

ADDEUNDUM #3
CONTRACT NO: 2024-04E
CHESTNUT STREET OVER IPSWICH RIVER BRIDGE REPLACEMENT
NORTH READING, MA 01864

Please acknowledge Addenda No. 1, 2, & 3 in your bid proposal, as acknowledgement must be entered in the space provided on the Bid Form.

RESPONSE TO CONTRACTOR QUESTIONS (Attachment 1): (3 pages)

SECTION 00300 – BID FORM (Attachment 2): (3 pages)

Revised bid tabs (Page 00300-4)
[Added Item 180.01 – Environmental Health and Safety Program
Added Item 180.02 – Personal Protection Level C Upgrade
Added Item 180.03 – Licensed Site Professional Services]

Revised bid tabs (Page 00300-7)
[Updated Quantity for 751.7,
Changed from 10 Cubic Yards to 20 Cubic Yards]
[Added Item 755.45 – Wetland Restoration]

Revised bid tabs (Page 00300-8)
[Removed Item 945.03 – 30-Inch Utility Pole Caisson]
[Added Item 983.521 – Streambed Restoration]

SECTION 02010 – REVISED SPECIAL PROVSISIONS (Attachment 3): (12 pages)

Revised Sections 02010-26, 02010-32 & 02010-36
[Updated Special Provision for Item numbers]

Added Section for Item 755.45
[Added Special Provisions for Item 755.45]

Added Section for Item 983.521
[Added Special Provisions for Item 983.521]

REVISED PLAN SHEETS (Attachment 4):

Edited Sheets 4 &12 (2 pages)
[Clarified access paths to be built “By Others”]
[Identified areas of Wetland Restoration]

**CONTRACT NO: 2024-04E
CHESTNUT STREET OVER IPSWICH RIVER BRIDGE REPLACEMENT
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RESPONSE TO CONTRACTOR QUESTIONS (Addendum 3) January 16, 2025

From Pre-Bid Meeting on January 9, 2025:

1. *Are there any work hour restrictions?*

A: 7AM - 5PM Monday-Friday are North Reading's standard construction hours. However, 7AM - 9PM is allowed per local zoning ordinance. If working past 5PM or Saturday work is needed, the Contractor will need permission and oversight by the Town Engineer or his consultant, TEC. Holiday work restrictions are noted in the project manual.

2. *Please provide more information for Item 945.03 at 3 Each; where are these required? what depth is required? detail for reinforcing?*

A: Utility pole caissons are not the contractor's responsibility. Item 945.03 has been removed from project, see updated bid form.

3. *Please add a pay item for 180.01 Environmental Health and Safety Plan; mentioned in the specifications but not included on the bid form.*

A: Pay Item 180.01 has been added to bid form.

4. *Please add a pay item for 180.02 Personal Protection Level C Upgrade; mentioned in the specifications but not included on the bid form.*

A: Pay Item 180.02 has been added to bid form.

5. *Please add a pay item for 180.03 Licensed Site Professional; mentioned in the specifications but not included on the bid form.*

A: Pay Item 180.03 has been added to bid form.

6. *Are the roller supports, for the permanent gas line work across the new bridge, provided by the gas company?*

A: National Grid will provide the non-conductive 3B support roller assemblies for both the temporary utility support and permanent gas line work across the new bridge. Contractor is responsible for providing (and pre-drilling) all steel utility supports.

7. It was mentioned during the pre-bid meeting that the overhead utility relocation work would be performed before the General Contractor mobilizes; please confirm the complete overhead utility relocation schedule.

A: Clearing / tree removal and RMLD pole re-location are anticipated to be complete prior to the general contractor mobilization. A specific schedule has not been finalized yet. Reading Municipal Light Department anticipates the poles being relocated by April 1.

8. Please confirm that the cost to the utility companies to perform their own relocations is not the responsibility of the General Contractor.

A: Costs for utility companies to perform relocations are not the responsibility of the General Contractor.

9. Will the existing waterline be cut and capped by the Town?

A: No, the contractor is responsible for removing the existing water line that is no longer needed. The Town Water Dept. and Town Engineer will be available for inspections and to answer specific questions.

10. Does the existing waterline have gate valves that can be closed to isolate the section within the project limits?

A: The Contractor shall utilize the proposed insertion valves to isolate the water line within the project limits. The water line on Chestnut Street will be temporarily dead ended beyond the existing service for #185 Chestnut Street. The water for the service at house #185 Chestnut Street will remain and no temporary water infrastructure is required for this project.

11. The Construction Plans show a 12' Temp Gravel Access Path on either side of the bridge; what pay item covers the cost, installation and removal, of this temporary access path?

A: The temporary gravel access paths will be constructed by the Town, prior to the General Contractor's mobilization. The plans have been amended to label this work as "By Others", refer to amended Typical Sections within. Once the temporary access paths are no longer required, the Contractor shall repurpose this material on site, if feasible, or it shall be removed and disposed of, per Item 120. Upon completion, the temporarily disturbed areas shall be restored to match the existing conditions, the bid tabs have been amended to include Item 755.45 – Wetland Restoration. Refer to the cross sections for the proposed finish grade.

12. There are two large electrical boxes that stop 500' before bridge they are not marked through the bridge. What are these and do they go over the bridge?

A: These electrical boxes are RMLD Electric Manholes that run to the RMLD station located behind the Town's DPW garage. All RMLD electric infrastructure is located above ground per the contract drawings in the area of the project limits.

13. What is Item 903. to be used for?

A: Item 903. is to be used for the thrust blocks at proposed water fitting bends, refer to the construction details for thrust block details.

PLANHOLDERS LIST

The plan holders list (updated 1/16/2025 @ 9:30AM) has been attached, for reference.

2024-04E Bridge Replacement Chestnut Street over Ipswich River Plan Holders

Company Name

Kodiak Corporation
Projectdog, Inc.
Northern Construction Service, LLC
Construction Dynamics, Inc.
E.T.& L. Corp.
EJ Prescott
Dodge Data & Analytics
JTROPEANO, INC.
Unified Contracting
MAS Building and Bridge Inc
Kinetic Demolition & Engineering, LLC
S&R Corporation
Brighter Horizons Environmental Corporation
J.R. Vinagro Corporation
T Ford Company, Inc.
Aqualine Utility Inc.
MacKay Construction Services
North America Procurement Council Inc., PBC
Aptus
Concrete Systems, Inc.
Dodge Construction Network
Island Pavement Cutting Co., Inc.
PWXPRESS
Holcim US
R. Zoppo Corp

Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)
SECTION 00300

BROUGHT FORWARD

ITEM NO.	QTY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE		TOTAL	
			DOLLARS	CENTS	DOLLARS	CENTS
151.2	700	AT GRAVEL BORROW FOR BACKFILLING STRUCTURES AND PIPES PER CUBIC YARD				
153.1	15	AT CONTROLLED DENSITY FILL - NON-EXCAVATABLE PER CUBIC YARD				
156.	90	AT CRUSHED STONE PER TON				
156.1	325	AT CRUSHED STONE FOR BRIDGE FOUNDATIONS PER TON				
170.	700	AT FINE GRADING AND COMPACTING - SUBGRADE AREA PER SQUARE YARD				
180.01	1	AT ENVIRONMENTAL HEALTH AND SAFETY PROGRAM PER LUMP-SUM				
180.02	10	AT PERSONAL PROTECTION LEVEL C UPGRADE PER HOURS				
180.03	10	AT LICENSED SITE PROFESSIONAL SERVICES PER HOURS				
181.11	20	AT DISPOSAL OF UNREGULATED SOIL PER TON				
181.12	10	AT DISPOSAL OF REGULATED SOIL - IN-STATE FACILITY PER TON				
181.13	10	AT DISPOSAL OF REGULATED SOIL - OUT-OF-STATE FACILITY PER TON				
181.14	8	AT DISPOSAL OF HAZARDOUS WASTE PER TON				
258.	5	AT STONE FOR PIPE ENDS PER SQUARE YARD				
280.15	1	AT SIDEWALK FLUME PER LUMP-SUM				
302.08	220	AT 8 INCH DUCTILE IRON WATER PIPE (RUBBER GASKET) PER FOOT				

CARRIED FORWARD

BT-2

Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)
SECTION 00300

BROUGHT FORWARD _____

ITEM NO.	QTY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE		TOTAL	
			DOLLARS	CENTS	DOLLARS	CENTS
697.1	1	AT SILT SACK PER EACH				
697.2	50	AT FLOATING SILT FENCE PER FOOT				
698.1	125	AT GEOTEXTILE FABRIC FOR STABILIZATION PER SQUARE YARD				
698.3	5	AT GEOTEXTILE FABRIC FOR SEPARATION PER SQUARE YARD				
698.4	150	AT GEOTEXTILE FABRIC FOR PERMANENT EROSION CONTROL PER SQUARE YARD				
701.	125	AT CEMENT CONCRETE SIDEWALK PER SQUARE YARD				
701.2	24	AT CEMENT CONCRETE PEDESTRIAN CURB RAMP PER SQUARE YARD				
748.	1	AT MOBILIZATION PER LUMP SUM				
751.	100	AT LOAM FOR ROADSIDES PER CUBIC YARD				
751.7	20	AT COMPOST BLANKET PER CUBIC YARD				
755.35	1	AT INLAND WETLAND REPLICATION AREA PER LUMP SUM				
755.45	300	AT WETLAND RESTORATION PER SQUARE YARD				
755.75	80	AT WETLAND SPECIALIST PER HOURS				
756.	1	AT NPDES STORMWATER POLLUTION PREVENTION PLAN PER LUMP SUM				
765.	700	AT SEEDING PER SQUARE YARD				

CARRIED FORWARD _____

BT-5

Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)
SECTION 00300

BROUGHT FORWARD

ITEM NO.	QTY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE		TOTAL	
			DOLLARS	CENTS	DOLLARS	CENTS
765.453	2	AT WOODLAND EDGE SHADE SEED MIX PER POUND				
765.635	3	AT NATIVE SEEDING AND ESTABLISHMENT PER POUND				
767.121	800	AT SEDIMENT CONTROL BARRIER PER FOOT				
767.78	125	AT COMPOST MULCH OVER MODIFIED ROCK PER SQUARE YARD				
769.	475	AT PAVEMENT MILLING MULCH UNDER GUARD RAIL PER FOOT				
847.1	1	AT SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY - STEEL PER EACH				
866.106	800	AT 6 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC) PER FOOT				
867.106	850	AT 6 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC) PER FOOT				
874.2	1	AT TRAFFIC SIGN REMOVED AND RESET PER EACH				
874.8	1	AT MISCELLANEOUS SIGNS REMOVED AND RESET PER EACH				
903.	15	AT 3000 PSI, 1.5 INCH, 470 CEMENT CONCRETE PER CUBIC YARD				
983.1	375	AT RIPRAP PER TON				
983.521	140	AT STREAMBED RESTORATION PER CUBIC YARD				

CARRIED FORWARD

BT-6

Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)

SECTION 02010

ITEM 280.15

SIDEWALK FLUME

LUMP SUM

The work under this item shall conform to the relevant provisions of Sections 201, 280, 701, 901, and 960 of the MassDOT Standard Specifications for Highways and Bridges and the following:

This work under this item includes the construction of a sidewalk section with a drainage flume with cast iron frame & covers. The work also includes but is not limited to the preparation of subgrade and borrow foundation; fine grading, and adjustment of the first 6" of roadway gutter pavement, jointing and protective coatings.

The Contractor shall verify all dimensions for the constructability of the sidewalk flume and shall submit shop drawings for approval by the Engineer. Only after approval shall any reinforcement, frames, or covers be ordered. The Contractor shall confirm elevations at the invert-in, the roadway gutter, the invert-out, and the top of the walk. Storm water drainage is to be away from the roadway. The sidewalk flume shall be constructed such that the longitudinal slope and cross slope of the sidewalk surface and the frames & covers shall comply with ADA/AAB guidelines and shall meet and match adjacent sidewalk slopes. Covers are not bolted down.

References

In addition to the MassDOT Standard Specifications, the Contractor may refer to the following MassDOT Construction Standard Drawings:

E 201.6.0 Catch Basin Frame

E 203.1.0 Drop Inlets – Frame Sections and 2-3 flange 4" C.I. Frames E 203.2.0 Drop Inlets Type AF – Precast

Submittals

Submit shop drawings for the castings and concrete work. Provide invert elevations and flume drainage slopes, roadway cross slopes, sidewalk longitudinal and cross slopes, and top of cover elevations and slopes. Indicate non-skid treatment for the cover. Identify steel reinforcement. Identify concrete mix.

Submit weigh slips for cement concrete (if casting in place) with mix design on the slip. Submit delivery slips for steel reinforcing (if casting in place).

Materials

Materials are as shown on the construction detail in the plans. Otherwise, comply with MassDOT material specifications.

Castings shall comply with MassDOT Section 201.40 of the MassDOT Standard Specifications for Highways and Bridges.

***Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)***

SECTION 02010

ITEM 697.1 (Continued)

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 697.1 will be measured and paid at the Contract unit price per each, complete in place, which price shall include all labor, materials, equipment and incidental costs required to complete the work.

No separate payment will be made for removal and disposal of the sediment from the insert, regardless of the frequency of removal and disposal, but all costs in connection therewith shall be included in the Contract unit price bid.

Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)

SECTION 02010

ITEM 751.7 (Continued)

When compost blanket is proposed for areas with planting, compost (and seed if applicable) shall be applied after planting. If compost and seed occur prior to planting, areas shall be regraded and compost and seed reapplied to the satisfaction of the Engineer and at the Contractor's expense.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Compost Blanket will be measured and paid for at the Contract unit price per Cubic Yard which price shall include all labor, materials, equipment, and all incidental costs required to complete the work of pneumatically applying compost.

Surface preparation of substrate receiving compost blanket shall be compensated under the applicable item for placement of loam, sand, ordinary borrow, wetland soil, topsoil rehandled and spread, tilled existing soil, or other specified substrate.

Seeding will be compensated for under the appropriate seeding Items

**Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)**

SECTION 02010

ITEM 755.45

WETLAND RESTORATION

SQUARE YARD

DESCRIPTION

The work under this item shall conform to the relevant provisions of Subsections 120, 751, 765, 767, and 771 of the MassDOT Standard Specifications for Highways and Bridges and the following:

The work under this item shall include all labor and furnishing of materials to complete the work specified herein to protect and restore existing inland wetland areas that will be temporarily impacted as shown on the drawings and as required by the Engineer.

Inland Wetland Replication work shall be as specified and compensated under that Item 755.35.

Restoration Area shall be constructed to meet the requirements of all associated permits and certifications, including relevant performance standards of the Massachusetts Wetlands Protection Act (MGL C. 131, s40), Section 401 Water Quality Certification, and Section 404, U.S. Army Corps of Engineers General Permit.

All work shall be in coordination with an approved Wetland Specialist. Wetland Specialist qualifications and requirements shall be per Item 755.75, Wetland Specialist.

SUBMITTALS – DOCUMENTS

Request for Conditional Acceptance: As specified below, a letter requesting Conditional Acceptance of the work and the site conditions shall be submitted to the Engineer.

Request for Final Acceptance: As specified below, a letter requesting Final Acceptance of the work and the site conditions shall be submitted to the Engineer.

Request for Certificate of Compliance (Partial or Full): If applicable, request for a Certificate of Compliance shall be submitted to the Engineer for distribution to appropriate regulatory agencies as specified below.

ASSOCIATED ITEMS AND MATERIALS

Compost shall be in accordance with Subsection 751 and M1.06.0 Organic Soil Additives of the Standard Specifications. Compost shall not contain seeds, roots, stems, or other viable parts of invasive plants or other noxious plants. Off-site sources shall be identified and available for inspection prior to transport of material to the site to verify that they are likely to be free of invasive plant species, including all viable plant parts.

Compost Blanket shall be as specified under that item.

**Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)**

SECTION 02010

ITEM 755.45 (Continued)

Seed Mix

Required submittals include:

- Certificate of Materials from the supplier shall be submitted and approved 30 days prior to ordering seed. Seed species listed on the certificate shall include ecotype region (i.e., *Asclepias incarnata*, PA Ecotype).
- Seed tag from the bag of seed used shall be submitted to the Engineer at the time of seeding. Seed tag shall include ecotype region and species, guaranteed percentages of purity, weed content and germination of the seed, and the net weight. Seed tag shall match the Certificate of Materials, include the name of the supplier, and date material was sent.
- Bill of lading or a notarized Certificate of Compliance from the Supplier serving as proof of purchase shall be submitted if requested by the Engineer. Document shall include date of sale, quantity, lot number, and address of Supplier. This shall match the seed tag. Notary shall not work for either the contractor or seed supplier.

**Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)**

SECTION 02010

ITEM 755.45 (Continued)

Seed mix shall be: Wetland – Riparian Mix

Mix 765.553 Wetland – Riparian Mix

	<u>Botanical Name</u>	<u>Common Name</u>	<u>% PLS By Weight</u>
Grass			
	Sorghastrum nutans NY Eco	Indiangrass NY Ecotype	14.00%
	Schizachyrium scoparium	Little Blue Stem	14.00%
	Elymus riparius	Riverbank Wild Rye	10.00%
	Elymus virginicus	Virginia Wild Rye	10.00%
	Panicum clandestinum 'Tioga'	Deer Tongue 'Tioga'	9.00%
	Andropogon gerardii NY Eco	Big Bluestem NY Eco	8.00%
	Carex vulpinoidea	Fox Sedge	7.00%
	Panicum virgatum	Switchgrass	3.00%
	Juncus effusus	Soft Rush	2.00% Agrostis
	perennans	Upland Bentgrass	2.00%
	Scirpus atrovirens	Green Bulrush	<u>1.00%</u>
			80.00%
Herb/Forb			
	Chamaecrista fasciculata	Partridge Pea	3.00%
	Verbena hastata	Blue Vervain	3.00%
	Asclepias incarnata	Swamp Milkweed	3.00%
	Heliopsis helianthoides	Ox-Eye Sunflower	2.00%
	Eupatorium perfoliatum	Boneset	2.00%
	Aster umbellatus	Flat Topped White Aster	1.00%
	Aster prenanthoides	Zig Zag Aster	1.00%
	Aster puniceus	Aster – Swamp	1.00%
	Aster novae-angliae	New England Aster	1.00%
	Eupatorium maculatum	Joe-pye Weed	1.00%
	Monarda fistulosa	Wild Bergamot	1.00%
	Vernonia noveboracensis	New York Ironweed	<u>1.00%</u>
			<u>20.00%</u>
			100.00%

Fertilizers shall not be used.

Straw mulch or hydromulch shall be per Section M6 of the Standard Specifications.

**Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)**

SECTION 02010

ITEM 755.45 (Continued)

Plants

Plant material shall conform to the applicable requirements of Subsection 771, PLANTING TREES, SHRUBS AND GROUNDCOVER, of the Standard Specifications and as amended below.

Plant Certifications shall be submitted at the time of delivery and shall conform to the Standard Specifications. Plants shall be native species, not cultivars. To the extent possible, plants shall originate from the applicable EPA Level III Ecoregion. The nursery source shall certify the provenance or origin of all plants.

Plant species and sizes to be included in the Restoration Area shall be as specified on the plans or as required by the Engineer.

Requests for substitutions shall be submitted in writing to the Engineer and the Town of North Reading Conservation Commission for review at least thirty (30) days prior to planting. All proposed substitutes shall be in conformance with the requirements herein and suitable for the site conditions.

Transplanting and plant material collected from the wild is prohibited unless approved in writing by the Engineer. Plants shall be selected from certified nurseries.

Dead and failing plants shall be replaced per the requirements of Subsection 771 of the Standard Specifications.

Water

The Contractor shall provide water and all equipment required at no extra cost. Water shall be suitable for irrigation and free from ingredients harmful to plants and wildlife. Water from the adjacent water bodies or waterways shall not be utilized. It is the Contractor's responsibility to correct injury or damage due to the lack of water, too much water, or use of contaminated water.

CONSTRUCTION METHODS & SEQUENCE

Restoration Upon Completion of Roadway Construction Work

Sediment Barriers

If required for sediment control during Restoration work (i.e, tilling is required to restore soil), sediment barriers shall be installed along the downslope perimeter of the Restoration Area beginning and ending in the surrounding upland so that no disturbed soil can enter adjacent wetlands or waters. Sediment barriers shall be in place and approved by the Engineer prior to any soil disturbance. No work shall take place outside the barriers.

Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)

SECTION 02010

ITEM 755.45 (Continued)

Removal of Fill and Grading

Fill shall be removed and disposed of as specified under the respective items.

Final elevations shall be approved by the Engineer prior to soil preparation and seeding. Grading shall be incidental to this item.

Following approval of grading to elevations required, soil shall be prepared and seeded as follows.

Soil Tilling with Compost

Two inches of compost shall be applied over the impacted area and soil shall be tilled to a depth of 4 inches below the existing grade. Following tilling, soil shall be raked relatively smooth, or as directed. Upon approval of prepared soil, area shall be seeded and hydromulched.

Seeding with Compost Blanket

Application of compost blanket and seed shall be done as one application and shall not begin until the Engineer has approved the site and soil conditions. The Contractor shall notify the Engineer when raked areas are ready for inspection and application of compost blanket and seed.

Compost shall be pneumatically applied (blown on) to a depth of one half to one inch at the same time that seed is broadcast such that seed is covered by a light application of compost.

When planting occurs on projects with compost blankets and seed application, planting shall occur prior to application of compost and seed. Otherwise, compost and seed shall be re-applied to the satisfaction of the Engineer and at not cost to the contract.

Seed tags shall be submitted at time of seeding.

Planting

Planting shall conform to SECTION 771 PLANTING TREES, SHRUBS AND GROUNDCOVER of the Division I Standard Specifications and as amended below.

Planting Season is May 15-June 15 and September 1-November 1 unless otherwise specified in applicable permit conditions.

Restoration Area shall be planted in the dry. Plants shall be placed according to the planting details and within the range of target elevations and at the spacing shown on the Plans or, at the direction of the Engineer, in conjunction with the Wetland Specialist. Unless otherwise noted on the Plans, final plant locations shall be determined on site and located with regard to expected hydrology, plant growth characteristics, habitat desired, and water protection.

Plant material shall be installed as soon as possible after delivery. Plants stored on-site prior to installation shall be stored in the shade and watered twice daily up until time of installation. Plants showing signs of stress or compromised health may be rejected by the Engineer and shall be replaced at the Contractor's expense.

Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)

SECTION 02010

ITEM 755.45 (Continued)

Plants shall be watered as necessary to maintain healthy establishment. Plants that fail by September 1 after spring planting or by June 1 after fall planting shall be replaced at the Contractor's expense.

Plant material shall be furnished and installed as indicated including all labor, materials, plants, equipment, incidentals, re-setting of plants (frost heaves, etc), irrigation, re-planting and clean up.

PLANT AND SEED ESTABLISHMENT

Plants shall be watered as necessary to maintain healthy establishment. Plants that fail by September 1 after spring planting or by May 15 after fall planting shall be replaced within the immediate or next planting period and at the Contractor's expense.

Seeding that fails to establish according to the conditions of acceptance below shall be over-seeded as required by the Engineer. Washouts and channels shall be repaired and stabilized prior to overseeding. Excessive weed growth shall be pulled out by the roots or, with approval from the Engineer, cut prior to over-seeding. Soil repair and weed control are incidental to this item.

CONDITIONAL ACCEPTANCE OF WORK

Conditional Acceptance shall indicate approval of the wetland restoration work and agreement that work has been done according to plan or modified as approved.

Upon completion of construction, the Contractor shall submit a Request for Conditional Acceptance that includes a brief narrative from the Wetland Specialist demonstrating that the wetland restoration work was done according to plans (or how modified) and meets required permit conditions. The narrative shall include, photo-documentation of pre-construction conditions as well as soil work, planting, and seeding. Seed tags shall be submitted as part of the Request for Conditional Acceptance.

Upon receipt of a Request for Conditional Acceptance, the Engineer, the Wetland Specialist, and regulatory representative shall assess the Restoration Area and the surrounding areas. At a minimum, the following conditions shall be included in the narrative and reviewed as part of the on-site assessment of whether:

- Soil compaction has been mitigated.
- Soils are stabilized and there is no sediment in the wetland and no channeling of slopes.
- Hydrology meets performance standards and has been adequately restored.
- Specified seed mix has been seeded and seeded species in the wetland and adjacent upland show signs of good germination and healthy growth.
- Planted woody and herbaceous species (if included) meet specifications and are establishing well.
- There are no invasive plants visible in the restored wetland area.
- Silt fence and non-biodegradable sediment barrier materials have been removed.

**Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)**

SECTION 02010

ITEM 755.45 (Continued)

Upon approval that the work meets the above conditions, the Town will issue a letter of Conditional Acceptance. If the Wetland Restoration work is not approved, the Town will issue a rejection letter requiring corrective actions. Work not approved shall be addressed by the Contractor at no extra cost.

Erosion of adjacent slopes or the flow of sediments into the wetland between Conditional and Final Acceptance shall be immediately addressed by the Contractor.

FINAL ACCEPTANCE OF WORK

Following one full growing season, the Contractor shall submit a Request for Final Acceptance. Submittal shall include a brief narrative of conditions. Upon receiving the Request, the Engineer, Wetland Specialist and regulatory representative shall assess the Restoration Area.

The following conditions shall be inspected and approved for acceptance and payment:

- Hydrology is functioning as intended.
- The desired seeded species are establishing well and cover 100 percent of the restoration area, excluding areas of open water, large boulders or planned bare soil.
- No sediments have entered the wetland.
- Adjacent slopes are stabilized with desirable vegetation.
- Planted woody and herbaceous species (if included) meet specifications and are establishing well.
- There are no visible invasive plants.

If the restoration work is not approved, the Town will issue a rejection letter requiring corrective action. All costs associated with corrective measures and plant replacement shall be incidental to this item with no additional compensation. Work not approved shall be addressed by the Contractor at no extra cost.

**Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)**

SECTION 02010

ITEM 755.45 (Continued)

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 755.45 will be paid for at the Contract unit price per Square Yard, which price shall include all labor, materials, compost and amendments, seed mixes, plantings, mulch, equipment, submittals, maintenance, grading, and incidental costs necessary to complete the work as required.

Payment shall be as follows:

- 50% upon completion of soil preparation and seeding
- 25% upon Conditional Acceptance
- 25% upon Final Acceptance or approval of the Engineer

Excavation of temporary fill will be paid under Item 120.
Sediment Control Barrier will be paid under Item 767.121
Compost Blanket will be paid under Item 751.7
Wetland Specialist will be paid under Item 755.75
Plants will be paid under the respective items.

Town of North Reading
Chestnut Street Bridge over Ipswich River – Bridge Replacement
(N-18-003) (CMX)

SECTION 02010

ITEM 983.521

STREAMBED RESTORATION

CUBIC YARD

GENERAL

The work to be done under this Item shall conform to the relevant provisions of Section 983 of the Standard Specifications and the following:

This work shall consist of furnishing and placing natural streambed material on the riverbed and bank as well as inside, upstream and downstream of, the proposed bridge to set a desired channel profile, maintain a natural bed appearance, and maintain aquatic organism passage. The placement of these materials shall be as specified herein and on the Plans. The ultimate product will replicate the function and appearance of the existing stream, to the extent possible.

MATERIALS

The streambed restoration material shall be comprised of 12" layer of natural streambed material.

The streambed stone for this item shall be native material. Angular rock is preferred over round and shall be able to lock tightly together to prevent movement during high flows. Crushed Stone will not be accepted as streambed material.

CONSTRUCTION

The placement of the streambed restoration materials under this Item shall not be placed until the Engineer approves the crushed stone and riprap layer along the precast structure. The Contractor shall submit to the Engineer for approval prior to the start of operations, his/her Placement Plan and Method of Placement.

METHOD OF MEASUREMENT

Item 983.521 Streambed Restoration shall be measured by CUBIC YARD placed.

BASIS OF PAYMENT

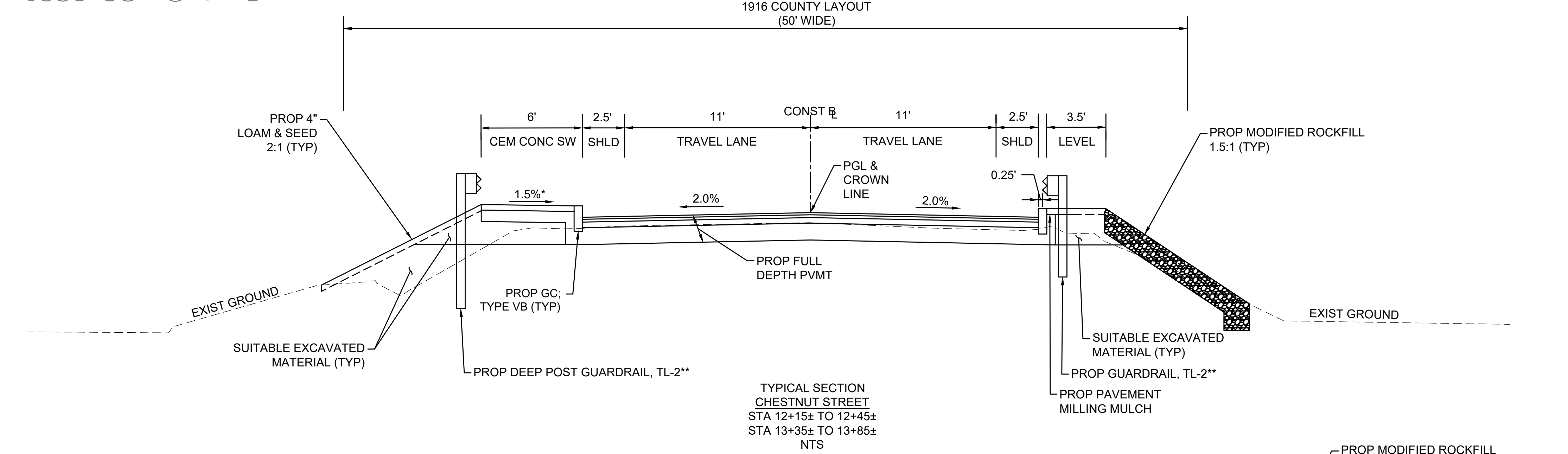
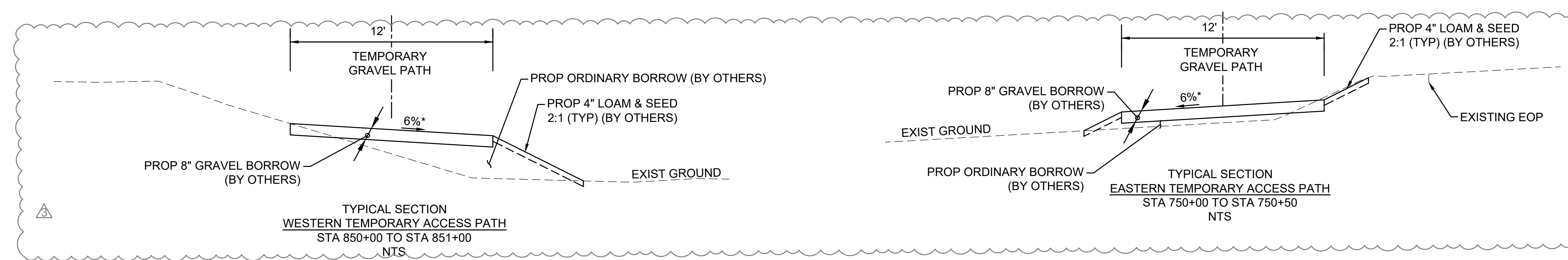
Item 983.521 Streambed Restoration shall be paid for at the Contract unit price per CUBIC YARD complete and in place which price shall be considered full compensation for all labor, tools, equipment, and materials necessary to rebuild the streambed.

**NORTH READING
CHESTNUT STREET OVER IPSWICH RIVER**

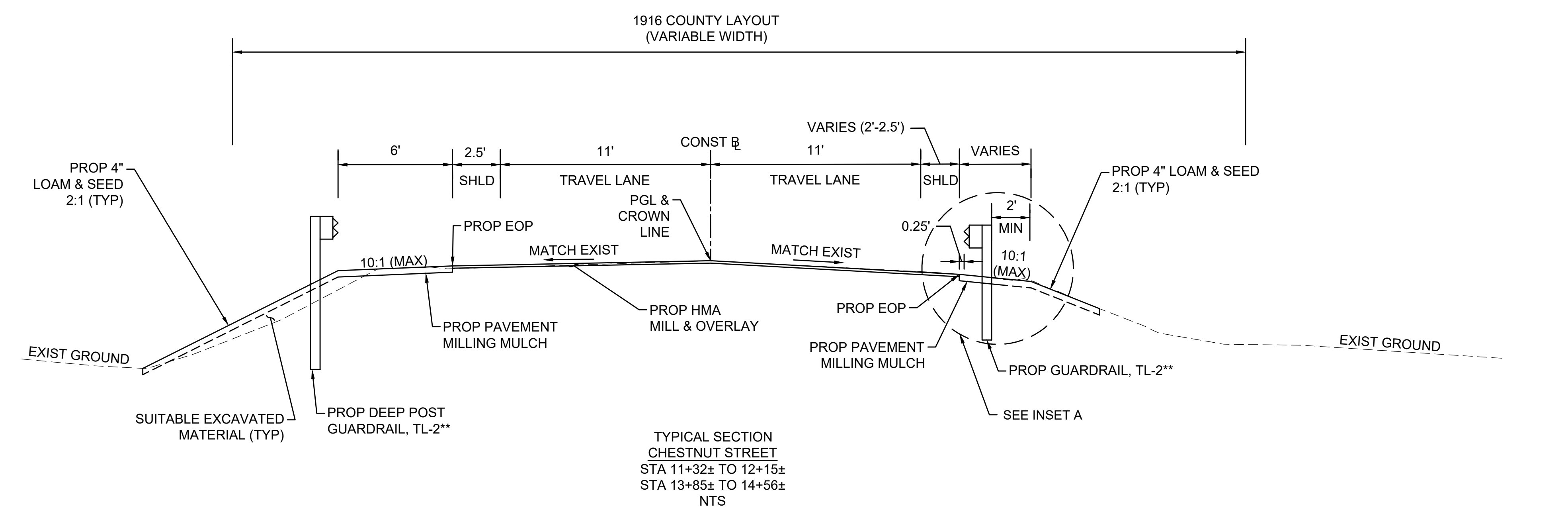
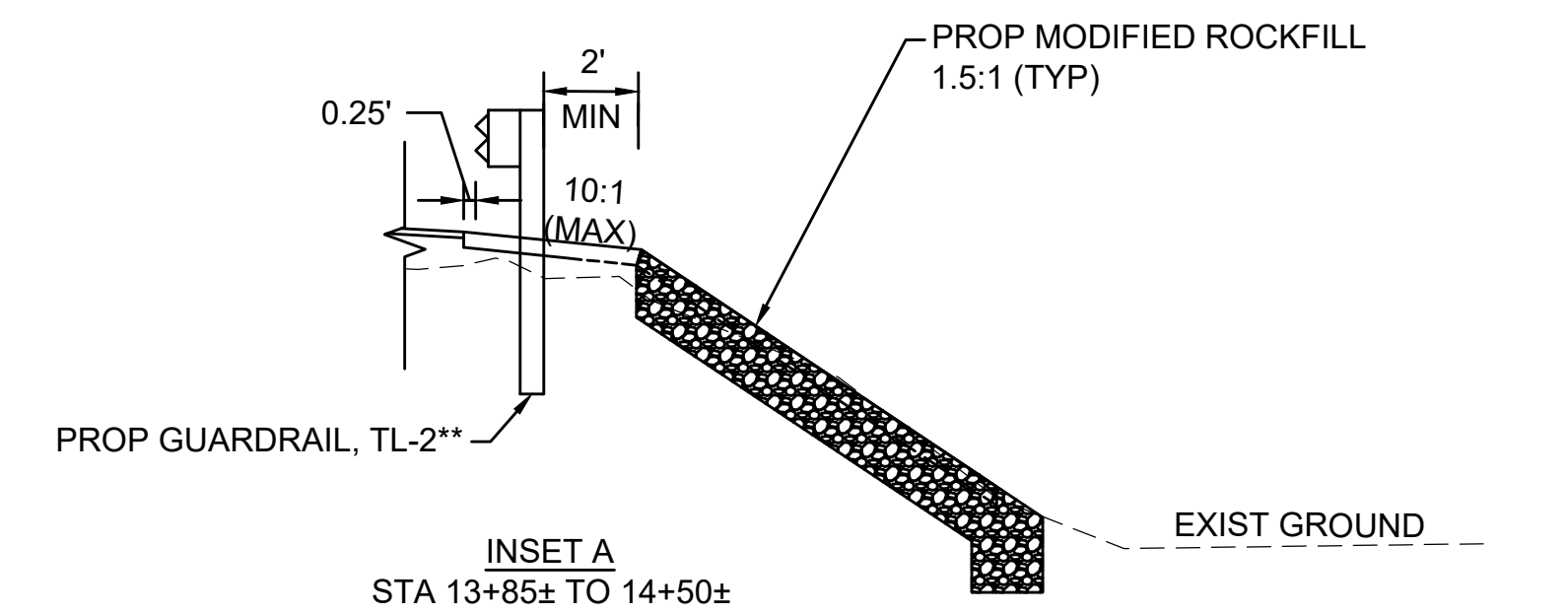
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	41
PROJECT FILE NO.		T1256.02	

TYPICAL SECTIONS & PAVEMENT NOTES

ADDENDUM #3



*TOLERANCE FOR CONSTRUCTION = ±0.5%
**SEE CONSTRUCTION PLANS FOR STATIONING OF GUARDRAIL



**SEE CONSTRUCTION PLANS FOR STATIONING OF GUARDRAIL

- PAVEMENT NOTES**
- PROPOSED HMA MILL & OVERLAY**
- SURFACE: 1½" SUPERPAVE BRIDGE SURFACE COURSE - 9.5 - POLYMER (SSC - B - 9.5 - P) OVER VARIABLE DEPTH (1½" MIN) PAVEMENT FINE MILLING (SEE NOTE 5)
- PROPOSED FULL DEPTH PAVEMENT**
- SURFACE: 1½" SUPERPAVE BRIDGE SURFACE COURSE - 9.5 - POLYMER (SSC - B - 9.5 - P) OVER 2" SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC - 12.5) OVER
- BASE: 4" SUPERPAVE BASE COURSE - 37.5 (SBC - 37.5) OVER
- SUBBASE: 12" GRAVEL BORROW, TYPE b
- PROPOSED BRIDGE PAVEMENT**
- SEE BRIDGE PLANS (BRIDGE SHEET 18)
- PROPOSED CEMENT CONCRETE SIDEWALKS / PEDESTRIAN CURB RAMPS**
- SURFACE: 4" CEMENT CONCRETE (4000 PSI, ¾", 610)
- BASE: 8" SUITABLE EXISTING GRAVEL; ADD GRAVEL BORROW, TYPE b AS REQUIRED


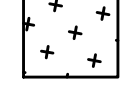
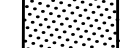
- GENERAL PAVEMENT NOTES**
- ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED BETWEEN ALL ASPHALT SURFACES AND SAWCUT JOINTS BEFORE PAVING. HMA JOINT ADHESIVE SHALL BE APPLIED TO ALL COLD JOINTS (LONGITUDINAL AND TRANSVERSE) BEFORE PAVING SURFACE COURSE. ASPHALT EMULSION FOR TACK COAT SHALL BE APPLIED AT A RATE CONSISTENT WITH STANDARD SPECIFICATION 450.43. ALL SURFACES SHALL BE CLEAN OF ALL ORGANICS, DEBRIS, AND SAND PRIOR TO PAVING.
 - ALL HMA SHALL BE IN ACCORDANCE WITH SECTION 450.
 - ASPHALT EMULSION FOR TACK COAT SHALL BE RS-1H TO RESIST TRACKING OF TACK HAUL VEHICLES.
 - ALL GRAVEL BORROW MEETING SPECIFICATION SHALL BE RETAINED IN PLACE, COMPACTED, AND LEVELED AS REQUIRED.
 - VARIABLE DEPTH MILLING AS REQUIRED TO MEET PROPOSED LINES AND GRADES WITH RESURFACING OVERLAY.
 - THE PROPOSED TEMPORARY GRAVEL PATHS SHALL BE CONSTRUCTED BY THE TOWN OF NORTH READING DPW IN CONJUNCTION WITH THE PROPOSED UTILITY POLE RELOCATIONS, IN ADVANCE OF THE CONTRACTOR'S MOBILIZATION. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING THE TEMPORARILY DISTURBED AREAS TO THE EXISTING CONDITIONS, REFER TO THE AMENDED WETLAND REPLICATION PLANS IDENTIFYING AREAS OF WETLAND RESTORATION. REFER TO THE CROSS SECTIONS FOR THE PROPOSED FINISH GRADE.

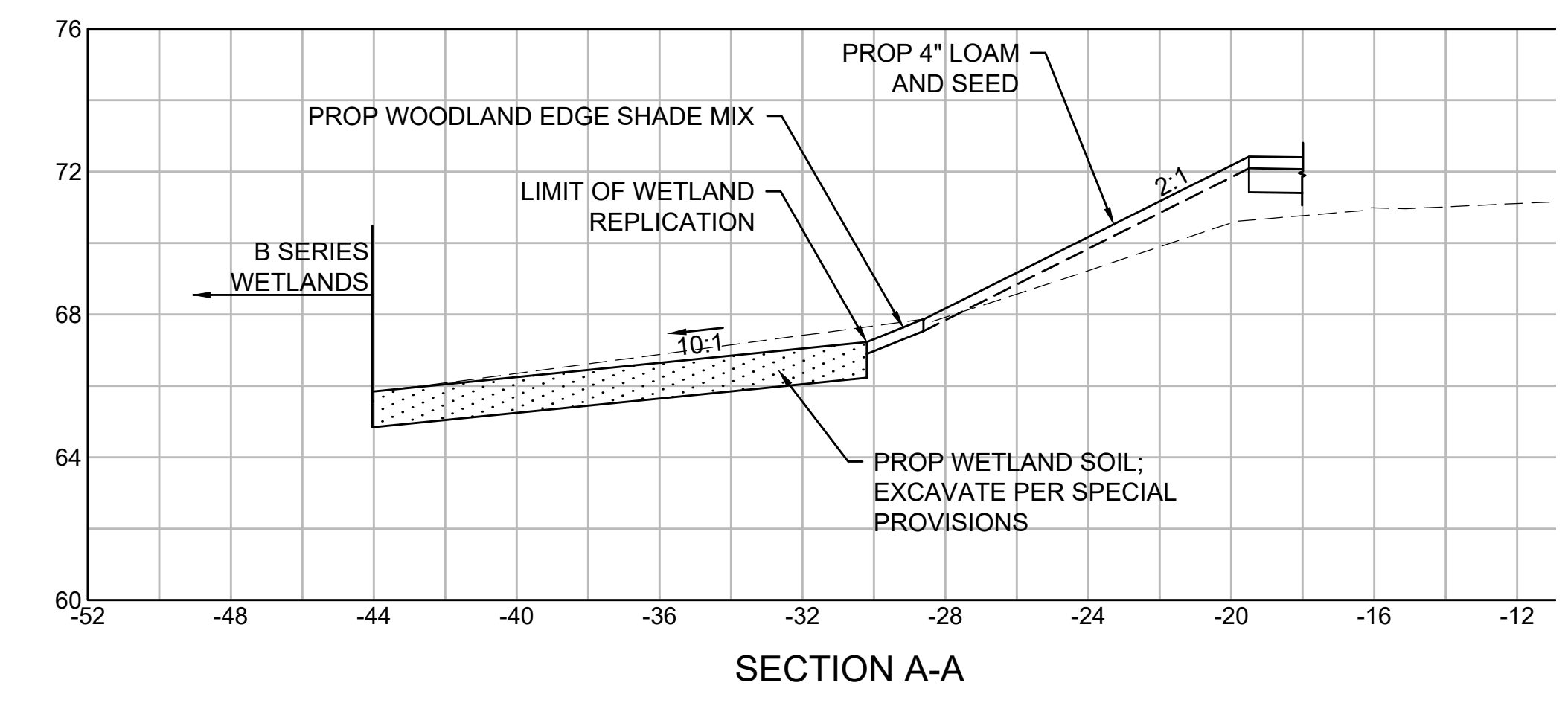
**NORTH READING
CHESTNUT STREET OVER IPSWICH RIVER**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	12	41
PROJECT FILE NO. T1256.02			






WETLAND REPLICATION PLAN

ADDENDUM #3

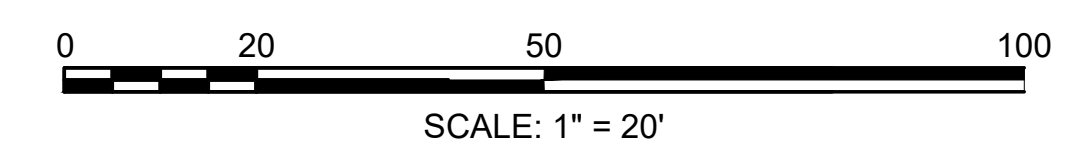
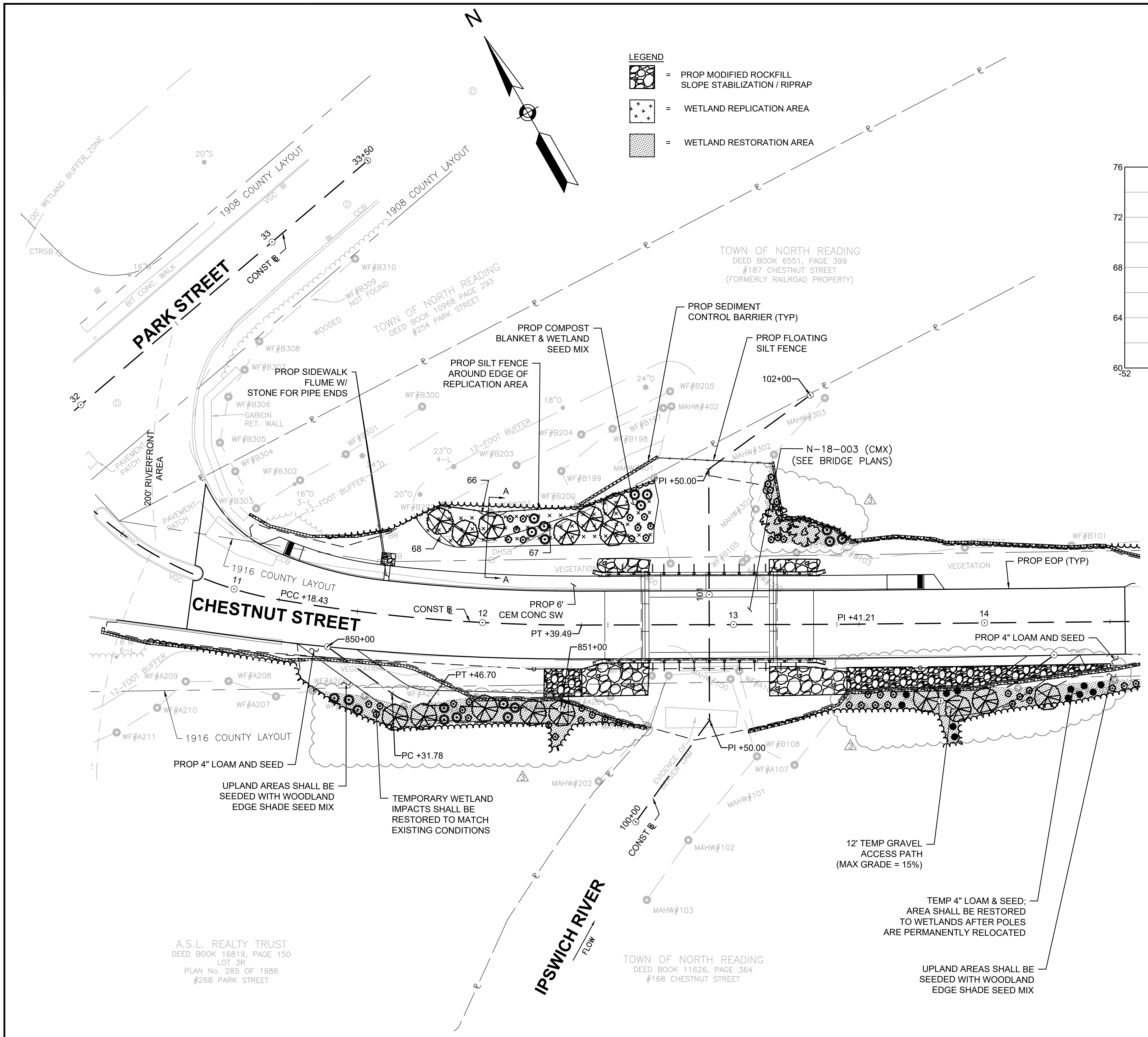
- LEGEND**
-  = PROP MODIFIED ROCKFILL SLOPE STABILIZATION / RIPRAP
 -  = WETLAND REPLICATION AREA
 -  = WETLAND RESTORATION AREA



PROPOSED PLANTING SUMMARY TABLE

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
	19	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	24" - 36"	5' ON CENTER	CONTAINER
	47	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	

- PLANTING NOTES:**
- CONTRACTOR SHALL HAVE ALL SUBSURFACE UTILITIES MARKED PRIOR TO THE START OF WORK.
 - FINAL LOCATION OF ALL PLANT MATERIAL WILL BE APPROVED BY THE TOWN PRIOR TO PLANTING.
 - ALL PLANT MATERIAL WILL HAVE TAGS INDICATING COMMON NAME, BOTANICAL NAME & SIZE. IMMEDIATELY AFTER ACCEPTANCE, TAGS AND RIBBONS SHALL BE REMOVED.
 - ALL PLANTS WILL BE MULCHED PER THE PLANS AND SPECIFICATIONS.
 - 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. CONTAMINATION OF THESE SOILS SHOULD BE PREVENTED. THEY SHOULD BE TRANSPORTED IN VEHICLES THAT HAVE BEEN WASHED SO THAT NO EXOTIC/INVASIVE SEEDS FROM OTHER SITES GET MIXED IN WITH THEM.
 - SHRUBS SHALL BE PLANTED IN A RANDOM PATTERN OR IN CLUSTERS TO MIMIC NATURAL CONDITIONS.
 - CONTRACTOR SHALL TAKE EXTREME CARE TO NOT CONTAMINATE THE WETLAND REPLICATION / RESTORATION AREA WITH OUTSIDE INVASIVE SPECIES.
 - ALL PLANTING SHALL OCCUR AT THE BEGINNING OR END OF THE GROWING SEASON. FALL PLANTINGS SHALL BE DONE BEFORE THE FIRST FROST, BUT NO LATER THAN NOVEMBER 15.



T1256.02_H09(WETLAND REPLICATION PLAN)DWG Plotted on 15-Jan-2025 4:32 PM