SITE PLAN REVIEW TECHNICAL ADVISORY COMMITTEE
PORTSMOUTH, NEW HAMPSHIRE

CONFERENCE ROOM A
CITY HALL, MUNICIPAL COMPLEX, 1 JUNKINS AVENUE

Members of the public also have the option to join the meeting over Zoom
*(See below for more details)**

2:00 PM **September 2, 2025**

AGENDA

I. NEW BUSINESS

A. The request of **Whitehouse Family Revocable Trust (Owner),** for property located at **58 Humphrey's Court** requesting the Subdivision of an existing parcel into two new residential lots with the associated and required site improvements. The proposed "Lot 1" is 5,003 square feet with 80 feet of frontage and the proposed "Lot 2" is 5,002 square feet with 104.81 feet of frontage. The creation of the proposed lots would require the removal of the existing structure. Said property is located on Assessor Map 101 Lot 47 and lies within the General Residence B (GRB) and Historic Districts. (LU-25-108)

B. The request of **PWED2 LLC (Owner),** for property located at **921 Islington Street** requesting Site Plan Review approval for the reconstruction of the existing building for a restaurant use with associated site improvements. Said property is located on Assessor Map 0172-0010172 Lot 10 and lies within the Character District 4 (CD4-W). (LU-25-96)

C. The request of **Martin Husslage (Owner),** for property located at **48-50 Langdon Street,** requesting preliminary and final Subdivision and Site Plan Review approval for the subdivision of one lot into two lots with a single-family dwelling and accessory dwelling proposed on each lot and associated site improvements. Proposed "Lot A" will have 70.62 feet of continuous street frontage and 5,664 square feet of lot area and proposed "Lot B" will have 132.5 feet of frontage and 4,264 square feet of lot area. Said property is located on Assessor Map 138 Lot 47 and lies within the General Residence C (GRC) District. (LU-25-124)

II. ADJOURNMENT

**Members of the public also have the option to join this meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser:*

https://us06web.zoom.us/webinar/register/WN_OQwJkRuGROW-mhbTNoT3MA

HALEY WARD
200 Griffin Road, Unit 14, Portsmouth, NH 03801
Phone (603) 430-9282

21 August 2025

Peter Stith, TAC Chair
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: TAC Submission - Subdivision Review at 58 Humphrey's Court, Tax Map 101, Lot 47

Dear Mr. Stith and TAC Members:

On behalf of the Robert M. Snover and Darcy E. Davidson, Trustees of the Robert M. Snover Revocable Trust, we are pleased to submit the attached plan set for continued **Technical Advisory Committee Review** for the above-mentioned project and request that we be placed on the agenda for your **September 2, 2025,** Meeting. The project is the subdivision of an existing parcel into two residential lots with the associated and required site improvements. The site is currently a 10,005 square foot parcel developed with a single-family residence that is located within the General Residence B (GRB) and Historic Overlay Zoning Districts. As required under the Portsmouth Subdivision Ordinance we are submitting the project to the Technical Advisory Committee (TAC) as a part of the Subdivision approval process, prior to our Planning Board submission. The application was tabled at the August 5, 2025 TAC meeting at our request.

The deeded property is comprised of what were once two lots shown on a plan of land from 1900 that was subsequently merged. The submission includes the Historic Lot Plan and current Tax Map overlay showing the historic ownership lines.

The pavement associated with Humphry's Court presently encroaches upon the northwest corner of the property. The encroachment is a direct result of the narrow right of way and 90-degree angle of the street, as depicted on the plans. The encroachment was likely done so that city vehicles could more easily and safely turn at the intersection where the Snover property is located. The applicant intends to grant the city an easement over their property for the encroachment in a form to be reviewed and approved by the City Legal Department. Please see the proposed easement location on the revised Subdivision Plan submitted herewith. The proposed easement provides for a smooth curved transition from the two adjacent street tangents. In the design it includes an offset area beyond the paved travel edge for snow and utilities, which mimics the offset on the north side of the Snover property.

The proposed subdivision meets all of the Zoning Ordinance and Subdivision Regulation standards. It appears to be permitted by right under the Zoning Ordinance and Subdivision regulations. The owner acknowledges that the creation of the proposed lots would require the removal of the existing structure. As on other projects with this requirement, the timing would be a condition of the approval and subdivision plan recording.

The applicant is proposing to connect each lot to the public sewer, water, power and communications systems located Humphrey's Court. Since the project is in the Historic District, and house design and placement is subject to Historic District Commission (HDC) review and approval, we request that the subdivision approval contain a Condition of Approval that indicates the need for additional reviews on the created lots, prior to the issuance of any building permits. Requiring additional design and review of future structures, at this time, creates an undue burden on the applicant. Future building will need to meet the city's requirements for densities, coverages, and access. The owner understands that requirement.

The following plans are included in our submission:

- Standard Boundary and Topographic Survey Plan – this plan shows the existing boundary and site features.
- Subdivision Plan – This plan shows the proposed lot lines.
- Utility Plan – this plan show the location of the public utilities.

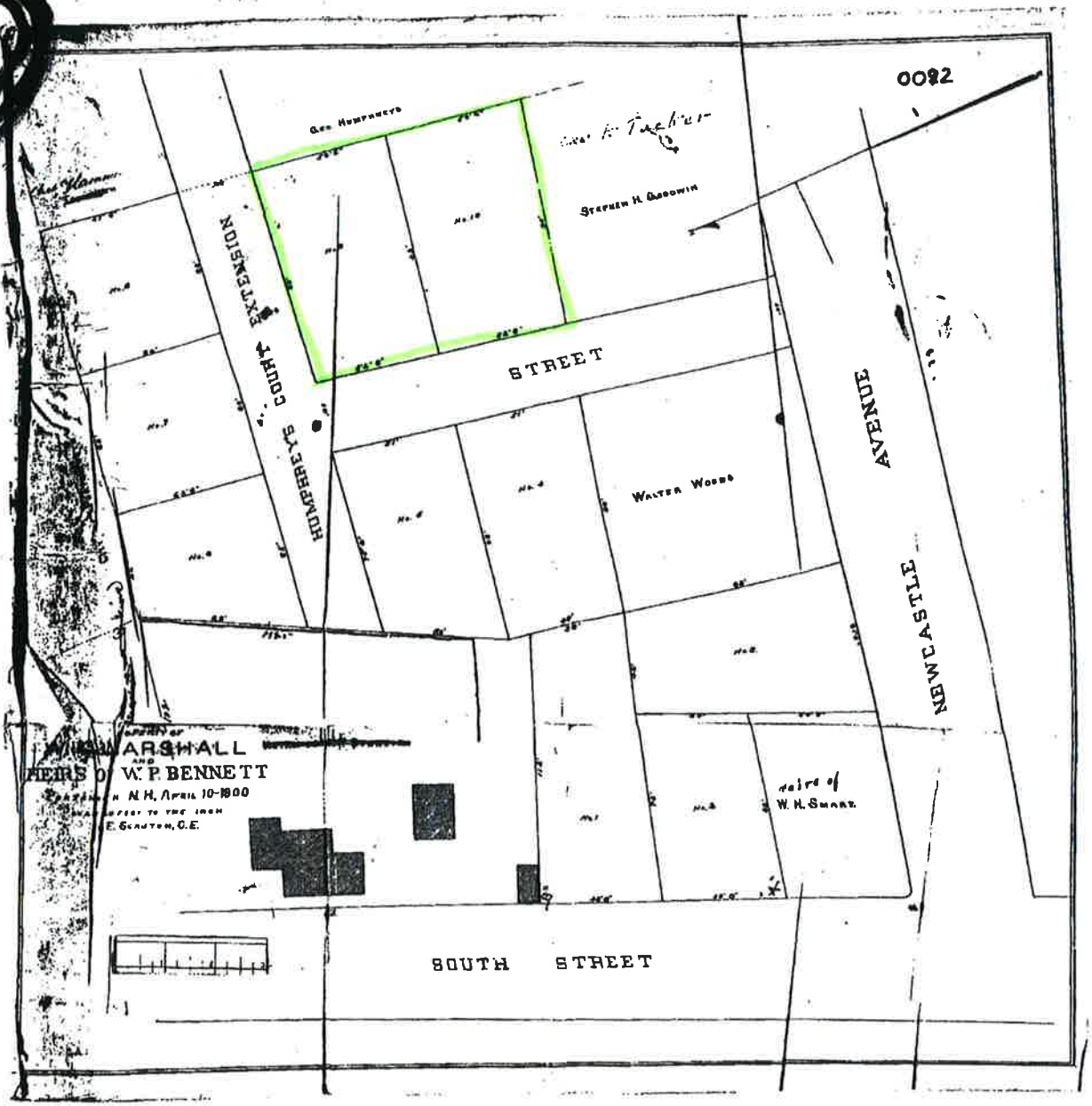
We look forward to an in-person presentation and TAC review of this submission, and respectfully request a positive recommendation to the Planning Board.

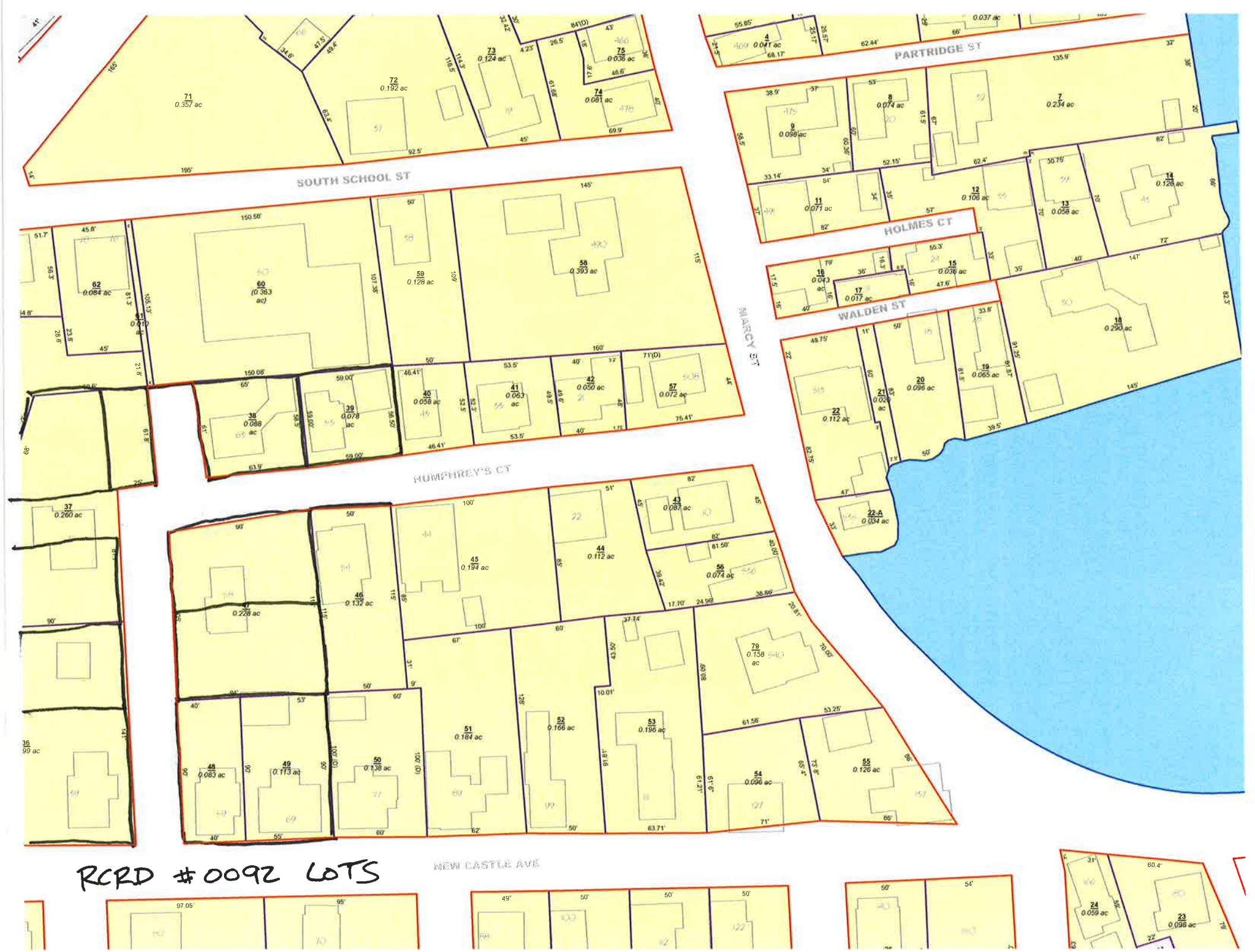
Sincerely,

John Chagnon, PE
Senior Project Manager

P:\NH\5010515-Robert_Snover\001-58 Humphreys Court, Portsmouth - CSA\03-WIP_Files\Applications\Portsmouth Subdivision\TAC Submission Letter 8-21-25.doc

#0092


0092
Geo Humphreys
Stephen H. Goodwin
HUMPHREYS COURT EXTENSION
STREET
Walter Woods
AVENUE
NEWCASTLE
MARSHALL
AND
HEIRS OF W. P. BENNETT
heirs of
W. H. Swasey
SOUTH STREET



RCRD #0092 LOTS

LEGEND:

DESCRIPTION	SYMBOL
ASSESSOR'S MAP & LOT	101/20
BENCHMARK	
FINISHED FLOOR	F.F.
HYDRANT	
IRON ROD/ IRON PIPE FOUND	
RAILROAD SPIKE SET	
NOW OR FORMERLY	N/F
SEWER MANHOLE	S
SPOT ELEVATION	10.2 x
TEMPORARY BENCHMARK	TBM
TREE	
UTILITY POLE	
WATER GATE VALVE	WGV
WATER SHUT OFF	
EDGE OF GRAVEL	
EDGE OF PAVEMENT	
FENCE	—x—x—
MINOR FOOT CONTOUR	98
MAJOR FOOT CONTOUR	100
OVERHEAD UTILITY LINE	OHU
APPROXIMATE ABUTTER'S PROPERTY LINE	
PROPERTY LINE	
STONE WALL	
TIE / REFERENCE LINE	

PLAN REFERENCES:

1. PROPERTY OF W.G.MARSHALL AND HEIRS OF W.P. BENNETT PORTSMOUTH, N.H., DATED: APRIL 10, 1900, PREPARED BY: L.E. SCRUTON, C.E., RCRD PLAN #0092.
2. PLAN OF LAND PORTSMOUTH, N.H. FOR: EDMUND L. PRICE, SCALE: 1" = 20', DATED: NOVEMBER 1983, PREPARED BY JOHN W. DURGIN ASSOCIATES, INC., RCRD C-12278.
3. SKETCH OF LAND, 58 HUMPHRETS COURT PORTSMOUTH, N.H., FOR HAROLD WHITEHOUSE, SCALE: 1" = 20', DATED: 8/31/98, PREPARED BY JAMES VERRA AND ASSOCIATES, INC., NOT RECORDED.
4. SUBDIVISION OF LAND NEW CASTLE AVE. & MARCY ST. PORTSMOUTH, NEW HAMPSHIRE FOR EDMUND L. PRICE, SCALE: 1" = 20', DATED: 7-31-03, PREPARED BY: JAMEV VERRA & ASSOCIATES, INC., RCRD D-31582.
5. STANDARD BOUNDARY SURVEY, TAX MAP 101 LOT 39, PROPERTY OF ZOE DABOUL, 35 HUMPHREY'S COURT, COUNTY OF ROCKINGHAM, PORTSMOUTH, NEW HAMPSHIRE, SCALE: 1" = 10', DATED: MARCH 8, 2012, PREPARED BY: MSC CIVIL ENGINEERS & LAND SURVEYORS, RCRD D-37165.
6. STANDARD BOUNDARY SURVEY TAX MAP 101-LOT 43, PREPARED FOR STEVE CRAIGE LAND OF BRIAN J. BEDNAREK, 10 HUMPHREY'S COURT CITY OF PPORTSMOUTH, COUNTY OF ROCKINGHAM, STATE OF NEW HAMPSHIRE, SCALE: 1" = 10', DATED: 4/10/17, PREPARED BY AMBIT ENGINEERING, INC., NOT RECORDED.

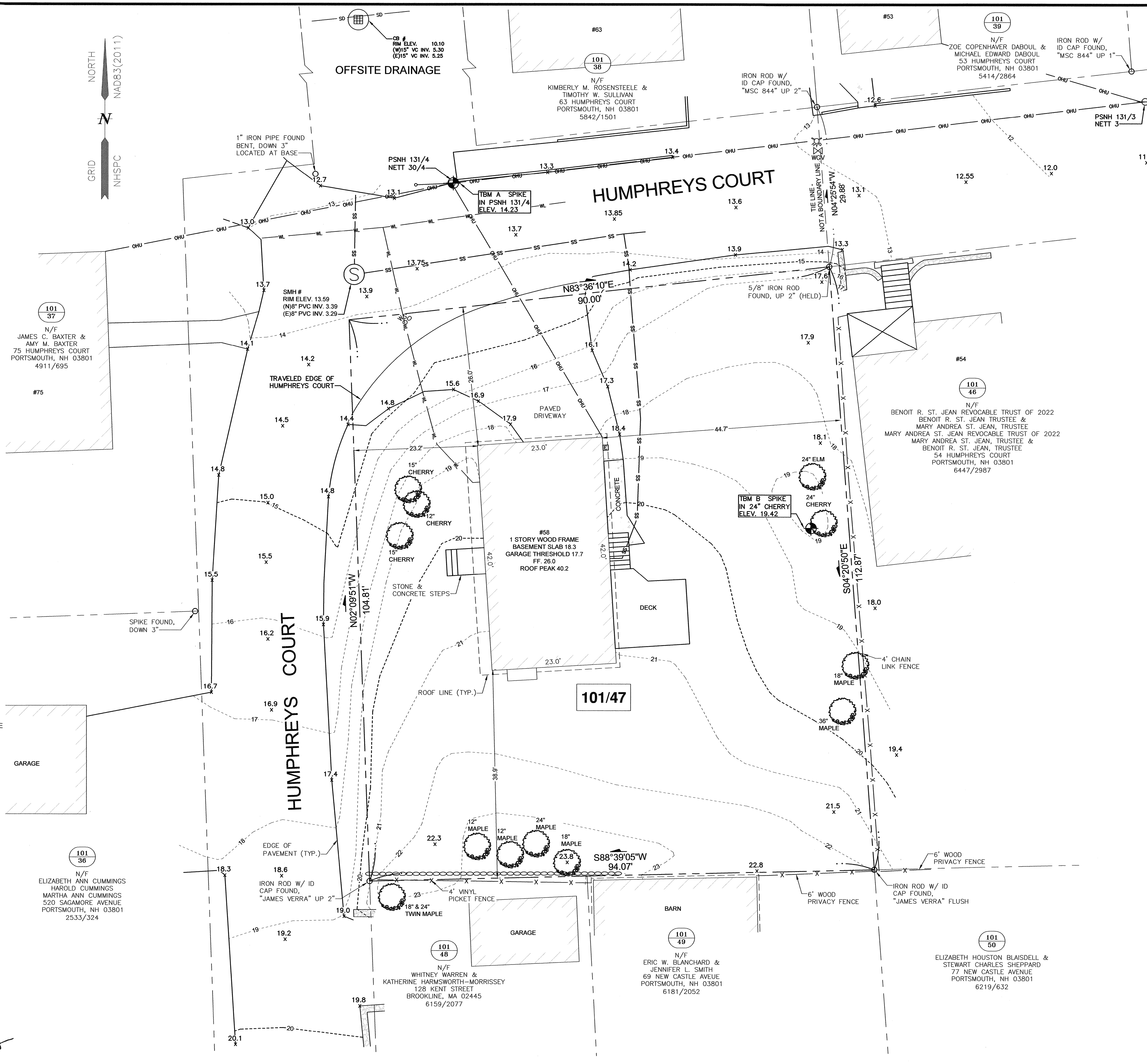
UTILITY NOTES:

1. THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
2. UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
3. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

STATE OF NEW HAMPSHIRE
PHILLIP A. YETMAN
No. 1122
LICENSED LAND SURVEYOR

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

PHILLIP A. YETMAN, LLS 1122 — 7/10/2025 — DATE



LOCATION MAP SCALE: 1" = 200'

NOTES:

1. PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 101 AS LOT 47.
2. OWNERS OF RECORD:
   ROBERT M. SNOVER REVOCABLE TRUST
   DARCY E. DAVIDSON, TRUSTEE
   ROBERT M. SNOVER, TRUSTEE
   60 TJ GAMESTER AVENUE
   PORTSMOUTH, NH 03801
   6589/369
   RCRD PLAN # 0092 LOTS 9&10
3. PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.
4. EXISTING LOT AREA:
   10,005 S.F.
   0.2297 ACRES
5. PARCEL IS LOCATED IN GENERAL RESIDENCE B (GRB) AND HISTORIC OVERLAY DISTRICT.
6. DIMENSIONAL REQUIREMENT:
   MIN LOT AREA: 5,000 S.F.
   FRONTAGE: 80 FEET
   SETBACKS: FRONT 5 FEET; SIDE 10 FEET; REAR 25 FEET
   MAXIMUM STRUCTURE HEIGHT: 35 FEET
   MAXIMUM BUILDING COVERAGE: 30%
   MINIMUM OPEN SPACE: 25%
7. VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.
8. THE PURPOSE OF THIS PLAN IS SHOW THE RESULTS OF A STANDARD BOUNDARY AND TOPOGRAPHIC SURVEY OF ASSESSOR'S MAP 101 LOT 47 IN THE CITY OF PORTSMOUTH.
9. ABUTTING STRUCTURE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY.
10. BUILDING DIMENSIONS AND OFFSETS SHOWN ARE TO THE FOUNDATION.

GRAPHIC SCALE

10 0 5 10 20 30
(IN FEET)
1 inch = 10 ft.

REV.	DATE	DESCRIPTION	BY	CHK
1	07/08/2025	ADD UTILITY LOCATIONS & GRADES	CSA	PAY
0	05/29/2025	ISSUED FOR COMMENT	CSA	PAY

DRAWING ISSUE STATUS

SITE SURVEY

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Road, Unit 14
Portsmouth, NH 03801
603-430-9282
WWW.HALEYWARD.COM

PROJECT

ROBERT M. SNOVER TRUST
58 HUMPHREY'S COURT, PORTSMOUTH, N.H.

TITLE

STANDARD BOUNDARY & TOPOGRAPHIC SURVEY

DATE	SCALE	
OCTOBER 2024	1" = 10'	
DRAWN BY	DESIGNED BY	CHECKED BY
CSA	—	PAY
PROJECT No.	FIELD BOOK & PAGE	
5010515	FB 379 PG 45	
DRAWING No.	REV.	
V101	1	

LEGEND:

DESCRIPTION	SYMBOL
ASSESSOR'S MAP & LOT	101/39
BENCHMARK	
FINISHED FLOOR	F.F.
HYDRANT	
IRON ROD/ IRON PIPE FOUND	
RAILROAD SPIKE SET	
NOW OR FORMERLY	N/F
SEWER MANHOLE	S
SPOT ELEVATION	10.2 x
TEMPORARY BENCHMARK	TBM
TREE	
UTILITY POLE	
WATER GATE VALVE	WGV
WATER SHUT OFF	
EDGE OF GRAVEL	
EDGE OF PAVEMENT	
FENCE	X X
MINOR FOOT CONTOUR	98
MAJOR FOOT CONTOUR	100
OVERHEAD UTILITY LINE	OHU
APPROXIMATE ABUTTER'S PROPERTY LINE	
PROPERTY LINE	
STONE WALL	
EDGE OF TRAVELED WAY	
TIE / REFERENCE LINE	

LENGTH TABLE

LINE	BEARING	DISTANCE
L1	S44°40'08"E	55.66'
L2	S10°38'30"E	6.00'
L3	S52°14'32"E	56.51'
L4	S04°20'50"E	22.77'

EASEMENT TABLE

E1	N02°09'51"W	17.49'
E2	N83°36'10"E	26.67'
E3	S44°40'08"E	11.30'

EASEMENT CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
EC1	44.58'	21.79'	21.57'	S59°19'33"W	28°00'11"
EC2	44.58'	11.96'	11.93'	S37°38'13"W	15°22'30"

PLAN REFERENCES:

1. PROPERTY OF W.G.MARSHALL AND HEIRS OF W.P. BENNETT PORTSMOUTH, N.H., DATED: APRIL 10, 1900, PREPARED BY: L.E. SCRUTON, C.E., RCRD PLAN #0092.
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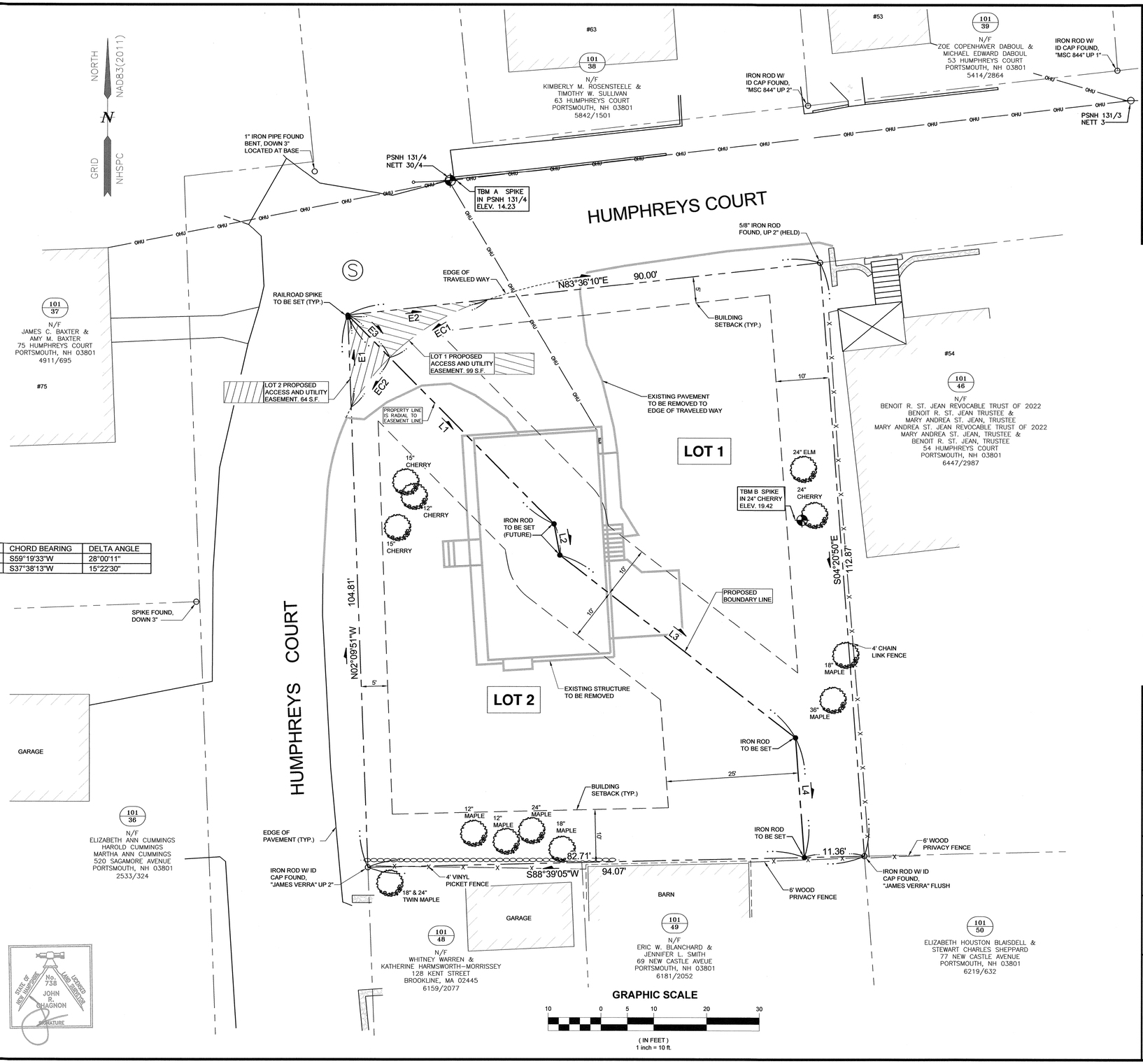
APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN _____ DATE _____

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

JOHN R. CHAGNON, LLS DATE 8.21.25

STATE OF NEW HAMPSHIRE No. 738 JOHN R. CHAGNON SIGNATURE LICENSED LAND SURVEYOR



LOCATION MAP SCALE: 1" = 200'

NOTES:

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2. OWNERS OF RECORD:
   ROBERT M. SNOVER REVOCABLE TRUST
   DARCY E. DAVIDSON, TRUSTEE
   ROBERT M. SNOVER, TRUSTEE
   60 TJ GAMESTER AVENUE
   PORTSMOUTH, NH 03801
   6589/369
   RCRD PLAN #0092 LOTS 9&10
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4. EXISTING LOT AREA:
   10,005 S.F.
   0.2297 ACRES

   PROPOSED LOT AREAS:
   LOT 1: 5,003 S.F.
   0.1149 ACRES

   LOT 2: 5,002 S.F.
   0.1148 ACRES
5. PARCEL IS LOCATED IN GENERAL RESIDENCE B (GRB) AND HISTORIC OVERLAY DISTRICT.
6. DIMENSIONAL REQUIREMENT:

MIN LOT AREA:		5,000 S.F.
FRONTAGE:		80 FEET
SETBACKS:	FRONT	5 FEET
	SIDE	10 FEET
	REAR	25 FEET
MAXIMUM STRUCTURE HEIGHT:		35 FEET
MAXIMUM BUILDING COVERAGE:		30%
MINIMUM OPEN SPACE:		25%

7. VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.
8. THE PURPOSE OF THIS PLAN IS TO SHOW THE SUBDIVISION OF ASSESSOR'S MAP 101 LOT 47 IN THE CITY OF PORTSMOUTH INTO 2 LOTS.
9. ABUTTING STRUCTURE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE ONLY.

REV.	DATE	DESCRIPTION	BY	CHK
2	8/21/2025	PROPERTY LINE	CSA	JRC
1	7/21/2025	ISSUED FOR APPROVAL	CSA	JRC
0	05/29/2025	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

SITE PLANS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
200 Griffin Road, Unit 14
Portsmouth, NH 03801
603-430-9282

PROJECT

ROBERT M. SNOVER TRUST
58 HUMPHREY'S COURT, PORTSMOUTH, N.H.

TITLE

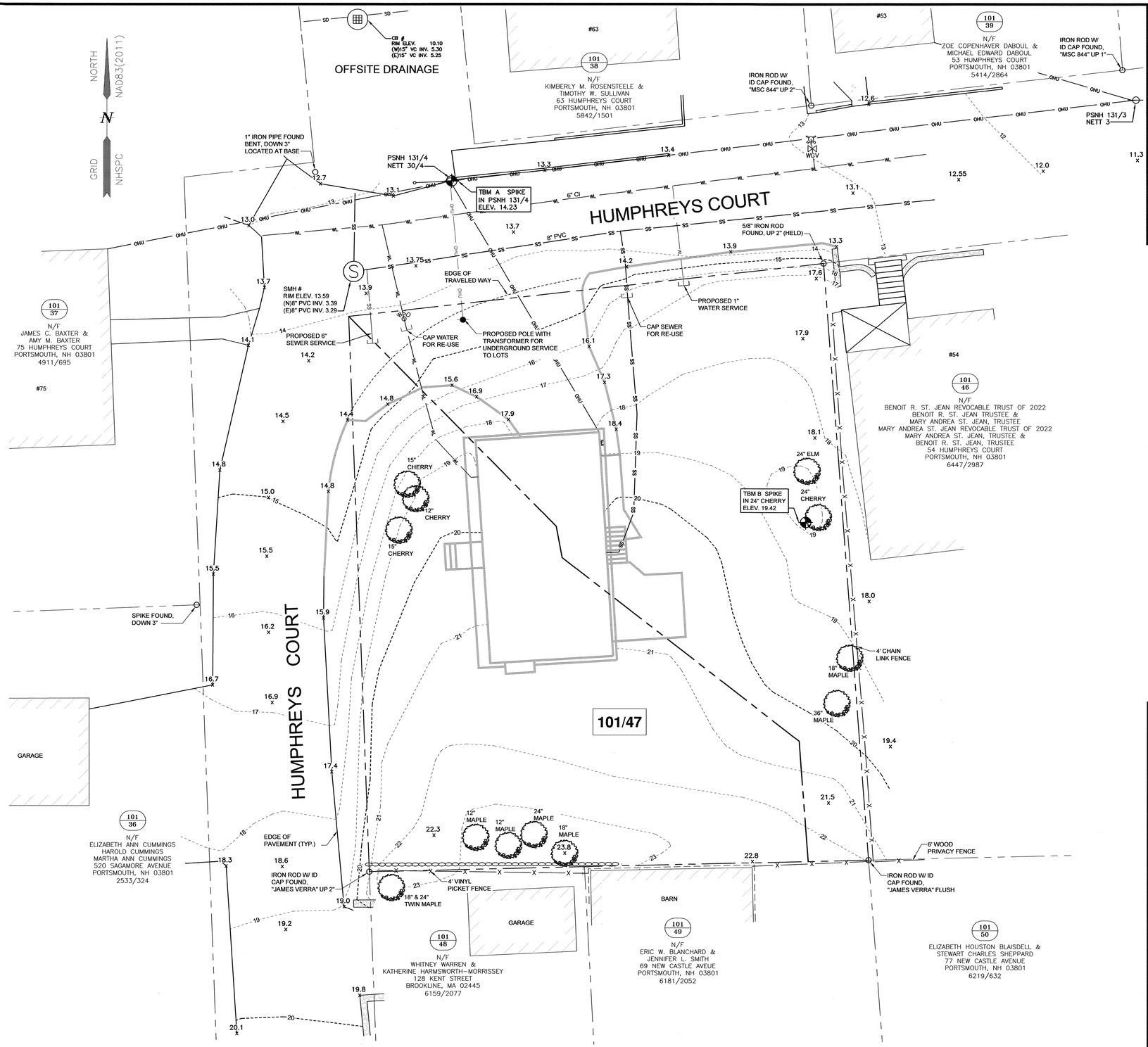
SUBDIVISION PLAN

DATE	SCALE
MAY 2025	1" = 10'
DRAWN BY: SJR	DESIGNED BY: SJR/JRC
CHECKED BY: JRC	
PROJECT No.: 5010515	FIELD BOOK & PAGE: FB 379 PG 45
DRAWING No.: C201	REV.: 2

FILE LOCATION: P:\NHS\0515-ROBERT_SNOVER\01-58 HUMPHREY'S COURT - PORTSMOUTH - CSA\02-CAD_FILES\0515 SITE.DWG, 2025.09.21, 2:52 PM

LEGEND:

DESCRIPTION	SYMBOL
ASSESSOR'S MAP & LOT	101/39
BENCHMARK	
FINISHED FLOOR	F.F.
HYDRANT	
IRON ROD/ IRON PIPE FOUND	
RAILROAD SPIKE SET	
NOW OR FORMERLY	N/F
SEWER MANHOLE	S
SPOT ELEVATION	10.2
TEMPORARY BENCHMARK	TBM
TREE	
UTILITY POLE	
WATER GATE VALVE	WGV
WATER SHUT OFF	
EDGE OF GRAVEL	
EDGE OF PAVEMENT	
FENCE	X X
MINOR FOOT CONTOUR	98
MAJOR FOOT CONTOUR	100
OVERHEAD UTILITY LINE	OHU
APPROXIMATE ABUTTER'S PROPERTY LINE	
PROPERTY LINE	
SANITARY SEWER	SS
STONE WALL	
EDGE OF TRAVELED WAY	
TIE / REFERENCE LINE	



LOCATION MAP SCALE: 1" = 200'

NOTES:

1. PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 101 AS LOT 47.
2. THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.
3. UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.
4. CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).
5. VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.
6. THE PURPOSE OF THIS PLAN IS TO SHOW PROPOSED UTILITIES TO SERVICE THE SNOVER SUBDIVISION.
7. EACH PROPOSED LOT WILL HAVE ITS OWN DRIVEWAY.

GRAPHIC SCALE

10 0 5 10 20 30

(IN FEET)
1 inch = 10 ft.

REV.	DATE	DESCRIPTION	BY	CHK
1	7/21/2025	ISSUED FOR APPROVAL	CSA	JRC
0	05/29/2025	ISSUED FOR COMMENT	SJR	JRC

DRAWING ISSUE STATUS

SITE PLANS

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
WWW.HALEYWARD.COM
200 Griffin Road, Unit 14
Portsmouth, NH 03801
603-430-9282

PROJECT

ROBERT M. SNOVER TRUST
58 HUMPHREY'S COURT, PORTSMOUTH, N.H.

TITLE

UTILITY PLAN

JOHN R. CHAGNON No. 7851 LICENSED PROFESSIONAL ENGINEER STATE OF NEW HAMPSHIRE

DATE	SCALE
MAY 2025	1" = 10'
DRAWN BY: SJR	DESIGNED BY: SJR/JRC
CHECKED BY: JRC	
PROJECT No.: 5010515	FIELD BOOK & PAGE: FB 379 PG 45
DRAWING No.: C202	REV.: 1

HALEY WARD

200 Griffin Road, Unit 14, Portsmouth, NH 03801
Phone (603) 430-9282

15 August 2025

Peter Stith, TAC Committee Chair
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Request for Site Plan Review, 921 Islington Street, Proposed Site Development

Dear Mr. Stith and Technical Advisory Committee (TAC) Members:

On behalf of PWED2, LLC, and Chinburg Development, we are pleased to submit the attached plan set for **Site Plan Review and Approval** for the above-mentioned project and request that we be placed on the agenda for your **September 2, 2025,** Meeting. The project is the reconstruction of the existing structure on the parcel to accommodate a Proposed Restaurant, with the associated and required site improvements. The building footprint will remain unchanged, and an addition added on the back. The prior gas station use has been discontinued, and the storage tanks have been removed. We are requesting the Technical Advisory Committee (TAC) review the project as a part of the approval process, and recommend approval to the Planning Board of the permit application at the site, and we look forward to an in-person presentation, and the TAC Committee review of this submission.

The reconstruction of the existing structure will need to comply with the applicable design, safety, and operational standards, including building code compliance. We believe that the restaurant will complement the surrounding commercial and mixed-use environment. The site's proximity to pedestrian-friendly infrastructure further enhances this re-use. The site plan shows sufficient parking, in accordance with the Ordinance requirements. Delivery and service vehicles will utilize designated loading areas to avoid disrupting traffic flow. The existing Islington Street curb cut will be reduced in size, and secondary access will be provided at a safe location away from the Islington Street intersection, on the 909 Islington Street adjacent property driveway, which is in the control of this applicant. Street trees and sidewalk connections will be added to the site.

Site Plan Submission

The submission requirements of the City of Portsmouth Site Plan Regulations have been reviewed. The information supplied herein is intended to assist in a determination of the project's compliance. Plans are drawn in accordance with scale and size requirements, with dates, titles, north orientation, Map and Lot, Zoning, revision blocks, and Legends. The proposed uses and Square footage of use are shown on the Architectural plans. The professional's seals with license numbers are on the submitted plans. On the Cover Sheet there is a picture of the former site used as a gasoline service station, in its prior glory. The Site Orthophoto Plan provides an overhead view of the site. The Existing Conditions plan shows the site topography, building location with floor elevation, feature locations, and driveway access / egress and current parking configuration. Available utility information is shown. Subsequent plans show the proposed development with the associated site improvements and construction details. The existing expansive dual curb cut will be adjusted to a single opening on Islington Street, and secondary access on the adjacent driveway. The project received Variances from the Portsmouth Zoning Board on July 22, 2025.

Site Zoning

The Site Plan C3 details information regarding the proposed uses and addition, including a calculation of the required parking under the Portsmouth Zoning Ordinance (PZO). The plan shows the existing and proposed Impervious Surface Areas on the lot and the Property Line Information in tabular format. The proposed project reduces the impervious surface by 10 %. The proposed building use is fully conforming, which was not the case previously. The plans show proposed outdoor dining, which will require a Conditional Use Permit (CUP), which will be filed directly to the Planning Board. The project received variances for the dumpster setback and parking in front of the principal building.

Vehicular and Pedestrian Circulation

Calculating site Trip Generation utilizing the ***Institute of Transportation Engineers (ITE)*** standards are as follows:

> **Land Use Code (LUC) 932 - High Turnover Sit-Down Restaurant**
> Average Vehicle Trips Ends vs: 1,000 Sq. Ft. Gross Floor Area
> Independent Variable (X): 9.140
> 1,494 SF Restaurant generates 1.494 X 9.140 Peak Hour Trips, or 14 Peak Hour Trips.

This amount of traffic is incidental to the use and capacity of Islington Street, and should not cause a change in the operation of the roadway.

The site is improving pedestrian access and circulation by closing one of the existing curb cuts and providing sidewalk extensions. Also, sidewalk access to the 909 property is improved with the proposed sidewalk leg from Islington Street on the adjacent driveway.

Screening and Landscaping

The site currently is not formerly landscaped at all and is mostly building and surface pavement. The proposed landscaping improvements expand the street landscaping and provides onsite beautification. Landscaping is detailed on Landscape Plan L1.

Water and Sewage Systems

The site is served by municipal water and sewer. The development proposes connections to the service stubs left during the recent Islington Street improvement project. A grease interceptor will be added to manage the kitchen waste. The utility demand generated by the renovations and addition are not expected to exceed the capacity of the existing updated infrastructure. These and other utilities are detailed on Utility Plan C4.

Stormwater Management

The site drainage patterns will not be altered by the construction. The proposed development has been designed to match the pre-development drainage patterns to the greatest extent feasible. Added infiltration is achieved with a porous patio for outdoor dining, as well as the impervious surface reduction and increased landscaping. Erosion and sediment control practices will be implemented for both the temporary condition during construction and for final stabilization after construction. Therefore, there are no negative impacts to downstream receptors or adjacent properties anticipated as a result of this project. A Drainage Maintenance Plan is attached to this submission.

Site Lighting

The re-development will introduce adequate lighting of the site and pedestrian areas to provide a welcoming and safe pedestrian and vehicular experience, contrary to the existing condition. The proposal is to provide catenary mounted lighting in the outdoor dining area The lighting intensities are detailed on the Lighting Plan C7, and the proposed fixtures are included in the Supplemental Material submission.

Site Signage and Artwork

The site is currently served by existing building mounted signage, and a free-standing tall sign on a post, which will be removed. New signage locations are shown on the plans and will be permitted through the sign permit process. The project site is adjacent to a free-standing sign for the 909 Islington site, which is located behind 921 Islington. The redevelopment provides a new place for that sign, behind the sidewalk improvements. In addition, there will be building mounted sculpture feature on the northeast façade to provide additional interest and site engagement.

Site Utilities and Solid Waste

Site utilities include natural gas, underground electric and communications services. The existing services will be adjusted and re-purposed as needed. Solid Waste will be collected in the proposed dumpster, shown on the Site Plan C3.

The following plans are included in our submission:

- Site Orthophoto Plan S1 – This plan shows the site in context to the abutting properties.
- Existing Conditions Plan C1 - This plan shows the results of an on-site survey at the site.
- Demolition Plan C2 - This plan shows required site demolition.
- Site Plan C3 - This plan shows the proposed site development.
- Landscape Plan L1 - This plan shows the proposed site landscaping.
- Offsite Improvements Plan C4 - This plan shows changes to the driveway and sidewalk along Islington Street.
- Utility Plan C5 – This plan shows the utilities to serve the site development.
- Grading and Drainage Plan C6 - This plan shows proposed site grading and drainage improvements.
- Lighting Plan C7 - This plan shows the proposed site lighting.
- Detail Plans D1 – D4 – These plans show site construction details.

We look forward to an in-person presentation and Technical Advisory Committee review of this submission, and request that Planning Board approval is recommended.

Sincerely,

John Chagnon, PE, LLS
Senior Project Manager

P:\NH\5010220-Chinburg_Builders\1379-909 Islington Street, Portsmouth-\2024 Site Development\03-WIP_Files\921 Site Plan\Portsmouth Site Plan\TAC Site Plan Submission Letter 8-15-25.doc

Site Photographs

PORT ONE ARCHITECTS
959 Islington Street
Portsmouth, NH

August 13, 2025

Site Plan Review - Green Building Statement

Project: Ampet Adaptive Reuse
921 Islington Street
Portsmouth, NH

The proposed project consists of an adaptive reuse of an existing ~1,305 sf structure previously used for vehicle fueling station & repair to be converted for use as a restaurant (Assembly A-2).

The projected is not pursuing a certification, but will aim to meet or exceed sustainable industry standards through the following measures:

Site Redevelopment
- Decrease impervious surface areas
- Provide additional landscaping

Reuse of Existing Structure
- Existing CMU (concrete masonry unit) and steel primary structure to remain thereby reducing new materials required for construction

Water Efficiency
- Low-flow toilets
- Low Flow faucets

Energy Efficiency
- Meet or exceed IECC prescriptive method for new exterior and infill wall assemblies
- Exceed IECC prescriptive roof assembly R-value by 10%
- Reduced thermal bridging using continuous insulation at new and infill exterior assemblies
- LED lighting throughout
- Window units with less than 0.28 u-factor

Indoor Environment
- Low VOC paints & adhesives
- Flooring to be Floor Score certified

Mechanical Systems
- Mechanical systems to meet or exceed 2021 IMC, IEBC and ASHRAE standards
- Energy Recovery Ventilation

Respectfully Submitted,

Evan Mullen, AIA, NCARB
Principal
Port One Architects, Inc.
emullen@portonearchitects.com
603-436-8891, ext. 11

Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

BD

LSI Abolite® Deep Bowl

wet location

OVERVIEW	
Lumen Package (lm)	1,650 - 5,250
CCT (K)	27/30/35/40/50K
Wattage Range (W)	13 - 22

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Heavy gauge spun steel with a thermally cured high quality polyester powder coat finish.
- Integrated power supply built into the fixture allowing the RLM to be connected directly to line voltage.
- Manufactured in the USA

Optical System

- Available in 5000K, 4000K, 3500K, 3000K, and 2700K color temperatures
- Glass Globe required for outdoor applications
- Minimum CRI of 80

Electrical

- Standard Universal Voltage (120-277 Vac) Input 50/60Hz
- 0-10V dimming, 5% standard
- Operating Temperature -30°C to +50°C (-22°F to +122°F)

Installation

- Pre-wired with 96" leads standard.
- Optional 10' prewired cord set and canopy available in black and white
- Optional 10' prewired cord set, aircraft wire, and canopy available in black and white
- Fixed hub tapped for 3/4" NPT conduit.
- Not designed for uplight applications.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- UL Listed
- Suitable for wet locations

BD LSI Abolite® Deep Bowl

Type : _____

Have questions? Call us at (800) 436-7800

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: BD 300 17L UNV 35 GPT LDS96WL

Prefix/Size	Lumen Package, Color Temperature & CRI	Voltage	Lens	Finish	Mounting
BD 100/8 **BD 200/10** **BD 300/12**	**FS2** (1650-2750, 2700-3000-3500-4000-5000K) **INC**- Medium E26 Socket 80 CRI min.	**UNV** - 120 - 277VAC	**Blank** - Flat lens clear/diffuse? **CGG6** - Clear Glass Globe 6 3/4" **FGG6** - Frosted Glass Globe 6 3/4" **PGG6** - Prismatic Glass Globe 6 3/4" **Colored globes by request***	**GWT** - Gloss White **GBK** - Gloss Black **GRD** - Gloss Red **BBL** - Bright Blue **DKG** - Dark Green **SLV** - Silver **MBK** - Matte Black **RST** - Rust **HCP** - Hammered Copper	**LDS96WL** - Pre wired leads

Need more information?
Click here for our glossary

Have additional questions?
Call us at (800) 436-7800

Accessory Ordering Information

Canopy Ordering Information (Accessories are field installed)	
Part Number	**Description**
BC600 3 GWT	3/4" (19mm) Tap Decorative Box Cover Aligner - Gloss White
BC585 ZINC	3/4" (19mm) Tap Round Box Cover Aligner - Zinc
BC585SQ ZINC	3/4" (19mm) Tap Square Box Cover Aligner - Zinc

Standard BC600 finish is Gloss White Powder; other RLM colors available.

Wire Guard Ordering Information (Accessories are field installed)	
Part Number	**Description**
COG 12 MSV	12" (304mm) Convex Wire Guard - Metallic Silver
COG 14 MSV	14" (356mm) Convex Wire Guard - Metallic Silver
COG 16 MSV	16" (406mm) Convex Wire Guard - Metallic Silver
COG 18 MSV	18" (457mm) Convex Wire Guard - Metallic Silver

Standard finish is Metallic Silver Powder; other RLM colors available.

Canopy Ordering Information (Accessories are field installed)	
Part Number	**Description**
GGDC6	6-3/4" Cast Aluminum Globe Guard
GGW6	6-3/4" Wire Globe Guard

Standard finish is Natural Aluminum; other RLM colors available

Stem Ordering Information (Accessories are field installed)	
Part Number	**Description**
ST 3 3 GWT	3/4" x 3" (19mm x 76mm) Aluminum Stem - Gloss White
ST 6 3 GWT	3/4" x 6" (19mm x 152mm) Aluminum Stem - Gloss White
ST 12 3 GWT	3/4" x 12" (19mm x .4m) Aluminum Stem - Gloss White
ST 18 3 GWT	3/4" x 18" (19mm x .5m) Aluminum Stem - Gloss White
ST 24 3 GWT	3/4" x 24" (19mm x .6m) Aluminum Stem - Gloss White
ST 36 3 GWT	3/4" x 36" (19mm x .9m) Aluminum Stem - Gloss White
ST 48 3 GWT	3/4" x 48" (19mm x 1.2m) Aluminum Stem - Gloss White
ST 60 3 GWT	3/4" x 60" (19mm x 1.5m) Aluminum Stem - Gloss White
ST 72 3 GWT	3/4" x 72" (19mm x 1.8m) Aluminum Stem - Gloss White
COP 3 GWT	3/4" (19mm) Alum. Stem Coupler - Gloss White

Standard finish is Gloss White Powder; other RLM colors available.
CA5 to be ordered for Stem mount applications.

Goose Neck Brackets Ordering Information (Accessories are field installed)	
Part Number	**Description**
GN A 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN B 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN C 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN E 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN F 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN G 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN H 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN K 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN P 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White
GN U 3 GWT	3/4" (19mm) Aluminum Gooseneck Bracket - Gloss White

Standard finish is Gloss White Powder; other RLM colors available.

Wall Brackets Ordering Information (Accessories are field installed)	
Part Number	**Description**
CWBM 1 GWT	Contemporary Wall Bracket - Medium - Gloss White
CWBL 1 GWT	Contemporary Wall Bracket - Long - Gloss White
CRB GWT	Contemporary Wall Box - Gloss White
CA5 GWT	Wall Plate Bracket*

Standard finish is Gloss White Powder; other RLM colors available.
CA5 to be ordered for Stem mount applications.

BD LSI Abolite® Deep Bowl

Type : _____

Have questions? Call us at (800) 436-7800

PERFORMANCE

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Delivered Lumens

Lumen Package	Distribution	Lens Type	CRI	2700K		3000K		3500K		4000K		5000K		Wattage
				Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	Efficacy	
BD FS2(1650L LOW SET)	100	STD.	90	1389	109	1425	111	1461	115	1486	117	1527	120	13
BD FS2(1650L LOW SET)CGG6	100	CGG6	90	1462	112	1500	115	1538	118	1564	123	1607	124	13
BD FS2(1650L LOW SET)FGG6	100	FGG6	90	1190	92	1221	94	1252	96	1273	100	1308	101	13
BD FS2(1650L LOW SET)PGG6	100	PGG6	90	1494	115	1532	118	1571	121	1598	126	1642	126	13
BD FS2(2050L MED SET)	100	STD.	90	1739	109	1784	111	1829	114	1860	116	1911	119	16
BD FS2(2750L HIGH SET)	100	STD.	90	2318	105	2378	108	2438	111	2480	112	2548	116	22
BD FS2(1650L LOW SET)	200	STD.	90	1350	104	1385	107	1420	109	1444	113	1484	114	13
BD FS2(1650L LOW SET)CGG6	200	CGG6	90	1451	112	1488	114	1526	117	1552	121	1595	123	13
BD FS2(1650L LOW SET)FGG6	200	FGG6	90	1138	88	1168	90	1198	92	1218	95	1252	96	13
BD FS2(1650L LOW SET)PGG6	200	PGG6	90	1475	113	1513	116	1551	119	1578	123	1622	125	13
BD FS2(2050L MED SET)	200	STD.	90	1679	105	1722	108	1766	110	1796	112	1846	115	16
BD FS2(2750L HIGH SET)	200	STD.	90	2318	105	2378	108	2438	111	2480	112	2548	116	22
BD FS2(1650L LOW SET)	300	STD.	90	1356	104	1391	107	1427	110	1451	113	1491	115	13
BD FS2(1650L LOW SET)CGG6	300	CGG6	90	1439	111	1477	114	1514	116	1540	120	1582	122	13
BD FS2(1650L LOW SET)FGG6	300	FGG6	90	1134	87	1163	89	1193	92	1213	94	1246	96	13
BD FS2(1650L LOW SET)PGG6	300	PGG6	90	1460	112	1498	115	1536	118	1562	122	1605	123	13
BD FS2(2050L MED SET)	300	STD.	90	1691	106	1735	108	1779	111	1809	112	1859	116	16
BD FS2(2750L HIGH SET)	300	STD.	90	2251	102	2309	105	2367	108	2408	108	2474	112	22

Electrical Data*

Lumen Package	Wattage	120V	208V	240V	277V
12L	9.3	0.08	0.04	0.04	0.03
15L	10.9	0.09	0.05	0.05	0.04
17L	12.8	0.11	0.06	0.05	0.05

*Electrical data at 25C (77F). Actual wattage may differ by +/-10%.

Recommended Lumen Maintenance[1]

Ambient Temp C	Initial [2]	25k hr [2]	50k hr [2]	75k hr [3]	100k hr [3]
0 C	100%	98%	95%	93%	91%
10 C	100%	97%	94%	91%	89%
20 C	100%	96%	93%	90%	87%
25 C	100%	96%	92%	89%	85%
30 C	100%	95%	91%	88%	84%
40 C	100%	92%	87%	83%	78%

1 Lumen maintenance values at 40C are calculated per TM-21 based on LM-80 data and in-situ testing.

2 In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times the IESNA LM-80-08 total test duration for the device under testing.

3 In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times the IESNA LM-80-08 total test duration for the device under testing

PRODUCT DIMENSIONS

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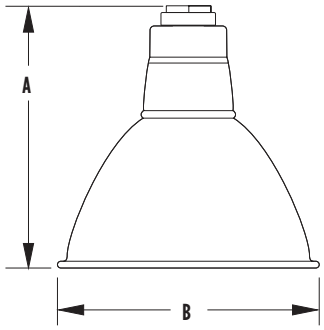
Prefix	Height (A)	Diameter (B)
BD100	7″	8″
BD200	9”	10”
BD300	11″	12″



Catalog #: _____ Project: _____

Prepared By: _____ Date: _____ Type: _____

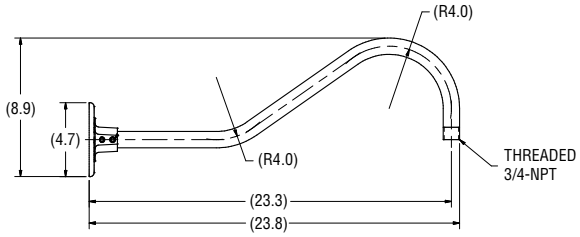
LSI Abolite Gooseneck and Wall Brackets

3/4” Single Reflector Gooseneck Wall Bracket. Features rigid conduit and cast wall plate which fits 4” octagonal box (by other). Brackets are finished in gloss white powder, additional colors are available.

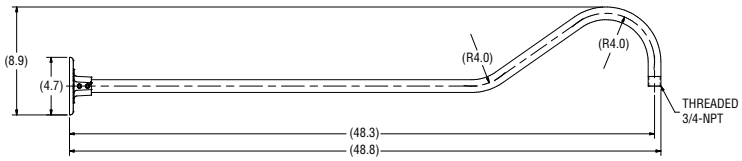
NOTE: Brackets feature 3/4” stems which slip fit into wall plate (wall end is unthreaded). Conduit may be cut down (in the field by other) to shorten bracket length. CA5 wall plate included with all goosenecks.

All dimensions displayed in inches.

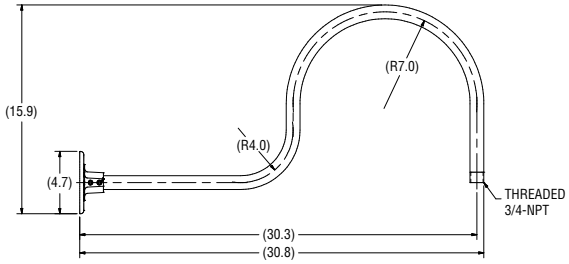
GB A 3 GWT



GB B 3 GWT

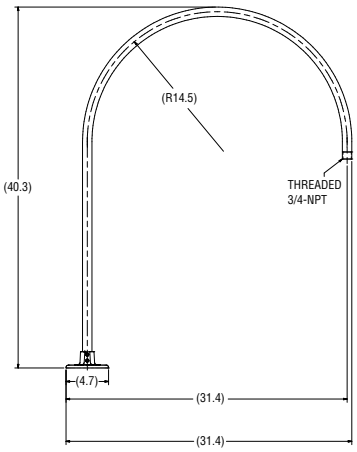


GB C 3 GWT

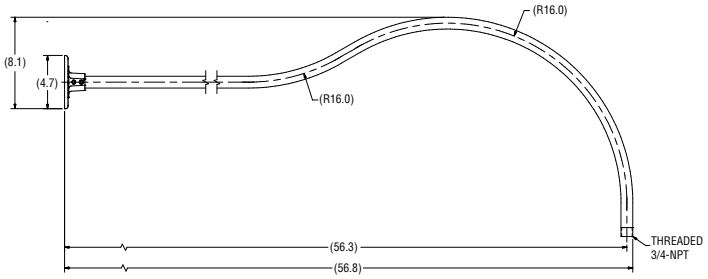


GB E 3 GWT

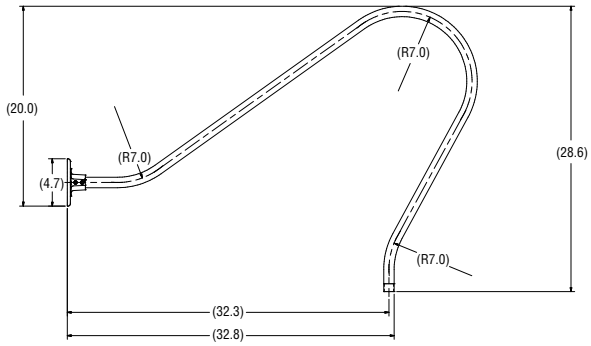
3/4” Single Reflector Gooseneck Wall Bracket. Features rigid conduit and cast wall plate which fits 4” octagonal box (by other). The bracket is designed to be mounted to a horizontal surface, but could also be mounted to a wall. The bracket features a gloss white powder finish, additional colors available.



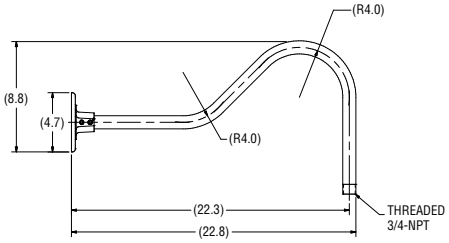
GB F 3 GWT



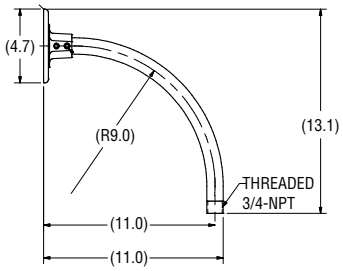
GB G 3 GWT



GB H 3 GWT



GB K 3 GWT



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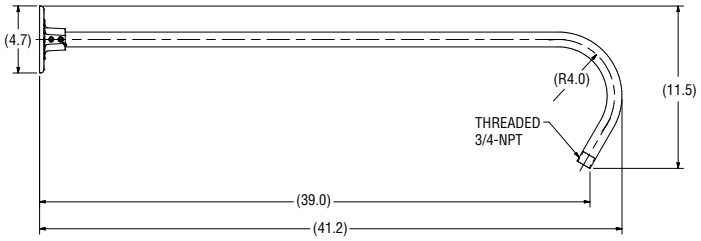
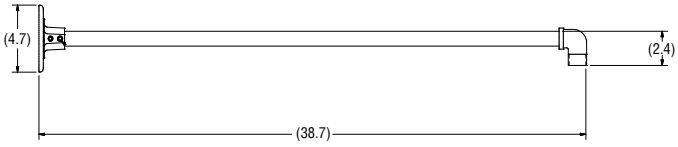
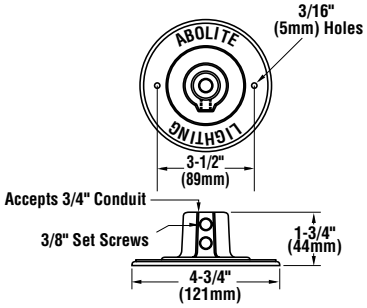


GB U 3 GWT



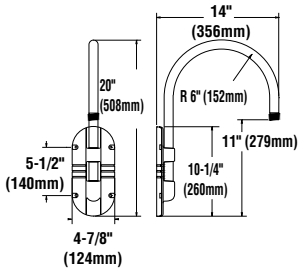
RECESSED CA-5

Gloss white powder finish (other colors available).
Mounts to recessed 4” octagon box (by others).

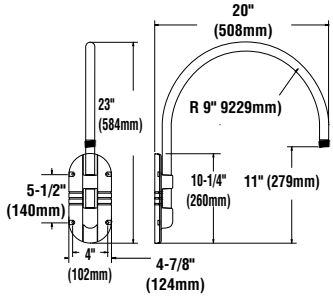


CWBM 1 GWT and CWBL 1 GWT

Contemporary Wall Bracket with gloss white powder finish, additional colors available.



CWBM 1 GWT



CWBL 1 GWT

CASA
EW27905

WALL

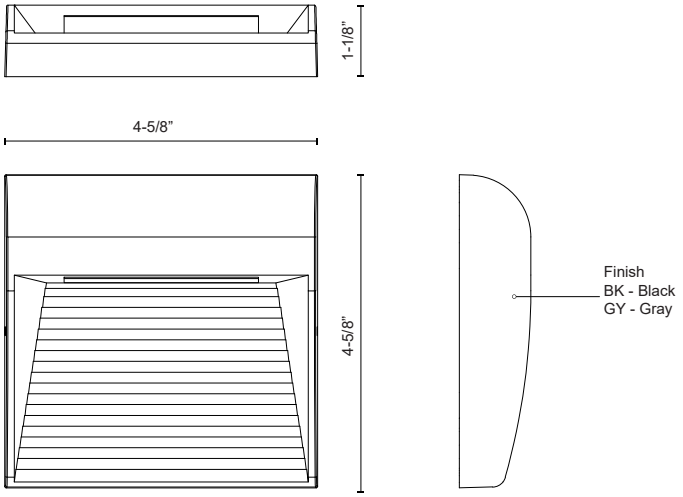
PROJECT

EW27905-GY
Gray

EW27905-BK
Black

DESCRIPTION

Newly re-designed Non-Climbable exterior wall-mounted fixtures. Light is directed downward from a recess, and the incline allows the glow to radiate gradually. Vanishingly thin and ideal for egress, courtesy, and grace lighting.



SPECIFICATION DETAILS

Fixture Dimensions	W4-5/8" x H4-5/8" x E1-1/8"
Height from center	2-1/2"
Light Source	AC LED Module
Wattage	11W
Total Lumens	850lm*
Delivered Lumens	BK-366lm; GY-414lm;
Voltage	120V
Color Temperature	3000K
CRI (Ra)	90CRI
Optional Color Temps	2700K - 5000K Available, Minimum Order Quantities Apply
LED Rated Life	50,000 hours
Dimming	100% - 10%, ELV Dimmer (Not Included)
Glass Details	Clear Glass
ADA Compliant	Yes
Location	IP65; Wet;
Illumination Direction	Down
Mounting Style	Wall Mount, Down Only
Material	Aluminum + Glass
Paint Finish	BK02; GY01;

* For custom options, consult factory for details.
* For warranty information, please visit www.kuzcolighting.com/warranty

KUZCO

CANADA: 19054 28TH AVENUE - SURREY, BC V3Z 6M3
USA: 3035 E. LONE MOUNTAIN ROAD - LAS VEGAS, NV 89081

WWW.KUZCOLIGHTING.COM

COMMENT

C ETL LISTED US
Intertek

PRIME

PRIME 4” LED ARCHITECTURAL CYLINDER

GENERAL INFORMATION

USE OF PRODUCT
PRIME Cylinder Series may be used in hospitality, commercial, retail, and residential applications. This product will reduce energy consumption, emits little heat, and reduces cooling loads for added costs savings. Approximately 75% in energy savings compared to incandescent light source. This product is for indoor use only.

LED ENGINE
LED engine available with CREE LEDs in 2700K, 3000K, 3500K, or 4000K in standard 93+ CRI. 2 Step MacAdam ellipse allows for color consistency between fixtures. LED mounted to aluminum heat sink for maximum life output and thermal management.

HOUSING
Rugged aluminum housing.

LED DRIVER
Durable dimmable driver provides high power factor with optimum thermal management to prevent damage caused by high temperature.

OPTICS
Field replaceable optical lens available in 15°, 24°, 30°, 35°, 40°, 50° and 70°. Easily achieve narrow spot to wide flood beam pattern. Option for frosted, honeycomb, or solite filter (2 Maximum).

MOUNTING
The PRIME Cylinder Series may be cable hung, stem mount, surface mount or wall mounted.

DIMMING
Available in 8 driver selections. (ID) Standard all-inclusive ELV, Triac, and 0-10V dimming driver called Intelligent Drive, 120-277V. (PEQ0) Lutron Hi-Lume Premier Ecosystem 0.1% w/soft on, fade to black dimming, 120-277V. (PEQ1) Lutron Hi-Lume Premier Ecosystem 1% w/soft on, fade to black dimming, (LDE1) Lutron Hi-Lume 1% Ecosystem with soft on, fade to black dimming, 120-277V. (L3DA) Hi-lume 1% EcoSystem/3-Wire L3D Driver (EEI) eldoLED Eco 1% Dim (0-10V), 120-277V. (EDIO) eldoLED Solo 0.1% Dim(0-10V), 120-277V. (EDID) eldoLED Solo 0.1% Dim(DALI), 120-277V.

LABELS / COMPLIANCE
- CSA Listed for US and Canada
- Damp rated
- 5 year limited warranty.

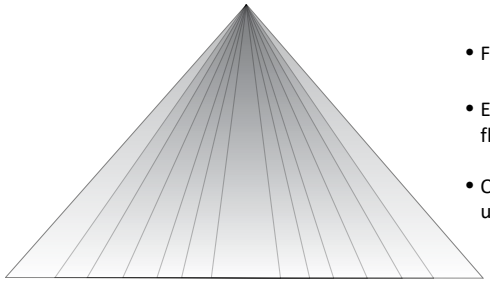
GENERAL PERFORMANCE CHART

*Detailed performance chart may be found on page 2

	6W	9W	12W	15W	20W	24W
Initial Lumens	955	1296	1618	2015	2422	2799
Delivered Lumens	650-829	891-1135	1129-1436	1404-1744	1706-2122	1986-2470

* Values are listed at 3000K, 90+ CRI with a white bevel & trim.
Delivered lumens range based on beam spread.
Performance may vary +/- 5%

BEAM SPREAD



Available optics: 15˚ 24˚ 30˚ 35˚ 40˚ 50˚ 70˚

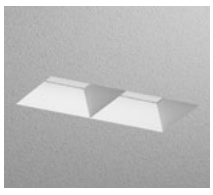
- Field replaceable TIR optics
- Easily achieve narrow spot to wide flood beam pattern
- Optional filters available upon request

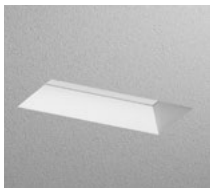
PRIME FAMILY OF PRODUCTS


Downlight

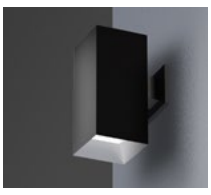

TechZone®


WoodWorks®


Multiple Dedicated Bevel


Multiple Open Bevel


Cylinder


Square Luminaire

PRIME

ORDERING INFORMATION

Series	Diameter	Shape	Length	Directional	Wattage	Dimming	Color Temperature
RPA	**4** - 5"	**CY** - Cylinder	**10** - 10"	**DL** - Down Light **UL** - Up Light	**6W** - 6 Watt **9W** - 9 Watt **12W** - 12 Watt **15W** - 15 Watt **20W** - 20 Watt **24W** - 24 Watt	**ID**[1] Standard all-inclusive ELV, Triac, and 0-10V dimming driver (Intelligent Drive) **PEQ0** Lutron Hi-Lume Premier Ecosystem 0.1% w/ soft on, fade to black dimming **LDE1** Lutron Hi-Lume 1% Ecosystem with soft on, fade to black dimming **LDE5** Lutron Hi-Lume 5% Ecosystem **L3DA** Hi-lume 1% EcoSystem/3-Wire L3D Driver **EEI**[2,3] eldoLED Eco 1% Dim (0-10V) **EDIO**[2,3] eldoLED Solo 0.1% Dim (0-10V) **EDID**[2,3] eldoLED Solo 0.1% Dim (DALI)	**27K** - 2700K **30K** - 3000K **35K** - 3500K **40K** - 4000K

Optical Lens	Filter	Bevel Finish	Cylinder Finish	Mounting	Option
15[4]- 15° **24**[4]- 24° **30** - 30° **35** - 35° **40** - 40° **50** - 50° **70** - 70°	**None** - Leave blank **F** - Frosted Filter **H** - Honey comb **S** - Solite filter	**W** - White **B** - Black **H** - Haze **S** - Specular Clear **WE** - Wheat **MTO** - Made to order	**BL** - Black **WH** - White **SL** - Silver **MTO** - Made to order	**PH** - Pendant **SC** - Single Cable **DC** - Double Cable **TC** - Triple Cable **SM** - Surface Mount **WM** - Wall Mount	**EM8W**[5] - Emergency Battery **LAW** - Lutron Athena Wireless Node (RF only version)

Notes

1. Intelligent Drive is the standard driver.
2. Must specify logarithmic or linear eldoLED diver.
3. Confirm dimming curve: linear or logarithmic.
4. Without standard frosted acrylic diffuser
5. Emergency battery only available in remote mount.

PERFORMANCE CHART

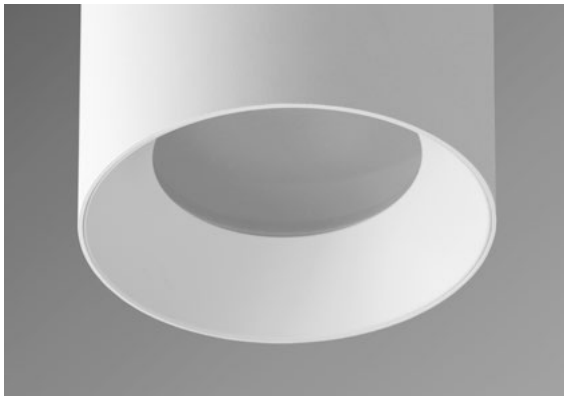
	Optics	[1]15°	[1]24°	30°	35°	40°	50°	70°
6W	Initial Lumens	955	955	955	955	955	955	955
	Delivered Lumens	803	829	748	771	785	713	650
9W	Initial Lumens	1296	1296	1296	1296	1296	1296	1296
	Delivered Lumens	1097	1135	1022	1055	1073	971	891
12W	Initial Lumens	1618	1618	1618	1618	1618	1618	1618
	Delivered Lumens	1387	1436	1285	1332	1347	1217	1129
15W	Initial Lumens	2015	2015	2015	2015	2015	2015	2015
	Delivered Lumens	1632	1744	1591	1644	1659	1481	1404
20W	Initial Lumens	2422	2422	2422	2422	2422	2422	2422
	Delivered Lumens	1976	2122	1933	2002	2017	1803	1706
24W	Initial Lumens	2799	2799	2799	2799	2799	2799	2799
	Delivered Lumens	2300	2470	2243	2333	2346	2101	1986

* Values are listed at 3000K, 90+ CRI with a white bevel & trim.

Notes

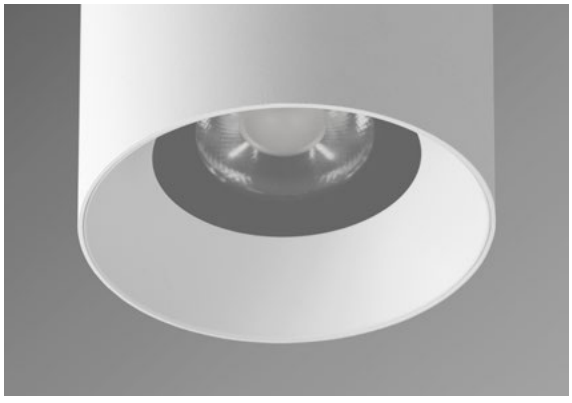
1. 15° and 24° spread without lens on trim

DIFFUSED LENS



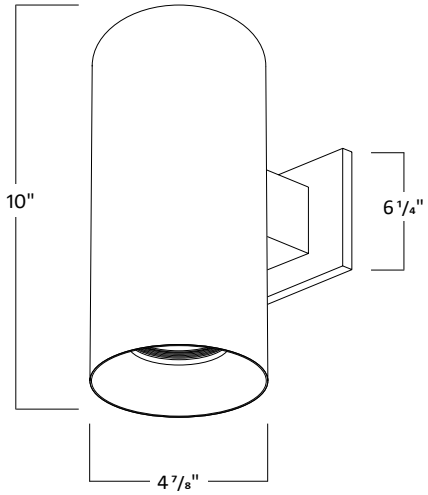
- Listed IES files are with diffused lens

OPTIONAL FIELD REMOVABLE LENS

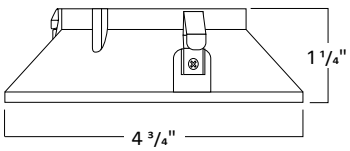


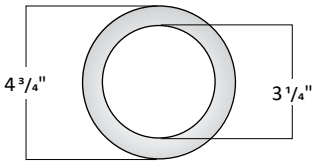
- Not suitable for wet locations
- Increase in lumens by approximately 7%

RPA4-CY-10 DIMENSIONS

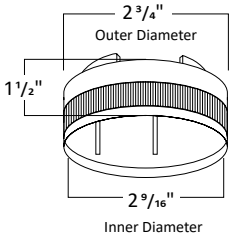


TRIM DIMENSIONS

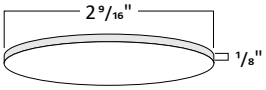




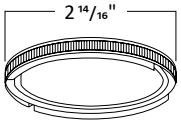
LED HOLDER AND FILTER DIMENSIONS



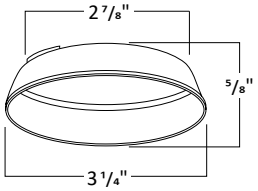
LED Holder (Body)



Filter

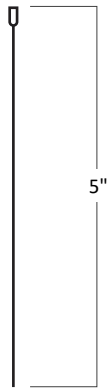


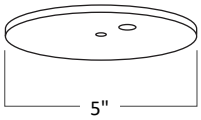
LED Holder (Body)



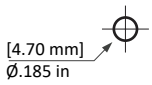
Light Enhancer

CABLE HUNG DIMENSIONS



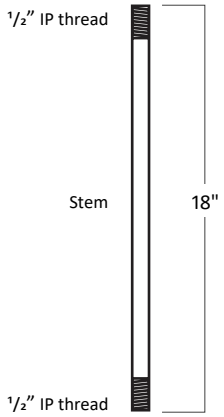


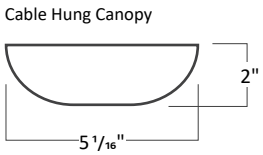
Cable Hung Canopy



3/64" Galvanized Cable Fuse Cut with Die Cast #1 Stop
Available in 24", 36", 50", 72", 100", 120", & 150" Lengths
7x7 Cable - MAX LOAD 270 lbs

STEM MOUNT DIMENSIONS



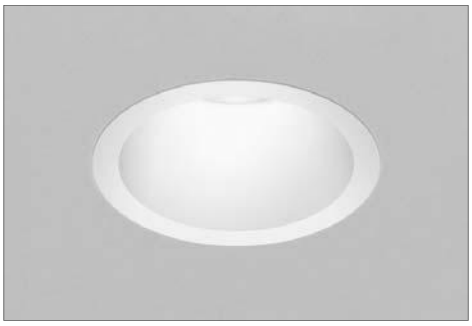


BeveLED® 2.2 Complete
4.5" Round Deep Regress Downlight - B4RC

USAI® Lighting

Universal and Field Convertible - Trim | Trimless | Millwork

Trimmed - B4RCF



Trimless - B4RCL

Millwork - B4RCM

usailighting.com/beveled

FEATURES

- Field Flexibility between trimmed, trimless and millwork
- Dry/damp/wet location rated for bathrooms and showers, including trimless and millwork
- 1% dimming standard + more dimming options
- Clear overspray protector for installation convenience
- Full family platform
- Iconic beveled look
- Doubler kit for repeatable two head fixture configuration installations
- Collar extender accessory options available for thick ceiling installations, up 3-5/8" thick

COMPANION FAMILY PRODUCTS

Downlight - B4RD
usailighting.com/B4RD

Adjustable - B4RA
usailighting.com/B4RA

Wall Wash - B4RW
usailighting.com/B4RW

DEEP REGRESS PERFORMANCE DATA

See Page 5 for details

	LED COLOR CHOICES									
	Classic White						Warm Glow Dimming		Color Select	
DELIVERED* PERFORMANCE:	**9W**	**12W**	**16W**	**24W**	**33W**	**36W**	**16W**	**32W**	**16W**	**32W**
Source Lumens:	1150	1300	1725	2400	3025	4150	1275	2150	1250	2075
Delivered Lumens:	725 - 850	825 - 975	1100 - 1300	1525 - 1800	1900 - 2250	2050 - 2975	625 - 950	1050 - 1600	775 - 850	1375 - 1525

*Based on 3000K, 80+ CRI.

THE COMPLETE BEVELED FAMILY PLATFORM

More Ceiling Applications

Sloped Ceiling

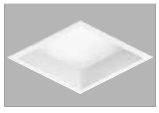
BeveLED Block

Cylinders

More Sizes and Shapes

BeveLED Micro

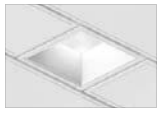
BeveLED Mini



BeveLED 5.0

Armstrong® Ceiling Solutions Compatible

Trimless Acoustical



Connect TechZone

BeveLED Connect

USAI LIGHTING COLLABORATORY
13 Crosby Street
New York, NY 10013
845-234-4090
showroom@usailighting.com

USAI LIGHTING HEADQUARTERS
1126 River Road
New Windsor, NY 12553
T: 845–565–8500
info@usailighting.com

BeveLED® 2.2 Complete
4.5" Round Deep Regress Downlight - B4RC with Integral Driver

USAI® Lighting

Specify fixture part number. (All boxes must be filled in to correctly order)

B4RC__

BeveLED Trim Style

F
Trimmed with Flange (use with all materials)

L
Trimless Spackle-in (use with sheetrock and plaster only) (15)

M
Millwork Knife-Edge (use with wood and stone) (15)

Wattage Options / LED Color Options / Beam Options

Classic White Light

Wattage Options	LED Color Options	Beam Options
09C3 9W LED	**27KS** 2700K, 80+ CRI	**25** 25° beam
12C3 12W LED	**27KH** 2700K, 90+ CRI	**40** 40° beam
16C3 16W LED	**30KS** 3000K, 80+ CRI	**70** 70° beam
24C3 24W LED	**30KH** 3000K, 90+ CRI	
33C3 33W LED	**35KS** 3500K, 80+ CRI	
36E1 36W LED	**35KH** 3500K, 90+ CRI	
	40KS 4000K, 80+ CRI	
	40KH 4000K, 90+ CRI	

Warm Glow Dimming

Wattage Options	LED Color Options	Beam Options
16WG2 16W LED	**2722KS** 2700K-2200K, 80+ CRI	**25** 25° beam
32WG2 32W LED	**2722KH** 2700K-2200K, 90+ CRI	**40** 40° beam
	3022KS 3000K-2200K, 80+ CRI	**65** 65° beam
	3022KH 3000K-2200K, 90+ CRI	

Color Select Tunable White

Wattage Options	LED Color Options	Beam Options
16CS1 16W LED	**6022KS** 6000K-2200K, Tunable White Light 80+ CRI	**30** 30° beam
32CS1 32W LED		**45** 45° beam
		70 70° beam

Note: Color Select option requires additional 0-10V dimming wires; see wiring diagrams for details. For more Color Select tunable white dimming and wiring options, visit our Color Select Digital spec sheets at: usailighting.com/b4rc-csd

Lens Options

S
Solite (provided standard)

SF
Solite Frosted

BF
Borosilicate Frosted

AS61
Linear Spread

CTS25
Solite lens with warm filter coating, 1/4 CTO Reduces output by ~15% and shifts CCT down by ~250K

HX
Hexcell Louver Trim Lens (15)

Bevel Trim Finish Options / *Flange/ Millwork Collar Finish

Bevel Trim Finish Options	*Flange/ Millwork Collar Finish
WH White	**WH** White
SC Conduit Silver	**SC** Conduit Silver
GR Grey	**GR** Grey
BL Black	**BL** Black
BZ Bronze	**BZ** Bronze
PR Primer Finish	**PR** Primer Finish
QW Antimicrobial Paint, White	**QW** Antimicrobial Paint, White
AC Clear Matte Anodized (15)	**WH** White **BL** Black **SC** Conduit Silver **BZ** Bronze
AB Piano Gloss Black (15)	**WH** White **GR** Grey **BL** Black **BZ** Bronze
RAL Custom Color Specify RAL #	**RAL** Custom Color Specify RAL #

*Leave blank for Trimless

Natatorium Corrosion Protection (optional)

NT
Natatorium triple-coat Corrosion resistant (available with "F" flanged trims and painted finishes only)

* Leave blank for non Natatorium trims

Housing Options

NCSM
New Construction Narrow Width

NC
New Construction

NCCP
Chicago Plenum (8)

NCIC
Insulation Contact Rated / Airtight (1, 8)

* See housing drawings for maximum ceiling thickness and collar extender accessories

Collar Extender Accessory for Thick Ceilings*

(leave blank for standard collar)

36
Extended collar accepts up to 3-5/8" thick ceilings maximum (NCSM housing only)

EXT12
Collar Extender accepts up to 1.5" thick ceilings maximum (16)

EXT16
Collar Extender accepts up to 2" thick ceilings maximum (16)

* See Details and separate ordering table on page 8

Voltage Options *Select one*

UNV
120V-277V

120V

Dimming Driver Options

For use with Universal Voltage 120V - 277V

No Additional Charge

D6E
EldoLED 0-10V, 1% (provided standard)

D6F
EldoLED 0-10V, 1%

D4H
Lutron H ECO, 1% Fade (2, 3, 4)

D4C
Lutron Ecosystem, 1% (9)

D6A
EldoLED 0-10V, 0.1%

D6B
EldoLED 0-10V, 0.1%

D7A
EldoLED DALI2, 0.1% (3)

D7B
EldoLED DALI2, 0.1% (3)

D7E
EldoLED DALI2, 1% (3)

D7F
EldoLED DALI2, 1% (3)

D28
EldoLED DMX, 0.1% (3)

D30
Lutron Athena wireless enabled with RF Node, 1% (2, 3, 6)

For use with 120V only

D29
ERP PHB Trimode (0-10V and Phase 2-wire), 1% (9)

D19
Phase 2-wire, 1% (1, 2, 3, 4, 5)

Emergency Battery (Optional)

EM5
Emergency Battery (7, 10)

EM5W
EM5W Emergency Battery with Remote dry/ damp/wet rated test switch (7, 12)

EM7C
Title 20 Compliant Emergency Battery with remote dry/ damp test switch (7, 11)

EM7CW
Title 20 Compliant Emergency Battery with remote dry/ damp/wet test switch (7, 11)

EMSH
Emergency Battery Shunt (6, 10, 13, 14)

Mounting Accessories (Optional*)

CB27
27" C-Channel Bars

CB32
32" C-Channel Bars

CB52
52" C-Channel Bars

B4-NCSM-DBX
Doubler Kit for NCSM housing, 7"/8"/9" on-center spacing

* Residential grade nailer bars provided standard

Notes:
1 Not available with 36E1LED
2 Not available for Warm Glow
3 Not available for Color Select
4 Not available with 9W
5 Not available with 33W
6 Not available with IC or CP rated housings
7 NCSM housing requires above ceiling access
8 EM options not available.
9 Not available with Classic White. Warm Glow and Color Select only.
10 NC housing can be serviced from below the ceiling
11 NC housing requires above ceiling access
12 Not available with NC housing. Test switch is integral to fixture and is already dry/damp/wet rated. Use EM5
13 For use with D30 driver option only
14 NCSM can be serviced from below the ceiling
15 Not available with natatorium finish
16 Not available with NCSM housing

TRIM FINISH OPTIONS

White | Grey | Black | Bronze | Clear Matte Anodized with White Flange | Custom RAL (example)

Custom colors and primer finish also available

USAI LIGHTING COLLABORATORY
13 Crosby Street
New York, NY 10013
845-234-4090
showroom@usailighting.com

USAI LIGHTING HEADQUARTERS
1126 River Road
New Windsor, NY 12553
T: 845–565–8500
info@usailighting.com

Revised 07/23/2025

SINGLE ADJUSTABLE FLOOD LIGHT

Endurance™ - WP-LED514

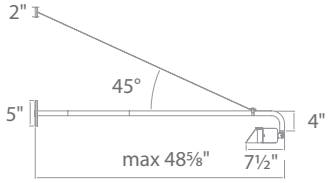
WAC LIGHTING
Responsible Lighting®

Fixture Type:

Catalog Number:

Project:

Location:



PRODUCT DESCRIPTION

Die cast aluminum factory sealed luminaire with patent pending design for a water and dust proof IP66 rated outdoor.

FEATURES

- Rotate to continuously adjust beam angles indexed at 15°, 25°, 40°, 60°
- IP66 and ETL & cETL Wet Location Listed
- Factory-Sealed LED Light Engine
- Die-Cast Aluminum Construction
- 120V Direct Wire - No Driver Needed
- Safety cable and canopy included
- Comes with extension rod kit to extend up to 44" total
- Detachable Shroud
- Safety cable recommended for extensions over 36"
- One 6", one 12", one 24" field interchangable rods included

SPECIFICATIONS

Construction: Die-cast aluminum

Power: Line Voltage input (120V)

CRI: 85

Dimming: 100% - 10% with Electronic Low Voltage (ELV) dimmer

Finish: Architectural Bronze, Black, Graphite and White

Operating Temp: -40˚F to 122˚F (-40˚C to 50˚C)

Standards: IP66, Wet Location, ETL & cETL Listed

Rated Life: 50,000 hours

ORDER NUMBER

	Power	*Comparable*	*Beam*	*Delivered Lumens*	*CBCP*	*Color Temp*		*Finish*	
WP-LED514 *Single*	*15W*	*150W PAR38*	*15˚* *60˚*	*600* *985*	*4145* *875*	**30**	*3000K*	**ABZ**	*Architectural Bronze*
								ABK	*Architectural Black*
								AGH	*Architectural Graphite*
			15˚ *60˚*	*695* *1140*	*4800* *1015*	**40**	*4000K*	**AWT**	*Architectural White*

Example: **WP-LED514-40-AGH**

WAC Lighting
www.waclighting.com
Phone (800) 526.2588 • Fax (800) 526.2585

Headquarters/Eastern Distribution Center
44 Harbor Park Drive • Port Washington, NY 11050
Phone (516) 515.5000 • Fax (516) 515.5050

Western Distribution Center
1750 Archibald Avenue • Ontario, CA 91760
Phone (800) 526.2588 • Fax (800) 526.2585

Catalog # : _____ Project : _____ Type : _____

Prepared By : _____ Date : _____

V-Locity Small (VALS)

Outdoor LED Area Light

OVERVIEW	
Lumen Package	6,000 - 27,000
Wattage Range	36 - 178
Efficacy Range (LPW)	142 - 171
Weight lbs(kg)	20 (9.1)
Control Options	IMSBT, ALB, ALS, 7-Pin, PCI

QUICK LINKS

Ordering Guide | Performance | Photometrics | Dimensions

FEATURES & SPECIFICATIONS

Construction

- Rugged die-cast aluminum housing contains factory prewired driver and optical units. Cast aluminum wiring access door located underneath.
- Self-contained optic, board and heat sink assembly can be rotated or replaced in the field.
- Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without cracking or peeling. Other standard LSI finishes available. Consult factory.
- Shipping weight: TBD lbs in carton.

Optical System

- State-of-the-Art acrylic optics delivers industry leading optical control with an integrated gasket to provide IP66 rated seal.
- Proprietary refractor optics provide exceptional coverage and uniformity in distribution types 2, 3M, 3W, 4M, 4W, 4F, FTM, 5QN, 5QM, 5Q, 5QW, AM, WF and LC/RC.
- Available in 5000K, 4000K, 3500K, 3000K and 2700K color temperatures per ANSI C78.377 as well as phosphor converted amber.
- Minimum CRI of 80 (optional 70 CRI for 5000K and 4000K).
- Factory or field installable integral shielding available for enhanced spill light control.
- Zero Uplight (excludes adjustable arms).

Electrical

- High-performance driver features over-voltage, under voltage, short-circuit and over temperature protection.
- 0-10 volt dimming (10% - 100%) standard, must specify EXT option for dimming leads to be extended to fixture exterior.
- Standard Universal Voltage (120-277 VAC) Input 50/60 Hz or optional High Voltage (347-480 VAC).
- L70 Calculated Life: >60k Hours
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F).
- Power factor: >.90
- Input power stays constant over life.
- Field replaceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).
- High-efficacy LEDs mounted to metal-core circuit board to maximize heat dissipation
- Driver is fully encased in potting material for moisture resistance and complies with FCC standards. Driver and key electronic components can easily be accessed.

Controls

- Optional integral passive infrared Bluetooth™ motion and photocell sensor. Fixtures operate independently and can be commissioned via iOS or Android configuration app.
- LSI's AirLink™ wireless control system options reduce energy and maintenance costs while optimizing light quality 24/7.

Installation

- REDiMount pole mount arm allows for a true one person installation.
- Side arm pole mount designed to mount to square or round poles.
- Pole mount arms can accommodate pole drill patterns from 2.4 to 5" on center and utilize LSI's reduced B3 or traditional B5 drill patterns.
- Additional mounting options are available including a mast arm or adjustable slip fitter that allow for luminaire attachment to a 2 3/8" tenon or mast arm.
- Adjustable arms allow for 65° of tilt (-5°below horizontal to +60° above horizontal) in 5° increments.

Warranty

- LSI luminaires carry a 5-year limited warranty. Refer to https://www.lsicorp.com/resources/terms-conditions-warranty/ for more information.

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- DarkSky approved with 3000K or warmer color temperature selection (side arm pole and mast arm mounting only).
- Title 24 Compliant; see local ordinance for qualification information.
- Suitable for wet locations.
- IP66 rated Luminaire per IEC 60598-1.
- 3G rated for ANSI C136.31 high vibration applications are qualified.

V-Locity Small (VALS) Outdoor LED Area Light

Type : _____

Have questions? Call us at (800) 436-7800

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: VALS 18L 4W UNV 40K8 BLK SA ALBMR2LR IS

Prefix	Lumen Package	Distribution	Orientation[2]	Voltage	Color Temp /Rendering	Finish
VALS - V-Locity Area Light Small	**6L** - 6,000 lms, 36W **9L** - 9,000 lms, 54W **12L** - 12,000 lms, 74W **15L** - 15,000 lms, 91W **18L** - 18,000 lms, 111W **21L** - 21,000 lms, 130W **24L** - 24,000 lms, 155W **27L** - 27,000 lms, 178W Custom Lumen Packages[1]	**2** - Type 2 **3M** - Type 3 Medium **3W** - Type 3 Wide **4M**- Type 4 Medium **4F** - Type 4 Forward **4W** - Type 4 Wide **FTM** - Forward Throw Medium **5QN** - Type 5 Square Narrow **5QM** - Type 5 Square Medium **5Q** - Type 5 Square **5QW** - Type 5 Square Wide **AM**- Automotive Merchandise **WF** - 6x6 Wide Flood **LC** - Left Corner **RC** - Right Corner	**(Blank)** - Standard **L**- Optics rotated left 90° **R** - Optics rotated right 90°	**UNV** - Universal Voltage (120-277V) **HV** - High Voltage (347-480V)	**50K7**- 5000 CCT - 70 CRI **50K8**- 5000 CCT - 80 CRI **40K7** - 4000 CCT - 70 CRI **40K8**- 4000 CCT - 80 CRI **35K8**- 3500 CCT - 80 CRI **30K8** - 3000 CCT - 80 CRI **27K8** - 2700 CCT - 80 CRI **AMB** - Phosphor Converted Amber	**BLK -** Black **BRZ -** Dark Bronze **GMG -** Gun Metal Gray **GPT -** Graphite **MSV -** Metallic Silver **PLP -** Platinum Plus **SVG -** Satin Verde Green **WHT -** White

Mounting	Controls (Choose One)		Options
SA - Universal Side Arm Pole Mount **SF** - Adjustable Slip Fitter **UA**- Universal Adjustable Pole Mount Arm **MA** - Mast Arm	**(Blank)** - None **Wireless Controls System** **ALSC** - AirLink Synapse Control System **ALSCS2** - AirLink Synapse Control System with 12-20' MH Motion Sensor **ALSCS4 -** AirLink Synapse Control System with 20-40' MH Motion Sensor **ALBMR1LR** - AirLink Blue Long Range Wireless Multi-Range Sensor Controller (8-15' MH)[4] **ALBMR2LR** - AirLink Blue Long Range Wireless Multi-Range Sensor Controller (16-40' MH)[4]	**Stand-Alone Controls** **EXT** - 0-10v Dimming leads extended to housing exterior **CR7P** - 7 Pin Control Receptacle ANSI C136.41[3] **IMSBTL1** - Integral Bluetooth™ Motion and Photocell Sensor (8-24' MH)[4] **IMSBTL2** - Integral Bluetooth™ Motion and Photocell Sensor (25-40' MH)[4] **PCIU** - 120-277 Button Photocell **PCI347** - 347V Button Photocell	**IS -** Integral Shield[2] **TE** - Tooless Entry (Mast Arm Only)

Need more information?
Click here for our glossary

Have additional questions?
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Accessory Ordering Information[5]

CONTROLS ACCESSORIES	
Description	**Order Number**
Twist Lock Photocell (120V) for use with CR7P	**122514**
Twist Lock Photocell (208-277) for use with CR7P	**122515**
Twist Lock Photocell (347V) for use with CR7P	**122516**
Twist Lock Photocell (480V) for use with CR7P	**1225180**
AirLink 5 Pin Twist Lock Controller	**661409**
AirLink 7 Pin Twist Lock Controller	**661410**
Shorting Cap for use with CR7P	**149328**

FUSING OPTIONS[7]	
Description	**Order Number**
Single Fusing (120V)	See Fusing Accessory Guide
Single Fusing (277V)	
Double Fusing (208V, 240V)	
Double Fusing (480V)	
Double Fusing (347V)	

EXTERNAL SHIELDING OPTIONS	
Description	**Order Number**
1.5" External Shield	See Shielding Guide
3" External Shield	

1. Custom lumen and wattage packages available, consult factory. Values are within industry standard tolerances but not DLC listed.
2. Not available on Type 5 or wide flood distributions.
3. Control device or shorting cap must be ordered separately. See Accessory Ordering Information.
4. Motion sensors are field configurable via the LSI app that can be downloaded from your smartphone's native app store.
5. Accessories are shipped separately and field installed.
6. "CLR" denotes finish. See Finish options.
7. Fusing must be located in hand hole of pole. See Fusing Accessory Guide for compatability.

V-Locity Small (VALS) Outdoor LED Area Light

Type : _____

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ACCESSORIES

MOUNTING ACCESSORIES

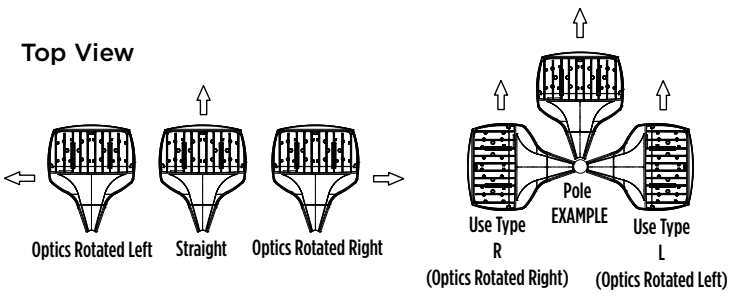
Side Arm	**Bullhorn Bracket** Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and allows for mounting up to 4 adjustable slip fitter mount luminaires **Part Number: BKS PTB 2 CLR / BKS PTB 12 CLR (2 Luminaires)** **Part Number: BKS PTB 3-30 CLR / BKS PTB 13-30 CLR (3 Luminaires)** **Part Number: BKS PTB 4 CLR / BKS PTB 14 CLR (4 Luminaires)**	
	Flood Wall Mount Bracket Mounts onto vertical wall surface (hardware/anchors not included) **Part Number: BKS FMW 5 CLR (5" Straight Version)** **Part Number: BKS FMW 18 CLR (18" Curved Version)**	
	Bolt on Side Tenon Mount Bolt on Side Tenon Mount **Part Number: BKSFB0 5 CLR (5" Straight Version)** **Part Number: BKSFB0 18 CLR (18" Curved Version)** **Part Number: BKSFB0 30 CLR (30" Dual Tenon Version)**	
Tenon / Slipfitter	**Square Tenon Top** Allows to seamlessly integrate LSI luminaires to open top 4", 5" or 6" square poles with 11 ga. Or 7 ga. wall thickness **Part Number: BKA ISF10 _SQ CLR**	
	Square Tenon Top Mounts onto a 2" (51mm) IP, 2.375" (60mm) O.D. tenon and allows for mounting up to 4 luminaires **Part Number: BKA XNM ***	
	Square Internal Slipfitter Mounts inside 4" or 5" square pole and allows for mounting up to 4 lumianires **Part Number: BKA X_ISF * CLR**	
Wall Mount/ Wood Pole	**Wall Mount Bracket** Mounts onto vertical wall surface (hardware/anchors not included) **Part Number: BKS XB0 WM CLR**	
	Wood Pole Bracket Mounts onto wooden poles (6" minimum OD, hardware/anchors not inlcuded) **Part Number: BKS XB0 WP CLR**	

SHIELDING, POLES & MISC. ACCESSORIES

Shielding	**Integral Shield for Asymmetric Distributions** Field Install Integral shield provides maximum backlight control by shiedling each individual row of LEDS with minimal impact on Streett/front side distribution **Part Number: TBD**	
	Integral Shield for Left and Right Corner Distributions Field install integral shield provides cutoff from two sides for maximum spill light control when utilizing LC or RC corner distributions **Part Number: TBD**	
	External Shield External shield blocks view of light source from anyside of luminaire, additional shielding configurations available **Part Number: TBD (1.5") / TBD (3")**	
Poles	**Square Poles** 14 - 39' steel and aluminum poles in 4", 5" and 6" sizes for retrofit and new construction **Part Number: 4SQ/5SQ/6SQ**	
	Round Poles 10 - 30' steel and aluminum poles in 4" and 5" sizes for retrofit and new construction **Part Number: 4RP/5RP**	
	Tapered Poles 20' - 39' steel and aluminum poles for retrofit and new construction **Part Number: RTP**	
Misc.	**Bird Spikes** 10' linear bird spike (3' recommended per luminaire) silcone adhesive (covers approximately 25' linear fee of bird spike) and application tool **Spike Part Number: 751631** **Adhesive Part Number: 751632** **Caulk Gun Part Number: 751636**	

1 Replace CLR with paint finish description
2 Repleace XX with SQ for square pole or RD for round pole (≥3" OD)
3 Replace * with S (Single), D180 (Double @180°), D90 (Double @90°), T90 (Triple), Q90 (Quad)
4 Replace _ with 4 (4" square pole) or 5 (5" square pole)

OPTICS ROTATION

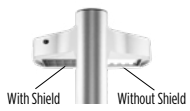


ACCESSORIES/OPTIONS

Integral Shield (IS)

Integral Shield (IS) available for improved backlight control without sacrificing Streett side performance. LSI's Integral Shield (IS) option delivers backlight control that significantly reduces spill light behind the pole for applications with pole locations close to adjacent properties. The design maximizes forward reflected light while reducing glare, maintaining the optical distribution selected, and most importantly eliminating light trespass. Shields rotate with the optical distribution.

Integral Shield (IS)



Luminaire Shown with AirLink Blue Sensor Option

7 Pin Photoelectric Control

7-pin ANSI C136.41-2013 control receptacle option available for twist lock photocontrols or wireless control modules. Control accessories sold separately. Dimming leads from the receptacle will be connected to the driver dimming leads (Consult factory for alternate wiring).

Luminaire Shown with CR7P

V-Locity Small (VALS) Outdoor LED Area Light

Type : _____

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PHOTOMETRICS

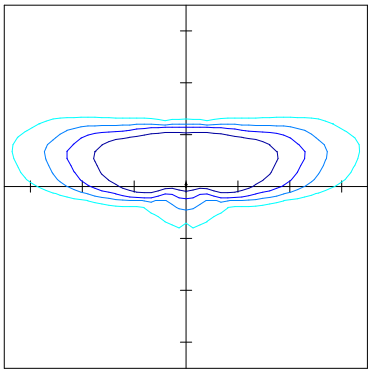
Back to Quick Links

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

See the individual product page on https://www.lsicorp.com/ for detailed photometric data.

VALS 18L 2 40K8

V-LOCITY Area Small, 18,000lm, Type 2 Distribution



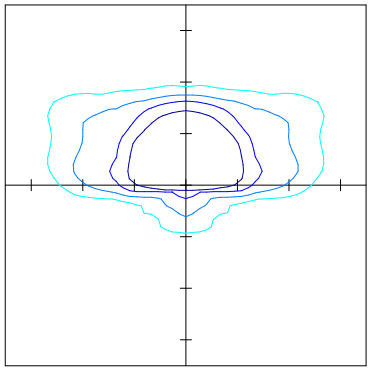
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	II Medium
BUG Rating	B2-U0-G4
Street Side Lumen %	88.9%
House Side Lumen %	11.1%
Uplight %	0.0%

VALS 18L 3M 40K8

V-LOCITY Area Small, 18,000lm, Type 3 Medium Distribution



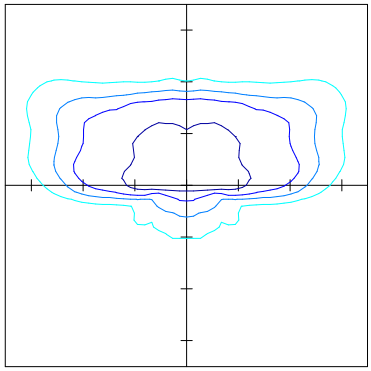
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	III Very Short
BUG Rating	B2-U0-G3
Street Side Lumen %	90.1%
House Side Lumen %	9.9%
Uplight %	0.0%

VALS 18L 3W 40K8

V-LOCITY Area Small, 18,000lm, Type 3 Wide Distribution



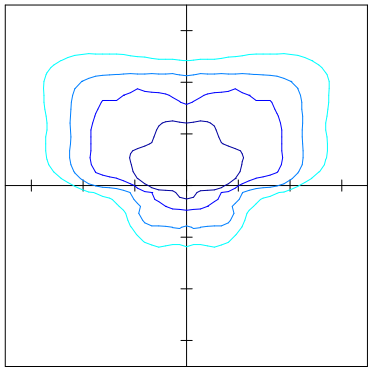
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	IV Medium
BUG Rating	B2-U0-G4
Street Side Lumen %	86.1%
House Side Lumen %	13.9%
Uplight %	0.0%

VALS 18L 4W 40K8

V-LOCITY Area Small, 18,000lm, Type 4 Wide Distribution



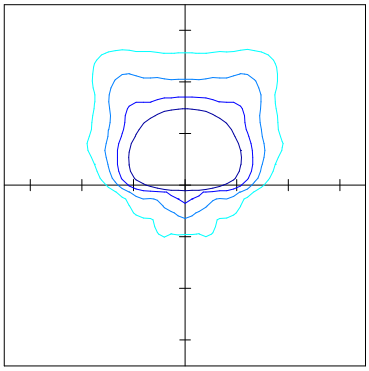
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	IV Medium
BUG Rating	B2-U0-G5
Street Side Lumen %	86.3%
House Side Lumen %	13.7%
Uplight %	0.0%

VALS 18L 4M 40K8

V-LOCITY Area Small, 18,000lm, Type 4 Medium Distribution



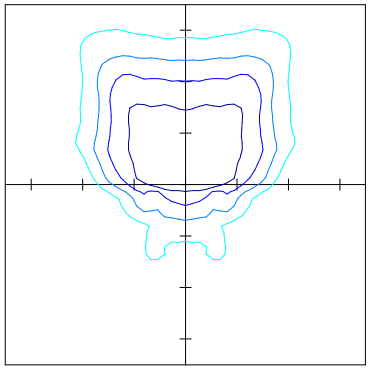
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	IV Very Short
BUG Rating	B1-U0-G3
Street Side Lumen %	91.0%
House Side Lumen %	9.0%
Uplight %	0.0%

VALS 18L 4F 40K8

V-LOCITY Area Small, 18,000lm, Type 4 Forward Distribution



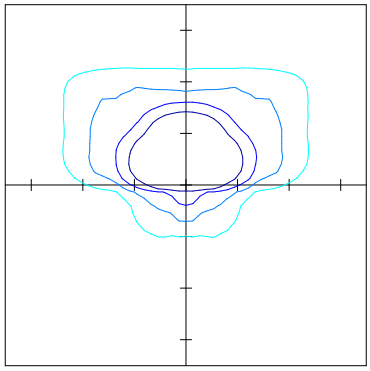
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	IV Short
BUG Rating	B2-U0-G4
Street Side Lumen %	87.9%
House Side Lumen %	12.1%
Uplight %	0.0%

VALS 18L FTM 40K8

V-LOCITY Area Small, 18,000lm, Forward Throw Medium Distribution



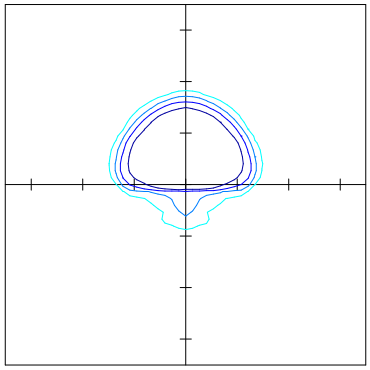
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	III Very Short
BUG Rating	B1-U0-G2
Street Side Lumen %	90.2%
House Side Lumen %	9.8%
Uplight %	0.0%

VALS 18L AM 40K8

V-LOCITY Area Small, 18,000lm, Automotive Merchandise Distribution



20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	III Very Short
BUG Rating	B1-U0-G2
Street Side Lumen %	94.1%
House Side Lumen %	5.9%
Uplight %	0.0%

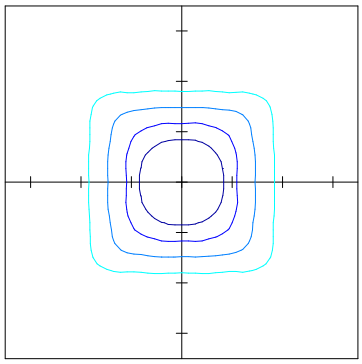
PHOTOMETRICS (CONTINUED)

Luminaire photometry has been conducted by a NVLAP accredited testing laboratory in accordance with IESNA LM-79-08. As specified by IESNA LM-79-08 the entire luminaire is tested as the source resulting in a luminaire efficiency of 100%.

See the individual product page on https://www.lsicorp.com/ for detailed photometric data.

VALS 18L 5QN 40K8

V-LOCITY Area Small, 18,000lm, Type 5 Square Narrow Distribution



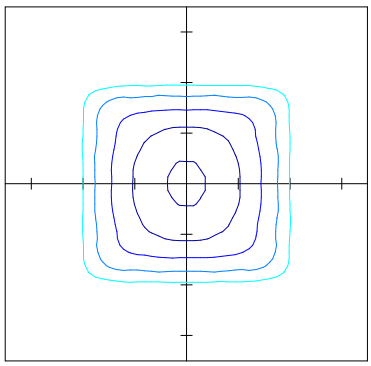
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	VS Very Short
BUG Rating	B3-U0-G2
0 - 60° Zonal Lumens	73.8%
60 - 90° Zonal Lumens	26.2%
Uplight %	0.0%

VALS 18L 5QM 40K8

V-LOCITY Area Small, 18,000lm, Type 5 Square Medium Distribution



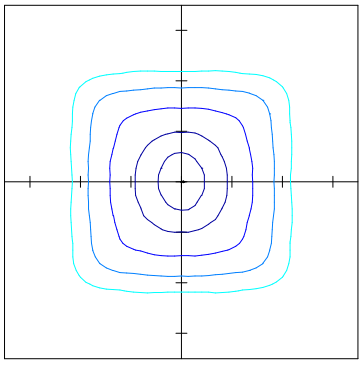
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	VS Short
BUG Rating	B4-U0-G2
0 - 60° Zonal Lumens	51.0%
60 - 90° Zonal Lumens	49.0%
Uplight %	0.0%

VALS 18L 5Q 40K8

V-LOCITY Area Small, 18,000lm, Type 5 Square Distribution



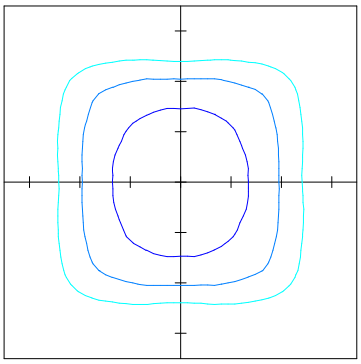
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	VS Medium
BUG Rating	B5-U0-G3
0 - 60° Zonal Lumens	41.8%
60 - 90° Zonal Lumens	58.2%
Uplight %	0.0%

VALS 18L 5QW 40K8

V-LOCITY Area Small, 18,000lm, Type 5 Square Wide Distribution



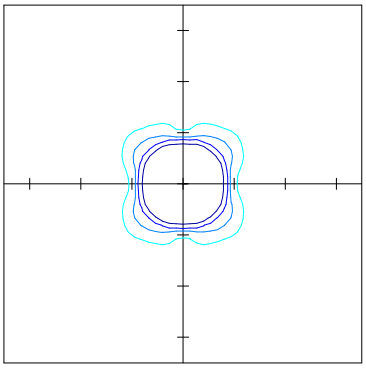
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	VS Medium
BUG Rating	B5-U0-G3
0 - 60° Zonal Lumens	33.7%
60 - 90° Zonal Lumens	66.3%
Uplight %	0.0%

VALS 18L WF 40K8

V-LOCITY Area Small, 18,000lm, Wide Flood Distribution



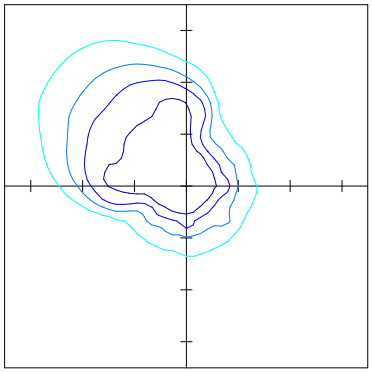
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

NEMA Type	6x6
Max Candela	9,352
Max Candela Angle	-19.5H x -29V
Beam Angle	80.7 x 90.0°
Field Angle	109.9 x 117.7°

VALS 18L LC 40K8

V-LOCITY Area Small, 18,000lm, Left Corner Distribution



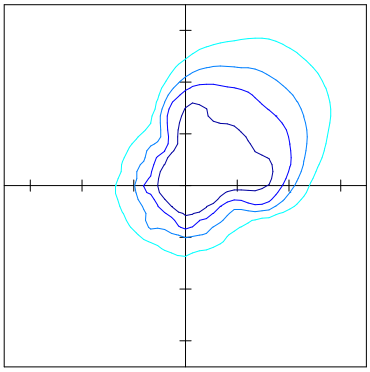
20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	N/A
BUG Rating	B3-U0-G4
Street Side Lumen %	74.3%
House Side Lumen %	25.7%
Uplight %	0.0%

VALS 18L RC 40K8

V-LOCITY Area Small, 18,000lm, Right Corner Distribution



20' Mounting Height / 30' Grid Spacing

2 FC 1 FC 0.5 FC 0.2 FC

IES Type	N/A
BUG Rating	B3-U0-G4
Street Side Lumen %	74.3%
House Side Lumen %	25.7%
Uplight %	0.0%

PRODUCT DIMENSIONS

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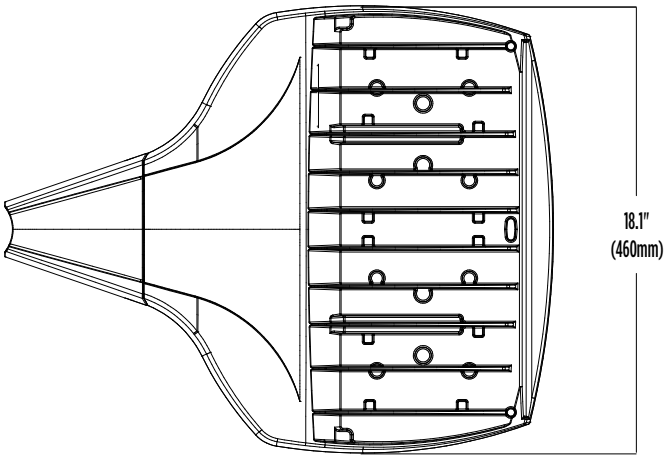


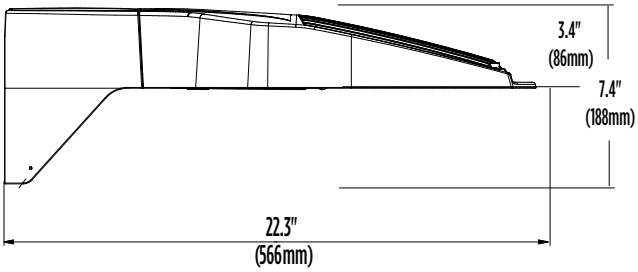
Luminaire EPA Chart - SA Side Arm		
Tilt Degree		0°
	Single	0.7
	D180°	1.3
	D90°	1.0
	T90°	1.4
	TN120°	1.5
	Q90°	1.4

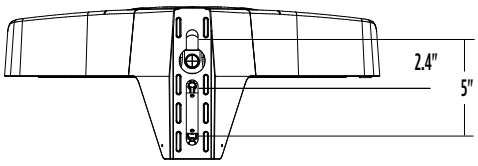
Luminaire EPA Chart - UA Universal Adjustable Arm						
Tilt Degree		0°	15°	30°	45°	60°
	Single	0.8	0.8	1.3	1.8	2.1
	D180°	1.5	1.9	2.5	3.2	3.8
	D90°	1.5	1.9	2.5	3.2	3.8
	T90°	1.8	2.1	2.7	3.2	3.8
	TN120°	1.8	2.3	3.4	4.3	5.0
	Q90°	1.8	2.1	2.7	3.2	3.8

Luminaire EPA Chart - MA Mast Arm		
Tilt Degree		0°
	Single	0.5

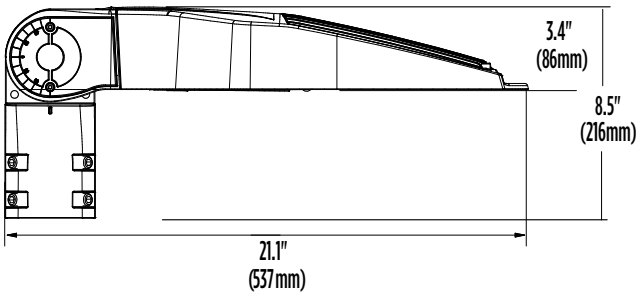
Luminaire EPA Chart - SF Adjustable Slip Fitter						
Tilt Degree		0°	15°	30°	45°	60°
	Single	0.7	1.3	1.4	1.8	2.2

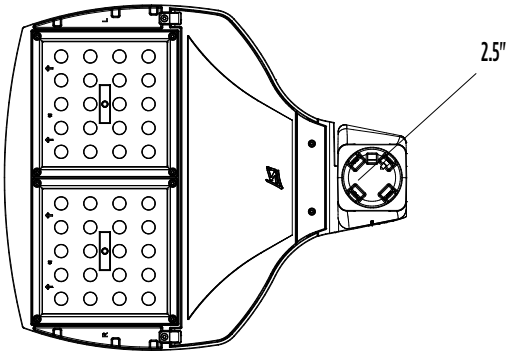
SA Universal Side Arm Mount



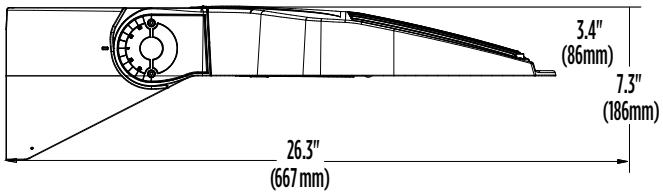


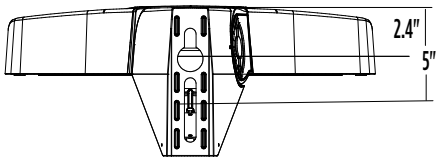
SF Adjustable Slipfitter



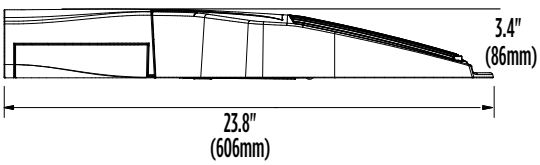


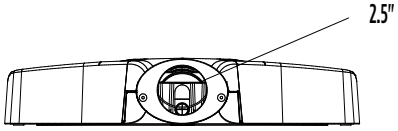
UA Universal Adjustable Arm





MA Mast Arm





CONTROLS

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Integral Bluetooth™ Motion and Photocell Sensor (IMSBTxL)

Slim low profile sensor provides multi-level control based on motion and/or daylight. Sensor controls 0-10 VDC LED drivers and is IP66 rated for cold and wet locations (-40°F to 167°F). Two unique PIR lenses are available and used based on fixture mounting height. All control parameters are adjustable via an iOS or Android App capable of storing and transmitting sensor profiles.

Click here to learn more details about IMSBT

LEVITON App | Apple | Android

AirLink Blue (ALBMRxLR, ALBCSx)

Wireless Bluetooth Mesh Outdoor Lighting Control System that provides energy savings, code compliance and enhanced safety/security for parking lots and parking garages. Three key components; Bluetooth wireless radio/sensor controller, Time Keeper and an iOS App. Capable of grouping multiple fixtures and sensors as well as scheduling time-based events by zone. Radio/Sensor Controller is factory integrated into Area/Site, Wall Mounted, Parking Garage and Canopy luminaires.

Click here to learn more details about AirLink Blue

AirLink Blue App | Apple

Sensor Sequence of Operations

Standard Programming	On Event	Off Event	On Light Level	Dim Light Level	Daylight Harvesting	Delay To Off	Sensitivity
OMSBTxL/IMSBTxL	Motion	No Motion	100%	N/A	On; Auto Calibration	20 minutes	High
OMS	Motion	No Motion	N/A	N/A	N/A	30 seconds	Auto

Operation	Description
On Event	Trigger that activates lights to turn on; either automatic via motion detected or manually activated via push of button.
Off Event	Trigger that activates lights to turn off; either automatic via no motion detected or manually activated via push of button.
On Light Level	The light level that the fixtures will turn on to when ON EVENT occurs.
Dim Light Level	The light level that the fixtures will dim down to when no motion is detected.
Delay to Dim	The amount of time after which no motion is detected that the fixtures will be triggered to dim down. This sequence is optional, and sensor can be programmed to only trigger the fixture to turn off by entering 100% in this field.
Delay to Off	The amount of time after which no motion is detected that the fixtures will be triggered to turn off. If delay to dim is part of the programmed functionality, this is the amount of time after which no motion is detected after the fixture have already dimmed down.
Sensitivity	The sensitivity can be set to high, medium, low, or auto where applicable. High will detect smaller, simple motions. Low will only detect larger more complex motions. Auto temperature calibration adjusts the PIR sensitivity as ambient temperature rises to increase detection of heat movement through the field of view.

Catalog # : _____ Project : _____

Prepared By : _____ Date : _____

Steel Poles

Square Straight

QUICK LINKS

Ordering Guide | Configurations | Dimensions | EPA

FEATURES & SPECIFICATIONS

Pole Shaft

- Straight poles are 4”, 5”, or 6” square.
- Pole shaft is electro-welded ASTM-A500 Grade C steel tubing with a minimum yield strength of 50,000 psi.
- On Tenon Mount steel poles, tenon is 2-3/8” O.D. high-strength pipe. Tenon is 4-3/4” in length.

Hand-Hole

- Standard hand-hole location is 12” above pole base.
- Poles 22’ and above have a 3” x 6” reinforced hand-hole. Shorter poles have a 2” x 4” non-reinforced hand-hole.

Base

- Pole base is ASTM-A36 hot-rolled steel plate with a minimum yield strength of 36,000 psi.
- Two-piece square base cover is optional.

Anchor Bolts

- Poles are furnished with anchor bolts featuring zinc-plated double nuts and washers. Galvanized anchor bolts are optional.
- Anchor Bolts conform to ASTM F 1554-07a Grade 55 with a minimum yield strength of 55,000 PSI.

Ground Lug

- Ground lug is standard.

Duplex Receptacle

- Weatherproof duplex receptacle is optional.

Ground Fault Circuit Interrupter

- Self-testing Ground fault circuit interrupter is optional.

Finishes

- Every pole is provided with the DuraGrip Protection System and a 5-year limited warranty:
- When the top-of-the line DuraGrip Plus Protection System is selected, in addition to the DuraGrip Protection System, a non-porous, automotive-grade corrosion coating is applied to the lower portion of the pole interior sealing and further protecting it from corrosion. This option extends the limited warranty to 7 years.

Determining The Luminaire/Pole Combination For Your Application:

- Select luminaire from luminaire ordering information.
- Select bracket configuration if required
- Determine EPA value from luminaire/ bracket EPA chart
- Select Pole Height
- Select MPH to match wind speed in the application area (See windspeed maps).
- Confirm pole EPA equal to or exceeding value of luminaire/bracket EPA
- Consult factory for special wind load requirements and banner brackets.

Pole Vibration Damper

- A pole vibration damper is recommended in open terrain areas of the country where low steady state winds are common.
- Non-tapered poles and lightly loaded poles are more susceptible to destructive vibration if a damper is not installed.

Listings

- UL Listed
- BAA/TAA Compliant

Steel Poles - Square Straight

Type: _____

Have questions? Call us at (800) 436-7800

ORDERING GUIDE

Back to Quick Links

TYPICAL ORDER EXAMPLE: 4SQ B3 S11G 24 S PLP DGP

Pole Series	Mounting Method	Material	Height [2]	Mounting Configuration	Pole Finish	Options
4SQ - 4" x 4" Square Straight Pole (New Build) **5SQ** - 5" x 5" Square Straight Pole (New Build) **6SQ** - 6" x 6" Square Straight Pole (New Build) **4SQU** - 4" x 4" Square Straight Pole (Retrofit) **5SQU** - 5" x 5" Square Straight Pole (Retrofit) **6SQU** - 6" x 6" Square Straight Pole (Retrofit)	**Bolt-On Mount**[1] - See pole selection guide for patterns and fixture matches **B5** - 5" Traditional Drilling Pattern **B3** - 3" Reduced Drilling Pattern **B2** - 2" Reduced Drilling Pattern **T** - Tenon Mount - See pole selection guide for tenon and fixture/bracket matches **I** - No Mounting Holes[1] - Use with: BKA-IFM4 - Flush Mount Adapter[7] Greenlee Lifestyle CH Mounting Style Enterprise, Lexington, Constitution PT Single Mounting[2]	**S11G** – 11 Ga. Steel (4SQ/4SQU and 5SQ/5SQU Only) **S07G** – 07 Ga. Steel	**8'** **10'** **12'** **13'** **14'** **15'** **16'** **17'** **17'6"** **18'** **20'** **22'** **22'6"** **23'** **24'** **25'** **26'** **27'** **28'** **30'** **32'** **35'** **39'**	**S** – Single/Parallel **D180** – Double **D90** – Double **DN90** – Double **T90** – Triple **TN120** – Triple **Q90** – Quad **QN90** – Quad **N** – Tenon Mount (Standard Tenon size is 2-3/8" O.D.)[8]	**BRZ** – Bronze **BLK** – Black **PLP** – Platinum Plus **WHT** – White **SVG** – Satin Verde Green **GPT** – Graphite **MSV** – Metallic Silver **BZA** – Alternate Bronze	**GA** – Galvanized Anchor Bolts **SF** – Single Flood[3] **DF** – Double Flood [3] **DGP** – DuraGrip® Plus **LAB** – Less Anchor Bolts **CRXX** - Conduit Raceway[4]

Need more information?
Click here for our glossary

Have additional questions?
Call us at (800) 436-7800

Accessory Ordering Information

DESCRIPTION	PART NUMBER
4BC – 4" Square Base Cover	122559CLR
5BC – 5" Square Base Cover	122561CLR
6BC – 6" Square Base Cover	122563CLR
5BC - 5' Square Universal Base Cover	132488CLR
6BC - 6' Square Universal Base Cover	131252CLR
ER2 – Weatherproof Duplex Receptacle	122566CLR
GFI – Ground Fault Circuit Interrupter	122567CLR
MH5 - mounting Hole Plugs for use with 5" traditional drill pattern (3 set of 3 plugs)	132336
MH3 - mounting Hole Plugs for use with 3" reduced drill pattern (3 set of 3 plugs)	681126
MH2 - Mounting Hole Plugs for use with 2" reduced drill pattern (3 sets of 3 plugs)	725841
Vibration Damper - 4" Square Pole (bolt-on mount only)	172539
Vibration Damper - 5" Square Pole (bolt-on mount only)	172538
Vibration Damper - 6" Square Pole (bolt-on mount only)	178361

FOOTNOTES:
1 - See Area Light Brackets - 3" Reduced Drill Pattern and Area Light Brackets - 5" Traditional Drill Pattern Spec Sheets.
2 - Pole heights will have +/- 1/2" tolerance.
3 - See Flood Lighting Brackets section for choice of FBO brackets.
4 - CR selection must indicate required height and side of pole mounting location. Mounting template required at time of order.

Steel Poles - Square Straight

Type: _____

Have questions? Call us at (800) 436-7800

DRILLING LOCATIONS

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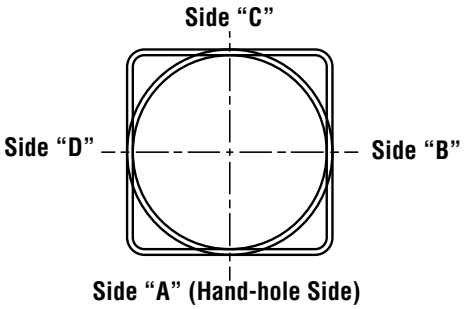
Sides	A	B	C	D
Hand-hole	X			
Single	X			
D180		X		X
D90	X			X
DN90[1]				
T90	X	X		X
TN120[2]				
Q90	X	X	X	X
QN90[3]				
Single FBO	X			
Double FBO		X		X



NOTES:

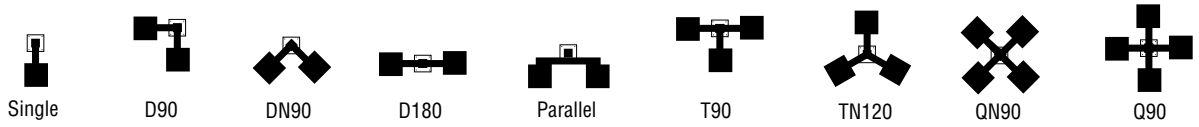
1 - Two locations will be 45° to the left and right of Side A.

2 - Other two locations will be 120° to the left and right of Side A.

3 - Two locations will be 45° to the left and right of Side A and two locations will be 135° to the left and right of Side A.

Consult factory for custom variations. Standard SF and DF pole preparations are located 3/4 of the height of the pole from the base, except on 20’ poles. Maximum height for SF and DF pole preparations on 20’ poles is 13’ from the base.

FIXTURE CONFIGURATIONS



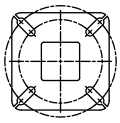
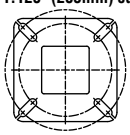
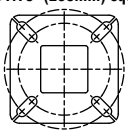
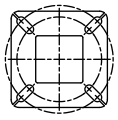
BOLT CIRCLE

STANDARD BASEPLATE

	4" (102mm) square 10-1/8" (257mm) sq.  11" (279mm) Dia. Bolt Circle	5" (127mm) square 10-1/8" (257mm) sq.  11" (279mm) Dia. Bolt Circle	5" (127mm) square 10-1/8" (257mm) sq.  11" (279mm) Dia. Bolt Circle	6" (152mm) square 12" (305mm) sq.  12" (305mm) Dia. Bolt Circle
Bolt Circle Designator	B	C	D	J
Bolt Circle	Slotted 8"-11" (203mm-279mm)	Slotted 9"-11" (229mm-279mm)	Slotted 9"-11" (229mm-279mm)	Slotted 12" (305mm)
Anchor Bolt Size	3/4" x 30" (19mm x 762mm)	3/4" x 30" (19mm x 762mm)	1" x 36" (25mm x 914mm)	1" x 36" (25mm x 914mm)
Anchor Bolt Projection	3-1/4" (83mm)	3-1/4" (83mm)	4" (102mm)	4" (102mm)
Base Plate Opening for Wireway Entry	3-5/8" (92mm)	4-3/4" (121mm)	4-5/8" (117mm)	5-5/8" (143mm)
Base Plate Dimensions	10-1/8" sq. x 3/4" thk. (257mm x 19mm)	10-1/8" sq. x 3/4" thk. (257mm x 19mm)	10-1/8" sq. x 1" thk. (257mm x 25mm)	12" sq. x 1-1/8" thk. (305mm x 29mm)
Pole Gauge	11	11	7	7

Note: Base plate illustrations may change without notice. Do not use for setting anchor bolts. Consult factory for the appropriate anchor bolt template.

UNIVERSAL BASEPLATE

	4" (102mm) square 10.5" (267mm) sq.  4SQ	5" (127mm) square 11.125" (283mm) sq.  5SQ	5" (127mm) square 11.75" (298mm) sq.  5SQ	6" (152mm) square 12-1/2" (318mm) sq.  14" (356mm) Dia. Bolt Circle
Bolt Circle Designator	E	F	G	H
Bolt Circle	Slotted 9"-12"	Slotted 10-13"	Slotted 10-13"	Slotted 11"-14" (279mm-356mm)
Anchor Bolt Size	3/4" x 30" (19mm x 762 mm)	3/4x 30" (25mm x 914 mm)	1x 36" (25mm x 914 mm)	1" x 36" (25mm x 914mm)
Anchor Bolt Projection	3-1/4" (83 mm)	3-1/4" (83 mm)	4" (102 mm)	4" (102mm)
Base Plate Opening for Wireway Entry	3-5/8" (92mm)	4-3/4" (121mm)	5-1/8" (130 mm)	5-5/8" (143mm)
Base Plate Dimensions	10-1/2" sq. x 3/4" thk. (267 mm x 19 mm)	11-1/8 sq. x 3/4" thk. (283 mm x 19 mm)	11-3/4" sq. x 1" thk. (298 mm x 25 mm)	12 1/2" sq. x 1 1/8" thk. (318mm x 29mm)
Pole Gauge	11	11	7	7

Note: Base plate illustrations may change without notice. Do not use for setting anchor bolts. Consult factory for the appropriate anchor bolt template.

PRODUCT DIMENSIONS

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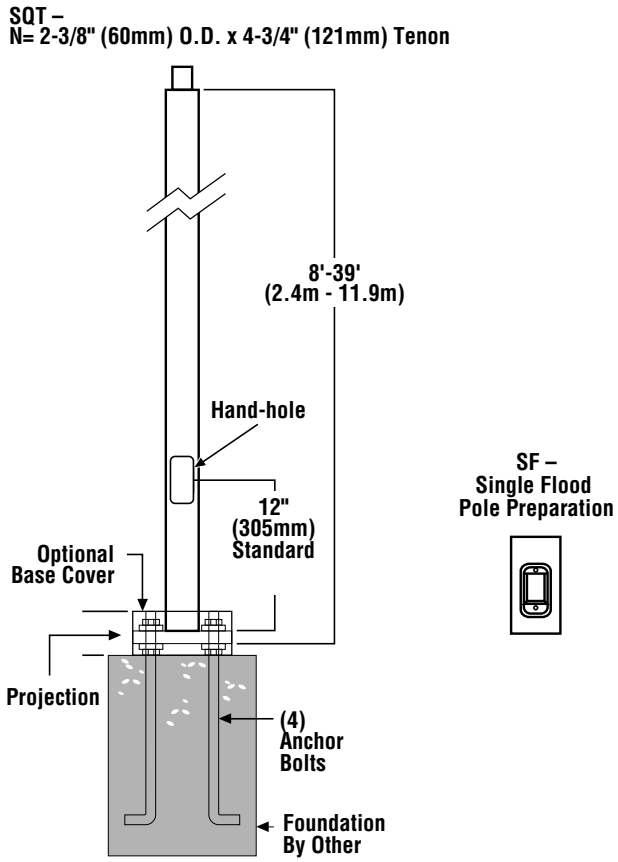
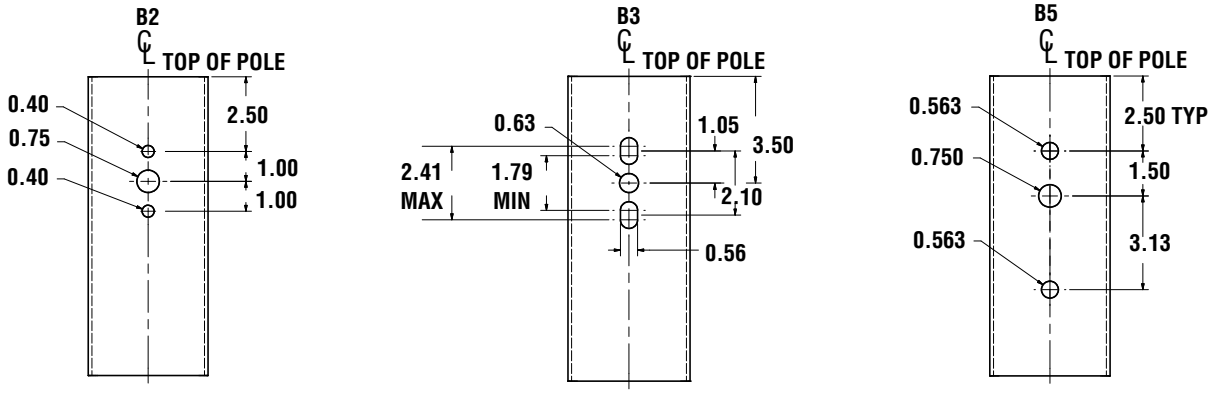


SHIPPING WEIGHTS	
4"(102mm) sq. 11 Ga. is approximately	7.50 lbs./ft.
4"(102mm) sq. 07 Ga. is approximately	10.00 lbs./ft.
5"(127mm) sq. 11 Ga. is approximately	9.00 lbs./ft.
5"(127mm) sq. 07 Ga. is approximately	12.50 lbs./ft.
6"(152mm) sq. 07 Ga. is approximately	15.40 lbs./ft.
Anchor Bolts (3/4" x 30")(19mm x 762mm)	15 lbs. (7kg)/set
Anchor Bolts (1" x 36")(25mm x 914mm)	30 lbs. (14kg)/set

Bolt-On Mount 2-Bolt Pattern



Steel Poles - Square Straight

Type: _____

Have questions? Call us at (800) 436-7800

WIND SPEED

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EPA Information
All LSI Industries' poles are guaranteed to meet the EPA requirements listed. LSI Industries is not responsible if a pole order has a lower EPA rating than the indicated wind-loading zone where the pole will be located.
CAUTION: This guarantee does not apply if the pole/bracket/fixture combination is used to support any other items such as flags, pennants, or signs, which would add stress to the pole. LSI Industries cannot accept responsibility for harm or damage caused in these situations.

NOTE: Pole calculations include a 1.3 gust factor over steady wind velocity. Example: poles designed to withstand 80 MPH steady wind will withstand gusts to 104 MPH. EPAs are for locations 100 miles away from hurricane ocean lines. Consult LSI for other areas. Note: Hurricane ocean lines are the Atlantic and Gulf of Mexico coastal areas. For applications in Florida or Canada, consult factory.

Use ONLY with "Wind Speed Map for ASCE 7-10

POLE[1]	Mtg. Height Length (ft)	Wall Thick (ga)	BOLT CIRCLE			EPA								
			Designator	Dia. (in)	Anchor bolt Dia {in}	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
4" x 11-ga x 12'	12	11	B	8" - 11"	0.75	13.9	12.5	11.3	9.2	7.6	6.3	5.2	4.3	3.6
4" x 11-ga x 14'	14	11	B	8" - 11"	0.75	10.7	9.5	8.5	6.8	5.4	4.4	3.5	2.7	2.1
4" x 11-ga x 16'	16	11	B	8" - 11"	0.75	8.2	7.2	6.4	4.9	3.8	2.9	2.1	1.5	1.0
4" x 11-ga x 18'	18	11	B	8" - 11"	0.75	6.3	5.4	4.7	3.4	2.4	1.6	1.0	0.4	n/a
4" x 11-ga x 20'	20	11	B	8" - 11"	0.75	4.6	3.9	3.2	2.1	1.2	0.6	n/a	n/a	n/a
4" x 11-ga x 22'	22	11	B	8" - 11"	0.75	7.6	6.6	5.7	4.2	3.0	2.0	1.2	0.5	n/a
4" x 11-ga x 24'	24	11	B	8" - 11"	0.75	6.0	5.1	4.3	2.9	1.8	0.9	n/a	n/a	n/a
4" x 11-ga x 26'	26	11	B	8" - 11"	0.75	4.6	3.7	3.0	1.7	0.7	n/a	n/a	n/a	n/a
4" x 7-ga x 14'	14	7	B	8" - 11"	0.75	18.3	16.4	14.9	12.2	10.2	8.5	7.1	5.9	5.0
4" x 7-ga x 16'	16	7	B	8" - 11"	0.75	14.7	13.2	11.8	9.6	7.8	6.3	5.2	4.2	3.4
4" x 7-ga x 18'	18	7	B	8" - 11"	0.75	11.9	10.5	9.3	7.4	5.9	4.6	3.6	2.8	2.1
4" x 7-ga x 20'	20	7	B	8" - 11"	0.75	9.6	8.4	7.4	5.7	4.3	3.2	2.3	1.6	0.9
4" x 7-ga x 22'	22	7	B	8" - 11"	0.75	7.7	6.6	5.7	4.2	3.0	2.0	1.2	0.5	n/a
4" x 7-ga x 24'	24	7	B	8" - 11"	0.75	6.0	5.1	4.3	2.9	1.8	0.9	n/a	n/a	n/a
4" x 7-ga x 26'	26	7	B	8" - 11"	0.75	4.6	3.7	3.0	1.7	0.7	n/a	n/a	n/a	n/a
4" x 7-ga x 28'[2]	28	7	B	8" - 11"	0.75	3.3	2.5	1.8	0.7	n/a	n/a	n/a	n/a	n/a
4" x 7-ga x 30'[2]	30	7	B	8" - 11"	0.75	2.2	1.4	0.8	n/a	n/a	n/a	n/a	n/a	n/a
5" x 11-ga x 14'	14	11	C	9" - 11"	0.75	17.4	15.7	14.1	11.5	9.3	7.7	6.3	5.2	4.2
5" x 11-ga x 16'	16	11	C	9" - 11"	0.75	13.8	12.3	10.9	8.7	6.9	5.5	4.3	3.3	2.5
5" x 11-ga x 18'	18	11	C	9" - 11"	0.75	10.8	9.6	8.4	6.5	4.9	3.7	2.6	1.8	1.1
5" x 11-ga x 20'	20	11	C	9" - 11"	0.75	8.5	7.3	6.3	4.6	3.2	2.1	1.2	0.5	n/a
5" x 11-ga x 22'	22	11	C	9" - 11"	0.75	10.9	9.5	8.3	6.2	4.5	3.2	2.1	1.2	0.5
5" x 11-ga x 24'	24	11	C	9" - 11"	0.75	8.8	7.5	6.4	4.5	3.0	1.8	0.8	n/a	n/a
5" x 11-ga x 26'	26	11	C	9" - 11"	0.75	6.8	5.7	4.6	3.0	1.6	0.6	n/a	n/a	n/a
5" x 11-ga x 28'	28	11	C	9" - 11"	0.75	5.2	4.1	3.2	1.6	0.4	n/a	n/a	n/a	n/a
5" x 11-ga x 30'	30	11	C	9" - 11"	0.75	3.6	2.7	1.8	0.4	n/a	n/a	n/a	n/a	n/a
5" x 7-ga x 20'	20	7	D	9" - 11"	1.00	21.6	19.3	17.3	14.0	11.3	9.2	7.4	6.0	4.8
5" x 7-ga x 22'	22	7	D	9" - 11"	1.00	20.7	18.6	16.6	13.3	10.7	8.5	6.8	5.4	4.2
5" x 7-ga x 24'	24	7	D	9" - 11"	1.00	17.7	15.6	13.8	10.8	8.5	6.6	5.0	3.7	2.6
5" x 7-ga x 26'	26	7	D	9" - 11"	1.00	14.9	13.1	11.4	8.8	6.6	4.9	3.5	2.3	1.3
5" x 7-ga x 28'	28	7	D	9" - 11"	1.00	12.5	10.9	9.4	6.9	4.9	3.4	2.1	1.0	n/a
5" x 7-ga x 30'	30	7	D	9" - 11"	1.00	10.3	8.9	7.5	5.2	3.4	2.0	0.8	n/a	n/a
5" x 7-ga x 35'	35	7	D	9" - 11"	1.00	6.0	4.8	3.6	1.8	n/a	n/a	n/a	n/a	n/a
6" x 7-ga x 24'	24	7	J	12"	1.00	18.6	16.4	14.3	11.2	8.6	6.5	4.8	3.4	2.2
6" x 7-ga x 26'	26	7	J	12"	1.00	15.6	13.4	11.7	8.8	6.5	4.6	3.0	1.8	0.7
6" x 7-ga x 28'	28	7	J	12"	1.00	12.9	10.9	9.3	6.7	4.6	2.8	1.5	n/a	n/a
6" x 7-ga x 30'	30	7	J	12"	1.00	10.4	8.8	7.3	4.8	2.9	1.3	n/a	n/a	n/a
6" x 7-ga x 32'	32	7	J	12"	1.00	8.3	6.8	5.5	3.1	1.3	n/a	n/a	n/a	n/a
6" x 7-ga x 34'	34	7	J	12"	1.00	6.5	5.0	3.7	1.6	n/a	n/a	n/a	n/a	n/a
6" x 7-ga x 35'	35	7	J	12"	1.00	5.5	4.2	2.9	0.9	n/a	n/a	n/a	n/a	n/a
6" x 7-ga x 39'	39	7	J	12"	1.00	2.3	1.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a

All LSI Industries' poles are guaranteed to meet the EPA requirements listed. LSI Industries is not responsible if a pole order has a lower EPA rating than the indicated wind-loading zone where the pole will be located.
CAUTION: This guarantee does not apply if the pole/bracket/fixture combination is used to support any other items such as flags, pennants, or signs, which would add stress to the pole. LSI Industries cannot accept responsibility for harm or damage caused in these situations.

Note:
1- Poles shorter than these listed here in for each gauge have EPA rating equal to or greater than what is provided in this table. To Confirm EPA ratings on shorter poles, contact LSI Industries.
2- LSI Industries recommends a vibration damper be ordered with this length.

Steel Poles - Square Straight

Type: _____

Have questions? Call us at (800) 436-7800

WIND SPEED

POLE[1]	Mtg. Height Length (ft)	Wall Thick (ga)	BOLT CIRCLE			EPA								
			Designator	Dia. (in)	Anchor bolt Dia (in)	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
5" x 11-ga x 14'	14	11	F	11"	0.75	17.6	15.8	14.2	11.5	9.4	7.7	6.3	5.2	4.3
5" x 11-ga x 14'	14	11	F	13"	0.75	17.6	15.8	14.2	11.5	9.4	7.7	6.3	5.2	4.3
5" x 11-ga x 16'	16	11	F	11"	0.75	13.9	12.2	11.0	8.8	7.0	5.5	4.3	3.4	2.5
5" x 11-ga x 16'	16	11	F	13"	0.75	13.9	12.2	11.0	8.8	7.0	5.5	4.3	3.4	2.5
5" x 11-ga x 18'	18	11	F	11"	0.75	11.0	9.6	8.4	6.5	5.0	3.7	2.7	1.8	1.1
5" x 11-ga x 18'	18	11	F	13"	0.75	11.0	9.6	8.4	6.5	5.0	3.7	2.7	1.8	1.1
5" x 11-ga x 20'	20	11	F	11"	0.75	8.6	7.4	6.4	4.6	3.3	2.2	1.3	0.5	-
5" x 11-ga x 20'	20	11	F	13"	0.75	8.6	7.4	6.4	4.6	3.3	2.2	1.3	0.5	-
5" x 11-ga x 22'	22	11	F	11"	0.75	12.7	11.1	9.6	7.4	5.6	4.1	3.0	2.0	1.1
5" x 11-ga x 22'	22	11	F	12"	0.75	10.3	8.9	7.7	5.7	4.1	2.8	1.8	0.9	-
5" x 11-ga x 22'	22	11	F	13"	0.75	8.6	7.4	6.4	4.6	3.1	2.0	1.1	-	-
5" x 11-ga x 24'	24	11	F	11"	0.75	10.2	8.9	7.6	5.6	4.0	2.6	1.6	0.7	-
5" x 11-ga x 24'	24	11	F	12"	0.75	8.0	6.9	5.8	4.0	2.6	1.5	0.5	-	-
5" x 11-ga x 24'	24	11	F	13"	0.75	6.7	5.5	4.6	3.0	1.7	0.7	-	-	-
5" x 11-ga x 26'	26	11	F	11"	0.75	8.1	6.9	5.8	4.0	2.5	1.3	-	-	-
5" x 11-ga x 26'	26	11	F	12"	0.75	6.2	5.1	4.1	2.6	1.3	-	-	-	-
5" x 11-ga x 26'	26	11	F	13"	0.75	5.0	4.0	3.1	1.6	0.5	-	-	-	-
5" x 11-ga x 28'	28	11	F	11"	0.75	6.3	5.2	4.3	2.5	1.1	-	-	-	-
5" x 11-ga x 28'	28	11	F	12"	0.75	4.6	3.6	2.7	1.2	-	-	-	-	-
5" x 11-ga x 28'	28	11	F	13"	0.75	3.4	2.5	1.7	-	-	-	-	-	-
5" x 11-ga x 30'	30	11	F	11"	0.75	4.7	3.7	2.8	1.2	-	-	-	-	-
5" x 11-ga x 30'	30	11	F	12"	0.75	3.1	2.2	1.4	-	-	-	-	-	-
5" x 11-ga x 30'	30	11	F	13"	0.75	2.0	1.2	0.5	-	-	-	-	-	-
5" x 7-ga x 20'	20	7	G	11"	0.75	19.0	17.0	15.0	12.2	9.7	7.8	6.2	5.0	3.8
5" x 7-ga x 20'	20	7	G	12"	0.75	21.4	19.1	17.1	13.8	11.2	9.1	7.3	5.9	4.7
5" x 7-ga x 20'	20	7	G	13"	0.75	21.4	19.2	17.2	13.9	11.3	9.2	7.4	6.0	4.8
5" x 7-ga x 20'	20	7	G	11"	1	21.7	19.4	17.4	14.0	11.4	9.3	7.5	6.0	4.8
5" x 7-ga x 20'	20	7	G	13"	1	21.7	19.4	17.4	14.0	11.4	9.3	7.5	6.0	4.8
5" x 7-ga x 22'	22	7	G	11"	0.75	16.0	14.1	12.5	9.8	7.6	5.9	4.4	3.3	2.3
5" x 7-ga x 22'	22	7	G	12"	0.75	17.7	15.9	14.2	11.2	8.7	7.0	5.4	4.1	3.0
5" x 7-ga x 22'	22	7	G	13"	0.75	19.9	17.3	15.6	12.6	10.0	8.0	6.3	5.0	3.8
5" x 7-ga x 22'	22	7	G	11"	1	21.0	18.7	16.7	13.4	10.6	8.5	6.8	5.4	4.2
5" x 7-ga x 22'	22	7	G	12"	1	23.4	20.6	18.4	15.0	12.2	9.9	8.0	6.4	5.1
5" x 7-ga x 22'	22	7	G	13"	1	21.3	18.8	17.0	13.7	11.0	8.8	7.0	5.6	4.3
5" x 7-ga x 24'	24	7	G	11"	0.75	13.3	11.6	10.0	7.7	5.7	4.2	2.9	1.9	1.0
5" x 7-ga x 24'	24	7	G	12"	0.75	15.0	13.0	11.6	8.9	6.8	5.1	3.8	2.6	1.7
5" x 7-ga x 24'	24	7	G	13"	0.75	16.6	14.6	12.9	10.2	8.0	6.1	4.6	3.3	2.3
5" x 7-ga x 24'	24	7	G	11"	1	17.5	15.7	13.9	10.9	8.6	6.7	5.0	3.7	2.7
5" x 7-ga x 24'	24	7	G	12"	1	20.0	17.4	15.4	12.3	9.9	7.8	6.0	4.7	3.5
5" x 7-ga x 24'	24	7	G	13"	1	18.1	16.0	14.2	11.0	8.7	6.7	5.3	3.9	2.8
5" x 7-ga x 26'	26	7	G	11"	0.75	10.9	9.3	8.0	5.9	4.1	2.7	1.6	0.6	-
5" x 7-ga x 26'	26	7	G	12"	0.75	12.4	10.9	9.5	7.0	5.1	3.6	2.3	1.3	-
5" x 7-ga x 26'	26	7	G	13"	0.75	14.0	12.3	10.7	8.1	6.0	4.4	3.1	2.0	1.0
5" x 7-ga x 26'	26	7	G	11"	1	15.0	13.2	11.5	8.8	6.7	4.9	3.5	2.3	1.3

Steel Poles - Square Straight

Type: _____

Have questions? Call us at (800) 436-7800

WIND SPEED

POLE[1]	Mtg. Height Length (ft)	Wall Thick (ga)	BOLT CIRCLE			EPA								
			Designator	Dia. (in)	Anchor bolt Dia {in}	110 MPH	115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH
5" x 7-ga x 26'	26	7	G	12"	1	17.0	14.8	13.0	10.2	7.9	6.0	4.4	3.1	2.1
5" x 7-ga x 26'	26	7	G	13"	1	15.3	13.5	11.8	9.0	6.8	5.0	3.6	2.5	1.4
5" x 7-ga x 28'	28	7	G	11"	0.75	8.9	7.4	6.3	4.3	2.7	1.4	-	-	-
5" x 7-ga x 28'	28	7	G	12"	0.75	10.2	8.8	7.5	5.3	3.5	2.1	1.0	-	-
5" x 7-ga x 28'	28	7	G	13"	0.75	11.8	10.2	8.8	6.4	4.5	3.0	1.7	0.7	-
5" x 7-ga x 28'	28	7	G	11"	1	12.5	10.9	9.5	7.0	5.0	3.3	2.1	1.0	-
5" x 7-ga x 28'	28	7	G	12"	1	14.2	12.4	11.0	8.2	6.0	4.3	3.0	1.7	0.8
5" x 7-ga x 28'	28	7	G	13"	1	12.9	11.0	9.7	7.2	5.2	3.6	2.2	1.1	-
5" x 7-ga x 30'	30	7	G	11"	0.75	7.0	5.8	4.7	2.8	1.3	-	-	-	-
5" x 7-ga x 30'	30	7	G	12"	0.75	8.4	7.0	5.8	3.8	2.2	0.9	-	-	-
5" x 7-ga x 30'	30	7	G	13"	0.75	9.7	8.2	7.0	4.8	3.0	1.6	0.5	-	-
5" x 7-ga x 30'	30	7	G	11"	1	10.4	8.8	7.6	5.3	3.4	2.0	0.8	-	-
5" x 7-ga x 30'	30	7	G	12"	1	12.0	10.3	9.0	6.4	4.4	2.9	1.6	0.5	-
5" x 7-ga x 30'	30	7	G	13"	1	10.6	9.1	7.7	5.5	3.6	2.1	1.0	-	-
5" x 7-ga x 35'	35	7	G	11"	0.75	3.2	2.2	1.2	-	-	-	-	-	-
5" x 7-ga x 35'	35	7	G	12"	0.75	4.4	3.2	2.2	0.5	-	-	-	-	-
5" x 7-ga x 35'	35	7	G	13"	0.75	5.5	4.2	3.1	1.3	-	-	-	-	-
5" x 7-ga x 35'	35	7	G	11"	1	6.0	4.8	3.6	1.8	-	-	-	-	-
5" x 7-ga x 35'	35	7	G	12"	1	7.3	6.0	4.8	2.7	1.1	-	-	-	-
5" x 7-ga x 35'	35	7	G	13"	1	6.3	5.0	3.8	1.9	-	-	-	-	-
6" x 7-ga x 24'	24	7	H	11"	1	16.5	14.4	12.6	9.6	7.2	5.3	3.8	2.5	1.4
6" x 7-ga x 24'	24	7	H	12-1/2"	1	19.8	17.5	15.4	12.0	9.2	7.0	5.3	3.8	2.7
6" x 7-ga x 24'	24	7	H	14"	1	23.0	20.5	18.0	14.3	11.2	8.9	6.9	5.3	3.8
6" x 7-ga x 26'	26	7	H	11"	1	13.7	11.8	10.2	7.5	5.3	3.6	2.1	1.0	-
6" x 7-ga x 26'	26	7	H	12-1/2"	1	16.5	14.6	12.6	9.6	7.0	5.2	3.6	2.2	1.1
6" x 7-ga x 26'	26	7	H	14"	1	19.6	17.3	15.2	11.7	8.9	6.7	5.0	3.5	2.2
6" x 7-ga x 28'	28	7	H	11"	1	11.0	9.3	7.8	5.5	3.5	1.9	0.6	-	-
6" x 7-ga x 28'	28	7	H	12-1/2"	1	13.8	12.0	10.2	7.5	5.2	3.4	1.9	0.7	-
6" x 7-ga x 28'	28	7	H	14"	1	16.4	14.5	12.5	9.4	6.9	4.7	3.2	1.8	0.7
6" x 7-ga x 30'	30	7	H	11"	1	9.0	7.3	6.0	3.6	1.9	0.5	-	-	-
6" x 7-ga x 30'	30	7	H	12-1/2"	1	11.4	9.6	8.0	5.5	3.4	1.7	-	-	-
6" x 7-ga x 30'	30	7	H	14"	1	14.0	12.0	10.0	7.2	5.0	3.2	1.6	-	-
6" x 7-ga x 32'	32	7	H	11"	1	7.0	5.5	4.2	2.0	-	-	-	-	-
6" x 7-ga x 32'	32	7	H	12-1/2"	1	9.2	7.6	6.0	3.8	1.8	-	-	-	-
6" x 7-ga x 32'	32	7	H	14"	1	11.4	9.7	8.0	5.4	3.2	1.6	-	-	-
6" x 7-ga x 34'	34	7	H	11"	1	5.1	3.7	2.5	0.6	-	-	-	-	-
6" x 7-ga x 34'	34	7	H	12-1/2"	1	7.2	5.6	4.4	2.2	-	-	-	-	-
6" x 7-ga x 34'	34	7	H	14"	1	9.3	7.6	6.2	3.6	1.7	-	-	-	-
6" x 7-ga x 35'	35	7	H	11"	1	4.2	3.0	1.8	-	-	-	-	-	-
6" x 7-ga x 35'	35	7	H	12-1/2"	1	6.2	4.8	3.6	1.4	-	-	-	-	-
6" x 7-ga x 35'	35	7	H	14"	1	8.2	6.6	5.2	2.9	1.0	-	-	-	-
6" x 7-ga x 39'	39	7	H	11"	1	1.0	-	-	-	-	-	-	-	-
6" x 7-ga x 39'	39	7	H	12-1/2"	1	3.0	1.6	0.5	-	-	-	-	-	-
6" x 7-ga x 39'	39	7	H	14"	1	4.6	3.3	2.0	-	-	-	-	-	-

All LSI Industries' poles are guaranteed to meet the EPA requirements listed. LSI Industries is not responsible if a pole order has a lower EPA rating than the indicated wind-loading zone where the pole will be located.

CAUTION: This guarantee does not apply if the pole/bracket/fixture combination is used to support any other items such as flags, pennants, or signs, which would add stress to the pole. LSI Industries cannot accept responsibility for harm or damage caused in these situations.

Note:

1- Poles shorter than these listed here in for each gauge have EPA rating equal to or greater than what is provided in this table. To Confirm EPA ratings on shorter poles, contact LSI Industries.

2- LSI Industries recommends a vibration damper be ordered with this length.

LIGHT STRING

Commercial Grade E26

PROJECT:	
TYPE:	
LOCATION:	
CATALOG NUMBER:	

Commercial E26 Medium base stringers are perfect for any outdoor patio or lighting display. Commercial grade stringers are weather resistant and designed for long term usage. Includes guy-wire loop for additional support for large spans or spaces. E26 base sockets are perfect for any standard LED or incandescent bulbs giving you the creative freedom for your lighting display.

- Great decorative lighting product for patios, gazebos, building outlines, event tents, and retail walkways
- Factory-molded, formulated PVC sockets on heavy-duty wire form a tight weather resistant seal around bulbs
- Suitable for indoor and outdoor commercial applications
- E26 Medium base decorative bulbs sold separately

OUTDOOR RATED

RoHS COMPLIANT

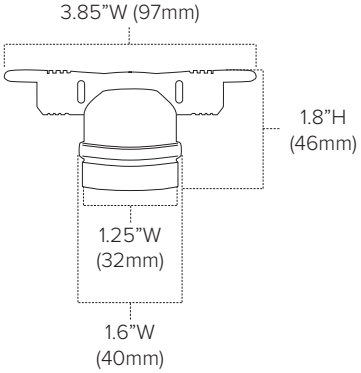
LS-M SERIES QUICK SPECS

SERIES	LS-M
INPUT VOLTAGE	120V AC
WATTAGE	25W per socket
MAX RUN	1200W
SOCKET TYPE	cULus Listed for Wet locations
SOCKET SPACING	24”
CUT INCREMENTS	Field cuttable (Must be properly sealed)
IP RATING	IP64 - Wet Location

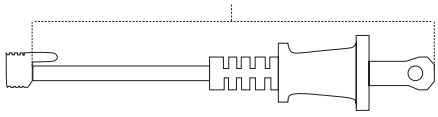
Interconnected strings must be properly sealed and strain relief protected with electrical tape at each connection point. For non-rated LS product, any cut ends must be sealed with LS-M/MS-END and/or electrical tape (ensure proper seal to preclude entrance of water).
Keep lamps at least 4.9m/16ft away from pools and spas.

LS-M SERIES QUICK DIMENSIONS

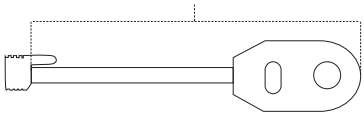
Socket Dimensions
Non-Suspended E26



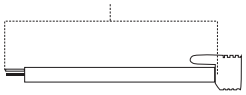
‘Cord and Plug’ set Lead Wire: 16”L (405mm)



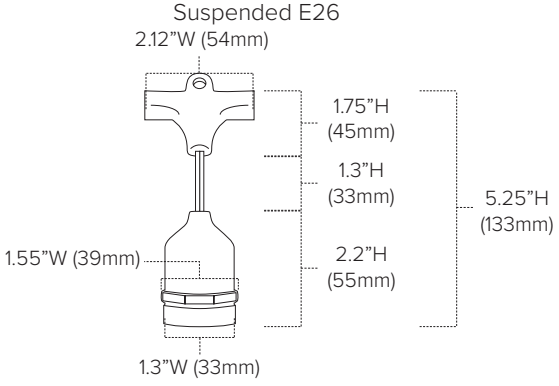
‘Cord and Plug’ set Tail Wire: 9”L (225mm)



‘330ft Reel’ Lead & Tail Wire: 72”L (182cm)



Socket Dimensions
Suspended E26



LS-M SERIES ORDERING INFORMATION

ITEM NUMBER	VOLTAGE	LENGTH	SOCKET TYPE	LED SPACING	COLOR	MAX RUN	IP RATING
LS-M-24-100-BK	120V AC	100ft (30m)	Non-Suspended E26	24”	Black	25W / Socket	IP64
LS-M-24-BK	120V AC	330ft (101m)	Non-Suspended E26	24”	Black	25W / Socket	IP64
LS-MS-24-100-BK	120V AC	100ft (30m)	Suspended E26	24”	Black	25W / Socket	IP64
LS-MS-24-BK	120V AC	330ft (101m)	Suspended E26	24”	Black	25W / Socket	IP64

100Ft reels Include: (1) 100ft length of commercial grade light string with 120V plug and terminated end
300Ft bulk reels Include: (1) 300ft length of commercial grade light string with bare wire lead and bare wire tail

*ASK VENDOR WHAT PARTS WILL BE NEEDED FOR LAYOUT SHOWN ON MARKED UP CIVIL PLAN

LS-M ACCESSORIES

ITEM NUMBER	DESCRIPTION
LS-M/MS-END	Black plastic end cap
COMPATIBLE LAMPS	Pro Decorative Series, C7 Standard LED Series, Incadescent B-Series
LS-CABLE-60	60ft Catenary Cable Kit
LS-CABLE-110	110ft Catenary Cable Kit
LS-CABLE-500	500ft Catenary Cable Bulk Reel Includes
LS-LOCK-4	(4) Heavy duty cable locks for 1/8” catenary cable
LS-TT	Tensioning Tool

Catenary Cable Kit Includes: (1) 1/8” diameter catenary/guide cable for light string installation, (2) Heavy duty cable locks, and (1) Cable release key


LS-M/MS-END


COMPATIBLE LAMPS


LS-CABLE-60BLE-60


LS-CABLE-500


LS-LOCK-4BLE-500


LS-TT

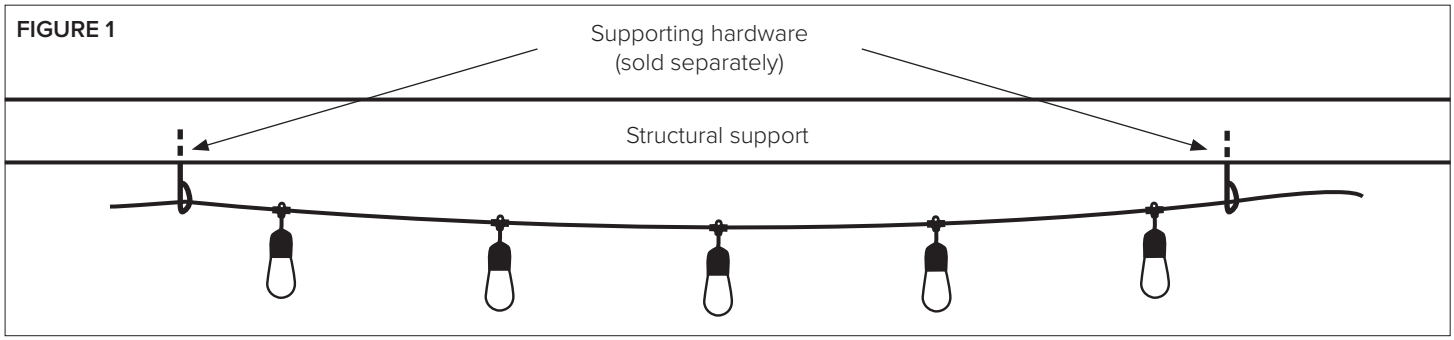
ADDITIONAL INFORMATION

SUSPENDING LIGHT STRINGS:

Light sockets must be suspended so that bulbs are facing down only. DO NOT MOUNT THE LIGHT STRINGS WITH SOCKETS FACING UPWARD!

1. Light string must be securely attached to a support structure at each end of each span. The maximum unsupported span distance for 48’ Cord & Plug Light String is 20 feet (10 sockets).
2. Secure light string to supporting hardware (eyebolts, brackets, etc., not provided) using cable ties (not included). See Figure 1.
3. Ensure any cut ends are properly sealed to preclude the entrance of water.
4. For spans exceeding 20 feet, use properly rated cable support system and cable ties (neither are provided with the light string) and follow local codes for suspended cables and loads. See www.americanlighting.com for steel cable support systems, if needed.

FIGURE 1



AMERICAN LIGHTING WARRANTY

LIMITED WARRANTY FOR LED PRODUCTS: 1 YEAR

LIMITED PRODUCT WARRANTY

Our products are warranted to be free from defects in material and workmanship for the warranty period listed. Warranty periods begin from the date of shipment from American Lighting Inc's warehouse to the original purchaser. Products that prove to be defective during their specific warranty period will be either repaired or replaced, at the sole discretion of American Lighting Inc. Claims for defective products must be submitted in writing to American Lighting Inc's RGA Department within the warranty period. Upon approval of such return, American Lighting Inc reserves the right to inspect the product for misuse or abuse. Claims for indirect or consequential damages or for product that, in American Lighting Inc's opinion, has been misused will be denied. This is a warranty of product reliability only and not a warranty of merchantability or fitness for a particular purpose. American Lighting Inc shall have no liability whatsoever in any event for payment of incidental or consequential damages, including, without limitations, installation costs and/or damages for personal injury and/or property. These products may represent a possible shock or fire hazard if improperly installed or altered in any way. This warranty does not apply to any product that has not been properly installed in accordance with current local codes and/or the National Electrical Code. Products that require a transformer, driver, or power supply must be used in conjunction with American Lighting Inc's recommended power supply to ensure safety and retain product warranty.

PRODUCT SPECIFICATIONS

For the latest product information, updates, instructions and details concerning specifications, colors, finishes, performance, installation and design, visit www.americanlighting.com. Color may vary from the color printed herein due to limitations in photographic and printing processes. American Lighting Inc. reserves the right to change product specifications without notice. Other product specifications such as color temperature, wavelength characteristics and lumen output are subject to production limitations and may vary.
LED technology is changing rapidly, and not all color temperatures and performance levels can be duplicated at a later time. Best practices include purchasing 10-15% more for a particular project on the same initial order where white LED color temperatures must be maintained over project and product life. Eventual product replacement should be considered at layout and design stages. Best practices also include testing connections and product performance prior to mounting and/or installing.

AVERAGE LIFE

Average incandescent lamp life, rated life and average life are terms used to describe the number of hours at which half of the lamps have failed. For LEDs, the hours of rated life specify the point where 70% of original lumen output is reached. Below this point, the effective life is over, however, the LED may still emit light. Individual results may vary with actual environmental conditions including, but not limited to, proper installation, ambient temperature and/or input voltage fluctuations.

921 ISLINGTON PICTURE BOOK_08.13.25

DISSECTUM JAPANESE CUTLEAF MAPLE
Acer palmatum (Dissectum Group) 'Dissectum'

GLOBEMASTER ORNAMENTAL ONION
Allium 'Globemaster'

HUMMINGBIRD SUMMER SWEET
Clethra alnifolia 'Hummingbird'

Dogwood, Variegated Red Twig
CORNUS (SWIDA) alba 'Argenteo-marginata'

PURPLE CONEFLOWER
Echinacea purpurea

HENRY'S GARNET VIRGINIA SWEETSPIRE
Itea virginica 'Henry's Garnet'

BLUE STAR JUNIPER
Juniperus squamata

LUPINE
Lupinus polyphyllus

Little Zebra
MISCANTHUS sinensis 'Little Zebra'

PURPURASCENS MAIDEN GRASS
Miscanthus sinensis 'Purpurascens'

STRICTUS MAIDEN GRASS
Miscanthus sinensis 'Strictus'

LITTLE BUNNY CHINESE FOUNTAIN GRASS
Pennisetum alopecuroides 'Little Bunny'

TINY WINE NINEBARK
Physocarpus opulifolius 'TINY WINE'

HINO-CRIMSON AZALEA
Rhododendron (subgenus Azalea) 'Hino-crimson'

GOLDFLAME JAPANESE SPIREA
Spiraea japonica 'Goldflame'

SHIROBANA JAPANESE SPIREA
Spiraea japonica 'Shirobana'

WINE & ROSES® WEIGELA
Weigela florida 'Alexandra'

HALEY WARD
200 Griffin Road, Unit 14, Portsmouth, NH 03801
Phone (603) 430-9282

INSPECTION & LONG-TERM MAINTENANCE PLAN
for
Proposed Development

921 Islington Street
Portsmouth, NH

Introduction

The intent of this plan is to provide PWED2, LLC (herein referred to as "owner") with a list of procedures that document the inspection and maintenance requirements of the stormwater management system for this development. Specifically, the proposed catch and permeable patio pavers (collectively referred to as the "Stormwater Management System"). The contact information for the owner shall be kept current, and if there is a change of ownership of the property this plan must be transferred to the new owner.

The following inspection and maintenance program is necessary to keep the stormwater management system functioning properly and will help in maintaining a high quality of stormwater runoff to minimize potential environmental impacts. By following the enclosed procedures, the owner will be able to maintain the functional design of the stormwater management system and maximize its ability to remove sediment and other contaminants from site generated stormwater runoff.

Annual Report

The owner shall prepare an annual Inspection & Maintenance Report. The report shall include a summary of the system's maintenance and repair by transmission of the Inspection & Maintenance Log and other information as required. A copy of the report shall be delivered annually to the Portsmouth DPW, as required.

Inspection & Maintenance Checklist/Log

The following pages contain the Stormwater Management System Inspection & Maintenance Requirements and a blank copy of the Stormwater Management System Inspection & Maintenance Log. These forms are provided to the owner as a guideline for performing the inspection and maintenance of the Stormwater Management System. This is a guideline and should be periodically reviewed for conformance with current practice and standards.

Stormwater Management System Components

The Stormwater Management System is designed to mitigate the quality of site-generated stormwater runoff. As a result, the design includes the following elements:

Non-Structural BMPs

Non-Structural best management practices (BMP's) include temporary and permanent measures that typically require less labor and capital inputs and are intended to provide protection against erosion of soils. Examples of non-structural BMP's on this project may include but are not limited to:

- Dust control
- Sediment barriers
- Stabilized construction entrance
- Catch basin basket
- Dewatering control

Structural BMPs

Structural BMPs are more labor and capital-intensive structures or installations that require more specialized personnel to install. Examples on this project include but are not limited to:

- Catch Basin with sump and oil separator
- Closed Drainage System
- Permeable Pavers

Inspection and Maintenance Requirements

The following summarizes the inspection and maintenance requirements for the various BMP's that may be found on this project.

1. **Catch Basin:** Clean the basin when accumulated sediment reaches one third the depth of the basin.
2. **Storm Drains:** Monitor accumulation of debris in drainage structures monthly or after significant rain events. Remove sediments when they accumulate within the outlet pipe. During construction, maintain inlet protection until all areas have been stabilized. Prior to the end of construction, inspect the drains and basins for accumulations and remove and clean by jet-vacuuming.
3. **Permeable Pavers:** Ensure that sediments do not enter and plug pavement. Remove sediments, trash, and debris, as necessary. Repair outlet structures and appurtenances, as necessary. Vacuum at least twice annually.

Pollution Prevention

The following pollution prevention activities shall be undertaken to minimize potential impacts on stormwater runoff quality. The Contractor is responsible for all activities during construction. The Owner is responsible thereafter.

Spill Procedures

Any discharge of waste oil or other pollutant shall be reported immediately to the New Hampshire Department of Environmental Services (NHDES). The Contractor/Owner will be responsible for any incident of groundwater contamination resulting from the improper discharge of pollutants to the stormwater system, and may be required by NHDES to remediate incidents that may impact groundwater quality. If the property ownership is transferred, the new owner will be informed of the legal responsibilities associated with operation of the stormwater system, as indicated above.

Sanitary Facilities

Sanitary facilities shall be provided during all phases of construction.

Material Storage

No on-site trash facility is provided until site construction is completed. The contractors are required to remove trash from the site. Hazardous material storage is prohibited.

Material Disposal

All waste material, trash, sediment, and debris shall be removed from the site and disposed of in accordance with applicable local, state, and federal guidelines and regulations. Removed sediments shall be if necessary dewatered prior to disposal.

PERMEABLE PAVER LONG-TERM MAINTENANCE SHEET

INSPECTION REQUIREMENTS		
ACTION TAKEN	**FREQUENCY**	**MAINTENANCE REQUIREMENTS**
-Inspect pavement surface for the occurrence of sediment, trash, debris, or structural damage. *-Check pavement for surface ponding*	Frequently in first few months following construction, Bi-annually after	*-Ensure that sediments do not enter and plug pavement. Remove sediments, trash, and debris, as necessary.* *-Repair outlet structures and appurtenances, as necessary.* *-Vacuum pavement at least twice annually.* *-Prevent vehicles with muddy wheels from accessing permeable pavement.*
-No winter sanding permitted *-Minimize application of salt*	Continuous practice	

MAINTENANCE LOG	
PROJECT NAME	
INSPECTOR NAME	**INSPECTOR CONTACT INFO**
DATE OF INSPECTION	**REASON FOR INSPECTION** ☐LARGE STORM EVENT ☐PERIODIC CHECK-IN
IS CORRECTIVE ACTION NEEDED? ☐YES ☐NO	**DESCRIBE ANY PROBLEMS, NEEDED MAINTENANCE**
DATE OF MAINTENANCE	**PERFORMED BY**
NOTES	

CATCH BASIN MAINTENANCE SHEET

INSPECTION REQUIREMENTS		
ACTION TAKEN	**FREQUENCY**	**MAINTENANCE REQUIREMENTS**
-Check for damage to basin -Remove sediment from basin	Twice yearly; spring and fall	*-Repair as necessary to prevent particles from reaching drainage system, or to prevent site flooding.* *-Remove sediment as needed*

MAINTENANCE LOG	
PROJECT NAME	
INSPECTOR NAME	**INSPECTOR CONTACT INFO**
DATE OF INSPECTION	**REASON FOR INSPECTION** ☐LARGE STORM EVENT ☐PERIODIC CHECK-IN
IS CORRECTIVE ACTION NEEDED? ☐YES ☐NO	**DESCRIBE ANY PROBLEMS, NEEDED MAINTENANCE**
DATE OF MAINTENANCE	**PERFORMED BY**
NOTES	

PROPOSED DEVELOPMENT

921 ISLINGTON STREET
PORTSMOUTH, NEW HAMPSHIRE

SITE PLAN

OWNER/APPLICANT:

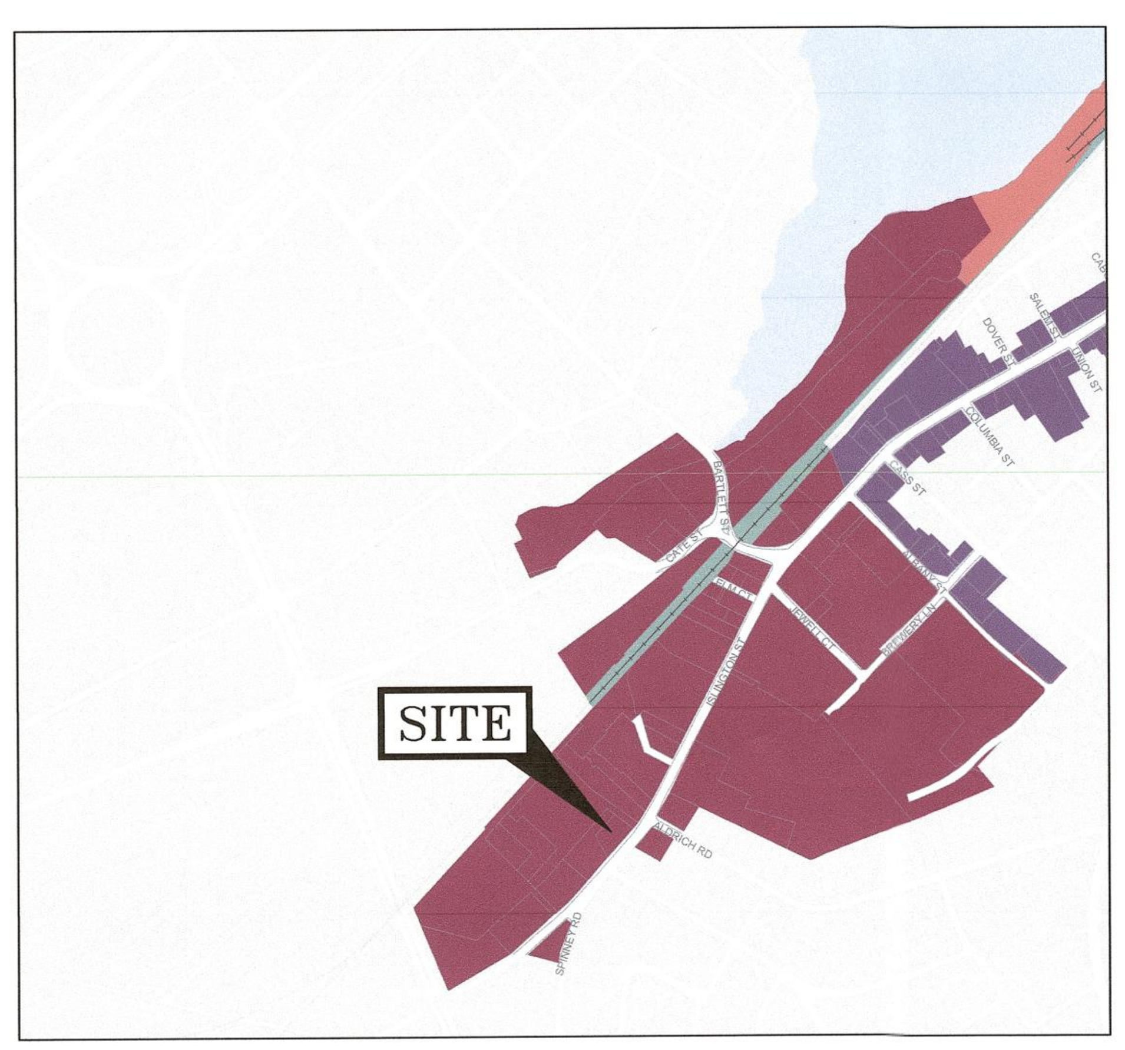
PWED2, LLC
3 PENSTOCK WAY
NEWMARKET, NH 03857

CIVIL ENGINEER/LAND SURVEYOR:

HALEY WARD, INC.
200 GRIFFIN ROAD, UNIT 14
PORTSMOUTH, N.H. 03801
TEL. (603) 430-9282

ARCHITECT:

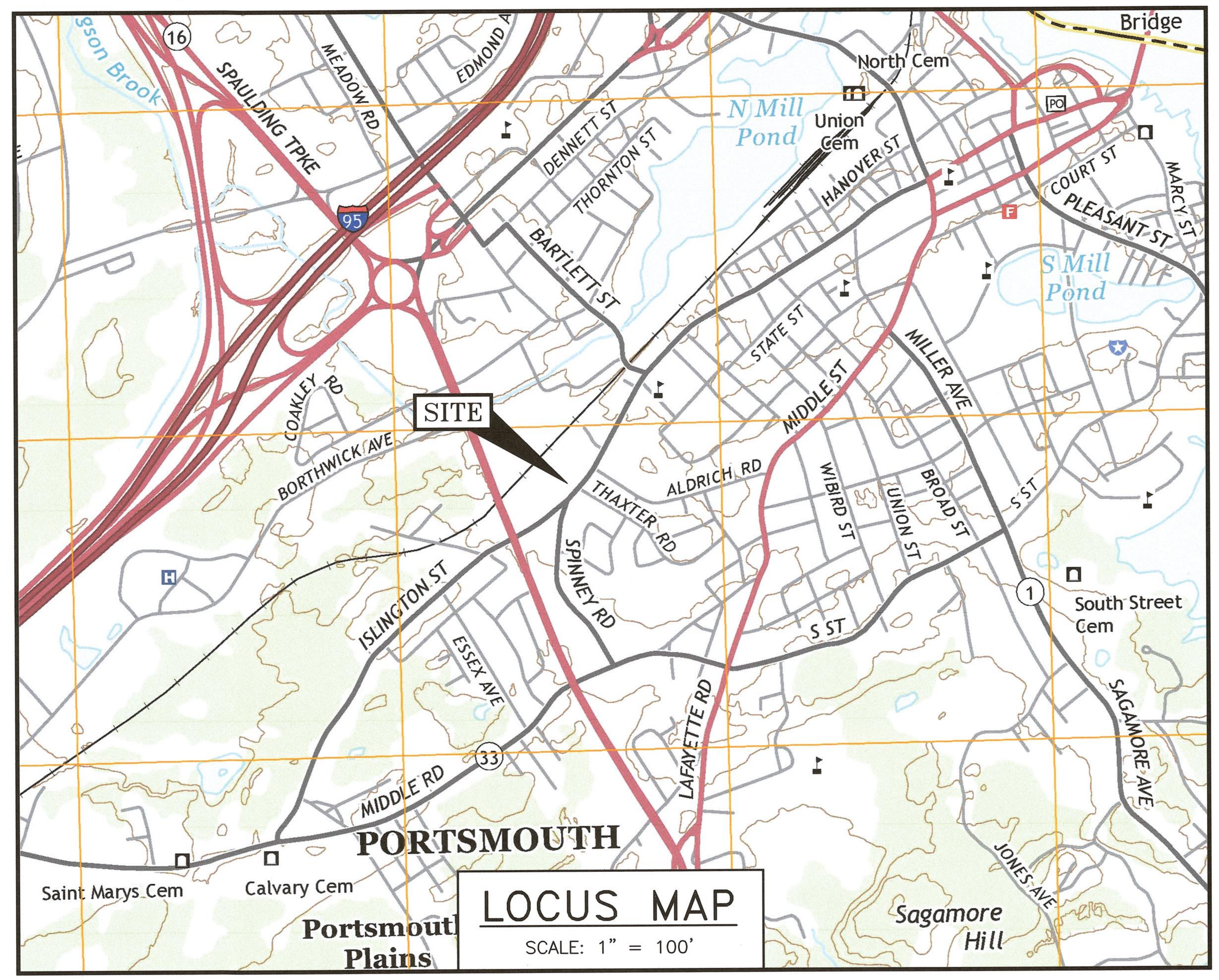
PORT ONE ARCHITECTS
959 ISLINGTON ST
PORTSMOUTH, NH 03801
TEL. (603) 436-8891



MAP 10.5A21A
CHARACTER DISTRICTS
AND CIVIC DISTRICTS

Character Districts

CD5	Character District 5
CD4	Character District 4
CD4-W	Character District 4-B
CD4-L1	Character District 4-L1
CD4-L2	Character District 4-L2



LOCUS MAP
SCALE: 1" = 100'

DIG SAFE
ME – NH – RI – VT
1-888-344-7233
CALL TOLL FREE

LEGEND:

EXISTING	PROPOSED	
		PROPERTY LINE
		SETBACK
S	S	SEWER PIPE
SL	SL	SEWER LATERAL
G	G	GAS LINE
D	D	STORM DRAIN
W	W	WATER LINE
WS	WS	WATER SERVICE
UGE	UGE	UNDERGROUND ELECTRIC
OHW	OHW	OVERHEAD ELECTRIC/WIRES
	UD	FOUNDATION DRAIN
		EDGE OF PAVEMENT (EP)
100	100	CONTOUR
97x3	98x0	SPOT ELEVATION
		UTILITY POLE
		WALL MOUNTED EXTERIOR LIGHTS
		TRANSFORMER ON CONCRETE PAD
		ELECTRIC HANDHOLD
WSO GSO	WSO GSO	SHUT OFFS (WATER/GAS)
	GV	GATE VALVE
	HYD	HYDRANT
CB	CB	CATCH BASIN
	SMH	SEWER MANHOLE
	DMH	DRAIN MANHOLE
	TMH	TELEPHONE MANHOLE
14	14	PARKING SPACE COUNT
PM		PARKING METER
LSA		LANDSCAPED AREA
TBD	TBD	TO BE DETERMINED
CI	CI	CAST IRON PIPE
COP	COP	COPPER PIPE
DI	DI	DUCTILE IRON PIPE
PVC	PVC	POLYVINYL CHLORIDE PIPE
RCP	RCP	REINFORCED CONCRETE PIPE
AC	–	ASBESTOS CEMENT PIPE
VC	VC	VITRIFIED CLAY PIPE
EP	EP	EDGE OF PAVEMENT
EL.	EL.	ELEVATION
FF	FF	FINISHED FLOOR
INV	INV	INVERT
S =	S =	SLOPE FT/FT
TBM	TBM	TEMPORARY BENCH MARK
TYP	TYP	TYPICAL

UTILITY CONTACTS

ELECTRIC:
EVERSOURCE
1700 LAFAYETTE ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 436-7708, Ext. 555.5678
ATTN: NICKOLAI KOSKO (MANAGER)

NATURAL GAS:
UNITIL
325 WEST ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 264-2033
ATTN: JOSH WILK

CABLE:
COMCAST
155 COMMERCE WAY
PORTSMOUTH, N.H. 03801
Tel. (603) 679-5695 (X1037)
ATTN: MIKE COLLINS

SEWER & WATER:
PORTSMOUTH DEPARTMENT OF PUBLIC WORKS
680 PEVERLY HILL ROAD
PORTSMOUTH, N.H. 03801
Tel. (603) 427-1530
ATTN: DOUG SPARKS

COMMUNICATIONS:
CONSOLIDATED COMMUNICATIONS
BENJAMIN WILLS
1575 GREENLAND ROAD
GREENLAND, N.H. 03840
Tel. (603) 427-5525

INDEX OF SHEETS

PORTSMOUTH APPROVAL CONDITIONS NOTE:
ALL CONDITIONS ON THIS PLAN SET SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE CITY OF PORTSMOUTH SITE PLAN REVIEW REGULATIONS.

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN ____________ DATE ____________

PROPOSED REDEVELOPMENT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

HALEYWARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

PLAN SET SUBMITTAL DATE: 18 AUGUST 2025

5010220.1379

GRAPHIC SCALE

10 5 0 10 20 30 40 FEET

3 0 5 10 METERS

HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282

WWW.HALEYWARD.COM

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 172 AS LOT 10.

2) OWNER OF RECORD:
   PWED2, LLC
   3 PENSTOCK WAY
   NEWMARKET, NH 03857
   6596/2664

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.

4) EXISTING LOT AREA:
   11,569 S.F.
   0.2654 ACRES

5) PARCEL IS LOCATED IN CHARACTER DISTRICT 4 WEST END (CD4–W).

6) DIMENSIONAL REQUIREMENTS:
   SEE CITY OF PORTSMOUTH ZONING ORDINANCE

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE SITE AREA ON ASSESSOR'S MAP 172 LOT 10 IN THE CITY OF PORTSMOUTH.

PWED2, LLC
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	5/14/25

REVISIONS

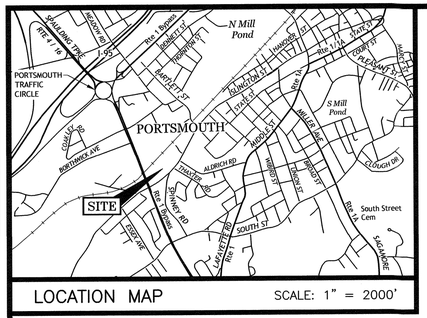
SCALE 1"=10' JANUARY 2025

SITE ORTHOPHOTO

S1

FB 332 & PG 57

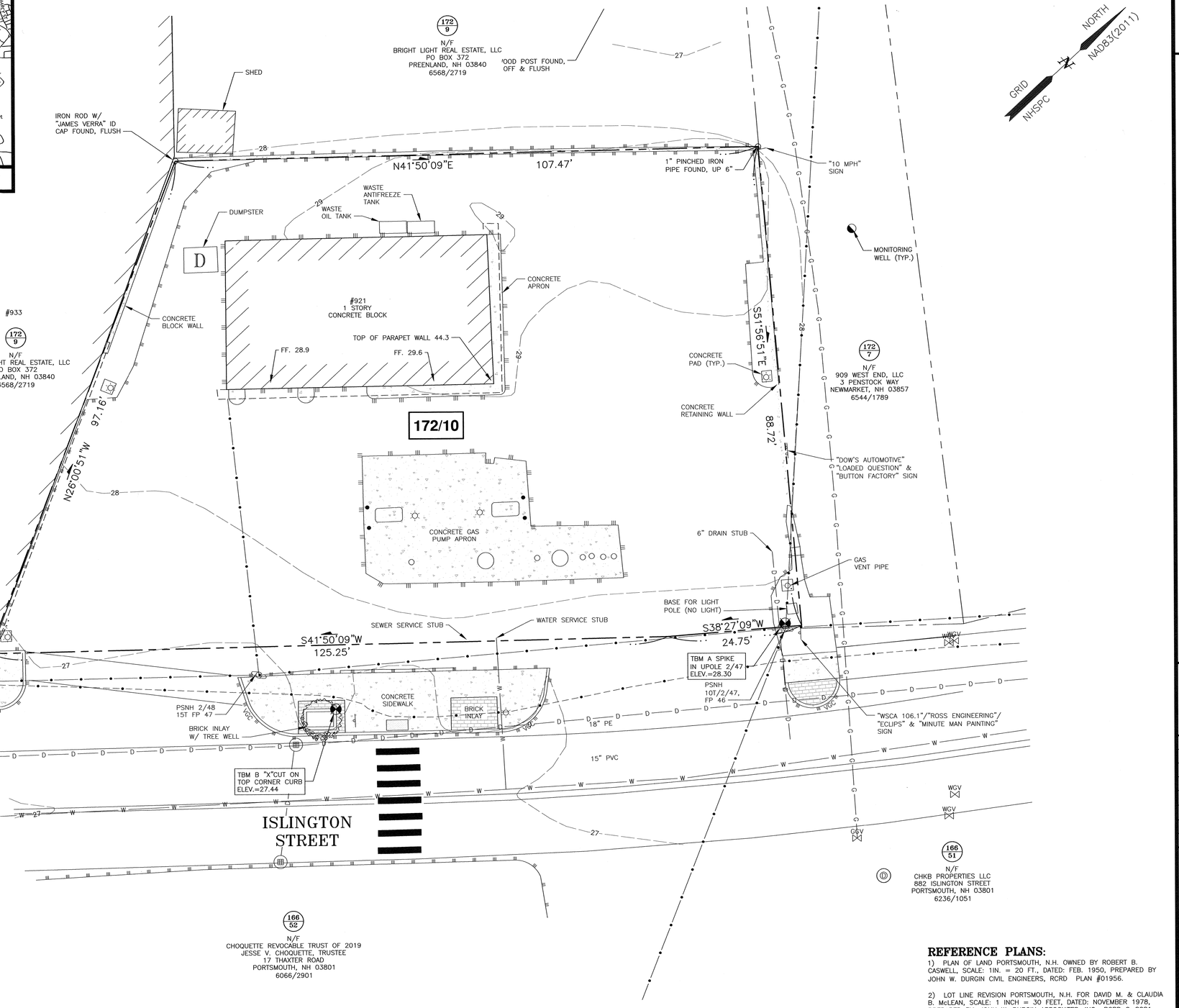
5010220.1379



LOCATION MAP SCALE: 1" = 2000'

LEGEND:

N/F	NOW OR FORMERLY
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
11/21	MAP 11 / LOT 21
	BOUNDARY
	SETBACK
○	IRON ROD FOUND/SET
●	IRON PIPE FOUND/SET
S	SEWER LINE
G	GAS LINE
D	STORM DRAIN
W	WATER LINE
	OVERHEAD ELECTRIC/WIRES
100	CONTOUR
97x3	SPOT ELEVATION
	EDGE OF PAVEMENT (EP)
	UTILITY POLE (w/ GUY)
	GAS SHUT OFF
	WATER SHUT OFF/CURB STOP
GV	GATE VALVE
	LIGHT POLE
	CATCH BASIN
S	SEWER MANHOLE
D	DRAIN MANHOLE
MW6	MONITORING WELL
	SIGNS
EL.	ELEVATION
F.F.	FINISHED FLOOR
TBM	TEMPORARY BENCHMARK
TYP.	TYPICAL
VGC/SGC	VERTICAL/SLOPED GRANITE CURB



GRAPHIC SCALE

10 5 0 10 20 30 40 FEET

3 0 5 10 METERS

STATE OF NEW HAMPSHIRE No. 1122 PHILLIP A. YETMAN LICENSED LAND SURVEYOR

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

PHILIP A. YETMAN, LLS 1122 — DATE 8/18/2025

REFERENCE PLANS:

1) PLAN OF LAND PORTSMOUTH, N.H. OWNED BY ROBERT B. CASWELL, SCALE: 1IN. = 20 FT., DATED: FEB. 1950, PREPARED BY JOHN W. DURGIN CIVIL ENGINEERS, RCRD PLAN #01956.

2) LOT LINE REVISION PORTSMOUTH, N.H. FOR DAVID M. & CLAUDIA B. McLEAN, SCALE: 1 INCH = 30 FEET, DATED: NOVEMBER 1978, PREPARED BY: JOHN W. DURGIN ASSOCIATES, INC., RCRD C-8281.

3) PLAN OF LAND 933 ISLINGTYON STREET PORTSMOUTH, NEW HAMPSHIRE ASSESSOR'S LOT 172-009, OWNER: EF II REALTY TRUST, SCALE: 1" 20', DATED: 9-3-2009, PREPARED BY: JAMES VERRA AND ASSOCIATES, INC., RCRD D-36191

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 172 AS LOT 10.

2) OWNER OF RECORD:
PWED2, LLC
3 PENSTOCK WAY
NEWMARKET, NH 03857
6596/2664

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.

4) EXISTING LOT AREA:
11,569 S.F.
0.2654 ACRES

5) PARCEL IS LOCATED IN CHARACTER DISTRICT 4 WEST END (CD4-W).

6) DIMENSIONAL REQUIREMENTS:
SEE CITY OF PORTSMOUTH ZONING ORDINANCE

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS ON ASSESSOR'S MAP 172 LOT 10 IN THE CITY OF PORTSMOUTH.

8) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.

9) ABUTTER INFORMATION TAKEN FROM THE CITY OF PORTSMOUTH GIS WEBSITE.

10) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

PWED2, LLC
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	ISSUED FOR TAC APPROVAL	8/18/25
0	ISSUED FOR COMMENT	2/12/25

REVISIONS

SCALE 1"=10' JANUARY 2025

EXISTING CONDITIONS PLAN

C1

FB 332 & PG 57

5010220.1379

P:\NH\5010220-Chinburg Builders\1379-909 Islington Street, Portsmouth-\2024 Site Development\02-CAD_Files\Survey\5010220-1379-V-EC.dwg, 8/15/2025 11:31:30 AM, \\SVRPSM-FS01\Portsmouth Plotter Canon TX5000

DEMOLITION NOTES

A) THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE DESIGNER. IT IS THE CONTRACTORS' RESPONSIBILITY TO LOCATE UTILITIES AND ANTICIPATE CONFLICTS. CONTRACTOR SHALL REPAIR EXISTING UTILITIES DAMAGED BY THEIR WORK AND RELOCATE EXISTING UTILITIES THAT ARE REQUIRED TO BE RELOCATED PRIOR TO COMMENCING ANY WORK IN THE IMPACTED AREA OF THE PROJECT.

B) ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTORS UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES. THE CONTRACTOR SHALL COORDINATE REMOVAL, RELOCATION, DISPOSAL, OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.

C) ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO THE ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

D) THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES AND CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.

E) SAWCUT AND REMOVE PAVEMENT ONE FOOT OFF PROPOSED EDGE OF PAVEMENT TRENCH IN AREAS WHERE PAVEMENT IS TO BE REMOVED.

F) IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE CONDITIONS OF ALL THE PERMIT APPROVALS.

G) THE CONTRACTOR SHALL OBTAIN AND PAY FOR ADDITIONAL CONSTRUCTION PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR ANY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK.

H) THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE, UTILITIES, VEGETATION, PAVEMENT, AND CONTAMINATED SOIL WITHIN THE WORK LIMITS SHOWN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ANY EXISTING DOMESTIC / IRRIGATION SERVICE WELLS IN THE PROJECT AREA IDENTIFIED DURING THE CONSTRUCTION AND NOT CALLED OUT ON THE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER FOR PROPER CAPPING / RE-USE.

I) ALL WORK WITHIN THE CITY OF PORTSMOUTH RIGHT OF WAY SHALL BE COORDINATED WITH THE CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS (DPW).

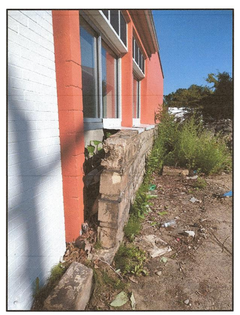
J) REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF-SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.

K) CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED, THE CONTRACTOR SHALL EMPLOY A NH LICENSED LAND SURVEYOR TO REPLACE THEM.

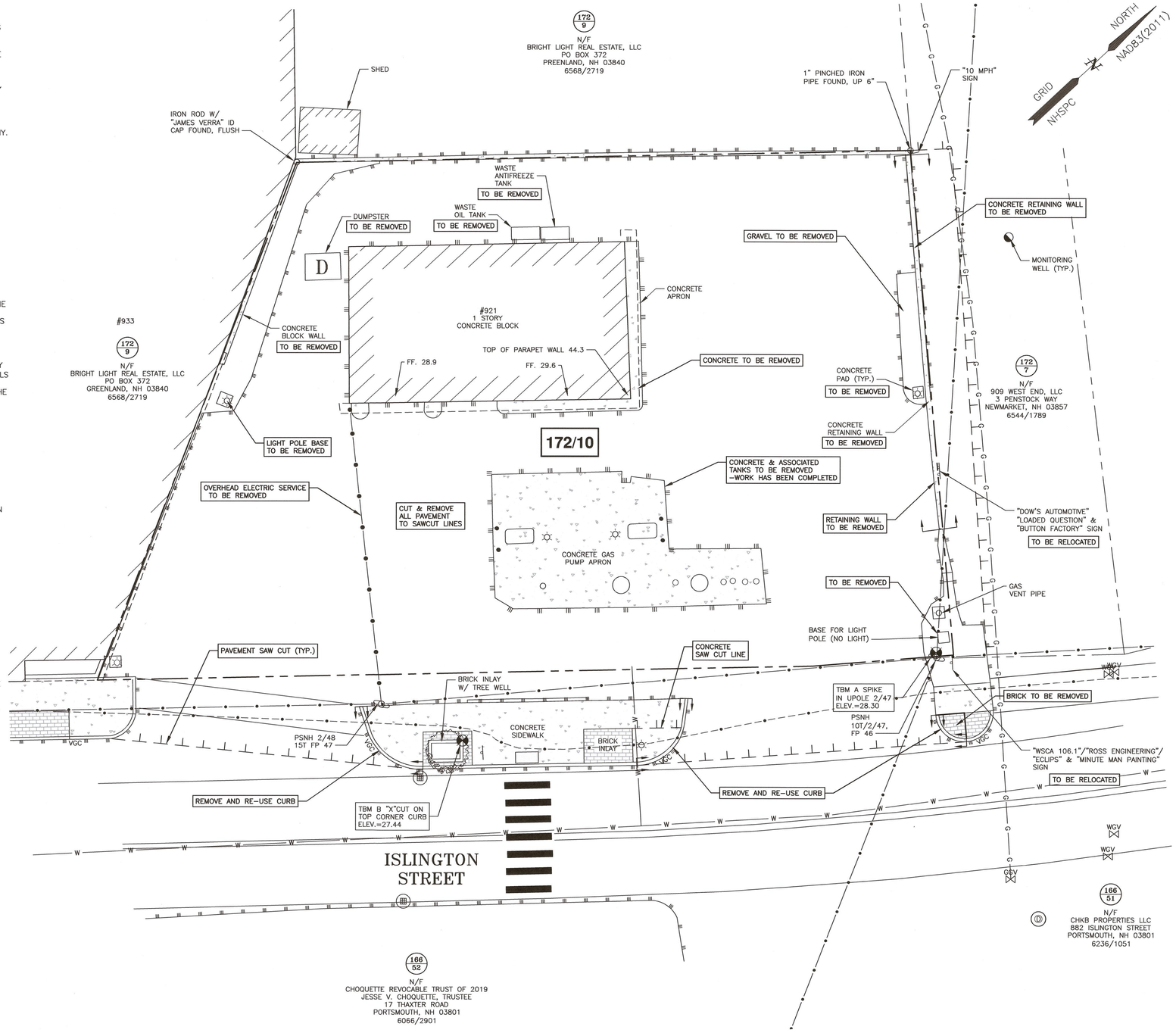
L) PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS WITHIN CONSTRUCTION LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE HIGH FLOW SILT SACK BY ACF ENVIRONMENTAL OR APPROVED EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN OF 0.25 INCHES OR GREATER. CONTRACTOR SHALL COMPLETE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR MORE OFTEN IF WARRANTED OR FABRIC BECOMES CLOGGED. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.

M) THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFELY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.

N) ANY CONTAMINATED MATERIAL REMOVED DURING THE COURSE OF THE WORK WILL REQUIRE HANDLING IN ACCORDANCE WITH NHDES REGULATIONS. CONTRACTOR SHALL HAVE A HEALTH AND SAFETY PLAN IN PLACE, AND COMPLY WITH ALL APPLICABLE PERMITS, APPROVALS, AUTHORIZATIONS, AND REGULATIONS



CONCRETE BLOCK WALL
TO BE REMOVED



GRAPHIC SCALE

10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

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603.430.9282
WWW.HALEYWARD.COM

NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1-888-DIG-SAFE (1-888-344-7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY WITHIN 100 FEET OF UNDERGROUND UTILITIES. THE EXCAVATOR IS RESPONSIBLE TO MAINTAIN MARKS. DIG SAFE TICKETS EXPIRE IN THIRTY DAYS.

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3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

PROPOSED RESTAURANT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	ISSUED FOR TAC APPROVAL	8/18/25
0	ISSUED FOR COMMENT	5/14/25

REVISIONS

STATE OF NEW HAMPSHIRE
JOHN R. CHAGNON
No. 7854
LICENSED
PROFESSIONAL ENGINEER

SCALE 1"=10' JANUARY 2025

DEMOLITION PLAN

C2

FB 332 & PG 57

5010220.1379

P:\NH\5010220-Chinburg_Builders\1379-909 Islington Street, Portsmouth-\2024 Site Development\02-CAD_Files\Survey\5010220-1379-DEMO.dwg, 8/15/2025 9:15:09 AM, \\SVRFSM-FS01\Portsmouth Plotter Canon TX3000

IMPERVIOUS SURFACE AREAS
(TO PROPERTY LINE)

STRUCTURE	PRE-CONSTRUCTION IMPERVIOUS (S.F.)	POST-CONSTRUCTION IMPERVIOUS (S.F.)
MAIN STRUCTURE	1341	1,494
CONCRETE	1,031	610
PAVEMENT	8,749	6,892
CONCRETE RETAINING WALL	78	20
PATIO	0	709
GRANITE CURB	0	95
TOTAL	11,199	9,820
LOT SIZE	11,569	11,569
% LOT COVERAGE	96.8%	84.9%

LENGTH TABLE

LINE	BEARING	DISTANCE
L1	N41°50'09"E	107.47'
L2	S51°56'51"E	88.72'
L3	S38°27'09"W	24.75'
L4	S41°50'09"W	125.25'
L5	N26°00'51"W	97.16'

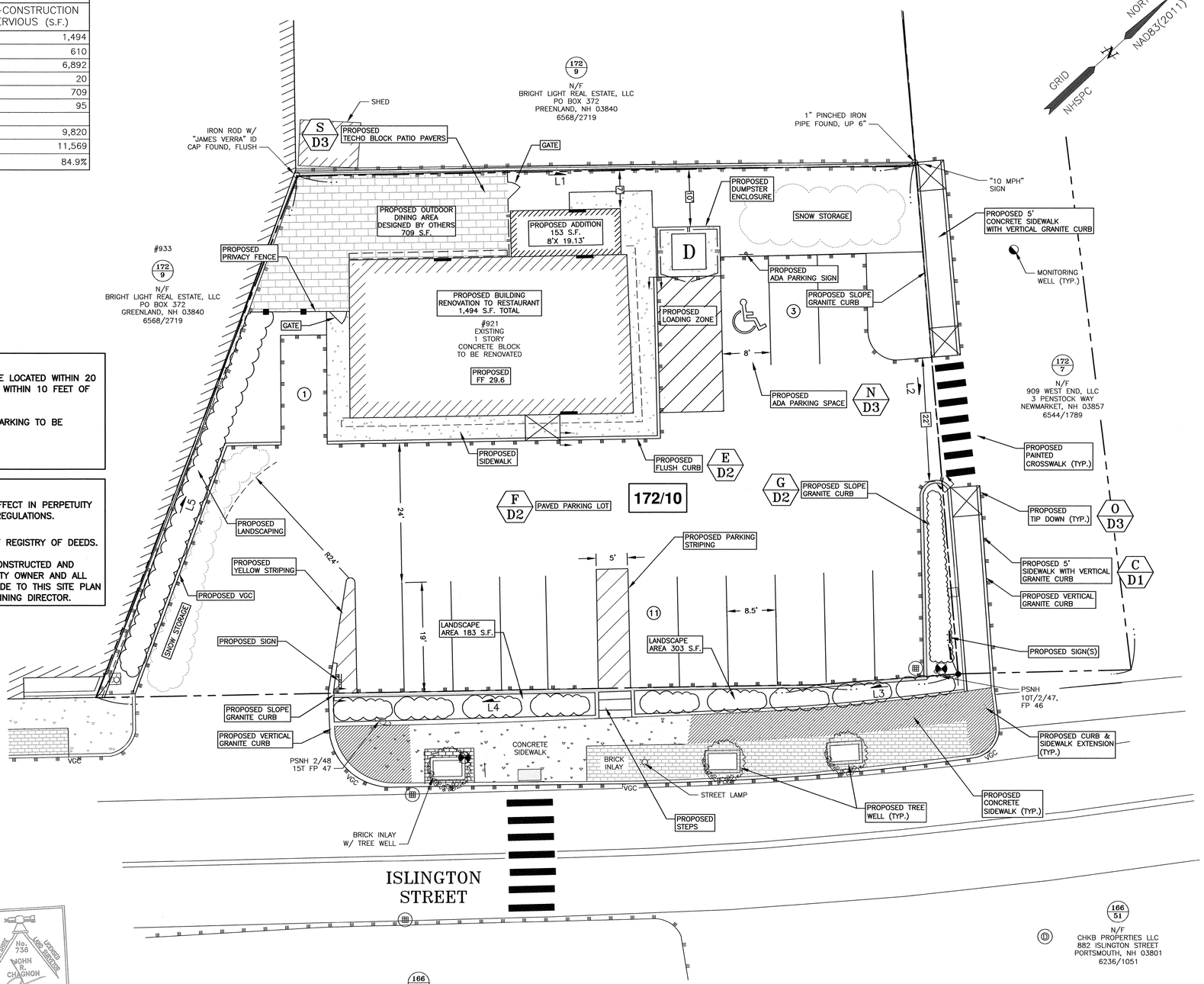
GRANTED VARIANCES:

1. VARIANCE FROM SECTION 10.575 TO ALLOW A DUMPSTER TO BE LOCATED WITHIN 20 FEET OF A RESIDENTIAL OR MIXED RESIDENTIAL ZONED LOT OR WITHIN 10 FEET OF ANY LOT LINE.
2. VARIANCE FROM SECTION 10.1113.20 TO ALLOW OFF-STREET PARKING TO BE LOCATED BETWEEN THE PRINCIPAL BUILDING AND THE STREET.

APPROVED: JULY 22, 2025

APPROVED CONDITIONS:

1. (2.5.4.2E): ALL CONDITIONS ON THIS PLAN SHALL REMAIN IN EFFECT IN PERPETUITY PURSUANT TO THE REQUIREMENTS OF THE SITE PLAN REVIEW REGULATIONS.
2. (2.13.3):
   a. THIS SITE 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 THE FUTURE PROPERTY OWNERS. NO CHANGES SHALL BE MADE TO THIS SITE PLAN WITHOUT THE EXPRESS APPROVAL OF THE PORTSMOUTH PLANNING DIRECTOR.



GRAPHIC SCALE

10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

"I CERTIFY THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION, THAT IT IS THE RESULT OF A FIELD SURVEY BY THIS OFFICE AND HAS AN ACCURACY OF THE CLOSED TRAVERSE THAT EXCEEDS THE PRECISION OF 1:15,000."

JOHN R. CHAGNON, LLS — DATE 8.18.25

STATE OF NEW HAMPSHIRE — No. 738 — LICENSED LAND SURVEYOR — JOHN R. CHAGNON — SIGNATURE

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN — DATE

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

NOTES:

1) PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 172 AS LOT 10.

2) OWNER OF RECORD:
PWED2, LLC
3 PENSTOCK WAY
NEWMARKET, NH 03857
6596/2664

3) PARCEL IS NOT IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON FIRM PANEL 33015C0259F. EFFECTIVE JANUARY 29, 2021.

4) EXISTING LOT AREA:
11,569 S.F.
0.2654 ACRES

5) PARCEL IS LOCATED IN CHARACTER DISTRICT 4 WEST END (CD4-W).

6) DIMENSIONAL REQUIREMENTS:
SEE CITY OF PORTSMOUTH ZONING ORDINANCE

7) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED SITE REDEVELOPMENT ON ASSESSOR'S MAP 172 LOT 10 IN THE CITY OF PORTSMOUTH.

8) VERTICAL DATUM IS NAVD88. BASIS OF VERTICAL DATUM IS REDUNDANT RTN GNSS OBSERVATIONS.

9) PARKING CALCULATION:

SECTION 9.10-9.50
ALL EATING AND DRINKING PLACES
1 SPACE PER 100 S.F. GFA

1,494 S.F./100 S.F. PER SPACE = 15 SPACES REQUIRED

15 SPACES PROVIDED

PROPOSED RESTAURANT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
3	ISSUED FOR TAC APPROVAL	8/18/25
2	ADDITION & PARKING	8/1/25
1	ISSUED FOR APPROVAL	5/14/25
0	ISSUED FOR COMMENT	2/12/25

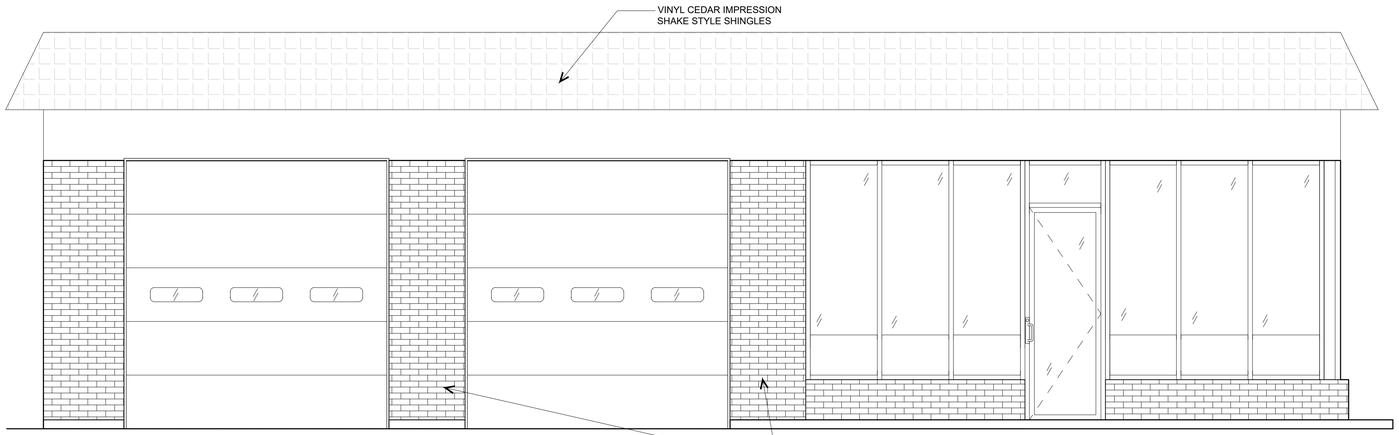
REVISIONS

STATE OF NEW HAMPSHIRE — JOHN R. CHAGNON — No. 7851 — LICENSED — PROFESSIONAL ENGINEER

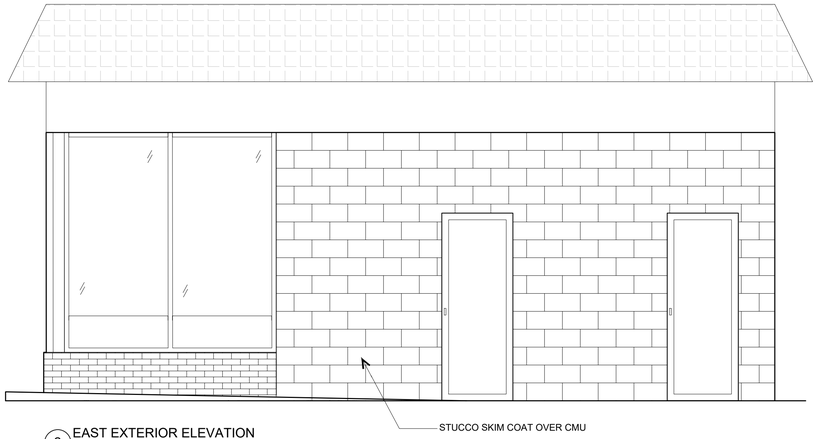
SCALE 1"=10' — JANUARY 2025

SITE PLAN — C3

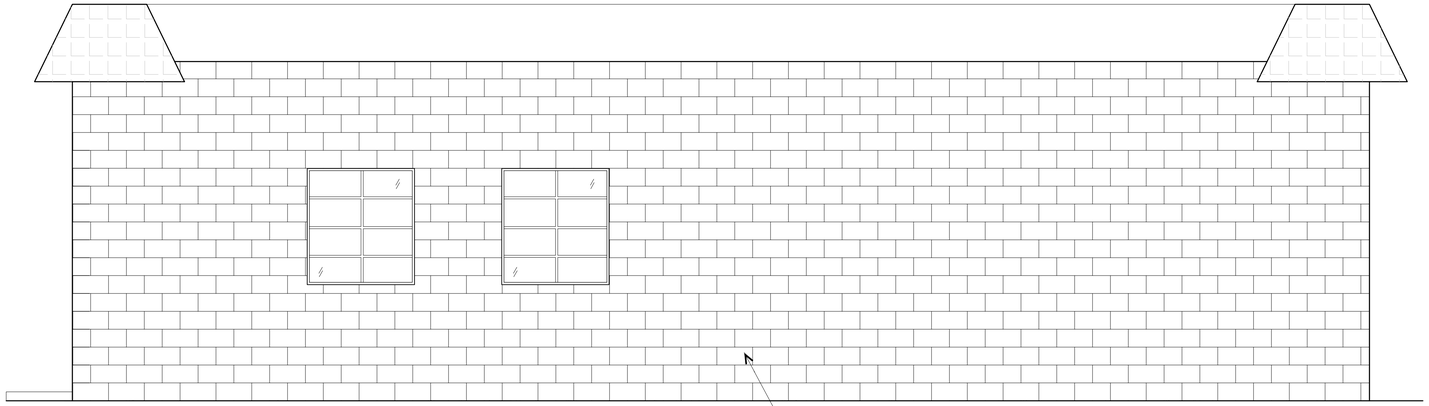
FB 332 & PG 57 — 5010220.1379



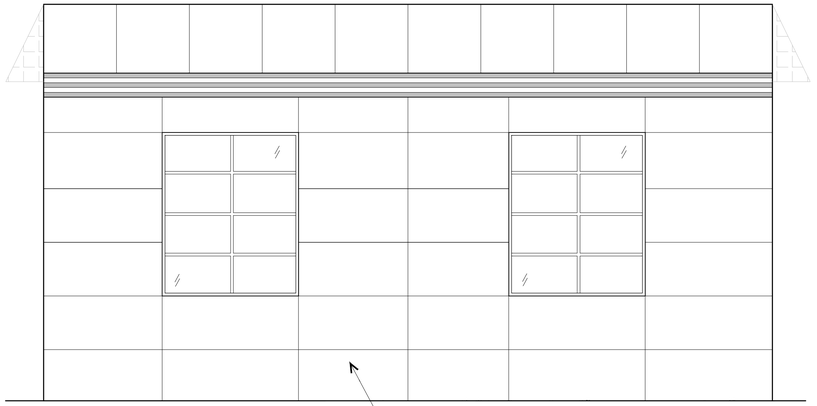
1 SOUTH EXTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



2 EAST EXTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



3 NORTH EXTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



4 WEST EXTERIOR ELEVATION
SCALE: 3/8" = 1'-0"

5 EXISTING CONDITIONS PHOTO (CIRCA 2010-PRESENT)
SCALE: NONE

6 EXISTING CONDITIONS PHOTO (CIRCA 2010-PRESENT)
SCALE: NONE

7 HISTORIC CONDITION PHOTO (CIRCA 1950-1960)
SCALE: NONE

(Not for Construction) PORTSMOUTH ZBA SUBMISSION FOR 06/18/25

CHINBURG

CHINBURG PROPERTIES
3 Penstock Way Newmarket, NH 03857
www.chinburg.com | (603) 868-5995

PROPOSED RESTAURANT

921 ISLINGTON STREET, PORTSMOUTH, NH, 03801

Revisions:

No.	Rev. Note	Date

Project status: -%

ARCHITECTURE DRAFT FOR REVIEW

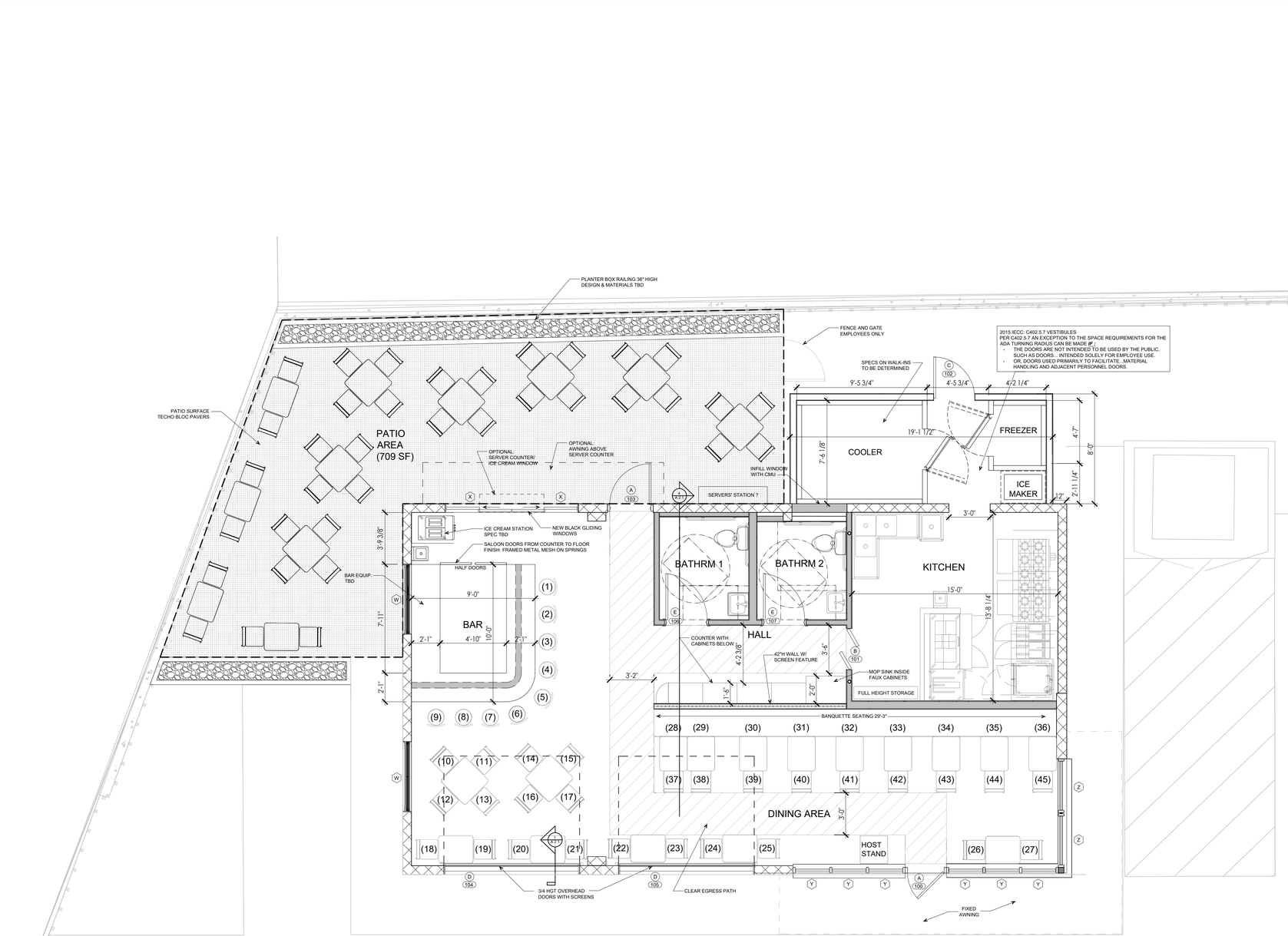
Project Date: 06-18-2025

Scale: AS NOTED | Drawn by: MS/KL/JW

Sheet Description:
EXISTING EXTERIOR ELEVATIONS

Sheet No:

EX 1.0



1 PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

1. It is the responsibility of all contractors to carefully examine the drawings, specifications and job conditions in order to coordinate their work with that of other trades, through the general contractor's superintendent on the job, so as to avoid conflict in the placing of materials and equipment by the trades in the spaces shown.
2. Contractors to verify all dimensions and conditions in the field prior to commencing any work.
3. All cabinetry and special features should be site verified for critical dimensions prior to ordering materials, notify interior designer with any changes that may be required.
4. Provide blocking for all millwork, fixed furniture and wall or ceiling mounted equipment. All concealed lumber and blocking to be fire treated. Coordinate blocking requirements with furniture installers as required.
5. Finish HVAC diffusers, draper/shade pockets, speaker grills and other items located in ceiling to match adjacent finish.
6. All work is to be performed in accordance with all applicable state, local, and national codes, and OSHA requirements.

(Not for Construction - For final feedback and coordination) PERMIT SET

CHINBURG

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www.chinburg.com | (603) 868-5995

PROPOSED RESTAURANT

921 ISLINGTON STREET, PORTSMOUTH, NH, 03801

Revisions:

No.	Rev. Note	Date

Project status: **95%**

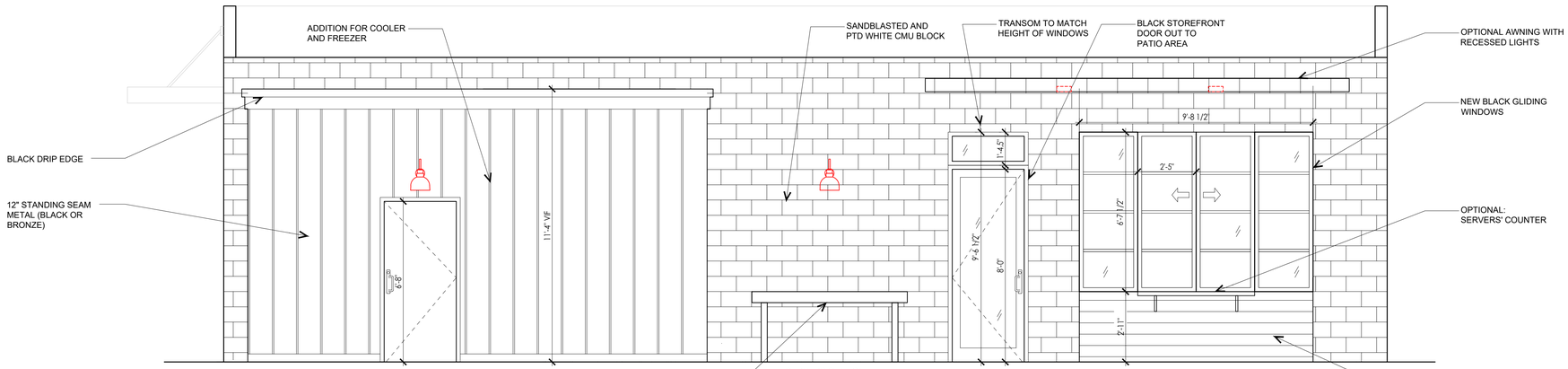
ARCHITECTURE
DRAFT FOR REVIEW

Project Date: **08-14-2025**

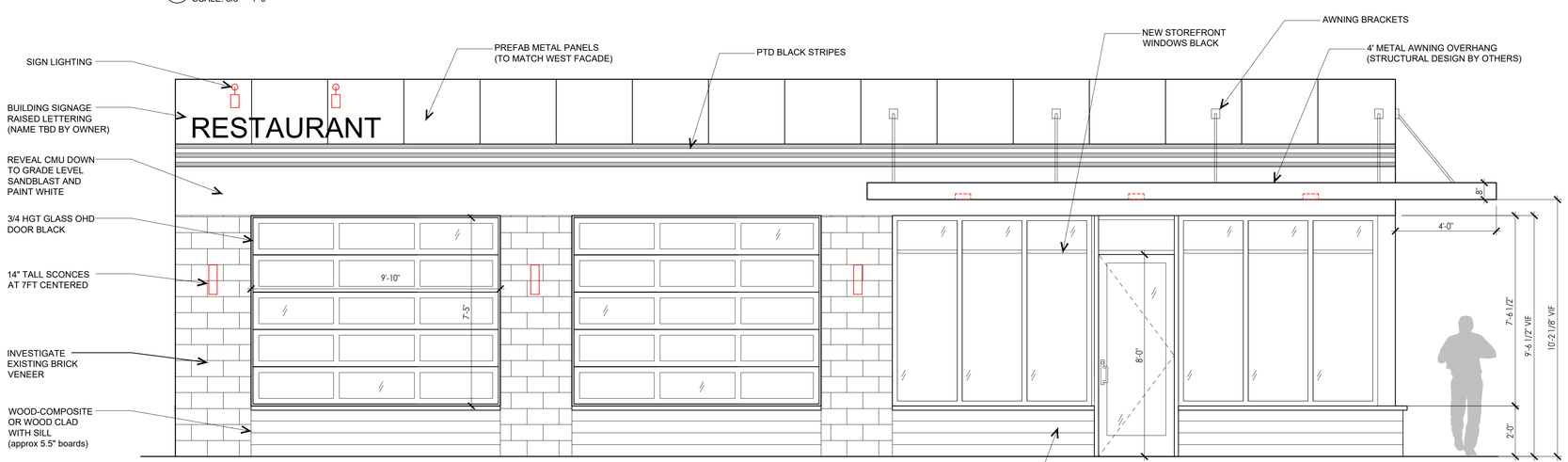
Scale: AS NOTED | Drawn by: MS/KL/JW

Sheet Description:
PROPOSED FLOOR PLAN

Sheet No:
A 1.0



1 NORTH EXTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



2 SOUTH EXTERIOR ELEVATION
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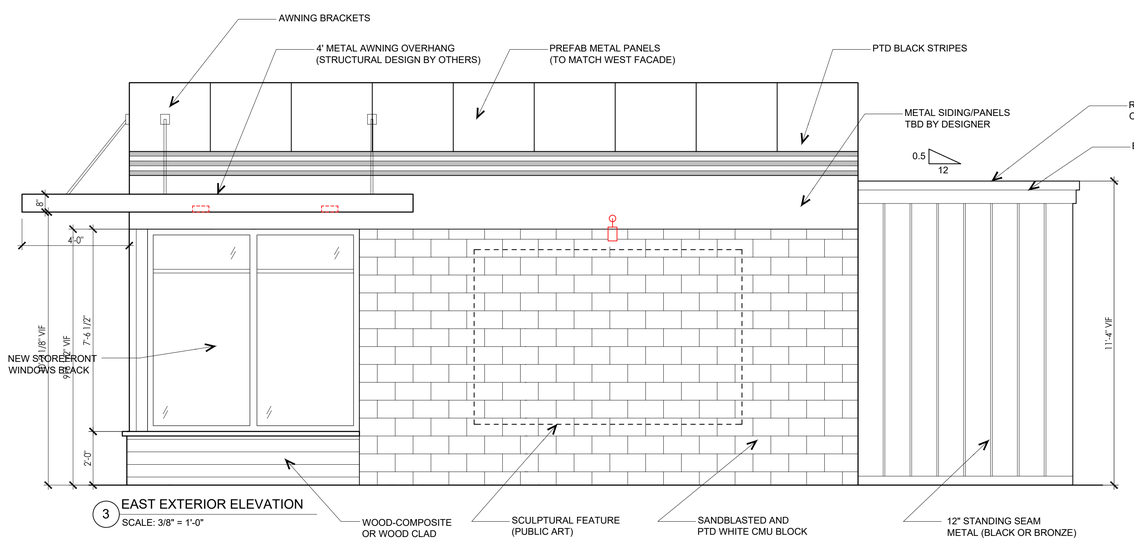
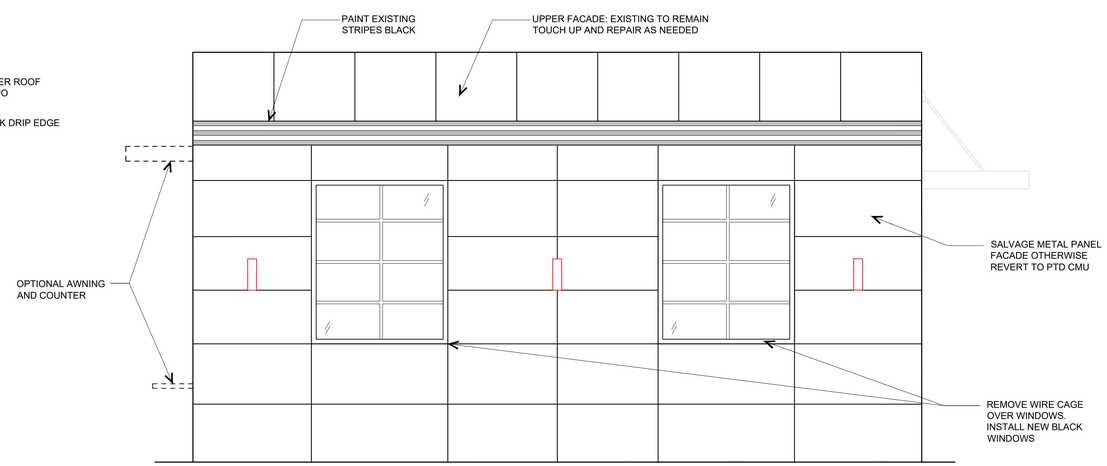


3 EAST EXTERIOR ELEVATION
SCALE: 3/8" = 1'-0"



4 WEST EXTERIOR ELEVATION
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PROPOSED RESTAURANT
921 ISLINGTON STREET, PORTSMOUTH, NH, 03801

Revisions:

No.	Rev. Note	Date

Project status: **95%**

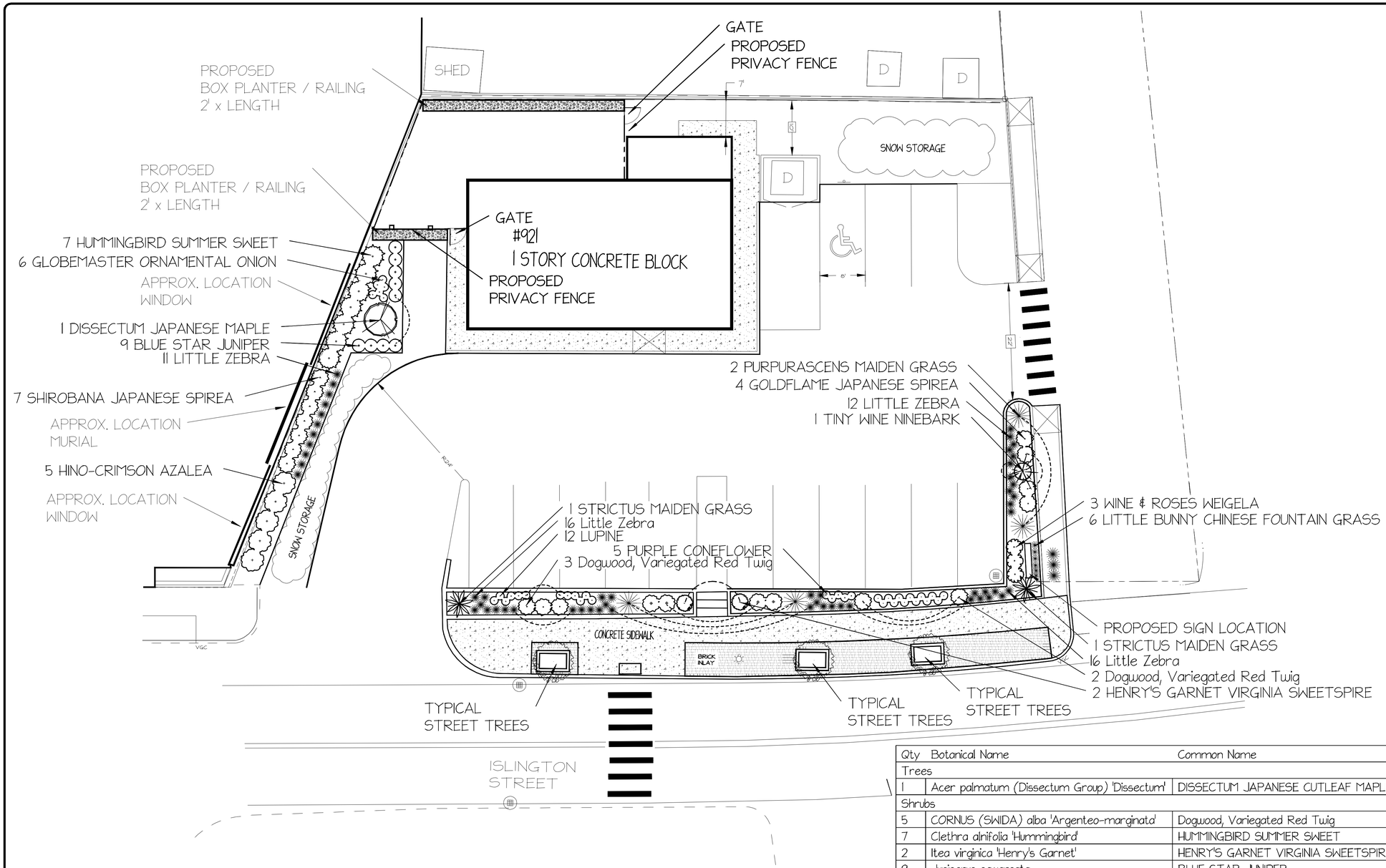
ARCHITECTURE DRAFT FOR REVIEW

Project Date: **08-13-2025**

Scale: AS NOTED | Drawn by: MS/KL/JW

Sheet Description:
PROPOSED EXTERIOR ELEVATIONS

Sheet No:
A 2.0



Qty	Botanical Name	Common Name	Remarks
Trees			
1	Acer palmatum (Dissectum Group) 'Dissectum'	DISSECTUM JAPANESE CUTLEAF MAPLE	
Shrubs			
5	CORNUS (SWIDA) alba 'Argenteo-marginata'	Dogwood, Variegated Red Twig	
7	Clethra alnifolia 'Hummingbird'	HUMMINGBIRD SUMMER SWEET	
2	Itea virginica 'Henry's Garnet'	HENRY'S GARNET VIRGINIA SWEETSPIRE	
9	Juniperus squamata	BLUE STAR JUNIPER	
1	Physocarpus opulifolius 'TINY WINE'	TINY WINE NINEBARK	
5	Rhododendron (subgenus Azalea) 'Hino-crimson'	HINO-CRIMSON AZALEA	
4	Spiraea japonica 'Goldflame'	GOLDFLAME JAPANESE SPIREA	
7	Spiraea japonica 'Shiroband'	SHIROBANA JAPANESE SPIREA	
3	Weigela florida 'Alexandra'	WINE & ROSES® WEIGELA	
Ornamental Grasses			
55	MISCANTHUS sinensis 'Little Zebra'	Little Zebra	
2	Miscanthus sinensis 'Purpurascens'	PURPURASCENS MAIDEN GRASS	
2	Miscanthus sinensis 'Strictus'	STRICTUS MAIDEN GRASS	
6	Pennisetum alopecuroides 'Little Bunny'	LITTLE BUNNY CHINESE FOUNTAIN GRASS	
Perennials			
6	Allium 'Globemaster'	GLOBEMASTER ORNAMENTAL ONION	
5	Echinacea purpurea	PURPLE CONEFLOWER	
12	Lupinus polyphyllus	LUPINE	

CALL BEFORE YOU DIG

811 DigSafe MA-ME-NH-RI-VT
Dig Safe System, Inc.
It's Smart. It's Free. It's the Law.

1" = 10'
0 5 10 20
SCALE IN FEET

NOTES

No.	Date	Description
REVISIONS		

921 ISLINGTON
PORTMOUTH, N.H.

PRELIMINARY
LANDSCAPE DRAWING

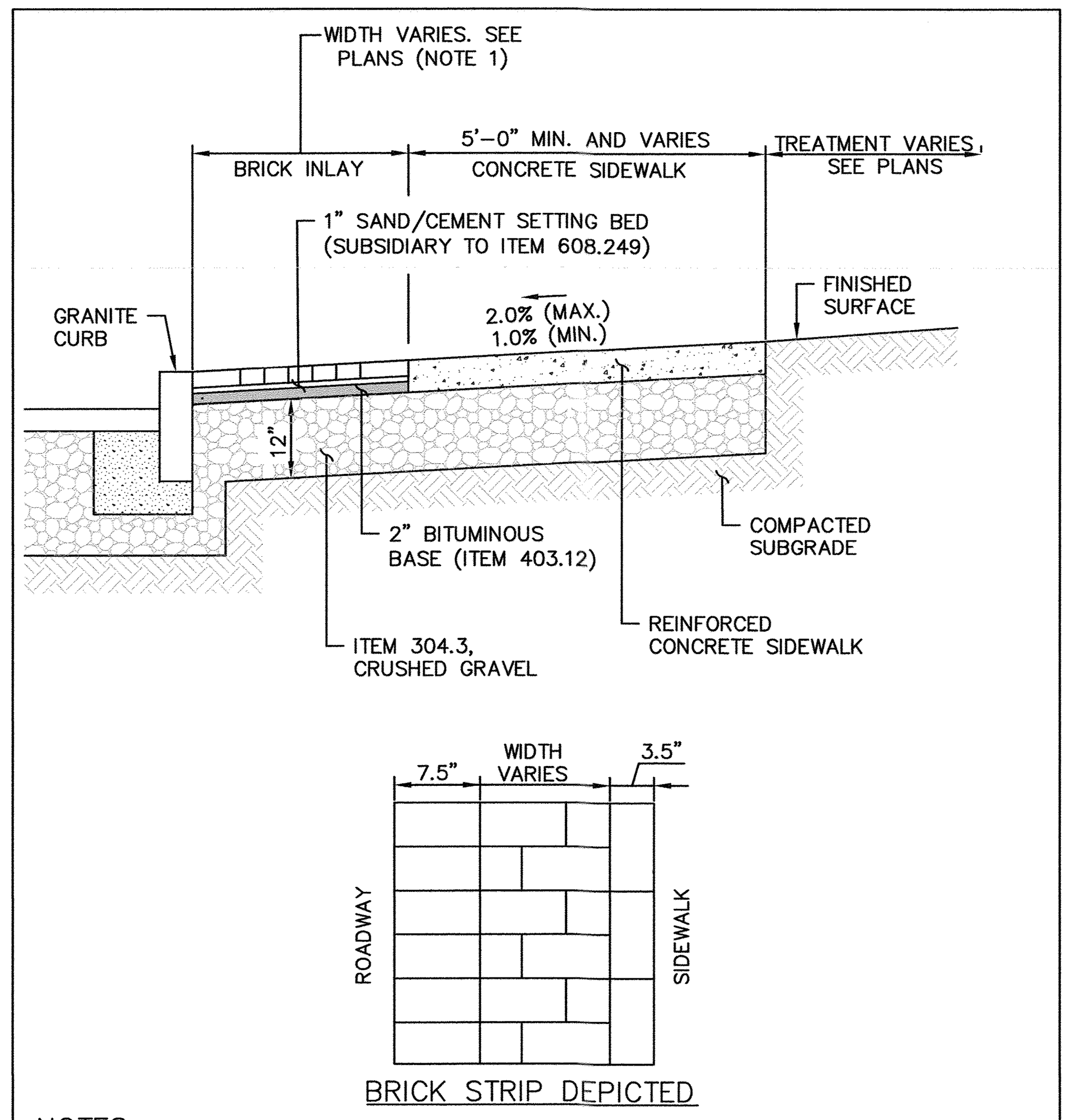
TRIMMERS LANDSCAPING, INC.

SCALE	1" = 10'
DRAWN BY	MIC
CHECKED BY	ES
DATE	08.13.25
DATE OF PRINT	

PROJECT NO.

SHEET NO. L-1

Powered by DynaSCAPE



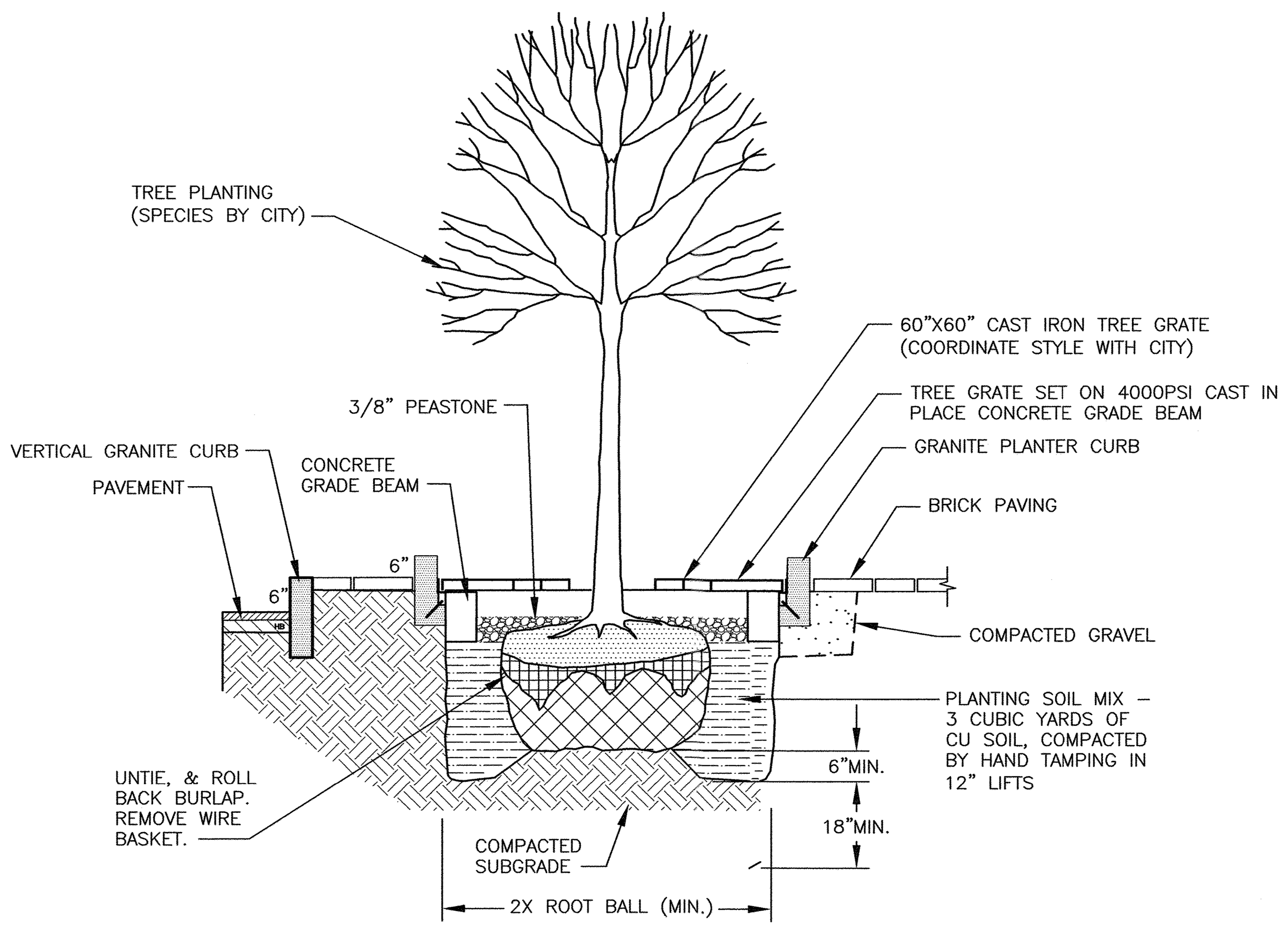
NOTES:

1. BRICK INLAY SPECIFICATIONS SHALL ALSO APPLY TO PROPOSED BRICK INLAY SHOWN BEHIND PROPOSED SIDEWALKS.

A/C4 TYPICAL CONCRETE SIDEWALK WITH BRICK INLAY

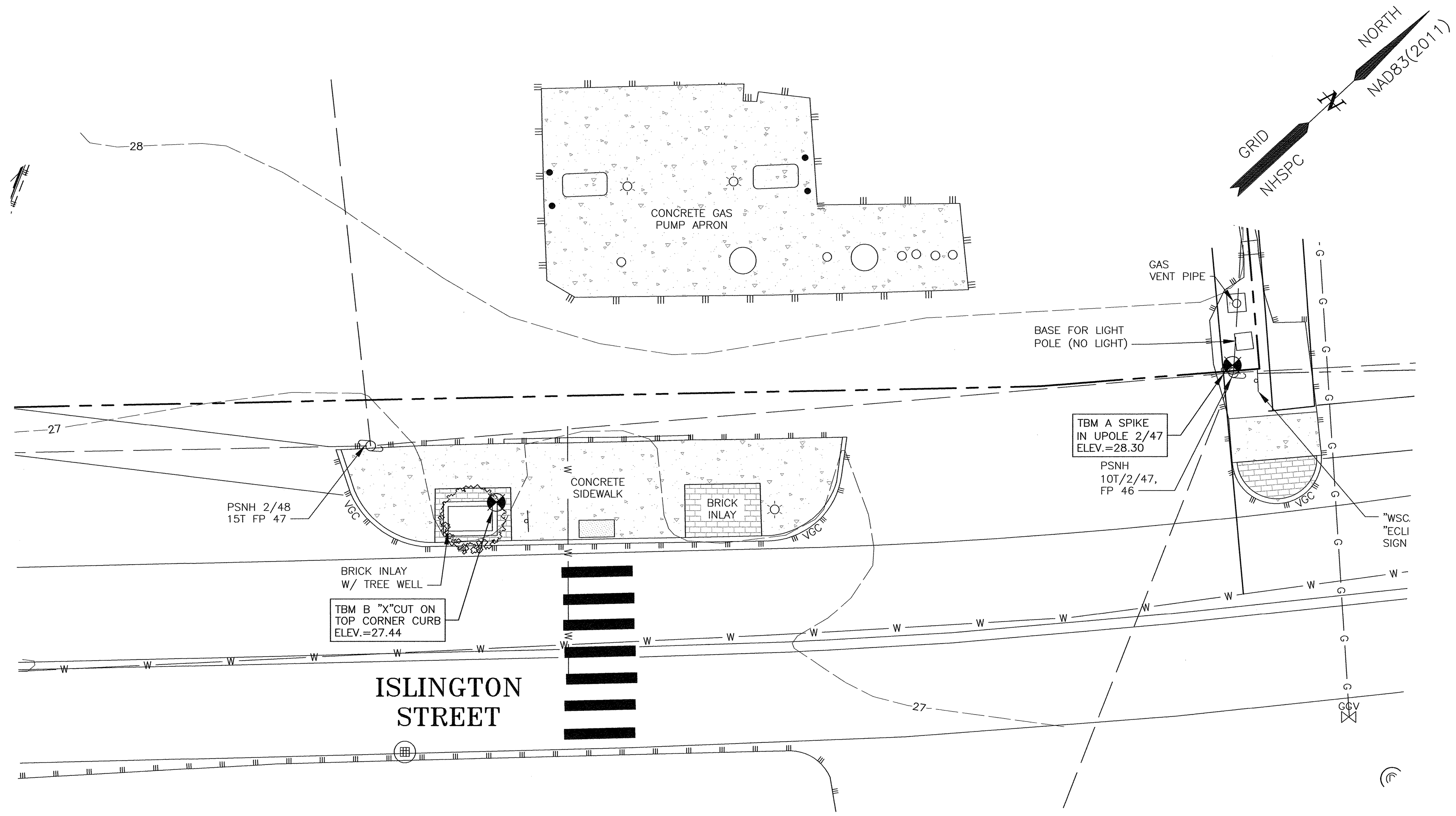
NOT TO SCALE

ISLINGTON STREET PROJECT DETAIL

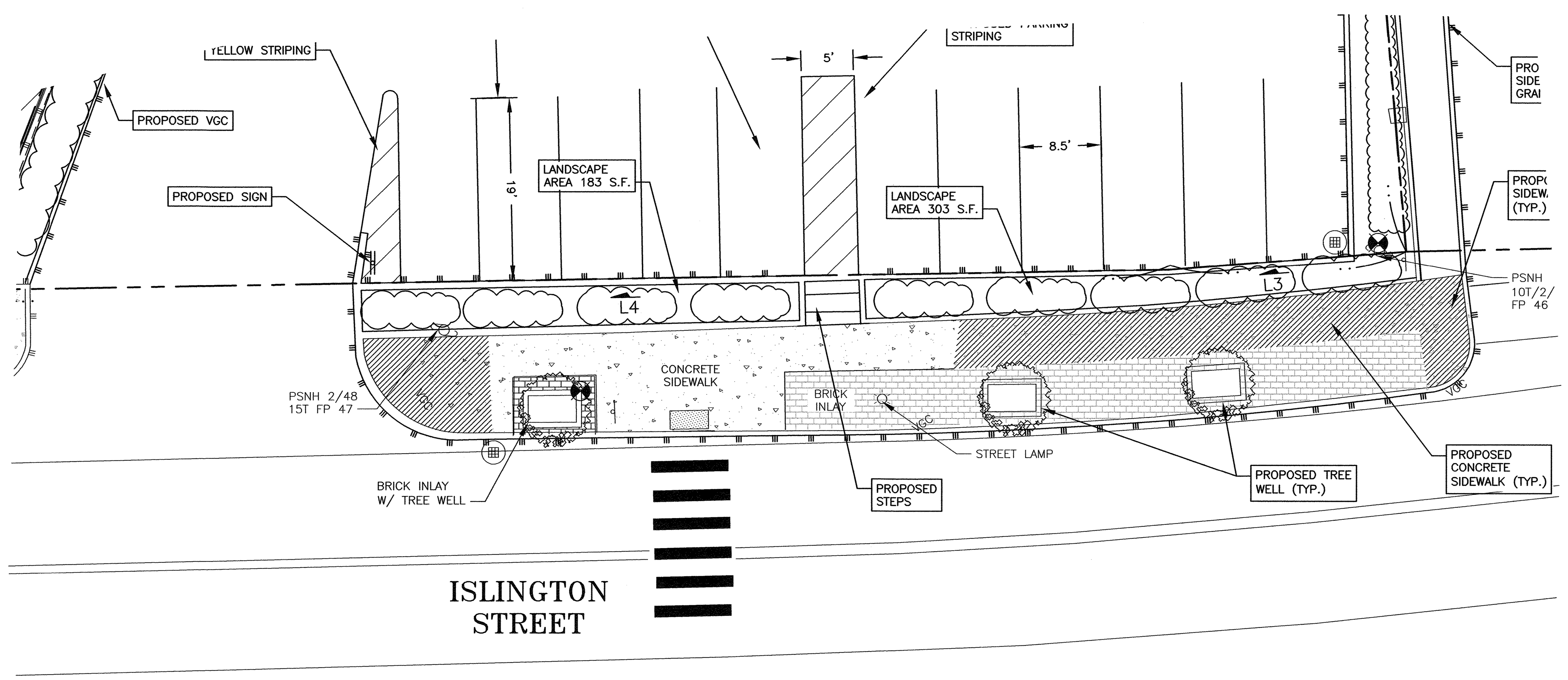


B/C4 TREE PLANTER

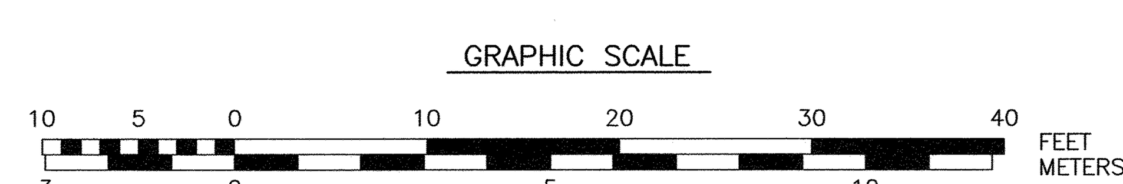
COORDINATE WITH CITY ARBORIST — NTS



EXISTING SIDEWALK



PROPOSED SIDEWALK



HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd, Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

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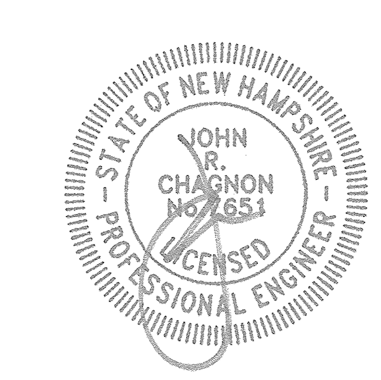
4) THE PURPOSE OF THIS PLAN IS TO SHOW THE OFFSITE IMPROVEMENTS AT 921 ISLINGTON STREET.

PWED2, LLC
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	ISSUED FOR APPROVAL	5/14/25
0	ISSUED FOR COMMENT	2/12/25

REVISIONS



SCALE 1"=10'   JANUARY 2025

OFFSITE IMPROVMENTS PLAN

C4

FB 332 & PG 57

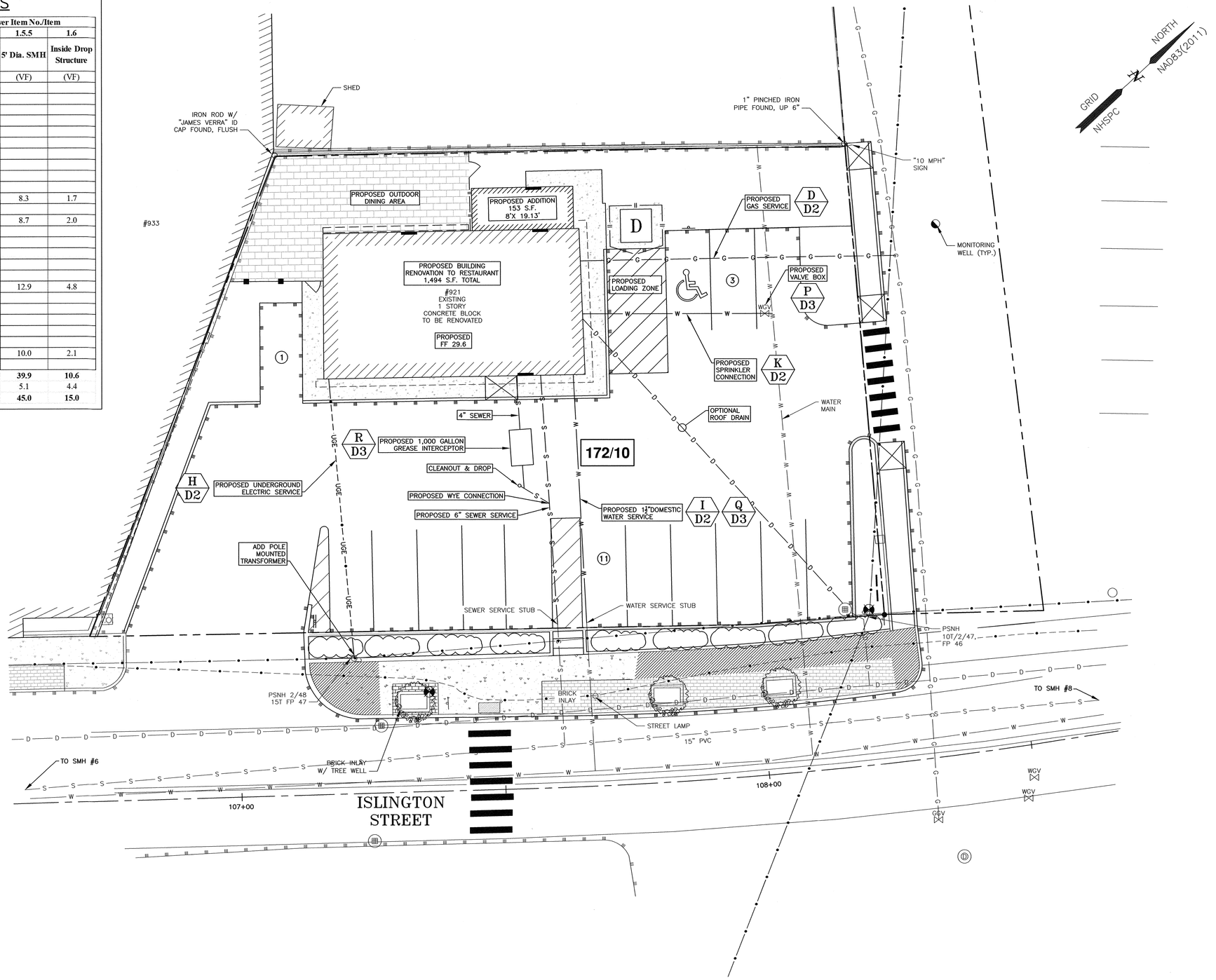
5010220.1379

SEWER STRUCTURES

Location ID			Sewer Item No./Item		
			1.5.4	1.5.5	1.6
Dwg. No.	SMH No.	Sta.	4' Dia. SMH	5' Dia. SMH	Inside Drop Structure
			(VF)	(VF)	(VF)
U4	1	101+65	11.8		
	2	103+95	10.1		
	3	103+98	9.0		
	4	103+98	10.1		
	5	104+36	9.9		
	6	106+36	8.8		
U5	7	108+96	9.3		
	8	108+96	10.7		
	9	111+09	10.8		
U6	10	114+15	8.6		
	11	116+48		8.3	1.7
	12	116+50	8.6		
U7	13	113+28		8.7	2.0
	14	113+30	9.9		
	15	121+34	9.8		
U8	16	123+00	13.7		
	17	125+12	14.9		
	18	126+86	14.0		
U9	19	129+23		12.9	4.8
	21	131+62	7.5		
	22	131+60	7.7		
U10	23	22+34	8.8		
	25	19+98	10.6		
	26	21+02	8.9		
	27	19+95		10.0	2.1
U11	24	30+34	7.5		
		Sub-Total:	**221.1**	**39.9**	**10.6**
		Rounding:	8.9	5.1	4.4
		Estimated Quantity:	**230.0**	**45.0**	**15.0**

PROPOSED SEWER CONNECTION:
ELEVATION AT STUB: 18.4±
47'X6" PVC @ S=0.089
INV. AT BUILDING 22.6

GREASE INTERCEPTOR:
INV. @ WYE CONNECTION 20.45
5'X4" PVC @ S=0.016
4' PIPE DROP
INV. IN 24.62
INV. OUT 21.25
5'X4" PVC S=0.016
INV. OUT 26.05 GI
INV. IN 26.30 GI
10'X4" PVC @ S=0.021
INV. @ BUILDING 26.60



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4) SEWER FLOW (GALLONS PER DAY)
PROPOSED RESTURANT:
45 SEATS X 40GPD PER SEAT = 1800 GPD

5) GREASE TRAP – SEE SHEET D3

PROPOSED RESTAURANT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
1	ISSUED FOR TAC APPROVAL	8/18/25
0	ISSUED FOR COMMENT	5/14/25

REVISIONS

STATE OF NEW HAMPSHIRE – JOHN CHAGNON No. 7851 LICENSED PROFESSIONAL ENGINEER

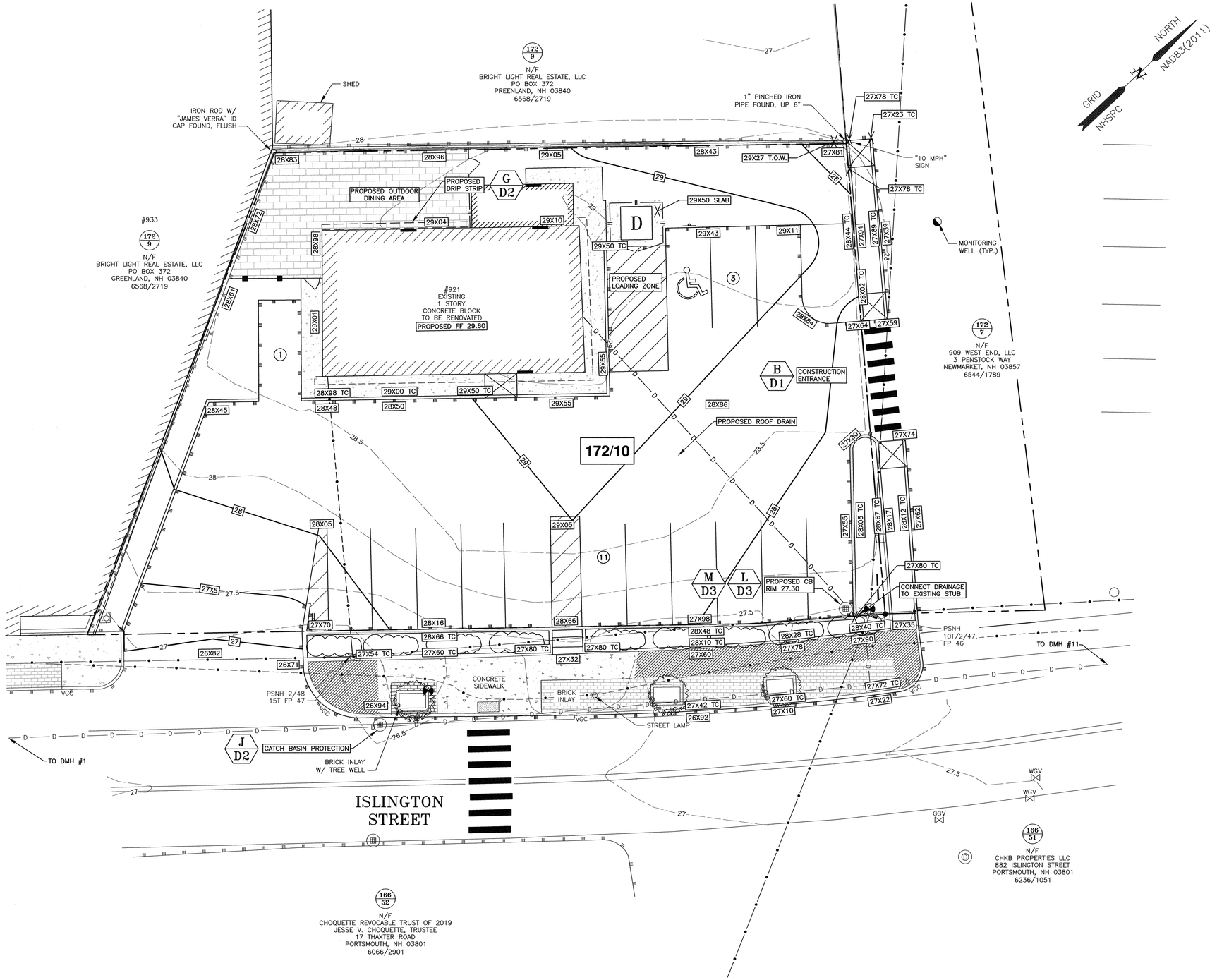
SCALE 1"=10' JANUARY 2025

UTILITY PLAN

C5

FB 332 & PG 57

5010220.1379



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3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

4) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED GRADING AND DRAINAGE PLAN ON ASSESSOR'S MAP 172 LOT 10 IN THE CITY OF PORTSMOUTH.

PROPOSED RESTAURANT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	5/14/25

REVISIONS

STATE OF NEW HAMPSHIRE - JOHN R. CHAGNON NO. 7551 LICENSED PROFESSIONAL ENGINEER

SCALE 1"=10' JANUARY 2025

GRADING & DRAINAGE PLAN

C6

FB 332 & PG 57

5010220.1379

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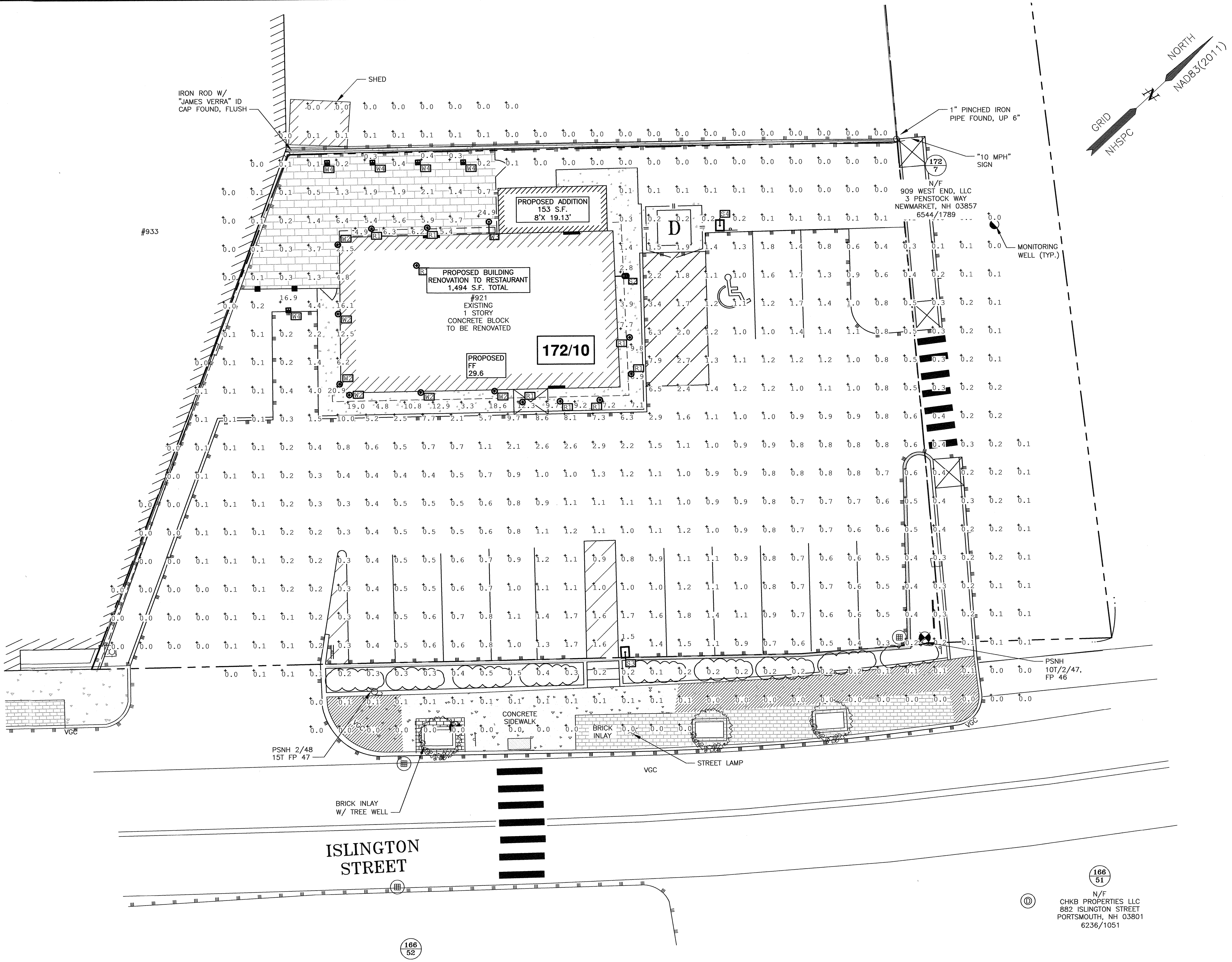

HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

NOTES:

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4) ALL LIGHTING SHALL BE SHIELDED TO MINIMIZE LIGHT TRESPASS AND DIRECT GLARE BEYOND THE PROPERTY.

5) ALL LIGHTS SHALL BE DARK SKY COMPLIANT AND DIRECTED DOWNWARD.

6) LIGHTING LAYOUT & FIXTURE SPECIFICATIONS DESIGNED/PROVIDED BY: EXPOSURE 2 LIGHTING. CONTACT: KEN SWEENEY 603–601–8080.

LUMINAIRE SCHEDULE:

SYMBOL	QTY	LABEL	ARRANGEMENT	DESCRIPTION	MANUFACTURER
	7	R1	SINGLE	B4RC–12C3–30KS–70–S–WH–NC–UNV–D6E	USA ILLUMINATION, INC.
	1	S2	SINGLE	WP–LED514–30–ABK–2	WAC LIGHTING
	1	S3	SINGLE	VALS–06L–3W–UNV–30K8––SA–CXX–IS / 4SQ B3 S11G15 S CXX AB 4BC	LSI INDUSTRIES, INC.
	1	S4	SINGLE	VALS–06L–4F–UNV–30K8–SA–CXX–IS / 4SQ B3 S11G15 S CXX AB 4BC	LSI INDUSTRIES, INC.
	6	W2	SINGLE	RPA–4–CY–10–DL–12W–ID–30K–70–W–BL–WM	INTEGER
	1	W3	SINGLE	BD 200/10 FS2 UNV MBK / GB A 3 MBK	LSI INDUSTRIES, INC.
	5	W4	SINGLE	EW27905 – BK	KUZCO LIGHTING

PROPOSED RESTAURANT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR COMMENT	8/18/2025

REVISIONS

SCALE 1"=10' JANUARY 2025

LIGHTING PLAN

C7

FB 332 & PG 57

5010220.1379

APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN DATE

GRAPHIC SCALE

10 5 0 10 20 30 40 FEET
3 0 5 10 METERS

EROSION CONTROL NOTES

CONSTRUCTION SEQUENCE

DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.

INSTALL PERIMETER CONTROLS, i.e., SILTSOXX AND CATCH BASIN PROTECTION AROUND THE LIMITS OF DISTURBANCE BEFORE ANY EARTH MOVING OPERATIONS. THE USE OF HAYBALES IS NOT ALLOWED.

THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES. PLACE FODS AS NEEDED.

REMOVE DEBRIS AND RUBBISH AS REQUIRED. PERFORM DEMOLITION.

ROUGH GRADE SITE. PERFORM OFF-SITE WORK PER CITY TIMING.

LAYOUT AND INSTALL ALL BURIED UTILITIES AND SERVICES UP TO 10' OF THE BUILDING FOUNDATIONS. CAP AND MARK TERMINATIONS OR LOG SWING TIES.

REMODEL BUILDING. CONNECT UTILITIES.

PLACE BINDER LAYER OF PAVEMENT AND CONSTRUCT SIDEWALK.

PLANT LANDSCAPING IN AREAS OUT OF WAY OF BUILDING CONSTRUCTION. PREPARE AND STABILIZE FINAL SITE GRADING BY ADDING TOPSOIL, SEED, MULCH AND FERTILIZER.

FINISH ALL REMAINING LANDSCAPED WORK.

FINISH PAVE PARKING AND COMPLETE SIDEWALKS.

REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF FINAL STABILIZATION OF THE SITE.

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF A BUILDING REDEVELOPMENT WITH ASSOCIATED UTILITIES AND PARKING.

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 0.328 ACRES.

BASED ON THE USCS WEB SOIL SURVEY THE SOILS ON SITE CONSIST OF URBAN LAND WHICH HAS AN UNSPECIFIED HYDROLOGIC SOIL GROUP RATING, ASSUMED D.

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA A CLOSED DRAINAGE SYSTEM TO THE CITY OF PORTSMOUTH CLOSED DRAINAGE SYSTEM WHICH ULTIMATELY FLOWS TO THE NORTH MILL POND.

GENERAL CONSTRUCTION NOTES

THE EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION" OF THE NHDOT, AND "STORM WATER MANAGEMENT AND EROSION AND SEDIMENT CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE". THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED FOR MORE THAN 45 DAYS.

ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEEDED WITH RYE GRASS TO PREVENT EROSION.

THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.

DUST CONTROL: DUST CONTROL MEASURES SHALL INCLUDE BUT ARE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.
IF TEMPORARY STABILIZATION PRACTICES, SUCH AS TEMPORARY VEGETATION AND MULCHING, DO NOT ADEQUATELY REDUCE DUST GENERATION, APPLICATION OF WATER OR CALCIUM CHLORIDE SHALL BE APPLIED IN ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

SILTSOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILTSOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED IN A SECURED LOCATION.

ALL FILLS SHALL BE PLACED AND COMPACTED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

ALL NON-STRUCTURAL, SITE-FILL SHALL BE PLACED AND COMPACTED TO 90% MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN THICKNESS UNLESS OTHERWISE NOTED.

FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIAL, TRASH, WOODY DEBRIS, LEAVES, BRUSH OR ANY DELETERIOUS MATTER SHALL NOT BE INCORPORATED INTO FILLS.

FILL MATERIAL SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.

DURING CONSTRUCTION AND UNTIL ALL DEVELOPED AREAS ARE FULLY STABILIZED, ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH ONE HALF INCH OF RAINFALL.

THE CONTRACTOR SHALL MODIFY OR ADD EROSION CONTROL MEASURES AS NECESSARY TO ACCOMMODATE PROJECT CONSTRUCTION.

ALL ROADWAYS AND PARKING AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.

AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
- BASE COURSE GRAVELS HAVE BEEN INSTALLED ON AREAS TO BE PAVED
- A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
- A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED
- EROSION CONTROL BLANKETS HAVE BEEN INSTALLED.
- IN AREAS TO BE PAVED, "STABLE" MEANS THAT BASE COURSE GRAVELS MEETING THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2 HAVE BEEN INSTALLED.

STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA.

STABILIZATION MEASURES TO BE USED INCLUDE:
- TEMPORARY SEEDING;
- MULCHING.

1. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
2. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN THESE AREAS, SILTSOXX, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
3. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILTSOXX, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY OCTOBER 15.

MAINTENANCE AND PROTECTION

THE SILTSOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.

SILTSOXX SHALL BE REMOVED ONCE SITE IS STABILIZED, AND DISTURBED AREAS RESULTING FROM SILTSOXX REMOVAL SHALL BE PERMANENTLY SEEDED.

THE CATCH BASIN INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.
SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

WINTER NOTES

ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. 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.

ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;

AFTER OCTOBER 15, 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, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;

STOCKPILES

1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

CONCRETE WASHOUT AREA

THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:
1. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FAILITY;
2. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
3. CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE WATERS OR DELINEATED WETLANDS;
4. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES

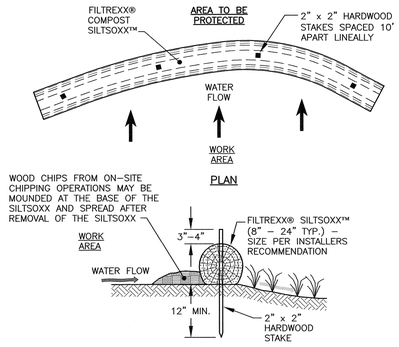
1. FIRE-FIGHTING ACTIVITIES;
2. FIRE HYDRANT FLUSHING;
3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
4. WATER USED TO CONTROL DUST;
5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
6. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
7. PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
9. UNCONTAMINATED GROUND WATER OR SPRING WATER;
10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
11. UNCONTAMINATED EXCAVATION DEWATERING;
12. LANDSCAPE IRRIGATION.

WASTE DISPOSAL

1. WASTE MATERIAL
   - ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
   - NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
   - ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE
   - ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER;
   - SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE
   - ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

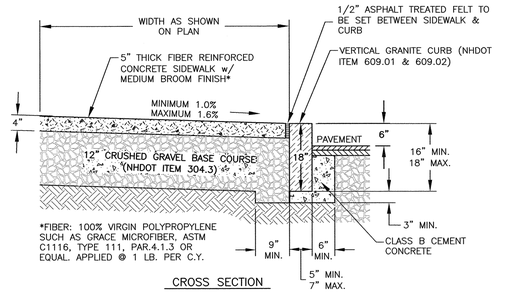
BLASTING NOTES

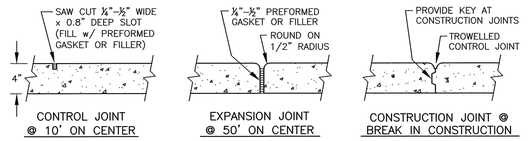
1. CONTRACTOR SHALL CONTACT THE NHDES AND/OR LOCAL JURISDICTION PRIOR TO COMMENCING ANY BLASTING ACTIVITIES.
2. FOR ANY PROJECT FOR WHICH BLASTING OF BEDROCK IS ANTICIPATED, THE APPLICANT SHALL SUBMIT A BLASTING PLAN THAT IDENTIFIES:
   - WHERE THE BLASTING ACTIVITIES ARE ANTICIPATED TO OCCUR;
   - THE ESTIMATED QUANTITY OF BLAST ROCK IN CUBIC YARDS; AND
   - SITE-SPECIFIC BLASTING BEST MANAGEMENT PRACTICES.



NOTES:
1. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
2. FILLTREXX SYSTEM SHALL BE INSTALLED BY A CERTIFIED FILTREXX INSTALLER.
3. THE CONTRACTOR SHALL MAINTAIN THE COMPOST FILTRATION SYSTEM IN A FUNCTIONAL CONDITION AT ALL TIMES. IT WILL BE ROUTINELY INSPECTED AND REPAIRED WHEN REQUIRED.
4. SILTSOXX DEPICTED IS FOR MINIMUM SLOPES, GREATER SLOPES MAY REQUIRE ADDITIONAL PLACEMENTS.
5. THE COMPOST FILTER MATERIAL WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED, AS DETERMINED BY THE ENGINEER.

A C6 FILTREXX® SILTSOXX™ FILTRATION SYSTEM (IF NEEDED) NTS





C C3 CONCRETE SIDEWALK GRANITE CURB NTS

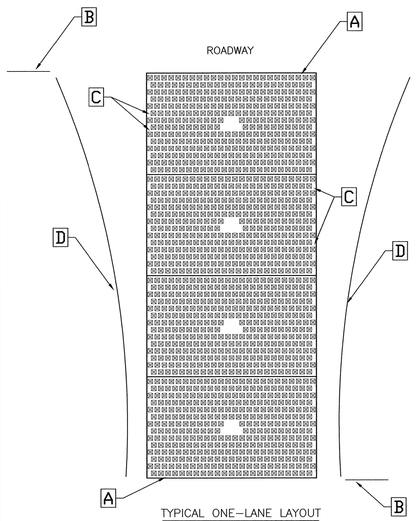
FODS TRACKOUT CONTROL SYSTEM

INSTALLATION:

THE PURPOSE AND DESIGN OF THE FODS TRACKOUT CONTROL SYSTEM IS TO EFFECTIVELY REMOVE MOST SEDIMENT FROM VEHICLE TIRES AS THEY EXIT A DISTURBED LAND AREA ONTO A PAVED STREET. THIS MANUAL IS A PLATFORM FROM WHICH TO INSTALL A FODS TRACKOUT CONTROL SYSTEM. (NOTE: THIS IS NOT A ONE SIZE FITS ALL GUIDE.) THE INSTALLATION MAY NEED TO BE MODIFIED TO MEET THE EXISTING CONDITIONS, EXPECTATIONS, OR DEMANDS OF A PARTICULAR SITE. THIS IS A GUIDELINE. ULTIMATELY THE FODS TRACKOUT CONTROL SYSTEM SHOULD BE INSTALLED SAFELY WITH PROPER ANCHORING AND SIGNS PLACED AT THE ENTRANCE AND EXIT TO CAUTION USERS AND OTHERS.

KEY NOTES:

A. FODS TRACKOUT CONTROL SYSTEM MAT.
B. FODS SAFETY SIGN.
C. ANCHOR POINT.
D. SILT OR ORANGE CONSTRUCTION FENCE.



INSTALLATION:
1. THE SITE WHERE THE FODS TRACKOUT CONTROL SYSTEM IS TO BE PLACED SHOULD CORRESPOND TO BEST MANAGEMENT PRACTICES AS MUCH AS POSSIBLE. THE SITE WHERE FODS TRACKOUT CONTROL SYSTEM IS PLACED SHOULD ALSO MEET OR EXCEED THE LOCAL JURISDICTION OR STORM WATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENTS.
2. CALL FOR UTILITY LOCATES 3 BUSINESS DAYS IN ADVANCE OF THE OF FODS TRACKOUT CONTROL SYSTEM INSTALLATION FOR THE MARKING OF UNDERGROUND UTILITIES. CALL THE UTILITY NOTIFICATION CENTER AT 811.
3. ONCE THE SITE IS ESTABLISHED WHERE FODS TRACKOUT CONTROL SYSTEM IS TO BE PLACED, ANY EXCESSIVE UNEVEN TERRAIN SHOULD BE LEVELED OUT OR REMOVED SUCH AS LARGE ROCKS, LANDSCAPING MATERIALS, OR SUDDEN ABRUPT CHANGES IN ELEVATION.
4. THE INDIVIDUAL MATS CAN START TO BE PLACED INTO POSITION. THE FIRST MAT SHOULD BE PLACED NEXT TO THE CLOSEST POINT OF EGRESS. THIS WILL ENSURE THAT THE VEHICLE WILL EXIT STRAIGHT FROM THE SITE ONTO THE PAVED SURFACE.
8. AFTER THE FIRST MAT IS PLACED DOWN IN THE PROPER LOCATION, MATS SHOULD BE ANCHORED TO PREVENT THE POTENTIAL MOVEMENT WHILE THE ADJOINING MATS ARE INSTALLED. ANCHORS SHOULD BE PLACED AT EVERY ANCHOR POINT (IF FEASIBLE) TO HELP MAINTAIN THE MAT IN ITS CURRENT POSITION.
9. AFTER THE FIRST MAT IS ANCHORED IN ITS PROPER PLACE, AN H BRACKET SHOULD BE PLACED AT THE END OF THE FIRST MAT BEFORE ANOTHER MAT IS PLACED ADJACENT TO THE FIRST MAT.
10. ONCE THE SECOND MAT IS PLACED ADJACENT TO THE FIRST MAT, MAKE SURE THE H BRACKET IS CORRECTLY SITUATED BETWEEN THE TWO MATS, AND SLIDE MATS TOGETHER.
11. NEXT THE CONNECTOR STRAPS SHOULD BE INSTALLED TO CONNECT THE TWO MATS TOGETHER.
12. UPON PLACEMENT OF EACH NEW MAT IN THE SYSTEM, THAT MAT SHOULD BE ANCHORED AT EVERY ANCHOR POINT TO HELP STABILIZE THE MAT AND ENSURE THE SYSTEM IS CONTINUOUS WITH NO GAPS IN BETWEEN THE MATS.
13. SUCCESSIVE MATS CAN THEN BE PLACED TO CREATE THE FODS TRACKOUT CONTROL SYSTEM REPEATING THE ABOVE STEPS.

USE AND MAINTENANCE
1. VEHICLES SHOULD TRAVEL DOWN THE LENGTH OF THE TRACKOUT CONTROL SYSTEM AND NOT CUT ACROSS THE MATS.
2. DRIVERS SHOULD TURN THE WHEEL OF THEIR VEHICLES SUCH THAT THE VEHICLE WILL MAKE A SHALLOW S-TURN ROUTE DOWN THE LENGTH OF THE FODS TRACKOUT CONTROL SYSTEM.
3. MATS SHOULD BE CLEANED ONCE THE VOIDS BETWEEN THE PYRAMIDS BECOME FULL OF SEDIMENT. TYPICALLY THIS WILL NEED TO BE PERFORMED WITHIN TWO WEEKS AFTER A STORM EVENT. BRUSHING IS THE PREFERRED METHOD OF CLEANING, EITHER MANUALLY OR MECHANICALLY.
4. THE USE OF ICE MELT, ROCK SALT, SNOW MELT, DE-ICER, ETC. SHOULD BE UTILIZED AS NECESSARY DURING THE WINTER MONTHS AND AFTER A SNOW EVENT TO PREVENT ICE BUILDUP.

REMOVAL
1. REMOVAL OF FODS TRACKOUT CONTROL SYSTEM IS REVERSE ORDER OF INSTALLATION.
2. STARTING WITH THE LAST MAT, THE MAT THAT IS PLACED AT THE INNERMOST POINT OF THE SITE OR THE MAT FURTHEST FROM THE EXIT OR PAVED SURFACE SHOULD BE REMOVED FIRST.
3. THE ANCHORS SHOULD BE REMOVED.
4. THE CONNECTOR STRAPS SHOULD BE UNBOLTED AT ALL LOCATIONS IN THE FODS TRACKOUT CONTROL SYSTEM.
5. STARTING WITH THE LAST MAT IN THE SYSTEM, EACH SUCCESSIVE MAT SHOULD THEN BE MOVED AND STACKED FOR LOADING BY FORKLIFT OR EXCAVATOR ONTO A TRUCK FOR REMOVAL FROM THE SITE.

B C6 FODS (USE AS REQUIRED) NTS

HALEYWARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

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PROPOSED RESTURANT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR APPROVAL	8/18/25

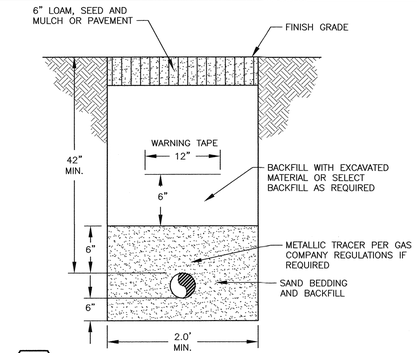
REVISIONS

SCALE: AS SHOWN MAY 2025

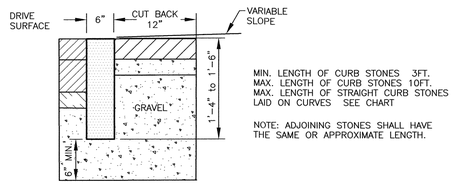
EROSION PROTECTION NOTES AND DETAILS — **D1**

FB 332 PG 57

5010220.1379



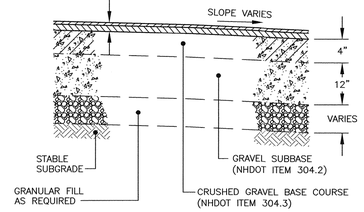
D C5 GAS SERVICE TRENCH NTS



MIN. LENGTH OF CURB STONES 3FT.
MAX. LENGTH OF CURB STONES 10FT.
MAX. LENGTH OF STRAIGHT CURB STONES LAID ON CURVES SEE CHART

NOTE: ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATE LENGTH.

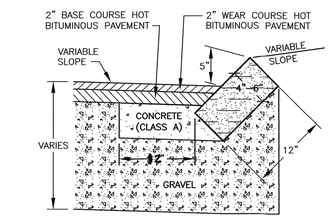
E C3 FLUSHED GRANITE CURB NTS



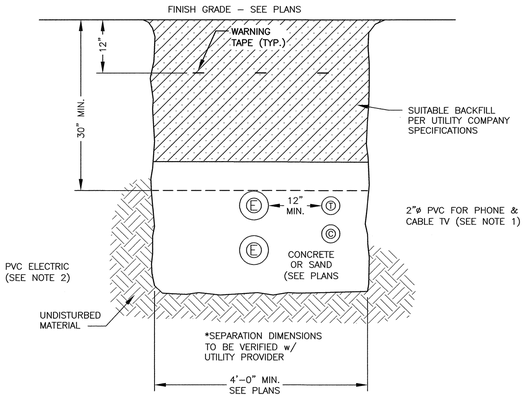
F C3 TYPICAL PAVEMENT CROSS–SECTION NTS

MIN. LENGTH OF STRAIGHT CURB STONES: 18"
MAX. LENGTH OF STRAIGHT CURB STONES: 8FT.
MAX. LENGTH OF STRAIGHT STRAIGHT CURB STONES LAID ON CURVE: SEE CHART

Radius for stones with square joints	Maximum length
16' – 28'	6" to 1'
29' – 41'	2'
42' – 55'	3'
56' – 68'	4'
69' – 82'	5'
83' – 96'	6'
97' – 110'	7'
over 110'	8'



G C3 SLOPED GRANITE CURBING NTS



NOTES:
1) ALL CONDUIT TO BE U.L. LISTED, SCH. 80 UNDER ALL TRAVEL WAYS, & SCHED. 40 FOR THE REMAINDER.

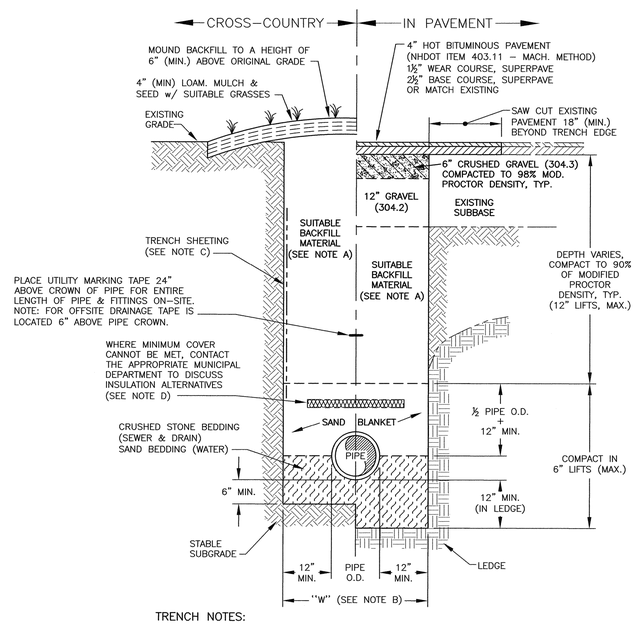
2) NORMAL CONDUIT SIZES FOR PSNH ARE 3 INCH FOR SINGLE PHASE PRIMARY AND SECONDARY VOLTAGE CABLES, 4 INCH FOR THREE PHASE SECONDARY, AND 5 INCH FOR THREE PHASE PRIMARY.

3) ALL WORK TO CONFORM TO THE NATIONAL ELECTRICAL CODE (LATEST REVISION)

4) INSTALL A 200# PULL ROPE FOR EACH CONDUIT

5) VERIFY ALL CONDUIT SPECIFICATIONS WITH UTILITY COMPANY'S PRIOR TO ANY CONSTRUCTION.

H C5 BURIED ELEC/COMM CABLE NTS



TRENCH NOTES:
A) TRENCH BACKFILL:
– IN PAVED AREAS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES IN LARGEST DIMENSION, OR ANY MATERIALS DEEMED TO BE UNACCEPTABLE BY THE ENGINEER.

– IN CROSS–COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK OR PEAT, IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE.

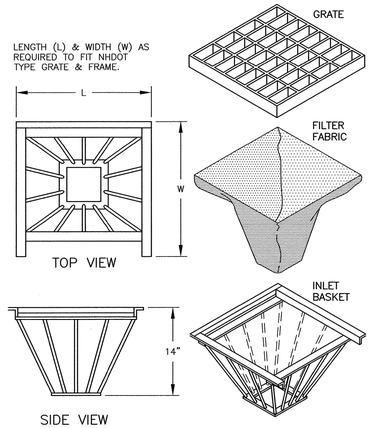
B) "W" = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE O.D..

C) TRENCH SHEETING:
THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFE EXCAVATION PRACTICES.

D) MINIMUM PIPE COVER FOR UTILITY MAINS (UNLESS GOVERNED BY OTHER CODES):
- 5' MINIMUM FOR SEWER (IN PAVEMENT)
- 4' MINIMUM FOR SEWER (CROSS COUNTRY)
- 3' MINIMUM FOR STORMWATER DRAINS
- 5' MINIMUM FOR WATER MAINS

E) ALL PAVEMENT CUTS SHALL BE REPAIRED BY THE INFRARED HEAT METHOD.

I C5 TYPICAL PIPE TRENCH NTS



1) INLET BASKETS SHALL BE INSTALLED IMMEDIATELY AFTER CATCH BASIN CONSTRUCTION IS COMPLETE AND SHALL REMAIN IN PLACE AND BE MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.

2) FILTER FABRIC SHALL BE PUSHED DOWN AND FORMED TO THE SHAPE OF THE BASKET. THE SHEET OF FABRIC SHALL BE LARGE ENOUGH TO BE SUPPORTED BY THE BASKET FRAME WHEN HOLDING SEDIMENT AND, SHALL EXTEND AT LEAST 6" PAST THE FRAME. THE INLET GRATE SHALL BE PLACED OVER THE BASKET/FRAME AND WILL SERVE AS THE FABRIC ANCHOR.

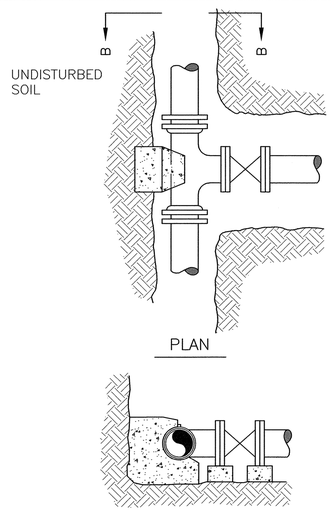
3) THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE, OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:
- –RAB STRENGTH: 45 LB. MIN. IN ANY PRINCIPAL DIRECTION (ASTM D1682)
- –MULLEN BURST STRENGTH: MIN. 60 psi (ASTM D774)

4) THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 gpm/s.f. (MULTIPLY THE PERMITTIVITY IN SEC.–1 FROM ASTM 54491–85 CONSTANT HEAD TEST USING THE CONVERSION FACTOR OF 74.)

5) THE INLET BASKET SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.

6) SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

J C6 CATCH BASIN INLET BASKET NTS



NOTES:
1) ALL MATERIALS SHALL BE APPROVED BY THE PORTSMOUTH WATER DEPARTMENT PRIOR TO INSTALLATION AND USE.
2) ALL JOINTS SHALL BE MECHANICAL.
3) "CLEAR" DIMENSIONS SHOWN ATE REQUIRED FOR WORKSPACE. NO JOINTS ON PIPE BEING TAPPED WITHIN "CLEAR" AREA.
4) FORD TYPE STAINLESS STEEL TAPPING SADDLES OR APPROVED EQUAL ARE ALSO ACCEPTABLE.

K C5 TAPPING SLEEVE AND GATE
INSTALL PER PORTSMOUTH REQUIREMENTS NTS

HALEYWARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1–888–DIG–SAFE (1–888–344–7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

PROPOSED RESTURANT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR APPROVAL	8/18/25

REVISIONS

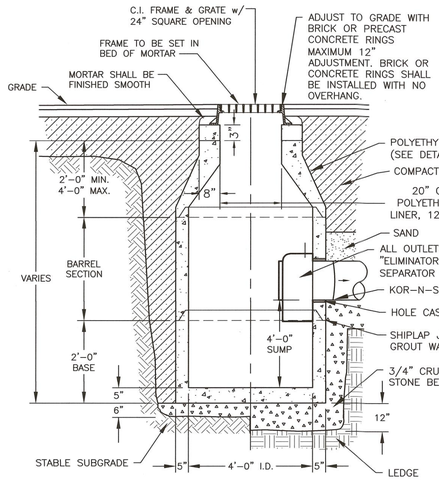
STATE OF NEW HAMPSHIRE – JOHN R. CHAGNON No. 7651 – LICENSED PROFESSIONAL ENGINEER

SCALE: AS SHOWN MAY 2025

DETAILS D2

FB 332 PG 57

5010220.1379



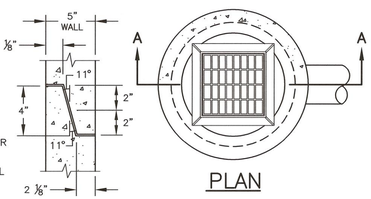
SECTION A – A

L / C6 CATCH BASIN DETAIL

NTS

CATCH BASIN POLYETHYLENE LINER NOTES:

1. POLYETHYLENE LINER (ITEM 604.0007) SHALL BE FABRICATED AT THE SHOP. DOWNSPOUT SHALL BE EXTRUSION FILLET WELDED TO THE POLYETHYLENE SHEET.
2. PLACE A CONTINUOUS BEAD OF AN APPROVED SILICONE SEALANT (SUBSIDIARY TO ITEM 604.0007) BETWEEN FRAME AND POLYETHYLENE SHEET.
3. PLACE CLASS AA CONCRETE TO 2" BELOW THE TOP OF THE GRATE ELEVATION (SUBSIDIARY TO DRAINAGE STRUCTURE).
4. USE ON DRAINAGE STRUCTURES 4' MIN. DIAMETER ONLY.
5. TRIM POLYETHYLENE SHEET A MAXIMUM OF 4" OUTSIDE THE FLANGE ON THE FRAME FOR THE CATCH BASIN BEFORE PLACING CONCRETE (EXCEPT AS SHOWN WHEN USED WITH 3-FLANGE FRAME AND CURB).
6. THE CENTER OF THE GRATE & FRAME MAY BE SHIFTED A MAXIMUM OF 6" FROM THE CENTER OF THE DOWNSPOUT IN ANY DIRECTION.
7. PLACED ONLY IN DRAINAGE STRUCTURES IN PAVEMENT.
8. SEE NHDOT DR-04, "DI-DB, UNDERDRAIN FLUSHING BASIN AND POLYETHYLENE LINER DETAILS," FOR ADDITIONAL INFORMATION.
9. CATCHBASINS WITHIN CITY RIGHT OF WAY SHALL HAVE A POLYETHYLENE LINER.



PLAN

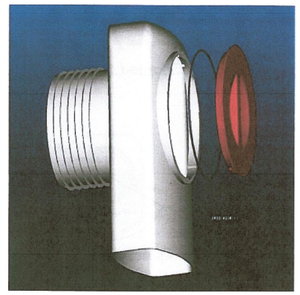
DETAIL OF SHIPLAP JOINT

NOTES:

1. CONCRETE SHALL BE 4,000 P.S.I. AFTER 28 DAYS.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS & SHALL BE PLACED IN THE CENTER THIRD OF WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
5. RISERS OF 1', 2', 3' & 4' CAN BE USED TO REACH DESIRED DEPTH.
6. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
8. FITTING FRAME TO GRADE MAY BE DONE WITH PREFABRICATED ADJUSTMENT RINGS OR CLAY BRICKS (2 COURSES MAX.).
9. CONE SECTIONS MAY BE EITHER CONCENTRIC OR ECCENTRIC, OR FLAT SLAB TOPS MAY BE USED WHERE PIPE WOULD OTHERWISE ENTER INTO THE CONE SECTION OF THE STRUCTURE AND WHERE PERMITTED.
10. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.

OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.

11. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
12. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
13. "ELIMINATOR" OIL/WATER SEPARATOR SHALL BE INSTALLED TIGHT TO INSIDE OF CATCHBASIN.



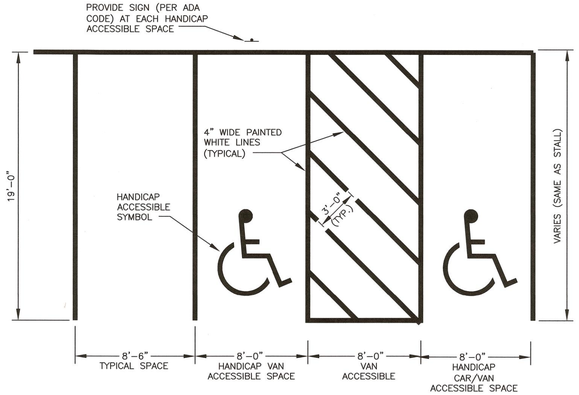
NOTES:

1. ALL CATCH BASIN OUTLETS TO HAVE "ELIMINATOR" OIL AND FLOATING DEBRIS TRAP MANUFACTURED BY KLEANSTREAM (NO EQUAL)
2. INSTALL DEBRIS TRAP TIGHT TO INSIDE OF STRUCTURE.
3. 1/4" HOLE SHALL BE DRILLED IN TOP OF DEBRIS TRAP.

M / C6 CATCH BASIN OIL TRAP

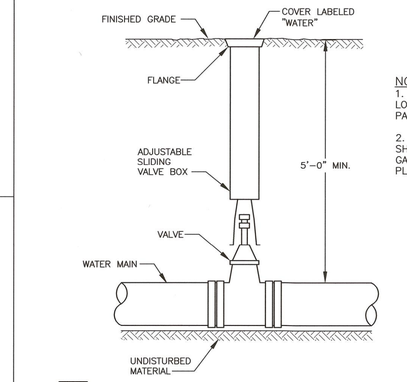
THE "ELIMINATOR"

NTS



N / C3 H/C PARKING STALL-VAN

NTS



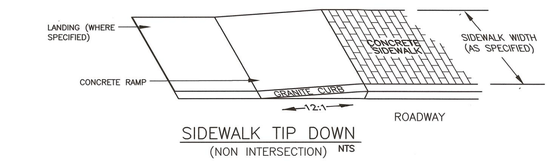
NOTES:

1. GATE VALVE TO BE LOCATED WITHIN ROADWAY PAVEMENT WHERE POSSIBLE.

2. PROPER SIZE VALVE BOX SHALL BE INSTALLED WHERE GATE VALVES ARE SHOWN ON PLANS.

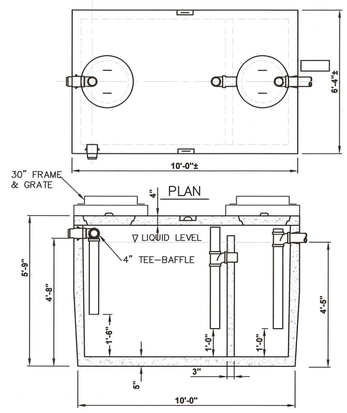
P / C5 VALVE AND BOX DETAIL

NTS



SIDEWALK TIP DOWN
(NON INTERSECTION) NTS

0 / C3 TYPICAL SIDEWALK TIP DOWNS



SPECIFICATIONS:

1. REINFORCING STEEL SHALL CONFORM TO LATEST ASTM SPECIFICATIONS ASTM-A615 GRADE 60.
2. CONCRETE SHALL HAVE A DESIGN STRENGTH OF 5,000psi AT 28 DAYS MINIMUM w/ AIR ENTRAINMENT OF 4% TO 6%.
3. DESIGN LOAD SHALL BE AASHTO-HS20-44, ASTM C-890-06.
4. DESIGN SHALL COMPLY WITH ASTM C-1227-08 AND ASTM C-913-08.
5. TANK PENETRATIONS SHALL BE INTEGRALLY CAST.
6. FLEXIBLE SLEEVES SHALL BE PROVIDED AT ALL PIPE CONNECTIONS.
7. JOINTS SHALL BE SEALED WITH TWO LAYERS OF BUTYL RUBBER SEALANT.
8. INLET SHALL PENETRATE A MINIMUM OF 6" BELOW THE LIQUID LEVEL, BUT NOT DEEPER THAN THE OUTLET BAFFLE.
9. OUTLET SHALL EXTEND BELOW THE SURFACE OF THE LIQUID LEVEL EQUAL TO 40% OF THE LIQUID LEVEL DEPTH (19").
10. TANK SHALL BE PUMPED AS NEEDED.
11. TANK SHALL BE VACUUM TESTED PRIOR TO OPERATION.

NOTES:

1. DETAIL PROVIDES GENERAL REQUIREMENTS BY THE CITY OF PORTSMOUTH.
2. COORDINATE WITH CITY OF PORTSMOUTH DEPARTMENT OF PUBLIC WORKS FOR THE FOLLOWING ITEMS (BUT NOT LIMITED TO): APPROVALS, TESTING, INSTALLATION, INSPECTIONS, PUMPING & MAINTENANCE, AND LOCATION OF INSTALLATION.
3. FRAMES AND COVERS: ~~MANHOLE FRAMES AND COVERS WITHIN THE CITY RIGHT-OF-WAY SHALL BE CITY STANDARD HINGED COVERS MANUFACTURED BY E.J. CONTACT CITY DPW FOR FULL REQUIREMENTS. ALL OTHER~~ MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30" CLEAR OPENING. A 3-INCH (MIN. HEIGHT) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.

SECTION

GREASE INTERCEPTOR LIQUID CAPACITY:

D x GL x ST x (HR/2) x LF = LIQUID CAPACITY

D = NUMBER OF SEATS IN DINING AREA;	45 SEATS
GL = GALLONS OF WASTE WATER PER MEAL; 5 GALLONS TYPICAL	5.0 GALLONS
ST = STORAGE CAPACITY FACTOR; MINIMUM 1.2, ON-SITE DISPOSAL 2.5,	1.7
HR = NUMBER OF HOURS OPEN;	10 HOURS
LF = LOADING FACTOR;	0.5

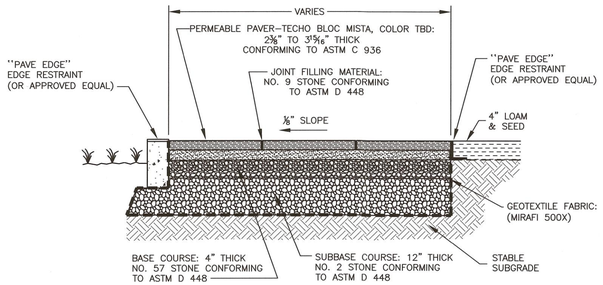
1.25 - INTERSTATE FREEWAY
1.0 - OTHER FREEWAY
1.0 - RECREATION HIGHWAY
0.8 - MAIN HIGHWAY
0.5 - OTHER HIGHWAY

45.0 x 5.0 x 1.7 x (10/2) x 0.5 = 956.25

LIQUID CAPACITY REQUIRED = 956.25 GALLONS

R / C5 GREASE INTERCEPTOR – TWO COMPARTMENT 1000 GALLON

NTS

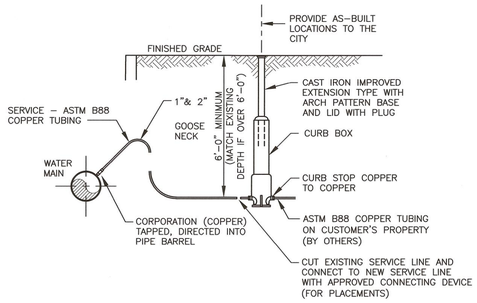


NOTES:
1) TECHO-BLOC (OR APPROVED EQUAL).
2) INSTALLED PER MANUFACTURERS INSTRUCTIONS.
3) PEDESTRIAN TRAFFIC ONLY.

S / C3 TECHO-BLOC® POROUS PATIO

HARDSCAPE DESIGN & INSTALLATION
1-410-969-9260

NTS



Q / C5 TYPICAL WATER SERVICE CONNECTION

NOTE:
PROVIDE WATER SERVICE SHUTOFF BOXES PER CITY STANDARDS.

HALEYWARD
ENGINEERING | ENVIRONMENTAL | SURVEYING
200 Griffin Rd. Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
WWW.HALEYWARD.COM

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NO.	DESCRIPTION	DATE
0	ISSUED FOR APPROVAL	8/18/25

REVISIONS

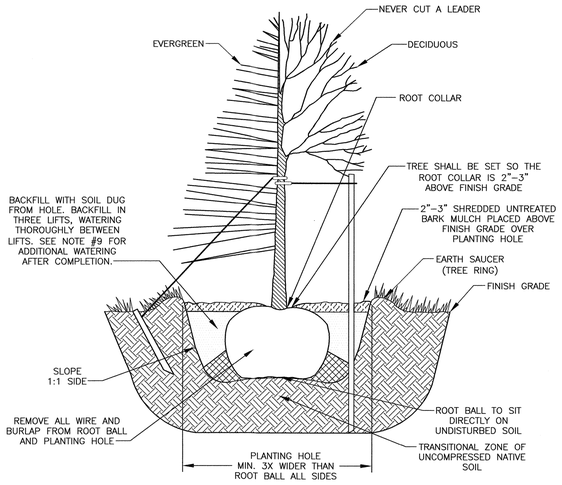
STATE OF NEW HAMPSHIRE – JOHN M. CHAGNON NO. 7651 LICENSED PROFESSIONAL ENGINEER

SCALE: AS SHOWN — MAY 2025

DETAILS — D3

FB 332 PG 57

5010220.1379



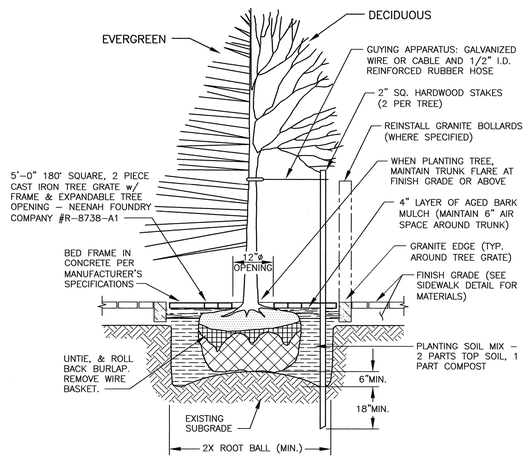
CITY OF PORTSMOUTH TREE PLANTING REQUIREMENTS

THE BASE OF THE CITY OF PORTSMOUTH TREE PLANTING REQUIREMENTS IS THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPLANTING. ANSI A300 PART 6 LAYS OUT TERMS AND BASIC STANDARDS AS SET FORTH BY INDUSTRY BUT IS NOT THE "END ALL" FOR THE CITY OF PORTSMOUTH. THE FOLLOWING ARE THE CITY OF PORTSMOUTH, NH TREE PLANTING REQUIREMENTS THAT ARE IN addition TO OR THAT GO BEYOND THE ANSI A300 PART 6.

1. ALL PLANTING HOLES MUST BE DUG BY HAND– NO MACHINES. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE NEW PLANTING PITS, PLANTING BEDS WITH GRANITE CURBING, AND PLANTING SITES WITH SILVA CELLS ARE BEING CREATED. IF A MACHINE IS USED TO DIG IN ANY OF THESE SITUATIONS AND PLANTING DEPTH NEEDS TO BE RAISED THE MATERIAL IN THE BOTTOM OF THE PLANTING HOLE MUST BE FIRMED WITH MACHINE TO PREVENT SINKING OF THE ROOT BALL.
2. ALL WIRE AND BURLAP SHALL BE REMOVED FROM THE ROOT BALL AND PLANTING HOLE.
3. THE ROOT BALL OF THE TREE SHALL BE WORKED SO THAT THE ROOT COLLAR OF THE TREE IS VISIBLE AND NO GIRDLING ROOTS ARE PRESENT.
4. THE ROOT COLLAR OF THE TREE SHALL BE 2"–3" ABOVE GRADE OF PLANTING HOLE FOR FINISHED DEPTH.
5. ALL PLANTINGS SHALL BE BACKFILLED WITH SOIL FROM THE SITE AND AMENDED NO MORE THAN 20% WITH ORGANIC COMPOST. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE ENGINEERED SOIL IS BEING USED IN CONJUNCTION WITH SILVA CELLS AND WHERE NEW PLANTING BEDS ARE BEING CREATED.
6. ALL PLANTINGS SHALL BE BACKFILLED IN THREE LIFTS AND ALL LIFTS SHALL BE WATERED SO THE PLANTING WILL BE SET AND FREE OF AIR POCKETS– NO EXCEPTIONS.
7. AN EARTH BERM SHALL BE PLACED AROUND THE PERIMETER OF THE PLANTING HOLE EXCEPT WHERE CURBED PLANTING BEDS OR PITS ARE BEING USED.
8. 2"–3" OF MULCH SHALL BE PLACED OVER THE PLANTING AREA.
9. AT THE TIME THE PLANTING IS COMPLETE THE PLANTING SHALL RECEIVE ADDITIONAL WATER TO ENSURE COMPLETE HYDRATION OF THE ROOTS, BACKFILL MATERIAL, AND MULCH LAYER.
10. STAKES AND GUYS SHALL BE USED WHERE APPROPRIATE AND/OR NECESSARY. GUY MATERIAL SHALL BE NON–DAMAGING TO THE TREE.
11. ALL PLANTING STOCK SHALL BE SPECIMEN QUALITY, FREE OF DEFECTS, AND DISEASE OR INJURY. THE CITY OF PORTSMOUTH, NH RESERVES THE RIGHT TO REFUSE/REJECT ANY PLANT MATERIAL OR PLANTING ACTION THAT FAILS TO MEET THE STANDARDS SET FORTH IN THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPLANTING AND/OR THE CITY OF PORTSMOUTH, NH PLANTING REQUIREMENTS.

U C4 TREE PLANTING

NTS



U C4 URBAN TREE PLANTING

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200 Griffin Rd, Unit 14
Portsmouth, New Hampshire 03801
603.430.9282
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NOTES:

1) THE CONTRACTOR SHALL NOTIFY DIG SAFE AT 1–888–DIG–SAFE (1–888–344–7233) AT LEAST 72 HOURS PRIOR TO COMMENCING ANY EXCAVATION ON PUBLIC OR PRIVATE PROPERTY.

2) UNDERGROUND UTILITY LOCATIONS ARE BASED UPON BEST AVAILABLE EVIDENCE AND ARE NOT FIELD VERIFIED. LOCATING AND PROTECTING ANY ABOVEGROUND OR UNDERGROUND UTILITIES IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND/OR THE OWNER. UTILITY CONFLICTS SHOULD BE REPORTED AT ONCE TO THE DESIGN ENGINEER.

3) CONTRACTOR SHALL INSTALL AND MAINTAIN EROSION CONTROL MEASURES IN ACCORDANCE WITH THE "NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 3, EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION. (NHDES DECEMBER 2008).

PROPOSED RESTURANT
921 ISLINGTON STREET
PORTSMOUTH, N.H.

NO.	DESCRIPTION	DATE
0	ISSUED FOR APPROVAL	8/18/25

REVISIONS

STATE OF NEW HAMPSHIRE – JOHN R CRAGNON NO. 7651 LICENSED PROFESSIONAL ENGINEER –

SCALE: AS SHOWN MARCH 2025

DETAILS D4

FB 444 PG 1

5010135.2977

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: PWED2, LLC Date Submitted: 8/14/2025

Application # (in City's online permitting): LU-25-96

Site Address: 921 Islington Street Map: 172 Lot: 10

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
☐	Complete application form submitted via the City's web-based permitting program (2.5.2.1**(2.5.2.3A)**	Online	N/A
☐	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)**	Online and Delivered	N/A

Site Plan Review Application Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	Statement that lists and describes "green" building components and systems. **(2.5.3.1B)**	Online Submission	
☐	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)**	Architects Plans	N/A
☐	Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)**	Existing Conditions Plan	N/A

Site Plan Review Application Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. **(2.5.3.1E)**	Cover Page	N/A
☐	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)**	Existing Conditions Plan	N/A
☐	Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)**	Cover Page	N/A
☐	List of reference plans. **(2.5.3.1H)**	Existing Conditions Plan	N/A
☐	List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)**	Cover Page	N/A

Site Plan Specifications			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	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
☐	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
☐	GIS data should be referenced to the coordinate system New Hampshire State Plane, NAD83 (1996), with units in feet. **(2.5.4.1C)**	Complies	N/A
☐	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
☐	Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. **(2.5.4.1E)**	N/A	N/A
☐	Title (name of development project), north point, scale, legend. **(2.5.4.2A)**	Cover Page	N/A
☐	Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)**	All Pages	N/A
☐	Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)**	Required on all plan sheets	N/A
☐	Source and date of data displayed on the plan. **(2.5.4.2D)**	On Site Survey	N/A

Site Plan Specifications – Required Exhibits and Data			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	**1. Existing Conditions: (2.5.4.3A)** • 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.	Existing Conditions Plan	
☐	**2. Buildings and Structures: (2.5.4.3B)** • 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.	Site Plan C3	
☐	**3. Access and Circulation: (2.5.4.3C)** • 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).	Site Plan C3	
☐	**4. Parking and Loading: (2.5.4.3D)** • Location of off street parking/loading areas, landscaped areas/buffers; • Parking Calculations (# required and the # provided).	Site Plan C3	
☐	**5. Water Infrastructure: (2.5.4.3E)** • Size, type and location of water mains, shut-offs, hydrants & Engineering data; • Location of wells and monitoring wells (include protective radii).	Utility Plan C5	
☐	**6. Sewer Infrastructure: (2.5.4.3F)** • Size, type and location of sanitary sewage facilities & Engineering data, including any onsite temporary facilities during construction period.	Utility Plan C5	

☐	**7. Utilities: (2.5.4.3G)** • The size, type and location of all above & below ground utilities; • Size type and location of generator pads, transformers and other fixtures.	Utility Plan C5	
☐	**8. Solid Waste Facilities: (2.5.4.3H)**		
	• The size, type and location of solid waste facilities.	Dumpster C3	
☐	**9. Storm water Management: (2.5.4.3I)** • 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.	Grading & Drainage Plan C6	
☐	**10. Outdoor Lighting: (2.5.4.3J)** • Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and photometric plan.	Lighting Plan C7	
☐	**11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)**	Lighting Specs	
☐	**12. Landscaping: (2.5.4.3K)** • Identify all undisturbed area, existing vegetation and that which is to be retained; • Location of any irrigation system and water source.	Landscape Plan L-1	
☐	**13. Contours and Elevation: (2.5.4.3L)** • Existing/Proposed contours (2 foot minimum) and finished grade elevations.	Grading & Drainage Plan C6	
☐	**14. Open Space: (2.5.4.3M)** • Type, extent and location of all existing/proposed open space.	Site Plan C3	
☐	**15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)**	N/A	
☐	**16. Character/Civic District (All following information shall be included): (2.5.4.3P)** • Applicable Building Height (10.5A21.20 & 10.5A43.30); • Applicable Special Requirements (10.5A21.30); • Proposed building form/type (10.5A43); • Proposed community space (10.5A46).	N/A	
☐	**17. Special Flood Hazard Areas (2.5.4.3Q)** • 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			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	Traffic Impact Study or Trip Generation Report, as required. **(3.2.1-2)**	Online	
☐	Indicate where Low Impact Development Design practices have been incorporated. **(7.1)**	N/A	
☐	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	
☐	Stormwater Management and Erosion Control Plan. **(7.4)**	Online	
☐	Inspection and Maintenance Plan **(7.6.5)**	Online	

Final Site Plan Approval Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	All local approvals, permits, easements and licenses required, including but not limited to: • Waivers; • Driveway permits; • Special exceptions; • Variances granted; • Easements; • Licenses. **(2.5.3.2A)**	Cover Sheet	
☐	Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to: • 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)**	Online	
☐	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)**	TBD	

Final Site Plan Approval Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	A list of any required state and federal permit applications required for the project and the status of same. **(2.5.3.2E)**	Cover Sheet	
☐	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)**	Site Plan C3	N/A
☐	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	
☐	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)**	Site Plan C3	N/A

Applicant's Signature:  **Date:** 8-15-25

TFM Since 1968

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

NEW HAMPSHIRE 200

Letter of Authorization

I, Martin Husslage, of 48 Langdon Street, Portsmouth NH 03801, hereby authorize TFMoran, Inc., 170 Commerce Way, Suite 102, Portsmouth, NH, to act on my behalf concerning property owned by Martin Husslage at 48 Langdon Street, Portsmouth, NH, known as Tax Map 138, Lot 47.

I hereby appoint TFMoran, Inc. as my agent to act on my behalf in the review process, to include any required signatures.

M Husslage — Aug 18/25

Client Name — Date

Husslage — Aug 18/25

Witness — Date

TFMoran, Inc.
48 Constitution Drive, Bedford, NH 03110
T(603) 472-4488 www.tfmoran.com

2025 BOB AWARDS

TFMoran, Inc. Seacoast Division
170 Commerce Way–Suite 102, Portsmouth, NH 03801
T(603) 431-2222

PROPOSED 2 LOT SUBDIVISION

48 & 50 LANGDON STREET
PORTSMOUTH, NEW HAMPSHIRE

GENERAL INFORMATION

OWNER & APPLICANT
MAP 138 LOT 47
MARTIN HUSSLAGE
446 CENTRAL ROAD
RYE, NH 03870

RESOURCE LIST

PLANNING/ZONING DEPARTMENT
1 JUNKINS AVE, 3RD FLOOR
PORTSMOUTH, NH 03801
(603) 610-7216

BUILDING DEPARTMENT
1 JUNKINS AVENUE
PORTSMOUTH, NH 03801
(603) 610-7243

PUBLIC WORKS
680 PEVERLY HILL ROAD
PORTSMOUTH, NH 03801
(603) 427-1530

POLICE DEPARTMENT
3 JUNKINS AVE
PORTSMOUTH, NH 03801
(603) 427-1500

FIRE DEPARTMENT
170 COURT STREET
PORTSMOUTH, NH 03801
(603) 427-1515

VICINITY PLAN

HORIZONTAL SCALE 1"=500'
500 250 0 500

INDEX OF SHEETS

PERMITS/APPROVALS

	NUMBER	APPROVED	EXPIRES
PORTSMOUTH PLANNING BOARD SUBDIVISION REVIEW APPROVAL	-	-	-
PORTSMOUTH PLANNING BOARD SITE PLAN REVIEW APPROVAL	-	-	-

TAX MAP 138 LOT 47

COVER

48 & 50 LANGDON STREET
PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR
MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

AUGUST 18, 2025

DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

THESE PLANS ARE PERMIT DRAWINGS ONLY AND HAVE NOT BEEN DETAILED FOR CONSTRUCTION OR BIDDING.

REV	DATE	DESCRIPTION	DR	CK

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE		DR	JKC			
	47229.03	CK	JCC	CADFILE	47229-03_COVER&NOTES	C-00

LEGEND

PROPOSED

- PROPERTY LINE
- ZONING LINE
- EASEMENT
- BASELINE
- FLOODPLAIN
- EDGE OF WATERBODY
- EDGE OF WETLAND
- SETBACK (WETLAND)
- SETBACK (STRUCTURE)
- SETBACK (PARKING)
- SETBACK (LANDSCAPE)
- GRAVEL ROAD
- EOP — EDGE OF PAVEMENT
- VGC — VERTICAL GRANITE CURB
- SGC — SLOPED GRANITE CURB
- CC — CONCRETE CURB
- ICC — INTEGRATED CONCRETE CURB
- BIT — BITUMINOUS ASPHALT CURB
- CCB — CAPE COD BERM
- SAWCUT
- BUILDING
- BUILDING ROOF OVERHANG
- BUILDING FOUNDATION
- BUILDING ENTRANCE
- OVERHEAD DOOR
- TREE LINE
- FENCE (CHAIN LINK)
- FENCE (WIRE)
- FENCE (STOCKADE)
- GUARDRAIL
- STONE WALL — [POINTS TOWARD HIGH SIDE]
- RETAINING WALL
- SF — SILT FENCE
- SS — SILT SOCK
- SOIL BOUNDARY
- LIMIT OF GRADING
- 100 — CONTOUR
- TC100.50 / BC100.00 OR 100.00 — SPOT GRADE
- ## — PARKING COUNT
- DSLY — YELLOW DOUBLE SOLID LINE
- SSLY — YELLOW SINGLE SOLID LINE
- SSLW — WHITE SINGLE SOLID LINE
- SBLW — WHITE SINGLE BROKEN LINE
- STOP — STOP BAR
- CROSSWALK
- ACCESSIBLE PARKING SYMBOL
- PAVEMENT ARROW
- TRAFFIC FLOW ARROW (NOT PAINTED)
- SIGN (SINGLE POST)
- SIGN (DOUBLE POST)
- SIGN (PYLON)
- SIGN (MONUMENT)
- BOLLARD
- D — DUMPSTER PAD

PROPOSED

- CONCRETE
- GRAVEL
- HEAVY DUTY PAVEMENT
- CONSTRUCTION ENTRANCE
- SNOW STORAGE
- RIPRAP
- INLET PROTECTION
- FLOW ARROW
- RIDGE — GRADE BREAK RIDGE
- DRAIN LINE
- DRAINAGE SWALE
- STORMWATER BMP
- S — SEWER LINE
- FM — SEWER FORCE MAIN LINE
- W — WATER LINE
- G — GAS LINE
- OHE — OVERHEAD UTILITY LINE
- UGE — UNDERGROUND UTILITY LINE
- CATCH BASIN
- DRAIN INLET
- OUTLET CONTROL STRUCTURE
- ROOF DRAIN
- DRAIN CLEANOUT
- DRAIN MANHOLE
- FARED END SECTION
- SEWER CLEAN OUT
- SEWER MANHOLE
- SEWER VENT
- DRAIN/SEWER/WATER PLUG OR CAP
- HYDRANT
- FIRE DEPARTMENT CONNECTION
- WATER GATE VALVE
- WATER SHUTOFF
- THRUST BLOCK
- W — WATER METER
- W — WATER MANHOLE
- WELL
- GAS GATE VALVE
- GAS SHUT OFF
- GAS METER
- TELEPHONE MANHOLE
- ELECTRIC MANHOLE
- TRAFFIC CONTROL CABINET
- ELECTRIC HANDHOLE
- ELECTRIC PULL BOX
- ELECTRIC METER
- FLOOD LIGHT
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- T — TRANSFORMER PAD
- B-# — BORING LOCATION
- TP-# — TEST PIT LOCATION
- IT-# — INFILTRATION TEST LOCATION
- MW-# — MONITORING WELL

ABBREVIATIONS

GENERAL

ABAN	ABANDON
AC	ACRES
ADJ	ADJUST
APPROX	APPROXIMATE
BC	BOTTOM OF CURB
BIT	BITUMINOUS
BK/PG	BOOK & PAGE
BLDG	BUILDING
BMP	BEST MANAGEMENT PRACTICE
BS	BOTTOM OF SLOPE
BW	BOTTOM OF WALL
CONC	CONCRETE
COORD	COORDINATE
DIA	DIAMETER
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
EXIST	EXISTING
FFE	FINISHED FLOOR ELEVATION
FND	FOUNDATION
HP	HIGH POINT
INV	INVERT ELEVATION
IT	INFILTRATION TEST
L	LENGTH
LF	LINEAR FEET
LSA	LANDSCAPE AREA
MAX	MAXIMUM
MIN	MINIMUM
N/F	NOW OR FORMERLY
NHFG	NEW HAMPSHIRE FISH & GAME
NTS	NOT TO SCALE
OC	ON CENTER
PAVE	PAVEMENT
PERF	PERFORATED
PROP	PROPOSED
R	RADIUS
R&D	REMOVE AND DISPOSE
R&R	REMOVE AND RESET
REM	REMOVE
RET	RETAIN
RIM	RIM ELEVATION
ROW	RIGHT OF WAY
S	SLOPE
SF	SQUARE FEET
SW	SIDEWALK
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TP	TEST PIT
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
WCR	ACCESSIBLE WHEELCHAIR RAMP
W/	WITH

UTILITIES

CB	CATCH BASIN
CIP	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COND	CONDUIT
DCB	DOUBLE CATCH BASIN
DIP	DUCTILE IRON PIPE
DMH	DRAIN MANHOLE
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FES	FLARED END SECTION
GT	GREASE TRAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HH	HANDHOLE
HW	HEADWALL
HYD	HYDRANT
LP	LIGHT POLE
OCS	OUTLET CONTROL STRUCTURE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
SMH	SEWER MANHOLE
SOS	SEDIMENT OIL SEPARATOR
TSV	TAPPING SLEEVE, VALVE, AND BOX
UP	UTILITY POLE

DIG SAFE — CALL 811 OR 1-888-DIG-SAFE — NEW HAMPSHIRE PLANT DAMAGE PREVENTION SYSTEM — CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

GENERAL NOTES

1. THESE PLANS WERE PREPARED UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER. TFMORAN, INC. ASSUMES NO LIABILITY AS A RESULT OF ANY CHANGES OR NON-CONFORMANCE WITH THESE PLANS EXCEPT UPON THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
2. THE SITE CONTRACTOR SHALL NOTIFY THE ENGINEER ONE WEEK IN ADVANCE OF CONSTRUCTION OF EACH STORMWATER FACILITY TO COORDINATE REQUIRED INSPECTIONS. THE CONTRACTOR SHALL TAKE PROGRESS PHOTOS DURING CONSTRUCTION OF ALL STORMWATER DRAINAGE COMPONENTS AND SEND TO THE ENGINEER.
3. SEE EXISTING CONDITIONS PLAN FOR THE HORIZONTAL AND VERTICAL DATUM. VERIFY TBM ELEVATIONS PRIOR TO CONSTRUCTION.
4. CONTACT EASEMENT OWNERS PRIOR TO COMMENCING ANY WORK WITHIN EASEMENTS.
5. PRIOR TO COMMENCING ANY SITE WORK, ALL LIMITS OF WORK SHALL BE CLEARLY MARKED IN THE FIELD.
6. SITE WORK SHALL BE CONSTRUCTED FROM A COMPLETE SET OF PLANS, NOT ALL FEATURES ARE DETAILED ON EVERY PLAN. THE ENGINEER IS TO BE NOTIFIED OF ANY CONFLICT WITHIN THIS PLAN SET.
7. TFMORAN, INC. ASSUMES NO LIABILITY FOR WORK PERFORMED WITHOUT AN ACCEPTABLE PROGRAM OF TESTING AND INSPECTION AS APPROVED BY THE ENGINEER OF RECORD.
8. PRIOR WRITTEN PERMISSION FROM THE LOCAL PERMITTING AUTHORITY IS REQUIRED IF CLOSURE/OBSTRUCTIONS TO ROADS, STREET, WALKWAYS, AND OTHERS IS DEEMED NECESSARY. CONTRACTOR TO PROVIDE ALTERNATE ROUTES AROUND CLOSURES/OBSTRUCTIONS PER LOCAL/STATE/FEDERAL REGULATIONS.
9. REFER TO ARCHITECTURAL PLANS FOR LAYOUT OF BUILDING FOUNDATIONS AND CONCRETE ELEMENTS WHICH ABUT THE BUILDING SUCH AS STAIRS, SIDEWALKS, LOADING DOCK RAMPS, PADS, AND COMPACTOR PADS. DO NOT USE SITE PLANS FOR LAYOUT OF FOUNDATIONS.
10. IN THE EVENT OF A CONFLICT BETWEEN PLANS, SPECIFICATIONS, AND DETAILS, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATION.
11. IF CONDITIONS AT THE SITE ARE DIFFERENT THAN SHOWN ON THE PLANS, THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED WORK.
12. CONTRACTOR'S GENERAL RESPONSIBILITIES:
    A. BID AND PERFORM THE WORK IN ACCORDANCE WITH ALL LOCAL, STATE, AND NATIONAL CODES, SPECIFICATIONS, REGULATIONS, AND STANDARDS AND CONDITIONS OF ALL PROJECT-SPECIFIC PERMITS AND APPROVALS AS LISTED ON THE COVER SHEET TO THESE PLANS OR OTHERWISE REQUIRED.
    B. NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES IN PROPOSED LAYOUT AND IN EXISTING FEATURES.
    C. EMPLOY A LICENSED SURVEYOR TO DETERMINE ALL LINES AND GRADES AND LAYOUT OF SITE ELEMENTS AND BUILDINGS.
    D. THE CONTRACTOR SHALL BE RESPONSIBLE TO BECOME FAMILIAR WITH THE SITE AND ALL SURROUNDING CONDITIONS. NOTIFY ALL APPROPRIATE AUTHORITY OF CONSTRUCTION ACTIVITIES REQUIRING TESTS OR INSPECTIONS IN ADVANCE.
    E. TAKE APPROPRIATE MEASURES TO MINIMIZE NOISE, DUST, AND DEBRIS. CONSTRUCTION ACTIVITIES SHALL BE CARRIED OUT BETWEEN THE HOURS OF 7:00 AM AND 9:00 PM, MONDAY THROUGH FRIDAY IN ACCORDANCE WITH THE APPLICABLE MUNICIPAL ORDINANCES AND REGULATIONS OF THE CITY OF PORTSMOUTH.
    F. MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
    G. IN ACCORDANCE WITH RSA 430:53 AND AGR 3800, THE CONTRACTOR SHALL NOT TRANSPORT INVASIVE SPECIES OFF THE PROPERTY, AND SHALL DISPOSE OF INVASIVE SPECIES ON-SITE IN A LEGAL MANNER.
    H. COORDINATE WITH ALL UTILITY COMPANIES AND CONTACT DIGSAFE (811 OR 888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
    I. PROTECT NEW AND EXISTING BURIED UTILITIES DURING ALL SITE WORK. DAMAGED UTILITIES SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
    J. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY TFMORAN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS, OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR OR ENGINEER HEREON DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
    K. WRITTEN DIMENSIONS HAVE PRECEDENCE OVER SCALED OR COORDINATE DIMENSIONS. IN CASE OF CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWING AND/OR SPECIFICATION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY FOR CLARIFICATIONS.
    L. PROVIDE AN AS-BUILT PLAN AT THE COMPLETION OF THE PROJECT AS REQUIRED BY PORTSMOUTH REGULATIONS.
    M. IF ANY DEVIATIONS FROM THE APPROVED PLANS AND SPECIFICATIONS HAVE BEEN MADE, THE SITE CONTRACTOR SHALL PROVIDE AS-BUILT DRAWINGS STAMPED BY A LICENSED SURVEYOR OR QUALIFIED ENGINEER ALONG WITH A LETTER STAMPED BY A QUALIFIED ENGINEER DESCRIBING ALL SUCH DEVIATIONS, AND BEAR ALL COSTS FOR PREPARING AND FILING ANY NEW PERMITS OR PERMIT AMENDMENTS THAT MAY BE REQUIRED.
    N. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL PROVIDE A LETTER CERTIFYING THAT THE PROJECT WAS COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, AND A LETTER STAMPED BY A QUALIFIED ENGINEER (WITH PHOTOGRAPHS) THAT THEY HAVE OBSERVED ALL UNDERGROUND DETENTION SYSTEMS, INFILTRATION SYSTEMS, OR FILTERING SYSTEMS PRIOR TO BACKFILL, AND THAT SUCH SYSTEMS CONFORM TO THE APPROVED PLANS AND SPECIFICATIONS.

GRADING & DRAINAGE NOTES

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK THE ACCURACY OF THE TOPOGRAPHY AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO ANY EARTHWORK BEING PERFORMED ON THE SITE. NO CLAIM FOR EXTRA WORK WILL BE CONSIDERED FOR PAYMENT AFTER EARTHWORK HAS COMMENCED.
2. COORDINATE WITH GEOTECHNICAL/STRUCTURAL PLANS FOR SITE PREPARATION AND OTHER BUILDING INFORMATION.
3. COORDINATE WITH ARCHITECTURAL PLANS FOR DETAILED LAYOUT AND GRADING AT BUILDING, AND SIZE AND LOCATION OF ALL BUILDING SERVICES, FOOTING DRAINS, AND ROOF DRAIN INFORMATION.
4. LIMITS OF WORK ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHALL COORDINATE ALL WORK TO PROVIDE SMOOTH TRANSITIONS. THIS INCLUDES GRADING, PAVEMENT, CURBING, SIDEWALKS, AND ALIGNMENTS.
5. THE CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCE, RAMPS, AND LOADING AREAS.
6. THE SITE SHALL BE GRADED SO ALL FINISHED PAVEMENT HAS POSITIVE DRAINAGE AND SHALL NOT POND WATER.
7. ALL ELEVATIONS SHOWN AT CURB ARE TO THE BOTTOM OF CURB UNLESS OTHERWISE NOTED. CURBS HAVE A 6" REVEAL UNLESS OTHERWISE NOTED.
8. ALL SIDEWALK AND OTHER CURB REVEALS SHALL BE 6" WITH A TOLERANCE OF PLUS OR MINUS 3/8". WHERE SIDEWALK IS TO BE FLUSH, THE PAVEMENT REVEAL SHALL BE WITHIN 1/4".
9. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE PRIOR TO INSTALLATION OF FINISHED PAVEMENT.
10. ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS AND SHALL MEET LOCAL STANDARDS AND THE REQUIREMENTS OF THE LATEST NHDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGE CONSTRUCTION AND THE NHDOT STANDARD STRUCTURE DRAWINGS UNLESS OTHERWISE NOTED.
11. STORMWATER DRAINAGE SYSTEM SHALL BE CONSTRUCTED TO LINE AND GRADE AS SHOWN ON THE PLANS. CONSTRUCTION METHODS SHALL CONFORM TO NHDOT STANDARD SPECIFICATIONS, SECTION 603. CATCH BASINS AND DRAIN MANHOLES SHALL CONFORM TO SECTION 604. ALL CATCH BASIN GRATES SHALL BE TYPE B AND CONFORM TO NHDOT STANDARDS AND SPECIFICATIONS UNLESS OTHERWISE NOTED.
12. NO FILL SHALL BE PLACED IN ANY WETLAND AREA WITHOUT A WETLANDS PERMIT.
13. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
14. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED, FERTILIZER, AND MULCH.
15. DENSITY REQUIREMENTS:

MINIMUM DENSITY*	LOCATION
95%*	BELOW PAVED OR CONCRETE AREAS
95%**	TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL
90%**	BELOW LOAM AND SEED AREAS

ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT.
* ASTM D-1557
** ASTM D-698.

UTILITY NOTES

1. LENGTH OF PIPE IS FOR CONVENIENCE ONLY. ACTUAL PIPE LENGTH SHALL BE DETERMINED IN THE FIELD.
2. ALL PROPOSED UTILITY WORK, INCLUDING MATERIAL, INSTALLATION, TERMINATION, EXCAVATION, BEDDING, BACKFILL, COMPACTION, TESTING, CONNECTIONS, AND CONSTRUCTION SHALL BE COORDINATED WITH AND COMPLETED IN ACCORDANCE WITH THE APPROPRIATE REQUIREMENTS, CODES, AND STANDARDS OF ALL CORRESPONDING UTILITY ENTITIES AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION BE AGREED TO BY THE ENGINEER BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT "DIGSAFE" (811) AT LEAST 72 HOURS BEFORE DIGGING.
4. COORDINATE ALL WORK ADJACENT TO PROPOSED BUILDINGS WITH ARCHITECTURAL BUILDING DRAWINGS. CONFIRM UTILITY PENETRATIONS AND INVERT ELEVATIONS ARE COORDINATED PRIOR TO INSTALLATION.
5. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES OWNING UTILITIES, EITHER OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA AND SHALL COORDINATE AS NECESSARY WITH THE UTILITY COMPANIES OF SAID UTILITIES. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
6. THE EXACT LOCATION OF NEW UTILITY CONNECTIONS SHALL BE DETERMINED BY THE CONTRACTOR IN COORDINATION WITH UTILITY COMPANY, COUNTY AGENCY, AND/OR PRIVATE UTILITY COMPANY.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER THE UTILITY INSTALLATION COMPLETE AND OPERATIONAL.
8. ALL UTILITY COMPANIES REQUIRE INDIVIDUAL CONDUITS. CONTRACTOR TO COORDINATE WITH TELEPHONE, CABLE, AND ELECTRIC COMPANIES REGARDING NUMBER, SIZE, AND TYPE OF CONDUITS REQUIRED PRIOR TO INSTALLATION OF ANY CONDUIT.
9. SANITARY SEWER SHALL BE CONSTRUCTED TO THE STANDARDS AND SPECIFICATIONS AS SHOWN ON THESE PLANS. ALL SEWER MAINS AND FITTINGS SHALL BE PVC AND SHALL CONFORM TO ASTM F 679 (SDR 35 MINIMUM). FORCE MAINS AND FITTINGS SHALL CONFORM TO NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. ALL SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH NH CODE OF ADMINISTRATIVE RULES ENV-WQ 700. SANITARY MANHOLES SHALL CONFORM TO NHDES WATER DIVISION WASTEWATER ENGINEERING BUREAU STANDARDS AND SPECIFICATIONS SHOWN HEREON.
10. ON-SITE WATER DISTRIBUTION SHALL BE TO CITY OF PORTSMOUTH STANDARDS AND SPECIFICATIONS. WATER MAINS SHALL HAVE A MINIMUM OF 5.5' COVER. WHERE WATER PIPES CROSS SEWER LINES A MINIMUM OF 18" VERTICAL SEPARATION BETWEEN THE TWO OUTSIDE PIPE WALLS SHALL BE OBSERVED. HORIZONTAL SEPARATION BETWEEN WATER AND SEWER SHALL BE 10' MINIMUM. WHERE A SANITARY LINE CROSSES A WATER LINE, SEWER LINE MUST BE CONSTRUCTED OF FORCE MAIN MATERIALS (PER ENV-WQ 704.08) FROM BUILDING OR MANHOLE TO MANHOLE, OR SUBSTITUTE RUBBER-GASKETED PRESSURE PIPE FOR THE SAME DISTANCE. WHEN SANITARY LINES PASS BELOW WATER LINES, LAY PIPE SO THAT NO JOINT IN THE SANITARY LINE WILL BE CLOSER THAN 6' HORIZONTALLY TO THE WATER LINE.
11. THRUST BLOCKS SHALL BE PROVIDED AT ALL LOCATIONS WHERE WATER LINE CHANGES DIRECTIONS OR CONNECTS TO ANOTHER WATER LINE.
12. ALL PROPOSED UTILITIES SHALL BE UNDERGROUND. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES.
13. THE CONTRACTOR SHALL ARRANGE AND PAY FOR ALL INSPECTIONS, TESTING, AND RELATED SERVICES AND SUBMIT COPIES OF ACCEPTANCE TO THE OWNER, UNLESS OTHERWISE INDICATED.
14. PROVIDE PERMANENT PAVEMENT REPAIR FOR ALL UTILITY TRENCHES IN EXISTING ROAD OR PAVEMENT TO REMAIN. SAW CUT TRENCH, PAVEMENT, AND GRANULAR BASE THICKNESS TO MATCH EXISTING PAVEMENT. OBTAIN ALL PERMITS REQUIRED FOR TRENCHING.
15. UNLESS OTHERWISE SPECIFIED, ALL UNDERGROUND STRUCTURES, PIPES, CHAMBERS, ETC. SHALL BE COVERED WITH A MINIMUM OF 18" OF COMPACTED SOIL BEFORE EXPOSURE TO VEHICLE LOADS.
16. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

DRAINAGE	MUNICIPAL
SEWER	MUNICIPAL
WATER	MUNICIPAL
GAS	UNITIL
ELECTRIC	EVERSOURCE
TELEPHONE	CONSOLIDATED COMMUNICATIONS
CABLE	COMCAST

TAX MAP 138 LOT 47

NOTES & LEGEND

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

AUGUST 18, 2025

REV	DATE	DESCRIPTION	DR	CK

Seacoast Division
TFM ©
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
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Portsmouth, NH 03801
Phone (603) 431-2222
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www.tfmoran.com

FILE		DR	JKC		
47229.03	CADFILE	CK	JCC	47229-03_COVER&NOTES	C-01

Aug 18, 2025 - 2:51pm
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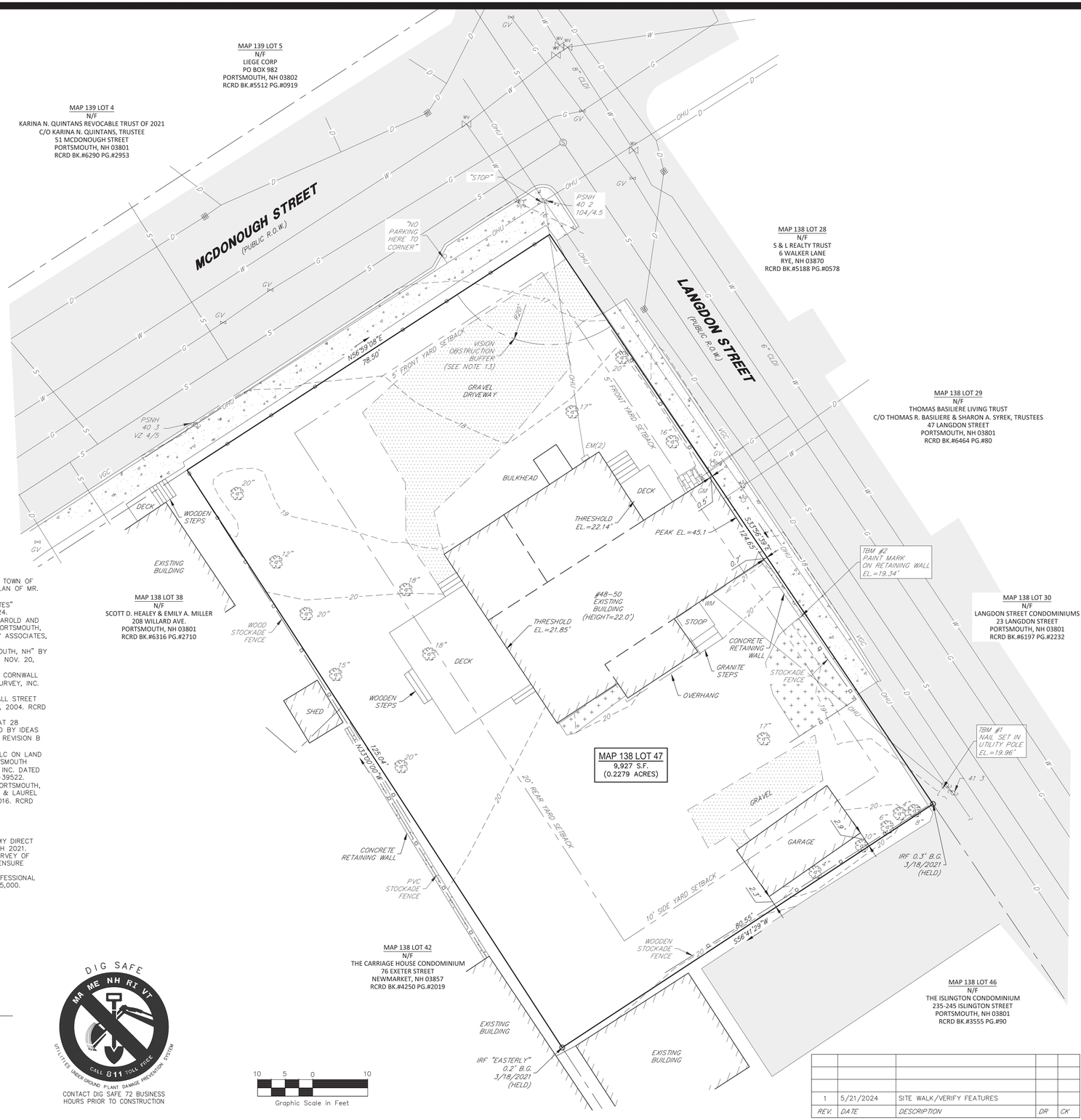
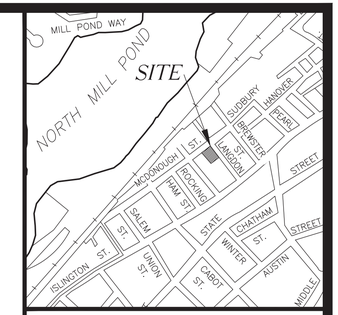
LEGEND:

MAP 137 LOT 11	ASSESSORS MAP AND LOT NUMBER
B.G.	BELOW GRADE
BK. PG.	BOOK / PAGE
CLDI	CEMENT–MORTAR LINED DUCTILE IRON
EL.	ELEVATION
EM	ELECTRIC METER
EP	EDGE OF PAVEMENT
GM	GAS METER
GV	GAS VALVE
IRF	IRON ROD FOUND
N/F	NOW OR FORMERLY
PSNH	PUBLIC SERVICE COMPANY OF NH
PVC	POLYVINYL CHLORIDE
RCRD	ROCKINGHAM COUNTY REGISTRY OF DEEDS
R.O.W.	RIGHT OF WAY
S.F.	SQUARE FEET
TBM	TEMPORARY BENCH MARK
VGC	VERTICAL GRANITE CURB
VZ	VERIZON UTILITY COMPANY
WM	WATER METER
	IRON PIN/ROD FOUND
	CATCH BASIN
GV	GAS VALVE
WV	WATER VALVE
	SEWER MANHOLE
	HYDRANT
	UTILITY POLE
	SEWER CLEAN OUT
	SIGN POLE
	DECIDUOUS TREE
	WATER SHUT OFF
	BOUNDARY LINE
	APPROXIMATE ABUTTERS LINE
	SETBACK LINE
D	DRAIN LINE
G	GAS LINE
W	WATER LINE
S	SEWER LINE
OHU	OVERHEAD UTILITIES
16	EXISTING CONTOUR
	STOCKADE FENCE
	CONCRETE
	PAVEMENT
	CRUSHED STONE/GRAVEL
	BRICK
	LANDSCAPED AREA





LOCATION PLAN

NOTES:

1. THE PARCEL IS LOCATED IN THE GENERAL RESIDENCE C (GRC) ZONING DISTRICT.
2. THE PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 138 AS LOT 47.
3. THE PARCEL IS LOCATED IN ZONE X AS SHOWN ON NATION FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM) NUMBER 33015C0259F, VERSION 2.2.3.1 MAP REVISED JANUARY 29, 2021.
4. OWNER OF RECORD:
   MAP 138 LOT 47
   MARTIN HUSSLAGE
   446 CENTRAL ROAD
   RYE, NH 03870
   RCRD BK.#5742 PG.#1401
5. TOTAL PARCEL AREA:
   MAP 138 LOT 47
   9,927 S.F
   (0.2279 ACRES)
6. DIMENSIONAL REQUIREMENTS:

	GRC
MINIMUM LOT DIMENSIONS:	
LOT AREA	3,500 S.F.
LOT AREA PER DWELLING UNIT	3,500 S.F.
CONTINUOUS STREET FRONTAGE	70'
DEPTH	50'
MINIMUM YARD DIMENSIONS:	
FRONT	5'
SIDE	10'
REAR	20'
MAXIMUM STRUCTURE DIMENSIONS:	
STRUCTURE HEIGHT	35'
ROOF APPURTENANCE HEIGHT	8'
BUILDING COVERAGE	35%
MINIMUM OPEN SPACE:	20%

   PER THE CITY OF PORTSMOUTH, NEW HAMPSHIRE ZONING ORDINANCE, SECTION 10.521.
7. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH THE CURRENT LEGAL DESCRIPTIONS. IT IS NOT AN ATTEMPT TO DEFINE THE EXTENT OF OWNERSHIP OR DEFINE THE LIMITS OF TITLE.
8. THE PURPOSE OF THIS PLAN IS TO SHOW THE BOUNDARY AND EXISTING SITE FEATURES OF MAP 138 LOT 47.
9. FIELD SURVEY COMPLETED BY TCE IN MARCH 2021 USING A USING A LEICA TS–16 AND CARLSON RT–4 DATA COLLECTOR.
10. HORIZONTAL DATUM IS NAD83 (2011) PER STATIC GPS OBSERVATIONS. THE VERTICAL DATUM IS NAVD88 PER STATIC GPS OBSERVATIONS. THE CONTOUR INTERVAL IS 1 FOOT.
11. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
12. THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. TFMORAN, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UNDERGROUND UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE.
13. THIS PARCEL IS SUBJECT TO THE CITY OF PORTSMOUTH ZONING ORDINANCE ARTICLE 5 SECTION 10.516.30 "CORNER OF LOT VISION OBSTRUCTION" THAT REQUIRES ON A CORNER LOT NO STRUCTURE, ACCESSORY STRUCTURE, LANDSCAPING, OR SCREENING WHICH OBSTRUCTS VISIBILITY SHALL BE ERECTED OR MAINTAINED BETWEEN THE HEIGHTS OF 2.5 AND 10 FEET ABOVE THE EDGE OF PAVEMENT GRADES WITHIN 20 FEET FROM THE INTERSECTION OF STREET SIDELINES.

PLAN REFERENCES:

1. "HUNKING PENHALLOW & BENJ. PENHALLOW PLAN OF THE ROCK FIELD IN THE TOWN OF PORTSMOUTH DRAWN IN PART FROM ACTUAL SURVEY AND PARTLY FROM A PLAN OF MR. WILLIAM HART" BY BENJ. AKERMAN, DATED 1815. RCRD PLAN #00562.
2. "CONSOLIDATION OF LOTS PORTSMOUTH, N.H. FOR LANGDON SQUARE ASSOCIATES" PREPARED BY FRANCIS J BARRETT, DATEDJUNE 27, 1980. RCRD PLAN C–10024.
3. "CONDOMINIUM SITE PLAN PREPARED FOR HENRY FAMILY REVOCABLE TRUST HAROLD AND LINDA HENRY, TRUSTEES TAX MAP 138 LOT 45 235–245 ISLINGTON STREET PORTSMOUTH, NEW HAMPSHIRE COUNTY OF ROCKINGHAM" PREPARED BY MCENEANEY SURVEY ASSOCIATES, INC. DATED OCTOBER 4, 2000. RCRD PLAN D–28788.
4. "CONDOMINIUM SITE PLAN FOR JONATHON HOWARD MAP 138, LOT 30 PORTSMOUTH, NH" BY ALEX ROSS CIVIL/STRUCTURAL ENGINEERING SERVICES WITH REVISION 2 DATED NOV. 20, 2002. RCRD PLAN #D–30364.
5. "EASEMENT PLAN FOR DAVID R. LEMIEUX & LANE CHENEY AND SUSIE STROUS CORNWALL STREET & MCDONOUGH STREET PORTSMOUTH, NEW HAMPSHIRE" BY DOUCET SURVEY, INC. DATED NOVEMBER 4, 2003. RCRD PLAN D–31220.
6. "AS–BUILT CONDOMINIUM SITE PLAN FOR SEAPORT DEVELOPMENT LLC CORNWALL STREET PORTSMOUTH, NEW HAMPSHIRE" BY DOUCET SURVEY, INC. DATED DECEMBER 1, 2004. RCRD PLAN D–32250.
7. "28 LANGDON STREET CONDOMINIUM ASSOCIATION SITE PLAN FOR PROPERTY AT 28 LANGDON STREET PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE OWNED BY IDEAS IN MOTION, LLC" BY NORTH EASTERLY SURVEYING, INC., DATED 9/10/07 WITH REVISION B DATED 9/26/07. RCRD PLAN #D–35045.
8. "SUBDIVISION PLAN TAX MAP 138 – LOT 48 FOR CHINBURG DEVELLOPMENT, LLC ON LAND OF JOHN L. AHLGREN & BESSIE PALMISCIANO LANGDON STREET CITY OF PORTSMOUTH COUNTY OF ROCKINGHAM STATE OF NEW HAMPSHIRE" BY AMBIT ENGINEERING, INC. DATED NOVEMBER 2015 WITH REVISION 2 DATED FEBRUARY 26, 2016. RCRD PLAN D–39522.
9. "TAX MAP 138 LOT 29 STANDARD BOUNDARY SURVEY 47 LANGDON STREET PORTSMOUTH, NEW HAMPSHIRE COUNTY OF ROCKINGHAM OWNED BY CHRISTOPHER J. WILSON & LAUREL VALCHUIS" BY TFM MSC A DIVISION OF TFMORAN, INC. DATED OCTOBER 14, 2016. RCRD PLAN D–39788.

I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN MARCH 2021. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS.
I FURTHER CERTIFY THAT THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

STATE OF NEW HAMPSHIRE — No. 844 — J. COREY COLWELL — LICENSED LAND SURVEYOR

LICENSED LAND SURVEYOR — 8/18/2025 DATE

DIG SAFE — MA ME NH RI VT — CALL 811 TOLL FREE — UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

REV.	DATE	DESCRIPTION	DR	CK
1	5/21/2024	SITE WALK/VERIFY FEATURES		

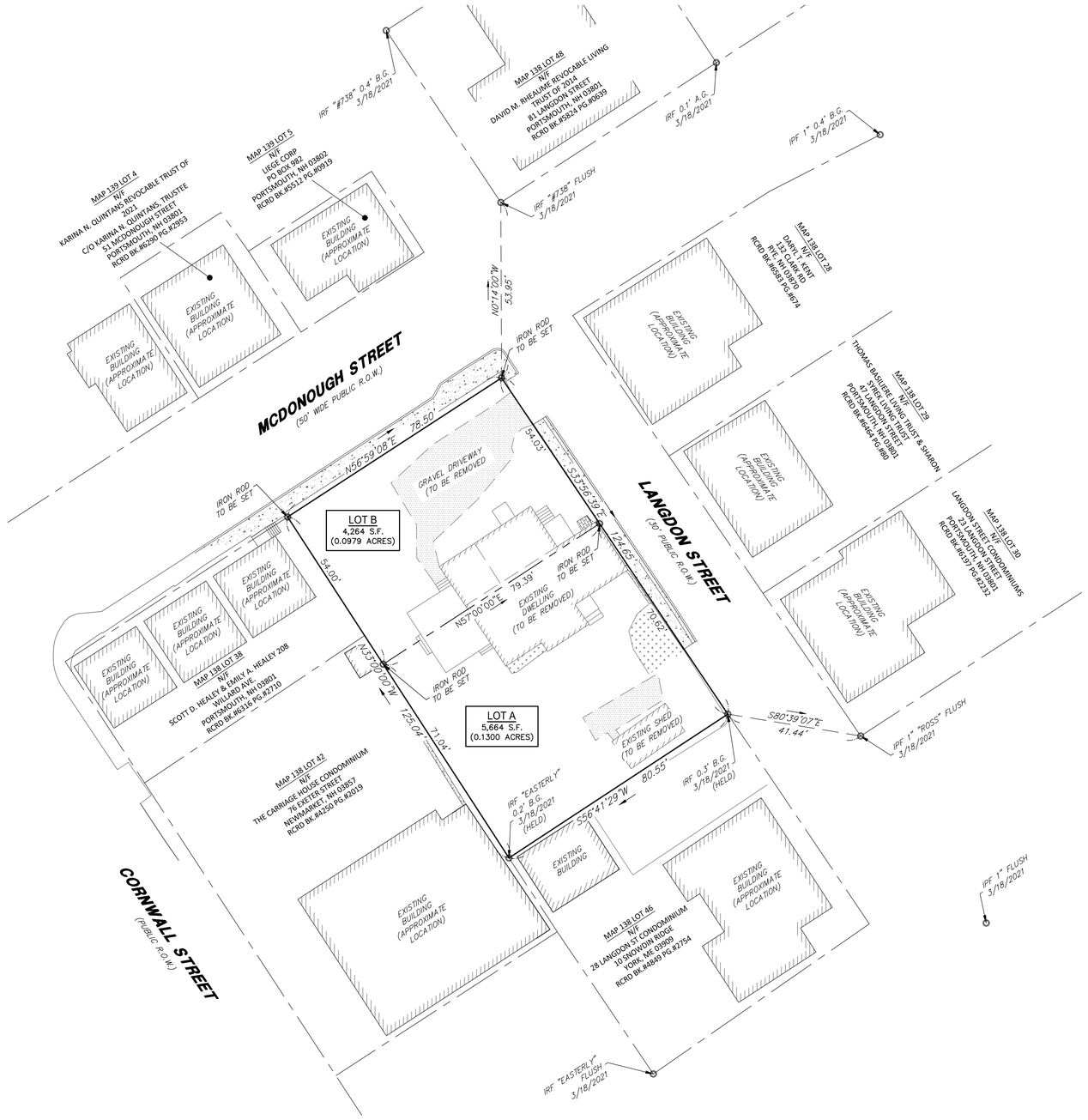
MAP 138 LOT 47
EXISTING CONDITIONS PLAN
HUSSLAGE
48-50 LANGDON STREET
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM
OWNED BY
MARTIN HUSSLAGE

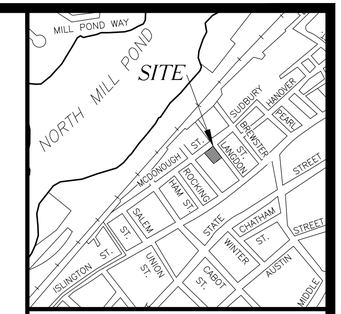
SCALE: 1" = 10' (22x34)
1" = 20' (11x17)
NOVEMBER 30, 2021

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431–2222
Fax (603) 431–0910
www.tfmoran.com

FILE	DR	MVP	FB	573	
47229-01	CK	BMK	CADFILE	SEE MARGIN	S-01

Aug 18, 2025 - 4:39pm
F:\MSC Projects\47229 - Langdon St - Portsmouth\47229-01 - Husslage - 48_50 Langdon St\Carlson Survey\Dwgs\47229-01 Survey.dwg





LOCATION PLAN

NOTES:

1. THE PARCEL IS LOCATED IN THE GENERAL RESIDENCE C (GRC) ZONING DISTRICT.
2. THE PARCEL IS SHOWN ON THE CITY OF PORTSMOUTH ASSESSOR'S MAP 138 AS LOT 47.
3. THE PARCEL IS LOCATED IN ZONE X AS SHOWN ON NATION FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM) NUMBER 33015C0259F, VERSION 2.2.3.1 MAP REVISED JANUARY 29, 2021.
4. OWNER OF RECORD:
   MAP 138 LOT 47
   MARTIN HUSSLAGE
   446 CENTRAL ROAD
   RYE, NH 03870
   RCRD BK.#5742 PG.#1401
5. TOTAL PARCEL AREA:
   MAP 138 LOT 47
   9,927 S.F
   (0.2279 ACRES)
6. DIMENSIONAL REQUIREMENTS: GRC

	REQUIRED:
LOT AREA	3,500 SF
MINIMUM LOT DIMENSIONS:	
CONTINUOUS STREET FRONTAGE	70'
DEPTH	50'
MINIMUM YARD DIMENSIONS:	
FRONT	5'
SIDE	10'
REAR	20'
MAXIMUM STRUCTURE DIMENSIONS:	
BUILDING HEIGHT	35'
ROOF APPURTENANCE HEIGHT	8'
BUILDING COVERAGE	35%
MINIMUM OPEN SPACE:	20%

   PER THE CITY OF PORTSMOUTH, NEW HAMPSHIRE ZONING ORDINANCE, SECTION 10.521.
7. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE 48–50 LANGDON STREET (MAP 138 LOT 47) INTO TWO LOTS.
8. FIELD SURVEY COMPLETED BY TCE IN MARCH 2021 AND JUNE 2024 USING A USING A LEICA TS–16 AND CARLSON RT–4 DATA COLLECTOR.
9. HORIZONTAL DATUM IS NAD83 (2011) PER STATIC GPS OBSERVATIONS. THE VERTICAL DATUM IS NAVD88 PER STATIC GPS OBSERVATIONS. THE CONTOUR INTERVAL IS 1 FOOT.
10. EASEMENTS, RIGHTS, AND RESTRICTIONS SHOWN OR IDENTIFIED ARE THOSE WHICH WERE FOUND DURING RESEARCH PERFORMED AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER RIGHTS, EASEMENTS, OR RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF SUBJECT PARCEL(S) WOULD DETERMINE.
11. THIS PARCEL IS SUBJECT TO THE CITY OF PORTSMOUTH ZONING ORDINANCE ARTICLE 5 SECTION 10.516.30 "CORNER OF LOT VISION OBSTRUCTION" THAT REQUIRES ON A CORNER LOT NO STRUCTURE, ACCESSORY STRUCTURE, LANDSCAPING, OR SCREENING WHICH OBSTRUCTS VISIBILITY SHALL BE ERECTED OR MAINTAINED BETWEEN THE HEIGHTS OF 2.5 AND 10 FEET ABOVE THE EDGE OF PAVEMENT GRADES WITHIN 20 FEET FROM THE INTERSECTION OF STREET SIDELINES.

PURSUANT TO NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES LAN 503.09(24): I CERTIFY THAT THIS SURVEY AND PLAN WERE PREPARED BY THOSE UNDER MY DIRECT SUPERVISION AND ARE THE RESULT OF A FIELD SURVEY CONDUCTED IN JULY–SEPTEMBER 2024. THIS SURVEY CONFORMS TO THE ACCURACY REQUIREMENTS OF AN URBAN SURVEY OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSURE FOR LAND SURVEYORS. THIS SURVEY IS CORRECT TO THE BEST OF MY PROFESSIONAL KNOWLEDGE, AND THE FIELD TRAVERSE SURVEY EXCEEDS A PRECISION OF 1:15,000.

FOR REVIEW

LICENSED LAND SURVEYOR _____ DATE _____

APPROVED BY THE CITY OF PORTSMOUTH PLANNING BOARD

ON _____

BOARD MEMBER _____ AND

BOARD MEMBER _____

20 10 0 20
Graphic Scale in Feet

REV.	DATE	DESCRIPTION	DR	CK

MAP 138 LOT 47

SUBDIVISION PLAN

48-50 LANGDON STREET
PORTSMOUTH, NEW HAMPSHIRE
COUNTY OF ROCKINGHAM

OWNED BY

MARTIN HUSSLAGE

SCALE: 1" = 20' (22x34)
1" = 40' (11x17)

AUGUST 18, 2025

Seacoast Division
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Civil Engineers
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FILE	DR	RJB	FB		
47229-03	CK	JCC	CADFILE	SEE MARGIN	S-02

Aug 18, 2025 - 3:15pm
F:\MSC Projects\47229 - Langdon St - Portsmouth\47229-03 - Husslage - 48-50 Langdon St\Carlson Survey\Dwgs\47229-03 Subdivision.dwg

NOTES

1. SEE NOTES ON SHEET C-02.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATIONS, SIZE, AND ELEVATIONS OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS PRIOR TO THE START OF ANY DEMOLITION. THE LOCATIONS SHOWN ON THESE PLANS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED DEMOLITION TO DETERMINE APPROPRIATE ACTION TO BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ANTICIPATE CONFLICTS AND REPAIR EXISTING UTILITIES AS NECESSARY TO COMPLETE THE WORK AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY WORK AT ALL TIMES.
4. THE CONTRACTOR SHALL VERIFY ALL SURVEY INFORMATION IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO THE START OF CONSTRUCTION.
5. EXISTING UTILITY SERVICES TO BE DISCONTINUED ARE TO BE CAPPED AS REQUIRED BY THE RESPECTIVE UTILITY COMPANIES.
6. CONSTRUCTION DEBRIS AND INVASIVE SPECIES SHALL BE REMOVED FROM SITE AND DISPOSED OF IN A LEGAL MANNER.
7. PRIOR TO THE START OF WORK, THE CONTRACTOR SHALL PLACE ORANGE CONSTRUCTION FENCING AROUND EACH TREE TO BE RETAINED THROUGHOUT CONSTRUCTION. NO STOCKPILES OF MATERIAL ARE PERMITTED WITHIN THE DRIP LINE OF THE TREES TO BE SAVED.
8. CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY IF ANY TREES ARE DAMAGED DURING CONSTRUCTION.

CONSTRUCTION SEQUENCE NOTES

TO MINIMIZE EROSION AND SEDIMENTATION DUE TO CONSTRUCTION, CONSTRUCTION SHALL FOLLOW THIS GENERAL CONSTRUCTION SEQUENCE.

MODIFICATIONS TO THE SEQUENCE NECESSARY DUE TO THE CONTRACTOR'S SCHEDULE SHALL INCLUDE APPROPRIATE TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES.

THE CONTRACTOR SHALL SCHEDULE WORK SUCH THAT ANY CONSTRUCTION AREA IS STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE EXCEPT AS NOTED BELOW. NO MORE THAN 5 ACRES OF DISTURBED LAND SHALL BE UNSTABILIZED AT ANY ONE TIME.

THE PROJECT SHALL BE MANAGED SO THAT IT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER ARC 3800 RELATIVE TO INVASIVE SPECIES.

DO NOT TRAFFIC EXPOSED SOIL SURFACE OF INFILTRATION SYSTEMS WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION COMPONENTS OF THE SYSTEM.

DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO STORMWATER BMP'S. STORMWATER RUNOFF MUST BE DIRECTED TO TEMPORARY PRACTICES UNTIL STORMWATER BMP'S ARE STABILIZED.

1. NOTIFY EASEMENT OWNERS PRIOR TO COMMENCEMENT OF WORK.
2. INSTALL ALL PERIMETER EROSION PROTECTION MEASURES AS INDICATED ON THE PLANS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
3. DURING CONSTRUCTION EVERY EFFORT SHALL BE MADE TO MANAGE SURFACE RUNOFF QUALITY.
4. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT BARRIERS, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED. (TEMPORARY SEED MIXTURE OF WINTER RYE APPLIED AT A RATE OF 2.5 LBS/1000 SF SHALL BE USED).
5. CONDUCT MAJOR EARTHWORK, INCLUDING CLEARING AND GRUBBING, WITHIN THE LIMITS OF WORK. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
6. ALL STRIPPED TOPSOIL AND OTHER EARTH MATERIALS SHALL BE STOCKPILED OUTSIDE THE IMMEDIATE WORK AND WETLAND AREAS. A SILT BARRIER SHALL BE CONSTRUCTED AROUND THESE PILES IN A MANNER TO PROVIDE ACCESS AND AVOID SEDIMENT OUTSIDE OF THE WORK AREA.
7. CONSTRUCT BUILDING PAD AND COMMENCE NEW BUILDING CONSTRUCTION.
8. CONSTRUCT TEMPORARY CULVERTS AND DIVERSIONS AS REQUIRED.
9. BEGIN PERMANENT AND TEMPORARY INSTALLATION OF SEED AND MULCH.
10. PERFORM EARTHWORK NECESSARY TO ESTABLISH ROUGH GRADING AROUND ACCESS DRIVES. MANAGE EXPOSED SOIL SURFACES TO AVOID TRANSPORTING SEDIMENTS INTO WETLANDS.
11. INSTALL SUBSURFACE UTILITIES (WATER, SEWER, GAS, ELECTRIC, COMMUNICATIONS, DRAINAGE, DRAINAGE FACILITIES, ETC.).
12. COMPLETE BUILDING AND ALL OFF-SITE IMPROVEMENTS.
13. COMPLETE SEEDING AND MULCHING. SEED TO BE APPLIED WITH BROADCAST SPREADER OR BY HYDRO-SEEDING, THEN ROLLED, RAKED, OR DRAGGED TO ASSURE SEED/SOIL CONTACT.
14. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDED AREAS HAVE BECOME FIRMLY ESTABLISHED AND SITE IMPROVEMENTS ARE COMPLETE.
15. DURING THE COURSE OF THE WORK AND UPON COMPLETION, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT DEPOSITS, EITHER ON OR OFF SITE, INCLUDING CATCH BASINS, AND SUMPS, DRAIN PIPES AND DITCHES, CURB LINES, ALONG SILT BARRIERS, ETC. RESULTING FROM SOIL AND/OR CONSTRUCTION OPERATIONS.
16. SEE WINTER CONSTRUCTION SEQUENCE FOR WORK CONDUCTED AFTER OCTOBER 15TH.

TAX MAP 138 LOT 47

SITE PREPARATION & DEMOLITION PLAN

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

AUGUST 18, 2025

REV	DATE	DESCRIPTION	DR	CK

Seacoast Division
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47229.03	CK	JCC		47229-03_SITEPREP	C-02

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SITE DATA

OWNER OF RECORD OF MAP 138 LOT 47: MARTIN HUSSLAGE, 446 CENTRAL ROAD RYE, NH 03870
DEED REFERENCE TO PARCEL IS BK 5742 PG 1401
AREA OF PARCEL = 9,927± SF OR 0.2279± ACRES

ZONED: GENERAL RESIDENCE C (GRC)
EXISTING USE: RESIDENTIAL
PROPOSED USE: RESIDENTIAL

THE PURPOSE OF THIS PLAN IS TO DEPICT CONSTRUCTION OF TWO SINGLE FAMILY DWELLINGS WITH ACCESSORY DWELLING UNITS. ASSOCIATED IMPROVEMENTS INCLUDE AND ARE NOT LIMITED TO ACCESS, GRADING, STORMWATER MANAGEMENT SYSTEMS, UTILITIES, AND LANDSCAPING.

DIMENSIONAL REQUIREMENTS (CURRENT ZONING)

	REQUIRED:	PROPOSED LOT A:	PROPOSED LOT B
MINIMUM LOT DIMENSIONS:			
LOT AREA	3,500 SF	5,664 SF	4,264 S.F.
LOT FRONTAGE	70 FT	70.6 FT	54 FT (LANGDON ST.) 78.5 FT (MCDONOUGH ST.)
DEPTH	50 FT	79.4 FT	78.5 FT
MINIMUM YARD DIMENSIONS:			
FRONT	5 FT	13.9 FT	8 FT (LANGDON ST.) 10 FT (MCDONOUGH ST.)
SIDE	10 FT	11.0 FT	11 FT
REAR	20 FT	24.7 FT	23.2 FT
MAXIMUM STRUCTURE DIMENSIONS:			
STRUCTURE HEIGHT	35 FT	30.1 FT	29.6 FT
ROOF APPURTENANCE HEIGHT	8 FT	<8 FT	<8 FT
BUILDING COVERAGE	35%	31.5%	34.9%
MINIMUM OPEN SPACE	20%	54.3%	53.6%

PARKING REQUIREMENTS

	REQUIRED:	PROPOSED LOT A:	PROPOSED LOT B
PARKING SPACES (SEE CALCULATION)	5 SPACES		6 SPACES (3 PER LOT)
ACCESSIBLE SPACES (REQ'D BY ADA)	0 SPACES		0 SPACES
PARKING SPACE SIZE	8.5 FT X 19 FT		8.5 FT X 19 FT

PARKING CALCULATIONS

REQUIRED PARKING RATIO:
RESIDENTIAL USE: LESS THAN 500 S.F. = 0.5 SPACES PER UNIT
500–750 S.F. = 1.0 SPACES PER UNIT
OVER 750 S.F. = 1.3 SPACES PER UNIT

TOTAL REQUIRED = 3 UNITS (>750 S.F.) * 1.3 SPACE/UNIT = 3.9 SPACES +
2 UNIT (500–750 S.F.)* 1 SPACE/UNIT = 1.0 SPACE
TOTAL = 4.9 SPACES

NOTES

1. SEE NOTES ON SHEET C–01.
2. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS NOTED OTHERWISE.
3. LIGHTING, SIGNAGE, LANDSCAPING, AND SCREENING SHALL MEET THE REQUIREMENTS OF THE PORTSMOUTH ZONING ORDINANCE AND SITE PLAN REGULATIONS.
4. SNOW SHALL NOT BE STOCKPILED IN STORMWATER BMP'S, WETLAND BUFFERS, OR WETLANDS. SEE SNOW STORAGE LOCATIONS. IN THE EVENT THAT THE SNOW STORAGE AREAS PROVIDED ON THE SITE ARE COMPLETELY UTILIZED, EXCESS SNOW SHALL BE TRANSPORTED OFF SITE FOR DISPOSAL IN ACCORDANCE WITH NHDES REGULATION. SALT USE FOR SNOW MANAGEMENT SHALL BE MINIMIZED AND WINTER MAINTENANCE SHALL BE PERFORMED BY GREEN SNOWPRO CERTIFIED OPERATORS.

HORIZONTAL SCALE 1"=10'
10 5 0 10

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TAX MAP 138 LOT 47

SITE LAYOUT PLAN

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

AUGUST 18, 2025

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CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

NOTES

1. SEE NOTES ON SHEET C-01.
2. ALL DOORS AND GARAGE ENTRANCES SHALL BE AT FINISHED FLOOR ELEVATION UNLESS OTHERWISE NOTED.
3. PROPOSED SPOT GRADES ARE PROVIDED TO THE NEAREST 0.05. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE FINISHED GRADES MEET ADA STANDARDS FOR WHEEL CHAIR RAMPS, HANDICAP SPACES AND ACCESS AISLES, CROSSWALKS, SIDEWALKS, ETC.
4. ALL ELEVATIONS SHOWN AT STEPS ARE TO THE BOTTOM OF STEPS UNLESS OTHERWISE NOTED.
5. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR SUBDRAINAGE SYSTEMS FOR THE BUILDING FOUNDATION. SUBDRAINAGE MUST DAYLIGHT OR TIE INTO THE STORMWATER MANAGEMENT SYSTEM.

TAX MAP 138 LOT 47

GRADING & DRAINAGE PLAN

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

AUGUST 18, 2025

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47229.03		CK	JCC	CADFILE	47229-03_GRADING&DRAINAGE	C-04

NOTES

1. SEE UTILITY NOTES ON SHEET C-01
2. THE PROPERTY WILL BE SERVICED BY THE FOLLOWING:

DRAINAGE	MUNICIPAL
SEWER	MUNICIPAL
WATER	MUNICIPAL
GAS	UNITIL
ELECTRIC	EVERSOURCE
TELEPHONE	CONSOLIDATED COMMUNICATIONS
CABLE	COMCAST

HORIZONTAL SCALE 1"=10'
10 5 0 10

TAX MAP 138 LOT 47

UTILITY PLAN

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

AUGUST 18, 2025

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DIG SAFE
CONTACT DIG SAFE - 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

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LANDSCAPE LEGEND

SYMBOL	QTY	BOTANICAL NAME COMMON NAME	PLANTING SIZE	REMARKS	MATURE SIZE (HEIGHT/SPREAD)	GROWTH HABIT
	4	QUERCUS RUBRA 'KINDRED SPIRIT' KINDRED SPIRIT RED OAK	2"–2.5" CAL. MIN.	B&B	20'–30'/6'–8'	FASTIGIATE

* ALL PLANTS CONTAINED IN LEGEND HAVE BEEN SELECTED FOR URBAN GROWING CONDITIONS.

LANDSCAPE NOTES

(SEE DETAILS FOR ADDITIONAL NOTES)

GENERAL

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE RULES, REGULATIONS, LAWS, AND ORDINANCES HAVING JURISDICTION OVER THIS PROJECT SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND NOTIFY OWNER'S REPRESENTATIVE OF CONFLICTS.
3. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON PLANS BEFORE PRICING THE WORK. ANY DIFFERENCE IN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR CLARIFICATION. LANDSCAPE QUANTITIES SHOWN ON THE PLAN SHALL SUPERCEDE QUANTITIES LISTED IN LANDSCAPE LEGEND.
4. THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK AND VERIFY THAT THE PLANS IN THE CONTRACTOR'S POSSESSION ARE THE MOST CURRENT PLANS AVAILABLE AND ARE THE APPROVED PLAN SET FOR USE IN CONSTRUCTION.
5. ALL PLANT MATERIALS INSTALLED SHALL MEET OR EXCEED THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
6. ALL PLANTS SHALL BE FIRST CLASS AND SHALL BE REPRESENTATIVE OF THEIR NORMAL SPECIES AND/OR VARIETIES. ALL PLANTS MUST HAVE GOOD, HEALTHY, WELL-FORMED UPPER GROWTH AND A LARGE, FIBEROUS, COMPACT ROOT SYSTEM.
7. ALL PLANTS SHALL BE FREE FROM DISEASE AND INSECT PESTS AND SHALL COMPLY WITH ALL APPLICABLE STATE AND FEDERAL LAWS PERTAINING TO PLANT DISEASES AND INFESTATIONS.
8. ALL TREES SHALL BE BALLED AND BURLAPPED (B & B) UNLESS OTHERWISE NOTED OR APPROVED BY LANDSCAPE ARCHITECT.
9. IF APPLICABLE, THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING AND STORED FOR FALL PLANTING.
10. ALL INVASIVE PLANT SPECIES FROM THE "NEW HAMPSHIRE PROHIBITED INVASIVE PLANT SPECIES LIST", TO BE REMOVED SHALL BE DONE SO IN ACCORDANCE WITH THE "INVASIVE SPECIES ACT, HB 1258-FN."

GUARANTEE

THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE WORK FOR A PERIOD OF ONE YEAR, BEGINNING AT THE START OF THE MAINTENANCE PERIOD.

LANDSCAPE SPECIFICATIONS

SITE AND SOIL PREPARATION

1. WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR LEDGE, NOTIFY LANDSCAPE ARCHITECT/ENGINEER BEFORE PLANTING.
2. ALL DISTURBED AREAS & PLANTING AREAS, INCLUDING AREAS TO BE SODDED, SHALL RECEIVE THE FOLLOWING SOIL PREPARATION PRIOR TO PLANTING: A MINIMUM OF 6 INCHES OF LIGHTLY COMPACTED TOPSOIL SHALL BE INSTALLED OVER THE SUBSOIL IF TOPSOIL HAS BEEN REMOVED OR IS NOT PRESENT.
3. LOAM SHALL CONSIST OF LOOSE FRIABLE TOPSOIL WITH NO ADMIXTURE OF REFUSE OR MATERIAL TOXIC TO PLANT GROWTH. LOAM SHALL BE FREE FROM STONES, LUMPS, STUMPS, OR SIMILAR OBJECTS LARGER THAN TWO INCHES (2") IN GREATEST DIAMETER, SUBSOIL, ROOTS, AND WEEDS. THE MINIMUM AND MAXIMUM PH VALUE SHALL BE FROM 5.5 TO 7.6. LOAM SHALL CONTAIN A MINIMUM OF THREE PERCENT (3%) AND A MAXIMUM OF TWENTY PERCENT (20%) ORGANIC MATTER AS DETERMINED BY LOSS BY IGNITION. NOT MORE THAN SIXTY-FIVE PERCENT (65%) SHALL PASS A NO. 200 SIEVE AS DETERMINED BY THE WASH TEST IN ACCORDANCE WITH ASTM D1140. IN NO INSTANCE SHALL MORE THAN 20% OF THAT MATERIAL PASSING THE #4 SIEVE CONSIST OF CLAY SIZE PARTICLES.
4. NATURAL TOPSOIL NOT CONFORMING TO THE PARAGRAPH ABOVE OR CONTAINING EXCESSIVE AMOUNTS OF CLAY OR SAND SHALL BE TREATED BY THE CONTRACTOR TO MEET THOSE REQUIREMENTS.
5. SUBMIT TEST RESULTS OBTAINED FROM SOURCE TO ENGINEER/LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL, PRIOR TO SPREADING OPERATIONS.
6. APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT TO USE THE TOPSOIL WILL DEPEND UPON THE RESULTS OF THE SOIL TESTS.
7. THE BURDEN OF PROOF OF SOIL AMENDMENT INSTALLATION RESTS WITH THE CONTRACTOR. SOIL TESTS MAY BE REQUIRED AT THE CONTRACTOR'S EXPENSE IN ORDER TO CONFIRM AMENDMENT INSTALLATION.

PLANTING

1. EXCAVATE PITS, PLANTERS, BEDS AND TRENCHES WITH VERTICAL SIDES AND WITH BOTTOM OF EXCAVATION SLIGHTLY RAISED AT CENTER TO PROVIDE PROPER DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION.
2. ANY LEDGE OR RUBBLE MATERIAL SHALL BE FRACTURED TO A DEPTH OF 3 FEET AND EXCAVATED TO A DEPTH OF 30 INCHES FOR TREE POCKETS AND 18 INCHES FOR SHRUB BEDS. THIS PROCEDURE SHALL BE HANDLED BY THE SITE CONTRACTOR. SITE TOPSOIL SHALL BE DEPOSITED IN ALL EXCAVATED POCKETS.
3. DISPOSE OF SUBSOIL REMOVED FROM PLANTING EXCAVATIONS. DO NOT MIX WITH PLANTING SOIL OR USE AS BACKFILL.
4. FILL EXCAVATIONS FOR TREES WITH WATER AND ALLOW TO PERCOLATE OUT BEFORE PLANTING.
5. DISH TOP OF BACKFILL TO ALLOW FOR MULCH – PLANT SAUCERS SHALL BE AS SHOWN ON DETAIL SHEETS; 6' DIAMETER FOR ALL DECIDUOUS TREES, AND FOR EVERGREEN TREES A RADIUS 2' BEYOND THE OUTER MOST BRANCHES.
6. MULCH TREES, SHRUBS, PLANTERS AND BEDS. PROVIDE NOT LESS THAN 2-3" THICKNESS OF BARK MULCH, 3/8"-2" OF WIDTH, AND WORK INTO TOP OF BACKFILL. FINISH LEVEL WITH ADJACENT FINISH GRADES AS DIRECTED IN THE FIELD.
7. TREEGATOR WATERING SYSTEM OR APPROVED EQUAL SHALL BE INSTALLED FOR ALL DECIDUOUS TREES AT TIME OF PLANTING AND REMOVED BEFORE FROST. WATERING RATE TO BE APPLIED PER MANUFACTURER'S SPECIFICATIONS.
8. ALL PLANT MATERIALS SHALL HAVE DEAD OR DAMAGED BRANCHES REMOVED AT TIME OF PLANTING. ALL TAGS AND RIBBONS SHALL BE REMOVED AT THIS TIME.
9. THE CONTRACTOR SHALL REQUEST A FINAL OBSERVATION BY THE OWNER'S REPRESENTATIVE UPON COMPLETION OF INSTALLATION.

SEEDING

1. SLOPES UP TO AND INCLUDING 3:1 GRADE, SEED WILL BE NEW ENGLAND EROSION CONTROL & RESTORATION MIX PER NEW ENGLAND WETLANDS PLANTS INC., AMHERST, MA.
2. GENERAL SEED WILL BE NHDOT SPECIFICATION SECTION 644, TABLE 644-1-PARK SEED TYPE 15, INCLUDING NOTES TO TABLE 1, 2 & 3.

PART 1 – GENERAL:

1.1 THE BASE OF THE CITY OF PORTSMOUTH TREE PLANTING REQUIREMENTS IS THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPLANTING. ANSI A300 PART 6 LAYS OUT TERMS AND BASIC STANDARDS AS SET FORTH BY INDUSTRY BUT IT IS NOT THE "END ALL" FOR THE CITY OF PORTSMOUTH. THE FOLLOWING ARE THE CITY OF PORTSMOUTH, NH TREE PLANTING REQUIREMENTS THAT ARE IN ADDITION TO OR THAT GO BEYOND THE ANSI A300 PART 6.

PART 2 – EXECUTION:

2.1 ALL PLANTING HOLES SHALL BE DUG BY HAND – NO MACHINES. THE ONLY EXCEPTIONS ARE NEW CONSTRUCTION WHERE NEW PLANTING PITS, PLANTING BEDS WITH GRANITE CURBING, AND PLANTING SITES WITH SILVA CELLS ARE BEING CREATED. IF A MACHINE IS USED TO DIG IN ANY OF THESE SITUATIONS AND PLANTING DEPTH NEEDS TO BE RAISED, THE MATERIAL IN THE BOTTOM OF THE PLANTING HOLE MUST BE FIRMED WITH MACHINE TO PREVENT SINKING OF THE ROOT BALL.

2.2 ALL WIRE AND BURLAP SHALL BE REMOVED FROM THE ROOT BALL AND PLANTING HOLE.

2.3 THE ROOT BALL OF THE TREE SHALL BE WORKED SO THAT THE ROOT COLLAR OF THE TREE IS VISIBLE AND NO GIRDLING ROOTS ARE PRESENT.

2.4 THE ROOT COLLAR OF THE TREE SHALL BE 2"-3" ABOVE GRADE OF PLANTING HOLE FOR FINISHING DEPTH.

2.5 ALL PLANTINGS SHALL BE BACKFILLED WITH SOIL FROM THE SITE AND AMENDED NO MORE THAN 20% WITH ORGANIC COMPOST. THE ONLY EXCEPTIONS ARE THE NEW CONSTRUCTION WHERE ENGINEERED SOIL IS BEING USED IN CONJUNCTION WITH SILVA CELLS AND WHERE NEW PLANTING BEDS ARE BEING CREATED.

2.6 ALL PLANTINGS SHALL BE BACKFILLED IN THREE LIFTS AND ALL LIFTS SHALL BE WATERED SO THE PLANTING WILL BE SET AND FREE OF AIR POCKETS – NO EXCEPTIONS.

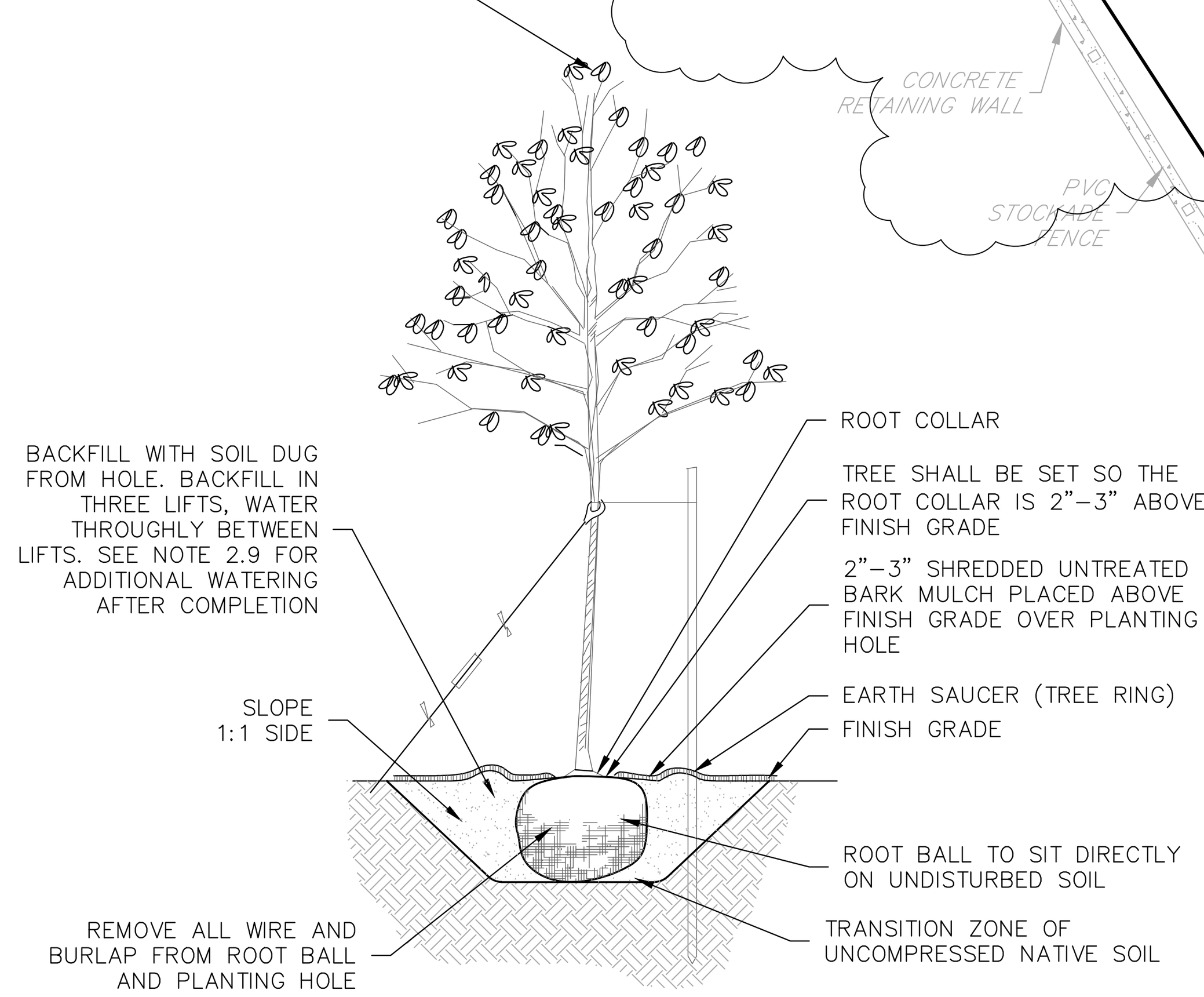
2.7 AN EARTH BERM SHALL BE PLACED AROUND THE PERIMETER OF THE PLANTING HOLE EXCEPT WHERE CURBED PLANTING BEDS OR PITS ARE BEING USED.

2.8 2"-3" OF MULCH SHALL BE PLACED OVER THE PLANTING AREA.

2.9 AT THE TIME THAT PLANTING IS COMPLETE, THE PLANTING SHALL RECEIVE ADDITIONAL WATER TO ENSURE COMPLETE HYDRATION OF THE ROOTS, BACKFILL MATERIAL AND MULCH LAYER.

2.10 STAKES AND GUYS SHALL BE USED WHERE APPROPRIATE AND/OR NECESSARY. GUY MATERIAL SHALL BE NON-DAMAGING TO THE TREE.

2.11 ALL PLANTING STOCK SHALL BE SPECIMEN QUALITY, FREE OF DEFECTS, AND DISEASE OR INJURY. THE CITY OF PORTSMOUTH NH RESERVES THE RIGHT TO REFUSE/REJECT ANY PLANT MATERIAL OR PLANTING ACTION THAT FAILS TO MEET THE STANDARDS SET FORTH IN THE ANSI A300 PART 6 STANDARD PRACTICES FOR PLANTING AND TRANSPORTATION AND/OR THE CITY OF PORTSMOUTH, NH PLANTING REQUIREMENTS.



TREE PLANTING

STANDARD TREE PLANTING DETAIL – CITY OF PORTSMOUTH

NOT TO SCALE

DIG SAFE
MA ME NH RI VT
CALL 811 TOLL FREE
UTILITIES UNDERGROUND PLANT DAMAGE PREVENTION SYSTEM
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

HORIZONTAL SCALE 1"=10'
10 5 0 10

REV	DATE	DESCRIPTION	DR	CK

TAX MAP 138 LOT 47

LANDSCAPE PLAN

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

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NOTES

1. INSTALL SILT BARRIER IN LOCATIONS SHOWN ON THIS PLAN AS FIRST ORDER OF WORK.
2. PROVIDE INLET PROTECTION BARRIERS AROUND ALL EXISTING AND PROPOSED STORM DRAINAGE INLETS WITHIN THE WORK LIMITS AND MAINTAIN FOR THE DURATION OF THE PROJECT UNTIL PAVEMENT HAS BEEN INSTALLED. INLET PROTECTION BARRIERS SHALL BE IN PLACE AT ALL CATCH BASINS PRIOR TO THE DISTURBANCE OF SOIL.
3. DUST CONTROL SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. IT SHALL BE ACCOMPLISHED BY THE UNIFORM APPLICATION OF CALCIUM CHLORIDE AT THE RATE OF 1-1/2 POUNDS PER SQUARE YARD BY MEANS OF A LIME SPREADER OR OTHER APPROVED METHOD. WATER MAY ALSO BE USED FOR DUST CONTROL, AND APPLIED BY SPRINKLING WITH WATER TRUCK DISTRIBUTORS, AS REQUIRED.
4. SILT PROTECTION MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS CONTAINED IN THIS PLAN SET.
5. INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAIN STORM OF 0.10" OR GREATER. REPAIR/MODIFY SILT BARRIER AS NECESSARY TO MAXIMIZE FILTER EFFICIENCY. REMOVE SEDIMENT WHEN SEDIMENT IS 1/3 THE STRUCTURE HEIGHT.
6. PROVIDE SILT BARRIERS AT THE BASE OF CUT AND FILL SLOPES UNTIL COMPLETION OF THE PROJECT OR UNTIL VEGETATION BECOMES ESTABLISHED ON SLOPES. EROSION PROTECTION BELOW FILL SLOPES SHALL BE PLACED IMMEDIATELY AFTER CLEARING, PRIOR TO EMBANKMENT CONSTRUCTION.
7. ALL DISTURBED AREAS SHALL BE REVEGETATED AS QUICKLY AS POSSIBLE. ALL CUT AND FILL SLOPES SHALL BE SEEDED WITHIN 72 HOURS AFTER GRADING.
8. ALL WORK AREAS TO BE STABILIZED AT THE END OF EACH WORK DAY AND PRIOR TO ANY PREDICTED SIGNIFICANT RAIN EVENT.
9. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, ARE INSTALLED IN AREAS TO BE PAVED
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
   C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
13. ALL CATCH BASINS, MANHOLES, AND DRAIN LINES SHALL BE THOROUGHLY CLEANED OF ALL SEDIMENT AND DEBRIS AFTER ALL AREAS HAVE BEEN STABILIZED.
14. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SLOPE STABILITY DURING CONSTRUCTION.
15. THE EROSION CONTROL PRACTICES SHOWN ON THESE PLANS ARE ILLUSTRATIVE ONLY AND SHALL BE SUPPLEMENTED BY THE SITE CONTRACTOR AS NEEDED.
16. SEE ADDITIONAL NOTES NEXT SHEET.

TAX MAP 138 LOT 47

EROSION CONTROL PLAN

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

AUGUST 18, 2025

HORIZONTAL SCALE 1"=20'
20 10 0 20

REV	DATE	DESCRIPTION	DR	CK

DIG SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE	DR	CADFILE		
47229.03	JKC	47229-03_EC&NOTES	C-07	
	CK JCC			

Aug 18, 2025 - 2:53pm
F:\M&C Projects\47229 - Langdon St - Portsmouth\47229-03 - Husslage - 48-50 Langdon St\Design\PRODUCTION DRWGS\47229-03_EC&Notes.dwg

SOIL CHARACTERISTICS

THE SOIL IN THE VICINITY OF THE SITE CONSISTS OF URBAN LAND.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 9,927 SQUARE FEET.

CRITICAL NOTE: THIS DRAWING IS PROVIDED FOR GENERAL GUIDANCE. ALL SPECIAL EROSION CONTROL MEASURES MUST BE EXECUTED IN ACCORDANCE WITH APPLICABLE CURRENT STATE AND LOCAL REGULATIONS, APPROVED SWPPP, AND PERMIT REQUIREMENTS.

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL PERIMETER CONTROLS, STABILIZED CONSTRUCTION ENTRANCE, AND TEMPORARY EROSION CONTROL MEASURES PER APPROVED SITE DEVELOPMENT PLANS, PERMITS, OR SWPPP IF REQUIRED, PRIOR TO EARTH MOVING OPERATIONS.
2. DEMOLISH EXISTING SITE WORK DESIGNATED FOR REMOVAL.
3. INSTALL STORMWATER TREATMENT PONDS AND SWALES BEFORE ROUGH GRADING THE SITE.
4. COMPLETE MAJOR GRADING OF SITE.
5. CONSTRUCT BUILDING FOUNDATIONS, STORMWATER SYSTEM, AND SITE UTILITIES.
6. CONSTRUCT PAVED AREAS.
7. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND SITE IS STABILIZED, REMOVE ALL INLET PROTECTION, SILT BARRIERS, AND SEDIMENT THAT HAS BEEN TRAPPED BY THESE DEVICES.
8. CONSULT APPLICABLE REGULATIONS, PERMITS, CONDITIONS, AND APPROVED SWPPP FOR CONDITIONS RELATED TO NOTICE OF TERMINATION, IF REQUIRED.

EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES AND DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR MORE THAN TWENTY ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:

1. BASE COURSE GRAVELS, WHICH MEET THE REQUIREMENTS OF NHDOT STANDARD FOR ROAD AND BRIDGE CONSTRUCTION, 2016, ITEM 304.2, HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
2. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
3. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR
4. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT BARRIERS. ALL STORM DRAIN INLETS SHALL BE PROVIDED WITH BARRIER FILTERS. STONE RIPRAP SHALL BE PROVIDED AT THE OUTLETS OF DRAINAGE PIPES WHERE EROSIVE VELOCITIES ARE ENCOUNTERED.

OFF SITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED.

INSTALLATION, MAINTENANCE, AND INSPECTION OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

THESE ARE THE GENERAL INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO IMPLEMENT THE PLAN.

1. STABILIZATION OF ALL SWALES, DITCHES, AND PONDS IS REQUIRED PRIOR TO DIRECTING FLOW TO THEM.
2. THE SMALLEST PRACTICAL PORTION OF THE SITE WILL BE DENUDED AT ONE TIME. (5 AC MAX)
3. ALL CONTROL MEASURES WILL BE INSPECTED IN ACCORDANCE WITH APPLICABLE REGULATIONS, PERMITS, AND CONDITIONS AND FOR PROJECTS REQUIRING A NPDES EPA CGP AND DISCHARGING TO A NON-SENSITIVE WATERBODY, AT LEAST EVERY 7 DAYS OR EVERY 14 DAYS AND AFTER A 0.25 INCHES RAIN EVENT OR GREATER.
4. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.
5. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT BARRIER WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE BARRIER.
6. ALL DIVERSION DIKES WILL BE INSPECTED AND ANY BREACHES PROMPTLY REPAIRED.
7. TEMPORARY SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNHEALTHY GROWTH.
8. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.
9. IF INSPECTIONS ARE REQUIRED OR THE PROJECT IS SUBJECT TO A NPDES EPA CGP THE CONTRACTOR'S SITE SUPERINTENDENT WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE, AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.

B. FILTERS / BARRIERS

1. SILT SOCKS

   A. KNOTTED MESH NETTING MATERIAL SHALL BE DELIVERED TO SITE IN A 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" MATERIAL, FILLED WITH COMPOST CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	TEST	REQUIREMENTS
PH	TMECC 04.11-A	5.0 TO 8.0
PARTICLE SIZE	TMECC 02.02-B	2" SIEVE AND MIN. 60% GREATER THAN THE ⅜" SIEVE
MOISTURE CONTENT		STND TESTING < 60%

   MATERIAL SHALL BE RELATIVELY FREE OF INERT OR FOREIGN MAN-MADE MATERIALS

   MATERIAL SHALL BE WEED FREE AND DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER, FREE FROM ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH.

   B. SEDIMENT COLLECTED AT THE BASE OF THE SILT SOCK SHALL BE REMOVED ONCE IT HAS REACHED 1/3 OF THE EXPOSED HEIGHT OF THE SILT SOCK.

   C. SILT BARRIER SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREAS HAS BEEN PERMANENTLY STABILIZED.

2. SEQUENCE OF INSTALLATION

   SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.

3. MAINTENANCE

   A. SILT BARRIERS SHALL BE INSPECTED WEEKLY AND 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 BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.

   B. SHOULD THE FABRIC 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 SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY 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 BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFIRM WITH THE EXISTING GRADE, PREPARED AND SEEDED.

C. MULCHING

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' OF WETLANDS. IT WILL BE NECESSARY TO CLOSELY MONITOR WEATHER PREDICTIONS, USUALLY BY CONTACTING THE NATIONAL WEATHER SERVICE, TO HAVE ADEQUATE WARNING OF SIGNIFICANT STORMS.

   B. REQUIRED MULCHING WITHIN A SPECIFIED TIME PERIOD.

   THE TIME PERIOD CAN RANGE FROM 14 TO 21 DAYS OF INACTIVITY ON AN AREA, WHERE THE LENGTH OF TIME VARIES 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.

2. GUIDELINES FOR WINTER MULCH APPLICATION.

   WHEN MULCH IS APPLIED TO PROVIDE PROTECTION OVER WINTER (PAST THE GROWING SEASON) IT SHALL BE AT A RATE OF 6,000 POUNDS OF HAY OR STRAW PER ACRE. A TACKIFIER MAY BE ADDED TO THE MULCH.

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.

D. VEGETATIVE PRACTICE

1. AFTER ROUGH GRADING OF THE SUBGRADE HAS BEEN COMPLETED AND APPROVED, THE SUB GRADE SURFACE SHALL BE SCARIFIED TO A DEPTH OF 4". THEN, FURNISH AND INSTALL A LAYER OF LOAM PROVIDING A ROLLED THICKNESS AS SPECIFIED IN THESE PLANS. ANY DEPRESSIONS WHICH MAY OCCUR DURING ROLLING SHALL BE FILLED WITH ADDITIONAL LOAM, REGRADED AND REROLLED UNTIL THE SURFACE IS TRUE TO THE FINISHED LINES AND GRADES. ALL LOAM NECESSARY TO COMPLETE THE WORK UNDER THIS SECTION SHALL BE SUPPLIED BY THE SITE SUBCONTRACTOR.
2. ALL LARGE STIFF CLODS, LUMPS, BRUSH, ROOTS, DEBRIS, GLASS, STUMPS, LITTER, AND OTHER FOREIGN MATERIAL, AS WELL AS STONES OVER 1" IN DIAMETER, SHALL BE REMOVED FROM THE LOAM AND DISPOSED OF OFF SITE. THE LOAM SHALL BE RAKED SMOOTH AND EVEN.
3. THE LOAM SHALL BE PREPARED TO RECEIVE SEED BY REMOVING STONES, FOREIGN OBJECTS AND GRADING TO ELIMINATE WATER POCKETS AND IRREGULARITIES PRIOR TO PLACING SEED. FINISH GRADING SHALL RESULT IN STRAIGHT UNIFORM GRADES AND SMOOTH, EVEN SURFACES WITHOUT IRREGULARITIES TO LOW POINTS.
4. SHAPE THE AREAS TO THE LINES AND GRADES REQUIRED. THE SITE SUBCONTRACTOR'S ATTENTION IS DIRECTED TO THE SCHEDULING OF LOAMING AND SEEDING OF GRADED AREAS TO PERMIT SUFFICIENT TIME FOR THE STABILIZATION OF THESE AREAS. IT SHALL BE THE SITE SUBCONTRACTOR'S RESPONSIBILITY TO MAINTAIN THE AREAS DURING THE CONSTRUCTION PERIOD AND REGRADE, LOAM AND RESEED ANY DAMAGED AREAS.
5. ALL AREAS DISTURBED BY CONSTRUCTION WITHIN THE PROPERTY LINES AND NOT COVERED BY STRUCTURES, PAVEMENT, OR MULCH SHALL BE LOAMED AND SEEDED.
6. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF 2 TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5.
7. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER.
8. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4 1/2 POUNDS AND 5 1/2 POUNDS PER INCH OF WIDTH.
9. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4" AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.
10. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 2 TONS PER ACRE. MULCH THAT BLOWS OR WASHES AWAY SHALL BE REPLACED IMMEDIATELY AND ANCHORED USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.
11. THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED.
12. THE SITE SUBCONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED, INCLUDING CUTTING, AS SPECIFIED HEREIN AFTER UNDER MAINTENANCE AND PROTECTION.
13. UNLESS OTHERWISE APPROVED, SEEDING SHALL BE DONE DURING THE APPROXIMATE PERIODS OF EARLY SPRING TO SEPTEMBER 30, WHEN SOIL CONDITIONS AND WEATHER ARE SUITABLE FOR SUCH WORK. IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. FOR TEMPORARY PLANTINGS AFTER SEPTEMBER 30, TO EARLY SPRING AND FOR TEMPORARY PROTECTION OF DISTURBED AREAS:

    A. FOLLOW ABOVE SLOPE, LOAM DEPTH AND GRADING REQUIREMENTS.
    B. FERTILIZER SHALL BE SPREAD AND WORKED INTO THE SURFACE AT A RATE OF 500 POUNDS PER ACRE.

    MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:

WINTER RYE (FALL SEEDING)	2.5 LBS/1,000 SF
OATS (SPRING SEEDING)	2.0 LBS/1,000 SF
MULCH	1.5 TONS/ACRE

E. CATCH BASIN INLET PROTECTION

1. INLET BASKET STRUCTURE

   A. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY PRIOR TO DISTURBING PAVEMENT AND SHALL REMAIN IN PLACE AND MAINTAINED UNTIL PAVEMENT BINDER COURSE IS COMPLETE.

   B. MOLD 6X6, 42 LB. WIRE SUPPORT AROUND INLET FRAME AND GRATE AND EXTEND 6" BEYOND SIDES. SECURE FILTER FABRIC TO WIRE SUPPORT.

   C. THE FILTER FABRIC SHALL BE A GEOTEXTILE FABRIC; POLYESTER, POLYPROPYLENE, STABILIZED NYLON, POLYETHYLENE OR POLYVINYLIDENE CHLORIDE MEETING THE FOLLOWING SPECIFICATIONS:

      GRAB STRENGTH: 45 LB. MINIMUM IN ANY PRINCIPAL DIRECTION (ASTM D1682)
      MULLEN BURST STRENGTH: MIN. 60PSI (ASTM D774)

   D. THE FABRIC SHALL HAVE AN OPENING NO GREATER THAN A NUMBER 20 U.S. STANDARD SIEVE AND A MINIMUM PERMEABILITY OF 120 GPM.

   E. THE INLET PROTECTION SHALL BE INSPECTED WITHIN 24 HOURS AFTER EACH RAINFALL OR DAILY DURING EXTENDED PERIODS OF PRECIPITATION. REPAIRS SHALL BE MADE IMMEDIATELY, AS NECESSARY, TO PREVENT PARTICLES FROM REACHING THE DRAINAGE SYSTEM AND/OR CAUSING SURFACE FLOODING.

   F. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT, OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED.

F. WINTER CONSTRUCTION SEQUENCE

1. ALL PROPOSED POST-DEVELOPMENT LANDSCAPED 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 SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT 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 EVENT.
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 WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
3. AFTER OCTOBER 15TH, INCOMPLETE PARKING AREAS WHERE ACTIVE CONSTRUCTION HAS STOPPED FOR THE WINTER ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3" OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOWFALL AFTER EACH STORM EVENT.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, SILT BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE APPLICABLE ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN TWENTY ONE (21) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN FOURTEEN (14) DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, SILT BARRIERS AND ANY EARTH/DIKES WILL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.

FOR SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT, THEN LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.

WASTE DISPOSAL

1. WASTE MATERIALS
   ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN A DUMPSTER. NO CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE
   ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE
   ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION

1. MATERIAL MANAGEMENT PRACTICES
   THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:

   GOOD HOUSEKEEPING:
   THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ON SITE DURING THE CONSTRUCTION PROJECT:

   A. AN EFFORT WILL BE MADE TO STORE ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB.

   B. ALL MATERIALS STORED ON SITE WILL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.

   C. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL WILL BE FOLLOWED.

   D. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

   E. SUBSTANCES WILL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.

   F. WHENEVER POSSIBLE ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER.

   HAZARDOUS PRODUCTS:
   THE FOLLOWING PRACTICES WILL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:

   A. PRODUCTS WILL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE.

   B. ORIGINAL LABELS AND MATERIAL SAFETY DATA WILL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION.

   C. SURPLUS PRODUCT THAT MUST BE DISPOSED OF WILL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.

2. PRODUCT SPECIFICATION PRACTICES
   THE FOLLOWING PRODUCT SPECIFIC PRACTICES WILL BE FOLLOWED ON SITE:

   PETROLEUM PRODUCTS:
   ALL ON SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

   FERTILIZERS:
   FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER. STORAGE WILL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER WILL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

   PAINTS:
   ALL CONTAINERS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM BUT WILL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.

   CONCRETE TRUCKS:
   CONCRETE TRUCKS WILL DISCHARGE AND WASH OUT SURPLUS CONCRETE OR DRUM WASH WATER IN A CONTAINED AREA DESIGNATED ON SITE.

SPILL CONTROL PRACTICES

IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.

B. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.

C. ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.

D. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.

E. SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.

F. THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM RECURRING AND HOW TO CLEANUP THE SPILL IF IT RECURS. A DESCRIPTION OF THE SPILL, ITS CAUSE, AND THE CLEANUP MEASURES WILL BE INCLUDED.

G. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.

DUST CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL METHODS SHALL INCLUDE, BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

TAX MAP 138 LOT 47

EROSION CONTROL NOTES

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

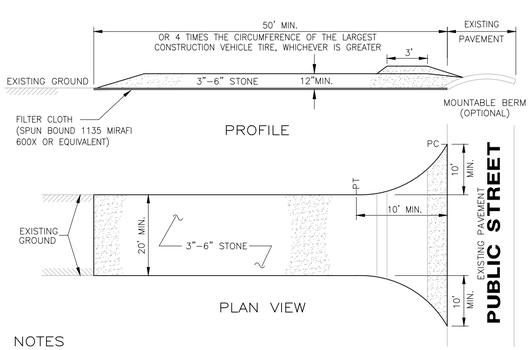
AUGUST 18, 2025

REV	DATE	DESCRIPTION	DR	CK

Seacoast Division
TFM
Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists
170 Commerce Way, Suite 102
Portsmouth, NH 03801
Phone (603) 431-2222
Fax (603) 431-0910
www.tfmoran.com

FILE		DR	JKC			
	47229.03	CK	JCC	CADFILE	47229-03_EC&NOTES	C-08

DIG SAFE
811 OR 1-888-DIG-SAFE
CONTACT DIG SAFE 72 BUSINESS HOURS PRIOR TO CONSTRUCTION

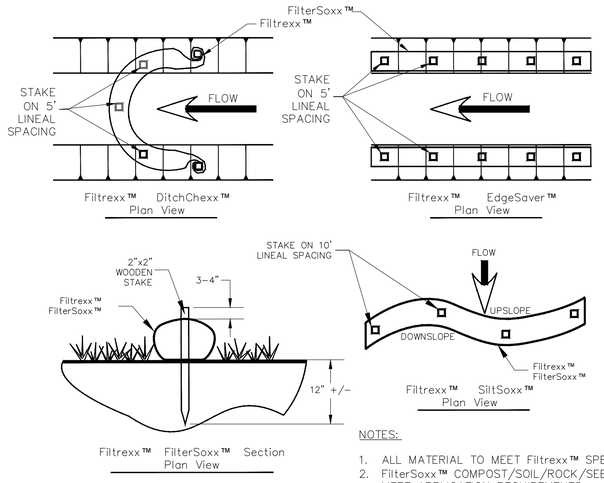


NOTES

1. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE SURFACE.
2. WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
3. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE 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.
4. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM EVENT.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

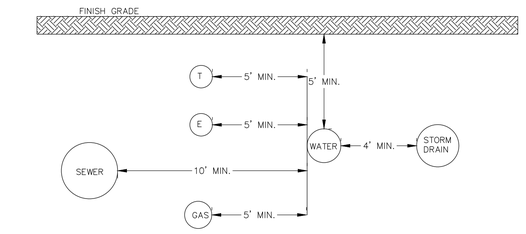


NOTES:

1. ALL MATERIAL TO MEET Filtrexx™ SPECIFICATIONS
2. FilterSoxx™ COMPOST/SOIL/ROCK/SEED FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
4. SIZE OF SOCK TO BE PER MANUFACTURER'S SPECIFICATIONS

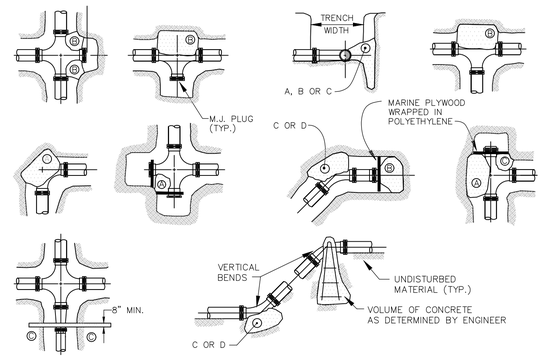
FILTREXX™ FILTERSOXX™ STAKING

NOT TO SCALE



TYPICAL UTILITY SEPARATION DETAIL

NOT TO SCALE



NOTES

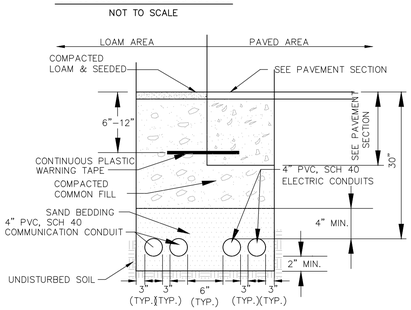
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED. EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO PIPE JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
4. WHERE MECHANICAL JOINT PIPE IS USED, MECHANICAL JOINT PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS.
5. INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CITY/TOWN ESTABLISHED RULES AND PROCEDURES.

TEST PRESSURE = 200psi

SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL						
	REACTION TYPE		PIPE SIZE			
			4"	6"	8"	10"	12"
A	90°		0.89	2.19	3.82	11.14	17.24
B	180°		0.65	1.55	2.78	8.38	12.00
C	45°		0.48	1.19	2.12	6.02	9.32
D	22-1/2°		0.25	0.60	1.06	3.08	4.74
E	11-1/4°		0.13	0.30	0.54	1.54	2.38

THRUST BLOCKS

NOT TO SCALE

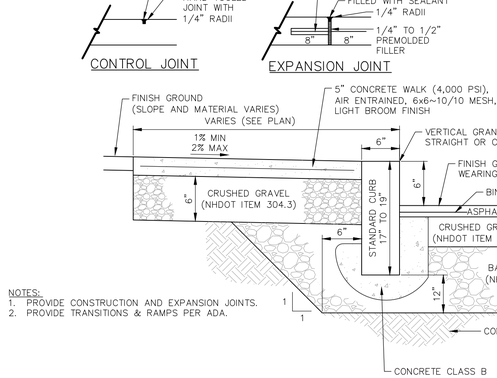


NOTES

1. ELECTRIC SERVICE INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL CODES.
2. COMMUNICATION SERVICE INSTALLATION SHALL MEET ALL CONSTRUCTION REQUIREMENTS.
3. ACTUAL NUMBER OF CONDUITS TO BE DETERMINED BY RESPECTIVE COMPANIES.
4. VERIFY INSTALLATION REQUIREMENTS WITH RESPECTIVE COMPANIES.

ELECTRIC/COMMUNICATIONS CONDUIT

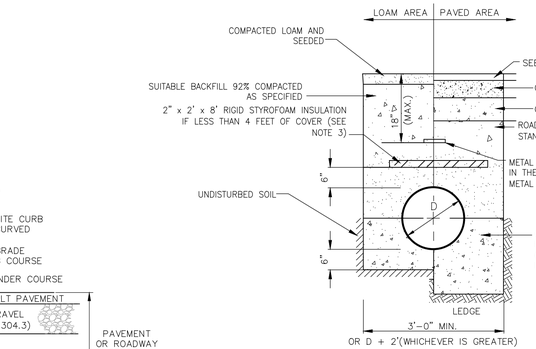
NOT TO SCALE



NOTES:
1. PROVIDE CONSTRUCTION AND EXPANSION JOINTS.
2. PROVIDE TRANSITIONS & RAMPS PER ADA.

CONCRETE SIDEWALK WITH VERTICAL GRANITE CURB

NOT TO SCALE

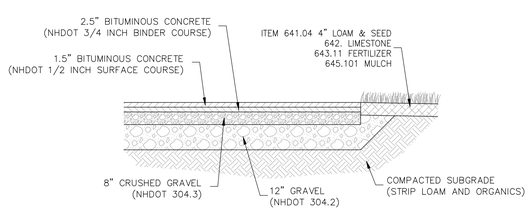


NOTES

1. PAVEMENT REPAIR IN EXISTING ROADWAYS SHALL CONFORM TO STREET OPENING REGULATIONS.
2. NEW ROADWAY CONSTRUCTION SHALL CONFORM TO SUBDIVISION SPEC'S.
3. GAPS BETWEEN SECTIONS OF INSULATION TO BE COVERED WITH 2" x 2" x 2" PIECE OF INSULATION CENTERED OVER GAP.

SEWER TRENCH WITH OPTIONAL INSULATION

NOT TO SCALE



PAVEMENT SECTION/LOAM & SEED DETAIL

NOT TO SCALE

TAX MAP 138 LOT 47

CONSTRUCTION DETAILS

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

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FILE	DR	CK	CADFILE	
47229.03	JKC	JCC	47229-03_DETAILS	C-09

Project #47229.03

DRAINAGE ANALYSIS REPORT

F O R

48 & 50 Langdon Street

Portsmouth, New Hampshire

Tax Map 138, Lot 47

Owned by and Prepared For
Martin Husslage

August 18, 2025

Prepared By:

TFM Since 1968

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

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Contents

Table of Figures

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1.0 - SUMMARY & PROJECT DESCRIPTION

The project includes the development of a two single family dwellings with accessory dwelling units at 48 & 50 Langdon Street. Tax Map 138 Lot 47 is approximately 0.23 acres and currently contains a single family dwelling. The project also proposes a subdivision of the subject property to two lots with a single family dwelling on each. The site is within the General Residence C Zoning District and is located at the intersection of Langdon Street and McDonough Street.

The project proposes a combined building footprint of 3,273 SF and approximately 9,900 SF of disturbance to facilitate the development.

This analysis has been completed to verify the project will not pose adverse stormwater effects on-site and off-site. Compared to the pre-development conditions, the post-development stormwater management system has been designed to reduce peak runoff rates, increases within regulatory limits the runoff volume, reduces the risk of erosion and sedimentation, and improves stormwater runoff quality. In addition, Best Management Practices are employed to formulate a plan that assures stormwater quality both during and after construction. The following summarizes the findings from the study.

2.0 - CALCULATION METHODS

The design storms analyzed in this study are the 2-year, 10-year, 25-year, and 50-year 24-hour storm events. The software program, HydroCAD version 10.00[1] was utilized to calculate the peak runoff rates from these storm events. The program estimates the peak rates using the TR-20 method. A Type III storm pattern was used in the model. Rainfall frequencies for the analyzed region were also incorporated into the model. Rainfall frequencies from the higher of the Extreme Precipitation Rates from Cornell University's Northeast Regional Climate Center. Due to the project's location within the Coastal/Great Bay Region community, the design rainfall increases the Cornell rates by 15% to address projected storm surge, sea level rise, and precipitation events per Env-Wq 1503.08(I). Design standards were taken from the New Hampshire Stormwater Manual, December 2008[2].

	24-HOUR RAINFALL RATES	
Storm-Event (year)	Northeast Regional Climate Center Extreme Precipitation (in)	Design Rainfall (in)
2	3.21	3.70
10	4.87	5.60
25	6.17	7.10
50	7.39	8.50

Table 1 – 24-Hour Rainfall Rates

Time of Concentration is the time it takes for water to flow from the hydraulically most remote point in the watershed (with the longest travel time) to the watershed outlet. This time is determined by calculating the time it takes runoff to travel this route under one of three

[1] HydroCAD version 10.00, HydroCAD Software Solutions LLC, Chocorua, NH, 2013.
[2] New Hampshire Stormwater Manual: Volume One - Stormwater and Antidegradation, December 2008; Volume Two - Post-Construction Best Management Practices Selection and Design, December 2008; Volume Three - Erosion and Sediment Controls During Construction, December 2008.

hydrologic conditions: sheet flow, shallow concentrated flow, or channel flow. Because the Intensity-Duration-Frequency (IDF) curve is steep with short TC's, estimating the actual intensity is subject to error and overestimates actual runoff. Due to this, the TC's are adjusted to a minimum of 6 minutes.

3.0 – EXISTING SITE CONDITIONS

All areas that contribute runoff to the project site are identified per the NRCS Web Soil (see Appendix B for detail and soil locations). The soils are composed of Urban Land which does not have a Hydrologic Soil Group classification. For the purpose of this analysis, the worst-case scenario was assumed and a HSG C rating was applied to the site.

4.0 - PRE-DEVELOPMENT CONDITIONS

The pre-development condition is characterized by one subcatchments which flows towards the municipal drainage system, which ultimately discharges to the Piscataqua River. Pre-development subcatchment areas are depicted on the attached plan entitled "Pre-Development Drainage Map," Sheet D-01 in Appendix C. Stormwater runoff from the site primarily discharges towards the existing municipal stormwater drainage system (POI-1).

In the pre-development condition, the total impervious area is 5,392 SF over a total drainage analysis area of 11,878 SF.

5.0 - POST-DEVELOPMENT CONDITIONS

The post-development condition is characterized by one subcatchment area. Post-development subcatchment areas are depicted on the attached plan entitled "Post-Development Drainage Map," sheet D-02 in Appendix C.

In the post-development condition, the total impervious area is 6,495 SF over a total drainage analysis area of 11,878 SF. Impervious area from the project consists of two proposed dwellings and their associated improvements.

Table **2** summarizes the pre- and post-development peak runoff rates for the 2-year, 10-year, 25-year, and 50-year 24-hour Type III storm events for all discharge. Table 3 summarizes the pre- and post-development peak runoff volumes for the 2-year 24-hour Type III storm events for all discharge.

TABLE 2 – SURFACE WATER PEAK RUNOFF RATE COMPARISON (CF)					
POINT OF INTEREST		DESIGN STORM			
		2-year	10-year	25-year	50-year
POI-1	Pre	0.6	1.1	1.4	1.8
	Post	0.6	1.1	1.4	1.7

Table 2 - Pre and Post- Development Peak Runoff Rate Comparison

TABLE 3 – SURFACE WATER PEAK RUNOFF VOLUME COMPARISON (CF)		
POINT OF INTEREST		DESIGN STORM
		2-year
POI-1	Pre	6,258
	Post	6,482

Table 3 - Pre and Post- Development Peak Runoff Volume Comparison

The proposed project maintains or reduces peak rates of runoff compared to existing conditions for all storm events, in accordance Portsmouth stormwater regulations. Additionally, per NHDES, the 2-year 24-hour storm does not result in an increased peak flow rate and reduces or increases volume within the limits of Env-Wq 1507.05(b)(1) from the pre-development to post-development condition. There will be no adverse effects on the abutting properties from the proposed stormwater management system.

Appendices D and F summarizes all 24-hour storm events for pre- and post-development drainage calculations using HydroCAD analysis. Appendices E and G provide a full summary of the 10-year, 24-hour storm for the pre- and post-development drainage calculations using HydroCAD analysis.

6.0 – REGULATORY COMPLIANCE

The project meets Post Construction Stormwater Management Standards as described in Portsmouth's Site Plan Regulations Section 7.6.1

1. Adequate provisions shall be made to retain natural and existing flow patterns and maintain existing groundwater recharge volumes to the maximum extent feasible, where appropriate, and/or retain, treat and/or potentially reuse the stormwater generated on the site.
    a. *The site drains to the municipal drainage systems in both the pre-development and post-development condition.*
2. Efforts shall be made to utilize methods that disconnect and/or reduce the amount of effective impervious area including, but not limited to, infiltration trenches, dry wells, bioretention areas, filter strips, permeable pavement, and cisterns.
    a. *The proposed dwellings have been located as close to Langdon Street as practicable to reduce the size and length of the proposed driveways.*
3. Applicants shall demonstrate why on-site infiltration approaches are not possible or adequate before proposing the use of conventional systems that rely on collection and conveyance to remove runoff from the site.
    a. *Infiltration is not feasible on site as it consists of urban land/fill with low infiltration rates.*
4. All proposed stormwater treatment practices shall be adequately sized to treat the Water Quality Volume (WQV) or Water Quality Flow (WQF) in order to minimize pollutant discharges and be properly maintained in accordance with NH Administrative Code PART Env-Wq 1507.03 "Pollutant Discharge Minimization Requirements" and PART Env-Wq, 1707.03, respectively (or as revised / renumbered).
    a. *No stormwater treatment practices are proposed.*
5. Where vegetated areas are used to control and treat stormwater, such areas shall be planted with appropriate non-invasive groundcover, shrubs and/or other

plantings sufficient to prevent soil erosion and to promote proper treatment of stormwater.

a. *All proposed plantings will be native plants and the existing vegetation is being kept to the maximum extent possible.*

6. Measures shall be taken to control the post-development peak rate of runoff so that it does not exceed pre-development runoff for the 2, 10, 25, and 50-year, 24-hour storm event. Rainfall amounts for these events shall be based on local rainfall data using the extreme precipitation table provided by the Northeast Regional Climate Center or as otherwise required by the NHDES Alteration of Terrain requirements, if applicable. Where stormwater will discharge directly to tidal waters, the Planning Board may waive peak flow control requirements provided the Applicant can demonstrate minimal risk of flooding or increased erosion as result of the discharge, adequate onsite stormwater treatment is provided for water quality purposes, and the City Engineer concurs with the waiver request.
    a. *All peak flow rates have been matched or reduced when comparing the pre-development and post-development.*
7. Site development shall comply with the requirements of the Flood Plain District as regulated by the Zoning Ordinance.
    a. *The site is not located within the Flood Plan District*
8. BMP designs shall include appropriate separation distances from the seasonal high-water table elevations, where appropriate, and as specified in the New Hampshire Stormwater Manual (as amended).
    a. *There are not any best management practices proposed.*
9. Salt storage areas shall be covered using permanent or semi-permanent measures and loading/offloading areas shall be located and designed to not drain directly to receiving waters and be maintained with good housekeeping measures in accordance with NHDES guidance documents.
    a. *No salt storage areas are proposed.*
10. Snow storage areas shall be located such that no direct discharges to receiving waters are possible from the storage site. Runoff from snow storage areas shall enter treatment areas to remove suspended solids and other contaminants before being discharged to receiving waters or preferably be allowed to infiltrate into the groundwater.
    a. *Snow storage areas are located such that it will not directly discharge to the municipal drains.*
11. The applicant shall demonstrate that there is sufficient on- and off-site downstream channel or system capacity to carry the stormwater run-off volume and flow without adverse effects, such as flooding and erosion of stream banks and shoreland areas.
    a. *There is a small increase in flow in 2-year volumes which equates to 164 cf. This is a negligible amount when compared to the site total runoff volume (2.6% of existing total volume).*
12. Stormwater treatment BMPs involving excavation or other site alterations shall be located outside of protected wetland buffer areas as defined in the City's Zoning Ordinance Article 10 -- Environmental Protection Standards unless approved under a Conditional Use Permit as outlined Article 10, as amended.
    a. *No best management practices are proposed.*
13. In addition to the requirements of this Article, all developments subject to Site Plan Review shall comply with the City's Regulation of Discharges into the Stormwater Drainage System Ordinance.
    a. *The design is in compliance with the City's Regulation of Discharges into the Stormwater Drainage System Ordinance.*

14. The applicant shall submit documentation demonstrating how and who will maintain stormwater treatment devices post-development.
    a. *An Inspection an Maintenance Manual has been included in this Drainage Analysis Report (See Appendix H)*
15. Property owners of new development projects that will add new paved areas shall minimize their salt use through appropriate measures including hiring Green SnowPro certified operators for winter maintenance.
    a. *The requirement for Green SnowPro certified operators is noted on Sheet C-03.*

7.0 – CONCLUSION

The proposed stormwater management system will treat, infiltrate, and mitigate the runoff generated from the proposed development in accordance with the Portsmouth Stormwater Management Regulations.. There is little change in the flow characteristics of the site. The proposed project has been designed to pose no adverse effects on surrounding properties.

Respectfully,
TFMoran, Inc. Seacoast Division

Jason Cook, EIT
Civil Engineer

JKC/crr

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APPENDIX A – EXTREME PRECIPITATION RATES

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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	43.075 degrees North
Longitude	70.765 degrees West
Elevation	0 feet
Date/Time	Tue Aug 12 2025 15:34:18 GMT-0400 (Eastern Daylight Time)

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**

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APPENDIX B – NRCS WEB SOIL REPORT

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United States Department of Agriculture

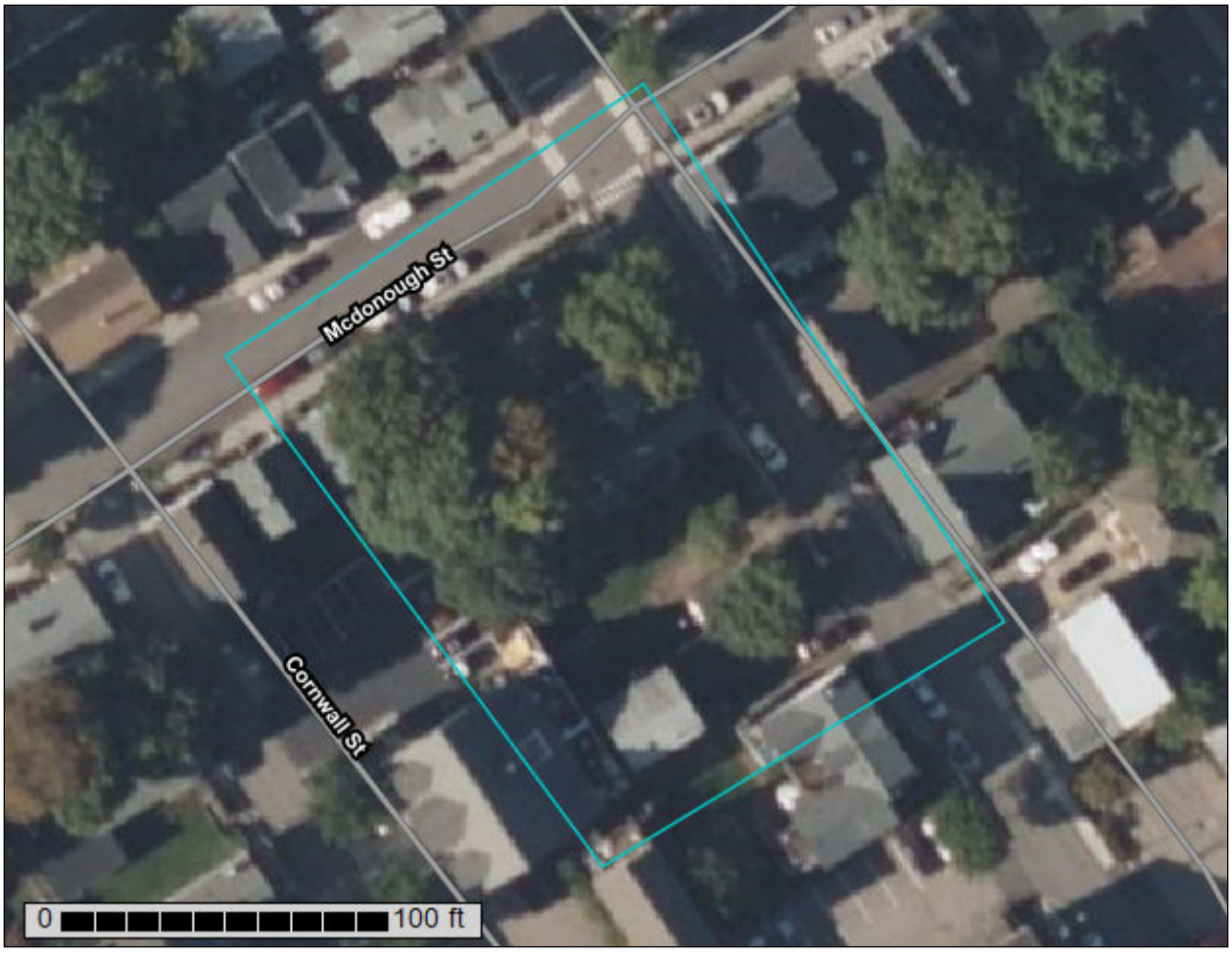
NRCS

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

48 & 50 Langdon Street Portsmouth, NH



August 12, 2025

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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Contents

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

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

Map Scale: 1:563 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 5 10 20 30

Feet
0 25 50 100 150

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

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
699	Urban land	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.

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

699—Urban land

Map Unit Composition

Urban land: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Minor Components

Not named

Percent of map unit: 15 percent
Hydric soil rating: No

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APPENDIX C – DRAINAGE MAPS

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LEGEND

- PROPERTY LINE
- LIMITS OF DRAINAGE SUBCATCHMENT
- SOIL GROUP BREAKLINE
- FLOW PATH (Tc LINE)
- POI-1 — POINT OF INTEREST
- PS-1 — SUBCATCHMENT AREA

SOIL LEGEND
(PER USDA NRCS WEB SOIL SURVEY)

SYMBOL	DESCRIPTION	HYDROLOGIC SOIL GROUP	DRAINAGE CLASS
699	URBAN LAND	N/A	N/A

HORIZONTAL SCALE 1"=20'
20 10 0 20

REV	DATE	DESCRIPTION	DR	CK

TAX MAP 138 LOT 47

PRE-DEVELOPMENT DRAINAGE MAP

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

AUGUST 18, 2025

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FILE					
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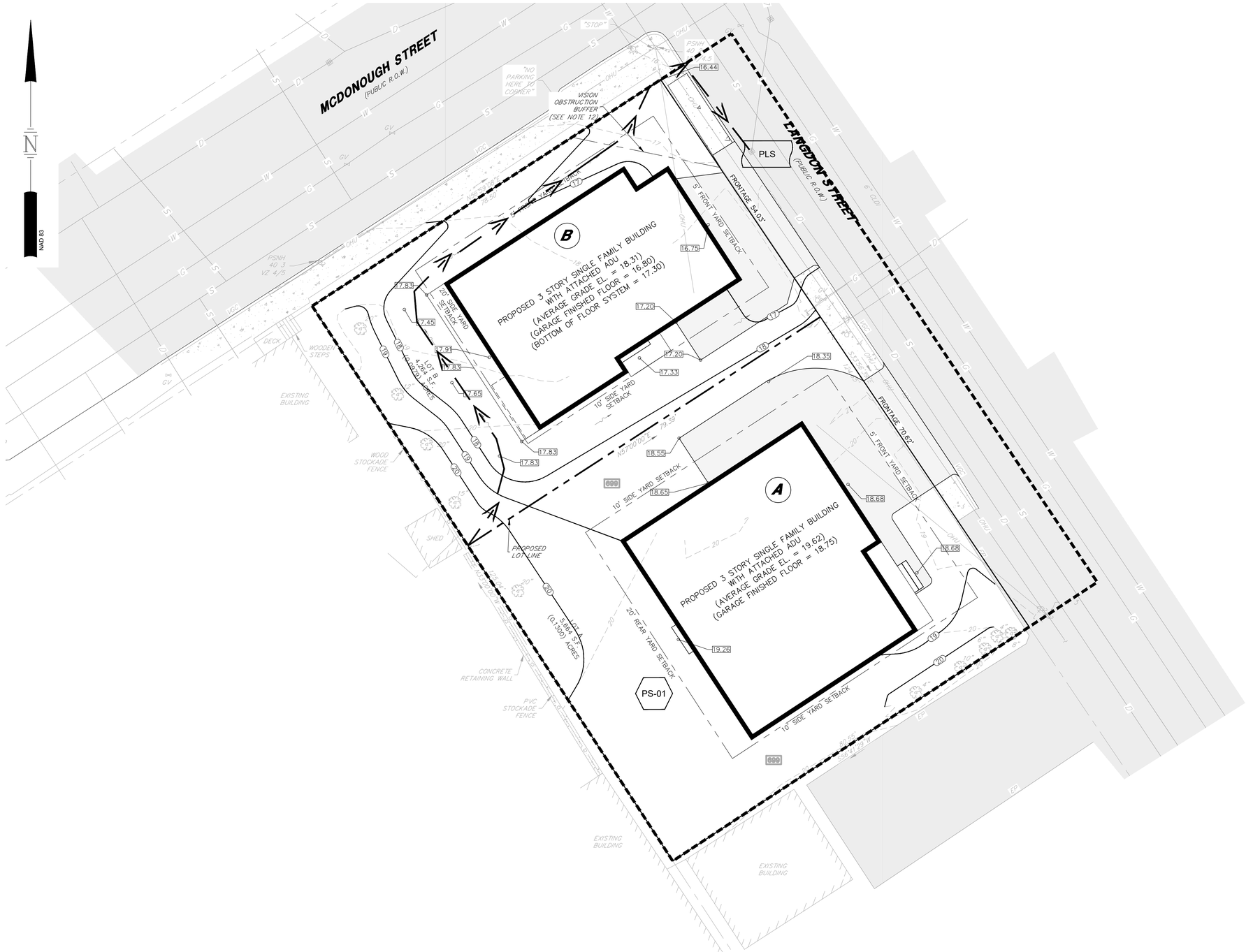

LEGEND

- PROPERTY LINE
- LIMITS OF DRAINAGE SUBCATCHMENT
- SOIL GROUP BREAKLINE
- FLOW PATH (Tc LINE)
- POI-1 — POINT OF INTEREST
- PS-1 — SUBCATCHMENT AREA

SOIL LEGEND
(PER USDA NRCS WEB SOIL SURVEY)

SYMBOL	DESCRIPTION	HYDROLOGIC SOIL GROUP	DRAINAGE CLASS
699	URBAN LAND	N/A	N/A

HORIZONTAL SCALE 1"=10'
10 5 0 10

REV	DATE	DESCRIPTION	DR	CK

TAX MAP 138 LOT 47

POST-DEVELOPMENT DRAINAGE MAP

48 & 50 LANGDON STREET

PORTSMOUTH, NEW HAMPSHIRE

OWNED BY & PREPARED FOR

MARTIN HUSSLAGE

1"=20' (11"X17")
SCALE: 1"=10' (22"X34")

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APPENDIX D – PRE-DEVELOPMENT CALCULATIONS

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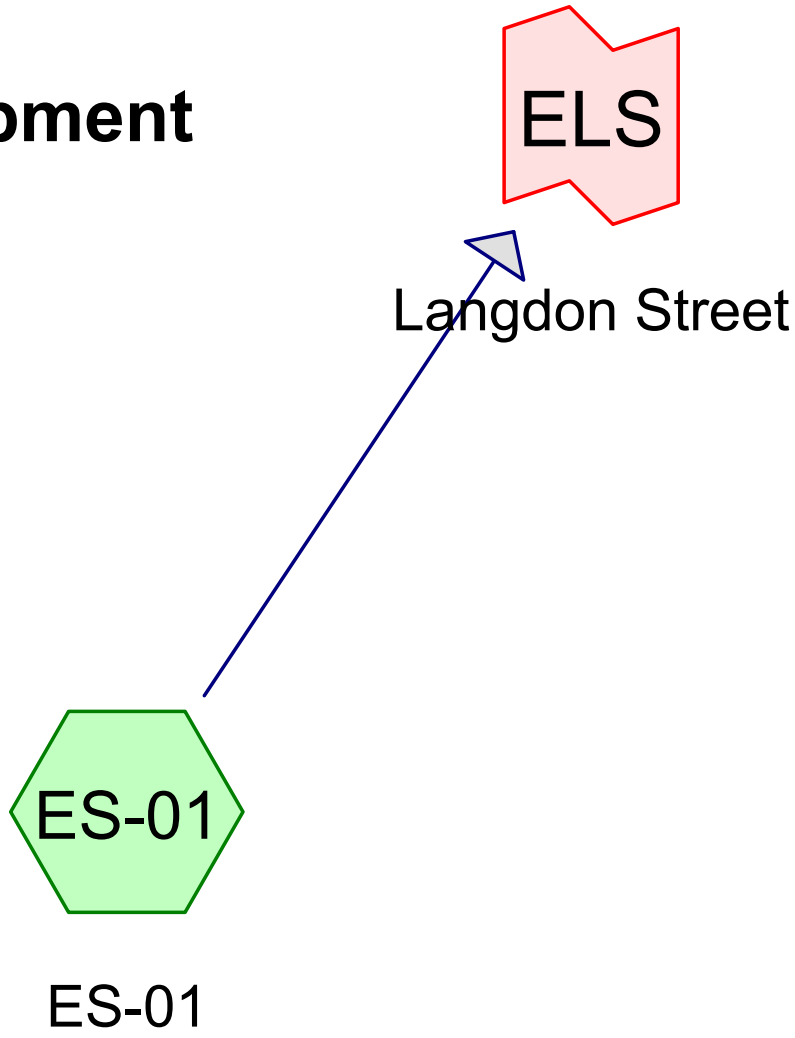
Pre-Development



Subcat Reach Pond Link

Routing Diagram for 47229-03 Drainage Analysis
Prepared by T F Moran Inc, Printed 8/15/2025

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
6,486	74	>75% Grass cover, Good, HSG C (ES-01)
2,017	98	Roofs, HSG C (ES-01)
3,375	98	Unconnected Pavement, HSG C (ES-01)
11,878	**85**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
11,878	HSG C	ES-01
0	HSG D	
0	Other	
11,878		**TOTAL AREA**

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 ES-01: ES-01 Runoff Area=11,878 sf 45.39% Impervious Runoff Depth>2.05"
Flow Length=183' Tc=10.1 min CN=85 Runoff=0.6 cfs 2,026 cf

Link ELS: Langdon Street Inflow=0.6 cfs 2,026 cf
Primary=0.6 cfs 2,026 cf

Total Runoff Area = 11,878 sf Runoff Volume = 2,026 cf Average Runoff Depth = 2.05"
54.61% Pervious = 6,486 sf 45.39% Impervious = 5,392 sf

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 ES-01: ES-01 Runoff Area=11,878 sf 45.39% Impervious Runoff Depth>5.04"
Flow Length=183' Tc=10.1 min CN=85 Runoff=1.4 cfs 4,993 cf

Link ELS: Langdon Street Inflow=1.4 cfs 4,993 cf
Primary=1.4 cfs 4,993 cf

Total Runoff Area = 11,878 sf Runoff Volume = 4,993 cf Average Runoff Depth = 5.04"
54.61% Pervious = 6,486 sf 45.39% Impervious = 5,392 sf

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 ES-01: ES-01 Runoff Area=11,878 sf 45.39% Impervious Runoff Depth>6.32"
Flow Length=183' Tc=10.1 min CN=85 Runoff=1.8 cfs 6,258 cf

Link ELS: Langdon Street Inflow=1.8 cfs 6,258 cf
Primary=1.8 cfs 6,258 cf

Total Runoff Area = 11,878 sf Runoff Volume = 6,258 cf Average Runoff Depth = 6.32"
54.61% Pervious = 6,486 sf 45.39% Impervious = 5,392 sf

APPENDIX E – PRE-DEVELOPMENT CALCULATIONS (10-YEAR STORM EVENT)

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Summary for Subcatchment ES-01: ES-01

Runoff = 1.1 cfs @ 12.14 hrs, Volume= 3,655 cf, Depth> 3.69"
Routed to Link ELS : Langdon Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.60"

Area (sf)	CN	Description
2,017	98	Roofs, HSG C
6,486	74	>75% Grass cover, Good, HSG C
3,375	98	Unconnected Pavement, HSG C
11,878	85	Weighted Average
6,486		54.61% Pervious Area
5,392		45.39% Impervious Area
3,375		62.59% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.6	98	0.0170	0.17		**Sheet Flow, Sheet Flow 1** Grass: Short n= 0.150 P2= 3.70"
0.5	85	0.0220	3.01		**Shallow Concentrated Flow, Shallow Concentrated 1** Paved Kv= 20.3 fps
10.1	183	Total			

Summary for Link ELS: Langdon Street

Inflow Area = 11,878 sf, 45.39% Impervious, Inflow Depth > 3.69" for 10-year event
Inflow = 1.1 cfs @ 12.14 hrs, Volume= 3,655 cf
Primary = 1.1 cfs @ 12.14 hrs, Volume= 3,655 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

APPENDIX F – POST-DEVELOPMENT CALCULATIONS

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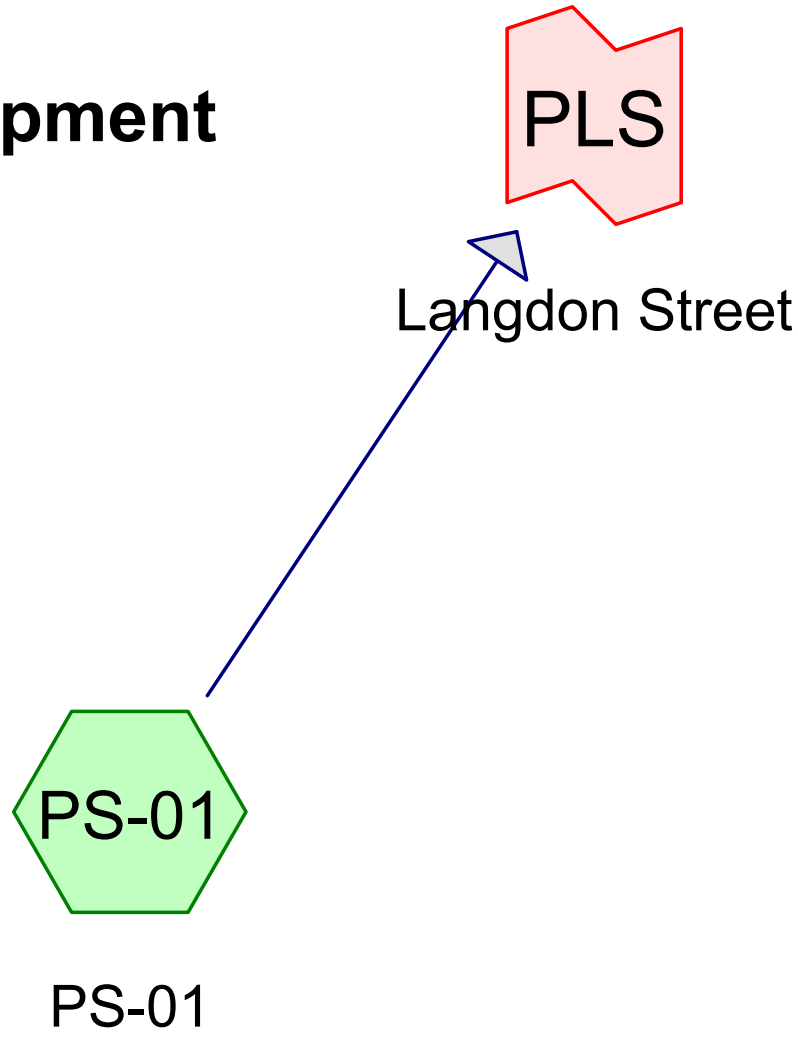
Post-Development



Subcat Reach Pond Link

Routing Diagram for 47229-03 Drainage Analysis
Prepared by T F Moran Inc, Printed 8/15/2025

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
5,383	74	>75% Grass cover, Good, HSG C (PS-01)
6,495	98	Unconnected Pavement, HSG C (PS-01)
11,878	**87**	**TOTAL AREA**

Soil Listing (selected nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
0	HSG A	
0	HSG B	
11,878	HSG C	PS-01
0	HSG D	
0	Other	
11,878		**TOTAL AREA**

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 PS-01: PS-01 Runoff Area=11,878 sf 54.68% Impervious Runoff Depth>2.21"
Flow Length=143' Tc=12.0 min CN=87 Runoff=0.6 cfs 2,190 cf

Link PLS: Langdon Street Inflow=0.6 cfs 2,190 cf
Primary=0.6 cfs 2,190 cf

Total Runoff Area = 11,878 sf Runoff Volume = 2,190 cf Average Runoff Depth = 2.21"
45.32% Pervious = 5,383 sf 54.68% Impervious = 6,495 sf

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 PS-01: PS-01 Runoff Area=11,878 sf 54.68% Impervious Runoff Depth>5.26"
Flow Length=143' Tc=12.0 min CN=87 Runoff=1.4 cfs 5,209 cf

Link PLS: Langdon Street Inflow=1.4 cfs 5,209 cf
Primary=1.4 cfs 5,209 cf

Total Runoff Area = 11,878 sf Runoff Volume = 5,209 cf Average Runoff Depth = 5.26"
45.32% Pervious = 5,383 sf 54.68% Impervious = 6,495 sf

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 PS-01: PS-01 Runoff Area=11,878 sf 54.68% Impervious Runoff Depth>6.55"
Flow Length=143' Tc=12.0 min CN=87 Runoff=1.7 cfs 6,482 cf

Link PLS: Langdon Street Inflow=1.7 cfs 6,482 cf
Primary=1.7 cfs 6,482 cf

Total Runoff Area = 11,878 sf Runoff Volume = 6,482 cf Average Runoff Depth = 6.55"
45.32% Pervious = 5,383 sf 54.68% Impervious = 6,495 sf

APPENDIX G – POST-DEVELOPMENT CALCULATIONS (10-YEAR STORM EVENT)

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Summary for Subcatchment PS-01: PS-01

Runoff = 1.1 cfs @ 12.16 hrs, Volume= 3,856 cf, Depth> 3.90"
Routed to Link PLS : Langdon Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-year Rainfall=5.60"

Area (sf)	CN	Description
6,495	98	Unconnected Pavement, HSG C
5,383	74	>75% Grass cover, Good, HSG C
11,878	87	Weighted Average
5,383		45.32% Pervious Area
6,495		54.68% Impervious Area
6,495		100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.0	18	0.1480	0.29		**Sheet Flow, Sheet Flow 1** Grass: Short n= 0.150 P2= 3.70"
4.9	34	0.0110	0.12		**Sheet Flow, Sheet Flow 2** Grass: Short n= 0.150 P2= 3.70"
5.5	49	0.0166	0.15		**Sheet Flow, Sheet Flow 3** Grass: Short n= 0.150 P2= 3.70"
0.2	14	0.0400	1.40		**Shallow Concentrated Flow, Shallow Concentrated** Short Grass Pasture Kv= 7.0 fps
0.4	28	0.0040	1.28		**Shallow Concentrated Flow, Shallow Concentrated 2** Paved Kv= 20.3 fps
12.0	143	Total			

Summary for Link PLS: Langdon Street

Inflow Area = 11,878 sf, 54.68% Impervious, Inflow Depth > 3.90" for 10-year event
Inflow = 1.1 cfs @ 12.16 hrs, Volume= 3,856 cf
Primary = 1.1 cfs @ 12.16 hrs, Volume= 3,856 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

APPENDIX H – INSPECTION & MAINTENANCE MANUAL

Project #47229.03

STORMWATER MANAGEMENT SYSTEM INSPECTION & MAINTENANCE MANUAL

F O R

48 & 50 Langdon Street

Portsmouth, New Hampshire

Tax Map 138, Lot 47

Owned by and Prepared for
Martin Husslage

August 18, 2025

Prepared By:

TFM Since 1968

Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

Table of Contents

Maintenance of Property

TFMoran, Inc., has prepared the following Stormwater Management System Inspection & Maintenance Plan for Martin Husslage at 48 & 50 Langdon Street, Portsmouth, New Hampshire. The intent of this plan is to provide the owner, and future property managers/owners of the site with a list of procedures that document the inspection and maintenance requirements of the Stormwater Management System for this development. This includes all temporary and permanent stormwater and erosion control measure during and post construction.

Plans

Refer to the Site Development Plans prepared by MSC a divisions TFMoran, Inc. for Tax Map 138 Lot 47, 48 & 50 Langdon Street, Portsmouth, New Hampshire, dated August 18, 2025.

Owner Responsibility

The owner shall be responsible for the following inspection and maintenance program which is necessary to keep the Stormwater Management System functioning properly. These measures will help greatly to reduce potential environmental impacts. By following the enclosed procedures, Martin Husslage and its successors will be able to maintain the functional design of the Stormwater Management System and maximize its ability to remove sediment and other contaminants from site-generated stormwater runoff.

The owner and future owners are the responsible party for the following record keeping activities further identified in this Inspection & Maintenance Manual:

- Conduct reporting, inspection, and maintenance activities in accordance with the “Inspection and Maintenance Checklist Requirements” and if applicable “Regular Inspection and Maintenance Guidance” provided by University of New Hampshire Stormwater Center (UNHSC);
- Document each inspection and maintenance activity with the “Inspection and Maintenance Log” and if applicable “Checklist for Inspection” provided by University of New Hampshire Stormwater Center (UNHSC);
- Photograph each practice that is subject to the “Inspection and Maintenance Checklist Requirements” at each inspection of that stormwater practice;
- Document actions taken if invasive species begin to grow in the stormwater management system; and
- Document each application of deicing material applied to the site with the “Deicing Log”

All record keeping required by the Inspection & Maintenance Manual shall be maintained by the responsible party and be made available to the applicable regulatory agencies upon request. Logs and reports required by this Inspection & Maintenance Manual should be prepared by a qualified inspector with working knowledge of the site. This manual and associated records shall be transferred to any future owners. All current and future

owners must comply with RSA 485-A:17, Env-Wq 1500, the permit, and all conditions contained in the permit.

The following inspection and maintenance program is necessary in order to keep the Stormwater Management System functioning properly. These measures will greatly help to reduce potential environmental impacts. By following the enclosed procedures, Martin Husslage and its successors will be able to maintain the functional design of the Stormwater Management System and maximize its ability to remove sediment and other contaminants from site-generated stormwater runoff.

General Inspection and Maintenance Requirements

Temporary stormwater, sediment and erosion control measures that require maintenance on the site during construction include, but are not limited, to the following:

- Stabilized construction entrance;
- Litter/trash removal;
- Construction dumpster area;
- Silt sock barriers;
- Inlet protection;
- Gravel.

Permanent stormwater, sediment and erosion control measures that require maintenance on the site include, but are not limited, to the following:

- Litter/trash removal;
- Landscaping and hardscaping;
- Conventional pavement; and
- Roof gutters and downspouts;

Inspection and Maintenance Checklist Requirements

By implementing the following procedures, current owners will be able to maintain the functional design of the Stormwater Management System and maximize the systems ability to remove sediment and other contaminants from site-generated stormwater runoff. The owner shall conduct inspection and maintenance activities in accordance with the following checklist:

	Frequency	***Inspect***	***Action***
Temporary Controls			
Stabilized Construction Entrance	Weekly	• Inspect adjacent roadway for sediment tracking • Inspect stone for sediment accumulation	• Sweep adjacent roadways as soon as sediment is tracked • Top dress with additional stone when necessary to prevent tracking

	Frequency	***Inspect***	***Action***
Temporary Controls			
Litter/Trash Removal	Routinely	• Inspect site especially construction areas	• Remove debris and clean areas as necessary
Construction Dumpster Area	Routinely	• Dumpster Areas	• Remove any accumulated debris and dispose of properly
Silt Sock Barrier	Weekly and after measurable rainfall	• Inspect accumulated sediment level, rips and tears	• Repair or replace damaged lengths • Remove and dispose accumulated sediment once level reaches 1/3 of barrier
Inlet Protection	During construction and after measurable rainfall	• Inspect for accumulated sediment	• Empty sediment bag if more than ½ filled with sediment or debris. Replace bag if torn or punctured to ½" diameter or greater on the lower half of the bag
Gravel	Spring and Fall	• Inspect gravel for ruts and depth	• Replace gravel as necessary, regrade as necessary to maintain design grades, remove any accumulated gravel washed from roadway

	Frequency	***Inspect***	***Action***
Permanent Controls			
Litter/Trash Removal	Routinely	• Inspect site	• Remove debris and clean areas as necessary

	Frequency	*Inspect*	*Action*
Permanent Controls			
Landscaping and hardscaping (	Spring	• Mulch/stone: Inspect mulch areas for trash and debris and thickness of mulch	• Remove weeds, invasive species, and debris. Top dress with new mulch or stone when necessary
	Spring	• Trees and Shrubs: Inspect for broken, weak or diseased branches and debris	• Prune to maintain shape to avoid splitting, remove broken, weak or diseased branches, replace as necessary
	As necessary	• Lawn	• Mow as required
	Spring and Fall	• Inspect landscaped areas for debris and litter	• Remove debris and litter as necessary
Conventional Pavement	Spring and Fall	• Inspect pavement for debris	• Sweeping as required
Roof Gutters and Downspouts	Spring and Fall	• Inspect for accumulated sediment and debris	• Clean any material upon inspection and deposit of properly

Inspection and Maintenance Records

A detailed, written record of all logs, reports, photographs required by this Inspection & Maintenance Manual must be kept by the owner.

The attached forms are provided to assist the property manager with the inspection and maintenance of the Stormwater Management System. The “Inspection and Maintenance Log” (Attachment 1) and “Deicing Log” (Attachment 2) on the following pages are a blank copy to aid in record keeping required by this Inspection & Maintenance Manual.

Supplement the “Inspection and Maintenance Log” with the most currently available “Checklist for Inspections” from UNHSC (attached to this Manual for reference). Each inspection or maintenance activity shall include photographs of each practice that is subject to the “Inspection and Maintenance Checklist Requirements” at each inspection of that stormwater practice. Log actions taken if invasive species begin to grow in the stormwater management system as required per the attached “Control of Invasive Plants”.

For all surface maintenance related activities related to deicing/plowing, complete the “Deicing Log” to track the amount and type of deicing materials applied to the site. No winter sanding of is permitted on permeable pavements or porous asphalt. Minimization of salt application for ice control is recommended on or where runoff may discharge to these areas. Snow shall be stored in designated snow storage areas which have been designed to drain on-site and receive treatment via the stormwater management system prior to infiltration or discharge.

Owner's Certification

Contact Information

Owner:	Martin Husslage
Contact Person	Martin Husslage
	48 Langdon Street

I have reviewed this document and understand the responsibilities contained. I agree to perform the required maintenance on the stormwater management system.

Owner's Signature (future owner's and successors, if applicable)

Print Name

Title

Date

Any inquiries in regards to the design, function, and/or maintenance of any one of the above mentioned facilities or tasks shall be directed to the project engineer:

TFMoran, Inc. Seacoast Division
170 Commerce Way, Suite 102
Portsmouth, NH 03801
603-431-2222

ATTACHMENT 1

Inspection and Maintenance Log

Attachment 1

Inspection and Maintenance Log

BMP/System Component	Date Inspected	Inspector	Cleaning/Repair Needed (list items/comments)	Date of Cleaning/Repair	Performed By

ATTACHMENT 2

Deicing Log

Attachment 2

Deicing Log

Deicing Material Used	Amount of Deicing Material Applied	Date of Application	Logged By

APPENDIX A

Control of Invasive Plants

CONTROL OF INVASIVE PLANTS

During maintenance activities, check for the presence of invasive plants and remove in a safe manner as described on the following pages. They should be controlled as described on the following pages.

Background:

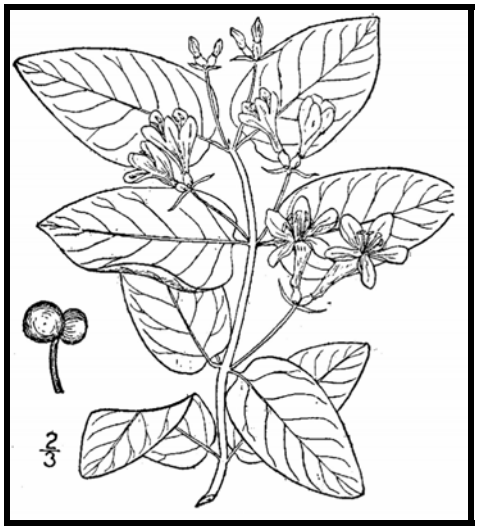
Invasive plants are introduced, alien, or non-native plants, which have been moved by people from their native habitat to a new area. Some exotic plants are imported for human use such as landscaping, erosion control, or food crops. They also can arrive as "hitchhikers" among shipments of other plants, 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.

University of New Hampshire Cooperative Extension

Methods for Disposing Non-Native Invasive Plants

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle
Lonicera tatarica
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 3: 282.

Non-native invasive plants crowd out natives in natural and managed landscapes. They cost taxpayers billions of dollars each year from lost agricultural and forest crops, decreased biodiversity, impacts to natural resources and the environment, and the cost to control and eradicate them.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands. In ideal conditions, they grow and spread even faster. There are many ways to remove these non-native invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts non-viable.

Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

New Hampshire Regulations

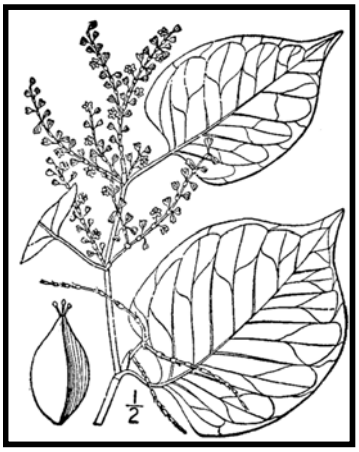
Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

How and When to Dispose of Invasives?

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

Burning: Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.



Japanese knotweed
Polygonum cuspidatum
USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. *An illustrated flora of the northern United States, Canada and the British Possessions*. Vol. 1: 676.

Bagging (solarization): Use this technique with softer-tissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

Chipping: Use this method for woody plants that don't reproduce vegetatively.

Burying: This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

Drowning: Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Well-rotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

Composting: Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Be diligent looking for seedlings for *years* in areas where removal and disposal took place.

Suggested Disposal Methods for Non-Native Invasive Plants

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

<table>
<tr><th>Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">Norway maple
(Acer platanoides)
European barberry
(Berberis vulgaris)
Japanese barberry
(Berberis thunbergii)
autumn olive
(Elaeagnus umbellata)
burning bush
(Euonymus alatus)
Morrow's honeysuckle
(Lonicera morrowii)
Tatarian honeysuckle
(Lonicera tatarica)
showy bush honeysuckle
(Lonicera x bella)
common buckthorn
(Rhamnus cathartica)
glossy buckthorn
(Frangula alnus)</td><td rowspan="2">Fruit and Seeds
  </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Use as firewood.
▪ Make a brush pile.
▪ Chip.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip once all fruit has dropped from branches.
▪ Leave resulting chips on site and monitor.</td></tr>
<tr><td rowspan="2">oriental bittersweet
(Celastrus orbiculatus)
multiflora rose
(Rosa multiflora)</td><td rowspan="2">Fruits, Seeds, Plant Fragments
  </td><td>Prior to fruit/seed ripening
Seedlings and small plants
▪ Pull or cut and leave on site with roots exposed. No special care needed.
Larger plants
▪ Make a brush pile.
▪ Burn.</td></tr>
<tr><td>After fruit/seed is ripe
Don't remove from site.
▪ Burn.
▪ Make a covered brush pile.
▪ Chip – only after material has fully dried (1 year) and all fruit has dropped from branches. Leave resulting chips on site and monitor.</td></tr>
</table>

<table>
<tr><th>Non-Woody Plants</th><th>Method of Reproducing</th><th>Methods of Disposal</th></tr>
<tr><td rowspan="2">garlic mustard
(Alliaria petiolata)
spotted knapweed
(Centaurea maculosa)
▪ Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling.
black swallow-wort
(Cynanchum nigrum)
▪ May cause skin rash. Wear gloves and long sleeves when handling.
pale swallow-wort
(Cynanchum rossicum)
giant hogweed
(Heracleum mantegazzianum)
▪ Can cause major skin rash. Wear gloves and long sleeves when handling.
dame’s rocket
(Hesperis matronalis)
perennial pepperweed
(Lepidium latifolium)
purple loosestrife
(Lythrum salicaria)
Japanese stilt grass
(Microstegium vimineum)
mile-a-minute weed
(Polygonum perfoliatum)</td><td rowspan="2">Fruits and Seeds
  </td><td>Prior to flowering
Depends on scale of infestation
Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>During and following flowering
Do nothing until the following year or remove flowering heads and bag and let rot.

Small infestation
▪ Pull or cut plant and leave on site with roots exposed.

Large infestation
▪ Pull or cut plant and pile remaining material. (You can pile onto plastic or cover with plastic sheeting).
▪ Monitor. Remove any re-sprouting material.</td></tr>
<tr><td>common reed
(Phragmites australis)
Japanese knotweed
(Polygonum cuspidatum)
Bohemian knotweed
(Polygonum x bohemicum)</td><td>Fruits, Seeds, Plant Fragments
Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn’t materially influence disposal activities.</td><td>Small infestation
▪ Bag all plant material and let rot.
▪ Never pile and use resulting material as compost.
▪ Burn.

Large infestation
▪ Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile.
▪ Monitor and remove any sprouting material.
▪ Pile, let dry, and burn.</td></tr>
</table>

January 2010

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: Martin Husslage Date Submitted: August 18, 2025

Application # (in City's online permitting): _____

Site Address: 48 Langdon Street Portsmouth, NH Map: 138 Lot: 47

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
☑	Complete application form submitted via the City's web-based permitting program (2.5.2.1**(2.5.2.3A)**		N/A
☑	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			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	Statement that lists and describes "green" building components and systems. **(2.5.3.1B)**		
☑	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
☑	Tax map and lot number, and current zoning of all parcels under Site Plan Review. **(2.5.3.1D)**	Title Block - All Sheets	N/A

Site Plan Review Application Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	Owner's name, address, telephone number, and signature. Name, address, and telephone number of applicant if different from owner. **(2.5.3.1E)**	Sheet C-00	N/A
☑	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)**	Abutters List	N/A
☑	Names, addresses and telephone numbers of all professionals involved in the site plan design. **(2.5.3.1G)**	C-00	N/A
☑	List of reference plans. **(2.5.3.1H)**	S-01	N/A
☑	List of names and contact information of all public or private utilities servicing the site. **(2.5.3.1I)**	C-01	N/A

Site Plan Specifications			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	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
☑	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
☑	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
☑	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
☑	Wetlands shall be delineated by a NH certified wetlands scientist and so stamped. **(2.5.4.1E)**		N/A
☑	Title (name of development project), north point, scale, legend. **(2.5.4.2A)**	C-00	N/A
☑	Date plans first submitted, date and explanation of revisions. **(2.5.4.2B)**	Title Block - All Sheets	N/A
☑	Individual plan sheet title that clearly describes the information that is displayed. **(2.5.4.2C)**	Required on all plan sheets	N/A
☑	Source and date of data displayed on the plan. **(2.5.4.2D)**	All Sheets	N/A

Site Plan Specifications – Required Exhibits and Data			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	**1. Existing Conditions: (2.5.4.3A)** • 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.	S-01	
☑	**2. Buildings and Structures: (2.5.4.3B)** • 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.	C-03	
☑	**3. Access and Circulation: (2.5.4.3C)** • 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).	C-03	
☑	**4. Parking and Loading: (2.5.4.3D)** • Location of off street parking/loading areas, landscaped areas/buffers; • Parking Calculations (# required and the # provided).	C-03	
☑	**5. Water Infrastructure: (2.5.4.3E)** • Size, type and location of water mains, shut-offs, hydrants & Engineering data; • Location of wells and monitoring wells (include protective radii).	C-05	
☑	**6. Sewer Infrastructure: (2.5.4.3F)** • Size, type and location of sanitary sewage facilities & Engineering data, including any onsite temporary facilities during construction period.	C-05	

☑	**7. Utilities: (2.5.4.3G)** • The size, type and location of all above & below ground utilities; • Size type and location of generator pads, transformers and other fixtures.	C-05	
☑	**8. Solid Waste Facilities: (2.5.4.3H)**		
	• The size, type and location of solid waste facilities.	C-05	
☑	**9. Storm water Management: (2.5.4.3I)** • 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.	C-04	
☐	**10. Outdoor Lighting: (2.5.4.3J)** • Type and placement of all lighting (exterior of building, parking lot and any other areas of the site) and photometric plan.	N/A	
☐	**11.** Indicate where dark sky friendly lighting measures have been implemented. **(10.1)**	N/A	
☑	**12. Landscaping: (2.5.4.3K)** • Identify all undisturbed area, existing vegetation and that which is to be retained; • Location of any irrigation system and water source.	C-06	
☑	**13. Contours and Elevation: (2.5.4.3L)** • Existing/Proposed contours (2 foot minimum) and finished grade elevations.	C-04	
☑	**14. Open Space: (2.5.4.3M)** • Type, extent and location of all existing/proposed open space.	C-04	
☐	**15. All easements, deed restrictions and non-public rights of ways. (2.5.4.3N)**	N/A	
☑	**16. Character/Civic District (All following information shall be included): (2.5.4.3P)** • Applicable Building Height (10.5A21.20 & 10.5A43.30); • Applicable Special Requirements (10.5A21.30); • Proposed building form/type (10.5A43); • Proposed community space (10.5A46).	S-01	
☐	**17. Special Flood Hazard Areas (2.5.4.3Q)** • 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			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	Traffic Impact Study or Trip Generation Report, as required. **(3.2.1-2)**	N/A	
☑	Indicate where Low Impact Development Design practices have been incorporated. **(7.1)**	Drainage Report	
☐	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	
☑	Stormwater Management and Erosion Control Plan. **(7.4)**	C-04 & C-07	
☑	Inspection and Maintenance Plan **(7.6.5)**	Drainage Report	

Final Site Plan Approval Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	All local approvals, permits, easements and licenses required, including but not limited to: • Waivers; • Driveway permits; • Special exceptions; • Variances granted; • Easements; • Licenses. **(2.5.3.2A)**		
☐	Exhibits, data, reports or studies that may have been required as part of the approval process, including but not limited to: • 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)**		
☐	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)**		

Final Site Plan Approval Required Information			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☐	A list of any required state and federal permit applications required for the project and the status of same. **(2.5.3.2E)**		
☐	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
☐	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)**		
☐	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: _____

City of Portsmouth, New Hampshire

Subdivision Application Checklist

This subdivision application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Planning Board review. 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 subdivision review requirements. Please refer to the Subdivision review regulations for full details.

Applicant Responsibilities (Section III.C): Applicable fees are due upon application submittal along with required number of copies of the Preliminary or final plat and supporting documents and studies. Please consult with Planning staff for submittal requirements.

Owner: Martin Husslage Date Submitted: August 18, 2025

Applicant: TFMoran, Inc.

Phone Number: (603) 431-2222 E-mail: ccolwell@tfmoran.com

Site Address 1: 48 Langdon Street Portsmouth, NH Map: 138 Lot: 47

Site Address 2: _____ Map: _____ Lot: _____

Application Requirements			
☑	**Required Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**	**Waiver Requested**
☑	Completed Application form. **(III.C.2-3)**		N/A
☑	All application documents, plans, supporting documentation and other materials provided in digital Portable Document Format (PDF) on compact disc, DVD or flash drive. **(III.C.4)**		N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	Name and address of record owner, any option holders, descriptive name of subdivision, engineer and/or surveyor or name of person who prepared the plat. **(Section IV.1/V.1)**	S-01 & S-02	☑ Preliminary Plat ☑ Final Plat	N/A

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	**Preliminary Plat** Names and addresses of all adjoining property owners. **(Section IV.2)** **Final Plat** Names and addresses of all abutting property owners, locations of buildings within one hundred (100) feet of the parcel, and any new house numbers within the subdivision. **(Section V.2)**	S-01	☑ Preliminary Plat ☑ Final Plat	N/A
☑	North point, date, and bar scale. **(Section IV.3/V3)**	Required on all Plan Sheets	☑ Preliminary Plat ☑ Final Plat	N/A
☑	Zoning classification and minimum yard dimensions required. **(Section IV.4/V.4)**	S-01	☑ Preliminary Plat ☑ Final Plat	N/A
☑	**Preliminary Plat** Scale (not to be smaller than one hundred (100) feet = 1 inch) and location map (at a scale of 1" = 1000'). **(Section IV.5)** **Final Plat** Scale (not to be smaller than 1"=100'), Location map (at a scale of 1"=1,000') showing the property being subdivided and its relation to the surrounding area within a radius of 2,000 feet. Said location map shall delineate all streets and other major physical features that my either affect or be affected by the proposed development. **(Section V.5)**	S-01	☑ Preliminary Plat ☑ Final Plat	N/A
☑	Location and approximate dimensions of all existing and proposed property lines including the entire area proposed to be subdivided, the areas of proposed lots, and any adjacent parcels in the same ownership. **(Section IV.6)**	S-01	☑ Preliminary Plat ☑ Final Plat	
☑	Dimensions and areas of all lots and any and all property to be dedicated or reserved for schools, parks, playgrounds, or other public purpose. Dimensions shall include radii and length of all arcs and calculated bearing for all straight lines. **(Section V.6/ IV.7)**	S-01	☑ Preliminary Plat ☑ Final Plat	N/A
☑	Location, names, and present widths of all adjacent streets, with a designation as to whether public or private and approximate location of existing utilities to be used. Curbs and sidewalks shall be shown. **(Section IV.8/V.7)**	S-01	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	Location of significant physical features, including bodies of water, watercourses, wetlands, railroads, important vegetation, stone walls and soils types that my influence the design of the subdivision. **(Section IV.9/V.8)**	S-01	☑ Preliminary Plat ☑ Final Plat	
☑	**Preliminary Plat** Proposed locations, widths and other dimensions of all new streets and utilities, including water mains, storm and sanitary sewer mains, catch basins and culverts, street lights, fire hydrants, sewerage pump stations, etc. **(Section IV.10)** **Final Plat** Proposed locations and profiles of all proposed streets and utilities, including water mains, storm and sanitary sewer mains, catchbasins and culverts, together with typical cross sections. Profiles shall be drawn to a horizontal scale of 1"=50' and a vertical scale of 1"=5', showing existing centerline grade, existing left and right sideline grades, and proposed centerline grade. **(Section V.9)**	S-01	☑ Preliminary Plat ☑ Final Plat	
☐	When required by the Board, the plat shall be accompanied by profiles of proposed street grades, including extensions for a reasonable distance beyond the subject land; also grades and sizes of proposed utilities. **(Section IV.10)**		☑ Preliminary Plat ☑ Final Plat	
☐	Base flood elevation (BFE) for subdivisions involving greater than five (5) acres or fifty (50) lots. **(Section IV.11)**	N/A	☑ Preliminary Plat ☑ Final Plat	
☐	For subdivisions of five (5) lots or more, or at the discretion of the Board otherwise, the preliminary plat shall show contours at intervals no greater than two (2) feet. Contours shall be shown in dotted lines for existing natural surface and in solid lines for proposed final grade, together with the final grade elevations shown in figures at all lot corners. If existing grades are not to be changed, then the contours in these areas shall be solid lines. **(Section IV.12/ V.12)**	N/A	☑ Preliminary Plat ☑ Final Plat	

Requirements for Preliminary/Final Plat				
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Required for Preliminary / Final Plat**	**Waiver Requested**
☑	Dates and permit numbers of all necessary permits from governmental agencies from which approval is required by Federal or State law. **(Section V.10)**	C-00	☐ Preliminary Plat ☑ Final Plat	
☐	For subdivisions involving greater than five (5) acres or fifty (50) lots, the final plat shall show hazard zones and shall include elevation data for flood hazard zones. **(Section V.11)**	N/A	☐ Preliminary Plat ☑ Final Plat	
☐	Location of all permanent monuments. **(Section V.12)**		☐ Preliminary Plat ☑ Final Plat	

General Requirements[1]			
☑	**Required Items for Submittal**	**Item Location (e.g. Page/line or Plan Sheet/Note #)**	**Waiver Requested**
☑	**1. Basic Requirements: (VI.1)**		
☐	a. Conformity to Official Plan or Map		
☐	b. Hazards		
☐	c. Relation to Topography		
☐	d. Planned Unit Development		
☑	**2. Lots: (VI.2)**		
☐	a. Lot Arrangement		
☐	b. Lot sizes		
☐	c. Commercial and Industrial Lots		
☑	**3. Streets: (VI.3)**		
☐	a. Relation to adjoining Street System		
☐	b. Street Rights-of-Way		
☐	c. Access		
☐	d. Parallel Service Roads		
☐	e. Street Intersection Angles		
☐	f. Merging Streets		
☐	g. Street Deflections and Vertical Alignment		
☐	h. Marginal Access Streets		
☐	i. Cul-de-Sacs		
☐	j. Rounding Street Corners		
☐	k. Street Name Signs		
☐	l. Street Names		
☐	m. Block Lengths		
☐	n. Block Widths		
☐	o. Grade of Streets		
☐	p. Grass Strips		
☑	**4. Curbing: (VI.4)**		
☑	**5. Driveways: (VI.5)**		
☑	**6. Drainage Improvements: (VI.6)**		
☑	**7. Municipal Water Service: (VI.7)**		
☑	**8. Municipal Sewer Service: (VI.8)**		
☐	**9. Installation of Utilities: (VI.9)**		
☐	a. All Districts		
☐	b. Indicator Tape		
☑	**10. On-Site Water Supply: (VI.10)**		
☐	**11. On-Site Sewage Disposal Systems: (VI.11)**	N/A	
☑	**12. Open Space: (VI.12)**		
☐	a. Natural Features		
☐	b. Buffer Strips	C-06	
☐	c. Parks		
☐	d. Tree Planting		
☐	**13. Flood Hazard Areas: (VI.13)**		
☐	a. Permits		
☐	b. Minimization of Flood Damage	N/A	
☐	c. Elevation and Flood-Proofing Records		
☐	d. Alteration of Watercourses		
☑	**14. Erosion and Sedimentation Control (VI.14)**	C-07	

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)	Waiver Requested
☐	**15. Easements (VI.15)** a. Utilities b. Drainage	N/A	
☐	**16. Monuments: (VI.16)**		
☐	**17. Benchmarks: (VI.17)**		
☐	**18. House Numbers (VI.18)**		

Design Standards			
	Required Items for Submittal	**Indicate compliance and/or provide explanation as to alternative design**	**Waiver Requested**
☐	**1. Streets have been designed according to the design standards required under Section (VII.1).** a. Clearing b. Excavation c. Rough Grade and Preparation of Sub-Grade d. Base Course e. Street Paving f. Side Slopes g. Approval Specifications h. Curbing i. Sidewalks j. Inspection and Methods	N/A	
☑	**2. Storm water Sewers and Other Drainage Appurtenances have been designed according to the design standards required under Section (VII.2).** a. Design b. Standards of Construction	C-05	
☑	**3. Sanitary Sewers have been designed according to the design standards required under Section (VII.3).** a. Design b. Lift Stations c. Materials d. Construction Standards		
☑	**4. Water Mains and Fire Hydrants have been designed according to the design standards required under Section (VII.4).** a. Connections to Lots b. Design and Construction c. Materials d. Notification Prior to Construction		

Applicant's/Representative's Signature:_____ **Date:**_____

[1] See City of Portsmouth, NH Subdivision Rules and Regulations for details.

ELEVATION 1

NO.	DESCRIPTION	BY	DATE
1	Town Review	HD	6/27/25

SHEET TITLE:
SHEET TITLE

PROJECT DESCRIPTION:
48/50 Langdon Street Lot A
Single Family W ADU

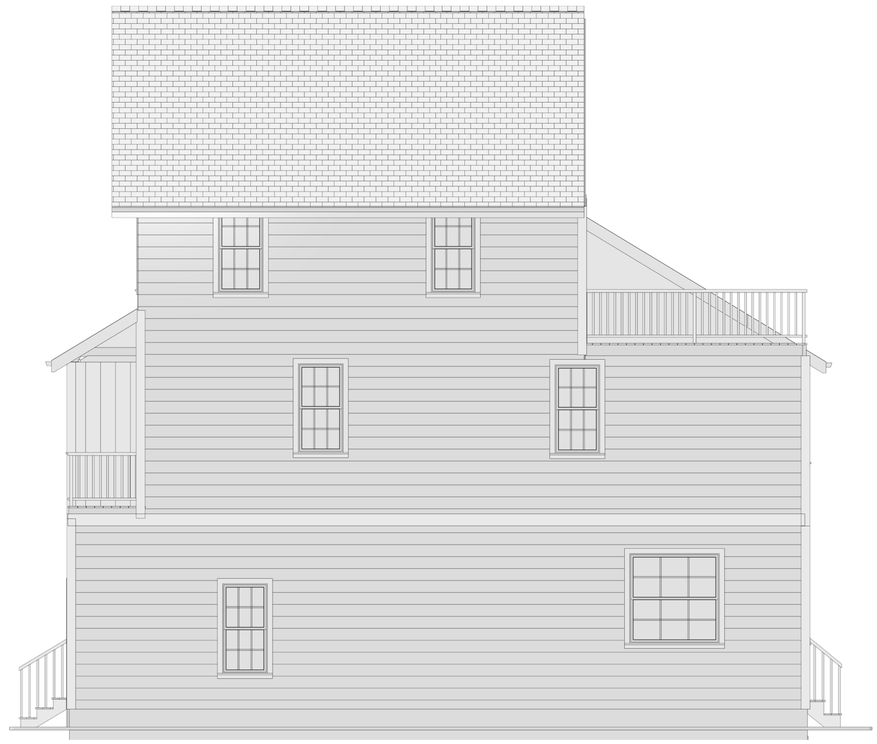
DRAWINGS PROVIDED BY:
DESIGNER
Home Designer

DATE:
6/27/25

SCALE:
1/4

SHEET:
A-1

FRONT ELEVATION



RIGHT ELEVATION

LEFT ELEVATION

REAR ELEVATION

NO.	DESCRIPTION	BY	DATE
1	Town Review	HD	6/27/25

SHEET TITLE:

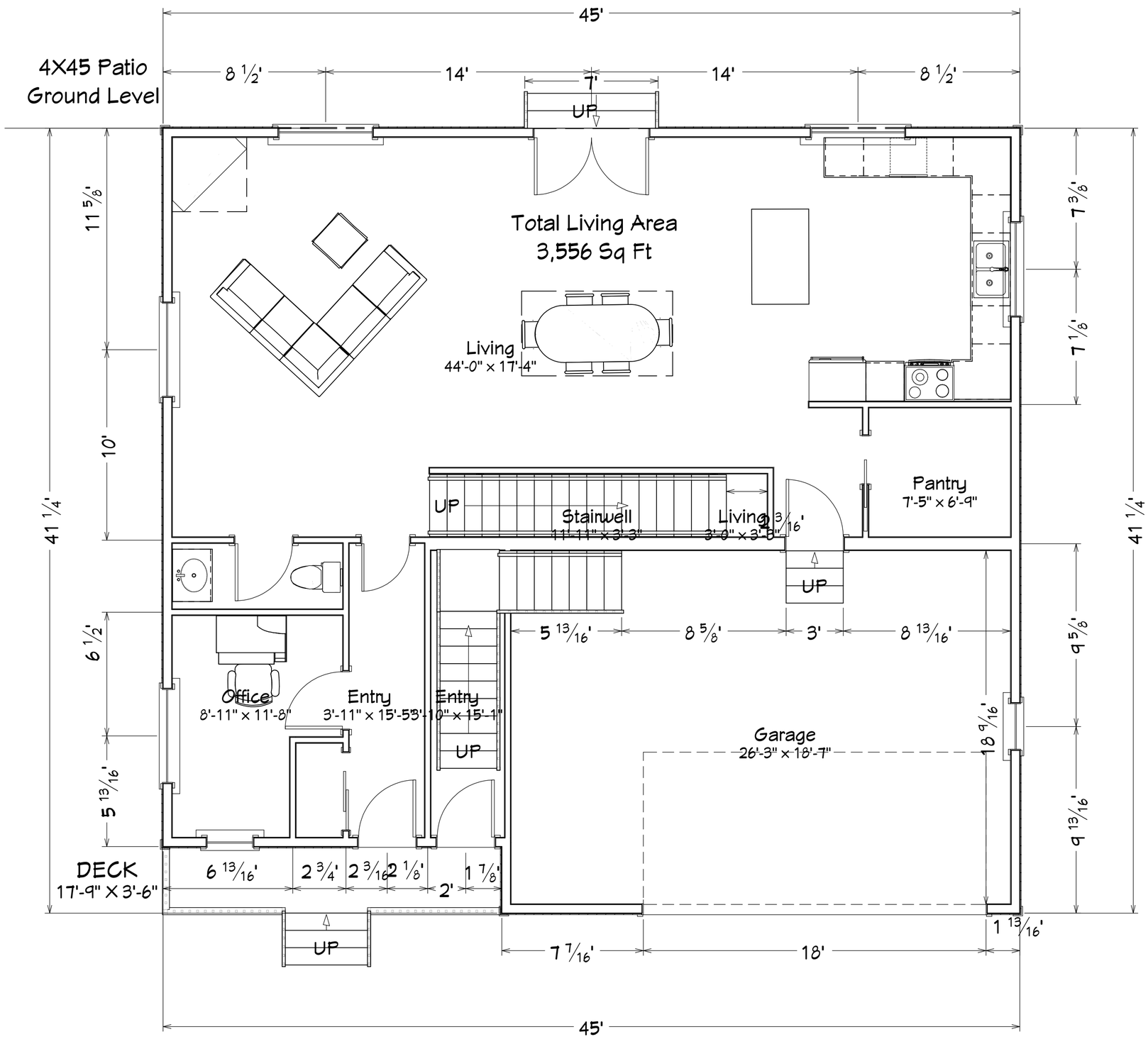
PROJECT DESCRIPTION:
48/50 Langdon Street Lot A
Single Family W ADU

DRAWINGS PROVIDED BY:
Home Designer

DATE:
6/27/25

SCALE:
1/6

SHEET:
A-2



LIVING AREA

1235 SQ FT

Drive & Walkway
Area 764.86 Sq Ft

Note: Dimensions In Fractions of Feet

1ST FLOOR

NO	DESCRIPTION	BY	DATE
1	Town Review	HD	6/27/25

SHEET TITLE:

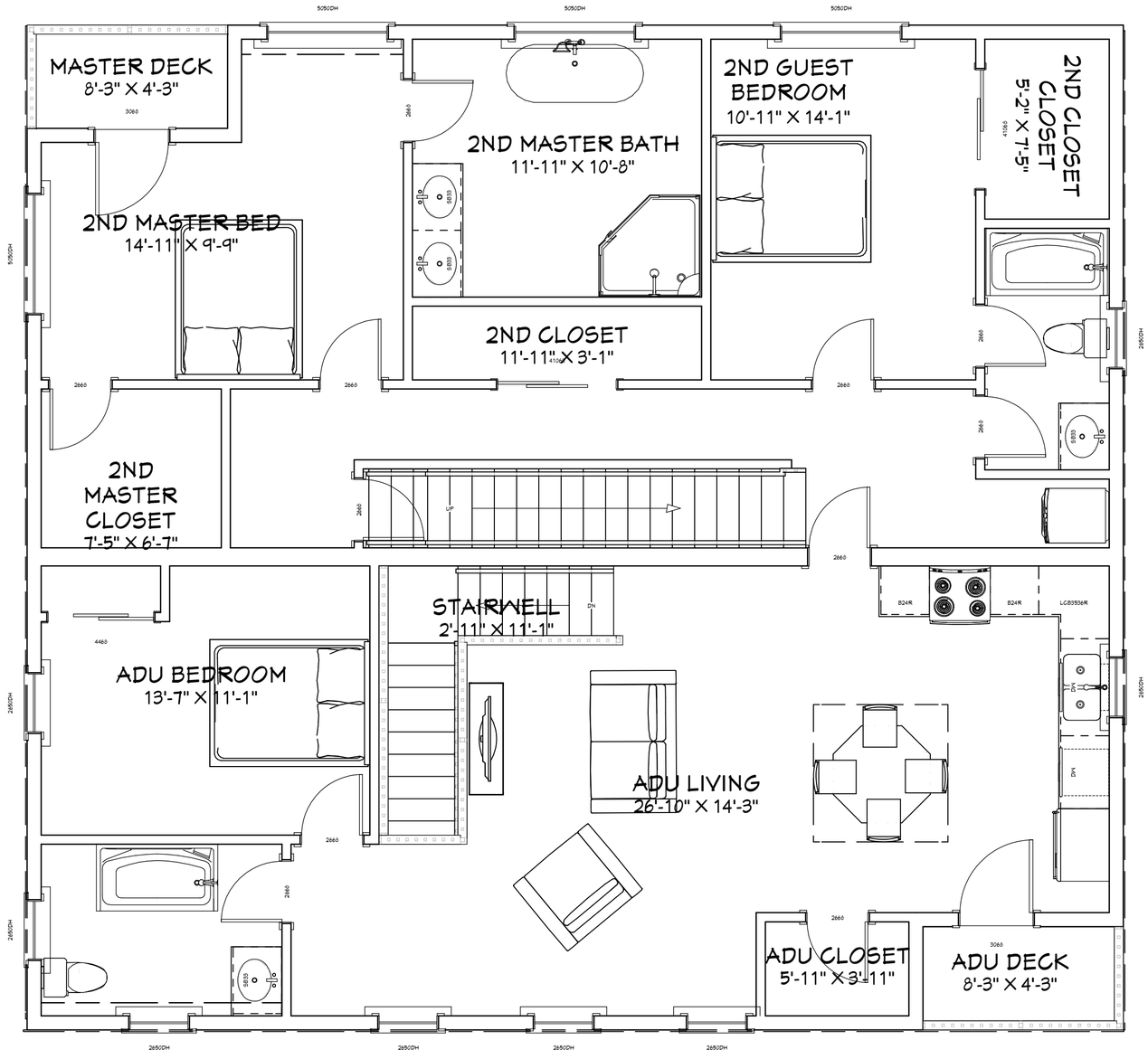
PROJECT DESCRIPTION:
48/50 Langdon Street Lot A
Single Family W ADU

DRAWINGS PROVIDED BY:
Home Designer

DATE:
6/27/25

SCALE:
1/4

SHEET:
A-3



LIVING AREA
1676 SQ FT

2ND FLOOR

NO.	DESCRIPTION	BY	DATE
1	Town Review	HD	6/27/25

SHEET TITLE:

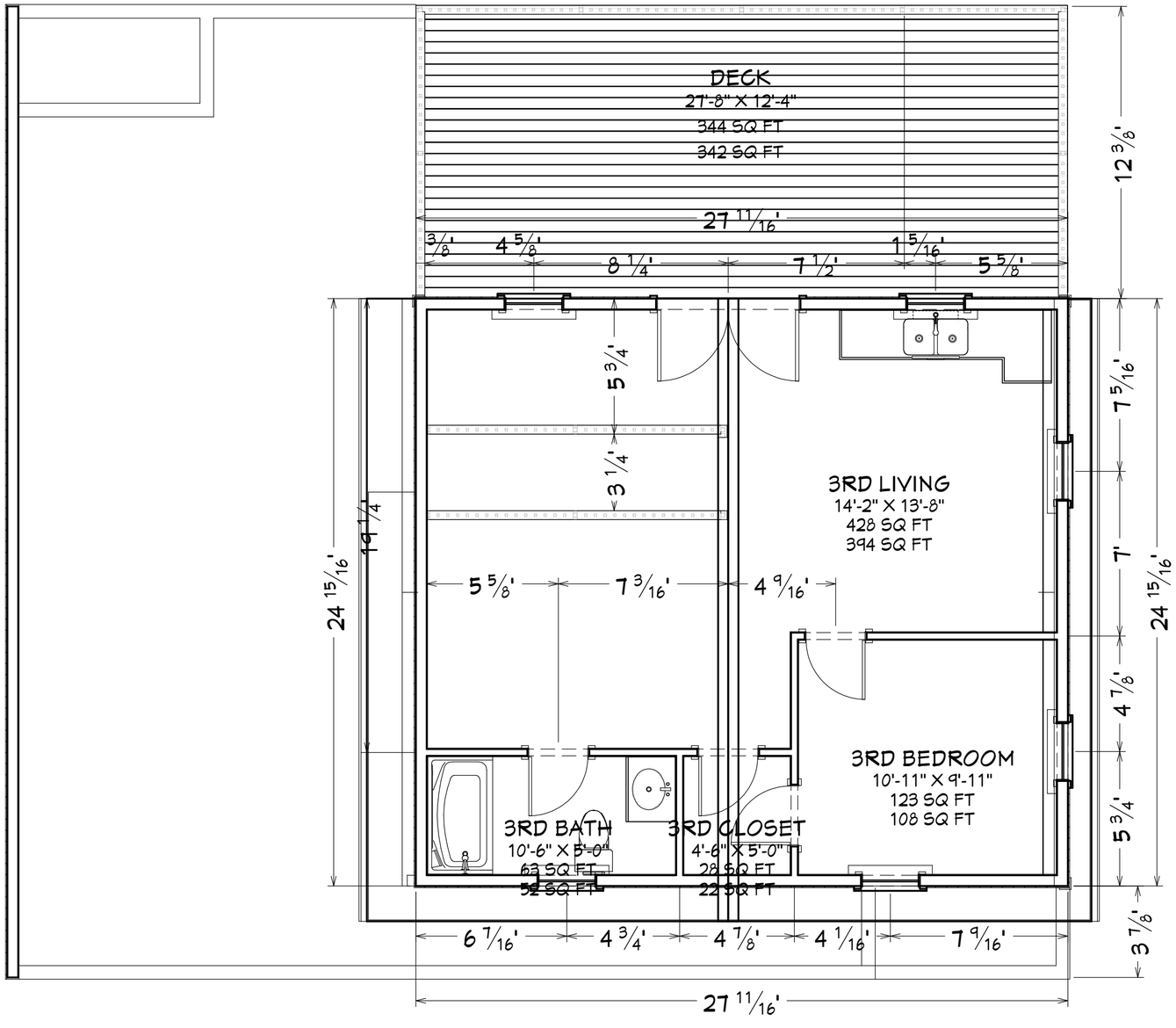
PROJECT DESCRIPTION:
48/50 Langdon Street Lot A
Single Family W ADU

DRAWINGS PROVIDED BY:
Home Designer

DATE:
6/27/25

SCALE:
1/4

SHEET:
A-4



LIVING AREA
689 SQ FT

3RD FLOOR

NO.	DESCRIPTION	BY	DATE
1	Town Review	HD	6/27/25

SHEET TITLE:

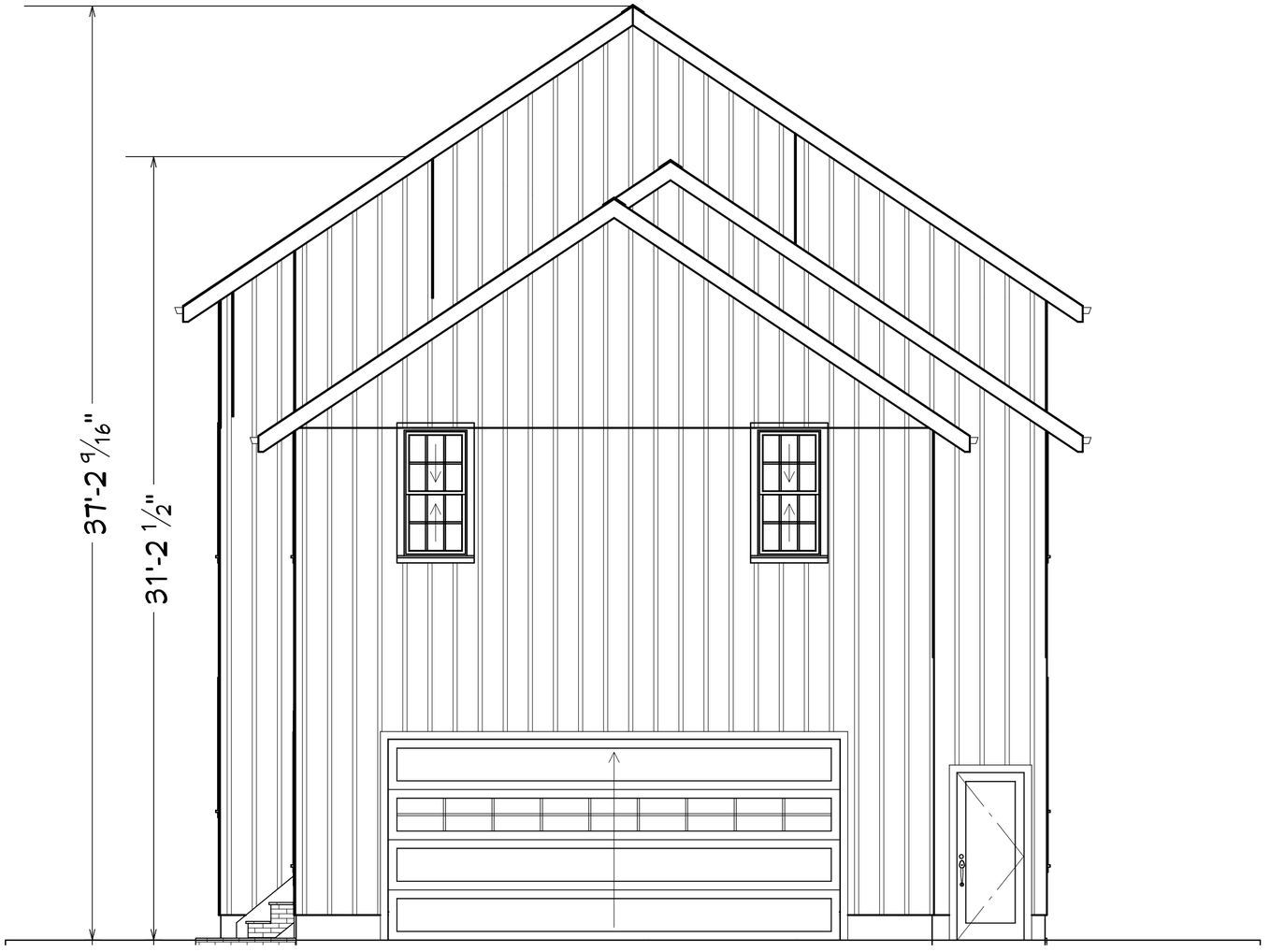
PROJECT DESCRIPTION:
48/50 Langdon Street Lot A
Single Family W ADU

DRAWINGS PROVIDED BY:
Home Designer

DATE:
6/27/25

SCALE:
1/4

SHEET:
A-5



Front Elevation

NO.	DESCRIPTION	BY	DATE
1	Town Review	MH	8/8/2024

SHEET TITLE:
Front Elevation

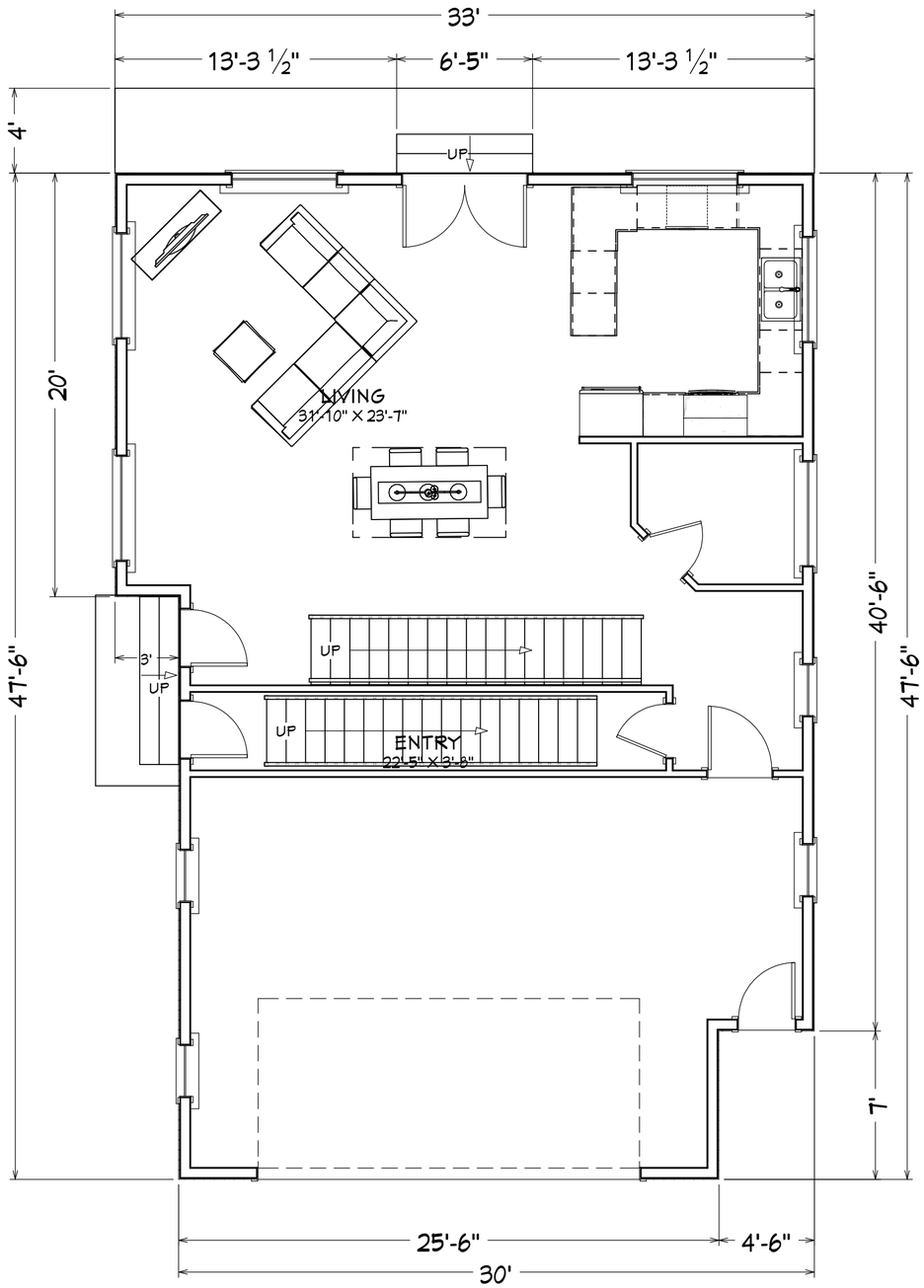
PROJECT DESCRIPTION:
48/50 Langdon Street Lot B
Single Family w ADU

DRAWINGS PROVIDED BY:
Home Designer Pro

DATE:
12/11/2024

SCALE:
1/4" = 1"

SHEET:
A-1



First Floor

NO.	DESCRIPTION	BY	DATE
1	Town Review	MH	8/8/2024

SHEET TITLE: First Floor

PROJECT DESCRIPTION: 48/50 Langdon Street Lot B Single Family w ADU

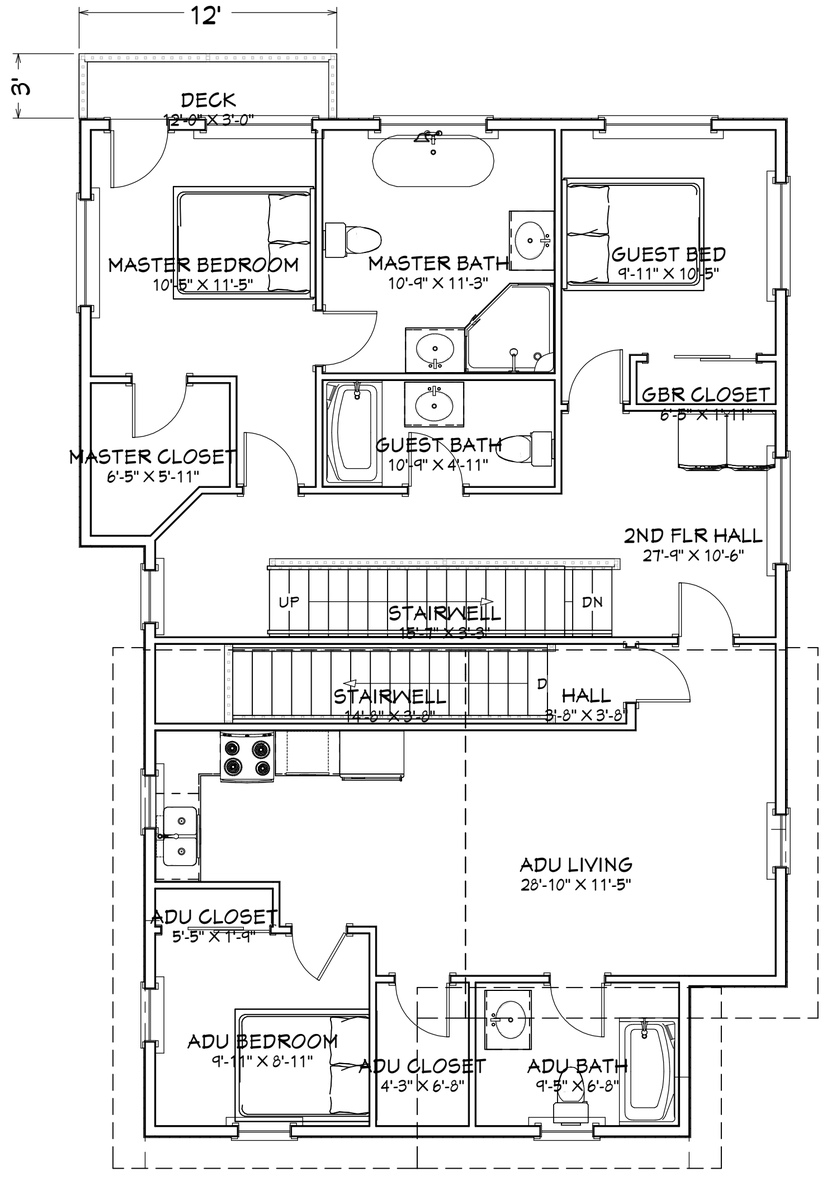
DRAWINGS PROVIDED BY: Home Designer Pro

DATE: 12/11/2024

SCALE: 1/5" = 1"

SHEET: A-2

12/11/2024 11:00 AM



LIVING AREA
1331 SQ FT

Second Floor

NO.	DESCRIPTION	BY	DATE
1	Town Review	MH	8/8/2024

SHEET TITLE: Second Floor

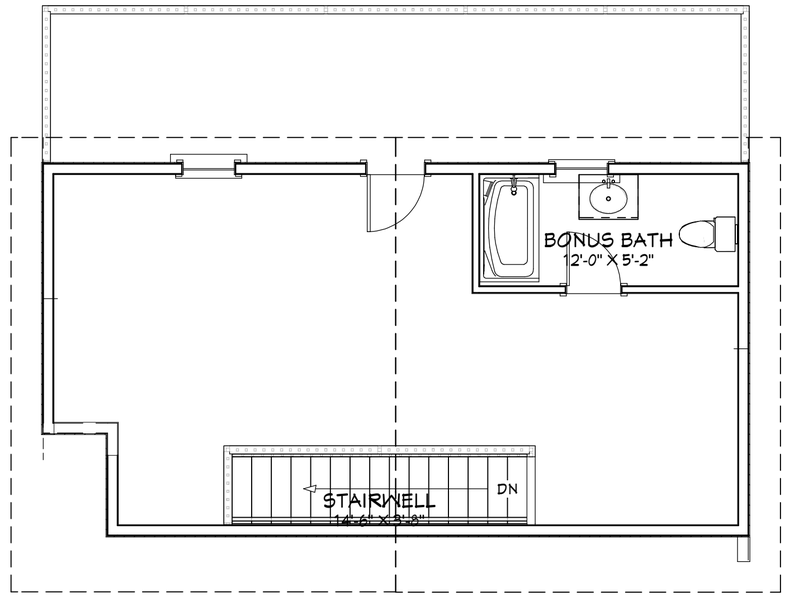
PROJECT DESCRIPTION: 48/50 Langdon Street Lot B Single Family w ADU

DRAWINGS PROVIDED BY: Home Designer Pro

DATE: 12/11/2024

SCALE: 1/5" = 1"

SHEET: A-3



Third Floor

NO.	DESCRIPTION	BY	DATE
1	Town Review	MH	8/8/2024

SHEET TITLE:
Third Floor

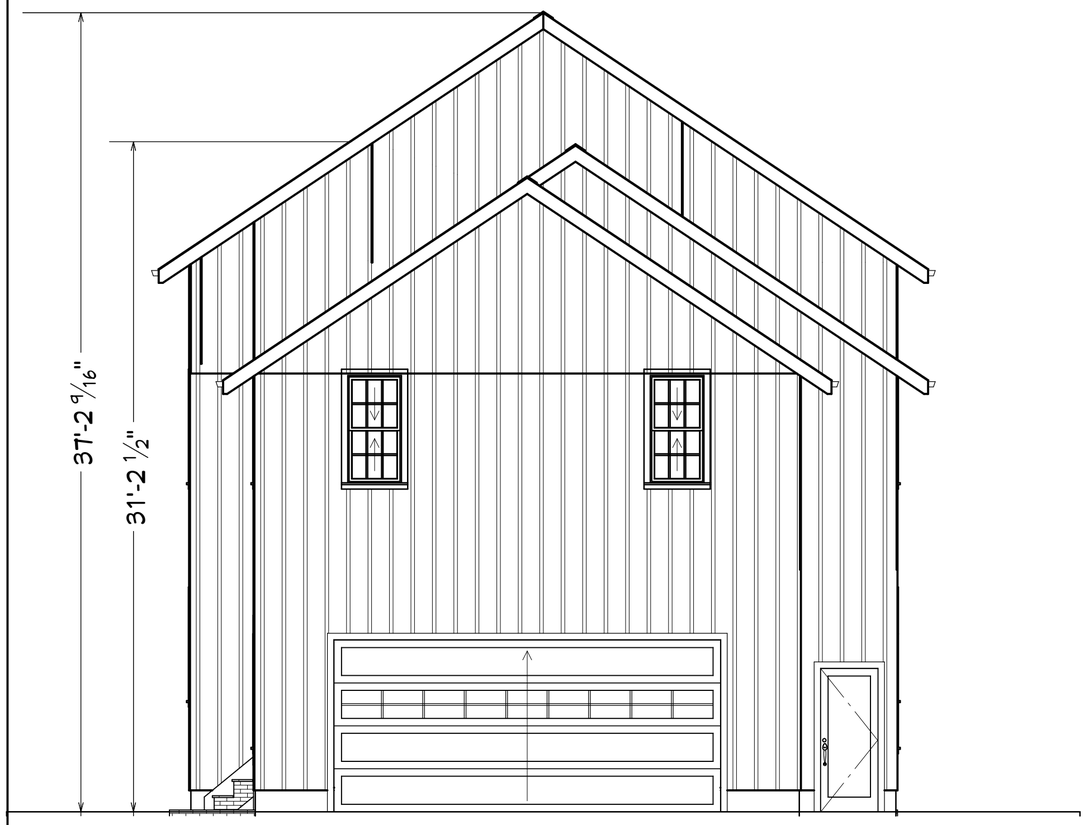
PROJECT DESCRIPTION:
48/50 Langdon Street Lot B
Single Family w ADU

DRAWINGS PROVIDED BY:
Home Designer Pro

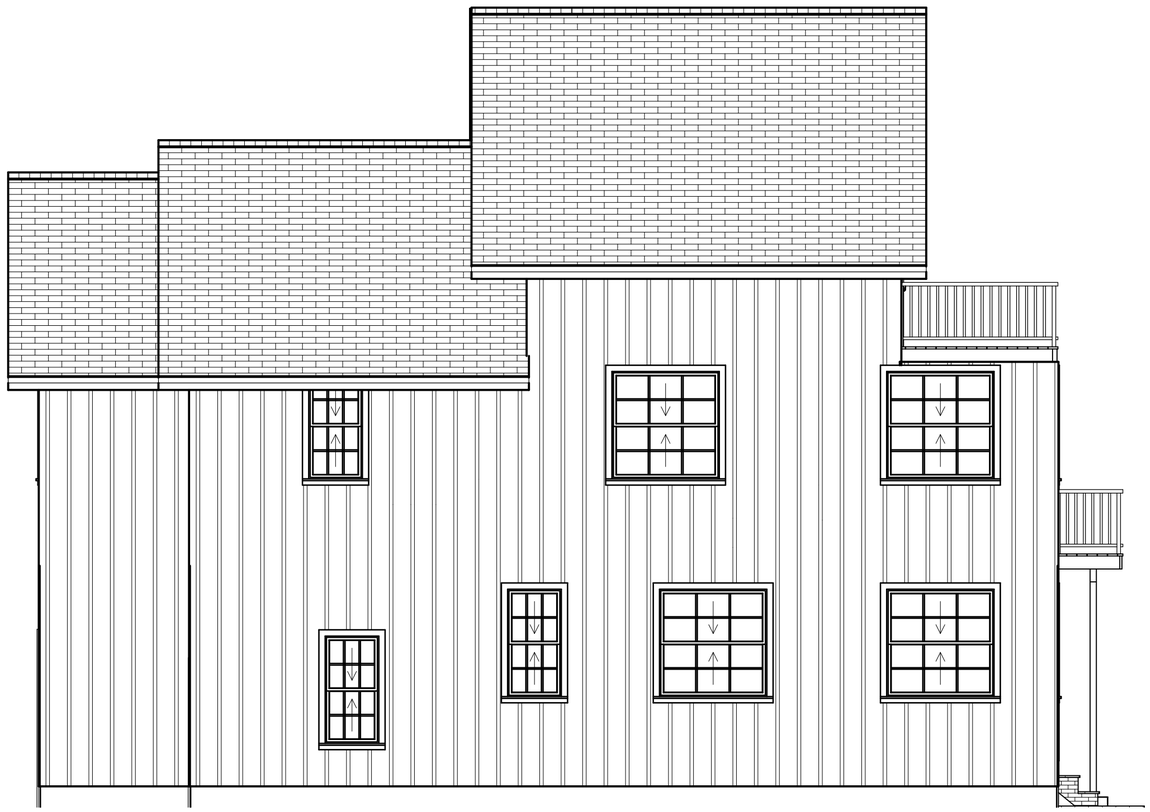
DATE:
12/11/2024

SCALE:
1/5" = 1"

SHEET:
A-4



Front Elevation



Right Elevation

Back Elevation

Left Elevation

NO	DESCRIPTION	BY	DATE
1	Town Review	MH	8/8/2024

SHEET TITLE:
Building Elevations

PROJECT DESCRIPTION:
48/50 Langdon Street Lot B
Single Family w ADU

DRAWINGS PROVIDED BY:
Home Designer Pro

DATE:
12/11/2024

SCALE:
1/5" = 1"

SHEET:
A-5