City of Portsmouth, New Hampshire Department of Public Works Building Additions City Project #16122

ISSUED FOR DESIGN-BUILD BIDDING DOCUMENTS (NOT FOR CONSTRUCTION)

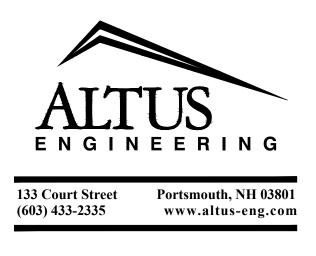




DEPTARTMENT OF PUBLIC WORKS 680 PEVERLY HILL ROAD PORTSMOUTH, NH 03801

Prepared By:

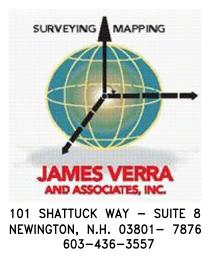
Civil Engineer:



Architect:

Placework 96 PENHALLOW STREET PORTSMOUTH, NH 03801 603.319.8199

Surveyor:



Structural Engineer:



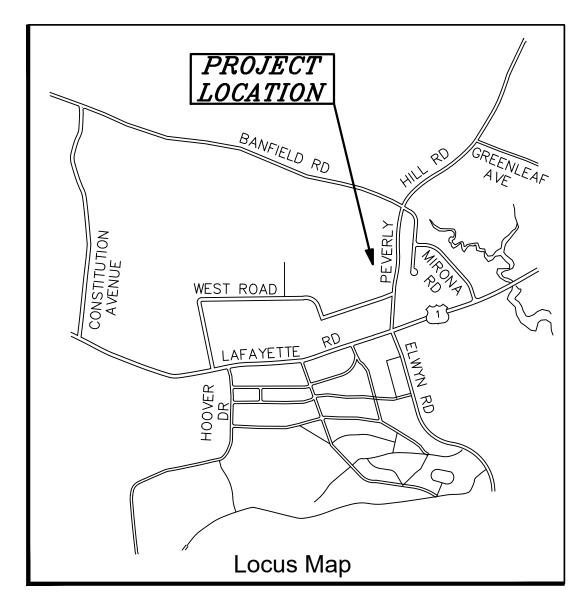
5 GREENLEAF WOODS DRIVE, #302 PORTSMOUTH, NH 03801 603-319-1817

ISSUED: DECEMBER 7, 2023

SHEET INDEX

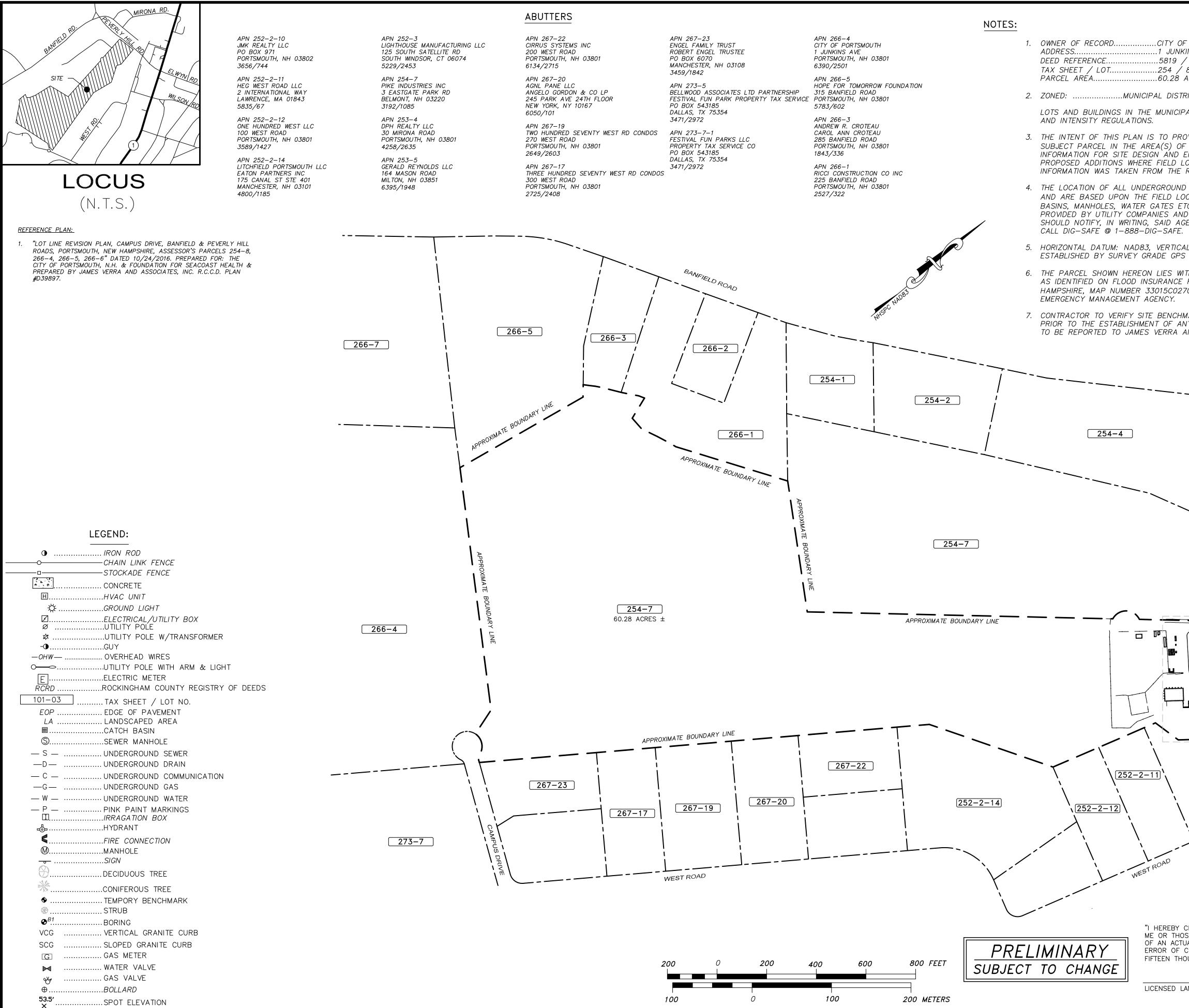
No.		Title	Date
1		Cover Sheet	12/07/23
2	S-1	Overall Plan (by JVA)	8/04/23
3	S-2	Limited Existing Conditions Site Plan (by JVA)	8/04/23
4	C-1	Demolition and Utilities Plan	12/01/23
5	C-2	Site Layout Plan	12/01/23
6	C-3	Grading, Drainage, and Erosion Control Plan	12/01/23
7	D-1	Details	12/01/23
8	D-2	Details	12/01/23
9	D-3	Details	12/01/23
10	D-4	Details	12/01/23
11	D-5	Details	12/01/23
		Landscape Plans (Not Included)	
	Structur	al Plans (Summit Engineering)	
12	S1.0	Maintenance Addition Foundation Plan	11/21/23
13	S1.1	Maintenance Addition Framing Plan	11/21/23
14	S2.0	Water Addition Foundation Plan	11/21/23
15	S2.1	Water Addition Framing Plan	11/21/23
	Architec	tural Plans (Placework)	
16	A100	Proposed Maintenace Addition	11/17/23
17	A101	Proposed Water Addition	11/17/23

NOTES:	1.
This plan set has been prepared to assist the City of Portsmouth in the Design—Build bidding process and are not for Construction.	2.

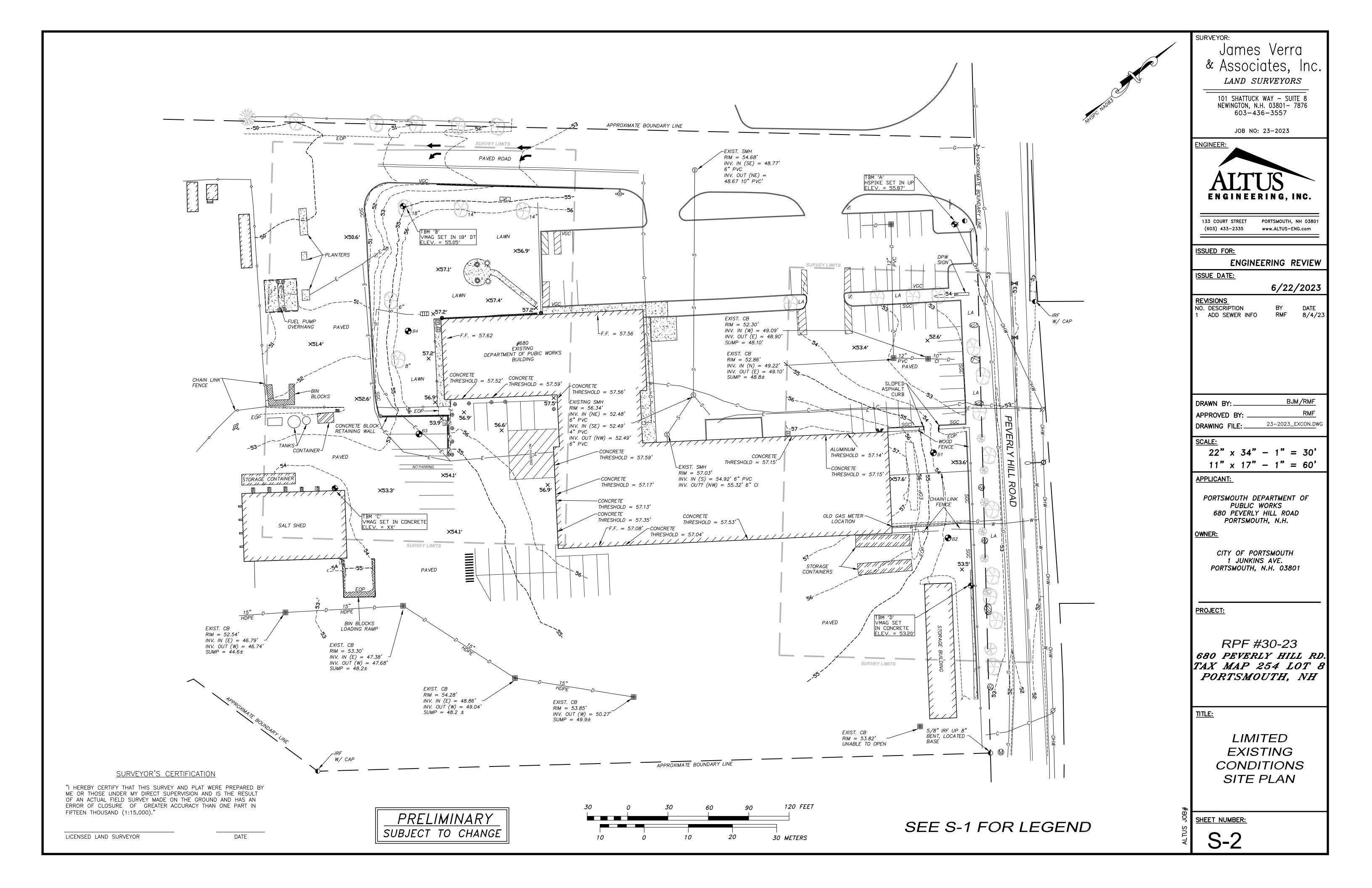


REFERENCES:

Geotechnical Report — Prepared by S.W. Cole Engineering, Inc., dated July 26, 2023. MEP/FP Conceptual and Schematic Design Narrative, Prepared by Petersen Engineering, Inc., dated December 6, 2023.



	James Verra
PORTSMOUTH INS AVE PORTSMOUTH, NH 03801	& Associates, Inc.
´ 2310 8	LAND SURVEYORS
ACRES ±	101 SHATTUCK WAY – SUITE 8
RICT (M)	NEWINGTON, N.H. 03801- 7876 603-436-3557
AL DISTRICT ARE EXEMPT FROM ALL DIMENSIONAL	
IVIDE THE LIMITED EXISTING CONDITIONS OF THE	JOB NO: 23-2023
THE PROPOSED ADDITIONS TO PROVIDE	ENGINEER:
ENGINEERING. ONLY AREAS AROUND THE OCATED AND UPDATED. THE OVERALL BOUNDARY	
REFERENCE PLAN.	
UTILITIES SHOWN HEREON ARE APPROXIMATE CATION OF ALL VISIBLE STRUCTURES (IE CATCH	ALTUS
C.) AND INFORMATION COMPILED FROM PLANS O GOVERNMENTAL AGENCIES. ALL CONTRACTORS	ENGINEERING, INC.
ENCIES PRIOR TO ANY EXCAVATION WORK AND	
L DATUM: NAVD88, UNITS: U.S. SURVEY FOOT.	133 COURT STREETPORTSMOUTH, NH 03801(603) 433-2335www.ALTUS-ENG.com
OBSERVATION AND PROCESSED BY OPUS.	
THIN ZONE X (AREA OF MINIMAL FLOOD HAZARD) RATE MAP, ROCKINGHAM COUNTY, NEW	ISSUED FOR:
OF, EFFECTIVE DATE 1/29/2021 BY THE FEDERAL	ENGINEERING REVIEW
IARKS BY LEVELING BETWEEN 2 BENCHMARKS	ISSUE DATE:
IY GRADES OR ELEVATIONS. DISCREPANCIES ARE	6/22/2023
ND ASSOCIATES, INC.	REVISIONSNO. DESCRIPTIONBYDATE
	1 ADD SEWER INFO RMF 8/4/23
	DRAWN BY:BJM/RMF
	APPROVED BY:RMF
	DRAWING FILE: 23-2023_EXCON.DWG
	SCALE:
	$22" \times 34" - 1" = 200'$
	$11" \times 17" - 1" = 400'$
	APPLICANT:
	DODTSMOUTH DEPARTMENT OF
	PORTSMOUTH DEPARTMENT OF PUBLIC WORKS
	680 PEVERLY HILL ROAD PORTSMOUTH, N.H.
	OWNER:
	CITY OF PORTSMOUTH 1 JUNKINS AVE
253-4	PORTSMOUTH, NH 03801
SHEET 2	PROJECT:
	RPF #30-23
	680 PEVERLY HILL RD.
	TAX MAP 254 LOT 8 PORTSMOUTH, NH
252-2-10	
	<u>TITLE:</u>
	OVERALL
	PLAN
SURVEYOR'S CERTIFICATION	
CERTIFY THAT THIS SURVEY AND PLAT WERE PREPARED BY	
SE UNDER MY DIRECT SUPERVISION AND IS THE RESULT IAL FIELD SURVEY MADE ON THE GROUND AND HAS AN	
CLOSURE OF GREATER ACCURACY THAN ONE PART IN DUSAND (1:15,000)."	
DUSAND (1:15,000)."	SHEET NUMBER:
AND SURVEYOR DATE OF THE OF TH	S-1
AL	1 3-1



DEMOLITION NOTES

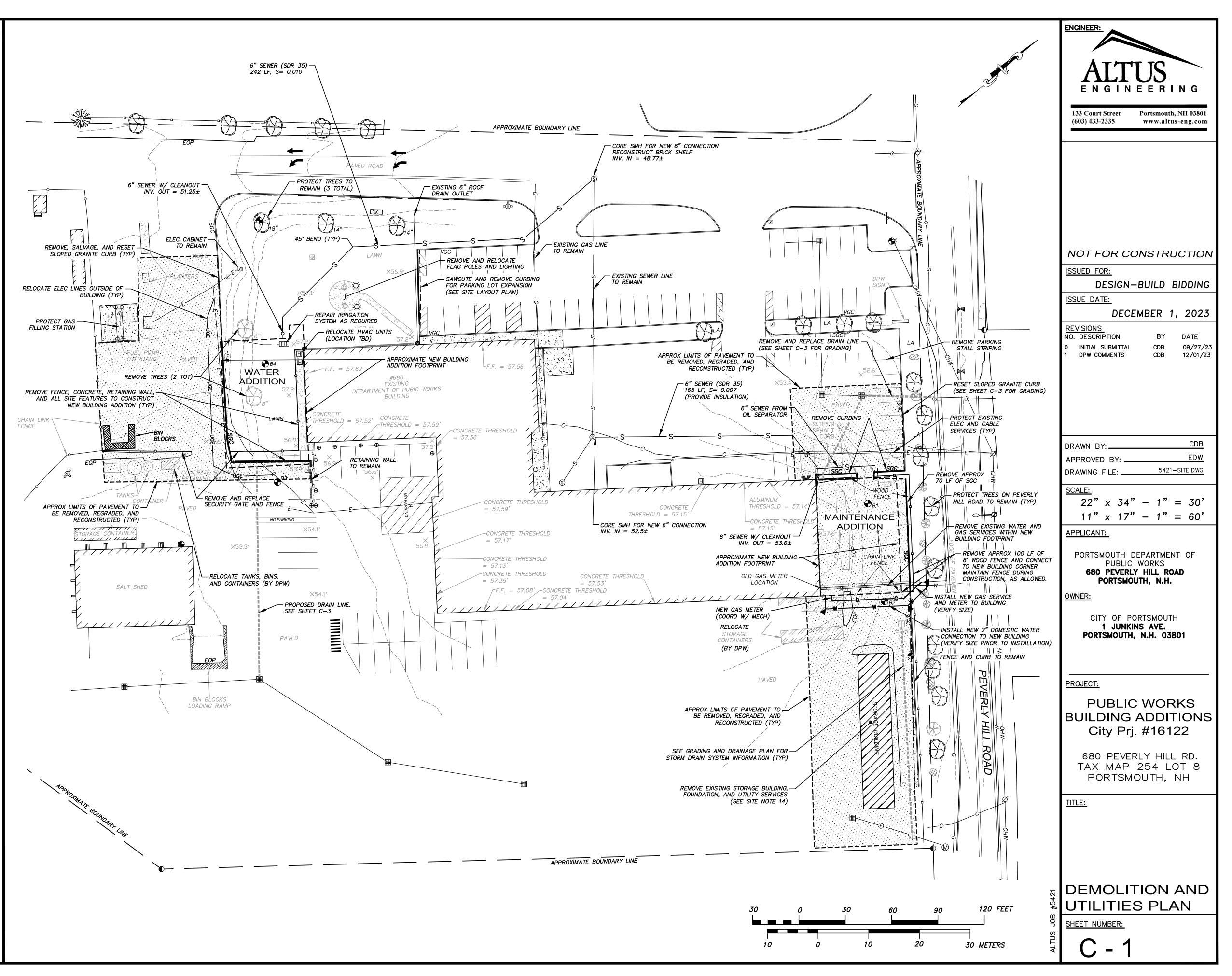
- THIS DEMOLITION PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR THE DEMOLITION OF EXISTING SITE FEATURES. UNLESS OTHERWISE NOTED TO REMAIN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL PAVEMENT, CONCRETE, CURBING, SIGNS, POLES, UTILITIES, FENCES, VEGETATION AND OTHER EXISTING FEATURES AS NECESSARY TO FULLY CONSTRUCT THE PROJECT.
- 2. CONTRACTOR SHALL SAFELY SECURE THE SITE WITH SECURITY FENCING. FENCING SHALL BE LOCKED DURING NON-WORK HOURS. COORDINATE WITH DPW.
- 3. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES TO REMAIN.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY NOTIFICATION OF ALL PARTIES, CORPORATIONS, COMPANIES, INDIVIDUALS AND STATE AND LOCAL AUTHORITIES OWNING AND/OR HAVING JURISDICTION OVER ANY UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES WHETHER OR NOT SAID UTILITIES ARE SUBJECT TO DEMOLITION, RELOCATION, MODIFICATION AND/OR CONSTRUCTION.
- 5. ALL UTILITY DISCONNECTIONS/DEMOLITIONS/RELOCATIONS TO BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES AND THE PORTSMOUTH DEPARTMENT OF PUBLIC WORKS. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING.
- 6. ALL STRUCTURES, CURBING, CONCRETE, PAVEMENT AND SUBBASE MATERIALS SHALL BE REMOVED FROM PROPOSED DEVELOPMENT AREAS AND REPLACED WITH SUITABLE MATERIALS SUITABLE MEETING THE PROJECT SPECIFICATIONS. REFERENCE GEOTECHNICAL REPORT BY SW COLE.
- 7. WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, ETC. SHALL BE ADJUSTED TO FINISH GRADE.
- 8. HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- IN AREAS WHERE CONSTRUCTION IS TO BE ADJACENT TO ABUTTING PROPERTIES, THE CONTRACTOR SHALL INSTALL ORANGE CONSTRUCTION FENCING ALONG THE PROPERTY LINE IN ALL AREAS WHERE SILT FENCING IS NOT OTHERWISE REQUIRED.
- 10. SEE GRADING, DRAINAGE AND EROSION CONTROL PLANS FOR EROSION CONTROL REQUIREMENTS TO BE IN PLACE PRIOR TO START OF DEMOLITION ACTIVITIES, INCLUDING, BUT NOT LIMITED TO; SILT BARRIERS, STABILIZED CONSTRUCTION SITE EXITS, AND STORM DRAIN INLET PROTECTION.
- 11. ALL DEMOLISHED MATERIALS OR MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS SPECIFIED TO BE SALVAGED BY THE OWNER.
- 12. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS AND CODES.
- 13. SEE GEOTHECHNICAL REPORT FOR SOIL CONDITIONS AT BORING LOCATIONS.
- 14. CONTRACTOR SHALL COORDINATE WITH DPW DEMOLITION OF EXISTING STORAGE BUILDING. LIMITS OF DEMOLITION TO BE DETERMINED. BAYS SHALL BE REMOVED TO PROVIDE ADEQUATE TRUCK TURNING TO MAINTENANCE ADDITION BAYS.

UTILITY NOTES

- 1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE, LOCAL, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH ALL PERMIT CONDITIONS AND REQUIREMENTS.
- 2. ALL WATER INSTALLATIONS AND SERVICE CONNECTIONS SHALL CONFORM TO PORTSMOUTH WATER DEPARTMENT STANDARDS. WATER MAIN SHALL BE WRAPPED WITH A WATER TIGHT POLYETHYLENE WRAPPING. ALL JOINTS SHALL HAVE THREE (3) WEDGES PER JOINT.
- 3. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL OSHA AND CITY REGULATIONS.
- 4. SITEWORK CONTRACTOR SHALL COORDINATE ALL WORK WITH ARCHITECTURAL, PLUMBING AND MECHANICAL DRAWINGS.
- 5. FINAL UTILITY LOCATIONS TO BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES AND THE ARCHITECT.
- 6. CONTRACTOR SHALL COORDINATE ALL TELECOMMUNICATIONS INSTALLATIONS WITH CONSOLIDATED COMMUNICATIONS.
- 7. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL INSTALLATIONS WITH EVERSOURCE. ALL ELECTRIC CONDUIT INSTALLATION SHALL BE INSPECTED BY EVERSOURCE PRIOR TO BACKFILL, 48-HOUR MINIMUM NOTICE REQUIRED.
- 8. DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.
- 9. OIL SEPARATOR MAY BE INSTALLED INTERNAL TO THE BUILDING AND PLUMBED TO CONNECT TO THE NEW SEWER DISCHARGE LINE. SEWER LINES SHALL BE SIZED BY THE PLUMBING ENGINEER.

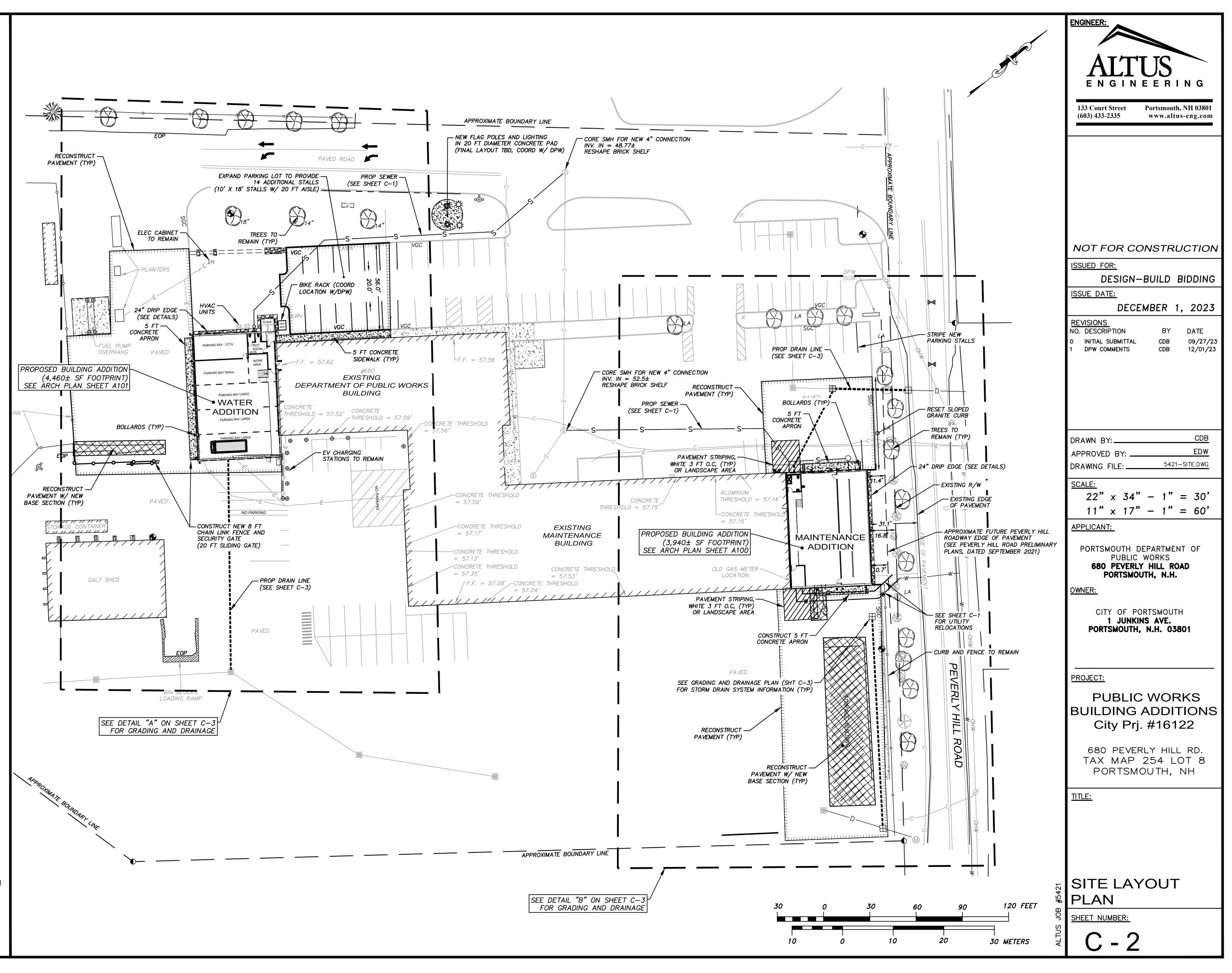
LEGEND

SEE SHEET S-1 FOR EXISTING FEATURES				
$igodoldsymbol{\Theta}$	BORING LOCATION (SEE GEOTECHNICAL RPT)			
►	PROPOSED	THRUST BLOCK/WATER/ CURB STOP/VALVE/HYDRANT		
<u> </u>	PROPOSED	SEWER/MANHOLE/CLEANOUT		
FM	PROPOSED	SEWER FORCEMAIN		
G	PROPOSED	GAS		
OHW	PROPOSED	OVERHEAD UTILITIES/UTILITY POLE		
UGE	PROPOSED	UNDERGROUND ELEC/PHONE/TV		
	SAWCUT PA	AVEMENT		
	APPROX. LI	MITS OF PAVEMENT REMOVAL		
//////</th <th>BUILDING R</th> <th>EMOVAL</th>	BUILDING R	EMOVAL		



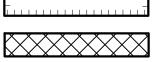
<u>SITE NOTES</u>

- 1. ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE CITY OF PORTSMOUTH & NHDOT'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
- 2. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINE WITH RS-1 IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
- THE CONTRACTOR SHALL VERIFY ALL BENCHMARKS AND TOPOGRAPHY IN THE FIELD PRIOR TO CONSTRUCTION.
- 4. THE CONTRACTOR SHALL VERIFY ALL BUILDING DIMENSIONS WITH THE ARCHITECTURAL AND STRUCTURAL PLANS PRIOR TO CONSTRUCTION. ALL DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER FOR RESOLUTION.
- 5. AREA OF DISTURBANCE IS UNDER 43,560 SF COVERAGE, THEREFORE EPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT IS NOT REQUIRED. CONTRACTOR SHALL MANAGE SITE STORMWATER RUNOFF PER CITY OF PORTSMOUTH REQUIREMENTS TO PREVENT SEDIMENT DISCHARGE TO THE MUNICIPAL STORM DRAIN SYSTEM.
- 6. PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC DEVICES," "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND THE AMERICANS WITH DISABILITIES ACT (ADA), LATEST EDITIONS.
- 7. SITEWORK CONTRACTOR SHALL PREPARE A LICENSED LAND SURVEYOR (LLS) STAMPED AS-BUILT SITE PLAN & PROVIDE A DIGITAL (CAD FORMAT) COPY FOR THE CITY'S G.I.S. DATA BASE.



LEGEND

SEE SHEET S-1 FOR EXISTING FEATURES



CONSTRUCT FULL PAVEMENT BASE SECTION CONSTRUCT CONCRETE SIDEWALK/APRON

LIMITS OF NEW PAVEMENT

GRADING AND DRAINAGE NOTES

- . PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES SCHEDULED TO REMAIN.
- 2. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION
- 3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL READ AND FAMILIARIZE THEMSELVES WITH THE PROJECT GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FOLLOWING ALL THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT.
- 4. DEWATERING ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH EPA AND NHDES **REGULATIONS AND GUIDELINES.**
- 5. PROTECTION OF SUBGRADE: THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STABLE, DEWATERED SUBGRADES FOR FOUNDATIONS, PAVEMENT AREAS, UTILITY TRENCHES AND OTHER AREAS DURING CONSTRUCTION. SUBGRADE DISTURBANCE MAY BE INFLUENCED BY EXCAVATION METHODS, MOISTURE, PRECIPITATION, GROUNDWATER CONTROL, AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO PREVENT SUBGRADE DISTURBANCE. SUCH PRECAUTIONS MAY INCLUDE DIVERTING STORMWATER RUNOFF AWAY FROM CONSTRUCTION AREAS, REDUCING TRAFFIC IN SENSITIVE AREAS, AND MAINTAINING AN EFFECTIVE DEWATERING PROGRAM. SOILS EXHIBITING HEAVING OR INSTABILITY SHALL BE OVER EXCAVATED TO MORE COMPETENT BEARING SOIL AND BEARING SOIL AND REPLACED WITH FREE DRAINING STRUCTURAL FILL IF THE EARTHWORK IS PERFORMED DURING FREEZING WEATHER, EXPOSED SUBGRADES AREA SUSCEPTIBLE TO FROST. NO FILL OR UTILITIES SHALL BE PLACED ON FROZEN SOIL CRUST AT THE COMMENCEMENT OF EACH DAY'S OPERATIONS DEGREE OF INSULATION AGAINST FREEZING.
- 6. IF SUITABLE, EXCAVATED MATERIALS SHALL BE PLACED AS FILL WITHIN UPLAND AREAS ONLY AND SHALL NOT BE PLACED WITHIN WETLANDS. PLACEMENT OF BORROW MATERIALS SHALL BE PERFORMED IN A MANNER THAT PREVENTS LONG TERM DIFFERENTIAL SETTLEMENT. EXCESSIVELY WET MATERIALS SHALL BE STOCKPILED AND ALLOWED TO DRAIN BEFORE PLACEMENT. FROZEN MATERIAL SHALL NOT BE USED FOR CONSTRUCTION.
- 7. ALL STORM DRAIN PIPE SHALL BE ADS N-12 OR EQUAL AND APPROVED BY THE ENGINEER.
- 8. ALL CATCH BASIN, GATE VALVE COVERS, AND MANHOLE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISHED GRADE. ANY RIM OR VALVE COVER ABOVE SURROUNDING FINISHED GRADE WILL NOT BE ACCEPTED.
- 9. ALL CATCH BASINS SHALL BE PRECAST, H-20 LOADING AND BE EQUIPPED WITH 4-FOOT DEEP MIN SEDIMENTATION SUMPS AND GREASE HOODS. (SEE DETAILS)
- 10. ALL SPOT GRADES ARE AT THE FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE.
- 11. UNLESS OTHERWISE SPECIFIED, RETAINING WALL AND BUILDING PERIMETER DRAINS SHALL BE DIRECTED TO THE NEAREST DRAINAGE STRUCTURE. IF DEEMED APPROPRIATE, CONTRACTOR SHALL PROVIDE ADDITIONAL UNDERDRAINS AT THE DIRECTION OF THE ENGINEER.
- 12. ALL INTERNAL FLOOR DRAINS SHALL TIE INTO SEWER SYSTEM AN NOT TIE INTO EXTERNAL STORM DRAIN SYSTEM.

DRAINAGE STRUCTURES

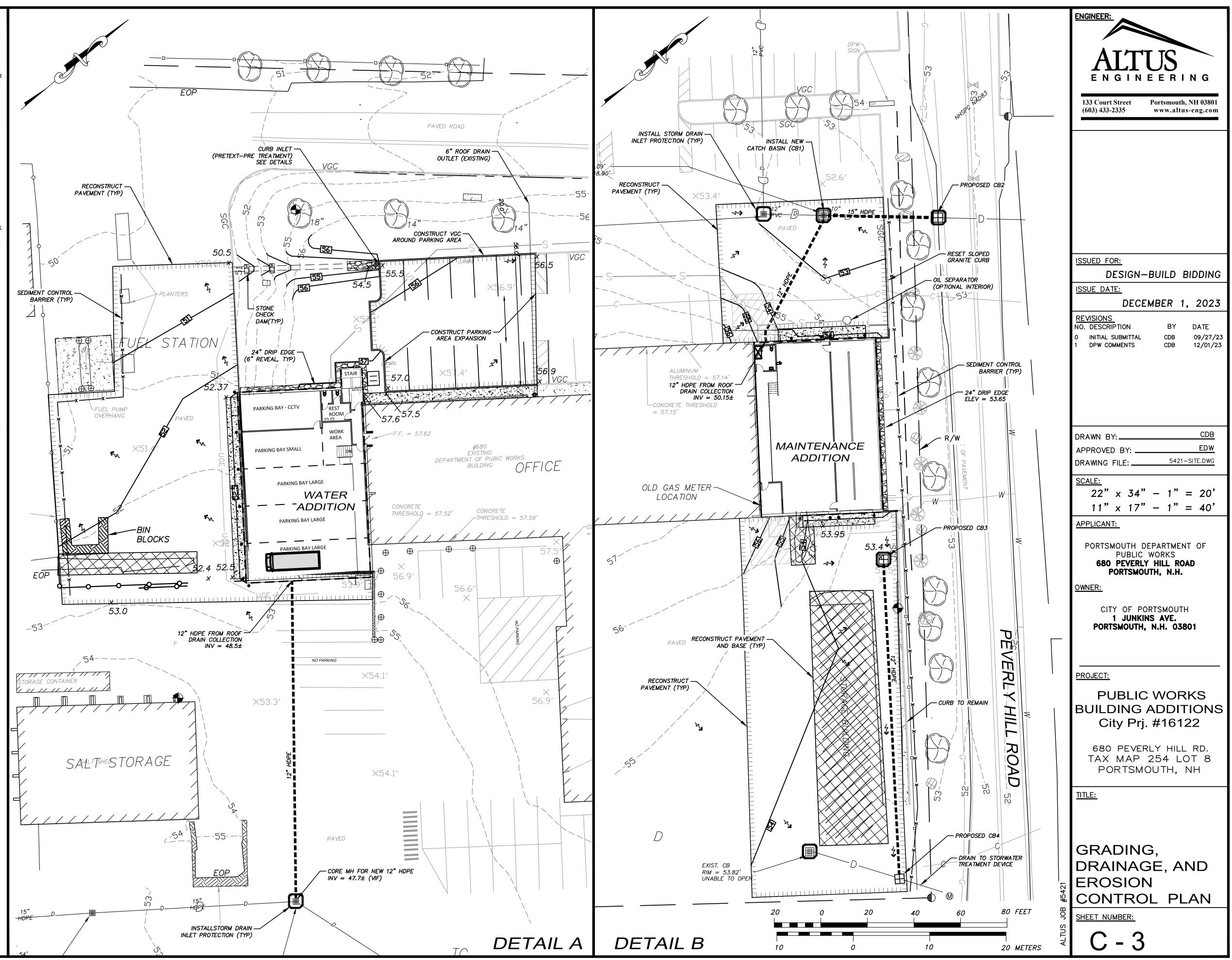
RIM = 52.3012" INV. IN = 49.09 (W) 12" INV. IN = 49.00 (ROOF) 15" INV. OUT = 48.90

CB2 RIM = 53.15 15" INV. IN = 48.40 (CB1) 10" INV. OUT = $48.3 \pm (VIF)$

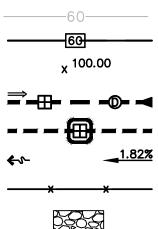
CB3 RIM = 53.4012" INV. OUT = 49.90 (CB4)

CB4 RIM = 52.90 (VIF)12" INV IN = 49.20 (CB3) INV. THRU = $49.1 \pm$ (VIF)

OIL SEPARATOR RIM = 53.75 8" INV IN. = 50.50 (INTERNAL TRENCH DRAIN) 8" INV OUT = 50.25 (CB3)



LEGEND



EXISTING CONTOUR PROPOSED CONTOUR PROPOSED SPOT GRADE - - O- - PROPOSED DRAINAGE PIPE/CB/DMH - - - PROPOSED CATCH BASIN INLET PROTECTION -1.82% GROUND SLOPE DIRECTION/APPROX. GRADE SEDIMENT BARRIER/CONST. FENCE STONE (DRIP EDGE, RIP RAP, CHECK DAM)

SEDIMENT AND EROSION CONTROL NOTES

PROJECT NAME AND LOCATION

PUBLIC WORKS BUILDING ADDITIONS (RFP #30-23) CITY OF PORTSMOUTH. NH 680 PEVERLY HILL ROAD PORTSMOUTH, NH 03801

DESCRIPTION

The project consists of two additions to the existing Department of Public Works facility on Peverly Hill Road. The existing building Public Works and maintenance building will remain. See architectural drawings for building related items adjacent to the additions. Site improvements include underground utilities and parking and access items.

DISTURBED AREA

The total area to be disturbed on the parcel and for the building additions, driveway, parking area, drainage, and utility construction is approximately 32,000 SF± (less than 1-acre). The combined disturbed area does NOT exceed 43,560 SF (1 acre), thus a SWPPP will NOT be required for compliance with the USEPA-NPDES Construction General Permit. All local requirements for stormwater and erosion control during construction are still required.

NPDES CONSTRUCTION GENERAL PERMIT- exempt

Site disturbance is less than one acre, therefore Contractor is NOT required to prepare a Stormwater Pollution Prevention Plan (SWPPP) or file an NOI (Notice of Intent) in accordance with federal storm water permit requirements under the USEPA-NPDES Construction General Permit.

SEQUENCE OF MAJOR ACTIVITIES

THE FOLLOWING PROVIDES AN ANTICIPATED SEQUENCE OF CONSTRUCTION ACTIVITIES. ACTUAL SEQUENCE WILL DEPEND ON CONTRACTOR MEANS AND METHODS AND PROPOSED WORK PLAN.

- 1. Hold a pre-construction meeting with City & stake holders.
- 2. Install temporary erosion control measures, including drain inlet protection, sediment barriers, and stabilized construction exit/entrance as necessary for the initial phase of construction. Erosion control measures shall be maintained throughout construction for various phases of work.
- 3. Remove pavement and structures intended to be removed within the work limits.
- 4. Construct utility infrastructure. Rough grade lot to prepare for site development
- 5. Construct Foundations.
- 6. Construct building addition framing.
- 7. Construct pavement to binder course
- 8. Complete building addition interiors.
- 9. Complete pavement wearing course
- 8. Loam and seed disturbed areas.
- 9. When all construction activity is complete and site is stabilized, remove all temporary erosion and sediment devices and all sediment that has been trapped by these devices.

NAME OF RECEIVING WATER

The site drainage discharges into a municipal closed drainage system outletting to Sagamore Creek. TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices

described in the "New Hampshire Stormwater Manual, Volumes 1 - 3", issued December 2008, as amended. As indicated in the sequence of Major Activities, the silt fences shall be installed prior to commencing any clearing or grading of the site. Structural controls shall be installed concurrently with the applicable activity. Once construction activity ceases permanently in an area, silt fences and any earth/dikes will be removed once permanent measures are established.

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

Stabilize all ditches, swales, stormwater ponds, level spreaders and their contributing areas prior to directing flow to them

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

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

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

- A. GENERAL
- These are general inspection and maintenance practices that shall be used to implement the plan:
- 1. The smallest practical portion of the site shall be denuded at one time, but in no case shall it
- exceed 5 acres at one time. 2. All control measures shall be inspected at least once each week and following any storm event of
- 0.25 inches or greater. 3. All measures shall be maintained in good working order: if a repair is necessary, it will be initiated
- within 24 hours. 4. Built-up sediment shall be removed from silt fence or other barriers when it has reached one-third
- the height of the fence or bale, or when "bulges" occur. 5. All diversion dikes shall be inspected and any breaches promptly repaired.
- 6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth.
- 7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.
- 8. All roadways and parking lots shall be stabilized within 72 hours of achieving finished grade. 9. All cut and fill slopes shall be seeded/loamed within 72 hours of achieving finished grade.
- 10. An area shall be considered stable if one of the following has occurred:
 - a. Base coarse gravels have been installed in areas to be paved; b. A minimum of 85% vegetated growth as been established;
 - c. A minimum of 3 inches of non-erosive material such as stone of riprap has been installed:
- or d. Erosion control blankets have been properly installed.

11. The length of time of exposure of area disturbed during construction shall not exceed 45 days. B. MULCHING

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

FROSION AND SEDIMENT CONTROL MEASURES (CONIT)

2. Gui

<u>I CONTROL MEASURE</u>	<u>.S (CONT)</u>
ch Application —	
	<u>Use and Comments</u> Must be dry and free m mold. May be used ngs.
460 to 920 lbs.	Used mostly with trees and shrub plantings.
As per manufacturer Specifications	Used in slope areas, water courses and other Control areas.
Spread more than 1/2" thick	Effective in controlling wind and water erosion.
	 * The organic matter content is between 80 and 100%, dry weight basis. * Particle size by weight is 100% passing a 6"screen and a minimum of 70 %, maximum of 85%, passing a 0.75" screen. * The organic portion needs to be fibrous elongated. * Large portions of silts, clays or fine sands not acceptable in the mix.
	ch Application – <u>Rate per 1,000 s.f.</u> 70 to 90 lbs. frou with planti 460 to 920 lbs. As per manufacturer Specifications Spread more than 1/2" thick 2" thick (min) and

- 3. Maintenance All mulches must be inspected periodically, in particular after rainstorms, to check immediately applied.
- C. TEMPORARY GRASS COVER
- 1. Seedbed Preparation -
- 2. Seeding -

 - fertilizer). Hydroseedings, which include mulch, may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.
- 3. Maintenance -
- D. FILTERS
- 1. Tubular Sediment Barrier
- a. See detail.
- 2. Silt Fence (if used) requirements:

Physical Property

Filtering Efficiency

Tensile Strength at 20% Maximum Elongation*

Flow Rate

0 degrees F to 120° F.

- inches)
- the original ground surfaces.
- existing trees.

3. Sequence of Installation -Sediment barriers shall be installed prior to any soil disturbance of the contributing upslope drainage area.

- 4. Maintenance -
- be replaced with a temporary stone check dam.
- promptly
 - the height of the barrier.

INSTALLATION. MAINTENANCE AND INSPECTION PROCEDURES FOR TEMPORARY

* Soluble salts content is less than 4.0 mmhos/cm

* The pH should fall between 5.0 and 8.0.

for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be

Apply fertilizer at the rate of 600 pounds per acre of 10-10-10. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of three (3) tons per acre.

- a. Utilize annual rye grass at a rate of 40 lbs/acre.
- b. Where the soil has been compacted by construction operations, loosen soil to a depth of two (2) inches before applying fertilizer, lime and seed. c. Apply seed uniformly by hand, cyclone seeder, or hydroseeder (slurry including seed and

Temporary seedings shall be periodically inspected. At a minimum, 95% of the soil surface should be covered by vegetation. If any evidence of erosion or sedimentation is apparent, repairs shall be made and other temporary measures used in the interim (mulch, filter barriers, check dams, etc.).

b. Install per manufacturer's requirements.

a. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following

<u>Test</u>	<u>Requirements</u>
VTM-51	75% minimum
VTM-52	Extra Strength 50 lb/lin in (min) Standard Strength 30 lb/lin in (min)

0.3 gal/sf/min (min) VTM - 51

* Requirements reduced by 50 percent after six (6) months of installation.

Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizer to provide a minimum of six (6) months of expected usable construction life at a temperature range of

b. Posts shall be spaced a maximum of ten (10) feet apart at the barrier location or as recommended by the manufacturer and driven securely into the ground (minimum of 16

c. A trench shall be excavated approximately six (6) inches wide and eight (8) inches deep along the line of posts and upslope from the barrier.

d. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least one (1) inch long, tie wires or hog rings. The wire shall extend no more than 36 inches above

e. The "standard strength" filter fabric shall be stapled or wired to the fence, and eight (8) inches of the fabric shall be extended into the trench. The fabric shall not extend more than 36 inches above the original ground surface. Filter fabric shall not be stapled to

f. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such a case, the filter fabric is stapled or wired directly to the posts with all other provisions of item (g) applying.

a. The trench shall be backfilled and the soil compacted over the filter fabric

h. Silt fences shall be removed when they have served their useful purpose but not before the upslope areas has been permanently stabilized

a. Silt fence barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired if there are any signs of erosion or sedimentation below them. Any required repairs shall be made immediately. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water, the sediment barriers shall

b. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced

c. Sediment deposits must be removed when deposits reach approximately one-third (1/3)

d. Any sediment deposits remaining in place after the silt fence or other barrier is no longer required shall be removed. The area shall be prepared and seeded.

- e. Additional stone may have to be added to the construction entrance, rock barrier and riprap lined swales, etc., periodically to maintain proper function of the erosion control structure.
- E. PERMANENT SEEDING
- 1. Bedding stones larger than $1\frac{1}{2}$, trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 5" to prepare a seedbed and mix fertilizer into the soil.
- 2. Fertilizer lime and fertilizer should be applied evenly over the area prior to or at the time of seeding and incorporated into the soil. Kinds and amounts of lime and fertilizer should be based on an evaluation of soil tests. When a soil test is not available, the following minimum amounts should be applied:
 - Agricultural Limestone @ 100 lbs. per 1,000 s.f. 10-20-20 fertilizer @ 12 lbs. per 1.000 s.f.
- 3. Seed Mixture (See Landscape Drawings for additional information):
- 3.1. Lawn seed mix shall be a fresh, clean new seed crop. The Contractor shall furnish a dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
- 3.2. Seed mixture shall consist of
 - a. 1/3 Kentucky blue,
- b. 1/3 perennial rye, and c. 1/3 fine fescue.
- 3.1. Turf type tall fescue is unacceptable
- 4. Sodding sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing, and placement of sod shall be performed according to the S.C.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

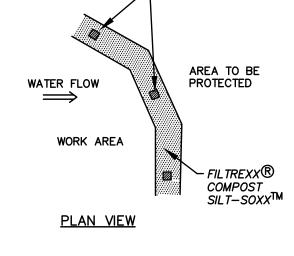
WINTER CONSTRUCTION NOTES

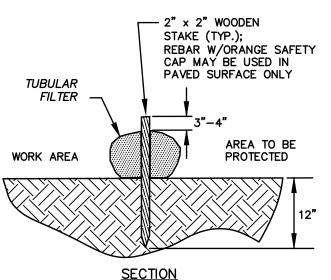
- 1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes areater than 3:1, and elsewhere seeding and placing 3 to 4 tons of mulch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

WINTER CONSTRUCTION NOTES

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

STAKE ON 10' LINEAR SPACING



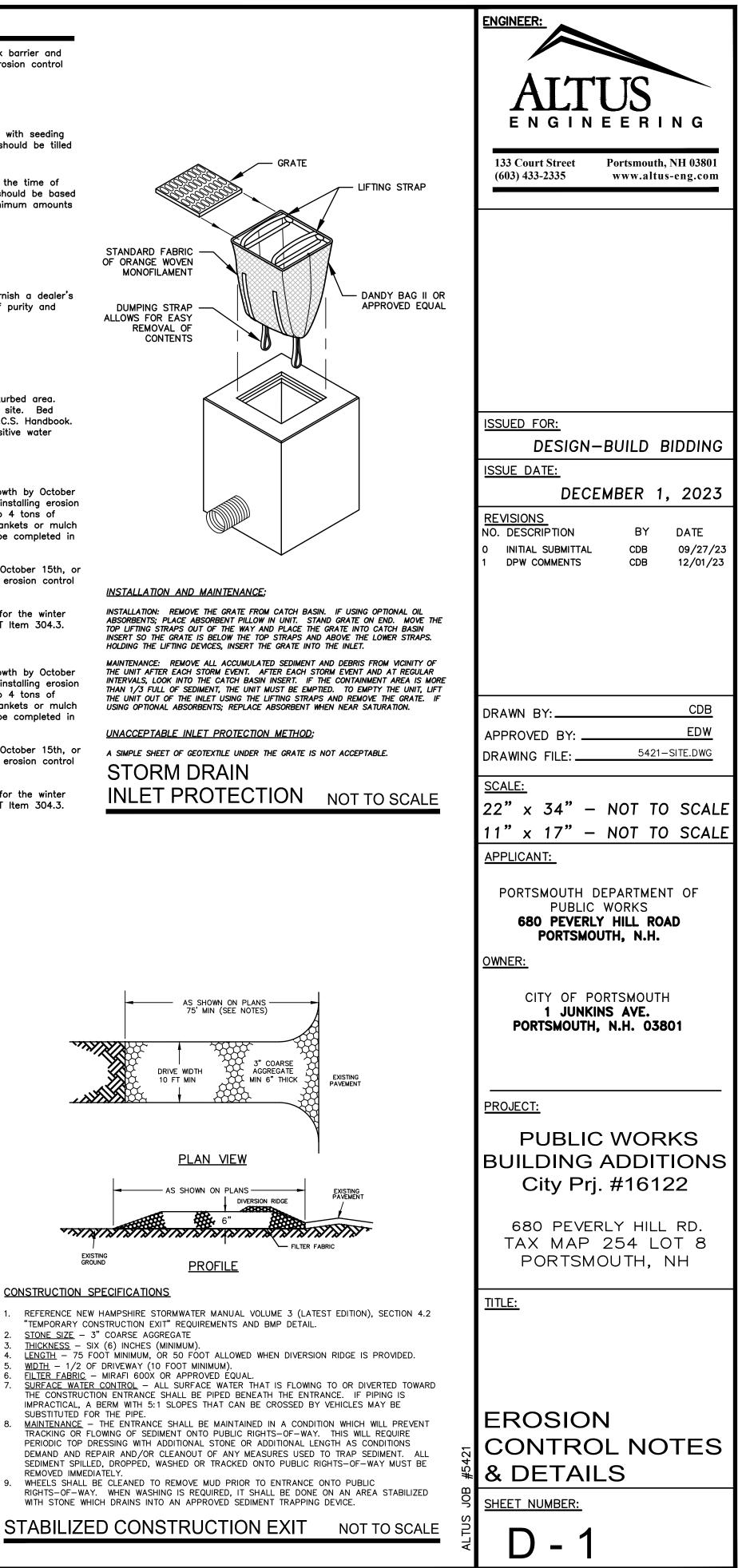


- <u>NOTES:</u> 1. SILTSOXX OR APPROVED EQUAL SHALL BE USED FOR TUBULAR SEDIMENT BARRIERS. 2. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS.
- . COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE
- REQUIREMENTS OF THE SPECIFIC APPLICATION 4. ALL SEDIMENT TRAPPED BY BARRIER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

TUBULAR SEDIMENT BARRIER DETAIL NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

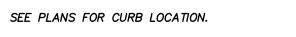
- SUBSTITUTED FOR THE PIPE.
- REMOVED IMMEDIATELY



VERTICAL GRANITE CURB

- 9. JOINTS BETWEEN CURB STONES SHALL BE MORTARED.
- 8. CURB SHALL BE INSTALLED PRIOR TO PLACEMENT OF TOP PAVEMENT COURSE.
- 7. CURB ENDS TO ROUNDED AND BATTERED FACES TO BE CUT WHEN CALL FOR ON THE PLANS.
- CURVES SEE CHART.
- 6. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON
- 5. MAXIMUM LENGTH OF CURB STONES = 10'.
- 4. MINIMUM LENGTH OF CURB STONES = 4'.
- APPROXIMATELY THE SAME LENGTH.
- 3. ADJOINING STONES SHALL HAVE THE SAME OR
- 2. SEE PLANS FOR PAVEMENT CROSS SECTION.
- 1. SEE PLANS FOR CURB LOCATION.

<u>NOTES</u>



GRANITE CURB

WEARING COURSE -

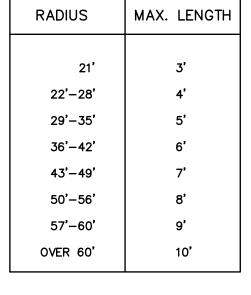
BINDER COURSE -

3,000 psi CONCRETE-

STRAIGHT OR CURVED

6" (MIN)





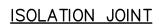
- NHDOT ITEM #304.3 -

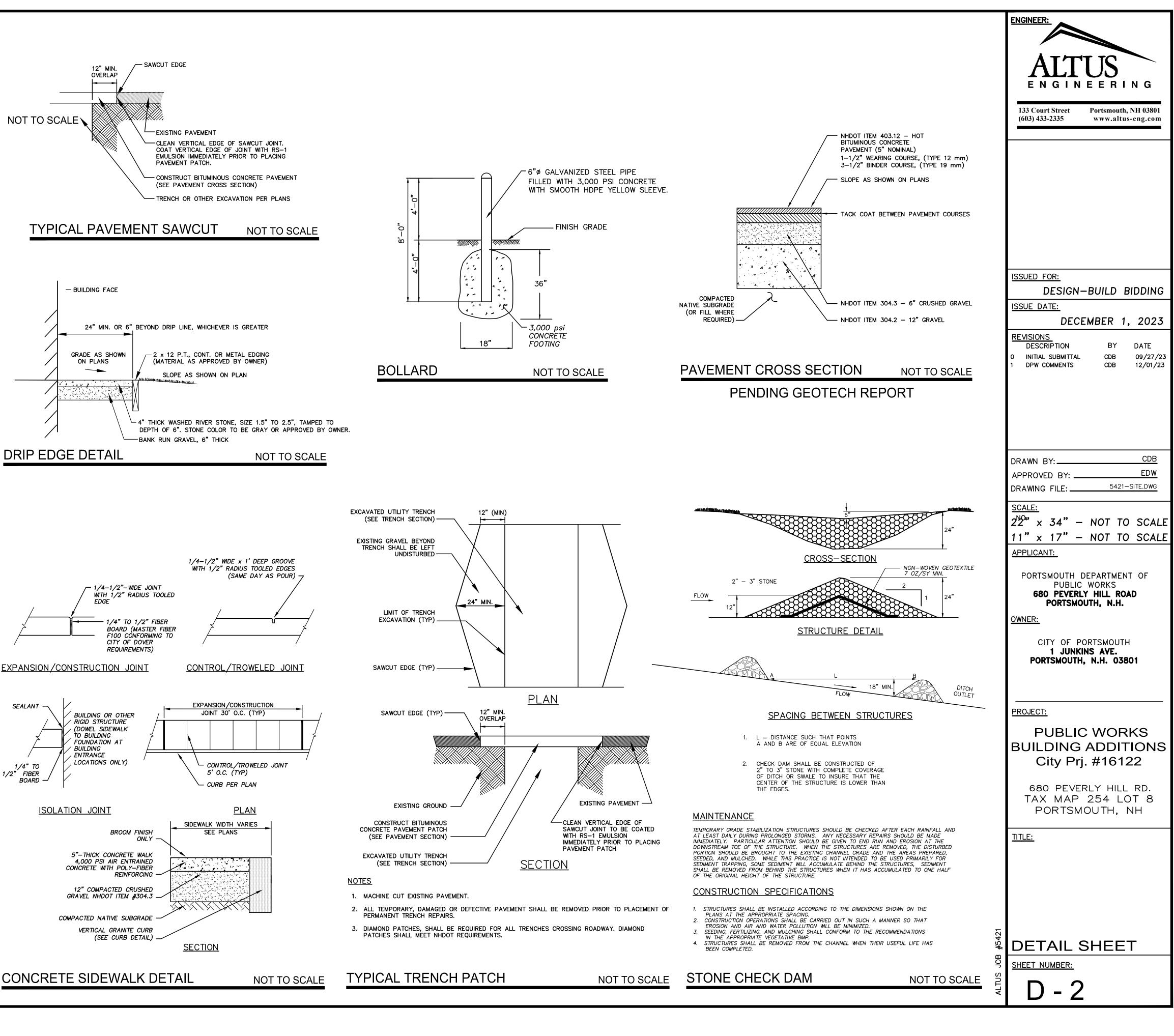
CRUSHED GRÄVEL

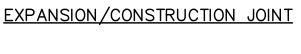
NOT TO SCALE

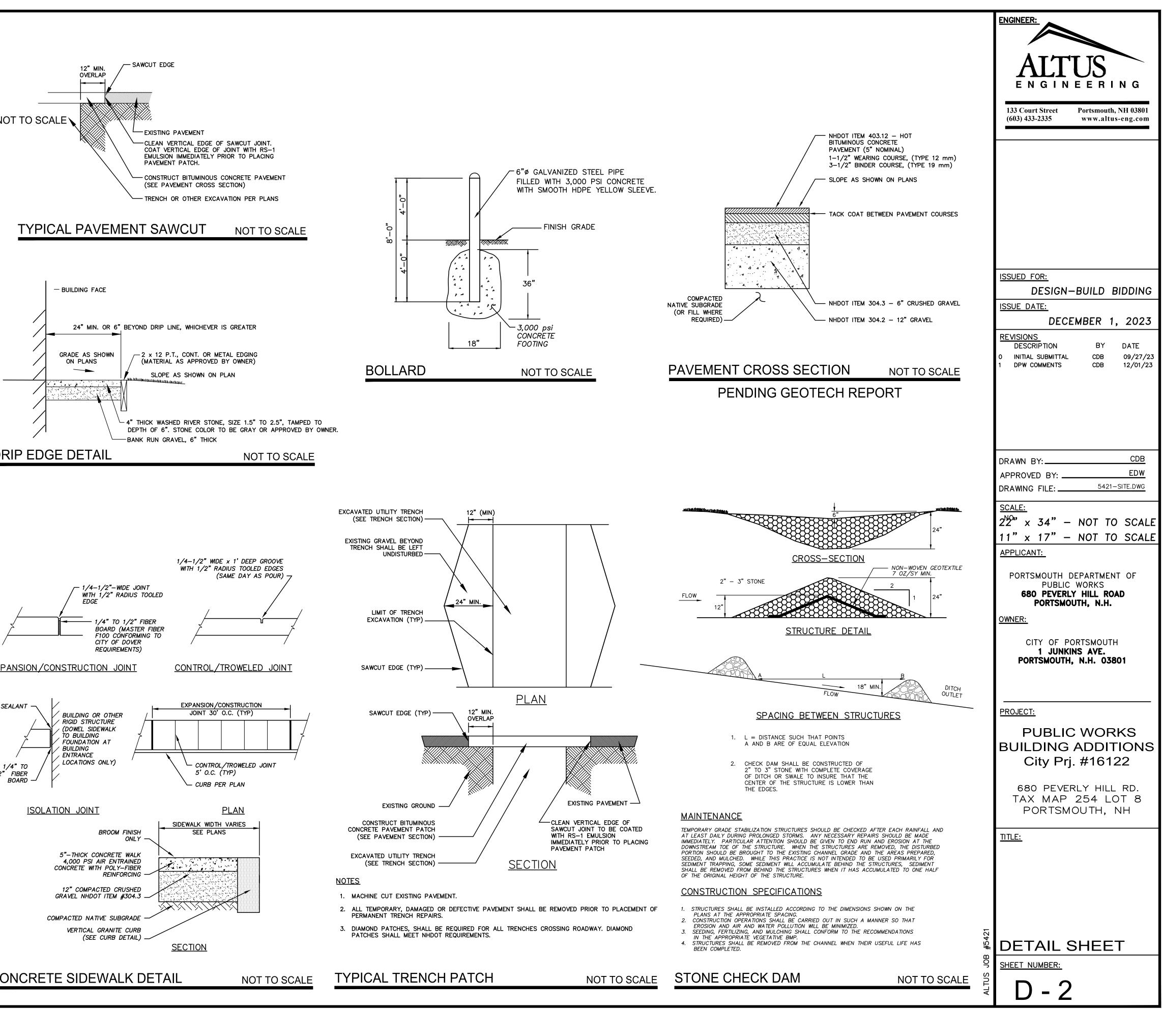
CONCRET	E SI	DEWA	LΚ	DE

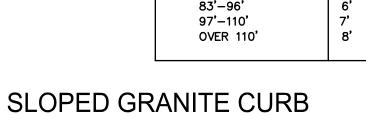
~	BROOM FINISH ONLY
_	5"-THICK CONCRETE WALK 4,000 PSI AIR ENTRAINED CONCRETE WITH POLY-FIBER REINFORCING
_	12" COMPACTED CRUSHED GRAVEL NHDOT ITEM #304.3
/	COMPACTED NATIVE SUBGRADE
_	VERTICAL GRANITE CURB (SEE CURB DETAIL)











SEE CHART

1. SEE SITE PLAN FOR LIMITS OF CURBING

RADIUS FOR STONES

WITH SQUARE JOINTS

16'-28

29'–41'

42'-55'

56'-68'

69'-82'

2. ADJOINING STONES OF STRAIGHT CURB LAID ON CURVES

3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18"

4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'

SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH

5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES -

MAXIMUM

LENGTH

5" (MIN)

4▼ · ·

'12" (MIN)

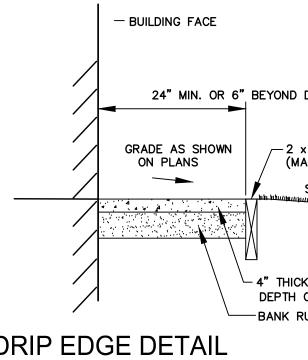
'12" (MIN)

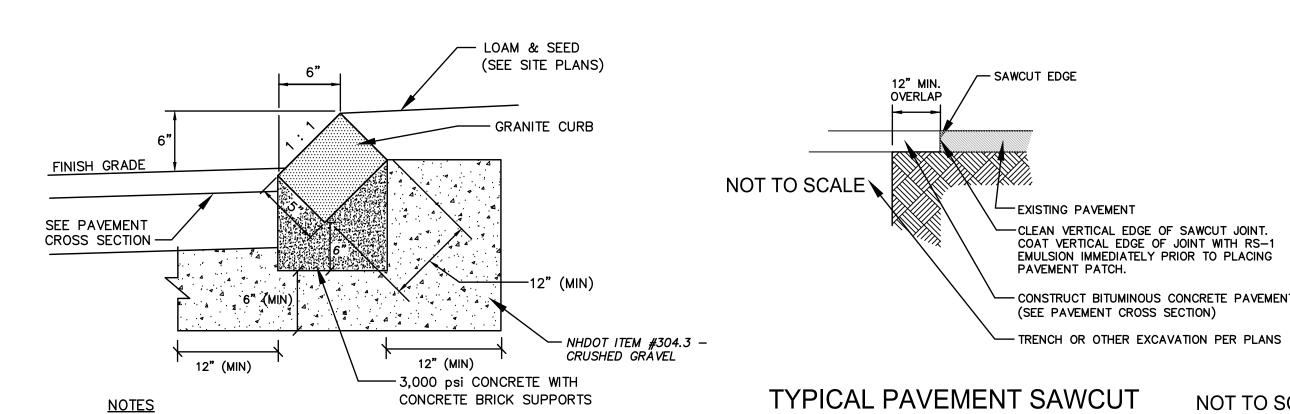
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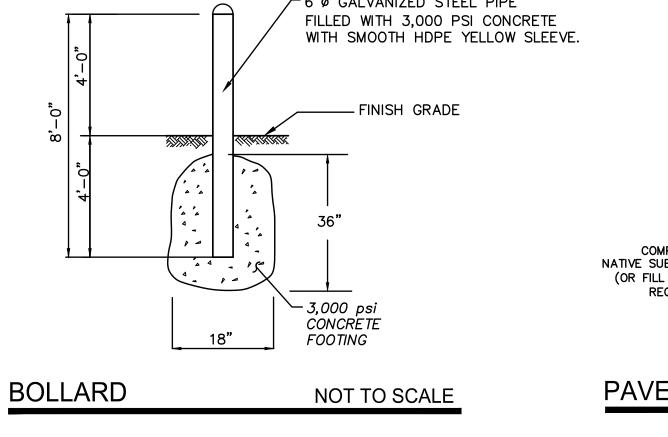
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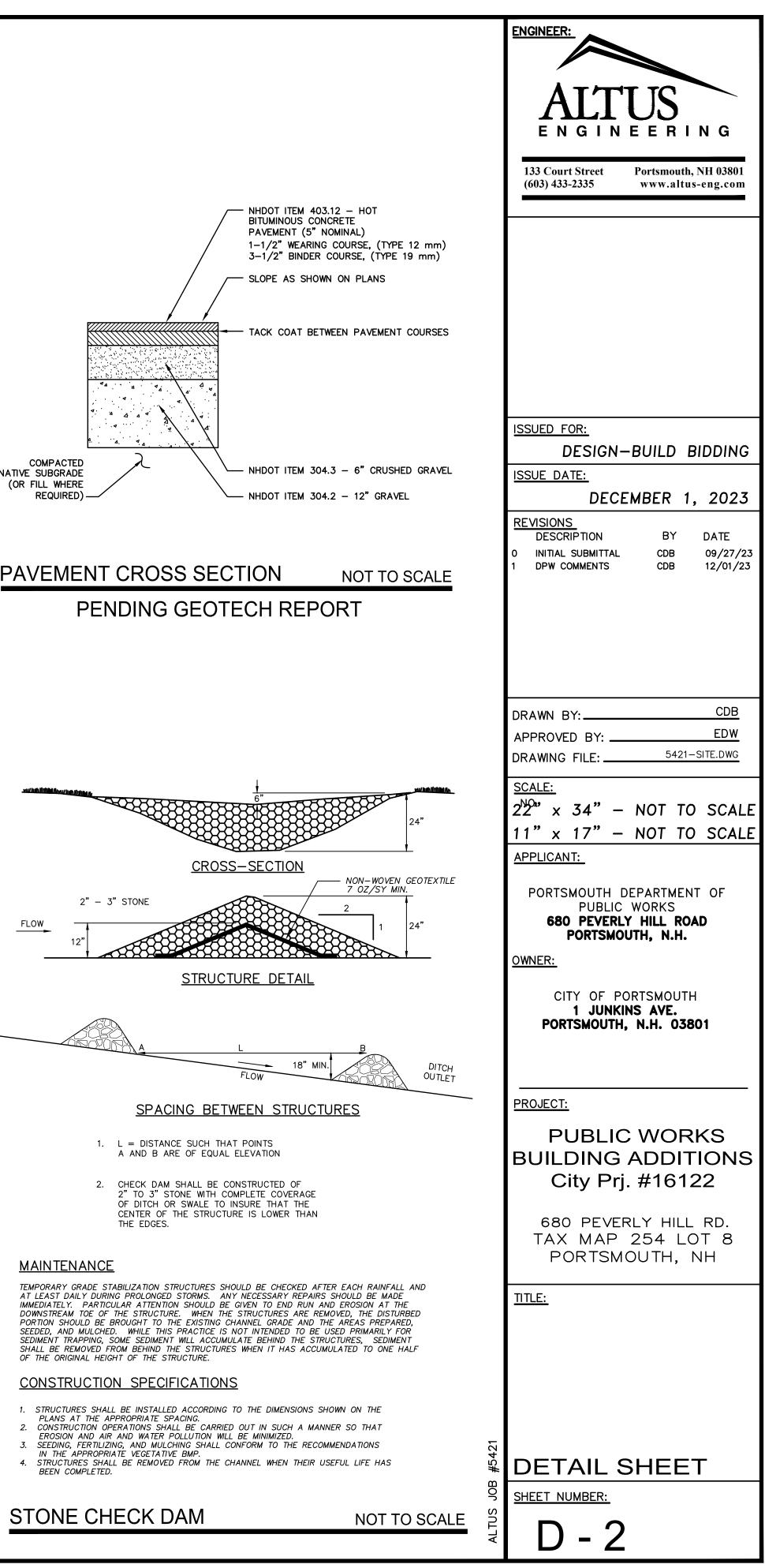
18" (MIN)

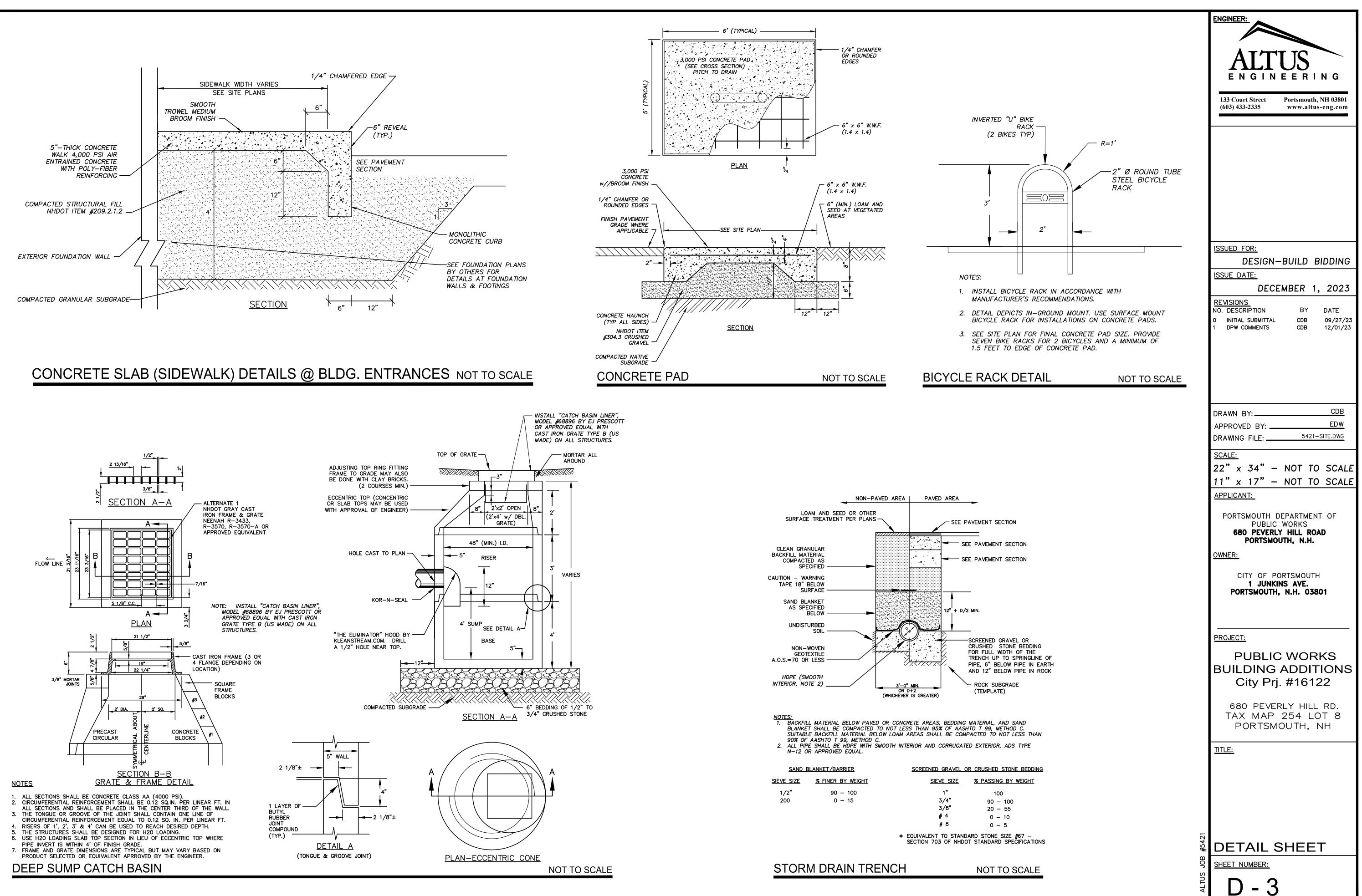
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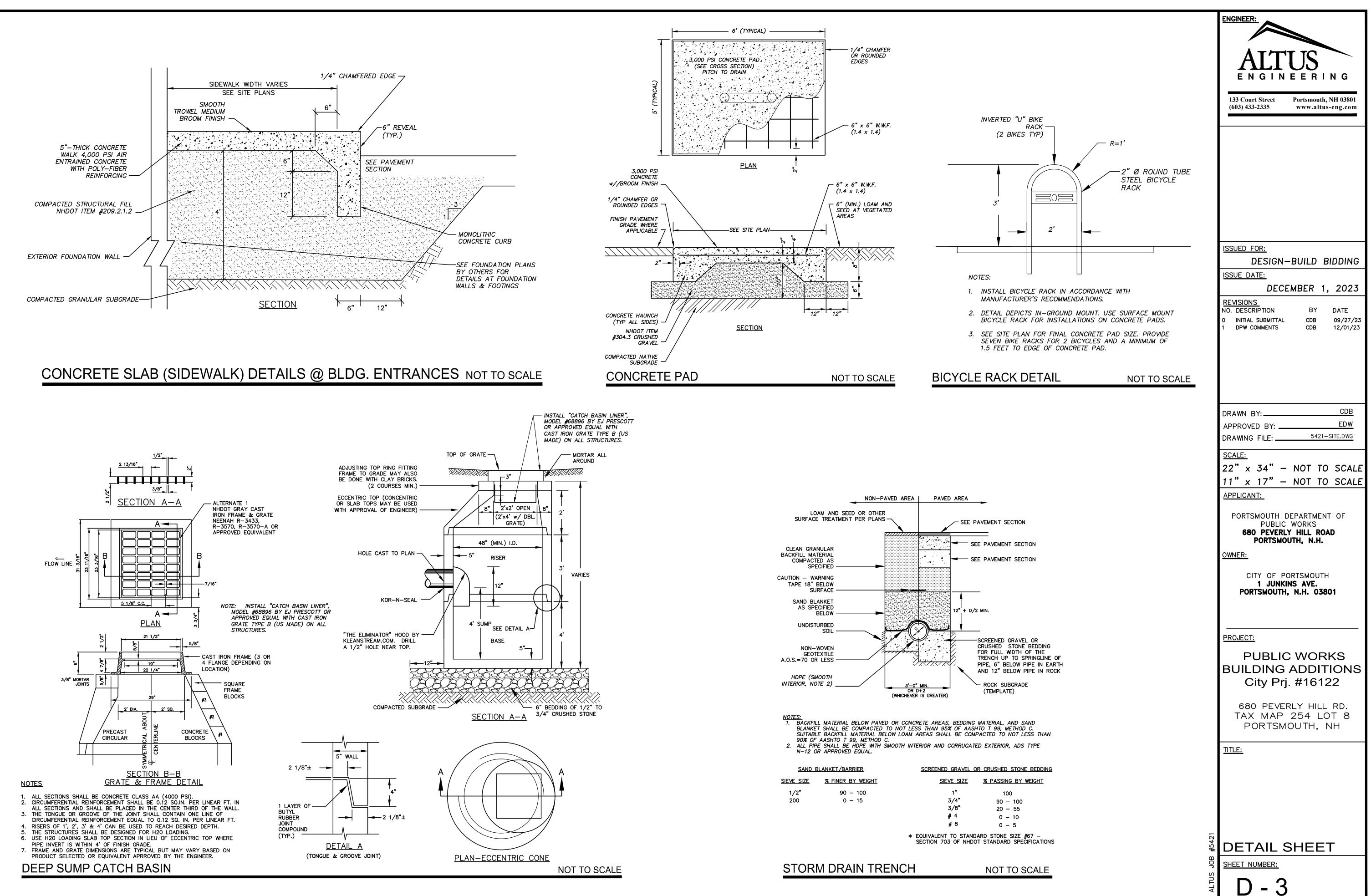


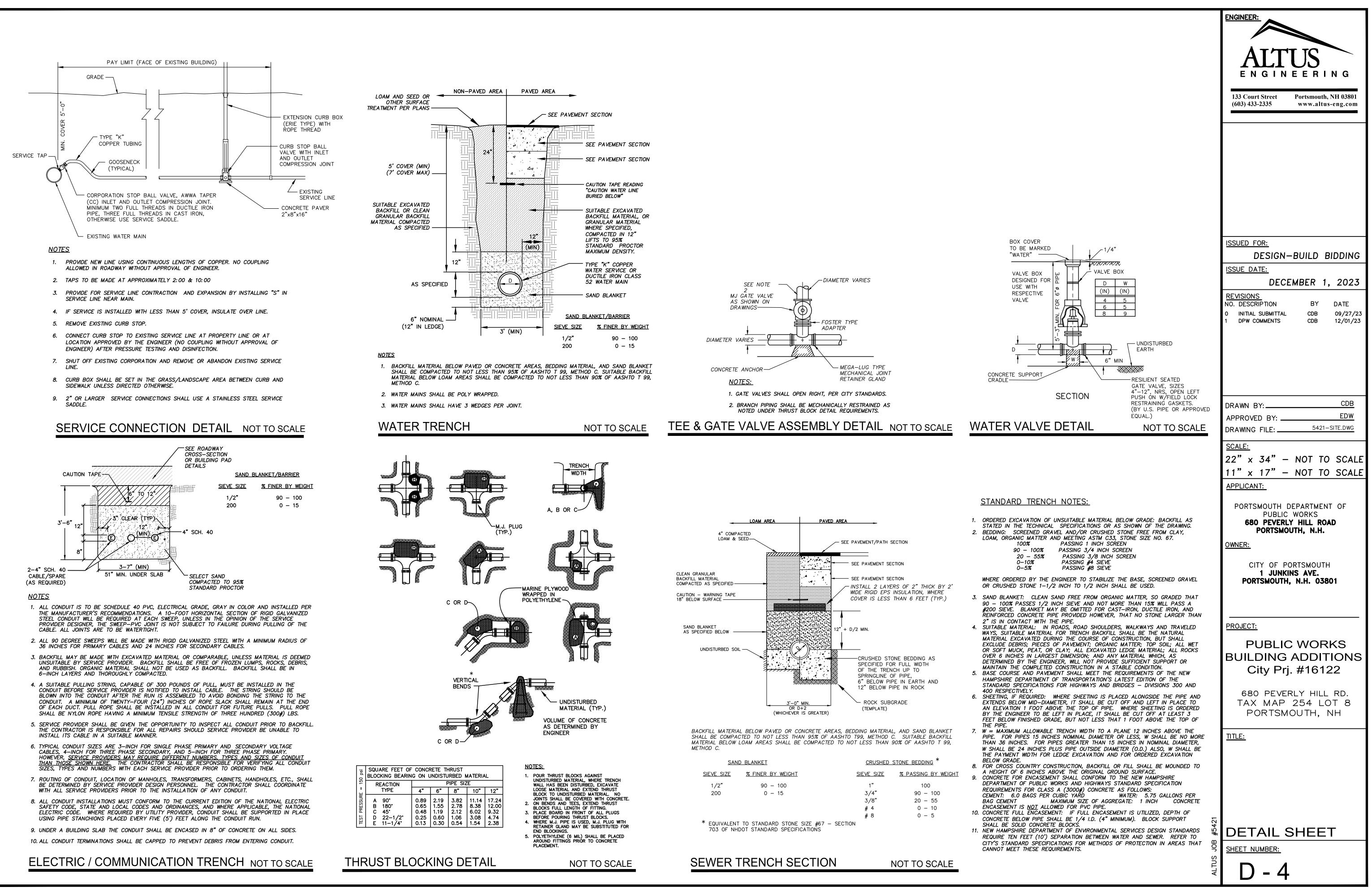


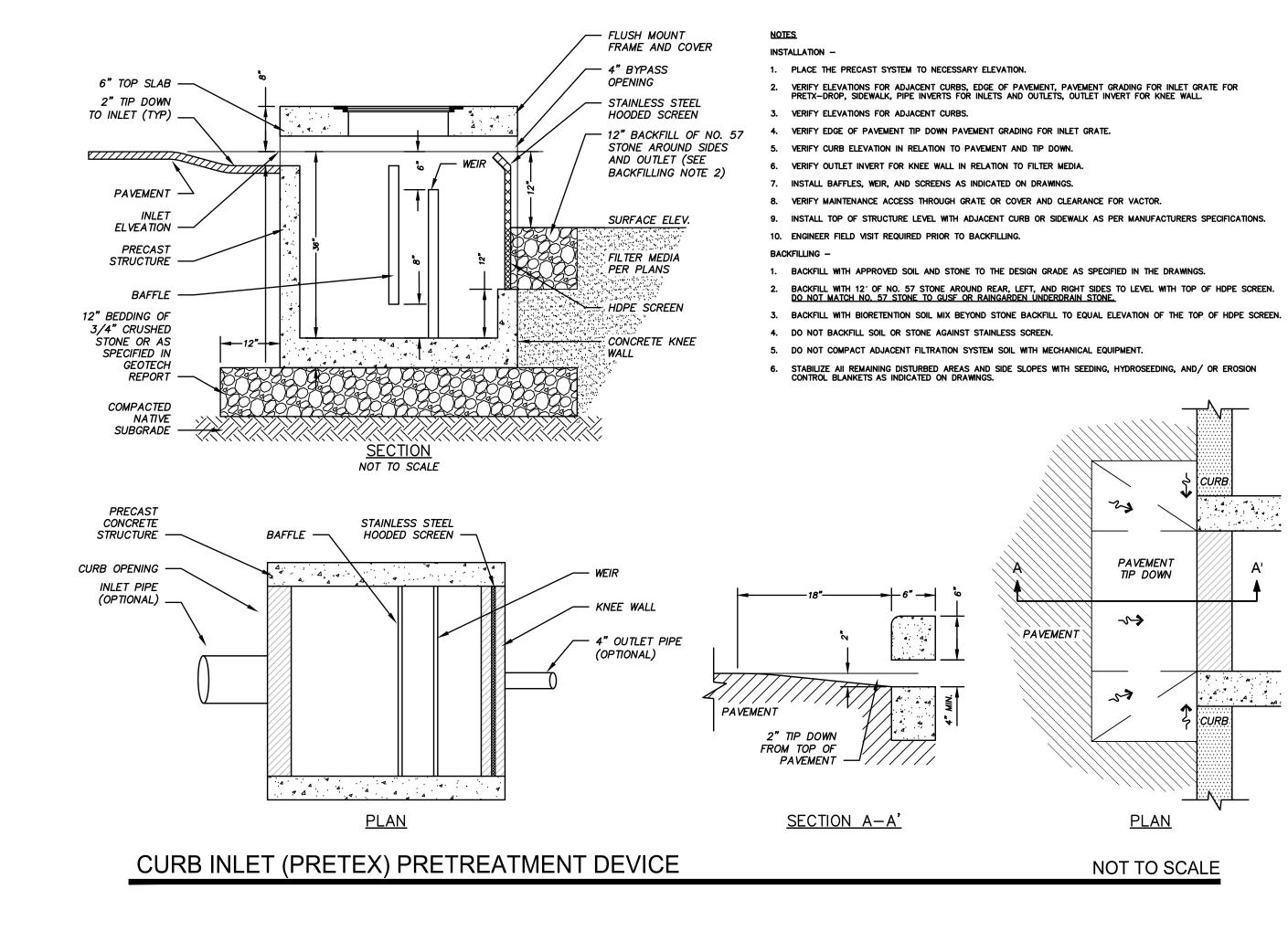


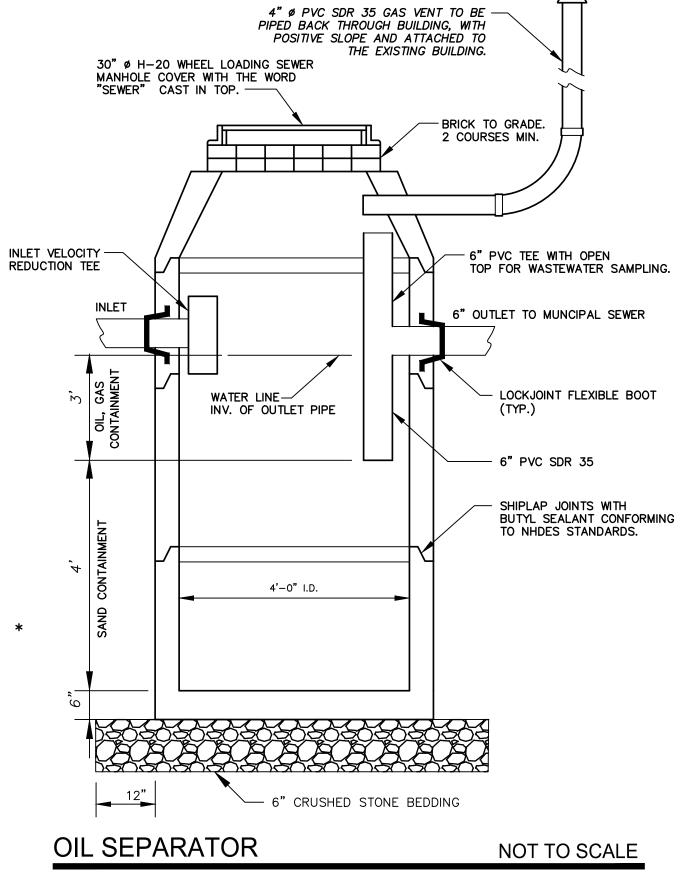








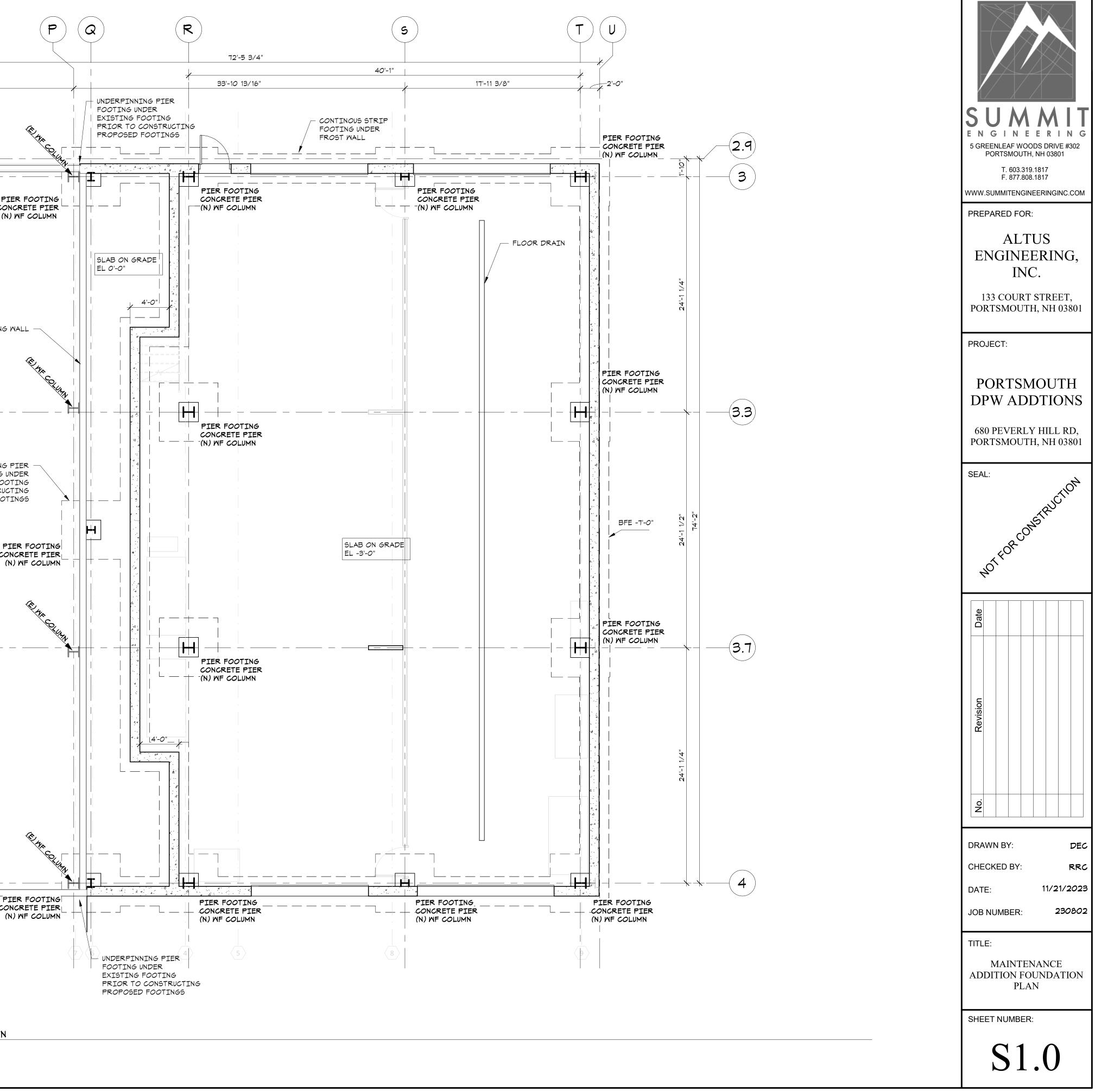




OPTIONAL INTERIOR INSTALLATION

	ENGINEER.				
	ENGINEER:				
	ALTUS				
	ENGINEERING				
133 Court Street Portsmouth, NH 03					
	(603) 433-2335 www.altus-eng.com				
	ISSUED FOR:				
	DESIGN-BUILD BIDDING				
	ISSUE DATE:				
	DECEMBER 1, 2023				
	REVISIONS NO. DESCRIPTION BY DATE				
	0 INITIAL SUBMITTAL CDB 12/01/23				
	DRAWN BY: CDB				
	APPROVED BY: EDW DRAWING FILE: 5421-SITE.DWG				
	SCALE:				
	11" x 17" – NOT TO SCALE				
	APPLICANT:				
	PORTSMOUTH DEPARTMENT OF PUBLIC WORKS				
	680 PEVERLY HILL ROAD PORTSMOUTH, N.H.				
	OWNER:				
	CITY OF PORTSMOUTH 1 JUNKINS AVE.				
	PORTSMOUTH, N.H. 03801				
	PROJECT:				
	PUBLIC WORKS BUILDING ADDITIONS				
	City Prj. #16122				
	680 PEVERLY HILL RD. TAX MAP 254 LOT 8				
	PORTSMOUTH, NH				
	<u>TITLE:</u>				
# 5421	DETAIL SHEET				
ALTUS JOB #5421					
, SUI					
AL ⁻	D - 5				

11/21/2023 4:03:52 PM	ORITH	(0.3)
	CHILLON END	18'-7 1/2"
		PIE CON (N)
		EXISTING P
		UNDERPINNING F FOOTING UN EXISTING FOOT PRIOR TO CONSTRUCT PROPOSED FOOTI
		PI CON (N
		- <u> </u>
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123-007_DPW_Structu		PI CON (N
smouth DPW\Drawings		
P:\Project Files\Altus Engineering\2023\Portsmouth DPW\Drawings\23-007_DPW_Structural updated-2022.rvt		
P:\Project Files\Altus	1 51.0	MAINTENACE ADDITION 3/16" = 1'-0"

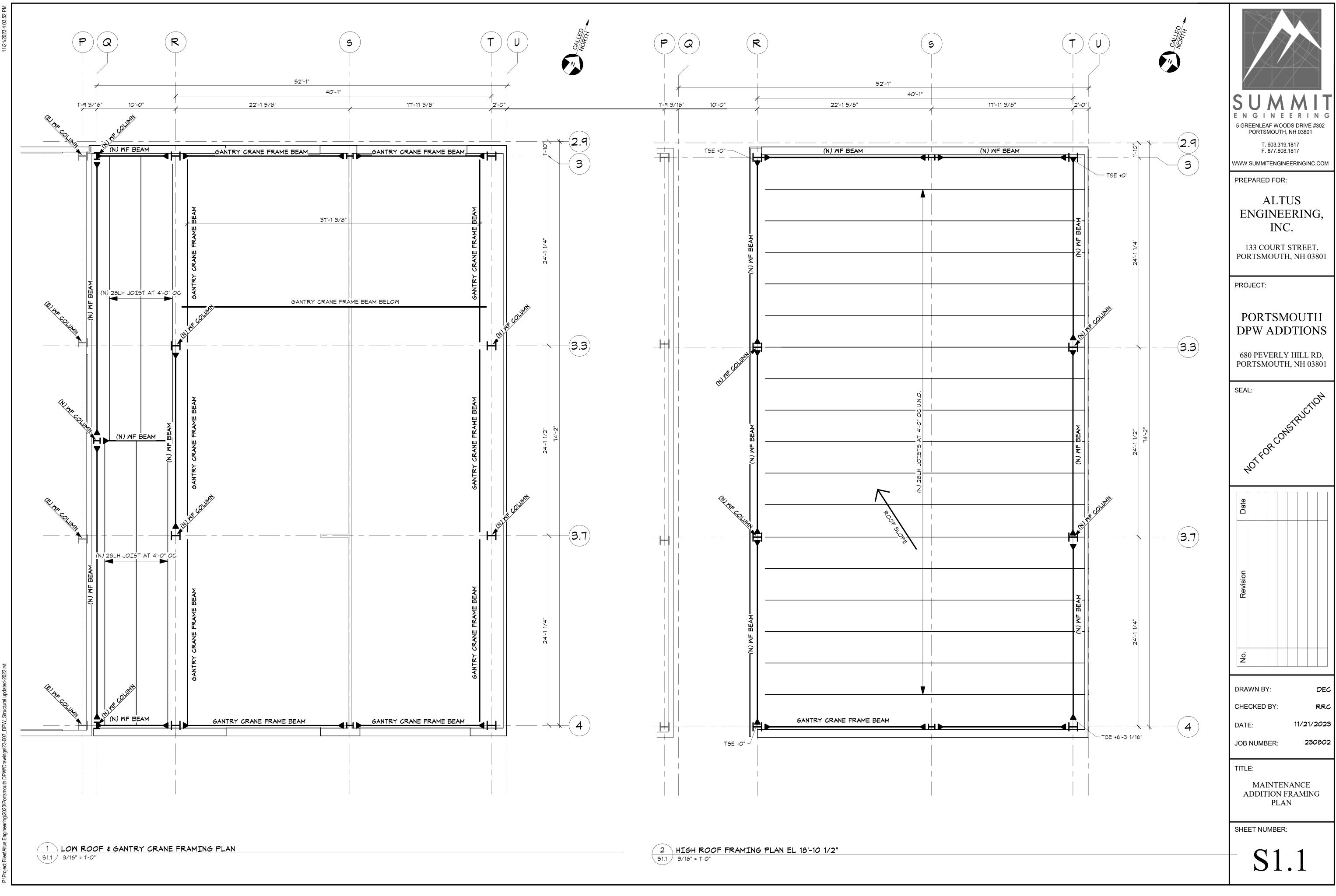


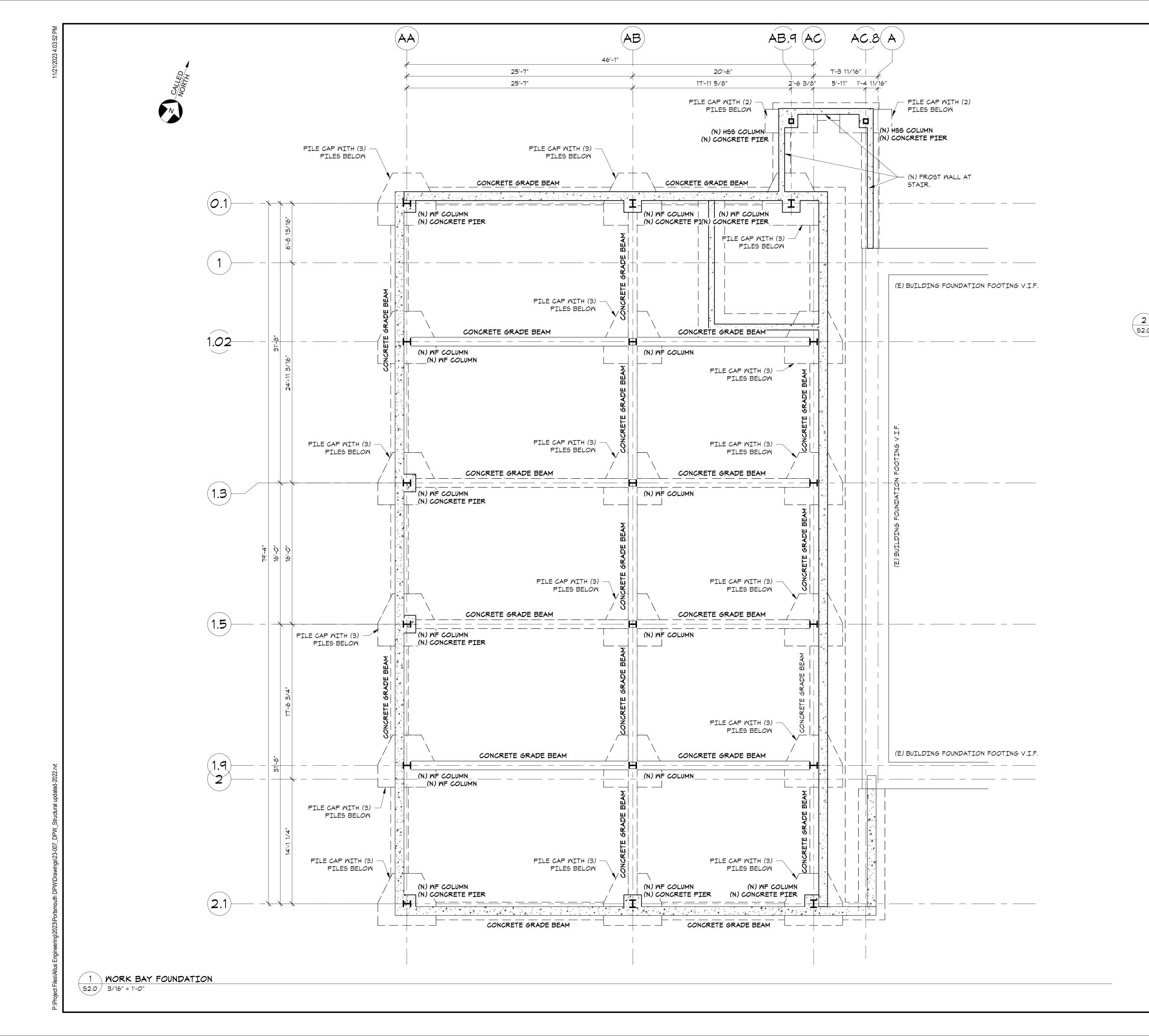
DEC

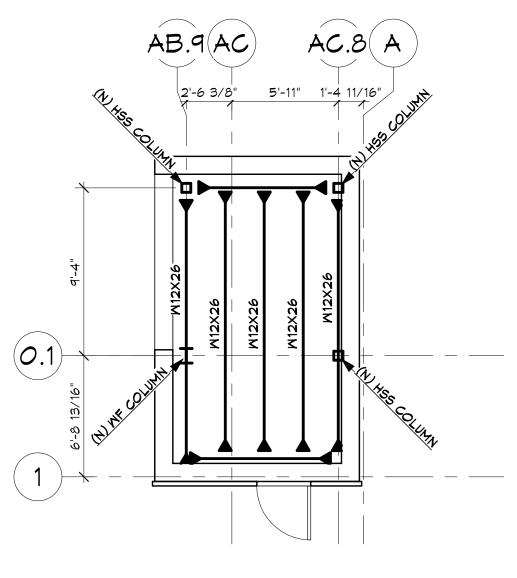
RRC

11/21/2023

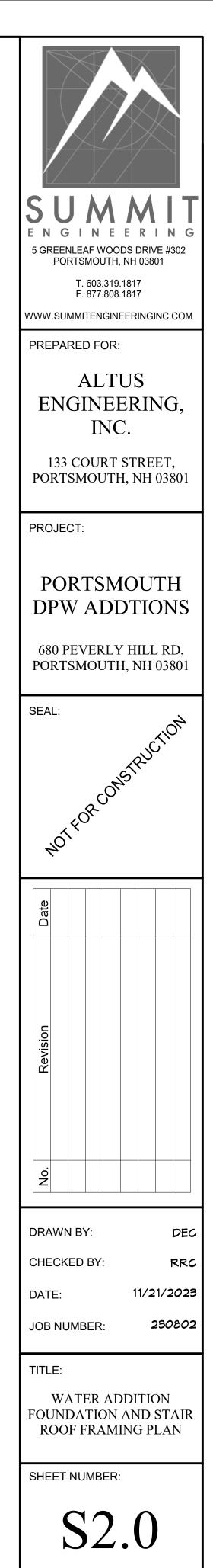
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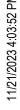


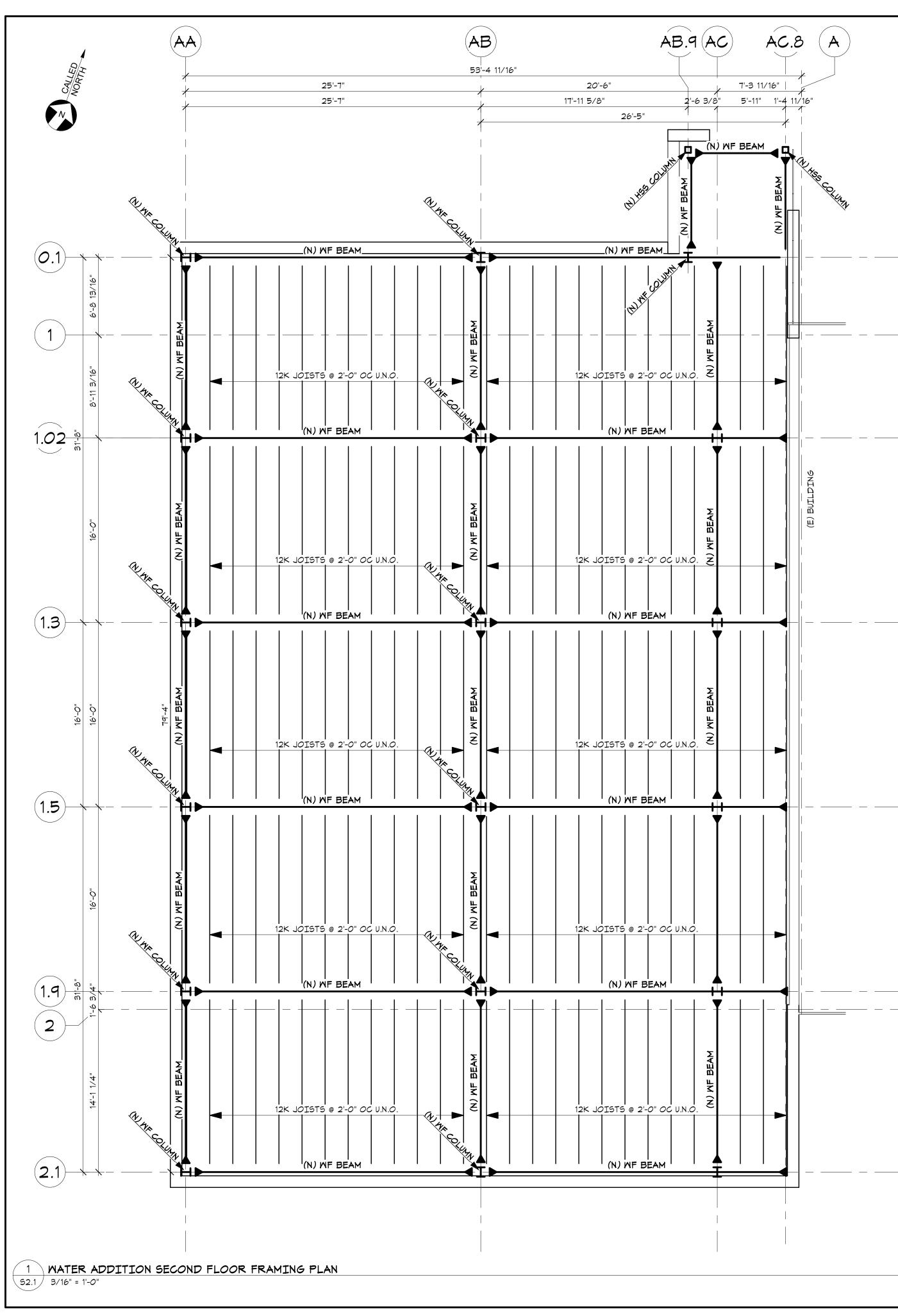




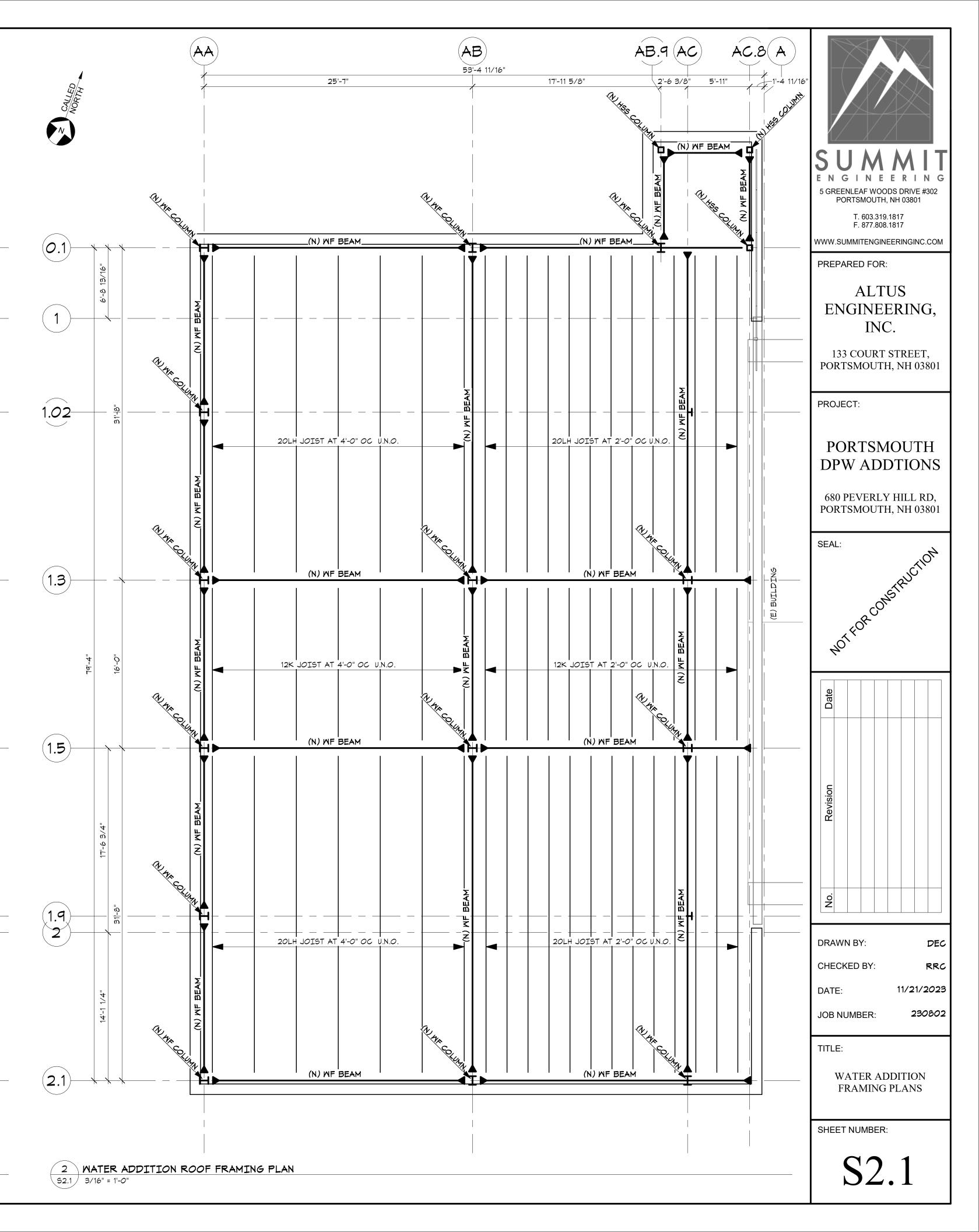
2 **STAIR ROOF FRAMING PLAN** 52.0 3/16" = 1'-0"

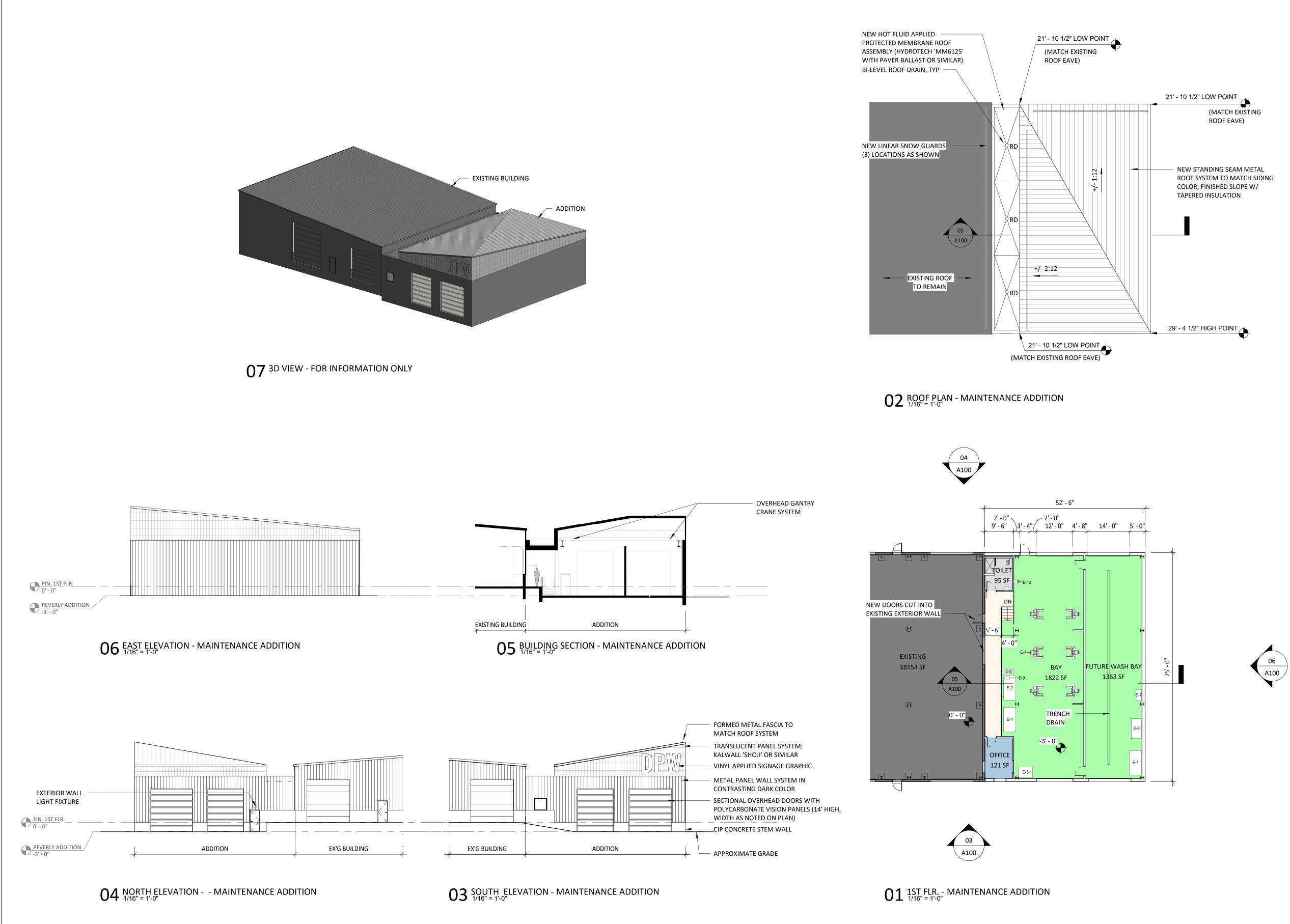




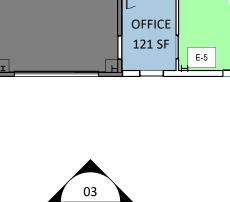


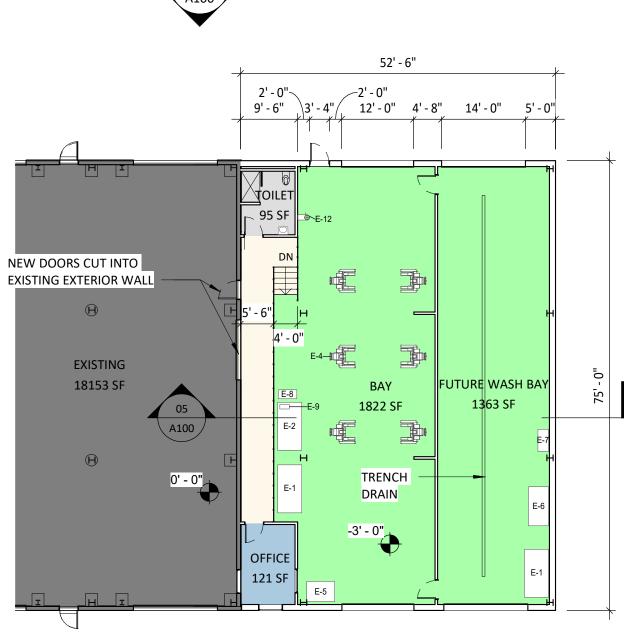
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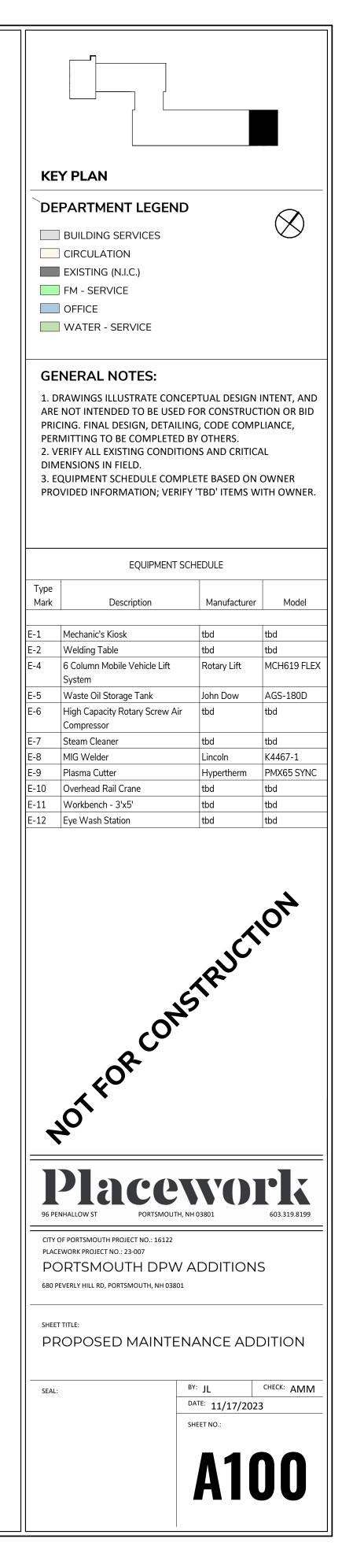


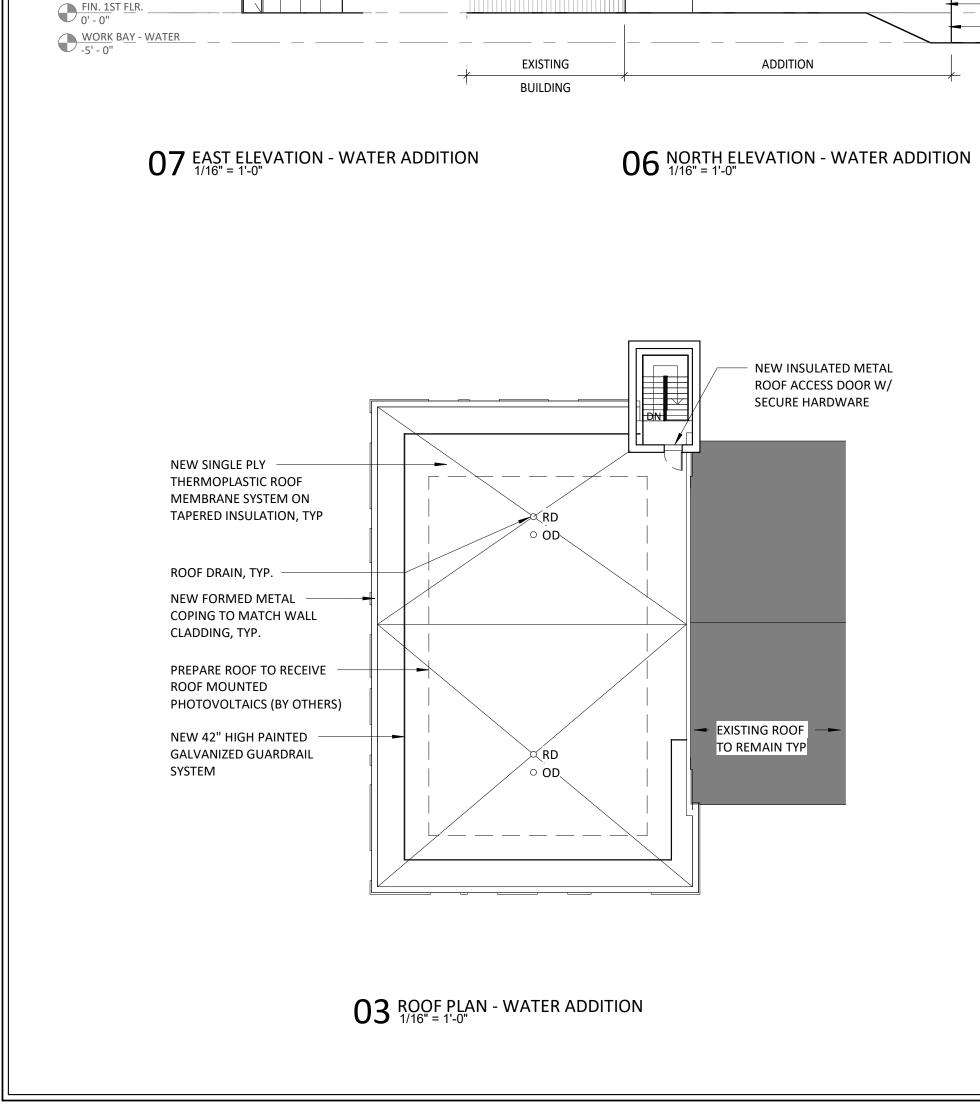


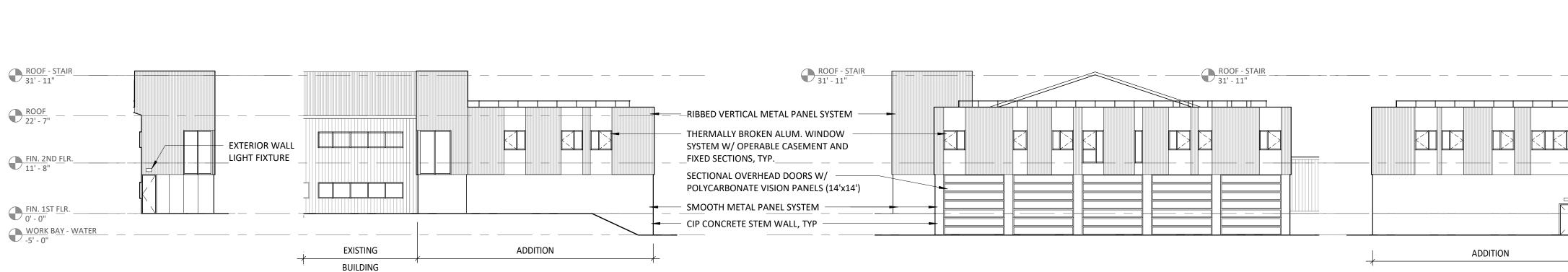






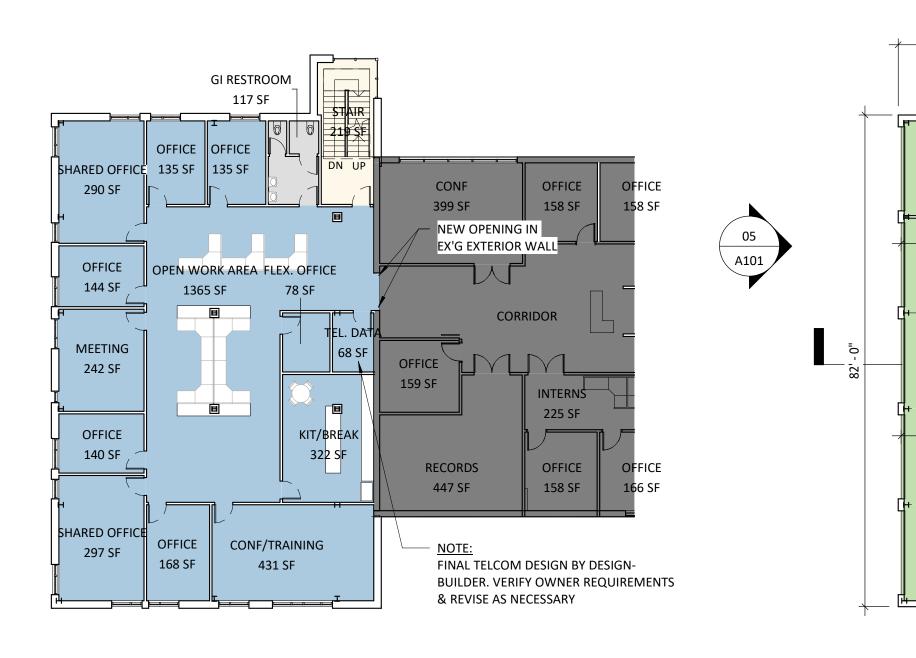






O2 $\frac{2ND}{1/16"}$ FLR. - WATER ADDITION

01 1ST FLR. - WATER ADDITION



05 WEST ELEVATION - WATER ADDITION



PARKING BAY - CCTV

545 SF

35' - 0"

PARKING BAY SMALL

545 SF

-5' - 0"

PARKING BAY LARGE

840 SF

47' - 6"

840 SF

840 SF

53' - 6"

06 A101

09 3d view - for information only

08 BUILDING SECTION - WATER ADDITION $\frac{1}{16} = 1'-0''$

