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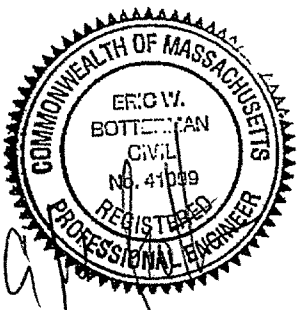
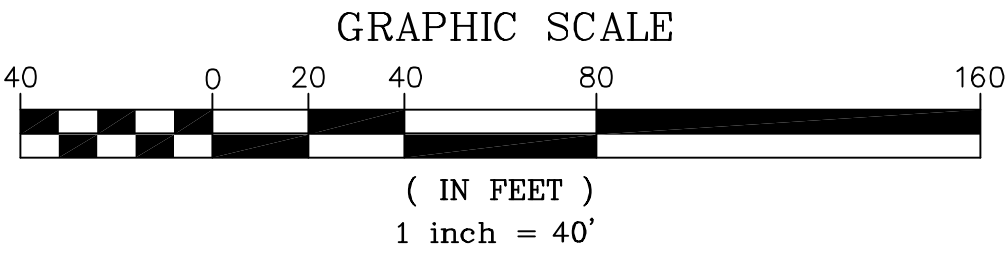
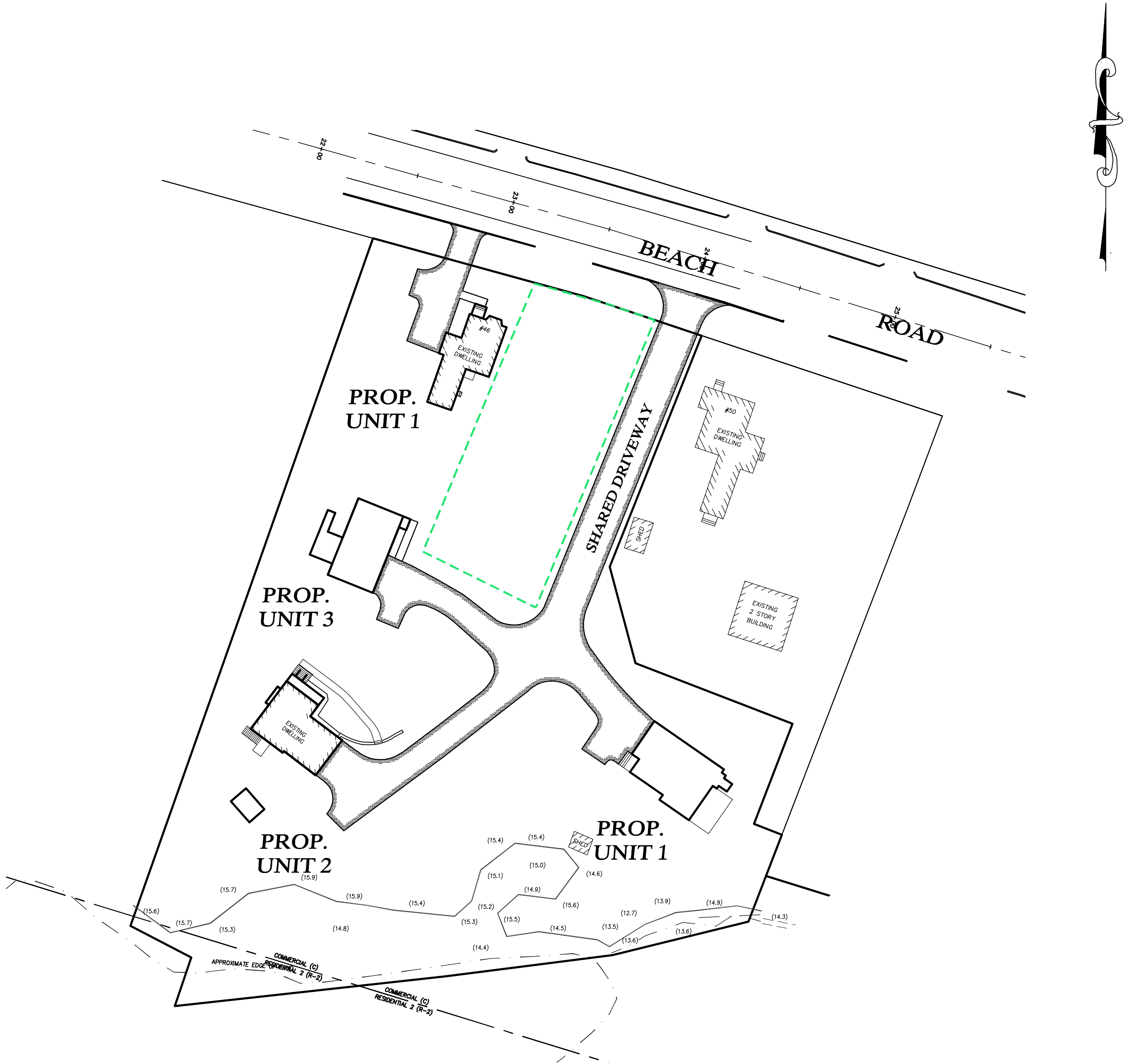
# FLEXIBLE RESIDENTIAL DEVELOPMENT IN SALISBURY, MA NOVEMBER 2021

SALISBURY PLANNING BOARD

DATE

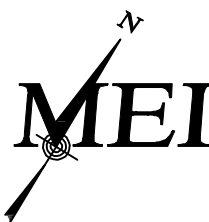
PLAN INDEX

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PREPARED FOR  
**DOWNEAST BUILDING & DEVELOPMENT**  
18 MAPLE LANE  
NORTHBOROUGH, MA 01532

1	12/15/21	RESPONSE TO PEER REVIEW	J.T.M.		
NO.	DATE	DESCRIPTION	BY		



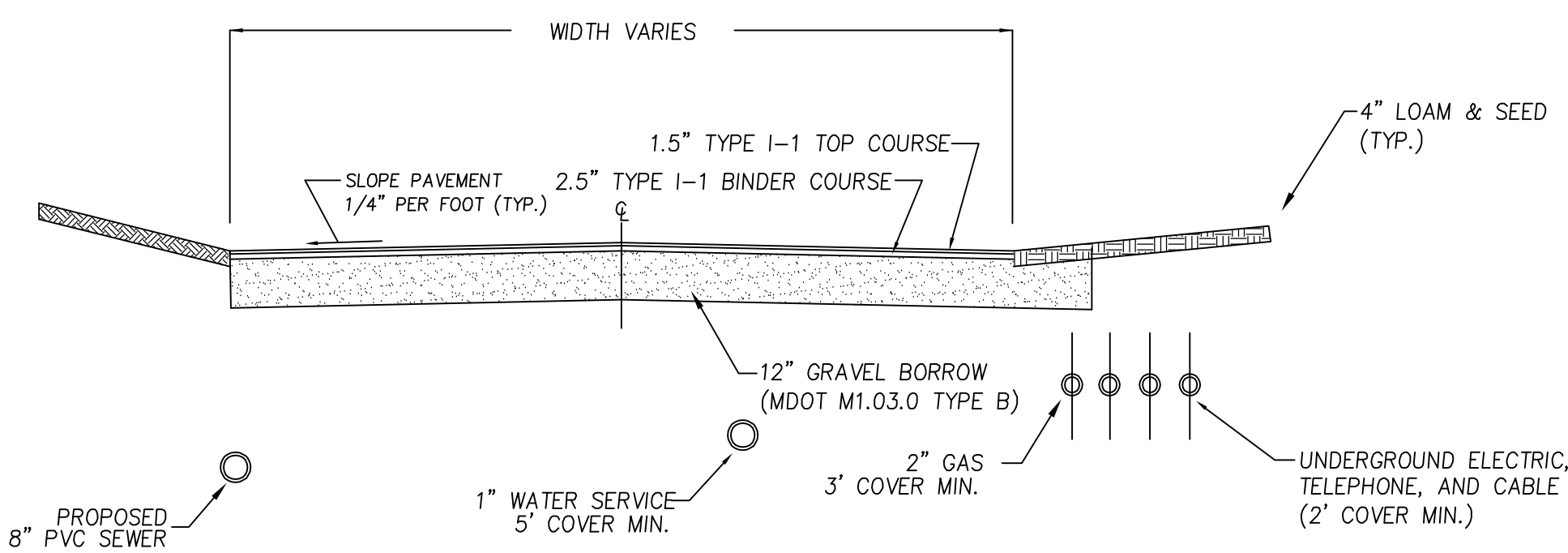
**MILLENNIUM ENGINEERING, INC.**  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40'	CALC. BY: J.T.M.	PROJECT: M213965
DATE: NOV. 5, 2021	CHKD. BY: E.W.B.	

**FLEXIBLE RESIDENTIAL  
DEVELOPMENT**  
IN  
**SALISBURY, MA**

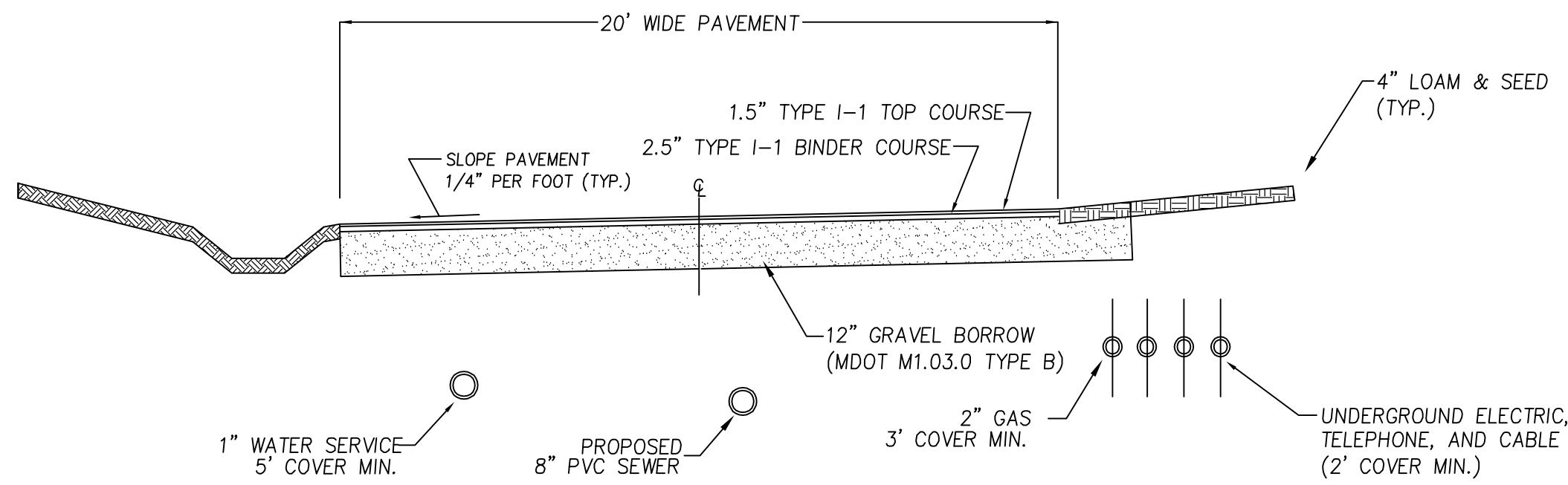
AT  
**46 BEACH ROAD & 2 GRAVEL WAY**

COVER  
SHEET



SECONDARY DRIVEWAY  
CROSS-SECTION

N.T.S.



PRIMARY SHARED DRIVEWAY  
CROSS-SECTION

N.T.S.

SALISBURY PLANNING BOARD

DATE

LEGEND

EXISTING	PROPOSED	
		CATCH BASIN (OR GUTTER INLET, OR LEACHING BASIN)
		CATCH BASIN (OR GUTTER INLET) WITH CURB INLET
		CURB (OR BERM) - TYPE NOTED
		EDGE OF ROAD
		CONTOUR
		SEWER MANHOLE
		DRAINAGE MANHOLE
		GAS GATE
		WATER GATE
		SEPTIC TANK
		HYDRANT
		FIRE ALARM BOX
		POST MOUNTED PEDESTRIAN LIGHT
		UTILITY POLE
		DRAIN PIPE
		SEWER MAIN
		SEWER FORCE MAIN
		UNDERGROUND ELECTRIC
		WATER MAIN
		MAIL BOX
		HIGHWAY GUARD (TYPE NOTED)
		FENCE (SIZE AND TYPE NOTED)
		EASEMENT LINE
		PROPERTY LINE
		100 FT BUFFER ZONE

		BASE OR SURVEY LINE
		CONSTRUCTION BASELINE
		WHEELCHAIR RAMP (WCR)
		CONCRETE SIDEWALK
		HAND CORE
		SILT SOCK
		SILT FENCE
		WETLAND

SURVEY

	WETLAND DELINEATION FLAG
	CONCRETE BOUND
	STONE BOUND
	DRILL HOLE
	MASONRY NAIL
	IRON PIPE
	IRON ROD
	FOUND
	NOT FOUND
	ASSESSORS MAP AND PARCEL

- THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS. ANY PROPOSED REVISIONS TO THE WORK SHALL NOT BE UNDERTAKEN UNTIL REVIEWED AND APPROVED BY THE OWNER AND REGULATING CITY AND/OR STATE AGENCIES.
- THE CONTRACTOR SHALL INSTALL ALL SYSTEM COMPONENTS IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AND ALL APPLICABLE ELECTRICAL, PLUMBING, AND SANITARY CODES.
- ALL WORK SHALL CONFORM TO: THE SALISBURY PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, THE WETLANDS PROTECTION ACT (310 CMR 10.00), THE ORDER OF CONDITIONS ISSUED BY THE SALISBURY CONSERVATION COMMISSION, AND THESE PLANS.
- THE LOCATION OF ALL UTILITIES, AS SHOWN ON THESE PLANS, ARE BASED UPON PLANS AND RECORD INFORMATION PROVIDED BY MUNICIPAL AND PRIVATE UTILITY COMPANIES AND ARE CONSIDERED APPROXIMATE BOTH AS TO SIZE AND LOCATION. NO WARRANTY IS MADE AS TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL NOT RELY ON THESE PLANS FOR SUCH INFORMATION AND WILL MAKE EXAMINATIONS IN THE FIELD BY VARIOUS AVAILABLE RECORDS, UTILITY COMPANIES AND INDIVIDUALS, AS TO THE LOCATION OF ALL SUBSURFACE STRUCTURES.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES BY CONTACTING "DIG-SAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION. DIG-SAFE TELEPHONE NUMBER: 1-888-344-7233.
- THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE NEW WORK. HE/SHE SHALL EXCAVATE TO VERIFY PERTINENT DRAINAGE INVERTS AND POTENTIAL UTILITY CONFLICTS. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER IMMEDIATELY.
- ALL EXISTING STRUCTURES AND SURFACES, UNLESS OTHERWISE SHOWN, SHALL BE COMPLETELY REMOVED FROM THE AREAS OF WORK. ALL TREES SCHEDULED FOR REMOVAL SHALL BE FIELD MARKED AND APPROVED FOR REMOVAL BY THE OWNER AND TOWN PRIOR TO CUTTING OPERATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF THE PUBLIC, EMPLOYEES, AND ALL OTHER PERSONS ASSOCIATED WITH THE PROJECT. HE/SHE SHALL COORDINATE AND BE RESPONSIBLE FOR ALL SAFETY SIGNING, BARRIERS AND TEMPORARY PAVEMENT MARKINGS NECESSARY TO PROVIDE A SMOOTH AND PROPER TRANSITION FOR TRAFFIC FLOW.
- IF REQUIRED BY THE CONTRACTOR, OVERHEAD LINES SHALL BE RELOCATED BY THE UTILITY COMPANY AT THE CONTRACTORS EXPENSE.

GENERAL NOTES

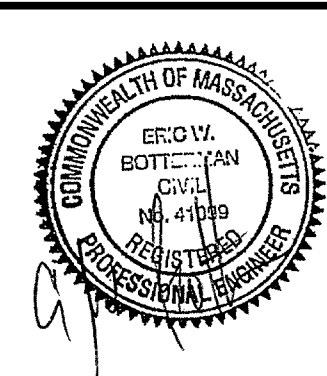
- ALL SEWER MAINS AND SERVICES SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY OR 18 INCHES VERTICALLY FROM PROPOSED WATER MAINS AND SERVICES AND SHALL MAINTAIN 5 FEET OF COVER OVER THE TOP OF THE PIPING, UNLESS OTHERWISE SHOWN OR APPROVED. PIPES SHALL BE ENCASED IN CONCRETE WHERE THIS SEPARATION CANNOT BE OBTAINED.
- ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 5 FEET OF COVER OVER THE TOP OF THE PIPE, UNLESS OTHERWISE SHOWN OR APPROVED.
- WHENEVER SEWER MAINS MUST CROSS WATER MAINS, THE SEWER SHALL BE CONSTRUCTED AS FOLLOWS; A) JOINTS SHALL BE MECHANICAL TYPE WATER PRESSURE RATED WITH ZERO LEAKAGE WHEN TESTED AT 25 PSI FOR GRAVITY SEWERS AND 1.5 TIMES WORKING PRESSURE FOR FORCE MAINS AND JOINTS NOT TO BE LOCATED WITHIN 9 FEET OF THE CROSSING; B) SEWER SERVICES SHOULD BE INSTALLED A MINIMUM OF 18 INCHES BELOW WATER MAINS. IF SEPARATION IS LESS THAN 18 INCHES, SEWER SERVICE SHALL BE CONCRETE ENCASED OR CONSTRUCTED WITH PRESSURE CLASS PVC FOR A DISTANCE OF 10 FEET EACH SIDE OF THE WATER MAIN. 10-FOOT MINIMUM HORIZONTAL SEPARATION DISTANCE SHALL BE MAINTAINED.
- INDIVIDUAL BUILDING OWNERS ARE RESPONSIBLE FOR MAINTENANCE OF THEIR SEWER SERVICE FROM THE BUILDING TO THE CONNECTION TO THE SEWER MAIN.
- ALL STREET, WARNING, AND REGULATORY SIGNS SHALL BE IN CONFORMANCE WITH THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES AND STANDARD SPECIFICATIONS AND LATEST ADDENDA.
- 14 DAYS PRIOR TO COMMENCING CONSTRUCTION, THE OWNER/DEVELOPER SHALL PRESENT A CONSTRUCTION SCHEDULE TO THE PLANNING DEPARTMENT.
- THE OWNER/DEVELOPER SHALL SUBMIT TWO HARD COPIES OF AS-BUILT DRAWINGS TO THE PLANNING BOARD WITHIN 90 DAYS OF ISSUANCE OF OCCUPANCY PERMIT. AS-BUILTS SHALL INCLUDE ALL LANDBASE AND UTILITIES INFORMATION.
- ONSITE BURIAL OF STUMPS OR ANY OTHER DEBRIS IS PROHIBITED.
- THE PROPERTY DOES NOT LIE WITHIN THE 100-YEAR FLOOD PLAIN ACCORDING TO F.I.R.M. COMMUNITY PANEL NUMBER 25009C 0126F.
- ALL ELEVATIONS ARE BASED ON N.A.V.D. 1988.

CONSTRUCTION  
SEQUENCE

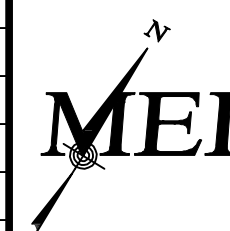
- INSTALL EROSION CONTROL AT LIMIT OF WORK & STAKE OUT STORMWATER AREAS
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AS DEPICTED.
- CLEAR AND GRUB DEBRIS TO LIMIT OF WORK AND DISPOSE OF PROPERLY.
- STRIP, SCREEN AND STOCKPILE TOPSOIL. TOPSOIL CAN BE TEMPORARILY STOCKPILED ON SITE PROVIDING THAT THE PERIMETER OF THE STOCKPILES ARE PROPERLY STAKED WITH SILT FENCE AT THE TOE OF SLOPE.
- ROUGH GRADE BIO-RETENTION AREA.
- GRADE PAVEMENT TO TOP OF SUBGRADE ELEVATIONS. ALL ROADWAYS MUST BE STABILIZED IMMEDIATELY AFTER GRADING.
- BEGIN BUILDING CONSTRUCTION.
- INSTALL UTILITIES/DRAINAGE STRUCTURES.
- PLACE RIPRAP WHERE SHOWN ON PLANS. LOAM AND HYDROSEED SIDESLOPES AND ALL DISTURBED AREAS WITHIN 72 HOURS.
- ADD PLANTINGS TO BIORETENTION AREA.
- SPREAD, SHAPE, AND COMPACT PAVEMENT SUBBASE AS PER TYPICAL PAVEMENT SECTION TO ATTAIN FINAL DESIGN ELEVATIONS.
- PERFORM BINDER COURSE PAVING.
- LOAM AND HYDROSEED ANY DISTURBED SURFACES ALONG EDGES OF PAVEMENT AS REQUIRED.
- PERFORM FINAL PAVING (TOP COURSE).
- REMOVE EROSION CONTROL.

SHARED DRIVEWAY NOTES

- ALL STUMPS, ROCKS AND LEDGE WITHIN THE LIMITS OF THE PROPOSED PAVED WAY SHALL BE REMOVED. ALL LEDGE SHALL BE REMOVED TO A MINIMUM DEPTH OF 2' BELOW FINISHED GRADE.
- DRIVEWAY SHALL NOT BE CONSTRUCTED DURING FREEZING WEATHER OR ON WET OR FROZEN SUBGRADE.
- GRADING AND ROLLING SHALL BE REQUIRED TO PROVIDE A SMOOTH, EVEN, AND UNIFORM COMPACTED BASE WHICH IS COMPACTED TO A MINIMUM DRY DENSITY OF 95 PERCENT.
- THE MINIMUM SLOPE FROM THE CROWN OF FINISHED BASE COURSE SHALL BE 1/4"PER FOOT UNLESS OTHERWISE SHOWN.
- ALL UNSUITABLE MATERIAL SHALL BE EXCAVATED AND REPLACED WITH SATISFACTORY MATERIAL AND BROUGHT UP TO GRADE WITH GRAVEL BORROW CONTAINING NO STONES GREATER THAN 6" DIAMETER.
- AT ALL TIMES DURING CONSTRUCTION, THE SUB-GRADE AND ALL DITCHES SHALL BE CONSTRUCTED AND MAINTAINED SO THAT THE ROADWAY WILL EFFECTIVELY BE DRAINED.
- THE CONTRACTOR SHALL REFER TO THE SALISBURY PLANNING BOARD RULES AND REGULATIONS GOVERNING THE SUBDIVISION OF LAND, SECTIONS I - VII.



PREPARED FOR  
**DOWNEAST BUILDING & DEVELOPMENT**  
18 MAPLE LANE  
NORTHBOROUGH, MA 01532



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**FLEXIBLE RESIDENTIAL  
DEVELOPMENT**  
IN  
**SALISBURY, MA**

**TYPICAL  
SECTIONS  
&  
GENERAL  
NOTES**

AT  
**46 BEACH ROAD & 2 GRAVEL WAY**

SHEET: 2 OF 9

1	12/15/21	RESPONSE TO PEER REVIEW	J.T.M.	NOT TO SCALE	CALC. BY: J.T.M.	PROJECT: M213965
NO.	DATE	DESCRIPTION	BY	DATE: NOV. 5, 2021	CHKD. BY: E.W.B.	

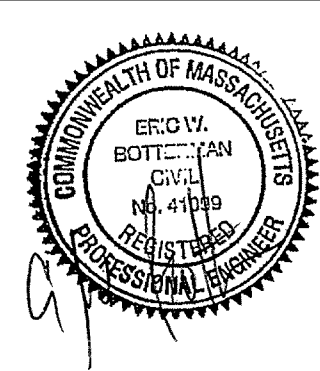
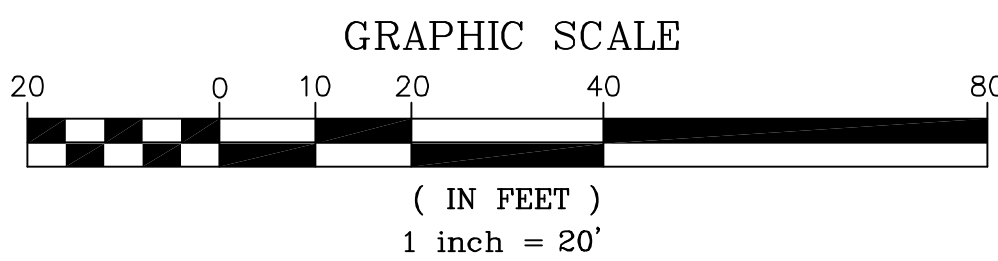
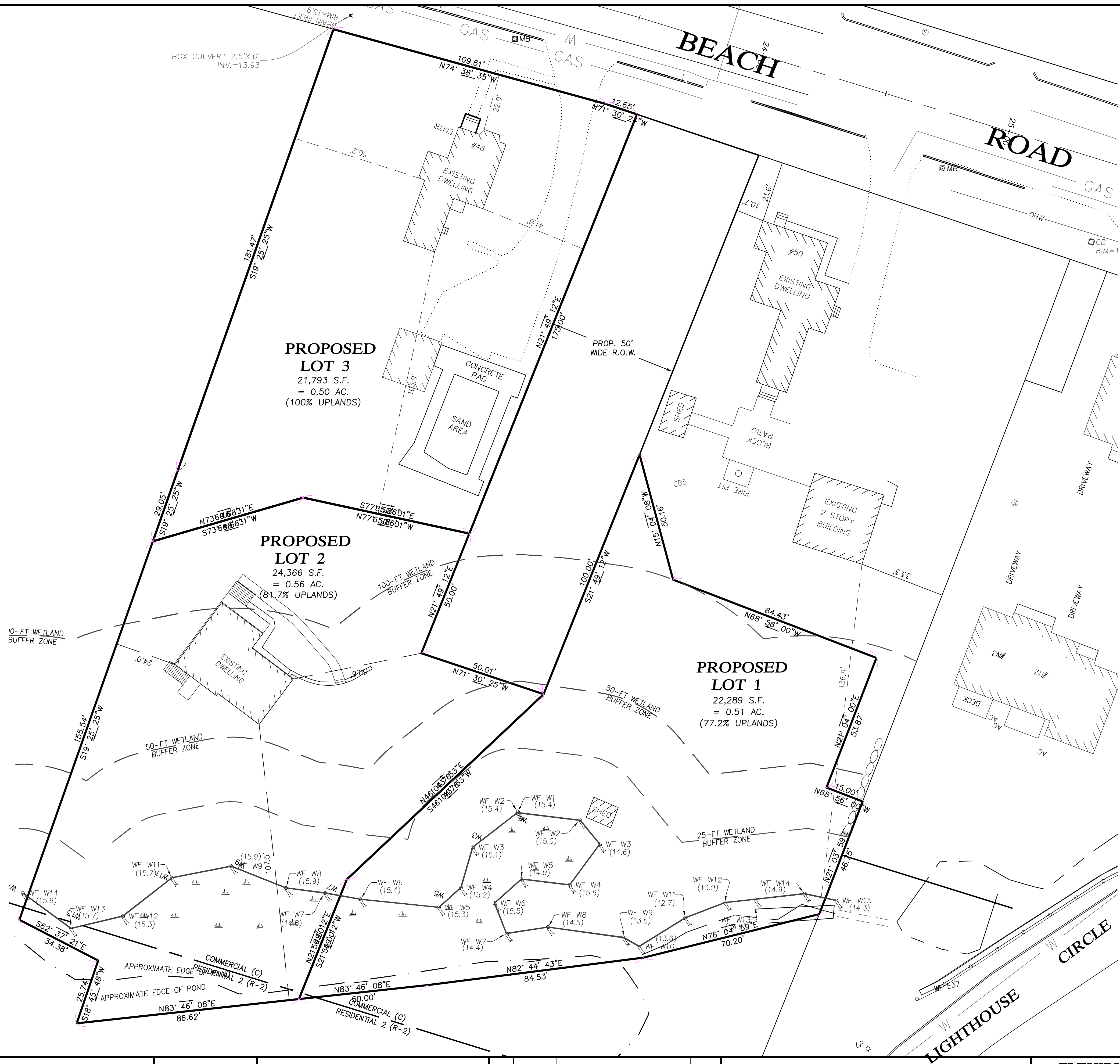






ZONING DISTRICT – C

LOT AREA:	1/2 ACRE
LOT FRONTAGE:	100 FEET
LOT WIDTH:	100 FEET
FRONT SETBACK:	50 FEET
SIDE SETBACK:	30 FEET
REAR SETBACK:	20 FEET
BLDG COVERAGE:	25%
BUILDING HEIGHT:	35 FEET



PREPARED FOR  
**DOWNEAST BUILDING & DEVELOPMENT**  
18 MAPLE LANE  
NORTHBOROUGH, MA 01532

NO.	DATE	DESCRIPTION	BY
1	12/15/21	RESPONSE TO PEER REVIEW	J.T.M.

<b>MEI</b> MILLENNIUM ENGINEERING, INC. ENGINEERING AND LAND SURVEYING 62 ELM ST. SALISBURY, MA 01952 (978) 463-8980 13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528	SCALE: 1"=20'	CALC. BY: J.T.M.	PROJECT: M213965
	DATE: NOV. 5, 2021	CHKD. BY: E.W.B.	

**FLEXIBLE RESIDENTIAL DEVELOPMENT**  
IN  
**SALISBURY, MA**  
AT  
**46 BEACH ROAD & 2 GRAVEL WAY**

**CONVENTIONAL SUBDIVISION YIELD PLAN**  
SHEET: 4 OF 9



DATE

BEACH ROAD

PROPOSED  
OPEN SPACE

PROP.  
UNIT 1

EUA

#46 EXISTING  
DWELLING  
TO REMAIN

PROPOSED COMMON  
PARK AREA

PROPOSED  
18' WIDE  
SHARED DRIVEWAY

EXISTING  
DWELLING  
OS#

EXISTING  
2 STORY  
BUILDING

PROP.  
UNIT 3

EUA

PROPOSED  
DWELLING

PROPOSED  
BIT. CONC.  
DRIVE

SECONDARY  
DRIVE

PRIMARY  
DRIVE

20.0'

100-FT WETLAND  
BUFFER ZONE

SECONDARY  
DRIVE

14.0'

SECONDARY  
DRIVE

PROPOSED  
BIT. CONC.  
DRIVE

PROP.  
UNIT 1

EUA

PROPOSED  
DWELLING

PROP.  
UNIT 2

EUA

EXISTING  
DWELLING

PROPOSED  
BIT. CONC.  
DRIVE

SECONDARY  
DRIVE

14.0'

50-FT WETLAND  
BUFFER ZONE  
PROP.  
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150-FT WETLAND  
BUFFER ZONE

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25-FT WETLAND  
BUFFER ZONE

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WF W4  
(15.2)

WF W3  
(15.1)

WF W2  
(15.4)

WF W1  
(15.4)

WF W14  
(15.6)

WF W13  
(15.7)

WF W12  
(15.3)

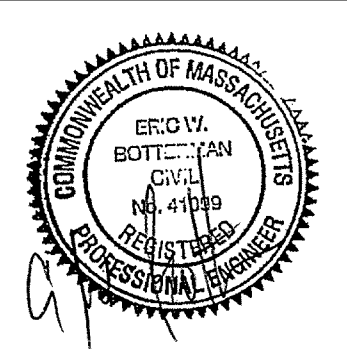
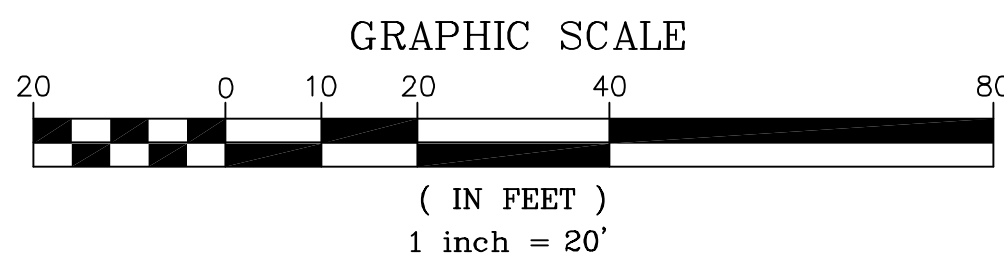
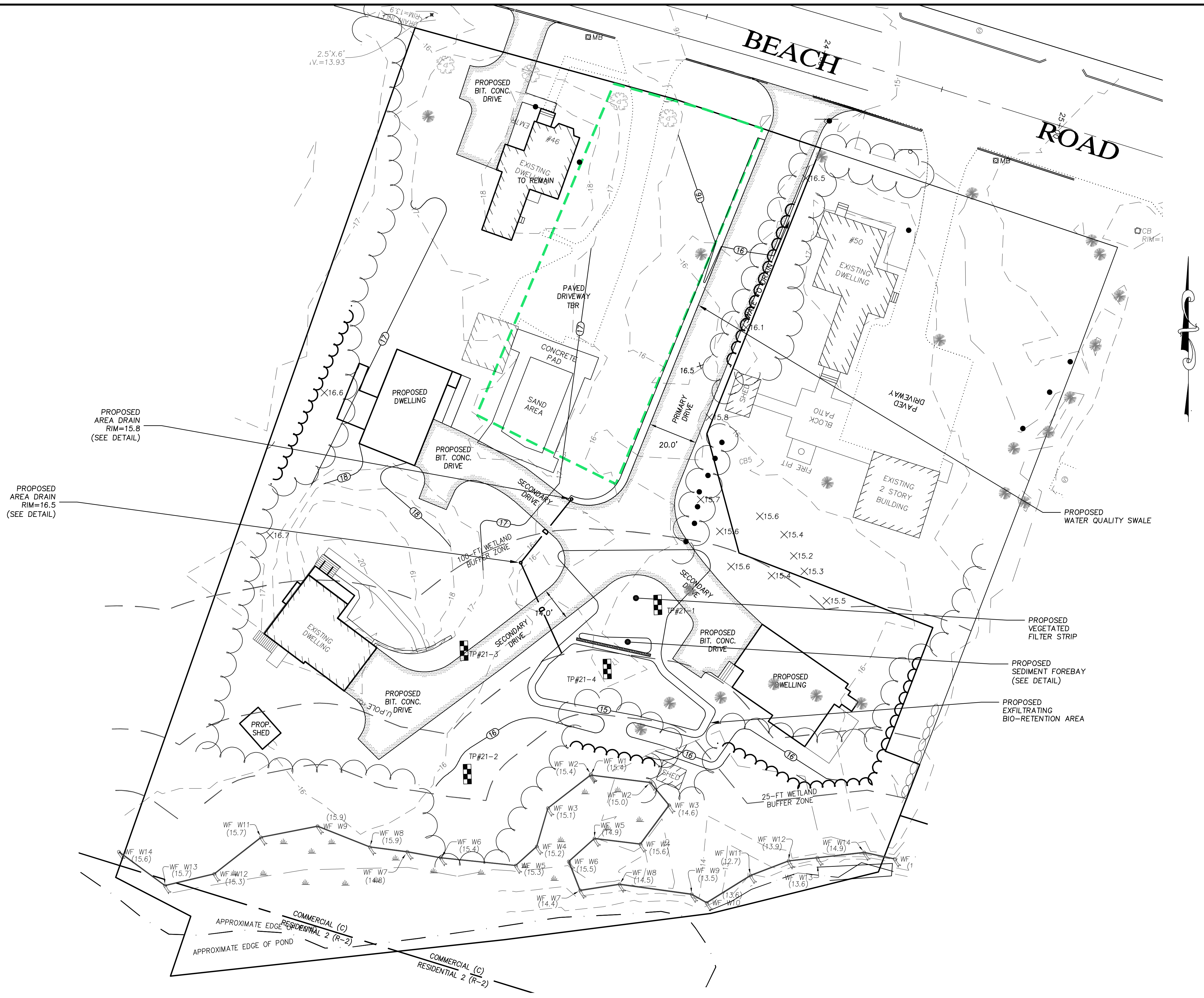
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WF W10  
(15.6)

WF W9  
(13.5)

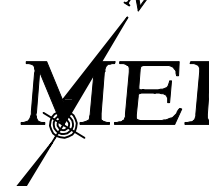
WF W8  
(14.5)





PREPARED FOR  
**DOWNEAST BUILDING & DEVELOPMENT**  
18 MAPLE LANE  
NORTHBOROUGH, MA 01532

1	12/15/21	RESPONSE TO PEER REVIEW	J.T.M.		
NO.	DATE	DESCRIPTION	BY		

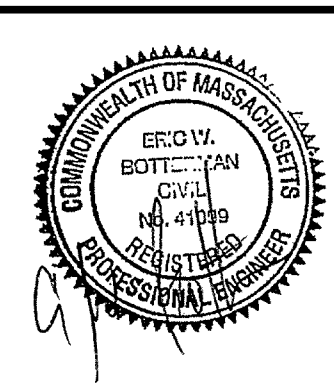
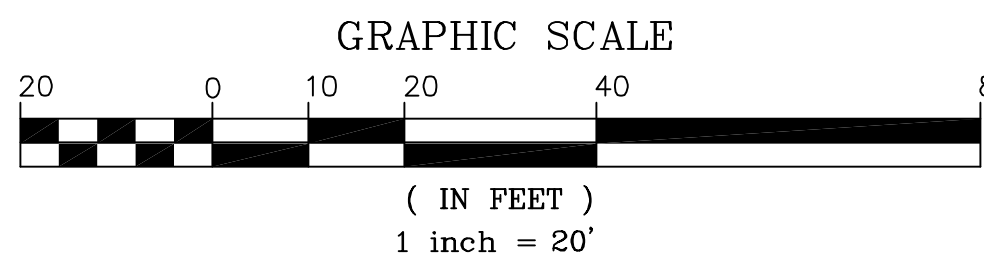
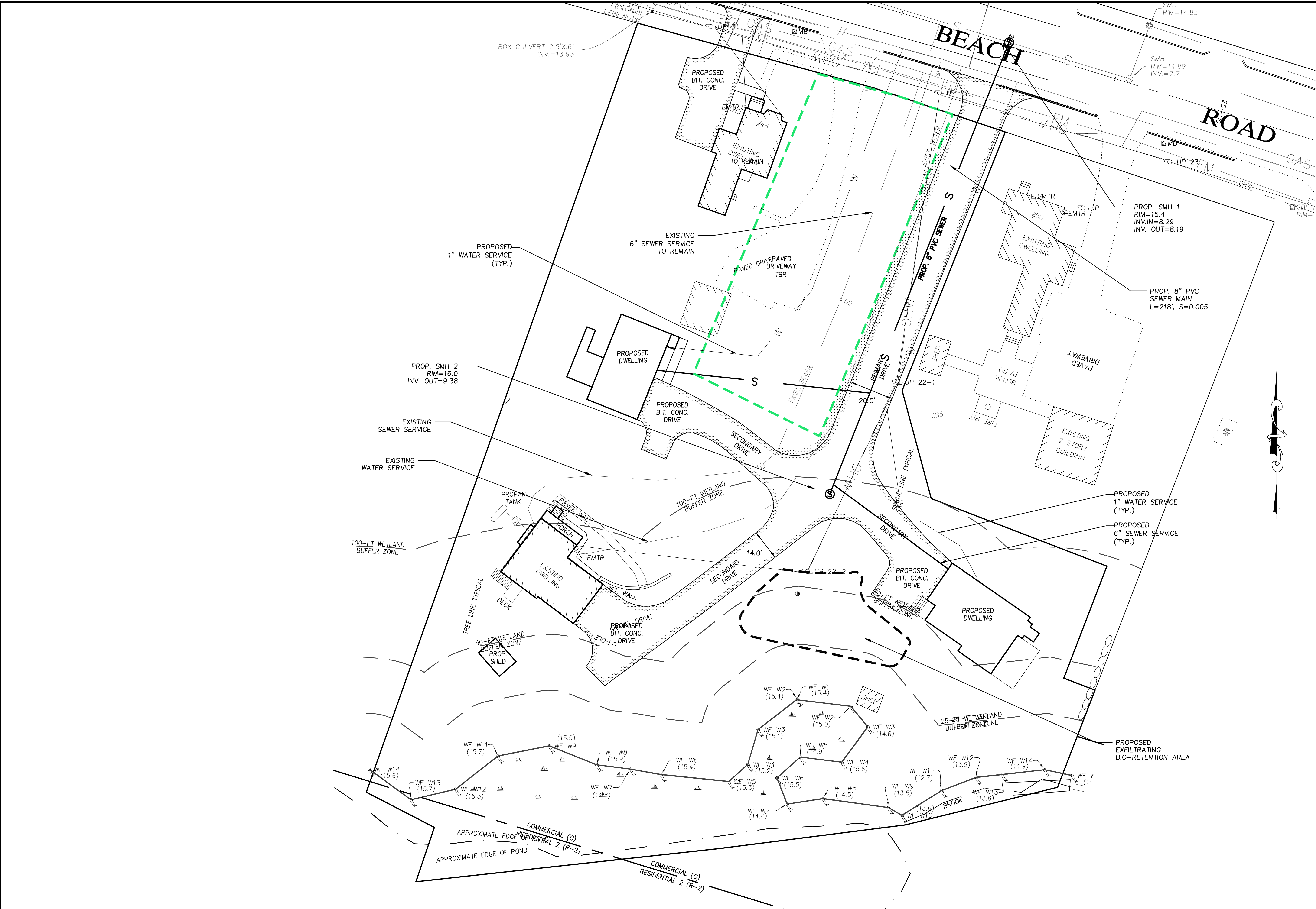
**MILLENNIUM ENGINEERING, INC.**  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=20'	CALC. BY: J.T.M.	PROJECT: M213965
DATE: NOV. 5, 2021	CHKD. BY: E.W.B.	

**FLEXIBLE RESIDENTIAL DEVELOPMENT**  
IN  
**SALISBURY, MA**  
AT  
**46 BEACH ROAD & 2 GRAVEL WAY**


**GRADING AND DRAINAGE PLAN**  
SHEET: 6 OF 9





PREPARED FOR  
**DOWNEAST BUILDING & DEVELOPMENT**  
18 MAPLE LANE  
NORTHBOROUGH, MA 01532

NO.	DATE	DESCRIPTION	BY
1	12/15/21	RESPONSE TO PEER REVIEW	J.T.M.



**MILLENNIUM ENGINEERING, INC.**  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
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SCALE: 1"=20'	CALC. BY: J.T.M.	PROJECT: M213965
DATE: NOV. 5, 2021	CHKD. BY: E.W.B.	

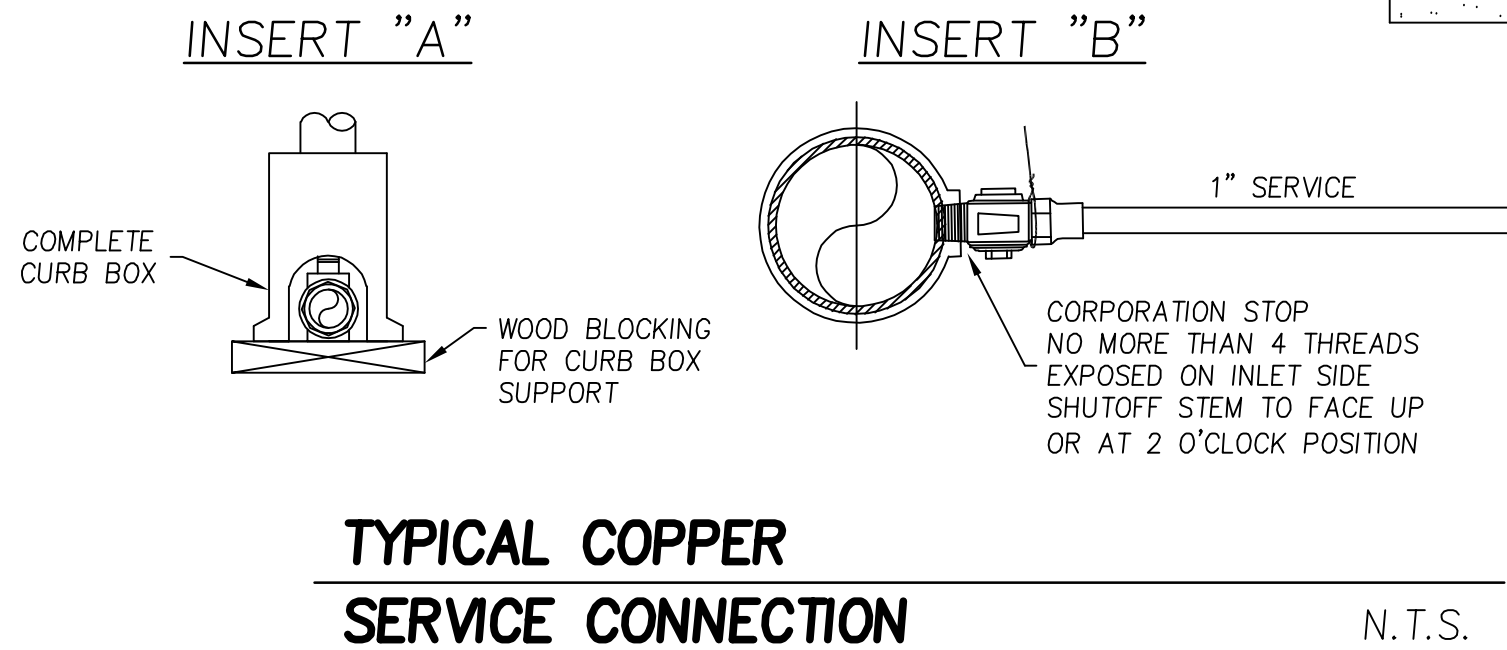
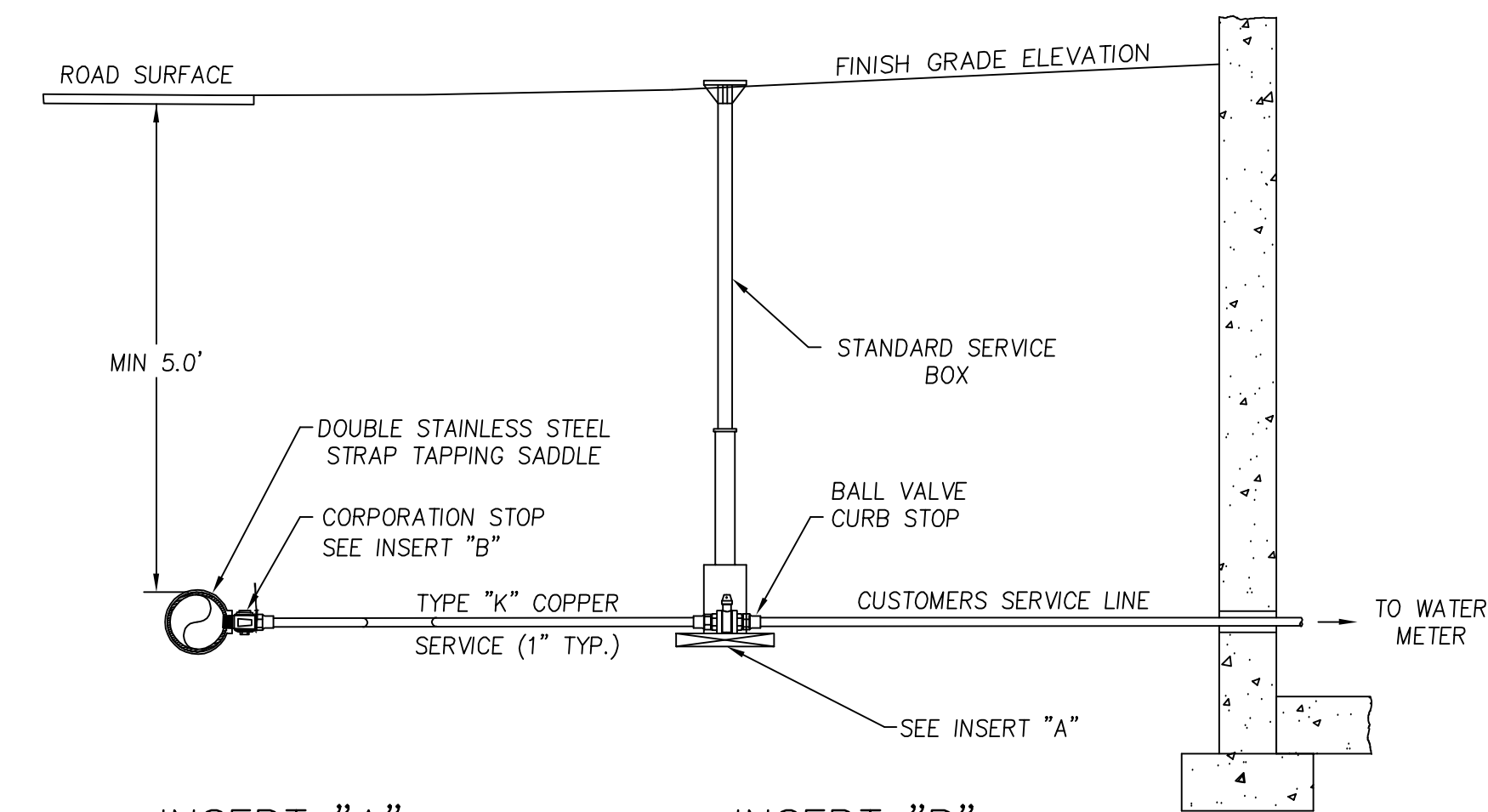
**FLEXIBLE RESIDENTIAL DEVELOPMENT**  
IN  
**SALISBURY, MA**  
AT  
**46 BEACH ROAD & 2 GRAVEL WAY**

**UTILITIES PLAN**  
SHEET: 7 OF 9



SHEET: 8 OF 9



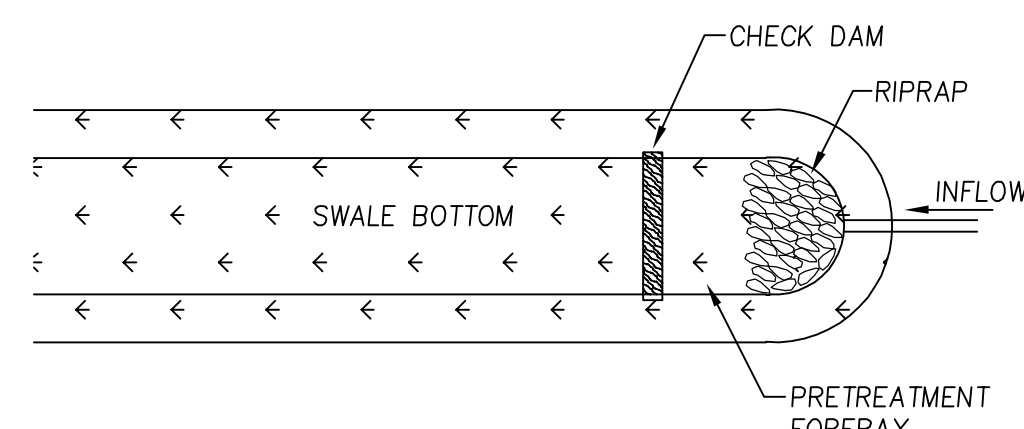


**TYPICAL COPPER SERVICE CONNECTION**  
N.T.S.

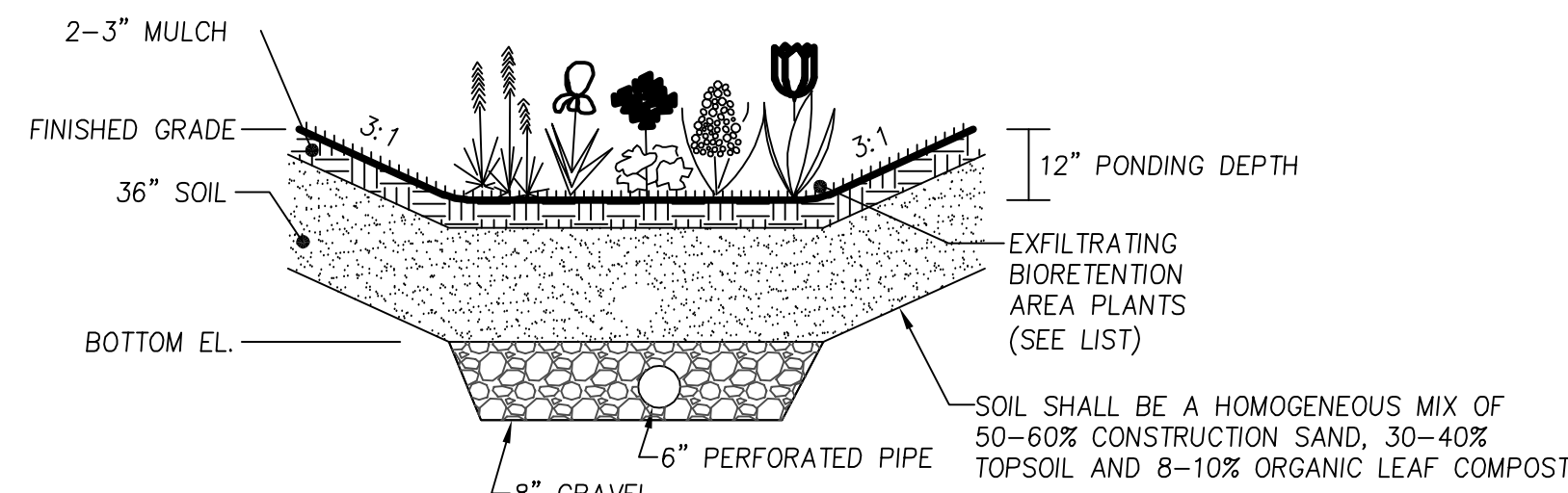
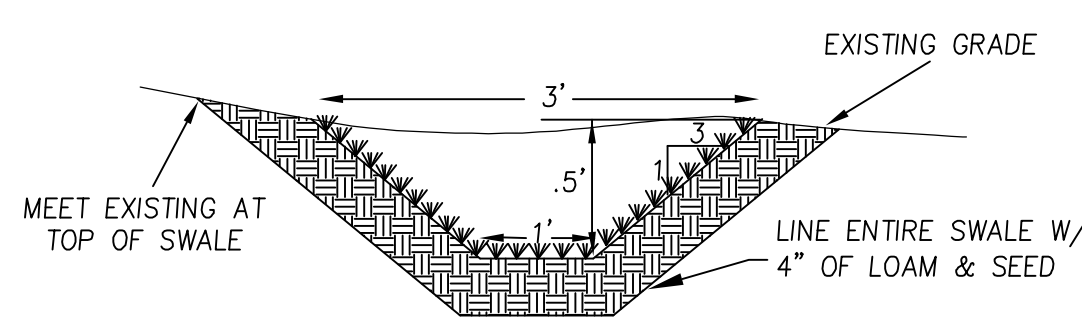
**NOTES**

1. TO INSTALL SILTSACK IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING. HOLD APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME. THIS IS THE AREA OF THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
2. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, SILTSACK IS FULL AND SHOULD BE EMPTIED.
3. TO REMOVE SILTSACK, TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE THE LIFTING OF SILTSACK.
4. TO EMPTY SILTSACK, PLACE UNIT WHERE THE CONTENTS WILL BE COLLECTED. PLACE THE REBAR THROUGH THE LIFT STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL LIFT SILTSACK FROM THE BOTTOM AND EMPTY THE CONTENTS. CLEAN OUT AND RINSE. RETURN SILTSACK TO ITS ORIGINAL SHAPE AND PLACE BACK IN THE BASIN.
5. SILTSACK IS REUSABLE. ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE SILTSACK FROM THE BASIN AND CLEAN. SILTSACK SHOULD BE STORED OUT OF SUNLIGHT UNTIL NEXT USE.

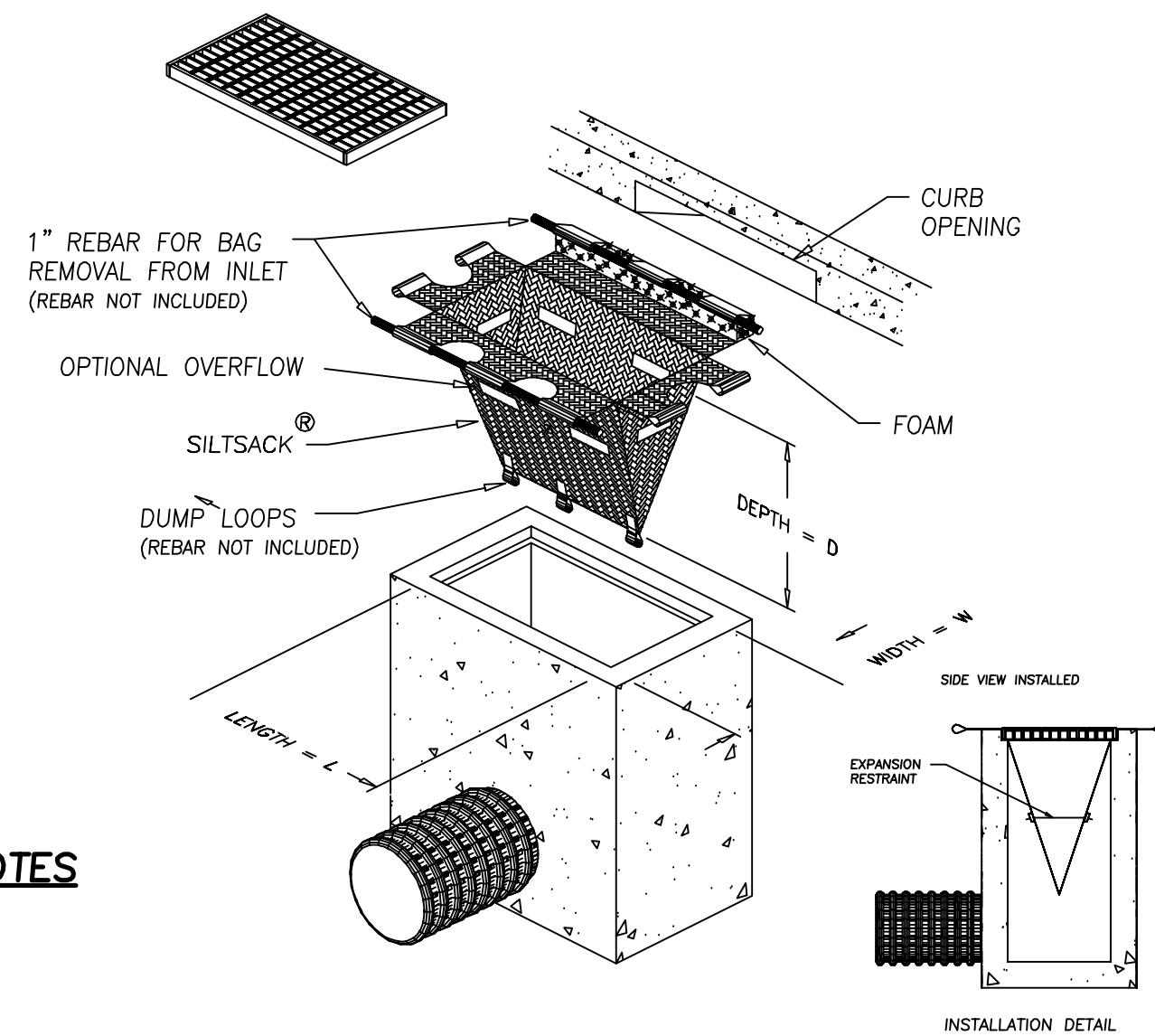
**SILT SACK DETAIL**  
N.T.S.



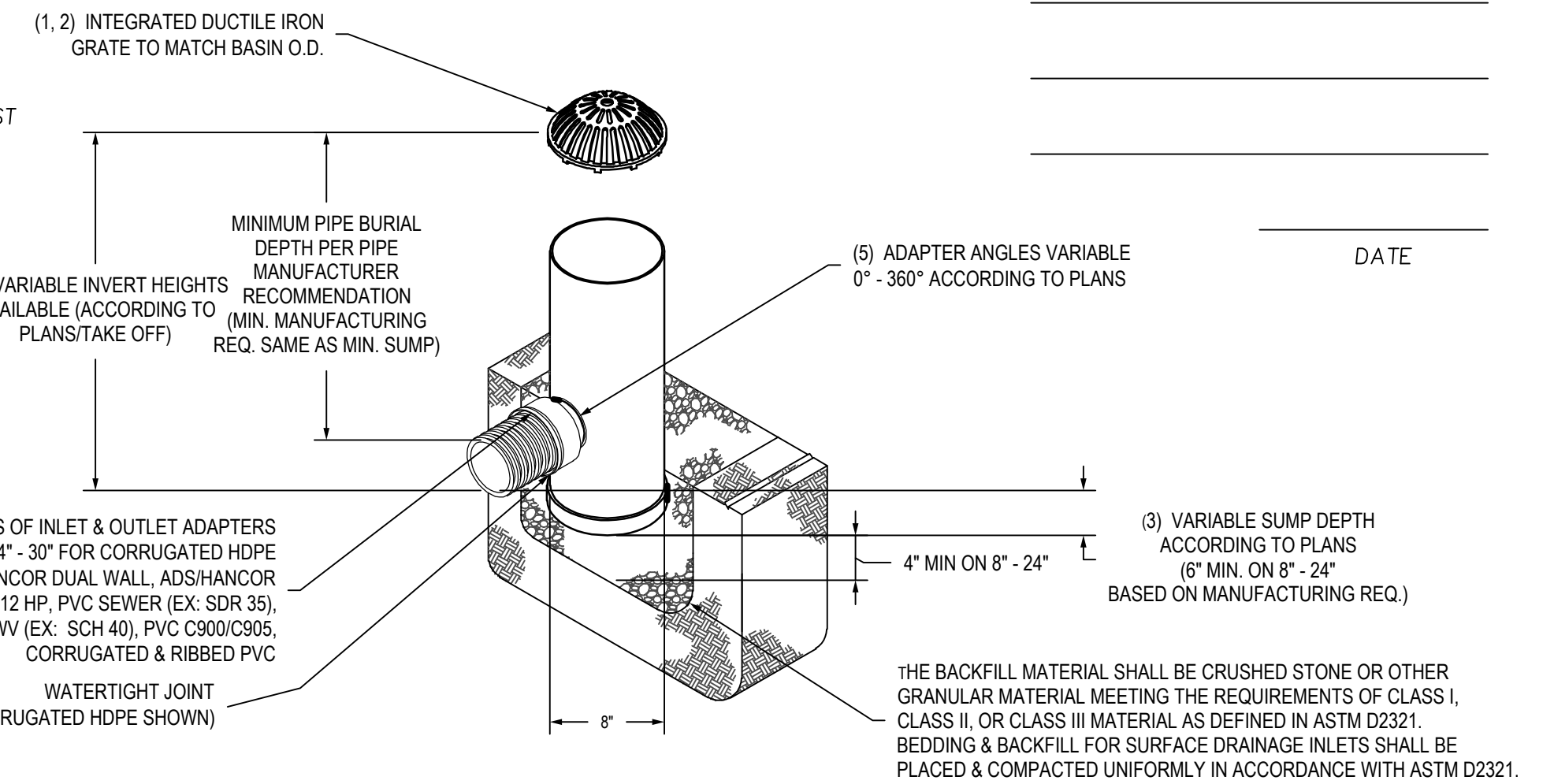
**WATER QUALITY SWALE DETAIL**  
N.T.S.



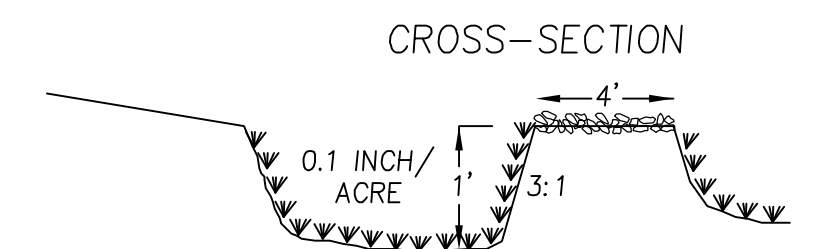
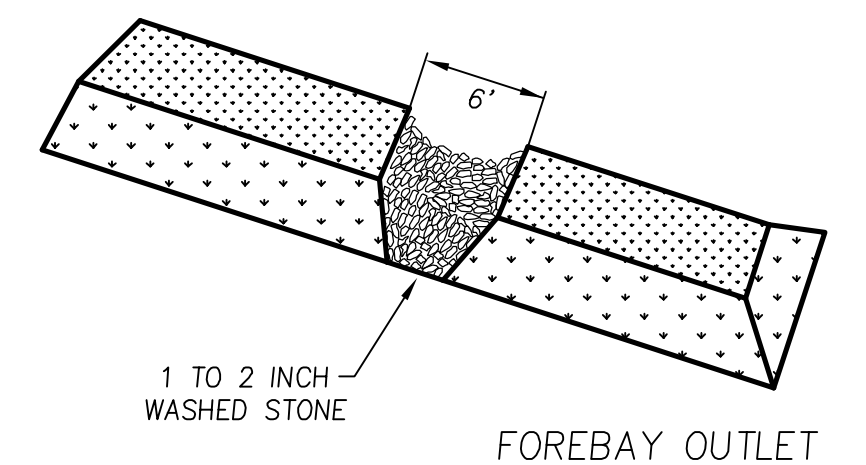
**PROFILE VIEW EXFILTRATING BIORETENTION AREA DETAIL**  
N.T.S.



- 1 - 8" - 30" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50/5.
- 2 - 8" & 10" DOME GRATES FIT ONTO THE DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
- 3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
- 4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D2321 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
- 5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS SEE DRAWING NO. 7001-110-012.
- 6 - 8" - 30" DOME GRATES HAVE NO LOAD RATINGS.

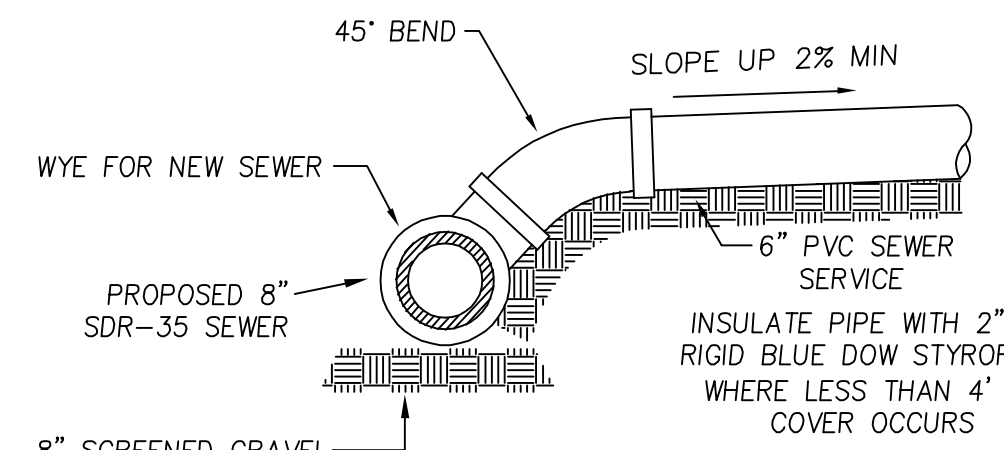


**AREA DRAIN DETAIL**  
N.T.S.

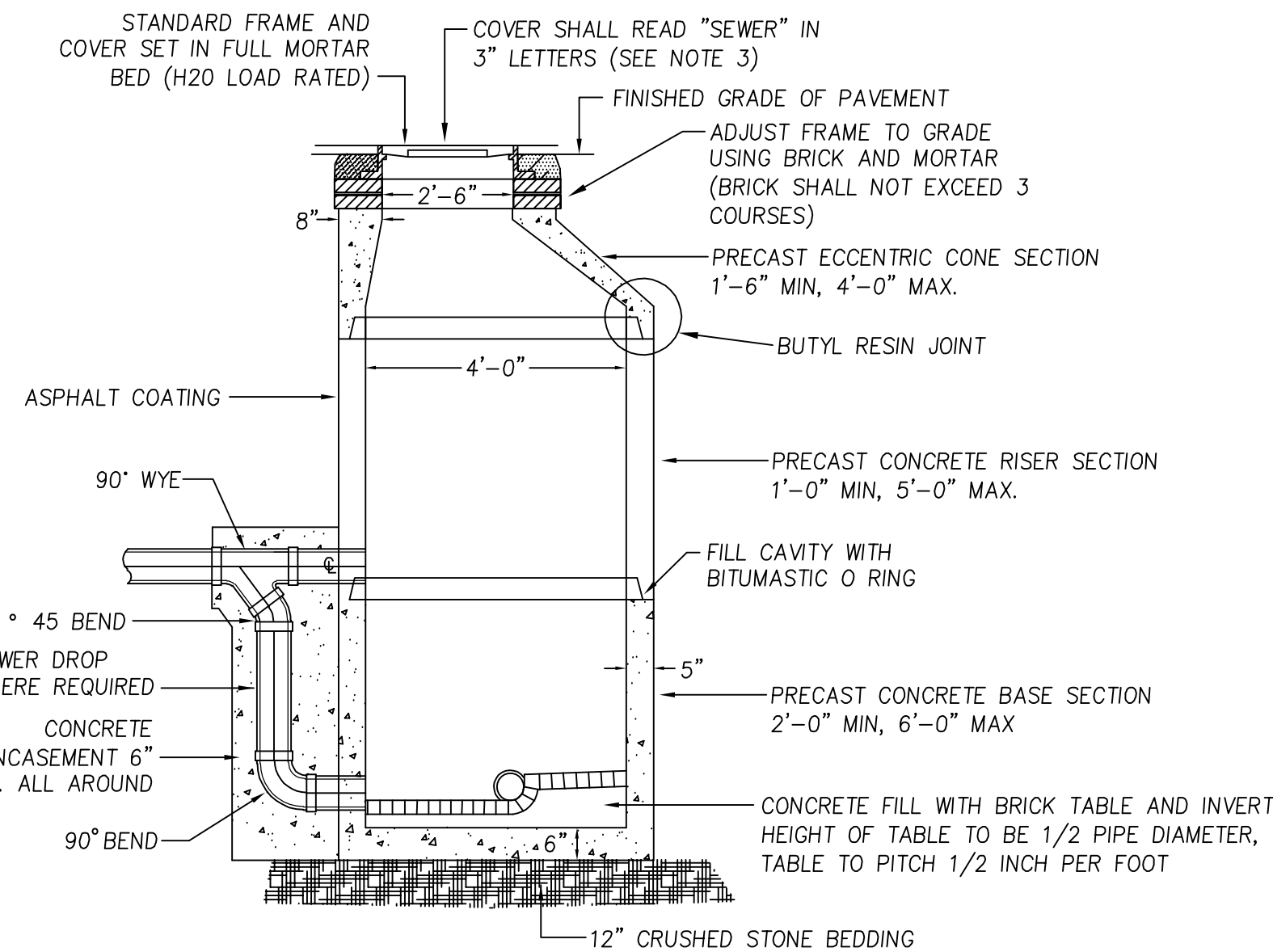


VOLUME OF SEDIMENT FOREBAY					
	DRAINAGE AREA (ACRES)	VOLUME (CU. YD)	VOLUME (CU. FT)	DIMENSIONS (L X W X H)	OUTLET LENGTH
FOREBAY #1A	0.20	2.7	74	9'x9'x1.0'	6.0'
FOREBAY #1B	0.17	2.3	63	8'x8'x1.0'	6.0'
FOREBAY #2	1.91	25.7	693	27'x27'x1.0'	6.0'
FOREBAY #3	1.63	22.0	593	25'x25'x1.0'	6.0'

**SEDIMENT FOREBAY DETAIL**  
N.T.S.

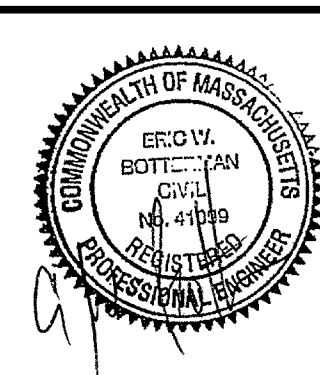


**SEWER SERVICE DETAIL**  
N.T.S.



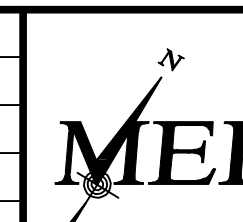
- NOTES:
- 1) SEWER MANHOLES SHALL CONFORM TO ASTM C478 AND ASTM C185
  - 2) STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC STEPS SHALL CONFORM TO LATEST ASTM C478 SPEC.
  - 3) COVER SHALL BE LEBARON FOUNDRY (MODEL NO. LA246), MECHANICS IRON FOUNDRY, NEEHAN FOUNDRY, OR EQUAL.
  - 4) ALL PENETRATIONS IN THE MANHOLE FOR INSERTION OF PIPING SHALL BE SEALED WITH KOR-N-SEAL FLEXIBLE PIPE CONNECTION.
  - 5) FLAT TOP STRUCTURES SHALL BE PRECAST SECTIONS AND HAVE A 28 DAY COMPRESSIVE STRENGTH OF 5000 PSI REINFORCED FOR AASHTO H-20 LOADING.
  - 6) CONICAL SECTIONS MAY BE SUBSTITUTED FOR FLAT-TOP STRUCTURES IN AREAS WHERE MORE THAN 4 FEET OF COVER IS PROVIDED FOR DRAIN PIPE.

**PRECAST SEWER MANHOLE DETAIL**  
N.T.S.



PREPARED FOR  
**DOWNEAST BUILDING & DEVELOPMENT**  
18 MAPLE LANE  
NORTHBOROUGH, MA 01532

1	12/15/21	RESPONSE TO PEER REVIEW	J.T.M.	NOT TO SCALE	CALC. BY: J.T.M.
NO.	DATE	DESCRIPTION	BY	DATE: NOV. 5, 2021	CHKD. BY: E.W.B.



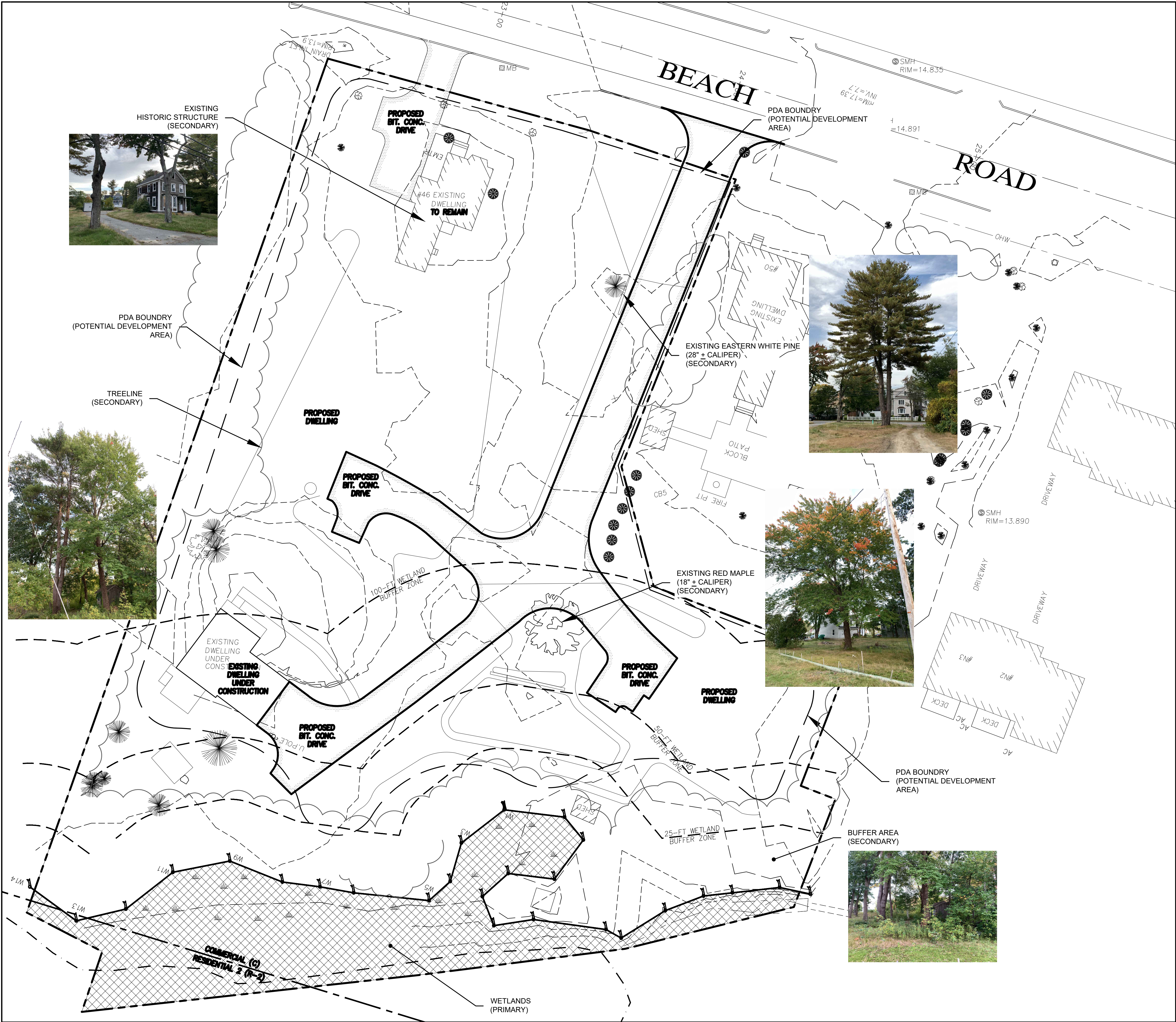
**MILLENNIUM ENGINEERING, INC.**  
ENGINEERING AND LAND SURVEYING  
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980  
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

PROJECT: M213965
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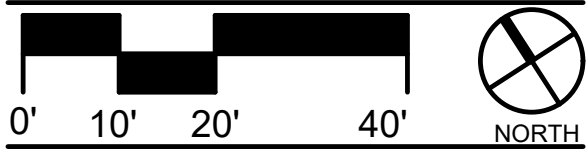
**FLEXIBLE RESIDENTIAL DEVELOPMENT**  
IN  
**SALISBURY, MA**  
AT  
**46 BEACH ROAD & 2 GRAVEL WAY**

**CONSTRUCTION DETAILS**  
SHEET: 9 OF 9





Ben Legare  
Downeast Building  
and Development  
18 Maple Avenue  
Northborough, MA 01532



FLEXIBLE RESIDENTIAL  
DEVELOPMENT

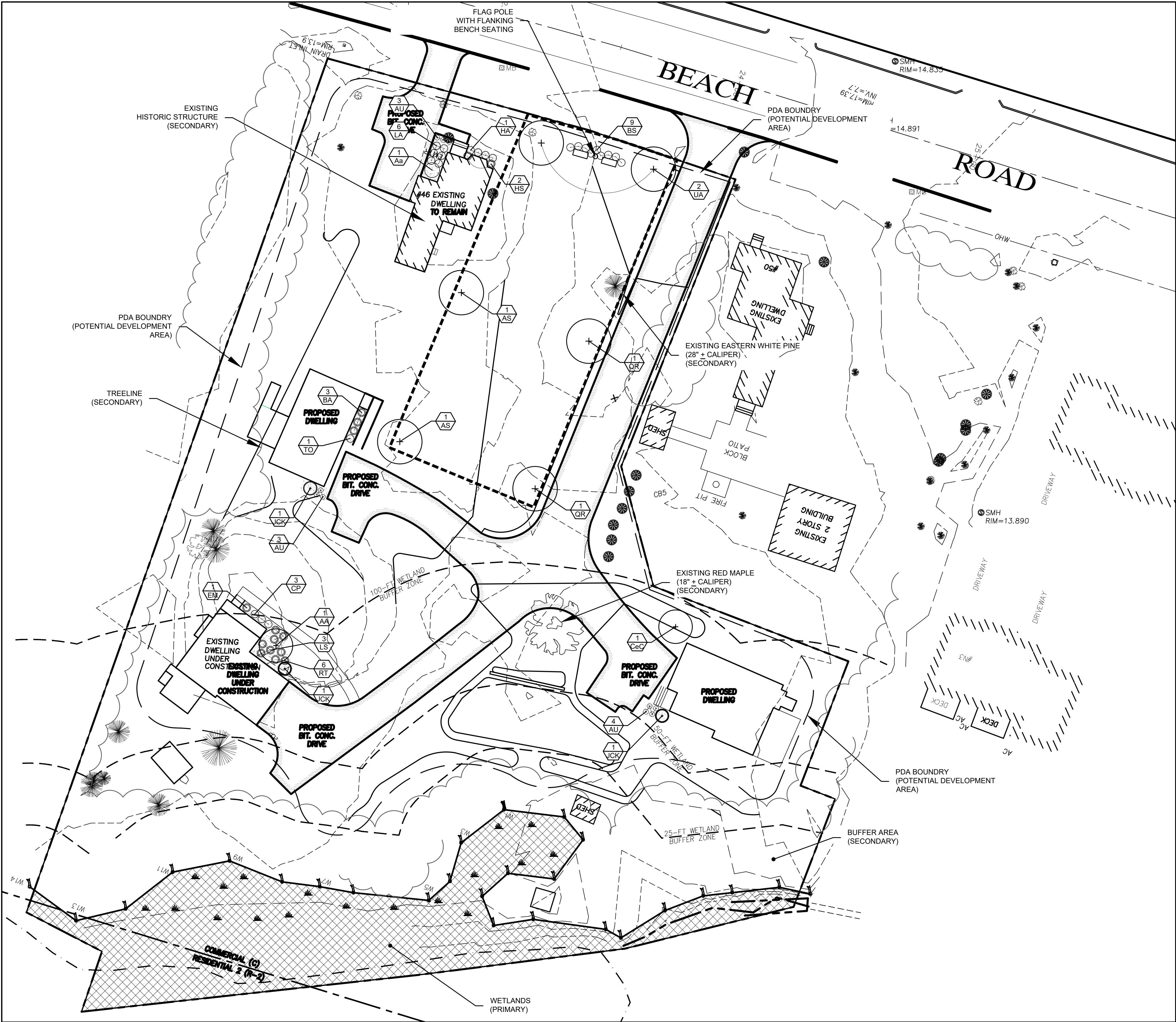
Project Address: 46 Beach Road and 2 Gravel Way  
Solidary, New Hampshire  
Project Issue Date: December 20, 2021  
Project Number: 21-310.00  
Project Status: Planning Board Submittal  
Reviewed By: Howard Snyder

REVISION	ISSUE TITLE	DATE
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FOUR STEP DESIGN PLAN







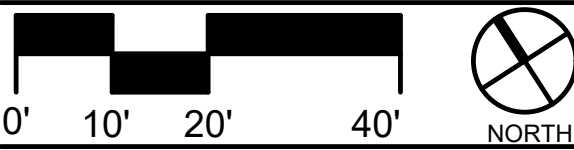
PLANT MATERIAL SCHEDULE

SHADE TREES	SIZE	NOTES	QTY
Existing Deciduous Tree to Remain		Preserve and Protect in Place	Verify in Field
Existing Conifer Tree to Remain		Preserve and Protect in Place	Verify in Field
Acer saccharum Sugar Maple	2.5" - 3.0" Cal.	Zone: 3	2 KEY: AS
Ulmus americana 'Princeton' American Elm	2.5" - 3.0" Cal.	Zone: 3	2 Fall Plant Haz. KEY: UA
Quercus robur f. fastigiata Fastigate English Oak	2.5" - 3.0" Cal.	Zone: 5	2 KEY: QR
ORNAMENTAL TREES	SIZE	NOTES	QTY
Amelanchier arborea Downy Serviceberry	2.0" - 2.5" Cal.	Zone: 4	1 KEY: AA
Cercis canadensis Eastern Redbud	2.0" - 2.5" Cal.	Zone: 4	1 Fall Plant HazKEY: CeC
CONIFER TREES	SIZE	NOTES	QTY
Juniperus chinensis 'Keteleeri' Chinese Juniper	8" - 10"	Zone: 4	3 Key: JCK
DECIDUOUS SHRUBS	SIZE	NOTES	QTY
Aronia arbutifolia Red Chokeberry	2 Gallon	Zone: 4	1 Salt: Tolerant KEY: AA
Comptonia peregrina Sweetfern	2 Gallon	Zone: 3	3 KEY: CP
Hydrangea arborescens Smooth Hydrangea	2 Gallon	Zone: 3	4 Salt: Medium KEY: HA
Lavandula angustifolia English Lavender 'Hidcote'	2 Gallon	Zone: 5	6 KEY: LA
EVERGREEN SHRUBS	SIZE	NOTES	QTY
Thuja occidentalis 'Little Giant' Little Giant Dwarf Arborvitae	2 Gallon	Zone: 3	1 KEY: TO
Buxus sempervirens 'Katerberg' North Star Boxwood	2 Gallon	Zone: 5	9 KEY: BS
PERENNIALS	SIZE	NOTES	QTY
Baptisia australis False Indigo	SP #4 Container	Zone: 3	3 KEY: BA
Echinacea magna Purple Cone Flower	SP #4 Container	Zone: 4a	1 KEY: EM
Hemerocallis fulva Orange Daylily	SP #4 Container	Zone: 3	12 KEY: HF
Helianthus salicifolius Table Mountain Helianthus	SP #4 Container	Zone: 4	2 KEY: HS
Liatris spicata Liatris	SP #4 Container	Zone: 3	3 KEY: LS
Rudbeckia trioba Black-eyed Susan	SP #4 Container	Zone: 4a	6 KEY: RT
GROUNDCOVERS	SIZE	NOTES	QTY
Arctostaphylos uva-ursi Kinnikinnick	SP #4 Container	Zone: 2	10 KEY: AU
SEED MIX			QTY
Hydroseed (All areas disturbed from construction)			TBD S.F.
	Mix of perennial type seed mix varieties best adapted to site conditions and use		

LANDSCAPE MATERIALS		QTY
Bark Mulch	3" depth	635 S.F.
Shredded Organic Bark Mulch	All planting beds	

- Not all plant material species and quantities shown will be used. Final plant material specifications dependent on conformance to, and approval by, local and state regulations and agencies.
- Plant material specified shall conform to ANLA American Standard for Nursery Stock, ANSI Z60.1 current edition.
- No permanent irrigation system is proposed.

Ben Legare  
Downtown Building  
and Development  
18 Maple Avenue  
Northborough, MA 01532



FLEXIBLE RESIDENTIAL DEVELOPMENT		
Project Address:	46 Beach Road and 2 Gravel Way Solidary, New Hampshire	
Project Issue Date:	December 20, 2021	
Project Number:	21-310.00	
Project Status:	Planning Board Submittal	
Reviewed By:	Howard Snyder	
REVISION	ISSUE TITLE	DATE

PLANTING PLAN

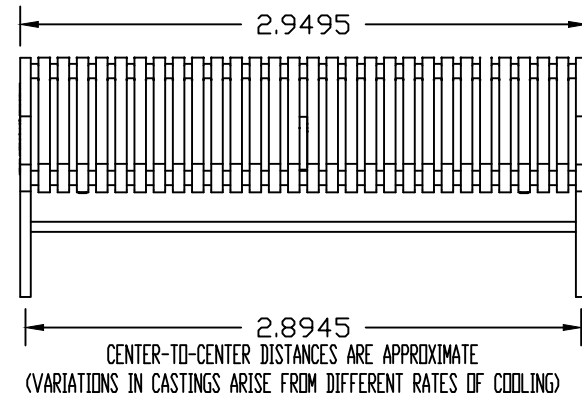
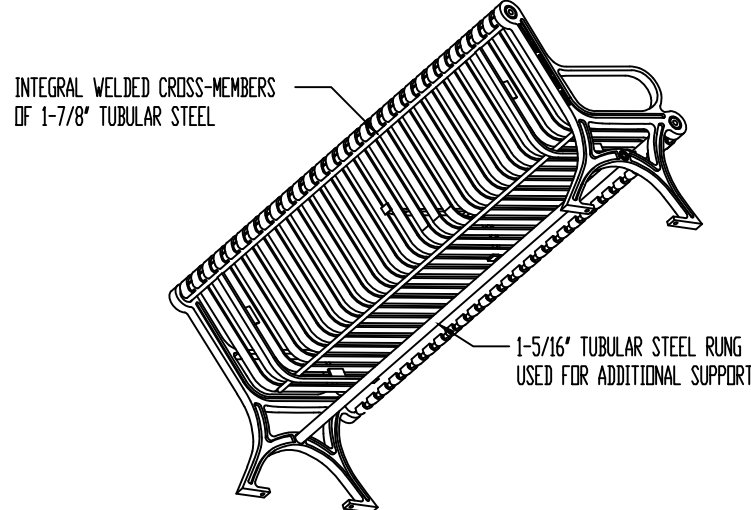
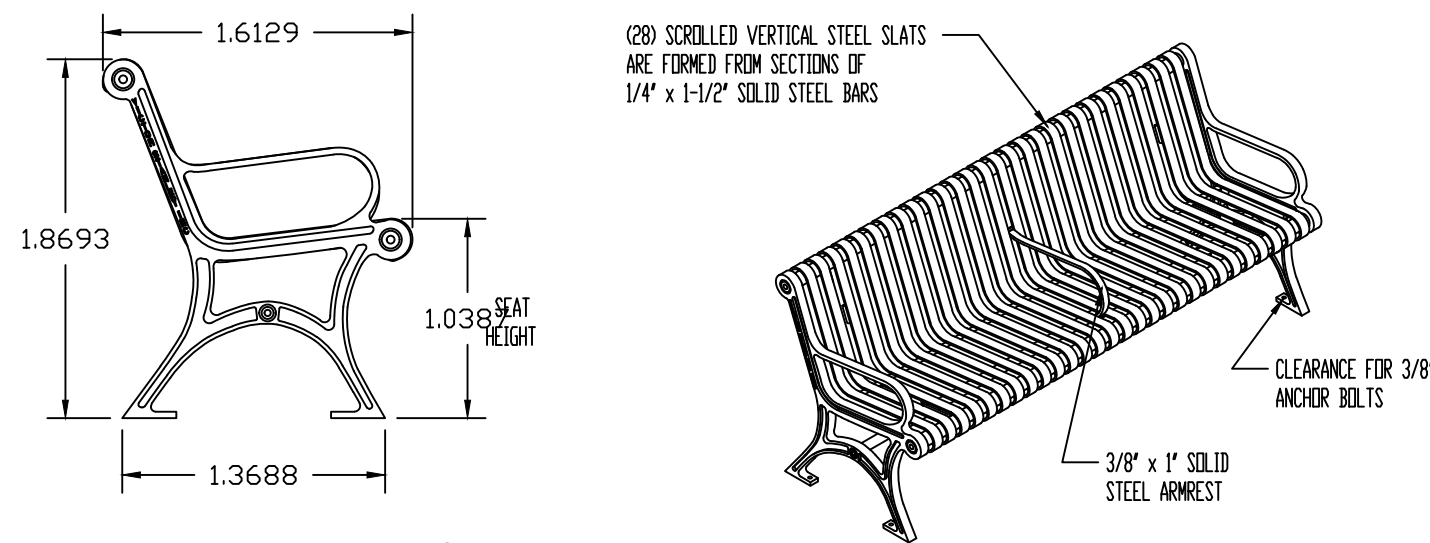
2 of 3

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**VICTOR STANLEY, INC.**  
Manufacturers of Quality Site Furnishings since 1962.

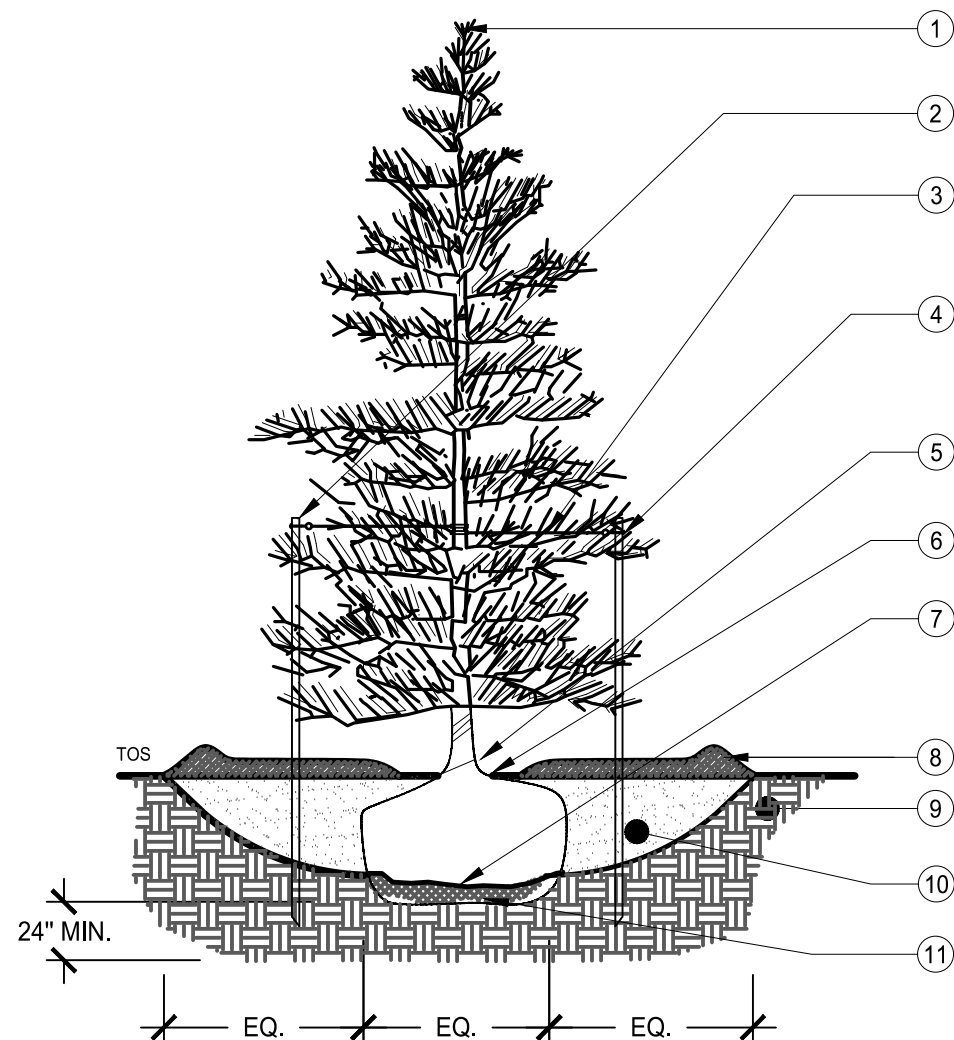
P.O. DRAWER 330 - BUNKER, MD 20754 USA  
TOLL FREE: (800) 368-2573 (USA & CANADA)  
TEL: (301) 855-8300 - FAX: (410) 257-7579  
WEB SITE: HTTP://WWW.VICTORSTANLEY.COM



- NOTES:
1. DUCTILE IRON CASTINGS COME WITH A TEN YEAR WARRANTY AGAINST BREAKAGE.
  2. DRAWING NOT TO SCALE. DO NOT SCALE DRAWINGS.
  3. ALL FABRICATED METAL COMPONENTS ARE STEEL SHOTBLASTED, ETCHED, PHOSPHATIZED, PREHEATED, AND ELECTROSTATICALLY POWDER-COATED WITH T.G.C. POLYESTER POWDER COATINGS. PRODUCTS ARE FULLY CLEANED AND PRETREATED, PREHEATED AND COATED WHILE HOT TO FILL CREVICES AND BUILD COATING FILM. COATED PARTS ARE THEN FULLY CURED TO COATING MANUFACTURER'S SPECIFICATIONS. THE THICKNESS OF THE RESULTING FINISH COAT AVERAGES 8-10 MILS (200-250 MICRONS).
  4. IT IS NOT RECOMMENDED TO LOCATE ANCHOR BOLTS UNTIL BENCH IS IN PLACE. THIS VICTOR STANLEY, INC. PRODUCT MUST BE PERMANENTLY AFFIXED TO THE GROUND. CONSULT YOUR LOCAL CODES FOR REGULATIONS.
  5. ANCHOR BOLTS NOT PROVIDED BY VICTOR STANLEY, INC.
  6. FOR HIGH SALT ABUSIVE CLIMATES, HOT DIP GALVANIZING BEFORE POWDER COATING IS AVAILABLE. SEE WRITTEN SPECIFICATIONS FOR DETAILS.
  7. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE. CONTACT MANUFACTURER FOR DETAILS.
  8. THIS PRODUCT IS SHIPPED FULLY ASSEMBLED.
  9. POWDER COATING COLOR: BLACK.
  10. LENGTH 6' STANDARD LENGTH WITH CENTER ARMRESTS.

## PARK BENCH: VICTOR STANLEY CR-96 CLASSIC SERIES

SCALE: N T S

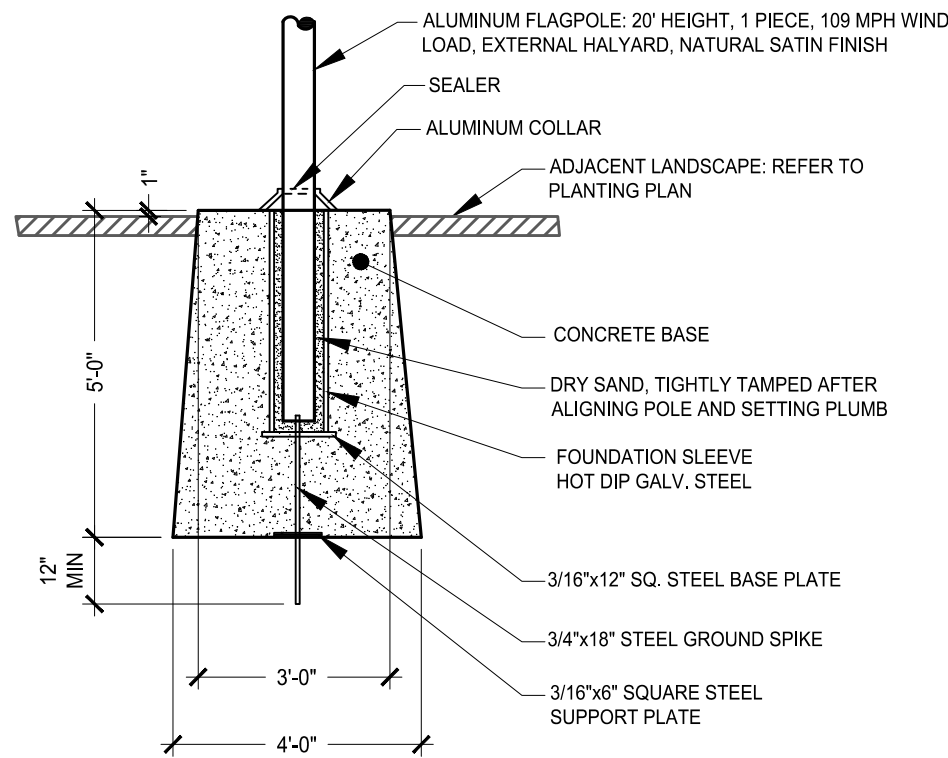


## CONIFER PLANTING

SCALE: N T S

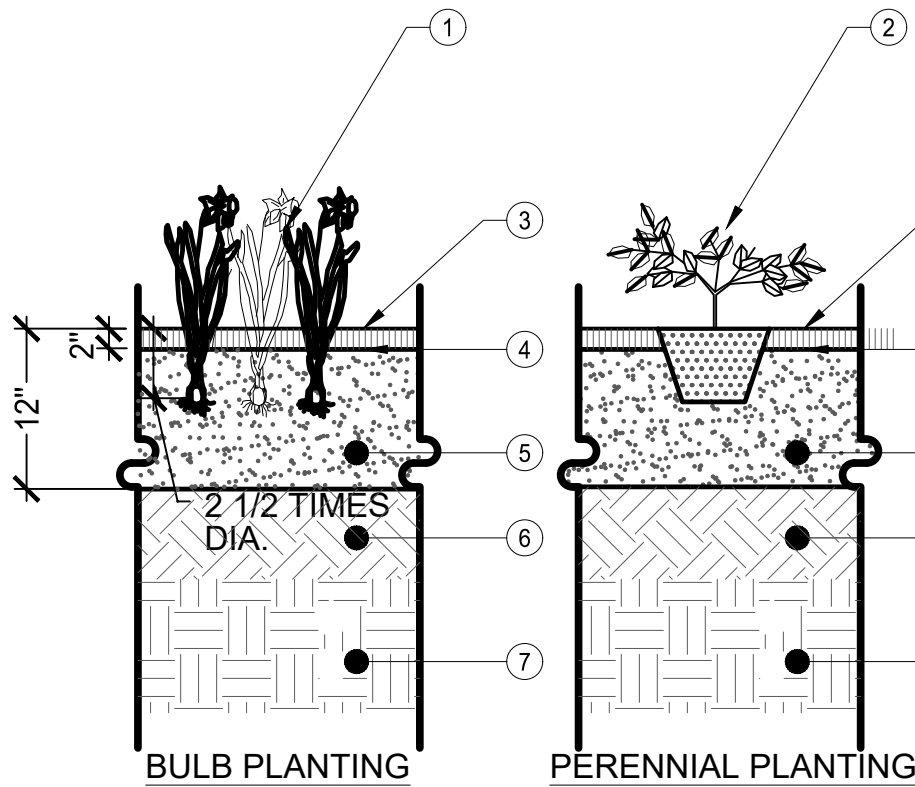
### LEGEND:

1. INSTALL TREE PLUMB.
2. 2" x 3" x 10' FIR POSTS, 3 PER TREE, ALL POSTS SHALL BE PLUMB AND HAVE SAME HEIGHT ABOVE FINISH GRADE. ORIENT 3", DIMENSION PERPENDICULAR TO TRUNK.
3. 13 GAUGE GALV. MALLEABLE WIRE CABLE LOOPED AROUND TRUNK AND THROUGH EYEBOLT, ENCASE WIRE AROUND TRUNK IN REINFORCED RUBBER HOSE, SECURE BY TWIST TAUTLY.
4. BORE 3/8" HOLE THROUGH 2" DIMENSION OF EACH POST, 6" FROM TOP OF POST, TO ACCEPT 1/4" X 4" GALVANIZED STEEL EYEBOLT, PROVIDE GALV. STEEL WASHER AND 2 BOLTS FOR EACH EYEBOLT.
5. TOP OF ROOTBALL SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS TO PREVIOUS EXISTING GRADE.
6. ROOT FLARE SHALL BE EXPOSED; MULCH NOT WITHIN 4" OF TREE TRUNK.
7. PLACE BALL ON SUBSOIL. REMOVE AND DISCARD BURLAP EXCEPT UNDER BALL. REMOVE ALL SYNTHETIC SOIL WRAPPING MATERIALS (TREATED BURLAP, NYLON TWINE, WIRE BASKETS, ETC.) AND DISCARD.
8. 3" ORGANIC BARK MULCH, AS SPECIFIED.
9. COMPACTED OR UNDISTURBED SUBGRADE.
10. EXCAVATE HOLE TO DIAMETER 3X WIDER THAN ROOTBALL. BACKFILL HOLE WITH PLANTINGSOIL MIX AS SPECIFIED. EXCAVATE SUBSOIL AS REQUIRED TO PLACE ROOTBALL TO PROPER ELEVATION. PLACE ROOTBALL DIRECTLY ON SUBSOIL.
11. TOS - TOP OF SOIL. REFER CIVIL PLANS FOR GRADES.



## FLAG POLE BASE

Not To Scale



## BULB AND PERENNIAL PLANTING

SCALE: N T S

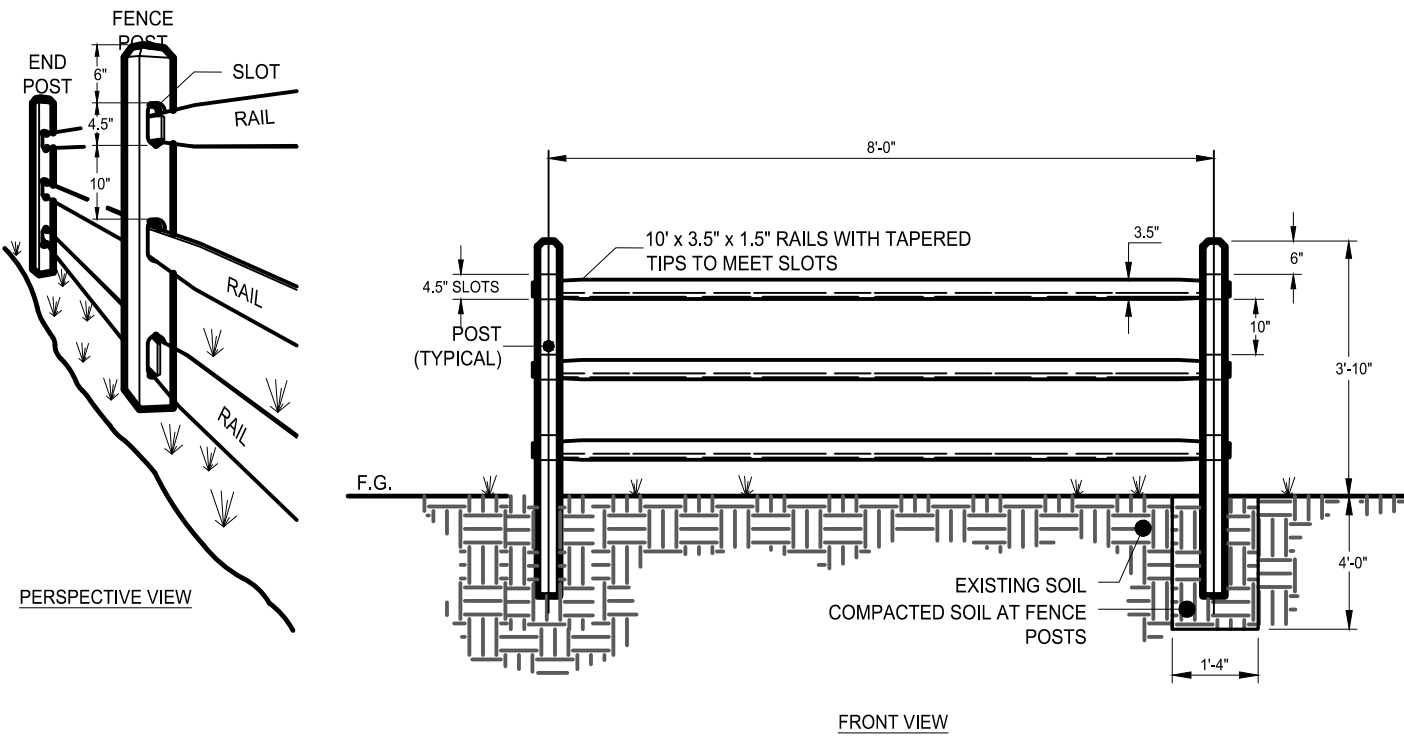
### LEGEND:

1. BULB: REFER TO PLANT LIST
2. PERENNIAL: REFER TO PLANT LIST
3. ORGANIC MULCH MATERIAL.
4. WEED BARRIER.
5. PLANTING SOIL BACKFILL MIX: 1 PART MULCH TO 3 PARTS TOPSOIL. PLANTING PIT SIZES: DEPTH-2X WIDTH OF ROOTBALL. FERTILIZER / AGRIFORM TABLETS DOWN ALONG PLANT ROOTBALL. 1 PER 1 GAL., 2 PER 2 GAL., 3 PER 15 GAL., 4 PER 24" ROOTBALL OR LARGER.
6. BACKFILL SOIL; UNCOMPACTED.
7. NATIVE UNDISTURBED SOIL.

TOS - TOP OF SOIL. REFER CIVIL PLANS FOR GRADES.

### NOTES:

- PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED IN KIND WITH SUITABLE PLANT.



## SPLIT RAIL FENCE

Not To Scale

- NOTES:
- 1) ALL WOOD FOR SPLIT RAIL FENCE TO BE NATURAL CEDAR.
  - 2) END POST IS ALSO CORNER POST.

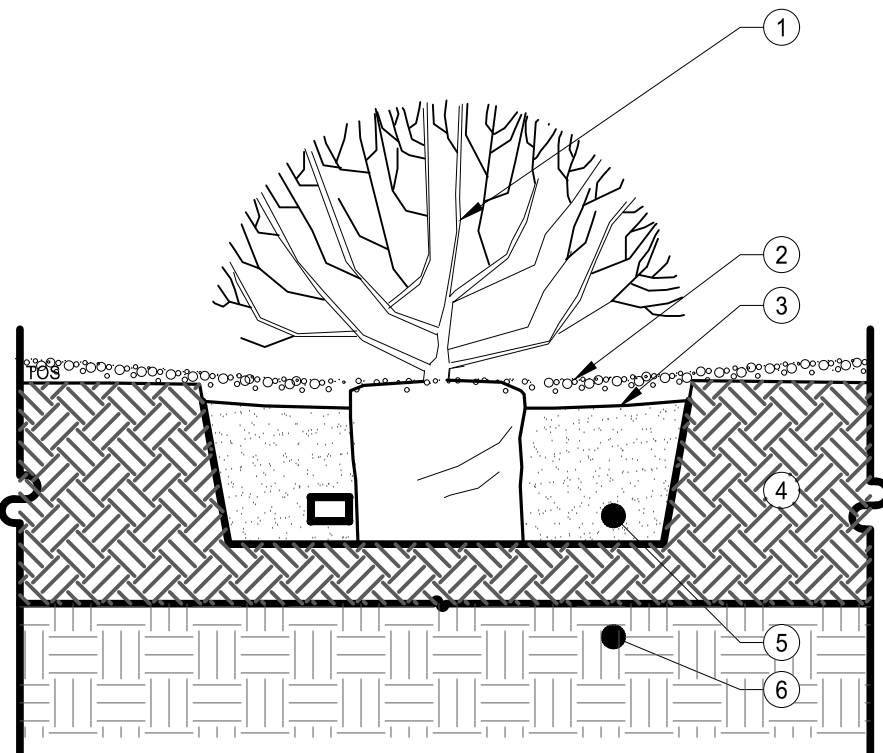
### LEGEND:

1. PLANT MATERIAL: REFER TO PLANT LIST.
2. ORGANIC MULCH MATERIAL.
3. WEED BARRIER.
4. BACKFILL SOIL; UNCOMPACTED.
5. PLANTING SOIL BACKFILL MIX: 1 PART MULCH TO 3 PARTS TOPSOIL. PLANTING PIT SIZES: DEPTH-2X WIDTH OF ROOTBALL. FERTILIZER / AGRIFORM TABLETS DOWN ALONG PLANT ROOTBALL. 1 PER 1 GAL., 2 PER 2 GAL., 3 PER 15 GAL., 4 PER 24" ROOTBALL OR LARGER.
6. NATIVE UNDISTURBED SOIL.

TOS - TOP OF SOIL. REFER CIVIL PLANS FOR GRADES.

### NOTES:

- PLANTS SHALL BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED IN KIND WITH SUITABLE PLANT.



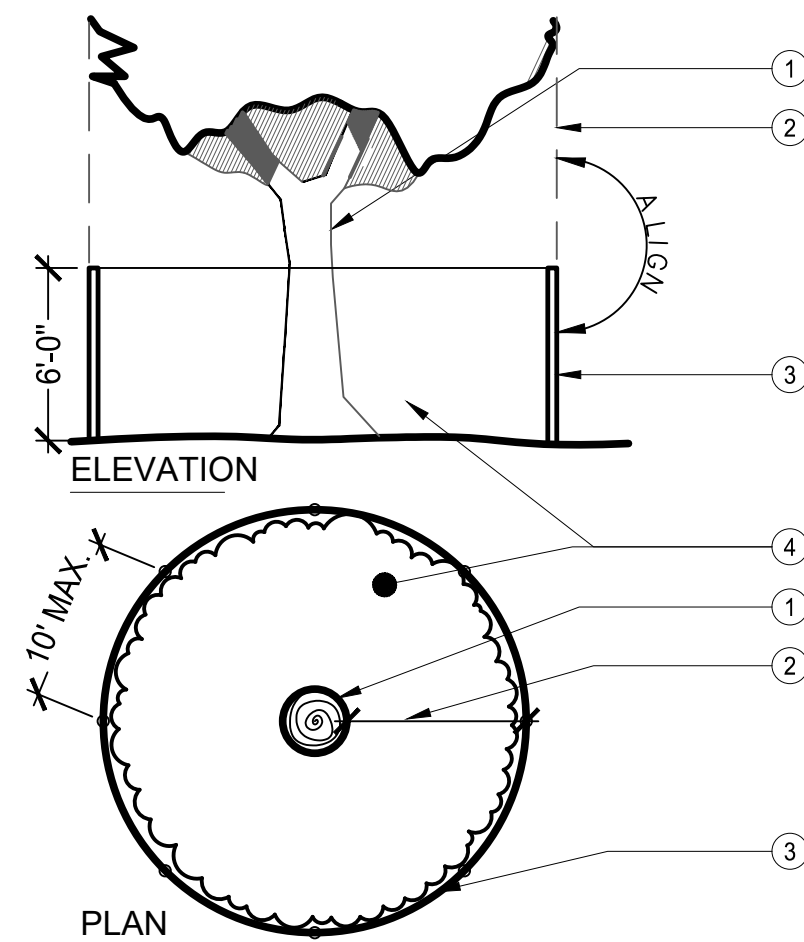
## SHRUB PLANTING

SCALE: N T S

### LEGENDS:

1. (1) 8" DIA. "HOSE RING" WIRE TIES. PLACE TIES 6" ABOVE THE TREE'S TRUNK BENDING POINT.
2. (2) 2" DIA. TREE STAKES, HAMMER 6" MIN. PAST UNDISTURBED SOIL TRIM STAKES TO 6" ABOVE TIE POINTS (ORIENT STAKES TOWARD PREVAILING WINDS).
3. LIGHTLY SPREAD BARK MULCH OVER ROOTBALL.
4. CREATE GENTLE SWALE DEPRESSION. DO NOT FORM RAISED BASIN.
5. DO NOT BURY OR COVER ROOT FLAIR.
6. PLANTING SOIL BACKFILL MIX: 1 PART MULCH TO 3 PARTS TOPSOIL. PLANTING PIT SIZES: DEPTH-2X WIDTH OF ROOTBALL. FERTILIZER / AGRIFORM TABLETS DOWN ALONG PLANT ROOTBALL. 1 PER 1 GAL., 2 PER 2 GAL., 3 PER 15 GAL., 4 PER 24" BOX OR LARGER.
7. PIT WIDTH: 3X DIA. OF CONTAINER. PIT DEPTH: TO EQUAL ROOTBALL.
8. 18"x6'-0" ROOT BARRIER. INSTALL AT ALL TREES PLACED 5'-0" FROM BLDGS. OR HARDSCAPE.

\*TOS - TOP OF SOIL. REFER TO CIVIL PLANS.



## TREE PROTECTION

SCALE: N T S

### LEGEND:

1. EXISTING TREE TO REMAIN.
2. DRIPLINE OF TREE CANOPY, TYP.
3. 6" GALVANIZED CHANLINK FENCE. POSTS SHALL BE 10' O.C. MAX. DO NOT STORE ANY MACHINERY OR MATERIALS WITHIN AREA OF THE PROTECTION FENCE.
- 4.

### NOTES:

- FENCE LAYOUT SHALL BE AS SHOWN ON SITE PREPARATION AND DEMOLITION PLAN. DUE TO SITE CONSTRAINTS, TREE PROTECTION SHALL BE ADJUSTED, UP TO 3 TIMES AROUND EACH TREE, TO ACCOMMODATE CERTAIN CONSTRUCTION PROCESSES. CONTRACTOR TO RELOCATE FENCES ONLY BY DIRECTION OF LANDSCAPE ARCHITECT.

Ben Legare  
Downeast Building  
and Development  
18 Maple Avenue  
Northborough, MA 01532

## FLEXIBLE RESIDENTIAL DEVELOPMENT

Project Address: 46 Beach Road and 2 Gravel Way  
Solidbury, New Hampshire  
Project Issue Date: December 20, 2021  
Project Number: 21-310.00  
Project Status: Planning Board Submittal  
Reviewed By: Howard Snyder

REVISION ISSUE TITLE DATE

## LANDSCAPE DETAILS

