

May 9, 2013

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION
DEPARTMENT OF ADMINISTRATION

DIVISION OF PURCHASES BID NO.

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

RHODE ISLAND CONTRACT NO.2013-CH-018

FEDERAL-AID PROJECT NO. FAP Nos: HPP-4865(001)

Trestle Trail - East Section

LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR)

CITY/TOWN OF Coventry

COUNTY OF KENT

NOTICE TO PROSPECTIVE BIDDERS

ADDENDUM NO. 1 Prospective bidders and all concerned are hereby notified of the following changes in the Plans, Specifications, Proposal and Distribution of Quantities for this contract. These changes shall be incorporated in the Plans, Specifications, Proposal and Distribution of Quantities, and shall become an integral part of the Contract Documents.

A. Clarification

1. Pre-Bid Sign-in Sheet and General Clarification
 - a. Pre-bid sign-in sheet has been provided as part of this Addendum No. 1.
 - b. Contaminated soil must be handled in accordance with the approved Remedial Action Work Plan (RAWP). The Contractor has the option to excavate and stockpile the contaminated soil or directly place the soil as fill at the Camp Westwood Road location, as outlined in the RAWP. The contaminated soil does not require testing.
 - c. Controlled blasting will be allowed.

B. Contract Documents

1. General Provisions - Contract Specific
 - a. Delete page CS-9 in its entirety and insert revised page CS-9 (R-1) attached to this Addendum No. 1. Section 27 Blasting Restrictions, Section 28 Protection of Historic Culverts and Railroad Monuments and Section 29 Construction Turn Around have been revised.
2. Appendices To General Provisions
 - a. Delete Structural Disposition List in its entirety and insert revised Structural Disposition List (R-1) attached to this Addendum No. 1. The Structural Disposition List has been signed.

3. Specifications - Job Specific

- a. Delete index pages JS-i through JS-v in their entirety and insert revised index pages JS-i (R-1) through JS-v (R-1) attached to this Addendum No. 1. Job Specific Items 202.9903, 817.9901 and 817.9904 have been added to the index. Job Specific Items 201.9903, T15.9906, T15.9907 and T15.9908 have been removed from the index.
- b. Delete page JS-6 in its entirety and insert revised page JS-6 (R-1) attached to this Addendum No. 1. Job Specific Item 201.9903 has been removed.
- c. Insert new pages JS-17A through JS-17P attached to this Addendum No. 1. Job Specific Item 202.9903 Rock Excavation - Controlled Blasting has been added.
- d. Delete page JS-35 in its entirety and insert revised page JS-35 (R-1) attached to this Addendum No. 1. Item 703.9901 has been revised.
- e. Delete pages JS-50 through JS-55 in their entirety and insert revised pages JS-50 (R-1) through JS-55 (R-1) attached to this Addendum No. 1. Job Specific Items 807.9901, 807.9902, 807.9903 and 807.9904 have been revised.
- f. Add new pages JS-71A, JS-71B and JS-71C to this Addendum No. 1. Job Specific Items 817.9901 and 817.9904 have been added.
- g. Delete pages JS-77 and JS-78 in their entirety and insert revised pages JS-77 (R-1) and JS-78 (R-1) attached to this Addendum No. 1. Job Specific Items 830.9901, 830.9902, 830.9903, 830.9904 and 830.9911 have been revised.
- h. Delete page JS-81 in its entirety and insert revised page JS-81 (R-1) and insert new page JS-81A attached to this Addendum No. 1. Job Specific Items 901.9902 and 901.9903 have been revised.
- i. Delete page JS-89 in its entirety and insert revised page JS-89 (R-1) attached to this Addendum No. 1. Job Specific Item 903.9901 has been revised.
- j. Delete page JS-98 in its entirety and insert revised page JS-98 (R-1) attached to this Addendum No. 1. Item Code 938.1000 has been revised.
- k. Delete page JS-99 in its entirety and insert revised page JS-99 (R-1) attached to this Addendum No. 1. Item Code 943.0200 has been revised.
- l. Delete page JS-104 in its entirety and insert revised page JS-104 (R-1) attached to this Addendum No. 1. Item Code L05.9901 has been revised.
- m. Delete pages JS-108, JS-109 and JS-110 in their entirety and insert revised pages JS-108 (R-1), JS-109 (R-1) and JS-110 (R-1) attached to this Addendum No. 1. Job Specific Item Codes T15.9901, T15.9902, T15.9903, T15.9904, T15.9905, T15.9909 and T15.9910 have been revised. Item Codes T15.9906 and T15.9908 were deleted and are being paid for under T15.0100. Item Code T15.9907 has been deleted from the project.
- n. Delete page JS-111 in its entirety and insert revised JS-111 (R-1) attached to this Addendum No. 1. Job Specific Item T19.9901 has been revised.

4. Distribution of Quantities
 - a. Delete pages Index 1 through Index 5 in their entirety and insert revised pages Index 1 (R-1) through Index 5 (R-1) attached to this Addendum No. 1. Items have been deleted and added to the DOQ.
 - b. Delete pages 6 through 13 in their entirety and insert revised pages 6 (R-1) through 13 (R-1) and new page 12a attached to this Addendum No. 1. Item 202.0201 has been deleted and Item 202.9901 has been revised.
 - c. Delete pages 15 and 16 in their entirety and insert pages 15 (R-1) and 16 (R-1) attached to this Addendum No. 1. Item 205.0270 has been deleted.
 - d. Delete page 40 in its entirety and insert revised page 40 (R-1) attached to this Addendum No. 1. Item 820.0110 has been revised. Also, Item 817.2110 has been deleted.
 - e. Delete page 52 in its entirety and insert revised page 52 (R-1) and new page 52A attached to this Addendum No. 1. Item 906.0118 has been revised
 - f. Delete pages 70 through 73 in their entirety and insert revised pages 70 (R-1) through 73 (R-1) and new pages 70A, 71A and 72A attached to this Addendum No. 1. Item T15.0100 has been revised.
 - g. Delete Page 75 in its entirety and insert revised page 75 (R-1) attached to this Addendum No. 1. Item T19.9901 has been revised.
 - h. Delete page 81 in its entirety and insert revised page 81 (R-1) attached to this Addendum No. 1. Item 202.9903 has been added.
 - i. Insert new pages 82 through 88 attached to this Addendum No. 1. Items 202.9903, 205.0240, 206.0208, 817.9901, 817.9904, 906.0120 and 906.0131 have been added to the DOQ.

C. Plans - Volume II

1. General Notes-2 - Volume 2 - Sheet 4 of 33
 - a. Modify this sheet as shown on Sketch No. 1 attached to this Addendum No. 1. Delete Concrete Note No. 14 and replace with new Note No. 14.
2. Quidnick Reservoir Bridge No. 1128 Limits of Substructure Repair - Volume 2 - Sheet 10 of 33
 - a. Modify this sheet as shown on Sketch No. 2 attached to this Addendum No. 1. Delete Substructure Note No. 5 and replace with new Note No. 5.
3. Quidnick Reservoir Bridge No. 1128 Substructure Repair Details - Volume 2 - Sheet 11 of 33
 - a. Modify this sheet as shown on Sketch No. 3 attached to this Addendum No. 1. A callout text for "Typical Concrete Patching Repair Detail" has been revised. Delete Repair Note Nos. 5 and 6 and replace with new Repair Note Nos. 5 and 6.
4. Quidnick Brook Bridge No. 1127 General Plan - Volume 2 - Sheet 12 of 33
 - a. Modify this sheet as shown on Sketch No. 4 attached to this Addendum No. 1. Delete Note No. 8 and replace with new Note No. 8.
5. Coventry Center Pond Bridge No. 1125 Deck Plan - Volume 2 - Sheet 23 of 33
 - a. Modify this sheet as shown on Sketch No. 5 attached to this Addendum No. 1. Note No. 5 has been deleted.

6. Flat River Reservoir Bridge No. 1124 Deck Plan- Volume 2 - Sheet 28 of 33
 - a. Modify this sheet as shown on Sketch No. 6 attached to this Addendum No. 1. Note No. 5 has been deleted.
7. Flat River Reservoir Bridge No. 1124 Limits of Substructure Repair - Volume 2 - Sheet 31 of 33
 - a. Modify this sheet as shown on Sketch No. 7 attached to this Addendum No. 1. Delete Note No. 7 and replace with new Note No. 7.
8. Flat River Reservoir Bridge No. 1124 Substructure Repair Details - Volume 2 - Sheet 32 of 33
 - a. Modify this sheet as shown on Sketch No. 8 attached to this Addendum No. 1. A callout text for "Typical Concrete Patching Repair Detail" has been revised. Delete Repair Note Nos. 5 and 6 and replace with new Repair Note Nos. 5 and 6.

D. Plans - Volume I

1. Typical Sections No. 1 Sheet 7 of 150
 - a. Modify this sheet as shown on Sketch No. 9 attached to this Addendum No. 1. A new table for Equestrian Trail Surface Material has been added.
 - b. Modify this sheet as shown on Sketch No. 10 attached to this Addendum No. 1. Replace "Shared-Use Path and Equestrian Trail (Fill Section)" with new revised Typical Section.


RI Department of Transportation
Chief Engineer

+++ MEETING SIGN-IN SHEET+++

Rhode Island Department of Transportation

DATE: MAY 2, 2013 TIME: 9:00 LOCATION: TMC

SUBJECT: PRE-BID CONFERENCE

NAME	AFFILIATION	TELEPHONE
Anita Marshall	RIDOT Highway	222-2023x4044
HUGH NEENAN	PRIME ENGINEERING	233-2993
MICHAEL WEATHERSTON	PRIME ENGINEERING INC	233-2993
Philip Kaczopuloski	RIDOT	2222023 4047
Thomas Capobianco	National Grid	784-7248
NATHAN SHAPIRO	RIDOT	222-3260x4410
WAYNE CLARKE	CARRI Corp	401 739 9300
ARTHUR SCOTCH	MANAFORT	401-333-2550
PAUL BROWN	JH LYNCH & SONS	401-333-4300
Lambri Zerva	RIDOT	222-2023x4060
Erik Johnston	RIDOT - NJRU	222-2023x4289
Barry Simpson	RIDOT - Cultural	222-2023x4056
Gey L. Lefebvre	Town of Country	822-9107
James Klowan	Narragansett Improvement Co	331-7420

22. PAVEMENT CORES

The Pavement Cores are included in the Appendices of this section.

23. RIDEM PERMIT

The RIDEM Permit is included in the SWPPP Appendices of this section.

24. STRUCTURAL DISPOSITION/ENCROACHMENT CHART

Structural Disposition/Encroachment Chart is included in the Appendices of this section.

25. REMEDIAL ACTION PLAN

The Remedial Action Plan is included in the Appendices of this section.

26. COORDINATION WITH ADJACENT PROJECTS

The Contractor shall be aware of other construction projects ongoing or commencing during the construction period of this project. It shall be the Contractor's responsibility to coordinate with the Engineer to determine the impacts of his construction operations on adjacent projects. The Contractor may be required to attend periodic coordination meetings with representatives of the Town and State to discuss and resolve potential conflicts. No separate payment will be made for this work.

(RIDOT may have construction in progress on the Coventry Greenway West Contract 2011-CH-027)

27. BLASTING RESTRICTIONS

Blasting will only be allowed between the hours of 7:00 am to 6:00 pm (Town Ordinance # 169-12). Chief of Police, Bryan Volpe approves the sound permit (Town Ordinance # 169-18). He can be reached at (401) 822-9117.

28. PROTECTION OF HISTORIC CULVERTS AND RAILROAD MONUMENTS

The Contractor shall protect Historic Culverts with less than five feet of cover during construction with steel plates as necessary. The Engineer may order added protection to culverts as necessary to prevent damage caused by construction activities/equipment. Such protection may include, but not limited to additional steel plates, planking or matting. The Contractor shall protect each of the historic railroad monuments during construction using methods/means approved by the Engineer. There will be no separate payment for this item as it is considered incidental to the contract.

29. CONSTRUCTION TURN AROUND

The locations of construction turn arounds indicated on the plans are for suggestion only. The contractor may construct turn arounds at other locations which are not in regulated areas and must be approved by the Engineer. There will be no separate payment for this item as it is considered incidental to the contract including steel plates if used to span the ditches.

STRUCTURAL DISPOSITION LIST

Trestle Trail Shared-Use Path (East)

Coventry, Rhode Island

RIC No. 2012-CH-080

RIFAP No. HPP-0506(002)

UIC No. 887

September 04, 2012

(For RIDEM Use Only)

Replacement Material

VALUE (EA.)

<u>STRUCTURE</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>STATUS</u>	<u>DISPOSITION</u>
SD-1	Sta 501+95	8'x20' Box Container	Interfere w/construction	Remove & Dispose
SD-2	Sta 502+00 R	Building	Encroachment	To Remain
SD-3	Sta 502+05	24' Trailer	Interfere w/construction	Remove & Dispose
SD-4	Sta 502+80 R	Wood Fence	Interfere w/construction	Remove & Dispose
SD-5	Sta 503+30 R	Wood Fence	Interfere w/construction	Remove & Dispose
SD-6	Sta 701+70 L	Bit. Driveway	Interfere w/construction	Remove & Dispose
SD-7	Sta 703+65 L	Well	Encroachment	To Remain
SD-8	Sta 704+30 L	Bit. Driveway	Encroachment	To Remain
SD-9	Sta 704+50 L	Well	Encroachment	To Remain
SD-10	Sta 704+85 L	Conc. Slab	Encroachment	To Remain
SD-11	Sta 705+45 L	Shed	Encroachment	To Remain
SD-12	Sta 705+55 L	Wood Planter	Encroachment	To Remain
SD-13	Sta 705+70 L	Chicken Coop	Encroachment	To Remain

(For RIDEEM Use Only)
Replacement Material
VALUE (E.A.)

<u>STRUCTURE</u>	<u>LOCATION</u>	<u>DESCRIPTION</u>	<u>STATUS</u>	<u>DISPOSITION</u>	<u>VALUE (E.A.)</u>
SD-14	Sta 729+00 L	Rock Ret. Wall	Encroachment	To Remain	
SD-15	Sta 729+60 L to Sta 729+95 R	Rock Ret. Wall	Interfere w/construction	Remove & Dispose	
SD-16	Sta 730+00 R	Bit. Driveway	Encroachment	To Remain	
SD-17	Sta 730+15 R	Wood Steps	Interfere w/construction	Remove & Dispose	
SD-18	Sta 730+30 R	Wood Ret. Wall	Interfere w/construction	Remove & Dispose	
SD-19	Sta 730+35 R	Wood Gazebo	Encroachment	To Remain	
SD-20	Sta 730+40 R	Lights & Outlets	Encroachment	To Remain w/Easement	
SD-21	Sta 730+25 to Sta 730+70 L	Stone Ret. Wall	Interfere w/construction	Remove & Dispose	
SD-22	Sta 730+40 L	Conc. Walkway	Encroachment	To Remain	
SD-23	Sta 730+60 L	Conc. Pavters	Encroachment	To Remain	
SD-24	Sta 730+80 L	Shed	Encroachment	To Remain	
SD-25	Sta 730+90 L	Conc. Slab	Encroachment	To Remain	
SD-26	Sta 747+10 L	Propane Tanks	Encroachment	To Remain	
SD-27	Sta 747+30 L	Building	Encroachment	To Remain	
SD-28	Sta 747+25 L to Sta 750+45 L	Gravel Parking	Encroachment	To Remain	

Approved by: 
 RIDEEM ROW Section 5/1/13

SPECIFICATIONS – JOB SPECIFIC

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702.9902	Furnish and Install PVC Drainage Basin, 1' Diameter W/ Frame and Grate	JS-31
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702.9904	Furnish and Install 3.5'X40' Water Quality Unit, W/ PVC Sump Tee, Access Risers, Frame and Covers	JS-33

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Job Specific R.I.

R.I. Contract No. 2013-CH-018

ITEM CODE 202.9903

ROCK EXCAVATION - CONTROLLED BLASTING

1.1 DESCRIPTION OF WORK

- A. For all blasting within 200 feet of existing buildings and structures, the contractor shall be solely responsible to adhere to the following requirements.

The work to be done under this section includes:

1. Furnishing all labor, equipment, materials and services and performing operations required to fragment rock utilizing controlled blasting techniques. Damage shall be prevented to adjacent pipes, utilities, structures, water wells, property, and other work. The resulting ground vibrations and air blast overpressures shall be consistently maintained below the maximum levels specified in this Section, and heave and ground movement outside the limits of the trench excavation shall be minimized.
2. Protecting workers, the State and representatives, Engineer and his consultants and representatives, and the general public from damage or injury from the blasting operation, handling of explosives, flyrock, excessive ground vibrations and/or excessive airblast overpressure levels.
3. Furnishing, installing, and implementing an audible warning system to indicate impending blasting and familiarizing workers, State personnel and representatives, Engineer and his consultants and representatives, and the general public with the system implemented.
4. Conducting pre-blast condition surveys of structures adjacent to blasting areas, in accordance with the procedures specified in this Code.
5. Maintaining records with details of the hole depth, spacing and loading of every blast round required to excavate rock during the conduct of construction.

JS-17A

ADDENDUM NO. 1

1.2 DEFINITIONS

- A. Airblast Overpressure: The air pressure over and above atmospheric pressure resulting from blasting, measured in pounds per square inch.
- B. Controlled Blasting: Excavation in rock in which the various elements of the blast, including hole size, position, alignment, depth, spacing, burden, charge size, distribution and delay sequence, are carefully controlled to excavate the rock to the desired lines while minimizing ground heave and overbreak outside the limits of excavation, and maintaining resulting ground vibrations and airblast overpressure within safe limits.
- C. Flyrock: Rock propelled through the air by blasting if not prevented by use of blasting mats or other means.
- D. Geophone or Vibration Transducer: A sensor used to monitor ground vibrations (particle velocity).
- E. Airblast Overpressure Transducer: A sensor used to monitor airblast overpressure.
- F. Peak Particle Velocity: The maximum of anyone of the three mutually perpendicular ground motion velocity components of a vibration measured in directions vertical, radial, and perpendicular to the vibration source; in inches per second.
- G. Seismograph: An instrument used to record the magnitude and frequency of ground vibrations sensed by a geophone and airblast overpressure sensed by an airblast overpressure transducer.
- H. Earth: All materials not classified as rock.
- I. Rock: Materials geologically classified as intact, untransported rock requiring systematic drilling and blasting for removal. Rock does not include boulders less than 1 cubic yard in volume or loose, weathered, or fragmented rock which can be excavated with a large backhoe.
- J. Pre-splitting: The controlled use of explosives and blasting accessories in carefully spaced and aligned drill holes to produce a free surface or shear plane in the rock along the specified excavation backslope and the detonation of the pre-split line before the detonation of any production holes.
- K. Cushing blasting: A procedure similar to pre-splitting, except that detonation along the cut face shall be performed after the detonation of the production holes.
- L. Production blasting: The main fragmentation blasting resulting from more widely spaced production holes drilled throughout the main excavation area adjacent to the controlled blast line. Production holes shall be detonated in a controlled delay sequence.

1.3 QUALITY ASSURANCE

A. Qualifications:

1. Persons responsible for blasting shall be licensed blasters in the State of Rhode Island and shall have had acceptable experience in similar excavations in rock and controlled blasting techniques.
2. The Contractor shall engage the services of a qualified, independent professional engineer, acceptable to the Engineer, to conduct pre-blast condition surveys. Alternatively, the Contractor may engage a firm specializing in pre-blast surveys, acceptable to the Engineer, to conduct pre-blast condition surveys.
3. The Contractor shall engage an independent consulting geotechnical engineer, acceptable to the Engineer, to conduct blast vibration monitoring, heave monitoring, and other observations. A minimum of three seismographs will be utilized for each blast. Results shall be made available to the Engineer immediately after each blast. The Contractor may conduct additional monitoring as he feels necessary, at no additional cost.
4. The State reserves the right to dismiss the blasting subcontractor, or any individual that works for the blasting subcontractor, who in the judgment of the Engineer is not complying with the specifications, or presents a significant risk to adjacent utilities, persons or structures near the work site. If the blasting subcontractor is dismissed, compensation to the blasting subcontractor shall be limited to the work that the blasting subcontractor has successfully completed.

B. Codes, Permits and Regulations:

1. The Contractor shall comply with all applicable laws, rules, ordinances, and regulations of the federal government, the State of Rhode Island, and the Municipality governing the transportation, storage, handling and use of explosives. All labor, materials, equipment, and services necessary to make the blasting operations comply with such requirements shall be provided without additional cost.
2. The Contractor shall obtain and pay for all permits and licenses required to complete the work of this Section
3. In case of conflict between regulations or between regulations and this Specification, the Contractor shall comply with the strictest applicable codes, regulations or Specifications.

C. Blasting Limit Criteria:

1. Peak Particle Velocity (PPV) Limits:

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a. At residential structures, maintain peak particle velocities within the "safe limits" recommended by the U.S. Bureau of Mines Report of Investigations (RI) 8507, Appendix A.

b. At other above ground structures:

<u>Distance from Blast to Structure</u>	<u>Max.PPV</u>
< 150 ft.	2.0 in./sec
> 150ft.	1.0 in./sec

c. More stringent peak particle velocity limits than those identified above may be required for structures identified during pre-blast condition surveys to be particularly sensitive to vibrations. The Contractor shall be required to identify any such areas prior to blasting and inform the Engineer what PPV limits will be used two weeks prior to work in that area.

2. Airblast Overpressure Limits:

a. The Contractor shall conduct all blasting activity in such a manner that the peak airblast overpressure measured at the location of the nearest occupied, above ground structure to the blast (considering wind direction) does not exceed 0.05 psi.

D. Blast Monitoring:

1. The consulting geotechnical engineer or his representative shall monitor peak particle velocities (PPV) and airblast overpressures resulting from each blast, at locations adjacent to the nearest structures from the blast. A minimum of three engineering seismographs shall be used where several structures are located in different directions from the blast site. In addition, the geotechnical engineer or his representative shall monitor settlement or heave at the ground surface above adjacent utilities. The results of the monitoring will be made available to the Contractor immediately following each blast.

2. The Contractor may perform additional blast monitoring as he feels necessary, at no additional cost.

3. The Contractor shall cooperate with the Engineer in permitting observation of the Contractor's drilling and loading procedures, as well as in providing blast stationing and blast round design information and other information to allow records to be kept as part of the blast monitoring.

E. Blast Monitoring Reports:

1. Following each blast, a Blast Monitoring Report shall be prepared by the geotechnical engineer and distributed to the Engineer and the Contractor.

F. Responsibilities of Contractor:

1. The Contractor shall be completely and solely responsible for all damages resulting from the blasting operations and shall, as a minimum, take whatever measures are necessary to maintain peak airblast overpressure and peak particle velocities and ground heave within the specified limits. Modifications to blasting and excavation methods required to meet these requirements shall be undertaken at no additional cost.

1.4 SUBMITTALS

A. Qualifications: Submit to the Engineer at least two (2) weeks prior to start of the work of the following:

1. Name and qualifications of the person(s) responsible for design and direction of the blasting. Include a list of references from projects of a similar nature to the work specified herein.
2. Written evidence of the licensing, experience, and qualifications of the blasters who will be directly responsible for the loading of each shot and for firing it.
3. Name and qualifications of the independent professional engineer or firm responsible for conducting pre-blast condition surveys of the adjacent structures. Include a list of references and samples of preconstruction surveys from projects of a similar nature to the work specified herein.
4. Name and qualification of the person(s) responsible for monitoring and reporting blast vibrations.

B. Blasting: Plan: At least two (2) weeks prior to commencing drilling and blasting operations, or at any time the contractor proposes to change the drilling and blasting operations, submit a blasting plan to the Engineer for review containing complete details of proposed blasting operations including:

1. Sequence and scheduling of blasting rounds including lift heights, the general sequence of drilling, blasting, and excavating.

2. Specifics of a typical production round including:
 - a. Diameter, spacing, burden, depth, and orientation of each blast hole for each round design.
 - b. Type and amount (in terms of weight and number or cartridges) of explosives and distribution of charge to be used within each hole, on each delay, and the total for the blast.
 - c. Type of detonators; delay pattern wiring diagram for the round; type and capacity of firing source; size, type, and location of safety switches, and lightning gap.
 - d. Type and location of stemming to be used in holes.
 - e. Calculations of anticipated vibrations levels at nearest adjacent structures.
3. Specifics of a typical trench blast round to be implemented in each of the following areas.
 - a. Areas where blasting may be required within 100 feet of existing buildings.
 - b. Areas where blasting may be required within 50 feet of existing buildings.
 - c. Areas where blasting may be required within 25 feet of existing buildings.
 - d. Areas where blasting may be required within 15 feet of existing utility pipes or conduits. In these areas include details of intended perimeter control procedures at the trench limits.
4. Methods of matting and covering of the blast area in open excavations to prevent flyrock and excessive airblast overpressure.
5. Manufacturers data sheets for all explosives, primers, and initiators to be employed.

The blasting plan submittal is for quality control and record keeping purposes. Review of the blasting plan by the Engineer shall not relieve the Contractor of his responsibility for the accuracy, safety and adequacy of the plan when implemented in the field.

All blasting plan submittals must be approved by the blasting consultant.

C. Blast Warning: System: Submit at least two (2) weeks prior to start of the work details of an audible advance warning system to be employed at the job site as a means of informing workers, the Engineer, State personnel and representatives, and the general public that a blast is about to occur.

D. Pre-blast Condition Survey: At least two (2) weeks prior to the start of the work, submit three (3)

copies of the pre-blast condition survey.

E. Permits: At least two (2) weeks prior to the start of the work, submit a copy of the blasting permit(s) obtained to conduct blasting at the site.

F. Progress Submittal:

1. In the event that the Contractor's design round results in ground heave, block movement, overbreak, or ground vibrations and/ or airblast overpressures which exceed the blasting limit criteria of these specifications, the Contractor shall immediately revise the round design appropriately and submit the revised round design to the Engineer for review. A revised blasting design shall be approved by the Engineer prior to any additional blasting, and an additional test blast may be required by the Engineer prior to resuming production blasting.

2. The Contractor shall report to the Engineer in writing all blasting complaints received by the Contractor within 24 hours of receipt. Each blast complaint report shall include the name and address of the complainant, time received, date and time of blast complained about, and a description of the circumstances which led to the complaint.

G. Review by the Engineer of blast designs and techniques shall not relieve the Contractor of full responsibility for the accuracy, adequacy and safety of the blasting, exercising proper supervision and field judgment, and producing the results within the blasting limits required by these specifications.

1.5 PRE-BLAST CONDITION SURVEY

A. Prior to the start of rock excavation or blasting work, conduct pre-blast condition surveys of all existing structures and conditions on the site, adjacent to the site, or in the vicinity of the site. These surveys shall extend to such structures or items that may be affected by the Contractor's construction operations. As a minimum, conditions surveys shall be performed on all structures within 200 feet of anticipated blasting areas. The condition survey shall be repeated at the conclusion of the blasting. The following items shall be required to perform the condition survey.

1. Coordinate activities, issue written notices, obtain clearances to enter properties, and provide whatever photographic and secretarial assistance is necessary to accomplish the survey.

2. Give notice in writing to the Owner of the property concerned, tenants of properties, and provide whatever photographic and secretarial assistance is necessary to accomplish the survey.

B. Observations shall be recorded during the survey of the existing conditions for houses, garages, commercial buildings, utility poles, and other structures which might be affected by the work of the Contractor.

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1. The survey shall consist of a description of the interior and exterior condition of the various structures examined. Descriptions shall include the locations of any cracks, damage, or other existing defects and shall include such information so as to make it possible to determine the effect, if any, of the construction operations on the defect. Where significant cracks or damage exists, or for defects too complicated to describe in words, photographs and/ or video tapes shall be taken and made part of the record.

C. Observations shall be recorded during the survey of the existing conditions for houses, garages, commercial buildings, utility poles, and other structures which might be affected by the work of the Contractor.

D. As part of the pre-blast survey, the Contractor shall make inquiries of each property owner contacted as to whether the property owner has an operational ground water well on their property. The Contractor shall immediately notify the Engineer of all such wells, so that tests may be made, if deemed necessary, of the quality and flow rates of water from the wells. The Contractor shall allow a minimum of two (2) calendar weeks from time of notification of the Engineer to the start of blasting in the area to allow for testing of the wells.

E. Document any condition or use of the structure that may indicate the need for more stringent vibration criteria than those in Section 1.3C.

F. Upon completion of all earth/rock excavation and blasting work, the Contractor shall make an examination similar to the pre-blast condition survey of any properties, structures, and conditions where complaints of damage have been received or damage claims have been filed. Give notice to all interested parties so that they may be present during the final examination. Records of the final examination shall be distributed in the same manner as the original pre-blast condition survey.

1.6 INDEMNITY

A. Notwithstanding full compliance with these specifications, approval of blasting plan, and successful limitations to maximum peak particle velocity and airblast overpressure noted above, the Contractor shall be solely responsible for any damage, direct or indirect, arising from blasting and shall hold the State, the Engineer, and their representatives harmless from any costs, liens, charges, claims or suits, including the costs of defense, arising from such damage, real or alleged. The State, the Engineer and the Contractor's geotechnical consultant shall be additionally named insured on any insurance policy covering blasting carried by the Contractor, and this requirement shall also be enforced on any subcontractor.

2. PRODUCTS

A. Where overhead electric wires or other source of stray electric current is overhead or nearby,

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blast detonators shall be Non-Electric, such as manufactured by Ensign-Bickford, to avoid accidental detonation due to stray electrical currents at the blast site.

B. Ammonium Nitrate Fuel Oil (ANFO), or other free flowing, pourable, or pumpable explosive shall not be used on this project. Cartridged explosives should be selected which are manufactured for trench blasting use, and are resistant to "dead pressing", "flashover", and are water resistant.

3. EXECUTION

3.1 SAFETY PRECAUTIONS

A. Clearing the Danger Area Before Blasting:

No blasting shall be permitted until all personnel in the danger area have been removed to a place of safety. A loud, audible, warning system, devised and implemented by the Contractor, shall be sounded before each blast. The Contractor shall familiarize all personnel in the project, the Engineer, Municipal emergency personnel, Geotechnical Consultant, and the general public with the implemented system. The danger area shall be patrolled before each blast to make certain that it has been completely cleared and guards shall be stationed to prevent entry until the area has been cleared by the blaster following the blast.

B. Explosives shall be stored, handled, and employed in accordance with federal, state, and local regulations.

C. No explosives, caps, detonators, or fuses shall be stored on the site during nonworking hours.

D. The Contractor shall be responsible for determining any other safety requirements unique to blasting operations on this particular site so as not to endanger life, property, utility services, any existing or new construction, or any property adjacent to the site.

E. No requirement of, or omission to require, any precautions under this Contract shall be deemed to limit or impair any responsibility or obligations assumed by the Contractor under or in connection with this Contract; and the Contractor shall at all times maintain adequate protection to safeguard the public and all persons engaged in the work, and shall take such precautions to accomplish such end, without undue interference to the public. The Contractor shall be responsible to pay for any damages to adjacent structures resulting from work executed under this Section.

3.2 GENERAL BLASTING PROCEDURES

A. The Contractor shall notify the Engineer at least 48 hours before blasting operations are to commence.

B. The owners and occupants of houses and buildings that are within 150 feet of proposed blasting shall be notified by the Contractor 48 hours prior to blasting. The Contractor shall provide written instruction to each owner about the meaning and timing of the blasters warning

Signals.

C. The Contractor shall insure that all persons are cleared from the blast area prior to blasting.

D. The Contractor shall stop all vehicular and pedestrian traffic from passing close to the blast area at least one minute prior to the blast. The traffic shall not be permitted to pass until completion of the blast, when the blasters "All Clear" signal is given. Appropriate traffic protection shall be used to direct the traffic.

E. The Contractor shall observe the entire blast area for a minimum of 5 minutes following a blast to guard against rock fall before commencing work in the cut.

F. The Engineer shall, at all times, have the authority to prohibit or halt the Contractor's blasting operations if it is apparent that through the methods being employed, the required slopes are not being obtained in a stable condition or the safety and convenience of the traveling public is being jeopardized.

G. The Contractor shall conduct blasting operations such that damage is prevented to adjacent structures, property and work, and such that peak particle velocity and airblast overpressure levels and heave measurements do not exceed the maximum specified limits.

H. The Contractor shall prevent the emission of any flyrock with the use of a sufficient number and weight of blasting mats for all blasts. If flyrock is emitted from a blast and damages nearby structures, adjacent overhead power lines, or causes a safety risk for construction workers or neighbors, the Contractor shall adjust his blast design and blast matting procedure to prevent another flyrock incident. After a flyrock incident, the Contractor shall submit in writing to the Engineer his proposed changes in procedures to prevent flyrock. Prior to any additional blasting, the proposed changes must be approved by the Engineer. Damages resulting from any flyrock incident shall be the sole responsibility of the Contractor.

3.3 CONTROLLED BLASTING METHODS

A. Pre-splitting -All pre-splitting shall be performed in accordance with the following requirements.

1. Unless otherwise permitted by the Engineer, the Contractor shall completely remove all overburden soil and loose or decomposed rock along the top of the excavation for a distance of at least 30 feet beyond the end of the production hole drilling limits, or to the end of the cut, before drilling the pre-splitting holes.

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2. Potentially dangerous boulders or other material located beyond the excavation limits shall also be removed as ordered by the Engineer. Payment for removal of the material located beyond the excavation limits shall be by force account.
3. The Contractor shall control his drilling operations by the use of proper equipment and technique to insure that no hole shall deviate from the plane of the planned slope by more than 9 inches either parallel or normal to the slope.
4. Pre-split holes shall be drilled within 3 inches of the staked collar location.
5. All drilling equipment used to drill the pre-split holes shall have mechanical devices affixed to that equipment to accurately determine the angle at which the drill steel enters the rock. Pre-split hole drilling will not be permitted if these devices are either missing or inoperative.
6. Pre-split holes shall extend a minimum of 30 feet beyond the limits of the production holes to be detonated, or to the end to the cut as applicable.
7. The length of pre-split holes for any individual lift shall not exceed 30 feet unless the Contractor can demonstrate to the Engineer that he can stay within the above tolerances and produce a uniform slope. Upon satisfactory demonstration, the length of holes may be increased to a maximum of 60 feet upon written approval of the Engineer. If greater than 5% of the pre-split holes are misaligned in anyone lift, the Contractor shall reduce the height of the lifts until the 9 inch alignment tolerance is met.
8. When the cut height will require more than one lift, a maximum 2 foot offset between lifts shall be permitted to allow for drill equipment clearances, The Contractor shall begin the control blast hole drilling at a point which will allow for necessary offsets and shall adjust, at the start of the lower lifts. Payment for additional excavation volume resulting from the allowed 2 foot offsets shall be at the contract unit price for roadway excavation.
9. Drilling 2 feet below ditch bottom will be allowed to facilitate removal of the toe berm.
10. Before placing charges, the Contractor shall determine that the hole is free of obstructions for its entire depth, All necessary precautions shall be exercised so that the placing of the charges will not cause caving of material from the walls of the holes.
11. Drill hole conditions may vary from dry to filled with water. The Contractor will be required to use whatever type(s) of explosives and/OR blasting accessories necessary to accomplish the specified results.
12. The maximum diameter of explosives used in pre-split holes shall not be greater than 1/2 the diameter of the pre-split hole.
13. Bulk ammonium nitrate and fuel oil (ANFO) shall not be allowed to be loaded in the pre-split holes.

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14. Only standard explosives manufactured especially for pre-splitting shall be used in pre-split holes, unless otherwise approved by the Engineer.

15. If fractional portions of standard explosive cartridges are used, they shall be firmly affixed to the detonating cord in such a manner that the cartridges will not slip down the detonating cord nor bridge across the hole. Spacing of fractional cartridges along the length of the detonating cord shall not exceed 30 inches center to center and shall be adjusted to give the desired results.

16. Pre-split blast holes shall be loaded and fired before the main round to create a fracture plane along the perimeter of the excavation.

17. Pre-split holes shall be string-loaded or space loaded with light, distributed charges and shall be thoroughly stemmed for the full length of hole with sand. The top of the hole, for a minimum of 18 inches, shall be unloaded and stemmed with tamped sand and gravel. The top charge of the pre-splitting hole shall be placed far enough below the collar, and reduced sufficiently, to avoid over breaking and heaving.

18. Hole diameter, spacing, and loading shall be maintained within the guidelines listed in Table I unless deviation from the guidelines is approved by the Engineer based on observed field performance.

TABLE I
PRE-SPLITTING GUIDELINES

Hole Diameter (in.)	Hole Spacing (ft.)	Column Load Charge Concentrations (lb./ft.)
1.5 to 2.5	1.0 to 1.5	0.06 to 0.15
3.0 to 4.0	1.5 to 2.0	0.10 to 0.20

19. Use of one or more strands of 400 grain/ft. PRIMACORD, such as manufactured by the Ensign-Bickford Company, or equivalent, as a string-loaded column concentrations for pre-split holes.

20. The bottom charge of a pre-split hole may be larger than the line charges but shall not be large enough to cause overbreak. The bottom charge concentration within the bottom 1 to 3 feet of hole shall be approximately 2 times the column charge concentration.

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21. Pre-split holes shall be fired simultaneously if particle velocity and airblast considerations will permit. Otherwise, groups of pre-split holes in segments along the pre-split line shall be systematically fired with millisecond (MS) delays, and or a sequential timer using delay intervals of 8 to 25 milliseconds.

22. As long as equally satisfactory pre-split slopes are obtained, the Contractor, at his option, may either pre-split the slope face before drilling for production blasting or may pre-split the slope face and production blast at the same time, provided that the pre-splitting drill holes are fired first. If required, to reduce ground vibrations or noise, pre-split holes may be delayed, providing the hole to hole delay is no more than 25 milliseconds.

23. The pre-split slope face shall not deviate more than one foot from a plane passing through adjacent drill holes, except where the character of the rock is such that, as determined by the Engineer, irregularities are unavoidable. The one foot tolerance shall be measured perpendicular to the plane of the slope. In no case shall any portion of the slope encroach on the roadbed.

B. Cushion Blasting:

1. Where the horizontal distance from the cut free to the existing rock free is less than 15 feet, the Contractor may cushion in lieu of pre-splitting. If used, cushion blast holes shall be loaded and fired after the main round to ensure a free face and equal burden.

2. Cushion blast holes shall be string-loaded or space-loaded with light charges, and shall be thoroughly stemmed with a minimum of 18 inches of tamped sand, water bags, or other material capable of maintaining explosive gas pressures. Blast hole diameter, spacing, burden, and loading shall be maintained within the guidelines listed in Table II.

TABLE II
CUSHION BLASTING GUIDELINES

Hole Diameter (in.)	Spacing (ft.)	Burden (ft.)	Column Load Charge Concentrations (lb./ ft.)
1.5 to 2.0	1.0 to 1.5	2.5 to 3.0	0.06 to 0.10
2.5 to 4.0	1.5 to 2.0	3.0 to 3.0	0.10 to 0.25

NOTE: Small diameter, unloaded guide holes shall be used if required for satisfactory results, located midway between each cushion blast hole.

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3. The use of one or more strands of 400 grain/ft. PRIMACORD, such as manufactured by the Ensign-Bickford Company, or equivalent, as a string-loaded column charge, will meet the required low levels of column load charge concentration.

3.4 TEST BLASTS

A. At the start of blasting, and prior to commencing full scale blasting operations, the Contractor shall perform a series of test blasts to establish a site-specific relationship between the charge weight per millisecond delay and peak ground vibration levels at the various distances from the blast. Similar relationships shall be developed for airblast overpressures.

B. The test blasts shall consist of a series of blasts with increasing charge weights. The charge weight for the initial test blast shall be less than the charge weight estimated to produce a peak particle velocity of 0.50 inch per second or less at the nearest structure.

C. The test blasts will be monitored and evaluated by the Contractor and shall form the basis for selection of appropriate procedures and maximum permissible charge weights during production blasting.

D. The relationships developed from the test blasts shall be updated and modified as blasting proceeds based on the monitoring data obtained during production blasting.

E. If vibration or heave measurements are exceeded during the blasting, additional test blasting shall be undertaken utilizing revised procedures submitted by the Contractor.

F. Prior to commencing full-scale blasting operations, the Contractor shall demonstrate the adequacy of the proposed blast plan by drilling, blasting, and excavating short test sections, up to 100 feet in length, to determine which combination of method, hole spacing, and charge works best. When field conditions warrant, as determined by the Engineer, the Contractor may be ordered to use test section lengths less than 100 feet.

G. Requirements for controlled and production blasting operations covered elsewhere in this specification shall also apply to the blasting carried out in conjunction with the test shots.

H. The Contractor will not be allowed to drill ahead of the test shot area until the test section has been excavated and the results evaluated by the Engineer. If the results of the test shot(s), in the opinion of the Engineer, are unsatisfactory, then, notwithstanding the Engineer's prior review of such methods, the Contractor shall adopt such revised methods as are necessary to achieve the required results. Unsatisfactory test shot results include an excessive amount of fragmentation beyond the indicated lines and grade, excessive flyrock, or violation of other requirements within these specifications. All costs incurred by the Contractor in adopting revised blasting methods necessary to produce an acceptable test shot shall be considered

incidental to the contract unit prices for roadway excavation and controlled blasting.

I. If at any time during the progress of the work, the methods of drilling and blasting do not produce the desired result of a uniform slope and shear face, within the tolerances specified, the Contractor will be required to drill, blast, and excavate in short sections, not exceeding 100 feet in length, until a technique is arrived at that will produce the desired results. Extra cost resulting from this requirement shall be borne by the Contractor.

3.5 SCALING AND STABILIZATION

A. All rock on the cut face that is loose, hanging, or which creates a potentially dangerous situation shall be removed or stabilized, to the Engineer's satisfaction, during or upon completion of the excavation in each lift. Drilling of the next lift will not be allowed until this work has been completed.

B. The slopes shall be scaled throughout the span of the contract and at such frequency as required to remove all hazardous loose rock or overhangs. The slopes shall be hand scaled using a suitable standard steel mine scaling rod. Subject to the Engineer's approval, other methods such as machine scaling, hydraulic splitters, or light blasting may be used in lieu of or to supplement hand scaling. Payment for scaling shall be incidental to the contract unit price for roadway excavation.

C. If in-place stabilization is required, as determined by the Engineer, rock bolting or other Engineer approved stabilization techniques will be used. Stabilization necessitated, in the opinion of the Engineer, by the rock geology, will be paid for at the appropriate unit price or force account. Stabilization necessitated, in the opinion of the Engineer, by the Contractor's blasting operations, shall be performed at the Contractor's expense.

3.6 PRODUCTION BLASTING

All production blasting, including that carried out in conjunction with the blasting test section requirements of Section 3.4, shall be performed in accordance with the following general requirements.

A. The row of production blast holes immediately adjacent to the controlled blast line shall be drilled on a plane approximately parallel to the controlled blast line. Production blast holes shall not be drilled closer than 6 feet to the controlled blast line, unless approved by the Engineer. The bottom of the production holes shall not be lower than the bottom of the controlled blast holes. Production holes shall not exceed 6 inches in diameter, unless approved by the Engineer. Detonation of production holes shall be on a delay sequence toward a free face. Stemming material used in production holes shall be and or other dry angular granular material, all of which passes a 3/8 inch sieve.

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B. It is the Contractor's responsibility to take all necessary precautions in the production blasting so as to minimize blast damage to the rock backslope.

3.7 SPECIAL PROCEDURES NEAR EXISTING BURIED UTILITY PIPES AND CONDUITS

A. When blasting within 15 feet of existing buried utility pipes and conduits, the following precautions shall be taken, as a minimum, to minimize the possibility of damage to the utilities.

1. Trench blasting in the area shall start as far as possible from the existing utilities, so that blast vibrations and bedrock geology can be evaluated as blasting approaches the utilities.
2. Well designed blast rounds shall be utilized with adequate relief to allow rock to move out towards a free face. Overburden soil shall be removed from the proposed blast area prior to blasting and fragmented rock from previous blasts shall be removed from the face prior to the next blast to allow for full relief at the free face.
3. Ground heave or settlement from blasting shall be less than 1 inch as measured at the ground surface immediately above adjacent utility pipes or conduits.
4. Special perimeter control blasting procedures shall be utilized at the perimeter of trench excavations to minimize the potential for overbreak or block movement outside the limits of excavation. Line drilling, pre-splitting, or cushion blasting procedures shall be utilized as indicated in Section 3.2 and below.
 - a. Line Drilling
 1. Line drilling shall consist of a minimum of 2-inch to 4-inch diameter holes evenly spaced at two per linear foot. Drill holes shall not deviate more than 3 inches from their required plan over the entire length of the hole. The line-drilled holes are to be drilled prior to production blasting and left unloaded.

4. METHOD OF MEASUREMENT AND PAYMENT

The accepted quantities of "Rock Excavation – Controlled Blasting" will be paid for at the contract unit price bid per "Cubic Yard" as listed in the proposal. The price so stated shall constitute full and complete compensation for all labor, materials, and equipment, including excavation within prescribed limits of work, formation of embankments, grading, compaction, disposal of surplus materials, preparation of subgrade and shoulders, and all other incidentals required to finish the work, complete and accepted by the Engineer.

JOB SPECIFIC
R.I. CONTRACT NO. 2013-CH-018

CODE 703.9901
18 INCH PERFORATED CORRUGATED POLYETHYLENE PIPE M294
COMBINATION DRAIN WITH FILTER MATERIAL

DESCRIPTION: This item of work shall include the furnishing and installation of 18-INCH PERFORATED CORRUGATED POLYETHYLENE PIPE M294 COMBINATION DRAIN WITH FILTER MATERIAL as specified below in accordance with the construction drawings, the relevant provisions of the “Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition” or as directed by the Engineer.

MATERIALS: Materials shall meet the requirements as indicated on the plans, shall be in accordance with section 701 of the “Rhode Island Standard Specifications for Rhode and Bridge Construction 2004 Edition”.

CONSTRUCTION METHODS: All work performed under this item shall conform to the relevant provisions of the “Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition” and the following:

METHOD OF MEASUREMENT: “18-INCH PERFORATED CORRUGATED POLYETHYLENE PIPE M294 COMBINATION DRAIN WITH FILTER MATERIAL” shall be measured for payment by the unit “LINEAR FOOT” for the length of corrugated polyethylene pipe installed.

BASIS OF PAYMENT: “18-INCH PERFORATED CORRUGATED POLYETHYLENE PIPE M294 COMBINATION DRAIN WITH FILTER MATERIAL” will be paid for at the contract unit price bid per “LINEAR FOOT” as listed in the proposal. The price so stated shall constitute full and complete compensation for all labor, materials, and equipment for furnishing and placing said units, including all bedding, filter stone, filter fabric, placing and compacting backfill and all other incidentals required to complete this work in accordance with this special provision, complete and accepted by the Engineer.

**JOB SPECIFIC
R.I. CONTRACT NO. 2013-CH-018**

**Code 807.9901
CLEANING, REPOINTING, & GROUTING ASHLAR MASONRY - FLAT RIVER
RESERVOIR BRIDGE NO. 1124**

**Code 807.9902
CLEANING, REPOINTING, & GROUTING ASHLAR MASONRY - COVENTRY
CENTER POND BRIDGE NO. 1125**

**Code 807.9903
CLEANING, REPOINTING, & GROUTING ASHLAR MASONRY - QUIDNICK
BROOK BRIDGE NO. 1127**

**Code 807.9904
CLEANING, REPOINTING, & GROUTING ASHLAR MASONRY - QUIDNICK
RESERVOIR BRIDGE NO. 1128**

DESCRIPTION: The work under this item shall consist of cleaning and repointing the existing granite joints to match existing, the patching of minor splits and cracks, filling voids between stones with grout for the existing stone masonry to remain, and pointing of any new stone layer placed or damaged stone replaced and as directed by the Engineer. This work shall include, but will not be limited to;

1. Protecting the site and adjoining properties from masonry dust, and other nuisances. Conform to all EPA, RIDEM, CRMC and OSHA regulations.
2. Providing masonry samples for cleaning joints including removing loose mortar from joints, joint cutting, repointing and other associated work. No general work shall be undertaken until samples are approved by the Engineer.
3. Cleaning, removing loose mortar from the existing joints and repointing deteriorated masonry joints as shown on drawings or general notes. Carefully protecting all non-masonry surfaces. The type of protection shall be the exclusive responsibility of the Prime Contractor.
4. Providing all required access, including barges, scaffoldings, to all areas of masonry, which require repairs, repointing or cleaning.
5. Removing any excessive construction materials from contractor's action including paint from masonry due to the Contractor's operation.

MATERIALS: All materials shall conform to the following requirements

Mortar and Gout Materials: Match composition, color and profile of existing mortar in all respects. Shall be in accordance with applicable subsections of section 807 of RIDOT Standard Specification and supplements to-date.

Masonry Materials: Granite to match existing in color, finish and other visual attributes and to fit snugly in holes being repaired. The Contractor shall use removed stockpiled stones.

CONSTRUCTION METHODS: All construction shall conform to the following requirements:

References

1. Applicable subsections of section 807 of RIDOT Standard Specification and supplements to-date.

Submittals

1. Shop Drawings: Detail bracing and temporary or permanent support. Contractor shall submit shop drawing in ample time to allow for review and approval by the Engineer.
2. Product Data: Submit manufacturer's technical data for each product indicated including recommendations for their application and use. Include test reports and certifications substantiating that products comply with requirements.
3. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.

Quality Assurance

1. At least one (1) month prior to the beginning of this work, the Contractor shall submit evidence of the mason's qualifications and experience for the Engineer's review and approval.

Cleaning, Repointing Sample Panel: Spot clean deteriorated joints of a 100 SF panel of wall to determine extent of cleaning and repointing. Locate where directed by the Engineer. Acceptable panel and method of procedure will become the standard for work for rest of the project.

Delivery, Storage, and Handling

1. Deliver, store, protect, and handle products in strict conformance with the manufacturer's recommendations, in compliance with all applicable sections of the latest Rhode Island Standard Specifications for Road and Bridge Construction, and as directed by the Engineer.
2. Deliver materials to site in manufacturer's original and unopened containers and packaging, bearing labels as to type and names of products and manufacturers
3. Protect mortar, grout and other materials from deterioration by moisture and temperature. Store in a dry location or in waterproof containers. Keep containers tightly closed and away from open flames. Protect liquid components from freezing. Comply with manufacturer's recommendations for minimum and maximum temperature requirements for storage.

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4. The Contractor shall restore the site to its original condition if it is damaged by storage of construction material or Contractor's equipments, mixing mortar or any other construction activity.
5. Store restoration cleaner materials in manufacturer's packaging.

Protection:

1. Protect elements surrounding the work of this section from damage or disfiguration.
2. Immediately remove stains, efflorescence, or other excess resulting from the work of this section.
3. The Contractor shall, at no additional cost to the State, repair any damage caused to the structure and/or any masonry as a result of the means and methods utilized to complete the Work.
4. The Contractor shall assure that no debris or any other foreign materials falls into the river or ground beneath the structure. Should any debris fall to the river and/or ground despite this assurance, all work shall stop until such time as the debris has been recovered to the satisfaction of the Engineer, and a revised procedure of operation has been submitted by the Contractor to the Engineer for review and approval. Any delay caused as a result of cessation of work and approval of the revised procedure of operation shall not relieve the contractor of any of his responsibilities under this Contract, including the timely completion of work

Environmental Requirements:

1. Do not repoint mortar joints or repair masonry unless air temperatures are between 40 degrees F (4 degrees C) and 80 degrees F (27 degrees C) and will remain so for at least 24 hours after completion of work.
2. Prevent mortar used in repointing and repair work from staining face of surrounding masonry and other surfaces. Remove immediately any mortar in contact with exposed masonry and other surfaces.
3. Protect sills, ledges and projections from mortar/grout and paint droppings

Sequencing: Perform repointing after cleaning joints and filling voids with grout.

Installation:

1. Protect all non-masonry surfaces from damage.
2. In addition, the Contractor shall comply with the applicable provisions of local, state and federal regulations that are in effect at the time of cleaning, repointing and grouting. The Contractor shall be responsible for the determination of the pertinent environmental and safety regulations and for the determination of all permits required to perform the work.

Repointing: If not mentioned otherwise in this specification or plans, all areas where more extensive repairs such as filling voids with grout are not required shall be repointed as directed by the Engineer. Review with the Engineer, specific areas to be repointed. Rake out joints for repointing to a uniform depth to the deepest of the following criteria; twice the width of the joint, one-inch minimum depth, until sound mortar is reached.

1. Remove loose and deteriorated mortar from masonry joints to provide reveals with square backs and to expose masonry for contact with pointing mortar. Brush, vacuum or flush joints to remove dirt and loose debris. Do not spall or damage edges of masonry units or widen joints. Replace any masonry that becomes damaged at no additional cost to the State. Remove loose mortar by hand with chisel and mallet, unless otherwise indicated. Power-operated rotary handsaws and grinders will be permitted, but only after approval of a sample panel and demonstrated ability of operators to use tools without damage to masonry. Test cuts must be prepared for review by the Engineer. If test cuts do not damage surrounding masonry or enlarge joints, power tools may be allowed at the discretion of the Engineer. Quality control program shall include provisions for supervising performance and preventing damage due to worker fatigue. The approved sample panel shall remain throughout the project and be used as the standard to quality. If any masonry is damaged by saws or grinders, all further work shall be done by hammer and chisel. All damaged masonry shall be replaced at no cost to the State.
2. Joint Pointing: Rinse masonry joint surfaces with water to remove any dust and mortar particles. Time application of rinsing so that, at time of pointing, excess water has evaporated or run off, and joint surfaces are damp, but free of standing water.
3. Apply first layer of pointing mortar to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8" until a uniform depth is formed. Compact each layer and allow it to become thumbprint-hard before applying next layer.
4. When mortar is thumbprint-hard, tool joints to match original appearance of joints, unless otherwise indicated. Remove excess mortar from edge of joint by brushing. Keep all joints recessed 1/16" to 1/8" from the face of stones.
5. Cure mortar by maintaining in a damp condition for not less than 72 hours.

METHOD OF MEASUREMENT:

The unit of measurement shall be by the number of "SQUARE FEET" required, applied in place and accepted for cleaning, grouting as necessary and repointing masonry.

BASIS OF PAYMENT:

Payment for:

Code 807.9901
CLEANING, REPOINTING, & GROUTING ASHLAR MASONRY - FLAT RIVER
RESERVOIR BRIDGE NO. 1124

Code 807.9902
CLEANING, REPOINTING, & GROUTING ASHLAR MASONRY - COVENTRY CENTER
POND BRIDGE NO. 1125

Code 807.9903
CLEANING, REPOINTING, & GROUTING ASHLAR MASONRY - QUIDNICK BROOK
BRIDGE NO. 1127

Code 807.9904
CLEANING, REPOINTING, & GROUTING ASHLAR MASONRY - QUIDNICK
RESERVOIR BRIDGE NO. 1128

shall be made at the contact unit price per "SQUARE FOOT" complete, applied in place. The price so-stated constitutes full and complete compensation for all labor, materials, equipment, temporary access/supports, barges, and all other incidentals listed and/or referenced in this Specification required to finish the work, complete and accepted by the Engineer.

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ADDENDUM NO. 1

**JOB SPECIFIC
R.I.CONTRACT NO. 2013-CH-018**

Code 817.9901

**REPAIRS TO STRUCTURAL CONCRETE MASONRY WITH INTEGRALLY
COLORED PATCHING MORTAR AND/OR WITH INTEGRALLY COLORED
CONCRETE - FLAT RIVER RESERVOIR BRIDGE NO. 1124**

Code 817.9904

**REPAIRS TO STRUCTURAL CONCRETE MASONRY WITH INTEGRALLY
COLORED PATCHING MORTAR AND/OR WITH INTEGRALLY COLORED
CONCRETE - QUIDNICK RESERVOIR BRIDGE NO. 1128**

DESCRIPTION:

This work shall consist of removing all deteriorated, disintegrated, soft, honeycombed, fractured, or otherwise defective concrete and replacing it with integrally colored patching mortar or integrally colored Portland cement concrete (if required) at locations shown on the Plans or as directed by the Engineer. Repairs shall be performed in accordance with Section 817 and as modified herein. The mortar and/or concrete shall be of the class, color, texture and have aggregates from approved sources that closely match the predominant color, texture and aggregates of the existing concrete structure as specified on the plans and as approved by the Engineer and in consultation with the RIDOT Historic Preservation Specialist. Repairs shall include, but will not be limited to: removal and disposal of damaged concrete, cleaning and preparing of the bonding surface, cleaning of existing reinforcing steel, placing of additional reinforcing steel where required, application of a bonding agent (as required) and placement of new mortar/concrete repair materials to restore the structural elements to the original line, grade, surface finish (color and texture) and designed structural capacity.

MATERIALS:

Aggregates: The fine and coarse aggregates must be approved by the Engineer in consultation with the RIDOT Historic Preservation Specialist as to color and texture.

Integrally Colored Concrete: Integrally colored Portland cement concrete shall conform to the requirements of Part 600, *Concrete* of the RI Standard Specifications. The concrete classification and location used shall be as specified on the Plans and as directed by the Engineer.

Integrally Colored Patching Mortar: Patching mortar shall conform to the requirements of ASTM C928.

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Coloring Agent: Coloring agents for integrally colored concrete or patching mortar shall meet the requirements of ASTM C979 and be approved by the Engineer. Coloring agents shall be used in accordance with the manufacturer's recommendations.

Concrete Anchors: Mechanical concrete anchors shall be hooked type expansion bolts galvanized in accordance with the Rhode Island Standard Specifications of a type to be approved by the Engineer.

CONSTRUCTION METHODS:

The Engineer shall be notified of any repair work no later than 24 hours prior to the scheduled repair work. The Contractor shall submit a repair plan for each specific type of repair in accordance with the Plans and these specifications. Prior to performing the field trial runs of the repair materials the Contractor shall submit to the Engineer one prototype (1'x1'x3" min.) for each concrete classification, mortar, color and texture as required in the project plans. The prototype(s) must be submitted to the Engineer sufficiently in advance to allow for review and approval in of color and texture of the repair material(s). The Contractor shall also provide in writing to the Engineer, the mix design, and finishing methods for obtaining any required surface finish (i.e.: exposed aggregate, etc.) for each repair material. The prototypes must be approved in writing by the Engineer in consultation with the RIDOT Historic Preservation Specialist.

FORMS: The Contractor shall use form release methods/materials that will not cause discoloration, staining or any other detriment to the concrete, in accordance with the coloring agent manufacturer's recommendations and subject to the approval of the Engineer.

SURFACE PREPARATION: Surface preparation will be achieved in accordance with the mortar manufacturer's recommendations. For repairs with integrally colored concrete, the surfaces shall be in saturated, surface-dry condition. Epoxy bonding agents will not be approved for use.

FINISHING: All exposed surfaces shall be finished straight and true, approximating the original contour as close as practicable. The final finished surfaces shall match the texture, color and aggregate exposure of the existing concrete surfaces adjoining or proximate to the area where new concrete has been placed.

The Contractor shall capture all the waste and water from the finishing operations, process and dispose these materials. Any materials and/or labor resulting from the surface finishing operations, including sedimentation and dewatering controls shall be included in the bid price of this item.

CURING: All curing procedures and methods shall be completed according to the color additive manufacturer's recommendations and as specified in Section 601 of the R.I. Standard Specifications or as otherwise directed by the Engineer. Use of curing compounds is not permitted unless specifically required by the manufacturer of the color additive.

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METHOD OF MEASUREMENT: The unit of measurement for "Repairs to Structural Concrete Masonry with Integrally Colored Patching Mortar or Integrally Colored Concrete" shall be measured by the number of cubic feet of new integrally colored patching mortar or concrete required in place, to establish the final finish of the exposed surface as specified above.

BASIS OF PAYMENT: Payment for "Repairs to Structural Concrete Masonry with Integrally Colored Patching Mortar or Integrally Colored Concrete" as measured above will be made by the cubic foot as listed in the Proposal. Such payment shall constitute full compensation for furnishing all materials, labor, equipment, tools, forms, scaffolds, anchors, supplemental steel reinforcement, bonding agent (if required), finishing, cleaning and all incidentals necessary to complete this item in accordance with these Special Provisions and the Standard Specifications to the satisfaction of the Engineer. No additional payment will be made for rebound, overlapping or other loss of material.

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**JOB SPECIFIC
R.I. CONTRACT NO. 2013-CH-018**

**Code 830.9901
STEEL BRIDGE RAIL WITHOUT PROTECTIVE SCREEN - FLAT RIVER
RESERVOIR BRIDGE NO. 1124**

**Code 830.9902
STEEL BRIDGE RAIL WITHOUT PROTECTIVE SCREEN - COVENTRY CENTER
POND BRIDGE NO. 1125**

**Code 830.9903
STEEL BRIDGE RAIL WITHOUT PROTECTIVE SCREEN – QUIDNICK BROOK
BRIDGE NO. 1127**

**Code 830.9904
STEEL BRIDGE RAIL WITHOUT PROTECTIVE SCREEN – QUIDNICK
RESERVOIR BRIDGE NO. 1128**

**Code 830.9911
STEEL BRIDGE RAIL WITH PROTECTIVE SCREEN - FLAT RIVER RESERVOIR
BRIDGE NO. 1124**

DESCRIPTION: This work shall include all equipment, labor, and materials necessary for furnishing and installing steel rail as indicated on the plans and as specified herein. All work shall be in accordance with the latest edition of Section 830 “Metal Bridge Railing” of the Rhode Island Standard Specifications for Road and Bridge Construction, except as modified in this Special Provision.

MATERIALS: All posts and rails shall be cold formed seamless tubing and shall conform to the latest provision of ASTM A500, Grade B. All steel plate shall conform to the requirements of AASHTO M270 Grade 50.

All posts and rail components including hardware shall be prepared, metalized and shop painted after fabrication and welding in accordance with section 827 “Thermal sprayed zinc coating for new structural steel” and section 825 “Painting Structural Steel” of the Rhode Island Standard Specifications for Road and Bridge Construction, except as modified in this Special Provision. The color of the top coat shall be “moderate olive green (Munsell 2.5/GY 4/3.5).

All anchor bolts shall conform to the requirements of ASTM A307.

Chain link fence shall conform to both the applicable provisions of Section M.08 “Fence and Guardrail” and applicable subsections of Section 831 of the Rhode Island Standard

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ADDENDUM NO. 1

Specifications for Road and Bridge Construction, except as modified in this Special Provision. Wire Fabric shall be No. 9 gauge (.148" diameter) and shall have a uniform diamond mesh measuring approximately 2-inches between parallel sides. Fabric shall be coated with a black PVC Class 1 coating conforming to ASTM F668.

The entire railing shall be constructed as shown on the plans.

CONSTRUCTION METHODS: Construction shall be in accordance with Section 830.03 of the Rhode Island Standard Specifications for Road and Bridge Construction. The contractor shall provide shop drawings for railing and fence. The bare contact between steel and aluminum shall not be allowed.

METHOD OF MEASUREMENT: These items will not be measured for payment.

BASIS OF PAYMENT: No separate payment will be made for these items. Costs for these items shall be included in the lump sum bid prices of the appropriate items listed in the Proposal.

**JOB SPECIFIC
R.I. CONTRACT NO. 2013-CH-018**

**Code 901.9902
FURNISH AND INSTALL METAL RAIL FENCE – WITH
PROTECTIVE SCREEN FENCE**

**Code 901.9903
FURNISH AND INSTALL METAL RAIL FENCE – WITHOUT
PROTECTIVE SCREEN FENCE**

DESCRIPTION: This work shall include all equipment, labor, and materials necessary for furnishing and installing steel rail as indicated on the plans and as specified herein. All work shall be in accordance with the latest edition of Section 830 “Metal Bridge Railing” of the Rhode Island Standard Specifications for Road and Bridge Construction, except as modified in this Special Provision.

MATERIALS: All posts and rails shall be cold formed seamless tubing and shall conform to the latest provision of ASTM A500, Grade B. All steel plate shall conform to the requirements of AASHTO M270 Grade 50.

All posts and rail components including hardware shall be prepared, metalized and shop painted after fabrication and welding in accordance with section 827 “Thermal sprayed zinc coating for new structural steel” and section 825 “Painting Structural Steel” of the Rhode Island Standard Specifications for Road and Bridge Construction, except as modified in this Special Provision. The paint system shall be 3 -part NEPCOAT, primer, intermediate and top finish coat. The color shall be “moderate olive green (Munsell 2.5/GY 4/3.5).

All anchor bolts shall conform to the requirements of ASTM A307.

Chain link fence shall conform to both the applicable provisions of Section M.08 “Fence and Guardrail” and applicable subsections of Section 831 of the Rhode Island Standard

Specifications for Road and Bridge Construction, except as modified in this Special Provision. Wire Fabric shall be No. 9 gauge (.148” diameter) and shall have a uniform diamond mesh measuring approximately 2-inches between parallel sides. Fabric shall be coated with a black PVC Class 1 coating conforming to ASTM F668.

The entire railing shall be constructed as shown on the plans.

CONSTRUCTION METHODS: Construction shall be in accordance with Section 830.03 of the Rhode Island Standard Specifications for Road and Bridge Construction. The contractor shall provide shop drawings for railing and fence. The bare contact between steel and aluminum shall not be allowed.

METHOD OF MEASUREMENT: “Furnish and install metal rail fence – with protective screen fence” and “Furnish and install metal rail fence – without protective screen fence” will be measured by the linear foot installed.

BASIS OF PAYMENT: “Furnish and install metal rail fence – with protective screen fence” and “Furnish and install metal rail fence – without protective screen fence” will be paid for at the contract unit price bid per “Linear Foot” as listed in the proposal. This payment shall constitute full and complete compensation for all labor, tools, materials, equipment, excavation, including foundations, drilling and grouting into stone headwall, and all other incidentals required to finish the work in accordance with this special provision complete and accepted by the Engineer.

**JOB SPECIFIC
R.I. CONTRACT NO. 2013-CH-018**

**CODE 903.9901
1 1/2" DIA. GALV. STEEL PEDESTRIAN FENCE, 42" HIGH WITH
1/2" PICKETS AND CONTINUOUS HANDRAIL**

DESCRIPTION: This work consist of furnishing and installing 1 1/2" dia. galv. steel pedestrian fence, 42" high with 1/2" pickets and continuous handrail, in accordance with these specifications, plan details, and in reasonably close conformity to the lines and grades shown on the plans or established by the Engineer.

MATERIALS: 1 1/2" galv. steel posts and railings with 1/2" dia. galv. steel post (pickets) @ 4" O.C. welded to top and bottom railings.

CONSTRUCTION METHODS: All construction shall be perform to the satisfaction of the Engineer.

METHOD OF MEASUREMENT: This Item will not be measured for payment.

BASIS OF PAYMENT: No separate payment will be made for "1 1/2" dia. galv. steel pedestrian fence, 42" high with 1/2" pickets and continuous handrail" cost of this item shall be included in the "LUMP SUM" bid price of item code 911.9901 "Retaining Wall and Ramp".

CODE 938.1000

JOB SPECIFIC
R.I. Contract No. 2013-CH-018

PRICE ADJUSTMENTS

DESCRIPTION.

a. **Liquid Asphalt Cement.** The Base Price of Liquid Asphalt Cement as required to implement **Subsection 938.03.1** of the Standard Specifications is \$620.00 per ton as of April 15th 2013.

b. **Diesel Fuel.** The Base Price of Diesel Fuel as required to implement **Subsection 938.03.2** of the Standard Specifications is \$ 3.0038 per gallon as of April 15th 2013.

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ADDENDUM NO. 1

Replace Code 943.0100; Training Provisions, pages AC-127 to AC-129 of the January 2011 Compilation of Approved Specifications in its entirety with the following.

CODE 943.0200

ON-THE-JOB TRAINING

(Job-Specific)

This On-the-Job Training Specification conforms to the requirements of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity and affirmative action programs, training shall be provided as follows:

A. The contractor shall provide on-the-job training aimed at developing full journey worker status in the type of trade or job classification involved.

B. The number of training hours assigned to this contract per this specification will be 4,000 hours. The specific number of trainees shall be determined by the Contractor during the post qualification process.

C. In the event that a contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided, however, that the contractor shall retain the primary responsibility for meeting the training requirements of this specification. The contractor shall also insure that this specification is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

D. The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journey workers in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to RIDOT for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work that is currently enrolled or becomes enrolled in an approved program, and will be reimbursed for such trainees as provided hereinafter.

GOOD FAITH EFFORTS

Training and upgrading of minorities and women toward journey worker status is a primary objective of this Specification. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Specification. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journey worker status, or in which he/she has been employed as a

**JOB SPECIFIC
R.I. CONTRACT NO. 2013-CH-018**

**CODE L05.9901
EQUESTRIAN TRAIL SLOPE STABILIZATION WITH GRID AND WOOD
DEFLECTOR**

DESCRIPTION: This item of work shall consist of furnishing and installing the “EQUESTRIAN TRAIL SLOPE STABILIZATION WITH GRID AND WOOD DEFLECTOR” in accordance with the construction drawings, these specifications, the relevant provisions of the Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition and Supplements, and as directed by the Engineer.

MATERIALS: Materials shall meet the requirements as indicated on the plans and as specified below and shall be in accordance with the relevant provisions of the Rhode Island Department of Transportation Standard Specification for Road and Bridge Construction 2004 Edition and Supplements.

- a. **Stone Fines** shall meet the requirements of the specification for Item Code 202.9902- Stone Dust 4” Deep.
- b. **Gravel Borrow** shall meet the requirements of the Standard Specifications Subsection M.01.09; Gradation of Aggregates, Table 1, Column 1.
- c. **Wood** for the deflector shall be cut from well-seasoned, straight, sound Southern Yellow Pine, Grade No. 2 or better, dressed on all four sides and shall be treated with alkaline copper quatamary (ACQ) wood preservative at the rate of 0.40pounds per cubic foot.
- d. **Grid** shall be one of the following or an approved equal:
 - i. Netpave 50
 - ii. EcoGrid/EcoRaster 50mm/5mm
 - iii. BodPave 85 Paving Grids

CONSTRUCTION METHODS: All work performed under this item shall conform to the relevant provisions of the Rhode Island Department of Transportation Standard Specification for Road and Bridge Construction 2004 Edition including all supplements and the manufacturers specifications.

METHOD OF MEASUREMENT: This item of work shall be measured for payment by the unit “Square Foot” for the actual number of square feet of the grid installed in accordance with the plans or as directed by the Engineer.

BASIS OF PAYMENT: “EQUESTRIAN TRAIL SLOPE STABILIZATION WITH GRID AND WOOD DEFLECTOR” will be paid for at the contract unit bid price bid per “Square Foot” as listed in the proposal. This payment shall constitute full and complete compensation for all labor, tools materials and equipment, including excavation, stones fines, gravel borrow, wood deflector, grid, hardware and all other incidentals required to finish the work in accordance with this special provision complete and accepted by the engineer.

**JOB SPECIFIC
RI CONTRACT NO. 2013-CH-018**

**CODE T15.9901
BIKEWAY AND EQUESTRIAN TRAIL ENTRANCE SIGN - RIDEM**

**CODE T15.9902
TRESTLE TRAIL EQUESTRIAN PARKING LOT SIGN - RIDEM**

**CODE T15.9903
CANOE PORTAGE PARKING ONLY SIGN**

**CODE T15.9904
CAR / VAN PARKING ONLY SIGN**

**CODE T15.9905
EQUESTRIAN PARKING ONLY SIGN**

**CODE T15.9909
TRAIL HEAD SIGN (SP-T1)**

**CODE T15.9910
WELCOME TO THE TRESTLE TRAIL SIGN**

DESCRIPTION: This item of work shall consist of furnishing and installing sign structures and signs in accordance with the construction drawings, these specifications, the relevant provisions of the "Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition" or as directed by the Engineer.

MATERIALS: Materials shall conform to the requirements as indicated on the plans and as specified below and shall be in accordance with the relevant provisions of the "Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition."

Wood: Lumber for framing and posts shall be cut from well-seasoned, straight, sound Southern Yellow Pine, Grade No. 2 or better, dressed on all four sides and shall be treated with alkaline copper quatamary (ACQ) wood preservative at the rate of .04 pounds per cubic foot.

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ADDENDUM NO. 1

Aluminum: The support posts shall be fabricated 2 ½" x 3 ½" x 3/16th special extruded aluminum posts. Panel backing, where specified, shall be ¼" aluminum plate with painted surface.

Fasteners: All fasteners shall be stainless steel.

Graphic Panel:

CODE T15.9901: BIKEWAY AND EQUESTRIAN TRAIL ENTRANCE
CODE T15.9902: TRESTLE TRAIL EQUESTRIAN PARKING LOT
CODE T15.9903: CANOE PORTAGE PARKING ONLY
CODE T15.9904: CAR / VAN PARKING ONLY
CODE T15.9905: EQUESTRIAN PARKING ONLY
CODE T15.9909: TRAIL HEAD SIGN (SP-T1)
CODE T15.9910: WELCOME TO THE TRESTLE TRAIL SIGN

Graphic panels shall 3-inches deep with the length and width as indicated on the plans. The graphic panels shall be double faced. Fiberglass faces to be 3/16th thick bonded to the aluminum backing and resined to a 3-inch solid urethane foam core. Face thickness to be 3/16" thick and bled edge detail (mounting detail that retain the face will not be accepted). Frames and backing to be painted black. Graphic panels shall be embedded fiberglass constructed of a digital imprint laminated layers of fiberglass and resin with ultraviolet inhibitors added, Spectralite Ltd. as distributed by Graphic Designers, Inc. Cranston, RI or approved equal. Panels shall be mounted to backup plates as shown on plans. Graphic panels shall also be glued to the backup panels with polyurethane exterior glue-minimum 50% coverage and entire perimeter. Colors and text will be as indicated on the plans or as designated by the Rhode Island Department of Environmental Management (RIDEM).

Graphic Standards:

Except as shown on drawings, the Owner will provide copy and artwork.

1. All copy and typography will be photo typeset.
2. All drawings, details, and photos will be provided camera ready reproducible or as camera ready film negatives/transparencies. Sign vendor is responsible for all stats: blow-ups, typesetting, and finish film costs.
3. Graphic presentation boards will be presented (11" x 17" or larger) in the following formats:

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ADDENDUM NO. 1

- a. Rough Draft - showing copy placement and layout for photo and drawings.
- b. Intermediate Draft - with corrected copy and Xerox images.
- c. Finished Draft - approval copy with actual image and color laser print.
- d. Finished Artwork - with color separations and all camera ready artwork, typography and film transparencies and/or black & white photos.

Warranty: Guarantee fiberglass faces with printed graphics and illustrations for ten years against excessive fading, chipping, delamination, vandalism, breakage, and weathering. Repair or replace graphic panels found to be defective for any of the above reasons subject to a use adjustment made on a pro rata basis for a maximum period of 120 months (photos for 60 months), beginning with the date of the shipment. The manufacturer will store and maintain a minimum of two additional substrates in case the faces need to be replaced.

CONSTRUCTION METHODS: All work performed under this item shall conform to the relevant provisions of the "Rhode Island Department of Transportation Standard Specifications for Road and Bridge Construction 2004 Edition." and the following:

Fabrication: Fabricate with joints tightly fitted and secured. Fit and shop assemble in largest practical sections for delivery to site.

Excavation: Place footings at locations indicated on the construction drawings. Set posts securely in proper alignment and elevation, as shown on the drawings. Backfill with gravel and compact well.

Setting Sign: Sign to be set plumb. Attach sign securely to the structure as indicated on the plans.

METHOD OF MEASUREMENT: The signs shall be measured by the unit each, complete in place and accepted.

BASIS OF PAYMENT: Upon approval of all artwork by the Engineer, the signage contractor may invoice up to 25% of the unit bid price for each sign to be installed. The balance of the sign cost shall be invoiced upon acceptance of the work item by the Engineer. Signs will be paid for at the contract unit price bid per "Each" as listed in the proposal. This payment shall constitute full and complete compensation for all signs, sign supports, fasteners, graphics, labor, materials, tools, excavation, backfill, and all other incidentals required to complete the work in accordance with this special provision complete and accepted by the Engineer.

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ADDENDUM NO. 1

JOB SPECIFIC
R.I. CONTRACT NO. 2013-CH-018

CODE T19.9901
MILEPOST MARKER

DESCRIPTION: This work consist of furnishing and installing a granite pillar in accordance with these specifications, plan details, and in reasonably close conformity to the lines and grades shown on the plans or established by the Engineer.

MATERIALS: The granite stone shall conform to the requirements of the Subsection M.14 of the Standard Specifications. It shall be split face with the exception of the carved area which is to be cut with a smooth finish.

CONSTRUCTION METHODS:

Fabrication: Cut and dress stone accurately to shape and dimensions indicated on the following detail. Work to be done by experienced stonecutters.

Carving: Carve and cut inscriptions to comply with final approved shop drawings, v-sunk to a depth of approximate 1/2 inch, opti sandblast letter style, using Sabon Regular font. Text to read "X.X and COV".

Excavation: Excavation of hole must meet the depth shown on the drawings.

Laying Mile Marker: Set mile marker in excavated hole in accordance with the drawings. Contractor shall backfill and tamp thoroughly. Any excess material from excavation must be removed.

Shop Drawings: Shop drawings shall be submitted in accordance with subsection 105.02 of the Standard Specifications.

METHOD OF MEASUREMENT: Milepost Marker will be measured for payment by the unit each, including all components, complete and accepted.

BASIS OF PAYMENT: Milepost Marker will be paid for at the contract unit price per each as measured under Method of Measurement. Price shall constitute full compensation for furnishing, carving, excavation, removal of all excess materials, gravel borrow subbase, backfilling, compaction, loam, seed, Milepost Marker installation and for all labor, tools, equipment and incidentals necessary to complete the item.

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201.0320	CLEARING AND GRUBBING	1
201.0401	REMOVE AND DISPOSE GRANITE CURB	2
201.0402	REMOVE AND DISPOSE CONCRETE CURB	2
201.0403	REMOVE AND DISPOSE SIDEWALKS	3
201.0409	REMOVE AND DISPOSE FLEXIBLE PAVEMENT	3
201.0410	REMOVE AND DISPOSE CATCH BASINS	4
201.0414	REMOVE AND DISPOSE PIPE - ALL SIZES	4
201.0415	REMOVE AND DISPOSE GUARDRAIL AND POST ALL TYPES	4
201.0419	REMOVE AND DISPOSE FENCE	4
201.0424	REMOVE AND DISPOSE RETAINING WALL	4
201.0428	REMOVE AND DISPOSE FRAME AND GRATE OR FRAME AND COVER	5
201.9902	REMOVE AND DISPOSE CONCRETE OR STONE BLOCKS	5
201.9904	REMOVE AND DISPOSE WOODEN STEPS	5
201.9905	REMOVE AND DISPOSE 8'X20' BOX CONTAINER	5
201.9906	REMOVE AND DISPOSE 24' TRAILER	5
201.9907	REMOVE AND DISPOSE WOOD POST	5
202.0100	EARTH EXCAVATION	6
202.0201	** ITEM DELETED **	6
202.0700	COMMON BORROW	10
202.9901	STONE DUST 4" DEEP	10
202.9902	HANDLING, HAULING, STOCKPILING AND MANAGEMENT OF CONTAMINATED SOILS	13
203.0100	STRUCTURAL EXCAVATION EARTH	13
203.0600	FILL GRAVEL BORROW UNDER STRUCTURES	13
203.0700	PERVIOUS FILL	14
204.0100	TRIMMING AND FINE GRADING	14
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207.0202	BALED HAY DITCH EROSION CHECK STANDARD 9.4.0	20
211.0100	CONSTRUCTION ACCESSES STANDARD 9.9.0	23
212.2000	CLEANING AND MAINTENANCE OF EROSION CONTROLS	24
302.0100	GRAVEL BORROW SUBBASE COURSE	24
401.9901	BITUMINOUS BASE COURSE, CLASS 19	24
401.9902	BITUMINOUS SURFACE COURSE, CLASS 9.5	25
401.9903	BITUMINOUS SURFACE COURSE, CLASS 4.75	26
403.0300	ASPHALT EMULSION TACK COAT	26
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701.0418	REINFORCED CONCRETE PIPE M 170 CLASS III 18 INCH	26
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701.4318	18 INCH SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE	27
701.8003	PIPE BEDDING CLASS C	27
701.9901	8 INCH SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE	28
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701.9903	18 INCH HDPE PIPE FLARED END SECTION	29
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702.0517	FRAME AND GRATE, STANDARD 6.3.2	29
702.0522	FRAME AND COVER STANDARD 6.2.1	29
702.0541	GRANITE INLET STONE 38'' STANDARD 7.3.6	30
702.0543	GRANITE APRON STONE 38'' STANDARD 7.3.8	30
702.0630	PRECAST MANHOLE 4' DIAMETER STANDARD 4.2.0	30
702.0635	PRECAST MANHOLE 5' DIAMETER STANDARD 4.2.1	30
702.0703	CATCH BASIN TYPE 'F' ROUND STANDARD 3.4.2	31
702.0705	CATCH BASIN W/GUTTER INLET STANDARD 3.4.1	31
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800.9903	QUIDNICK BROOK BRIDGE NO. 1127	37
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803.0400	CLEANING BRIDGE BEAM SEATS	37
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803.9902	REMOVE, REUSE, STOCKPILE AND OR DISPOSE EXISTING STONE MASONRY - COVENTRY CENTER POND BRIDGE NO. 1125	38
803.9903	REMOVE, REUSE, STOCKPILE AND OR DISPOSE EXISTING STONE MASONRY - QUIDNICK BROOK BRIDGE NO. 1127	38
803.9904	REMOVE, REUSE, STOCKPILE AND OR DISPOSE EXISTING STONE MASONRY - QUIDNICK RESERVOIR BRIDGE NO. 1128	38
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017	201.9907 Cont.					
				Item 201.9907 Total:	2.00	
018	202.0100	EARTH EXCAVATION	CY			
		ACRES OF PINE ROAD				
		BEGIN TO END		23.00	0028	01
		BIKEWAY				
		EXCAVATION OF CONTAMINATED SOIL		2,235.00	0028	01
		LESS ITEM 202.9903		-4,740.00	0028	01
		LESS ITEM 202.9904		-1,213.00	0028	01
		STA 500+00 TO 700+00		14,683.00	0028	01
		STA 700+00 TO 768+93		5,624.00	0028	01
		CAMP WESTWOOD ROAD				
		BEGIN TO END		227.00	0028	01
		HILL FARM ROAD				
		BEGIN TO END		1,376.00	0028	01
		LOG BRIDGE ROAD				
		BEGIN TO END		973.00	0028	01
		PHILLIPS HILL ROAD				
		BEGIN TO END		435.00	0028	01
		PINE HAVEN ROAD				
		BEGIN TO END		879.00	0028	01
				Item 202.0100 Total:	20,502.00	
019	202.0201	ROCK EXCAVATION MECHANICAL	CY			
		BIKEWAY				
		HILL FARM ROAD - EQUESTRIAN			0028	01
		PARKING LOT				
		LESS ITEM CODE 202.0201		1078	0028	01
		STA 509+67.53 TO 569+97.13		1029	0028	01
		STA 509+97.13 TO 510+00		1028	0028	01
		STA 510+00 TO 510+50		1028	0028	01
		STA 510+50 TO 510+60		1028	0028	01

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019	202.0203 Cswt	STA 511+00 TO 511+50			0020	01
		STA 511+50 TO 512+00			0020	01
		STA 512+00 TO 512+50			0020	01
		STA 512+50 TO 513+00			0020	01
		STA 513+00 TO 513+10.87			0020	01
		STA 513+10.87 TO 513+50			0020	01
		STA 513+50 TO 514+00			0020	01
		STA 514+00 TO 514+50			0020	01
		STA 514+50 TO 515+00			0020	01
		STA 515+00 TO 515+50			0020	01
		STA 515+50 TO 516+00			0020	01
		STA 516+00 TO 516+50			0020	01
		STA 516+50 TO 517+00			0020	01
		STA 520+50 TO 521+00			0020	01
		STA 521+00 TO 521+50			0020	01
		STA 521+50 TO 522+00			0020	01
		STA 522+00 TO 522+50			0020	01
		STA 522+50 TO 523+00			0020	01
		STA 523+00 TO 523+15.83			0020	01
		STA 523+15.83 TO 523+50			0020	01
		STA 523+50 TO 524+00			0020	01
		STA 524+00 TO 524+50			0020	01
		STA 524+50 TO 525+00			0020	01
		STA 525+00 TO 525+50			0020	01
		STA 525+50 TO 526+00			0020	01
		STA 526+00 TO 526+50			0020	01
		STA 526+50 TO 527+00			0020	01
		STA 527+00 TO 527+50			0020	01
		STA 527+50 TO 528+00			0020	01
		STA 528+00 TO 528+50			0020	01
		STA 528+50 TO 529+00			0020	01
		STA 529+00 TO 529+50			0020	01
		STA 529+50 TO 530+00			0020	01

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339	197.0201 Crank	STA 530+00 TO 530+50			0028	01
		STA 531+50 TO 532+00			0028	01
		STA 532+00 TO 532+50			0028	01
		STA 532+50 TO 533+00			0028	01
		STA 533+00 TO 533+50			0028	01
		STA 533+50 TO 534+00			0028	01
		STA 534+00 TO 534+50			0028	01
		STA 534+50 TO 535+00			0028	01
		STA 535+00 TO 535+50			0028	01
		STA 535+50 TO 536+00			0028	01
		STA 536+00 TO 536+50			0028	01
		STA 536+50 TO 537+00			0028	01
		STA 537+00 TO 537+50			0028	01
		STA 581+08.66 TO 581+41.32			0028	01
		STA 581+41.02 TO 581+50			0028	01
		STA 581+50 TO 581+76.38			0028	01
		STA 581+76.28 TO 582+00			0028	01
		STA 582+00 TO 582+50			0028	01
		STA 582+50 TO 583+00			0028	01
		STA 583+00 TO 583+50			0028	01
		STA 583+50 TO 584+00			0028	01
		STA 584+00 TO 584+50			0028	01
		STA 584+50 TO 585+00			0028	01
		STA 585+00 TO 585+50			0028	01
		STA 585+50 TO 586+00			0028	01
		STA 586+00 TO 586+50			0028	01
		STA 586+50 TO 587+00			0028	01
		STA 587+00 TO 587+50			0028	01
		STA 587+50 TO 588+00			0028	01
		STA 588+00 TO 588+31.18			0028	01
		STA 588+31.18 TO 588+50			0028	01
		STA 588+50 TO 589+00			0028	01
		STA 589+00 TO 589+50			0028	01

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114	200 0201 Cont	STA 615+50 TO 616+00			0020	01
		STA 616+00 TO 616+50			0020	01
		STA 616+50 TO 617+00			0020	01
		STA 617+00 TO 617+50			0020	01
		STA 617+50 TO 618+00			0020	01
		STA 618+00 TO 618+50			0020	01
		STA 618+50 TO 619+00			0020	01
		STA 619+00 TO 619+50			0020	01
		STA 619+50 TO 620+00			0020	01
		STA 620+00 TO 620+50			0020	01
		STA 620+50 TO 621+00			0020	01
		STA 621+00 TO 621+50			0020	01
		STA 621+50 TO 621+97.12			0020	01
		STA 643+00 TO 643+50			0020	01
		STA 643+50 TO 644+00			0020	01
		STA 644+00 TO 644+50			0020	01
		STA 644+50 TO 645+00			0020	01
		STA 645+00 TO 645+50			0020	01
		STA 645+50 TO 646+00			0020	01
		STA 646+00 TO 646+50			0020	01
		STA 646+50 TO 647+00			0020	01
		STA 647+00 TO 647+50			0020	01
		STA 647+50 TO 648+00			0020	01
		STA 648+00 TO 648+50			0020	01
		STA 648+50 TO 649+00			0020	01
		STA 649+00 TO 649+50			0020	01
		STA 649+50 TO 650+00			0020	01
		STA 650+00 TO 650+50			0020	01
		STA 650+50 TO 651+00			0020	01
		STA 705+75 LT			0020	01
		STA 705+80 RT			0020	01
		STA 705+86 RT			0020	01
		STA 707+00 TO 707+50			0020	01

Distribution of Quantities

Project Name - Trestle Trail - East Section
 Estimate Name - Addendum No. 1
 R.I. Contract No. - 2013-CH-018
 FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
019	202.0201 Cont.	STA 707+50 TO 708+00			0028	01
		STA 708+00 TO 708+50			0028	01
		STA 708+50 TO 709+00			0028	01
		STA 709+00 TO 709+50			0028	01
		STA 709+50 TO 710+00			0028	01
		STA 710+00 TO 710+50			0028	01
		STA 710+50 TO 711+00			0028	01
		STA 711+00 TO 711+50			0028	01
		STA 711+50 TO 712+00			0028	01
		STA 712+00 TO 712+50			0028	01
		STA 712+50 TO 713+00			0028	01
		STA 713+00 TO 713+50			0028	01
		STA 713+50 TO 714+00			0028	01
		STA 714+00 TO 714+50			0028	01
		STA 714+50 TO 715+00			0028	01
		STA 715+00 TO 715+50			0028	01
		STA 715+50 TO 716+00			0028	01
		STA 716+00 TO 716+50			0028	01

Item 202.0201 Total: **DELETED**

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
020	202.0700	COMMON BORROW	CY			
		BIKEWAY				
		CAMP WESTWOOD RD		14.00	0028	01
		CONTAMINATED SOIL AREAS		2,235.00	0028	01
		HILL FARM RD		32.00	0028	01
		PHILLIPS RD		78.00	0028	01
		PINE HAVEN RD		10.00	0028	01
		STA 500+00 TO 685+64.91		8,696.00	0028	01
		STA 700+00 TO 768+92		2,895.00	0028	01
				Item 202.0700 Total:	13,960.00	

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
021	202.9901	STONE DUST 4" DEEP	CY			
		EQUESTRIAN TRAIL				

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
021	202.9901 Cont.	CAMP WESTWOOD ROAD - STA. 549+00		5.00	0028	01
		LOG BRIDGE ROAD - STA. 509+90		46.00	0028	01
		STA. 500+00 - STA. 502+75		20.00	0028	01
		STA. 509+90 - STA. 513+00		18.00	0028	01
		STA. 513+00 - STA. 517+50		22.00	0028	01
		STA. 517+50 - STA. 522+00		22.00	0028	01
		STA. 522+00 - STA. 526+50		22.00	0028	01
		STA. 526+50 - STA. 531+00		22.00	0028	01
		STA. 531+00 - STA. 535+50		22.00	0028	01
		STA. 535+50 - STA. 540+00		22.00	0028	01
		STA. 540+00 - STA. 544+50		22.00	0028	01
		STA. 544+50 - CAMP WESTWOOD ROAD		28.00	0028	01
		STA. 549+00 - STA. 553+50		32.00	0028	01
		STA. 553+50 - STA. 558+00		28.00	0028	01
		STA. 558+00 - STA. 562+50		28.00	0028	01
		STA. 562+50 - STA. 567+00		28.00	0028	01
		STA. 567+00 - STA. 571+50		31.00	0028	01
		STA. 571+50 - STA. 576+00		28.00	0028	01
		STA. 576+00 - STA. 580+50		28.00	0028	01
		STA. 580+50 - STA. 585+00		28.00	0028	01
		STA. 585+00 - STA. 589+50		28.00	0028	01
		STA. 589+50 - STA. 594+00		28.00	0028	01
		STA. 594+00 - STA. 598+50		28.00	0028	01
		STA. 598+50 - STA. 603+00		38.00	0028	01
		STA. 603+00 - STA. 607+50		27.00	0028	01
		STA. 607+50 - STA. 612+00		33.00	0028	01
		STA. 612+22 - STA. 612+42		3.00	0028	01
		STA. 614+18 - STA. 614+95		11.00	0028	01
		STA. 621+95 - STA. 622+22		4.00	0028	01
		STA. 622+22 - STA. 624+74		16.00	0028	01
		STA. 624+74 - STA. 625+04		5.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
021	202.9901	Cont.				
		STA. 628+34 - STA. 629+11		11.00	0028	01
		STA. 633+06 - STA. 633+52		7.00	0028	01
		STA. 643+23 - STA. 644+18		14.00	0028	01
		STA. 650+14 - STA. 650+34		3.00	0028	01
		STA. 650+14 - STA. 652+50		16.00	0028	01
		STA. 652+50 - STA. 654+94		18.00	0028	01
		STA. 655+32 - STA. 655+47		2.00	0028	01
		STA. 664+75 - STA. 665+66		14.00	0028	01
		STA. 666+40 - STA. 666+82		6.00	0028	01
		STA. 667+42 - STA. 667+78		5.00	0028	01
		STA. 668+92 - STA. 669+47		4.00	0028	01
		STA. 669+47 - STA. 669+74		4.00	0028	01
		STA. 671+04 - STA. 675+00		29.00	0028	01
		STA. 675+00 - STA. 679+50		33.00	0028	01
		STA. 679+50 - STA. 681+87		18.00	0028	01
		STA. 682+36 - 684+00		12.00	0028	01
		STA. 684+00 - STA. 686+59		25.00	0028	01
		STA. 700+00 - STA. 700+79		8.00	0028	01
		STA. 701+16 - STA. 706+73		55.00	0028	01
		STA. 706+24 - STA. 706+73		7.00	0028	01
		STA. 706+73 - STA. 707+00		3.00	0028	01
		STA. 707+00 - STA. 711+50		44.00	0028	01
		STA. 711+50 - STA. 716+00		44.00	0028	01
		STA. 716+00 - STA. 720+50		38.00	0028	01
		STA. 720+50 - STA. 721+26		7.00	0028	01
		STA. 722+43 - STA. 725+00		19.00	0028	01
		STA. 725+00 - STA. 728+82		29.00	0028	01
		STA. 728+93 - STA. 729+50		3.00	0028	01
		STA. 729+50 - STA. 734+00		30.00	0028	01
		STA. 734+00 - STA. 738+61		32.00	0028	01
		STA. 741+64 - STA. 741+94		2.00	0028	01
		STA. 742+18 - STA. 744+04		14.00	0028	01
		STA. 744+04 - STA. 746+69		26.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

<u>Item No.</u>	<u>Item Code</u>	<u>Description</u>	<u>UM</u>	<u>Qty.</u>	<u>Pay Code</u>	<u>Seq. No.</u>
021	202.9901	Cont.	STA. 746+93 - STA. 751+09	46.00	0028	01
			STA. 768+06 - STA. 768+79	11.00	0028	01
			STA. 768+79 - STA. 768+93	2.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
021	202.9901	Cont.				
				Item 202.9901 Total:	1,364.00	
022	202.9902	HANDLING, HAULING, STOCKPILING AND MANAGEMENT OF CONTAMINATED SOILS BIKEWAY BIKEWAY	LS			
				Item 202.9902 Total:	1.00	0028 01
023	203.0100	STRUCTURAL EXCAVATION EARTH COVENTRY CENTER POND BRIDGE NO.1125 STA 681+20 FLAT RIVER RESERVOIR BRIDGE NO. 1124 STA 721+75 PEDESTRIAN RAMP - WILLIAMS CROSSING ROAD STA 580+74 QUIDNICK BROOK BRIDGE NO. 1127 STA 603+60 QUIDNICK RESERVOIR BRIDGE NO. 1128 STA 570+70	CY			
				Item 203.0100 Total:	575.00	
024	203.0600	FILL GRAVEL BORROW UNDER STRUCTURES PEDESTRIAN RAMP - WILLIAMS CROSSING ROAD STA 580+74 QUIDNICK BROOK BRIDGE NO. 1127 STA 603+60 QUIDNICK RESERVOIR BRIDGE NO. 1128	CY			
				Item 203.0600 Total:	25.00	0028 01

Distribution of Quantities

Project Name - Trestle Trail - East Section
 Estimate Name - Addendum No. 1
 R.I. Contract No. - 2013-CH-018
 FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
026	204.0100	Cont.				
		PHILLIPS HILL ROAD		464.00	0028	01
		PINE HAVEN ROAD		1,327.00	0028	01
		PINE HAVEN ROAD - PARKING LOT		618.00	0028	01
		RAILROAD ST		406.00	0028	01
		SHARED USE PATH		29,771.00	0028	01
		EQUESTRIAN TRAIL				
		DRIVEWAYS (FROM CODE 905.0115)		99.00	0028	01
		FROM CODE 202.9901		11,205.00	0028	01
		SIDEWALK (FROM CODE 905.0110)		525.00	0028	01
		STA. 612+00 - STA. 622+22		908.00	0028	01
		STA. 624+74 - 650+14		2,258.00	0028	01
		STA. 654+94 - STA. 670+24		1,360.00	0028	01
		STA. 704+06 - STA. 706+73		237.00	0028	01
		STA. 750+00 - STA. 768+79		1,670.00	0028	01
Item 204.0100 Total:				105,568.00		

027	205 0270	TRENCH ROCK EXCAVATION-MECHANICAL	CY			
		10-7')				
		SKRWAY				
		500+67.53 TO 509+97.13			0028	01
		509+97.13 TO 510+00			0028	01
		510+00 TO 510+50			0028	01
		510+50 TO 511+00			0028	01
		511+00 TO 511+50			0028	01
		511+50 TO 512+00			0028	01
		512+00 TO 512+50			0028	01
		512+50 TO 513+00			0028	01
		513+00 TO 513+10.87			0028	01
		513+10.87 TO 513+50			0028	01
		513+50 TO 514+00			0028	01
		514+00 TO 514+50			0028	01
		514+50 TO 515+00			0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
127	305.0270 Cont	515-00 TO 515-50			0028	01
		515-50 TO 516-00			0028	01
		516-00 TO 516-50			0028	01
		516-50 TO 517-00			0028	01
		517-00 TO 517-50			0028	01
		517-50 TO 518-00			0028	01
		518-50 TO 519-00			0028	01
		519-00 TO 519-50			0028	01
		519-50 TO 520-00			0028	01
		520-00 TO 520-50			0028	01
		520-50 TO 521-00			0028	01
		521-00 TO 521-50			0028	01
		521-50 TO 522-00			0028	01
		522-00 TO 522-50			0028	01
		522-50 TO 523-00			0028	01
		523-00 TO 523-15.83			0028	01
		523-15.83 TO 523-50			0028	01
		523-50 TO 524-00			0028	01
		524-00 TO 524-50			0028	01
		524-50 TO 525-00			0028	01
		525-00 TO 525-50			0028	01
		525-50 TO 526-00			0028	01
		526-00 TO 526-50			0028	01
		526-50 TO 527-00			0028	01
		527-00 TO 527-50			0028	01
		527-50 TO 528-00			0028	01
		528-00 TO 528-50			0028	01
		528-50 TO 529-00			0028	01
		529-00 TO 529-50			0028	01
		529-50 TO 530-00			0028	01
		530-00 TO 530-50			0028	01

Item 305 0270 Total:

0028

Distribution of Quantities

Project Name - Trestle Trail - East Section
 Estimate Name - Addendum No. 1
 R.I. Contract No. - 2013-CH-018
 FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
079	807.9904	CLEANING, REPOINTING & GROUTING ASHLAR MASONRY - QUIDNICK RESERVOIR BRIDGE NO. 1128 QUIDNICK RESERVOIR BRIDGE NO. 1128 STA 570+70	SF	635.00	0028	01
Item 807.9904 Total:				635.00		
080	817.2110	REPAIRS TO STRUCTURAL CONCRETE MASONRY (PATCHING MORTAR) MACT RIVER RESERVOIR BRIDGE NO. 1124 STA 721+75 QUIDNICK RESERVOIR BRIDGE NO. 1128 STA 570+70	CF			
Item 817.2110 Total:				**DELETED**		
081	820.0110	CONCRETE SURFACE TREATMENT (PROTECTIVE COATING) COUNTRY CENTER POND BRIDGE NO. 1125 STA 681+00 MACT RIVER RESERVOIR BRIDGE NO. 1124 STA 721+75 QUIDNICK BROOK BRIDGE NO. 1127 STA 603+60 QUIDNICK RESERVOIR BRIDGE NO. 1128 STA 570+70	SF	525.00	0028	01
Item 820.0110 Total:				525.00		

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
105	906.0118 Cont.	STA 14+88 RT		1.00	0028	01
		STA 15+19 RT		1.00	0028	01
		STA 15+23 LT		1.00	0028	01
		STA 16+34 RT		1.00	0028	01
		STA 19+86 LT		1.00	0028	01
		PHILLIPS HILL ROAD				
		STA 11+82 LT		1.00	0028	01
		STA 11+82 RT		1.00	0028	01
		PHILLIPS HILL ROAD				
		STA 11+82 LT		1.00	0028	01
		STA 11+82 RT		1.00	0028	01
				Item 906.0118 Total:	16.00	
106	906.0119	3' GRANITE TRANSITION CURB STANDARD 7.3.1	EACH			
		HILL FARM ROAD				
		STA 11+08 RT		1.00	0028	01
		STA 11+26 RT		1.00	0028	01
		STA 11+29 LT		1.00	0028	01
		STA 11+47 LT		1.00	0028	01
		STA 12+04 LT		1.00	0028	01
		STA 12+22 LT		1.00	0028	01
		PHILLIPS HILL ROAD				
		STA 11+36 LT		1.00	0028	01
		STA 11+60 LT		1.00	0028	01
				Item 906.0119 Total:	8.00	
107	906.0210	CEMENT CONCRETE CURB PRECAST STRAIGHT STANDARD 7.1.0	LF			
		HILL FARM ROAD				
		PARKING LOT		561.00	0028	01
				Item 906.0210 Total:	561.00	

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

<u>Item No.</u>	<u>Item Code</u>	<u>Description</u>	<u>UM</u>	<u>Qty.</u>	<u>Pay Code</u>	<u>Seq. No.</u>
108	906.0211	CEMENT CONCRETE CURB PRECAST CIRCULAR STANDARD 7.1.0 HILL FARM ROAD	LF			

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
S170	L15.9901	Cont.		5.00	0028	01
		LOCATION SELECTED BY RIDEM				
		STA. 503+36 LT.		1.00	0028	01
		STA. 580+60 RT.		1.00	0028	01
		STA. 684+86 LT.		1.00	0028	01
		STA. 701+85 RT.		1.00	0028	01
		STA. 732+34 LT.		1.00	0028	01
Item L15.9901 Total:				10.00		
S171	T14.9901	FURNISH AND INSTALL EARLY WARNING SYSTEM	EACH			
		CAMP WESTWOOD ROAD				
		CAMP WESTWOOD ROAD		1.00	0028	01
		HILL FARM ROAD				
		HILL FARM ROAD		1.00	0028	01
		LOG BRIDGE ROAD				
		LOG BRIDGE ROAD		1.00	0028	01
Item T14.9901 Total:				3.00		
S172	T15.0100	DIRECTIONAL REGULATORY AND WARNING SIGNS	SF			
		SIGNING AND STRIPING PLAN NO. 1				
		D11-1		3.00	0028	01
		M4-6		1.00	0028	01
		R1-1		13.00	0028	01
		R5-3		8.00	0028	01
		R7-1		3.00	0028	01
		R9-1M		2.00	0028	01
		SP-2		9.00	0028	01
		SP-P6		2.00	0028	01
		W11-15		13.00	0028	01
		W11-15M		13.00	0028	01
		W16-13P		6.00	0028	01
		W16-2A		6.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

<u>Item No.</u>	<u>Item Code</u>	<u>Description</u>	<u>UM</u>	<u>Qty.</u>	<u>Pay Code</u>	<u>Seq. No.</u>
S172	T15.0100	Cont.	W16-8P	3.00	0028	01
			W3-1	5.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
S172	T15.0100 Cont.	SIGNING AND STRIPING PLAN NO. 2				
		R1-1		13.00	0028	01
		R5-3		8.00	0028	01
		R7-1		5.00	0028	01
		R9-1M		3.00	0028	01
		W11-15		13.00	0028	01
		W11-15M		19.00	0028	01
		W11-7		6.00	0028	01
		W16-13P		6.00	0028	01
		W16-2A		6.00	0028	01
		W16-8P		5.00	0028	01
		W3-1		5.00	0028	01
		SIGNING AND STRIPING PLAN NO. 3				
		R7-1		3.00	0028	01
		R9-1M		6.00	0028	01
		R9-7		6.00	0028	01
		SP-1		40.00	0028	01
		W11-15P		6.00	0028	01
		W11-7		6.00	0028	01
		W5-4A		5.00	0028	01
		SIGNING AND STRIPING PLAN NO. 4				
		W1-10L		6.00	0028	01
		W11-1		12.00	0028	01
		W11-15		6.00	0028	01
		W11-15M		7.00	0028	01
		W11-1P		6.00	0028	01
		W11-7		6.00	0028	01
		W16-2A		2.00	0028	01
		SIGNING AND STRIPING PLAN NO. 5				
		R1-1		30.00	0028	01
		R5-2		4.00	0028	01
		R5-3		8.00	0028	01
		R9-1M		3.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

<u>Item</u> <u>No.</u>	<u>Item Code</u>	<u>Description</u>	<u>UM</u>	<u>Qty.</u>	<u>Pay</u> <u>Code</u>	<u>Seq.</u> <u>No.</u>
S172	T15.0100	Cont.	SP-2	9.00	0028	01
			SP-P6	5.00	0028	01
			W1-10R	6.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
S172	T15.0100	Cont.		25.00	0028	01
		W11-15				
		W11-15M		13.00	0028	01
		W11-7		13.00	0028	01
		W16-13P		6.00	0028	01
		W16-2A		4.00	0028	01
		W16-7P		4.00	0028	01
SIGNING AND STRIPING PLAN NO. 6						
		R1-2		5.00	0028	01
		R5-3		8.00	0028	01
		R9-1M		3.00	0028	01
		SP-1		8.00	0028	01
		W11-15M		13.00	0028	01
		W16-7P		4.00	0028	01
		W3-2		5.00	0028	01
SIGNING AND STRIPING PLAN NO. 7						
		R1-1		15.00	0028	01
		R5-3		8.00	0028	01
		R9-1M		3.00	0028	01
		W11-15M		19.00	0028	01
		W11-7		13.00	0028	01
		W14-1		6.00	0028	01
		W16-7P		4.00	0028	01
		W16-8P		2.00	0028	01
		W3-1		13.00	0028	01
SIGNING AND STRIPING PLAN NO. 8						
		R1-1		15.00	0028	01
		R5-3		8.00	0028	01
		R9-1M		3.00	0028	01
		W11-15M		25.00	0028	01
		W14-1		6.00	0028	01
		W16-2A		2.00	0028	01
		W16-7P		4.00	0028	01
		W16-8P		2.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
S172	T15.0100	Cont.	W16-9P	2.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
S172	T15.0100 Cont.	W3-1		9.00	0028	01
				Item T15.0100 Total:		628.00
S173	T15.1000	STREET SIGN ASSEMBLY STD. 24.6.1	EACH			
		ACRES OF PINE ROAD				
		STA 742+00		1.00	0028	01
		CAMP WESTWOOD ROAD				
		STA 548+25		1.00	0028	01
		HILL FARM ROAD				
		STA 14+85 RT		1.00	0028	01
		LOG BRIDGE ROAD				
		STA 502+80		2.00	0028	01
		PHILLIPS HILL ROAD				
		STA 10+19 LT		2.00	0028	01
		PINE HAVEN ROAD				
		STA 10+11 RT		1.00	0028	01
		STA 10+82 LT		1.00	0028	01
		WILLIAMS CROSSING ROAD				
		STA 581+00		1.00	0028	01
				Item T15.1000 Total:		10.00
S174	T15.9901	BIKEWAY AND EQUESTRIAN TRAIL	EACH			
		ENTRANCE SIGN - RIDEM				
		HILL FARM ROAD				
		STA 15+88 LT (SP-P1)		1.00	0028	01
		LOG BRIDGE ROAD				
		STA 11+50 RT (SP-P1)		1.00	0028	01
				Item T15.9901 Total:		2.00
S175	T15.9902	TRESTLE TRAIL EQUESTRIAN PARKING	EACH			
		LOT SIGN - RIDEM				
		PINE HAVEN ROAD				
		AT RTE 117 (SP-P2)		1.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
S180	T15.9908 Cont.	STA 510+10 LT (SP-1)		1.00	0028	01
		STA 570+18 RT (SP-1)		1.00	0028	01
		STA 571+23 LT (SP-1)		1.00	0028	01
		STA 603+14 RT (SP-1)		1.00	0028	01
		STA 604+05 LT (SP-1)		1.00	0028	01
		STA 668+22 RT (SP-1)		1.00	0028	01
		STA 668+84 LT (SP-1)		1.00	0028	01
		STA 680+59 LT (SP-1)		1.00	0028	01
		STA 681+80 LT (SP-1)		1.00	0028	01
		STA 720+67 LT (SP-1)		1.00	0028	01
		STA 722+13 LT (SP-1)		1.00	0028	01
Item T15.9908 Total:				12.00		
S181	T15.9909	TRAIL HEAD SIGN (SP-T1)	EACH			
		BIKEWAY				
		COVENTRY CENTER PARKING LOT		1.00	0028	01
		LOG BRIDGE ROAD PARKING LOT		1.00	0028	01
		PINE HAVEN ROAD PARKING LOT		1.00	0028	01
		STA 729+00 LT		1.00	0028	01
Item T15.9909 Total:				4.00		
S182	T15.9910	WELCOME TO THE TRESTLE TRAIL SIGN	EACH			
		SIGNING AND STRIPING PLAN NO. 1				
		SP-2		1.00	0028	01
		SIGNING AND STRIPING PLAN NO. 3				
		SP-2		1.00	0028	01
		SIGNING AND STRIPING PLAN NO. 5				
		SP-2		2.00	0028	01
Item T15.9910 Total:				4.00		
183	T19.9901	MILEPOST MARKER	EACH			
		BIKEWAY				
		STA 503+27 4' LT		1.00	0028	01

Distribution of Quantities

Project Name - Trestle Trail - East Section
 Estimate Name - Addendum No. 1
 R.I. Contract No. - 2013-CH-018
 FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
S193	T20.9906	Cont. "EQUESTRIAN XING"				
		BIKEWAY				
		STA. 510+00		2.00	0028	01
		STA. 668+50		2.00	0028	01
				Item T20.9906 Total:		4.00
S194	T20.9907	EPOXY RESIN PAVEMENT MARKING WORD	EACH			
		"YIELD AHEAD"				
		BIKEWAY				
		STA 728+25		1.00	0028	01
		STA 729+50		1.00	0028	01
				Item T20.9907 Total:		2.00
S195	T20.9908	EPOXY RESIN PAVEMENT MARKING AT	SF			
		EQUESTRIAN CROSSING				
		BIKEWAY				
		STA 510+00		80.00	0028	01
		STA 668+50		96.00	0028	01
				Item T20.9908 Total:		176.00
196	202.9903	ROCK EXCAVATION - CONTROLLED	CY			
		BLASTING				
		BIKEWAY				
		HILL FARM ROAD - EQUESTRIAN		2.00		
		PARKING LOT				
		LESS ITEM CODE 205.0240		-1,213.00		
		STA 509+67.53 TO 509+97.13		8.00		
		STA 509+97.13 TO 510+00		2.00		
		STA 510+00 TO 510+50		30.00		
		STA 510+50 TO 511+00		39.00		
		STA 511+00 TO 511+50		50.00		
		STA 511+50 TO 512+00		44.00		
		STA 512+00 TO 512+50		45.00		

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
196	202.9903	Cont.				
		STA 512+50 TO 513+00		39.00		
		STA 513+00 TO 513+10.87		8.00		
		STA 513+10.87 TO 513+50		30.00		
		STA 513+50 TO 514+00		38.00		
		STA 514+00 TO 514+50		32.00		
		STA 514+50 TO 515+00		26.00		
		STA 515+00 TO 515+50		27.00		
		STA 515+50 TO 516+00		35.00		
		STA 516+00 TO 516+50		21.00		
		STA 516+50 TO 517+00		2.00		
		STA 520+50 TO 521+00		19.00		
		STA 521+00 TO 521+50		40.00		
		STA 521+50 TO 522+00		36.00		
		STA 522+00 TO 522+50		36.00		
		STA 522+50 TO 523+00		46.00		
		STA 523+00 TO 523+15.83		14.00		
		STA 523+15.83 TO 523+50		29.00		
		STA 523+50 TO 524+00		47.00		
		STA 524+00 TO 524+50		46.00		
		STA 524+50 TO 525+00		43.00		
		STA 525+00 TO 525+50		44.00		
		STA 525+50 TO 526+00		38.00		
		STA 526+00 TO 526+50		34.00		
		STA 526+50 TO 527+00		34.00		
		STA 527+00 TO 527+50		40.00		
		STA 527+50 TO 528+00		47.00		
		STA 528+00 TO 528+50		38.00		
		STA 528+50 TO 529+00		34.00		
		STA 529+00 TO 529+50		34.00		
		STA 529+50 TO 530+00		35.00		
		STA 530+00 TO 530+50		19.00		
		STA 551+50 TO 552+00		8.00		
		STA 552+00 TO 552+50		18.00		

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
196	202.9903	Cont.				
		STA 552+50 TO 553+00		31.00		
		STA 553+00 TO 553+50		60.00		
		STA 553+50 TO 554+00		64.00		
		STA 554+00 TO 554+50		60.00		
		STA 554+50 TO 555+00		96.00		
		STA 555+00 TO 555+50		133.00		
		STA 555+50 TO 556+00		126.00		
		STA 556+00 TO 556+50		92.00		
		STA 556+50 TO 557+00		65.00		
		STA 557+00 TO 557+50		26.00		
		STA 581+05.66 TO 581+41.02		9.00		
		STA 581+41.02 TO 581+50		5.00		
		STA 581+50 TO 581+76.38		16.00		
		STA 581+76.38 TO 582+00		21.00		
		STA 582+00 TO 582+50		56.00		
		STA 582+50 TO 583+00		39.00		
		STA 583+00 TO 583+50		48.00		
		STA 583+50 TO 584+00		68.00		
		STA 584+00 TO 584+50		67.00		
		STA 584+50 TO 585+00		41.00		
		STA 585+00 TO 585+50		19.00		
		STA 595+50 TO 596+00		17.00		
		STA 596+00 TO 596+50		43.00		
		STA 596+50 TO 597+00		36.00		
		STA 597+00 TO 597+50		21.00		
		STA 597+50 TO 598+00		13.00		
		STA 598+00 TO 598+31.18		15.00		
		STA 598+31.18 TO 598+50		15.00		
		STA 598+50 TO 599+00		17.00		
		STA 615+00 TO 615+50		32.00		
		STA 615+50 TO 616+00		59.00		
		STA 616+00 TO 616+50		70.00		
		STA 616+50 TO 617+00		89.00		

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
196	202.9903	Cont.				
		STA 617+00 TO 617+50		100.00		
		STA 617+50 TO 618+00		90.00		
		STA 618+00 TO 618+50		84.00		
		STA 618+50 TO 619+00		89.00		
		STA 619+00 TO 619+50		63.00		
		STA 619+50 TO 620+00		38.00		
		STA 620+00 TO 620+50		33.00		
		STA 620+50 TO 621+00		61.00		
		STA 621+00 TO 621+50		97.00		
		STA 621+50 TO 621+97.12		52.00		
		STA 643+00 TO 643+50		50.00		
		STA 643+50 TO 644+00		68.00		
		STA 644+00 TO 644+50		60.00		
		STA 644+50 TO 645+00		74.00		
		STA 645+00 TO 645+50		65.00		
		STA 645+50 TO 646+00		99.00		
		STA 646+00 TO 646+50		172.00		
		STA 646+50 TO 647+00		192.00		
		STA 647+00 TO 647+50		136.00		
		STA 647+50 TO 648+00		72.00		
		STA 648+00 TO 648+50		49.00		
		STA 648+50 TO 649+00		53.00		
		STA 649+00 TO 649+50		52.00		
		STA 649+50 TO 650+00		60.00		
		STA 650+00 TO 650+50		61.00		
		STA 650+50 TO 651+00		26.00		
		STA 705+75 LT		2.00		
		STA 705+80 RT		2.00		
		STA 705+86 LT		2.00		
		STA 707+00 TO 707+50		46.00		
		STA 707+50 TO 708+00		62.00		
		STA 708+00 TO 708+50		30.00		
		STA 708+50 TO 709+00		31.00		

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
196	202.9903 Cont.	STA 709+00 TO 709+50		37.00		
		STA 709+50 TO 710+00		39.00		
		STA 710+00 TO 710+50		48.00		
		STA 710+50 TO 711+00		47.00		
		STA 711+00 TO 711+50		50.00		
		STA 711+50 TO 712+00		68.00		
		STA 712+00 TO 712+50		86.00		
		STA 712+50 TO 713+00		89.00		
		STA 713+00 TO 713+50		81.00		
		STA 713+50 TO 714+00		62.00		
		STA 714+00 TO 714+50		40.00		
		STA 714+50 TO 715+00		53.00		
		STA 715+00 TO 715+50		64.00		
		STA 715+50 TO 716+00		65.00		
		STA 716+00 TO 716+50		34.00		
Item 202.9903 Total:				4,647.00		

197	205.0240	TRENCH ROCK EXCAVATION (0-7')	CY			
		BIKEWAY				
		509+67.53 TO 509+97.13		8.00		
		509+97.13 TO 510+00		2.00		
		510+00 TO 510+50		28.00		
		510+50 TO 511+00		34.00		
		511+00 TO 511+50		43.00		
		511+50 TO 512+00		40.00		
		512+00 TO 512+50		37.00		
		512+50 TO 513+00		37.00		
		513+00 TO 513+10.87		8.00		
		513+10.87 TO 513+50		29.00		
		513+50 TO 514+00		37.00		
		514+00 TO 514+50		32.00		
		514+50 TO 515+00		26.00		
		515+00 TO 515+50		27.00		

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
197	205.0240	Cont.				
		515+50 TO 516+00		35.00		
		516+00 TO 516+50		18.00		
		516+50 TO 517+00		17.00		
		517+00 TO 517+50		7.00		
		517+50 TO 518+00		2.00		
		518+50 TO 519+00		6.00		
		519+00 TO 519+50		29.00		
		519+50 TO 520+00		26.00		
		520+00 TO 520+50		6.00		
		520+50 TO 521+00		15.00		
		521+00 TO 521+50		33.00		
		521+50 TO 522+00		33.00		
		522+00 TO 522+50		34.00		
		522+50 TO 523+00		44.00		
		523+00 TO 523+15.83		14.00		
		523+15.83 TO 523+50		26.00		
		523+50 TO 524+00		40.00		
		524+00 TO 524+50		39.00		
		524+50 TO 525+00		38.00		
		525+00 TO 525+50		39.00		
		525+50 TO 526+00		34.00		
		526+00 TO 526+50		31.00		
		526+50 TO 527+00		31.00		
		527+00 TO 527+50		40.00		
		527+50 TO 528+00		43.00		
		528+00 TO 528+50		34.00		
		528+50 TO 529+00		32.00		
		529+00 TO 529+50		31.00		
		529+50 TO 530+00		32.00		
		530+00 TO 530+50		16.00		
Item 205.0240 Total:				1,213.00		

198 206.0208 REMOVAL OF BALED HAY EROSION CHECKS LF

Distribution of Quantities

Project Name - Trestle Trail - East Section
 Estimate Name - Addendum No. 1
 R.I. Contract No. - 2013-CH-018
 FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
198	206.0208 Cont.	BIKEWAY				
		FROM ITEM CODE 207.0202		1,428.00	0028	01
		Item 206.0208 Total:		1,428.00		
199	817.9901	REPAIRS TO STRUCTURAL CONCRETE	CF			
		MASONRY WITH INTEGRALLY COLORED				
		PATCHING MORTAR AND/OR WITH				
		INTEGRALLY COLORED CONCRETE - FLAT				
		RIVER RESERVOIR BRIDGE NO. 1124				
		FLAT RIVER RESERVOIR BRIDGE NO.				
		1124				
		STA 721+75		95.00	0028	01
		Item 817.9901 Total:		95.00		
200	817.9904	REPAIRS TO STRUCTURAL CONCRETE	CF			
		MASONRY WITH INTEGRALLY COLORED				
		PATCHING MORTAR AND/OR WITH				
		INTEGRALLY COLORED CONCRETE -				
		QUIDNICK RESERVOIR BRIDGE NO. 1128				
		QUIDNICK RESERVOIR BRIDGE NO.				
		1128				
		STA 570+70		40.00	0028	01
		Item 817.9904 Total:		40.00		
201	906.0120	GRANITE WHEELCHAIR RAMP CURB	EACH			
		STANDARDS 7.3.3, 43.3.0 AND 43.3.1				
		PHILLIPS HILL ROAD				
		STA 10+20 RT		2.00	0028	01
		STA 11+10 RT		2.00	0028	01
		Item 906.0120 Total:		4.00		
202	906.0131	GRANITE RAMP STONE CIRCULAR	EACH			
		STANDARD 7.3.9				

Distribution of Quantities

Project Name - Trestle Trail - East Section

Estimate Name - Addendum No. 1

R.I. Contract No. - 2013-CH-018

FAP Nos: HPP-4865(001)

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
202	906.0131 Cont.	PHILLIPS HILL ROAD				
		STA 10+20 RT		1.00	0028	01
		STA 11+10 RT		1.00	0028	01
Item 906.0131 Total:				2.00		

GENERAL NOTES-2, SHEET 4 OF 33
 DELETE NOTE NO. 14, REPLACE WITH THE FOLLOWING.

- 14. THE ENTIRE TOPSIDE SURFACES OF ABUTMENT BEAM SEATS, AS WELL AS VERTICAL FACES OF BACKWALLS FOR QUIDNICK BROOK BRIDGE NO. 1127, SHALL BE PROVIDED WITH A FILM FORMING SEALER (M12.03.01) CONCRETE SURFACE TREATMENT – PROTECTIVE COATING IN ACCORDANCE WITH SECTION 820 OF THE RI STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED – USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR)	
COVENTRY,	RHODE ISLAND
GENERAL NOTES-2	
	392 Wampanoag Trail, East Providence, Rhode Island 02915 Tel: 401-233-2593 Fax: 401-383-0773 55 Capital Blvd., 2 nd Floor, Rocky Hill, CT 06067 Tel: 860-436-5600; Fax: 860-436-5601

QUIDNICK RESERVOIR BRIDGE NO. 1128 LIMITS OF SUBSTRUCTURE REPAIR
 SHEET 10 OF 33
 DELETE NOTE NO. 5, REPLACE WITH THE FOLLOWING.

5. THE REPAIRS TO CONCRETE MASONRY SHALL BE PERFORMED WITH INTEGRALLY COLORED PATCHING MORTAR OR INTEGRALLY COLORED CONCRETE. SEE SPECIAL PROVISION ITEM CODE 817.9904.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED – USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR) COVENTRY, RHODE ISLAND	
QUIDNICK RESERVOIR BRIDGE NO. 1128 LIMITS OF SUBSTRUCTURE REPAIR	
	392 Wampanoag Trail, East Providence, Rhode Island 02915 Tel. 401-233-2993 Fax. 401-383-0773 55 Capital Blvd., 2 nd Floor, Rocky Hill, CT 06067 Tel. 860-436-5600, Fax: 860-436-5601

QUIDNICK RESERVOIR BRIDGE NO. 1128 SUBSTRUCTURE REPAIR DETAILS
SHEET 11 OF 33

TYPICAL CONCRETE PATCHING
REPAIR DETAIL

DELETE CALLOUT: "CEMENTITIOUS REPAIR MORTAR"
REPLACE WITH: "CEMENTITIOUS REPAIR MORTAR, SEE NOTE NO. 5"

DELETE NOTE NO. 5 REPLACE WITH THE FOLLOWING.

5. PLACE EPOXY BONDING AGENT AND PATCH WITH CEMENTIOUS REPAIR MORTAR, COMPATIBLE WITH VERTICAL AND OVERHEAD APPLICATIONS, WHERE REQUIRED. IF INTEGRALLY COLORED CONCRETE IS USED IN LIEU OF INTEGRALLY COLORED PATCHING MORTAR, OMIT EPOXY BONDING AGENT AND ATTAIN SATURATED SURFACE DRY (SSD) CONDITION OF CONCRETE SUBSTRATE JUST PRIOR TO CONCRETE PLACEMENT.

DELETE NOTE NO. 6 REPLACE WITH THE FOLLOWING.

6. ALL WORK ASSOCIATED WITH THIS REPAIR DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH ITEM CODE 817.9904.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED – USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR) COVENTRY, RHODE ISLAND	
QUIDNICK RESERVOIR BRIDGE NO. 1128 SUBSTRUCTURE REPAIR DETAILS	
	392 Wampanoag Trail, East Providence, Rhode Island 02915 Tel: 401-233-2993 Fax: 401-383-0773 55 Capital Blvd., 2 nd Floor, Rocky Hill, CT 06067 Tel: 860-436-5600; Fax: 860-436-5601

QUIDNICK BROOK BRIDGE NO. 1127 GENERAL PLAN
 SHEET 12 OF 33
 DELETE NOTE NO. 8, REPLACE WITH THE FOLLOWING.

8. THE ENTIRE TOPSIDE SURFACES OF ABUTMENT BEAM SEATS, AS WELL AS VERTICAL FACES OF BACKWALLS SHALL BE PROVIDED WITH A FILM FORMING SEALER (M12.03.01) CONCRETE SURFACE TREATMENT – PROTECTIVE COATING IN ACCORDANCE WITH SECTION 820 OF THE RI STANDARD SPECIFICATIONS.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED – USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR)	
COVENTRY,	RHODE ISLAND
QUIDNICK BROOK BRIDGE NO. 1127 GENERAL PLAN	
	392 Wampanoag Trail, East Providence, Rhode Island 02915 Tel: 401-233-2993 Fax: 401-383-0773 55 Capital Blvd., 2 nd Floor, Rocky Hill, CT 06067 Tel: 860-436-5600; Fax: 860-436-5601

COVENTRY CENTER POND BRIDGE NO. 1125 DECK PLAN
SHEET 23 OF 33
DELETE NOTE NO. 5 IN ITS ENTIRETY.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED – USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR) COVENTRY, RHODE ISLAND	
COVENTRY CENTER POND BRIDGE NO. 1125 DECK PLAN	
	392 Wampanoag Trail, East Providence, Rhode Island 02915 Tel: 401-233-2993 Fax: 401-383-0773 55 Capital Blvd., 2 nd Floor, Rocky Hill, CT 06067 Tel: 860-436-5600; Fax: 860-436-5601

FLAT RIVER RESERVOIR BRIDGE NO. 1124 DECK PLAN
 SHEET 28 OF 33
 DELETE NOTE NO. 5 IN ITS ENTIRETY.

RHODE ISLAND
 DEPARTMENT OF ENVIRONMENTAL
 MANAGEMENT

TRESTLE TRAIL SHARED – USE PATH
 EAST
 LOG BRIDGE ROAD (SUMMIT) TO
 TOWN FARM ROAD (NEAR)
 COVENTRY, RHODE ISLAND

FLAT RIVER RESERVOIR
 BRIDGE NO. 1124
 DECK PLAN



392 Wampanoag Trail, East Providence, Rhode Island 02915
 Tel: 401-233-2993 Fax: 401-383-0773

55 Capital Blvd., 2nd Floor, Rocky Hill, CT 06067
 Tel: 860-436-5600; Fax: 860-436-5601

FLAT RIVER RESERVOIR BRIDGE NO. 1124 LIMITS OF SUBSTRUCTURE REPAIR
SHEET 31 OF 33
DELETE NOTE NO. 7, REPLACE WITH THE FOLLOWING.

- 7. THE REPAIRS TO CONCRETE MASONRY SHALL BE PERFORMED WITH INTEGRALLY COLORED PATCHING MORTAR OR INTEGRALLY COLORED CONCRETE. SEE SPECIAL PROVISION ITEM CODE 817.9901.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED – USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR) COVENTRY, RHODE ISLAND	
FLAT RIVER RESERVOIR BRIDGE NO. 1124 LIMITS OF SUBSTRUCTURE REPAIR	
 PRIME Engineering, Inc.	392 Wampanoag Trail, East Providence, Rhode Island 02915 Tel: 401-233-2993 Fax: 401-383-0773 55 Capital Blvd., 2 nd Floor, Rocky Hill, CT 06067 Tel: 860-436-5600; Fax: 860-436-5601

FLAT RIVER RESERVOIR BRIDGE NO. 1124 SUBSTRUCTURE REPAIR DETAILS
SHEET 32 OF 33

TYPICAL CONCRETE PATCHING
REPAIR DETAIL

DELETE CALLOUT: "CEMENTITIOUS REPAIR MORTAR"
REPLACE WITH: "CEMENTITIOUS REPAIR MORTAR, SEE NOTE NO. 5"

DELETE NOTE NO. 5 REPLACE WITH THE FOLLOWING.

5. PLACE EPOXY BONDING AGENT AND PATCH WITH CEMENTIOUS REPAIR MORTAR, COMPATIBLE WITH VERTICAL AND OVERHEAD APPLICATIONS, WHERE REQUIRED. IF INTEGRALLY COLORED CONCRETE IS USED IN LIEU OF INTEGRALLY COLORED PATCHING MORTAR, OMIT EPOXY BONDING AGENT AND ATTAIN SATURATED SURFACE DRY (SSD) CONDITION OF CONCRETE SUBSTRATE JUST PRIOR TO CONCRETE PLACEMENT.

DELETE NOTE NO. 6, REPLACE WITH THE FOLLOWINGS:

6. ALL WORK ASSOCIATED WITH THIS REPAIR DETAIL SHALL BE PERFORMED IN ACCORDANCE WITH ITEM CODE 817.9901.

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED – USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR) COVENTRY, RHODE ISLAND	
FLAT RIVER RESERVOIR BRIDGE NO. 1124 SUBSTRUCTURE REPAIR DETAILS	
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TYPICAL SECTIONS NO. 1, SHEET 7 OF 150
 ADD THE FOLLOWING TABLE

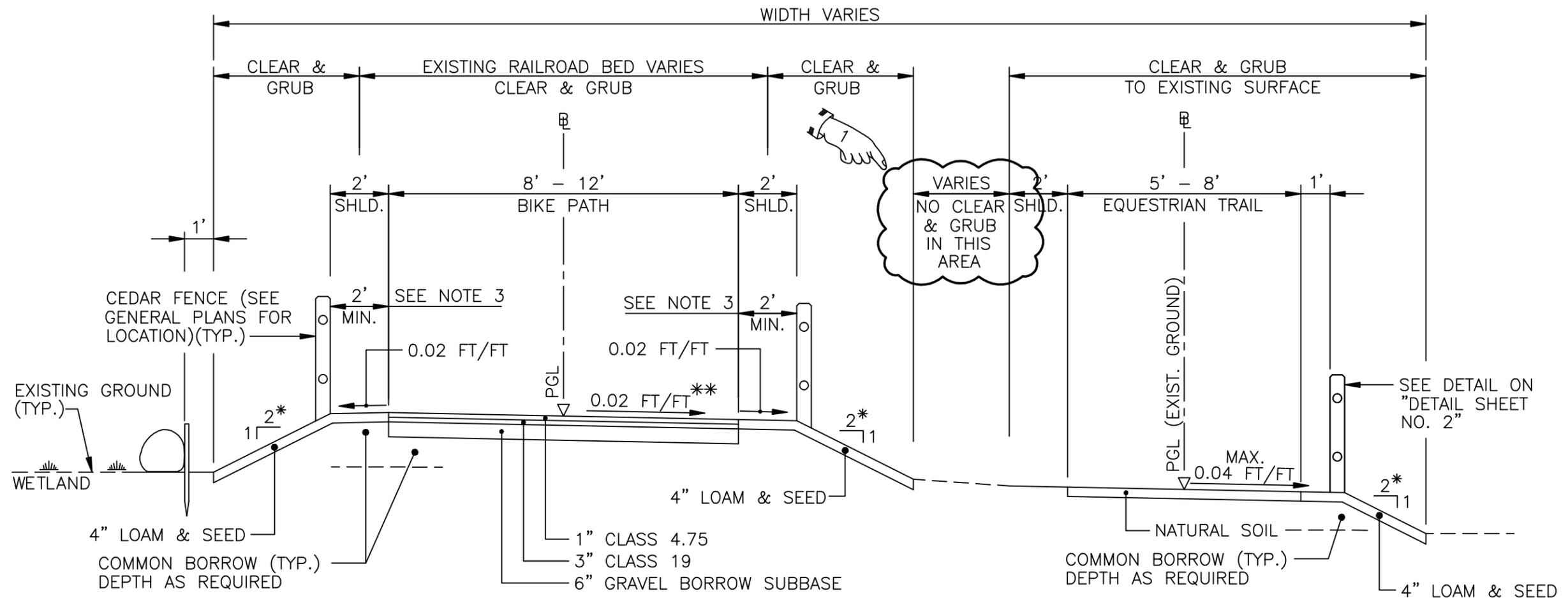


TABLE - EQUESTRIAN TRAIL SURFACE MATERIAL			
4" STONE FINES:		NATURAL SURFACE:	
STA. 500+00 TO	STA. 612+42	STA. 612+42 TO	STA. 614+18
STA. 614+18 TO	STA. 614+95	STA. 614+95 TO	STA. 621+95
STA. 621+95 TO	STA. 625+04	STA. 625+04 TO	STA. 628+34
STA. 628+34 TO	STA. 629+11	STA. 629+11 TO	STA. 633+06
STA. 633+06 TO	STA. 633+52	STA. 633+52 TO	STA. 643+23
STA. 643+23 TO	STA. 644+18	STA. 644+18 TO	STA. 650+14
STA. 650+14 TO	STA. 655+48	STA. 655+48 TO	STA. 664+75
STA. 664+75 TO	STA. 665+66	STA. 665+66 TO	STA. 666+40
STA. 666+40 TO	STA. 667+78	STA. 667+78 TO	STA. 669+00
STA. 668+91 TO	STA. 669+74	STA. 669+74 TO	STA. 671+00
STA. 670+98 TO	STA. 686+58.57	STA. 751+00 TO	STA. 768+08
STA. 700+00 TO	STA. 751+09		
STA. 768+08 TO	STA. 769+09.24		

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED-USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR)	
COVENTRY,	RHODE ISLAND
TYPICAL SECTIONS NO. 1	
CHECKED BY <u> </u> PEI <u> </u> DATE <u>MAY 2013</u> SCALE <u> </u>	

	392 Wampanoag Trail, East Providence, RI 02915 Tel: 401.233.2993 Fax: 401.383.0773
PRIME Engineering, Inc.	

TYPICAL SECTIONS NO. 1, SHEET 7 OF 150
 DELETE DETAIL 'SHARED-USE PATH AND EQUESTRIAN TRAIL (FILL SECTION)'
 REPLACE WITH THIS DETAIL



* A MAX. SLOPE OF 1:1.5 MAY BE USED IN AREAS WHERE A STEEPER SLOPE IS REQUIRED TO MINIMIZE DISTURBANCE TO A REGULATED AREA.

- NOTES:
1. WHEN PLANTING GRASS USE ADHESIVE MULCH STABILIZER ON SIDE SLOPES OF 1:3 OR GREATER.
 2. B AND PGL ARE NOT NECESSARILY CENTERLINE OF PATH.
 3. 1 FT. MIN. WHERE PATH CROSSES EXISTING CULVERTS.

SHARED-USE PATH AND EQUESTRIAN TRAIL
(FILL SECTION)
 SCALE: 1/4" = 1'-0"

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT	
TRESTLE TRAIL SHARED-USE PATH EAST LOG BRIDGE ROAD (SUMMIT) TO TOWN FARM ROAD (NEAR)	
COVENTRY,	RHODE ISLAND
TYPICAL SECTIONS NO. 1	
CHECKED BY <u> PEI </u> DATE <u> MAY 2013 </u> SCALE <u> </u>	

Pei 392 Wampanoag Trail, East Providence, RI 02915
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