

WYMAN HILL

28 WYMAN AVENUE
KITTERY, MAINE

Assessor's Parcel 16, Lot 148

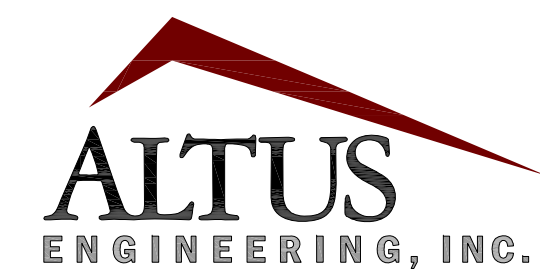
Plan Issue Date:

June 21, 2022	Planning Board Submission
August 11, 2022	P.B. Re-Submission

Owner/Applicant:

LUSITANO, LLC
JIM HIGGINS
119 KINGS HIGHWAY NO.
ELIOT, MAINE 03903
(617) 501-6149

Civil Engineer:



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

Architect:

HIGGINS + DESIGN
119 Kings Highway North
Eliot, ME 03903
(617) 501-6149
jimhiggins05@comcast.net

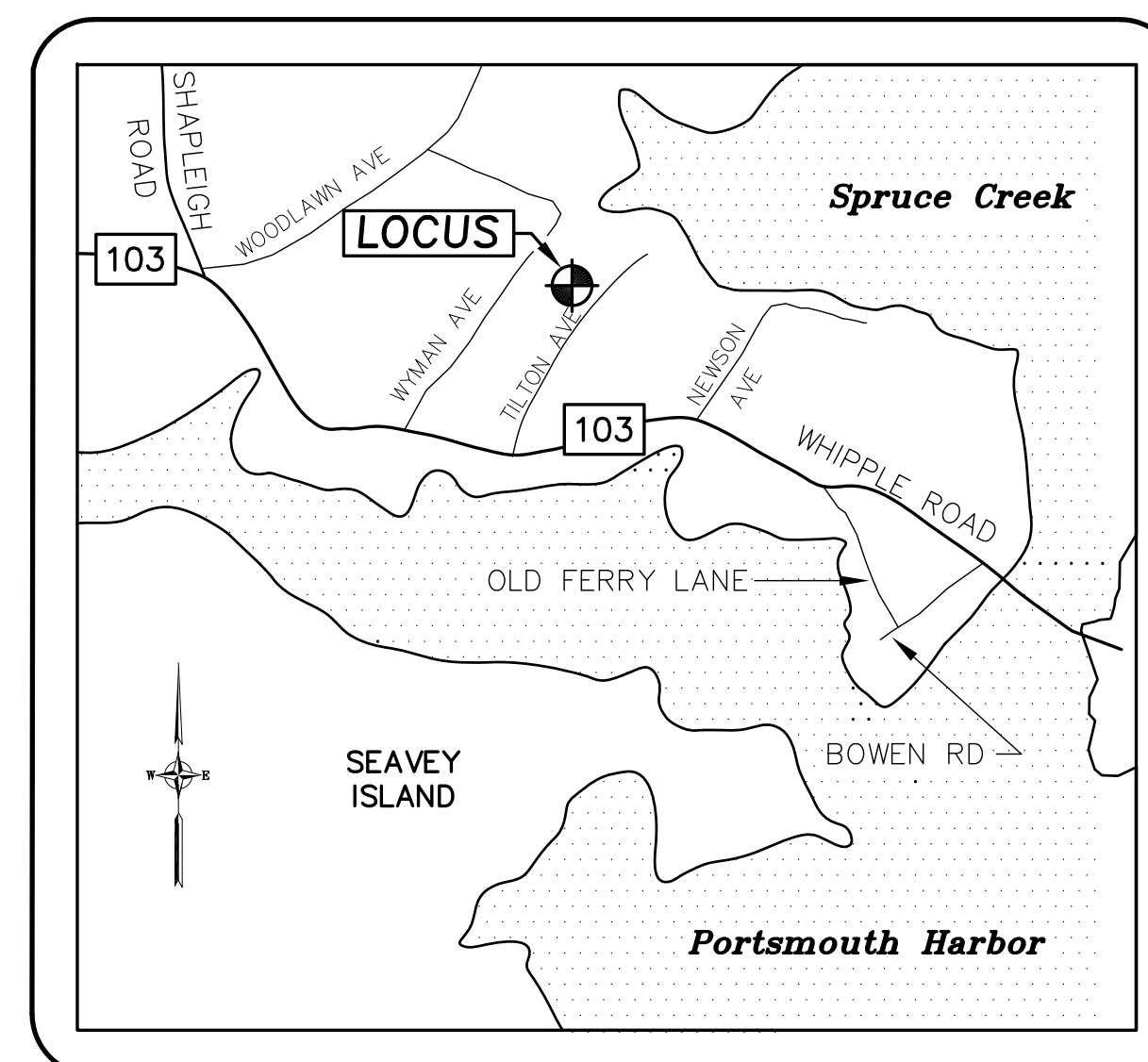
Surveyor:



191 STATE ROAD, SUITE #1
KITTERY, MAINE 03904

Soils/Wetlands Scientist:

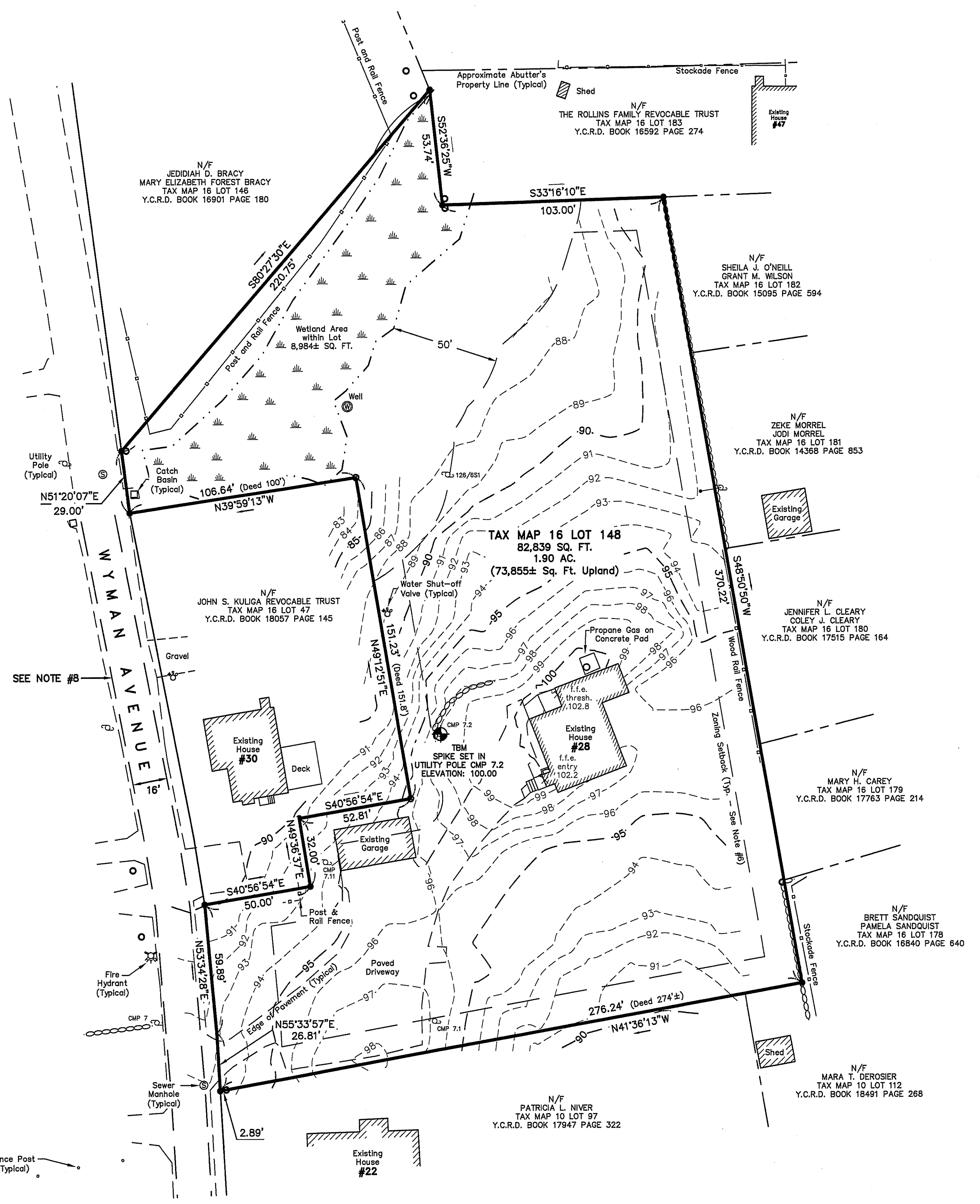
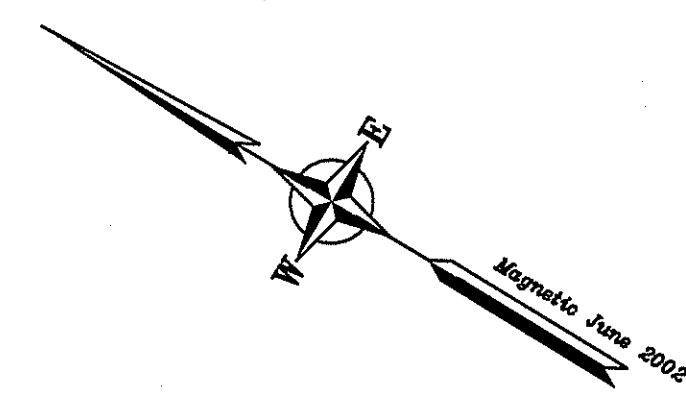
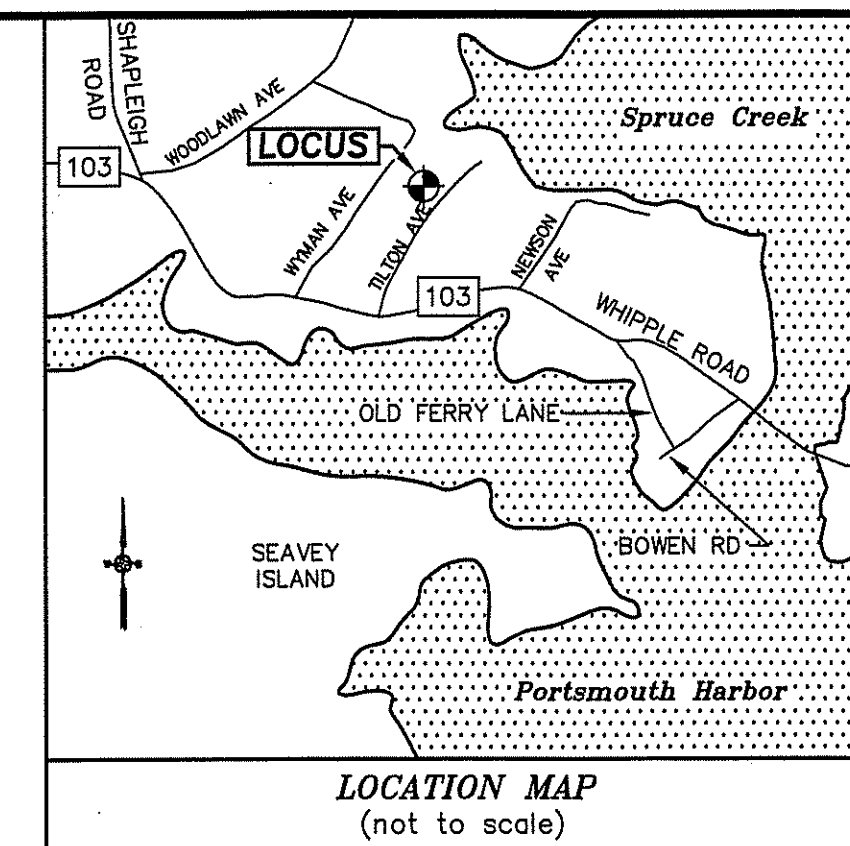
MICHAEL MARIANO, CSS
75 Prospect Street
Somersworth, NH 03878
(603) 692-4457



LOCUS NOT TO SCALE

Sheet Index

Title	Sheet No.:	Rev.	Date
Existing Conditions Plan	1 of 1	0	07/09/21
Demolition Plan	C-1	0	12/22/21
Condominium Site Plan	C-2	3	08/11/22
Grading & Stormwater Management Plan	C-3	2	08/11/22
Utility Plan	C-4	2	08/11/22
Erosion Control Notes	C-5	1	08/11/22
Detail Sheet	C-6	1	08/11/22
Detail Sheet	C-7	1	08/11/22
Detail Sheet	C-8	1	08/11/22
Layout Plans	A01	0	11/22/21
Elevations	A02	0	11/22/21
Elevations	A03	0	11/22/21



ZONING DATA PER KITTERY ZONING ORDINANCE
(LAST AMENDED JANUARY 11, 2021 - SEE NOTE #6):

BASE ZONE: Residential-Urban (R-U)

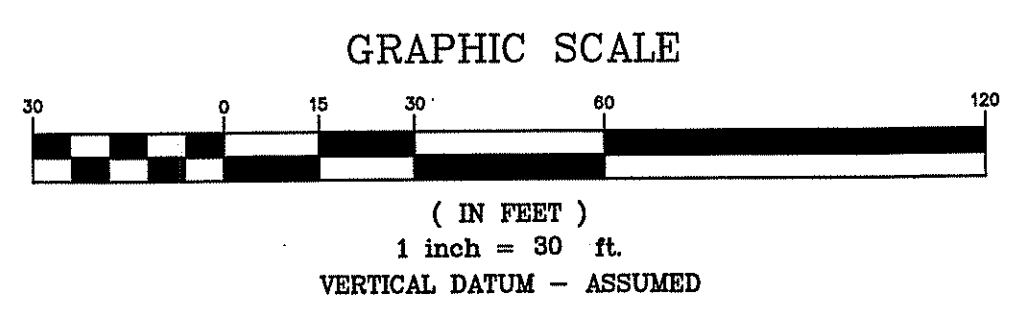
REQUIREMENTS:
 MINIMUM LAND AREA: 20,000 Sq Ft
 PER DWELLING UNIT: 20,000 Sq Ft
 MINIMUM LOT SIZE: 20,000 Sq Ft
 MINIMUM STREET FRONTAGE: 100 Ft
 MINIMUM FRONT YARD: 30 Ft
 MAXIMUM BUILDING COVERAGE: 20%
 MINIMUM REAR AND SIDE YARDS: 15 Ft*
 MAXIMUM BUILDING HEIGHT: 35 Ft*

BUILDING COVERAGE CALCULATION:

LOT AREA: 82,839 SQ. FT.
 HOUSE: 1,635± SQ. FT.
 GARAGE: 678± SQ. FT.
 TOTAL: 2,313± SQ. FT. (2.8%)

MONUMENTATION LEGEND:

- MONUMENT FOUND PER PLAN REFERENCE #1
- IRON ROD WITH CAP #1322 SET PER PLAN REFERENCE #1



PLAN REFERENCES:

1. "STANDARD BOUNDARY SURVEY FOR PROPERTY AT 28 WYMAN AVENUE, KITTERY, YORK COUNTY, MAINE OWNED BY HARRY A. & PATRICIA J. HANNIGAN", PREPARED BY NORTH EASTERLY SURVEYING INC., DATED APRIL 14, 2008, AND RECORDED AT THE Y.C.R.D. AS PLAN BOOK 329 PAGE 7.
2. "LAND OF MATTAWAMKEAG REALTY CO., LOCATED IN KITTERY, MAINE," BY JOHN W. DURGIN CIVIL ENGINEERS DATED JUNE 10, 1941 AND RECORDED AT Y.C.R.D. PLAN BOOK 16 PAGES 31 & 32.
3. "PLAN OF PARCEL OF LOTS ON PROPERTY OF HARRY N. WYMAN IN KITTERY, YORK COUNTY, MAINE" PREPARED BY C.S. GERRISH, CE, DATED DECEMBER 8, 1938, Y.C.R.D. BOOK 17 PAGE 7.
4. "STANDARD BOUNDARY SURVEY FOR PROPERTY AT 44 TILTON AVENUE, YORK COUNTY, KITTERY, MAINE OWNED BY CANDACE J. DELISIO" PREPARED BY NORTH EASTERLY SURVEYING, INC., DATED SEPTEMBER 12, 2002.
5. "STANDARD BOUNDARY SURVEY FOR PROPERTY AT 49 TILTON AVENUE, KITTERY, YORK COUNTY, MAINE OWNED BY SARA GALLANT GRASTY" PREPARED BY NORTH EASTERLY SURVEYING, INC., DATED JANUARY 9, 2008, RECORDED Y.C.R.D. BOOK 328 PAGE 15.

NOTES:

1. OWNERS OF RECORD:
TAX MAP 16 LOT 148
LUSITANO, LLC
Y.C.R.D. BOOK 17499 PAGE 681
DATED FEBRUARY 23, 2007
2. TOTAL EXISTING PARCEL AREA:
TAX MAP 16 LOT 148
1.90 Acres
3. BASIS OF BEARING IS PER PLAN REFERENCE #1.
4. APPROXIMATE ABUTTER'S LINES SHOWN HEREON ARE FOR REFERENCE PURPOSES ONLY AND SHALL NOT BE RELIED UPON AS BOUNDARY INFORMATION.
5. EASEMENTS OR OTHER UNWRITTEN RIGHTS MAY EXIST THAT ENCUMBER OR BENEFIT THE PROPERTY NOT SHOWN HEREON.
6. ZONING INFORMATION AND SETBACKS SHOWN HEREON ARE FOR REFERENCE PURPOSES. CONFIRM CURRENT ZONING REQUIREMENTS WITH THE TOWN OF KITTERY PRIOR TO DESIGN OR CONSTRUCTION.
7. THE BOUNDARY SHOWN HEREON IS PER PLAN REFERENCE #1.
8. ABUTTING DEEDS CALL FOR A "16-FOOT WIDE PASSAGEWAY" WHERE WYMAN AVENUE EXISTS. A 30-FOOT WIDE RIGHT OF WAY (AS SHOWN ON ABUTTING PLANS) WAS ASSUMED FOR THE BOUNDARY SHOWN HEREON, REFERENCE IS MADE TO PLAN REFERENCE #1.

PURPOSE OF PLAN:

THE PURPOSE OF THIS PLAN IS TO SHOW EXISTING CONDITIONS FOR DESIGN PURPOSES. THIS PLAN IS NOT A STANDARD BOUNDARY SURVEY AND IS NOT INTENDED TO BE RECORDED, USED FOR CONVEYANCE, OR ANY OTHER TITLE PURPOSE.



Peter L. Agrodnia
7/9/2021

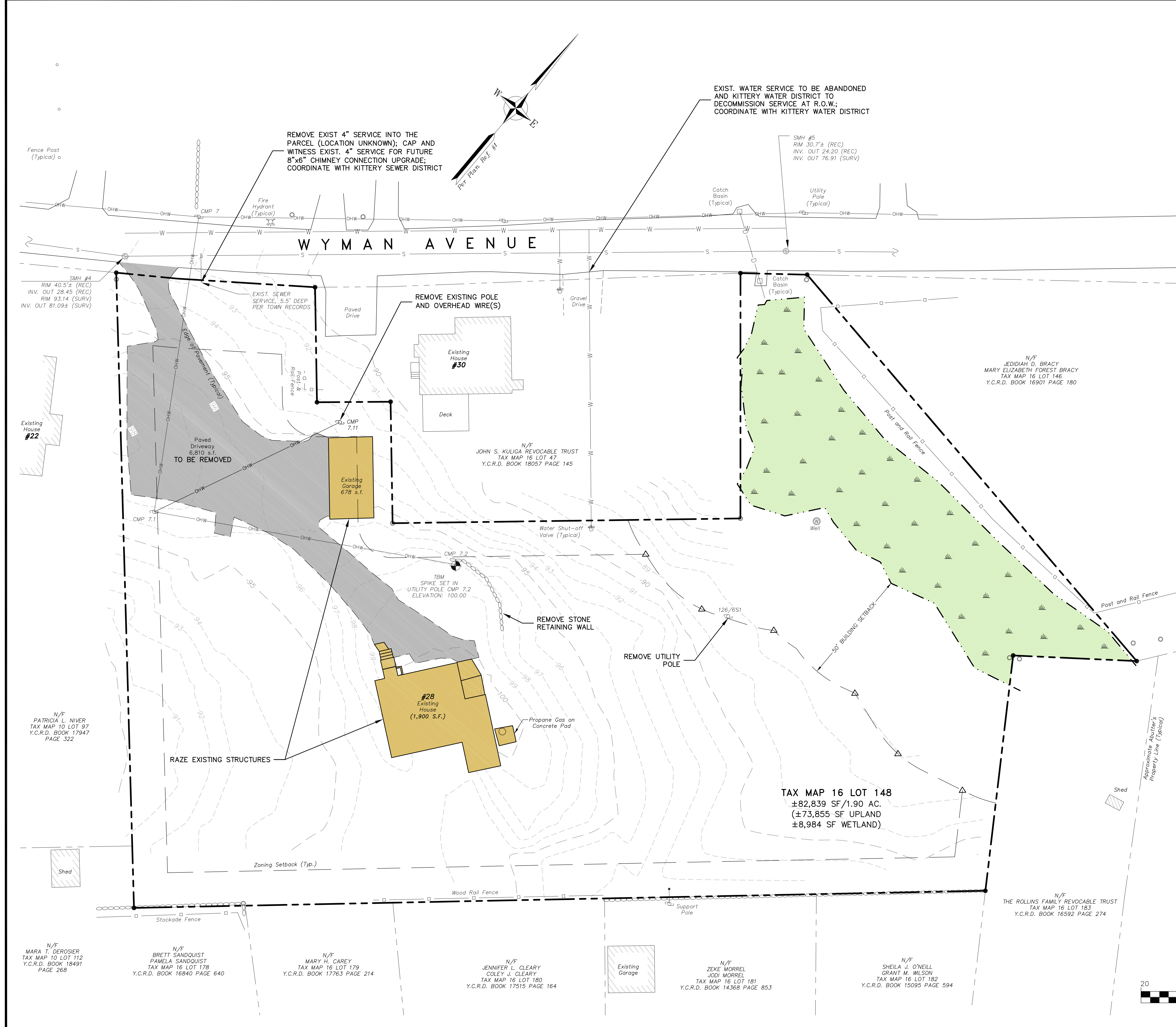
EXISTING CONDITIONS PLAN
 FOR PROPERTY AT
28 Wyman Avenue
 Kittery, York County, Maine
 OWNED BY
Lusitano, LLC
 Attn: Jim Higgins
 119 Kings Highway No., Eliot, ME 03903

North

EASTERLY SURVEYING, Inc.
 SURVEYORS IN N.H. & MAINE 191 STATE ROAD, SUITE #1
 (207) 439-6333 KITTERY, MAINE 03904

SCALE: 1" = 30'	PROJECT NO: 08610	DATE: 7/9/21	SHEET: 1 OF 1	DRAWN BY: A.H.P.	CHECKED BY: P.L.A.
DRAWING No: 08610_EXISTING_CONDITIONS			FIELD BOOK No: Kittery #40		

REV.	DATE	STATUS	BY	CHKD	APPD.

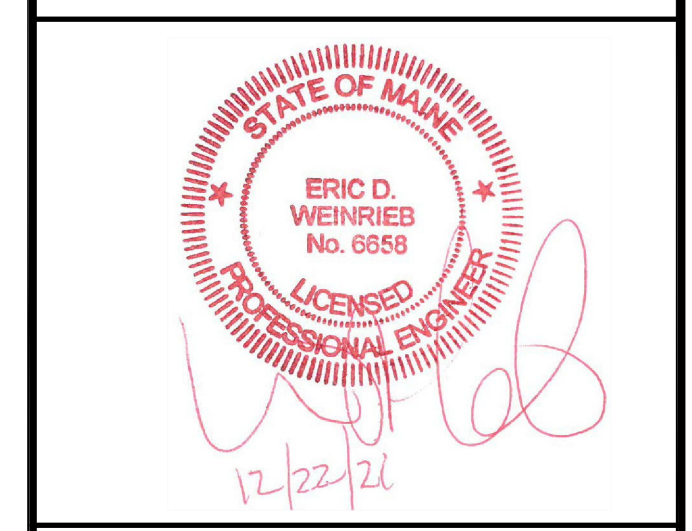


DEMOLITION NOTES

1. CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES SCHEDULED TO REMAIN.
2. ALL MATERIALS SCHEDULED FOR DEMOLITION OR REMOVAL ON PRIVATE PROPERTY SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TIMELY NOTIFICATION OF ALL PARTIES, CORPORATIONS, COMPANIES, INDIVIDUALS AND STATE AND LOCAL AUTHORITIES OWNING AND/OR HAVING JURISDICTION OVER ANY UTILITIES RUNNING TO, THROUGH OR ACROSS AREAS TO BE DISTURBED BY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES WHETHER OR NOT SAID UTILITIES ARE SUBJECT TO DEMOLITION, RELOCATION, MODIFICATION AND/OR CONSTRUCTION.
4. AT NO TIME SHALL ANY UTILITY SERVICE OR VEHICULAR ACCESS TO ADJOINING PROPERTIES BE COMPLETELY INTERRUPTED UNLESS A FULL SHUTDOWN IS COORDINATED WITH ALL AFFECTED PARTIES AND UTILITY PROVIDER(S).
5. ALL UTILITY DISCONNECTIONS/DEMOLITIONS/RELOCATIONS SHALL BE COORDINATED BETWEEN THE CONTRACTOR, ALL APPROPRIATE UTILITY COMPANIES, KITTERY DPW AND ADJOINING PROPERTY OWNERS AS NECESSARY. UNLESS OTHERWISE SPECIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELATED EXCAVATION, TRENCHING AND BACKFILLING.
6. WHERE SPECIFIED TO REMAIN, MANHOLE RIMS, CATCH BASIN GRATES, VALVE COVERS, HANDHOLES, ETC. SHALL BE ADJUSTED TO FINISH GRADE UNLESS OTHERWISE SPECIFIED.
7. SEE EROSION CONTROL PLANS FOR PERIMETER EROSION AND SEDIMENT CONTROL MEASURES THAT SHALL BE IN PLACE PRIOR TO DEMOLITION ACTIVITIES.
8. ALL MATERIAL SCHEDULED TO BE REMOVED SHALL BE LEGALLY DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS/CODES.
9. CONTRACTOR TO CONTACT KITTERY WATER DISTRICT (KWD) AND KITTERY SEWER DISTRICT (KSD) A MINIMUM OF TWO WEEKS PRIOR TO ANY DEMOLITION TO COORDINATE ALL WORK CONCERNING DISCONNECTION/DEMOLITION OF ANY PROPOSED WATER AND SEWER LINE IMPROVEMENTS.
10. ALL WATER AND SEWER DISCONNECTIONS SHALL CONFORM TO KSD AND KWD STANDARDS.
11. NO BURNING SHALL BE PERMITTED PER LOCAL REGULATIONS.
12. HAZARDOUS MATERIALS ENCOUNTERED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES SHALL BE ABATED IN STRICT ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
13. THIS PLAN IS INTENDED TO PROVIDE MINIMUM GUIDELINES FOR THE DEMOLITION OF EXISTING SITE FEATURES. UNLESS OTHERWISE NOTED TO REMAIN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL BUILDINGS, PAVEMENT, CONCRETE, CURBING, SIGNS, POLES, UTILITIES, FENCES, VEGETATION AND OTHER EXISTING FEATURES AS NECESSARY TO FULLY CONSTRUCT THE PROJECT.

ENGINEER:

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



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ISSUED FOR: **REVIEW**

ISSUE DATE: **DECEMBER 22, 2021**

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EBS	12/22/21

DRAWN BY: _____ RMB
 APPROVED BY: _____ EBS
 DRAWING FILE: 5235CONDO.DWG

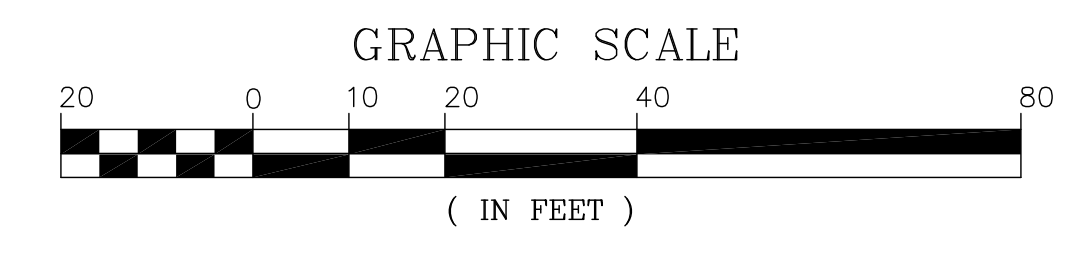
SCALE:
 (24"x36") 1" = 20'
 (11"x17") N.T.S.

OWNER/APPLICANT:
 LUSITANO, LLC
 JIM HIGGINS
 119 KINGS HIGHWAY NO.
 ELIOT, MAINE 03903

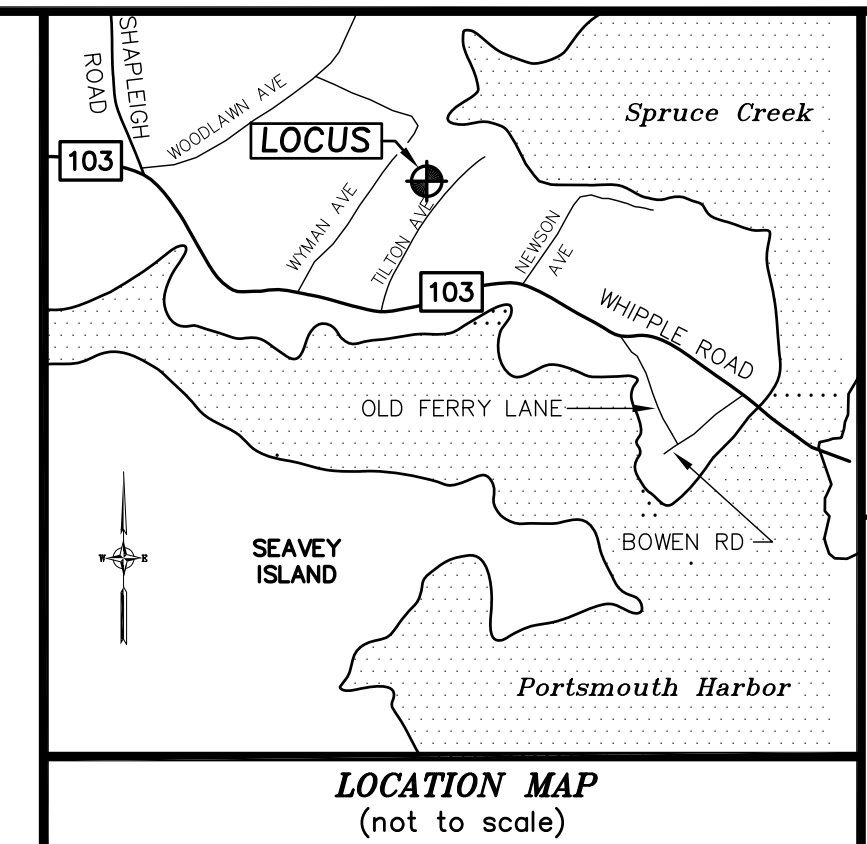
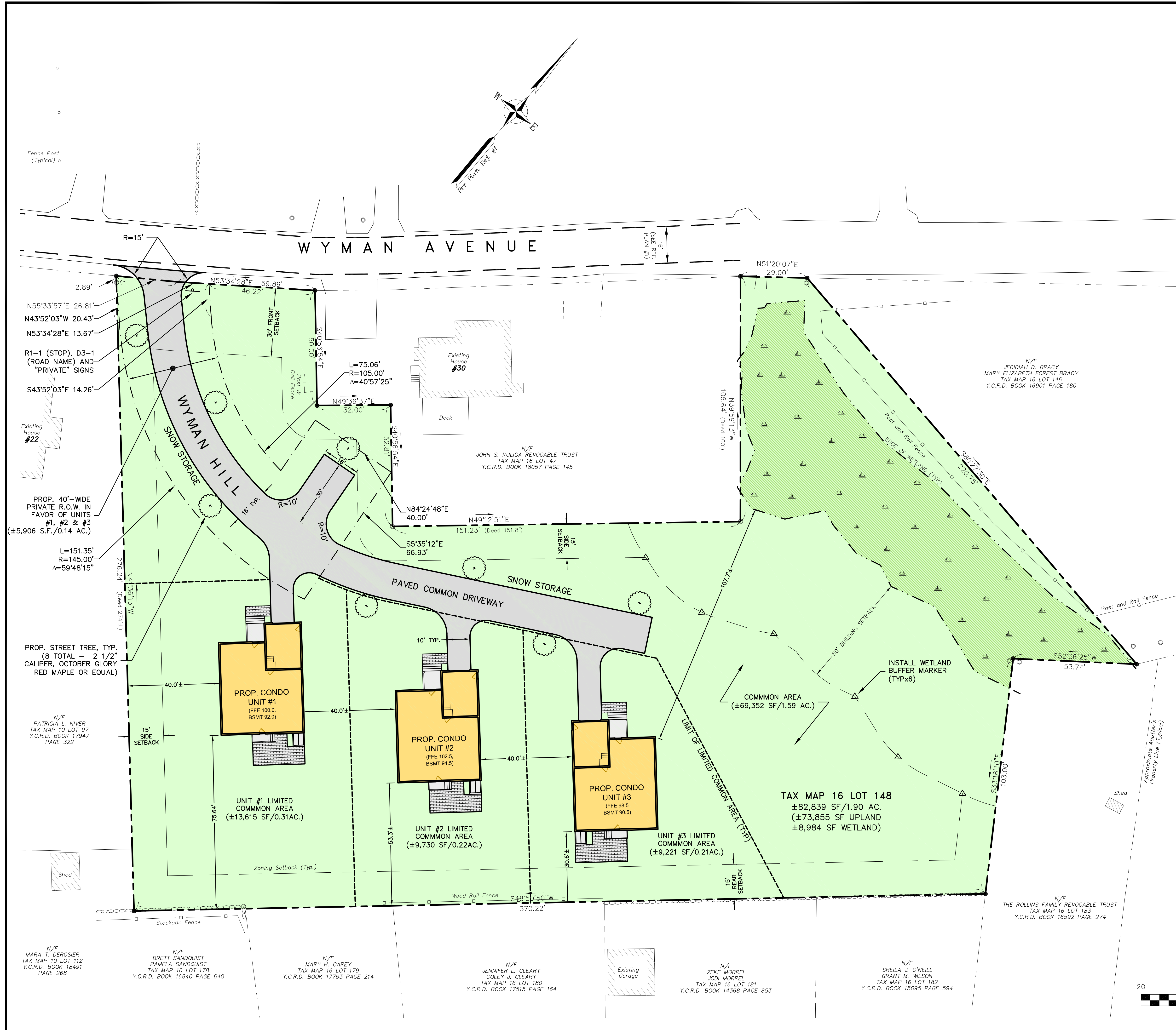
PROJECT:
WYMAN HILL
TAX MAP 16, LOT 148
 28 WYMAN AVENUE
 KITTERY, MAINE

TITLE:
DEMOLITION PLAN

SHEET NUMBER:
C - 1



P5235



ENGINEER:
ALTUS
 ENGINEERING, INC.
 133 Court Street Portsmouth, NH 03801
 (603) 433-2335 www.altus-eng.com

SURVEYOR:
 North
 W **EASTERLY**
 SURVEYING, Inc.
 SURVEYORS IN N.H. & MAINE
 191 STATE ROAD, SUITE #1
 KITTERY, MAINE 03904
 (207) 439-6333

SITE NOTES

- DESIGN INTENT - THIS PLAN SET IS INTENDED TO DEPICT A THREE (3) SINGLE-FAMILY DETACHED CONDOMINIUM PLAN WITH SHARED RIGHT OF WAY AND COMMON DRIVE.
- PLAN REFERENCE: "EXISTING CONDITIONS PLAN FOR PROPERTY AT 28 WYMAN AVENUE, KITTERY, MAINE" BY NORTH EASTERLY SURVEYING, INC., DATED PRELIMINARY JULY 7, 2021.
- LOT AREA: ±82,839 S.F. (±1.90 ACRES) EXISTING
- ZONE: RESIDENTIAL USE (R-U)
- DIMENSIONAL REQUIREMENTS -

	STANDARD	PROVIDE
MINIMUM LOT AREA PER UNIT	20,000 S.F.	>20,000 S.F. MIN.
ROAD FRONTAGE	100 FT.	88.89 FT. MIN.
FRONT YARD	30 FT.	>30 FT. MIN.
SIDE YARD	15 FT.	>15 FT. MIN.
REAR YARD	15 FT.	>15 FT. MIN.
BUILDING COVERAGE	20 %	2.8% EXISTING 5.7% PROPOSED
WETLANDS SETBACK (< 1 ACRE)	50 FT.	>100 FT.
16' DRIVEWAY (FROM TOE)	10 FT.	> 10 FT.
- DENSITY/NET RESIDENTIAL AREA CALCULATIONS:

TOTAL LOT AREA	1.90 AC.
LESS WETLANDS	- 0.21 AC.
LESS RIGHT OF WAY	- 0.17 AC.
NET RESIDENTIAL AREA =	1.52 AC.
- NUMBER OF DWELLING UNITS PERMITTED
 (1.52 AC * 43,560 SF/AC / 20,000 S.F./UNIT) = 3.31 UNITS
 NUMBER OF DWELLING UNITS PROPOSED = 3 UNITS
- OPEN SPACE CALCULATIONS:
 50% TOTAL LOT AREA AND 30% NET RES. AREA REQUIRED
 TOTAL LOT AREA: 1.90 AC. x 50% = 0.95 AC. REQUIRED
 NET RES. AREA: 1.52 AC. x 30% = 0.46 AC. REQUIRED
 TOTAL LOT AREA = 1.90 AC.
 LESS ROW = -0.16 AC.
 LESS LIMITED COMMON AREA = -0.71 AC.
 LESS DRIVEWAY AREA = -0.05 AC.
 OPEN SPACE PROVIDED = 0.98 AC.
 (49% OF TOTAL LOT, 64% OF NET RES. AREA)
 OPEN SPACE, RESERVED: 0.00 AC.
 OPEN SPACE, COMMON: 0.94 AC.
 OPEN SPACE, PUBLIC: 0.00 AC.
- WETLANDS WERE DELINEATED BY MIKE MARIANO IN 2017.
- AREA OF DISTURBANCE LESS THAN 43,560 SF, THEREFORE NOI AND SWPPP INSPECTIONS ARE NOT REQUIRED.
- SNOW SHALL BE STORED AT THE EDGE OF PAVEMENT AND IN AREAS SHOWN.
- ALL CONSTRUCTION SHALL MEET THE MINIMUM STANDARDS OF THE TOWN OF KITTERY & MEDOT'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, LATEST EDITIONS. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
- CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAWCUT LINES WITH RS-1 IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
- BUILDING AREA SHOWN IS BASED ON FOOTPRINT MEASURED TO THE EDGE OF FOUNDATIONS AND/OR SLABS. ACTUAL INTERIOR SPACE WILL DIFFER.



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ISSUED FOR: _____

REVIEW _____

ISSUE DATE: **AUGUST 11, 2022**

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EBS	12/22/21
1	ADD PRIVATE R.O.W.	EBS	05/19/22
2	REV. PER PLANNING BOARD	EBS	06/21/22
3	ADD TURN AROUND	EBS	08/11/22

DRAWN BY: _____ RMB

APPROVED BY: _____ EBS

DRAWING FILE: _____ 5235CONDO.DWG

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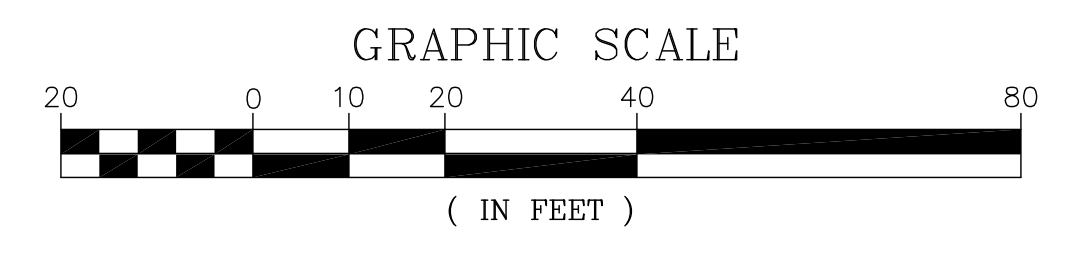
OWNER/APPLICANT:
LUSITANO. LLC
JIM HIGGINS
 119 KINGS HIGHWAY NO.
 ELIOT, MAINE 03903

TOWN OF KITTERY, PLANNING BOARD

CHAIR	DATE
OWNER	DATE
APPLICANT	DATE

YORK ss REGISTRY OF DEEDS
 RECIEVED _____ 20____
 AT _____ H _____ M _____ M., AND
 RECORDED IN BOOK _____ PAGE _____
 ATTEST:

 REGISTER

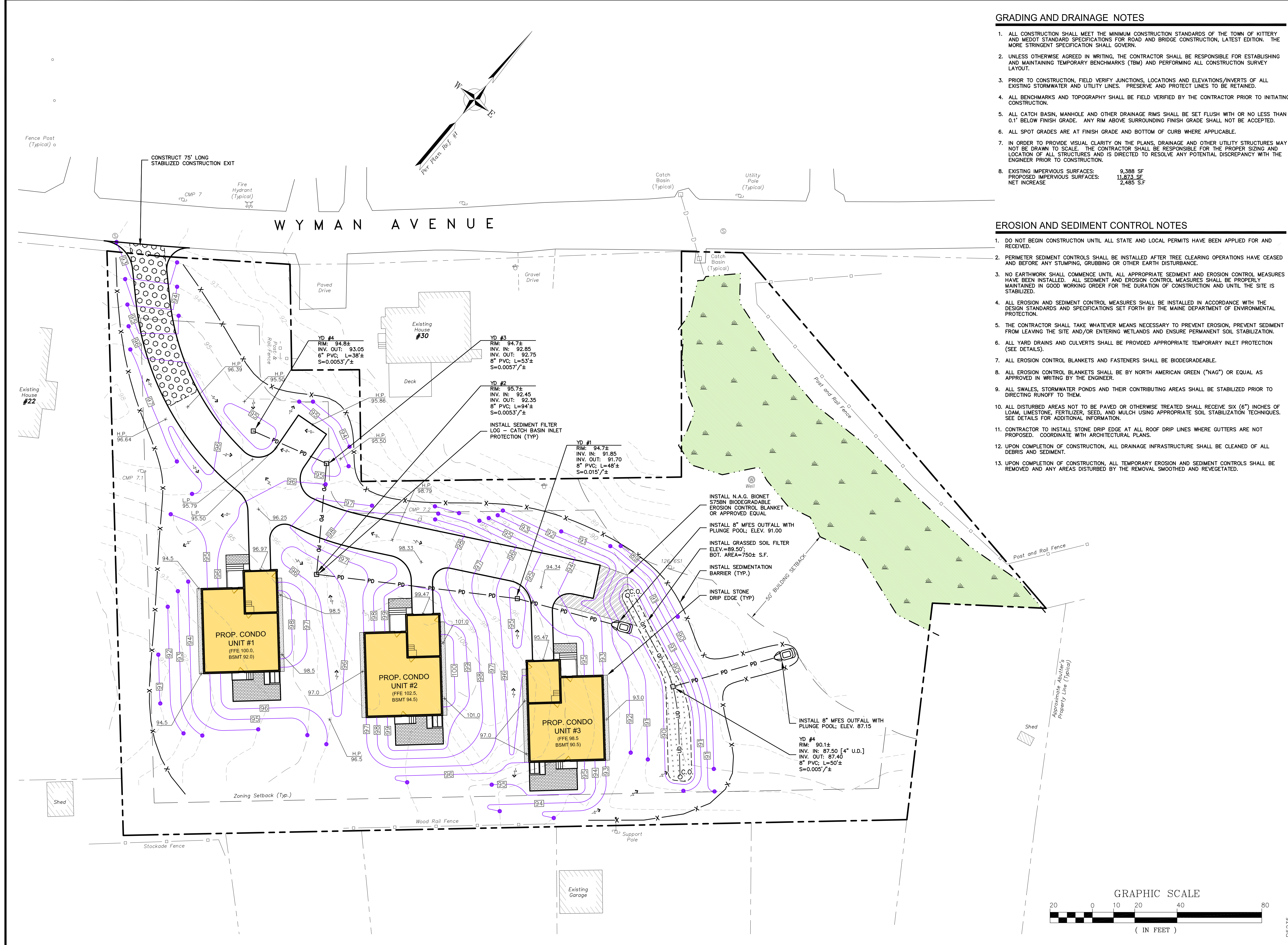


PROJECT:
WYMAN HILL
TAX MAP 16, LOT 148
28 WYMAN AVENUE
KITTERY, MAINE

TITLE:
CONDOMINIUM
SITE PLAN

SHEET NUMBER:
C - 2

P5235



GRADING AND DRAINAGE NOTES

1. ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE TOWN OF KITTEERY AND MEDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
2. UNLESS OTHERWISE AGREED IN WRITING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING TEMPORARY BENCHMARKS (TBM) AND PERFORMING ALL CONSTRUCTION SURVEY LAYOUT.
3. PRIOR TO CONSTRUCTION, FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING STORMWATER AND UTILITY LINES. PRESERVE AND PROTECT LINES TO BE RETAINED.
4. ALL BENCHMARKS AND TOPOGRAPHY SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO INITIATING CONSTRUCTION.
5. ALL CATCH BASIN, MANHOLE AND OTHER DRAINAGE RIMS SHALL BE SET FLUSH WITH OR NO LESS THAN 0.1' BELOW FINISH GRADE. ANY RIM ABOVE SURROUNDING FINISH GRADE SHALL NOT BE ACCEPTED.
6. ALL SPOT GRADES ARE AT FINISH GRADE AND BOTTOM OF CURB WHERE APPLICABLE.
7. IN ORDER TO PROVIDE VISUAL CLARITY ON THE PLANS, DRAINAGE AND OTHER UTILITY STRUCTURES MAY NOT BE DRAWN TO SCALE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER SIZING AND LOCATION OF ALL STRUCTURES AND IS DIRECTED TO RESOLVE ANY POTENTIAL DISCREPANCY WITH THE ENGINEER PRIOR TO CONSTRUCTION.
8. EXISTING IMPERVIOUS SURFACES: 9,388 SF
 PROPOSED IMPERVIOUS SURFACES: 11,873 SF
 NET INCREASE: 2,485 SF

EROSION AND SEDIMENT CONTROL NOTES

1. DO NOT BEGIN CONSTRUCTION UNTIL ALL STATE AND LOCAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
2. PERIMETER SEDIMENT CONTROLS SHALL BE INSTALLED AFTER TREE CLEARING OPERATIONS HAVE CEASED AND BEFORE ANY STUMPING, GRUBBING OR OTHER EARTH DISTURBANCE.
3. NO EARTHWORK SHALL COMMENCE UNTIL ALL APPROPRIATE SEDIMENT AND EROSION CONTROL MEASURES HAVE BEEN INSTALLED. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE PROPERLY MAINTAINED IN GOOD WORKING ORDER FOR THE DURATION OF CONSTRUCTION AND UNTIL THE SITE IS STABILIZED.
4. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN STANDARDS AND SPECIFICATIONS SET FORTH BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
5. THE CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO PREVENT EROSION, PREVENT SEDIMENT FROM LEAVING THE SITE AND/OR ENTERING WETLANDS AND ENSURE PERMANENT SOIL STABILIZATION.
6. ALL YARD DRAINS AND CULVERTS SHALL BE PROVIDED APPROPRIATE TEMPORARY INLET PROTECTION (SEE DETAILS).
7. ALL EROSION CONTROL BLANKETS AND FASTENERS SHALL BE BIODEGRADABLE.
8. ALL EROSION CONTROL BLANKETS SHALL BE BY NORTH AMERICAN GREEN ("NAG") OR EQUAL AS APPROVED IN WRITING BY THE ENGINEER.
9. ALL SWALES, STORMWATER PONDS AND THEIR CONTRIBUTING AREAS SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
10. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE SIX (6") INCHES OF LOAM, LIMESTONE, FERTILIZER, SEED, AND MULCH USING APPROPRIATE SOIL STABILIZATION TECHNIQUES. SEE DETAILS FOR ADDITIONAL INFORMATION.
11. CONTRACTOR TO INSTALL STONE DRIP EDGE AT ALL ROOF DRIP LINES WHERE GUTTERS ARE NOT PROPOSED. COORDINATE WITH ARCHITECTURAL PLANS.
12. UPON COMPLETION OF CONSTRUCTION, ALL DRAINAGE INFRASTRUCTURE SHALL BE CLEANED OF ALL DEBRIS AND SEDIMENT.
13. UPON COMPLETION OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED AND ANY AREAS DISTURBED BY THE REMOVAL SMOOTHED AND REVEGETATED.

ENGINEER:

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

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ISSUED FOR: REVIEW
 ISSUE DATE: AUGUST 11, 2022

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EBS	12/22/21
1	REV. PER PLANNING BOARD	EBS	06/21/22
2	ADD TURN AROUND	EBS	08/16/22

DRAWN BY: RMB
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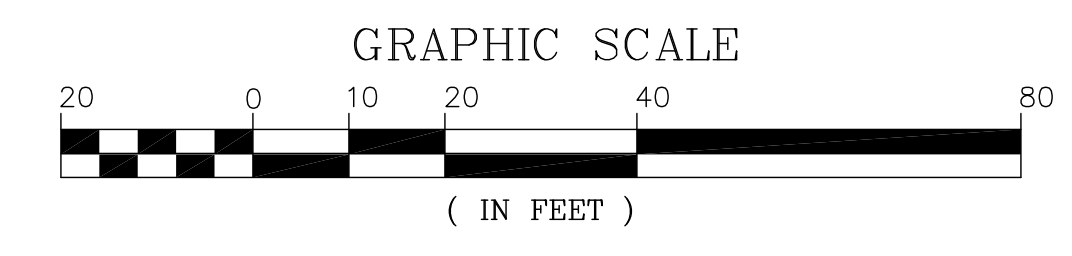
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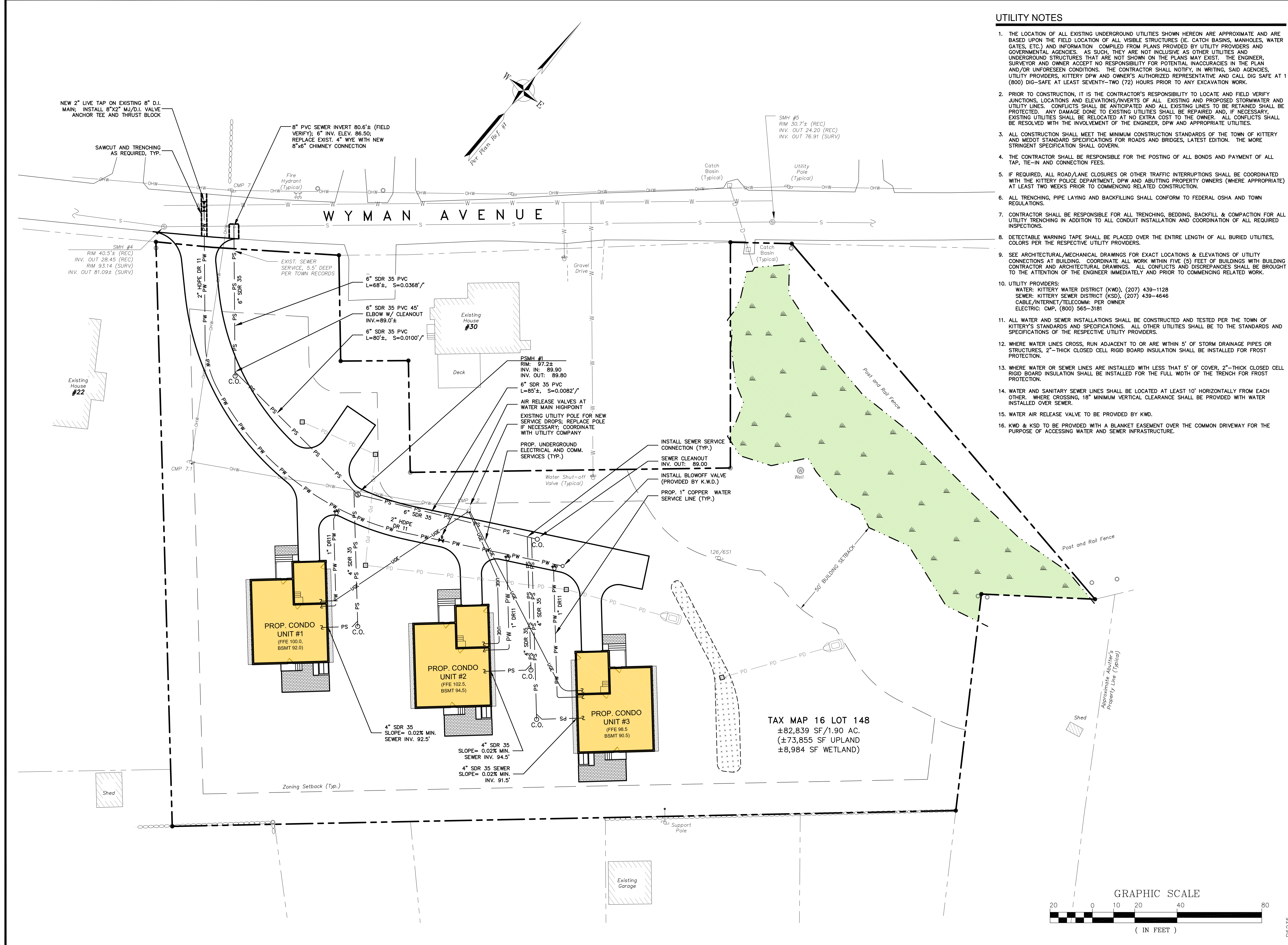
PROJECT:
WYMAN HILL
 TAX MAP 16, LOT 148
 28 WYMAN AVENUE
 KITTEERY, MAINE

TITLE:
GRADING & STORMWATER MANAGEMENT PLAN

SHEET NUMBER:
C - 3



P5235



UTILITY NOTES

1. THE LOCATION OF ALL EXISTING 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 PROVIDERS AND GOVERNMENTAL AGENCIES. AS SUCH, THEY ARE NOT INCLUSIVE AS OTHER UTILITIES AND UNDERGROUND STRUCTURES THAT ARE NOT SHOWN ON THE PLANS MAY EXIST. THE ENGINEER, SURVEYOR AND OWNER ACCEPT NO RESPONSIBILITY FOR POTENTIAL INACCURACIES IN THE PLAN AND/OR UNFORESEEN CONDITIONS. THE CONTRACTOR SHALL NOTIFY, IN WRITING, SAID AGENCIES, UTILITY PROVIDERS, KITTERY DPW AND OWNER'S AUTHORIZED REPRESENTATIVE AND CALL DIG SAFE AT 1 (800) DIG-SAFE AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO ANY EXCAVATION WORK.
2. PRIOR TO CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND FIELD VERIFY JUNCTIONS, LOCATIONS AND ELEVATIONS/INVERTS OF ALL EXISTING AND PROPOSED STORMWATER AND UTILITY LINES. CONFLICTS SHALL BE ANTICIPATED AND ALL EXISTING LINES TO BE RETAINED SHALL BE PROTECTED. ANY DAMAGE DONE TO EXISTING UTILITIES SHALL BE REPAIRED AND, IF NECESSARY, EXISTING UTILITIES SHALL BE RELOCATED AT NO EXTRA COST TO THE OWNER. ALL CONFLICTS SHALL BE RESOLVED WITH THE INVOLVEMENT OF THE ENGINEER, DPW AND APPROPRIATE UTILITIES.
3. ALL CONSTRUCTION SHALL MEET THE MINIMUM CONSTRUCTION STANDARDS OF THE TOWN OF KITTERY AND MDOT STANDARD SPECIFICATIONS FOR ROADS AND BRIDGES, LATEST EDITION. THE MORE STRINGENT SPECIFICATION SHALL GOVERN.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE POSTING OF ALL BONDS AND PAYMENT OF ALL TAP, TIE-IN AND CONNECTION FEES.
5. IF REQUIRED, ALL ROAD/LANE CLOSURES OR OTHER TRAFFIC INTERRUPTIONS SHALL BE COORDINATED WITH THE KITTERY POLICE DEPARTMENT, DPW AND ADJUTING PROPERTY OWNERS (WHERE APPROPRIATE) AT LEAST TWO WEEKS PRIOR TO COMMENCING RELATED CONSTRUCTION.
6. ALL TRENCHING, PIPE LAYING AND BACKFILLING SHALL CONFORM TO FEDERAL OSHA AND TOWN REGULATIONS.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRENCHING, BEDDING, BACKFILL & COMPACTION FOR ALL UTILITY TRENCHING IN ADDITION TO ALL CONDUIT INSTALLATION AND COORDINATION OF ALL REQUIRED INSPECTIONS.
8. DETECTABLE WARNING TAPE SHALL BE PLACED OVER THE ENTIRE LENGTH OF ALL BURIED UTILITIES, COLORS PER THE RESPECTIVE UTILITY PROVIDERS.
9. SEE ARCHITECTURAL/MECHANICAL DRAWINGS FOR EXACT LOCATIONS & ELEVATIONS OF UTILITY CONNECTIONS AT BUILDING. COORDINATE ALL WORK WITHIN FIVE (5) FEET OF BUILDINGS WITH BUILDING CONTRACTOR AND ARCHITECTURAL DRAWINGS. ALL CONFLICTS AND DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY AND PRIOR TO COMMENCING RELATED WORK.
10. UTILITY PROVIDERS:
 WATER: KITTERY WATER DISTRICT (KWD), (207) 439-1128
 SEWER: KITTERY SEWER DISTRICT (KSD), (207) 439-4646
 CABLE/INTERNET/TELECOMM: PER OWNER
 ELECTRIC: CMP, (800) 565-3181
11. ALL WATER AND SEWER INSTALLATIONS SHALL BE CONSTRUCTED AND TESTED PER THE TOWN OF KITTERY'S STANDARDS AND SPECIFICATIONS. ALL OTHER UTILITIES SHALL BE TO THE STANDARDS AND SPECIFICATIONS OF THE RESPECTIVE UTILITY PROVIDERS.
12. WHERE WATER LINES CROSS, RUN ADJACENT TO OR ARE WITHIN 5' OF STORM DRAINAGE PIPES OR STRUCTURES, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR FROST PROTECTION.
13. WHERE WATER OR SEWER LINES ARE INSTALLED WITH LESS THAT 5' OF COVER, 2"-THICK CLOSED CELL RIGID BOARD INSULATION SHALL BE INSTALLED FOR THE FULL WIDTH OF THE TRENCH FOR FROST PROTECTION.
14. WATER AND SANITARY SEWER LINES SHALL BE LOCATED AT LEAST 10' HORIZONTALLY FROM EACH OTHER. WHERE CROSSING, 18" MINIMUM VERTICAL CLEARANCE SHALL BE PROVIDED WITH WATER INSTALLED OVER SEWER.
15. WATER AIR RELEASE VALVE TO BE PROVIDED BY KWD.
16. KWD & KSD TO BE PROVIDED WITH A BLANKET EASEMENT OVER THE COMMON DRIVEWAY FOR THE PURPOSE OF ACCESSING WATER AND SEWER INFRASTRUCTURE.

ENGINEER:

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



THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR: REVIEW

ISSUE DATE: AUGUST 11, 2022

REVISIONS

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EBS	12/22/21
1	REV. PER PLANNING BOARD	EBS	06/21/22
2	ADD TURN AROUND	EBS	08/11/22

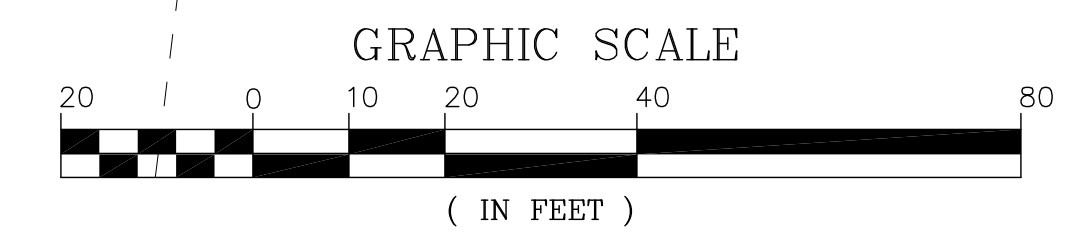
DRAWN BY: _____ RMB
 APPROVED BY: _____ EBS
 DRAWING FILE: 5235CONDO.DWG

SCALE:
 (24"x36") 1" = 20'
 (11"x17") N.T.S.

OWNER/APPLICANT:
 LUSITANO. LLC
 JIM HIGGINS
 119 KINGS HIGHWAY NO.
 ELIOT, MAINE 03903

PROJECT:
WYMAN HILL
 TAX MAP 16, LOT 148
 28 WYMAN AVENUE
 KITTERY, MAINE

TITLE:
UTILITY PLAN
 SHEET NUMBER:
C - 4



PS235

PROJECT NAME AND LOCATION

Wyman Hill
Map 16 Lot 148
Kittery, Maine

Latitude: 043° 05' 16" N
Longitude: 070° 43' 45" W

DESCRIPTION

The project consists of a three (3) single-family detached condominium units with shared right-of-way and drive. The project will be completed in a single phase.

DISTURBED AREA

The total area to be disturbed is approximately 0.8 acres for constructing new driveway and dwelling units (including lot development). Prior to lot clearing and soil disturbance, sedimentation barrier shall be installed to prevent sediment leaving the lot.

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. Clear and grub wooded area; strip and stockpile loam. Stockpiles shall be temporarily stabilized with hay bales mulch and surrounded by a hay bale or silt fence barrier until material is removed and final grading is complete.
- 3. Shut off and terminate existing services; demolish existing structures and pavement.
- 4. Construct ditches and stabilize prior to directing flow to them.
- 5. Construct drainage structures, swales & road base materials.
- 6. Ditches and swales with grades over 5% shall have sides and bottom reinforced with excelsior matting.
- 7. Shape site to desired grades.
- 8. Loam (6" min) and seed all disturbed areas not paved or otherwise stabilized.
- 9. Install landscaping.
- 10. 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.

NAME OF RECEIVING WATER

Unnamed wetlands complex and open drainage systems to tidal waters of Spruce Creek.

TEMPORARY EROSION AND SEDIMENT CONTROLS AND STABILIZATION PRACTICES

All work shall be in accordance with state and local permits. Installation or construction of erosion control measures shall conform to the practices described in the 2014 Revision to the 2003 Maine Erosion and Sediment Control Field Guide for Contractors, published by the Maine Department of Environmental Protection.

Minimum erosion control measures will need to be implemented and the contractor will be responsible to maintain all components of the erosion control plan until the site is fully stabilized. However, based on site and weather conditions during construction, additional erosion control measures may need to be implemented. All areas of instability and erosion must be repaired immediately during construction and need to be maintained until the site is fully stabilized or vegetation is established. A construction log must be maintained for the erosion and sedimentation control inspections and maintenance.

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, silt fences and hay bale barriers and any earth/dikes will be removed once permanent measures are established.

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

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 desired vegetative cover is established. These control measures are essential to erosion prevention and also reduce costly rework of graded and sloped areas.

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

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

- A. GENERAL
- 1. Perimeter controls shall be installed prior to earth moving operations.
- 2. The smallest practical portion of the site will be denuded at one time and no more than be mulched in one day. All disturbed areas must be stabilized by temporary measures within 5 days of initial disturbance and stabilized by permanent measures immediately after final grading.
- 3. Sediment barriers shall be installed downgradient of stockpiles and diversion swales installed upgradient of stockpiles to prevent movement of soil.
- 4. Built-up sediment shall be removed from silt fence or other barriers when it has reached one-third the height of the tubular barrier or bale, or when "bulges" occur in silt fence.
- 5. All diversion dikes shall be inspected and any breaches promptly repaired.
- 6. Temporary seeding and planting shall be inspected for bare spots, washouts, and unhealthy growth.
- 7. The owner's authorized engineer shall inspect the site on a periodic basis to review compliance with the plans.
- 8. All ditches and swales shall be stabilized prior to directing runoff to them. All diversion dikes will be inspected and any breaches promptly repaired.
- 9. Temporary water diversion basins, basins, etc) shall be used as necessary until areas are stabilized.
- 10. Ponds and swales shall be installed early on in the construction sequence (before rough grading site).
- 11. All cut and fill slopes shall be seeded/loamed within 72 hours of achieving finished grade.
- 12. 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 90% 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.

MULCHING

- Application
 - In sensitive areas (within 100 ft of streams, wetlands and in lake watersheds) temporary mulch shall be applied within 7 days of exposing soil or prior to any storm event.
 - Areas, which have been temporarily or permanently seeded, shall be mulched immediately following seeding.
 - Areas which cannot be seeded within the growing season shall be mulched for over-winter protection and the area should be seeded at the beginning of the growing season.
 - Mulch anchoring should be used on slopes greater than 5% in late fall (post September 15), and over-winter (September 15 - April 15).

Type of Mulch

Hay or Straw Mulches
Organic mulches, including hay and straw, shall be air-dried, free of undesirable seeds and coarse materials. Application rate shall be 2 bales (70-90 pounds) per 1000 sq. ft. or 1.5 to 2 tons (90-100 bales) per acre to cover 75 to 90 % of the ground surface. Hay mulch subject to wind blowing shall be anchored via: netting; peg and twine or tracking.

Erosion Control Mix

Erosion control mix shall consist primarily of organic material and shall include any of the following: shredded bark, stump grindings, composted bark or other acceptable products based on a similar raw source. Wood or bark chips, ground construction debris or reprocessed wood products shall not be acceptable as the organic component of the mix. It can be used as a stand-alone reinforcement:

- On slopes 2 horizontal to 1 vertical or less.
- On frozen ground or forested areas.
- At the edge of gravel parking areas and areas under construction.

Other reinforcement BMPs (i.e. riprap) should be used:

- On slopes with groundwater seepage;
- At low points with concentrated flows and in gullies;
- At the bottom of steep perimeter slopes exceeding 100 feet in length;
- Below culvert outlet aprons; and
- Around catch basins and closed storm systems.

Composition

Erosion control mix shall contain a well-graded mixture of particle sizes and may contain rocks less than 4" in diameter. Erosion control mix must be free of refuse, physical contaminants, and material toxic to plant growth. The mix composition shall meet the following standards:

- The organic matter content shall be between 80 and 100%, dry weight basis.
- Particle size by weight shall be 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.

Installation

- Erosion control mix shall not be used on slopes steeper than 2:1.
- On slopes of 3:1 or less; 2 inches plus an additional 1/2 inch per 20 feet of slope up to 100 feet.
- On slopes between 3:1 and 2:1, 4 inch plus an additional 1/2 inch per 20 feet of slope up to 100 feet.
- The thickness of the mulch at the bottom of the slope needs to be:

<20° of slope	<3:1 slope	slopes between 3:1 and 2:1
<60° of slope	2.0"	4.0"
<100° of slope	3.0"	5.0"
	4.0"	6.0"
- It shall be placed evenly and must provide 100% coverage with the soil totally invisible.

Any required repairs shall be made immediately, with additional erosion control mix placed on top of the mulch to reach the recommended thickness. When the mix is decomposed, clogged with sediment, eroded or ineffective, it shall be replaced or repaired. Erosion control mix mulch shall be left in place. If the mulch needs to be removed spread it out into the landscape.

Maintenance

All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied. Nets shall be inspected after rain events for dislocation or failure. If washouts or breakage occur, re-install the nets as necessary after repairing damage to the slope. Inspections shall take place until grasses are firmly established (95% soil surface covered with grass). Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface. Repair as needed.

TEMPORARY VEGETATION

Considerations

- Proper seedbed preparation and the use of quality seed are important in this practice just as in permanent seeding. Failure to carefully follow sound agronomic recommendations will often result in an inadequate stand of vegetation that provides little or no erosion control.
- Nutrients and pesticides used to establish and maintain a vegetation cover shall be managed to protect the surface and ground water quality.
- Temporary seeding shall be used extensively in sensitive areas (ponds and lake watersheds, steep slopes, streambanks, etc.).
- Late fall seeding may fail and cause water quality deterioration in spring runoff events, thus other measures such as mulching shall be implemented.

Specifications

Seedbed Preparation

Apply limestone and fertilizer according to soil test recommendations. If soil testing is not feasible on small or variable sites, or where timing is critical, fertilizer may be applied at the rate of 600 pounds per acre or 13.8 pounds per 1,000 square feet of 10-10-10 (N-P2O5-K2O) or equivalent. Apply limestone (equivalent to 50 percent calcium plus magnesium oxide) at a rate of 3 tons per acre (138 lb. per 1,000 square feet).

Seeding

- Select seed from recommendations in enclosed table.
- Where the soil has been compacted by construction operations, loosen soil to a depth of 2 inches before applying fertilizer, lime and seed.
- Apply seed uniformly by hand, cyclone seeder, drill, cultipacker type seeder or hydroseeder (slurry including seed and fertilizer). Hydroseeding that includes mulch may be left on soil surface. Seeding rates must be increased 10% when hydroseeding.

Mulching

Apply mulch over seeded area according to the TEMPORARY MULCHING BMP.

Maintenance

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

Temporary Seeding Rates and Dates

Seed	Lb./Ac	Seeding Depth	Recommended Seeding Dates	Remarks
Winter Rye	112 (2.0 bu)	1-1.5 in	8/15-10/1	Good for fall seeding. Select a hardy species, such as Aroostook Rye.
Oats	80 (2.5 bu)	1-1.5 in	4/1-7/1 8/15-9/15	Best for spring seeding. Early fall seeding will die when winter weather moved in, but mulch will provide protection.
Annual Ryegrass	40	.25 in	4/1-7/1	Grows quickly but is of short duration. Use where appearance is important. With mulch, seeding may be done throughout growing season.
Sudangrass	40 (1.0 bu)	.5-1 in	5/15-8/15	Good growth during hot summer periods.
Perennial	40 (2.0 bu)	.25 in	8/15-9/15	Good cover, longer lasting than Annual Ryegrass. Mulching will allow seeding throughout growing season. Refer to TEMPORARY MULCHING BMP PERMANENT VEGETATION BMP.
Temporary mulch with or and/or without dormant seeding			10/1-4/1	

SEDIMENT BARRIERS

Tubular Sediment Barrier

- To be provided by an approved manufacturer or supplier;
- Installed per manufacturer's specifications;
- Barrier shall be removed when they have served their useful purpose but not before the upslope areas has been permanently stabilized.

Organic Filter Berm See detail

Installation

- Sediment barriers shall be installed along the down gradient side of proposed ground disturbance areas prior to any construction activities.
- The barrier must be placed along a relatively level contour.

Maintenance

- Hay bale barriers, silt fences and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. They shall be repaired immediately if there are any signs of erosion or sedimentation below them. If there are signs of undercutting at the center or the edges of the barrier, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam.
- Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier still is necessary, the fabric shall be replaced promptly.
- Sediment deposits should be removed when deposits reach approximately one third (1/3) the height of the barrier.
- Filter berms should be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required shall be dressed or removed to conform to the existing grade, prepared and seeded.
- Additional stumps may have to be removed to the construction stabilized entrance, rock barriers, stone lined swales, etc., periodically to maintain proper function of the erosion control structure.

PERMANENT SEEDING

- 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 6" to prepare a seedbed and mix fertilizer (refer to Landscape Drawings and Specifications) into the soil.
- Fertilizer (refer to Landscape Drawings and Specifications) - 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.
- Seed Mixture (See Landscape Drawings for additional information):
 - 3.1. Lawn seed mix shall be a fresh, clean new seed crop. The Contractor shall furnish a dealer's guaranteed statement of the composition of the mixture and the percentage of purity and germination of each variety.
 - 3.2. Seed mixture shall conform to landscape specifications
- Sodding - sodding is done where it is desirable to rapidly establish cover on a disturbed area. Sodding an area may be substituted for permanent seeding procedures anywhere on site. Bed preparation, fertilizing and placement of sod shall be performed according to the S.O.S. Handbook. Sodding is recommended for steep sloped areas, areas immediately adjacent to sensitive water courses, easily erodible soils (fine sand/silt), etc.

DEWATERING

A dewatering plan shall be implemented to address excavation de-watering following heavy rainfall events or where the excavation may intercept the groundwater table during construction. The collected water needs treatment and a discharge point that will not cause downgradient erosion and offsite sedimentation or within a resource.

All dewatering discharge locations shall be located on relatively flat ground at least 75' from streams and 25' from wetlands. The contractor shall utilize dirtbags, erosion control mix berms, or similar methods for filtration of dewatering and shall conform to the Maine Erosion and Sediment Control BMPs.

MONITORING SCHEDULE

The contractor shall be responsible for installing, monitoring, maintaining, repairing, replacing and removing all of the erosion and sedimentation controls or appointing a qualified subcontractor to do so. Maintenance measures will be applied as needed during the entire construction cycle, immediately following any significant rainfall, and at least once a week, a visual inspection will be made of all erosion and sedimentation controls as follows:

- Silt fence shall be inspected and repaired. Sediment trapped behind these barriers shall be excavated when it reaches a depth of 6" and redistributed to areas undergoing final grading.
- Construction entrance shall be visually inspected and repaired as needed. Any areas subject to rutting shall be stabilized immediately. If the voids of the construction entrance become filled with mud, more crushed stone shall be added as needed. The public roadway shall be swept should mud be deposited/tracked onto them.

STANDARDS FOR STABILIZING SITES FOR THE WINTER

The following standards and methodologies shall be used for stabilizing the site during the winter construction period:

- Standard for the timely stabilization of disturbed soils (any area having a grade greater than 25%) - the contractor will seed and mulch all slopes to be vegetated by September 15th. If the contractor fails to stabilize any slope to be vegetated by September 15th, then the contractor will take one of the following actions to stabilize the slope for late fall and winter:
 - A. Stabilize the soil with temporary vegetation and erosion control mats; by October 1st the contractor will seed the disturbed slope with winter rye at a rate of 3 pounds per 1000 square feet and then install erosion control mats or anchored hay mulch over the seeding. The contractor will monitor growth of the rye over the next 30 days.
 - B. Stabilize the slope with wood-waste compost; the contractor will place a six-inch layer of wood-waste compost on the slope by November 15th. The contractor will not use wood-waste compost to stabilize slopes having grades greater than 50% (2h:1v) or having groundwater seeps on the slope face.
 - C. Stabilize the slope with stone riprap; the contractor will place a layer of stone riprap on the slope by November 15th. The development's owner will hire a registered professional engineer to determine the stone size needed for stability on the slope and to design a filter layer for underneath the riprap.
- Standard for the timely stabilization of disturbed soils - by September 15th the contractor will seed and mulch all disturbed soils on the site. If the contractor fails to stabilize these soils by this date, then the contractor will take one of the following actions to stabilize the soil for late fall and winter:
 - A. Stabilize the soil with temporary vegetation; by October 1st the contractor will seed the disturbed soil with winter rye at a seeding rate of 3 pounds per 1000 square feet, lightly mulch the seeded soil with hay or straw at 75 pounds per 1000 square feet, and anchor the mulch with plastic netting. The contractor will monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1, then the contractor will mulch the area for stabilization as described in item iii of this standard.
 - B. Stabilize the soil with sod; the contractor will stabilize the disturbed soil with properly installed sod by October 1st. Proper installation includes the contractor pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.
 - C. Stabilize the soil with mulch; by November 15th the contractor will mulch the disturbed soil by spreading hay or straw at a rate of at least 150 pounds per 1000 square feet on the area so that no soil is visible through the mulch. Immediately after applying the mulch, the contractor will anchor the mulch with netting or other method to prevent wind from moving the mulch off the disturbed soil.

Winter inspections shall be performed after, each rainfall, snowstorm or thawing and at least once a week. All areas within 75 feet of a protected natural resource must be protected with a double row of sediment barrier.

EROSION CONTROL REMOVAL

An area is considered stable if it is paved or if 90% growth of planted seeds is established. Once an area is considered stable, the erosion control measures can be removed as follows:

- Silt Fence: Silt fence shall be disposed of legally and properly off-site. All sediment trapped behind these controls shall be distributed to an area undergoing final grading or removed and relocated off-site.
- Stabilized Construction Entrances: The stabilized construction entrance shall be removed once the compacted roadway base is in place. Stone and sediment from the construction entrance shall be redistributed to an area undergoing grading or removed and relocated offsite.
- Miscellaneous: Once all the trapped sediments have been removed from the temporary sedimentation devices the disturbed areas must be regraded in an aesthetic manner to conform to the surrounding topography. Once graded these disturbed areas must be loamed (if necessary), fertilized, seeded and mulched in accordance with the rates previously stated.

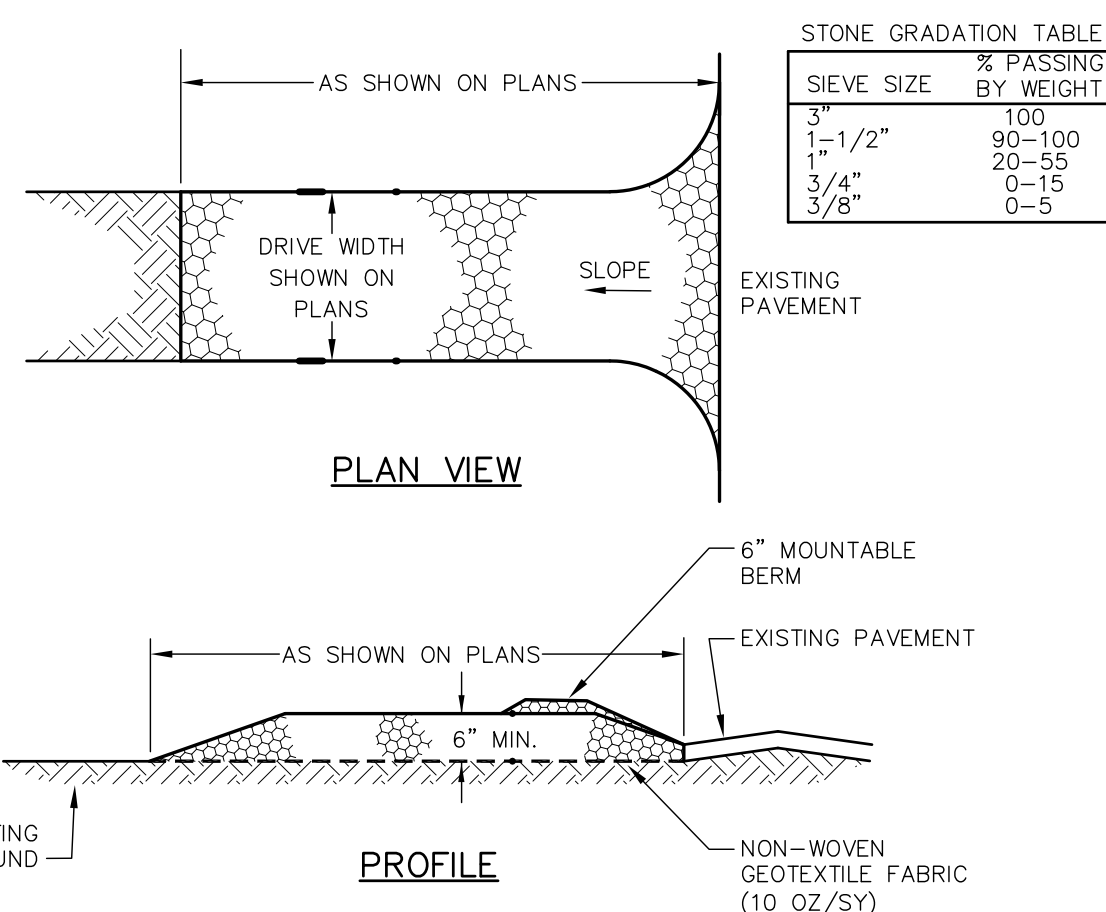
The above erosion controls must be removed within 30 days of final stabilization of the site. Conformance with this plan and following these practices will result in a project that complies with the state regulations and the standards of the natural resources protection act, and will protect water quality in areas downstream from the project.

INSPECTION AND MAINTENANCE

- All sediment control measures shall be inspected at least once each week and following any storm event of 0.5 inches or greater for the duration of construction and until the site is fully stabilized. An inspection report shall be made after each inspection by a qualified inspector engaged by the Owner. The qualified inspector shall be a Professional Engineer licensed in Maine or be a Certified Professional in Erosion and Sediment Control approved by the Owner.
- All measures shall be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours and completed within 72 hours.
- Inspection and maintenance requirements: Inspect disturbed and impervious areas, erosion and stormwater control measures, areas used for storage that are exposed to precipitation, and locations where vehicles enter or exit the site. Inspect these areas at least once a week as well as before and after a 0.5 inches or greater storm event and prior to completion of permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards in the MCGP and any departmental companion document to the MCGP, must conduct the inspection. This person must be identified in the inspection log. If best management practices (BMPs) need to be modified or if additional BMPs are necessary, implementation must be completed within 7 calendar days and prior to any storm event (rainfall). All measures must be maintained in effective operating condition until areas are permanently stabilized.
- Inspection Log (report): A log (report) must be kept summarizing the scope of the inspection, name(s) and qualifications of the person making the inspection, the date(s) of the inspection, and major observations relating to operation of erosion and sedimentation controls and pollution prevention measures. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the inspection log the correct action taken and when it was taken. The log must be made accessible to the department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of the permanent stabilization.

HOUSEKEEPING

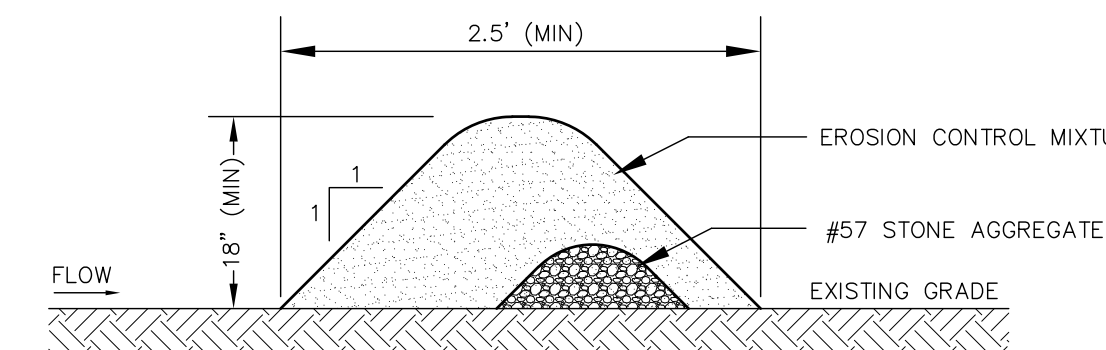
- Spill prevention: Controls must be used to prevent pollutants from construction and waste materials stored onsite, including storage practices to minimize exposure of the materials to stormwater and appropriate spill prevention, containment, and response planning implementation. The contractor and owners need to take care with construction and waste materials such that contaminants do not enter the stormwater. The storage of materials such as paint, petroleum products, cleaning agents and the like are to be stored in watertight containers. The use of the products should be in accordance with manufacturer recommendations. When fueling equipment, including snowblowers and lawnmowers, have oil absorbent pads available below the fueling. Refueling of small engines by the owner should occur in the garage or on a paved surface. Any spill or release of toxic or



CONSTRUCTION SPECIFICATIONS

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

STABILIZED CONSTRUCTION EXIT NOT TO SCALE

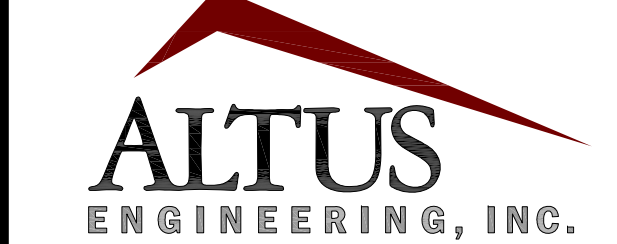


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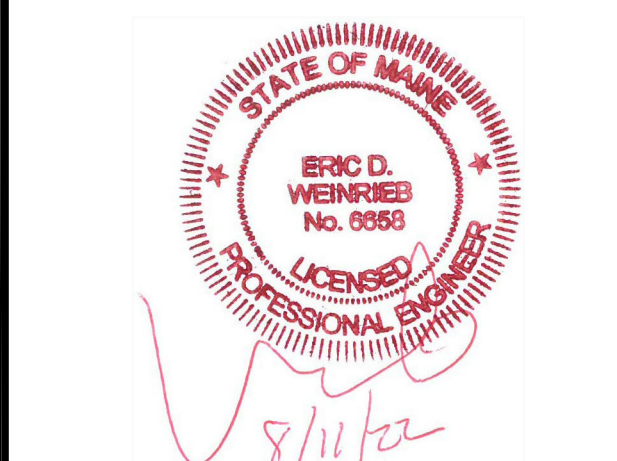
- ORGANIC FILTER BERMS MAY BE UTILIZED IN LIEU OF SILT FENCE OR OTHER SEDIMENT BARRIERS.
- THE EROSION CONTROL MIXTURE USED IN FILTER BERMS SHALL BE A WELL-GRADED MIX OF PARTICLE SIZES THAT MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER, STUMP GRINDINGS, SHREDDED OR COMPOSTED BARK, AND/OR ACCEPTABLE MANUFACTURED PRODUCTS AND SHALL BE FREE OF REFUSE, PHYSICAL CONTAMINANTS AND MATERIAL TOXIC TO PLANT GROWTH. EROSION CONTROL MIXTURE SHALL MEET THE FOLLOWING STANDARDS:
 - a) THE ORGANIC CONTENT SHALL BE 80-100% OF DRY WEIGHT.
 - b) PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN, AND 70-85% PASSING A 0.75" SCREEN.
 - c) THE ORGANIC PORTION SHALL BE FIBROUS AND ELONGATED.
 - d) LARGE PORTIONS OF SILTS, CLAYS, OR FINE SANDS SHALL NOT BE INCLUDED IN THE MIXTURE.
 - e) SOLUBLE SALTS CONTENT SHALL BE >4.0mhos/cm.
 - f) THE pH SHALL BE BETWEEN 5.0 AND 8.0.
- ORGANIC FILTER BERMS SHALL BE INSTALLED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BERM.
- ON SLOPES LESS THAN 5% OR AT THE BOTTOM OF SLOPES NO STEEPER THAN 3:1 AND UP TO 20' LONG, THE BERM SHALL BE A MINIMUM OF 12" HIGH (AS MEASURED ON THE UPHILL SIDE) AND A MINIMUM OF 36" WIDE. ON LONGER AND/OR STEEPER SLOPES, THE BERM SHALL BE TALLER AND WIDER TO ACCOMMODATE THE POTENTIAL FOR ADDITIONAL RUNOFF (MAXIMUM HEIGHT SHALL NOT EXCEED 2').
- FROZEN GROUND, OUTCROPS OF BEDROCK, AND VERY ROOTED FORESTED AREAS PRESENT THE MOST PRACTICAL AND EFFECTIVE LOCATIONS FOR ORGANIC FILTER BERMS. OTHER BMP'S SHOULD BE USED AT LOW POINTS OR CONCENTRATED RUNOFF, BELOW VERT. OUTLET APRONS, AROUND CATCH BASINS, AND AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT HAVE A LARGE CONTRIBUTING AREA.
- SEDIMENT SHALL BE REMOVED FROM BEHIND THE FILTER BERMS WHEN IT HAS ACCUMULATED TO ONE HALF THE ORIGINAL HEIGHT OF THE BERM.
- ORGANIC FILTER BERMS MAY BE LEFT IN PLACE ONCE THE SITE IS STABILIZED PROVIDED ANY SEDIMENT DEPOSITS TRAPPED BY THEM ARE REMOVED AND DISPOSED OF PROPERLY.
- FILTER BERMS ARE PROHIBITED AT THE BASE OF SLOPES STEEPER THAN 8% OR WHERE THERE IS FLOWING WATER WITHOUT THE SUPPORT OF ADDITIONAL MEASURES SUCH AS SILTFENCE.

ORGANIC FILTER BERM NOT TO SCALE

ENGINEER:



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8/11/22

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DRAWN BY: _____ **RMB**

APPROVED BY: _____ **EBS**

DRAWING FILE: _____ **5235DETAILS.DWG**

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OWNER/APPLICANT:

LUSITANO. LLC
JIM HIGGINS
119 KINGS HIGHWAY NO.
ELIOT, MAINE 03903

PROJECT:

RE-DEVELOPMENT PLAN

TAX MAP 16, LOT 148

28 WYMAN AVENUE
KITTERY, MAINE

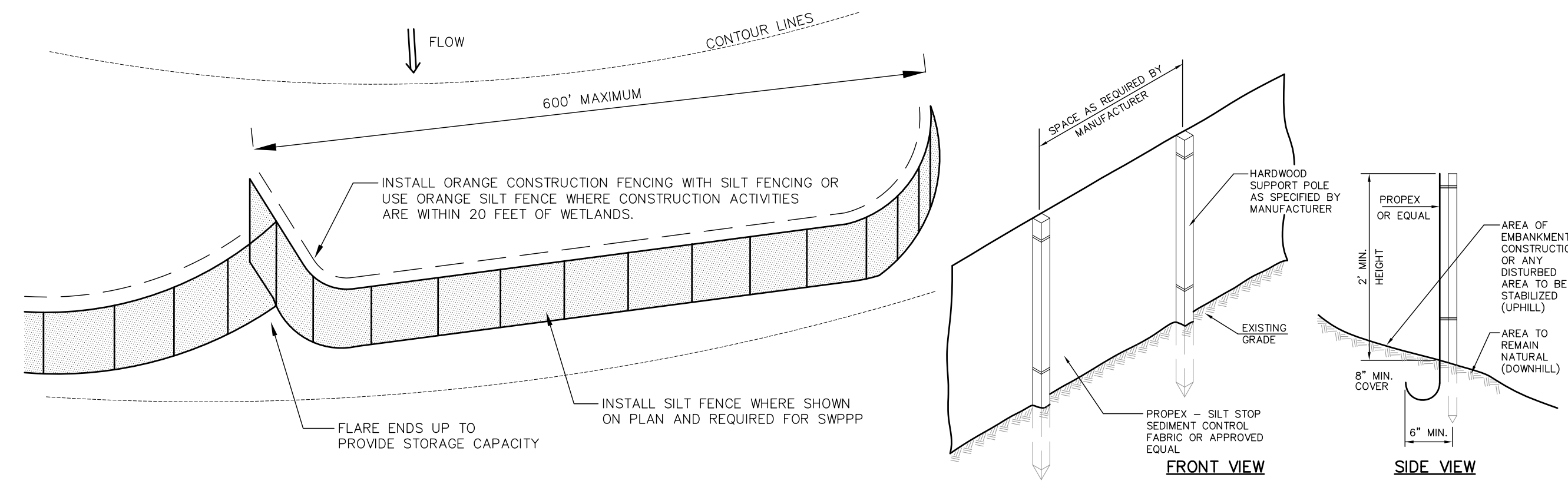
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EROSION CONTROL NOTES

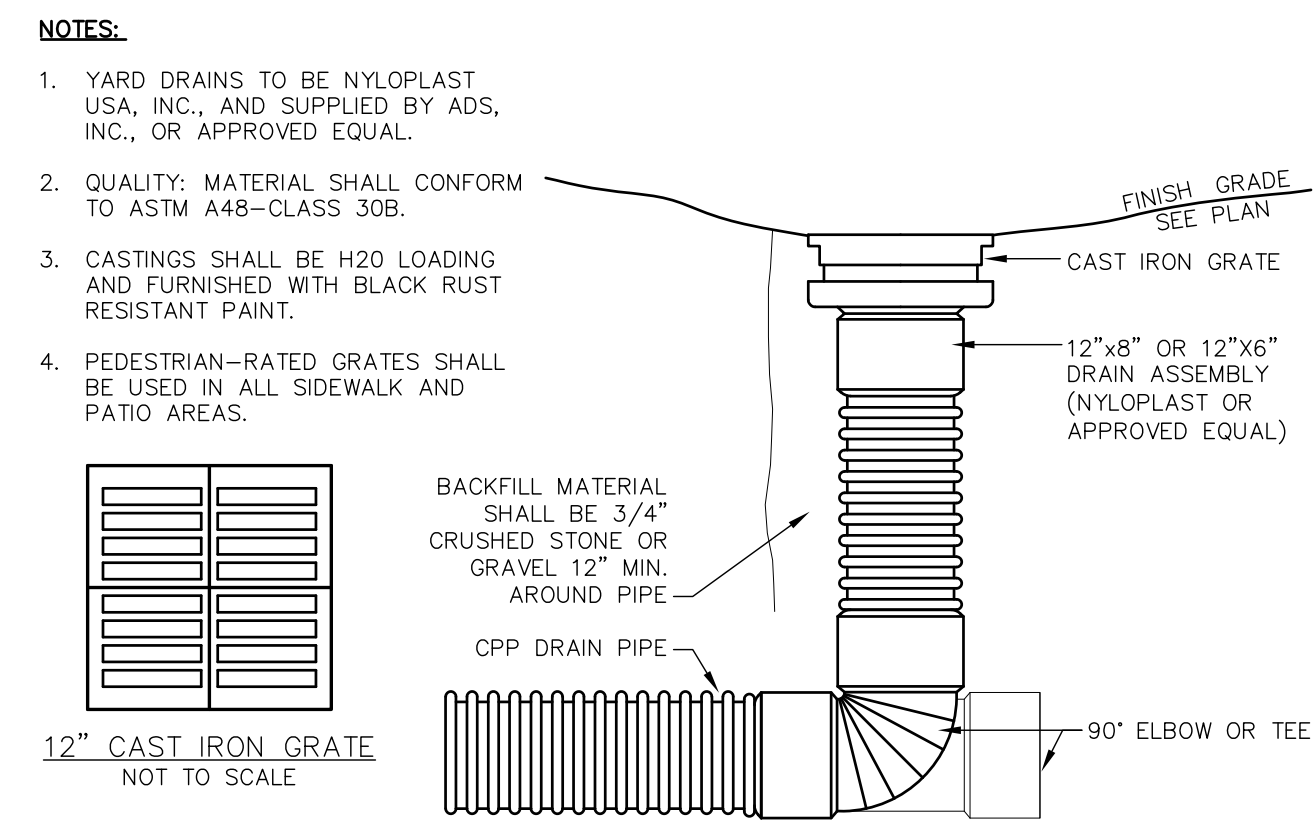
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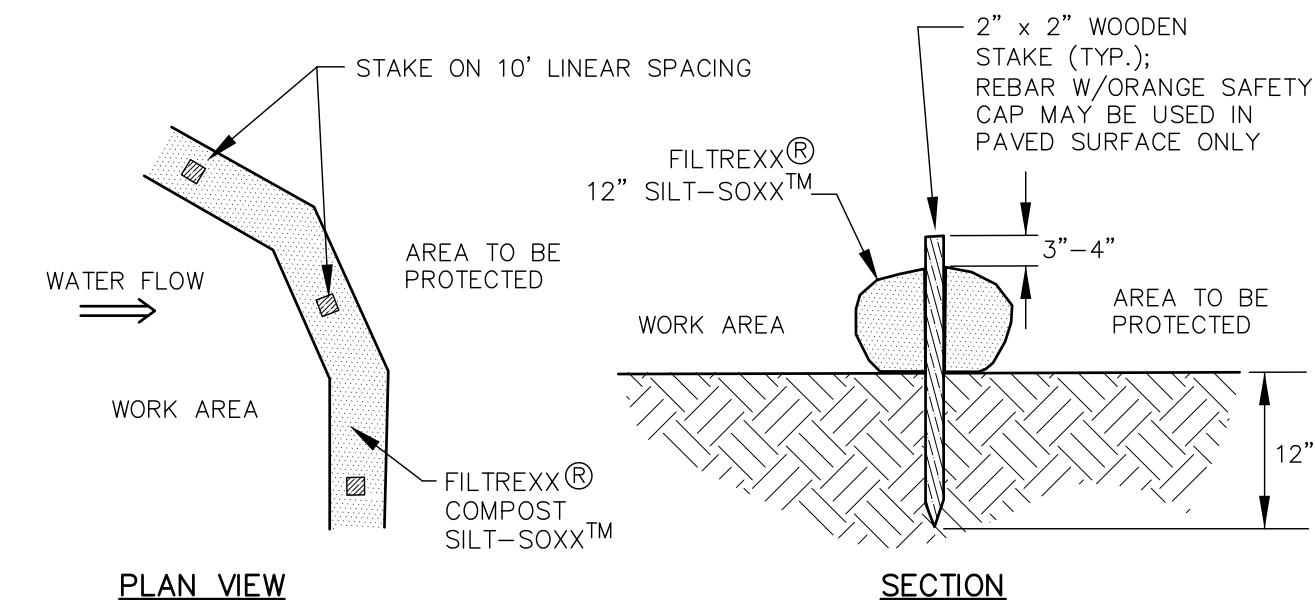
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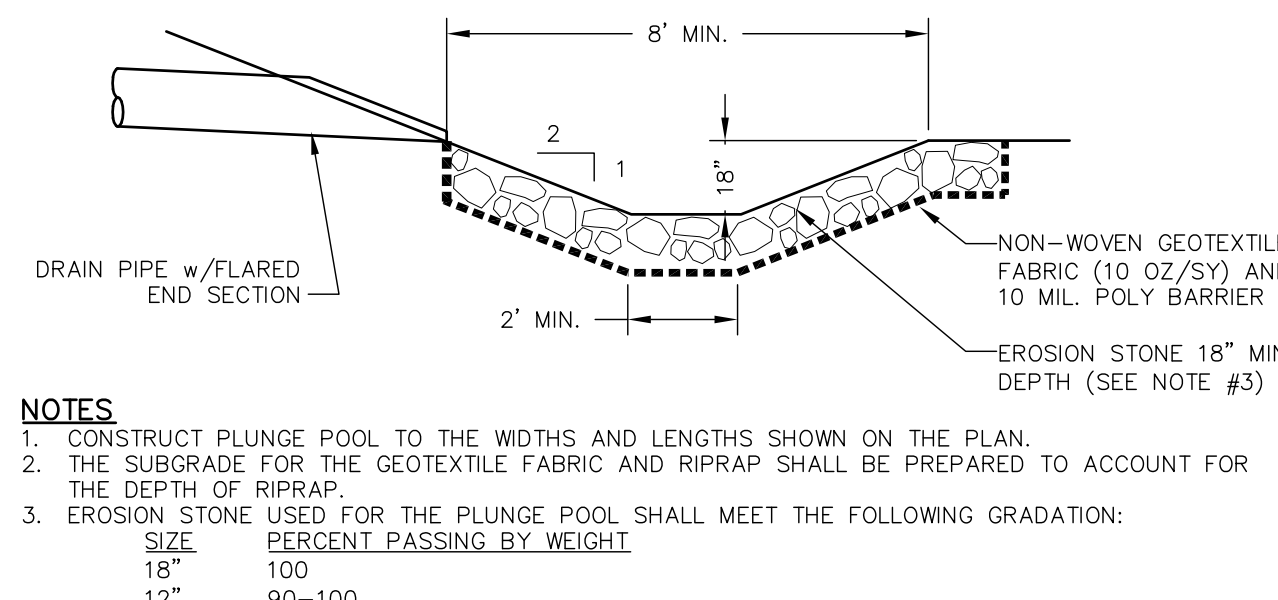
SILT AND ORANGE CONSTRUCTION FENCE LAYOUT DETAIL NOT TO SCALE



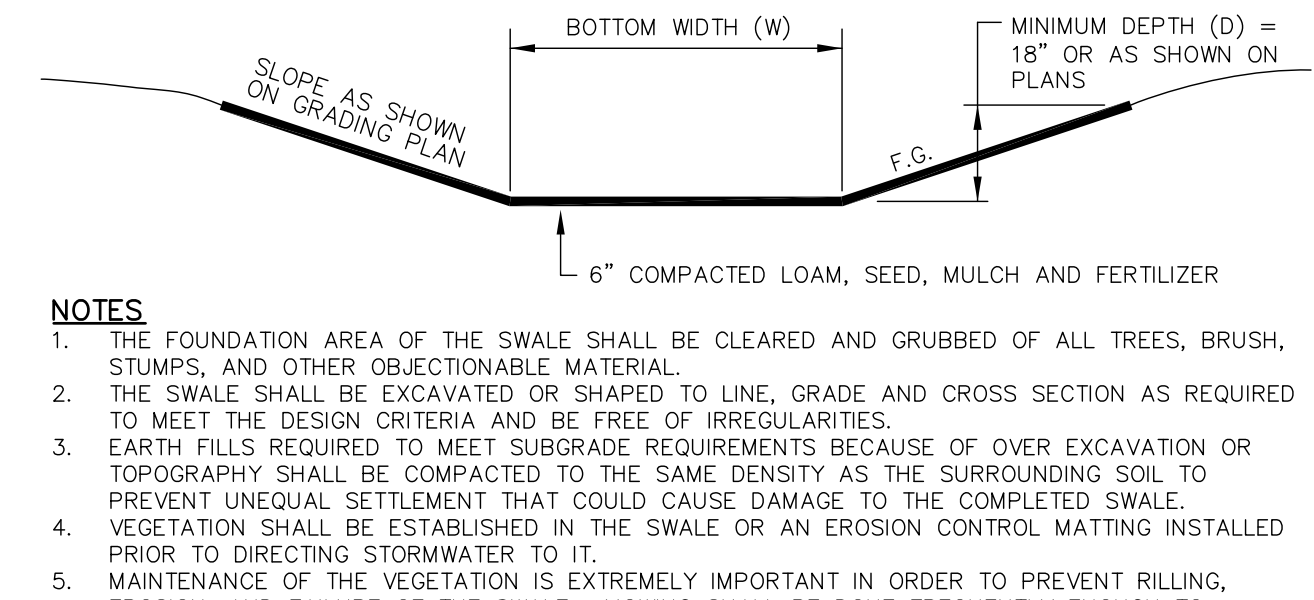
YARD DRAIN (YD) NOT TO SCALE



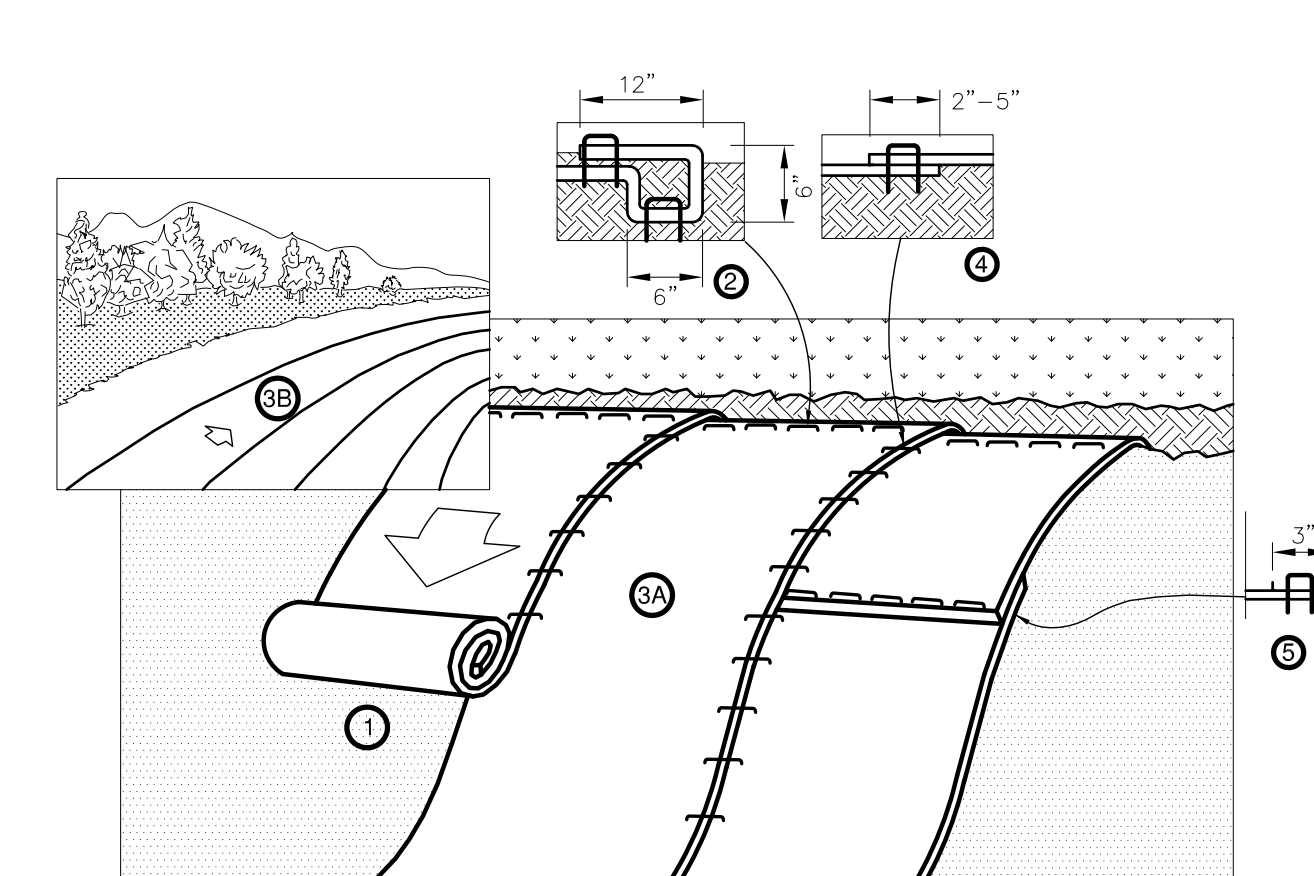
TUBULAR SEDIMENT BARRIER NOT TO SCALE



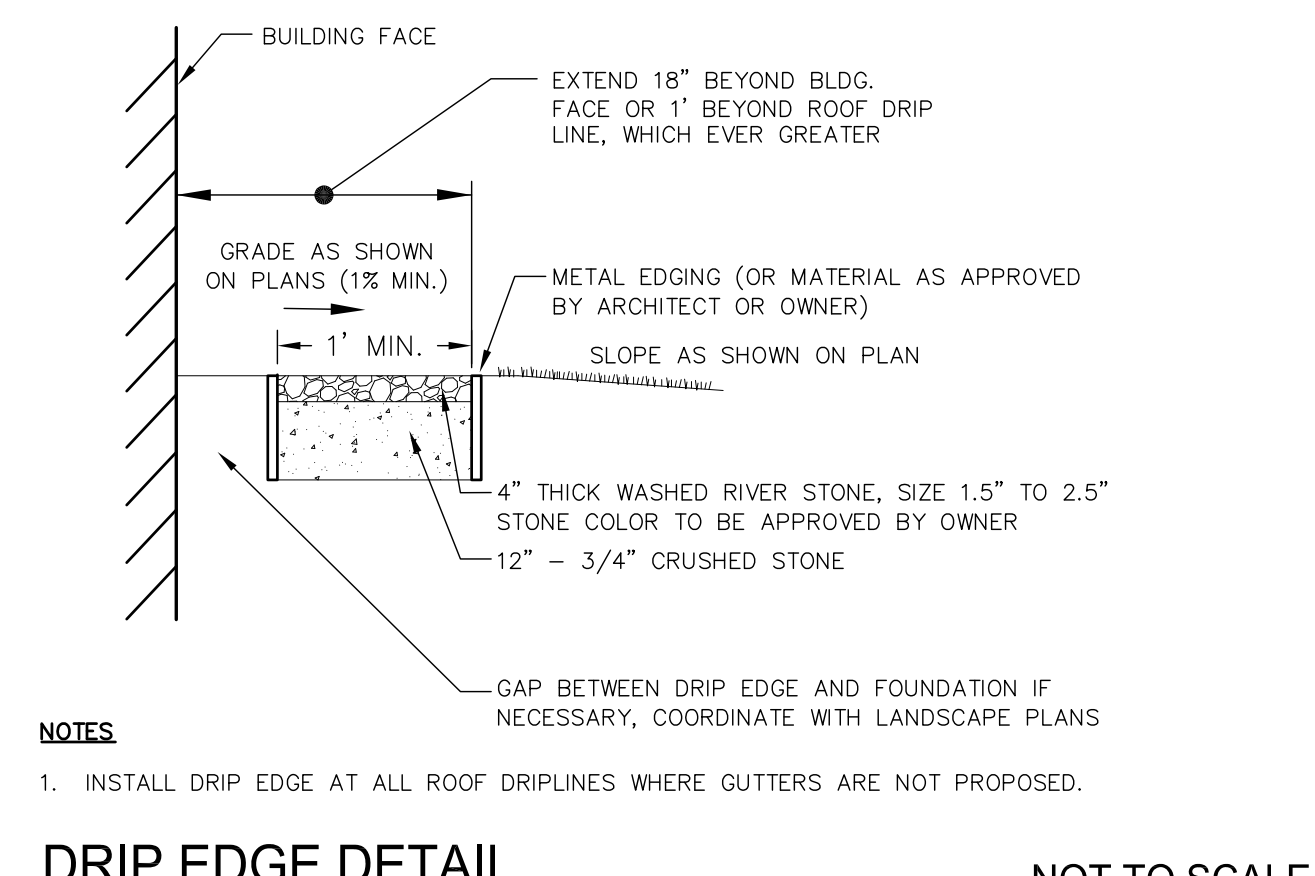
PLUNGE POOL NOT TO SCALE



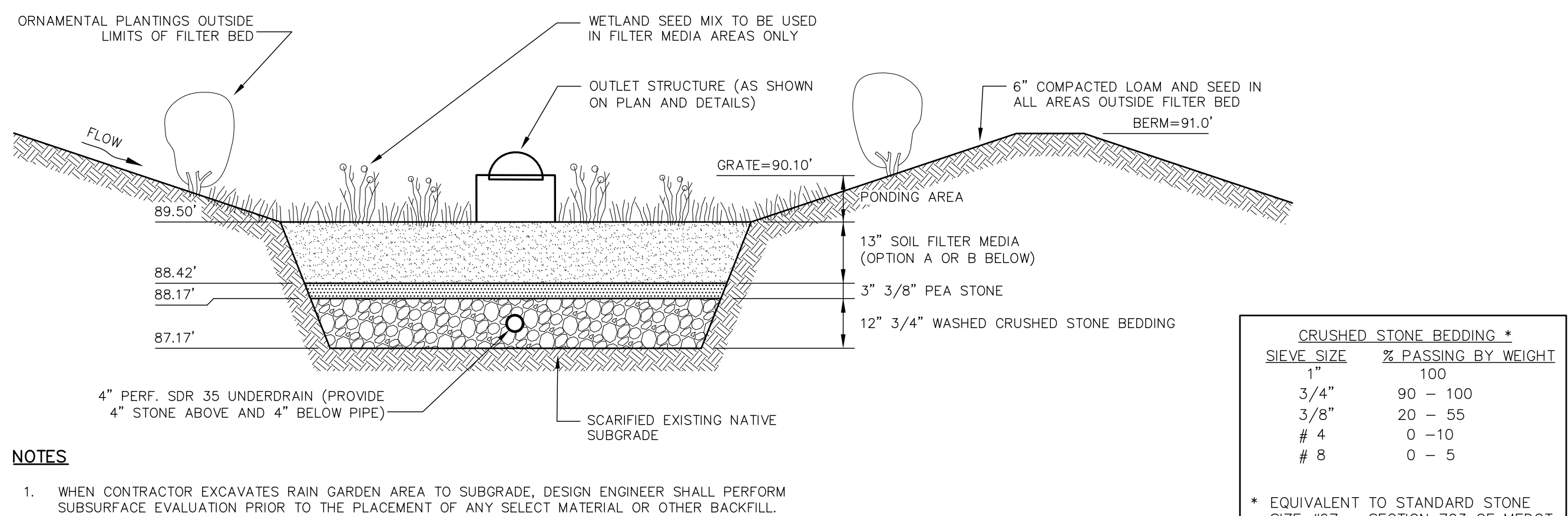
VEGETATED SWALE NOT TO SCALE



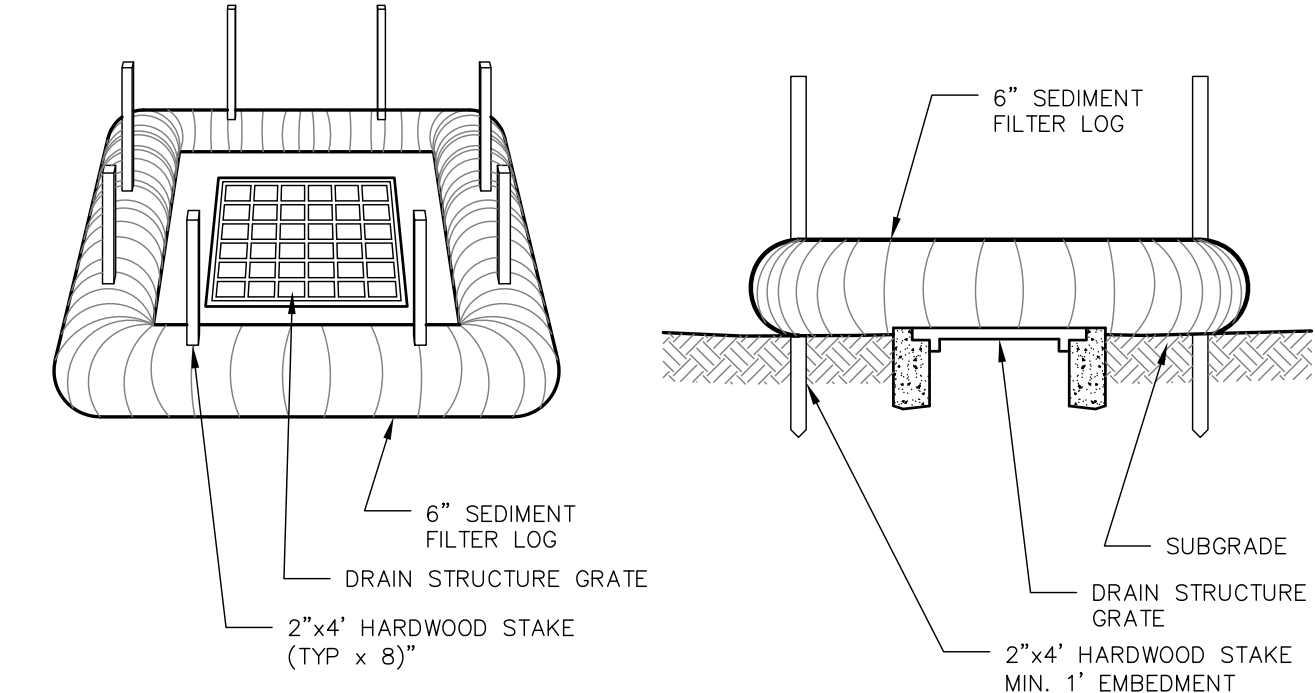
EROSION CONTROL BLANKET - SLOPE NOT TO SCALE



DRIP EDGE DETAIL NOT TO SCALE



TYPICAL GRASSED SOIL FILTER (GSF) NOT TO SCALE



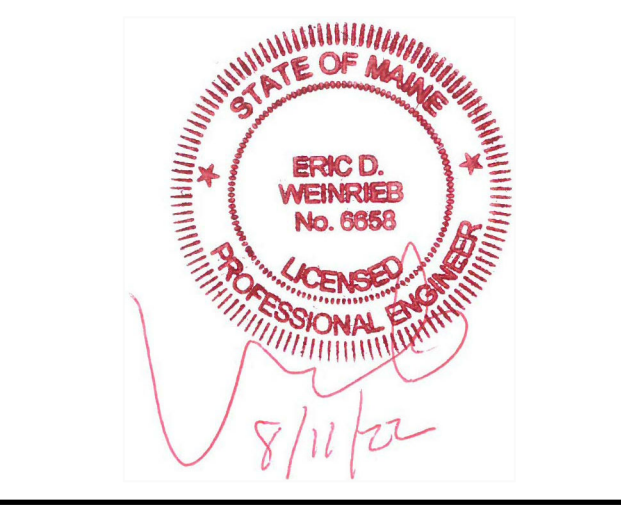
SEDIMENT FILTER LOG - CATCH BASIN INLET PROTECTION NOT TO SCALE

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

FILTER MEDIA MIXTURES NOT TO SCALE

- NOTES:**
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
 - BEGIN AT THE TOP OF THE SLOPE 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 STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. 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 STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
 - ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
 - THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
 - CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH. NOTE: IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.

- NOTES:**
- WHEN CONTRACTOR EXCAVATES RAIN GARDEN AREA TO SUBGRADE, DESIGN ENGINEER SHALL PERFORM SUBSURFACE EVALUATION PRIOR TO THE PLACEMENT OF ANY SELECT MATERIAL OR OTHER BACKFILL.
 - SOIL FILTER MEDIA SHALL EITHER OPTION A OR OPTION B AT CONTRACTOR'S DISCRETION.
 - DO NOT PLACE GSF INTO SERVICE UNTIL IT HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS STABILIZED.
 - DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES TO THE GSF DURING ANY STAGE OF CONSTRUCTION.
 - DO NOT TRAFFIC EXPOSED SURFACES OF GSF WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATION ACTIVITIES WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE BASIN.
- MAINTENANCE REQUIREMENTS**
- SYSTEMS SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND FOLLOWING ANY RAINFALL EXCEEDING 2.5 INCHES IN A 24-HOUR PERIOD, WITH MAINTENANCE OR REHABILITATION CONDUCTED AS WARRANTED BY SUCH INSPECTION.
 - PRETREATMENT MEASURES SHOULD BE INSPECTED AT LEAST TWICE ANNUALLY, AND CLEANED OF ACCUMULATED SEDIMENT AS WARRANTED BY INSPECTION, BUT NO LESS THAN ONCE ANNUALLY.
 - AT LEAST ONCE ANNUALLY, SYSTEM SHOULD BE INSPECTED FOR DRAINAGE TIME. IF BIOTREATMENT SYSTEM DOES NOT DRAIN WITHIN 72-HOURS FOLLOWING A RAINFALL EVENT, THEN A QUALIFIED PROFESSIONAL SHOULD ASSESS THE CONDITION OF THE FACILITY TO DETERMINE MEASURES REQUIRED TO RESTORE FILTRATION FUNCTION OR INFILTRATION FUNCTION (AS APPLICABLE), INCLUDING BUT NOT LIMITED TO REMOVAL OF ACCUMULATED SEDIMENTS OR RECONSTRUCTION OF THE FILTER MEDIA.
 - VEGETATION SHOULD BE INSPECTED AT LEAST ANNUALLY, AND MAINTAINED IN HEALTHY CONDITION, INCLUDING, PRUNING, REMOVAL, AND REPLACEMENT OF DEAD OR DISEASED VEGETATION, AND REMOVAL OF INVASIVE SPECIES.
- DESIGN REFERENCES**
- UNH STORMWATER CENTER
 - EPA (1999A)
 - MAINE STORMWATER MANAGEMENT DESIGN MANUAL, VOLUME 3, MAY 2016 AS AMENDED.



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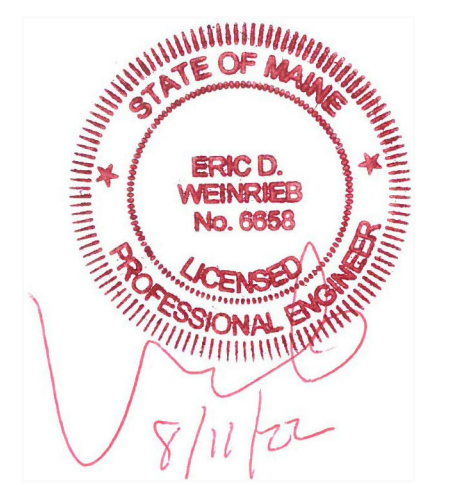
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OWNER/APPLICANT:
 LUSITANO, LLC
 JIM HIGGINS
 119 KINGS HIGHWAY NO.
 ELIOT, MAINE 03903

PROJECT:
RE-DEVELOPMENT PLAN
TAX MAP 16, LOT 148
 28 WYMAN AVENUE
 KITTERY, MAINE

TITLE:
EROSION CONTROL DETAILS

SHEET NUMBER:
C - 6



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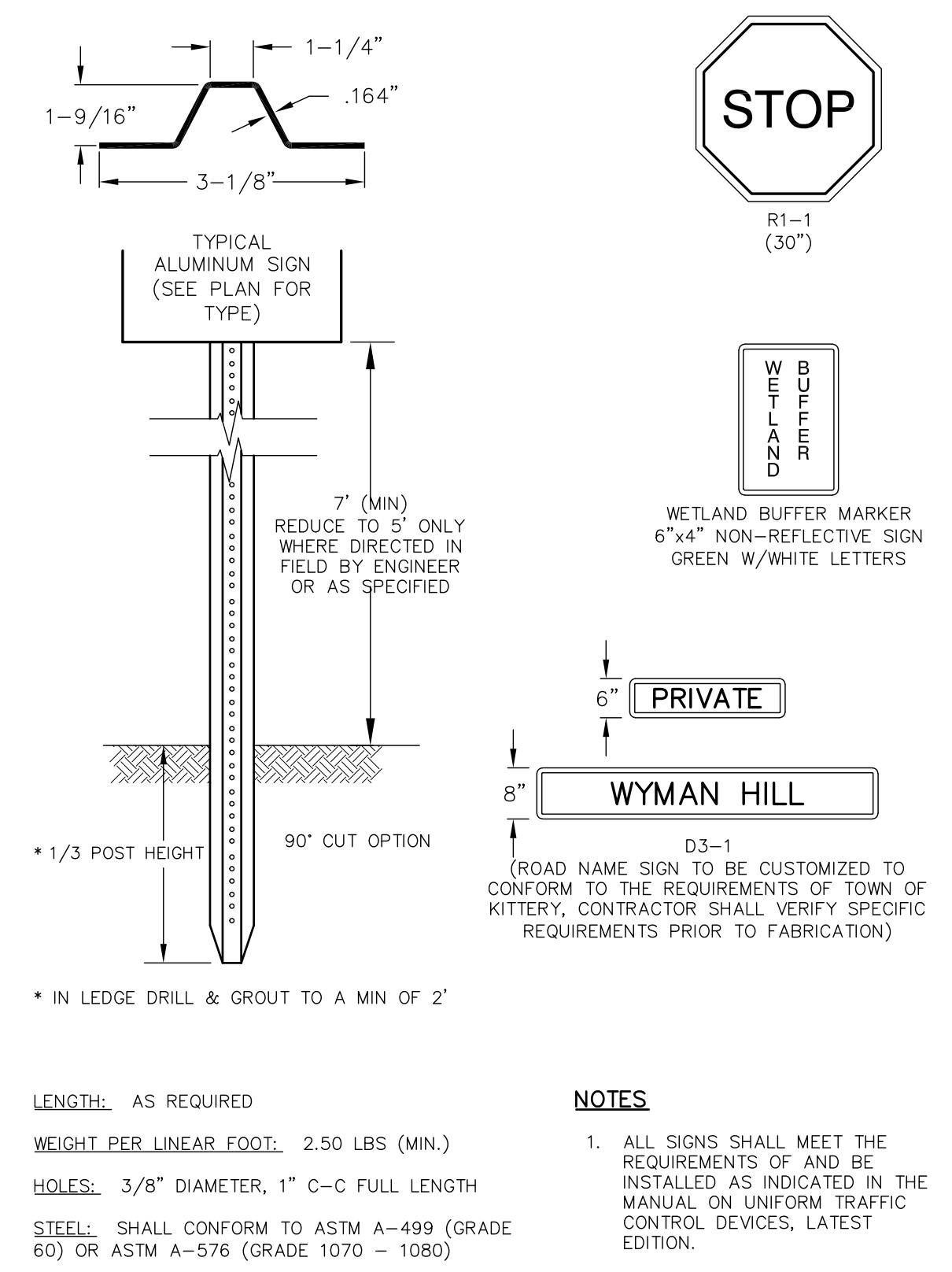
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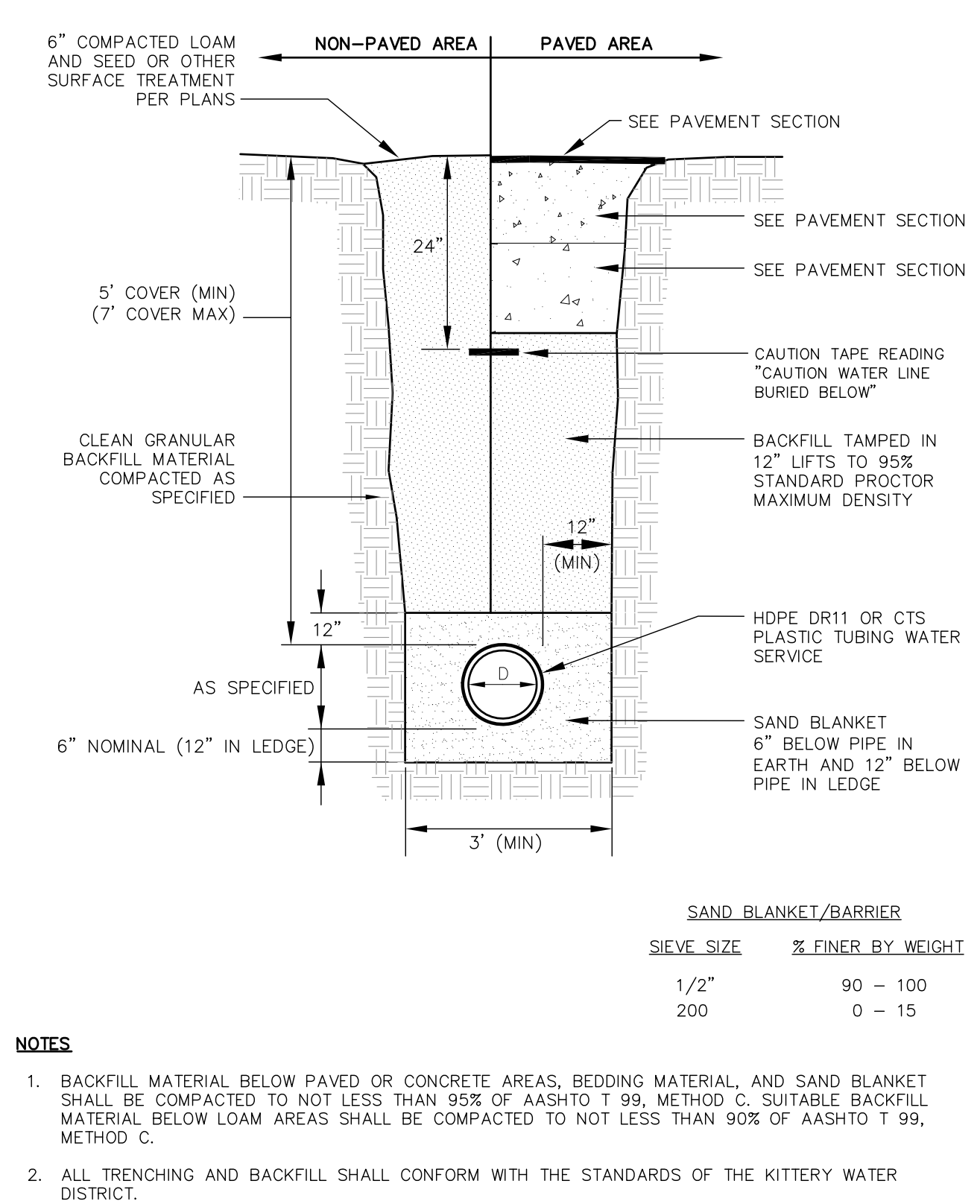
PROJECT:
RE-DEVELOPMENT PLAN
 TAX MAP 16, LOT 148
 28 WYMAN AVENUE
 KITTERY, MAINE

TITLE:
 DETAIL SHEET

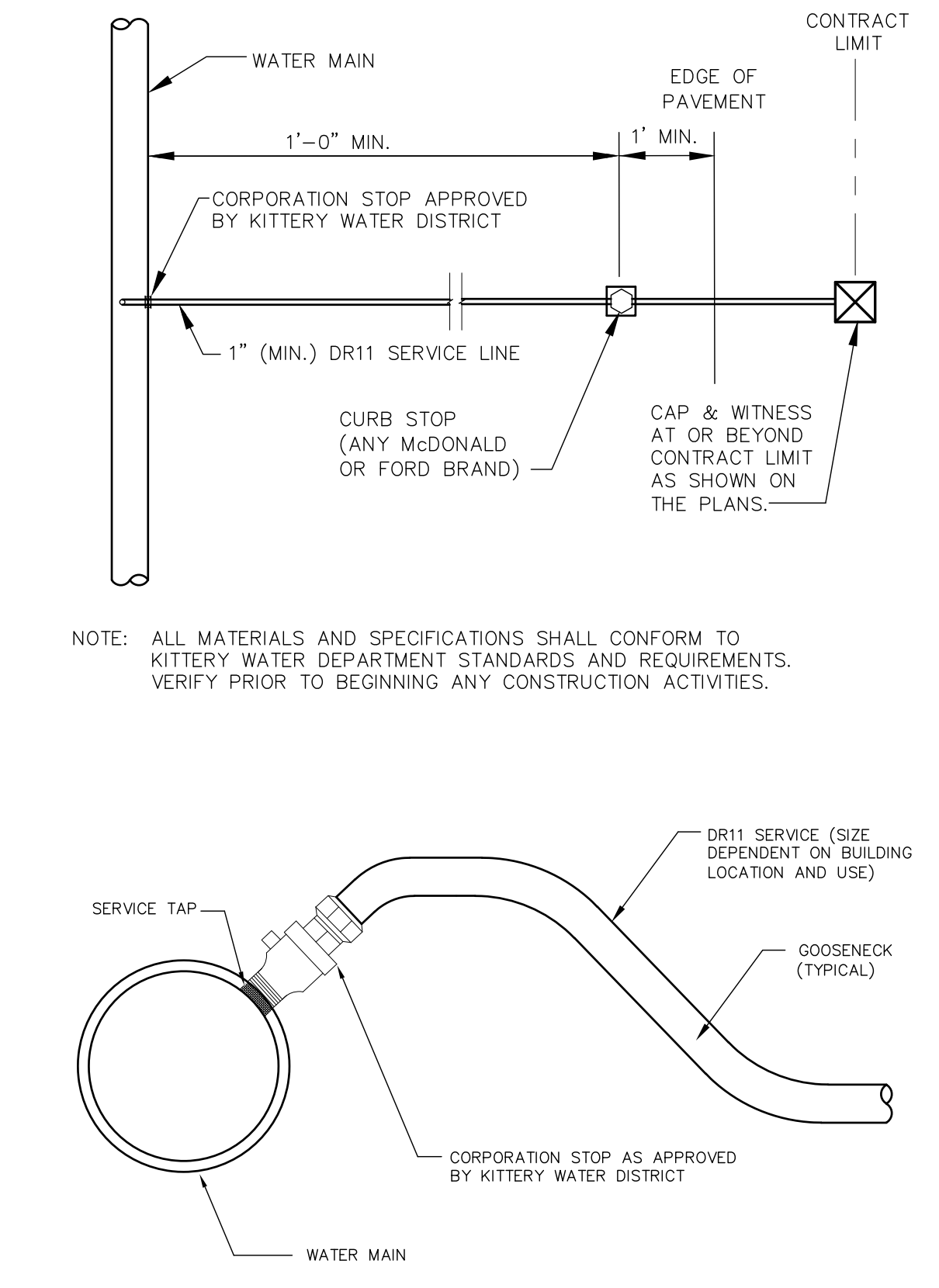
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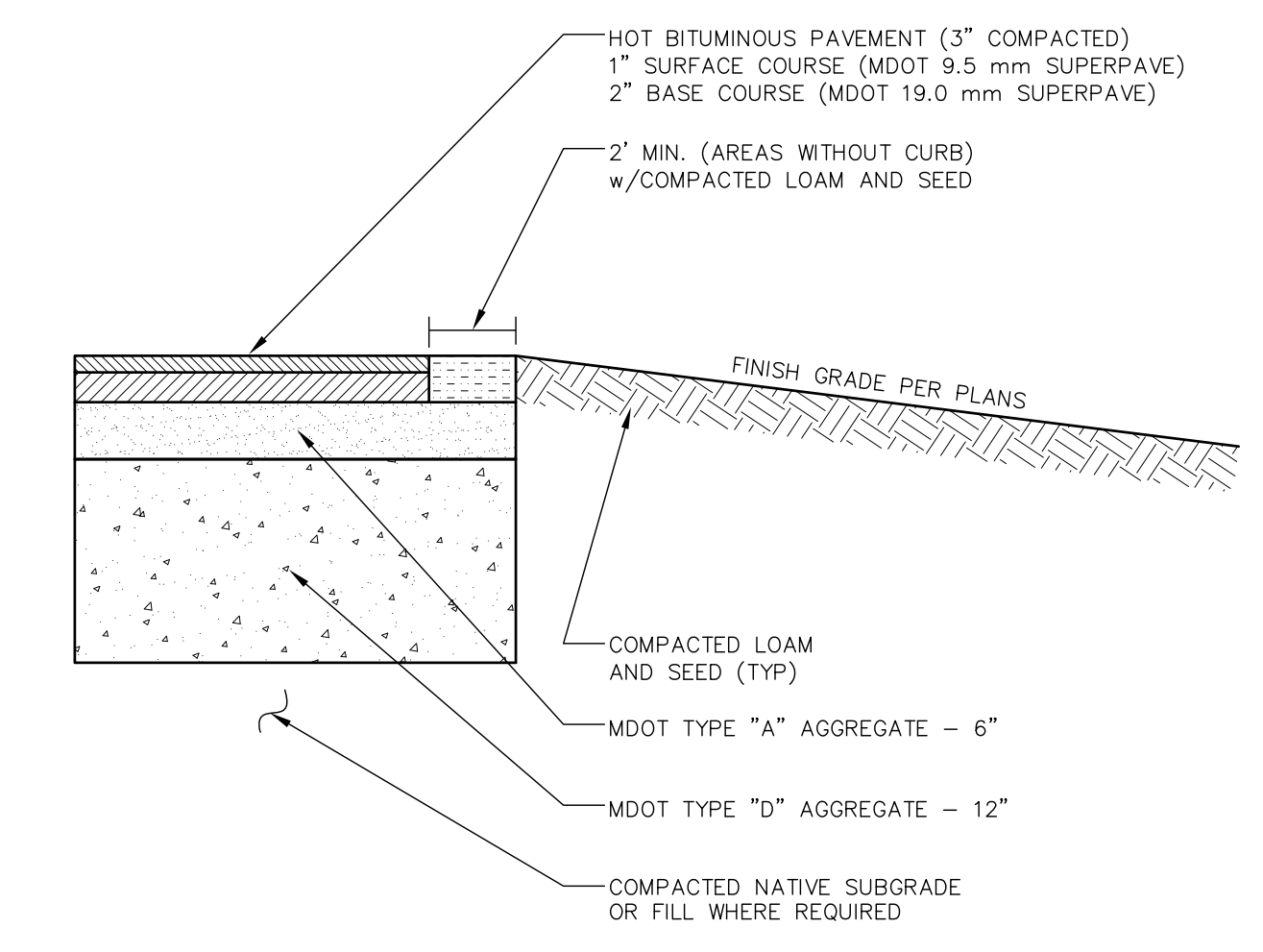
SIGN DETAILS NOT TO SCALE



WATER MAIN TRENCH NOT TO SCALE

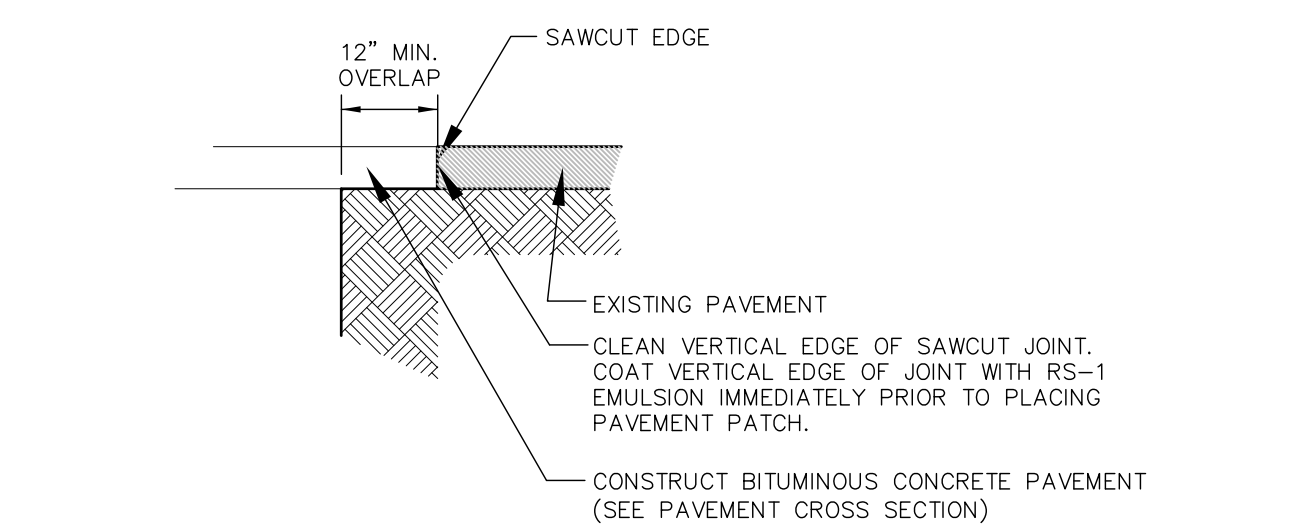


WATER SERVICE CONNECTION NOT TO SCALE

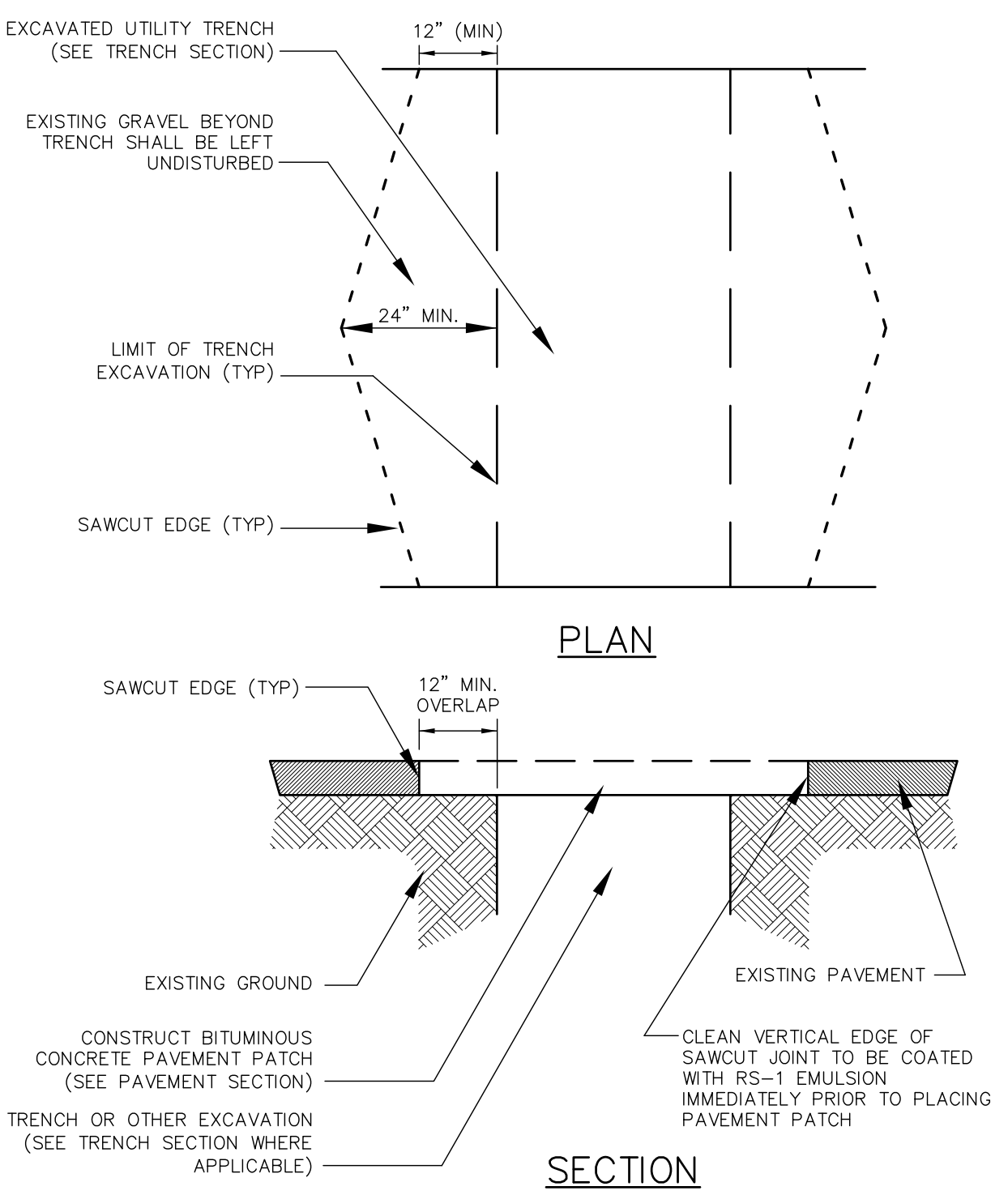


- NOTES FOR STANDARD AND HEAVY DUTY ASPHALT PAVEMENT**
- PROJECT GEOTECHNICAL REPORT MAY REQUIRE A DIFFERENT PAVEMENT CROSS SECTION(S). THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FOLLOWING ALL RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. IN THE EVENT THAT THE REPORT AND CIVIL PLANS DIFFER, THE MORE STRINGENT SPECIFICATION SHALL APPLY.
 - ALL EXISTING FILL, BURIED ORGANIC MATTER, CLAY, LOAM, MUCK, AND/OR OTHER QUESTIONABLE MATERIAL SHALL BE REMOVED FROM BELOW ALL PAVEMENT, SHOULDERS AND UNDERGROUND PIPING/UTILITIES TO DEPTHS RECOMMENDED IN GEOTECHNICAL REPORT.
 - SUBGRADE SHALL BE PROOFROLLED A MINIMUM OF 6 PASSES WITH A 10-TON VIBRATORY COMPACTOR OPERATING AT PEAK RATED FREQUENCY OR BY MEANS APPROVED BY THE ENGINEER.
 - FILL BELOW PAVEMENT GRADES SHALL BE GRANULAR BORROW COMPACTED PER DOT REQUIREMENTS.
 - SIWELK CONTRACTOR SHALL COORDINATE GEOTECHNICAL ENGINEERING INSPECTIONS WITH THE CONSTRUCTION MANAGER PRIOR TO PLACING GRAVELS.
 - TACK COAT SHALL BE APPLIED BETWEEN SUCCESSIVE LIFTS OF ASPHALT.
 - THE BITUMINOUS PAVEMENT SHALL BE COMPACTED TO 95 PERCENT OF ITS THEORETICAL MAXIMUM DENSITY AS DETERMINED BY ASTM D-2041. THE BASE AND SUBBASE MATERIALS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THEIR MAXIMUM DRY DENSITIES AS DETERMINED BY ASTM D-1557.

STANDARD DUTY ASPHALT PAVEMENT NOT TO SCALE

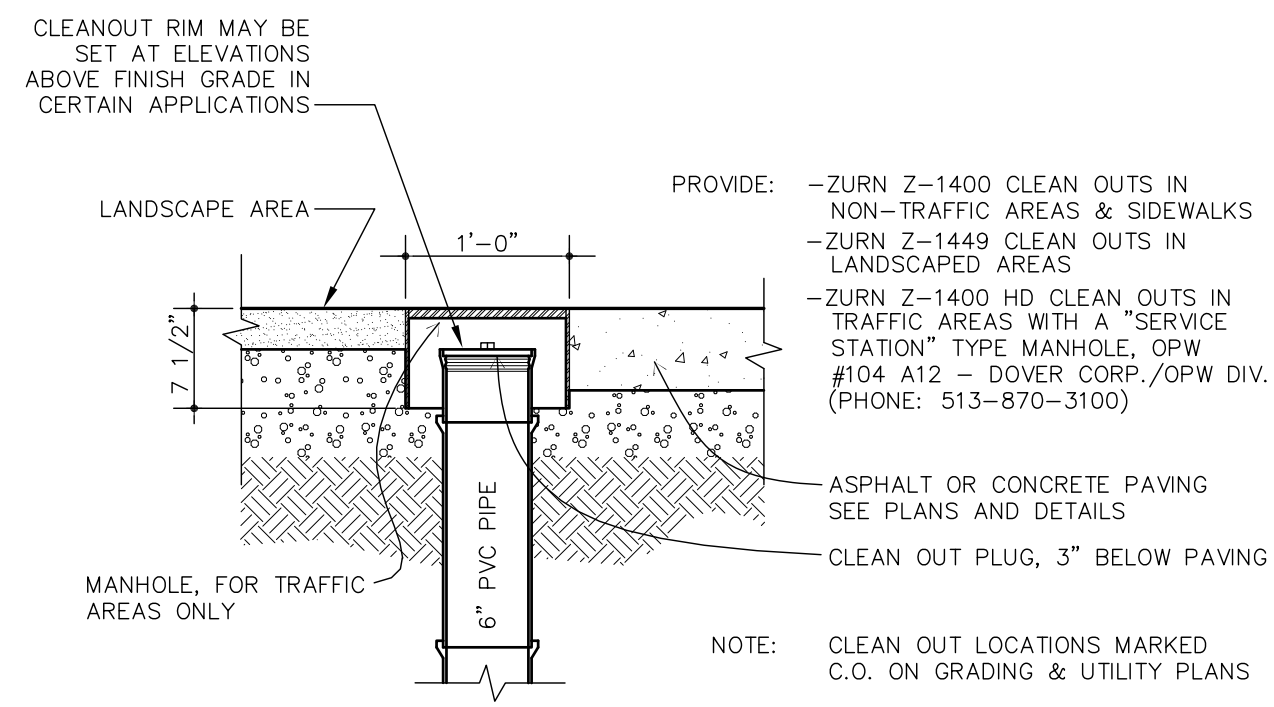


TYPICAL PAVEMENT SAWCUT NOT TO SCALE



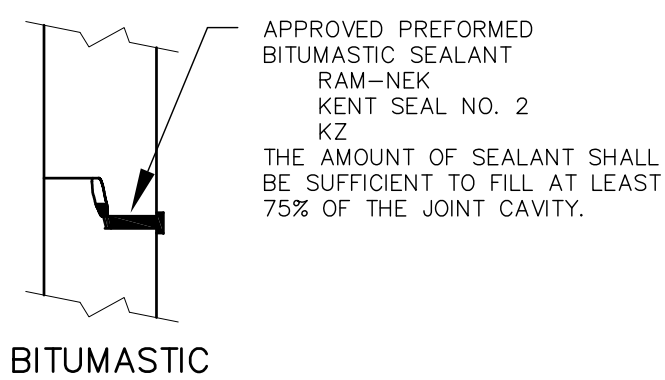
- NOTES:**
- MACHINE CUT EXISTING PAVEMENT.
 - ALL TEMPORARY, DAMAGED OR DEFECTIVE PAVEMENT SHALL BE REMOVED PRIOR TO PLACEMENT OF PERMANENT TRENCH REPAIRS.
 - DIAMOND PATCHES, SHALL BE REQUIRED FOR ALL TRENCHES CROSSING ROADWAY. DIAMOND PATCHES SHALL MEET MDOT REQUIREMENTS.

TYPICAL TRENCH PATCH NOT TO SCALE



CLEANOUT

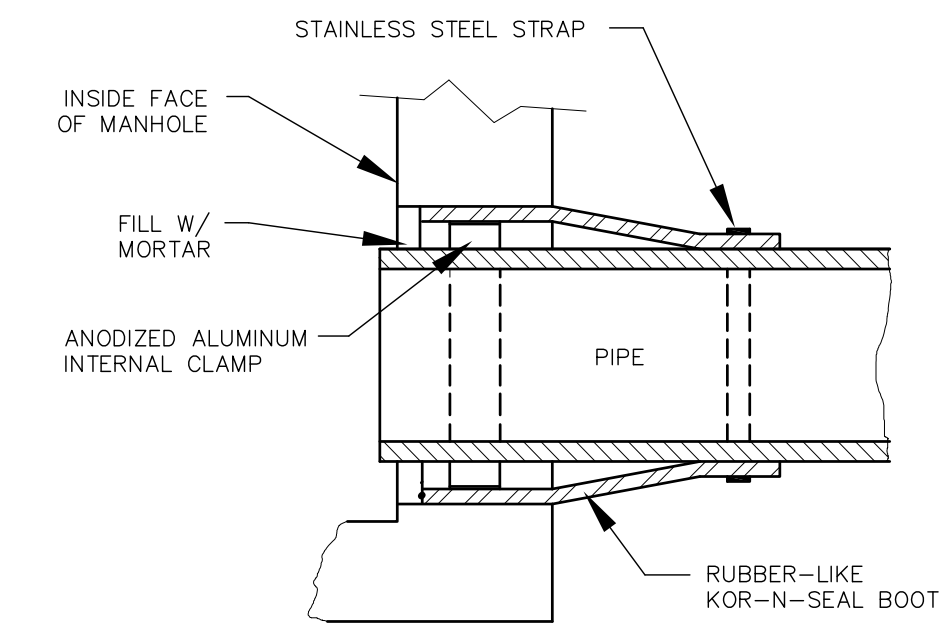
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NOTE: ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.

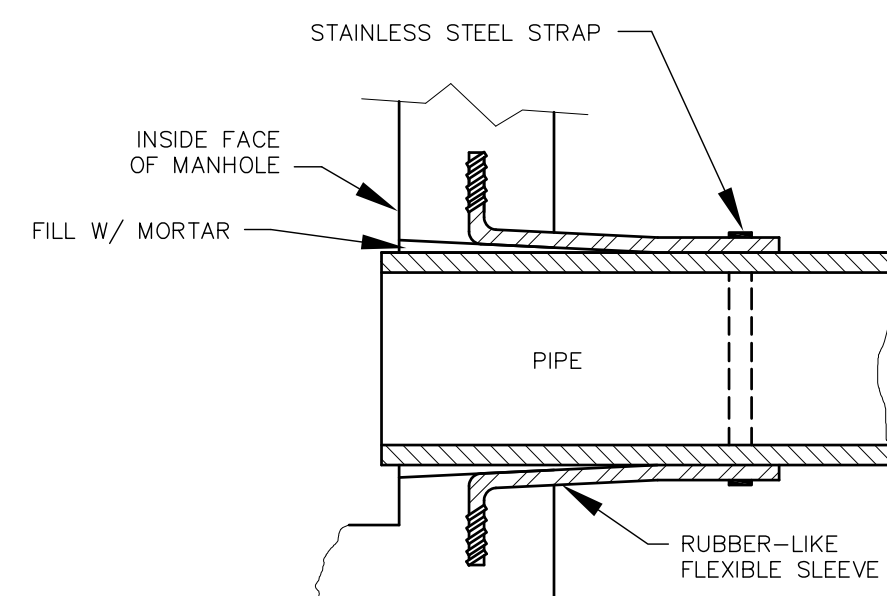
SEWER MANHOLE DETAIL B

NOT TO SCALE



KOR-N-SEAL JOINT SLEEVE (OR EQUAL)

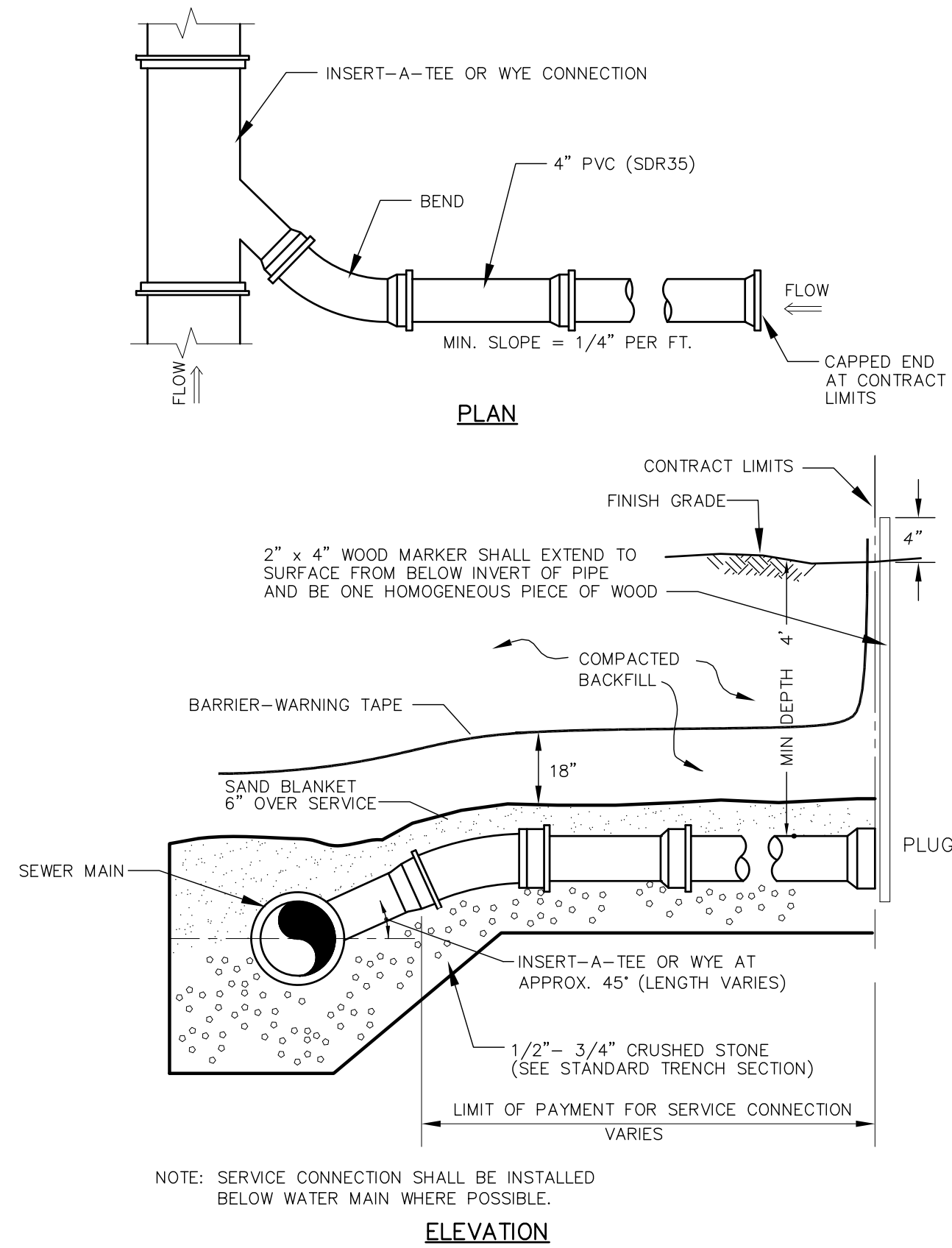
NOTE: ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS.



LOCK-JOINT FLEXIBLE MANHOLE SLEEVE (OR EQUAL)

SEWER MANHOLE DETAIL A

NOT TO SCALE

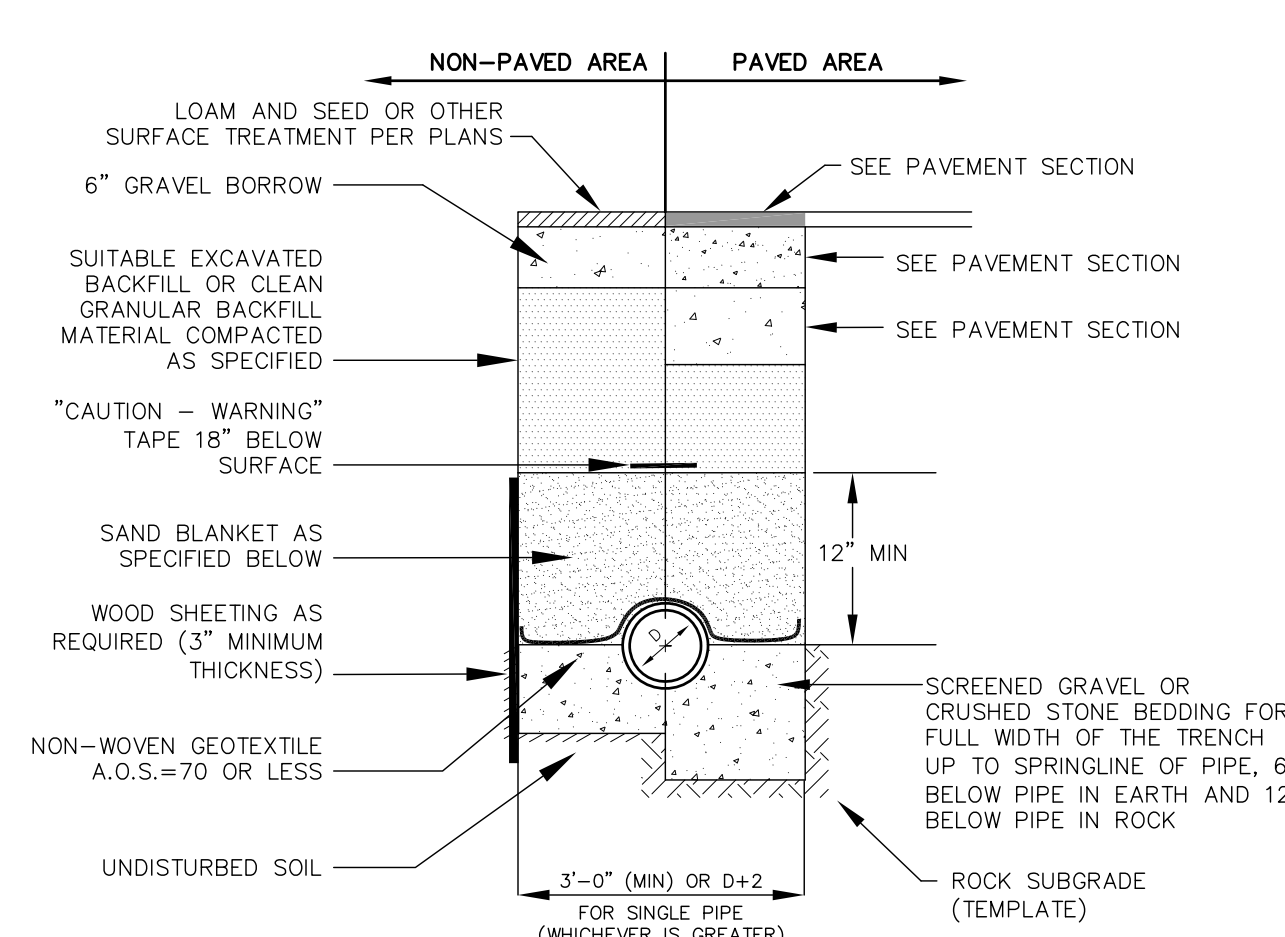


SEWER SERVICE CONNECTION

NOT TO SCALE

DRAINAGE & SEWER TRENCH

NOT TO SCALE



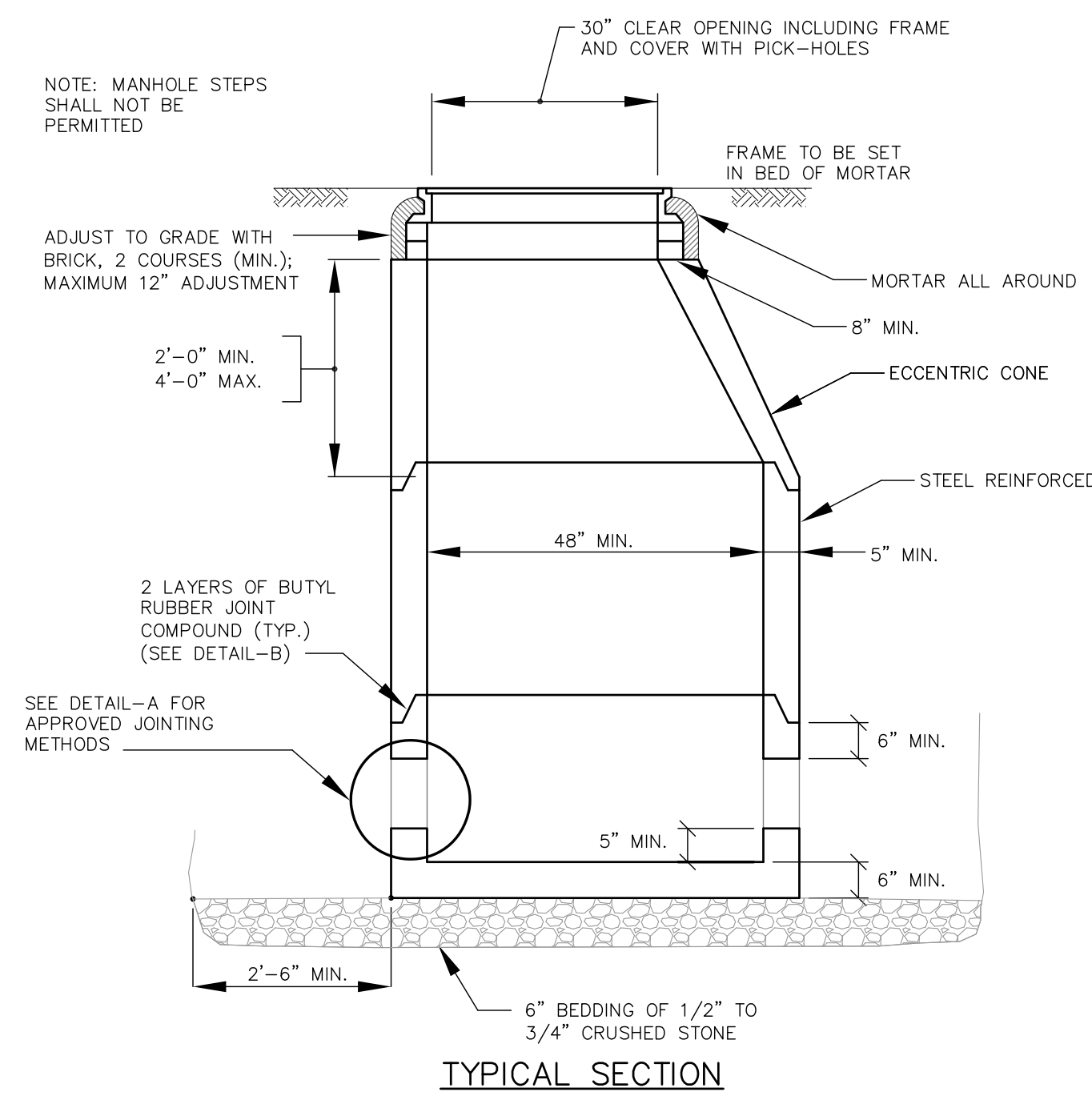
NOTES

- BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.
- INSULATE GRAVITY SEWER AND FORCEMAINS WHERE THERE IS LESS THAN 5'-0" OF COVER WITH 2" THICK CLOSED CELL RIGID BOARD INSULATION, 18" ON EACH SIDE OF PIPE.
- MAINTAIN 12" MINIMUM HORIZONTAL SEPARATION AND WIDEN TRENCH ACCORDINGLY IF MULTIPLE PIPES ARE IN TRENCH.

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

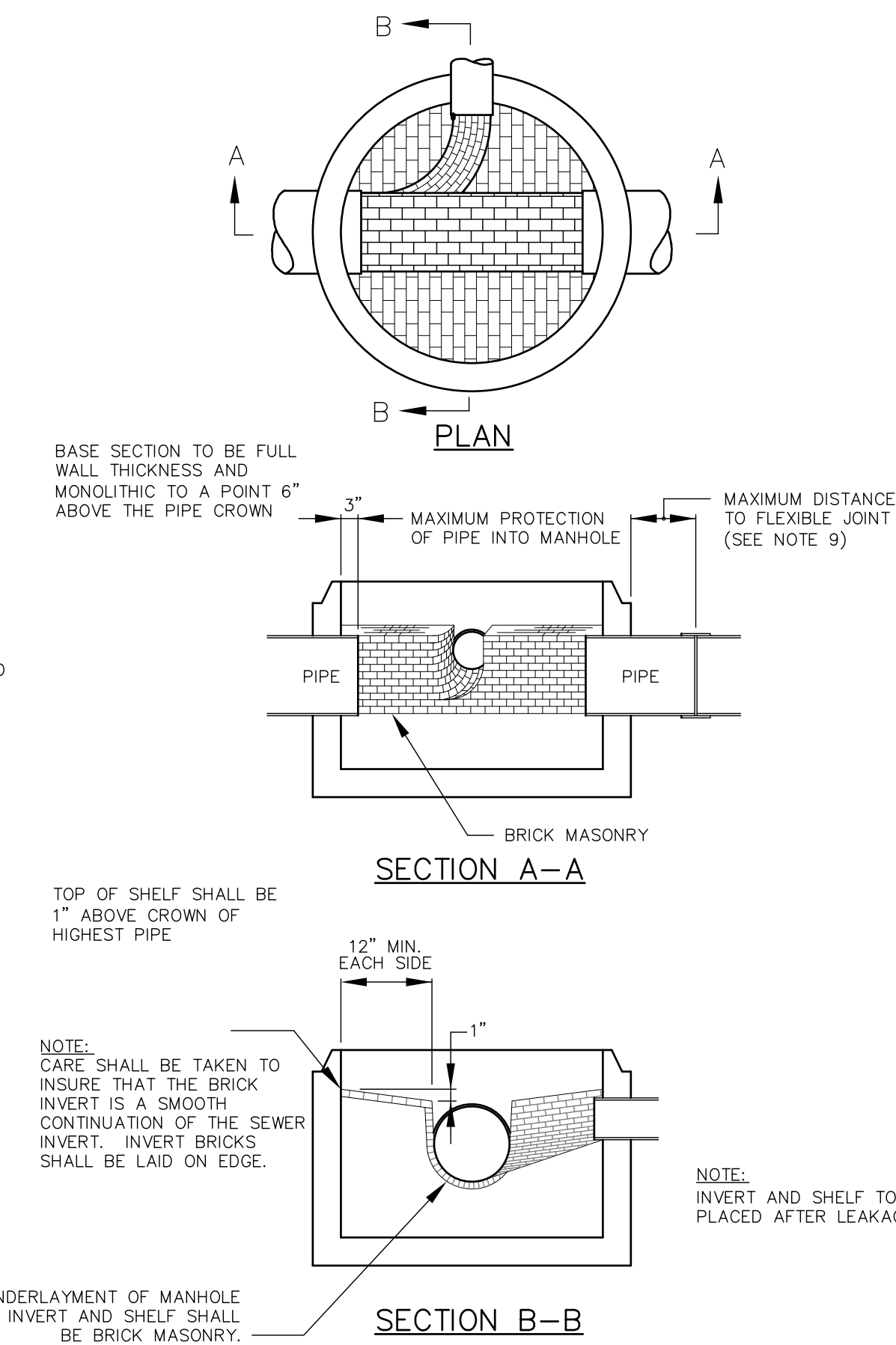
STANDARD TRENCH NOTES

- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE: BACKFILL AS STATED IN THE TECHNICAL SPECIFICATIONS OR AS SHOWN ON THE DRAWING.
- BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 INCH TO 1/2 INCH SHALL BE USED.
- SAND BLANKET: CLEAN SAND FREE FROM ORGANIC MATTER MEETING THE GRADATION SHOWN IN THE TRENCH DETAIL. BLANKET MAY BE REPLACED WITH BEDDING MATERIAL FOR CAST-IRON, DUCTILE IRON, AND REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE AND THE GEOTEXTILE IS RELOCATED ACCORDINGLY.
- SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE THE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOP SOIL, ALL WET OR SOFT MUCK, PEAT, OR CLAY. ALL EXCAVATED LEDE MATERIAL, ALL ROCKS OVER 8 INCHES IN LARGEST DIMENSION, AND ANY MATERIAL WHICH, AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT OR MAINTAIN THE COMPLETED CONSTRUCTION IN A STABLE CONDITION. IN CROSS COUNTRY CONSTRUCTION, SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP SOIL, LOAM, MUCK, OR PEAT, IF SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE AND POSSIBLE RECONSTRUCTION WILL BE PRESERVED.
- BASE COURSE AND PAVEMENT SHALL MEET THE REQUIREMENTS OF THE MAINE DEPARTMENT OF TRANSPORTATION'S LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES - DIVISION 700.
- SHEETING, IF REQUIRED: WHERE SHEETING IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER, IT SHALL BE CUT OFF AND LEFT IN PLACE TO AN ELEVATION 1 FOOT ABOVE THE TOP OF PIPE. WHERE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISHED GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 15 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 15 INCHES IN NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS PIPE OUTSIDE DIAMETER (O.D.) ALSO, W SHALL BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
- FOR CROSS COUNTRY CONSTRUCTION, BACKFILL, FILL AND/OR LOAM SHALL BE MOUND TO A HEIGHT OF 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- CONCRETE FOR ENCASEMENT SHALL CONFORM TO THE MAINE DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS STANDARD SPECIFICATION REQUIREMENTS FOR CLASS A (3000#) CONCRETE AS FOLLOWS:
CEMENT: 6.0 BAGS PER CUBIC YARD
WATER: 5.75 GALLONS PER BAG
CEMENT MAXIMUM SIZE OF AGGREGATE: 1 INCH
CONCRETE ENCASEMENT IS NOT ALLOWED FOR PVC PIPE.
- CONCRETE FULL ENCASEMENT: IF FULL ENCASEMENT IS UTILIZED, DEPTH OF CONCRETE BELOW PIPE SHALL BE 1/4 I.D. (4" MINIMUM). BLOCK SUPPORT SHALL BE SOLID CONCRETE BLOCKS.
- MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION DESIGN STANDARDS REQUIRE TEN FEET (10') SEPARATION BETWEEN WATER AND SEWER. REFER TO TOWN'S STANDARD SPECIFICATIONS FOR METHODS OF PROTECTION IN AREAS THAT CANNOT MEET THESE REQUIREMENTS.
- IN AREAS WHERE DEWATERING IS REQUIRED OR THE TRENCH SLOPE EXCEEDS 5%, THE CONTRACTOR SHALL INSTALL TRENCH DAMS IN ACCORDANCE WITH MEDEP REGULATIONS.



SEWER MANHOLE

NOT TO SCALE



MANHOLE NOTES:

- IT IS THE INTENTION OF THE MAINE DEP THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE SPACE, STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY BY THE COMMISSION FOR THE INTENDED SERVICE. SPACE REQUIREMENTS AND CONFIGURATIONS, SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING, OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT IN ANY APPROVED MANHOLE. THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H=20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MAN-HOLE CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE, A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
- BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED.
- PRECAST CONCRETE BARREL SECTIONS, CONES AND BASES SHALL CONFORM TO ASTM C478.
- LEAKAGE TEST SHALL BE PERFORMED IN ACCORDANCE WITH THE TOWN'S STANDARD SPECIFICATIONS AND WITH MAINE DEP 10-144 CMR 241.
- INVERTS AND SHELVES MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW AT CHANGES IN DIRECTION. THE INVERTS SHALL BE LAID OUT IN CURVES, OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY. BRICK MASONRY SHALL CONFORM WITH ASTM C32.
- MORTAR MORTAR USED FOR MANHOLE CONSTRUCTION SHALL CONFORM WITH MAINE DEP 10-144 CMR 241.
- FRAMES AND COVERS MANHOLE FRAMES AND COVERS SHALL CONFORM WITH ASTM A48/48M, BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) LETTER "S" FOR SEWERS OR "D" FOR DRAINS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
- BEDDING SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33.
100% PASSING 1 INCH SCREEN 0-10% PASSING #4 SIEVE
90-100% PASSING 3/4 INCH SCREEN 0-5% PASSING #8 SIEVE
20- 55% PASSING 3/8 INCH SCREEN
WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2" TO 1/2" SHALL BE USED.
- CONCRETE FOR DROP SUPPORT SHALL CONFORM TO THE REQUIREMENT FOR CLASS A (3000 LBS.) CONCRETE OF THE MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:
CEMENT 6.0 BAGS PER CUBIC YARD
WATER 5.75 GALLONS PER BAG CEMENT
MAXIMUM SIZE OF AGGREGATE 1 INCH 9.
- FLEXIBLE JOINT A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES:
PVC PIPE - 60"
RCP & CI PIPE - ALL SIZES - 48"
AC & VC PIPE - UP THROUGH 12" DIAMETER - 18"
AC & VC PIPE - LARGER THAN 12" DIAMETER - 36"
- SHALLOW MANHOLE IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 6 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED HAVING AN ECCENTRIC ENTRANCE OPENING AND CAPABLE OF SUPPORTING H=20 LOADS.

ENGINEER:
ALTUS ENGINEERING, INC.
133 Court Street Portsmouth, NH 03801
(603) 433-2335 www.altus-eng.com

THIS DRAWING HAS NOT BEEN RELEASED FOR CONSTRUCTION

ISSUED FOR: REVIEW

ISSUE DATE: AUGUST 11, 2022

NO.	DESCRIPTION	BY	DATE
0	INITIAL SUBMISSION	EBS	12/22/21
1	GENERAL REVISION	EBS	08/11/22

DRAWN BY: RMB
APPROVED BY: EBS
DRAWING FILE: 5235DETAILS.DWG

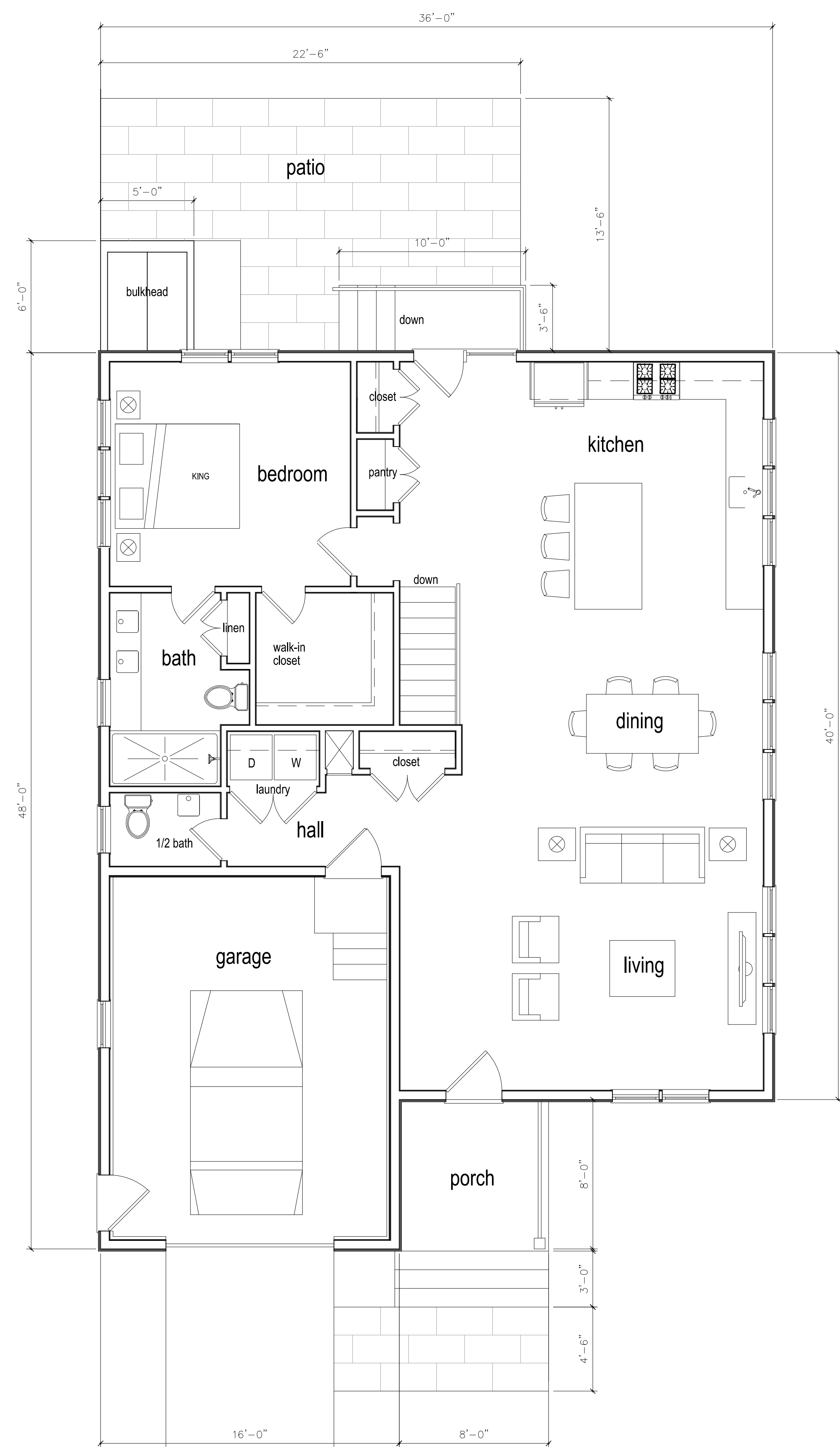
SCALE: NOT TO SCALE

OWNER/APPLICANT:
LUSITANO, LLC
JIM HIGGINS
119 KINGS HIGHWAY NO.
ELIOT, MAINE 03903

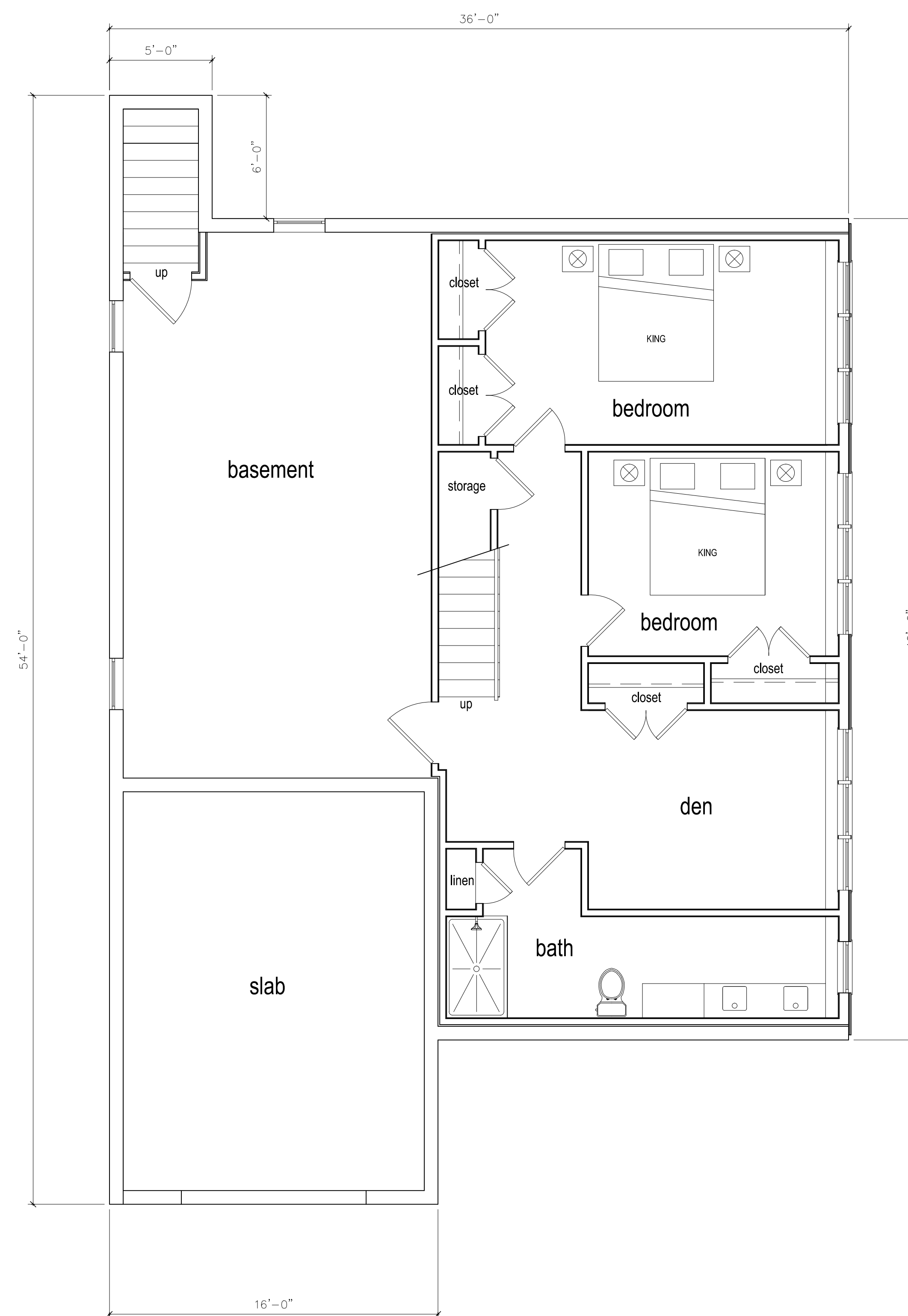
PROJECT:
RE-DEVELOPMENT PLAN
TAX MAP 16, LOT 148
28 WYMAN AVENUE
KITTERY, MAINE

TITLE:
DETAIL SHEET
SHEET NUMBER:

C - 8



PROPOSED 1ST FLOOR
(Living Space: 1177 sq. ft.)



PROPOSED LOWER LEVEL
(Living Space: 729 sq. ft.)

Wyman Hill
Residential Unit
28 Wyman Avenue
Kittery Maine

architectural designer
HIGGINS + DESIGN

119 Kings Highway North
Eliot, ME 03903
Tel 617.501.6149
jimhiggins05@comcast.net

Proposed Residential Unit

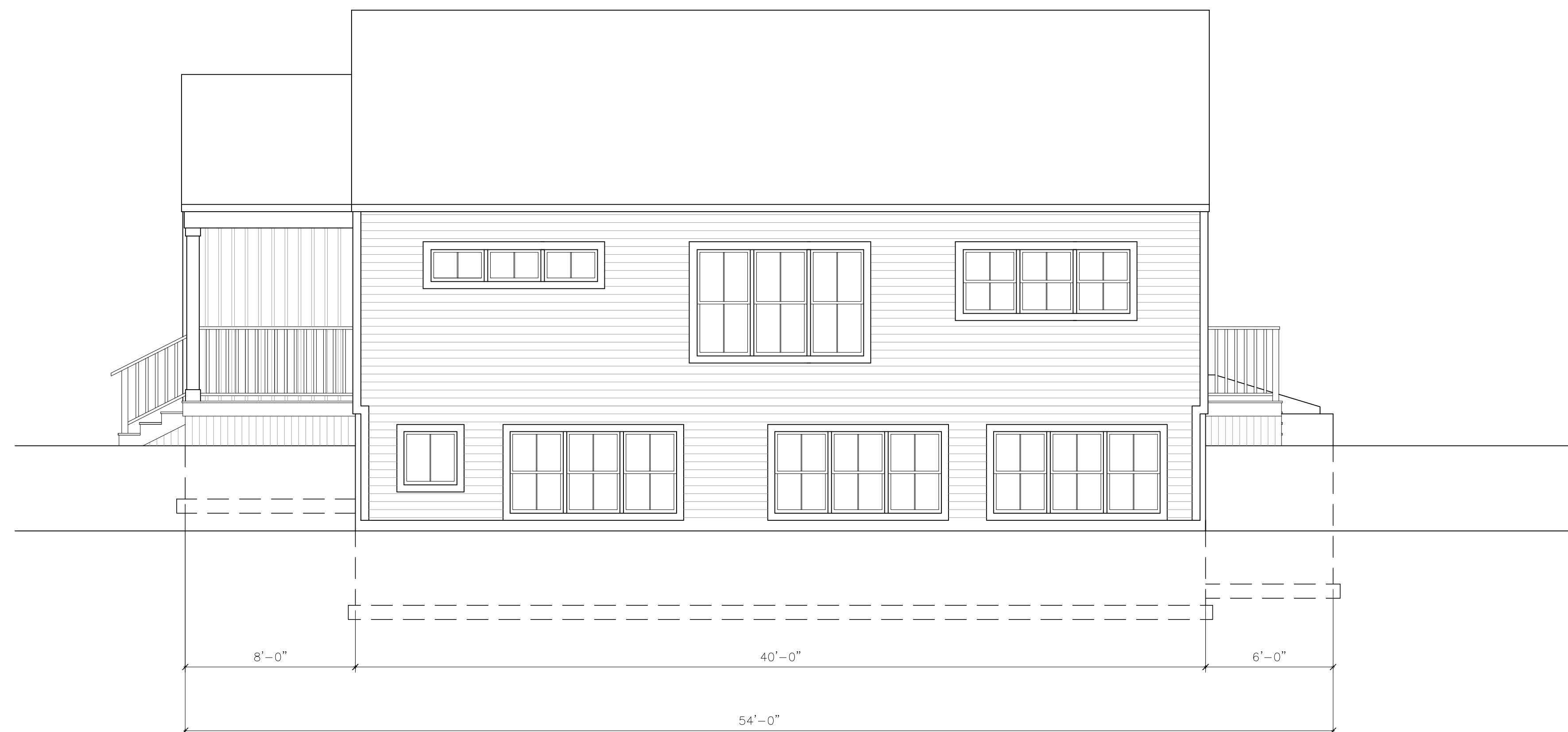
LAYOUT PLANS

scale
1/4"=1'-0"
date
November 22, 2021
project
Kittery01

A01



FRONT ELEVATION



RIGHT SIDE ELEVATION

Wyman Hill

Residential Unit

28 Wyman Avenue
Kittery Maine

architectural designer

HIGGINS + DESIGN

119 Kings Highway North
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Proposed Residential Unit

ELEVATIONS

scale
1/4"=1'-0"

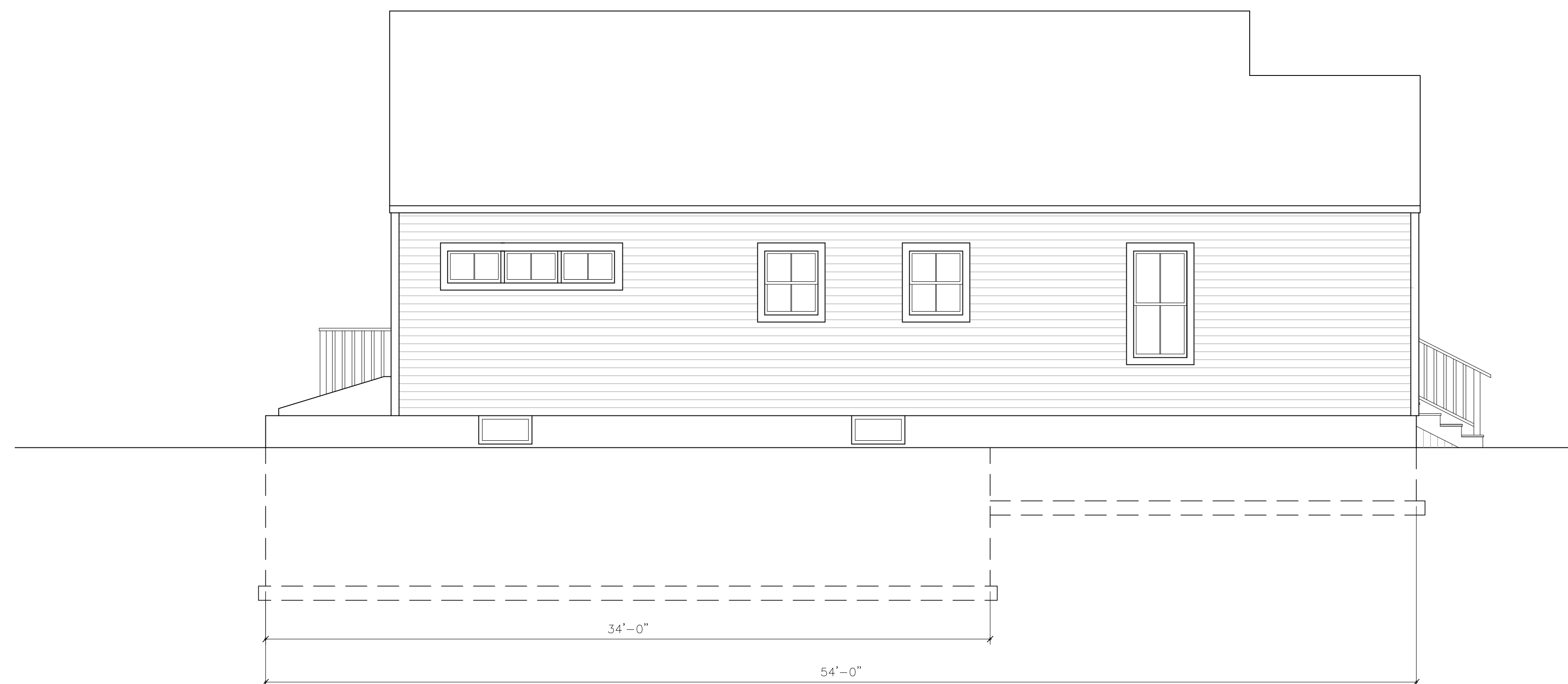
date
November 22, 2021

project
Kittery01

A02



BACK ELEVATION



LEFT SIDE ELEVATION

Wyman Hill

Residential Unit

28 Wyman Avenue
Kittery Maine

architectural designer

HIGGINS + DESIGN

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Eliot, ME 03903
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Proposed Residential Unit

ELEVATIONS

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