

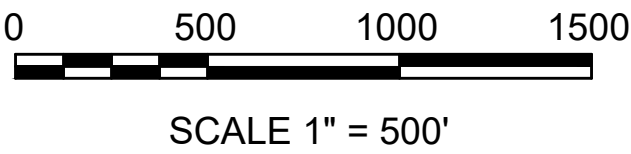
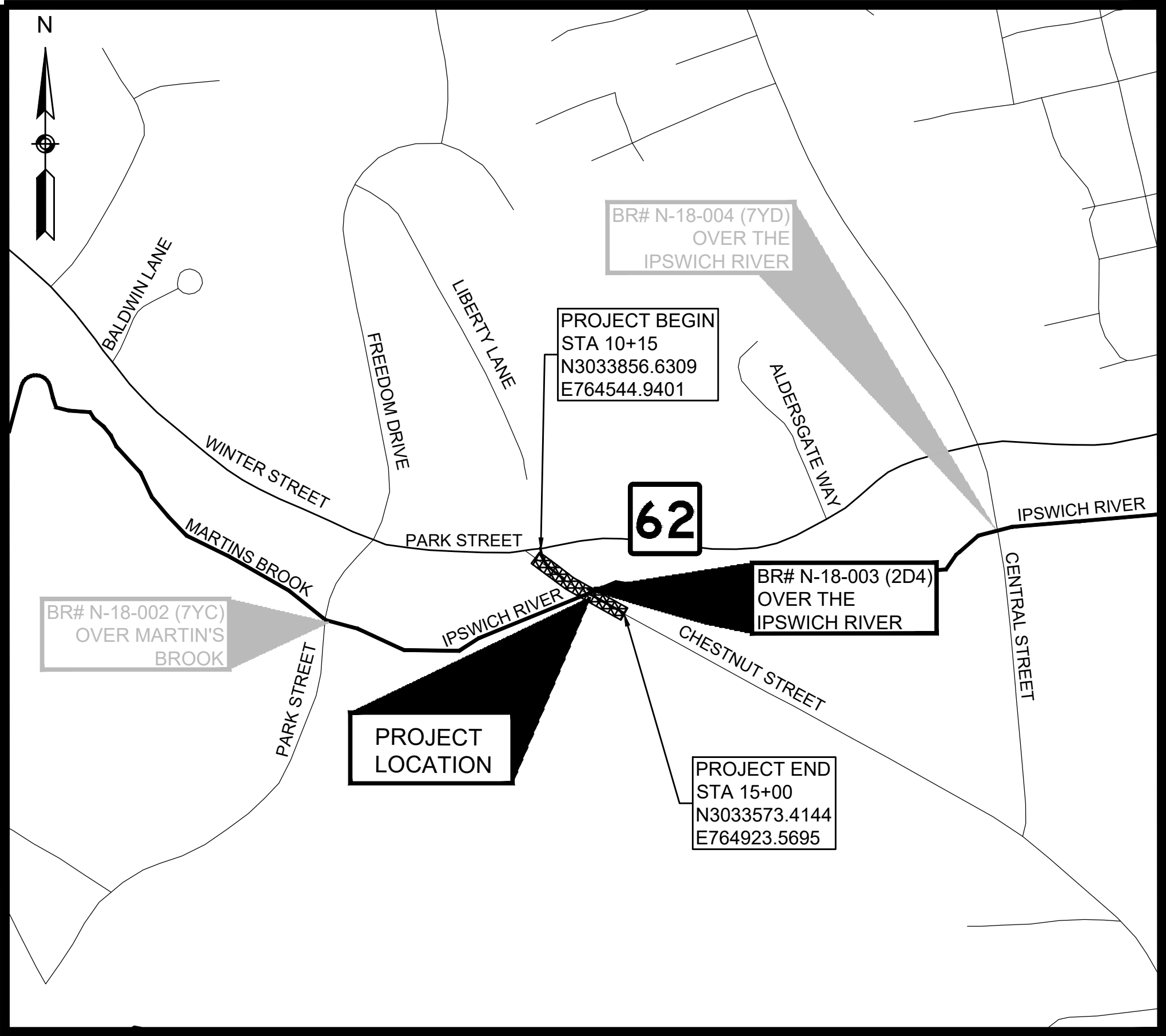
BRIDGE REPLACEMENT PROJECT

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

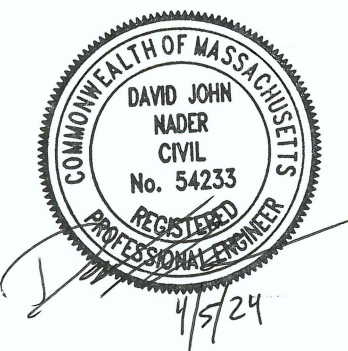
IN THE TOWN OF
NORTH READING
MIDDLESEX COUNTY

NOTICE OF INTENT


INDEX	
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



NORTH READING
CHESTNUT STREET NOI
TITLE SHEET & INDEX
SHEET 1 OF 5



04/5/2024	UTILITY RELOCATION IMPACTS	1
DATE	DESCRIPTION	REV #

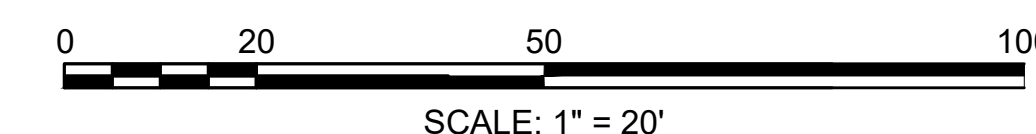
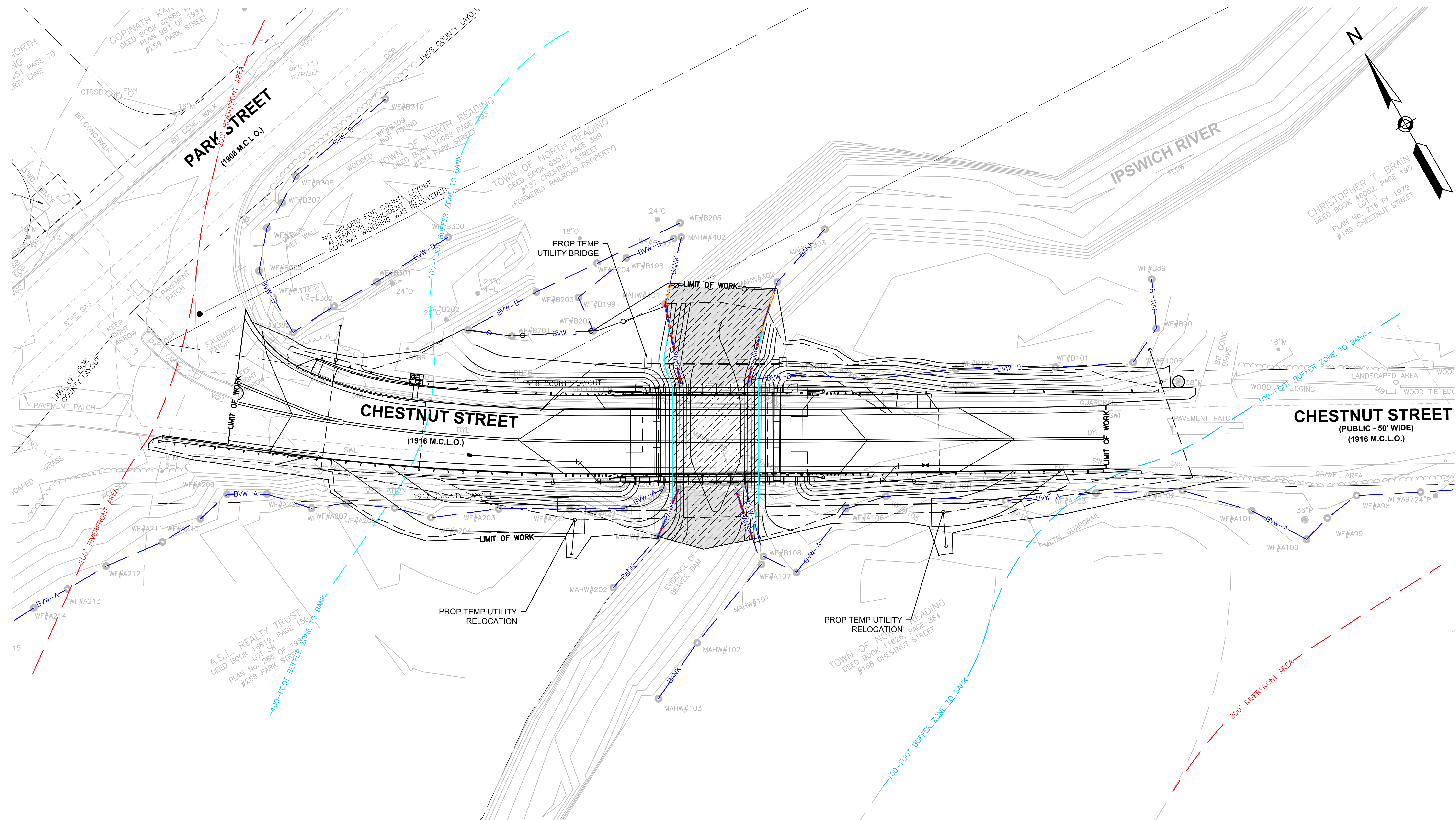
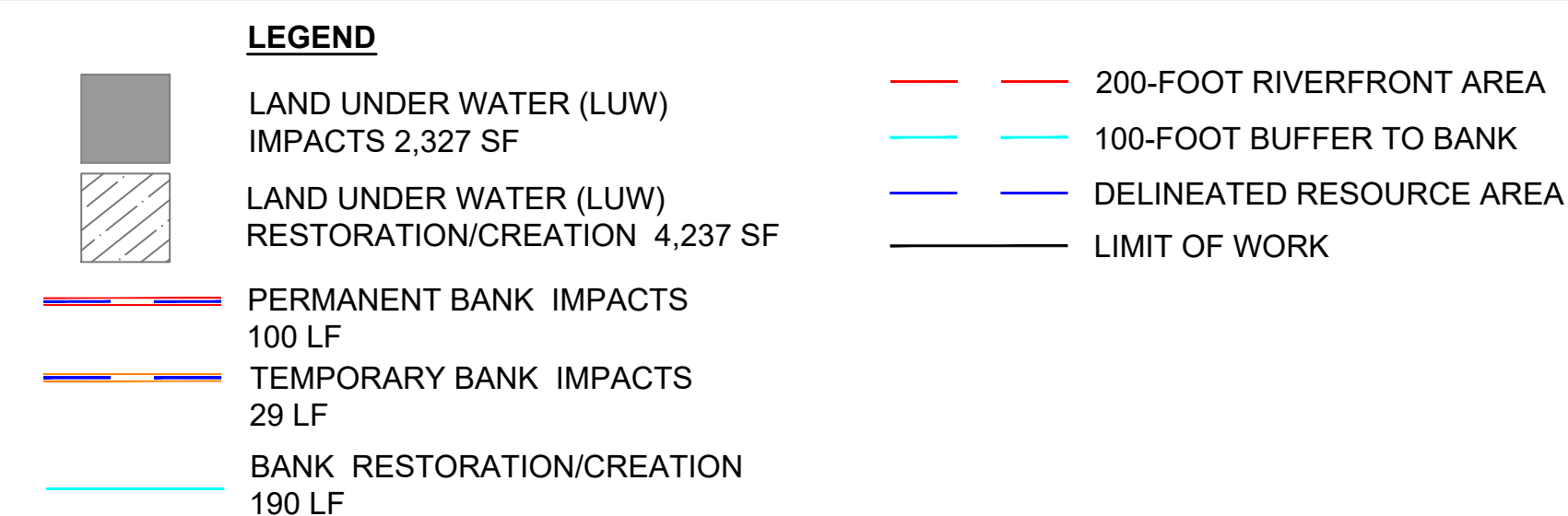


TEC, Inc.

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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**NORTH READING
CHESTNUT STREET
BANK & LUW IMPACT PLAN
SHEET 2 OF 5**



**NORTH READING
CHESTNUT STREET
BLSF IMPACT PLAN
SHEET 3 OF 5**

LEGEND

EXISTING BLSF (71')

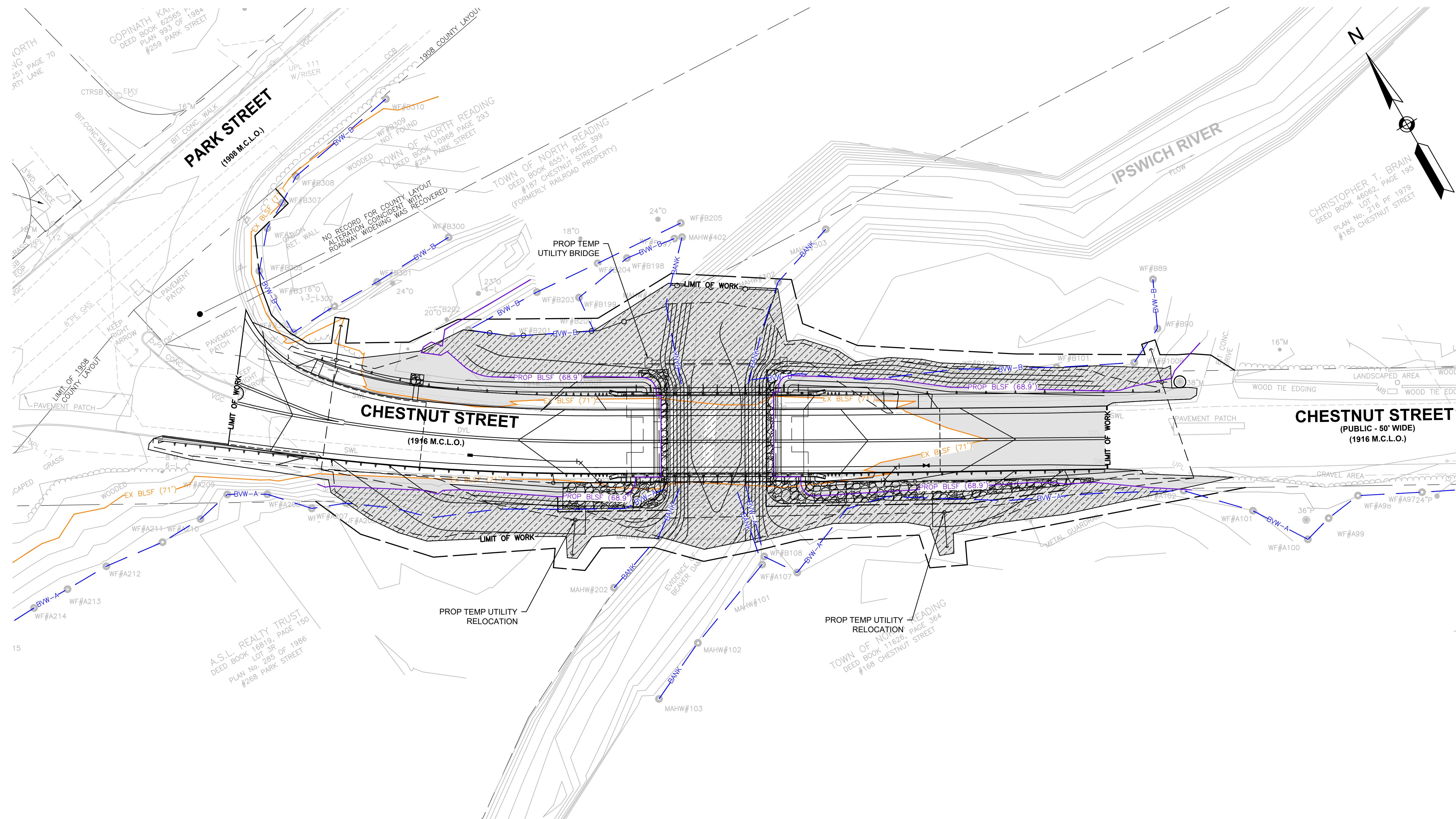
EXISTING BORDERING LAND
SUBJECT TO FLOODING (71')

PROPOSED BLSF (68.9')
+2,229 CF FLOOD STORAGE

PROPOSED BORDERING LAND
SUBJECT TO FLOODING (68.9)

DELINEATED RESOURCE AREA
LIMIT OF WORK

LIMIT OF WORK



0 20 50 100
SCALE: 1" = 20'

LEGEND

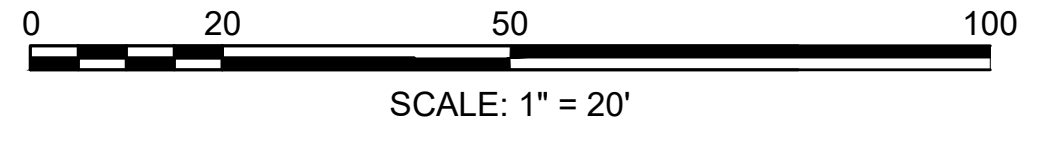
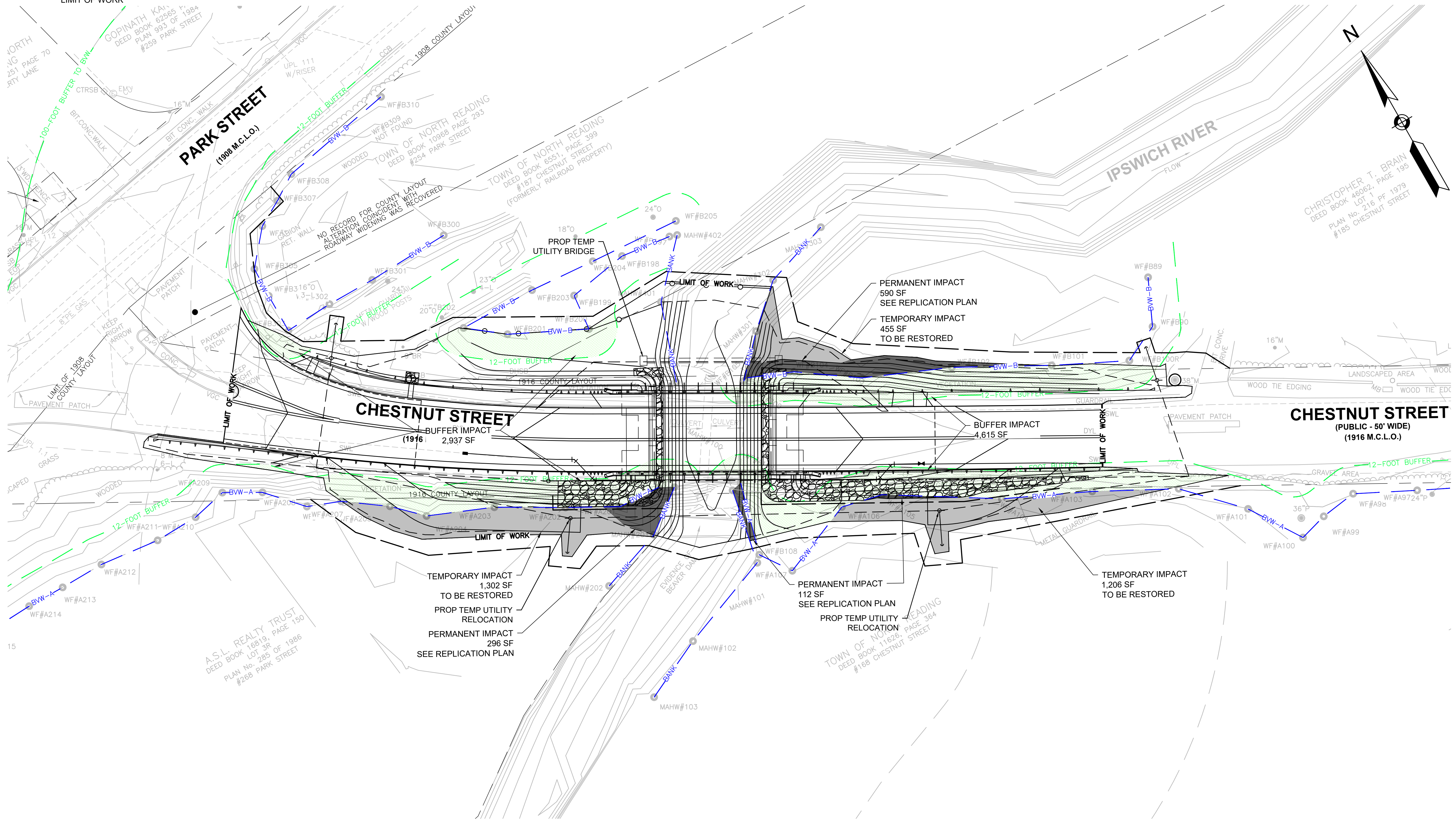
- PERMANENT BVW IMPACTS
998 SF
- TEMPORARY BVW IMPACTS
2,963 SF
- 12-FOOT BUFFER TO BVW IMPACTS
7,552 SF

- 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**



	REPLICATION	RESTORATION
IMPACT	998 SF (PERMANENT)	2,963 SF (TEMPORARY)
REQUIRED MITIGATION AREA	1.5:1 RATIO 1,497 SF	1:1 RATIO 2,963 SF
PROVIDED MITIGATION AREA	1,501 SF	2,963 SF
NET	4 NET SF OF WETLAND	0 NET SF OF WETLAND

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

PRUNE PER ISA STANDARDS
REMOVE DEAD & DAMAGED BRANCHES. THE BRANCHES UP TO AVOID DAMAGE FROM CONSTRUCTION EQUIPMENT

(VARIES) LIMIT OF DRUPLINE

INSTALL FENCING AT EDGE OF DRUPLINE OR AS FAR FROM TRUNK AS POSSIBLE. MAY BE PLASTIC SNOW FENCE OR CHAIN LINK, 4' HIGH (MIN)

ZONE OF CONSTR. IMPACT

9" (MIN)

2"X4" LUMBER ATTACHED W/ METAL STRAPPING AT 2' LOCATIONS (MIN). GLACING SHALL BE 8" HIGH WITH 6" SPACING OF BOARDS. WRAP BARK W/ BURLAP PRIOR TO ARMORING.

WOODEN OR METAL POSTS

EXISTING TREES

EXISTING TREE

AREA OF UNDISTURBED ROOT ZONE

WOODEN OR METAL POSTS (NAIL SPACING)

LIMIT OF FENCING (LIMIT TREE TREES)

LIMIT OF CANOPY (VARIES)

LIMIT OF FENCE (INDIVIDUAL TREE)

LIMIT OF CONSTRUCTION IMPACT (REFER TO PLANS)

PLAN VIEW

SW FILLING

LIMITS OF ENERGY DISSIPATION ROW

PLAN

STONE FOR PIPE ENDS (M2 02.3)

EXIST GRADE

12"

DSO

SECTION A-A

GEOTEXTILE FABRIC FOR SEPARATION

COMPACTED SUBGRADE

EMBEDDED CRUSHED STONE BEDDING 6" BELOW EXIST GRADE (2" STONE)

STONE FOR PIPE ENDS

N.T.S.

8" CRUSHED STONE OVER GRADED SLOPE

PLACE 12" MODIFIED ROCKFILL (M2 02.4)

1.5 MIN.

TAPER STONE AND COMPOST TO MEET FINAL GRADE

NOTE:
NO STORAGE OF EQUIPMENT OR STOCKPILING OF MATERIALS WITHIN DRUPLINE IS ALLOWED

PERENNIAL PLANTING

1. EXCAVATE TO REQUIRED DEPTH AND BACKFILL WITH PLANTING MIX.

2. RAISE AND RE-PLANT PLANTS THAT SETTLE MORE THAN 3 INCHES AFTER PLANTING AND WATERING IN.

3. WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS.

Labels for Perennial Planting:

- SPACING VARIES (SEE PLANS OR NOTES)
- CROWN OF PLANT TO BE 2 INCHES MIN. ABOVE FINISHED GRADE AFTER SETTING
- 2-3 INCH DEPTH AGED PINE BARK MULCH (PULL AWAY FROM BASE OF SHAUB)
- 3 INCH HIGH EARTH WATERING SAUCER AROUND PLANTING BED
- BACKFILL MIX PER SPECIAL PROVISIONS
- REMOVE PLANT FROM CONTAINER EVEN IF PLANTABLE CONTAINER; SCORE SIDES AND BOTTOM OF ROOT BALL TO LOOSEN ROOTS
- UNDISTURBED SUBGRADE

COMPOST AND SEED OVER MODIFIED ROCKFILL (NON-WATERWAY)

Labels for Compost and Seed Over Modified Rockfill (Non-Waterway):

- SEED OVER COMPOST PER SPECIFICATIONS
- MEET FINAL GRADE
- 18"
- PROP. GEOTEXTILE FABRIC FOR STABILIZATION
- EXISTING SUBSOIL
- 18"

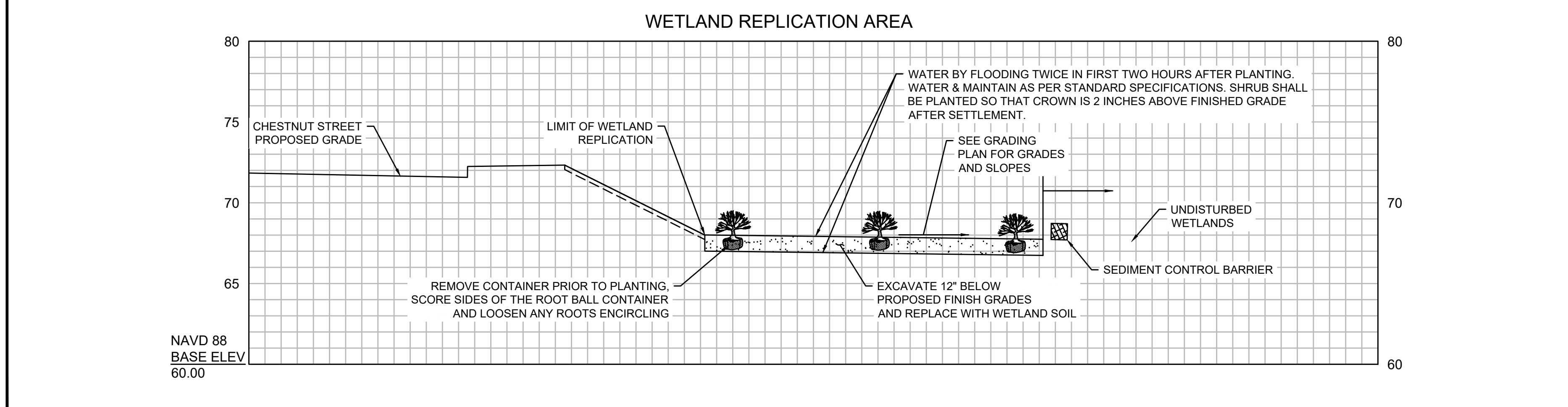


Diagram illustrating the construction of a wetland replication area and a sediment control barrier. The vertical axis shows elevation in feet, ranging from 60.00 to 80.00.

Key features and instructions:

- CHESTNUT STREET PROPOSED GRADE:** Indicated by a horizontal line at approximately 72 feet elevation.
- LIMIT OF WETLAND REPLICATION:** A dashed line indicating the boundary of the wetland area.
- REMOVE CONTAINER PRIOR TO PLANTING. SCORE SIDES OF THE ROOT BALL CONTAINER AND LOOSEN ANY ROOTS ENCIRCLING:** Instruction for the first plant.
- WATER BY FLOODING TWICE IN FIRST TWO HOURS AFTER PLANTING. WATER & MAINTAIN AS PER STANDARD SPECIFICATIONS. SHRUB SHALL BE PLANTED SO THAT CROWN IS 2 INCHES ABOVE FINISHED GRADE AFTER SETTLEMENT.** Instruction for the second plant.
- SEE GRADING PLAN FOR GRADES AND SLOPES:** Reference to the grading plan for the third plant.
- EXCAVATE 12" BELOW PROPOSED FINISH GRADES AND REPLACE WITH WETLAND SOIL:** Instruction for the fourth plant.
- UNDISTURBED WETLANDS:** Area to the right of the barrier.
- SEDIMENT CONTROL BARRIER:** A structure separating the wetland replication area from the undisturbed wetlands.

NAVD 88
BASE ELEV
60.00

NAVD 88
BASE ELE
60.00