April 17, 2019

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATION DEPARTMENT OF ADMINISTRATION

DIVISION OF PURCHASES BID NO. 7598710

RHODE ISLAND DEPARTMENT OF TRANSPORTATION

RHODE ISLAND CONTRACT NO.2019-CB-045

FEDERAL-AID PROJECT NO. FAP Nos: BHO-0574(001)

Bridge Group 01 - PVD

Between Eddy Street and Broadway on Interstate 95 Providence, RI
CITY/TOWN OF Providence
COUNTY OF PROVIDENCE

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.

C. Specifications - Job Specific

1. JS-2 - JS-3

Delete pages JS-2 and JS-3 in their entirety and replace with JS-2(R-1) and JS-3(R-1) attached to this Addendum No. 1. The index of job specific specifications has been revised.

2. JS-20 - JS-25D

Delete pages JS-20 – JS-25 in their entirety and replace with JS-20(R-1) through JS – 25(R-1) attached to this Addendum No. 1. Add pages JS-25A – JS-25D attached to Addendum No.1. Specification Code 109.06 for Payment of Work has been revised.

3. JS-30 - JS-32

Delete pages JS-30 and JS-32 in their entirety and replace with JS-30(R-1) and JS-32(R-1) attached to this Addendum No. 1. Specification Code 800.9901 Temporary Deck Underside and Side Protection Shielding has been revised to clarify limits of work.

4. JS-33A

Add page JS-33A in their entirety attached to this Addendum No. 1. Specification Code 803.9901 Remove and Dispose Existing Deck Joint has been added.

5. JS-35

Delete page JS-35 in its entirety and replace with JS-35(R-1) attached to this Addendum No. 1. Specification Code 817.9901 Repairs to Structural Concrete Masonry (Form and Cast in Place) has been revised to clarify supplemental reinforcement payment.

6. JS-35A

Add pages JS-35A in its entirety attached to this Addendum No. 1. Specification Code 818 Portland Cement Concrete Bridge Deck Repair has been added to clarify required compressive strength prior to traffic loading.

7. JS-42

Delete page JS-42 in its entirety and replace with JS-42(R-1) attached to this Addendum No. 1. Specification Code 824.9901 – 824.9905 Steel Girder Repairs Bridge No. 537, 571, 572, 573, and 574 has been revised to clarify incidental work and method of measurement.

8. JS-49A

Add page JS-49A in its entirety attached to this Addendum No. 1. Specification Code 9226.9901 Temporary Impact Attenuator has been added.

D. Plans

- SHEET NO. 14 Bridge No. 537 I-95 over Eddy Street DEMOLITION PLANS
 Remove and replace Sheet 14 in its entirety with Sheet 14(R-1) attached to this Addendum No. 1.
 This sheet has been revised.
- SHEET NO. 15 Bridge No. 537 I-95 over Eddy Street REPAIR PLANS
 Remove and replace Sheet 15 in its entirety with Sheet 15(R-1) attached to this Addendum No. 1.
 This sheet has been revised.
- SHEET NO. 16 Bridge No. 537 I-95 over Eddy Street DECK REPAIR DETAILS
 Added additional sections attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 22 Bridge No. 537 I-95 over Eddy Street CONCRETE DECK REPAIR DETAILS
 Deleted Note 8 attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 30 Bridge No. 571 Broad Street over I-95 ROADWAY JOINTS SHEET 2 OF 2
 Revised Strip Seal installation detail attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 35 Bridge No. 571 Broad Street over I-95 CONCRETE DECK REPAIR DETAILS
 Deleted Note 8 attached to this Addendum No. 1. This sheet has been revised.

- SHEET NO. 36 Bridge No. 572 Westminister Street over I-95 GENERAL PLAN
 Replaced Note 1 with new note attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 40 Bridge No. 572 Westminister Street over I-95 ROADWAY JOINTS SHEET 2 OF 2
 Revised Strip Seal installation detail attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 44 Bridge No. 572 Westminister Street over I-95 CONCRETE DECK REPAIR DETAILS
 Remove and replace Sheet 44 in its entirety with Sheet 44(R-1) attached to this Addendum No. 1. This entire sheet's contents have been deleted.
- SHEET NO. 45 Bridge No. 573 Washington Street over I-95 GENERAL PLAN
 Replaced Note 1 with new note attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 47 Bridge No. 573 Washington Street over I-95 ABUTMENT ELEVATIONS
 Repair callouts removed and revised attached to this Addendum No. 1. This sheet has been revised.
- 12. SHEET NO. 50 Bridge No. 573 Washington Street over I-95 ROADWAY JOINTS SHEET 2 OF 2 Revised Strip Seal installation detail attached to this Addendum No. 1. This sheet has been revised.
- 13. SHEET NO. 54 Bridge No. 573 Washington Street over I-95 CONCRETE DECK REPAIR DETAILS
 Remove and replace Sheet 54 in its entirety with Sheet 54(R-1) attached to this Addendum No. 1. This entire sheets contents have been deleted.
- SHEET NO. 55 Bridge No. 574 Broadway over I-95 GENERAL PLAN
 Added Note 6 attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 59 Bridge No. 574 Broadway over I-95 ROADWAY JOINTS SHEET 2 OF 2
 Revised Strip Seal installation detail attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 63 Bridge No. 574 Broadway over I-95 CONCRETE DECK REPAIR DETAILS
 Deleted Note 8 attached to this Addendum No. 1. This sheet has been revised.
- SHEET NO. 6 GENERAL BRIDGE NOTES SHEET 1 of 3
 Revised concrete strength notes attached to this Addendum No. 1. This sheet has been revised.

E. Distribution of Quantities

Index Pages

Delete page Index 1 and Index 2 in its entirety and replace with revised pages Index 1(R-1) and Index 2(R-1) attached to this Addendum No. 1. Items highlighted in bold have been reordered, added or deleted to the contract.

2. Pages 1, 2, 3, 4, 6, 9

Delete Pages 1, 2, 3, 4, 6, 9 in its entirety and replace with revised pages 1(R-1), 2(R-1), 3(R-1), 4(R-1), 6(R-1), 9(R-1) attached to this Addendum No. 1. Items in bold have been revised due to quantity changes or group location changes.

3. Pages 1a(R-1), 2a(R-1), 3a(R-1), 6a(R-1), 9a(R-1)

Add Pages 1a(R-1), 2a(R-1), 3a(R-1), 6a(R-1), 9a(R-1) attached to this Addendum No. 1. Items have expanded due to group location descriptions.

4. Page 14

Delete Page 14 and replace with 14(R-1) attached to this Addendum No. 1. Item 808.1640 has been added.

RI Department of Transportation

Administrator, Division of Project Management

INDEX SPECIFICATIONS - JOB SPECIFIC RIC No. 2019 – CB-045

<u>SECTION</u>	TITLE	<u>PAGE</u>
105.02	Plans and Shop Drawings	JS-4
105.14	Open Sections of Project to Traffic	JS-6
108.03	Prosecution and Progress	JS-7
108.1000	Prosecution and Progress	JS-19
109.06	Payment of Work	JS-20
212.2000	Cleaning And Maintenance of Erosion and Pollution Controls	JS-26
401.9902 – 401.9903	Remove and Replace Overlay and Waterproof Membrane Bridge No. 537 and Bridge No. 571	JS-27
800.9901	Temporary Deck Underside and Side Protection Shielding	JS-29
800.9902	Miscellaneous Bridge Repairs	JS-33
803.9901	Remove and Dispose Existing Deck Joint	JS-33A
808.9901	Concrete Superstructure Class HP 3/8" Bridge Sidewalk	JS-34
817.9901	Repairs to Structural Concrete Masonry (Form and Cast-in-Place Concrete)	JS-35
818	Portland Cement Concrete Deck Repair	JS-35A
820.9901-820.9905	High Pressure Water Cleaning – Bridge No. 537, 571, 572, 573, and 574	JS-Error! Bookmark not defined.
820.9906	Concrete Surface Treatment (Protective Coating)	JS-39
824.9901 – 824.9905	Steel Girder Repairs Bridge No. 537, 571, 572, 573, and 574	JS-40

824.9906	Temporary Traffic Plate Bridge No. 571	JS-43
825.9901 – 825.9905	Repainting Existing Structural Steel – Bridge No. 537, 571, 572, 573, and 574	JS-45
826.9901	Management of Pigeon Guano and Mixed Debris	JS-47
907.1000	Dust Control	JS-49
926.9901	Temporary Impact Attenuator	JS-49A
928.0800	Truck Mounted Attenuator (TMA) With Truck Mounted Flashing Arrow Board (TMFAB)	JS-A
929.0110	Field Office	JS-53
934.9901	Field Control and Construction Layout	JS-55
936	Mobilization and Demobilization	JS-56
937.0200	Maintenance and Movement Traffic Protection	JS-58
938.1000	Price Adjustments	JS-59
943.0200	On-The-Ioh Training	IS-60

Remove Subsection 109.06, Partial Payments, pages AC-13 through AC-16 of the September 2018 Compilation of Approved Specifications and replace it with the following.

CODE 109.06

PAYMENT FOR WORK

109.06 PAYMENT FOR WORK.

- a. General. The Department will make payment for Work before the Project is accepted and final payment is made. These payments for Work will be processed via progress payments. To receive a payment for Work, the Contractor shall prepare an invoice in accordance with Subsection 109.06 (c). The Department may suspend progress payments if the Contractor does not comply with the terms of the Contract or the Engineer's instructions or written directives. The Department will notify the Contractor whenever progress payments will be suspended. Processing of progress payments for work prior to the Department's acceptance and final payment of the Work does not constitute the Department's acceptance of the Work, and does not relieve the Contractor of responsibility for the Work, which includes but is not limited to:
 - i. Protecting, repairing, correcting, maintaining, or renewing the Work where necessary to meet Contract requirements before acceptance.
 - ii. Replacing or repairing all defective work or materials used in the construction of the Work, and repairing all damage to other work or materials whose damage is attributable to such defective work or materials.
 - iii. All defects or damage that the Engineer may discover on or before the Engineer's acceptance and final payment of the Work. The Engineer is the sole judge of these defects or damage.
- **b. Frequency.** The department will make progress payments bi-weekly (every two weeks) in accordance with established Department procedures. Progress payments will be subject to a 5 percent retainage.
- c. Invoice for Payment for Work. The Contractor shall submit an invoice for payment biweekly (every two weeks), and, as requested by the Engineer, a weekly progress report for review detailing the items included in the invoice. The Contractor shall utilize and complete invoice forms supplied by the Department, including a certification for payment, in accordance with the instructions contained thereon.
- d. Invoice for Partial Payment for Materials, Supplies, and Equipment. The Engineer may allow invoicing as provided above and permit partial payments for those materials, supplies, and equipment delivered to an approved location but not yet incorporated into

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the Work. Payment for materials, supplies and equipment furnished at an approved site but not yet incorporated into the Work shall not exceed the lesser of the following amounts:

- i. 100 percent of the cost incurred by the Contractor, or
- ii. 80 percent of the value calculated by multiplying the quantity of the item delivered by the unit price for the corresponding item in the Bid Schedule.

For verification of costs, the Contractor shall provide the Engineer with an original paid supplier's invoice for the furnished materials, supplies or equipment within thirty (30) days after receiving the partial payment. Otherwise, the amount of the partial payment will be deducted from subsequent invoices.

The Engineer will not approve any payment for perishable plant materials until such plant materials are planted as specified in the Contract.

- e. Engineer's Review of Contractor's Request for Payment for Work and Request for Partial Payment for Materials, Supplies, and Equipment. Upon receipt of the Contractor's invoice, the Engineer will review the invoice and may approve or reject payment or portions thereof. The Engineer will notify the Contractor in writing of any modifications and/or rejection of the invoice. Modifications and reasons for the change will be made to the Excel spreadsheet in the columns provided. In the case of a rejection, the Engineer will request that the invoice be resubmitted.
- f. Subcontractor Payments and Release of Retainage. The Contractor shall notify RIDOT within 7 days upon the Contractor's assessment that the subcontractor's work is complete and ready for inspection for partial acceptance by RIDOT.

The Contractor shall make progress payments to the subcontractor incrementally as the Contractor is paid progress payments by RIDOT, with each progress payment made no more than 30 days for when so paid by RIDOT. The Work of a subcontractor will be inspected by RIDOT within 14 days of the date of Contractor's notification for partial acceptance. Within 30 days of partial acceptance of the completed subcontract work, the Department will pay the Contractor for all work covered by the acceptance including the relevant portion of retainage due the subcontractor. Within 30 days of receipt of such payment, the Contractor shall pay the subcontractor for all accepted subcontract work including all retainage owed. The Contractor must obtain RIDOT's prior written consent for good cause delays in or postponement of payment to the subcontractor.

g. Final Release of Contractor Retainage. Retainage due the Contractor will be released when all documentation requirements and items on the Punch List have been addressed to the satisfaction of the Engineer.

Procedures for Section 109.06 - Payment for Work

The Contractor shall prepare an invoice to apply for a payment for work completed. This invoice shall utilize the Request for Payment templates supplied by the Department, including the following attachments:

- **A. Detailed Invoice** The detailed invoice shall be submitted in both hard copy and Excel and include the following information:
 - 1. The date of the invoice.
 - 2. The Project Name and State and Federal-Aid Project Numbers.
 - 3. The Contract Item number(s) and name(s) for which the Contractor is seeking payment, as they appear in the Contract Proposal.
 - 4. The date(s) each Contract Item was performed.
 - 5. Name of Contractor/Subcontractor(s) that performed the work.
 - 6. The location(s) where the Work associated with each Contract Item was performed, cross referenced to the location(s) shown in the Distribution of Quantities.
 - 7. Invoiced Item Quantities: The quantity of each Contract Item performed by date and by location since the previous invoice.

For Lump Sum Items, the Contractor shall provide the percentage of work completed since the previous invoice. Prior to the start of work, the Contractor shall submit a Lump Sum Item Breakdown for the Engineer's review, acceptance and allocation of payments for the item, in accordance with **Section 109.07** of the Standard Specifications.

All calculations shall conform to the Method of Measurement and Basis of Payment portions of the appropriate Item Code(s). Documentation shall include, but is not limited to, backup calculations, measurements, sketches, and related supporting information.

- 8. Cumulative Item Quantities: A cumulative total of the quantities performed for each Contract Item, including the current request.
- 9. Bid Prices: The Contract Price for each Contract Item, including Unit Bid Items and Lump Sum Bid items as applicable, shall be listed for each item being invoiced.
- 10. Extended Prices: Calculate the extended price for each item being invoiced in this request.

For Unit Bid Items, this is to be calculated by multiplying each item by the percentage of work completed during the invoice period by its Contract Unit Bid Price (i.e., Extended Price \$ = Qty. Invoiced x Unit Bid Price.)

11. Total Invoice Price: Sum all extended prices calculated in step 10 and report this amount as the total amount being invoiced under the request.

- **B.** Certificates of Compliance A list of the Certificate(s) of compliance attached or that have been submitted to the Department, including date(s) submitted, for the work that is listed on the invoice in accordance with Section 106.04, Certification of Compliance.
- C. Certified Payrolls A list of the certified payrolls attached or that have been submitted to the Department, including date(s) submitted, for the work that is listed on the invoice. List all outstanding payrolls yet to be submitted by week ending date and Contractor/Subcontractor(s).
- **D.** Subcontractor Payments A list of all payments (including all retainage payments) made to date to subcontractors for amounts previously billed and paid by the State for the related project.
- E. Extra Work A list of approved and/or potential extra work subject to approval, including dates(s) when the work was identified and/or approved, and a description and associated cost(s) of the work, including information pertaining to when and by whom the work was performed.
- **F. EEO Certification** A statement that all EEO documentation has been submitted as required by the Contract.
- G. As-Built Data A set of as-built data in hard copy or electronic form of the work billed on the invoice, including plans, sketches, diagrams and all other information necessary for resulting in a complete and accurate set of as-built data representing the work completed. A final set of as-built plans is also required in accordance with Section 934.03.3 (h), Field Control and Construction Layout.

General – Outstanding or missing documentation for Items A through G above will be a basis for rejection and/or modification of the Request for Payment.

Addendum 1

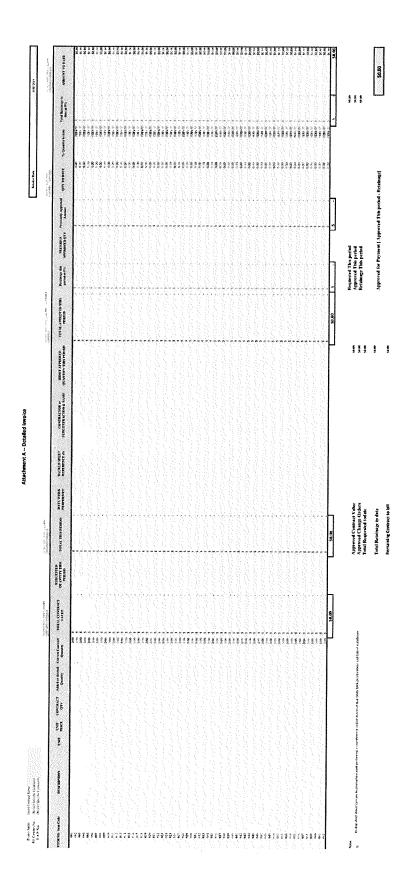
R-1

REQUEST FOR PAYMENT

(Address) (City, State Zin)	RI DEPT OF TRANSPORTATION	RI DEPT OF TRANSPORTATION			
Contract For:	PROVIDENCE, RI 02903 Insert Contract Name	in 230/Accounts rayable	-	Invoice date: 4/11/2019 Period ending date: MM/DD/YYYY	
Request for payment:					
Original contract amount Approved changes			Project	(Project Name)	
Revised contract amount	·		Location:	(Location(s))	
Total Requested Todate			·QLN	MAKATODIVXXXX	
Approved This period					
Retainage This period Approved for Payment This period		Γ	Contract Completion:	WM/DD/YYYY	
Total Retainage todate		1	Contract No.:	RI 20	
Remaining Contract to bill	\$	П	АТТ:	Construction Manager Project Manager	
CHANGE ORDER SUMMARY	ADDITIONS DEC	DEDUCTIONS	Current Billing Requirements	†	N/A
Changes approved in previous months by			Detailed Invoice		
Owner			Certificates of Compliance		
Total approved this month			Payrolls Received		
TOTALS \$	•		Subcontractor Payments		
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I certify that, to the best of my knowledge, the Work performed and materials supplied under this invoice have been completed in accordance with the Contract (including all authorized changes). I certify that the Resident Engineer/staff of any requested in this invoice represents the actual value of the Work completed under the terms and requirements of the Contract (including all authorized changes). I understand that failure to notify the Resident Engineer/staff of any Work performed and included on this invoice will be considered null until adequate investigation/inspection by the State is completed and justified. I also certify that the Contractor Name) has paid all subcontractors (by terms of their contracts) the amounts previously billed and paid by the owner. This certification is made in compliance with all federal and state laws and regulations for false statements including, but not limited, to 18 U.S.C. §1020, Fraud and False Statements, and 23 C.F.R. §635.119, False Statements.

ONTRAC	TOR:	(Contractor name)	State Of RHODE ISLAND		County Of	PROVIDENCE
¥.			Subscribed and sworn to b	Subscribed and sworn to before me this day of		
ate:			Notary Public My commission expires:			
	C. M.	C. M. Resident		Project Manager		



Request for Payment

Attachment B -- Certificates of Compliance

Project Name: Insert Contract Name

R.I. Contract No.: (Project Specific Contract #)

F.A.P. Nos.: (Project Specific Contract #)

Invoice Date: 4/11/2019

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Notes

List Certificates of Compliance and QTY's attached to this request

Request for Payment

Attachment C -- Certified Payrolls

Project Name: Insert Contract Name

R.I. Contract No.: (Project Specific Contract #)

F.A.P. Nos.: (Project Specific Contract #)

Invoice Date: 4/11/2019

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Addendum 1

Notes

request.

up to date

Request for Payment

Attachment D - Subcontractor Payments

Project Name:

1 Contract Name

Invoice Date: 4/11/2019

R.I. Contract No. ;
F.A.P. Nos.:

(Project Specific Contract #)

(Project Specific Contract #)

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Notes	List all payments to subcontractors during this period as well

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All Payments have been submitted in PRISM and up todate

Project Name: R.I. Contract No. : F.A.P. Nos.:	house Contract Name (2) Phinics Specific Contract #1 (Project Specific Contract #)		E-Additional and Potential Extra Work			8	Invoke Date: 4'11/26	619
Number Date Extra work Identified	vork Name Contractor/subcontractor	Issue Description	RI standard Specification Supporting Request for Extra Work.	Vork. Extra Work Value	RI DOT Pesition	Bate Change Order Issue Hange Order Recolved	Item# Amoun	Ē 2
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Job Specific RIC No. 2019 – CB-045 Page 2 of 4

and Debris Nets. The combined-use nets shall have a minimum working rating of not less than 10,000 ft-lb. The Contractor shall determine the size, weight and height-of-fall of anticipated debris. The debris netting shall have a mesh of the size and strength sufficient to contain the expected debris without penetration when properly supported by the personnel net. The debris net shall not compromise the design, construction or performance of personnel nets.

SUBMITTALS:

- 1. Shop drawings.
- 2. Netting Qualifications Test per ANSI A 10.11, Part 8.2, if applicable.

The Contractor shall submit shop drawings and design calculations stamped by Professional Engineer registered in Rhode Island, in accordance with Subsection 105.2 "Plans and Shop Drawings". The Contractor shall also submit the design calculations for the system to be employed including an analysis of the load which will be added to the structure by the protective shield. The analysis shall assure that the system will not induce a load on the bridge that will create an overstress condition or compromise the structural integrity of the bridge. The shop drawings and calculations shall be submitted in sufficient time to allow for review and approval by the Engineer. In no case shall the protective shield encroach upon minimum bridge clearance.

CONSTRUCTION METHODS: The deck underside and side protective shielding shall be erected at the locations and to the limits indicated on the contract drawings and/or as directed by the Engineer. All work shall be performed in accordance with the Maintenance and Protection of Traffic Plans, and in accordance with the demolition and construction sequences shown on the Plans and as specified in the Contract Documents.

All shielding shall meet or exceed the following requirements:

- 1. It shall be the Contractor's responsibility, as part of this item of work, to design and detail the protective shielding to conform to all Federal, State, and Local laws and regulations, as well as to the requirements contained here in this Specification.
- 2. The shielding shall extend under all areas of concrete decks, safety walks, and safety barriers to be removed. It shall extend horizontally a minimum of 3 feet beyond the bridge railings or parapets, and it shall extend vertically to a point 2 feet above the top of the bridge parapet, or to a point 4 feet above the top of bridge safety walks or decks, whichever is higher. It shall extend longitudinally 3' from the face of substructure units towards the center of the span.
- 3. The various components of the deck underside protective shielding system shall be designed for the anticipated weight of all material and debris to be supported, based on the Contractor's method and sequence of removal, but in no case shall it be designed for less than 150 pounds per square foot. Vertical shielding shall be designed for anticipated loads, or a minimum of 30 pounds per square foot, whichever is higher.
- 4. The shielding shall be placed and secured in a manner as to prevent it from being blown out by wind. If, in the opinion of the Engineer, the shielding is not secure, then the Contractor shall make corrections to secure the shielding in place or remove and reinstall it to the Engineer's satisfaction. The Contractor's Engineer shall provide written approval that the

- corrected measures have secured the shielding before the Engineers final acceptance.
- Shielding shall be placed so as to maintain the existing vertical clearance under the bridges.
- 5. The Contractor may utilize the existing beams as supports. However, the Contractor will not be permitted to drill or weld to any existing beam, unless otherwise noted in this section or on the Construction Drawings.
- 6. The Protective Shield is intended to act as a barrier against construction materials falling below the work area. The shielding shall not contain any gaps or openings that would allow debris to pass through, and shall be sufficiently strong to support any debris or section of demolished concrete from falling onto the roadway or walkway below.
- 7. If the Contractor's operations damage any existing portions of the bridges that are not within the scope of the contract, such damage shall be repaired at the Contractor's expense, and to the satisfaction of the Engineer.
- 8. The Protective Shield shall be in place prior to commencing any removal work.
- 9. The protective shield shall be erected at a level below the construction area so as not to exceed the shield rating under the shield design load.
- 10. For the debris net system selected, the care, maintenance and storage of protective shielding shall be in accordance with the manufacturer's recommendations if prefabricated. Due attention shall be given to factors affecting net life. Nets shall be inspected weekly. Nets shall be tested immediately following installation, relocation or major repair and when left in one locations, at six-month intervals in accordance with ANSI A.10.11 Part 9.
- 11. The debris nets shall not carry more than 5 psf of ice, snow or other weather-related material. Debris shall be removed daily to prevent potential overload of shielding.
- 12. Protective shield shall be designed to safely withstand all loads that it will be subjected to. The allowable design stresses shall be in accordance with AASHTO Standard Specifications for Highway Bridges. The design shall also include a complete description of the equipment and construction methods proposed.
- 13. In the event debris falls onto the roads or rivers below, the Contractor shall promptly remove the debris. The Contractor shall be liable for any consequences as a result of falling debris and shall correct any deficiencies in the shield as required. The Contractor shall correct the deficiencies in place or remove and reinstall it to the Engineer's satisfaction. The Contractor's Engineer shall provide written approval that the corrected measures have secured the shielding before the Engineers final acceptance.
- 14. All locations of work shall have Temporary Protective Shield. Temporary Protective Shield shall be installed or removed only on approval of the Engineer.
- 15. Temporary Protective Shield may be anchored to portions of the existing structures exhibiting sound concrete. Drilling through existing rebar to anchor the shield will not be permitted. The Contractor shall use a Pachometer or other suitable non-destructive means to located existing rebar. Cost of locating rebar shall be included in the cost of Temporary Protective Shield.

Use of existing shielding is at the discretion of the Contractor. The requirements and design specifications shall apply to the suitability of the existing shielding. It will be the Contractor's responsibility to verify the suitability of the existing shielding.

All materials used in the shielding system shall become the property of the Contractor and shall be removed from the site at the completion of the Project.

All work shall be performed in accordance with the phased construction, as designated on the Plans.

METHOD OF MEASUREMENT: This work will be measured for payment by the numbers of square foot" of "Temporary Deck Underside And Side Protective Shielding" complete and accepted in place within the limits shown on the plans or as directed by the Engineer.

BASIS OF PAYMENT: The quantity determined under "Method of Measurement" section will be paid for at the contract unit price bid per square foot" of "Temporary Deck Underside And Side Protective Shielding" as listed in the proposal. The price so stated shall constitute full compensation for all labor, materials, equipment, tools, design and installation, and removal and disposal of the Temporary Deck Underside And Side Protective Shielding and all other incidentals required to finish the work, complete and accepted by the Engineer.

CODE 803.9901

REMOVE AND DISPOSE EXISTING DECK JOINT

DESCRIPTION: The work included under this item shall consist of removing and disposing the existing bridge deck joint in accordance with the plans and the requirements of these specifications. The work shall be performed in accordance with the contract drawings, the Rhode Island Standard Specifications for Road and Bridge Construction, Amended March 2018, all applicable compilations of approved specifications, as modified by this special provision, and as directed by the Engineer.

CONSTRUCTION REQUIREMENTS: The removal of the existing expansion joint systems shall be completed with care to avoid damaging the anchorages and any hardware anchored to the bridge deck and/or approach slab that shall remain. The Contractor shall survey and document the existing joints and review existing plans to avoid damaging the bridge deck or anchor rods. Any damage caused to the bridge deck, anchor rods, or other anchor materials during the removal of the joint membrane shall be repaired or replaced at the contractor's sole expense.

METHOD OF MEASUREMENT: This work will be measured for payment by the numbers of linear feet of "Remove and Dispose Existing Deck Joint" complete and accepted in place within the limits shown on the plans or as directed by the Engineer.

BASIS OF PAYMENT: The quantity determined under "Method of Measurement" section will be paid for at the contract unit price per linear feet of "Remove and Dispose Existing Deck Joint" complete in place including all disposal, materials, equipment, tools, labor, and incidental expenses associated with this work.

CODE 817.9901

REPAIRS TO STRUCTURAL CONCRETE MASONRY (FORM AND CAST IN PLACE)

DESCRIPTION: The work under this item shall consist of making structural concrete masonry repairs to the bridge superstructures, including reinforced concrete beams and prestressed concrete beams, and substructure at locations indicated on the Plans or as directed by the Engineer. Work shall consist of saw cutting; removing and disposing deteriorated concrete; furnishing and installing welded wired fabric, anchors, and supplemental reinforcement as required; preparing bonding surfaces of concrete; replacing the deteriorated concrete with new concrete; and finishing and curing to the lines and grades specified at the locations indicated on the Plans, all in accordance with these Specifications and as directed by the Engineer.

This Special Provision is intended to apply to spalled concrete areas where the depth of the repair extends beyond the reinforcing steel. The engineer shall be the sole judge in determining the repair locations. All repairs shall be performed only as directed by the Engineer.

Except as modified by this Special Provision, all work under this item shall be performed in accordance with Section 817 of the Rhode Island Standard Specifications for Road and Bridge Construction, amended 2018, including all revisions and supplements.

MATERIALS: Concrete shall conform to Class HP 3/8" concrete in accordance with the applicable provisions of Section 601 of the RI Standard Specifications and the Special Provisions.

Reinforcement:

Bar Reinforcement: All bar reinforcement shall meet the requirements of Section 810 of the RI Standard Specifications. All bar reinforcement shall be galvanized in accordance with Section 810 of the RI Standard Specifications.

Weld Wire Fabric: Welded wire fabric shall meet the requirements of ASTM A1064. All welded wire fabric shall be galvanized in accordance with ASTM A1060.

CONSTRUCTION METHODS: Construction shall be in accordance with the relevant provisions of Section 817.03 of the RI Standard Specifications.

METHOD OF MEASUREMENT: This work will be measured for payment by the numbers of cubic feet of "Repairs to Structural Concrete Masonry (Form and Cast in Place)" complete and accepted in place within the lines shown on the plans or as directed by the Engineer.

BASIS OF PAYMENT: The quantity determined under "Method of Measurement" section will be paid for at the contract unit price per cubic feet of "Repairs to Structural Concrete Masonry (Form and Cast in Place)" complete in place including all surface preparation, material, equipment, tools labor and incidental expense.

Costs for furnishing and installing supplemental steel reinforcement bars shall be paid separately via FORCE ACCOUNT in accordance with the provisions of **Subsections 109.04** of these Specifications.

Revise **Subsection 818.03.5**, **Placing and Finishing Concrete**, pages 8-113 through 8-114 of the RI Standard Specifications for Road and Bridge Construction as follows.

CODE 818

PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIR

818.03.5 Placing and Finishing Concrete: Delete the 5th paragraph of the referenced section and replace with the following:

Traffic or external loads from heavy equipment such as pavers shall not be allowed on the repaired deck surfaces until the concrete has reached the compressive design strength as indicated on the plans.

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work shall be in accordance with the relevant sections of the State of Rhode Island Standard Specifications for Road and Bridge Construction.

If, in the opinion of the Engineer, the Contractor's operations damage other members of the structure being repaired, he shall be required to change his methods of operations and make all necessary repairs as ordered by the Engineer at no additional or extra cost to the State.

METHOD OF MEASUREMENT:

Work under this Item 824.9901, 824.9902, 824.9903, 824.9904, and 824.9905 will be measured and paid for at the Contract unit price per Pound, installed in place and accepted by the Engineer. Replacing and tightening of anchor bolt nuts shall be considered incidental to the steel girder repairs and shall not be measured separately for payment.

BASIS OF PAYMENT:

The quantity determined under "Method of Measurement" section will be paid at the contract unit price per Pound as listed in the Proposal. The price so stated will constitute full and complete compensation for all materials, labor, equipment, bolted connections and all else necessary, including but not removing and disposing portions of existing structural steel; furnishing, fabricating, erecting, and painting new structural elements; local deleading (including proper personnel protection and collection & disposal of paint removed); surface preparation; any miscellaneous shields, staging, access, scaffolding; field drilling; field bolting; replacement of anchor bolt nuts; tightening of anchor bolt nuts; temporary protective shielding for utilities; field measurements; shop drawings to complete the work in accordance with these specifications and as required by the Engineer.

CODE 926.9901

TEMPORARY IMPACT ATTENUATOR

DESCRIPTION:

The Contractor shall furnish and install a Temporary Impact Attenuator at locations shown on the plans and as directed by the Engineer. The temporary impact attenuator shall meet the requirements of AASHTO Manual for Accessing Safety Hardware (MASH) and be accepted by the Federal Highway Administration.

MATERIALS:

The Temporary Impact Attenuator shall be approved by AASHTO Manual for Assessing Safety Hardware (MASH) Test Level 3 and must be approved by the Engineer.

Before installation, the Contractor shall submit a copy of the manufacture's documents indicating satisfactory testing in accordance with MASH Test Level 3 rating and/or its subsequent revisions, and a copy of the approval by the FHWA for use of the impact attenuator as intended.

No work shall commence under these items until all documents have been returned approved by the Engineer.

EXECUTION:

Installation and securing of the impact attenuator units shall be done according to the manufacturer's recommendations so that the unit meets MASH Test Level 3 criteria. Installation must be approved by the Engineer.

Additional construction details shall be coordinated based on the barrier type to be protected. Impact attenuator connection to the proposed barrier shall be considered incidental to this item.

MEASUREMENT:

The Temporary Impact Attenuator will be measured per the single unit each, each in place.

BASIS OF PAYMENT:

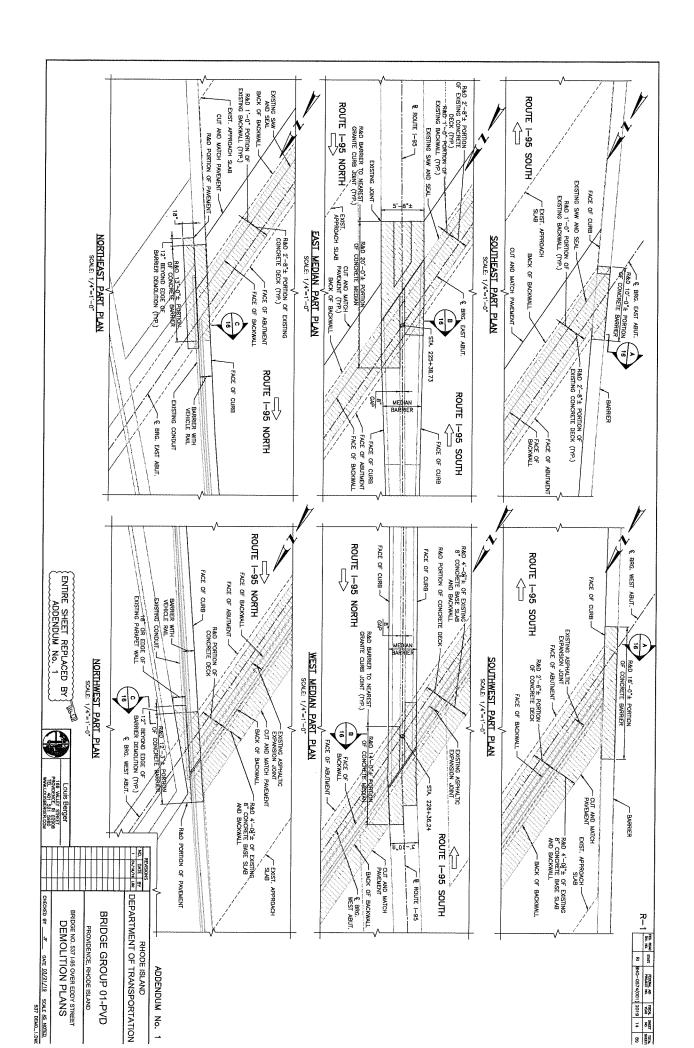
Temporary Impact attenuators will be paid for at the contract bid price, per each unit, for each location. Payment shall be considered full compensation for all labor, tools, equipment, materials, design calculations, shop drawings and all incidental items of work necessary for a complete operational system that meets MASH Test Level 3.

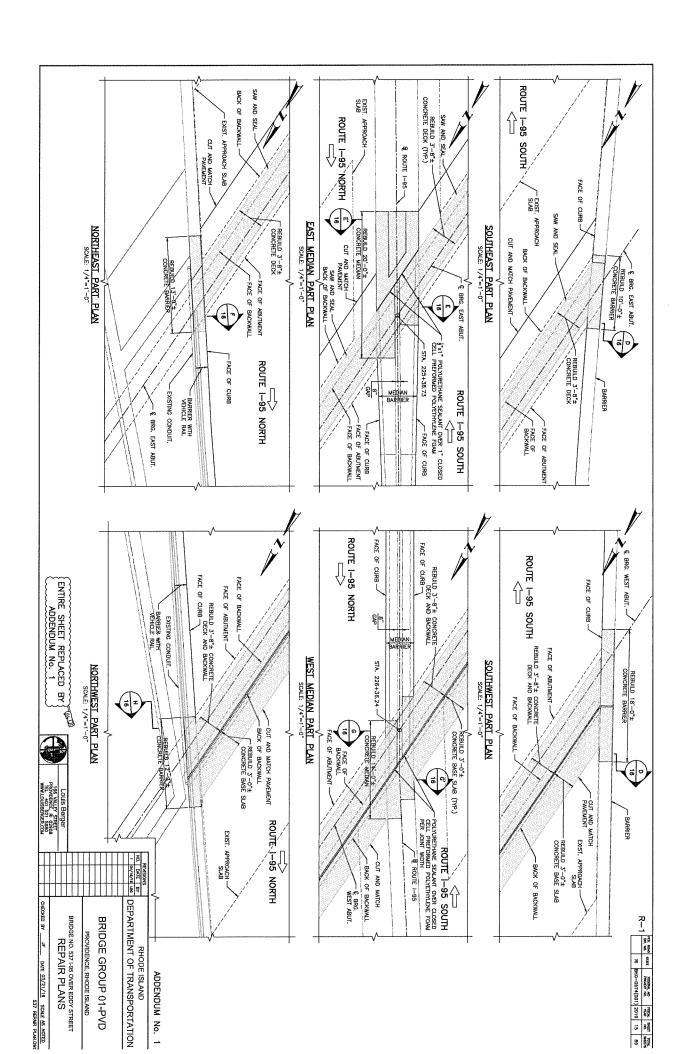
Payment will be made under:

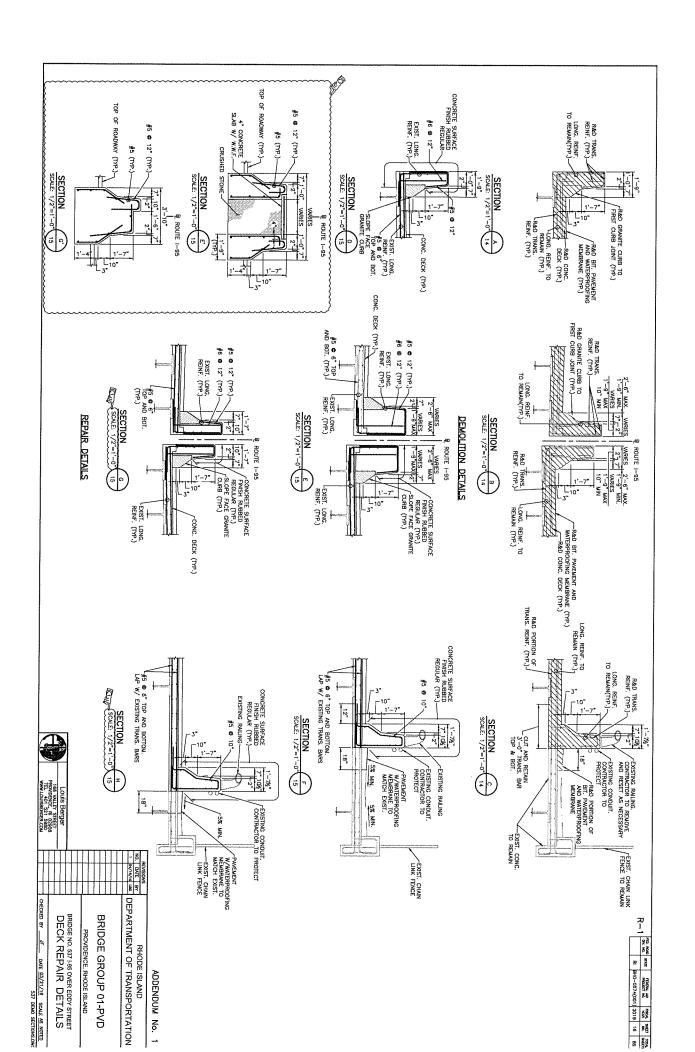
Pay Item Pay Unit

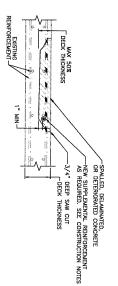
926.9901 Temporary Impact Attenuator

Each









TYPICAL SECTION PARTIAL—DEPTH TOPSIDE PATCH REPAIR DETAIL NOT TO SCALE

MAX 50% DECK THICKNESS TOP OF BITUMINOUS PAVEMENT EPOXY ADHESIVE BONDING AGENT (TYP.) 1 . ¥ EXISTING REINFORCEMENT T XIN -SPALLED, DELAMINATED, OR DETERIORATED CONCRETE -NEW SUPPLEMENTAL REINFORCEMENT AS REQUIRED, SEE CONSTRUCTION NOTES -3/4" DEEP SAW CUT -DECK THICKNESS

TYPICAL SECTION PARTIAL—DEPTH UNDERSIDE PATCH REPAIR DETAIL NOT TO SCALE

3/4" DEEP SAW CUT (TYP.). 50% DECK THICKNESS-SPALLED, DELAMINATED, OR DETERIORATED CONCRETE: REMOVE, DISPOSE AND REPLACE PAVEMENT (SEE NOTE 9)minera section ---FEXISTING REINFORCEMENT NEW WATERPROOFING THAIT OF EXISTING SPALL NEW SUPPLEMENTAL REINFORCEMENT AS REQUIRED. SEE CONSTRUCTION NOTES 200.0 -DECK THICKNESS

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CONCRETE DECK REPAIR - NOTES:

- CONCRETE BRIDGE DECK REPAIRS TO THE TOP OF THE DECK AND FOR FULL DEPTH PATCH REPAIR SHALL BE IN ACCORDANCE WITH SECTION 818 PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIR.
- PARTIAL DEPTH PATCH REPAIRS TO THE UNDERSIDE OF THE DECK SHALL BE IN ACCORDANCE WITH SECTION 817 REPAIRS TO CONCRETE MASONRY.
- ALL PARIM-DEPH BICK PATCHES TO THE UNDERSOR OF DECK SHALL BE PAID FOR UNDER TEM "BI7.2110 REPHAIS TO STRUCTURAL CONNECTE MAXONING MICHONING MORTHAY PATCHES MITH DEPHIS GREVER THAN 50% OF COUNCETE DECK THOUNESS OF AREAS GREVER THAN 4 ST SHALL BE PAID FOR UNDER TEM '818.2010 PORTLAND CEMENT CONNECTE DECK REPAIRS (FULL DEPTH REMOVAL)". SEE PROMISIONS FOR ACCEPTABLE MATERIALS AND METHODS.
- THE CONTRACTOR SHALL REPORT TO THE ENGINEER ANY DETERIORATION THAT EXCEED THE LIMITS SHOWN ON THE PLANS AND SHALL NOT CONTINUE WORK WITHOUT DIRECTIONS FROM THE ENGINEER.
- IF DURNO REMOVAL, OF DETENDANTED CONCRETE, THE CONTRACTOR DAMAGES EXISTING REINFORCEMENT TO THE EXTENT REQUIRING REPLACEMENT, ANY ADDITIONAL CONCRETE REMOVAL, PACHING METENAL, CLEANING EXISTING REENFORCING STEEL, AND DETENBISHING AND INSTITALING REPLACEMENT REMOVEDING STEEL SHALL BE AT THE CONTRACTOR'S EXPENSE. INSTALL ACCORDING TO REINFORCING REPLACEMENT CONTRACTOR'S EXPENSE. INSTALL ACCORDING TO REINFORCING REPLACEMENT
- REINFORCEMENT USED TO REPLACE EXISTING DETERIORATED REINFORCING STEEL SHALL BE GALVANIZED. COST OF REPLACEMENT SHALL BE INCLUDED IN THE RESPECTIVE REPAIR ITEMS.
- DANDACTE DECK THOUSES SHALL BE FULL-DEFIH REPARE.

 CONCRETE DECK THOUSES SHALL BE FULL-DEFIH REPARE.

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8. DELETED

9. FULL DEPTH REPARTS SHALL BE COORDINATED WITH THE PAVEMENT REPLACEMENT TO AVOID UNNECESSARY PATCHING OF THE NEW PAVEMENT.

- SURFACE PREPARATION NOTES: SAW CUT AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION, USE A CUT DEPTH OF $3/4^\circ$ OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
- IF REINFORCING STEEL IS EXPOSED, CLEAN EXPOSED STEEL AND SURROUNDING CONCRETE AS SPECIFIED IN THE PROVISIONS FOR PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIRS'.
- THE CONTRACTOR SHALL ENSURE THAT ALL BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) HAVE BEEN REMOVED IMMEDIATELY PRIOR TO PATCHING.
- WET CONCRETE REPAIR AREA SO THAT SUBSTRATE IS SATURATED SURFACE DRY WITH NO STANDING WATER, WATER USED TO PREPARE AND WET THE SURFACE SHALL CONTAIN NO DETERGENTS OR BOND INHIBITING CHEMICALS.
- ALL CONCRETE REPAIR MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS PROVIDED IN SECTION 818 "PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIRS".

CONSTRUCTION NOTES:

- IA NEW (CALMANIZE)) REINFORCING BAR SHALL BE FLACED TO SUPPLIGHT ME DESTING REINFORCING BAR SHALL BE FLACED TO SUPPLICATE AN EXCENSION CASS SECTION, AS DETERMINED BY THE ENGINEER, OR THE EXENTING REINFORCEMENT HAS BEIGNAMED BAS SHALL RETEND 3.0 BAR DUMBETERS PAST LOCATIONS WHERE SECTION LOSS OR A BREAK IS PRESENT AND SHALL BE FLACED AT THE SME LIVEL, ALONG THE DIFFERENCIATION FOR BROAKED HAR, IN LEEU OF SUPPLIASATION A BAR AND ALCEMANICALLY SUCKED TO A DETERMINATION BAR OF THE SME LIVEL ALONG THE DETERMINATION FOR THE SME LIVEL AND SHALL BE SUBSTRUCTURE CONCRETE REPLAIS FOR DETAILS.
- THE FINISHED SURFACE OF ALL PATCHES SHALL BE EVEN WITH THE ADJACENT EXISTING DECK SLAB. DISCONTINUITIES GREATER THAN 1/B" SHALL BE GROUND DOWN OR REPAIRED.
- DECK REINFORCEMENT AND CONCRETE PATCH DETAILS PROVIDED ARE GENERAL, ACTUAL REINFORCEMENT SIZE AND SPACING WILL VARY.

ADDENDUM No. 1

LEGEND:

DETERIORATED CONCRETE TO BE REMOVED.

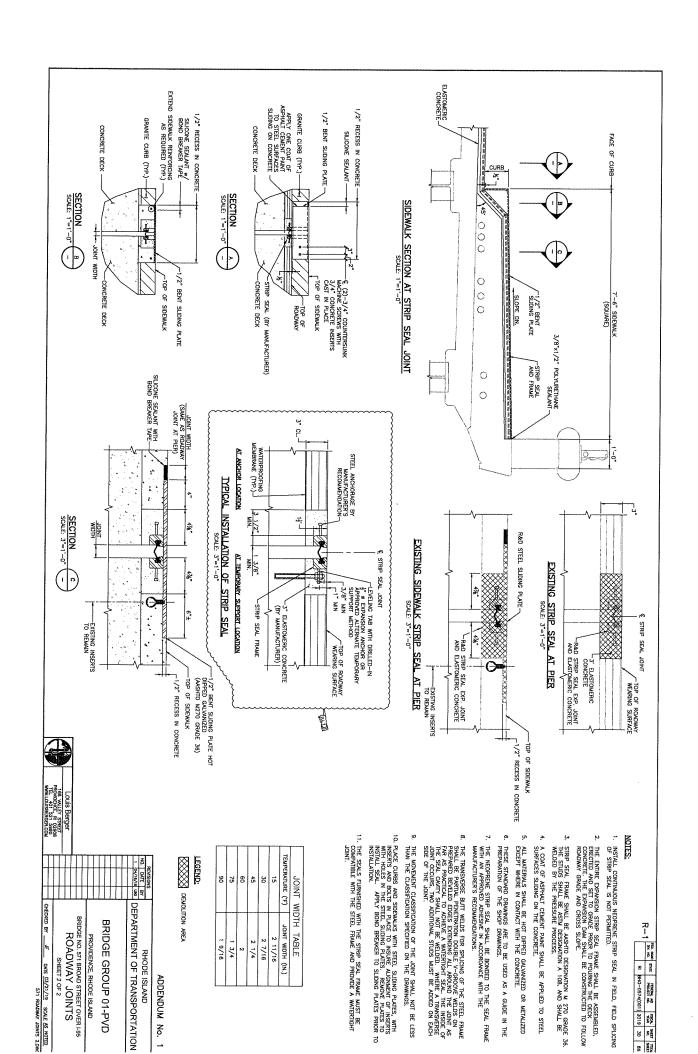
EXPOSED REINFORCING STEEL

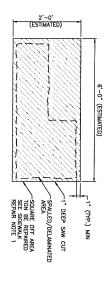
TYPICAL SECTION
FULL—DEPTH REPAIR DETAIL

NOT TO SCALE

DEMOLITION AREA

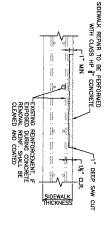
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SIDEWALK REPAIR PLAN

NOT TO SCALE



SIDEWALK PATCH REPAIR DETAIL NOT TO SCALE

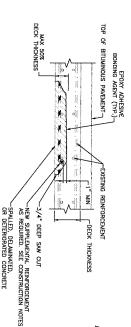
SIDEWALK REPAIR NOTES:

- HAMMER SOUND AREA AROUND SPALLED AND PATCH AREA, UNSOUND CONCRETE SHALL BE REMOVED AND REPAIRED.
- THE CONTRACTOR IS HEREBY NOTIFIED OF UTILITIES WITHIN SIDEWALK. CARE SHALL BE TAKEN TO PROTECT UTILITIES AT ALL TIMES.
- 3. REMOVAL AND DISPOSAL OF DETERIORATED SIDEWALK CONGRETE SHALL BE ADDE FOR HUNDER ITEM ASJA 0300 "PARTIAL REMOVAL AND DISPOSAL OF EXISTING CONCRETE MASONRY".
- REPAIR CONCRETE AND ALL ASSOCIATE WORK, INCLUDING CLEANING AND CONTING OF EXPOSED REBAR SHALL BE PAID UNDER ITEM 808.1502 "CONCRETE SUPERSTRUCTURE CLASS HP \(\frac{1}{2}\)" BRIDGE SIDEWALKS"
- SAWCUT AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION, DEPTH OF SAWCUT MAY BE REDUCED TO AVOID REINFORCEMENT OR UTILITIES.
- COST OF SAWCUT SHALL BE CONSIDERED INCIDENTAL TO ITEM 803,0300 PARTIAL REMOVAL AND DISPOSAL OF EXISTING CONCRETE MASONRY.
- SAWGUT $\frac{1}{2}$ " DEEP CRACK RELIEF JOINT AT LOCATIONS OF EXISTING SIDEWALK JOINTS.

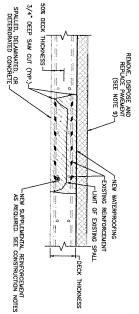
COST OF SAWCUT CRACK RELIEF JOINT SHALL BE INCIDENTAL TO ITEM BOB.1502 "CONCRETE SUPERSTRUCTURE CLASS HP 2" BRIDGE SIDEWALKS"

DECK THICKNESS 1 " XIN--3/4" DEEP SAW CUT □DECK THICKNESS -NEW SUPPLEMENTAL REINFORCEMENT AS REQUIRED. SEE CONSTRUCTION NOTES

DEPTH TOPSIDE PATCH REPAIR DETAIL NOT TO SCALE



PARTIAL—DEPTH UNDERSIDE PATCH REPAIR DETAIL NOT TO SCALE



CONCRETE DECK REPAIR NOTES:

CONCRETE BRIDGE DECK REPAIRS TO THE TOP OF THE DECK AND FOR FULL DEPTH PATCH REPAIR SHALL BE IN ACCORDANCE WITH SECTION 818 PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIR.

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- PARTIAL DEPTH PATCH REPAIRS TO THE UNDERSIDE OF THE DECK SHALL BE IN ACCORDANCE WITH SECTION 817 REPAIRS TO CONCRETE MASONRY.
- ALL PARTIM—OEPH DECK PATOMES TO THE UNDERSIDE OF DECK SMALL BE PAID FOR NUTBER TEM 917.2110 REPAIRS TO STRUCTURAL CONCRETE MASONRY PATOMINE MARTIMS!. ANTOMES MITH DEPTHS GREATER THAM 8.00 OF CONCRETE DECK THOMNESS OR AREAS GREATER THAM 8.50 SMALL BE PAID FOR NUTBER ITEM. 918.2010. PORTLAND CEMENT CONCRETE DECK REPAIRS (FULL DEPTH REMOVAL);. SEE PROVISONS FOR ACCEPTABLE MATERIALS AND METHODS.
- THE CONTRACTOR SHALL REPORT TO THE ENGINEER ANY DETERIORATION THAT EXCEED THE LIMITS SHOWN ON THE PLANS AND SHALL NOT CONTINUE WORK WITHOUT DIRECTIONS FROM THE ENGINEER.
- IF DURNIC REMOVAL OF DETERIORATED CONCRETE, THE CONTRACTIOR DAMAGES ESTIMIC REINFORCEMENT TO THE EXTEXT REQUIRING REPURDALIST, MY BODTIONAL CONCRETE REMOVAL, PATCHMIC MATERIAL. CLEMBING EXISTING REINFORCING STEEL, AND TURNISHING AND INSTILLING REPURCEMENT REMOVED RESIDENCE STEELS. SHALL BE AT THE CONTRACTIOR'S EXPENSE. INSTILL ACCORDING TO REINFORCING REPLACEMENT DETAIL.
- REINFORCEMENT USED TO REPLACE EXISTING DETERIORATED REINFORCING STEEL SHALL BE GALVANIZED COST OF REPLACEMENT SHALL BE INCLUDED IN THE RESPECTIVE REPAIR ITEMS.
- 7. PARTIM_PEETH PATCHES SHALL BE USED IN AREAS WHERE SOUND CONCRETE, IS REACHED MORE THAN
 11. DEPTH FROM THE FACE OF THE DECK USAL ON REMPORDING STELL IS RECOUNTERED, CONCRETE
 SHALL BE REMOVED TO A MINIMAL DEPTH OF 1 PAST THE DISTRICT ESTELL BY THE OFFICE OF THE CONCRETE DECK THOKNESS REPAIRS THAT REDURE REMOVAL OF MORE THAN 30% OF THE
 CONCRETE DECK THICKNESS SHALL BE FULL—DEPTH REPAIRS.

8. DELETED

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SURFACE PREPARATION NOTES:

- SAW CUT AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION, USED A CUT DEPTH OF $3/4^\circ$ OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
- IF REINFORCING STEEL IS EXPOSED, CLEAN EXPOSED STEEL AND SURROUNDING CONCRETE AS SPECIFIED IN THE PROVISIONS FOR "PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIRS".
- THE CONTRACTOR SHALL ENSURE THAT ALL BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED ASGREGATE) HAVE BEEN REMOVED IMMEDIATELY PRIOR TO PATCHING.
- WET CONCRETE REPUR AREA SO THAT SUBSTRATE IS SATURATED. SURFACE DRY WITH NOT STANDING WATER, WATER USED TO PREPARE AND WET THE SURFACE SHALL CONTAIN NO DETERGENTS OR BOND INHABITING CHEMICALS.
- ALL CONCRETE REPAIR MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS PROVIDED IN "PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIRS".

CONSTRUCTION NOTES:

- A NEW (CALVANIZED) REPROPCING BAR SHALL BE PLACED TO SUPPLEMENT AN EXISTING REDIFCORCING BAR HARN AN EXISTING REDIFCORCING BAR HARN AND EXISTING REDIFCORCING BAR HARS SECTION LOSS OF 22% OR MORE OF THE CORGINAL CROSS SECTION, AS DETERMEND BY THE EXIGINETE, OR THE EXISTING REMORENERT HAS BEEN BROKEN, THE NEW REINFORCING BAR SHALL EXTRIN AS BAR DIMAFTERS PAST LOCATIONS WHERE SECTION LOSS OF A BECAN IS RESENT AND SHALL BE PLACED AT THE SAME LEYEL, ALONG THE DEFENDANTED DAY AND ASSENT AND SHALL BE PLACED AT THE SAME LEYEL, ALONG THE DEFENDANTED BAR AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING REINFORCEMENT, SEE SUBSTRUCTURE CONCRETE REPAIRS FOR DEFAULS.
- THE FINISHED SURFACE OF ALL PATCHES SHALL BE EVEN WITH THE ADJACENT EXISTING DECK SLAB. DISCONTINUITIES GREATER THAN 1/8" SHALL BE GROUND DOWN OR REPAIRED.
- DECK REINFORCEMENT AND CONCRETE PATCH DETAILS PROVIDED ARE GENERAL, ACTUAL REINFORCEMENT SIZE AND SPACING WILL VARY.

ADDENDUM No. 1

LEGEND:

EXPOSED REINFO

DEMOLITION AREA TO BE REMOVED.

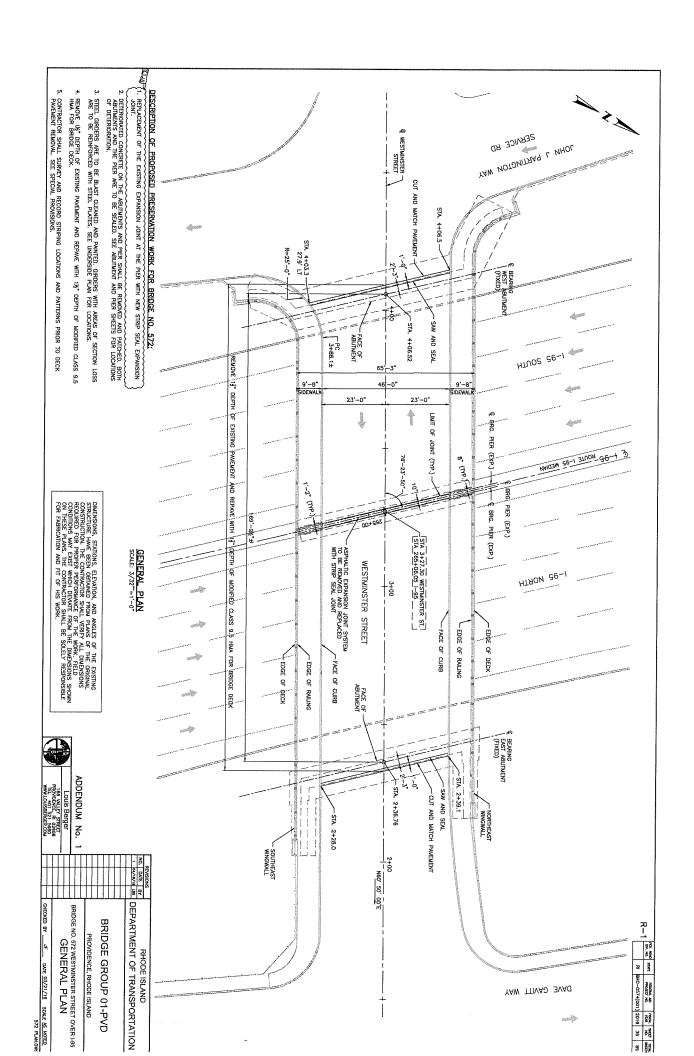
TYPICAL SECTION
FULL—DEPTH REPAIR DETAIL

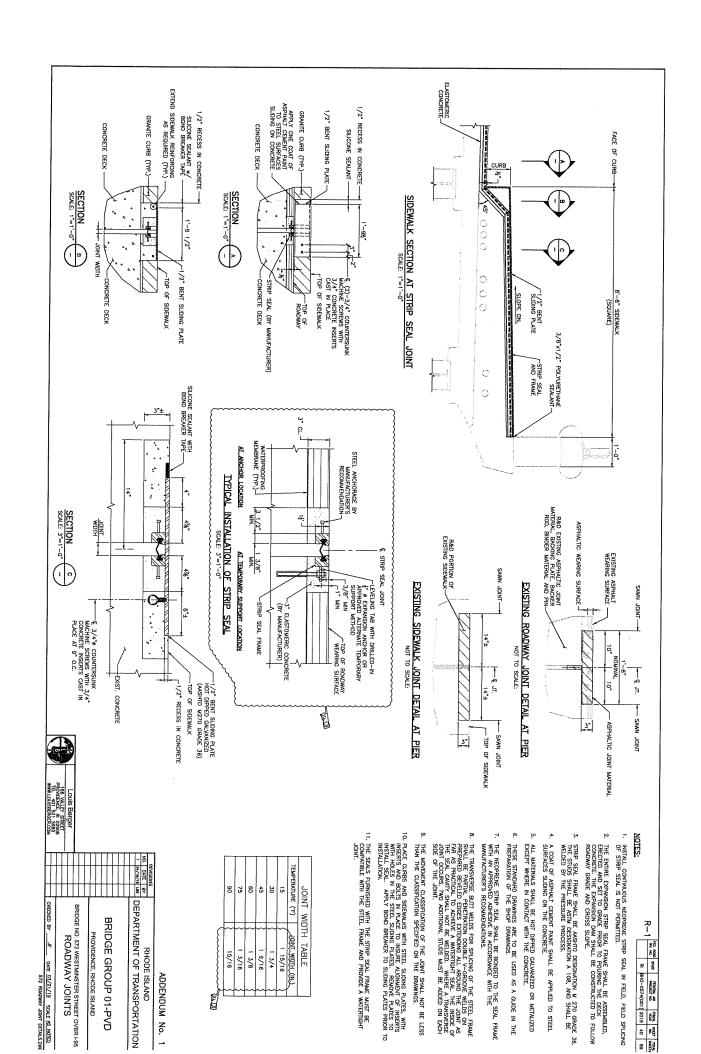
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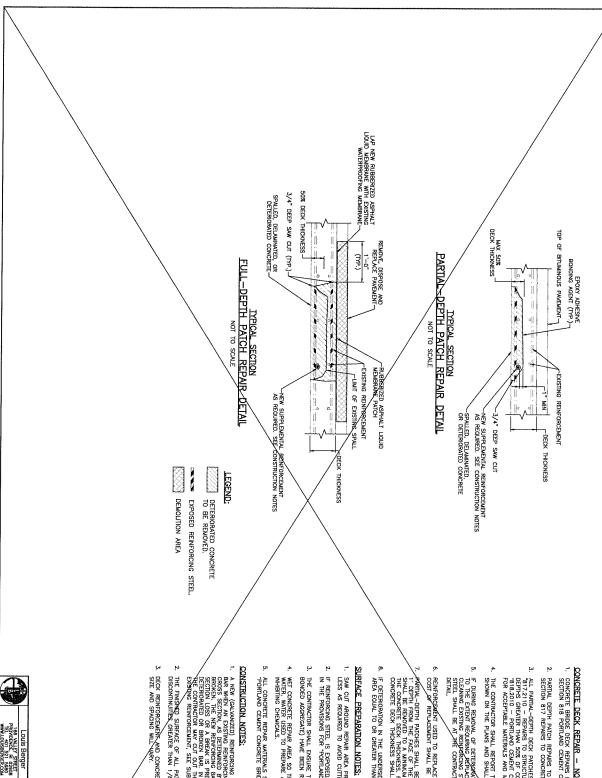
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DETAILS

166 VALLEY STREET PROVIDENCE, RI 02908 TEL 401 521 5980 WWW.LOUISBERGER.COM







CONCRETE DECK REPAIR - NOTES:

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- CONCRETE BRIDGE DECK REPAIRS FOR FULL DEPTH PATCH REPAIR SHALL BE IN ACEÓRDANCE WITH SECTION 818 PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIR.
- PARTIAL DEPTH PATCH REPAIRS TO THE UNDERSIDE OF THE DECK SHALL BE IN ACCORDANCE WITH SECTION 817 REPAIRS TO CONCRETE MASONRY.
- ALL PARIM,—DEPTH DECK PAICHES TO THE UNDERSIDE OF DEAK SHALL BE PAND FOR UNDER TEAL 1817.2110 REPAIRS TO STRUCTURAL CONCRETE LIKENING-PATOPIGES WITH DEPTHS GREATER THAN 50% OF CONCRETE DECK THICKNESS SHALL BE PAID FOR UNDER TEAL THE SHAZOTO PORTIAND CEMENT CONCRETE DECK REPAIRS (FUIL DEPTH REJOVAL). SEE PROVISIONS FOR ACCEPTABLE MATERIALS AND METHODS.
- THE CONTRACTOR SHALL REPORT TO THE PRISINEER ANY DETERIORATION THAT EXCEED THE LIMTS SHOWN ON THE PLANS AND SHALL NOT CONTINUE WORK WITHOUT DIRECTIONS FROM THE ENGINEER
- IE DURNG REMOWL OF DETENDATION CONCRETE, THE CONTRACTOR DAWASES SETUM REINFORCEMENT TO THE EXTENT REQUIRING SEPLOCHENT, MAY ADDITIONAL CONCRETE REMOWL, PATCHING METENAL CEMBING EXISTING REINFORCING STEEL, MIO FURNISHING AND INSTILLING REPLACEMENT REINFORCING STEEL SHALL BE AT AFE CONTRACTOR'S EXPENSE. INSTILL ACCORDING TO REINFORCING REPLACEMENT DEFAIL.
- REINFORCEMENT USED TO REPLACE EXISTING DETERIORATED REINFORCING STEEL SHALL BE GALVANIZED. COST OF REPLACEMENT SHALL BE INCLUDED IN THE RESPECTIVE REPAIR ITEMS.
- "AFTIM_DEPTH PATCHES SHALL BE USED IN ABEAS WHERE SOUND CONCRETE IS RECASED MORE THAN IT DEPTH FROM THE FACE OF THE DECK SLAW OF REINFORMOWS STELL IS ENCOUNTRED. CONCRETE DECK THICKNESS REPAIRS THAT REQUIRE BEADOWL OF ENSITING STELL, IP TO SOM OF CHICKNESS CHICKNESS REPAIRS THAT REQUIRE BEADOWL OF MORE THAN 50% OF THE CONCRETE DECK THICKNESS SHALL BE FULL—DEPTH REPAIRS.
- If deterioration in the underside of the deck completely exposes the reinforcement for area equal to or greater than 4 sf, the area shall be treated with a full depth repair.

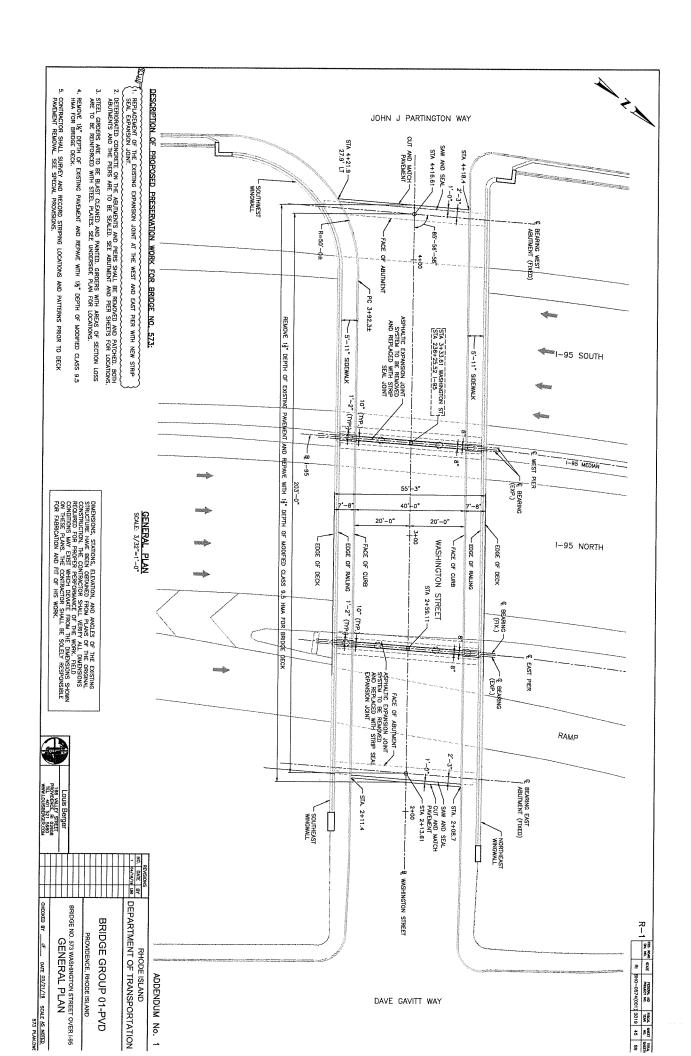
- SAW CUT AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION, USED A CUT DEPTH OF $3/4^{\circ}$ OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
- IF REINFORCING STEEL IS EXPOSED, CLEAN EXPOSED STEEL AND SURROUNDING CONCRETE AS SPECIFIED IN THE PROVISIONS FOR "PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIRS".
- THE CONTRACTOR SHALL ENSURE THAT ALL BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) HAVE BEEN REMOVED IMMEDIATELY PRIOR TO PATCHING,
- WET CONCRETE REPAIR AREA, 50 THAT SUBSTRATE IS SATURATED. SURFACE DRY WITH NOT STANDING WATER, WATER USED TO PREPARE AND WET THE SURFACE SHALL CONTAIN NO DETERGENTS OR BOND INHIBITING CHEMICALS.
- ALL CONCRETE REPAIR MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS PROVIDED IN "PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIRS".

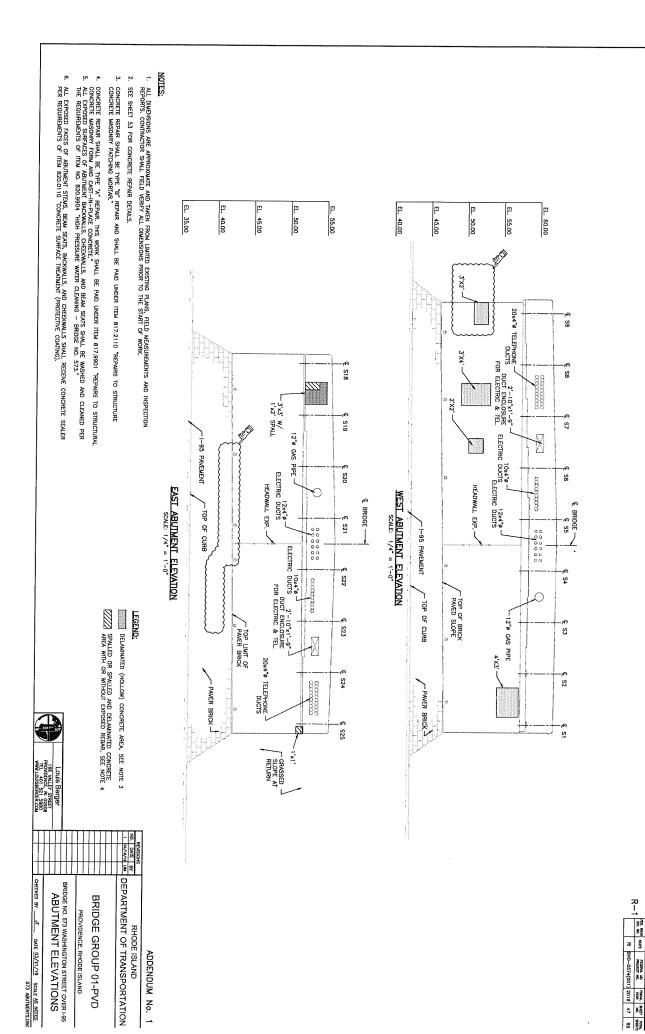
- A NEW (CALLWAZED) REPURDEDING BAY SHALL BE PLACED TO SUPPLEARIN AN INSTRUM ERROROUMO BAY WHEN AN EXPRIMING PERVORMON BAY HAS SECTION LOSS OF 25X OR MORE OF THE CHORNING PRIVATE SECTION SECTION, AS DETERMINED BY THE ENDINEER, OR THE EXTEND AS BAY DIFFER PRIVATE OR THE PRIVATE OR THE PRIVATE OR THE PRIVATE OR AS SHALL EXPENDED AS THE SAME LOCAL DAYS OF THE SECTION LOSS OF A BREAK IS PRESENT AND SHALL BE PLACED AT THE SAME LOCAL AGNOTHE EXERGIBLE OF THE BROKEN BAY, AN LEYD OF SUPPLEARING AS BAY ADJACET TO A DETERMINED BAY RECONSISTED FOR THE SECTION WAY OUT OUT THE DETERMINATION BAY AND MECHANICALLY SPLICE THE NEW BAY TO EXTRAGORM CHAPTOCALANT, SEE SUBSTRUCTURE CONCRETE REPARKS FOR DETAILS.
- THE FINISHED SURFACE OF ALL PATCHES SHALL BE EVEN WITH THE ADJACENT EXISTING DECK SLAB, DISCONTINUITIES GREATER THAN 1/8" SHALL BE GROUND DOWN OR REPAIRED.
- 3. DECK REINFORCEMENT AND CONCRETE PATCH DETAILS PROVIDED ARE GENERAL, ACTUAL REINFORCEMENT SIZE AND SPACING WILL VARY.

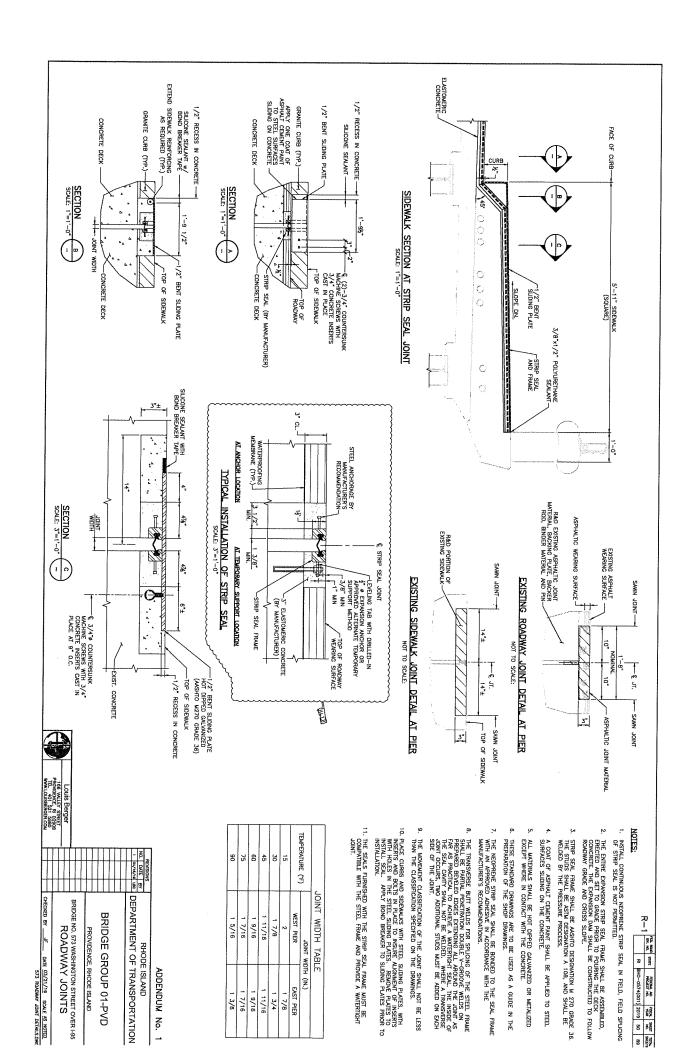
DEPARTMENT OF TRANSPORTATION BRIDGE NO. 572 WESTMINSTER STREET OVER 1-95
CONCRETE DECK REPAIR BRIDGE GROUP 01-PVD SHEET DELETED BY ADDENDUM NO.1 PROVIDENCE, RHODE ISLAND RHODE ISLAND DETAILS

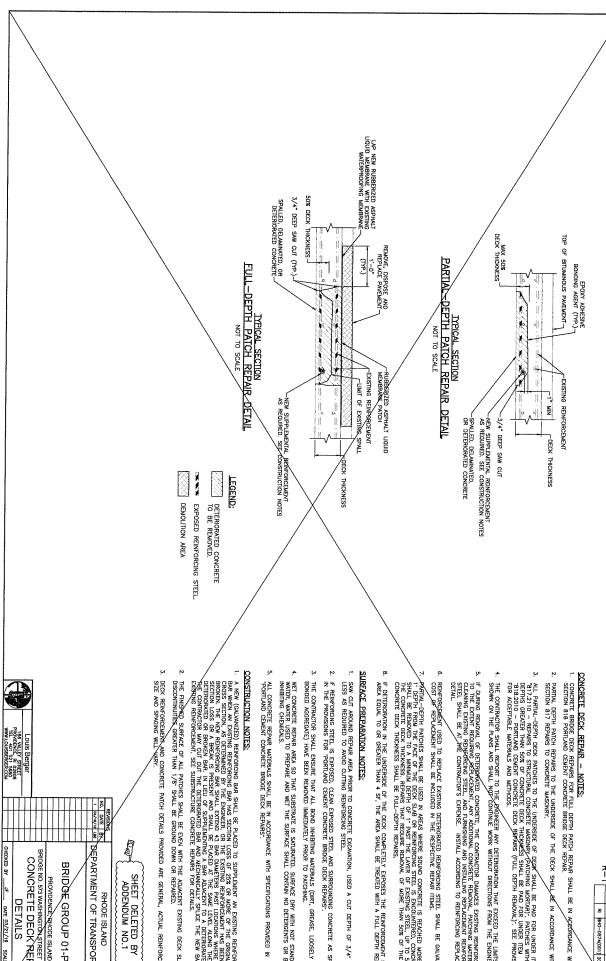
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572 CONCRETE DECK REPAIR DETAILD#C









CONCRETE BRIDGE DECK REPAIRS FOR FULL DEPTH PATCH REPAIR SHALL BE IN ACCORDANCE WITH SECTION 818 PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIR.

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- PARTIAL DEPTH PATCH REPAIRS TO THE UNDERSIDE OF THE DECK SHALL BE IN ACCORDANCE WITH SECTION 817 REPAIRS TO CONCRETE MASONRY.
- 3. ALL PARTIAL—DEPH DECK PATCHES TO THE UNDERSIDE OF BEAM SHALL BE PAID FOR UNDER ITAL 311.2110 REPAIRS TO STRUCTURAL COMPORETE MEASURY PATCHMEN, MORTAN): PATCHES MITH BEFTIS GREATER HAM 50% OF CONFORTE BECK THICOMESS SHALL BE PAID FOR UNDER ITAL 318.2010 PORTLAND CERENT CONFORTE BECK PRÉMITS (FULL DEPTH REMOVAL): SEE PROMISIONS FOR ACCEPTABLE MATERIALS AND METHODS.
- THE CONTRACTOR SHALL REPORT TO THE ENGINEER ANY DETERIORATION THAT EXCEED THE LIMITS SHOWN ON THE PLANS AND SHALL NOT CONTINUE WORK WITHOUT DIRECTIONS FROM THE ENGINEER.
- E DURNO REMOVAL OF DETENGATED CONCRETE, THE CONTRACTOR DAMAGES ESTING REMERGEDERING TO THE ENTENT REDURNOUS ATEMENT. AND ADDITIONAL CONCRETE REMOVAL, PATCHING INTERPALL CLEANING ENGING REPLACEMENT STEEL, AND TURNISHING AND INSTALLING REPLACEMENT REINFORCING STEEL, AND TURNISHING AND INSTALLING REPLACEMENT REINFORCING REPLACEMENT DETAIL.
- REMPORGEMENT USED TO REPLACE EXISTING DETERIORATED REINFORCING STEEL SHALL BE GALVANIZED COST OF REPLACEMENT SHALL BE INCLUDED IN THE RESPECTIVE REPAIR ITEMS.
- -APTIM_-DEPH PATCHES SHALL BE LISED IN AREAS WHERE SOUND CONCRETE IS RECAPED MORE THAN
 1° DEPH FROM THE FACE OF THE DECK SLAD OR REINFORDING STEEL IS ROCOMITIERD, CONCRETE
 SHALL BE REMOVED TO A MINIMUM DEPH OF 1° PAST THE LAYER OF EXISTING STEEL, UP TO SOX OF
 THE CONCRETE DECK THICKNESS REPAIRS THAT REQUIRE REMOVAL OF MORE THAN 50% OF THE
 CONCRETE DECK THICKNESS SHALL BE FULL—DEPTH REPAIRS.
- IF DETERIORATION IN THE UNDERSIDE OF THE DECK COMPLETELY EXPOSES THE REINFORCEMENT FOR AREA EQUAL TO OR GREATER THAN 4 SF, THE AREA SHALL BE TREATED WITH A FULL DEPTH REPAIR
- SAW CUT AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION, USED A CUT DEPTH OF $3/4^\circ$ OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
- IF REINFORCING STEEL IS EXPOSED, CLEAN EXPOSED STEEL AND SURROUNDING CONCRETE AS SPECIFED IN THE PROVISIONS FOR "PORTLAND CENENT CONCRETE BRIDGE DECK REPAIRS".
- WET COMPOSITE REPAIR AREA SO THAT SUBSTRATE IS SATURATED. SURFACE DRY WITH NOT STANDING WATER, WATER USED TO PREPARE AND WET THE SURFACE SHALL CONTAIN NO DETERGENTS OR BOND IMPHIBITING CHEMICLES.
- ALL CONCRETE REPAIR MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS PROVIDED IN "PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIRS".
- THE FINISHED SURFACE OF ALL PATCHES SHALL BE EVEN WITH THE ADJACENT EXISTING DECK SLAB. DISCONTINUITIES GREATER THAN 1/8" SHALL BE GROUND DOWN OR REPAIRED.
- DECK REINFORCEMENT AND CONGRETE PATCH DETAILS PROVIDED ARE GENERAL, ACTUAL REINFORCEMENT SIZE AND SPAGING WILL VARY.

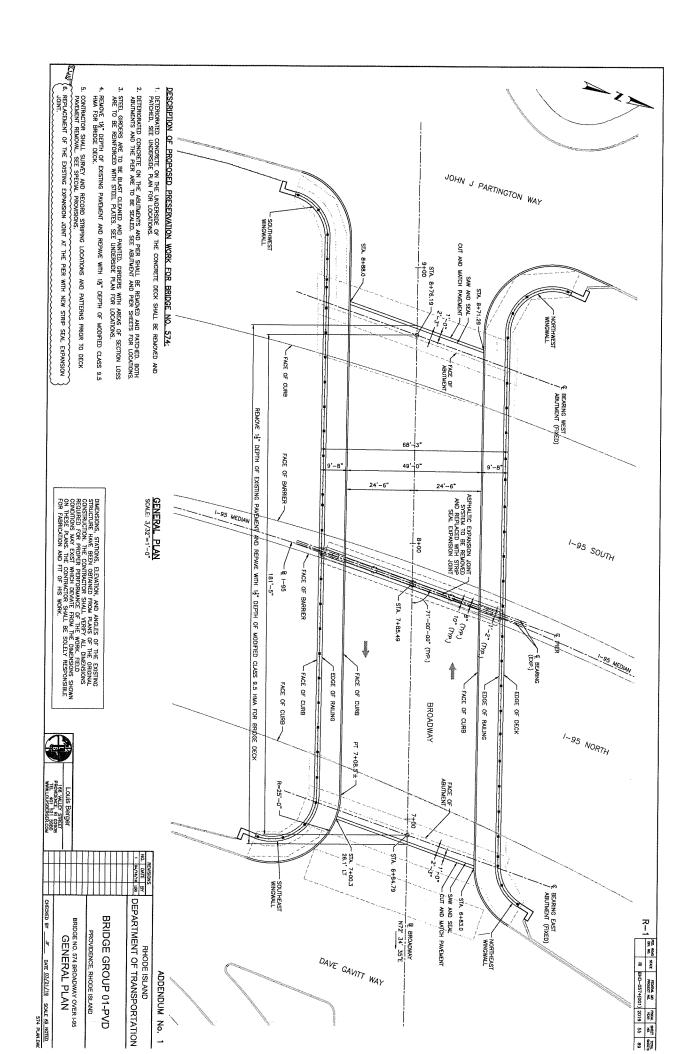
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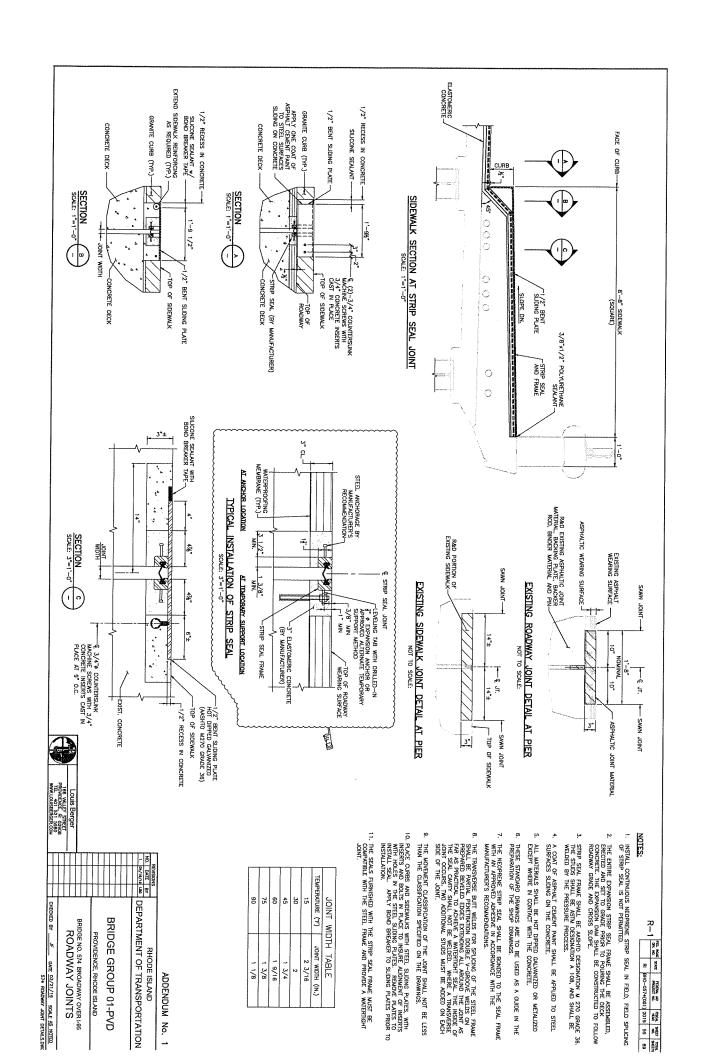
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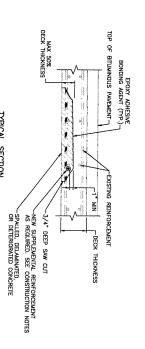
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DETAILS

PROVIDENCE SHODE ISLAND
BRIDGE NO. 573 WASHINGTON STREET OVER 1-95
CONCRETE DECK REPAIR







TYPICAL SECTION PARTIAL-DEPTH PATCH REPAIR DETAIL NOT TO SCALE

LAP NEW RUBBERIZED ASPHALT LIQUID MEMBRANE WITH EXISTING WATERPROOFING MEMBRANE: 50% DECK THICKNESS-J 3/4" DEEP SAW CUT (TYP.)-SPALLED, DELAMINATED, OR DETERIORATED CONCRETE REMOVE, DISPOSE AND REPLACE PAVEMENT (JAb.) -----EXISTING REINFORCEMENT RUBBERIZEO ASPHALT LIQUID MEMBRANE PATCH TUMIT OF EXISTING SPALL 9 NEW SUPPLEMENTAL REINFORCEMENT AS REQUIRED. SEE CONSTRUCTION NOTES -DECK THICKNESS

TYPICAL SECTION
FULL—DEPTH PATCH REPAIR DETAIL
NOT TO SCALE

DETERIORATED CONCRETE TO BE REMOVED.

LEGEND:

EXPOSED REINFORCING STEEL. DEMOLITION AREA

CONCRETE DECK REPAIR - NOTES:

R-1 00; NO. 91 01004 NO. 9004 NO. 9401 1004 NO. 9401 1004 NO. 9401 NO. 9401

- CONCRETE BRIDGE DECK REPAIRS FOR FULL DEPTH PATCH REPAIR SHALL BE IN ACCORDANCE WITH SECTION 818 PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIR.
- PARTIAL DEPTH PATCH REPAIRS TO THE UNDERSIDE OF THE DECK SHALL BE IN ACCORDANCE WITH SECTION 817 REPAIRS TO CONCRETE MASONRY.
- ALL PARTIAL—DEPTH DECK PATCHES TO THE UNDERSIDE OF DECK SHALL BE PAU FOR UNDER TITAL 817.2110 REPARES TO STRUCTURAL CONCRETE MASONAY (PATCHING MORTHAY), PATCHES WITH DEPTHS GREATER THAN 56% DF CONCRETE DECK THICKNESS SHALL BE PAU FOR UNDER TITAL 918.2210 PORTLAND CEMENT CONCRETE DECK REPAIRS (PULL DEPTH REMOVAL)Y. SEE PROVISIONS FOR ACCEPTABLE MATERIALS AND METHODS.
- THE CONTRACTOR SHALL REPORT TO THE ENGINEER ANY DETERIORATION THAT EXCEED THE LIMITS SHOWN ON THE PLANS AND SHALL NOT CONTINUE WORK WITHOUT DIRECTIONS FROM THE ENGINEER
- IF DURING REMOVAL OF RETERIORATED CONCRETE, THE CONTRACTOR DAMAGES EXTRING REINFORCEMENT TO THE EXTENT REQUIRING REPURDALENT, MAY ADDITIONAL CONCRETE REMOVAL, PATCHING MATERIAL, CLEMING EXISTING REINFORCING STEEL, AND FURNISHING AND INSTALLING REPUACELENT REPROPORING STEEL SHALL BE AT THE CONTRACTOR'S EXPENSE. INSTALL ACCORDING TO REINFORCING REPLACEMENT DEFAIL.
- REINFORCEMENT USED TO REPLACE EXISTING DETERIORATED REINFORCING STEEL SHALL BE GALVANIZED. COST OF REPLACEMENT SHALL BE INCLUDED IN THE RESPECTIVE REPAIR ITEMS.
- PARTIM_DEPTH PARCHES SYML BE LISED IN AREAS WHERE SOUND CONCRETE IS RECHED MORE THAN INCREME FACE OF THE DECK SUAD OR REMYRIGHOR STEAL IS RECOUNTREED, CONCRETE SHALL BE REMYRED TO A MINIMUM DEPTH OF IT PAST THE LAYER OF EXISTING STEEL, UP TO SOXY OF THE CONCRETE DECK THOCKNESS REPAIRS THAT REQUIRE REMOVAL OF MORE THAN 50% OF THE CONCRETE DECK THICKNESS SHALL BE TOLL—DEPTH REPAIRS.

(IIII) | 8. DELETED

SURFACE PREPARATION NOTES:

- SAW CUT AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION, USED A CUT DEPTH OF $3/4^{\circ}$ OR LESS AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
- IF REINFORCING STEEL, IS EXPOSED, CLEAN EXPOSED STEEL AND SURROUNDING CONCRETE AS SPECIFIED IN THE PROVISIONS FOR "PORTLAND CEMENT CONCRETE BRIDGE DECK REPARS".
- THE CONTRACTOR SHALL ENSURE THAT ALL BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) HAVE BEEN REMOVED IMMEDIATELY PRIOR TO PATCHING.
- WET CONCRETE REPARE ABEA, SO THAT SUBSTRATE IS SATURATED. SURFACE DRY WITH NOT STANDING WATER, WHERE USED TO PREPARE AND WET THE SURFACE SHALL CONTAIN NO DETERGINTS OR BOND INHIBITING CHEMICALS.
- ALL CONCRETE REPAIR MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATIONS PROVIDED IN "PORTLAND CEMENT CONCRETE BRIDGE DECK REPAIRS".

CONSTRUCTION NOTES:

- A NEW (GALWAIZED) REMFORCING BAR SYML BE PLACED TO SUPPLEMENT AN EXEMPOREME BAR WHEN AN EXPRINCE REMFORMED BAY HEE ENGINEER OR THE ENGING REMFORCING THE OPENION BAR HAS SECTION LOSS OF ZEX OR A DUBLE OF THE OPENION BAR BAY BAY EXTEND AS DAR DUMETERS PAST LOCATIONS WHERE SECTION LOSS OF A BERKAY IS PRESENT AND SHALL BE PLACED AT THE SAME LEFT, LOONE THE DAY BAY IN LED OF SUPPLEMENTING A DAR DAYLOUT FOR A DETERMENTED BAR, THE PROMETER OF A DETERMENTED BAR, THE DAYLOUT OF THE DETERMENTED BAR, AND MECHANICALLY SPLICE THE NEW BAR TO EXISTING PRESENTING THE NEW BAR TO CHARLES.
- THE FINISHED SURFACE OF ALL PATCHES SHALL BE EVEN WITH THE ADJACENT EXISTING DECK SLAB, DISCONTINUITIES GREATER THAN 1/8" SHALL BE GROUND DOWN OR REPAIRED.
- DECK REINFORCEMENT AND CONCRETE PATCH DETAILS PROVIDED ARE GENERAL, ACTUAL REINFORCEMENT SIZE AND SPACING WILL VARY.

ADDENDUM No. 1

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574 CONCRETE DECK REPAIR DETAILS.DWG

- GENERAL NOTES:
 1. ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE IN ACCORDANCE WITH:
- THE LATEST EDITION OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD SPECIFICATIONS)
- THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LIFED BRIDGE CONSTRUCTION SPECIFICATIONS, EIGHTH EDITION, INCLUDING THE LATEST INTERIM REVISIONS
- THE SPECIFICATIONS ACCOMPANYING THESE PLANS.
- IN CASE OF CONFLICT, THE SPECIAL PROVISIONS OF THE SPECIFICATIONS ACCOMPANYING THESE PLANS SHALL GOVERN.
- 2. DMENSONS, STATIONS AND ELEVATION ARE SHOWN TO THE NEAREST ONE—HUNDRETH OF A FOOT OR ONE—EIGHTH OF AN INCH. EXCEPT STRUCTURAL STEEL DIMENSIONS WHICH ARE TO THE NEAREST ONE—SIXTEENTH OF AN INCH.
- DIMENSIONS, STATIONS, ELEXATION, AND ANGLES OF THE EXISTING STRUCTURE HAVE BEEN OFFINED FROM PLANS OF THE ORIGINAL CONSTRUCTION, THE CONTROCTOR SHALL VERBY ALL DIMENSIONS REQUIRED FOR PROPER PEPFORMANCE OF THE WORK. FIELD CONDITIONS MAY EXIST WHICH DEPARTE FROM THE DIMENSIONS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR FABRICATION AND THE OF HIS WORK.
- THE BASE OF LEVELS, TO WHICH PLAN ELEVATIONS ARE REFERENCED, ARE BASED ON THE ORIGINAL CONSTRUCTION PLANS, INCLUDED WITHIN THE CONTRACT DOCUMENTS.
- ALL ABUTMENTS AND WALLS ARE DRAWN LOOKING AT THE EXPOSED FACES.
- ANY DAMAGE TO EXISTING STATE OR PRIVATE PROPERTY CAUSED BY THE CONTRACTORS OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- THE CONTRACTOR SHALL PLACE ALL EQUIPMENT AND MATERIALS IN HIS FIELD YARD OR AT A SITE APPROPED BY THE ENGINEER, THE EQUIPMENT AND MATERIAL SHALL BE PLACED IN A STORAGE AREA SO AS NOT TO CJUSE A SAFETY MAZARD.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERBY ALL ELEVATIONS, DIMENSIONS, DETAILS, WAGLES, STRUCTURAL MEMBER SIZES, AND LAYOUTS AS SHOWN ON THESE PLANS, THIS PRIOR FIELD VERBYCATION IS ESPECIALLY PERTINENT FOR PRE-PARRACTED STRUCTURAL ITEMS, WORK IN THE VICINITY OF UTILITIES, AND FOR EXISTING STRUCTURAL ITEMS TO REMAIN.
- THE CONTRACTOR SHALL TAKE THE PROPER PRECAUTION TO ENSURE THE STABILITY OF ALL STRUCTURAL ELEMENTS DURING CONSTRUCTION UNTIL ALL REPAIRS ARE COMPLETE.
- 10. FOR REQUIRED SEQUENCE OF CONSTRUCTION, SEE CONTRACT DOCUMENTS UNDER GENERAL PROVISION'S/CONSTRUCTION SECTION, AND HIGHWAY PLANS FOR MAINTENANCE AND PROTECTION OF
- 11. IF THIS PROJECT IS ON A HURRICANE EMOLIATION ROUTE AS DESIGNATED ON THE COVER SHEET, THE CONTROLTOR IS ADVISED THAT UPON 12 (TWELVE) HOURS NOTICE, THE ROADWAY SHALL BE OPEN TO ENACULEES AND EMERGENCY PERSONNEL, MAY EXTRA WORK RECESSIVEY TO COMPLY WITH THESE REGULEREMENT WILL BE REIMBURSED UNDER FORCE ACCOUNT PROCEDURES.

DESIGN DATA:

- DESIGN SPECIFICATIONS:
- THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EIGHTH EDITION, 2018, INCLUDING ALL INTERIM REVISIONS TO DATE.
- THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL, 2007 EDITION INCLUDING ALL REVISIONS TO DATE.
- ALL OTHER APPLICABLE DESIGN SPECIFICATIONS ARE REFERENCED IN SECTION 1 OF THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL DATED 2007.
- THE LATEST REVISIONS OF AND SUPPLEMENTS TO THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (RI STANDARD
- IN CASE OF CONFLICT, THE RHODE ISLAND LRFD BRIDGE DESIGN MANUAL SHALL GOVERN

STRUCTURAL STEEL:

AASHTO DESIGNATION M 270, GRADE

REINFORCING STEEL:

AASHTO DESIGNATION M31, GRADE 60

CONCRETE STRENGTHS:

CLASS HP & rc = 5000 PSI (28 DAYS)
SUBSTRUCTURE FORM AND CAST-IN-PLACE REPAIR AND SIDEWALK REPAIRS

CLASS HP $\frac{\pi}{4}$ " f'e=5000 PSI (28 DAYS) DECK OVER BACKWALL, BACKWALL MODIFICATIONS, APPROACH SLAB AND BARRIERS

- RAPID SET HIGH EARLY CONCRETE FC = 3000 PSI (PRIOR TO TRAFFIC LOADING), 5000 PSI (28 DAYS).
 FULL DEFTH AND PARTIAL DEPTH DECK REPAIRS

RAPID SETTING MORTAR I'C = 5000 PSI (28 DAYS)
SUBSTRUCTURE PATCHING MORTAR REPAIR (AND UNDERSIDE OF DECK REPAIRS) TIME!

- THE CONTRACTOR MAY, AT THE APPROVAL OF THE ENDINEER, PROPOSE THE USE OF SELF-CONSOLIDATING CONCRETE FOR ANY CLASS OF CONCRETE ON THIS PROLECT, SECTION 606 "SELF-CONSOLIDATING CONCRETE ECGL", CONTRINS THE REQUIREMENTS FOR MODIFYING ALL CLASSES OF CONCRETE MIX DESIGN FOR ALL SELF-CONSOLIDATING APPLICATIONS.
- ы ALL PORTLAND CEMENT CONCRETE SHALL BE AIR-ENTRAINED.

- UNLESS OTHERWISE INDICATED ON THE PLANS, ALL MAIN REINFORCING BARS SHALL HAVE THE FOLLOWING MINIMUM COVER:

ALL OTHER BARS	DECK SLABS (EXPOSED DECK)	DECK SLABS (WITH WEARING SURFACE)	CONCRETE CAST AGAINST OR PERMANENTLY EXPOSED TO EARTH (FOOTINGS, ABUTNIENTS AND WALL FACES, BACKWALLS)
	TOP BOTTOM	TOP BOTTOM	
2"	3" (+ 1/4", -0") 1" (+ 1/8", -0")	2" (+ 1/4", -0") 1" (+ 1/8", -0")	ધ્

- 11. AL, JOHN SEMANT SHALL BE SUCCOME SEMANT AS DESIGNATED BY THE PLANS, THE COLOR OF THE SEMANT, WHERE EXPOSED, SHALL BE NUTTHEA (LORD OF THE CONTRACTOR).

 SEMANT, WHERE NOT EXPOSED, WILL BE AT THE DISCRETION OF THE CONTRACTOR.

- 15. EMBEDMENT LENGTHS FOR DRILLED AND GROUTED DOWELS SHALL BE IN ACCORDANCE WITH SECTION 819 OF THE RI STANDARD SPECIFICATIONS.

- CONCRETE NOTES:

 1. CUASES OF CONCRETE SHALL BE HIGH PERFORMANCE CLASS HP AS DESCRIBED IN THE RI STANDARD SPECIFICATIONS AND THE SPECIAL PROMISIONS OF THE SPECIFICATIONS REFER TO THE "MATERIALS" NOTES FOR CLASSES OF CONCRETE SPECIFIED FOR WARDUS COMPONENTS.
- UNLESS OTHERWISE NOTED ON THE PLANS, ALL REINFORCING STEEL SHALL BE GALVANEZED ALL WIRE GALVANEZED. ALL GALVANEZED, ALL GALVANEZED, ALL GALVANEZED, ALL GALVANEZED, STALL BE IN ACCORDANCE WITH THE RI STANDARD SPECIFICATIONS, SECTION K.O.S.
- LAP SPLICES SHOWN ON THE PLANS SHALL BE CONSIDERED CRITICAL, UNLESS OTHERWISE NOTES SPLICES NOT SHOWN ON THE PLANS SHALL BE CONSIDERED CRITICAL, UNLESS OTHERWISE NOTES OF THE PLANS SHALL BE CONSIDERED NECES.
- THE TOP BARS IN THE DECK SLABS SHALL BE SPLICED AT THE CENTER OF SPANS BETWEEN GIRDERS. THE BOTTOM BARS SHALL BE SPLICED OVER THE GIRDERS.

COVER TO TIES AND STIRRUPS MAY BE 0.5 INCH LESS THAN THE ABOVE VALUES SPECIFIED FOR MAIN REINFORCING, BUT IN NO CASE LESS THAN 1.5 INCHES.

- ANCHOR RODS SHALL CONFORM TO ASTM F1554. ANCHOR RODS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M 232.
- ALL ANCHOR BOLTS SHALL BE SET PRIOR TO PLACEMENT OF CONCRETE UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
- 10. ALL EXPOSED EDGES AND REENTRANT CORNERS NOT OTHERWISE DETAILED ON THE PLANS SHALL HAVE A MINIMUM OF $\frac{3}{4}^{\infty}$ CHAMFER.
- 12.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING CONCRETE STAINS OR DISCOLORATION DURING CONSTRUCTION UNTIL SUICH TIME WHEN THE SURFACES ARE APPROVED AND ACCEPTED, MAY CONCRETE STAINS OR DISCOLORATION OCCURRING PROPE TO ACCEPTANCE OF THE SURFACES SHALL BE REMOVED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE STATE.
- UNLESS OTHERWISE NOTED ON THE PLANS, JOINT FILLER IS TO BE PREFORMED, NON-EXPANSIVE, NON-EXPRUDING TYPE IN ACCORDANCE WITH SECTION M.02.11.1 OF THE RI STANDARD SPECIFICATIONS.
- 14. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL DECK FORMS SHALL BE OF THE REMOVABLE TYPE THAT WILL PRODUCE THE DIMENSIONS SHOWN ON THE PLANS.
- IEI, N. ACCORDANCE WITH THE RI STANDARD SECRICATIONS, LLL NETAL TIES OR ANCHORAGES WHICH ARE REQUIRED FOR CONCRETE FORMANCES SHALL BE SO CONSTRUCTED THAT THEY CAME BE READINED TO AT THE CONCRETE SHAPPORT BY THE SAME SHAPPORT OF THE CONCRETE WITHOUT CAUSING DAMAGE TO THE CONCRETE SHEPPACE SHAPE SHAPE
- HAND HELD VIBRATIONS SHALL BE EQUIPPED WITH RUBBER TIPPED HEADS WHEN USED TO CONSOLIDATE CONCRETE AROUND EPOXY REINFORCEMENT AND EMBEDMENTS.

REINFORCEMENT NOTES:

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THE CONTRACTOR SHALL VERIFY ALL ORDER LISTS AND BENDING DIAGRAMS BASED ON COMMENTS RECEIVED. MAY REVISIONS REQUIRED TO WEET THE DESIGN DRAWINGS AND SPECIFICATION SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE STATE. THE CONTRACTOR SHALL SUBJECT TO THE BOWNERS OF RECORD ALL REINFORCEMENT DETAILS AND SCHEDULES MITH SUFFICIENT LEAD TIME TO ALLOW FOR CAPETUL RAPKEN, REVISION OF DETAILS AND SCHEDULES WITH SUFFICIENT LEAD TIME TO ALLOW FOR CAPETUL RAPKEN, REVISION OF THE RESPONSIBILITY TO MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

GENERAL BRIDGE NOTES	PROVIDENCE, RHODE ISLAND	BRIDGE GROUP 01-PVD	PARTMENT OF TRANSPORTATION
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DATE 03/21/19

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RHODE ISLAND

ADDENDUM No. 1

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401.9901	MODIFIED CLASS 9.5 HMA FOR BRIDGE DECKS	1
401.9902	REMOVE AND REPLACE OVERLAY AND WATERPROOF MEMBRANE BRIDGE NO. 537	1
401.9903	REMOVE AND REPLACE OVERLAY AND WATERPROOF MEMBRANE BRIDGE NO. 571	1
403.0300		2
800.9901	TEMPORARY DECK UNDERSIDE AND SIDE PROTECTION SHIELDING	2
800.9902		2
803.0300	PARTIAL REMOVAL AND DISPOSAL OF EXISTING CONCRETE MASONRY	2
803.9901	REMOVE AND DISPOSE EXISTING DECK JOINT	2
808.1200	CONCRETE SUPERSTRUCTURE CLASS HP 3/4''	2
808.1506	CONCRETE SUPERSTRUCTURE CLASS UD 3/4 DADDIEDS	3
808.1642	PREFORMED POLYETHYLENE FOAM JOINT FILLER 1''	3
808.1644	PREFORMED POLYETHYLENE FOAM JOINT FILLER 1'' PREFORMED POLYETHYLENE FOAM JOINT FILLER 1-1/2''	3
808.1675	POLYURETHANE ELASTOMERIC JOINT SEALANT	3
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808.9901	CONCRETE SUPERSTRUCTURE CLASS HP 3/8" BRIDGE SIDEWALKS	3
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813.0400	RUBBERIZED ASPHALT LIQUID MEMBRANE (WATERPROOFING	4
817.2110	MEMBRANE) REPAIRS TO STRUCTURAL CONCRETE MASONRY (PATCHING MORTAR)	
817.9901		4
817.9901	REPAIRS TO STRUCTURE CONCRETE MASONRY (FORM AND CAST-IN-PLACE)	4
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818.2020	PORTLAND CEMENT CONCRETE DECK REPAIRS (PARTIAL DEPTH REMOVAL)	5
819.0800	DRILL AND GROUT REINFORCING DOWELS	5
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820.9902	HIGH PRESSURE WATER CLEANING - BRIDGE NO. 571	5
820.9903	HIGH PRESSURE WATER CLEANING - BRIDGE NO. 572	5
820.9904	HIGH PRESSURE WATER CLEANING - BRIDGE NO. 573	6
820.9905	HIGH PRESSURE WATER CLEANING - BRIDGE NO. 574	6
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924.0113	ADVANCE WARNING ARROW PANEL	10
925.0112	PLASTIC PIPE TYPE III BARRICADE STANDARD 26.3.1 FLUORESCENT TRAFFIC CONES STANDARD 26.1.0 ADVANCE WARNING ARROW PANEL PORTABLE CHANGEABLE MESSAGE SIGN	10
926.0121	UNANCHORED PRECAST CONCRETE BARRIER FOR TEMPORARY TRAFFIC CONTROL STANDARD 40.5.0	11
926.0140	REFLECTIVE DELINEATORS FOR TEMPORARY CONCRETE BARRIERS	11
926.9901	TEMPORARY IMPACT ATTENUATOR	11
	REMOVE AND RESET TEMPORARY IMPACT ATTENUATOR	11
926.9903	RELOCATE PRECAST MEDIAN BARRIER FOR TEMPORARY TRAFFIC	
	CONTROL	and the
928.9901	TRUCK MOUNTED ATTENUATOR WITH TRUCK MOUNTED FLASHING ARROW	11
929 0110	FIFID OFFICE	12
932.0100	CUTTING AND MATCHING ASPHALT MOBILIZATION	12
936.0110	MOBILIZATION	12
937.0200	MAINTENANCE AND MOVEMENT TRAFFIC PROTECTION TRAINEE MAN-HOURS REMOVE EXISTING PAVEMENT MARKINGS	12
943.0200	TRAINEE MAN-HOURS	12
T20.1000	REMOVE EXISTING PAVEMENT MARKINGS	12
T20.1106	6 INCH TEMPORARY WATERBORNE PAINT PAVEMENT MARKINGS WHITE	13
	6 INCH TEMPORARY WATERBORNE PAINT PAVEMENT MARKINGS YELLOW	
T20.2006	6 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE	13
T20.2012	12 INCH EPOXY RESIN PAVEMENT MARKINGS WHITE	13
T20.2014	4 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW	13
T20.2016	6 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW	14
808.1640	4 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW 6 INCH EPOXY RESIN PAVEMENT MARKINGS YELLOW PREFORMED POLYETHYLENE FOAM JOINT FILLER 1/2''	14

Item No.	Item Code	Description UM	Qty.	Pay Code	
001	201.0401	REMOVE AND DISPOSE GRANITE CURB LF			<u></u>
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	100.00	0014	01
		Item 201.0401 Total:	100.00	_	
002	203.0400	STRUCTURAL EXCAVATION UNCLASSIFIED CY			
		BRIDGE GROUP 1			
		Br 537	10.00	0014	01
		BR 571	15.00	0014	01
		Item 203.0400 Total:	25.00	-	
003	203.0650	CRUSHED STONE FILL UNDER STRUCTURES CY			
		BRIDGE GROUP 1			
		BR 571	15.00	0014	01
		BRIDGE GROUP 1	15.00	0014	01
		Item 203.0650 Total:	30.00	-	
004	401.9901	MODIFIED CLASS 9.5 HMA FOR BRIDGE TON			
		DECKS			
		BRIDGE GROUP 1			
		BR 572	72.00	0014	01
		BR 573	75.00	0014	01
		BR 574	83.00	0014	01
		Item 401.9901 Total:	230.00	•	
005	401.9902	REMOVE AND REPLACE OVERLAY AND LS			
		WATERPROOF MEMBRANE BRIDGE NO. 537			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	1.00	0014	01
		Item 401.9902 Total:	1.00	•	
006	401.9903	REMOVE AND REPLACE OVERLAY AND LS			
		WATERPROOF MEMBRANE BRIDGE NO. 571			

Item No.	Item Code	Description	UM	Qty.	Pay Code	-
006	401.9903 Cont.	BRIDGE GROUP 1			***************************************	
		BRIDGE GROUP 1		1.00	0014	01
		Item 401.9903 Total	L:	1.00	-	

Item No.	Item Code	Description UM	Qty.	Pay Code	
007	403.0300	ASPHALT EMULSION TACK COAT SY			
		BRIDGE GROUP 1			
		BR 572	905.00	0014	01
		BR 573	940.00	0014	01
	### A03.0300 ASPHALT EMULSION TACK COAT STERRING GROUP 1	1,025.00	0014	01	
	ASPHALT EMULSION TACK COAT BRIDGE GROUP 1 BR 572 BR 573 BR 574 Ttem 403.0300 Total D8 800.9901 TEMPORARY DECK UNDERSIDE AND SIDE PROTECTION SHIELDING BRIDGE GROUP 1 BR 537 BR 571 Item 800.9901 Total: 09 800.9902 MISCELLANEOUS BRIDGE REPAIRS BRIDGE GROUP 1 BRIDGE GROUP 1 Item 800.9902 Total: 00 803.0300 PARTIAL REMOVAL AND DISPOSAL OF EXISTING CONCRETE MASONRY BRIDGE GROUP 1 BR 537 BR 571 BR 572 BR 573 BR 574 Item 803.0300 Total: 1 803.9901 REMOVE AND DISPOSE EXISTING DECK JOINT	Item 403.0300 Total:	2,870.00		
008	800.9901	TEMPORARY DECK UNDERSIDE AND SIDE SF			
		PROTECTION SHIELDING			
		BRIDGE GROUP 1			
A03.0300	01				
		BR 571	700.00	0014	01
		Item 800.9901 Total:	2,900.00	_	
009	800.9902	MISCELLANEOUS BRIDGE REPAIRS LS			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	150,000.00	0014	01
		Item 800.9902 Total:	150,000.00	_	
010	803.0300	PARTIAL REMOVAL AND DISPOSAL OF CY			
		EXISTING CONCRETE MASONRY			
		BRIDGE GROUP 1			
		BR 537	110.00	0014	01
		BR 571	25.00	0014	01
		BR 572	1.00	0014	01
		BR 573	1.00	0014	01
		BR 574	1.00	0014	01
		Item 803.0300 Total:	138.00	_	
011	803.9901	REMOVE AND DISPOSE EXISTING DECK LF			
		JOINT			
		BRIDGE GROUP 1			
		BR 537	245.00	0014	01

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
011	803.9901 Cont.	BR 571		65.00	0014	01
		BR 572		70.00	0014	01
		BR 573		111.00	0014	01
		BR 574		73.00	0014	01
		Item 803.990	1 Total:	564.00		
012	808.1200	CONCRETE SUPERSTRUCTURE CLAS	SS HP CY			
		3/4''				
		BRIDGE GROUP 1				
		BR 537		110.00	0014	01
		BR 571		25.00	0014	01
		BR 572		1.00	0014	01
		BR 573		1.00	0014	01
		BR 574		1.00	0014	01
		District of the second				
		Item 808.120	0 Total:	138.00	-	

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FAP Nos: BHO-0574(001)

Ctem No.	Item Code	FAP Nos: BHO-0574(001) Description UM	Qty.	Pay Code	
13	808.1506	CONCRETE SUPERSTRUCTURE CLASS HP CY			
		3/4'' BARRIERS			
		BRIDGE GROUP 1			
		BR 537	20.00	0014	01
		Item 808.1506 Total:	20.00		
L 4	808.1642	PREFORMED POLYETHYLENE FOAM JOINT SF			
		FILLER 1''			
		BRIDGE GROUP 1			
		BR 537	535.00	0014	01
		BR 571	105.00	0014	01
		Item 808.1642 Total:	640.00		
		FILLER 1-1/2'' BRIDGE GROUP 1 BR 537	670.00		01
		Item 808.1644 Total:	670.00	-	
. 6	808.1675	POLYURETHANE ELASTOMERIC JOINT CI			
		SEALANT			
		BRIDGE GROUP 1			
		BR 537	4,000.00	0014	01
		BR 571	1,000.00	0014	01
		BR 572	200.00	0014	01
		BR 573	250.00	0014	01
		BR 574	200.00	0014	01

017 808.1810 CONCRETE SURFACE FINISHING RUBBED REGULAR

BRIDGE GROUP 1

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
017	808.1810 Cont.	BR 537		790.00	0014	01
		Item 8	08.1810 Total:	790.00		
018	808.9901	CONCRETE SUPERSTRUCTUR	E CLASS HP CF			

CONCRETE SUPERSTRUCTURE CLASS HP 3/8" BRIDGE SIDEWALKS

BRIDGE GROUP 1

Item		FAP Nos: BHO-0574(001)			
No.	Item Code	Description UM	Qty.	Pay Code	
018	808.9901 Cont.	BRIDGE GROUP 1	2.00	0014	
		Item 808.9901 Total:	2.00		
019	810.0210	GALVANIZED BAR REINFORCEMENT GRADE LBS			
		60			
		BRIDGE GROUP 1			
		BR 537	21,000.00	0014	01
		BR 571	3,000.00	0014	01
		Item 810.0210 Total:	24,000.00	_	
020	811.1401	THERMOPLASTIC PIPE 3 INCH LF			
		COMMERCIAL GRADE PLASTIC			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	35.00	0014	01
		Item 811.1401 Total:	35.00	-	
021	813.0400	RUBBERIZED ASPHALT LIQUID MEMBRANE SY			
021	813.0400	RUBBERIZED ASPHALT LIQUID MEMBRANE SY (WATERPROOFING MEMBRANE) BRIDGE GROUP 1	.		
021	813.0400	(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1	50.00	_	01
021	813.0400	(WATERPROOFING MEMBRANE) BRIDGE GROUP 1	50.00 50.00	_	01
021	813.0400 817.2110	(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1		_	01
		(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1 Item 813.0400 Total:		_	01
		(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1 Item 813.0400 Total: REPAIRS TO STRUCTURAL CONCRETE CF		_	01
		(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1 Item 813.0400 Total: REPAIRS TO STRUCTURAL CONCRETE CF MASONRY (PATCHING MORTAR)		-	
		(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1 Item 813.0400 Total: REPAIRS TO STRUCTURAL CONCRETE CF MASONRY (PATCHING MORTAR) BRIDGE GROUP 1	50.00	-	
022		(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1 Item 813.0400 Total: REPAIRS TO STRUCTURAL CONCRETE CF MASONRY (PATCHING MORTAR) BRIDGE GROUP 1 BRIDGE GROUP 1	50.00 1,450.00	-	
022	817.2110	(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 Item 813.0400 Total: REPAIRS TO STRUCTURAL CONCRETE CF MASONRY (PATCHING MORTAR) BRIDGE GROUP 1 BRIDGE GROUP 1 Ttem 817.2110 Total:	50.00 1,450.00	-	
	817.2110	(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1 Item 813.0400 Total: REPAIRS TO STRUCTURAL CONCRETE CF MASONRY (PATCHING MORTAR) BRIDGE GROUP 1 BRIDGE GROUP 1 Ttem 817.2110 Total: REPAIRS TO STRUCTURE CONCRETE CF	50.00 1,450.00	-	
022	817.2110	(WATERPROOFING MEMBRANE) BRIDGE GROUP 1 BRIDGE GROUP 1 Item 813.0400 Total: REPAIRS TO STRUCTURAL CONCRETE CF MASONRY (PATCHING MORTAR) BRIDGE GROUP 1 BRIDGE GROUP 1 Item 817.2110 Total: REPAIRS TO STRUCTURE CONCRETE CF MASONRY (FORM AND CAST-IN-PLACE)	50.00 1,450.00	0014	

Item No.	Item Code	Description UM	Qty.	Pay Code	
024	818.2010	PORTLAND CEMENT CONCRETE DECK SF			
		REPAIRS (FULL DEPTH REMOVAL)			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	1,650.00	0014	01
		Item 818.2010 Total:	1,650.00	-	
025	818.2020	PORTLAND CEMENT CONCRETE DECK SF			
		REPAIRS (PARTIAL DEPTH REMOVAL)			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	1,100.00	0014	01
		Item 818.2020 Total:	1,100.00	-	
026	819.0800	DRILL AND GROUT REINFORCING DOWELS EACH			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	730.00	0014	01
		Item 819.0800 Total:	730.00	-	
027	820.9901	HIGH PRESSURE WATER CLEANING - LS			
		BRIDGE NO. 537			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	1.00	0014	01
		Item 820.9901 Total:	1.00		
028	820.9902	HIGH PRESSURE WATER CLEANING - LS			
		BRIDGE NO. 571			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	1.00	0014	01
		Item 820.9902 Total:	1.00		
029	820.9903	HIGH PRESSURE WATER CLEANING - LS			
		BRIDGE NO. 572			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	1.00	0014	01

Item No.	Item Code	Description UM	Qty.	Pay	Seq.
029	820.9903 Cont.	Item 820.9903 Total:	1.00	code	NO.
030	820.9904	HIGH PRESSURE WATER CLEANING - LS			
		BRIDGE NO. 573			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	1.00	0014	01
		Item 820.9904 Total:	1.00		
031	820.9905	HIGH PRESSURE WATER CLEANING - LS			
		BRIDGE NO. 574			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	1.00	0014	01
		Item 820.9905 Total:	1.00		
032	820.9906	CONCRETE SURFACE TREATMENT SF (PROTECTIVE COATING) BRIDGE GROUP 1 BRIDGE GROUP 1	33,060.00	0014	01
		Item 820.9906 Total:			01
		12em 020.9900 10tal:	33,060.00		
033	821.1690	SAW & SEALING JOINTS IN BITUMINOUS LF			
		CONCRETE PAVEMENT			
		BRIDGE GROUP 1			
		BR 571	95.00	0014	01
		BR 573	85.00	0014	01
		BR 574	105.00	0014	01
		在美国大学 (1) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
		Item 821.1690 Total:	285.00	-	
034	823.1760	STRIP SEAL EXPANSION JOINT LF			
		ASSEMBLIES			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	560.00	0014	01

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Item No.	Item Code	Description	UM	Qty.	-	-
034	823.1760 Cont.	Ite	n 823.1760 Total: 56	0.00		

035 824.9901 STEEL GIRDER REPAIRS BRIDGE NO. 537 LBS

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Item No.	Item Code	Description	UM	Qty.	Pay Code	_
035	824.9901 Cont.	BRIDGE GROUP 1			Code	NO.
		BRIDGE GROUP 1		220.00	0014	01
		Item 82	4.9901 Total:	220.00		
036	824.9902	STEEL GIRDER REPAIRS BR	IDGE NO. 571 LBS			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		140.00	0014	01
		Item 82	4.9902 Total:	140.00		
037	824.9903	STEEL GIRDER REPAIRS BR	IDGE NO. 572 LBS			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		280.00	0014	01
		Item 82	4.9903 Total:	280.00	-	
038	824.9904	STEEL GIRDER REPAIRS BR	IDGE NO. 573 LBS			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		560.00	0014	01
		Item 824	4.9904 Total:	560.00	-	
039	824.9905	STEEL GIRDER REPAIRS BR	IDGE NO. 574 LBS			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		275.00	0014	01
		Item 824	1.9905 Total:	275.00	-	
040	824.9906	TEMPORARY TRAFFIC PLATE	BRIDGE 571 LS			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01
		Item 824	1.9906 Total:	1.00	-	
041	825.9901	REPAINTING EXISTING STRU	UCTURAL LS			
		STEEL - BRIDGE NO. 537				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01

Item No.	Item Code	Description	UM	Qty.	Pay Code	
041	825.9901 Cont.	Item 825.9901 Tota	1:	1.00		
042	825.9902	REPAINTING EXISTING STRUCTURAL	LS			
		STEEL - BRIDGE NO. 571				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01
		Item 825.9902 Tota	1:	1.00		
043	825.9903	REPAINTING EXISTING STRUCTURAL	LS			
		STEEL - BRIDGE NO. 572				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1			0014	01
		Item 825.9903 Tota:	1:	1.00		
044	825.9904	REPAINTING EXISTING STRUCTURAL	LS			
		STEEL - BRIDGE NO. 573				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01
		Item 825.9904 Total	L:	1.00	-	
045	825.9905	REPAINTING EXISTING STRUCTURAL	LS			
		STEEL - BRIDGE NO. 574				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01
		Item 825.9905 Total	L:	1.00	-	
046	826.0100	CONTAINMENT, COLLECTION, STORAGE	LS			
		AND DISPOSAL OF DEBRIS AND SPENT				
		MATERIALS				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01
		Item 826.0100 Total	L:	1.00	-	

Thom	Thom Code	FAP Nos: BHO-0574(00	•		_	_
Item No.	Item Code	Description	UM	Qty.	Pay Code	
047	826.0200	PERSONNEL PROTECTION DURING	LS			
		PAINTING AND CLEANING OPERATIONS				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01
		Item 826.0200 Tot	tal:	1.00	····	
048	830.0200	ALUMINUM BRIDGE RAIL REMOVE AND	LF			
		RESET				
		BRIDGE GROUP 1				
		BR 537		90.00	0014	01
		Item 830.0200 Tot	al:	90.00		
049	834.0212	SLOPE FACE GRANITE CURB STRAIGHT	LF			
		10'' x 15''				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		100.00	0014	01
		Item 834.0212 Tot	:al:	100.00		
050	839.0100	PARTIAL-DEPTH REMOVAL AND DISPOSA	AL SY			
		OF BITUMINOUS PAVEMENT FROM				
		CONCRETE BRIDGE DECKS		v		
		BRIDGE GROUP 1				
		BR 572		905.00	0014	01
		BR 573		940.00	0014	01
	·	BR 574		1,025.00	0014	01
		Item 839.0100 Tot	al:	2,870.00	-	
051	914.5010	FLAGPERSONS	MHRS			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		500.00	0014	01
		Item 914.5010 Tot	al·	500.00	-	01
		100 511.0010 100		300.00		
052	914.5020	FLAGPERSONS - OVERTIME	MHRS			

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Item No.	Item Code	Description	UM	Qty. Pay Seq. Code No.
052	914.5020 Cont.	BRIDGE GROUP 1		
		BRIDGE GROUP 1		100.00 0014 01

Item No.	Item Code	Description UM	Qty.	Pay Code	-
052	914.5020 Cont.	Item 914.5020 Total:	100.00		
053	922.0100	TEMPORARY CONSTRUCTION SIGNS SF			
		STANDARD 29.1.0 AND 27.1.1			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	4,400.00	0014	01
		Item 922.0100 Total:	4,400.00		
054	923.0105	DRUM BARRICADE STANDARD 26.2.0 BDAY			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	75,525.00	0014	01
		Item 923.0105 Total:	75,525.00		
055	923.0125	PLASTIC PIPE TYPE III BARRICADE EACH			
		STANDARD 26.3.1			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	20.00	0014	01
		Item 923.0125 Total:	20.00		
056	923.0200	FLUORESCENT TRAFFIC CONES STANDARD EACH			
		26.1.0			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	240.00	0014	01
		Item 923.0200 Total:	240.00		
057	924.0113	ADVANCE WARNING ARROW PANEL PDAY			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	430.00	_	01
		Item 924.0113 Total:	430.00		
058	925.0112	PORTABLE CHANGEABLE MESSAGE SIGN PDAY			
		BRIDGE GROUP 1			
		BRIDGE GROUP 1	390.00	0014	01

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Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq.
058	925.0112 Cont.	Item 925.0112 Total	.:	390.00		
050	006 0101					
059	926.0121	UNANCHORED PRECAST CONCRETE	LF			
		BARRIER FOR TEMPORARY TRAFFIC				
		CONTROL STANDARD 40.5.0				
		BRIDGE GROUP 1		C	0014	0.1
		BRIDGE GROUP 1		6,560.00		01
		Item 926.0121 Total	· :	6,560.00		
060	926.0140	REFLECTIVE DELINEATORS FOR	EACH			
		TEMPORARY CONCRETE BARRIERS				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		200.00	0014	01
		Item 926.0140 Total		200.00	-	
061	926.9901	TEMPORARY IMPACT ATTENUATOR	EACH			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		10.00	0014	01
		Item 926.9901 Total	•	10.00	-	
062	926.9902	REMOVE AND RESET TEMPORARY IMPACT	EACH			
		ATTENUATOR				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		22.00	0014	01
		Item 926.9902 Total	*	22.00	-	
063	926.9903	RELOCATE PRECAST MEDIAN BARRIER	LF			
		FOR TEMPORARY TRAFFIC CONTROL				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		16,564.00	0014	01
		Item 926.9903 Total	•	16,564.00	-	
0.04	000 0001	TOTAL MAINTEN THEORY AND THE				

TRUCK MOUNTED ATTENUATOR WITH

HRS

064 928.9901

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Item No.	Item Code	Description	UM	Qty.	Pay Code	
064	928.9901 Cont.	TRUCK MOUNTED FLASHING ARROW				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		2,880.00	0014	01
		Item 928.9901 Tota	al:	2,880.00		
065	929.0110	FIELD OFFICE	PMO			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		29.00	0014	01
		Item 929.0110 Tota	al:	29.00		
066	932.0100	CUTTING AND MATCHING ASPHALT	LF			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		285.00	0014	01
		Item 932.0100 Tota	al:	285.00	LATES .	
067	936.0110	MOBILIZATION	LS			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01
		Item 936.0110 Tota	al:	1.00	-	
068	937.0200	MAINTENANCE AND MOVEMENT TRAFFIC	LS			
		PROTECTION				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1.00	0014	01
		Item 937.0200 Tota	al:	1.00		
069	943.0200	TRAINEE MAN-HOURS	MHRS			
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1,300.00	0014	01
		Item 943.0200 Tota	al:	1,300.00	-	
070	T20.1000	REMOVE EXISTING PAVEMENT MARKINGS	LF			
		DRINGE CROUD 1				

BRIDGE GROUP 1

Project Name - Bridge Group 01 - PVD
Estimate Name - Addendum 1 to PS&E
R.I. Contract No. - 2019-CB-045

FAP Nos: BHO-0574(001)

Item No.	Item Code	Description U	M	Qty.	Pay Code	Seq. No.
070	T20.1000 Cont.	BRIDGE GROUP 1		194,570.00	0014	01
		Item T20.1000 Total:		194,570.00	-	
071	T20.1106	6 INCH TEMPORARY WATERBORNE PAINT L	F			
		PAVEMENT MARKINGS WHITE				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		73,660.00	0014	01
		Item T20.1106 Total:		73,660.00	_	
072	T20.1206	6 INCH TEMPORARY WATERBORNE PAINT L	F			
		PAVEMENT MARKINGS YELLOW				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		24,940.00	0014	01
		Item T20.1206 Total:		24,940.00	-	
073	T20.2006	6 INCH EPOXY RESIN PAVEMENT	F			
		MARKINGS WHITE				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		8,810.00	_	01
		Item T20.2006 Total:		8,810.00		
074	T20.2012	12 INCH EPOXY RESIN PAVEMENT LI	F			
		MARKINGS WHITE				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		2,030.00	0014	01
		Item T20.2012 Total:		2,030.00	-	
075	T20.2014	4 INCH EPOXY RESIN PAVEMENT LI	F			
		MARKINGS YELLOW				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		1,730.00	0014	01
		Item T20.2014 Total:		1,730.00	-	

Item No.	Item Code	Description	UM	Qty.	Pay Code	Seq. No.
076	T20.2016	6 INCH EPOXY RESIN PAVEMENT	LF			
		MARKINGS YELLOW				
		BRIDGE GROUP 1				
		BRIDGE GROUP 1		4,350.00	0014	01
		Item T20.2016 Total	L:	4,350.00	-	
077	808.1640	PREFORMED POLYETHYLENE FOAM JOINT	SF			
		FILLER 1/2''				
		BRIDGE GROUP 1				
		BR 537		315.00	0014	01
		BR 571		180.00	0014	01
		Item 808.1640 Total	L:	495.00	-	