

Jul 08, 2024

New Hampshire Department of Environmental Services (NHDES)

Re: **Portsmouth Regional Hospital (PRH) – Culvert Replacement**
333 Borthwick Ave, Portsmouth, NH 03801

Portsmouth Regional Hospital is an existing acute hospital on a ±21-acre parcel at 333 Borthwick Ave, Portsmouth, NH 03801. Along the northern property boundary (adjacent to interstate 10) there is an existing *Unitil* natural gas enclosure with regulators and valves. There is an existing gravel drive with (3) 24" culverts that cross over a man made swale (now classified as wetland) that *Unitil* uses to service their equipment. The existing (3) 24" culverts were installed in 1988 based on design drawings by *Kimball Chase*.

On behalf of Portsmouth Regional Hospital and HCA Healthcare, at the request of the City of Portsmouth, Bowman is proposing to remove the existing (3) 24" culverts and replace with a 10' wide by 3' tall box culvert. All construction and materials shall be in compliance with the *New Hampshire Stream Crossing Guidelines*, latest edition. Temporary disturbance will be ±1,600 square feet and permanent disturbance will be ±750 square feet.

The contributing drainage area to the existing crossing is ±195-acres, based on USGS topographic delineation. A majority of the contributing drainage area is state prime wetland that flows from south of Borthwick Avenue through two (2) city owned and maintained 18" PVC pipes.

See **Appendix A** for the Overall Drainage Area Map. Contributing drainages area parameters:

- Area: ±195-acres
- Time of Concentration: 128.4 minutes
 - 100' sheet flow at 0.5% slope with 0.95 Manning's N Value. Two-year, 24 hr rainfall: 3.33"
 - 3,780' shallow concentrated flow at 0.5% slope (unpaved)
- Curve Number: 90 (very conservative estimate)

See **Appendix B** for Peak Stormwater Runoff outputs, based on Hydrology Studio 2024 v 3.0.0.32 with Portsmouth, NH IDF Data:

- 2-year storm event: 71.57 cubic ft/ second (cfs)
- 10-year storm event: 136.0 cubic ft/ second (cfs)

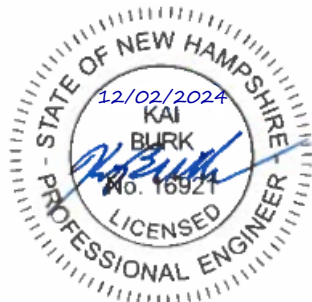
The replacement box culvert has been sized to meet and exceed the 10-year storm event. The 10' wide x 3' tall box culvert at 0.09% slope has a flow capacity of 164.93 cfs. See **Appendix C** for Studio Express 2023 v1.0.0.15 sizing model results.

If you have any questions, please feel free to reach me at mhamby@bowman.com.



Matthew Hamby

Principal, Civil Engineer
Bowman Consulting



Kai Burk, PE
Chief Civil Engineer

Attachments:

- Appendix A – Overall Drainage Basin Map
- Appendix B – Peak Stormwater Runoff Results
- Appendix C – Box Culvert Sizing Results
- Appendix D – Construction Documents

Pre Overall



Hydrograph by Return Period

Project Name:

Hydrology Studio v 3.0.0.32

07-15-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Outflow (cfs)							
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
1	NRCS Runoff	Pre Overall		71.57			136.0			244.7

Tc by TR55 Worksheet

Project Name:

Hydrology Studio v 3.0.0.32

07-15-2024

Overall NRCS Runoff

Hyd. No. 1

Description	Segments			Tc (min)
	A	B	C	
Sheet Flow				
Description	Overall			
Manning's n	0.950	0.013	0.013	
Flow Length (ft)	100			
2-yr, 24-hr Precip. (in)	3.33	2.28	2.28	
Land Slope (%)	.5			
Travel Time (min)	73.22	0.00	0.00	73.22
Shallow Concentrated Flow				
Flow Length (ft)	3780			
Watercourse Slope (%)	0.50	0.00	0.00	
Surface Description	Unpaved	Paved	Paved	
Average Velocity (ft/s)	1.14			
Travel Time (min)	55.22	0.00	0.00	55.22
Channel Flow				
X-sectional Flow Area (sqft)				
Wetted Perimeter (ft)				
Channel Slope (%)				
Manning's n	0.013	0.013	0.013	
Velocity (ft/s)				
Flow Length (ft)				
Travel Time (min)	0.00	0.00	0.00	0.00
Total Travel Time				128.44 min

Channel Report

APPENDIX C

Project Name: New Project

Studio Express by Hydrology Studio v 1.0.0.15

07-15-2024

BOX CULVERT

Channel 1

RECTANGULAR

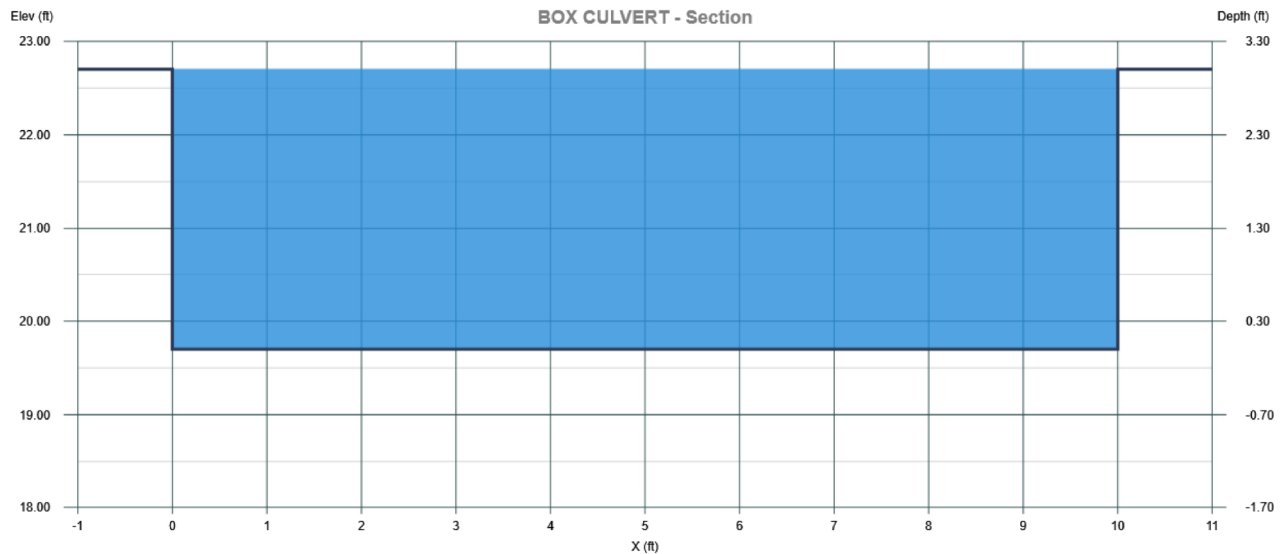
Bottom Width = 10.00 ft
 Total Depth = 3.00 ft
 Invert Elevation = 19.70 ft
 Channel Slope = 0.100 %
 Manning's n = 0.013

DISCHARGE

Method = Q vs Depth
 Q Min = 4.67 cfs
 Q Max = 164.93 cfs
 Increments = 10

CALCULATION SAMPLE

Flow	Depth	Area	Velocity	WP	n-value	Crit Depth	HGL	EGL	Max Shear	Top Width
(cfs)	(ft)	(sqft)	(ft/s)	(ft)		(ft)	(ft)	(ft)	(lb/sqft)	(ft)
164.93	3.00	30.00	5.50	16.00	0.013	2.04	22.70	23.17	0.19	10.00



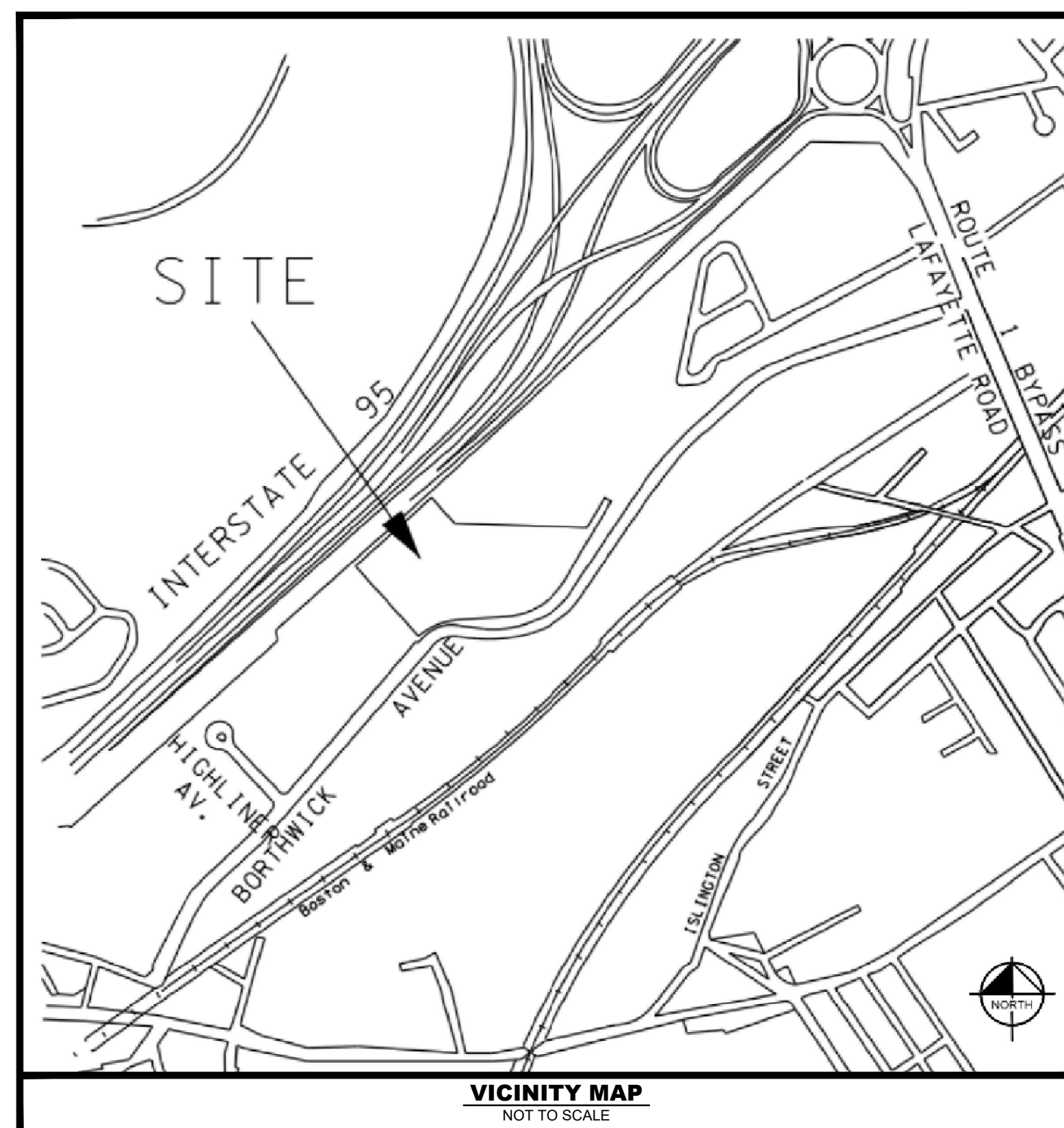
GRADING AND DRAINAGE PLANS FOR HCA PORTSMOUTH REGIONAL HOSPITAL CULVERT REPLACEMENT - UTILITY ACCESS DRIVE

333 BORTHWICK AVE, PORTSMOUTH, NH 03801

CITY OF PORTSMOUTH, NH - CONDITIONAL USE PERMIT SUBMITTAL : DECEMBER 23, 2024

SITE DATA TABLE	
OWNER OF RECORD	HCA HEALTH SERVICES OF NH INC D/B/A PRH 32902
SITE ADDRESS	333 BORTHWICK AVE, PORTSMOUTH, NH 03801
TAX MAP & LOT	TAX MAP 240, LOT 2-1
ZONING	OR - OFFICE RESEARCH
LAND USE	HOSPITAL
PROPERTY AREA	± 20.87 AC

PROJECT PURPOSE
<p>AT THE REQUEST OF THE CITY OF PORTSMOUTH, NH - THIS PROJECT INTENDS TO RE-GRADE A HISTORIC MANMADE SWALE TO THE ORIGINAL 1988 DRAINAGE DESIGN BY KIMBALL CHASE, THAT ULTIMATELY CONVEYS PUBLIC STORMWATER RUNOFF FROM SOUTH OF BORTHWICK AVENUE TO NORTH OF INTERSTATE 95 IN PORTSMOUTH, NEW HAMPSHIRE. THE SUBJECT HISTORIC MANMADE SWALE HAS NOW BEEN MAPPED AS STATE WETLANDS. HCA HEALTH SERVICES OF NH INC D/B/A PRH (PROPERTY OWNER) PROPOSED TO REGRADE PORTIONS OF THE WETLAND THAT LIE ON THEIR PROPERTY ONLY. PROPOSED PROJECT SCOPE CONSISTS OF BY-PASS STORMWATER PUMPING, RE-GRADING, LOWERING STORMWATER CULVERTS, AND RE-STABILIZING WITH NEW ENGLAND WETLAND SEED MIX.</p>



**CITY OF PORTSMOUTH
ROCKINGHAM COUNTY, NEW HAMPSHIRE**

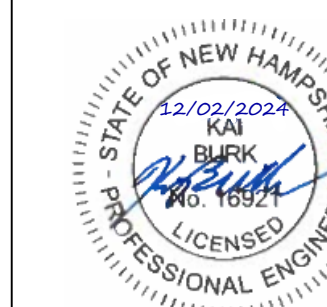
PROJECT DESIGN TEAM

CIVIL ENGINEER
BOWMAN CONSULTING
CONTACT: MATTHEW HAMBY
PHONE: 615-649-7622
EMAIL: MHAMBY@BOWMAN.COM

SURVEY
JAMES VERRA & ASSOCIATES, INC.
101 SHATTUCK WAY, SUITE 8
NEWINGTON, NH 03801
PHONE: (603) 436-3557
CONTACT: JIM VERRA, LLS

ENVIRONMENTAL
GOVE ENVIRONMENTAL SERVICES, INC
8 CONTINENTAL DR, UNIT H
EXTER, NH 03833
PHONE: (603) 778-0654
CONTACT: BRENDEN WALDEN

Sheet List Table	
Sheet Number	Sheet Title
C0-00	COVER SHEET
C0-01	GENERAL NOTES
C1-00	SITE SURVEY - BY OTHERS
C2-00	CULVERT REPLACEMENT- PLAN & PROFILE
C2-01	SITE PLAN - OVERALL
C3-00	EROSION CONTROL PLAN
C3-01	EROSION CONTROL DETAILS



**PORTSMOUTH REGIONAL HOSPITAL
HCA HEALTHCARE
PORTSMOUTH, NH**



Know what's below.
Call before you dig.

PLAN STATUS		
DATE	DESIGN	DESCRIPTION

MARCH 2024

COVER SHEET

C0-00

GENERAL CONSTRUCTION NOTES

- THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE NEW HAMPSHIRE STORMWATER MANUAL, VOLUME 2 (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
- THE INFORMATION PROVIDED IN THESE PLANS IS TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF THE WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT ANY INVESTIGATION THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITION THAT WILL BE ENCOUNTERED AND UPON WHICH THEIR BIDS WILL BE BASED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE BOTH THE SURFACE AND SUBSURFACE CONDITIONS AND BASE HIS PRICING ACCORDINGLY. GEOTECHNICAL AND ENVIRONMENTAL REPORTS ARE AVAILABLE FOR REVIEW.
- EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE COMMENCING ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. AN APPROXIMATE LIST OF THE UTILITY COMPANIES WHICH THE CONTRACTOR MUST CALL BEFORE COMMENCING WORK IS PROVIDED ON THE COVER SHEET OF THESE CONSTRUCTION PLANS. THIS LIST SERVES AS A GUIDE ONLY AND IS NOT INTENDED TO LIMIT THE UTILITY COMPANIES WHICH THE CONTRACTOR MAY WISH TO NOTIFY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, GEOTECHNICAL REPORT AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
- ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
- ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NEW HAMPSHIRE DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF NEW HAMPSHIRE PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING ALL QUANTITIES, TAKE-OFF MEASUREMENTS, MATERIALS, ETC. DURING THE BID PROCESS, WHEN DISCREPANCIES OCCUR, THE PHYSICAL PLAN TAKES PRECEDENCE. THE ENGINEER, LANDSCAPE ARCHITECT, COUNTY, CITY OR PROJECT MANAGERS ARE NOT TO BE HELD RESPONSIBLE FOR DISCREPANCIES FROM THE SPECIFICATIONS OR PLANS.
- THE CONTRACTOR SHALL LIMIT CONSTRUCTION OPERATIONS TO WITHIN THE LIMITS OF CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY DAMAGES OUTSIDE THE LIMITS OF CONSTRUCTION.
- CONTRACTOR IS ADVISED THAT THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT ALL OPERATORS FILE A NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES GENERAL PERMIT PRIOR TO BEGINNING WORK. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN THE SAME. A COPY SHALL BE SENT TO THE ENGINEER OF RECORD, ARCHITECT OF RECORD AND THE OWNER.
- PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF PROPOSED EXCAVATION." THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 2 WORKING DAYS AND A MAXIMUM OF 5 WORKING DAYS PRIOR TO EXCAVATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE LOCAL ELECTRICAL PROVIDER ON ANY WORK IN THE VICINITY OF OVERHEAD OR UNDERGROUND POWER LINES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL PLANS RELATED TO SITE WORK INCLUDING (BUT NOT LIMITED TO) LANDSCAPE, IRRIGATION, SITE LIGHTING, BUILDING FOUNDATION, PLUMBING, FIRE SPRINKLER, AND OTHER APPLICABLE PLANS FOR CONFLICTING INFORMATION AND ALERT OWNER'S REPRESENTATIVE OF ANY CONFLICT FOR RESOLUTION.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL IRRIGATION, STREET LIGHTING, AND ELECTRICAL CONDUIT THAT WILL BE IN CONFLICT WITH ANY PROPOSED CONSTRUCTION AND SHALL RESOLVE CONFLICT ACCORDINGLY. COST OF CONFLICT RESOLUTION SHALL BE INCLUDED IN THE BID.
- ANY DEBRIS RESULTING FROM STRIPING AND DEMOLITION OPERATIONS SHALL BE REMOVED FROM THE SITE AT FREQUENT INTERVALS TO PREVENT THIS MATERIAL FROM ACCUMULATING ON SITE.
- UPON REMOVAL OF TREES, SHRUBS OR ANY STUMP GRINDING, NO ROOT GREATER THAN THREE INCHES IN DIAMETER SHALL REMAIN WITHIN FIVE FEET OF AN UNDERGROUND STRUCTURE OR UTILITY LINE OR UNDER PAVED FOOTINGS OR PAVED AREAS.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
- SAFE PEDESTRIAN TRAFFIC IS TO BE MAINTAINED AT ALL TIMES. POST SIGNAGE AS NEEDED TO AID IN PEDESTRIAN SAFETY.
- PRIOR TO GRAND OPENING THE CONTRACTOR SHALL:
 - SWEEP THE ENTIRE SITE
 - ELIMINATE ALL DEBRIS IN THE LANDSCAPING AREAS
 - PRESSURE CLEAN THE SITE ASPHALT
 - PRESSURE CLEAN THE CURBS, SIDEWALKS, AND CONCRETE PADS

RECORD DRAWINGS

- CONTRACTOR SHALL PROVIDE TO THE ENGINEER AND OWNER A MINIMUM OF 1 HARD COPY OF A PAVING, GRADING AND DRAINAGE RECORD DRAWING AND A SEPARATE UTILITY RECORD DRAWING, AS WELL AS BOTH IN AUTOCAD 2018 OR LATER, BOTH PREPARED BY A NEW HAMPSHIRE REGISTERED SURVEYOR. THE RECORD DRAWINGS SHALL VERIFY ALL DESIGN INFORMATION INCLUDED ON THE DESIGN PLANS OF THE SAME NAME.

PAVING, GRADING AND DRAINAGE NOTES

- THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL VEGETATION IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
- ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE ENGINEERING AND LANDSCAPE PLANS.
- THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES AND PIPES WITHIN THE LIMITS OF CONSTRUCTION SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
- IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
- CONTRACTOR SHALL STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
- FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
- ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS. MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
- ALL CUT OR FILL SLOPES SHALL BE 3 (HORIZONTAL) :1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.
- THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO DOWNSTREAM WATER BODIES IS CAUSED DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS. AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE NEW

HAMPSHIRE WATER QUALITY STANDARDS.

- THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE DREDGING PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY NHDES REPRESENTATIVES.
- THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

DEMOLITION NOTES

- ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.
- REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE UNLESS OTHERWISE NOTED. ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.
- THE CONTRACTOR SHALL REFER TO THE DEMOLITION PLAN FOR DEMOLITION/PRESERVATION OF EXISTING TREES. ALL TREES NOT SPECIFICALLY SHOWN TO BE PRESERVED OR RELOCATED SHALL BE REMOVED AS A PART OF THIS CONTRACT. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY DEMOLITION.
- CONTRACTOR SHALL ADJUST GRADE OF ANY EXISTING UTILITIES OR DRAINAGE STRUCTURES TO REMAIN.

MAINTENANCE

- ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
 - INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION. INLET PROTECTION DEVICES SHALL BE CLEANED OUT AT REGULAR INTERVALS AS THEY BECOME FULL OF DEBRIS.
 - ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND OF GRASS IS MAINTAINED. AREAS SHOULD BE WATERED AND RESEEDED AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER TO NHDES EROSION CONTROL SPECIFICATIONS.
 - SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
 - THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
 - THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
 - OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 55 CUBIC YARDS / ACRE.
 - ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.
 - SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.

TYPICAL ENGINEER OBSERVATIONS

CONTRACTOR SHALL NOTIFY ENGINEER 72 HOURS IN ADVANCE OF THE FOLLOWING ACTIVITIES:

- PRE-CONSTRUCTION MEETING
- GRADING STARTING
- FINAL STABILIZATION
- ANY OTHER INSPECTION FOR WHICH A PERMITTING AGENCY REQUIRES THE ENGINEER TO BE PRESENT

3RD PARTY TEST REPORTS REQUIRED

TEST REPORTS REQUIRED FOR CLOSE OUT INCLUDE, BUT ARE NOT LIMITED TO:

- DENSITY TEST REPORTS
- BACTERIOLOGICAL TESTS OF WATER SYSTEM
- PRESSURE TEST OF WATER/SEWER
- LEAK TESTS ON SEWER SYSTEM AND GREASE TRAPS
- ANY OTHER TESTING REQUIRED BY THE AGENCY

SURVEY DATA

- ALL ELEVATIONS ON THE PLANS OR REFERENCED IN THE SPECIFICATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (N.A.V.D. 88)
- THE CONTRACTOR SHALL PROTECT ALL PERMANENT REFERENCE MONUMENTS AND TAKE ALL PRECAUTIONS NECESSARY TO AVOID DAMAGE TO SURVEY MARKERS DURING CONSTRUCTION. ANY SURVEY MARKERS DAMAGED DURING CONSTRUCTION WILL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
- BENCHMARK LOCATION AND ELEVATION ARE AS REPRESENTED BY SURVEYOR AT THE TIME OF SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT TIME OF CONSTRUCTION.

PRECONSTRUCTION RESPONSIBILITIES

- UPON RECEIPT OF NOTICE OF AWARD, THE CONTRACTOR SHALL ARRANGE A PRECONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, ALL AFFECTED UTILITY OWNERS, THE OWNER, THE ENGINEER AND ITSELF.
- THE CONTRACTOR SHALL CONTACT ONE CALL (811) AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING ANY EXCAVATION.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE SIZE, LOCATION, ELEVATION, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE AREA OF CONSTRUCTION.
- EXISTING UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING UTILITIES SHOWN OR FOR ANY EXISTING UTILITIES NOT SHOWN.
- IF UPON EXCAVATION, AN EXISTING UTILITY IS FOUND TO BE IN CONFLICT WITH THE PROPOSED CONSTRUCTION OR TO BE OF A SIZE OR MATERIAL DIFFERENT FROM THAT SHOWN ON THE PLANS; THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.

CONSTRUCTION SAFETY

- ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER, SPECIFICALLY, THE RULES AND REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION (NHDOT) AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE STRICTLY OBSERVED.

TRENCH SAFETY ACT

- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLIANCE WITH ANY STATE OF NEW HAMPSHIRE TRENCH SAFETY ACTS.
- WHERE EXCAVATIONS TO A DEPTH IN EXCESS OF FIVE FEET (5') ARE REQUIRED, THE CONTRACTOR SHALL INCLUDE THE FOLLOWING INFORMATION IN THE BID:
 - A REFERENCE TO THE TRENCH SAFETY STANDARDS THAT WILL BE IN EFFECT DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
 - WRITTEN ASSURANCES BY THE CONTRACTOR PERFORMING THE TRENCH EXACTION THAT SUCH CONTRACTOR WILL COMPLY WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
 - A SEPARATE ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY STANDARDS.
- WHEN A BID IS NOT SUBMITTED, THE CONTRACTOR SHALL SUBMIT THE INFORMATION LISTED IN ITEM "2" TO THE ENGINEER PRIOR TO STARTING WORK.

INTERRUPTION OF EXISTING UTILITIES

- ANY CONSTRUCTION WORK THAT REQUIRES INTERRUPTION OF SERVICE TO ANY CUSTOMER SHALL BE DONE SO WITH A MINIMUM OF SEVENTY-TWO (72) HOUR NOTICE TO, AND WRITTEN APPROVAL BY THE APPROPRIATE UTILITY COMPANY AND PORTSMOUTH REGIONAL HOSPITAL. THE CONTRACTOR SHALL ARRANGE A MEETING WITH THE LOCAL JURISDICTIONAL AGENCIES AND OTHER GOVERNING AGENCIES, AND OTHER AFFECTED UTILITIES PRIOR TO SCHEDULING THE SHUT/DOWN TO ASSESS THE SCOPE OF WORK. ALL SYSTEM SHUT/DOWN SHALL BE SCHEDULED BY THE CONTRACTOR AT SUCH TIME THAT SYSTEM DEMAND IS LOW. THIS GENERALLY REQUIRES NIGHT TIME WORK BY THE CONTRACTOR AND REQUIRES FULL TIME INSPECTION BY A REPRESENTATIVE OF THE UTILITY. ALL COST FOR OVERTIME WORK BY THE REPRESENTATIVE OF THE UTILITY SHALL BE BORNE BY THE CONTRACTOR. EACH CUSTOMER AFFECTED BY THE SHUT/DOWN SHALL BE PROVIDED, MINIMUM, FORTY-EIGHT (48) HOURS WRITTEN NOTIFICATION BY THE CONTRACTOR.

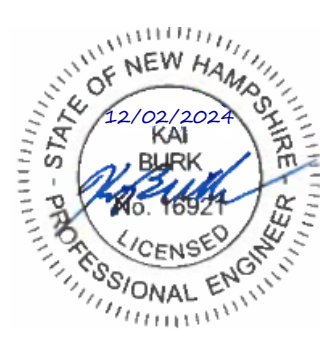
MINIMUM REQUIRED AS-BUILT INFORMATION

- ALL AS-BUILT INFORMATION SUBMITTED TO THE ENGINEER SHALL BE SUFFICIENTLY ACCURATE, CLEAR, AND LEGIBLE TO SATISFY THE ENGINEER THAT THE INFORMATION PROVIDES A TRUE REPRESENTATION OF THE IMPROVEMENTS CONSTRUCTED.
- UTILITY CROSSING SEPARATION INFORMATION FOR THAT PROVIDED ON THE PLANS VERIFYING:
 - SIZE AND MATERIAL OF CROSSING PIPES
 - TOP ELEVATION OF BOTTOM PIPE
 - BOTTOM ELEVATION OF TOP PIPE
 - FINISH SURFACE ELEVATION OVER UTILITY CROSSING
- STORM DRAINAGE:
 - TOP ELEVATION OF EACH MANHOLE FRAME AND COVER / GRATE AS WELL ALL OTHER STRUCTURES (HEADWALLS, CONTROL STRUCTURES, ETC.)
 - INVERT ELEVATION OF EACH LINE ENTERING AND LEAVING EACH STRUCTURE, INCLUDING UNDERDRAIN PIPES.

- INVERTS OF ALL MITERED END SECTIONS
 - ACTUAL GRADE OF PIPE BETWEEN THE STRUCTURES
 - INVERT ELEVATION AND TWO HORIZONTAL TIES FROM PERMANENT VISIBLE OBJECTS TO ALL STORM STUB-OUTS.
- LOCATIONS AND DEPTHS OF UNDERGROUND UTILITIES.
 - REVISIONS TO ROUTING OF PIPING AND CONDUITS.
 - ACTUAL EQUIPMENT LOCATIONS.
 - CHANGES MADE BY CHANGE ORDER OR CONSTRUCTION CHANGE DIRECTIVE.
 - CHANGES MADE FOLLOWING ENGINEER'S WRITTEN ORDERS.
 - DETAILS NOT ON THE ORIGINAL CONTRACT DRAWINGS.
 - FIELD RECORDS FOR VARIABLE AND CONCEALED CONDITIONS.
 - ALL SLEEVES, FITTINGS, TEES, BENDS, VALVES, ETC. SHALL BE LOCATED BY STATION/OFFSET (OR METHOD APPROVED BY ENGINEER) AND ELEVATION OF TOP OF PIPE FOR ALL CONSTRUCTED SLEEVING. AS-BUILTS FOR ALL SLEEVING DEPICTING TOP OF PIPE AT 100-FOOT INTERVALS MUST BE PROVIDED.
 - RECORD DRAWINGS SHALL INDICATE AS-BUILT DATA FOR EVERY ELEVATION SHOWN ON THE PLANS.
 - IF A NEW BENCHMARK LOCATION IS ESTABLISHED, CONTRACTOR SHALL PROVIDE A BENCH LOOP CLOSURE TO THE CLOSEST EXISTING BENCHMARKS IN BOTH DIRECTIONS. ALL BENCHMARK DATA SHALL BE SUBMITTED BY A REGISTERED LAND SURVEYOR.
 - IDENTIFICATION OF ADDENDUM ITEMS ISSUED DURING BIDDING PERIOD.
 - THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL AS-BUILT DATA FOR UTILITIES AND SLEEVING IS COLLECTED PRIOR TO PAVEMENT SECTION CONSTRUCTION. PRELIMINARY UTILITY AS-BUILTS MUST BE PROVIDED TO THE ENGINEER FOR REVIEW PRIOR TO PAVEMENT SECTION CONSTRUCTION.

Bowman

1219 4th Avenue S, Nashville, TN 37210
Phone: (615) 649-7610 | www.bowman.com
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**PORTSMOUTH REGIONAL HOSPITAL
HCA HEALTHCARE
PORTSMOUTH, NH**



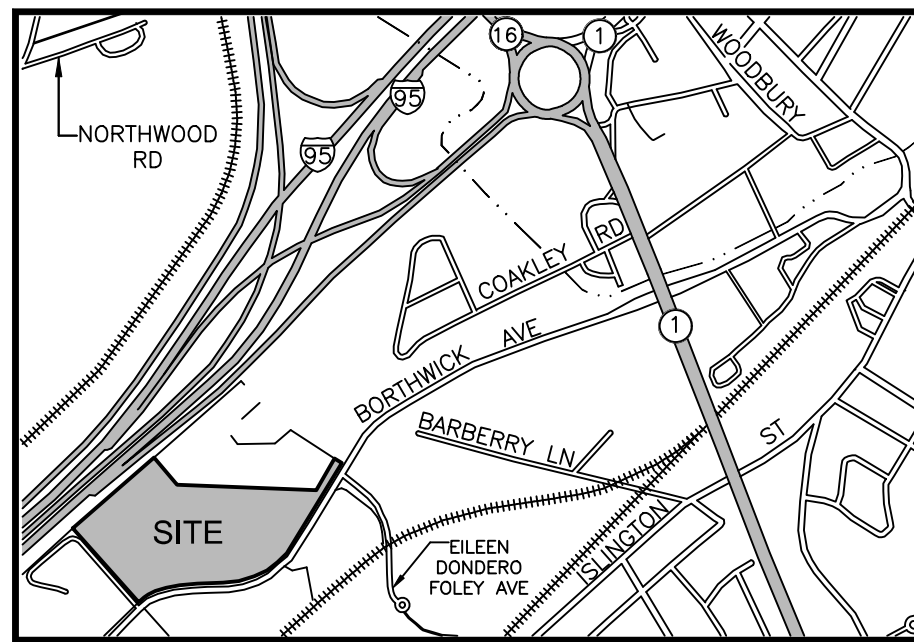
Know what's below.
Call before you dig.

PLAN STATUS		
DATE	DESCRIPTION	
DESIGN	DRAWN	CHKD

MARCH 2024

GENERAL NOTES

C0-01



THE LIMITS OF JURISDICTIONAL WETLANDS WERE DELINEATED BY BRENDEN WALDEN NH CWS 297 OF GOVE ENVIRONMENTAL SERVICES ON JANUARY 19, 2024 IN ACCORDANCE WITH THE FOLLOWING DOCUMENTS:

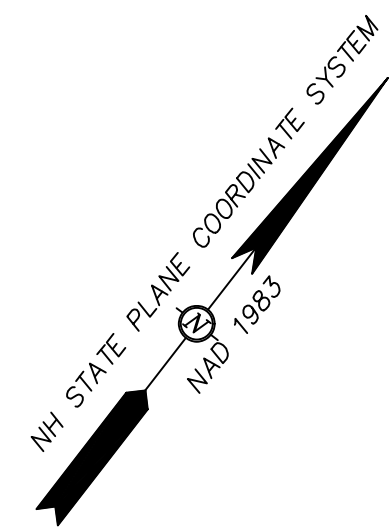
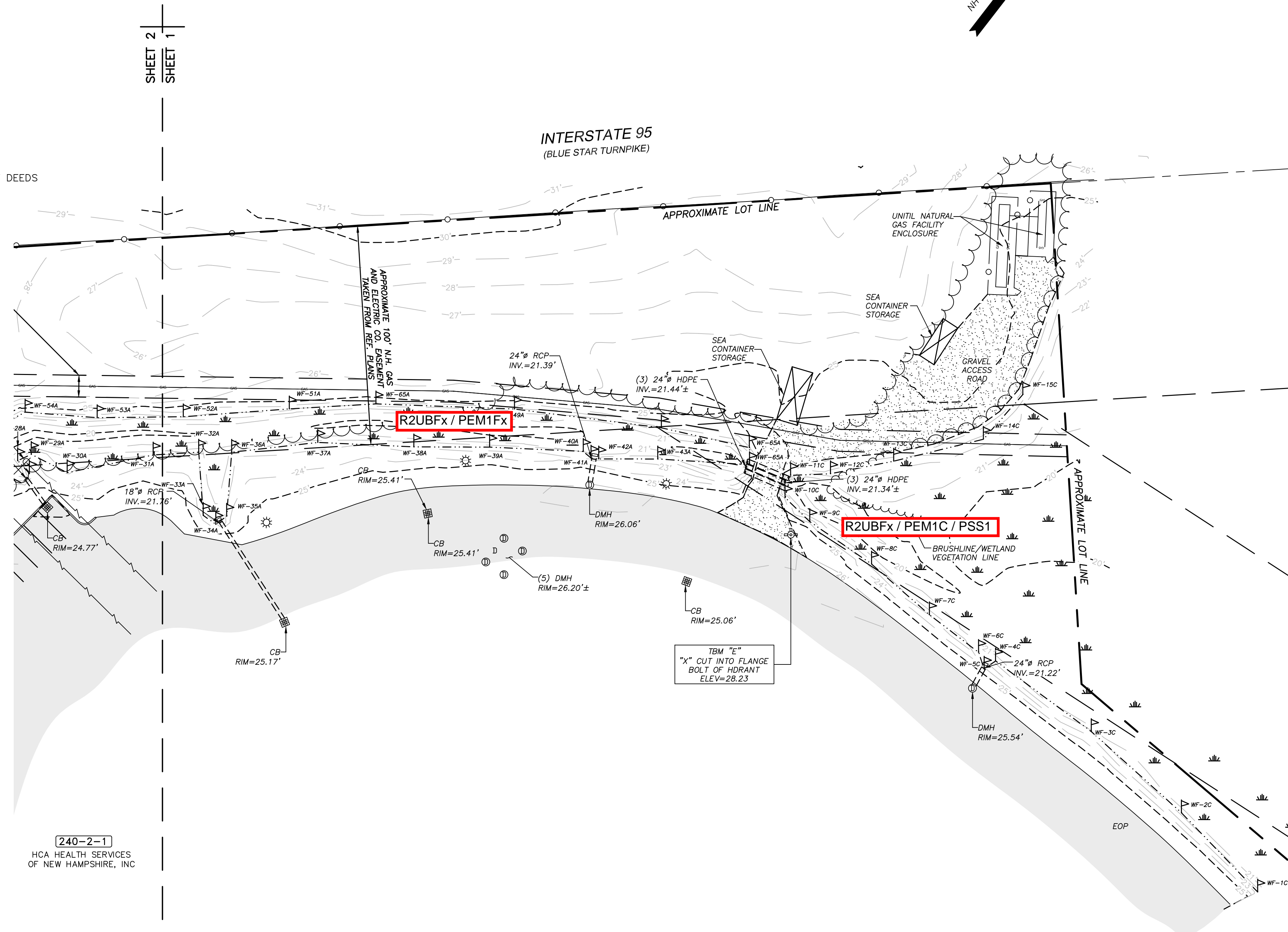
1. US Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Technical Report ERDC/EL TR-12-1 (January 2012).
2. Field Indicators for Identifying Hydric Soils in New England - Version 4, June 2020. New England Hydric Soils Technical Committee.
3. US Army Corps of Engineers National Wetland Plant List, 2018.
4. Classification of Wetlands and Deepwater Habitats of the United States. USFW Manual FWS/OBS -79/31 (1979).



LOCUS (N.T.S.)

LEGEND:

- CHAIN LINK FENCE
- ⊙ UTILITY POLE
- ⊙ UTILITY POLE W/TRANSFORMER
- GUY
- ⊙ LIGHT POLE
- OVERHEAD WIRES
- UNDERGROUND UTILITIES
- RCRD ROCKINGHAM COUNTY REGISTRY OF DEEDS
- 240-02-01 TAX SHEET / LOT NO.
- EOP EDGE OF PAVEMENT
- LA LANDSCAPED AREA
- VGC VERTICAL FACED GRANITE CURB
- SGC SLOPED FACED GRANITE CURB
- PSNH PUBLIC SERVICE CO. OF NH
- ♿ HANDICAP PARKING SPACE
- ☐ CATCH BASIN (SQUARE)
- ⊙ CATCH BASIN (ROUND)
- ⊙ DRAIN MANHOLE
- ⊙ SEWER MANHOLE
- SIGN
- DOUBLE POST SIGN
- ⊙ ELECTRIC METER
- ⊙ GAS VALVE
- W WATER LINE
- S SEWER LINE
- D DRAIN LINE
- G GAS LINE
- ☐ CONIFEROUS TREE
- ☐ DECIDUOUS TREE
- TREE LINE
- ☐ WATER GATE VALVE
- ☐ WATER SHUT OFF VALVE
- ☐ HYDRANT
- ☐ FIRE CONNECTION
- ☐ RIP RAP
- ☐ CEMENT CONCRETE PAD
- ☐ CONCRETE RETAINING WALL
- ☐ LANDSCAPE/LAWN AREA
- (15) PARKING SPACE COUNT



NOTES:

1. OWNER OF RECORD: HCA HEALTH SVC OF NH INC D/B/A PRH 32902
C/O DUCHARME MCMILLEN & ASSOCIATES
ADDRESS: PO BOX 80610, INDIANAPOLIS, IN 46280
DEED REFERENCE: BK:2784 PG:1340
TAX SHEET: 240-02-01
2. ZONED: OFFICE RESEARCH (OR)
MIN. LOT AREA: 3 ACRES FRONT YARD SETBACK: 50'
FRONTAGE: 300' SIDE YARD SETBACK: 75'
BUILDING COVERAGE: 30% REAR YARD SETBACK: 50'
STRUCTURE HEIGHT: 60'
3. THE INTENT OF THIS PLAN IS TO SHOW THE LIMITED AS-BUILT CONDITIONS OF THE BUILDING ADDITION AND RECONFIGURED DETENTION BASIN. THE BOUNDARY INFORMATION SHOWN IS APPROXIMATE AND TAKEN FROM THE REFERENCE PLANS AND DOES NOT CONSTITUTE AN UPDATED BOUNDARY SURVEY BY THIS OFFICE.
4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE AND ARE BASED UPON THE FIELD LOCATION OF ALL VISIBLE STRUCTURES (IE CATCH BASINS, MANHOLES, WATER GATES ETC.) AND INFORMATION COMPILED FROM PLANS OF RECORD, AND PLANS PROVIDED BY UTILITY COMPANIES AND GOVERNMENTAL AGENCIES. ALL CONTRACTORS SHOULD NOTIFY, IN WRITING, SAID AGENCIES PRIOR TO ANY EXCAVATION WORK AND CALL DIG-SAFE @ 1-888-DIG-SAFE.
5. HORIZONTAL DATUM: NAD 1983 ESTABLISHED BY SURVEY GRADE GPS OBSERVATION AND NGS "OPUS" SOLUTION. REFERENCE FRAME: NAD83 (2011)(EPOCH: 2010.0000), US SURVEY FOOT.
VERTICAL DATUM: NAVD 1988. PRIMARY BENCHMARK: CITY OF PORTSMOUTH "ALBA"
6. THE PLAN IS BASED UPON A FIELD SURVEY COMPLETED IN JANUARY OF 2024 WITH TRIMBLE S5 ROBOTIC TOTAL STATION, CARLSON BROTHERS RTK GPS UNITS, PANASONIC FZ-M1/TRIMBLE TSC7 DATA COLLECTORS.
7. THE PARCEL SHOWN HEREON LIES WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0260E, EFFECTIVE DATE MAY 17, 2005 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
8. THE DELINEATION OF THE WETLANDS SHOWN HEREON WAS BY BRENDEN WALDEN NEW HAMPSHIRE CERTIFIED WETLAND SCIENTIST #297, GOVE ENVIRONMENTAL SERVICES, LLC., 8 CONTINENTAL DRIVE, UNIT H, EXETER, NH 03833.
9. CONTRACTOR TO VERIFY SITE BENCHMARKS BY LEVELING BETWEEN 2 BENCHMARKS PRIOR TO THE ESTABLISHMENT OF ANY GRADES OR ELEVATIONS. DISCREPANCIES ARE TO BE REPORTED TO JAMES VERRA AND ASSOCIATES, INC.

REFERENCE PLANS:

1. GAS LINE AS-BUILT EASEMENT AND CONSERVATION PLAN, PREPARED FOR HOSPITAL CORPORATION OF AMERICA, PORTSMOUTH, NH, DATED 10/31/85. RCRD PLAN #D-15830.
2. SCHILLER S/S-OCEAN ROAD S/S, 115 KV TRANSMISSION LINE #U181, MILE 4, PLAN-6775-A, DATED 7/10/2009, BY NORTHEAST UTILITIES, NOT RECORDED.
3. SUBDIVISION OF LAND, FRANETAL REALTY TRUST COMPANY, OPTIONED TO LIBERTY MUTUAL INSURANCE COMPANY, PORTSMOUTH, NEW HAMPSHIRE, REVISED TO 2/19/71 RCRD PLAN #2190.
4. LIMITED EXISTING CONDITIONS PLAN - 333 BORTHWICK AVENUE, PORTSMOUTH, NEW HAMPSHIRE - ASSESSORS PARCEL #240-002-001 FOR HCA HEALTH SERVICES OF NEW HAMPSHIRE ON NOVEMBER 19, 2019 BY THIS OFFICE. NOT RECORDED
4. LIMITED AS-BUILT PLAN - PORTSMOUTH REGIONAL HOSPITAL - HCA, 333 BORTHWICK AVENUE, PORTSMOUTH, NEW HAMPSHIRE, TAX MAP 240, LOT 2-1, PREPARED FOR: DPR CONSTRUCTION, LAND OF: HCA HEALTH SERVICES OF NH ON FEBRUARY 29, 2024 BY THIS OFFICE. NOT RECORDED

DIRECT ABUTTERS TO SUBJECT PARCEL:

240-01 LIBERTY MUTUAL INSURANCE ATTN: JOANNE BRAGG 175 BERKLEY STREET BOSTON, MA 02116 BK: 2057 PG: 0357	240-2-2 JACKSON GRAY CONDOS MASTER CARD 330 BORTHWICK AVE PORTSMOUTH, NH 03801 BK: 2648 PG: 0901	234-7-3 CITY OF PORTSMOUTH 1 JUNKINS AVENUE PORTSMOUTH, NH 03801 BK: 4211 PG: 1155
240-2-2001 CITY OF PORTSMOUTH DPW PO BOX 628 PORTSMOUTH, NH 03802 BK: 2648 PG: 0901	240-2-1001 CITY OF PORTSMOUTH DPW PO BOX 628 PORTSMOUTH, NH 03802 BK: 2648 PG: 0902	

REV. NO.	DATE	DESCRIPTION	APPR'D
LIMITED EXISTING CONDITIONS PLAN PORTSMOUTH REGIONAL HOSPITAL - HCA 333 BORTHWICK AVENUE PORTSMOUTH, NEW HAMPSHIRE TAX MAP 240 LOT 2-1 PREPARED FOR: BOWMAN LAND OF: HCA HEALTH SERVICES OF NH			

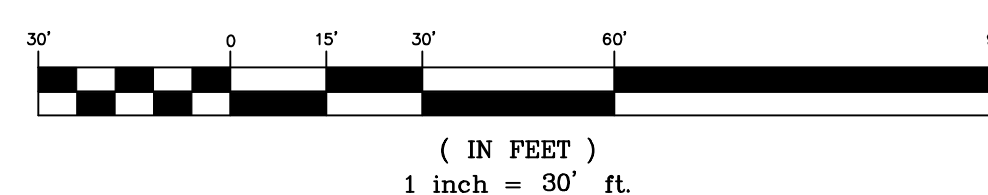
 101 SHATTUCK WAY, SUITE 8, NEWINGTON, N.H., 03801 - 603-436-3557 - ©2024	REL	DATE: 02/29/2024
	DRAWN BY	JOB NO: 24-2003
	RMF	SCALE: 1" = 60'
	PROJECT MGR	DWG NAME: 24-2003.DWG
		PLAN NO: 24-2003.DWG
		SHEET: 1 OF 3

SURVEYOR'S CERTIFICATION

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

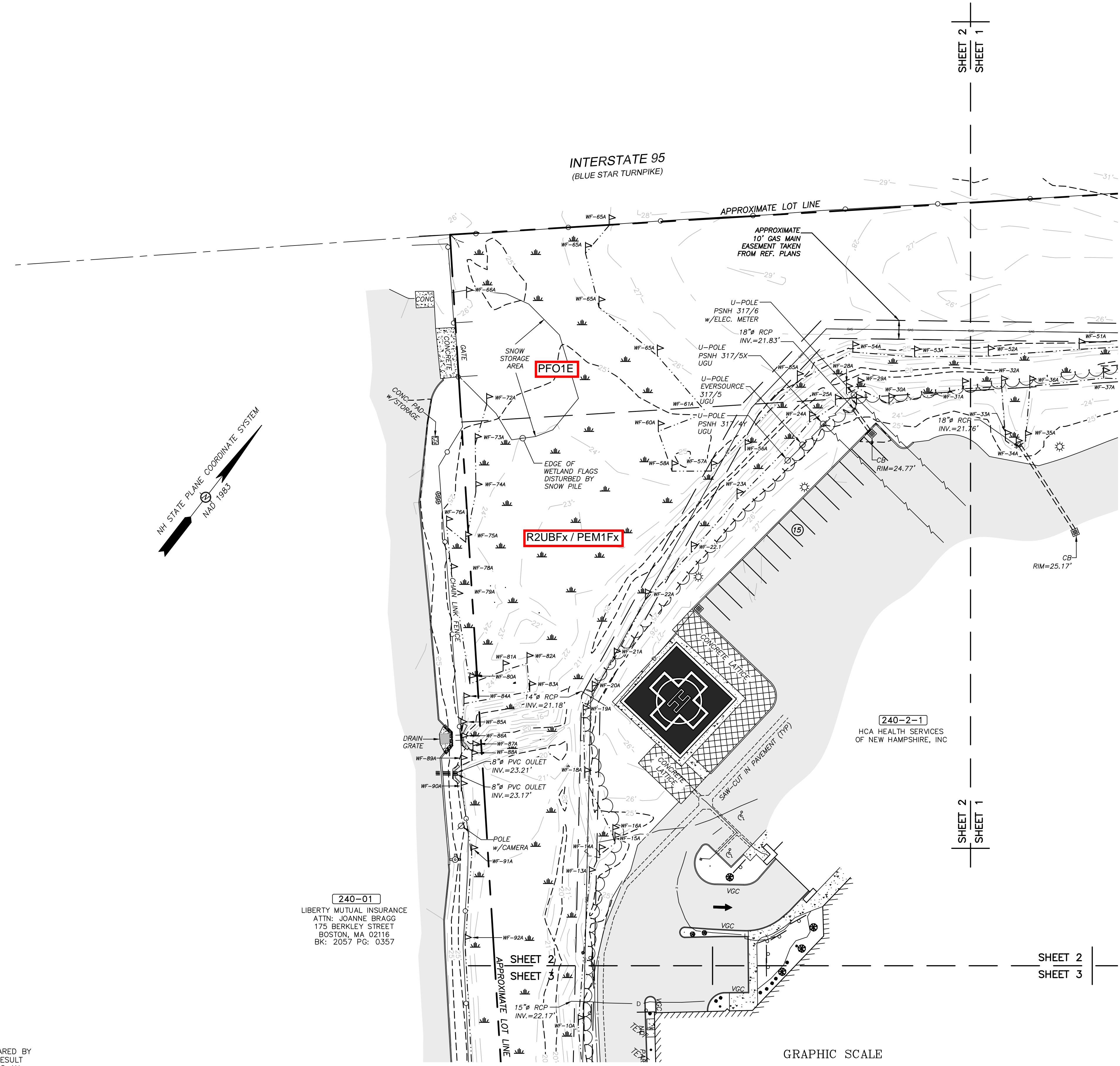
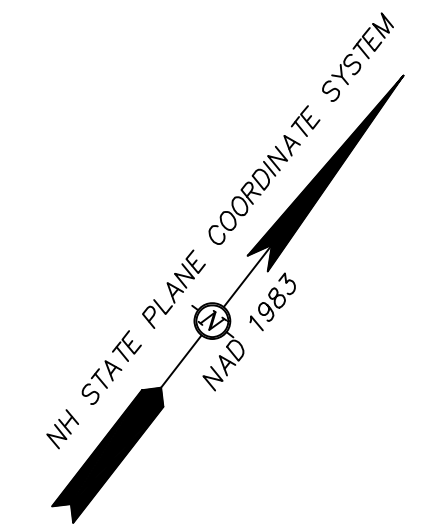
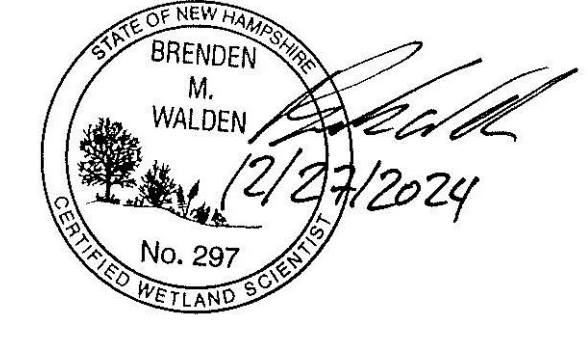
LICENSED LAND SURVEYOR _____ DATE _____

GRAPHIC SCALE

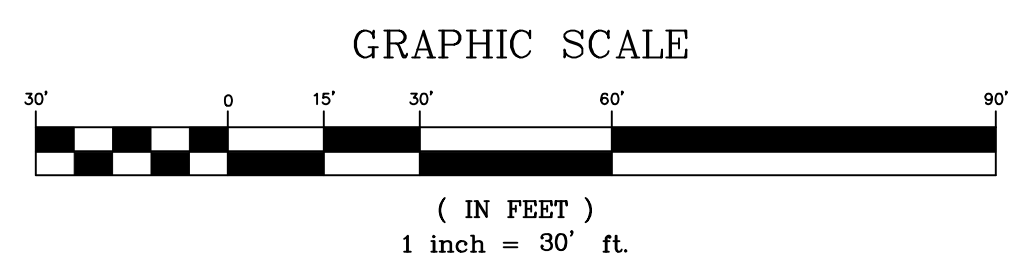


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240-01
LIBERTY MUTUAL INSURANCE
ATTN: JOANNE BRAGG
175 BERKLEY STREET
BOSTON, MA 02116
BK: 2057 PG: 0357



SURVEYOR'S CERTIFICATION

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

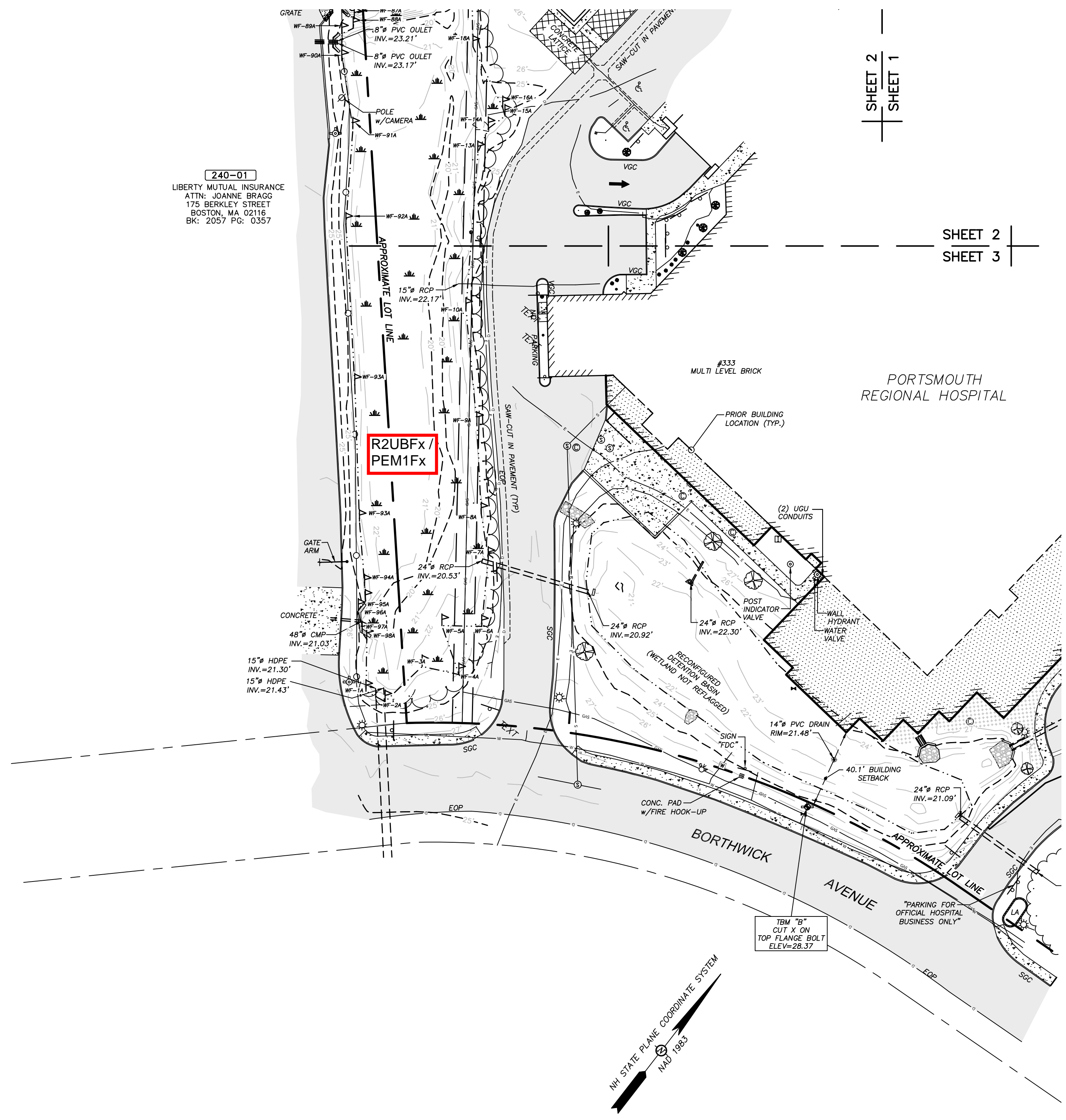
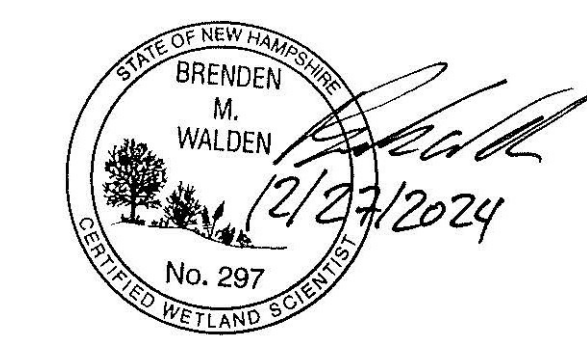
LICENSED LAND SURVEYOR _____ DATE _____

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REL		DATE: 02/29/2024	
DRAWN BY		JOB NO: 24-2003	
RMF		SCALE: 1" = 60'	
PROJECT MGR		DWG NAME: 24-2003.DWG	
		PLAN NO: 24-2003.DWG	
		SHEET: 2 OF 3	



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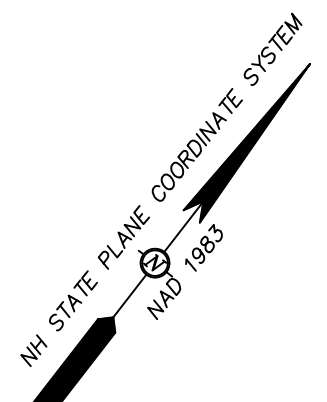


240-01
LIBERTY MUTUAL INSURANCE
ATTN: JOANNE BRAGG
175 BERKLEY STREET
BOSTON, MA 02118
BK. 2057 PG. 0357

SHEET 2
SHEET 1

SHEET 2
SHEET 3

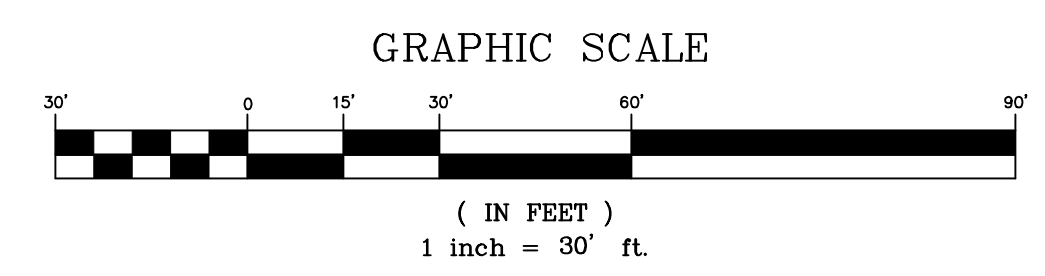
R2UBFx/
PEM1Fx



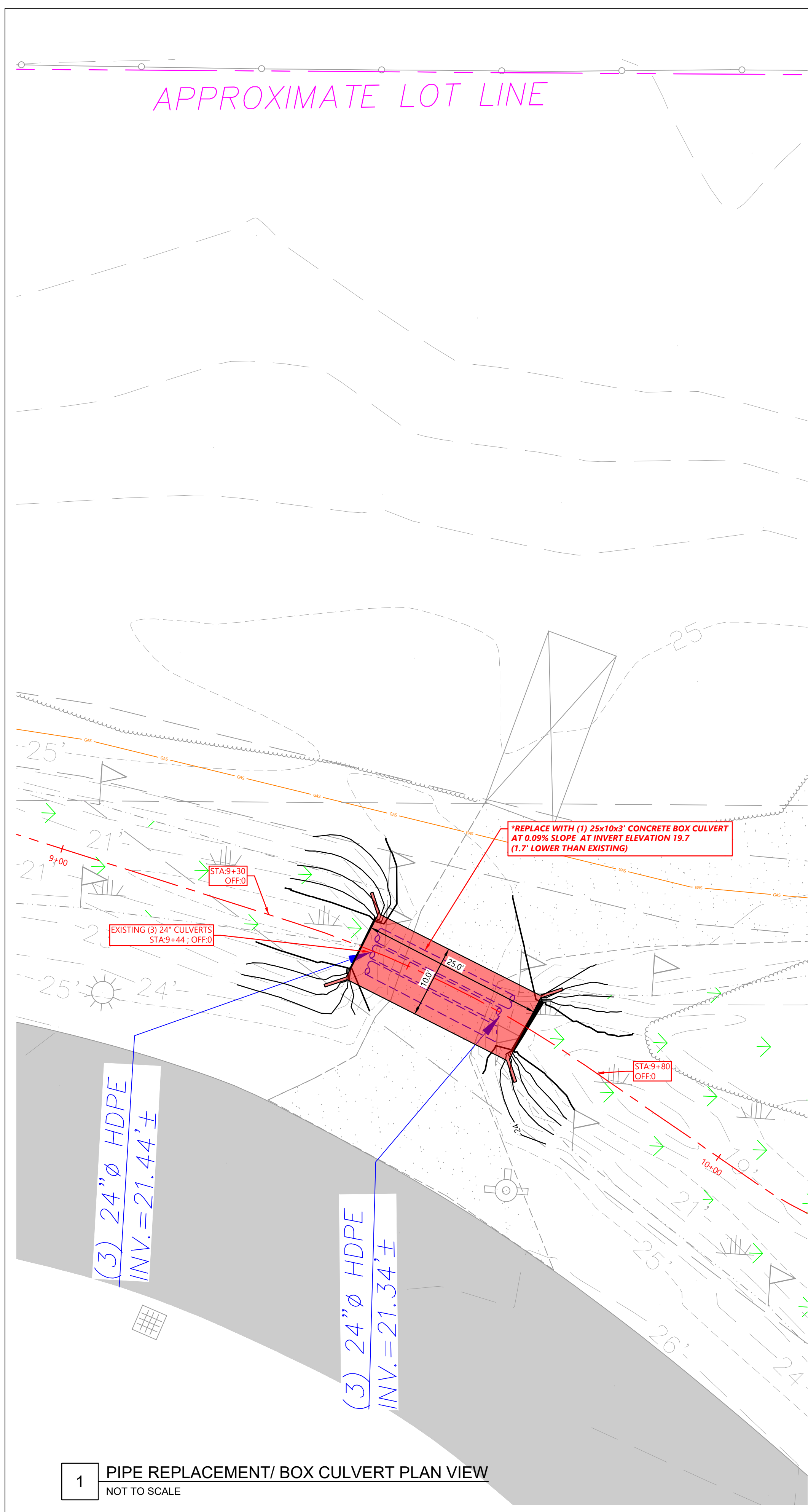
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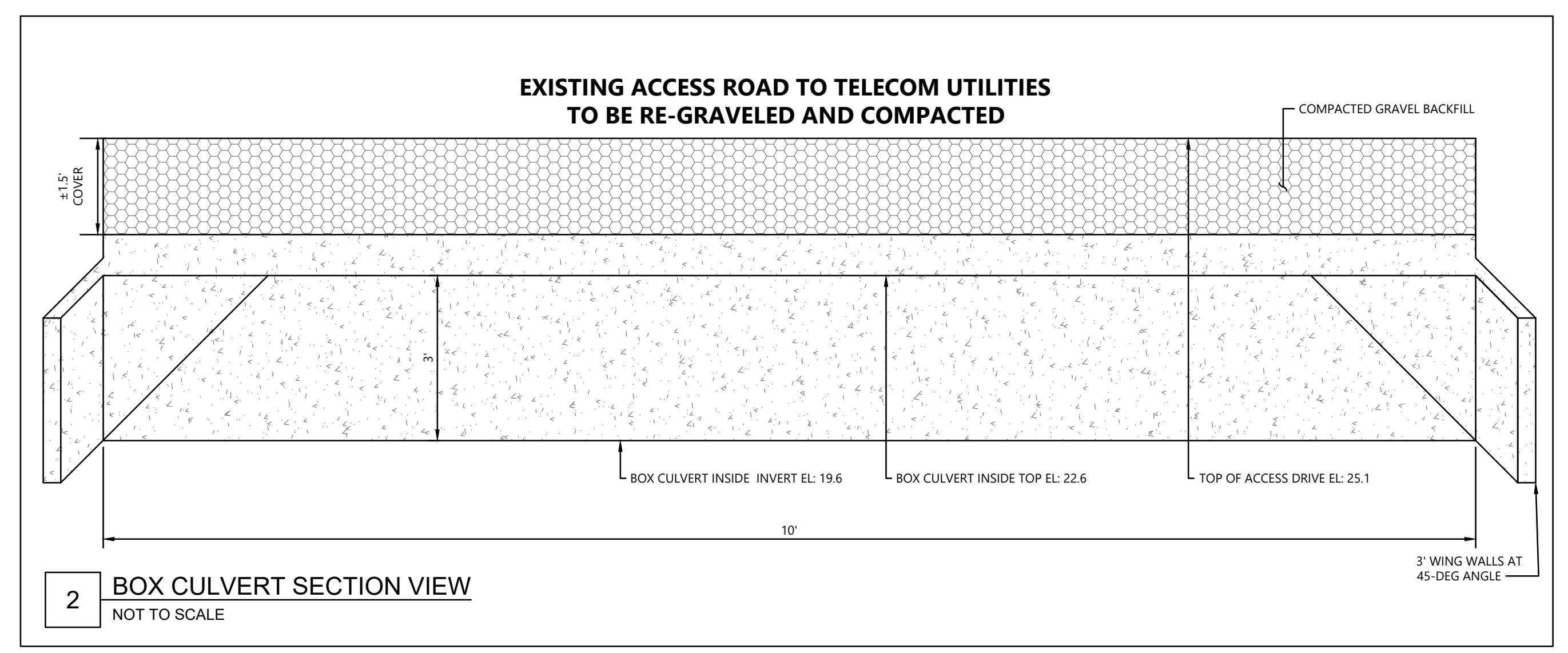
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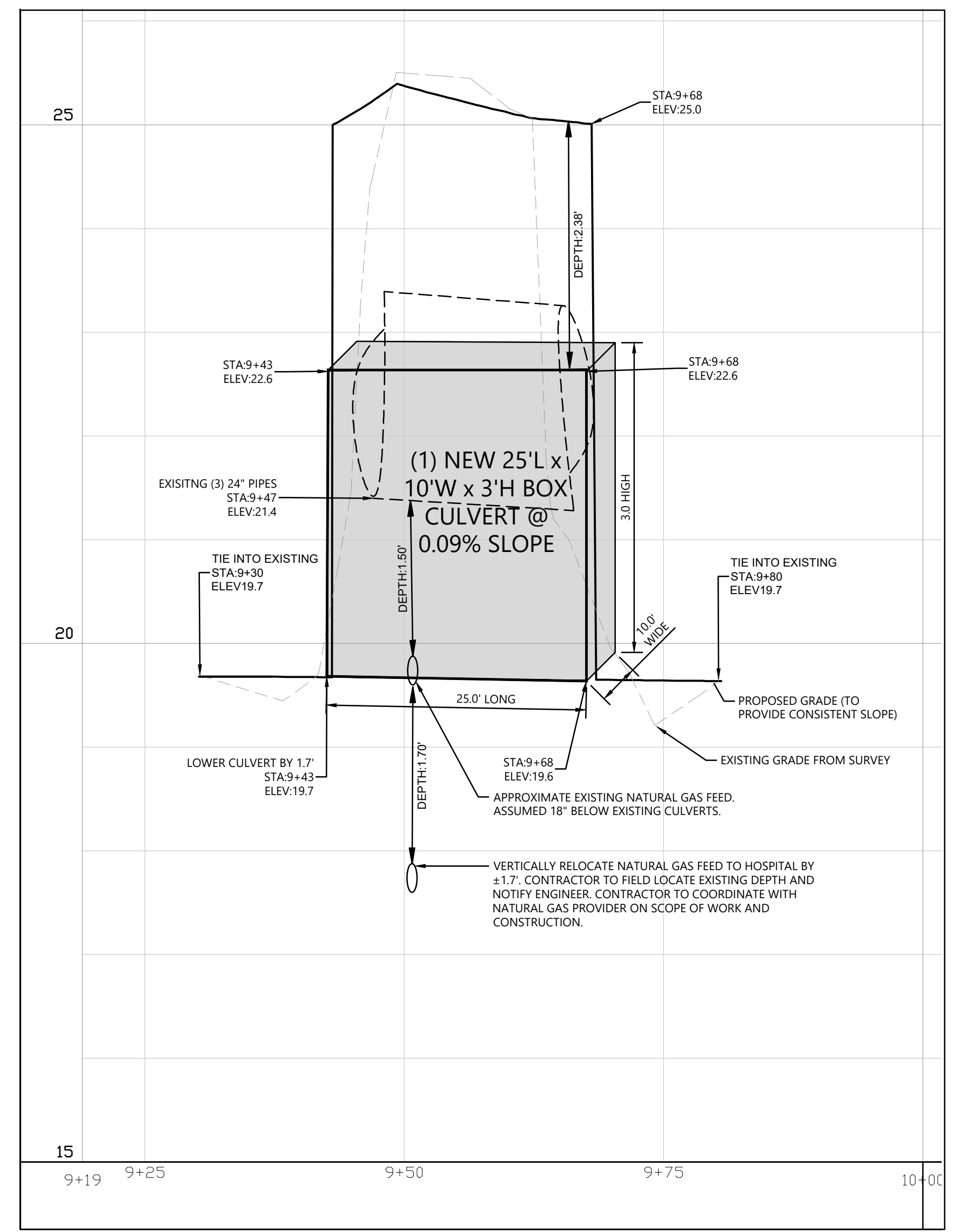
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		REL _____ DRAWN BY _____ RMF _____ PROJECT MGR _____	DATE: 02/29/2024 JOB NO: 24-2003 SCALE: 1" = 60' DWG NAME: 24-2003.DWG PLAN NO: 24-2003.DWG SHEET: 3 OF 3
101 SHATTUCK WAY, SUITE 8, NEWINGTON, N.H., 03801 – 603-436-3557 – ©2024			



1 PIPE REPLACEMENT/ BOX CULVERT PLAN VIEW
NOT TO SCALE



2 BOX CULVERT SECTION VIEW
NOT TO SCALE



3 PIPE REPLACEMENT/ BOX CULVERT PROFILE
NOT TO SCALE

GRADING NOTES

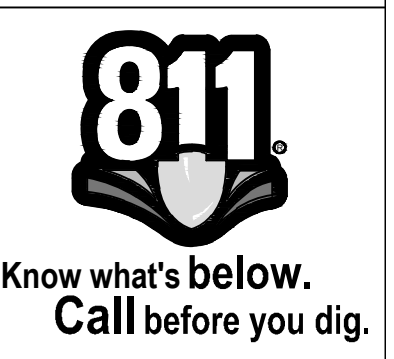
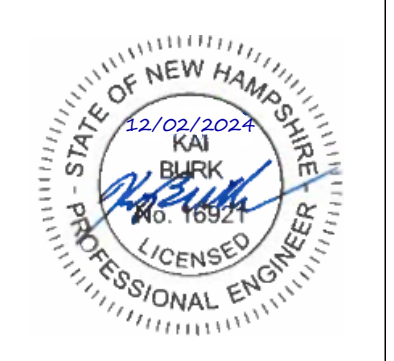
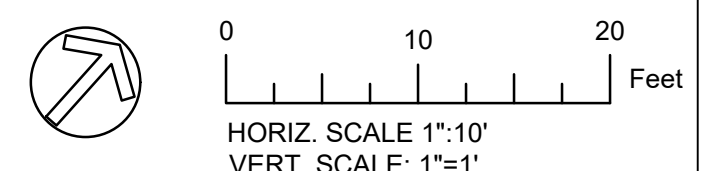
- CONTRACTOR RESPONSIBLE FOR VERIFYING LOCATION, SIZE, AND ELEVATIONS OF EXISTING UTILITIES AT CONNECTION POINTS PRIOR TO GRADING OR INSTALLATION OF ANY PROPOSED UTILITIES. CONTRACTOR TO IMMEDIATELY NOTIFY OWNER'S REPRESENTATIVE IF DISCREPANCIES ARE FOUND.
- ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY LOCAL INSPECTOR.
- DISTURBED AREAS LEFT BARE FOR FIVE DAYS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION, MULCH, TEMPORARY VEGETATION OR PERMANENT VEGETATION SHALL BE COMPLETED ON ALL EXPOSED AREAS WITHIN 14 DAYS AFTER DISTURBANCE. ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION UPON COMPLETION.
- WHEN HAND-PLANTING MULCH OR STRAW SHOULD BE UNIFORMLY SPREAD OVER SEEDING AREA WITHIN 24 HOURS OF SEEDING. IF UNABLE TO ACCOMPLISH, MULCH SHALL BE USED AS A TEMPORARY COVER. CONCENTRATED FLOW AREAS AND ALL SLOPES STEEPER THAN 2:1 AND WITH A HEIGHT OF TEN FEET OR GREATER (DOES NOT APPLY TO RETAINING WALLS), AND CUTS AND FILLS WITHIN BUFFERS, SHALL BE STABILIZED WITH THE APPROPRIATE EROSION CONTROL MATTING OR BLANKETS.
- THE PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
- EROSION AND SEDIMENT CONTROL DEVICES MUST BE DISPLAYED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR MUST CALL FOR AN INSPECTION TO OBTAIN A PERMIT TO GRADE. PLEASE CALL WITH ENOUGH LEAD TIME FOR AN INSPECTION TO MEET YOUR SCHEDULE.
- SEDIMENT/EROSION CONTROL DEVICES MUST BE INSPECTED ACCORDING TO LOCAL AND STATE REQUIREMENTS. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE. ADDITIONAL DEVICES MAY BE NECESSARY AS THE PROJECT PROGRESSES.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.
- EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. IF FULL INFILTRATION OF THE PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION CONTROL AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.
- CONTRACTOR SHALL REVIEW SITE GEOTECHNICAL REPORT BEFORE COMMENCING GRADING OPERATIONS.
- SEED ALL DISTURBED AREAS UNLESS OTHERWISE NOTED AS PART OF THIS CONTRACT.
- INSTALL SOIL MATTING OR RIPRAP IN SWALES AS INDICATED ON GRADING PLANS AND EROSION CONTROL PLANS.
- APPROPRIATE DRAINAGE, EROSION AND SEDIMENT CONTROL MEASURES, BEST MANAGEMENT PRACTICES, AND/OR OTHER WATER QUALITY MANAGEMENT FACILITIES SHALL BE PROVIDED AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION. DAMAGES TO ADJACENT PROPERTY AND/OR THE CONSTRUCTION SITE CAUSED BY THE CONTRACTOR'S OR PROPERTY OWNER'S FAILURE TO PROVIDE AND MAINTAIN ADEQUATE DRAINAGE AND EROSION/SEDIMENT CONTROL FOR THE CONSTRUCTION AREA SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER AND/OR CONTRACTOR.
- UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, DESIGNER, OR THEIR REPRESENTATIVES. BEFORE YOU DIG CALL ONE-CALL-811.
- THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.
- HORIZONTAL DATUM IS BASED ON NAD 1983.
- VERTICAL DATUM IS BASED ON NAVD83.

WILDLIFE NOTES

- BLANDING'S TURTLE (STATE ENDANGERED) AND SPOTTED TURTLE (STATE THREATENED) OCCUR WITHIN THE VICINITY OF THE PROJECT AREA. ALL OPERATORS AND PERSONNEL WORKING ON OR ENTERING THE SITE SHALL BE MADE AWARE OF THE POTENTIAL PRESENCE OF THESE SPECIES AND SHALL BE PROVIDED FLYERS THAT HELP TO IDENTIFY THESE SPECIES, ALONG WITH NHFG CONTACT INFORMATION. SEE PLAN SHEET C3-01.
- RARE SPECIES INFORMATION SHALL BE COMMUNICATED DURING MORNING TAILGATE MEETINGS PRIOR TO WORK COMMENCEMENT DURING THE CONSTRUCTION PHASE OF THE PROJECT. COMMUNICATIONS MAY CONSIST OF:
 - IDENTIFICATION, OBSERVATION AND REPORTING OF OBSERVATIONS
 - WHEN TO CONTACT NHFG IMMEDIATELY AND NHFG CONTACT INFORMATION
- ALL WORK SHALL OCCUR BETWEEN APRIL 1ST AND OCTOBER 15TH TO AVOID IMPACTING OVERWINTERING TURTLES.
- TURTLES MAY BE ATTRACTED TO DISTURBED GROUND DURING THE NESTING SEASON (MAY 15TH - JUNE 30TH). TURTLE NESTS ARE PROTECTED BY NH LAWS. IF A NEST IS OBSERVED OR SUSPECTED, OPERATORS SHALL CONTACT MELISSA WINTERS OR JOSH MEGYESY AT NHFG IMMEDIATELY FOR FURTHER CONSULTATION. SEE SPECIES FLYERS, SEE THIS SHEET FOR NHFG CONTACT INFORMATION.
- TO MINIMIZE THE POTENTIAL FOR NESTING TO OCCUR WITHIN THE PROJECT SITE:
 - MINIMIZE GROUND DISTURBANCE ACTIVITIES DURING THE ACTIVE NESTING SEASON. LIMIT CLEARING AREAS AND DISTURBING GROUND UNTIL READY TO START ACTIVE CONSTRUCTION FOR A PROJECT COMPONENT.
 - MINIMIZE ACCESS OR MAKE AREAS LESS ATTRACTIVE TO WILDLIFE FOR NESTING FOR DISTURBED GROUND AREAS DURING ACTIVE NESTING SEASON. COVER SOIL/SANDY MOUNDS OR OPEN SANDY/GRAVELY AREAS WITHIN THE ACTIVE PROJECT SITE WITH TARPS OR OTHER CONSTRUCTION MATERIALS AT THE END OF THE WORK DAY (NOTE TURTLES CAN MOVE INTO A SITE OVERNIGHT TO NEST - BE OBSERVANT FOR OF TRACKS AND NESTING SIGNS).
 - THE NEST OR SUSPECTED NEST SHALL BE MARKED (SURROUNDING ROPED OFF OR CONE BUFFER DEPLOYED) AND AVOIDED; THIS SHALL BE COMMUNICATED TO ALL PERSONNEL ON-SITE.
 - SITE ACTIVITIES SHALL NOT OCCUR IN THE AREA SURROUNDING THE NEST OR SUSPECTED NEST UNTIL FURTHER GUIDANCE IS PROVIDED BY NHFG.
- ALL MANUFACTURED EROSION AND SEDIMENT CONTROL PRODUCTS, WITH THE EXCEPTION OF TURF REINFORCEMENT MATS, UTILIZED FOR, BUT NOT LIMITED TO, SLOPE PROTECTION, RUNOFF DIVERSION, SLOPE INTERRUPTION, PERIMETER CONTROL, INLET PROTECTION, CHECK DAMS, AND SEDIMENT TRAPS SHALL NOT CONTAIN PLASTIC, OR MULTIFILAMENT OR MONOFILAMENT POLYPROPYLENE NETTING OR MESH WITH AN OPENING SIZE OF GREATER THAN 1/8 INCHES. SEE PLAN SHEET C3-01.
- ALL OBSERVATIONS OF THREATENED OR ENDANGERED SPECIES ON THE PROJECT SITE SHALL BE REPORTED IMMEDIATELY TO THE NHFG NONGAME AND ENDANGERED WILDLIFE ENVIRONMENTAL REVIEW PROGRAM BY PHONE AT 603-271-2461 AND BY EMAIL AT NHFGREVIEW@WILDLIFE.NH.GOV, WITH THE EMAIL SUBJECT LINE CONTAINING THE NH DATA CHECK TOOL RESULTS LETTER ASSIGNED NUMBER, THE PROJECT NAME, AND THE TERM WILDLIFE SPECIES OBSERVATION.
 - PHOTOGRAPHS OF THE OBSERVED SPECIES AND NEARBY ELEMENTS OF HABITAT OR AREAS OF LAND DISTURBANCE SHALL BE PROVIDED TO NHFG IN DIGITAL FORMAT AT THE ABOVE EMAIL ADDRESS FOR VERIFICATION, AS FEASIBLE.
- IN THE EVENT A THREATENED OR ENDANGERED SPECIES IS OBSERVED ON THE PROJECT SITE DURING THE TERM OF THE PERMIT, THE SPECIES SHALL NOT BE DISTURBED, HANDLED, OR HARMED IN ANY WAY PRIOR TO CONSULTATION WITH NHFG AND IMPLEMENTATION OF CORRECTIVE ACTIONS RECOMMENDED BY NHFG.
 - SITE OPERATORS SHALL BE ALLOWED TO RELOCATE WILDLIFE ENCOUNTERED IF DISCOVERED WITHIN THE ACTIVE WORK ZONE IF IN DIRECT HARM FROM PROJECT ACTIVITIES.
 - WILDLIFE SHALL BE RELOCATED IN CLOSE PROXIMITY TO THE CAPTURE LOCATION BUT OUTSIDE OF THE WORK ZONE AND IN THE DIRECTION THE INDIVIDUAL WAS HEADING.
 - NHFG SHALL BE CONTACTED IMMEDIATELY IF THIS ACTION OCCURS.
- NHFG, INCLUDING ITS EMPLOYEES AND AUTHORIZED AGENTS, SHALL HAVE ACCESS TO THE PROPERTY DURING THE TERM OF THE PERMIT.
- SOBA (SPECIAL CONCERN) AND MARSH WREN OCCUR WITHIN THE VICINITY OF THE PROJECT AREA. ALL OPERATORS AND PERSONNEL WORKING ON OR ENTERING THE SITE SHOULD BE MADE AWARE OF THE POTENTIAL PRESENCE OF THESE SPECIES AND SHOULD BE PROVIDED FLYERS THAT HELP TO IDENTIFY THIS SPECIES, ALONG WITH NHFG CONTACT INFORMATION. SEE PLAN SHEET C3-01.

NEW HAMPSHIRE FISH & GAME - BIOLOGIST CONTACTS:

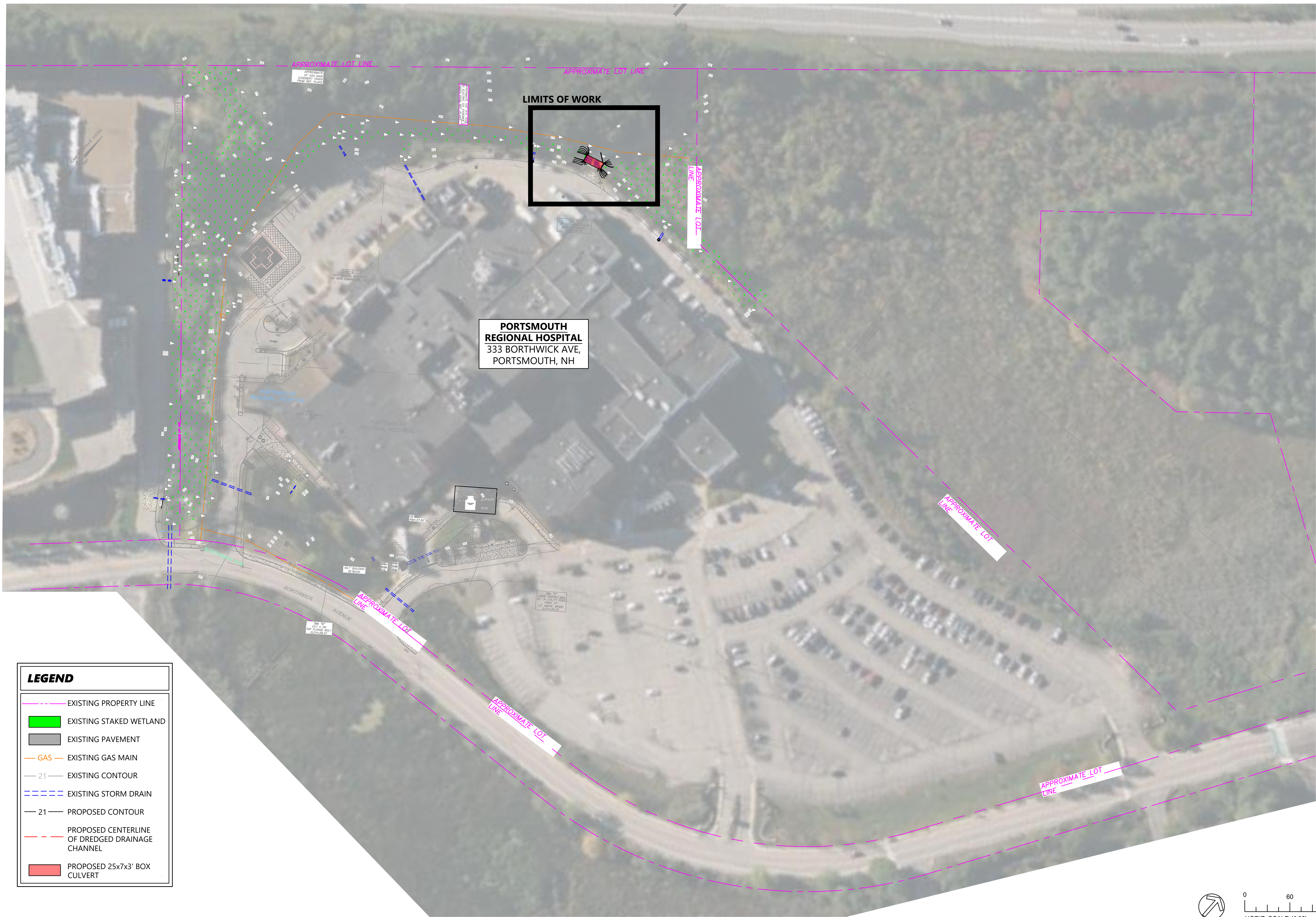
- MELISSA WINTERS (603) 479-1129
- JOSH MEGYESY (978) 578-0802



PLAN STATUS	
DATE	DESCRIPTION
DESIGN	DRAWN
	CHKD

MARCH 2024

CULVERT REPLACEMENT- PLAN & PROFILE

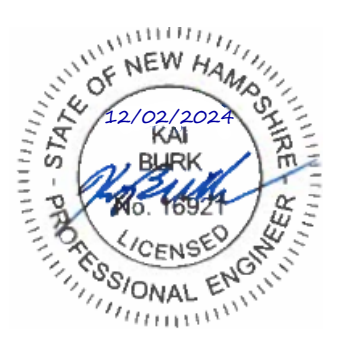


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 333 BORTHWICK AVE,
 PORTSMOUTH, NH

LIMITS OF WORK

LEGEND

	EXISTING PROPERTY LINE
	EXISTING STAKED WETLAND
	EXISTING PAVEMENT
	GAS — EXISTING GAS MAIN
	— 21 — EXISTING CONTOUR
	EXISTING STORM DRAIN
	— 21 — PROPOSED CONTOUR
	PROPOSED CENTERLINE OF DREDGED DRAINAGE CHANNEL
	PROPOSED 25x7x3' BOX CULVERT



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HCA HEALTHCARE
 PORTSMOUTH, NH



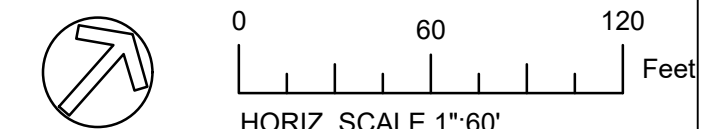
Know what's below.
 Call before you dig.

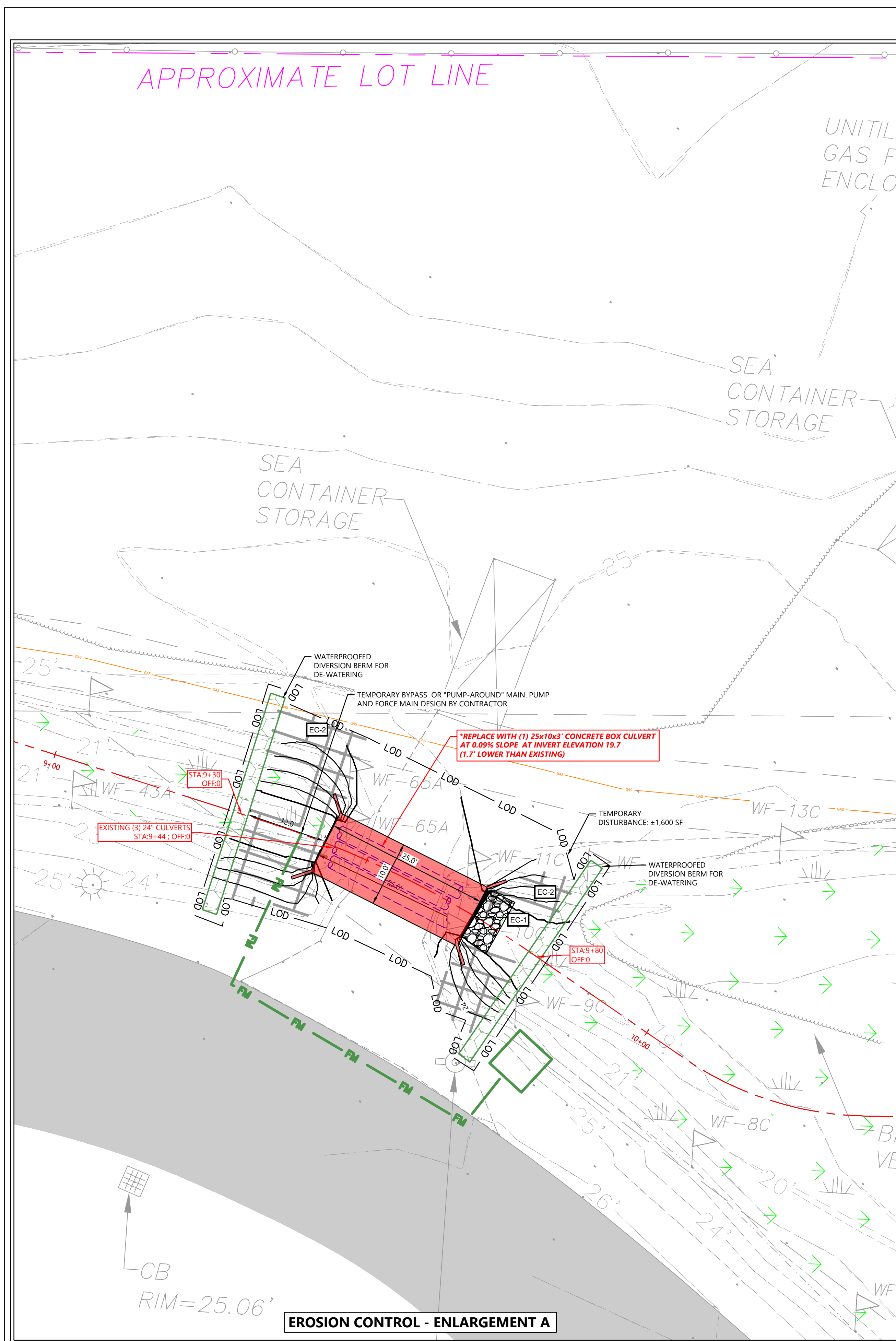
PLAN STATUS		
DATE	DESCRIPTION	
DESIGN	DRAWN	CHKD

MARCH 2024

SITE PLAN -
 OVERALL

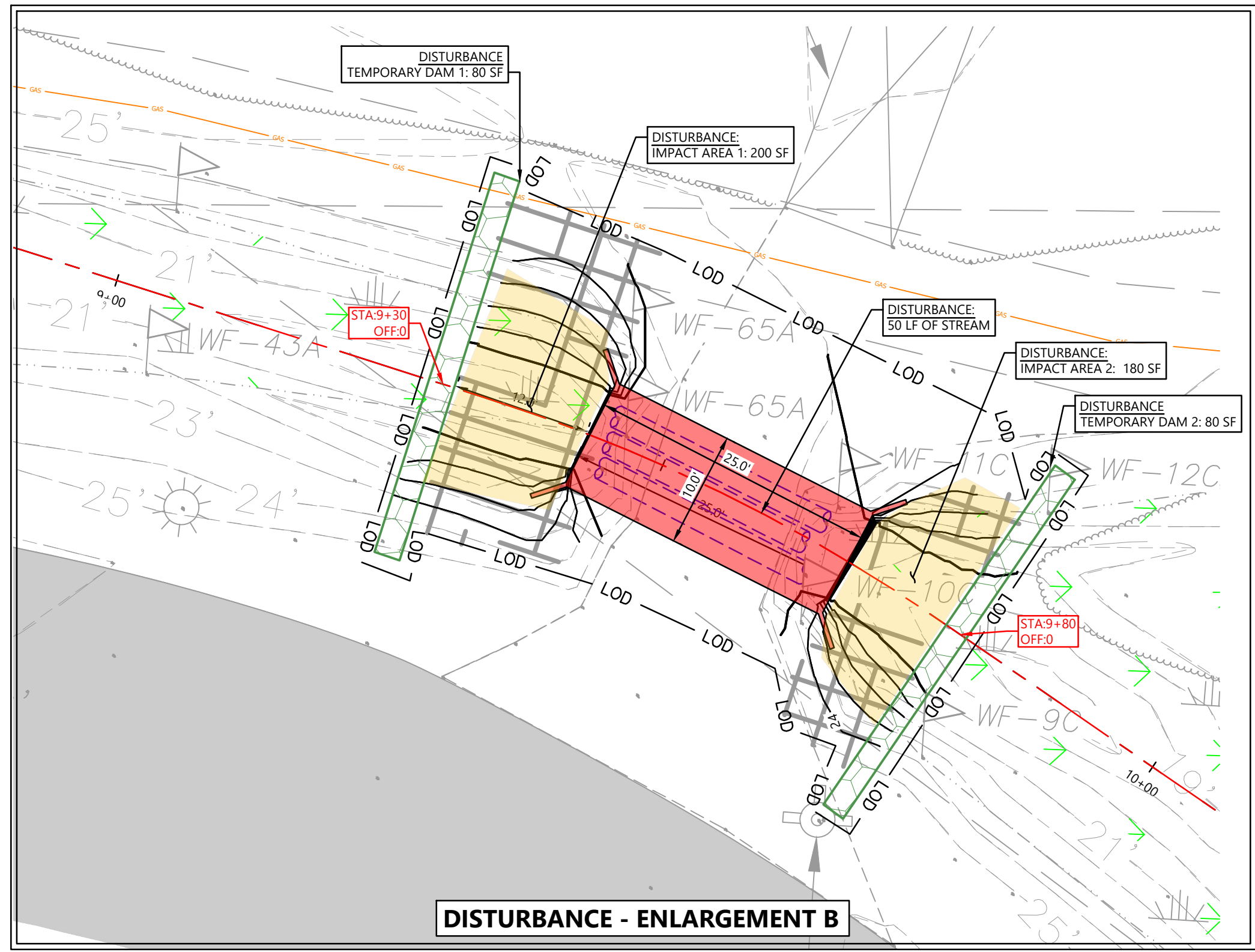
C2-01





EROSION CONTROL - ENLARGEMENT A

- ### EROSION CONTROL NOTES
- EROSION PREVENTION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONAL BEFORE EARTH MOVING OPERATION BEGINS AND MUST BE CONSTRUCTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. TEMPORARY MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY BUT MUST BE REPLACED AT THE END OF THE WORKDAY.
 - THE FOLLOWING RECORDS SHALL BE MAINTAINED ON OR NEAR SITE: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; THE DATES WHEN STABILIZATION MEASURES ARE INITIATED; INSPECTION RECORDS AND RAINFALL RECORDS.
 - THE CONTRACTOR SHALL MAINTAIN A RAIN GAUGE AND DAILY RAINFALL RECORDS AT THE SITE OR USE A REFERENCE SITE FOR A RECORD OF DAILY AMOUNT OF PRECIPITATION.
 - PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED MORE THAN 10 DAYS PRIOR TO GRADING OR EARTH MOVING UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.
 - CONSTRUCTION MUST BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED AREAS.
 - SEDIMENT SHOULD BE REMOVED FROM SEDIMENT TRAPS, SILT FENCES, SEDIMENTATION PONDS AND OTHER SEDIMENT CONTROLS AS NECESSARY AND MUST BE REMOVED WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50% OR AS DIRECTED BY OWNERS REPRESENTATIVE.
 - THE CONTRACTOR SHALL REMOVE SEDIMENT FROM ALL DRAINAGE STRUCTURES BEFORE ACCEPTANCE BY LOCAL GOVERNING AGENCY OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
 - THE CONTRACTOR SHALL REMOVE THE TEMPORARY EROSION AND WATER POLLUTION CONTROL DEVICES ONLY AFTER A SOLID STAND OF GRASS HAS BEEN ESTABLISHED ON GRADED AREAS AND WHEN IN THE OPINION OF THE OWNER'S REPRESENTATIVE, THEY ARE NO LONGER NEEDED.
 - DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF THE COMPLETION OF GRADING ACTIVITIES. SLOPES 3:1 OR STEEPER SHALL BE STABILIZED WITHIN 7 DAYS.
 - INSPECTIONS DESCRIBED IN PARAGRAPHS 2, 3 AND 4 BELOW, SHALL BE PERFORMED AT LEAST TWICE EVERY CALENDAR WEEK. INSPECTIONS SHALL BE CONDUCTED ONCE PER MONTH UNTIL THAWING OR PRECIPITATION RESULTS IN RUNOFF OR CONSTRUCTION ACTIVITY RESUMES. INSPECTION REQUIREMENTS DO NOT APPLY TO DEFINABLE AREAS THAT HAVE BEEN FINALLY STABILIZED. WRITTEN NOTIFICATION OF THE INTENT TO CHANGE THE INSPECTION FREQUENCY AND THE JUSTIFICATION FOR SUCH REQUEST MUST BE SUBMITTED TO THE LOCAL ENVIRONMENTAL FIELD OFFICE. SHOULD NHDDES DISCOVER THAT MONTHLY INSPECTIONS OF THE SITE ARE NOT APPROPRIATE DUE TO INSUFFICIENT STABILIZATION MEASURES OR OTHERWISE, TWICE WEEKLY INSPECTIONS SHALL RESUME. NHDDES MAY INSPECT THE SITE TO CONFIRM OR DENY THE NOTIFICATION TO CONDUCT MONTHLY INSPECTIONS.
 - QUALIFIED PERSONNEL (PROVIDED BY THE PERMITTEE OR COOPERATIVELY BY MULTIPLE PERMITTEES) SHALL INSPECT DISTURBED AREAS OF THE CONSTRUCTION SITE THAT HAVE NOT BEEN FINALLY STABILIZED. AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION, STRUCTURAL CONTROL MEASURES, LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND EACH OUTFALL.
 - DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE SITE'S DRAINAGE SYSTEM. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES SHALL BE OBSERVED TO ENSURE THAT THEY ARE OPERATING CORRECTLY.
 - OUTFALL POINTS (WHERE DISCHARGES LEAVE THE SITE AND/OR ENTER WATERS OF THE STATE) SHALL BE INSPECTED TO DETERMINE WHETHER EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
 - BASED ON THE RESULTS OF THE INSPECTION, ANY INADEQUATE CONTROL MEASURES OR CONTROL MEASURES IN DISREPAIR SHALL BE REPLACED OR MODIFIED, OR REPAIRED AS NECESSARY, BEFORE THE NEXT RAIN EVENT, BUT IN NO CASE MORE THAN 7 DAYS AFTER THE NEED IS IDENTIFIED.
 - BASED ON THE RESULTS OF THE INSPECTION, THE SITE DESCRIPTION AND POLLUTION PREVENTION MEASURES IDENTIFIED IN THIS SWPPP SHALL BE REVISED AS APPROPRIATE, BUT IN NO CASE LATER THAN 7 DAYS FOLLOWING THE INSPECTION. SUCH MODIFICATIONS SHALL PROVIDE FOR TIMELY



DISTURBANCE - ENLARGEMENT B

- ### IMPLEMENTATION OF ANY CHANGES TO THE SWPPP, BUT IN NO CASE LATER THAN 14 DAYS FOLLOWING THE INSPECTION.
- ALL INSPECTIONS SHALL BE DOCUMENTED ON THE CONSTRUCTION STORMWATER INSPECTION CERTIFICATION FORM PROVIDED IN APPENDIX D OF THE SWPPP REPORT FOR ALL CONSTRUCTION SITES. INSPECTION DOCUMENTATION WILL BE
 - MAINTAINED ON SITE AND MADE AVAILABLE TO NHDDES UPON REQUEST. INSPECTION REPORTS MUST BE SUBMITTED TO NHDDES WITHIN 10 DAYS OF THE REQUEST. IF NHDDES REQUESTS THE CONSTRUCTION STORMWATER INSPECTION CERTIFICATION FORM TO BE SUBMITTED, THE SUBMITTED FORM MUST CONTAIN THE PRINTED NAME AND SIGNATURE OF THE TRAINED CERTIFIED INSPECTOR AND THE PERSON WHO MEETS THE SIGNATORY REQUIREMENTS OF SECTION 7.7.2 OF THE NPDES GENERAL PERMIT.
 - TRAINED CERTIFIED INSPECTORS SHALL COMPLETE INSPECTION DOCUMENTATION TO THE BEST OF THEIR ABILITY. FALSIFYING INSPECTION RECORDS OR OTHER DOCUMENTATION OR FAILURE TO COMPLETE INSPECTION DOCUMENTATION SHALL RESULT IN A VIOLATION OF THIS PERMIT AND ANY OTHER APPLICABLE ACTS OR RULES.
 - SUBSEQUENT OPERATOR(S) (PRIMARY PERMITTEES) WHO HAVE OBTAINED COVERAGE UNDER THE NPDES GENERAL PERMIT SHOULD CONDUCT TWICE WEEKLY INSPECTIONS, UNLESS THEIR PORTION(S) OF THE SITE HAS BEEN TEMPORARILY STABILIZED, OR RUNOFF IS UNLIKELY DUE TO WINTER CONDITIONS OR DUE TO EXTREME DROUGHT AS STATED IN PARAGRAPH A) ABOVE. THE PRIMARY PERMITTEE (SUCH AS A DEVELOPER) IS NO LONGER REQUIRED TO CONDUCT INSPECTIONS OF PORTIONS OF THE SITE THAT ARE COVERED BY A SUBSEQUENT PRIMARY PERMITTEE (SUCH AS A HOME BUILDER).
 - THE SITE ASSESSMENT SHALL BE PERFORMED BY INDIVIDUALS WITH THE FOLLOWING QUALIFICATIONS:
 - A LICENSED PROFESSIONAL ENGINEER OR LANDSCAPE ARCHITECT
 - A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) OR
 - A PERSON THAT SUCCESSFULLY COMPLETED THE "LEVEL II DESIGN PRINCIPLES FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE.
 - QUALITY ASSURANCE OF EROSION PREVENTION AND SEDIMENT CONTROLS SHALL BE DONE BY PERFORMING SITE ASSESSMENT AT A CONSTRUCTION SITE. THE SITE ASSESSMENT SHALL BE CONDUCTED AT EACH OUTFALL INVOLVING DRAINAGE TOTALING 10 OR MORE ACRES OR 5 OR MORE ACRES IF DRAINING TO AN IMPAIRED OR EXCEPTIONAL QUALITY WATERS, WITHIN A MONTH OF CONSTRUCTION COMMENCING AT EACH PORTION OF THE SITE THAT DRAINS THE QUALIFYING ACREAGE OF SUCH PORTION OF THE SITE.
 - AS A MINIMUM, SITE ASSESSMENT SHOULD BE PERFORMED TO VERIFY THE INSTALLATION, FUNCTIONALITY AND PERFORMANCE OF THE EPSC MEASURES DESCRIBED IN THE SWPPP REPORT. THE SITE ASSESSMENT SHOULD BE PERFORMED WITH THE INSPECTOR, AND SHOULD INCLUDE A REVIEW AND UPDATE (IF APPLICABLE) OF THE SWPPP REPORT. MODIFICATIONS OF PLANS AND SPECIFICATIONS FOR ANY BUILDING OR STRUCTURE, INCLUDING THE DESIGN OF SEDIMENT BASINS OR OTHER SEDIMENT CONTROLS INVOLVING STRUCTURAL, HYDRAULIC, HYDROLOGIC OR OTHER ENGINEERING CALCULATIONS SHALL BE PREPARED BY A LICENSED PROFESSIONAL ENGINEER.
 - THE SITE ASSESSMENT FINDINGS SHALL BE DOCUMENTED AND THE DOCUMENTATION SHALL INCLUDE INFORMATION INCLUDED IN THE INSPECTION FORM PROVIDED IN APPENDIX D OF THE SWPPP REPORT. THE DOCUMENTATION MUST CONTAIN THE PRINTED NAME AND SIGNATURE OF THE INDIVIDUAL PERFORMING THE SITE ASSESSMENT AND THE FOLLOWING CERTIFICATION:
 - "I CERTIFY UNDER PENALTY OF LAW THAT THIS REPORT AND ALL ATTACHMENTS ARE, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."
 - THE SITE ASSESSMENT CAN TAKE THE PLACE OF ONE OF THE TWICE WEEKLY INSPECTIONS REQUIREMENT.
 - NHDDES MAY REQUIRE ADDITIONAL SITE ASSESSMENT(S) TO BE PERFORMED IF SITE INSPECTION BY NHDDES PERSONNEL REVEALS SITE CONDITIONS THAT HAVE POTENTIAL OF CAUSING POLLUTION TO THE WATERS OF THE STATE.
 - CONTRACTOR SHALL INSTALL A 4'x4' WEATHER PROOF SIGN (6' HEIGHT) AT THE MAIN CONSTRUCTION ENTRANCE. THE SIGN SHALL HAVE THE FOLLOWING INFORMATION:
 - A COPY OF THE NOTICE OF COVERAGE WITH THE NPDES PERMIT NUMBER (FURNISHED BY ENGINEER).
 - THE NAME AND TELEPHONE NUMBER OF A LOCAL CONTACT PERSON (FURNISHED BY CONSTRUCTION MANAGER).
 - DESCRIPTION OF PROJECT (FURNISHED BY CONSTRUCTION MANAGER)

LEGEND

- EXISTING PROPERTY LINE
- █ EXISTING STAKED WETLAND
- █ EXISTING PAVEMENT
- GAS — EXISTING GAS MAIN
- 21 — EXISTING CONTOUR
- EXISTING STORM DRAIN
- 21 — PROPOSED CONTOUR
- PROPOSED CENTERLINE OF DREDGED DRAINAGE CHANNEL
- █ PROPOSED 25x7x3' BOX CULVERT

STORMWATER NOTES

FEMA NOTE
THIS LOT DOES NOT LIE IN AN AREA DESIGNATED AS A SPECIAL FLOOD HAZARD AREA ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP 33015C0280F, DATED 01/29/2021.

CONSTRUCTION SCHEDULE

- PRE-CONSTRUCTION MEETING
- INSTALLATION OF EROSION CONTROL MEASURES
- EROSION INSPECTION BY AHJ
- ISSUANCE OF PERMIT
- CONSTRUCTION

CONSTRUCTION SHALL BE COMPLETED WITHIN 12 MONTHS OF THE PERMIT BEING ISSUED. IF CONSTRUCTION IS NOT COMPLETE IN THAT AMOUNT OF TIME, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY FOR AN EXTENSION OF THE PERMIT.

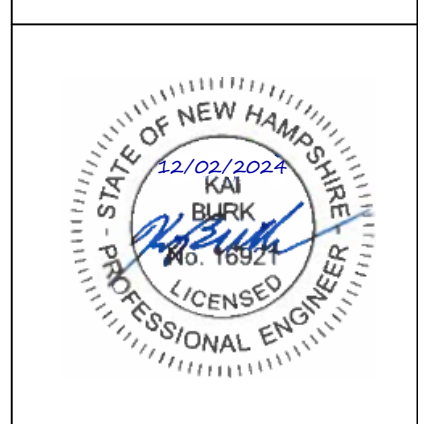
NEW HAMPSHIRE DEPT. OF ENVIRONMENTAL SERVICES (NHDES) NOTICE OF COVERAGE
THIS PROJECT DOES NOT DISTURB MORE THAN 1 ACRE AND IS NOT REQUIRED TO APPLY FOR A NOTICE OF COVERAGE UNDER THE NEW HAMPSHIRE GENERAL CONSTRUCTION PERMIT FROM NHDES.

EROSION CONTROL LEGEND

- EC-1 4'x8' LARGE DIAMETER SMOOTH RIVER ROCK OUTLET PROTECTION TO BE INSTALLED UPON COMPLETION OF GRADING AND BYPASS PUMPING OPERATION - SEE DETAIL ON C3-01
- EC-2 EROSION CONTROL MATTING - CONTECH LANDLOCK S2 OR APPROVED EQUAL. CONTRACTOR TO INSTALL ON ALL SLOPES STEEPER THAN 3:1 OR STEEPER. SEE DETAIL ON C3-01. "ENSURE PRODUCTS DO NOT HAVE PLASTIC" -WITH-
- EC-3 PERMANENT STABILIZATION - CONSERVATION SEED MIX/ NEW ENGLAND WETMIX (BENEATH EROSION CONTROL MATTING). "PERMANENTLY" STABILIZE ALL DISTURBED AREAS.
- FM TEMPORARY BYPASS PUMP/ PUMP AROUND INFRASTRUCTURE. SEE DETAIL ON C3-01.
- LOD LIMITS OF DISTURBANCE: ±2,500 SF

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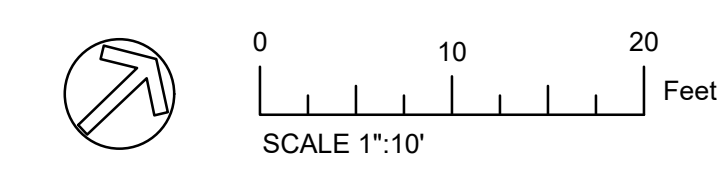
**PORTSMOUTH REGIONAL HOSPITAL
HCA HEALTHCARE**
PORTSMOUTH, NH

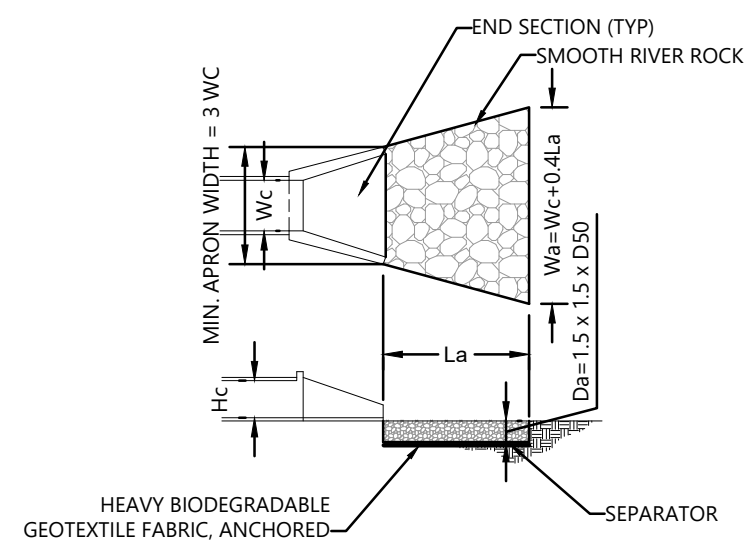


PLAN STATUS	
DATE	DESCRIPTION
DESIGN	DRAWN
	CHKD

MARCH 2024
EROSION CONTROL PLAN

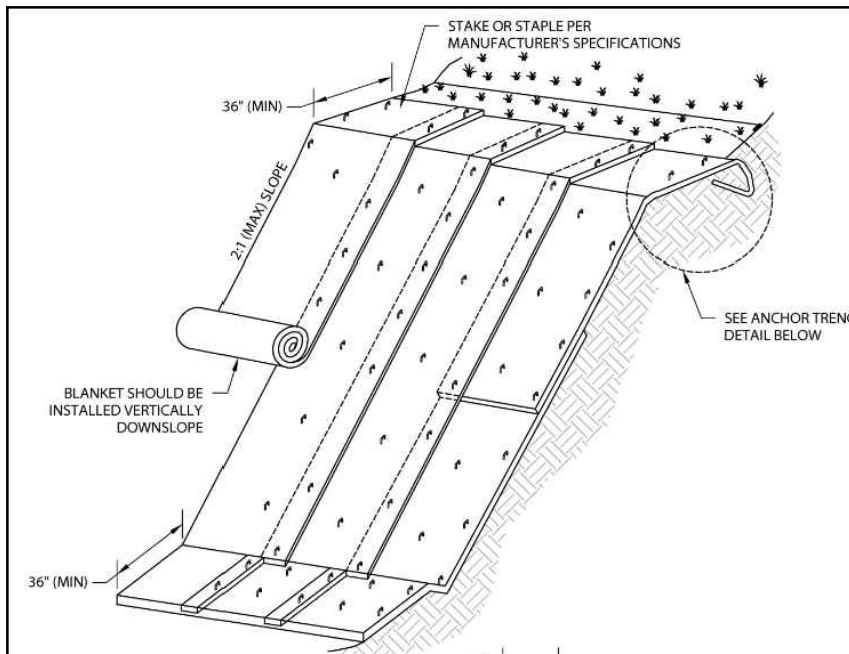
C3-00





OUTFALL PIPE LENGTH (Lp)	WIDTH (Wa)	d50
8-18"	8'	DIA+La/3
24"	8'	DIA+La/3
48"	20'	DIA+La/3

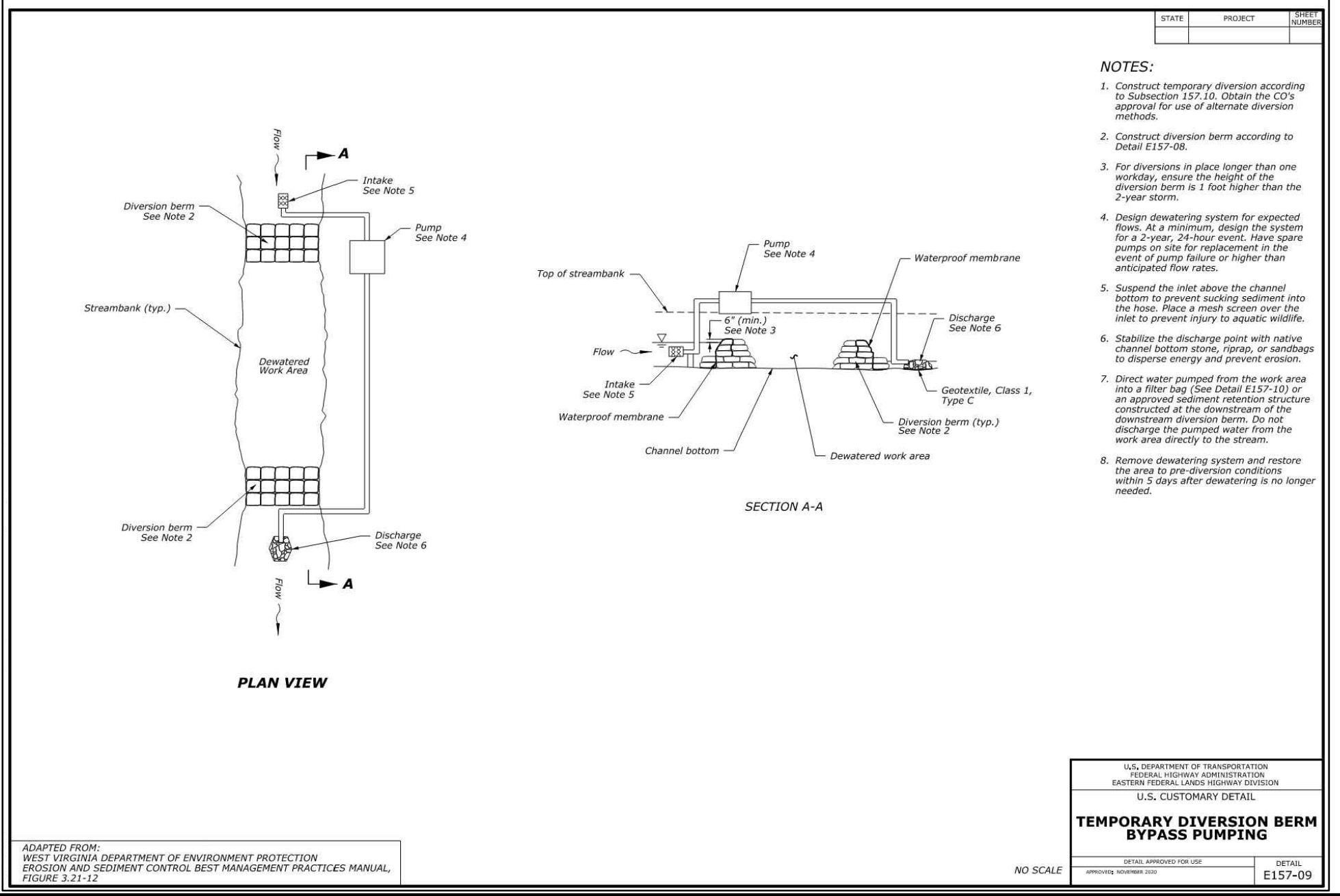
1 OUTLET PROTECTION
NOT TO SCALE



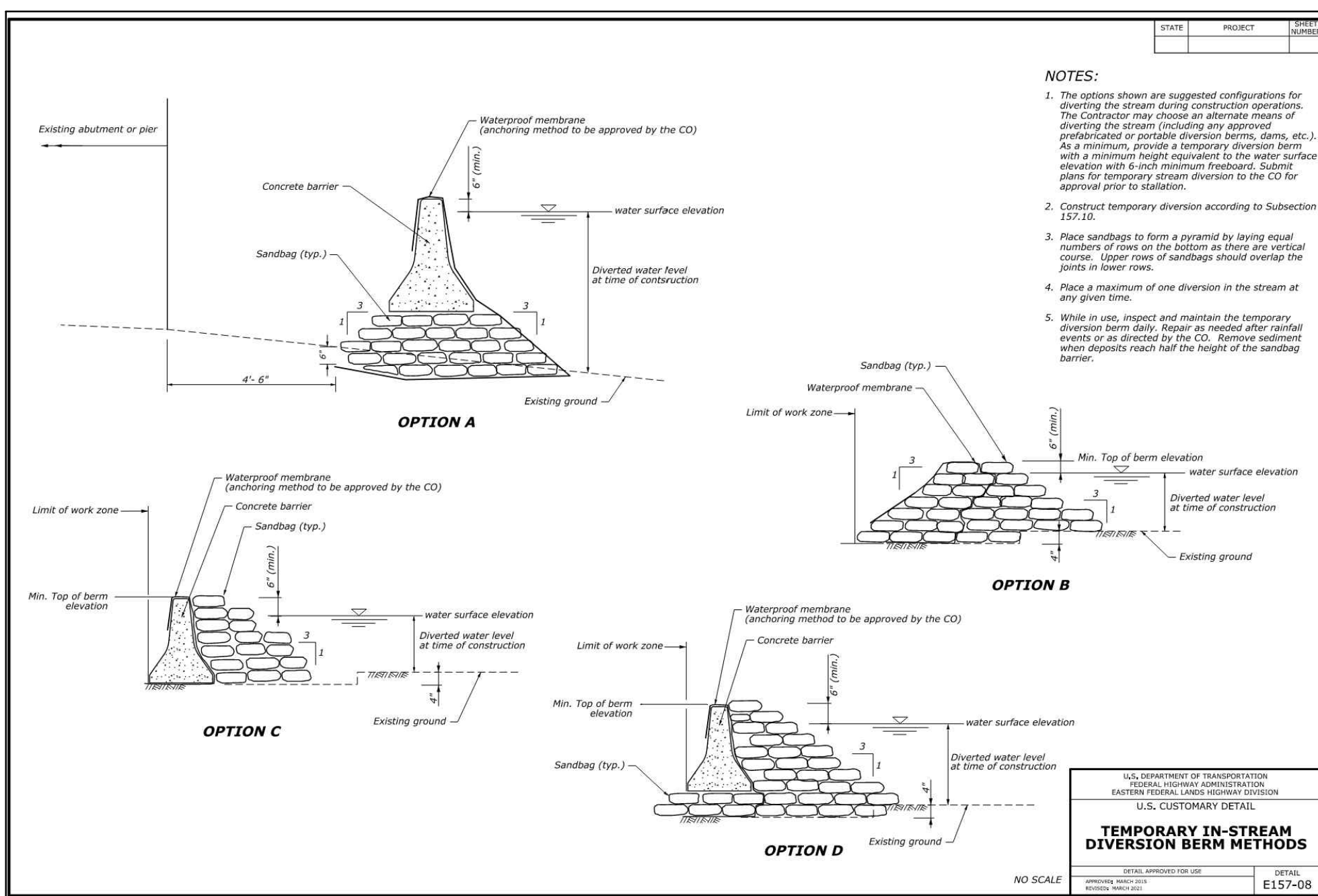
CONTRACTOR ENSURE EROSION BLANKETS DO NOT INCLUDE PLASTICS

- NOTES:
1. SLOPE SURFACE SHALL BE FREE OF ROCKS, VEGETATION, STICKS, AND DEBRIS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT. SCARIFY AND/OR TILL SLOPE SURFACE 12" DEEP BEFORE LAYING BLANKET.
 2. LAY BLANKETS LOOSELY AND STAKE OR STAPLE AS NEEDED TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH OR TWIST.
 3. EROSION CONTROL BLANKETS SHOULD BE USED IN CONJUNCTION WITH VEGETATION (CONTAINER OR PLUG PLANTING) TO SPECIFICATIONS OF REVEGETATION PLAN FOR PROJECT.
 4. HAND WALK BLANKET DOWN SLOPE AS BLANKET IS STAKED OR STAPLED TO PREVENT STRETCHING.
 5. DO NOT WALK ON BLANKET ONCE IN PLACE.
 6. ALL ANCHORS SHALL BE INSTALLED PERPENDICULAR TO SLOPE.

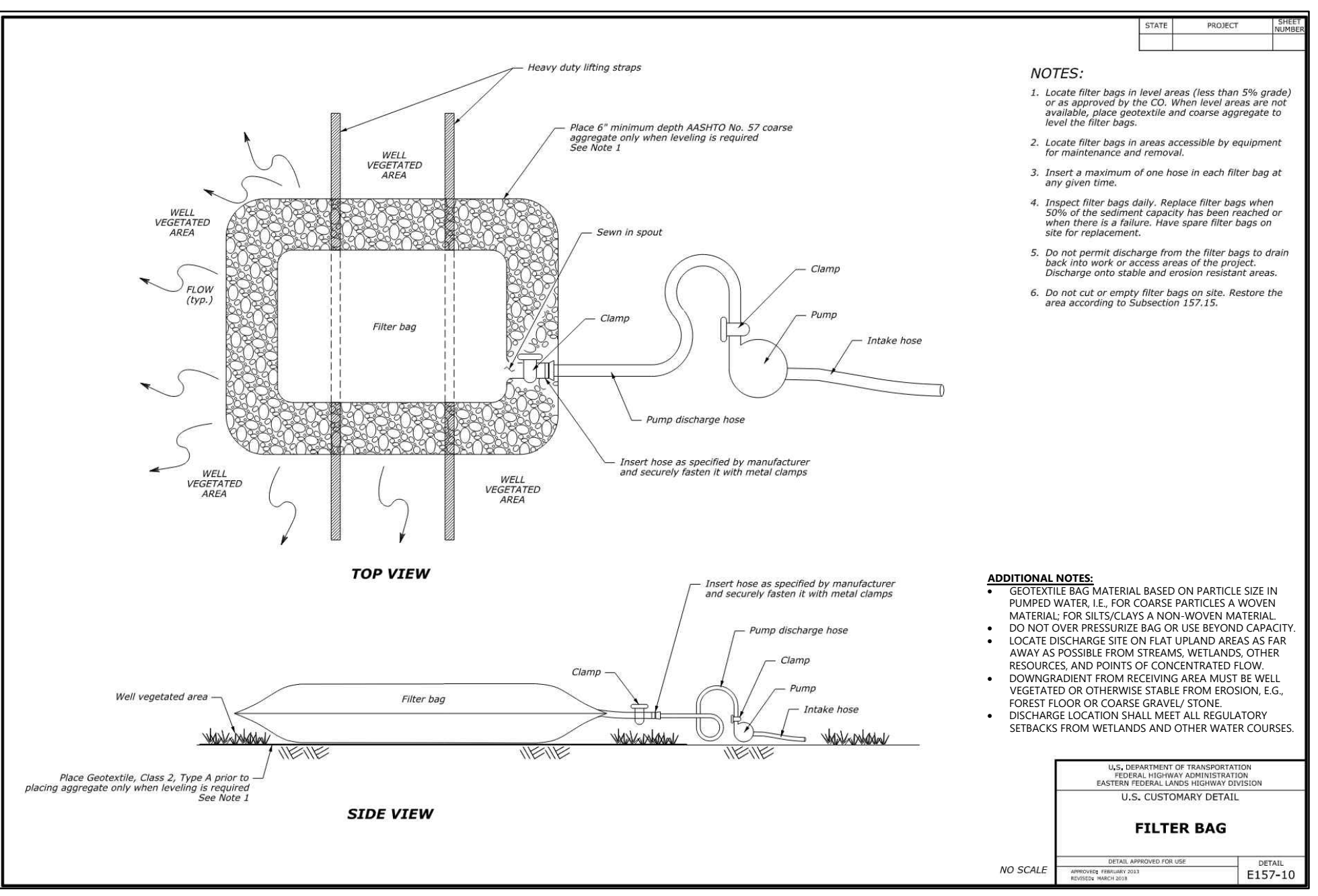
2 EROSION CONTROL BLANKET
NOT TO SCALE



TEMPORARY DIVERSION BERM BYPASS PUMPING
NO SCALE
DETAIL E157-09



3 TEMPORARY DEWATERING MEASURES
NOT TO SCALE



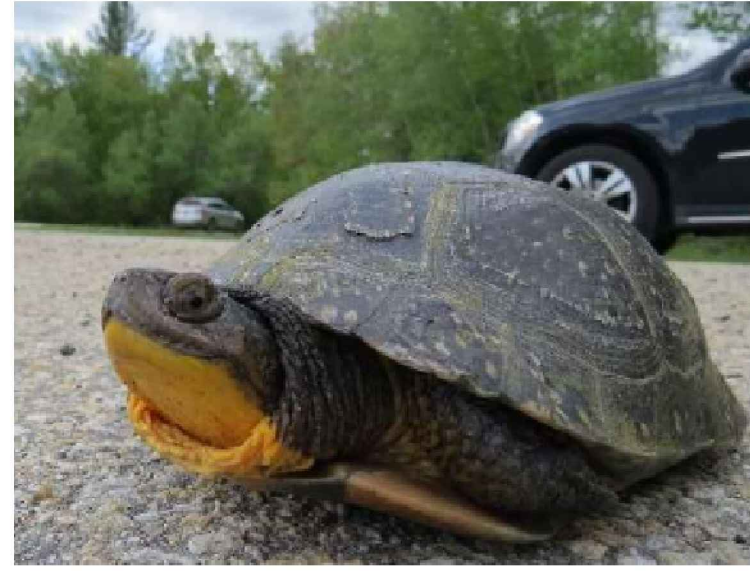
TEMPORARY IN-STREAM DIVERSION BERM METHODS
NO SCALE
DETAIL E157-08



WATCH FOR RARE TURTLES

NHFG Wildlife Biologist Contacts:
Melissa Winters 603-479-1129 and Josh Megyesy 978-578-0802

- Turtles may be attracted to disturbed ground during nesting season (May 15th – June 30th).
- Turtles are most active from April 15th - October 15th.



Blanding's turtle (State Endangered)
Large, dark/black domed shell with lighter speckles.
Distinct yellow throat/chin.
Semi-aquatic- uses both wetland and terrestrial habitats.



Spotted turtle (State Threatened)
Small, mostly aquatic with black or dark brown with yellow spots.
Fairly flat shell compared to Blanding's turtle.
Spots vary in color and number.
Semi-aquatic - uses both wetland and terrestrial habitats.

Blanding's and spotted turtles are protected by state laws. It is illegal to capture, harass or harm these species, including their nests. Handle ONLY if necessary to move out of harms way. Move to the nearest location in the direction they were moving and contact NHFG. Do not disturb nests.

Report sightings in accordance with NHFG permit conditions. Contact NHFG Wildlife Biologist Melissa Winters 603-479-1129 (cell) and Josh Megyesy 978-578-0802 (group text preferred) if a turtle is observed nesting or a nest site is suspected within the project area. Please report promptly, noting specific location, project site and date – Photographs strongly encouraged to be included with report.

WATCH FOR SORA & MARSH WREN



House Wren



Winter Wren



Sedge Wren



Marsh Wren



Carolina Wren



Sora

NEW HAMPSHIRE FISH & GAME - BIOLOGIST CONTACTS:
• MELISSA WINTERS (603) 479-1129
• JOSH MEGYESY (978) 578-0802

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HCA HEALTHCARE
PORTSMOUTH, NH



PLAN STATUS		
DATE	DESCRIPTION	
DESIGN	DRAWN	CHKD

MARCH 2024
EROSION CONTROL DETAILS

C3-01

Matthew Hamby

From: DeMoss III Trip <Trip.DeMoss@hcahealthcare.com>
Sent: Monday, December 23, 2024 7:51 AM
To: Matthew Hamby
Subject: [EXTERNAL] Re:Portsmouth Owner Authorization to Submit

Matthew,

You are authorized to upload on HCA's behalf.

Thank you,

Trip DeMoss

Sr. Construction Manager
Design & Construction

HCA Healthcare
2545 Park Plaza Building 3-2, Nashville, TN 37203
P 615.344.1604 | M 615.957.3504

[HCAhealthcare.com](https://www.hcahealthcare.com) | [Connect With Us](#)

From: Matthew Hamby <mhamby@bowman.com>
Sent: Monday, December 23, 2024 7:48:43 AM
To: DeMoss III Trip <Trip.DeMoss@hcahealthcare.com>
Subject: {EXTERNAL} RE: Portsmouth Owner Authorization to Submit

CAUTION! This email originated from outside of our organization. **DO NOT CLICK** links or open attachments unless you recognize the sender and know the content is safe.

Good morning Trip,

Please provide written authorization for me to upload the Conditional Use Permit package on behalf of HCA for Portsmouth Reginal Hospital's culvert replacement project.

Regards,

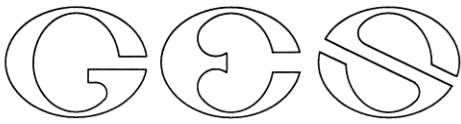
MATTHEW HAMBY, P.E.

Civil Engineer - Principal | **BOWMAN**

M: (615) 579-1629 | mhamby@bowman.com

From: DeMoss III Trip <Edwin.DeMossIII@hcahealthcare.com>
Sent: Wednesday, December 27, 2023 4:57 PM
To: Matthew Hamby <mhamby@bowman.com>
Subject: [EXTERNAL] Re:Portsmouth Owner Authorization to Submit

Matthew,



Date: September 25, 2024

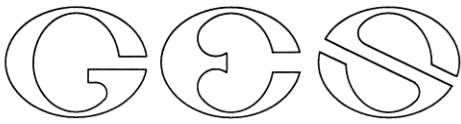
Subject: Functions and Values Analysis

Re: Minor Dredge and Fill Application
333 Borthwick Ave, Portsmouth

The subject property located on 333 Borthwick Ave, in Portsmouth, NH, identified by Tax map 240 Lot 2-1. The proposed project is for the replacement of an existing tier 1 stream crossing currently utilized as a utility access for a natural gas station on the north of the property. The project area was reviewed and field delineated by Brenden Walden, a NH CWS, in the fall of 2019 with additional flagging to encompass the project area done during February of 2024. During the wetland delineation of the property, two wetlands were identified within the scope of the project area. These wetlands area identified and discussed below as Wetland A & B. A wetland function and value assessment was conducted using the US Army Corps Highway Methodology for the three wetlands identified and will be discussed in more detail below.

The US Army Corps Highway Methodology considers 13 categories of function or value within a particular wetland area:

- 1. Groundwater recharge/discharge:** This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area. Recharge should relate to the potential for the wetland to contribute water to an aquifer. Discharge should relate to the potential for the wetland to serve as an area where ground water can be discharged to the surface.
- 2. Floodflow Alteration:** This function considers the effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events.
- 3. Fish and Shellfish Habitat:** This function considers the effectiveness of seasonal or permanent water bodies associated with the wetland in question for fish and shell fish habitat.
- 4. Water Quality—Sediment/Toxicant/Pathogen Retention:** This function reduces or prevents degradation of water quality. It relates to the effectiveness of the wetland as a trap for sediments, toxicants or pathogens.
- 5. Water Quality—Nutrient Removal/Retention/Transformation:** This function relates to the effectiveness of the wetland to prevent adverse effects of excess nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers or estuaries.
- 6. Production Export:** This function relates to the effectiveness of the wetland to produce food or usable products for human, or other living organisms.
- 7. Sediment/Shoreline Stabilization:** This function relates to the effectiveness of a wetland to stabilize stream banks and shorelines against erosion.
- 8. Wildlife Habitat:** This function considers the effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and the wetland edge. Both resident and or migrating species must be considered.
- 9. Recreation:** This value considers the effectiveness of the wetland and associated watercourses to provide recreational opportunities such as canoeing, boating, fishing, hunting and other active or passive recreational activities. Consumptive opportunities consume or



diminish the plants, animals or other resources that are intrinsic to the wetland, whereas non-consumptive opportunities do not.

10. Educational/Scientific Value: This value considers the effectiveness of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research.

11. Uniqueness/Heritage: This value relates to the effectiveness of the wetland or its associated water bodies to produce certain special values. Special values may include such things as archeological sites, unusual aesthetic quality, historical events, or unique plants, animals, or geological features.

12. Visual Quality/Aesthetics: This value relates to the visual and aesthetic qualities of the wetland.

13. Threatened or Endangered Species Habitat: This value relates to the effectiveness of the wetland or associated water bodies to support threatened or endangered species

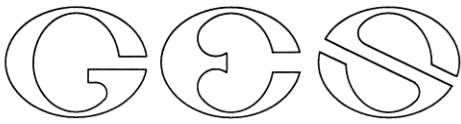
Functions are self-sustaining properties of wetlands, which exist in the absence of human involvement. Values refers to the benefits gained by human society from a given wetland or ecosystem and their inherit functions. Functions and values identified as “Principal” have been determined to be significant features of the wetland being evaluated. This does not necessarily indicate the wetland supports these functions or values at a significant level in comparison to other wetlands in the region or even near the site. A discussion of the evaluated areas and the associated functions and values is provided in the sections below.

Wetland A:

Wetland A is a man-made wetland system designed to direct stormwater around the hospital ground with hydrologic connections to adjacent wetlands through existing culverts. The wetland is dominantly vegetated with Phragmites, with some shrubs and trees existing along the boundary of the wetland. Areas of open water with unknown depth are present, and there is identified flow occurring near the norther outlet structure. Functions and values associated with this wetland identified with this wetland include, Groundwater Recharge/Discharge, Floodlfow Alteration, Sediment and Toxicant Retention, Nutrient Removal, Production Export, Sediment and Shorleline Stabilization, and Wildlife Habitat. These functions are attributed to the nature of the wetland’s development, existing dense vegetation, association with a watercourse and hydrologic connectivity up and down stream. The proposed impacts to this wetland for the replacement and improvement of the existing culvert from three 24-inch HDPE culverts to one single 10 x 3 box culvert will have no observable impact to the identified functions and values. Additionally, this wetland will have increase connectivity and passage for aquatic organisms.

Wetland B:

Wetland B is the down stream more natural wetland system that extends off site. This wetland is composed of areas of emergent vegetation adjacent to the existing parking area with dense scrub shrub vegetation adjacent to the existing watercourse. Functions and values associated with this wetland identified with this wetland include, Groundwater Recharge/Discharge, Floodlfow Alteration, Sediment and Toxicant Retention, Nutrient Removal, Production Export, Sediment and Shorleline Stabilization, and Wildlife Habitat. These functions are attributed to the nature of the existing dense vegetation, association with a watercourse and hydrologic connectivity up and down stream. The proposed impacts to this wetland for the replacement and improvement of the existing culvert from three 24-inch HDPE culverts to one single 10 x 3 box culvert will have no observable impact to the identified functions and values. Additionally, this wetland will have increase connectivity and passage for aquatic organisms.



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Overall, the applicant has limited all wetland impacts to the greatest extent practicable and designed the project to be the least impacting alternative. The replacement of an existing structure will provide an overall net benefit to the existing functions and values that exist within the two wetland systems.

This concludes the functions and values analysis for the Minor Dredge and Fill Application for 333 Borthwick Ave, Portsmouth. If you have any other questions or believe I can assist you and any other way please feel free to contact me either by email: bwalden@gesinc.biz or by phone: 207- 710-7863.

Sincerely

Brenden Walden

President & Wetland Scientist
Gove Environmental Services, Inc



A

B

Wetland Function-Value Evaluation Form

Total area of wetland unknown Human made? yes Is wetland part of a wildlife corridor? yes or a "habitat island"? no

Adjacent land use Commercial development and roadway Distance to nearest roadway or other development >50ft

Dominant wetland systems present R2UBFx Contiguous undeveloped buffer zone present no

Is the wetland a separate hydraulic system? no If not, where does the wetland lie in the drainage basin? lower

How many tributaries contribute to the wetland? unknown Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. A













Latitude _____ Longitude _____

Prepared by: BMW Date 12/7/23

Wetland Impact:
Type N/a Area N/a

Evaluation based on:
Office x Field x

Corps manual wetland delineation completed? Y x N _____

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	Y	1,2,4,6,7,9,15	y	wetland associated with a stream, has high density of vegetation, shows varying levels of water depth
 Floodflow Alteration	Y	3,4,5,6,7,8,9,10,11,12,13,15,16,18	y	Wetland associated with a watercourse hydrologically connected to upstream and down stream wetlands.
 Fish and Shellfish Habitat	n	hydroperiod unknown	n	Level of permanent water depth is unknown
 Sediment/Toxicant Retention	Y	1,2,3,4,5,6	y	Slow moving water with high density of vegetation
 Nutrient Removal	Y	3,4,5,6,7,8,9,10,11	y	dense vegetation for nutrient acquisition
 Production Export	Y	1,2,5,7,10,11,	y	associated with a watercourse with potential for flushing
 Sediment/Shoreline Stabilization	Y	1,2,3,4,12,13,15	y	bank of water course is effectively stable from existing vegetation
 Wildlife Habitat	Y	7,8,13,17,18,19,20,21	Y	man influenced wetland with associated water course and dense vegetation
 Recreation	n	10,11	n	private property
 Educational/Scientific Value	n	11,13,14	n	private property
 Uniqueness/Heritage	n	1,10,11,17,	n	private property
 Visual Quality/Aesthetics	n	6,9,12	n	private property
ES Endangered Species Habitat		See NHB		
Other				

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland unknown Human made? yes Is wetland part of a wildlife corridor? yes or a "habitat island"? no

Adjacent land use Commercial development and roadway Distance to nearest roadway or other development >50ft

Dominant wetland systems present PSS1/EM1C Contiguous undeveloped buffer zone present no

Is the wetland a separate hydraulic system? no If not, where does the wetland lie in the drainage basin? lower

How many tributaries contribute to the wetland? unknown Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. B













Latitude _____ Longitude _____

Prepared by: BMW Date 12/7/23

Wetland Impact:
Type: Fill Area 200SF

Evaluation based on:
Office X Field X

Corps manual wetland delineation completed? Y X N _____

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	Y	1,2,4,6,7,9,15	y	wetland associated with a stream, has high density of vegetation, shows varying levels of water depth
 Floodflow Alteration	Y	3,4,5,6,7,8,9,10,11,12,13,15,16,18	y	Wetland associated with a watercourse hydrologically connected to upstream and down stream wetlands.
 Fish and Shellfish Habitat	n	hydroperiod unknown	n	Level of permanent water depth is unknown
 Sediment/Toxicant Retention	Y	1,2,3,4,5,6	y	Slow moving water with high density of vegetation
 Nutrient Removal	Y	3,4,5,6,7,8,9,10,11	y	dense vegetation for nutrient acquisition
 Production Export	Y	1,2,5,7,10,11,	y	associated with a watercourse with potential for flushing
 Sediment/Shoreline Stabilization	Y	1,2,3,4,12,13,15	y	bank of water course is effectively stable from existing vegetation
 Wildlife Habitat	Y	7,8,13,17,18,19,20,21	Y	Large wetland with associated water course and dense vegetation
 Recreation	n	10,11	n	private property
 Educational/Scientific Value	n	11,13,14	n	private property
 Uniqueness/Heritage	n	1,10,11,17,	n	private property
 Visual Quality/Aesthetics	n	6,9,12	n	private property
ES Endangered Species Habitat		See NHB		
Other				

Notes:

* Refer to backup list of numbered considerations.