

Shoreline Stabilization Improvements

148 Brackett Road
Portsmouth, New Hampshire

Assessor's Parcel 206 - 18 & 19
ISSUED FOR NHDES WETLANDS PERMIT/PORTSMOUTH C.U.P.

Plan Issue Date:
AUGUST 26, 2020

APPROVED BY THE PORTSMOUTH PLANNING BOARD	
CHAIRMAN	DATE

Owner / Applicant:

The Pamela N. Blalock
Trust Agreement
Pamela N. Blalock, Trustee
148 Brackett Road
Portsmouth, NH 03801

Civil Engineer:



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

Surveyor:

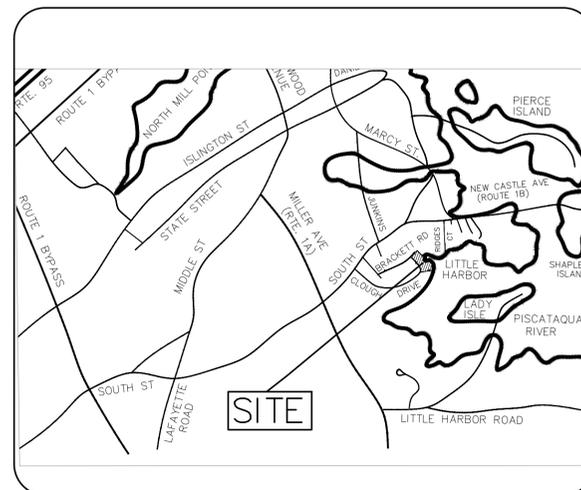
James Verra and
Associates, Inc.
LAND SURVEYORS
101 SHATTUCK WAY - SUITE 8
NEWINGTON, N.H. 03801- 7876
603-436-3557

Wetland Scientist:

Joe Noel
P.O. BOX 174
South Berwick, ME 03908
Phone: (207) 384-5587

Consultant:

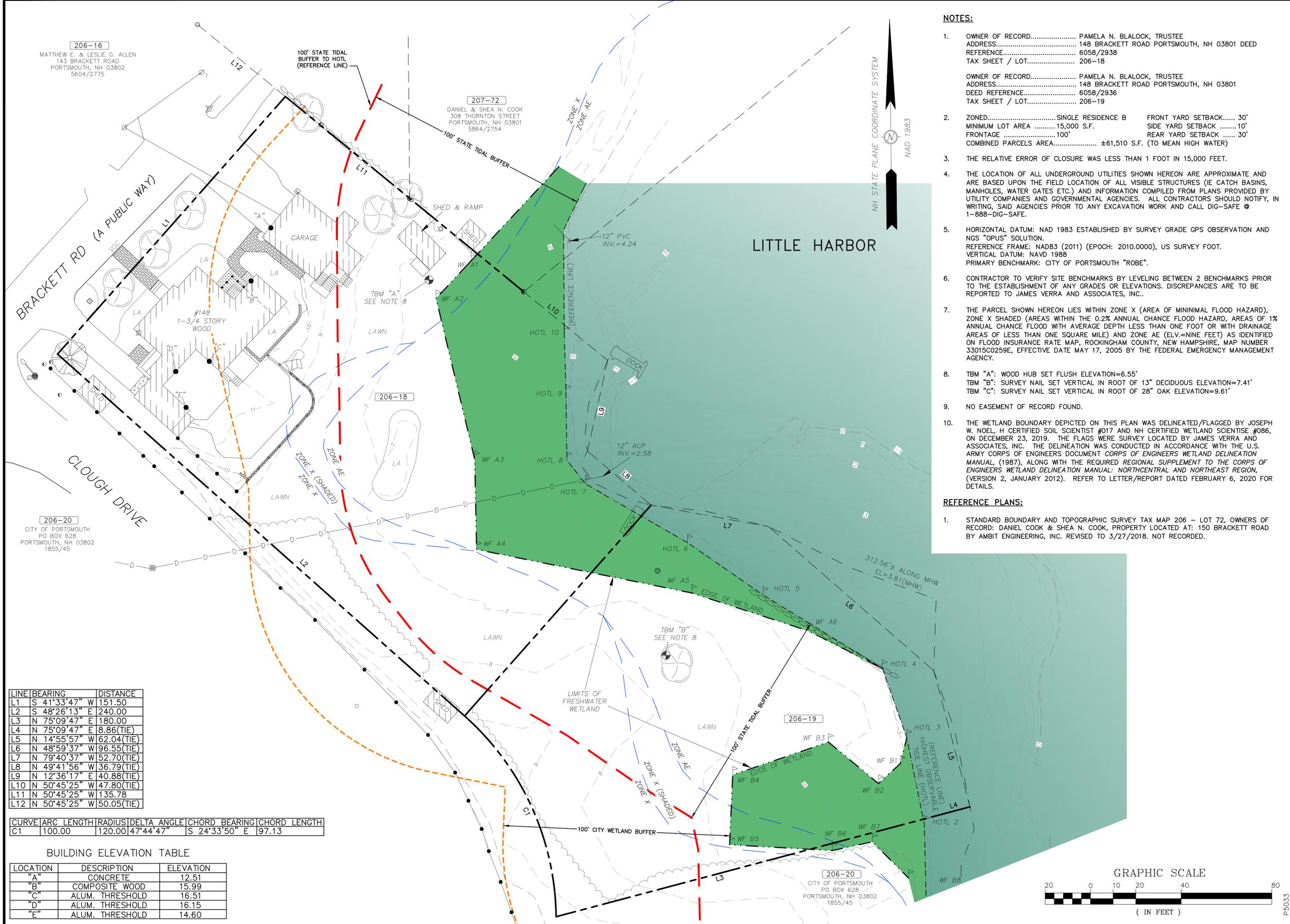
Dr. David Burdick
University of New Hampshire
School of Marine Science and Ocean Engineering
Natural Resources & the Environment
James Hall Rm 266
Durham, NH 03824
Phone: (603) 862-5129



LOCUS MAP
Not To Scale

Sheet Index

Title	Sheet No.:	Rev.	Date
Existing Conditions Plan	C-1	0	08/26/20
Grading, Drainage & Wetland Impact Plan	C-2	0	08/26/20
Planting Plan	C-3	0	08/26/20
Detail Sheet	C-4	0	08/26/20
Detail Sheet	C-5	0	08/26/20



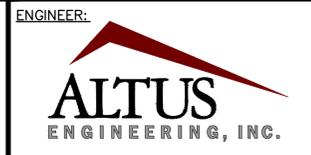
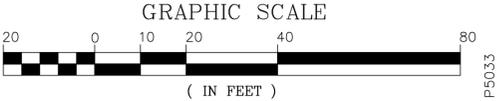
- NOTES:**
- OWNER OF RECORD..... PAMELA N. BLALOCK, TRUSTEE
 ADDRESS..... 148 BRACKETT ROAD PORTSMOUTH, NH 03801 DEED
 REFERENCE..... 6058/2938
 TAX SHEET / LOT..... 206-18
 OWNER OF RECORD..... PAMELA N. BLALOCK, TRUSTEE
 ADDRESS..... 148 BRACKETT ROAD PORTSMOUTH, NH 03801
 DEED REFERENCE..... 6058/2936
 TAX SHEET / LOT..... 206-19
 - ZONED..... SINGLE RESIDENCE B FRONT YARD SETBACK..... 30'
 MINIMUM LOT AREA 15,000 S.F. SIDE YARD SETBACK 10'
 FRONTAGE 100' REAR YARD SETBACK 30'
 COMBINED PARCELS AREA..... ±61,510 S.F. (TO MEAN HIGH WATER)
 - THE RELATIVE ERROR OF CLOSURE WAS LESS THAN 1 FOOT IN 15,000 FEET.
 - 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 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.
 - 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 "ROBE".
 - 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..
 - THE PARCEL SHOWN HEREON LIES WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD), ZONE X SHADED (AREAS WITHIN THE 0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE) AND ZONE AE (ELV.=NINE FEET) AS IDENTIFIED ON FLOOD INSURANCE RATE MAP, ROCKINGHAM COUNTY, NEW HAMPSHIRE, MAP NUMBER 33015C0259E, EFFECTIVE DATE MAY 17, 2005 BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.
 - TBM "A": WOOD HUB SET FLUSH ELEVATION=6.55'
 TBM "B": SURVEY NAIL SET VERTICAL IN ROOT OF 13" DECIDUOUS ELEVATION=7.41'
 TBM "C": SURVEY NAIL SET VERTICAL IN ROOT OF 28" OAK ELEVATION=9.61'
 - NO EASEMENT OF RECORD FOUND.
 - THE WETLAND BOUNDARY DEPICTED ON THIS PLAN WAS DELINEATED/FLAGGED BY JOSEPH W. NOEL, H CERTIFIED SOIL SCIENTIST #017 AND NH CERTIFIED WETLAND SCIENTIST #086, ON DECEMBER 23, 2019. THE FLAGS WERE SURVEY LOCATED BY JAMES VERRA AND ASSOCIATES, INC. THE DELINEATION WAS CONDUCTED IN ACCORDANCE WITH THE U.S. ARMY CORPS OF ENGINEERS DOCUMENT CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, (1987), ALONG WITH THE REQUIRED REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTH-CENTRAL AND NORTHEAST REGION, (VERSION 2, JANUARY 2012). REFER TO LETTER/REPORT DATED FEBRUARY 6, 2020 FOR DETAILS.
- REFERENCE PLANS:**
- STANDARD BOUNDARY AND TOPOGRAPHIC SURVEY TAX MAP 206 - LOT 72, OWNERS OF RECORD: DANIEL COOK & SHEA N. COOK, PROPERTY LOCATED AT: 150 BRACKETT ROAD BY AMBIT ENGINEERING, INC. REVISED TO 3/27/2018. NOT RECORDED.

LINE	BEARING	DISTANCE
L1	S 41°33'47" W	151.50
L2	S 48°26'13" E	240.00
L3	N 75°09'47" E	180.00
L4	N 75°09'47" E	8.86(TIE)
L5	N 14°55'57" W	62.04(TIE)
L6	N 48°59'37" W	96.55(TIE)
L7	N 79°40'37" W	52.70(TIE)
L8	N 49°41'56" W	36.79(TIE)
L9	N 12°36'17" E	40.88(TIE)
L10	N 50°45'25" W	47.80(TIE)
L11	N 50°45'25" W	135.78
L12	N 50°45'25" W	50.05(TIE)

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	100.00	120.00	47°44'47"	S 24°33'50" E	97.13

BUILDING ELEVATION TABLE

LOCATION	DESCRIPTION	ELEVATION
"A"	CONCRETE	12.51
"B"	COMPOSITE WOOD	15.99
"C"	ALUM. THRESHOLD	16.51
"D"	ALUM. THRESHOLD	16.15
"E"	ALUM. THRESHOLD	14.60



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



ISSUED FOR: APPROVAL

ISSUE DATE: AUGUST 26, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EBS	08/26/20

NOT FOR CONSTRUCTION

DRAWN BY: EBS
 APPROVED BY: EDW
 DRAWING FILE: 5033-SITE.DWG

SCALE:
 22" x 34" - 1" = 20'
 11" x 17" - 1" = 40'

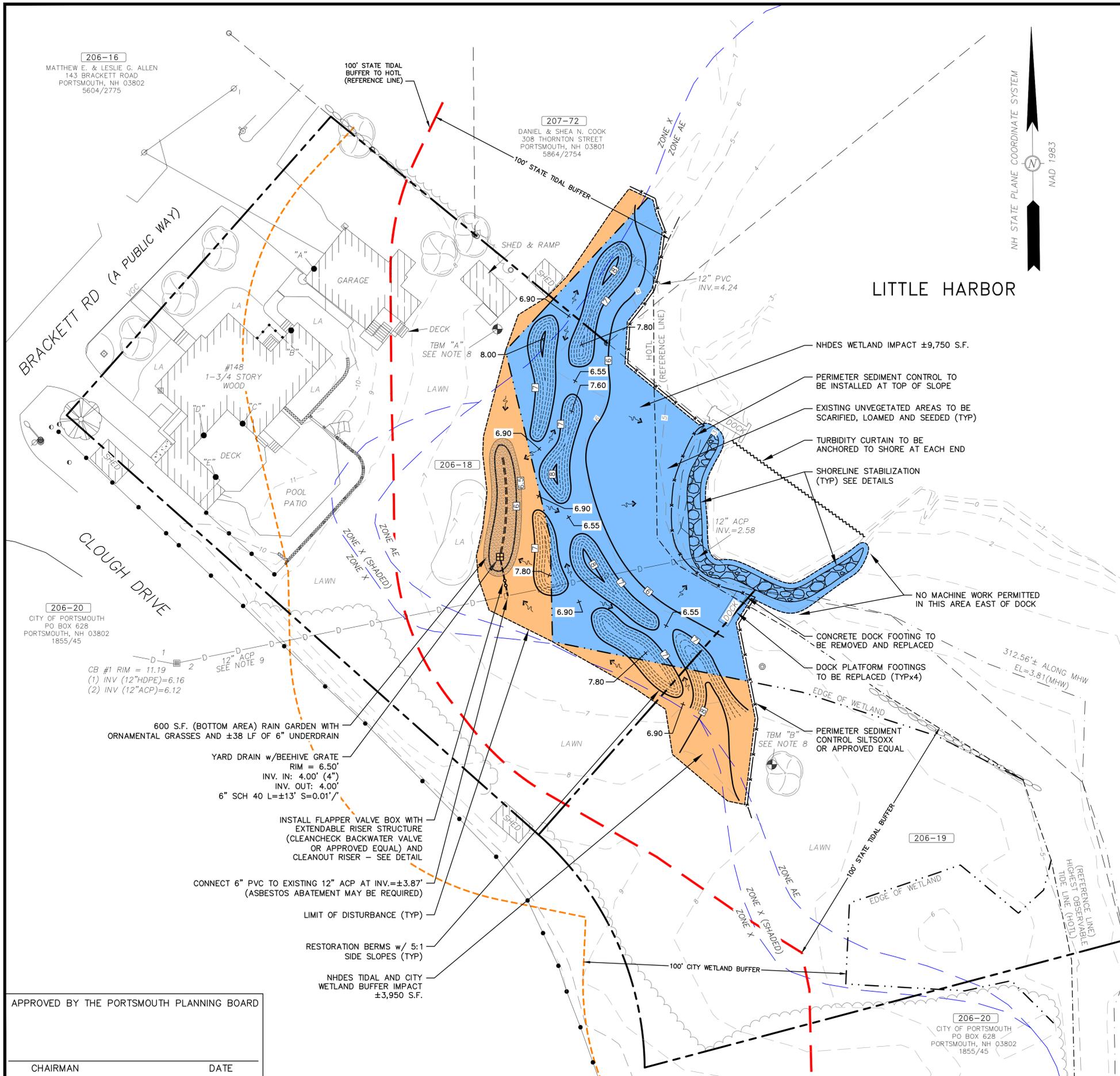
OWNER/APPLICANT:
 PAMELA N. BLALOCK TRUST AGREEMENT
 PAMELA N. BLALOCK, TRUSTEE
 148 BRACKETT ROAD
 PORTSMOUTH, N.H.

ASSESSOR'S PARCEL 206-18
 ASSESSOR'S PARCEL 206-19

PROJECT:
SHORELAND STABILIZATION
 148 BRACKETT ROAD
 PORTSMOUTH, N.H.
 ASSESSOR'S PARCEL 206-18
 ASSESSOR'S PARCEL 206-19

TITLE:
EXISTING CONDITIONS PLAN

SHEET NUMBER:
C-1

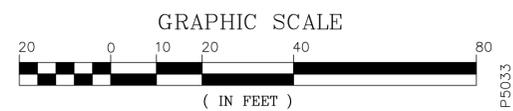


SITE NOTES

- DESIGN INTENT – THIS PLAN IS INTENDED TO DEPICT THE STABILIZATION OF THE TIDAL EMBANKMENT THROUGH THE INSTALLATION OF A "LIVING SHORELINE" TOGETHER WITH OTHER IMPROVEMENTS.
- THE BASE PLAN USED HERE WAS DEVELOPED FROM "EXISTING CONDITIONS PLAN, 148 BRACKETT ROAD, PORTSMOUTH, NH" BY JAMES VERRA AND ASSOCIATES, INC., DATED AUGUST 7, 2020.
- CONTRACTOR SHALL OBTAIN A "DIGSAFE" NUMBER AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
- 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.
- THE CONTRACTOR SHALL VERIFY ALL BENCHMARKS AND TOPOGRAPHY IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
- WETLAND AND BUFFER IMPACTS:**
 NHDES AREA OF WETLAND IMPACT: ±9,750 S.F.
 AREA OF BUFFER DISTURBANCE: ±3,950 S.F. (CITY & NHDES BUFFERS)
 TOTAL DISTURBANCE: ±13,700 S.F. (0.31 ACRE)
- NHDES WETLANDS PERMIT REQUIRED (PENDING).
- NO WORK REQUIRED BEYOND THE 100' TIDAL BUFFER, NHDES SHORELAND PERMIT NOT REQUIRED.
- ZONING SECTION 10.1016 – CITY CONDITIONAL USE PERMIT REQUIRED FOR SURFACE ALTERATION IN THE WETLAND BUFFER (PENDING).
- AREA OF DISTURBANCE IS UNDER 43,560 SF, COVERAGE UNDER EPA NPDES PHASE II CONSTRUCTION GENERAL PERMIT IS NOT REQUIRED.
- PORTIONS OF THE SITE ARE IN FLOOD HAZARD ZONE AE PER FLOOD INSURANCE RATE MAP (FIRM), ROCKINGHAM COUNTY, NEW HAMPSHIRE, PANEL 259 OF 681, MAP 33015C0259E DATED MAY 17, 2005.
- WETLANDS WERE DELINEATED BY JOSEPH NOEL, NH CERTIFIED SOILS SCIENTIST #017 AND NH CERTIFIED WETLANDS SCIENTIST #086, ON DECEMBER 23, 2019.
- CONTRACTOR SHALL INSTALL AND MAINTAIN TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES TO PREVENT SEDIMENT FROM CONSTRUCTION ACTIVITIES LEAVING THE SITE. PERIMETER EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED IN GOOD WORKING ORDER FOR THE DURATION OF CONSTRUCTION AND ARE NOT TO BE REMOVED UNTIL THE UPHILL CONTRIBUTING AREAS ARE STABILIZED. CONTROLS SHALL BE INSPECTED ON A REGULAR BASIS AND AFTER ALL RAIN EVENTS OF 0.25 INCHES OR GREATER. ANY DEFICIENCIES IN THE CONTROLS SHALL BE ADDRESSED IMMEDIATELY AND BROUGHT TO THE ATTENTION OF THE OWNER.
- ON-SITE LOAM SHALL BE REUSED IN IT'S ENTIRETY. IMPORTED LOAM SHALL BE MIXED WITH NATIVE LOAM PRIOR TO APPLICATION TO AVOID SEGREGATED SOIL ZONES.

LEGEND

- PROPERTY LINE
- TIE LINE
- 100' PORTSMOUTH WETLAND BUFFER
- 100' NHDES TIDAL BUFFER
- WETLAND BOUNDARY
- HIGHEST OBSERVABLE TIDE LINE (HOTL)
- MEAN HIGH WATER LINE (MHW)
- EXISTING PAVEMENT/CURB
- EXISTING TREELINE
- 60 --- EXISTING CONTOUR
- 60 --- PROPOSED CONTOUR 1'/0.25' INTERVAL
- 100.00 --- PROPOSED SPOT GRADE
- W --- EXISTING WATER/CURB STOP/VALVE/HYDRANT
- UG --- EXIST. OVER/UNDERGROUND UTILITIES/POLE
- D --- EXISTING DRAINAGE/CB/DMH
- PROPOSED DRAIN HARD PIPE/CATCH BASIN/PERFORATED PIPE
- LIMIT OF DISTURBANCE
- x --- SILTFENCE/SEDIMENT BARRIER/CONST. FENCE
- TURBIDITY CURTAIN
- PROPOSED NHDES WETLAND IMPACT
- PROPOSED NHDES AND CITY WETLAND BUFFER DISTURBANCE



LITTLE HARBOR

NH STATE PLANE COORDINATE SYSTEM
NAD 1983

206-16
MATTHEW E. & LESLIE G. ALLEN
143 BRACKETT ROAD
PORTSMOUTH, NH 03802
5604/2775

207-72
DANIEL & SHEA N. COOK
308 THORNTON STREET
PORTSMOUTH, NH 03801
5864/2754

206-20
CITY OF PORTSMOUTH
PO BOX 628
PORTSMOUTH, NH 03802
1855/45

206-20
CITY OF PORTSMOUTH
PO BOX 628
PORTSMOUTH, NH 03802
1855/45

APPROVED BY THE PORTSMOUTH PLANNING BOARD
CHAIRMAN _____ DATE _____

ENGINEER:

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

Issued for: APPROVAL
 Issue Date: AUGUST 26, 2020

REVISIONS
 NO. DESCRIPTION BY DATE
 0 INITIAL SUBMISSION EBS 08/26/20

NOT FOR CONSTRUCTION

DRAWN BY: EBS
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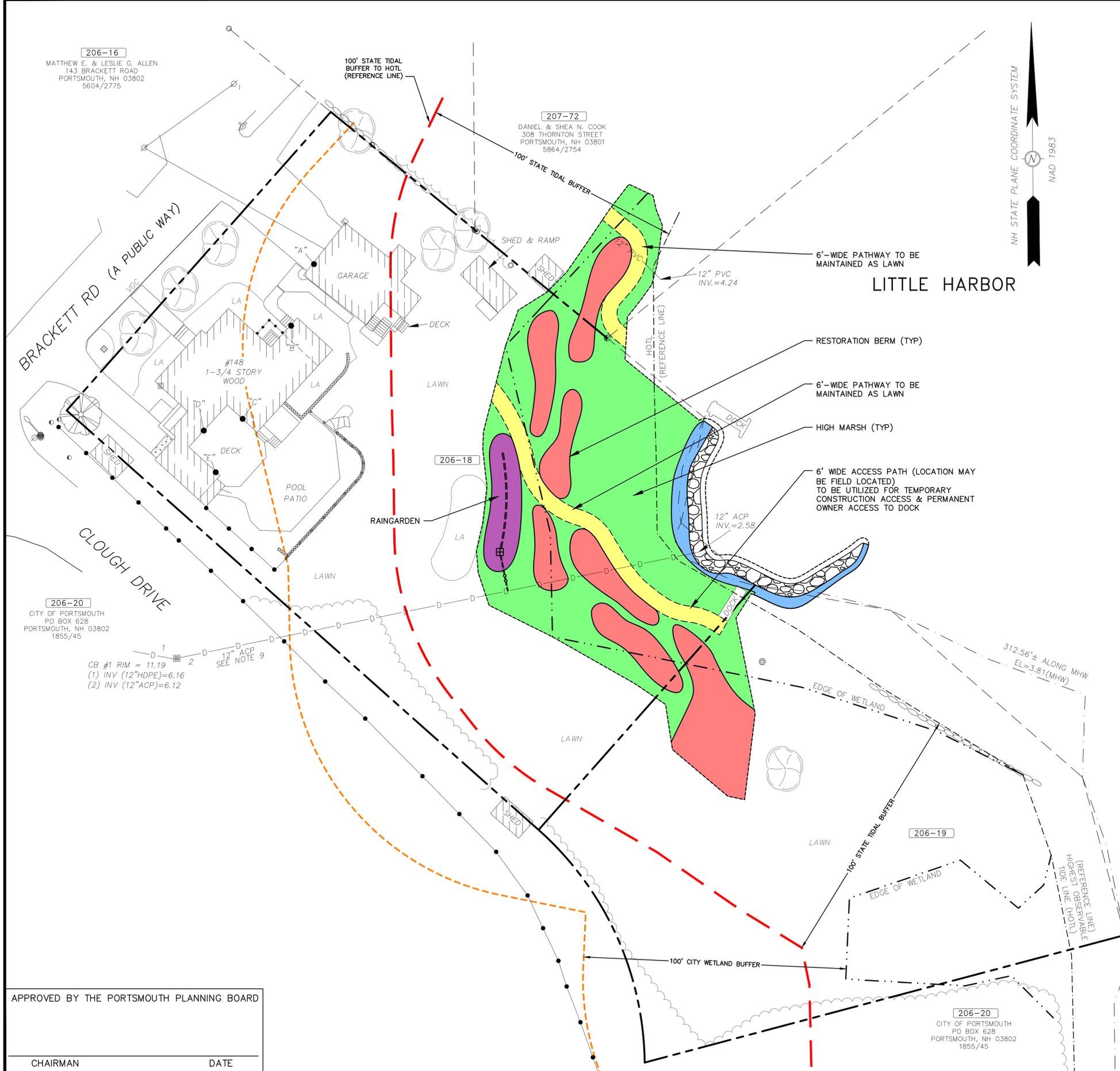
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 PAMELA N. BLALOCK, TRUSTEE
 148 BRACKETT ROAD
 PORTSMOUTH, N.H.

ASSESSOR'S PARCEL 206-18
 ASSESSOR'S PARCEL 206-19

PROJECT:
SHORELAND STABILIZATION
 148 BRACKETT ROAD
 PORTSMOUTH, N.H.

ASSESSOR'S PARCEL 206-18
 ASSESSOR'S PARCEL 206-19

TITLE:
GRADING, DRAINAGE AND WETLAND IMPACT PLAN
 SHEET NUMBER:
C-2

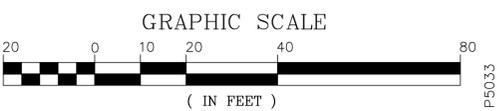


PLANTING NOTES

1. THE PLANTING PLAN IS DEPICTED WITH SEED & PLANT RECOMMENDATIONS PROVIDED BY DR. DAVID BURDICK OF UNH SCHOOL OF MARINE SCIENCE AND OCEAN ENGINEERING. ACTUAL PLANTINGS AND SEED MIX MAY VARY SLIGHTLY DEPENDING UPON AVAILABILITY. THE DESIGN INTENT SHALL BE MAINTAINED.
2. SPECIALTY SEED MIXTURES AND SOME PLANTINGS ARE AVAILABLE FROM NEW ENGLAND WETLAND PLANTS, INC., 820 WEST STREET, AMHERST, MA.
3. THE DESIGN AND GRADING AS DEPICTED MAY VARY SLIGHTLY AND BE ADJUSTED BASED ON FIELD CONDITIONS WITH WRITTEN APPROVAL OF THE ENGINEER.
4. THE PROJECT SHALL BE CONSTRUCTED IN ONE PHASE.

LEGEND

- PROPOSED RAINGARDEN (±600 S.F.)**
NE WETLAND SEED MIX, 1 LB./2,500 S.F.
LOW (INNER) PERIMETER:
CALAMAGROTIS X ACUTIFLORA, 1 GAL., 4' O.C.
HIGH (OUTER) PERIMETER:
MUHLENBERGIA REVERCHONII PUNDOIS', 2.5 QT., 2' O.C.
- PROPOSED PATHWAY PLANTING (LAWN) (±1,150 S.F.)**
NE COASTAL SALT TOLERANT GRASS MIX, 1 LB./1,250 S.F.
- PROPOSED RESTORATION BERM PLANTING (±3,550 S.F.)**
NE CONSERVATION/WILDLIFE SEED MIX, 1 LB./1,743 S.F.
- PROPOSED LOW MARSH (±550 S.F.)**
SPARTINA ALTERNIFLORA, PLUG, 1' O.C.
- PROPOSED HIGH MARSH (±7,100 S.F.)**
NE COASTAL SALT TOLERANT GRASS MIX, 1 LB./1,250 S.F.
ALTERNATE FOR 1' O.C. OVERALL SPACING:
JUNCUS GERARDII, PLUG
DISTICHLIS SPICATA, PLUG
SPARTINA PATENS, PLUG



NH STATE PLANE COORDINATE SYSTEM
NAD 1983

LITTLE HARBOR

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APPROVED BY THE PORTSMOUTH PLANNING BOARD

CHAIRMAN	DATE
----------	------

ENGINEER:

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

Eric D. Weinrieb
Professional Engineer

ISSUED FOR: APPROVAL
ISSUE DATE: AUGUST 26, 2020

REVISIONS	NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION		EBS	08/26/20

NOT FOR CONSTRUCTION

DRAWN BY: EBS
APPROVED BY: EDW
DRAWING FILE: 5033-SITE.DWG

SCALE:
22" x 34" - 1" = 20'
11" x 17" - 1" = 40'

OWNER/APPLICANT:
PAMELA N. BLALOCK TRUST AGREEMENT
PAMELA N. BLALOCK, TRUSTEE
148 BRACKETT ROAD
PORTSMOUTH, N.H.

ASSESSOR'S PARCEL 206-18
ASSESSOR'S PARCEL 206-19

PROJECT:
SHORELAND STABILIZATION
148 BRACKETT ROAD
PORTSMOUTH, N.H.
ASSESSOR'S PARCEL 206-18
ASSESSOR'S PARCEL 206-19

TITLE:
PLANTING PLAN
SHEET NUMBER:
C-3

SEDIMENT AND EROSION CONTROL NOTES

PROJECT NAME AND LOCATION

148 BRACKETT ROAD
PORTSMOUTH, NEW HAMPSHIRE
TAX MAP 206 LOTS 18 & 19

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

OWNER/APPLICANT:

PAMELA N. BLALOCK TRUST AGREEMENT,
PAMELA N. BLALOCK, TRUSTEE
148 BRACKETT ROAD
PORTSMOUTH, NH 03801

DESCRIPTION

The project consists of the repair of an existing embankment and dock, installation of a raingarden and construction of seven restoration berms with associated planting.

DISTURBED AREA

The total area to be disturbed for the project is approximately ±13,750 S.F. (±0.32 acres). USEPA NPDES Phase II compliance not required.

PROJECT PHASING

The proposed project will be completed in one phase.

NAME OF RECEIVING WATER

The site drains to Little Harbor (tidal waters).

SEQUENCE OF MAJOR ACTIVITIES

1. Install temporary erosion control measures, including perimeter controls, as noted on the plan. All temporary erosion control measures shall be maintained in good working condition for the duration of the project.
2. Remove and store dock floats.
3. Remove landscaping, strip loam and stockpile.
4. Construct shoreline stabilization per details. This shall be performed in multiple phases in order to limit the area of unstabilized shoreline at any given time.
5. Repair dock footings.
6. Rough grade site including placement of borrow materials for restoration berms.
7. Construct drainage structure, piping and check valve.
8. Construct raingarden.
9. Loam (6" min) and seed all disturbed areas not otherwise stabilized.
10. Install plantings per Planting Plan.
11. When all construction activity is complete and site is stabilized, remove all temporary erosion control measures and any sediment that has been trapped by these devices.

TEMPORARY EROSION & SEDIMENT CONTROL AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Work shall conform to the practices described in the "New Hampshire Stormwater Manual, Volumes 1 - 3", issued December 2008, as amended. As indicated in the sequence of Major Activities, perimeter controls 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 and permanent measures are established, perimeter controls shall be removed.

During construction, runoff will be diverted around the site with stabilized channels where possible. Sheet runoff from the site shall be filtered through appropriate perimeter controls. All storm drain inlets shall be provided with inlet protection measures.

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

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

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

A. GENERAL

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

1. The smallest practical portion of the site shall be denuded at one time.
2. All control measures shall be inspected at least once each week and following any storm event of 0.5 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 perimeter barriers when it has reached one-third the height of the barrier or when "bulges" occur.
5. All diversion dikes shall be inspected and any breaches promptly repaired.
6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth.
7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the Plans.
8. An area shall be considered stable if one of the following has occurred:
 - a. Base coarse gravels have been installed in areas to be paved;
 - b. A minimum of 85% vegetated growth as been established;
 - c. A minimum of 3 inches of non-erosive material such as stone or riprap has been installed; - or -
 - d. Erosion control blankets have been properly installed.
9. The length of time of exposure of area disturbed during construction shall not exceed 45 days.

B. MULCHING

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

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

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

2. Guidelines for Winter Mulch Application -

Type	Rate per 1,000 s.f.	Use and Comments
Hay or Straw	70 to 90 lbs.	Must be dry and free from mold. May be used with plantings.
Wood Chips or Bark Mulch	460 to 920 lbs.	Used mostly with trees and shrub plantings.
Jute and Fibrous Matting (Erosion Blanket)	As per manufacturer Specifications	Used in slope areas, water courses and other Control areas.
Crushed Stone 1/4" to 1-1/2" dia.	Spread more than 1/2" thick	Effective in controlling wind and water erosion.
Erosion Control Mix	2" thick (min)	<ul style="list-style-type: none"> * The organic matter content is between 80 and 100% dry weight basis. * Particle size by weight is 100% passing a 6" screen and a minimum of 70 %, maximum of 85%, passing a 0.75" screen. * The organic portion needs to be fibrous and elongated. * Large portions of silts, clays or fine sands are not acceptable in the mix. * Soluble salts content is less than 4.0 mmhos/cm. * The pH should fall between 5.0 and 8.0.

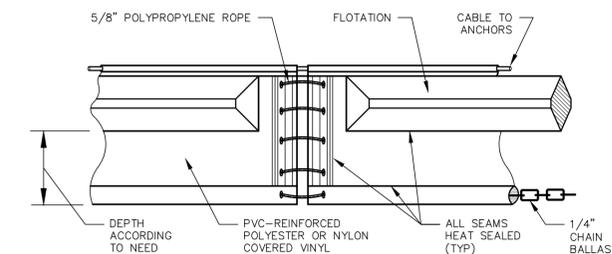
3. Maintenance - All mulches must be inspected periodically, in particular after rainstorms, to check for fill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied.

C. PERMANENT SEEDING -

1. Bedding - stones larger than 1 1/2", trash, roots, and other debris that will interfere with seeding and future maintenance of the area should be removed. Where feasible, the soil should be tilled to a depth of 5" to prepare a seedbed and mix fertilizer into the soil.
 - Agricultural Limestone @ 100 lbs. per 1,000 s.f.
 - 10-20-20 fertilizer @ 12 lbs. per 1,000 s.f.
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:
 - Follow Planting Plan
3. Seed Mixture (recommended):
 - Follow Planting Plan
4. Sodding shall not be permitted for this project.

WINTER CONSTRUCTION NOTES

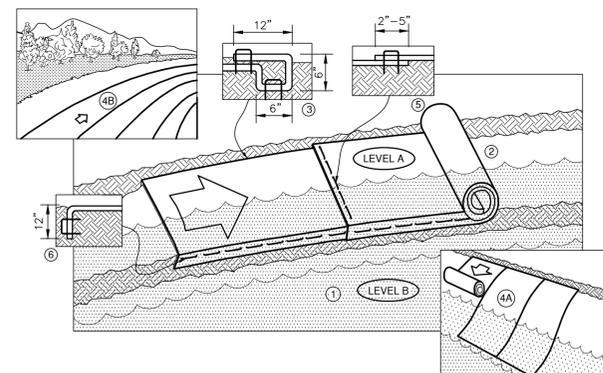
1. All proposed vegetated areas which do not exhibit a minimum of 85% vegetative growth by October 15th, or which are disturbed after October 15th, shall be stabilized by seeding and installing erosion control blankets on slopes greater than 3:1, and elsewhere seeding and placing 3 to 4 tons of mulch 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.



NOTES:

1. TURBIDITY BARRIER TO BE SECURELY ANCHORED TO SHORE AT EACH END.
2. TYPICAL SPECIFICATIONS -
 - FABRIC: 20 MIL., 18 OZ. NOMINAL PVC-COVERED POLYESTER OR NYLON REINFORCED VINYL.
 - ROPE: 5/8" POLY ROPE, 600# BREAK STRENGTH, WITH #5 BRASS OR STAINLESS STEEL GROMMETS.
 - CABLE: 5/16" GALVANIZED STEEL 7x19 LOAD CABLE w/ PVC COATING, 9800# BREAK STRENGTH.
 - BALLAST: 5/16" GALVANIZED CHAIN BALLAST IN BOTTOM OF CURTAIN.
 - PLATES: ALUMINUM STRESS PLATES AT ALL CABLE AND CHAIN TERMINATIONS.
 - FLOTATION: 8" CLOSED-CELL SOLID PLASTIC, 17 LB./FT. MIN. BUOYANCY.

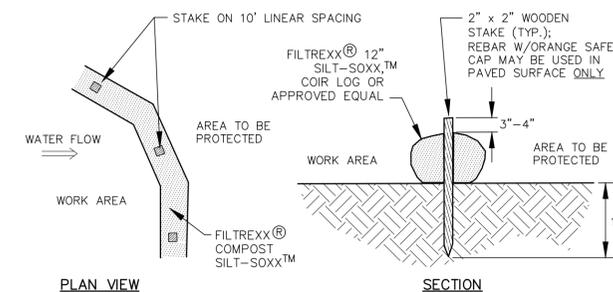
TURBIDITY BARRIER NOT TO SCALE



NOTES:

1. FOR EASIER INSTALLATION, LOWER WATER FROM LEVEL A TO LEVEL B BEFORE INSTALLATION OR WAIT FOR APPROPRIATE TIDAL CONDITIONS.
2. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
3. BEGIN AT THE TOP OF THE SHORELINE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
4. ROLL BLANKETS EITHER (A) DOWN THE SHORELINE FOR LONG BANKS (TOP TO BOTTOM) OR (B) HORIZONTALLY ACROSS THE SHORELINE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAKES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
5. THE EDGES OF ALL HORIZONTAL AND VERTICAL BLANKET SEAMS MUST BE STAKED WITH APPROXIMATELY 2"-5" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT BETWEEN ADJACENT BLANKETS, PLACE THE EDGE OF THE OVERLAPPING BLANKET EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET. SECURE ALL OVERLAPS WITH STAKES SPACED 12" APART. NOTE: SEAM OVERLAP SHOULD BE SHINGLED WITH UPHILL BLANKETS OVERLAPPING DOWNHILL BLANKETS.
6. THE EDGE OF THE BLANKET AT OR BELOW NORMAL WATER LEVEL MUST BE ANCHORED BY PLACING THE BLANKET IN A 12" DEEP BY 6" WIDE ANCHOR TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAKES SPACED APPROXIMATELY 12" APART IN THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAKING WITH STONE OR SOIL. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.
7. ALL BLANKET FASTENERS SHALL BE BIODEGRADABLE.

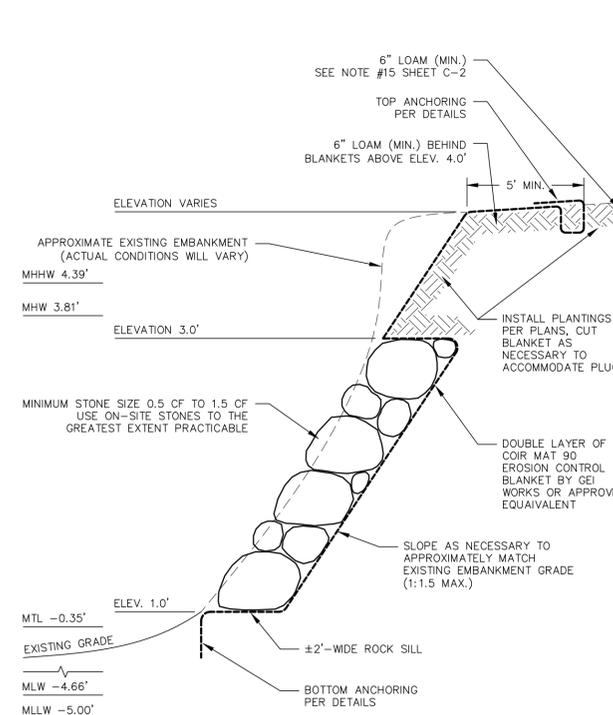
EROSION CONTROL BLANKET NOT TO SCALE



NOTES:

1. SILTSOXX MAY BE USED IN PLACE OF SILT FENCE OR OTHER SEDIMENT BARRIERS.
2. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
3. SILTSOXX COMPOST/SOIL/ROCK/SEED FILL MATERIAL SHALL BE ADJUSTED AS NECESSARY TO MEET THE REQUIREMENTS OF THE SPECIFIC APPLICATION.
4. ALL SEDIMENT TRAPPED BY SILTSOXX SHALL BE DISPOSED OF PROPERLY.

TUBULAR SEDIMENT BARRIER NOT TO SCALE



NOTES:

1. ON SITE ROCK SHALL BE USED TO THE GREATEST EXTENT POSSIBLE. WHERE REQUIRED, IMPORTED STONES SHALL GENERALLY BE LESS ANGULAR IN SHAPE - USE OF MANUFACTURED RIPRAP WILL NOT BE ACCEPTED.

SHORELAND STABILIZATION NOT TO SCALE

ENGINEER:



133 Court Street
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ISSUED FOR:

APPROVAL

ISSUE DATE:

AUGUST 26, 2020

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EBS	08/26/20

NOT FOR CONSTRUCTION

DRAWN BY: EBS

APPROVED BY: EDW

DRAWING FILE: 5033-SITE.DWG

SCALE:

22" x 34" - 1" = 20'

11" x 17" - 1" = 40'

OWNER/APPLICANT:

PAMELA N. BLALOCK TRUST AGREEMENT
PAMELA N. BLALOCK, TRUSTEE
148 BRACKETT ROAD
PORTSMOUTH, N.H.

ASSESSOR'S PARCEL 206-18

ASSESSOR'S PARCEL 206-19

PROJECT:

SHORELAND STABILIZATION

148 BRACKETT ROAD
PORTSMOUTH, N.H.

ASSESSOR'S PARCEL 206-18

ASSESSOR'S PARCEL 206-19

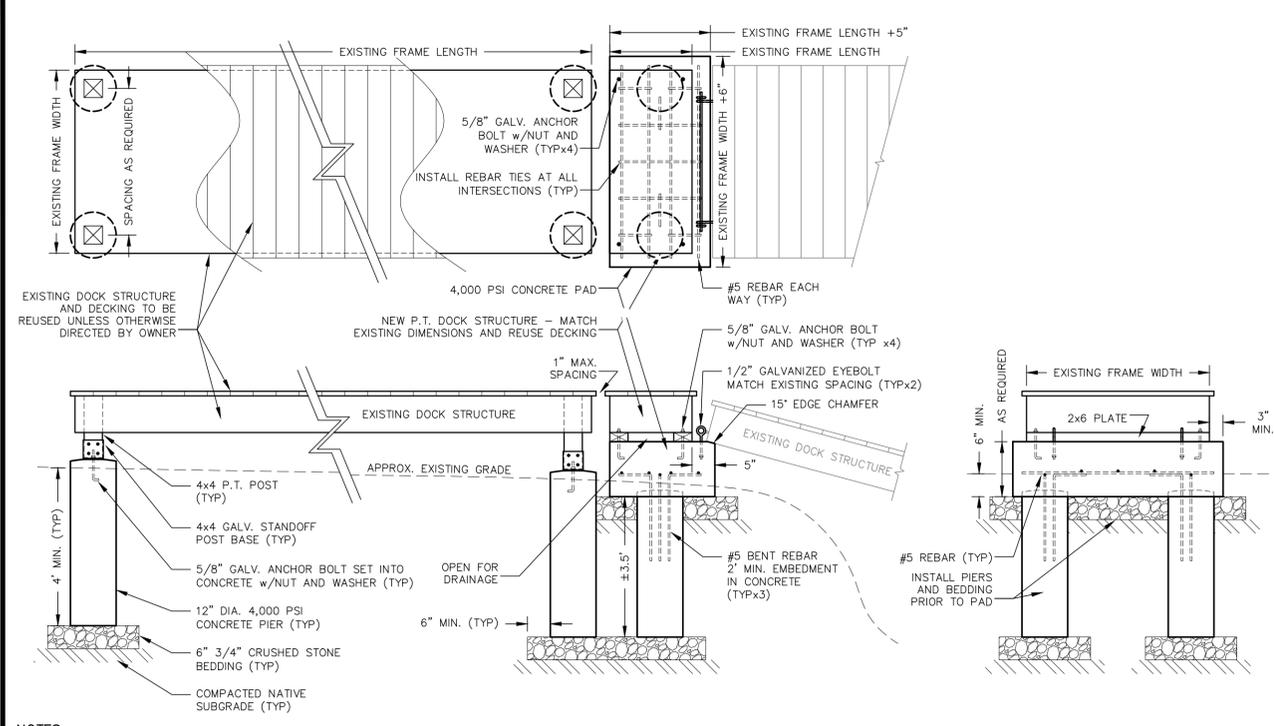
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DETAIL SHEET

SHEET NUMBER:

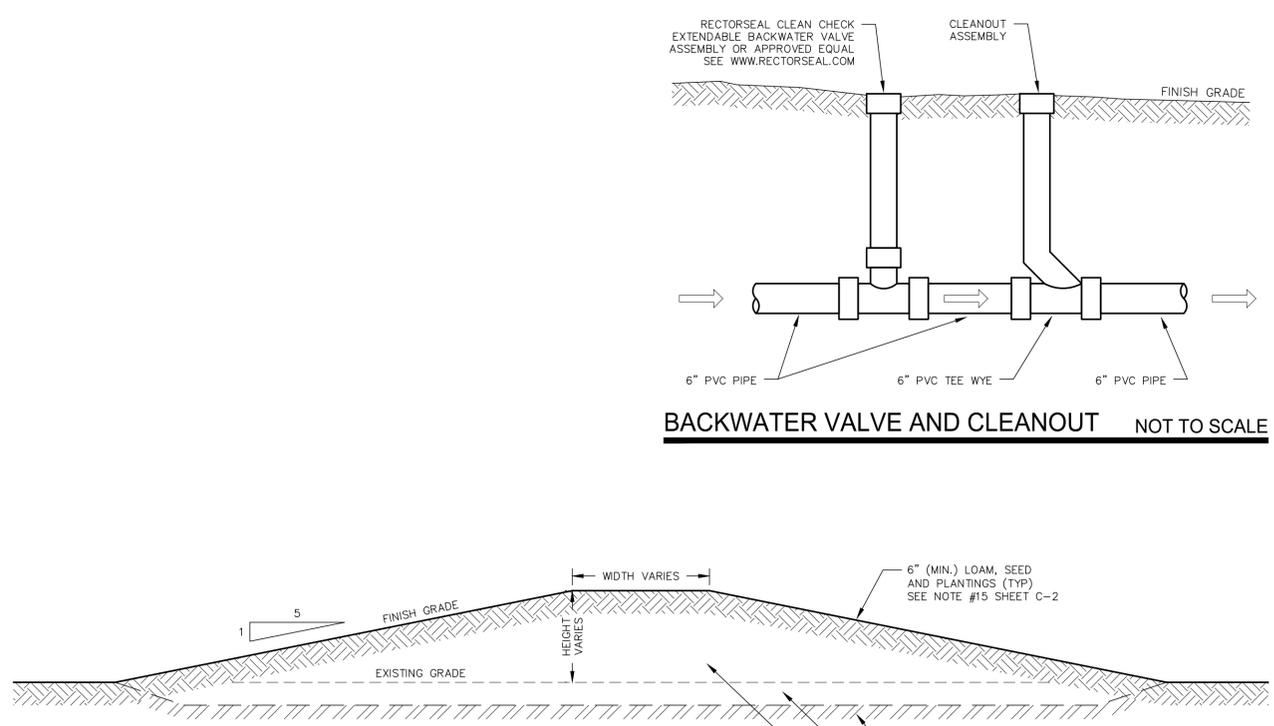
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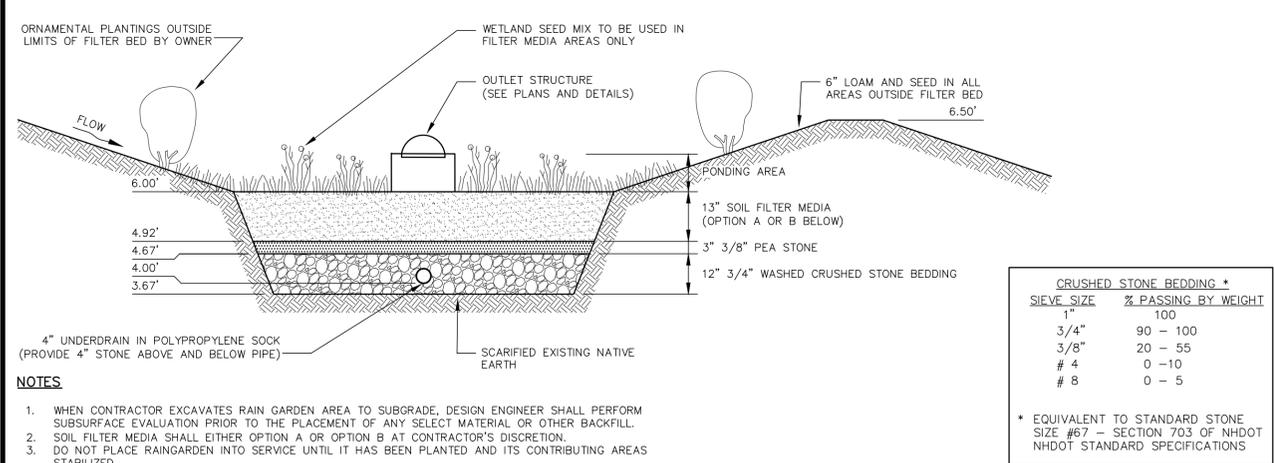


- NOTES:**
- EXCEPT AS NOTED, EXISTING DOCK STRUCTURE AND DECKING TO BE REUSED UNLESS OTHERWISE DIRECTED BY OWNER.
 - DOCK DIMENSIONS TO MATCH EXISTING WOOD STRUCTURES. THE CONTRACTOR SHALL PERFORM THEIR OWN SITE INSPECTION AND TAKE ALL REQUIRED MEASUREMENTS AS NEEDED.
 - ALL FASTENERS TO BE GALVANIZED OR STAINLESS STEEL AND INSTALLED WHERE AND AS REQUIRED PER COMMON CONSTRUCTION PRACTICES AND THE MANUFACTURERS SPECIFICATIONS.
 - INSTALL FOAM SILL SEAL BETWEEN LUMBER AND CONCRETE.
 - THIS DETAIL IS SCHEMATIC IN NATURE AND IS INTENDED TO PROVIDE A GENERALIZED REPRESENTATION OF THE WORK REQUIRED TO REPAIR AND/OR RECONSTRUCT THE EXISTING FACILITIES. IT SHALL IN NO WAY BE INTERPRETED AS A COMPLETE DEPICTION OF ALL MATERIALS OR WORK REQUIRED TO COMPLETE CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL APPLICABLE CODES AND STANDARDS.

DOCK REPAIR DETAIL NOT TO SCALE



TYPICAL RESTORATION BERM CROSS SECTION NOT TO SCALE

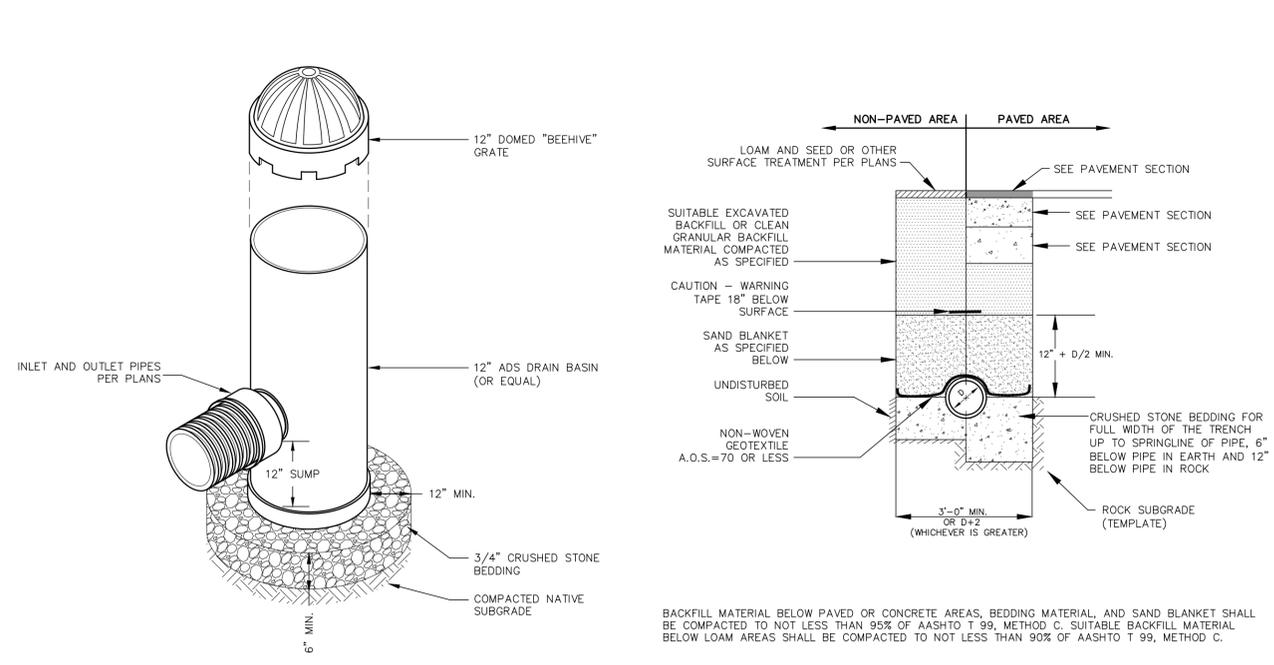


CRUSHED STONE BEDDING *			
SIEVE SIZE	% PASSING BY WEIGHT		
1"	100		
3/4"	90 - 100		
3/8"	20 - 55		
# 4	0 - 10		
# 8	0 - 5		

* EQUIVALENT TO STANDARD STONE SIZE #67 - SECTION 703 OF NHDOT STANDARD SPECIFICATIONS

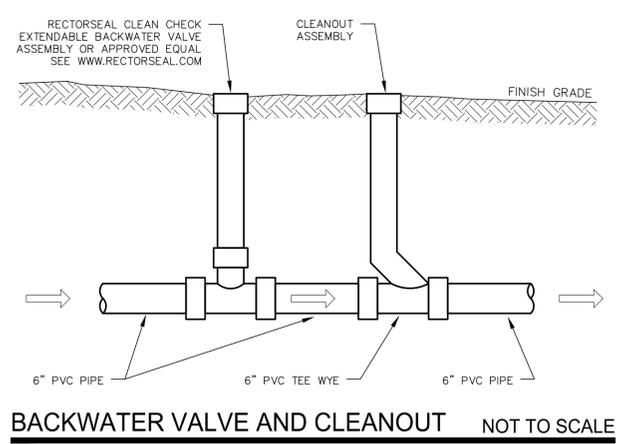
FILTER MEDIA MIXTURES			
Component Material	Percent of Mixture by Volume	Gradation of material	
		Sieve No.	Percent by Weight Passing Standard Sieve
Filter Media Option A			
ASTM C-33 concrete sand	50 to 55		
Loamy sand topsoil, with fines as indicated	20 to 30	200	15 to 25
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5
Filter Media Option B			
Moderately fine shredded bark or wood fiber mulch, with fines as indicated	20 to 30	200	< 5
Loamy coarse sand	70 to 80	10	85 to 100
		20	70 to 100
		60	15 to 40
		200	8 to 15

TYPICAL RAINGARDEN NOT TO SCALE

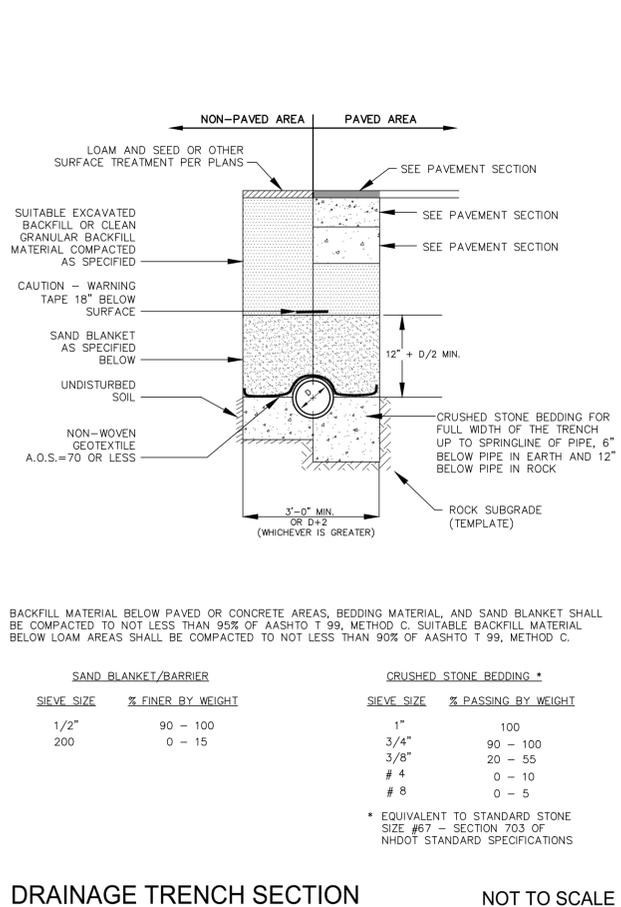


- NOTES:**
- FRAMES AND GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN AND DETAILS.
 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE, N-12HP AND PVC SEWER.
 - INLINE DRAIN TO BE PVC DIAMETER AS SPECIFIED AND AS MANUFACTURED BY ADS OR APPROVED EQUAL.
 - THE CONTRACTOR SHALL INSTALL THE DRAIN BASIN PER THE MANUFACTURER'S RECOMMENDATIONS AND AS SHOWN ON THE DRAWINGS.

YARD DRAIN AND GRATE NOT TO SCALE

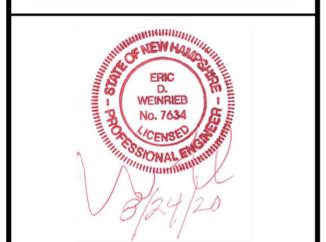


BACKWATER VALVE AND CLEANOUT NOT TO SCALE



DRAINAGE TRENCH SECTION NOT TO SCALE

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 ENGINEERING, INC.
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ISSUED FOR: APPROVAL

ISSUE DATE: AUGUST 26, 2020

REVISIONS
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TITLE:
DETAIL SHEET
 SHEET NUMBER:
C-5