

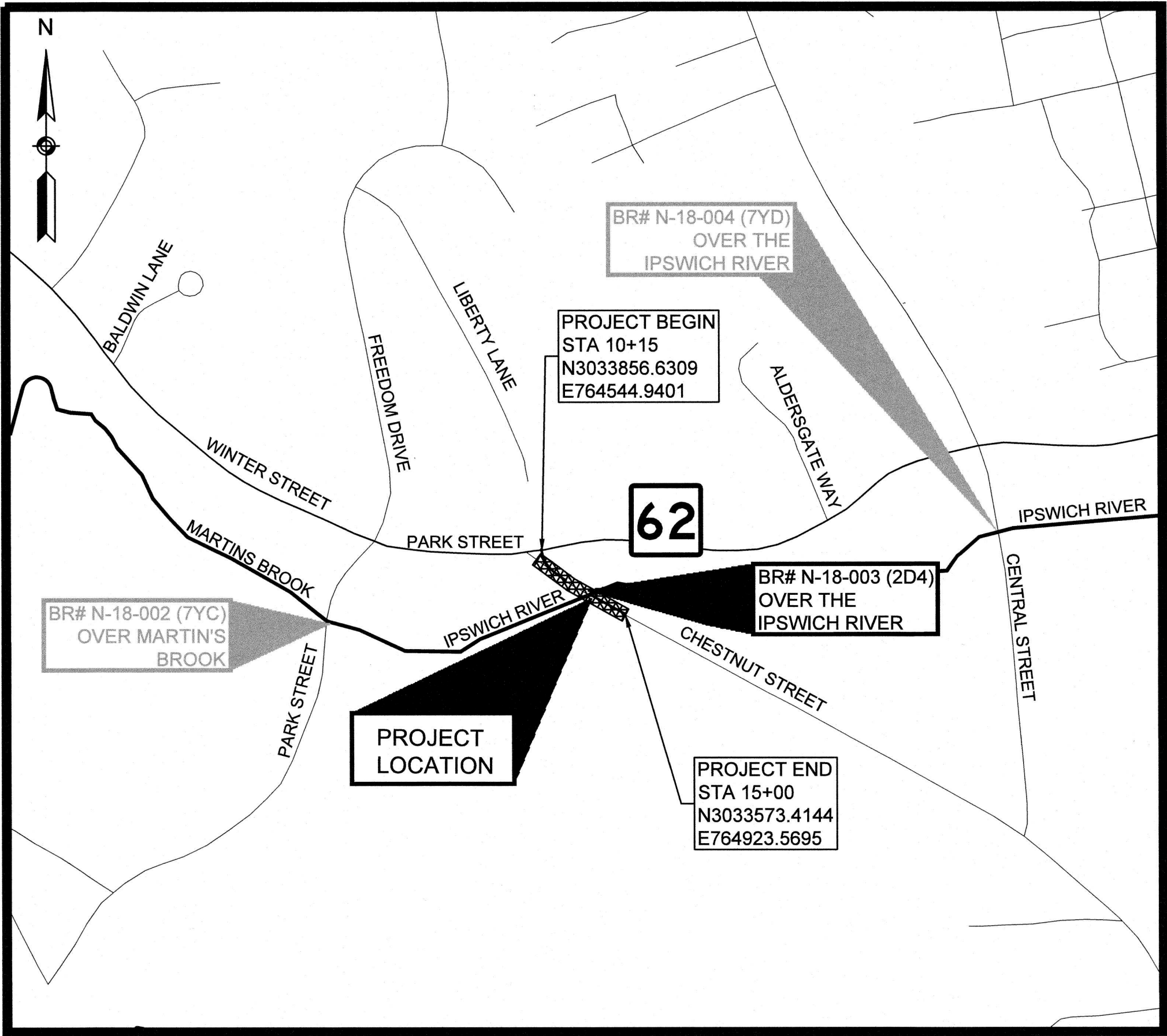
BRIDGE REPLACEMENT PROJECT


CHESTNUT STREET OVER THE IPSWICH RIVER
BRIDGE NO. N-18-003 (2D4)

IN THE TOWN OF
NORTH READING
MIDDLESEX COUNTY

NOTICE OF INTENT

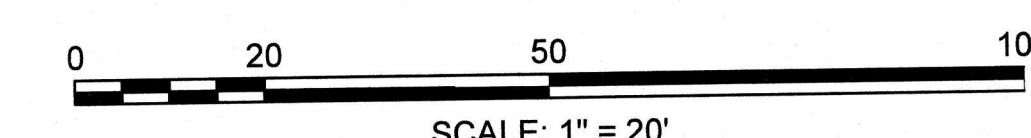
SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2	BANK & LAND UNDER WATER IMPACTS & MITIGATION
3	BORDERING LAND SUBJECT TO FLOODING IMPACTS & MITIGATION
4	WETLAND & BUFFER IMPACTS
5	WETLAND REPLICATION & RESTORATION



DATE	DESCRIPTION	REV #			
<div><div> TEC, Inc.</div><div><table><tr><td>282 Merrimack St 2nd Floor Lawrence, MA 01843 978-794-1792</td><td>311 Main Street 2nd Floor Worcester, MA 01608 508-868-5104</td><td>169 Ocean Blvd, Unit 3 PO Box 249 Hampton, NH 03842 603-601-8154</td></tr></table></div><div>www.TheEngineeringCorp.com</div></div>			282 Merrimack St 2nd Floor Lawrence, MA 01843 978-794-1792	311 Main Street 2nd Floor Worcester, MA 01608 508-868-5104	169 Ocean Blvd, Unit 3 PO Box 249 Hampton, NH 03842 603-601-8154
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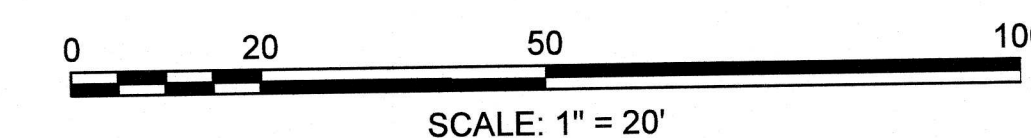
1256 03 NOI IMPACT PLAN DWG Plotted on 18-Dec-2023 12:16 PM

1256 03 NOI IMPACT PLAN DWG Plotted on 18-Dec-2023 12:16 PM



T1256 03 NOI IMPACT PLAN DWG Plotted on 18-Dec-2023 12:14 PM

DELINEATED RESOURCE AREA
LIMIT OF WORK



LEGENDPERMANENT BVW IMPACTS
999 SFTEMPORARY BVW IMPACTS
2,412 SF12-FOOT BUFFER TO BVW IMPACTS
7,272 SF

12-FOOT BUFFER TO BORDERING VEGETATED WETLAND

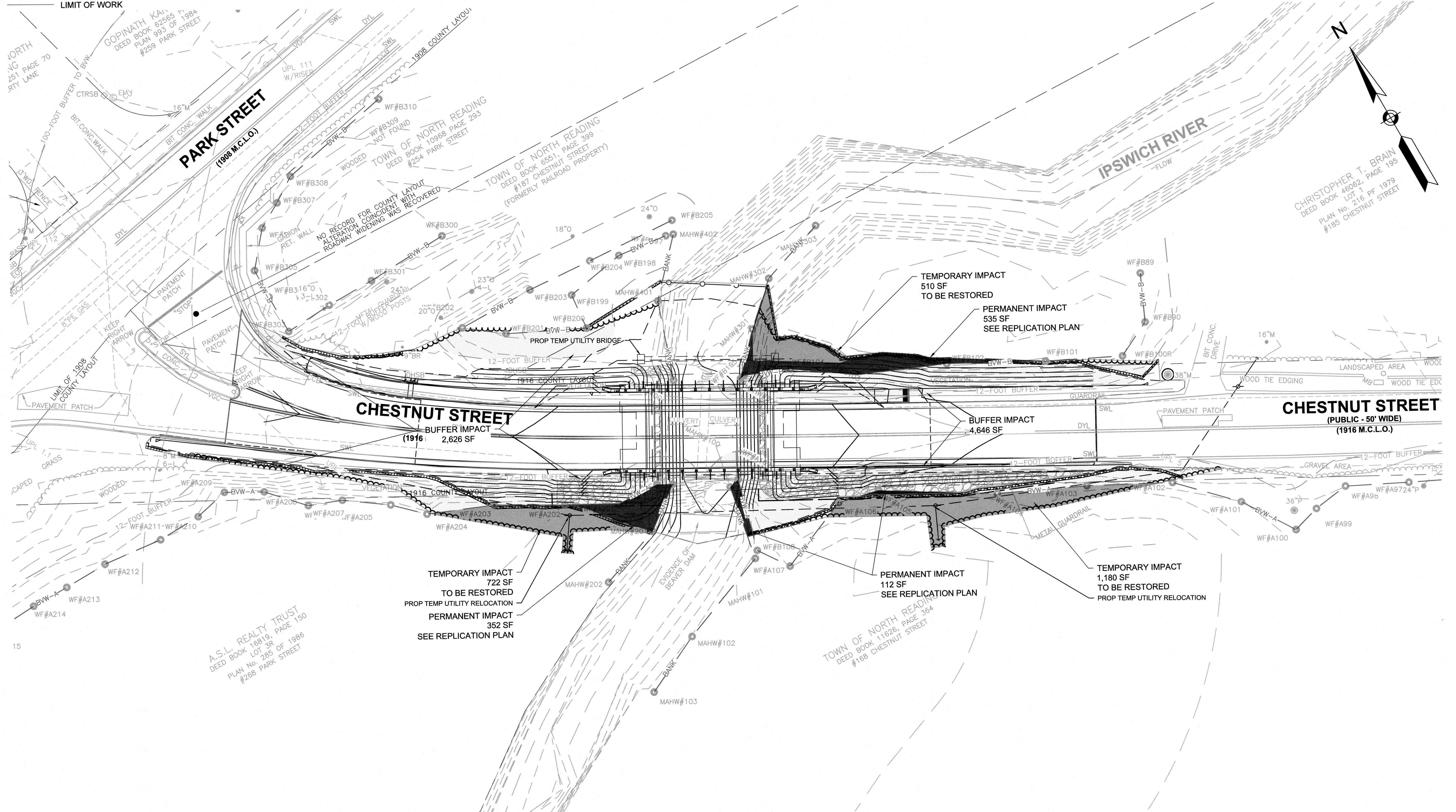
100-FOOT BUFFER TO BORDERING VEGETATED WETLAND

DELINEATED RESOURCE AREA

LIMIT OF WORK

IMPACT NOTES:

1. NORTH READING WETLAND REGULATIONS
 - 4.4 COMPENSATORY WETLAND AREA SHALL BE PROVIDED AT 1.5 TIMES THE SIZE OF THE LOST AREA.
 - 5.1 ANY WORK WITHIN TWELVE (12) FEET OF A WETLAND OR VERNAL POOL IS PRESUMED TO ALTER THAT RESOURCE AREA.
2. SEE SHEET 6 FOR WETLAND REPLICATION AND RESTORATION.
3. AREAS OF TEMPORARY WETLAND IMPACT ARE TO BE RESTORED TO ORIGINAL CONDITION.
4. AREAS OF PERMANENT WETLAND IMPACT ARE TO BE REPLICATED ON SITE.
5. THE ENTIRETY OF THE LIMIT OF WORK IS WITHIN THE 100-FOOT BUFFER TO BVW. IMPACTS IN THE 100-FOOT BUFFER TOTAL 29,819 SF.

**NORTH READING
CHESTNUT STREET
BVW IMPACT PLAN
SHEET 4 OF 5**0 20 50 100
SCALE: 1" = 20'

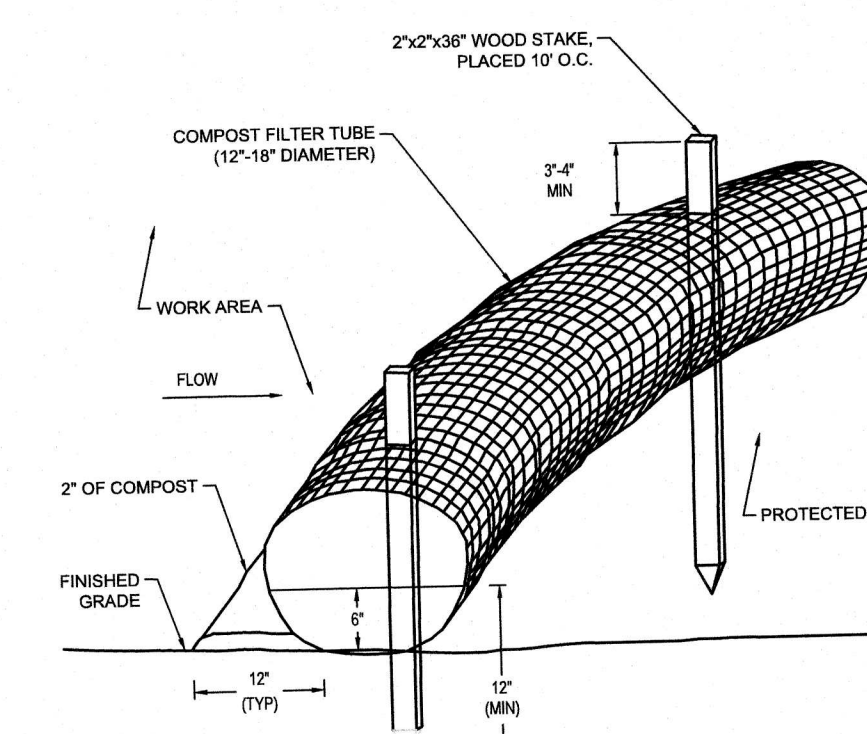
NORTH READING
CHESTNUT STREET
WETLAND REPLICATION PLAN
SHEET 5 OF 5

	REPLICATION	RESTORATION
IMPACT	999 SF (PERMANENT)	2,412 SF (TEMPORARY)
REQUIRED MITIGATION AREA	1.5:1 RATIO 1,499 SF	1:1 RATIO 2,412 SF
PROVIDED MITIGATION AREA	1,503 SF	2,412 SF
NET	4 NET SF OF WETLAND	0 NET SF OF WETLAND

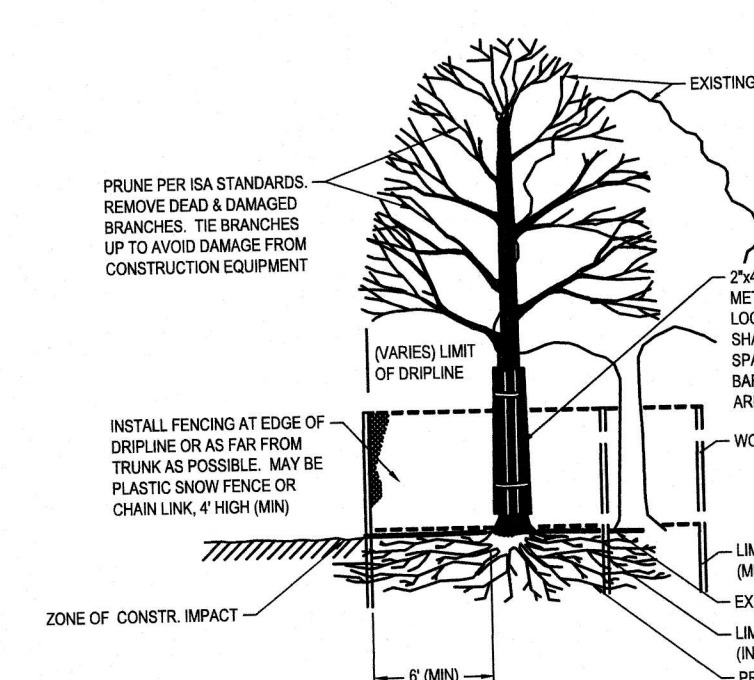
- NOTES:
1. NORTH READING WETLAND REGULATIONS
4.4 COMPENSATORY WETLAND AREA SHALL BE PROVIDED AT 1.5 TIMES THE SIZE OF THE LOST AREA.

PROPOSED PLANTING SUMMARY TABLE						
SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
	13	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	24" - 36"	5' ON CENTER	CONTAINER
	44	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	24" - 36"	5' ON CENTER	CONTAINER
	12	VIBURNUM DENTATUM	SMOOTH ARROW WOOD	24" - 36"	5' ON CENTER	CONTAINER
	14	ACER RUBRUM	RED MAPLE	MIN 6'	10' ON CENTER	
	2	ULMUS AMERICANA	AMERICAN ELM	MIN 6'	10' ON CENTER	

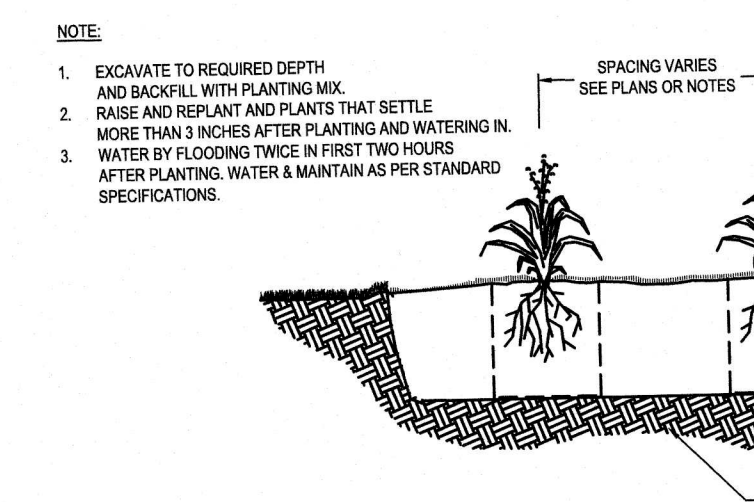
- PLANTING NOTES:
1. CONTRACTOR SHALL HAVE ALL SUBSURFACE UTILITIES MARKED PRIOR TO THE START OF WORK.
2. FINAL LOCATION OF ALL PLANT MATERIAL WILL BE APPROVED BY THE ENGINEER PRIOR TO PLANTING.
3. ALL PLANT MATERIAL WILL HAVE TAGS INDICATING COMMON NAME, BOTANICAL NAME & SIZE.
4. ALL PLANTS WILL BE MULCHED PER THE PLANTING SPECIFICATIONS AND DETAILS.
5. PLANTING SOIL OR LOAM SHALL BE APPLIED TO ALL DISTURBED AREAS AND SEEDED WITH THE CORRESPONDING SEED MIX PER THE APPLICABLE DETAIL.
6. IMPORTED SOIL SHALL CONSIST OF EQUAL PARTS ORGANIC MATTER (LEAF COMPOST IS PREFERRED) AND CLEAN LOAM OR ORGANIC RICH LOAM WITH A MINIMUM 20% ORGANIC CARBON BY DRY WEIGHT. SURVEYING OF SUBGRADES AND FINISHED ELEVATIONS SHOULD BE CONDUCTED FREQUENTLY DURING CONSTRUCTION.
7. SEEDS FROM OTHER SITES GET MIXED IN WITH THEM. THEY SHOULD BE TRANSPORTED IN VEHICLES THAT HAVE BEEN WASHED SO THAT NO EXOTIC/INVASIVE CONTAMINATION OF THESE SOILS SHOULD BE PREVENTED.
8. SEEDS FROM OTHER SITES GET MIXED IN WITH THEM. THEY SHOULD BE TRANSPORTED IN VEHICLES THAT HAVE BEEN WASHED SO THAT NO EXOTIC/INVASIVE CONTAMINATION OF THESE SOILS SHOULD BE PREVENTED.
9. SHRUBS SHOULD BE PLANTED IN A RANDOM PATTERN OR IN CLUSTERS TO MIMIC NATURAL CONDITIONS.
10. TRUCKS THAT HAVE PREVIOUSLY BEEN ON OTHER SITES SHOULD BE WASHED PRIOR TO INTRODUCTION TO THE RESTORATION SITE SO THAT MUD/DIRT WITH EXOTIC/INVASIVE SEEDS IS NOT INADVERTENTLY BROUGHT TO THE RESTORATION SITE.
11. EXOTIC/INVASIVE SEEDS IS NOT INADVERTENTLY BROUGHT TO THE RESTORATION SITE.
12. FALL PLANTINGS SHOULD BE DONE BEFORE THE FIRST FROST, BUT NO LATER THAN NOVEMBER 15.



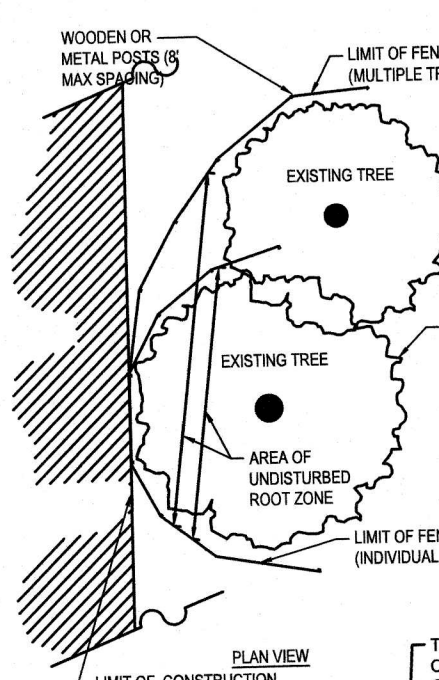
COMPOST FILTER TUBE
N.T.S.



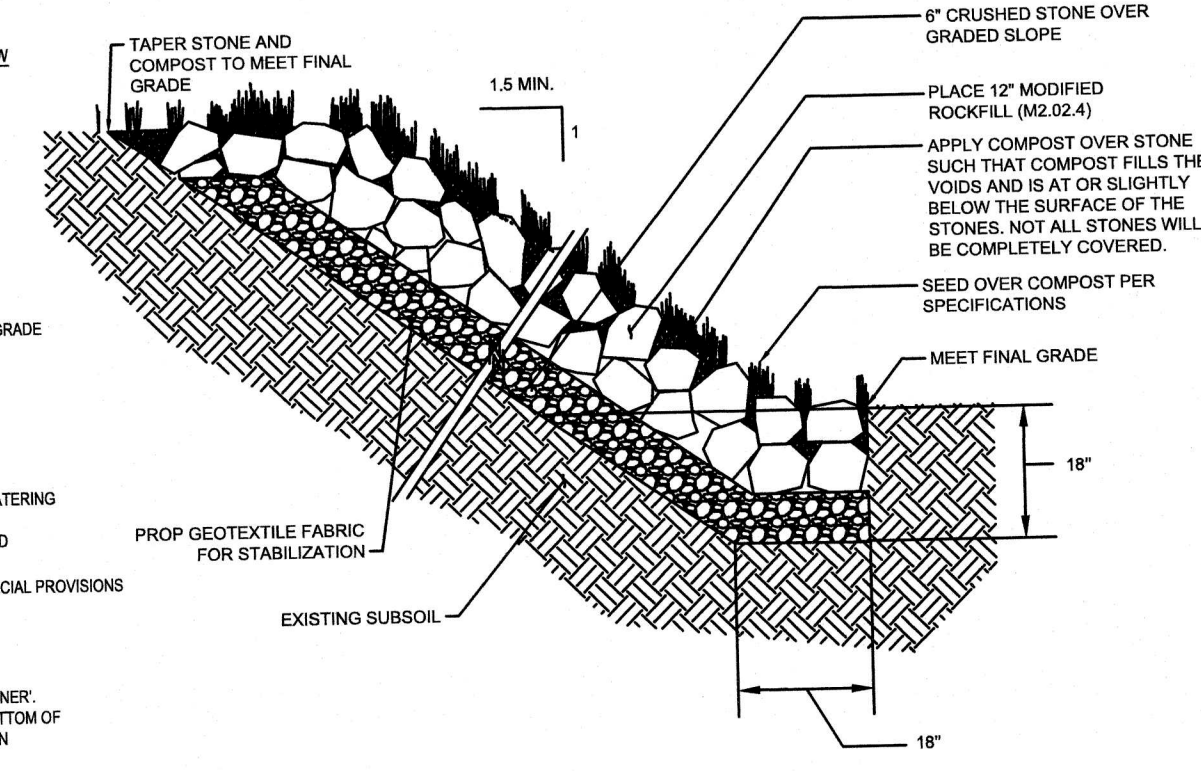
TREE PROTECTION
N.T.S.



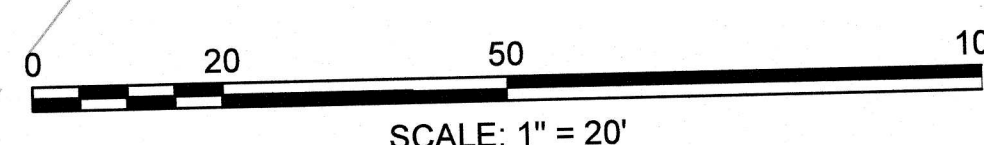
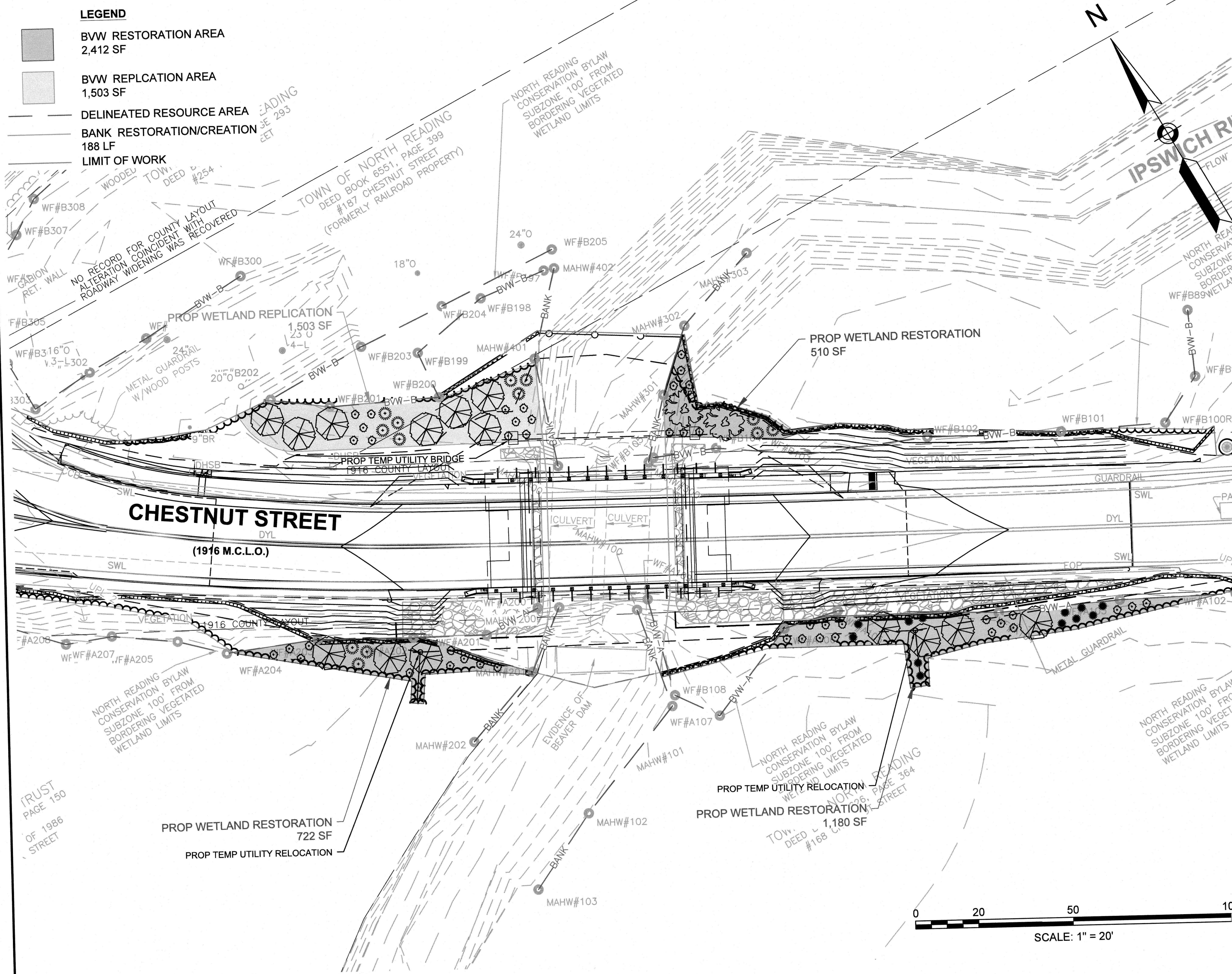
PERENNIAL PLANTING
N.T.S.



STONE FOR PIPE ENDS
N.T.S.

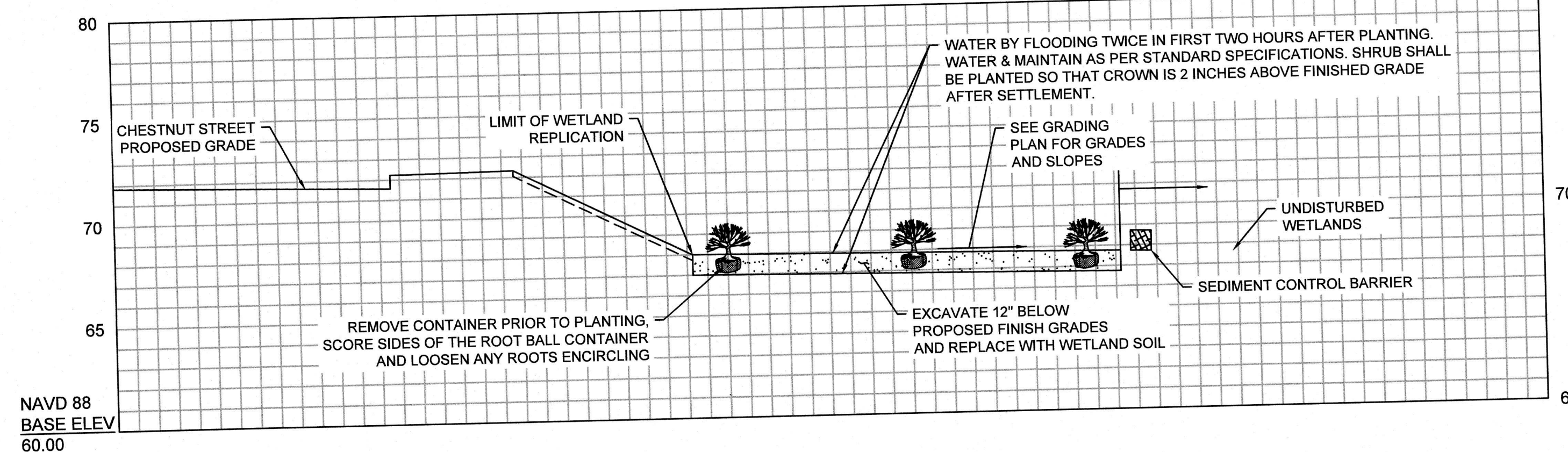


COMPOST AND SEED OVER MODIFIED ROCKFILL (NON-WATERWAY)
N.T.S.



SCALE: 1" = 20'

WETLAND REPLICATION AREA



NAVD 88
BASE ELEV
60.00