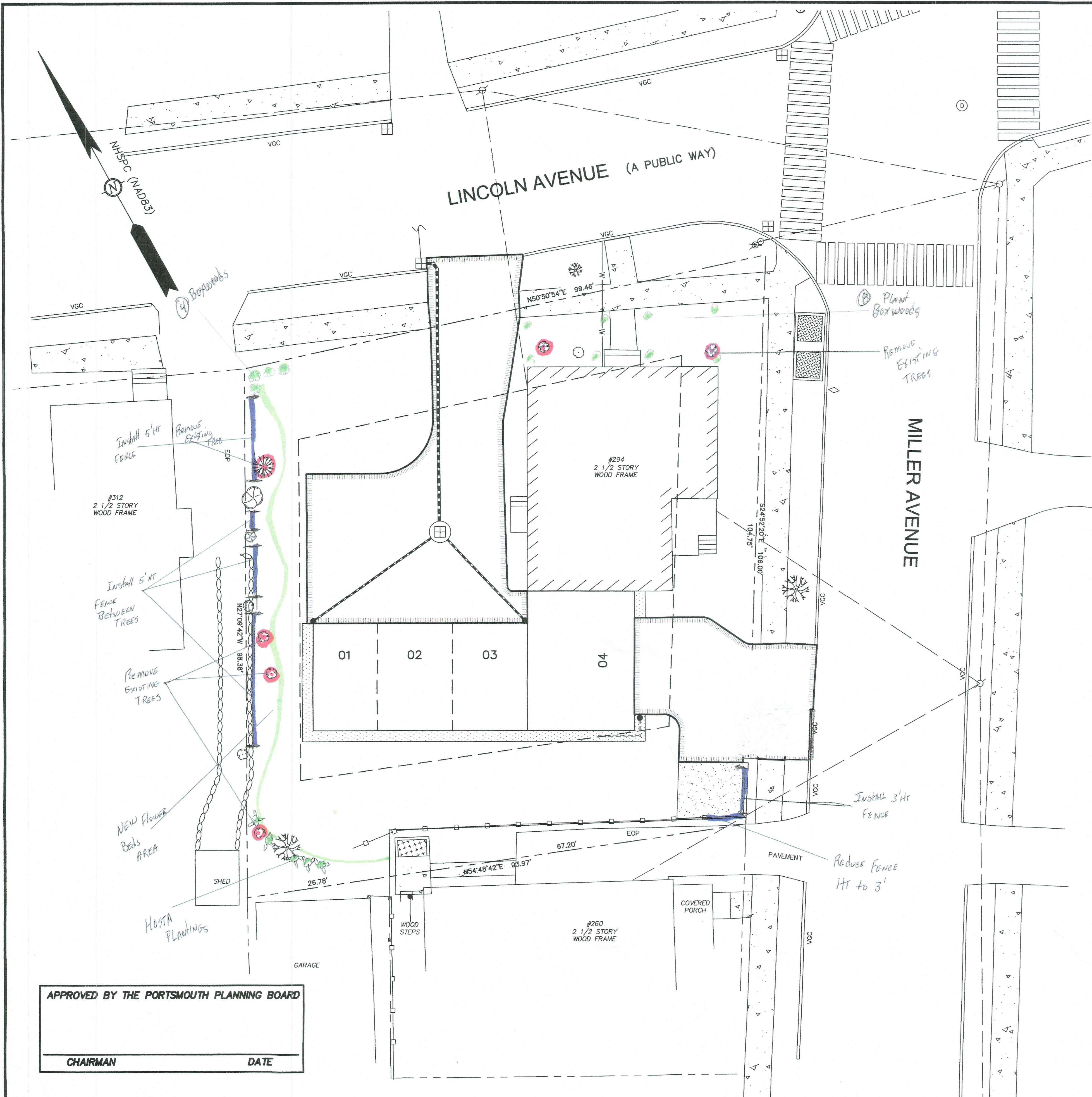
GRADING, DRAINAGE
& EROSION CONTROL
PLAN

SHEET NUMBER:

C-3

LANDSCAPING NOTES

-  - REMOVAL of TREE
-  - FENCE
-  - PLANTING Boxwoods
-  - HOSTA
-  - NEW Flower Beds AREA (misc flowers)



SEDIMENT AND EROSION CONTROL NOTES

PROJECT NAME AND LOCATION
PROPOSED GARAGE CONSTRUCTION
294 LINCOLN AVENUE
PORTSMOUTH, NEW HAMPSHIRE
TAX MAP 130 LOT 24

LONGITUDE: 70°45'39" W
LATITUDE: 43°04'05" N

OWNER / APPLICANT:

GARY B. DODDS REVOCABLE TRUST
300 SAGAMORE ROAD
RYE, NH 03870

DESCRIPTION

The project consists of the construction of a 4-bay garage along with associated site improvements.

DISTURBED AREA

The total area to be disturbed for the redevelopment improvements is approximately 6,300 S.F. (±0.15 acres).

PROJECT PHASING

The proposed project will be completed in one phase.

NAME OF RECEIVING WATER

The site drains overland to the municipal drainage system and eventually to the South Mill Pond

SEQUENCE OF MAJOR ACTIVITIES

1. Install temporary erosion control measures including perimeter sediment controls, stabilized construction exit and inlet sediment filters as noted on the plan. All temporary erosion control measures shall be maintained in good working condition for the duration of the project.
2. Remove temporary shed & raze existing garage structure,
3. Strip loam and stockpile.
4. Rough grade site including placement of borrow materials.
5. Construct garage addition.
6. Construct drainage structures, culverts, utilities, swales & pavement base course materials.
7. Loam (6" min) and seed all disturbed areas not paved or otherwise stabilized.
8. Install final pavement course.
9. When all construction activity is complete and site is stabilized, remove all temporary erosion control measures and any sediment that has been trapped by these devices.

TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "New Hampshire Stormwater Manual, Volumes 1 – 3", issued February 2025, as amended. As indicated in the sequence of Major Activities, the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site shall be filtered through hay bale barriers, stone check dams, and silt fences. All storm drain inlets shall be provided with hay bale filters or stone check dams. Stone rip rap shall be provided at the outlets of drain pipes and culverts where shown on the drawings.

Stabilize all ditches, swales, & level spreaders prior to directing flow to them.

Temporary and permanent vegetation and mulching is an integral component of the erosion and sedimentation control plan. All areas shall be inspected and maintained until vegetative cover is established. These control measures are essential to erosion prevention and also reduce costly rework of graded and shaped areas.

Temporary vegetation shall be maintained in these areas until permanent seeding is applied. Additionally, erosion and sediment control measures shall be maintained until permanent vegetation is established.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES

A. GENERAL

These are general inspection and maintenance practices that shall be used to implement the plan:

1. The smallest practical portion of the site shall be denuded at one time.
2. All control measures shall be inspected at least once each week and following any storm event of 0.25 inches or greater.
3. All measures shall be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours.
4. Built-up sediment shall be removed from silt fence or other barriers when it has reached one-third the height of the fence or bale, or when "bulges" occur.
5. All diversion dikes shall be inspected and any breaches promptly repaired.
6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth.
7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.
8. An area shall be considered stable if one of the following has occurred:
 - a. Base coarse gravels have been installed in areas to be paved;
 - b. A minimum of 85% vegetated growth as been established;
 - c. A minimum of 3 inches of non-erosive material such as stone of riprap has been installed;
 - d. Erosion control blankets have been properly installed.
9. The length of time of exposure of area disturbed during construction shall not exceed 45 days.

B. MULCHING

Mulch shall be used on highly erodible soils, on critically eroding areas, on areas where conservation of moisture will facilitate plant establishment, and where shown on the plans.

1. Timing – In order for mulch to be effective, it must be in place prior to major storm events. There are two (2) types of standards which shall be used to assure this:
 - a. Apply mulch prior to any storm event. This is applicable when working within 100 feet of wetlands. It will be necessary to closely monitor weather predictions, usually by contacting the National Weather Service in Concord, to have adequate warning of significant storms.
 - b. Required Mulching within a specified time period. The time period can range from 21 to 28 days of inactivity on a area, the length of time varying with site conditions. Professional judgment shall be used to evaluate the interaction of site conditions (soil erodibility, season of year, extent of disturbance, proximity to sensitive resources, etc.) and the potential impact of erosion on adjacent areas to choose an appropriate time restriction.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CON'T)

2. Guidelines for Winter Mulch Application –

Type	Rate per 1,000 s.f.	Use and Comments
Hay or Straw	70 to 90 lbs.	Must be dry and free from mold. May be used with plantings.
Wood Chips or Bark Mulch	460 to 920 lbs.	Used mostly with trees and shrub plantings.
Jute and Fibrous Matting (Erosion Blanket	As per manufacturer Specifications	Used in slope areas, water courses and other Control areas.
Crushed Stone 1/4" to 1-1/2" dia.	Spread more than 1/2" thick	Effective in controlling wind and water erosion.
Erosion Control Mix	2" thick (min)	<ul style="list-style-type: none">* The organic matter content is between 80 and 100% dry weight basis.* Particle size by weight is 100% passing a #6 screen and a minimum of 70 % maximum of 85% passing a #75' screen.* The organic portion needs to be fibrous and elongated.* Large portions of silts, clays or fine sands are not acceptable in the mix.* Soluble salts content is less than 4.0 mmhos/cm.* The pH should fall between 5.0 and 8.0.

3. Maintenance – All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

C. TEMPORARY GRASS COVER

1. Seedbed Preparation – Apply fertilizer at the rate of 600 pounds per acre of 10-10-10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.
2. Seeding –
 - a. Utilize annual rye grass at a rate of 40 lbs./acre.
 - b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed.
 - c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.
3. Maintenance – Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

D. FILTERS

1. Sequence of Installation – Sediment barriers shall be installed prior to any soil disturbance of the contributing upslope drainage area.
2. Maintenance –
 - a. Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water, the sediment barriers shall be replaced with a temporary stone check dam.
 - b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
 - c. Sediment deposits must be removed when deposits reach approximately one-third (1/3) the height of the barrier.
 - d. Any sediment deposits remaining in place after the silt fence or other barrier is no longer required shall be removed. The area shall be prepared and seeded.
 - e. Additional stone may have to be added to the construction entrance, rock barrier and riprap lined swales, etc., periodically to maintain proper function of the erosion control structure.
3. PERMANENT SEEDING –
 1. Bedding – stones larger than 1 1/2", trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 5" to prepare a seedbed and mix fertilizer into the soil.
 2. Fertilizer – lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:

Agricultural Limestone @ 100 lbs. per 1,000 s.f.
10-20-20 fertilizer @ 12 lbs. per 1,000 s.f.

Type	Lbs. / Acre	Lbs. / 1,000 sf
Tall Fescue	24	0.55
Creeping Red Fescue	24	0.55
Total	48	1.10

Seed Mixture (For slope embankments):
Grass Seed: Provide fresh, clean, new-crop seed complying with tolerance for purity and germination established by Official Seed Analysts of North America. Provide seed mixture composed of grass species, proportions and minimum percentages of purity, germination, and maximum percentage of weed seed, as specified:

Type	Min. Purity (%)	Min. Germination (%)	Kg./Hectare (Lbs./Acre)
Creeping Red Fescue (c)	96	85	45 (40)
Perennial Rye Grass (a)	98	90	35 (30)
Redtop	95	80	5 (5)
Alsike Clover	97	90(e)	5 (5)
Total			90 (80)

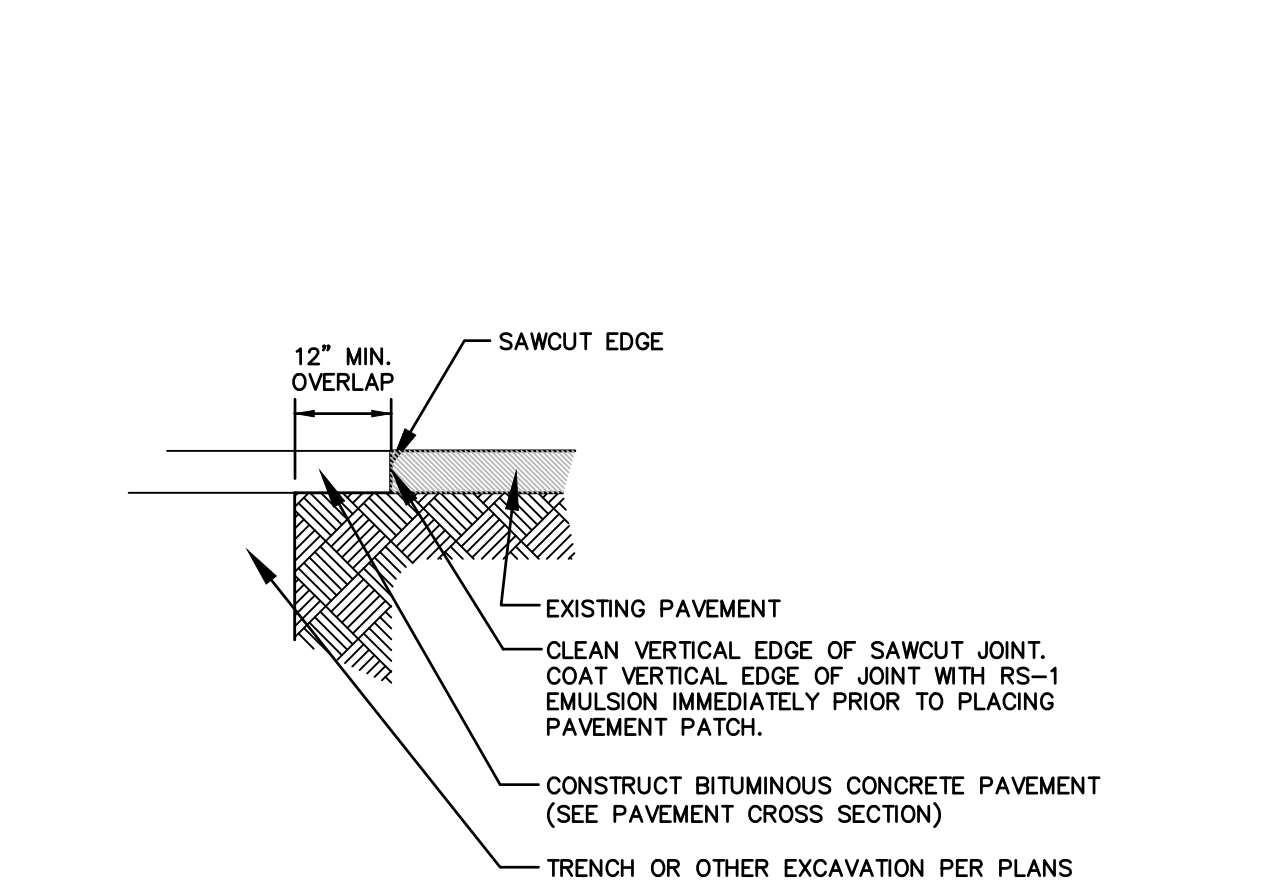
- a. Ryegrass shall be a certified fine-textured variety such as Pennfine, Fiesta, Yorktown, Diplomat, or equal.
- b. Fescue varieties shall include – Creeping Red and/or Hard Reliant, Scaldis, Koket, or Jamestown.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES (CON'T)

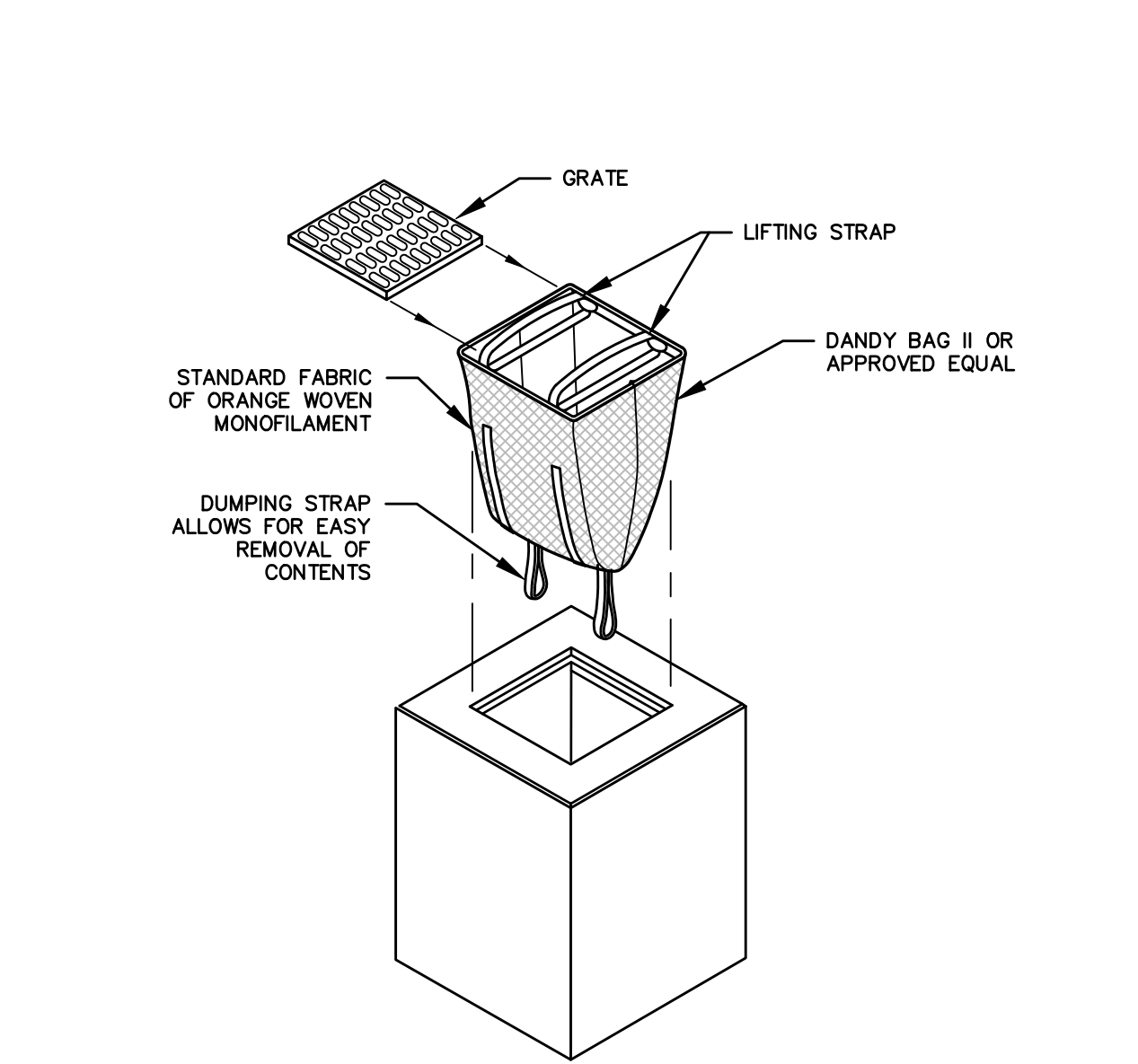
4. Sodding – sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

WINTER CONSTRUCTION NOTES

1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and elsewhere seeding and placing 3 to 4 tons of mulch per acre, secured with anchored netting. The installation of erosion control blankets or mulch and netting shall not occur over accumulated snow or on frozen ground and shall be completed in advance of thaw or spring melt events;
2. All ditches or swales which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized temporarily with stone or erosion control blankets appropriate for the design flow conditions; and
3. After November 15th, incomplete road or parking surfaces where work has stopped for the winter season shall be protected with a minimum of 3 inches of crushed gravel per NHDOT Item 304.3.



TYPICAL PAVEMENT SAWCUT NOT TO SCALE



INSTALLATION AND MAINTENANCE:

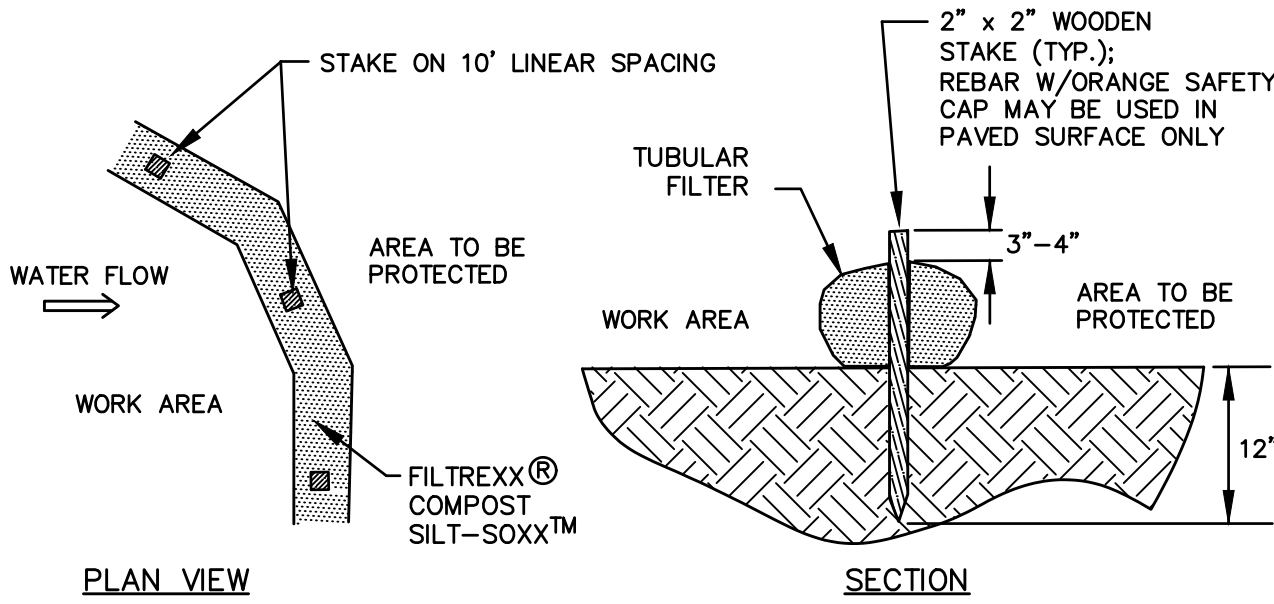
INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO CATCH BASIN INSERT SO THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF THE UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE CATCH BASIN INSERT. IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY THE UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

UNACCEPTABLE INLET PROTECTION METHOD:

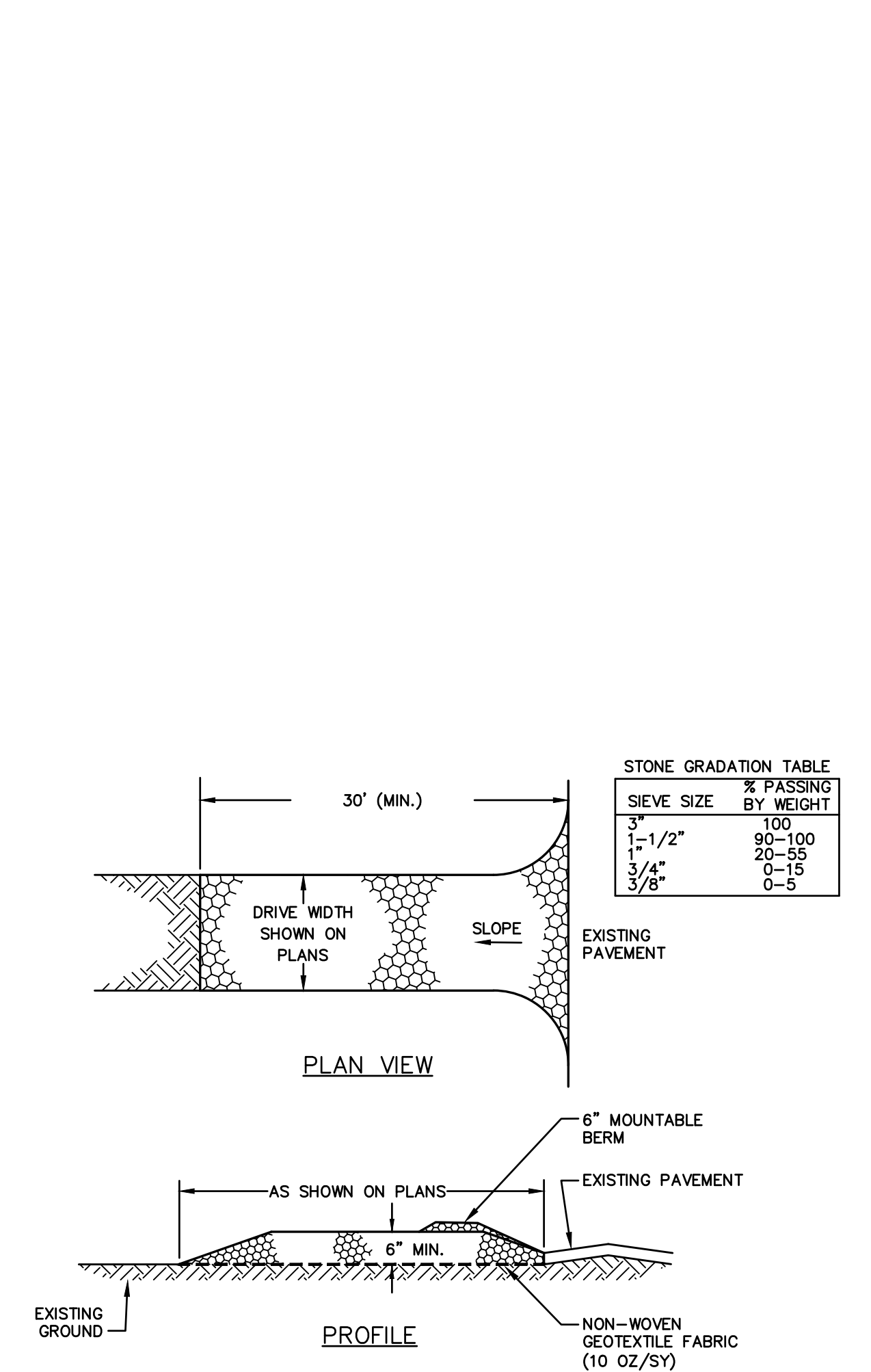
A SIMPLE SHEET OF GEOTEXTILE UNDER THE GRATE IS NOT ACCEPTABLE.

STORM DRAIN INLET PROTECTION NOT TO SCALE



- NOTES:
1. SILT/SOXX OR APPROVED EQUAL SHALL BE USED FOR TUBULAR SEDIMENT BARRIERS.
 2. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS.
 3. COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIREMENTS OF THE SPECIFIC APPLICATION.
 4. ALL SEDIMENT TRAPPED BY BARRIER SHALL BE DISPOSED OF PROPERLY.

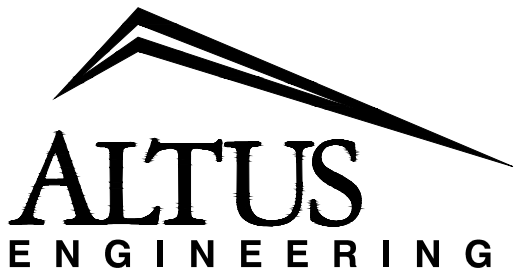
TUBULAR SEDIMENT BARRIER DETAIL NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. **STONE SIZE** – NHDOT STANDARD STONE SIZE #4 – SECTION 703 OF NHDOT STANDARD.
2. **LENGTH** – DETAILED ON PLANS (50 FOOT MINIMUM) OR AS SHOWN ON PLANS.
3. **THICKNESS** – SIX (6) INCHES (MINIMUM).
4. **WIDTH** – FULL DRIVE WIDTH UNLESS OTHERWISE SPECIFIED.
5. **FILTER FABRIC** – MIRAFI 600X OR EQUAL APPROVED BY ENGINEER.
6. **SURFACE WATER CONTROL** – ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.
7. **MAINTENANCE** – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. **WHEELS** SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. STABILIZED CONSTRUCTION EXITS SHALL BE INSTALLED AT ALL ENTRANCES TO PUBLIC RIGHTS-OF-WAY, AT LOCATIONS SHOWN ON THE PLANS, AND/OR WHERE AS DIRECTED BY THE ENGINEER.

STABILIZED CONSTRUCTION EXIT NOT TO SCALE



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NOT FOR CONSTRUCTION

ISSUED FOR:

TAC SUBMISSION

ISSUE DATE:

MAY 19, 2025

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EDW	05/19/25

DRAWN BY: _____ RLH

APPROVED BY: _____ EDW

DRAWING FILE: 5548-DETAILS.DWG

SCALE:

22" x 34" – N.T.S.
11" x 17" – N.T.S.

OWNER:

GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

APPLICANT:

GARY B. DODDS
REVOCABLE TRUST
GARY B. DODDS TRUSTEE
300 SAGAMORE ROAD
RYE, NH 03870

PROJECT:

**GARAGE
CONSTRUCTION**
TAX MAP 130 LOT 024

294 LINCOLN AVENUE
PORTSMOUTH, NH
03801

TITLE:

DETAIL SHEET

SHEET NUMBER:

D-1

1-1/2" SQ BALUSTER

2.5" SPACING

2" X 3-1/2"

5.25"

2" X 6"

DECO RAIL

7/8" X 11.3"

INTERLOCKING T&G BOARD

END CHANNEL

2" X 6"

DECO RAIL

BOTTOM ALUMINUM CHANNEL

6' OR 8' PANELS

16"

60"

NHDOT ITEM 403.11 - HOT-MIX
 BITUMINOUS PAVEMENT (4" COMPACTED)
 1.5" SURFACE COURSE (TYPE 12mm)
 2.5" BASE COURSE (TYPE 19mm)
 2' MIN. (AREAS WITHOUT CURB)
 w/COMPACTED LOAM AND SEED
 FINISH GRADE PER PLANS
 COMPACTED LOAM
 AND SEED (TYP)
 NHDOT ITEM 304.3 -
 6" CRUSHED GRAVEL
 NHDOT ITEM 304.2 -
 12" GRAVEL
 COMPACTED NATIVE SUBGRADE
 OR FILL WHERE REQUIRED

OPTION B

Diagram illustrating Trunk Armoring (Option B). The diagram shows a tree trunk wrapped in burlap and wire. Labels include: BURLAP AGAINST TREE, WIRE, 2"x2" KD, and TRUNK ARMORING. A vertical dimension line indicates a height of 5' or 6'.

NOTE:
IF SOIL BECOMES COMPACTED OVER THE ROOT ZONE OF ANY TREE, THE GROUND SHOULD BE AERATED BY MAKING SMALL HOLES IN IT WITH SUITABLE AERATING EQUIPMENT.

ANY DAMAGE TO THE CROWN, TRUNK OR ROOT SYSTEM OF ANY TREE RETAINED ON SITE SHOULD BE REPAIRED IMMEDIATELY. CONSULT A FORESTER OR TREE SPECIALIST FOR MORE SERIOUS DAMAGE OF TREES.

CONTRACTOR TO USE OPTION A OR B WHERE SUITABLE AND/OR AS DIRECTED BY THE ENGINEER.

Diagram illustrating the cross-section of a trench for a single pipe, showing the relationship between the non-paved area and the paved area.

Labels and Dimensions:

- NON-PAVED AREA
- PAVED AREA
- LOAM AND SEED OR OTHER SURFACE TREATMENT PER PLANS
- 6" GRAVEL BORROW
- SUITABLE EXCAVATED BACKFILL OR CLEAN GRANULAR BACKFILL MATERIAL COMPACTED AS SPECIFIED
- "CAUTION - WARNING" TAPE 18" BELOW SURFACE
- SAND BLANKET AS SPECIFIED BELOW
- NON-WOVEN GEOTEXTILE A.O.S.=70 OR LESS
- UNDISTURBED SOIL
- SEE PAVEMENT SECTION
- SEE PAVEMENT SECTION
- SEE PAVEMENT SECTION
- 12" MIN
- SCREENED GRAVEL OR CRUSHED STONE BEDDING FOR FULL WIDTH OF THE TRENCH UP TO SPRINGLINE OF PIPE, 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK
- 12" BELOW DUCTILE IRON PIPE IN ALL SETTINGS
- ROCK SUBGRADE (TEMPLATE)
- 3'-0" (MIN) OR D+2
- FOR SINGLE PIPE (WHICHEVER IS GREATER)


<u>SAND BLANKET/BARRIER</u>		<u>SCREENED GRAVEL OR CRUSHED STONE BEDDING*</u>	
<u>SIEVE SIZE</u>	<u>% FINER BY WEIGHT</u>	<u>SIEVE SIZE</u>	<u>% PASSING BY WEIGHT</u>
1/2"	90 - 100	1"	100
200	0 - 15	3/4"	90 - 100
		3/8"	20 - 55
		# 4	0 - 10
		# 8	0 - 5

The diagram illustrates a cross-section of a circular manhole structure. It consists of several concentric layers. The innermost circle is labeled "24\" DIA.". Surrounding this are multiple layers of grates and concrete. Arrows point from the text labels to their respective parts in the diagram.

	NOTES
1.	TO ACCOMMODATE A 24" CAST IRON FRAME AND GRATE.
2.	GRATE OPENING MAY BE OFFSET OR CENTERED IN STRUCTURE TOP.
3.	CONCRETE: 4,000 PSI AFTER 28 DAYS.
4.	MATERIALS SHALL WITHSTAND H=20' LOADING AT TRAFFIC AREAS
5.	RIMS TO BE ELEVATED 6" ABOVE FINISH GRADE WHERE SPECIFIED, SEE DRAINAGE RIM AND INVERT SCHEDULE.

Technical drawing of a 4-foot diameter manhole assembly. The drawing shows a cross-section of the structure with the following dimensions and components:

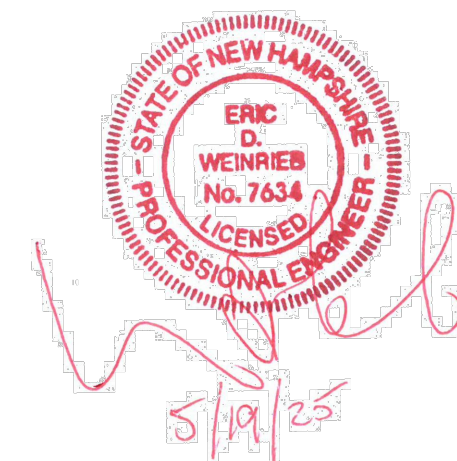
- Overall Dimensions:**
 - Top width: 24" OPENING
 - Top height: 12"
 - Side height: 6"
 - Bottom height: 12"
 - Bottom width: 7'
- Components and Labels:**
 - CAST IRON FRAME AND GRATE SET IN MORTAR
 - BRICK, 2 COURSES MIN. 12" MAX.
 - PIPE INLETS/OUTLETS AS SPECIFIED
 - FILTER FABRIC MIRAFI 700X OR APPROVED EQUAL
 - 3/4" CRUSHED STONE, 12" AROUND SIDES AND BOTTOM
- Internal Features:**
 - A central circular opening labeled 4' DIA.
 - A grid of 16 smaller circular inlets/outlets arranged in a 4x4 pattern.
 - A horizontal line indicating the filter fabric location, with a 5" dimension shown from the center to the fabric.



ALTUS
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ISSUED FOR:

ISSUE DATE:

REVISIONS

REVISIONS	
NO.	DESCRIPTION

0 INITIAL SUB

BY DATE

EDW 05/19/25

DRAWN BY: _____ RLH

APPROVED BY: _____ EDW

DRAWING FILE: 5548-DETAILS.DWG

SCALE:

22" x 34" - N.T.S.
11" x 17" - N.T.S.

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TAX MAP 130 LOT 024

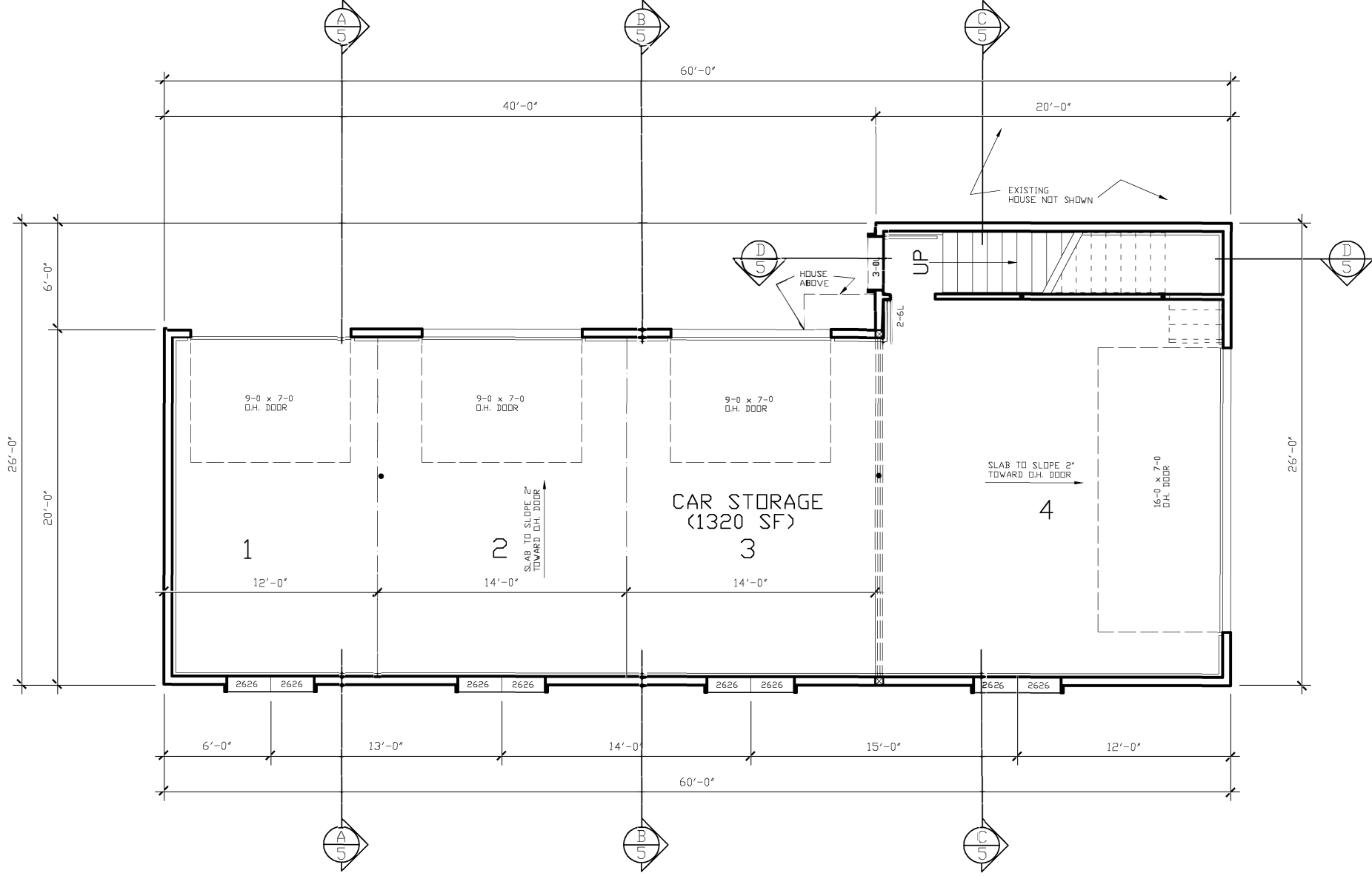
294 LINCOLN AVENUE
PORTSMOUTH, NH
03801

TITLE:

DETAIL SHEET

SHEET NUMBER:

D-2



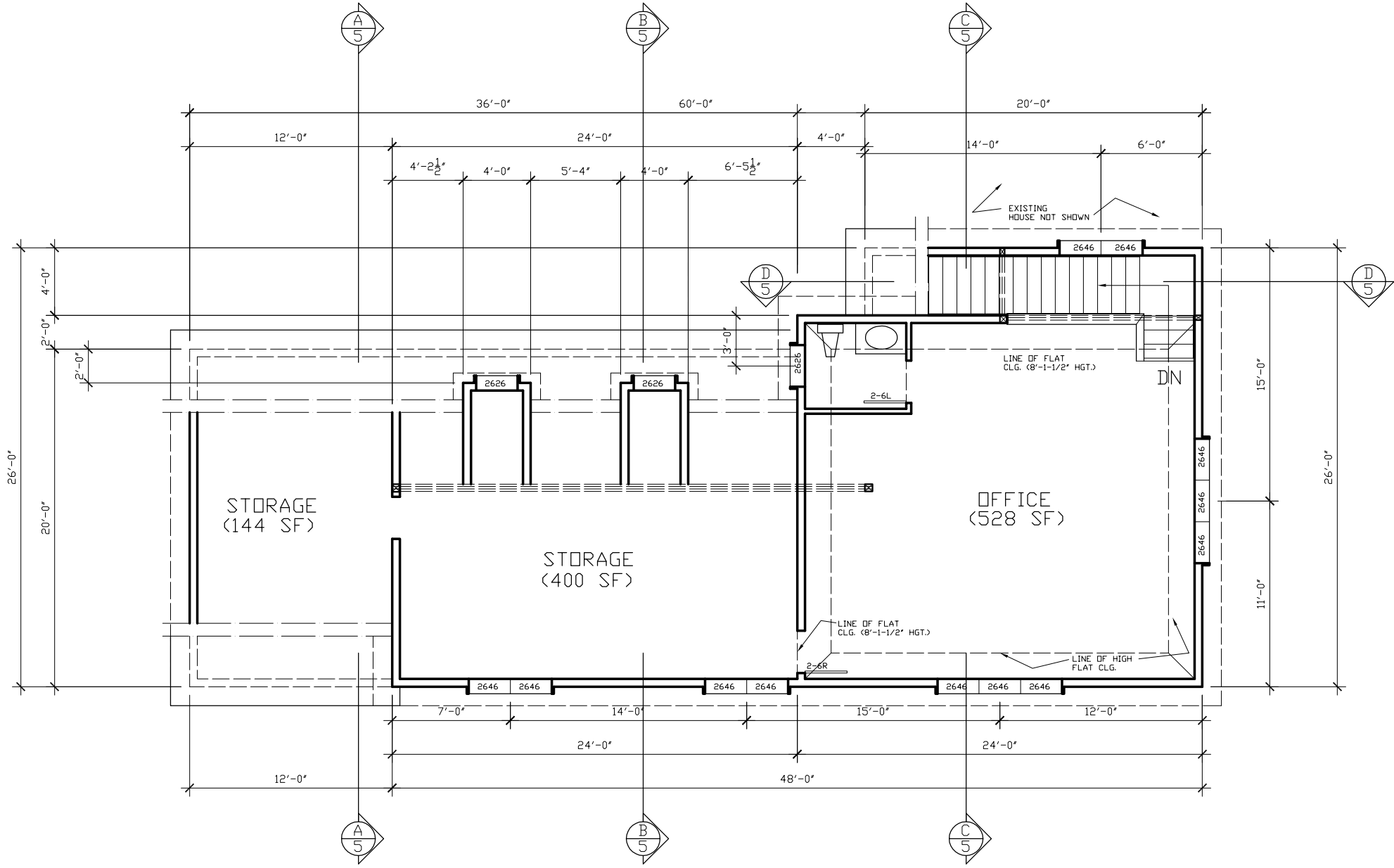
REEDesign
3 SHARON ST
TEWKSBURY, MA 01876
(617) 462-5189

CAR STORAGE ADDITION
294 LINCOLN AVENUE
PORTSMOUTH, NH 03801
ROCKINGHAM COUNTY

ENTRY LEVEL PLAN
SCALE: 1/4" = 1'-0" (22X34)
SCALE: 1/8" = 1'-0" (11X17)

10/29/24 MR
10/30/24 MR
11/22/24 MR
11/26/24 MR
12/02/24 MR
12/16/24 MR

1 OF 4



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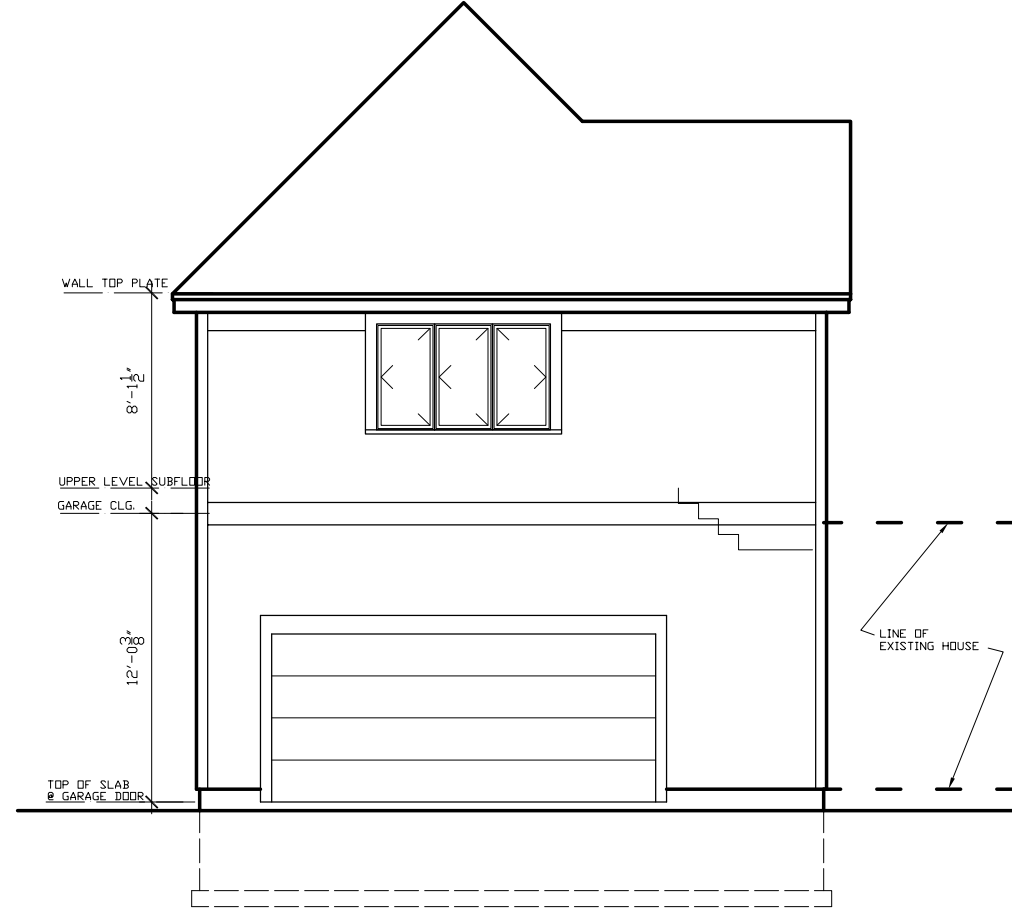
CAR STORAGE ADDITION
294 LINCOLN AVENUE
PORTSMOUTH, NH 03801
ROCKINGHAM COUNTY

UPPER LEVEL PLAN
SCALE: 1/4" = 1'-0" (22X34)
SCALE: 1/8" = 1'-0" (11X17)

10/29/24 MR
10/30/24 MR
12/02/24 MR
12/16/24 MR

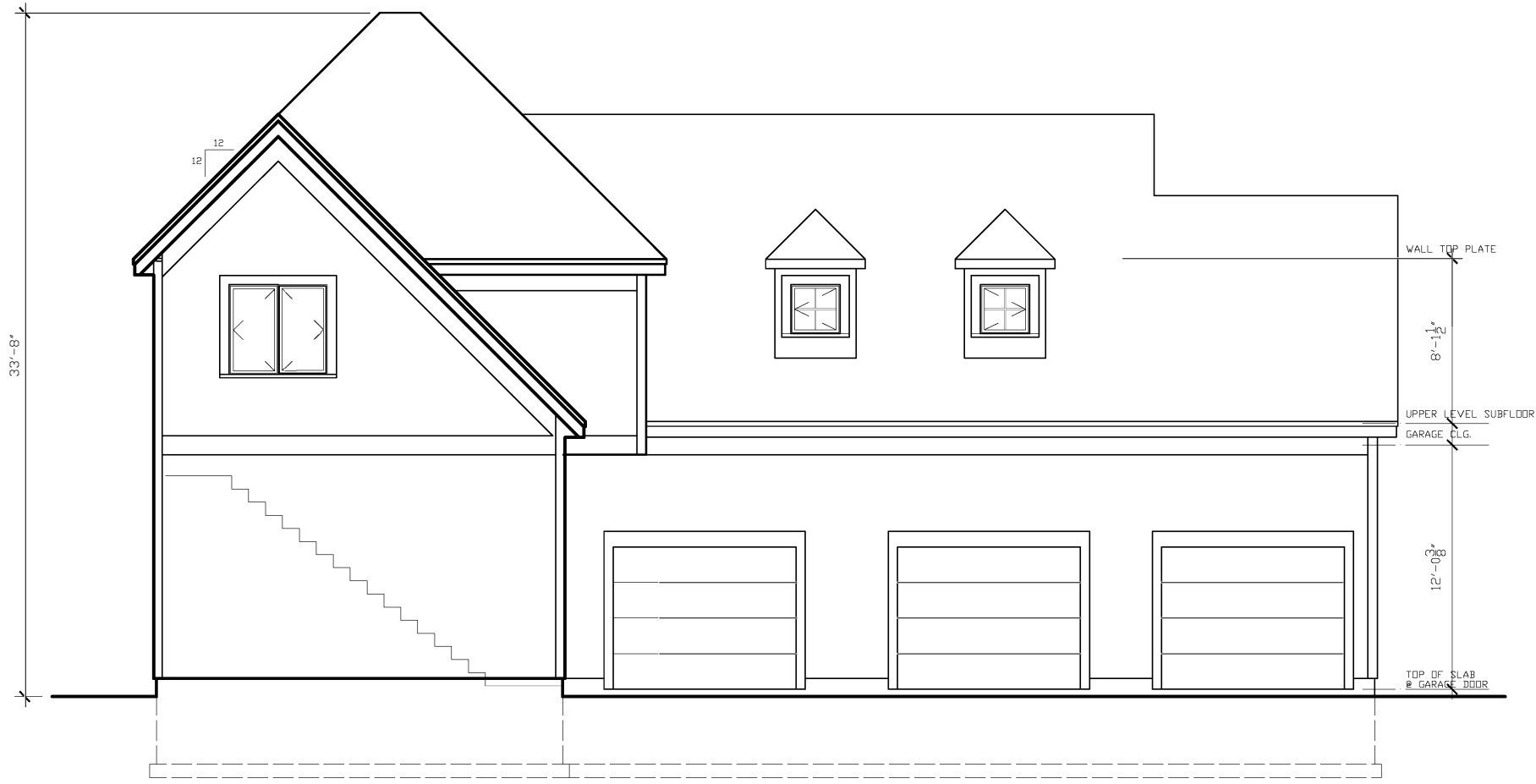


SOUTH ELEVATION

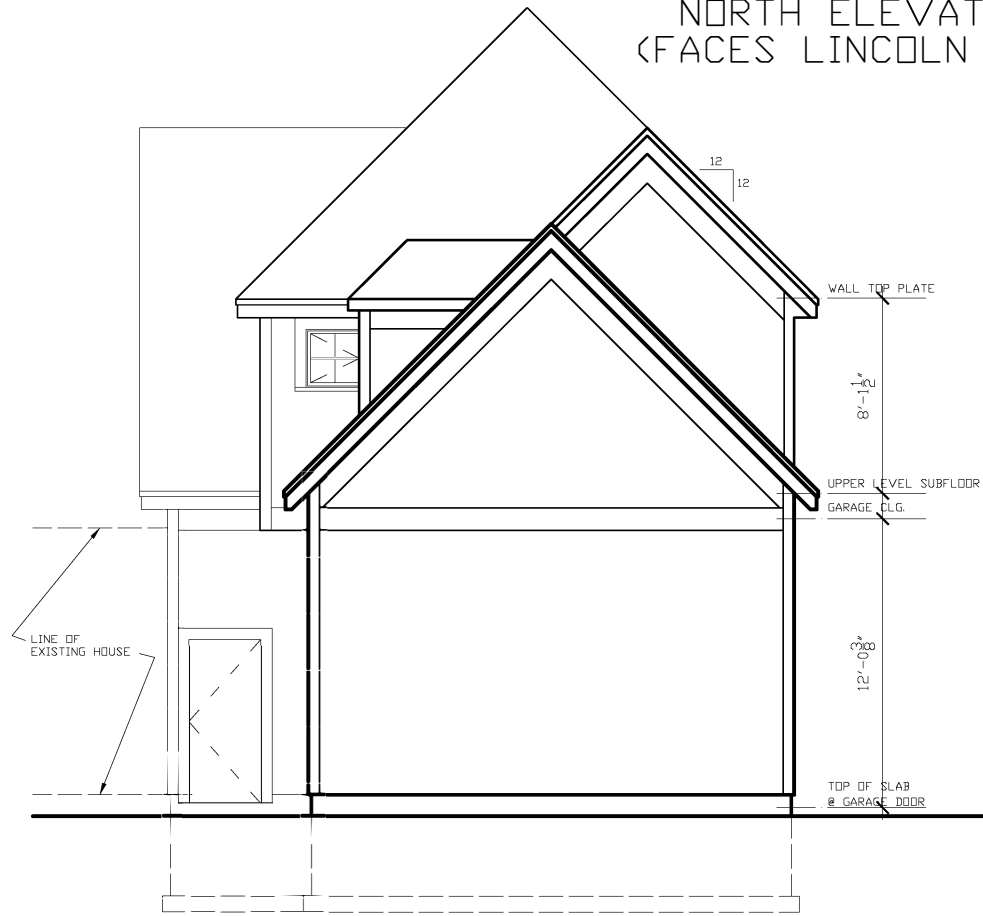


EAST ELEVATION (FACES MILLER AVE)

REEDesign 3 SHARON ST TEWKSBURY, MA 01876 (617) 462-5189	CAR STORAGE ADDITION 294 LINCOLN AVENUE PORTSMOUTH, NH 03801 ROCKINGHAM COUNTY	SOUTH AND EAST EXTERIOR ELEVATIONS SCALE: 1/4" = 1'-0" (22X34) SCALE: 1/8" = 1'-0" (11X17)	10/30/24 MR 12/02/24 MR 12/16/24 MR	3 OF 4
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NORTH ELEVATION
(FACES LINCOLN AVE)



WEST ELEVATION

REEDesign

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(617) 462-5189

CAR STORAGE ADDITION
294 LINCOLN AVENUE
PORTSMOUTH, NH 03801
ROCKINGHAM COUNTY

NORTH AND WEST
EXTERIOR ELEVATIONS
SCALE: 1/4" = 1'-0" (22X34)
SCALE: 1/8" = 1'-0" (11X17)

10/30/24 MR
12/02/24 MR
12/16/24 MR

4 OF 4