

COMMONWEALTH OF MASSACHUSETTS



CONTRACT DOCUMENTS AND SPECIAL PROVISIONS

PROPOSAL NO.	613781-132474
P.V. =	\$3,320,000.00
PLANS	NO

FOR

**Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3)
and H-12-038 (2X0 & 2WY)**

in the Municipalities of

BURLINGTON - HAVERHILL

In accordance with the STANDARD SPECIFICATIONS
for HIGHWAYS and BRIDGES dated 2025

This Proposal to be opened and read:

TUESDAY, NOVEMBER 4, 2025 at 2:00 P.M.

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DOCUMENT 00010

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*** END OF DOCUMENT ***

DOCUMENT 00102

**NOTICE TO CONTRACTORS**

Electronic proposals for the following project will be received through the internet using www.bidx.com until the date and time stated below and will be posted on www.bidx.com forthwith after the bid submission deadline. No paper copies of bids will be accepted. All Bidders must have a valid vendor code issued by MassDOT in order to bid on projects. Bidders need to apply for a Digital ID at least 14 days prior to a scheduled bid opening date with www.bidx.com.

TUESDAY, NOVEMBER 4, 2025 at 2:00 P.M. ****BURLINGTON - HAVERHILL****Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3)
and H-12-038 (2X0 & 2WY)******Date Subject to Change**PROJECT VALUE = \$3,320,000.00

Bidders must be pre-qualified by the Department in the BRIDGE - CONSTRUCTION category to bid on the above project. An award will not be made to a Contractor who is not pre-qualified by the Department prior to the opening of Proposals.

All prospective Bidders who intend to bid on this project must obtain "Request Proposal Form (R109)". The blank "Request Proposal Form (R109)" can be obtained at:
<https://www.mass.gov/prequalification-of-horizontal-construction-firms>.

All prospective Bidders must complete and e-mail an electronic copy of "Request Proposal Form (R109)" to the MassDOT Director of Prequalification for approval:
prequal.r109@dot.state.ma.us.

Proposal documents for official bidders are posted on www.bidx.com. Other interested parties may receive informational Contract Documents containing the Plans and Special Provisions, free of charge.

Bids will be considered, and the contract awarded in accordance with statutes governing such contracts in accordance with Massachusetts General Laws Chapter 30 § 39M.

The Project Bids File Attachments folder for proposals at www.bidx.com shall be used for submitting at the time of bid required information such as the Bid Bond required document, and other documents that may be requested in the proposal.

NOTICE TO CONTRACTORS (Continued)

All parties who wish to have access to information plans and specification must send a “Request for Informational Documents” to MassDOTBidDocuments@dot.state.ma.us.

A Proposal Guaranty in the amount of 5% of the value of the bid is required.

This project is subject to the schedule of prevailing wage rates as determined by the Commissioner of the Massachusetts Department of Labor and Workforce Development, and the Division of Occupational Safety.

PRICE ADJUSTMENTS

This Contract contains price adjustments for hot mix asphalt and Portland cement mixtures, diesel fuel, and gasoline. For reference the base prices are as follows: liquid asphalt \$625.00 per ton, Portland cement \$425.13 per ton, diesel fuel \$2.793 per gallon, and gasoline \$2.471 per gallon, and Steel Base Price Index 374.7. MassDOT posts the **Price Adjustments** on their Highway Division’s website at

<https://www.mass.gov/massdot-contract-price-adjustments>

This Contract contains Price Adjustments for steel. See Document 00813 - PRICE ADJUSTMENT FOR STRUCTURAL STEEL AND REINFORCING STEEL for their application and base prices.

MassDOT projects are subject to the rules and regulations of the Architectural Access Board (521 CMR 1.00 et seq.)

Prospective bidders and interested parties can access this information and more via the internet at WWW.COMMBUYS.COM.

BY: Monica G. Tibbits-Nutt, Secretary and CEO, MassDOT
Jonathan L. Gulliver, Administrator, MassDOT Highway Division
SATURDAY, SEPTEMBER 20, 2025

DOCUMENT 00210

REQUIREMENTS OF MASSACHUSETTS GENERAL LAWS
CHAPTER 30, SECTION 39R;
CHAPTER 30, SECTION 39O

July 1, 1981, updated October 2016

M.G.L. c. 30, § 39R. Award of Contracts; Accounting Statements; Annual Financial Statements; Definitions.

(a) The words defined herein shall have the meaning stated below whenever they appear in this section:

- (1) "Contractor" means any person, corporation, partnership, joint venture, sole proprietorship, or other entity awarded a contract pursuant to sections thirty-eight A1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A to forty-four H, inclusive, of chapter one hundred and forty-nine, which is for an amount or estimated amount greater than one hundred thousand dollars.
- (2) "Contract" means any contract awarded or executed pursuant to sections thirty-eight A1/2 to thirty-eight O, inclusive, of chapter seven and any contract awarded or executed pursuant to section eleven C of chapter twenty-five A, section thirty-nine M of chapter thirty, or sections forty-four A through forty-four H, inclusive, of chapter one hundred and forty-nine, which is for amount or estimated amount greater than one hundred thousand dollars.
- (3) "Records" means books of original entry, accounts, checks, bank statements and all other banking documents, correspondence, memoranda, invoices, computer printouts, tapes, discs, papers and other documents or transcribed information of any type, whether expressed in ordinary or machine language.
- (4) "Independent Certified Public Accountant" means a person duly registered in good standing and entitled to practice as a certified public accountant under the laws of the place of his residence or principal office and who is in fact independent. In determining whether an accountant is independent with respect to a particular person, appropriate consideration should be given to all relationships between the accountant and that person or any affiliate thereof. Determination of an accountant's independence shall not be confined to the relationships existing in connection with the filing of reports with the awarding authority.
- (5) "Audit", when used in regard to financial statements, means an examination of records by an independent certified public accountant in accordance with generally accepted accounting principles and auditing standards for the purpose of expressing a certified opinion thereon, or, in the alternative, a qualified opinion or a declination to express an opinion for stated reasons.
- (6) "Accountant's Report", when used in regard to financial statements, means a document in which an independent certified public accountant indicates the scope of the audit which he has made and sets forth his opinion regarding the financial statements taken as a whole with a listing of noted exceptions and qualifications, or an assertion to the effect that an overall opinion cannot be expressed. When an overall opinion cannot be expressed the reason therefor shall be stated. An accountant's report shall include as a part thereof a signed statement by the responsible corporate officer attesting that management has fully disclosed all material facts to the independent certified public accountant, and that the audited financial statement is a true and complete statement of the financial condition of the contractor.
- (7) "Management", when used herein, means the chief executive officers, partners, principals or other person or persons primarily responsible for the financial and operational policies and practices of the contractor.
- (8) Accounting terms, unless otherwise defined herein, shall have a meaning in accordance with generally accepted accounting principles and auditing standards.

(b) Subsection (a)(2) hereof notwithstanding, every agreement or contract awarded or executed pursuant to sections thirty-eight A 1/2 to thirty-eight O, inclusive, of chapter seven, or eleven C of chapter twenty-five A, and pursuant to section thirty-nine M of chapter thirty or to section forty-four A through H, inclusive, of chapter one hundred and forty-nine, shall provide that:

- (1) The contractor shall make, and keep for at least six years after final payment, books, records, and accounts which in reasonable detail accurately and fairly reflect the transactions and dispositions of the contractor, and
- (2) Until the expiration of six years after final payment, the office of inspector general, and the commissioner of capital asset management and maintenance shall have the right to examine any books, documents, papers or records of the contractor or of his subcontractors that directly pertain to, and involve transactions relating to, the contractor or his subcontractors, and
- (3) If the agreement is a contract as defined herein, the contractor shall describe any change in the method of maintaining records or recording transactions which materially affect any statements filed with the awarding authority, including in his description the date of the change and reasons therefor, and shall accompany said description with a letter from the contractor's independent certified public accountant approving or otherwise commenting on the changes, and
- (4) If the agreement is a contract as defined herein, the contractor has filed a statement of management on internal accounting controls as set forth in paragraph (c) below prior to the execution of the contract, and
- (5) If the agreement is a contract as defined herein, the contractor has filed prior to the execution of the contracts and will continue to file annually, an audited financial statement for the most recent completed fiscal year as set forth in paragraph (d) below.

(c) Every contractor awarded a contract shall file with the awarding authority a statement of management as to whether the system of internal accounting controls of the contractor and its subsidiaries reasonably assures that:

- (1) transactions are executed in accordance with management's general and specific authorization;
- (2) transactions are recorded as necessary
 - i. to permit preparation of financial statements in conformity with generally accepted accounting principles, and
 - ii. to maintain accountability for assets;
- (3) access to assets is permitted only in accordance with management's general or specific authorization; and
- (4) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action was taken with respect to any difference.

Every contractor awarded a contract shall also file with the awarding authority a statement prepared and signed by an independent certified public accountant, stating that he has examined the statement of management on internal accounting controls, and expressing an opinion as to:

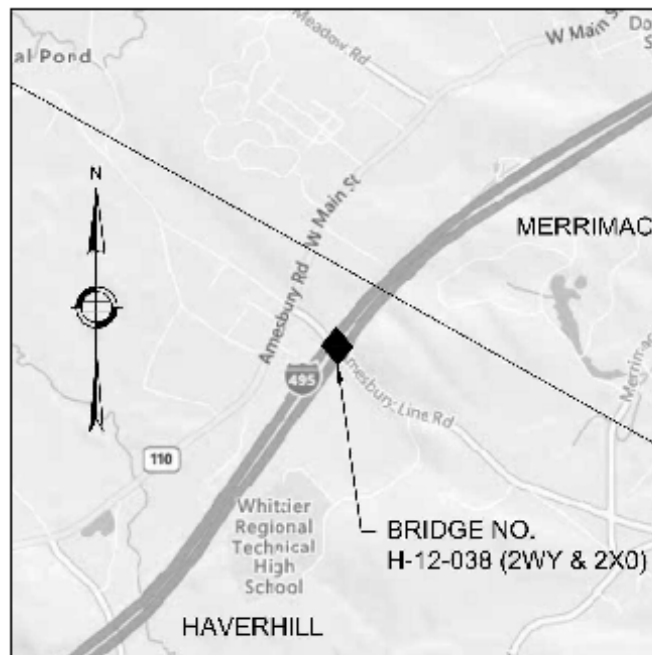
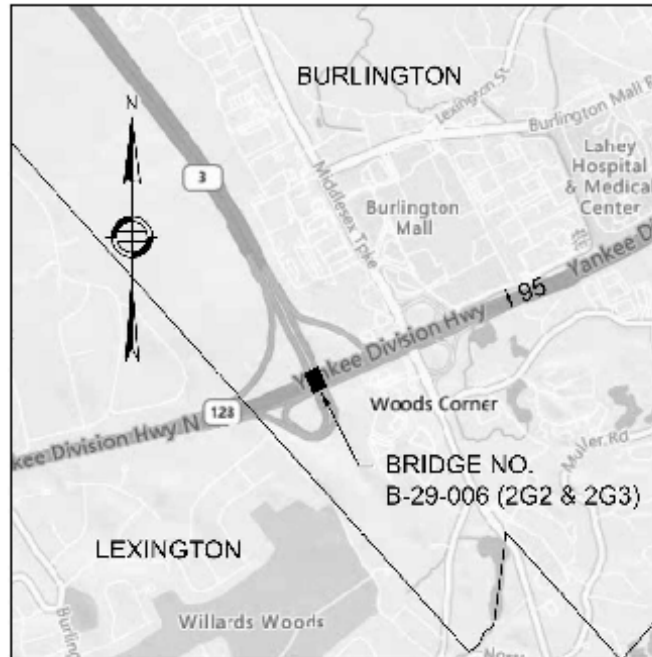
- (1) whether the representations of management in response to this paragraph and paragraph (b) above are consistent with the result of management's evaluation of the system of internal accounting controls; and
- (2) whether such representations of management are, in addition, reasonable with respect to transactions and assets in amounts which would be material when measured in relation to the applicant's financial statements.

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DOCUMENT 00331

LOCUS MAP**BURLINGTON - HAVERHILL**

**Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3)
and H-12-038 (2X0 & 2WY)**



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Final Report ☐Interim Report ☐**CONTRACTOR PROJECT EVALUATION FORM***For instructions on using this form, see Engineering Directive E-10-002, Dated 4/20/2010*

Date: _____

City/Town: _____

Contractor: _____

Project: _____

Address: _____

F.A. No. _____

Contract Number: _____

Bid Price: _____

Notice to Proceed: _____

Funds: State: _____ Fed Aid: _____

Current Contract Completion Date: _____

Date Work Started: _____

Date Work Completed*: _____

Contractor's Superintendent: _____

Division: (indicates class of work) Highway: _____ Bridge: _____ Maintenance: _____

*If work was NOT completed within specified time (including extensions) give reasons on following page.

	Excellent 10	Very Good 9	Average 8	7	Fair 6	5	Poor 4	% Rating
1. Workmanship								x 2=
2. Safety								x 2=
3. Schedule								x 1.5=
4. Home Office Support								x 1=
5. Subcontractors Performance								x 1=
6. Field Supervision/ Superintendent								x 1=
7. Contract Compliance								x 0.5=
8. Equipment								x 0.5=
9. Payment of Accounts								x 0.5=
(use back for additional comments)								
							Overall Rating:	

*(Give explanation of items 1 through 9 on the following page in numerical order if overall rating is below 80%. Use additional sheets if necessary.)*_____
District Construction Engineer's Signature/Date_____
Resident Engineer's Signature/Date_____
Contractor's Signature Acknowledging Report/DateContractor Requests Meeting with the District: No ☐Yes ☐

Date Meeting Held: _____

Contractor's Comments/Meeting Notes (extra sheets may be added to this form and noted here if needed): __________

CONTRACTOR PROJECT EVALUATION FORM (Continued)

Date: _____ Contract Number: _____

INFORMATION FOR DISTRICT HIGHWAY DIRECTORS RELATING TO PREQUALIFICATION

A deduction shall be recommended for unsatisfactory performance if computed overall rating is under 80%.

A deduction may be recommended for this project being completed late due to the Contractor's fault.

RECOMMENDATIONS FOR DEDUCTIONS FROM CONTRACTORS' ASSIGNED FACTOR

(Write Yes or No in space provided)

I recommend a deduction for Contractor's unsatisfactory performance: _____

I recommend a deduction for project completed late: _____

Signed: _____

District Highway Director

EXPLANATION OF RATINGS 1 – 9: _____

[illegible]

WORK NOT COMPLETED WITHIN SPECIFIED TIME:

Revised: 04/28/17

*** END OF DOCUMENT ***



DOCUMENT 00440

Final Report ☐Interim Report ☐**SUBCONTRACTOR PROJECT EVALUATION FORM***For instructions on using this form, see Engineering Directive E-10-002, Dated 4/20/2010*

Date: _____

City/Town: _____

Subcontractor: _____

Project: _____

Address: _____

F.A. No.: _____

Contract Number: _____

Prime Contractor _____

Current Contract Completion Date: _____

Date Work Started: _____

Date Work Completed*: _____

Subcontractor's Superintendent: _____

Type of Work Performed by Subcontractor: _____

*If work was NOT completed within specified time (including extensions) give reasons on following page.

	Excellent 10	Very Good 9	Average 8	7	Fair 6	5	Poor 4	% Rating
1. Workmanship								x 2=
2. Safety								x 2=
3. Schedule								x 1.5=
4. Home Office Support								x 1.5=
5. Field Supervision/ Superintendent								x 1=
6. Contract Compliance								x 1=
7. Equipment								x 0.5=
8. Payment of Accounts								x 0.5=
(use back for additional comments)							Overall Rating:	

(Give explanation of items 1 through 8 on the following page in numerical order if overall rating is below 80%. Use additional sheets if necessary.)

District Construction Engineer's Signature/Date _____

Resident Engineer's Signature/Date _____

Contractor Signature Acknowledging Report/Date _____

Subcontractor Signature Acknowledging Report/Date _____

Subcontractor Requests Meeting with the District: No ☐ Yes ☐ Date Meeting Held: _____

Subcontractor's Comments / Meeting Notes (extra sheets may be added to this form and noted here if needed): _____

Contractor's Comments: _____

SUBCONTRACTOR PROJECT EVALUATION FORM (Continued)

Date: _____ Contract Number: _____

INFORMATION FOR DISTRICT HIGHWAY DIRECTORS RELATING TO PREQUALIFICATION

A deduction shall be recommended for unsatisfactory performance if computed overall rating is under 80%.

A deduction may be recommended for this project being completed late due to the Contractor's fault.

RECOMMENDATIONS FOR DEDUCTIONS FROM CONTRACTORS' ASSIGNED FACTOR

(Write Yes or No in space provided)

I recommend a deduction for Contractor's unsatisfactory performance: _____

I recommend a deduction for project completed late: _____

Signed: _____
District Highway Director

EXPLANATION OF RATINGS 1 – 8: _____

[illegible]

WORK NOT COMPLETED WITHIN SPECIFIED TIME:

Revised: 04/28/17

*** END OF DOCUMENT ***

DOCUMENT 00710
GENERAL CONTRACT PROVISIONS
Revised: 04-16-25

NOTICE OF AVAILABILITY

The STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES dated 2025, the SUPPLEMENTAL SPECIFICATIONS, the 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS; the 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING and the CONSTRUCTION STANDARD DETAILS are available online at <https://www.mass.gov/massdot-highway-division-manuals-and-publications>

SPECIAL PROVISIONS FOR RIGHT-TO-KNOW ACT REQUIREMENTS

The Contractor's attention is directed to Massachusetts General Laws, Chapter 111F, commonly known as the Right-To-Know Act, and to the regulations promulgated pursuant thereto. Among the provisions of the Right-To-Know Act is a requirement that employers make available to employees Materials Safety Data Sheets (MSDS) for any substance on the Massachusetts Substance List (MSL) to which employees are, have been, or may be exposed.

To ensure prompt compliance with these regulations and legislation, the Contractor shall:

1. Deliver to the Department, prior to the start of any work under this contract, copies of MSDS for all MSL substances to be used, stored, processed or manufactured at the worksite by the Contractor.
2. Train employees of the Department, who may be exposed to MSL substances as a result of the Contractor's work under this contract, with regard to those specific substances in accordance with requirements of the Right-To-Know Act.
3. Observe all safety precautions recommended on the MSDS for any MSL substance to be used, stored, processed, or manufactured at the worksite by the Contractor.
4. Inform the Department in writing regarding specific protective equipment recommended in the MSDS for MSL substances to which employees of the Department may be exposed as a result of the Contractor's work under this contract.

The Department shall not be liable for any delay or suspension of work caused by the refusal of its employees to perform any work due to the Contractor's failure to comply with the Right-To-Know Act. The Contractor agrees to hold the Department or the Commissioner of the Department harmless and fully indemnified for any and all claims, demands, fines, actions, complaints, and causes of action resulting from or arising out of the Contractor's failure to comply with the requirements of the Right-To-Know Act.

ALTERNATIVE DISPUTE RESOLUTION

Forum, Choice of Law and Mediations:

Any actions arising out of a contract shall be governed by the laws of Massachusetts and shall be brought and maintained in a State or federal court in Massachusetts which shall have exclusive jurisdiction thereof. MassDOT and the Contractor may both agree to mediation of any claim and will share the costs of such mediation pro rata based on the number of parties involved.

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DOCUMENT 00715



SUPPLEMENTAL SPECIFICATIONS

SEPTEMBER 30, 2025

The 2025 *Standard Specifications for Highways and Bridges* are amended by the following modifications, additions and deletions. These Supplemental Specifications prevail over those published in the Standard Specifications.

The Specifications Committee has issued these Supplemental Specifications for inclusion into each proposal until such time as they are updated or incorporated into the next Standard Specifications.

Contractors are cautioned that these Supplemental Specifications are dated and will change as they are updated.

DIVISION I

GENERAL REQUIREMENTS AND COVENANTS

SECTION 2.00: PROPOSAL REQUIREMENTS AND CONDITIONS

Subsection 2.09: Rejection of Proposals

Replace the first bullet in the third paragraph with the following:

- award of the contract would result in the Bidder exceeding the Aggregate Bonding Capacity or the Single Bonding Capacity established by its Surety Company, or the Bidder's Proposal exceeds its Single Contract Limit, or the Bidder was not prequalified in the specified class of work on or before the time of bid opening; or

SECTION 3.00: AWARD AND EXECUTION OF THE CONTRACT

Subsection 3.02: Award of Contract

Replace the third paragraph with the following:

The successful bidder will be notified by mail or otherwise that their bid has been accepted and that they have been awarded the Contract.

SECTION 7.00: LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

Subsection 7.01: Laws to be Observed

In paragraph 701.G Buy America Provisions change Federally-aid to Federal-aid.

Subsection 7.05: Insurance Requirements

Change the title of paragraph A to Workers' Compensation Insurance

Subsection 7.22: Labor, Lodging, Board, Maximum Hours of Employment, Weekly Payment, Keeping of Payroll Records.

Replace this subsection with the following;

Subsection 7.22: Labor, Lodging, Board; Maximum Hours of Employment; Minimum Wage Rates; Payment of Wages; Keeping of Payroll Records

Every employee in public work shall lodge, board and trade where and with whom he elects; and no person or their agents or employees under contract with the commonwealth, a county, city or town, or with a department, board, commission or officer acting therefor, for the doing of public work shall directly or indirectly require, as a condition of employment therein, that the employee shall lodge, board or trade at a particular place or with a particular person. This section shall be made a part of the contract for such employment. (M.G.L. c. 149, § 25).

Every contract, except for the purchase of material or supplies, involving the employment of laborers, workers, mechanics, foremen or inspectors, to which the commonwealth or any county or any town, subject to section thirty, is a party, shall contain a stipulation that no laborer, worker, mechanic, foreman or inspector working within the commonwealth, in the employ of the contractor, sub-contractor or other person doing or contracting to do the whole or a part of the work contemplated by the contract, shall be required or permitted to work more than eight hours in any one day or more than forty-eight hours in any one week, or more than six days in any one week, except in cases of emergency, or, in case any town subject to section thirty-one is a party to such a contract, more than eight hours in any one day, except as aforesaid; provided, that in contracts entered into by the department of highways [a predecessor agency to MassDOT] for the construction or reconstruction of highways there may be inserted in said stipulation a provision that said department, or any contractor or sub-contractor for said department, may employ laborers, workers, mechanics, foreman and inspectors for more than eight hours in any one day in such construction or reconstruction when, in the opinion of the commissioner [currently defined in M.G.L. c. 149, § 1 as the director of the Department of Labor Standards], public necessity so requires. Every such contract not containing the aforesaid stipulation shall be null and void. (M.G.L. c. 149, § 34).

Attention of Bidders is called to M.G.L. c. 149, § 26-27H (the Prevailing Wage Law), requiring that the rate per hour of the wages paid to mechanics and apprentices, teamsters, chauffeurs and laborers in the construction of public works shall not be less than the rate or rates of wages to be determined by the director of the department of labor standards, and M.G.L. c. 149, § 148 requiring the weekly or bi-weekly payment of employees.

The Contractor shall furnish certified copies of any or all payrolls for the Contract, showing the name, address, and occupational classification of each employee on said works, and the hours worked by, and the wages paid to each such employee. Such payroll shall also include the rates paid for rented trucks or rental equipment of any kind used on the work. This requirement shall also apply to the work of any Subcontractor, having a Subcontract for any of the work performed on the project. Such records shall be kept in such manner as the Director of Labor Standards shall prescribe, and shall be open to inspection by the Engineer or any authorized representative of the Department of Labor Standards at any reasonable time and as often as may be necessary.

SECTION 8.00: PROSECUTION AND PROGRESS

Subsection 8.01: Subletting or Assignment of Contract

In the first bullet of the third paragraph replace the title of Subsection 7.22 Labor, Lodging, Board; Maximum Hours of Employment; Minimum Wage Rates; Payment of Wages; Keeping of Payroll Records

SECTION 9.00: MEASUREMENT AND PAYMENT

Subsection 9.03: Payment for Extra Work

Replace 903.B, first paragraph, numbers (2) and (3) with the following.

- (2) Plus 13 percent of direct labor, for the estimated costs of Federal Insurance Contribution Act (FICA) including Medicare; Federal Unemployment Tax Act (FUTA); State Unemployment Tax Act (SUTA), which includes Unemployment Insurance, the Workforce Training Fund Program,-Employer Medical Assistance Contribution, and COVID-19 Recovery Assessment; Earned Sick Time (EST) Law (940 CMR 33.00); and Paid Family and Medical Leave (PFML) Act (458 CMR 2.00); or, as an alternative to the above 13 percent, the Contractor may elect to use actual rates for FICA, FUTA, SUTA, EST and PFML provided the actual rates are supported with verifiable documentation and shall be subject to review by MassDOT Audit Operations.
- (3) Plus the estimated cost of Workers' Compensation and Liability Insurance, Health, Welfare and Pension benefits, and such additional fringe benefits which the Contractor is required to pay as a result of Union Labor Agreements and/or is required by authorized governmental agencies;

In 903.B, second paragraph, number (3), replace the word "Workmen's" with "Workers".

DIVISION II

CONSTRUCTION DETAILS

SECTION 300: WATER SYSTEMS

SUBSECTION 301: WATER SYSTEMS

Subsection 301.60G: Laying Pipe

Revise the third paragraph to read as follows:

Pipe sections shall be laid with the bell on the upgrade end. Before laying the pipe, the outside of the spigot and the inside of the bell shall be wire brushed and wiped clean and dry.

Subsection 301.80: Method of Measurement

Delete the words cast iron in the first paragraph.

Replace the second paragraph with the following;

Fittings, consisting of bends, tees, caps, wyes, sleeves, reducers, increasers, blow-off fittings and other special fittings, apply only when new materials are necessary and which are not specifically provided for under other items in the Proposal. Fittings other than new will not be paid separately but only under the applicable pipe items. When new fittings are measured separately for payment, the length of pipe occupied by the fittings will not be measured for payment.

SECTION 700: INCIDENTAL WORK

SUBSECTION 715: RURAL MAIL BOXES REMOVED AND RESET

Subsection 715: Rural Mail Boxes Removed and Reset

Change the words mail box and mail boxes to the word mailbox or mailboxes where encountered in the title, and all subsections.

SECTION 800: TRAFFIC CONTROL DEVICES

SUBSECTION 850: TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE OPERATIONS

Subsection 850.29: Temporary Barrier and Temporary Barrier Removed and Reset

Delete this subsection.

Subsection 850.49: Temporary Barrier

Delete this subsection.

Subsection 850.69: Temporary Barrier and Temporary Barrier Removed and Reset

Delete this subsection.

Subsection 850.80: Method of Measurement

Delete the fifth paragraph from the end of this subsection.

Subsection 850.81: Basis of Payment

Delete the sixth and seventh paragraphs from the end of this subsection.

SUBSECTION 853: TEMPORARY BARRIER**Subsection 853.: Temporary Barrier**

Add this new subsection:

DESCRIPTION**853.20: General**

Work under this Subsection consists of furnishing, placing, adjusting, resetting, maintaining, and removing temporary barrier.

MATERIALS**853.40: General**

Materials shall meet the requirements specified in the following Subsections of Division III, Materials:

Material	Section
Precast, Prestressed, and Prefabricated Concrete Products	M4.09.0
Temporary Barrier	M10.16.0
Limited Deflection Temporary Barrier	M10.16.1
Delineators for Temporary Barrier	M10.16.2

The Contractor shall supply a temporary barrier system that meets or exceeds the Test Level (TL) designated in the description of the bid item.

If the Contractor uses a proprietary temporary barrier system, it shall be listed on the QTCE.

Temporary barrier segments that appear to be damaged or in otherwise unsuitable condition may be rejected or ordered to be replaced by the Engineer at no additional cost.

853.41: Deflection

The deflection of a temporary barrier system is defined as the measured deflection, permanent and/or dynamic, during MASH Test Designation 2-11 (for TL-2) or Test Designation 3-11 (for TL-3).

The Contractor shall supply a temporary barrier system that is equal to or less than the maximum allowable deflection (permanent and/or dynamic) for each run of temporary barrier, as shown in the Plans or stated in the Special Provisions. If no distinction between permanent and temporary deflection is shown in the plans or Special Provisions, then dynamic deflection shall govern.

853.42: Precast Concrete Barriers

Precast Concrete Barriers used as temporary barriers shall be fabricated in accordance with M4.09.0: Precast, Prestressed, and Prefabricated Concrete Products. The Contractor shall submit a Certificate of Compliance (CoC) attesting to meeting this requirement.

853.43: Delineation

Delineators installed at 20-ft intervals throughout the entire barrier run shall be included. The delineators shall conform to M10.16.2: Delineators for Temporary Barrier. Delineators that may act as a washer on a bolted connection shall not be used unless specifically allowed by the barrier manufacturer. Delineators that are damaged, are no longer reflective, or go missing while temporary barrier is deployed shall be replaced in kind by the Contractor.

Delineators may be top or side-mounted to the barrier and oriented in a manner to maximize reflectivity to approaching traffic.

Temporary barrier placed on the right side of the travel way, or top-mounted and separating two or more lanes traveling in the same direction, shall use white delineators. Temporary barrier placed on the left side of the travel way shall use amber or yellow delineators; if separating two-way traffic and top-mounted, the delineator shall be double-sided.

853.44: Anchored Barrier

Temporary barrier systems that include an anchor system in order to meet performance requirements of the contract and/or meet MASH testing requirements may be accepted for use at the discretion of the Department.

Barrier that utilizes an anchor system shall use the same pattern, placement, and material of anchors that was used in MASH crash testing.

853.45: Shop Drawings

Within 30 days of the Notice to Proceed, the Contractor shall provide Shop Drawings showing the proposed temporary barrier system and confirming that it conforms to 853.40: General and will meet the allowable deflection requirements as described in 853.41: Deflection.

If anchors are proposed, the means, methods, pattern, placement, and materials for anchoring and subsequent pavement and/or deck repairs following removal of the temporary barrier system shall be included in the Shop Drawing submittal. If the use of an anchor system is rejected by the Department, the Contractor shall select an unanchored system that meets or exceeds the contract specified performance requirements, at no additional cost.

Shop Drawings for proprietary barrier systems shall include manufacturer's instructions for installation.

CONSTRUCTION METHODS**853.60: General**

A Traffic Management Plan approved by the Department is required prior to the installation of the temporary barrier system.

The Contractor shall install temporary barrier systems in accordance with the Plans.

Barrier ends shall not be exposed to approaching traffic during installation. Crashworthy shielding or attenuation shall be provided at all times.

Proprietary temporary barrier systems shall be installed per the manufacturer's instructions.

The Contractor shall not place any breaks in the temporary barrier system that will result in sections that are shorter than the tested minimum length-of-need (LON) under MASH Test 2-11 (for TL-2) or 3-11 (for TL-3). Exceptions shall be allowed for gate systems or changeable length segments placed over expansion joints, if those barrier segment types have been determined to be crashworthy per MASH.

Temporary barrier shall not be placed on unpaved surfaces, unless otherwise shown in the Plans.

The Contractor shall not store materials, vehicles, or other equipment within the measured dynamic deflection envelope, as defined in 853.41: Deflection.

853.61: Temporary Barrier Removed and Reset

Temporary Barrier Removed and Reset consists of relocating a string of temporary barrier from one alignment to another to support the sequence and phasing of construction, as shown in the Plans.

Temporary Barrier Removed and Reset does not include moving all or a portion of the temporary barrier system to gain access to a work area, for the convenience of the Contractor, or to realign units that have moved due to construction activities or a traffic incident.

853.62: Quality Control Inspection

After temporary barrier installation is completed, the Contractor shall perform a Quality Control (QC) Inspection in the presence of the Engineer. QC Inspection activities shall include, but are not limited to the following reviews:

- Installation location per the approved Plans.
- Alignment and connection mechanism between adjacent barrier segments.
- Alignment and connection mechanism between barrier segment and attenuator, if present.
- Anchor system installation, if present.

For proprietary barrier systems, the QC Inspection shall also include any manufacturer-specific inspection details or criteria found in the installation instructions.

Work behind the barrier shall not commence until the QC Inspection has been accepted by the Engineer.

COMPENSATION

853.80: Method of Measurement

Temporary Barrier will be measured by the foot installed, in place.

Temporary Barrier Removed and Reset will be measured by the foot removed and reset.

853.81: Basis of Payment

Temporary Barrier will be paid for at the contract unit price per foot which shall provide full compensation for fabrication, storage, transport, furnishment, installation, delineation, alignment, maintenance, repair, and final removal of the temporary barrier.

Temporary Barrier Removed and Reset will be paid for at the contract unit price per foot which shall provide full compensation for removing, relocating, transporting, and installing new anchorage (if used). If more than one accepted temporary barrier system is approved for use in a single contract, the unit cost for Temporary Barrier Removed and Reset shall not differ among systems.

All costs associated with fabrication, installation, and maintenance of temporary barrier delineators shall be considered incidental to the cost of the item.

All costs associated with Shop Drawings and COCs shall be considered incidental to the item.

All costs associated with patching or repairing the road surface or bridge deck due to the installation and removal of temporary barrier and/or anchors for a temporary barrier system shall be considered incidental to the cost of the item.

853.82: Payment Items

Item number	Description	Unit
853.2	Temporary Barrier (TL-2)	Foot
853.21	Temporary Barrier Removed and Reset	Foot
853.23	Temporary Barrier (TL-3)	Foot
853.33	Temporary Barrier – Limited Deflection (TL-3)	Foot

SECTION 900: STRUCTURES

SUBSECTION 902: ULTRA HIGH PERFORMANCE CONCRETE

Subsection 902.32: Mockup

In Table 902.32-1 change the Link Slab width to 2 ft – 0 in. and change the Joint Header width to 0 ft – 6 in. .

Subsection 902.32: - 902.38

Renumber section 902.32 Surface Preparation to 902.33 Surface Preparation and renumber section 902.33 through 902.38 to 902.34 through 902.39.

DIVISION III

MATERIALS SPECIFICATIONS

SECTION M2: AGGREGATES AND RELATED MATERIALS

Subsection M2.01.0 Crushed Stone

Replace the fourth paragraph and the associated asterisk notes with the following;

The crushed stone shall have a maximum 45% wear as determined by the Los Angeles Abrasion Test (AASHTO T 96)

SECTION M5: PIPE, CULVERT SECTIONS AND CONDUIT

Subsection M5.01.0 Joint Materials for Pipe

Replace this subsection with the following;

- Jute or oakum furnished for use in pipe joints shall be of an accepted grade approved for common usage.
- Mortar shall conform to the requirements of M4.04.0: Cementitious Grout, Mortar and Concrete Products
- Standard couplers as approved by the manufacturer shall be used to join corrugated metal pipe
- Rubber ring or plastic gaskets for concrete pipe joints, or manholes section joints shall be of tough, flexible, chemical-resistant material, and of such size and shape as to ensure satisfactory pipe joints when incorporated in the work and shall conform to AWWA C153.
- Rubber gasket joints for ductile iron pipe shall be Styrene-Butadiene Rubber (SBR), Ethylene Propylene Diene Monomer (EPDM) or Nitrile and conform to AWWA C111

Subsection M5.05.03.B Gate Valves

Replace this subsection with the following;

Gate valves shall conform to the requirements of AWWA Standard C500 and/or to the type used by the municipality as specified in the Special Provisions.

SECTION M7: PAINTS, PROTECTIVE COATINGS AND PAVEMENT MARKINGS

Subsection M7.01.04 Fast Drying White and Yellow Waterborne Traffic Paint

Replace the subsection with the following;

Approved waterborne traffic paint shall be tested in accordance with AASHTO M 348 and be listed on the QCML. The dry paint film shall be under the Toxicity Characteristic Leaching Procedure (TCLP) limits for all contaminants listed in 40 CFR 261.24. The markings shall be installed using reflective glass beads meeting the requirements of M7.01.07. For waterborne yellow paint use Organic Yellow No. 65 or No. 75 pigment.

SECTION M9: MISCELLANEOUS MATERIALS

Subsection M9.12.0 Reflectors for Barriers

Delete this subsection.

SECTION M10: TRAFFIC CONTROL DEVICES

Subsection M10.16.0: Temporary Barrier

Subsection M10.16.1: Limited Deflection Temporary Barrier

Subsection M10.16.2: Delineators for Temporary Barrier

Add these new subsections.

DOCUMENT 00718

SPECIAL PROVISION FOR PARTICIPATION BY MINORITY OR WOMEN'S BUSINESS ENTERPRISES
AND SERVICE- DISABLED VETERAN- OWNED BUSINESS ENTERPRISES(Implementing Chapter 102, Section 24 and
Chapter 273, Section 124, of the Acts of 1994 and Chapter 56, Sections 1 to 5 of the Acts of 2010
and subsequent Acts)

Revised: September 27, 2021

I. PARTICIPATION

M/WBE PARTICIPATION GOAL

On this Contract, the Massachusetts Department of Transportation (MassDOT) has established a goal for participation by Minority or Women Business Enterprise(s) (M/WBE). One half of the goal shall be met in the form of contractor activity. This goal shall remain in effect throughout the life of the Contract.

☒ Design-Bid-Build Projects: M/WBE Participation Goal 0 %
(One half of this goal shall be met in the form of Subcontractor construction activity)

☐ Design-Build Projects: M/WBE Design Participation Goal % and M/WBE
Construction Participation Goal %
*(One half of the Construction Goal shall be met in the form of Subcontractor
construction activity)*

SDVOBE PARTICIPATION BENCHMARK

On this Contract, the Massachusetts Department of Transportation (MassDOT) has established a goal for participation by Service- Disabled Veteran- Owned Business Enterprise(s) (SDVOBE). This goal shall remain in effect throughout the life of the Contract.

☐ Design-Bid-Build Projects: SDVOBE Participation Goal %

☐ Design-Build Projects: SDVOBE Design Participation Goal % and SDVOBE
Construction Participation Goal %

II. POLICY

It is the policy of the MassDOT that Minority, Women Business Enterprises (M/WBEs) and Service- Disabled Veteran- Owned Business Enterprises (SDVOBEs) have equal opportunity to receive and participate in the performance of its state funded Contracts.

III. M/WBE and SDVOBE OBLIGATION

The Contractor agrees to take all necessary and reasonable steps to ensure that MBE, WBE, and SDVOBEs have the maximum opportunity to compete for, and to perform, Department Contracts.

IV. FAILURE TO COMPLY WITH M/WBE OR SDVOBE REQUIREMENTS

All Contractors and Subcontractors are hereby advised that failure to carry out the requirements of these Provisions constitutes a breach of Contract which may result in termination of the Contract, a determination that the Contractor or Subcontractor be barred from bidding on Department Contracts for up to three (3) years, or any other remedy as the Department may impose under Section XIV of these Special Provisions.

V. REQUIRED SUBCONTRACT PROVISIONS

The Prime Contractor shall include the Provisions of Sections II, III, and IV above in every subcontract making those provisions binding on each subcontractor, supplier, manufacturer, consultant or service provider.

VI. DEFINITIONS

For the purpose of these Special Provisions, the terms listed below are defined as follows:

Minority Business Enterprise or MBE means any individual, business organization, or non-profit corporation certified as a MBE by the Supplier Diversity Office (SDO), formerly known as the State Office of Minority and Women Business Assistance (SOMWBA), or by the Department for the purposes of a particular bid or proposal to be submitted to the Department.

Women Business Enterprise or WBE means any individual, business or organization, or non-profit corporation certified as a WBE by SDO, or by the Department for the purposes of a particular bid or proposal to be submitted to the Department.

Service- Disabled Veterans- Owned Businesses or SDVOBE means a business not less than 51 percent of which is owned by one or more service- disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and the management and daily business operations of which are controlled by one or more service- disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

"Contractor activity" means any work, including but not limited to, construction, demolition, renovation, survey, test boring services, or maintenance work performed under the Contract.

"Approved Joint Venture" means a joint venture between M/WBEs and non-M/WBEs, or SDVOBEs and non-SDVOBEs, which has been established for the purpose of participation on a particular contract, where:

1. The M/WBE or SDVOBE partner(s) shares in the ownership, control, management responsibilities, risks and profits of the joint venture; and
2. The Joint Venture has been approved by the Department for M/WBE or SDVOBE participation on the particular contract.

"Equipment Rental Firm" means a firm that owns equipment and assumes actual and contractual responsibility to rent said equipment to perform a useful function of the work of the contract consistent with normal industry practice.

"Material Supplier" means a vendor engaged in sales to the highway construction industry from an established place of business or source of supply, which:

- (a) Manufactures goods from raw materials or substantially alters them before resale, or
- (b) Provides and maintains a storage facility for materials used in the work, consistent with normal industry practice.

"Department" means the Massachusetts Department of Transportation (MassDOT).

"SDO" means the Massachusetts Supplier Diversity Office.

VII. ELIGIBILITY of M/WBEs

Only firms, *OTHER THAN THE PRIME CONTRACTOR*, which have been certified by SDO and/or the Department as eligible to participate on state funded contracts as MBEs or WBEs may be used on this contract for credit toward the toward the M/WBE participation goal.

1. SDO Directory of Certified M/WBEs: The Supplier Diversity Office publishes a Directory of certified MBE and WBEs. This Directory can be obtained from SDO at <https://www.sdo.osd.state.ma.us/>. This site lists those firms which have been certified as minority owned (MBEs) or women owned (WBEs) in accordance with the criteria of 425 CMR 2.00 et seq to participate as M/WBEs on state funded contracts. It also lists the kinds of work in which each firm engages but does not constitute an endorsement of the quality or performance of any business and does not represent Department subcontractor approval.
2. Application for Certification by the Department for a Particular Project: A firm which has (1) submitted a fully completed M/WBE application to SDO at least 30 days previously, (2) has provided in a timely manner, any additional information which may have been requested by SDO, and (3) can provide evidence, satisfactory to the Department, of a bidder's conditional commitment to subcontract with the firm, if certified, may apply directly to the MassDOT Office of Civil Rights to be certified for participation on the particular contract.
3. Joint Venture Approval: To obtain recognition as an approved joint venture between M/WBEs and non-M/WBEs, the Joint Venture must provide to the MassDOT Office of Civil Rights, at least 14 business days before the bid opening date, the Joint Venture Affidavit Document B00847, and a copy of the Joint Venture Agreement, which shall include a detailed breakdown of the following:
 - (a) Capital participation by the M/WBE,
 - (b) Specific equipment to be provided to the Joint Venture by the M/WBE,
 - (c) Specific responsibilities of the M/WBE in the management of the Joint Venture,
 - (d) Workforce and specific skills to be provided to the Joint Venture by the M/WBE, and
 - (e) Percentage distribution to the M/WBE of the projected profit or loss incurred by the Joint Venture.
 - (f) The Joint Venture shall provide all such additional information as may be requested by the Department for the purpose of determining joint venture eligibility.

VIII. ELIGIBILITY of SDVOBEs

Only firms, *OTHER THAN THE PRIME CONTRACTOR*, which have demonstrated that they are listed as a service-disabled veteran- owned small businesses within the VetBiz database may be used on this contract for credit toward the SDVOBE participation goal.

1. VetBiz Database: The website, located at www.VetBiz.gov, listing verified service- disabled veteran- owned businesses.
2. Joint Venture Approval: To obtain recognition as an approved joint venture between SDVOBEs and non-SDVOBEs, the joint venture must provide to the MassDOT Office of Civil Rights, at least 14 business days before the bid opening date, an application for joint venture participation approval, and a copy of the Joint Venture Agreement, which shall include a detailed breakdown of the following:
 - (a) Capital participation by the SDVOBE,
 - (b) Specific equipment to be provided to the joint venture by the SDVOBE,
 - (c) Specific responsibilities of the SDVOBE in the management of the Joint Venture,
 - (d) Workforce and specific skills to be provided to the joint venture by the SDVOBE, and

- (e) Percentage distribution to the SDVOBE of the projected profit or loss incurred by the Joint Venture.
- (f) The Joint Venture shall provide all such additional information as may be requested by the Department for the purpose of determining joint venture eligibility.

IX. COUNTING M/WBE PARTICIPATION AND SDVOBE BENCHMARKS TOWARDS M/WBE AND SDVOBE GOALS

In order for M/WBE participation and SDVOBE benchmarks to count toward the Contract goal, the M/WBE and SDVOBE must have independently managed, supervised and performed the Contract work with its own workforce, equipment and resources. M/WBE and SDVOBE participation which fulfills these requirements shall be counted toward meeting the M/WBE and SDVOBE goals in accordance with the following rules:

- 1 If a firm has been determined to be an eligible MBE, WBE or SDVOBE, the total dollar value of the contract performed by the M/WBE or SDVOBE is counted toward the applicable goal as follows:
 - a. Except as provided below, in Section IX (1)(g), work performed by a M/WBE or a SDVOBE Prime Contractor shall not be counted toward the M/WBE or SDVOBE goal, and all Prime Contractors, including M/WBE or SDVOBE Prime Contractors, must comply with the M/WBE and SDVOBE requirements of this Contract.
 - b. For a M/WBE or SDVOBE material supplier, sixty percent (60%) of the amount to be paid for materials and supplies required under this Contract shall be credited toward the goal.
 - c. For a M/WBE or SDVOBE who provides a bonafide service such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for performance of the contract, reasonable fees or commissions charged for the service shall be listed, but the cost of items themselves shall not be credited.
 - d. For a M/WBE or SDVOBE hauler, trucker, or delivery service, which is not also the manufacturer of or a regular dealer in the materials and supplies, reasonable fees charged for delivery of materials and supplies required on the job site shall be credited; the cost of the materials and supplies themselves shall not be credited.
 - e. For a M/WBE or SDVOBE who provides any bonds or insurance specifically required for the performance of the contract, reasonable fees or commissions charged for such service shall be listed, but the face amount or actual premium paid for the bond or insurance shall not be credited.
 - f. The Department shall determine if the fees or commissions listed in accordance with paragraphs (c), (d), and (e) are not excessive as compared with fees or commissions customarily allowed for similar services.
 - g. That portion of the contract total dollar value equal to the percentage of ownership and control of the M/WBE partner(s) or SDVOBE partner(s) in an approved Joint Venture shall be counted toward the Contract goal, except that credit for M/WBE and SDVOBE participation in an approved Prime Joint Venture shall not exceed one half of the Contract goal.

X. JOINT CHECK POLICY

1. MassDOT recognizes that the use of joint checks may be a business practice required by material suppliers and vendors in the construction industry. A joint check is a two-party check issued by a/the Prime Contractor to a M/WBE or SDVOBE third party such as a regular dealer of material or supplies. The Prime Contractor issues the check as payor to the M/WBE or SDVOBE and the third party jointly as payees to guarantee payment to the third party for materials or supplies obtained or to be used by the M/WBE or SDVOBE. MassDOT has established criteria to ensure that M/WBEs or SDVOBEs are in fact performing a commercially useful function ("CUF") while using a joint check arrangement. Contractors and M/WBEs or SDVOBEs must meet and conform to these conditions and criteria governing the use of joint checks.

2. In the event that a Contractor, M/WBE or SDVOBE Subcontractor desires to use a joint check, MassDOT will require prior notice and will closely monitor the arrangement for compliance. MassDOT may allow a joint check arrangement and give credit to a Contractor for use of the M/WBE or SDVOBE where one or more of the following conditions exist:
 - The use of a joint check is in fact required by this type of vendor or supplier as a standard industry practice that applies to all Contractors (M/WBEs, SDVOBE and non-M/WBEs or non-SDVOBEs); or is required by a specific vendor or supplier;
 - Payment for supplies or materials would be delayed for an unreasonably extended period without the joint check arrangement;
 - The M/WBE or SDVOBE (or any of its Subcontractors) has a pattern or history of not paying a vendor or supplier within a reasonable time or has not established enough of a credit history with the supplier or vendor; and/or
 - The presence of severe adverse economic conditions, where credit resources may be limited and such practices may be necessary or required to effect timely payments.
3. Other factors MassDOT may consider:
 - Whether there is a requirement by the Prime Contractor that a M/WBE or SDVOBE should use a specific vendor or supplier to meet their Subcontractor specifications;
 - Whether there is a requirement that a M/WBE or SDVOBE use the Prime Contractor's negotiated price;
 - The independence of the M/WBE or SDVOBE;
 - Whether approval has been sought prior to use of a joint check arrangement; and
 - Whether any approved joint check arrangement has exceeded a reasonable period of use;
 - The operation of the joint check arrangement; and
 - Whether the M/WBE or SDVOBE has made an effort to establish alternate arrangements for following periods (i.e., the M/WBE or SDVOBE must show it can, or has, or why it has not, established or increased a credit line with the vendor or supplier).

Even with the use of a Joint Check, both the Contractor and M/WBE or SDVOBE remain responsible for compliance with all other elements of the Special Provisions, and must still be able to prove that a commercially useful function is being performed for the Contractor.

XI. JOINT CHECK PROCEDURES

- The M/WBE or SDVOBE advises its General or Prime Contractor that it will have to use a Joint Check and provide proof of such requirement.
- The General or the Prime Contractor submits a request for approval to MassDOT, using MassDOT's approved Joint Check Request form (Document B00846) and by notification on the M/WBE Letter of Intent (Document B00843) or SDVOBE Letter of Intent (Document B00845), and any other relevant documents. Requests that are not initiated during the bid process should be made in writing and comply with the procedure.
- The Contractor and M/WBE or SDVOBE must have:
 - (a) a written agreement with the material supplier/vendor;
 - (b) applied for credit with the subject material supplier and has supplied the vendor's response;

- (c) shown that it will place all orders to the subject material supplier/vendor;
 - (d) made and retains all decision-making responsibilities concerning the materials; and
 - (e) provided a Joint Check Agreement that is acceptable to MassDOT;
- The MassDOT Office of Civil Rights will review the request and render a decision as part of the approval process for M/WBE or SDVOBE Schedules and Letters of Intent.
 - Review and Approval will be project specific and relevant documents will be made part of the Project Contract file.
 - Payments should be made in the name of both the M/WBE or SDVOBE and vendor or supplier. Payments should be issued and signed by the Contractor as only the guarantor for prompt payment of purchases to the vendor or supplier. The payment to the vendor or supplier should be handled by the M/WBE or SDVOBE (i.e. if possible, funds or the joint check should be processed by the M/WBE or SDVOBE and sent by the M/WBE or SDVOBE to the vendor or supplier).
 - MassDOT may request copies of cancelled checks (front and back) and transmittal information to verify any payments made to the M/WBE or SDVOBE and vendor or supplier.
 - MassDOT may request other information and documents, and may ask questions of the Contractor, Subcontractor and vendor or supplier prior to, during, and after the project performance to ascertain whether the Subcontractor is performing a commercially useful function and all parties are complying with M/WBE or SDVOBE Program policies and procedures as part of the Subcontractor approval process.

XII. AWARD DOCUMENTATION AND PROCEDURES

1. The two lowest bidders/the two bidders with the lowest price per quality score point, including any M/WBE bidder or SDVOBE bidder, shall submit, by the close of business on the third business day after the bid opening, a completed Schedule of M/WBE and SDVOBE participation, in the form attached, which shall list:
 - a. The full company name, address and telephone number of each M/WBE or SDVOBE with whom the bidder intends to make a commitment;
 - b. The Contract item(s), by number(s) and quantity(ies), if applicable, or specific description of other business activity to be performed by each M/WBE or SDVOBE as set forth in the Letters of Intent. The bidder shall list only firms which have the capacity to perform, manage and supervise the work proposed in accordance with the requirements of Section XII of these Special Provisions.
 - c. The total dollar amount to be paid to each M/WBE or SDVOBE. (Bidders are cautioned that at least one half of the participation goal must be met with Contract work.)
 - d. The total dollar amount to be paid to each M/WBE or SDVOBE which is eligible for credit toward the M/WBE or SDVOBE goal under the crediting rules set out in Section IX.
 - e. The total creditable M/WBE or SDVOBE participation as a percentage of the total bid price.
2. All firms listed on the Schedule must be currently certified.
3. The two lowest bidders/the two bidders with the lowest price per quality score point shall submit with their Schedules of Participation, fully completed, signed Letters of Intent from each of the M/WBEs or SDVOBEs listed on the Schedule. The Letters of Intent shall be in the form attached and shall identify specifically the contract activity the M/WBE or SDVOBE proposes to perform, expressed as contract item number, if applicable, description of the activity, quantity, unit price and total price. In the event of discrepancy between the Schedule and the Letter of Intent, the Letter of Intent shall govern.

4. Evidence of good faith efforts will be evaluated by the Department in the selection of the lowest responsible bidder/best value bidder. All information requested by the Department for the purpose of evaluating the bidder's efforts to achieve the goal must be provided within three calendar days and must be accurate and complete in every detail. The apparent low bidder's/best value bidder's attainment of the M/WBE or SDVOBE goal or a satisfactory demonstration of good faith efforts is a prerequisite for Award of the Contract.
5. Failure to meet, or to demonstrate good faith efforts to meet, the requirements of these Special Provisions shall render a bid non-responsive. Therefore, in order to be eligible for award, the bidder (1) must list on the Schedule of Participation, and provide the required Letters of Intent for, M/WBE or SDVOBE participation which meets or exceeds the Contract goal in accordance with the terms of these Special Provisions or (2) must demonstrate, to the satisfaction of the Department, that good faith efforts were made to achieve the goal.
6. If the Department finds that the percentage of M/WBE or SDVOBE participation submitted by the bidder on its Schedule does not meet the Contract goal, or that the Letters of Intent were not timely filed, and that the bidder has not demonstrated good faith efforts to comply with these requirements, it shall propose that the bidder be declared ineligible for Award. In that case, the bidder may request administrative reconsideration. Such requests must be sent in writing within three calendar days of receiving notice of proposed ineligibility to: The Office of the General Counsel, Massachusetts Department of Transportation, 10 Park Plaza, Boston, MA, 02116.
7. If, after administrative reconsideration, the Department finds that the bidder has not shown that sufficient good faith efforts were made to comply with the requirements of these Special Provisions it shall reject the bidder's proposal and may retain the proposal guaranty.
8. Actions which constitute evidence of good faith efforts to meet the M/WBE or SDVOBE goals include, but are not limited to, all of the following examples:
 - a. Efforts made to select portions of the work proposed to be performed by M/WBEs or SDVOBEs in order to increase the likelihood of achieving the stated goal, including, where appropriate, but not limited to, breaking down contracts into economically feasible units to facilitate M/WBE and SDVOBE participation. The value of such work is required to at least equal the M/WBE and SDVOBE goal.
 - b. Reasonable written notification prior to the opening of bids soliciting individual M/WBEs or SDVOBEs interested in participation in the contract as subcontractors, regular dealers, manufacturers, consultants, or service providers and identifying the specific items or type of work being solicited.
 - c. Written notification to M/WBE or SDVOBE economic development assistance agencies and organizations which provide assistance in recruitment and placement of M/WBEs and SDVOBEs, describing the type of work, supplies or services being considered for M/WBE or SDVOBE subcontracting on this contract.
 - d. Efforts made to negotiate with M/WBEs or SDVOBEs for specific items of work including evidence of:
 - (1) The names, addresses, telephone numbers of M/WBEs or SDVOBEs who were contacted, the dates of initial contact and whether initial solicitations of interest were followed up by contacts with M/WBEs or SDVOBEs to determine with certainty whether the M/WBEs or SDVOBEs were interested. Personal or phone contacts are expected.
 - (2) A description of the information provided by the M/WBEs or SDVOBEs regarding the plans and specifications and estimated quantities for portions of the work to be performed.
 - (3) A statement of why additional agreements with M/WBEs or SDVOBEs were not reached.
 - (4) Documentation of each M/WBE or SDVOBE contacted but rejected and the reasons for the rejection.
 - e. Absence of any agreements between the Contractor and the M/WBE or SDVOBE in which M/WBE or SDVOBE promises not to provide subcontracting quotations to other bidders.
 - f. Efforts made to assist the M/WBEs or SDVOBEs that need assistance in obtaining bonding, insurance, or lines of credit required by the Contractor.

- g. Documentation that qualified M/WBEs or SDVOBEs are not available, or are not interested.
 - h. Attendance at any meeting scheduled by the Department to encourage better Contractor-M/WBE or Contractor- SDVOBE relationships and/or to inform M/WBEs or SDVOBEs of forthcoming M/WBE or SDVOBE utilization opportunities.
 - i. Advertisement, in general circulation media, in trade association publications and in disadvantaged business enterprise-focused media, of interest in utilizing M/WBEs or SDVOBEs and the area of interest.
 - j. Efforts to effectively use the services of available minority community organizations; women organizations, veteran organizations, minority, women disadvantaged and veteran contractor's groups; local, state and federal disadvantaged business assistance offices; and other organizations that provide assistance in recruitment and placement of M/WBEs or SDVOBEs.
9. The demonstration of good faith efforts must establish that the Contractor has actively and aggressively sought out M/WBEs or SDVOBEs to participate in the project and has taken all actions which could be reasonably expected to achieve the goal. Examples of circumstances or actions not acceptable as reasons for failure to meet the M/WBE or SDVOBE goal, include, but are not limited to:
- a. The M/WBE or SDVOBE was unable to provide performance and/or payment bonds.
 - b. The M/WBEs or SDVOBEs commercially reasonable bid was rejected based on price.
 - c. The M/WBE or SDVOBE would not agree to perform items of work at the unit bid price.
 - d. The Contractor does not want to subcontract a percentage of the work sufficient to meet the goal.
 - e. Solicitation by mail or fax only.

XIII. COMPLIANCE

- 1. All activity performed by a M/WBE or SDVOBE for credit toward the Contract goal must be performed, managed and supervised by the M/WBE or SDVOBE. Prime Contractor shall not enter into, or condone, any other arrangement.
- 2. The Prime Contractor shall not perform with its own organization, or assign to any other business, any activity designated for the M/WBEs or SDVOBEs named on the Schedule submitted by the Prime Contractor under Section IX, or under Section XII(6), without the approval of the Department in accordance with the requirements of Sections XIII(6) and XIII(10).
- 3. The Department may suspend payment for any activity which was not performed by the M/WBE or SDVOBE to whom the activity was committed on the approved Schedule of Participation, or which was not performed in accordance with the requirements of Section XIII(1).
- 4. The Department retains the right to approve or disapprove all subcontractors. Requests by the Prime Contractor for approval of participation by a M/WBE or SDVOBE subcontractor for credit toward the Contract goal must include, in addition to any other requirements for subcontractor approval, the following:
 - a. A copy of the proposed subcontract. The subcontract must be for at least the dollar amount, and for the work described, in the Prime Contractor's Schedule of Participation.
 - b. A resume stating the qualifications and experience of the M/WBE or SDVOBE superintendent and/or foreperson who will supervise the on-site work. A new resume will be required for any change in supervisory personnel during the progress of the work.
 - c. A Schedule of Operations indicating when the M/WBE or SDVOBE is expected to perform the work.

- d. A list of (1) equipment owned by the M/WBE or SDVOBE to be used on the Project, and (2) equipment to be leased by the M/WBE or SDVOBE for use on the Project.
 - e. A list of: (1) all projects (public and private) which the M/WBE or SDVOBE is currently performing, (2) all projects (public and private) to which the M/WBE or SDVOBE is committed, (3) all projects (public and private) to which the M/WBE or SDVOBE intends to make a commitment. For each contract, list the contracting organization, the name and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and the M/WBEs or SDVOBEs work schedule for each project.
5. If, pursuant to the subcontractor approval process, the Department finds that a M/WBE or SDVOBE subcontractor does not have sufficient experience or resources to perform, manage and supervise work of the kind proposed in accordance with the requirements of Section XIII(1), approval of the M/WBE or SDVOBE subcontractor may be denied. In the event of such denial, the Prime Contractor shall proceed in accordance with the requirements of Sections XIII(6) and XIII(10).
 6. If, for reasons beyond its control, the Prime Contractor cannot comply with its M/WBE or SDVOBE commitment in accordance with the Schedule of participation submitted under Section IX and the terms of these Special Provisions, the Prime Contractor shall submit to the Department the reasons for its inability to comply with its obligations under Section I and shall submit, and request approval for, a revised Schedule of Participation. If approved by the Department, the revised Schedule shall govern the Prime Contractor's performance in meeting its obligations under these special provisions.
 7. A Prime Contractor's compliance with the participation goal in Section I shall be determined by reference to the required percentage of the total Contract price, including any additions and modifications thereto, provided, however, that no decrease in the dollar amount of a bidder's commitment to any M/WBE or SDVOBE shall be allowed without the approval of the Department.
 8. If the Contract amount is increased, the Prime Contractor shall submit a revised Schedule of Participation in accordance with Sections XIII(6) and XIII(10).
 9. In the event of the decertification of a M/WBE or SDVOBE participating or scheduled to participate on the contract for credit toward the goal, the Contractor shall proceed in accordance with Sections XIII(6) and XIII(10).
 10. The Prime Contractor shall notify the Department immediately of any facts which come to its attention indicating that it may or will be unable to comply with any aspect of its M/WBE or SDVOBE obligation under this Contract.
 11. Any notice required by these Special Provisions shall be given in writing to the Resident Engineer and the district designated Compliance Officer with a copy to the Director of Compliance, Office of Diversity and Civil Rights, 10 Park Plaza, Room 3170, Boston MA 02116.
 12. The Prime Contractor and its subcontractors shall comply with the Department's Electronic Reporting System Requirements (Contract Document 00821) and submit all information required by the Department related to the M/WBE Special Provisions and SDVOBE Special Provisions through the Equitable Business Opportunity Solution (EBO). The Department reserves the right to request reports in the format it deems necessary anytime during the performance of the Contract.
 13. The Contractor shall pay each M/WBE or SDVOBE for satisfactory performance of its Contract no later than 10 days from receipt of payment for the work from the Department. Any delay or postponement of payment to the M/WBEs or SDVOBEs must be for good cause and only with the prior approval of the Department.
 14. The Department may withhold the Contractor's next periodic payment if each M/WBE or SDVOBE is not paid in accordance with Section XIII(13).
 15. The Department may require specific performance of the Prime Contractor's commitment under the Contract by requiring the Prime Contractor to subcontract with a M/WBE or SDVOBE for any contract or specialty item.

XIV. SANCTIONS

If the Prime Contractor does not comply with the terms of these Special Provisions and cannot demonstrate to the satisfaction of the Department that good faith efforts were made to achieve such compliance, the Department may, in addition to any other remedy provided for in the Contract, and notwithstanding any other provision in the Contract:

1. Retain, in connection with final acceptance and final payment, an amount determined by multiplying the total contract amount by the percentage in Section I, less the amount paid to approved M/WBEs or SDVOBEs for work performed under the Contract in accordance with the provisions of Section X. The Prime Contractor shall have the right to appeal such retention of funds in accordance with the provisions of M.G.L. c. 30A s.10.
2. Suspend, terminate or cancel this Contract, in whole or in part, and call upon the Prime Contractor's surety to perform all terms and conditions in the Contract.
3. In accordance with 720 CMR 5.05(1)(f), modify or revoke the Prime Contractor's Prequalification status or recommend that the Prime Contractor not receive award of a pending Contract. The Prime Contractor may appeal the determination of the Prequalification Committee in accordance with the provisions of 720 CMR 5.07.
4. Initiate debarment proceedings under M.G.L. c.29 §29F.

XV. FURTHER INFORMATION

Any proposed M/WBE, SDVOBE, bidder, Contractor or subcontractor shall provide such information as is necessary in the judgement of the Department to ascertain its compliance with the terms of this Special Provision.

XVI. LIST OF ADDITIONAL DOCUMENTS

1. The following documents shall be completed and signed by the bidder and designated M/WBEs or SDVOBEs in accordance with Section XII - Award Documentation and Procedures. These documents must be returned by the bidder to MassDOT's Bid Document Distribution Center:
 - ☐ Schedule of M/WBEs (Document B00842) or SDVOBE Participation (Document B00844)
 - ☐ Letter of Intent: M/WBEs (Document B00843) or SDVOBE (Document B00845)
 - ☐ M/WBEs or SDVOBE Joint Check Arrangement Approval Form (Document B00846), if Contractor and M/WBE or SDVOBE plan, or if M/WBE or SDVOBE is required to use a Joint Check (when applicable)
2. The following document shall be signed and returned by Contractor and Subcontractors/M/WBEs or SDVOBEs to the MassDOT District Office overseeing the Project, as applicable:
 - ☐ Contractor/Subcontractor Certification Form (Document No. 00859) (a checklist of other documents to be included with every subcontract (M/WBEs or SDVOBEs and non-M/WBEs or SDVOBEs alike)).
3. The following document shall be provided to MassDOT's Office of Civil Rights and Prequalification Office at least fourteen (14) business days before the bid opening date:
 - ☐ Joint Venture Affidavit of M/WBE or SDVOBE/Non-M/WBE or Non-SDVOBE (Document B00847)
4. The following document shall be provided to MassDOT's District Office of Civil Rights within 30 calendar days after the work of the M/WBE is completed, or no later than 30 calendar days after the work of the M/WBE is on a completed and processed CQE. This document shall be completed and submitted by the Prime Contractor:
 - ☐ Certificate of Completion by a Minority/Women or Disadvantaged Business Enterprise (M/WBE) (Form No. CSD-100)

** END OF DOCUMENT **

DOCUMENT 00761

**SPECIAL PROVISIONS FOR CERTIFICATION REGARDING DEBARMENT,
SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION**

Revised: 02/09/16

I. Instructions for Certification - Primary Covered Transactions:

By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

1. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the MassDOT's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
2. The certification in this clause is a material representation of fact upon which reliance was placed when the MassDOT determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available, the MassDOT may terminate this transaction for cause of default.
3. The prospective primary participant shall provide immediate written notice to the MassDOT if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the MassDOT for assistance in obtaining a copy of those regulations.
5. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the MassDOT.
6. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the MassDOT, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration and the Debarment Lists compiled by both the Massachusetts Office of the Attorney General and the Department of Capital Asset Management and Maintenance (DCAMM) and published separately in the Central Register.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available, the MassDOT may terminate this transaction for cause or default.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Primary Covered Transactions

The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal, State or local department or agency;
2. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 2 of this certification; and
4. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

II. Instructions for Certification - Lower Tier Covered Transactions:

By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

1. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available the MassDOT may pursue available remedies, including suspension and/or debarment.
2. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
3. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the MassDOT for assistance in obtaining a copy of those regulations.
4. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the MassDOT.
5. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
6. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List and the Debarment Lists.

7. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
8. Except for transactions authorized under paragraph 4 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, the MassDOT may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions

The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal, State or local department or agency.

Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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DOCUMENT 00811

SPECIAL PROVISIONS
MONTHLY PRICE ADJUSTMENT FOR HOT MIX ASPHALT (HMA) MIXTURES
Revised: 02/03/2023

This provision applies to all projects using greater than 100 tons of hot mix asphalt (HMA) mixtures containing liquid asphalt cement as stipulated in the Notice to Contractors section of the bid documents.

Price Adjustments will be based on the variance in price, for the liquid asphalt component only, between the Base Price and the Period Price. They shall not include transportation or other charges. Price Adjustments will occur on a monthly basis.

Base Price

The Base Price of liquid asphalt on a project as listed in the Notice to Contractors section of the bid documents is a fixed price determined by the Department at the time of the bid using the same method as the determination of the Period Price detailed below. The Base Price shall be used in all bids.

Period Price

The Period Price is the price of liquid asphalt for each monthly period as determined by the Department using the average selling price per standard ton of PG64-28 paving grade (primary binder classification) asphalt, FOB manufacturer's terminal, as listed under the "East Coast Market - New England, Boston, Massachusetts area" section of the Poten & Partners, Inc. "Asphalt Weekly Monitor". This average selling price is listed in the issue having a publication date of the second Friday of the month and will be posted as the Period Price for that month. The Department will post this Period Price on its website at <https://www.mass.gov/service-details/massdot-current-contract-price-adjustments> following its receipt of the relevant issue of the "Asphalt Weekly Monitor". Poten and Partners has granted the Department the right to publish this specific asphalt price information sourced from the Asphalt Weekly Monitor.

Price Adjustment Determination, Calculation and Payment

The Contract Price of the HMA mixture will be paid under the respective item in the Contract. Price Adjustments, as herein provided, either upwards or downwards, will be made after the work has been performed using the monthly period price for the month during which the work was performed.

Price Adjustments will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

The Price Adjustment applies only to the actual virgin liquid asphalt content in the mixture placed on the job in accordance with the approved Job Mix Formula.

Price Adjustments will be separate payment items. The pay item numbers are 999.401 for a positive price adjustment (a payment) and 999.402 for a negative price adjustment (a deduction). Price Adjustments will be calculated using the following equation:

Price Adjustment = Tons of HMA Placed X Liquid Asphalt Content % X RAP Factor X (Period Price - Base Price)

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Department-approved extension of time.

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DOCUMENT 00812

SPECIAL PROVISIONS
MONTHLY PRICE ADJUSTMENT FOR DIESEL FUEL AND GASOLINE –
ENGLISH UNITS
Revised: 02/01/2021

This monthly fuel price adjustment is inserted in this contract because the national and worldwide energy situation has made the future cost of fuel unpredictable. This adjustment will provide for either additional compensation to the Contractor or repayment to the Commonwealth, depending on an increase or decrease in the average price of diesel fuel or gasoline.

This adjustment will be based on fuel usage factors for various items of work developed by the Highway Research Board in Circular 158, dated July 1974. These factors will be multiplied by the quantities of work done in each item during each monthly period and further multiplied by the variance in price from the Base Price to the Period Price.

The Base Price of Diesel Fuel and Gasoline will be the price as indicated in the Department's web site <https://www.mass.gov/service-details/massdot-current-contract-price-adjustments> for the month in which the contract was bid, which includes State Tax.

The Period Price will be the average of prices charged to the State, including State Tax for the bulk purchases made during each month.

This adjustment will be effected only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No adjustment will be paid for work done beyond the extended completion date of any contract.

Any adjustment (increase or decrease) to estimated quantities made to each item at the time of final payment will have the fuel price adjustment figured at the average period price for the entire term of the project for the difference of quantity.

The fuel price adjustment will apply only to the following items of work at the fuel factors shown:

ITEMS COVERED	FUEL FACTORS	
	Diesel	Gasoline
Excavation: and Borrow Work: Items 120, 120.1, 121, 123, 124, 125, 127, 129.3, 140, 140.1, 141, 142, 143, 144, 150, 150.1, 151 and 151.1 (Both Factors used)	0.29 Gallons / CY.	0.15 Gallons / CY
Surfacing Work: All Items containing Hot Mix Asphalt	2.90 Gallons / Ton	Does Not Apply

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DOCUMENT 00813

SPECIAL PROVISIONS

PRICE ADJUSTMENTS FOR STRUCTURAL STEEL AND REINFORCING STEEL

September 17, 2025

This special provision applies to all projects containing the use of structural steel and/or reinforcing steel as specified elsewhere in the Contract work. It applies to all structural steel and all reinforcing steel, as defined below, on the project. Compliance with this provision is mandatory, i.e., there are no “opt-in” or “opt-out” clauses. Price adjustments will be handled as described below and shall only apply to unfabricated reinforcing steel bars and unfabricated structural steel material, consisting of rolled shapes, plate steel, sheet piling, pipe piles, steel castings and steel forgings.

Price adjustments will be variances between Base Prices and Period Prices. Base Prices and Period Prices are defined below.

Price adjustments will only be made if the variances between Base Prices and Period Prices are 5% or more. A variance can result in the Period Price being either higher or lower than the Base Price. Once the 5% threshold has been achieved, the adjustment will apply to the full variance between the Base Price and the Period Price.

Price adjustments will be calculated by multiplying the number of pounds of unfabricated structural steel material or unfabricated reinforcing steel bars on a project by the index factor calculated as shown below under Example of a Period Price Calculation.

Price adjustments will not include guardrail panels or the costs of shop drawing preparation, handling, fabrication, coatings, transportation, storage, installation, profit, overhead, fuel costs, fuel surcharges, or other such charges not related to the cost of the unfabricated structural steel and unfabricated reinforcing steel.

The weight of steel subject to a price adjustment shall not exceed the final shipping weight of the fabricated part by more than 10%.

Base Prices and Period Prices are defined as follows:

Base Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are fixed prices determined by the Department and found in the table below. While it is the intention of the Department to make this table comprehensive, some of a project’s unfabricated structural steel and/or unfabricated reinforcing steel may be inadvertently omitted. Should this occur, the Contractor shall bring the omission to the Department’s attention so that a contract alteration may be processed that adds the missing steel to the table and its price adjustments to the Contract.

The Base Price Date is the month and year of the most recent finalized period price index at the time that MassDOT opened bids for the project. The Base Price Index for this contract is the Steel PPI listed in the Notice to Contractors.

Period Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are variable prices that have been calculated using the Period Price Date and an index of steel prices to adjust the Base Price.

The Period Price Date is the date the steel was delivered to the fabricator as evidenced by an official bill of lading submitted to the Department containing a description of the shipped materials, weights of the shipped materials and the date of shipment. This date is used to select the Period Price Index.

The index used for the calculation of Period Prices is the U.S. Department of Labor Bureau of Labor Statistics Producer Price Index (PPI) Series ID WPU101702 (Not Seasonally Adjusted, Group: Metals and Metal Products, Item: Semi-finished Steel Mill Products.) As this index is subject to revision for a period of up to four (4) months after its original publication, no price adjustments will be made until the index for the period is finalized, i.e., the index is no longer suffixed with a “(P)”.

Period Prices are determined as follows:

Period Price = Base Price X Index Factor

Index Factor = Period Price Index / Base Price Index

Example of a Period Price Calculation:

Calculate the Period Price for December 2009 using a Base Price from March 2009 of \$0.82/Pound for 1,000 Pounds of ASTM A709 (AASHTO M270) Grade A36 Structural Steel Plate.

The Period Price Date is December 2009. From the PPI website*, the Period Price Index = 218.0.

The Base Price Date is March 2009. From the PPI website*, the Base Price Index = 229.4.

Index Factor = Period Price Index / Base Price Index = $218.0 / 229.4 = 0.950$

Period Price = Base Price X Index Factor = $\$0.82/\text{Pound} \times 0.950 = \$0.78/\text{Pound}$

Since $\$0.82 - \$0.78 = \$0.04$ is less than 5% of \$0.82, no price adjustment is required.

If the \$0.04 difference shown above was greater than 5% of the Base Price, then the price adjustment would be 1,000 Pounds X \$0.04/Pound = \$40.00. Since the Period Price of \$0.78/Pound is less than the Base Price of \$0.82/Pound, indicating a drop in the price of steel between the bid and the delivery of material, a credit of \$40.00 would be owed to MassDOT. When the Period Price is higher than the Base Price, the price adjustment is owed to the Contractor.

* To access the PPI website and obtain a Base Price Index or a Period Price Index, go to

<http://data.bls.gov/cgi-bin/srgate>

End of example.

The Contractor will be paid for unfabricated structural steel and unfabricated reinforcing steel under the respective contract pay items for all components constructed of either structural steel or reinforced Portland cement concrete under their respective Contract Pay Items.

Price adjustments, as herein provided for, will be paid separately as follows:

Structural Steel

Pay Item Number 999.449 for positive (+) pay adjustments (payments to the Contractor)

Pay Item Number 999.457 for negative (-) pay adjustments (credits to MassDOT Highway Division)

Reinforcing Steel

Pay Item Number 999.466 for positive (+) pay adjustments (payments to the Contractor)

Pay Item Number 999.467 for negative (-) pay adjustments (credits to MassDOT Highway Division)

No price adjustment will be made for price changes after the Contract Completion Date, unless the MassDOT Highway Division has approved an extension of Contract Time for the Contract.

TABLE

Steel Type		Price per Pound
1	ASTM A615/A615M Grade 60 (AASHTO M31 Grade 60 or 420) Reinforcing Steel	\$0.58
2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes (See Note below.)	\$0.81
3	ASTM A668 / A668M (AASHTO M102) Steel Forgings	\$0.81
4	ASTM A108 (AASHTO M169) Steel Forgings for Shear Studs	\$0.83
5	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Plate	\$0.87
6	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Shapes	\$0.82
7	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Plate	\$0.87
8	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Shapes	\$0.82
9	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Plate	\$0.90
10	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Shapes	\$0.83
11	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W 345W Structural Steel Plate	\$0.90
12	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W or 345W Structural Steel Shapes	\$0.83
13	ASTM A709/A709M Grade HPS 50W / AASHTO M270M/M270 Grade HPS 50W or 345W Structural Steel Plate	\$0.94
14	ASTM A709/A709M Grade HPS 70W / AASHTO M270M/M270 Grade HPS 70W or 485W Structural Steel Plate	\$1.02
15	ASTM A514/A514M-05 Grade HPS 100W / AASHTO M270M/M270 Grade HPS 100W or 690W Structural Steel Plate	\$1.55
16	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Plate	\$0.90
17	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Shapes	\$0.83
18	ASTM A276 Type 316 Stainless Steel	\$4.67
19	ASTM A240 Type 316 Stainless Steel	\$4.67
20	ASTM A148 Grade 80/50 Steel Castings (See Note below.)	\$1.60
21	ASTM A53 Grade B Structural Steel Pipe	\$1.02
22	ASTM A500 Grades A, B, 36 & 50 Structural Steel Pipe	\$1.02
23	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	\$0.81
24	ASTM 252, Grade 2 Permanent Steel Casing	\$0.81
25	ASTM A36 (AASHTO M183) for H-piles, steel supports and sign supports	\$0.85
26	ASTM A328 / A328M, Grade 50 (AASHTO M202) Steel Sheetpiling	\$1.53
27	ASTM A572 / A572M, Grade 50 Sheetpiling	\$1.53
28	ASTM A36/36M, Grade 50	\$0.87
29	ASTM A570, Grade 50	\$0.85
30	ASTM A572 (AASHTO M223), Grade 50 H-Piles	\$0.87
31	ASTM A1085 Grade A (50 KSI) Steel Hollow Structural Sections (HSS), heat-treated per ASTM A1085 Supplement S1	\$1.02
32	AREA 140 LB Rail and Track Accessories	\$0.52

NOTE: Steel Castings are generally used only on moveable bridges. Cast iron frames, grates and pipe are not “steel” castings and will not be considered for price adjustments.

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DOCUMENT 00814

SPECIAL PROVISIONS
PRICE ADJUSTMENT FOR PORTLAND CEMENT CONCRETE MIXES

January 12, 2009

This provision applies to all projects using greater than 100 Cubic Yards (76 Cubic Meters) of Portland cement concrete containing Portland cement as stipulated in the Notice to Contractors section of the Bid Documents. This Price Adjustment will occur on a monthly basis.

The Price Adjustment will be based on the variance in price for the Portland cement component only from the Base Price to the Period Price. It shall not include transportation or other charges.

The Base Price of Portland cement on a project is a fixed price determined at the time of bid by the Department by using the same method as for the determination of the Period Price (see below) and found in the Notice to Contractors.

The Period Price of Portland cement will be determined by using the latest published price, in dollars per ton (U.S.), for Portland cement (Type I) quoted for Boston, U.S.A. in the **Construction Economics** section of *ENR Engineering News-Record* magazine or at the ENR website <http://www.enr.com> under **Construction Economics**. The Period Price will be posted on the MassDOT website the Wednesday immediately following the publishing of the monthly price in ENR, which is normally the first week of the month.

The Contract Price of the Portland cement concrete mix will be paid under the respective item in the Contract. The price adjustment, as herein provided, upwards or downwards, will be made after the work has been performed, using the monthly period price for the month during which the work was performed.

The price adjustment applies only to the actual Portland cement content in the mix placed on the job in accordance with the Standard Specifications for Highways and Bridges, Division III, Section M4.02.01. No adjustments will be made for any cement replacement materials such as fly ash or ground granulated blast furnace slag.

The Price Adjustment will be a separate payment item. It will be determined by multiplying the number of cubic yards of Portland cement concrete placed during each monthly period times the Portland cement content percentage times the variance in price between the Base Price and Period Price of Portland cement.

This Price Adjustment will be paid only if the variance from the Base Price is 5% or more for a monthly period. The complete adjustment will be paid in all cases with no deduction of the 5% from either upward or downward adjustments.

No Price Adjustment will be allowed beyond the Completion Date of this Contract, unless there is a Department-approved extension of time.

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DOCUMENT 00820

**THE COMMONWEALTH OF MASSACHUSETTS
SUPPLEMENTAL EQUAL EMPLOYMENT OPPORTUNITY,
NON-DISCRIMINATION AND AFFIRMATIVE ACTION PROGRAM**

I. Definitions

For purposes of this contract,

"Minority" means a person who meets one or more of the following definitions:

- (a) American Indian or Native American means: all persons having origins in any of the original peoples of North America and who are recognized as an Indian by a tribe or tribal organization.
- (b) Asian means: All persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian sub-continent, or the Pacific Islands, including, but Not limited to China, Japan, Korea, Samoa, India, and the Philippine Islands.
- (c) Black means: All persons having origins in any of the Black racial groups of Africa, including, but not limited to, African-Americans, and all persons having origins in any of the original peoples of the Cape Verdean Islands.
- (d) Eskimo or Aleut means: All persons having origins in any of the peoples of Northern Canada, Greenland, Alaska, and Eastern Siberia.
- (e) Hispanic means: All persons having their origins in any of the Spanish-speaking peoples of Mexico, Puerto Rico, Cuba, Central or South America, or the Caribbean Islands.

"State construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility, or a contract for the construction, reconstruction, alteration, remodeling or repair of a public work undertaken by a department, agency, board, or commission of the commonwealth.

"State assisted construction contract" means a contract for the construction, reconstruction, installation, demolition, maintenance or repair of a building or capital facility undertaken by a political subdivision of the commonwealth, or two or more political subdivisions thereof, an authority, or other instrumentality and whose costs of the contract are paid for, reimbursed, grant funded, or otherwise supported, in whole or in part, by the commonwealth.

II. Equal Opportunity, Non-Discrimination and Affirmative Action

During the performance of this Contract, the Contractor and all subcontractors (hereinafter collectively referred to as "the Contractor") for a state construction contract or a state assisted construction contract, for him/herself, his/her assignees and successors in interest, agree to comply with all applicable equal employment opportunity, non-discrimination and affirmative action requirements, including but not limited to the following:

In connection with the performance of work under this contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability, shall not discriminate in the selection or retention of subcontractors, and shall not discriminate in the procurement of materials and rentals of equipment.

The aforesaid provision shall include, but not be limited to, the following: employment upgrading, demotion, or transfer; recruitment advertising, layoff or termination; rates of pay or other forms of compensation; conditions or privileges of employment; and selection for apprenticeship or on-the-job training opportunity. The Contractor shall comply with the provisions of chapter 151B of the Massachusetts General Laws, as amended, and all other applicable anti-discrimination and equal opportunity laws, all of which are herein incorporated by reference and made a part of this Contract.

The Contractor shall post hereafter in conspicuous places, available for employees and applicants for employment, notices to be provided by the Massachusetts Commission Against Discrimination setting forth the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151 B).

In connection with the performance of work under this contract, the Contractor shall undertake, in good faith, affirmative action measures to eliminate any discriminatory barriers in the terms and conditions of employment on the grounds of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. Such affirmative action measures shall entail positive and aggressive measures to ensure nondiscrimination and to promote equal opportunity in the areas of hiring, upgrading, demotion or transfer, recruitment, layoff or termination, rate of compensation, apprenticeship and on-the-job training programs. A list of positive and aggressive measures shall include, but not be limited to, advertising employment opportunities in minority and other community news media; notifying minority, women and other community-based organizations of employment opportunities; validating all job specifications, selection requirements, and tests; maintaining a file of names and addresses of each worker referred to the Contractor and what action was taken concerning such worker; and notifying the administering agency in writing when a union with whom the Contractor has a collective bargaining agreement has failed to refer a minority or woman worker. These and other affirmative action measures shall include all actions required to guarantee equal employment opportunity for all persons, regardless of race, color, religious creed, national origin, sex, sexual orientation, genetic information, military service, age, ancestry or disability. One purpose of this provision is to ensure to the fullest extent possible an adequate supply of skilled tradesmen for this and future Commonwealth public construction projects.

III. Minority and Women Workforce Participation

Pursuant to his/her obligations under the preceding section, the Contractor shall strive to achieve on this project the labor participation goals contained herein. Said participation goals shall apply in each job category on this project including but not limited to bricklayers, carpenters, cement masons, electricians, ironworkers, operating engineers and those classes of work enumerated in Section 44F of Chapter 149 of the Massachusetts General Laws. The participation goals for this project shall be 15.3% for minorities and 6.9% for women. The participation goals, as set forth herein, shall not be construed as quotas or set-asides; rather, such participation goals will be used to measure the progress of the Commonwealth's equal opportunity, non-discrimination and affirmative action program. Additionally, the participation goals contained herein should not be seen or treated as a floor or as a ceiling for the employment of particular individuals or group of individuals.

IV. Liaison Committee

At the discretion of the agency that administers the contract for the construction project there may be established for the life of the contract a body to be known as the Liaison Committee. The Liaison Committee shall be composed of one representative each from the agency or agencies administering the contract for the construction project, hereinafter called the administering agency, a representative from the Office of Affirmative action, and such other representatives as may be designated by the administering agency. The Contractor (or his/her agent, if any, designated by him/her as the on-site equal employment opportunity officer) shall recognize the Liaison Committee as an affirmative action body, and shall establish a continuing working relationship with the Liaison Committee, consulting with the Liaison Committee on all matters related to minority recruitment, referral, employment and training.

V. Reports and Records

The Contractor shall prepare projected workforce tables on a quarterly basis when required by the administering agency. These shall be broken down into projections, by week, of workers required in each trade. Copies shall be furnished one week in advance of the commencement of the period covered, and also, when updated, to the administering agency and the Liaison Committee when required.

The Contractor shall prepare weekly reports in a form approved by the administering agency, unless information required is required to be reported electronically by the administering agency, the number of hours worked in each trade by each employee, identified as woman, minority, or non-minority. Copies of these shall be provided at the end of each such week to the administering agency and the Liaison Committee.

Records of employment referral orders, prepared by the Contractor, shall be made available to the administering agency on request.

The Contractor will provide all information and reports required by the administering agency on instructions issued by the administering agency and will permit access to its facilities and any books, records, accounts and other sources of information which may be determined by the administering agency to effect the employment of personnel. This provision shall apply only to information pertinent to the Commonwealth's supplementary non-discrimination, equal opportunity and access and opportunity contract requirements. Where information required is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to the administering agency and shall set forth what efforts he has made to obtain the information.

VI. Access to Work Site

A designee of the administering agency and a designee of the Liaison Committee shall each have a right to access the work site.

VII. Solicitations for Subcontracts, and for the Procurement of Materials and Equipment

In all solicitations either by competitive bidding or negotiation made by the Contractor either for work to be performed under a subcontract or for the procurement of materials or equipment, each potential subcontractor or supplier shall be notified in writing by the Contractor of the Contractor's obligations under this contract relative to non-discrimination and equal opportunity.

VIII. Sanctions

Whenever the administering agency believes the General or Prime Contractor or any subcontractor may not be operating in compliance with the provisions of the Fair Employment Practices Law of the Commonwealth (Massachusetts General Laws Chapter 151B), the administering agency may refer the matter to the Massachusetts Commission Against Discrimination ("Commission") for investigation.

Following the referral of a matter by the administering agency to the Massachusetts Commission Against Discrimination, and while the matter is pending before the MCAD, the administering agency may withhold payments from contractors and subcontractors when it has documentation that the contractor or subcontractor has violated the Fair Employment Practices Law with respect to its activities on the Project, or if the administering agency determines that the contractor has materially failed to comply with its obligations and the requirements of this Section. The amount withheld shall not exceed a withhold of payment to the General or Prime Contractor of 1/100 or 1% of the contract award price or \$5,000, whichever sum is greater, or, if a subcontractor is in non-compliance, a withhold by the administering agency from the General Contractor, to be assessed by the General Contractor as a charge against the subcontractor, of 1/100 or 1% of the subcontractor price, or \$1,000 whichever sum is greater, for each violation of the applicable law or contract requirements. The total withheld from anyone General or Prime Contractor or subcontractor on a Project shall not exceed \$20,000 overall. No withhold of payments or investigation by the Commission or its agent shall be initiated without the administering agency providing prior notice to the Contractor.

If, after investigation, the Massachusetts Commission Against Discrimination finds that a General or Prime Contractor or subcontractor, in commission of a state construction contract or state-assisted construction contract, violated the provisions of the Fair Employment Practices Law, the administering agency may convert the amount withheld as set forth above into a permanent sanction, as a permanent deduct from payments to the General or Prime Contractor or subcontractor, which sanction will be in addition to any such sanctions, fines or penalties imposed by the Massachusetts Commission Against Discrimination.

No sanction enumerated under this Section shall be imposed by the administering agency except after notice to the General or Prime Contractor or subcontractor and an adjudicatory proceeding, as that term is used, under Massachusetts General Laws Chapter 30A, has been conducted.

IX. Severability

The provisions of this section are severable, and if any of these provisions shall be held unconstitutional by any court of competent jurisdiction, the decision of such court shall not affect or impair any of the remaining provisions.

X. Contractor's Certification

After award and prior to the execution of any contract for a state construction contract or a state assisted construction contract, the Prime or General Contractor shall certify that it will comply with all provisions of this Document 00820 Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program, by executing Document 00859 Contractor/Subcontractor Certification Form.

XI. Subcontractor Requirements

Prior to the award of any subcontract for a state construction contract or a state assisted construction contract, the Prime or General Contractor shall provide all prospective subcontractors with a complete copy of this Document 00820 entitled "Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program" and will incorporate the provisions of this Document 00820 into any and all contracts or work orders for all subcontractors providing work on the Project. In order to ensure that the said subcontractor's certification becomes a part of all subcontracts under the prime contract, the Prime or General Contractor shall certify in writing to the administering agency that it has complied with the requirements as set forth in the preceeding paragraph by executing Document 00859 Contractor/Subcontractor Certification Form.

Rev'd 03/07/14

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DOCUMENT 00821

ELECTRONIC REPORTING REQUIREMENTS
CIVIL RIGHTS PROGRAMS AND CERTIFIED PAYROLL

Implemented on March 2, 2009

Revised June 04, 2019

The Massachusetts Department Of Transportation (MassDOT) has replaced the CHAMP reporting system with Equitable Business Opportunity Solution (EBO), a new web-based civil rights reporting software system. This system is capable of handling both civil rights reporting requirements and certified payrolls. The program's functions include the administration of Equal Employment Opportunity (EEO) requirements, On-The-Job Training requirements (OJT), Disadvantage Business Enterprise (DBE) and/or Minority / Women's Business Enterprise (M/WBE) subcontracting requirements, and the electronic collection of certified payrolls associated with MassDOT projects. In addition, this system is used to generate various data required as part of the American Recovery and Reinvestment Act (ARRA). Contractors are responsible for all coordination with all sub-contractors to ensure timely and accurate electronic submission of all required data.

Contractor and Sub-Contractor EBO User Certification

All contractors and sub-contractors must use the EBO software system. The software vendor, Internet Government Solutions (IGS), has developed an online EBO Training Module that is available to contractors and sub-contractors. This module is a self-tutorial which allows all users in the company to access the training, complete the tutorial, and become certified as EBO users for a one time fee of \$75.00. This is the only cost to contractors and sub-contractors associated with the EBO software system. The online EBO Training Module can be accessed at www.ebotraining.com. Click the "Register My Company" button on the login page to begin your training registration. Questions regarding EBO online training should be directed to Gerry Anguilano, IGS at (440) 238-1684.

MassDOT will track contractors and sub-contractors who have successfully completed the on-line training module. All persons performing civil rights program and/or certified payroll functions should be EBO certified.

Vetting of Firms and Designated Firm Individuals

Contractors must authorize a Primary Log-In ID Holder who has completed EBO on-line training to have access to the EBO system by completing and submitting the "Request For EBO System Log-In/Password Form" located on the MassDOT website at: <https://www.mass.gov/how-to/how-to-get-an-ebo-login>. Contractors must also agree to comply with the EBO system user agreement located on the MassDOT website.

All subcontracts entered into on a project must include language that identifies the submission and training requirements that the sub-contractor must perform. Sub-contractors will be approved by the respective District Office of MassDOT through the existing approval process. When new sub-contractors, who have not previously worked for MassDOT, are initially selected by a general contractor, the new sub-contractor must be approved by the District before taking the EBO on-line training module.

Interim Reporting Requirements

Until MassDOT is satisfied that the EBO system is fully operational and functioning as designed, contractors and sub-contractors will be required to submit certified payrolls manually. There will be a transition period where dual reporting, through manual and electronic submission, will be required. MassDOT, however, will notify contractors and sub-contractors when they may cease manual submission of certified payrolls.

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DOCUMENT 00859

CONTRACTOR/SUBCONTRACTOR CERTIFICATION FORM ‡*The contractor shall submit this completed document 00859 to MassDOT for each subcontract.*_____
(Contractor) Date: __________
(Subcontractor) ☐ District Approved SubcontractorContract No: 132474 Project No. 613781 Federal Aid No.: NFALocation: BURLINGTON - HAVERHILLProject Description: Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)

PART 1 CONTRACTOR CERTIFICATION: I hereby certify, as an authorized official of this company, that to the best of my knowledge, information and belief, the company is in compliance with all applicable federal and state laws, rules, and regulations governing fair labor and employment practices, that the company will not discriminate in their employment practices, that the company will make good faith efforts to comply with the minority employee and women employee workforce participation ratio goals and specific affirmative action steps contained in Contract Document 00820 The Commonwealth of Massachusetts Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program, and that the company will comply with the special provisions and documentation indicated below (as checked).

I further hereby certify, as an authorized official of this company, that the special provisions and documentation indicated below (as checked) have been or are included in, and made part of, the Subcontractor Agreement entered into with the firm named above.

☐ **This is not a Federally-aided construction project****Document #**

- ☐ 00718 –Participation By Minority Or Women's Business Enterprises and SDVOBE†
- ☐ 00761 –Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
- ☐ 00820 – MA Supplemental Equal Employment Opportunity, Non-Discrimination, and Affirmative Action Program
- ☐ 00821 – Electronic Reporting Requirements, Civil Rights Programs, and Certified Payroll
- ☐ 00859 – Contractor/Subcontractor Certification Form (this document)
- ☐ 00860 – MA Employment Laws
- ☐ 00861 – Applicable State Wage Rates in the Contract Proposal**
- ☐ B00842 – MA Schedule of Participation By Minority or Women Business Enterprises (M/WBEs)†
- ☐ B00843 – MA Letter of Intent – M/WBEs†
 - ** Does not apply to Material Suppliers, unless performing work on-site
 - † Applies only if Subcontractor is a M/WBE; only include these forms for the particular M/WBE Entity
- ☐ B00844 - Schedule of Participation By SDVOBE
- ☐ B00845 - Letter of Intent – SDVOBE
- ☐ B00846 – M/WBE or SDVOBE Joint Check Arrangement Approval Form
- ☐ B00847 – Joint Venture Affidavit

☐ **This is a Federally-aided construction project (Federal Aid Number is present)****Document #**

- ☐ 00719 – Special Provisions for Participation by Disadvantaged Business Enterprises†
- ☐ 00760 - Form FHWA 1273 - Required Contract Provisions for Federal-Aid Construction Contracts
- ☐ 00820 – MA Supplemental Equal Employment Opportunity, Non-Discrimination and Affirmative Action Program
- ☐ 00821 – Electronic Reporting Requirements, Civil Rights Programs and Certified Payroll
- ☐ 00859 – Contractor/Subcontractor Certification Form (this document)
- ☐ 00860 – MA Employment Laws
- ☐ 00870 – Standard Federal Equal Employment Opportunity Construction Contract Specifications Executive Order 11246, (41 CFR Parts 60-4.2 and 60-4.3 (Solicitations and Equal Opportunity Clauses))*
- ☐ 00875 – Federal Trainee Special Provisions

- ☐ B00853 – Schedule of Participation by Disadvantaged Business Enterprise†
☐ B00854 – Letter of Intent – DBEs†
☐ B00855 – DBE Joint Check Arrangement Approval Form
☐ B00856 – Joint Venture Affidavit
☐ 00861/00880 - Applicable state and federal wage rates from Contract Proposal**

*Applicable only to Contracts or Subcontracts in excess of \$10,000

**Does not apply to Material Suppliers, unless performing work on-site

† Applies only if Subcontractor is a DBE; only include these forms for the particular DBE Entity

Signed this _____ Day of _____, 20____ Under The Pains And Penalties Of Perjury.

 (Print Name and Title)

 (Authorized Signature)

PART 2

PART 2. SUBCONTRACTOR CERTIFICATION: I hereby certify, as an authorized official of this company, that the required documents in Part 1 above were physically incorporated in our Agreement/Subcontract with the Contractor and give assurance that this company will fully comply or make every good faith effort to comply with the same. I further certify that:

1. This company recognizes that if this is a Federal-Aid Project, then this Contract is covered by the equal employment opportunity laws administered and enforced by the United States Department of Labor ("USDOL"), Office of Federal Contract Compliance Programs ("OFCCP"). By signing below, we acknowledge that this company has certain reporting obligations to the OFCCP, as specified by 41 CFR Part 60-4.2.
2. This company further acknowledges that any contractor with fifty (50) or more employees on a Federal-aid Contract with a value of fifty-thousand (\$50,000) dollars or more must annually file an EEO-1 Report (SF 100) to the EEOC, Joint Reporting Committee, on or before September 30th, each year, as specified by 41 CFR Part 60-1.7a.
3. For more information regarding the federal reporting requirements, please contact the USDOL, OFCCP Regional Office, at 1-646-264-3170 or EEO-1, Joint Reporting Committee at 1-866-286-6440.
4. This company ☐ has, ☐ has not, participated in a previous contract or subcontract subject to the Equal Opportunity clauses set forth in 41 CFR Part 60-4 and Executive Order 11246, and where required, has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance Programs or the EEO Commission all reports due under the applicable filing requirements.
5. This company is in full compliance with applicable Federal and Commonwealth of Massachusetts laws, rules, and regulations and is not currently debarred or disqualified from bidding on or participating in construction contracts in any jurisdiction of the United States. See : <https://www.mass.gov/service-details/contractors-and-vendors-suspended-or-debarred-by-massdot>
6. This company is properly registered and in good standing with the Office of the Secretary of the Commonwealth.

Signed this _____ Day of _____, 20____, Under The Pains And Penalties Of Perjury.

Firm: _____

Address: _____

 (Print Name and Title)

Telephone Number: _____

Federal I.D. Number: _____

Estimated Start Date: _____

Estimated Completion Date: _____

Estimated Dollar Amount: _____

 (Authorized Signature)

 (Date)

DOCUMENT 00860

COMMONWEALTH OF MASSACHUSETTS PUBLIC EMPLOYMENT LAWS

Revised February 20, 2019

The Contractor's attention is directed to Massachusetts General Laws, Chapter 149, Sections 26 through 27H, and 150A. This contract is considered to fall within the ambit of that law, which provides that in general, the Prevailing Rate or Total Rate must be paid to employees working on projects funded by the Commonwealth of Massachusetts or any political subdivision including Massachusetts Department of Transportation (MassDOT).

A Federal Aid project is also subject to the Federal Minimum Wage Rate law for construction. When comparing a state minimum wage rate, monitored by the Massachusetts Attorney General, versus federal minimum wage rate, monitored by the U.S. Department of Labor Wage and Hour Division, for a particular job classification the higher wage is at all times to be paid to the affected employee.

Every contractor or subcontractor engaged in this contract to which sections twenty-seven and twenty-seven A apply will keep a true and accurate record of all mechanics and apprentices, teamsters, chauffeurs and laborers employed thereon, showing the name, address and occupational classification of each such employee on this contract, and the hours worked by, and the wages paid to, each such employee, and shall furnish to the MassDOT's Resident Engineer, on a weekly basis, a copy of said record, in a form approved by MassDOT and in accordance with M.G.L. c. 149, § 27B, signed by the employer or his/her authorized agent under the penalties of perjury.

Each such contractor or subcontractor shall preserve its payroll records for a period of three years from the date of completion of the contract.

The Prevailing Wage Rate generally includes the following:

Minimum Hourly Wage + Employer Contributions to Benefit Plans = Prevailing Wage Rate or Total Rate

Any employer who does not make contributions to Benefit Plans must pay the total Prevailing Wage Rate directly to the employee.

Any deduction from the Prevailing Wage Rate or Total Rate for contributions to benefit plans can only be for a Health & Welfare, Pension, or Supplementary Unemployment plan meeting the requirements of the Employee Retirement Income Security Act (ERISA) of 1974. The maximum allowable deduction for these benefits from the prevailing wage rate cannot be greater than the amount allowed by Executive Office of Labor (EOL) for the specified benefits. Any additional expense of providing benefits to the employees is to be borne by the employer and cannot be deducted from the Minimum Hourly Wage. If the employer's benefit expense is less than that so provided by EOL the difference will be paid directly to the employee. The rate established must be paid to all employees who perform work on the project.

When an employer makes deductions from the Minimum Hourly Wage for an employee's contribution to social security, state taxes, federal taxes, and/or other contribution programs, allowed by law, the employer shall furnish each employee a suitable pay slip, check stub or envelope notifying the employee of the amount of the deductions.

No contractor or subcontractor contracting for any part of the contract week shall require or permit any laborer or mechanic to be employed on such work in excess of forty hours in any workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours worked in excess of forty hours in such workweek, whichever is the greater number of overtime hours.

Apprentice Rates are permitted only when there is an Apprentice Agreement registered with the Massachusetts Division of Apprentice Training in accordance with M.G.L. c. 23, § 11E-11L.

The Prevailing Wage Rates issued for each project shall be the rates paid for the entire project. The Prevailing Wage Rates must be posted on the job site at all times and be visible from a public way.

In addition, each such contractor and subcontractor shall furnish to the MassDOT's Resident Engineer, within fifteen days after completion of its portion of the work, a statement, executed by the contractor or subcontractor or by any authorized officer or employee of the contractor or subcontractor who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

Date: _____

I, _____ do hereby state:
(Name of signatory party) (Title)

That I pay or supervise the payment of the persons employed by:

(Contractor or Subcontractor)

on the _____
(MassDOT Project Location and Contract Number)

and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty-nine of the General Laws.

Signature _____

Title _____

The above-mentioned copies of payroll records and statements of compliance shall be available for inspection by any interested party filing a written request to the MassDOT's Resident Engineer for such inspection and copying.

Massachusetts General Laws c. 149, §27, requires annual updates to prevailing wage schedules for all public construction contracts lasting longer than one year. MassDOT will request the required updates and furnish them to the Contractor. The Contractor is required to pay no less than the wage rates indicated on the annual updated wage schedules.

MassDOT will request the updates no later than two weeks before the anniversary of the Notice to Proceed date of the contract to allow for adequate processing by the Department of Labor Standards (DLS). The effective date for the new rates will be the anniversary date of the contract (i.e. the notice to proceed date), regardless of the date of issuance on the schedule from DLS.

All bidders are cautioned that the aforementioned laws require that employers pay to covered employees no less than the applicable minimum wages. In addition, the same laws require that the applicable prevailing wages become incorporated as part of this contract. The prevailing minimum wage law establishes serious civil and criminal penalties for violations, including imprisonment and exclusion from future public contracts. Bidders are cautioned to carefully read the relevant sections of the Massachusetts General Laws.

*** END OF DOCUMENT ***

DOCUMENT 00861

STATE PREVAILING WAGE RATES

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**THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS
Prevailing Wage Rates**

MAURA HEALY
Governor

KIM DRISCOLL
Lt. Governor

**As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H**

LAUREN JONES
Secretary
MICHAEL FLANAGAN
Director

Awarding Authority:	MassDOT Highway	City/Town:	BURLINGTON
Contract Number:	132474		
Description of Work:	BURLINGTON-HAVERHILL – Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)		
Job Location:	I-95 over Route 3 and 495 over Amesbury Lint Road		

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, the awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. The updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.
- This annual update requirement is generally not applicable to 27F “rental of equipment” contracts. For such contracts, the prevailing wage rates issued by DLS shall remain in effect for the duration of the contract term. However, if the prevailing wage rate sheet issued does not contain wage rates for each year covered by the contract term, the Awarding Authority must request updated rate sheets from DLS and provide them to the contractor to ensure the correct rates are being paid throughout the duration of the contract. Additionally, if an Awarding Authority exercises an option to renew or extend the contract term, they must request updated rate sheets from DLS and provide them to the contractor.
- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the “Wage Request Number” on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or a sub-contractor.
- Apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentices must keep their apprentice identification card on their persons during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **Any apprentice not registered with DAS regardless of whether they are registered with another federal, state, local, or private agency must be paid the journeyworker's rate.**
- Every contractor or subcontractor working on the construction project must submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee’s name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. For a sample payroll reporting form go to <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Contractors must obtain the wage schedules from awarding authorities. Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may file a complaint with the Fair Labor Division of the office of the Attorney General at (617) 727-3465.

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT	8/1/2025	\$42.05	\$15.41	\$20.17	\$0.00	\$0.00	\$77.63
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$42.05	\$15.41	\$21.78	\$0.00	\$0.00	\$79.24
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	6/1/2026	\$43.05	\$15.41	\$21.78	\$0.00	\$0.00	\$80.24
	8/1/2026	\$43.05	\$15.91	\$21.78	\$0.00	\$0.00	\$80.74
	12/1/2026	\$43.05	\$15.91	\$23.52	\$0.00	\$0.00	\$82.48
(3 AXLE) DRIVER - EQUIPMENT	8/1/2025	\$41.12	\$15.41	\$20.17	\$0.00	\$0.00	\$76.70
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.12	\$15.41	\$21.78	\$0.00	\$0.00	\$78.31
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	6/1/2026	\$43.12	\$15.41	\$21.78	\$0.00	\$0.00	\$80.31
	8/1/2026	\$43.12	\$15.91	\$21.78	\$0.00	\$0.00	\$80.81
	12/1/2026	\$43.12	\$15.91	\$23.52	\$0.00	\$0.00	\$82.55
(4 & 5 AXLE) DRIVER - EQUIPMENT	8/1/2025	\$42.24	\$15.41	\$20.17	\$0.00	\$0.00	\$77.82
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$42.24	\$15.41	\$21.78	\$0.00	\$0.00	\$79.43
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	6/1/2026	\$43.24	\$15.41	\$21.78	\$0.00	\$0.00	\$80.43
	8/1/2026	\$43.24	\$15.91	\$21.78	\$0.00	\$0.00	\$80.93
	12/1/2026	\$43.24	\$15.91	\$23.52	\$0.00	\$0.00	\$82.67
ADS/SUBMERSIBLE PILOT	1/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							
AIR TRACK OPERATOR	6/1/2025	\$48.35	\$9.90	\$9.25	\$9.65	\$0.00	\$77.15
LABORERS	12/1/2025	\$49.85	\$9.90	\$9.25	\$9.65	\$0.00	\$78.65
LABORERS - ZONE 1	6/1/2026	\$50.65	\$9.90	\$9.25	\$9.65	\$0.00	\$79.45
	12/1/2026	\$52.90	\$9.90	\$9.25	\$9.65	\$0.00	\$81.70
	6/1/2027	\$54.50	\$9.90	\$9.25	\$9.65	\$0.00	\$83.30
	12/1/2027	\$56.10	\$9.90	\$9.25	\$9.65	\$0.00	\$84.90
	6/1/2028	\$57.78	\$9.90	\$9.25	\$9.65	\$0.00	\$86.58
	12/1/2028	\$59.45	\$9.90	\$9.25	\$9.65	\$0.00	\$88.25
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$48.45	\$9.90	\$9.25	\$9.65	\$0.00	\$77.25
LABORERS	12/1/2025	\$49.95	\$9.90	\$9.25	\$9.65	\$0.00	\$78.75
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$51.50	\$9.90	\$9.25	\$9.65	\$0.00	\$80.30
	12/1/2026	\$53.00	\$9.90	\$9.25	\$9.65	\$0.00	\$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASBESTOS REMOVER - PIPE / MECH. EQUIPT.	6/1/2025	\$43.80	\$14.50	\$4.30	\$6.75	\$0.00	\$69.35
HEAT & FROST INSULATORS LOCAL 6	12/1/2025	\$44.80	\$14.50	\$4.30	\$6.75	\$0.00	\$70.35
HEAT & FROST INSULATORS LOCAL 6 (BOSTON)							
ASPHALT RAKER	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75
For apprentice rates see "Apprentice- LABORER"							
ASPHALT RAKER (HEAVY & HIGHWAY)	6/1/2025	\$47.95	\$9.90	\$9.25	\$9.65	\$0.00	\$76.75
LABORERS	12/1/2025	\$49.45	\$9.90	\$9.25	\$9.65	\$0.00	\$78.25
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$51.00	\$9.90	\$9.25	\$9.65	\$0.00	\$79.80
	12/1/2026	\$52.50	\$9.90	\$9.25	\$9.65	\$0.00	\$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	6/1/2025	\$48.35	\$9.90	\$9.25	\$9.65	\$0.00	\$77.15
LABORERS	12/1/2025	\$49.85	\$9.90	\$9.25	\$9.65	\$0.00	\$78.65
LABORERS - ZONE 1	6/1/2026	\$50.65	\$9.90	\$9.25	\$9.65	\$0.00	\$79.45
	12/1/2026	\$52.90	\$9.90	\$9.25	\$9.65	\$0.00	\$81.70
	6/1/2027	\$54.50	\$9.90	\$9.25	\$9.65	\$0.00	\$83.30
	12/1/2027	\$56.10	\$9.90	\$9.25	\$9.65	\$0.00	\$84.90
	6/1/2028	\$57.78	\$9.90	\$9.25	\$9.65	\$0.00	\$86.58
	12/1/2028	\$59.45	\$9.90	\$9.25	\$9.65	\$0.00	\$88.25
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	6/1/2025	\$48.45	\$9.90	\$9.25	\$9.65	\$0.00	\$77.25
LABORERS	12/1/2025	\$49.95	\$9.90	\$9.25	\$9.65	\$0.00	\$78.75
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$51.50	\$9.90	\$9.25	\$9.65	\$0.00	\$80.30
	12/1/2026	\$53.00	\$9.90	\$9.25	\$9.65	\$0.00	\$81.80
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
BOILER MAKER	1/1/2024	\$48.12	\$7.07	\$14.60	\$6.00	\$0.00	\$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: BOILER MAKER Effective Date: 1/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
2	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
3	70.00	\$33.68	\$7.07	\$10.03	\$4.20	\$0.00	\$54.98
4	75.00	\$36.09	\$7.07	\$10.74	\$4.50	\$0.00	\$58.40
5	80.00	\$38.50	\$7.07	\$11.45	\$4.80	\$0.00	\$61.82
6	85.00	\$40.90	\$7.07	\$12.18	\$5.10	\$0.00	\$65.25
7	90.00	\$43.31	\$7.07	\$12.88	\$5.40	\$0.00	\$68.66
8	95.00	\$45.71	\$7.07	\$13.62	\$5.70	\$0.00	\$72.10
Apprentice to Journeyworker Ratio: 1:4							
BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	8/1/2025	\$67.95	\$11.49	\$15.57	\$8.02	\$0.00	\$103.03
BRICKLAYERS LOCAL 3	2/1/2026	\$69.30	\$11.49	\$15.57	\$8.02	\$0.00	\$104.38
BRICKLAYERS LOCAL 3 (WALTHAM)	8/1/2026	\$71.50	\$11.49	\$15.57	\$8.02	\$0.00	\$106.58
	2/1/2027	\$72.90	\$11.49	\$15.57	\$8.02	\$0.00	\$107.98
Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.98	\$11.49	\$15.57	\$8.02	\$0.00	\$69.06
2	60.00	\$40.77	\$11.49	\$15.57	\$8.02	\$0.00	\$75.85
3	70.00	\$47.57	\$11.49	\$15.57	\$8.02	\$0.00	\$82.65
4	80.00	\$54.36	\$11.49	\$15.57	\$8.02	\$0.00	\$89.44
5	90.00	\$61.16	\$11.49	\$15.57	\$8.02	\$0.00	\$96.24
Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING) Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.65	\$11.49	\$15.57	\$8.02	\$0.00	\$69.73
2	60.00	\$41.58	\$11.49	\$15.57	\$8.02	\$0.00	\$76.66
3	70.00	\$48.51	\$11.49	\$15.57	\$8.02	\$0.00	\$83.59
4	80.00	\$55.44	\$11.49	\$15.57	\$8.02	\$0.00	\$90.52
5	90.00	\$62.37	\$11.49	\$15.57	\$8.02	\$0.00	\$97.45
Apprentice to Journeyworker Ratio: 1:5							
BULLDOZER/GRADER/SCRAPER	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$48.85	\$9.90	\$9.25	\$9.80	\$0.00	\$77.80
	12/1/2025	\$50.35	\$9.90	\$9.25	\$9.80	\$0.00	\$79.30
	6/1/2026	\$51.90	\$9.90	\$9.25	\$9.80	\$0.00	\$80.85
	12/1/2026	\$53.40	\$9.90	\$9.25	\$9.80	\$0.00	\$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.80	\$0.00	\$76.65
	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.80	\$0.00	\$78.15
	6/1/2026	\$50.75	\$9.90	\$9.25	\$9.80	\$0.00	\$79.70
	12/1/2026	\$52.25	\$9.90	\$9.25	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$48.03	\$9.90	\$9.25	\$9.80	\$0.00	\$76.98
	12/1/2025	\$49.53	\$9.90	\$9.25	\$9.80	\$0.00	\$78.48
	6/1/2026	\$51.08	\$9.90	\$9.25	\$9.80	\$0.00	\$80.03
	12/1/2026	\$52.58	\$9.90	\$9.25	\$9.80	\$0.00	\$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR LABORERS LABORERS - ZONE 1	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75
For apprentice rates see "Apprentice- LABORER"							
CARPENTER CARPENTERS CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2025	\$50.35	\$10.33	\$11.47	\$8.50	\$0.00	\$80.65
	3/1/2026	\$51.60	\$10.33	\$11.47	\$8.50	\$0.00	\$81.90
	9/1/2026	\$52.85	\$10.33	\$11.47	\$8.50	\$0.00	\$83.15
	3/1/2027	\$54.10	\$10.33	\$11.47	\$8.50	\$0.00	\$84.40

Apprentice: CARPENTER							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$22.66	\$10.33	\$0.00	\$1.73	\$0.00	\$34.72
2	45.00	\$22.66	\$10.33	\$0.00	\$1.73	\$0.00	\$34.72
3	55.00	\$27.69	\$10.33	\$0.00	\$3.40	\$0.00	\$41.42
4	55.00	\$27.69	\$10.33	\$0.00	\$3.40	\$0.00	\$41.42
5	70.00	\$35.25	\$10.33	\$11.41	\$5.10	\$0.00	\$62.09
6	70.00	\$35.25	\$10.33	\$11.41	\$5.10	\$0.00	\$62.09
7	80.00	\$40.28	\$10.33	\$11.44	\$6.80	\$0.00	\$68.85
8	80.00	\$40.28	\$10.33	\$11.44	\$6.80	\$0.00	\$68.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CARPENTER							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.22	\$10.33	\$0.00	\$1.73	\$0.00	\$35.28
2	45.00	\$23.22	\$10.33	\$0.00	\$1.73	\$0.00	\$35.28
3	55.00	\$28.38	\$10.33	\$0.00	\$3.40	\$0.00	\$42.11
4	55.00	\$28.38	\$10.33	\$0.00	\$3.40	\$0.00	\$42.11
5	70.00	\$36.12	\$10.33	\$11.41	\$5.10	\$0.00	\$62.96
6	70.00	\$36.12	\$10.33	\$11.41	\$5.10	\$0.00	\$62.96
7	80.00	\$41.28	\$10.33	\$11.44	\$6.80	\$0.00	\$69.85
8	80.00	\$41.28	\$10.33	\$11.44	\$6.80	\$0.00	\$69.85

Apprentice to Journeyworker Ratio: 1:5

CARPENTER WOOD FRAME	10/1/2024	\$26.65	\$7.02	\$3.80	\$1.00	\$0.00	\$38.47
CARPENTERS	10/1/2025	\$27.75	\$7.02	\$3.80	\$1.00	\$0.00	\$39.57
CARPENTERS-ZONE 3 (Wood Frame)	10/1/2026	\$28.85	\$7.02	\$3.80	\$1.00	\$0.00	\$40.67

All Aspects of New Wood Frame Work

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$15.99	\$7.02	\$0.00	\$0.00	\$0.00	\$23.01
2	60.00	\$15.99	\$7.02	\$0.00	\$0.00	\$0.00	\$23.01
3	65.00	\$17.32	\$7.02	\$0.00	\$1.00	\$0.00	\$25.34
4	70.00	\$18.66	\$7.02	\$0.00	\$1.00	\$0.00	\$26.68
5	75.00	\$19.99	\$7.02	\$3.80	\$1.00	\$0.00	\$31.81
6	80.00	\$21.32	\$7.02	\$3.80	\$1.00	\$0.00	\$33.14
7	85.00	\$22.65	\$7.02	\$3.80	\$1.00	\$0.00	\$34.47
8	90.00	\$23.99	\$7.02	\$3.80	\$1.00	\$0.00	\$35.81

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
2	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
3	65.00	\$18.04	\$7.02	\$0.00	\$1.00	\$0.00	\$26.06
4	70.00	\$19.43	\$7.02	\$0.00	\$1.00	\$0.00	\$27.45
5	75.00	\$20.81	\$7.02	\$3.80	\$1.00	\$0.00	\$32.63
6	80.00	\$22.20	\$7.02	\$3.80	\$1.00	\$0.00	\$34.02
7	85.00	\$23.59	\$7.02	\$3.80	\$1.00	\$0.00	\$35.41
8	90.00	\$24.98	\$7.02	\$3.80	\$1.00	\$0.00	\$36.80

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																																																
Apprentice to Journeyworker Ratio: 1:5																																																																							
CEMENT MASONRY/PLASTERING BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 (WALTHAM)	7/1/2024	\$49.19	\$13.35	\$16.43	\$7.78	\$1.80	\$88.55																																																																
Apprentice: CEMENT MASONRY/PLASTERING Effective Date: 7/1/2024 <table> <tr> <th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr> <tr> <td>1</td><td>50.00</td><td>\$24.60</td><td>\$13.35</td><td>\$16.43</td><td>\$0.00</td><td>\$0.00</td><td>\$54.38</td></tr> <tr> <td>2</td><td>60.00</td><td>\$29.51</td><td>\$13.35</td><td>\$16.43</td><td>\$2.78</td><td>\$1.80</td><td>\$63.87</td></tr> <tr> <td>3</td><td>65.00</td><td>\$31.97</td><td>\$13.35</td><td>\$16.43</td><td>\$3.78</td><td>\$1.80</td><td>\$67.33</td></tr> <tr> <td>4</td><td>70.00</td><td>\$34.43</td><td>\$13.35</td><td>\$16.43</td><td>\$4.78</td><td>\$1.80</td><td>\$70.79</td></tr> <tr> <td>5</td><td>75.00</td><td>\$36.89</td><td>\$13.35</td><td>\$16.43</td><td>\$5.78</td><td>\$1.80</td><td>\$74.25</td></tr> <tr> <td>6</td><td>80.00</td><td>\$39.35</td><td>\$13.35</td><td>\$16.43</td><td>\$6.78</td><td>\$1.80</td><td>\$77.71</td></tr> <tr> <td>7</td><td>90.00</td><td>\$44.27</td><td>\$13.35</td><td>\$16.43</td><td>\$7.78</td><td>\$1.80</td><td>\$83.63</td></tr> </table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	1	50.00	\$24.60	\$13.35	\$16.43	\$0.00	\$0.00	\$54.38	2	60.00	\$29.51	\$13.35	\$16.43	\$2.78	\$1.80	\$63.87	3	65.00	\$31.97	\$13.35	\$16.43	\$3.78	\$1.80	\$67.33	4	70.00	\$34.43	\$13.35	\$16.43	\$4.78	\$1.80	\$70.79	5	75.00	\$36.89	\$13.35	\$16.43	\$5.78	\$1.80	\$74.25	6	80.00	\$39.35	\$13.35	\$16.43	\$6.78	\$1.80	\$77.71	7	90.00	\$44.27	\$13.35	\$16.43	\$7.78	\$1.80	\$83.63
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																																																
1	50.00	\$24.60	\$13.35	\$16.43	\$0.00	\$0.00	\$54.38																																																																
2	60.00	\$29.51	\$13.35	\$16.43	\$2.78	\$1.80	\$63.87																																																																
3	65.00	\$31.97	\$13.35	\$16.43	\$3.78	\$1.80	\$67.33																																																																
4	70.00	\$34.43	\$13.35	\$16.43	\$4.78	\$1.80	\$70.79																																																																
5	75.00	\$36.89	\$13.35	\$16.43	\$5.78	\$1.80	\$74.25																																																																
6	80.00	\$39.35	\$13.35	\$16.43	\$6.78	\$1.80	\$77.71																																																																
7	90.00	\$44.27	\$13.35	\$16.43	\$7.78	\$1.80	\$83.63																																																																
Apprentice to Journeyworker Ratio: 1:3																																																																							
CHAIN SAW OPERATOR	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65																																																																
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15																																																																
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70																																																																
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20																																																																
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80																																																																
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40																																																																
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08																																																																
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75																																																																
For apprentice rates see "Apprentice- LABORER"																																																																							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	6/1/2025	\$59.51	\$15.55	\$13.25	\$3.25	\$0.00	\$91.56																																																																
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$60.98	\$15.55	\$13.25	\$3.25	\$0.00	\$93.03																																																																
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$62.31	\$15.55	\$13.25	\$3.25	\$0.00	\$94.36																																																																
	12/1/2026	\$63.79	\$15.55	\$13.25	\$3.25	\$0.00	\$95.84																																																																
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																																																							
COMPRESSOR OPERATOR	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57																																																																
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52																																																																
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38																																																																
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33																																																																
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																																																							
DELEADER (BRIDGE)	7/1/2025	\$58.51	\$10.30	\$11.95	\$12.50	\$0.00	\$93.26																																																																
PAINTERS LOCAL 35	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.60	\$0.00	\$94.51																																																																
PAINTERS LOCAL 35 - ZONE 2																																																																							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: DELEADER (BRIDGE)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.26	\$10.30	\$0.00	\$0.00	\$0.00	\$39.56
2	55.00	\$32.18	\$10.30	\$0.00	\$6.88	\$0.00	\$49.36
3	60.00	\$35.11	\$10.30	\$0.00	\$7.50	\$0.00	\$52.91
4	65.00	\$38.03	\$10.30	\$0.00	\$8.13	\$0.00	\$56.46
5	70.00	\$40.96	\$10.30	\$11.95	\$8.75	\$0.00	\$71.96
6	75.00	\$43.88	\$10.30	\$11.95	\$9.38	\$0.00	\$75.51
7	80.00	\$46.81	\$10.30	\$11.95	\$10.00	\$0.00	\$79.06
8	90.00	\$52.66	\$10.30	\$11.95	\$11.25	\$0.00	\$86.16

Apprentice: DELEADER (BRIDGE)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29

Apprentice to Journeyworker Ratio: 1:1

DEMO: ADZEMAN	6/2/2025	\$47.75	\$9.90	\$9.25	\$9.65	\$0.00	\$76.55
LABORERS	12/1/2025	\$49.25	\$9.90	\$9.25	\$9.65	\$0.00	\$78.05
LABORERS - ZONE 1	6/1/2026	\$50.80	\$9.90	\$9.25	\$9.65	\$0.00	\$79.60
	12/7/2026	\$52.30	\$9.90	\$9.25	\$9.65	\$0.00	\$81.10
	6/7/2027	\$53.90	\$9.90	\$9.25	\$9.65	\$0.00	\$82.70
	12/6/2027	\$55.50	\$9.90	\$9.25	\$9.65	\$0.00	\$84.30
	6/5/2028	\$57.18	\$9.90	\$9.25	\$9.65	\$0.00	\$85.98
	12/4/2028	\$58.85	\$9.90	\$9.25	\$9.65	\$0.00	\$87.65

For apprentice rates see "Apprentice- LABORER"

DEMO: BACKHOE/LOADER/HAMMER OPERATOR	6/2/2025	\$48.75	\$9.90	\$9.25	\$9.65	\$0.00	\$77.55
LABORERS	12/1/2025	\$50.25	\$9.90	\$9.25	\$9.65	\$0.00	\$79.05
LABORERS - ZONE 1	6/1/2026	\$51.80	\$9.90	\$9.25	\$9.65	\$0.00	\$80.60
	12/7/2026	\$53.30	\$9.90	\$9.25	\$9.65	\$0.00	\$82.10
	6/7/2027	\$54.90	\$9.90	\$9.25	\$9.65	\$0.00	\$83.70
	12/6/2027	\$56.50	\$9.90	\$9.25	\$9.65	\$0.00	\$85.30
	6/5/2028	\$58.18	\$9.90	\$9.25	\$9.65	\$0.00	\$86.98
	12/4/2028	\$59.85	\$9.90	\$9.25	\$9.65	\$0.00	\$88.65

For apprentice rates see "Apprentice- LABORER"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
DEMO: BURNERS	6/2/2025	\$48.50	\$9.90	\$9.25	\$9.65	\$0.00	\$77.30
LABORERS	12/1/2025	\$50.00	\$9.90	\$9.25	\$9.65	\$0.00	\$78.80
LABORERS - ZONE 1	6/1/2026	\$51.55	\$9.90	\$9.25	\$9.65	\$0.00	\$80.35
	12/7/2026	\$53.05	\$9.90	\$9.25	\$9.65	\$0.00	\$81.85
	6/7/2027	\$54.65	\$9.90	\$9.25	\$9.65	\$0.00	\$83.45
	12/6/2027	\$56.25	\$9.90	\$9.25	\$9.65	\$0.00	\$85.05
	6/5/2028	\$57.93	\$9.90	\$9.25	\$9.65	\$0.00	\$86.73
	12/4/2028	\$59.60	\$9.90	\$9.25	\$9.65	\$0.00	\$88.40

For apprentice rates see "Apprentice- LABORER"

DEMO: CONCRETE CUTTER/SAWYER	6/2/2025	\$48.75	\$9.90	\$9.25	\$9.65	\$0.00	\$77.55
LABORERS	12/1/2025	\$50.25	\$9.90	\$9.25	\$9.65	\$0.00	\$79.05
LABORERS - ZONE 1	6/1/2026	\$51.80	\$9.90	\$9.25	\$9.65	\$0.00	\$80.60
	12/7/2026	\$53.30	\$9.90	\$9.25	\$9.65	\$0.00	\$82.10
	6/7/2027	\$54.90	\$9.90	\$9.25	\$9.65	\$0.00	\$83.70
	12/6/2027	\$56.50	\$9.90	\$9.25	\$9.65	\$0.00	\$85.30
	6/5/2028	\$58.18	\$9.90	\$9.25	\$9.65	\$0.00	\$86.98
	12/4/2028	\$59.85	\$9.90	\$9.25	\$9.65	\$0.00	\$88.65

For apprentice rates see "Apprentice- LABORER"

DEMO: JACKHAMMER OPERATOR	6/2/2025	\$48.50	\$9.90	\$9.25	\$9.65	\$0.00	\$77.30
LABORERS	12/1/2025	\$50.00	\$9.90	\$9.25	\$9.65	\$0.00	\$78.80
LABORERS - ZONE 1	6/1/2026	\$51.55	\$9.90	\$9.25	\$9.65	\$0.00	\$80.35
	12/7/2026	\$53.05	\$9.90	\$9.25	\$9.65	\$0.00	\$81.85
	6/7/2027	\$54.65	\$9.90	\$9.25	\$9.65	\$0.00	\$83.45
	12/6/2027	\$56.25	\$9.90	\$9.25	\$9.65	\$0.00	\$85.05
	6/5/2028	\$57.93	\$9.90	\$9.25	\$9.65	\$0.00	\$86.73
	12/4/2028	\$59.60	\$9.90	\$9.25	\$9.65	\$0.00	\$88.40

For apprentice rates see "Apprentice- LABORER"

DEMO: WRECKING LABORER	6/2/2025	\$47.75	\$9.90	\$9.25	\$9.65	\$0.00	\$76.55
LABORERS	12/1/2025	\$49.25	\$9.90	\$9.25	\$9.65	\$0.00	\$78.05
LABORERS - ZONE 1	6/1/2026	\$50.80	\$9.90	\$9.25	\$9.65	\$0.00	\$79.60
	12/7/2026	\$52.30	\$9.90	\$9.25	\$9.65	\$0.00	\$81.10
	6/7/2027	\$53.90	\$9.90	\$9.25	\$9.65	\$0.00	\$82.70
	12/6/2027	\$55.50	\$9.90	\$9.25	\$9.65	\$0.00	\$84.30
	6/5/2028	\$57.18	\$9.90	\$9.25	\$9.65	\$0.00	\$85.98
	12/4/2028	\$58.85	\$9.90	\$9.25	\$9.65	\$0.00	\$87.65

For apprentice rates see "Apprentice- LABORER"

DIRECTIONAL DRILL MACHINE OPERATOR	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

DIVER	8/1/2024	\$78.11	\$10.08	\$11.62	\$10.04	\$0.00	\$109.85
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							

as of 8-1-24, Apprentices with diving licenses begin at second year. % of Diver wage 70/80/90 2A \$69.83, 3A \$91.79,4A \$102.14 Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
DIVER TENDER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Piledriver wage 70/80/90 2A \$54.20, 3A \$73.93,4A \$82.05 Total Rate							
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	\$83.69	\$10.08	\$11.62	\$12.67	\$0.00	\$118.06
For apprentice rates see "Apprentice- PILE DRIVER"							
DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
For apprentice rates see "Apprentice- PILE DRIVER"							
DRAWBRIDGE OPERATOR (Construction) DRAWBRIDGE - SEIU LOCAL 888 DRAWBRIDGE - SEIU LOCAL 888	7/1/2020	\$26.77	\$6.67	\$3.93	\$0.00	\$0.16	\$37.53
ELECTRICIAN ELECTRICIANS LOCAL 103 ELECTRICIANS LOCAL 103	9/1/2025	\$66.17	\$13.00	\$14.37	\$8.72	\$0.00	\$102.26
	3/1/2026	\$66.86	\$13.00	\$14.64	\$9.00	\$0.00	\$103.50
	9/1/2026	\$68.78	\$13.00	\$14.69	\$9.00	\$0.00	\$105.47
	3/1/2027	\$69.97	\$13.00	\$14.73	\$9.00	\$0.00	\$106.70
	9/1/2027	\$71.88	\$13.00	\$14.79	\$9.00	\$0.00	\$108.67
	3/1/2028	\$73.08	\$13.00	\$14.82	\$9.00	\$0.00	\$109.90

Apprentice: ELECTRICIAN

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$26.47	\$13.00	\$0.79	\$0.00	\$0.00	\$40.26
2	40.00	\$26.47	\$13.00	\$0.79	\$0.00	\$0.00	\$40.26
3	45.00	\$29.78	\$13.00	\$13.27	\$3.92	\$0.00	\$59.97
4	45.00	\$29.78	\$13.00	\$13.27	\$3.92	\$0.00	\$59.97
5	50.00	\$33.09	\$13.00	\$13.37	\$4.36	\$0.00	\$63.82
6	55.00	\$36.39	\$13.00	\$13.47	\$4.80	\$0.00	\$67.66
7	60.00	\$39.70	\$13.00	\$13.57	\$5.23	\$0.00	\$71.50
8	65.00	\$43.01	\$13.00	\$13.67	\$5.67	\$0.00	\$75.35
9	70.00	\$46.32	\$13.00	\$13.77	\$6.10	\$0.00	\$79.19
10	75.00	\$49.63	\$13.00	\$13.87	\$6.54	\$0.00	\$83.04

Apprentice: ELECTRICIAN

Effective Date: 3/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$26.74	\$13.00	\$0.80	\$0.00	\$0.00	\$40.54
2	40.00	\$26.74	\$13.00	\$0.80	\$0.00	\$0.00	\$40.54
3	45.00	\$30.09	\$13.00	\$13.53	\$3.92	\$0.00	\$60.54
4	45.00	\$30.09	\$13.00	\$13.53	\$4.05	\$0.00	\$60.67

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ELECTRICIAN Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	50.00	\$33.43	\$13.00	\$13.63	\$4.50	\$0.00	\$64.56
6	55.00	\$36.77	\$13.00	\$13.73	\$4.95	\$0.00	\$68.45
7	60.00	\$40.12	\$13.00	\$13.83	\$5.40	\$0.00	\$72.35
8	65.00	\$43.46	\$13.00	\$13.93	\$5.85	\$0.00	\$76.24
9	70.00	\$46.80	\$13.00	\$14.03	\$6.30	\$0.00	\$80.13
10	75.00	\$50.15	\$13.00	\$14.13	\$6.75	\$0.00	\$84.03
Apprentice Notes :							
Apprentice to Journeyworker Ratio: 2:3							
ELEVATOR CONSTRUCTOR	1/1/2025	\$74.17	\$16.28	\$10.96	\$10.40	\$0.00	\$111.81
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2026	\$77.26	\$16.38	\$11.06	\$10.70	\$0.00	\$115.40
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$80.55	\$16.48	\$11.16	\$11.00	\$0.00	\$119.19
Apprentice: ELEVATOR CONSTRUCTOR Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$37.09	\$0.00	\$0.00	\$0.00	\$0.00	\$37.09
2	55.00	\$40.79	\$16.28	\$10.96	\$10.40	\$0.00	\$78.43
3	65.00	\$48.21	\$16.28	\$10.96	\$10.40	\$0.00	\$85.85
4	70.00	\$51.92	\$16.28	\$10.96	\$10.40	\$0.00	\$89.56
5	80.00	\$59.34	\$16.28	\$10.96	\$10.40	\$0.00	\$96.98
Apprentice: ELEVATOR CONSTRUCTOR Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$38.63	\$0.00	\$0.00	\$0.00	\$0.00	\$38.63
2	55.00	\$42.49	\$16.38	\$11.06	\$10.70	\$0.00	\$80.63
3	65.00	\$50.22	\$16.38	\$11.06	\$10.70	\$0.00	\$88.36
4	70.00	\$54.08	\$16.38	\$11.06	\$10.70	\$0.00	\$92.22
5	80.00	\$61.81	\$16.38	\$11.06	\$10.70	\$0.00	\$99.95
Apprentice to Journeyworker Ratio: 1:1							
ELEVATOR CONSTRUCTOR HELPER	1/1/2025	\$51.92	\$16.28	\$10.96	\$10.40	\$0.00	\$89.56
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2026	\$54.08	\$16.38	\$11.06	\$10.07	\$0.00	\$91.59
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$56.39	\$16.48	\$11.16	\$11.00	\$0.00	\$95.03
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	6/1/2025	\$47.95	\$9.90	\$9.25	\$9.65	\$0.00	\$76.75
LABORERS	12/1/2025	\$49.45	\$9.90	\$9.25	\$9.65	\$0.00	\$78.25
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$51.00	\$9.90	\$9.25	\$9.65	\$0.00	\$79.80
	12/1/2026	\$52.50	\$9.90	\$9.25	\$9.65	\$0.00	\$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	5/1/2025	\$53.22	\$15.30	\$13.15	\$3.25	\$0.00	\$84.92
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$54.51	\$15.30	\$13.15	\$3.25	\$0.00	\$86.21
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$55.95	\$15.30	\$13.15	\$3.25	\$0.00	\$87.65
	11/1/2026	\$57.24	\$15.30	\$13.15	\$3.25	\$0.00	\$88.94
	5/1/2027	\$58.67	\$15.30	\$13.15	\$3.25	\$0.00	\$90.37
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	5/1/2025	\$54.82	\$15.30	\$13.15	\$3.25	\$0.00	\$86.52
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$56.12	\$15.30	\$13.15	\$3.25	\$0.00	\$87.82
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$57.57	\$15.30	\$13.15	\$3.25	\$0.00	\$89.27
	11/1/2026	\$58.87	\$15.30	\$13.15	\$3.25	\$0.00	\$90.57
	5/1/2027	\$60.32	\$15.30	\$13.15	\$3.25	\$0.00	\$92.02
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	5/1/2025	\$26.22	\$15.30	\$13.15	\$3.25	\$0.00	\$57.92
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$26.98	\$15.30	\$13.15	\$3.25	\$0.00	\$58.68
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$27.83	\$15.30	\$13.15	\$3.25	\$0.00	\$59.53
	11/1/2026	\$28.59	\$15.30	\$13.15	\$3.25	\$0.00	\$60.29
	5/1/2027	\$29.44	\$15.30	\$13.15	\$3.25	\$0.00	\$61.14
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	\$66.17	\$13.00	\$14.37	\$9.00	\$0.00	\$102.54
ELECTRICIANS LOCAL 103	3/1/2026	\$66.86	\$13.00	\$14.64	\$9.00	\$0.00	\$103.50
ELECTRICIANS LOCAL 103	9/1/2026	\$68.78	\$13.00	\$14.69	\$9.00	\$0.00	\$105.47
	3/1/2027	\$69.97	\$13.00	\$14.73	\$9.00	\$0.00	\$106.70
	9/1/2027	\$71.88	\$13.00	\$14.79	\$9.00	\$0.00	\$108.67
	3/1/2028	\$73.08	\$13.00	\$14.82	\$9.00	\$0.00	\$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	\$52.94	\$13.00	\$13.97	\$6.98	\$0.00	\$86.89
/ COMMISSIONING	3/1/2026	\$53.49	\$13.00	\$14.23	\$7.20	\$0.00	\$87.92
ELECTRICIANS LOCAL 103	9/1/2026	\$55.02	\$13.00	\$14.28	\$7.20	\$0.00	\$89.50
ELECTRICIANS LOCAL 103	3/1/2027	\$55.98	\$13.00	\$14.31	\$7.20	\$0.00	\$90.49
	9/1/2027	\$57.50	\$13.00	\$14.36	\$7.20	\$0.00	\$92.06
	3/1/2028	\$58.46	\$13.00	\$14.38	\$7.20	\$0.00	\$93.04
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	6/1/2025	\$47.02	\$15.55	\$13.25	\$3.25	\$0.00	\$79.07
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$48.19	\$15.55	\$13.25	\$3.25	\$0.00	\$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$49.25	\$15.55	\$13.25	\$3.25	\$0.00	\$81.30
	12/1/2026	\$50.43	\$15.55	\$13.25	\$3.25	\$0.00	\$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	6/1/2025	\$28.09	\$9.90	\$9.25	\$9.65	\$0.00	\$56.89

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	12/1/2025	\$28.09	\$9.90	\$9.25	\$9.65	\$0.00	\$56.89
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$29.21	\$9.90	\$9.25	\$9.65	\$0.00	\$58.01
	12/1/2026	\$29.21	\$9.90	\$9.25	\$9.65	\$0.00	\$58.01

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

FLOORCOVERER	9/1/2025	\$57.74	\$10.33	\$11.47	\$8.80	\$0.00	\$88.34
FLOORCOVERERS LOCAL 2168	3/1/2026	\$59.24	\$10.33	\$11.47	\$8.80	\$0.00	\$89.84
FLOORCOVERERS LOCAL 2168 ZONE I	9/1/2026	\$60.74	\$10.33	\$11.47	\$8.80	\$0.00	\$91.34
	3/1/2027	\$62.24	\$10.33	\$11.47	\$8.80	\$0.00	\$92.84

Apprentice: FLOORCOVERER**Effective Date: 9/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$25.98	\$10.33	\$0.00	\$1.76	\$0.00	\$38.07
2	45.00	\$25.98	\$10.33	\$0.00	\$1.76	\$0.00	\$38.07
3	55.00	\$31.76	\$10.33	\$0.00	\$3.52	\$0.00	\$45.61
4	55.00	\$31.76	\$10.33	\$0.00	\$3.52	\$0.00	\$45.61
5	70.00	\$40.42	\$10.33	\$11.47	\$5.28	\$0.00	\$67.50
6	70.00	\$40.42	\$10.33	\$11.47	\$5.28	\$0.00	\$67.50
7	80.00	\$46.19	\$10.33	\$11.47	\$7.04	\$0.00	\$75.03
8	80.00	\$46.19	\$10.33	\$11.47	\$7.04	\$0.00	\$75.03

Apprentice: FLOORCOVERER**Effective Date: 3/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$26.66	\$10.33	\$0.00	\$1.76	\$0.00	\$38.75
2	45.00	\$26.66	\$10.33	\$0.00	\$1.76	\$0.00	\$38.75
3	55.00	\$32.58	\$10.33	\$0.00	\$3.52	\$0.00	\$46.43
4	55.00	\$32.58	\$10.33	\$0.00	\$3.52	\$0.00	\$46.43
5	70.00	\$41.47	\$10.33	\$11.47	\$5.28	\$0.00	\$68.55
6	70.00	\$41.47	\$10.33	\$11.47	\$5.28	\$0.00	\$68.55
7	80.00	\$47.39	\$10.33	\$11.47	\$7.04	\$0.00	\$76.23
8	80.00	\$47.39	\$10.33	\$11.47	\$7.04	\$0.00	\$76.23

Apprentice Notes

Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

FORK LIFT/CHERRY PICKER	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	7/1/2025	\$48.01	\$10.30	\$11.95	\$12.50	\$0.00	\$82.76
GLAZIERS LOCAL 35	1/1/2026	\$49.06	\$10.35	\$12.00	\$12.60	\$0.00	\$84.01
GLAZIERS LOCAL 35 (ZONE 2)							

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.01	\$10.30	\$0.00	\$0.00	\$0.00	\$34.31
2	55.00	\$26.41	\$10.30	\$0.00	\$6.88	\$0.00	\$43.59
3	60.00	\$28.81	\$10.30	\$0.00	\$7.50	\$0.00	\$46.61
4	65.00	\$31.21	\$10.30	\$0.00	\$8.13	\$0.00	\$49.64
5	70.00	\$33.61	\$10.30	\$11.95	\$8.75	\$0.00	\$64.61
6	75.00	\$36.01	\$10.30	\$11.95	\$9.38	\$0.00	\$67.64
7	80.00	\$38.41	\$10.30	\$11.95	\$10.00	\$0.00	\$70.66
8	90.00	\$43.21	\$10.30	\$11.95	\$11.25	\$0.00	\$76.71

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.53	\$10.30	\$0.00	\$0.00	\$0.00	\$34.83
2	55.00	\$26.98	\$10.30	\$0.00	\$6.88	\$0.00	\$44.16
3	60.00	\$29.44	\$10.30	\$0.00	\$7.50	\$0.00	\$47.24
4	65.00	\$31.89	\$10.30	\$0.00	\$8.13	\$0.00	\$50.32
5	70.00	\$34.34	\$10.30	\$11.95	\$8.75	\$0.00	\$65.34
6	75.00	\$36.80	\$10.30	\$11.95	\$9.38	\$0.00	\$68.43
7	80.00	\$39.25	\$10.30	\$11.95	\$10.00	\$0.00	\$71.50
8	90.00	\$44.15	\$10.30	\$11.95	\$11.25	\$0.00	\$77.65

Apprentice to Journeyworker Ratio: 1:1

HOISTING ENGINEER/CRANES/GRADALLS	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS							
Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.08	\$0.00	\$0.00	\$0.00	\$0.00	\$32.08

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: HOISTING ENGINEER/CRANES/GRADALLS							
Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
2	60.00	\$35.00	\$15.55	\$13.25	\$3.25	\$0.00	\$67.05
3	65.00	\$37.91	\$15.55	\$13.25	\$3.25	\$0.00	\$69.96
4	70.00	\$40.83	\$15.55	\$13.25	\$3.25	\$0.00	\$72.88
5	75.00	\$43.75	\$15.55	\$13.25	\$3.25	\$0.00	\$75.80
6	80.00	\$46.66	\$15.55	\$13.25	\$3.25	\$0.00	\$78.71
7	85.00	\$49.58	\$15.55	\$13.25	\$3.25	\$0.00	\$81.63
8	90.00	\$52.50	\$15.55	\$13.25	\$3.25	\$0.00	\$84.55
Apprentice: HOISTING ENGINEER/CRANES/GRADALLS							
Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.88	\$0.00	\$0.00	\$0.00	\$0.00	\$32.88
2	60.00	\$35.87	\$15.55	\$13.25	\$3.25	\$0.00	\$67.92
3	65.00	\$38.86	\$15.55	\$13.25	\$3.25	\$0.00	\$70.91
4	70.00	\$41.85	\$15.55	\$13.25	\$3.25	\$0.00	\$73.90
5	75.00	\$44.84	\$15.55	\$13.25	\$3.25	\$0.00	\$76.89
6	80.00	\$47.82	\$15.55	\$13.25	\$3.25	\$0.00	\$79.87
7	85.00	\$50.81	\$15.55	\$13.25	\$3.25	\$0.00	\$82.86
8	90.00	\$53.80	\$15.55	\$13.25	\$3.25	\$0.00	\$85.85
Apprentice to Journeyworker Ratio: 1:6							
HVAC (DUCTWORK)	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (ELECTRICAL CONTROLS)	9/1/2025	\$66.17	\$13.00	\$14.37	\$8.72	\$0.00	\$102.26
ELECTRICIANS LOCAL 103	3/1/2026	\$66.86	\$13.00	\$14.64	\$9.00	\$0.00	\$103.50
ELECTRICIANS LOCAL 103	9/1/2026	\$68.78	\$13.00	\$14.69	\$9.00	\$0.00	\$105.47
	3/1/2027	\$69.97	\$13.00	\$14.73	\$9.00	\$0.00	\$106.70
	9/1/2027	\$71.88	\$13.00	\$14.79	\$9.00	\$0.00	\$108.67
	3/1/2028	\$73.08	\$13.00	\$14.82	\$9.00	\$0.00	\$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
HVAC (TESTING AND BALANCING - AIR)	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (TESTING AND BALANCING -WATER)	3/1/2025	\$68.88	\$12.70	\$13.05	\$8.75	\$0.00	\$103.38
PIPEFITTERS LOCAL 537							
PIPEFITTERS LOCAL 537							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HVAC MECHANIC PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537	3/1/2025	\$68.88	\$12.70	\$13.05	\$8.75	\$0.00	\$103.38

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

HYDRAULIC DRILLS LABORERS LABORERS - ZONE 1	6/1/2025	\$48.35	\$9.90	\$9.25	\$9.65	\$0.00	\$77.15
	12/1/2025	\$49.85	\$9.90	\$9.25	\$9.65	\$0.00	\$78.65
	6/1/2026	\$50.65	\$9.90	\$9.25	\$9.65	\$0.00	\$79.45
	12/1/2026	\$52.90	\$9.90	\$9.25	\$9.65	\$0.00	\$81.70
	6/1/2027	\$54.50	\$9.90	\$9.25	\$9.65	\$0.00	\$83.30
	12/1/2027	\$56.10	\$9.90	\$9.25	\$9.65	\$0.00	\$84.90
	6/1/2028	\$57.78	\$9.90	\$9.25	\$9.65	\$0.00	\$86.58
	12/1/2028	\$59.45	\$9.90	\$9.25	\$9.65	\$0.00	\$88.25

For apprentice rates see "Apprentice- LABORER"

HYDRAULIC DRILLS (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2025	\$48.45	\$9.90	\$9.25	\$9.65	\$0.00	\$77.25
	12/1/2025	\$49.95	\$9.90	\$9.25	\$9.65	\$0.00	\$78.75
	6/1/2026	\$51.50	\$9.90	\$9.25	\$9.65	\$0.00	\$80.30
	12/1/2026	\$53.00	\$9.90	\$9.25	\$9.65	\$0.00	\$81.80

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

INSULATOR (PIPES & TANKS) HEAT & FROST INSULATORS LOCAL 6 HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	9/1/2025	\$60.34	\$14.75	\$9.52	\$10.09	\$0.00	\$94.70
	9/1/2026	\$63.76	\$14.75	\$9.52	\$10.09	\$0.00	\$98.12

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$30.17	\$14.75	\$9.27	\$5.05	\$0.00	\$59.24
2	60.00	\$36.20	\$14.75	\$9.32	\$6.05	\$0.00	\$66.32
3	70.00	\$42.24	\$14.75	\$9.37	\$7.06	\$0.00	\$73.42
4	80.00	\$48.27	\$14.75	\$9.42	\$8.07	\$0.00	\$80.51

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$31.88	\$14.75	\$9.27	\$5.05	\$0.00	\$60.95
2	60.00	\$38.26	\$14.75	\$9.32	\$6.05	\$0.00	\$68.38
3	70.00	\$44.63	\$14.75	\$9.37	\$7.06	\$0.00	\$75.81
4	80.00	\$51.01	\$14.75	\$9.42	\$8.07	\$0.00	\$83.25

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER IRONWORKERS LOCAL 7 IRONWORKERS LOCAL 7 (BOSTON AREA)	9/16/2025	\$57.87	\$9.05	\$12.75	\$14.50	\$0.00	\$94.17
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: IRONWORKER/WELDER							
Effective Date: 9/16/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$34.72	\$9.05	\$12.75	\$4.50	\$0.00	\$61.02
2	75.00	\$43.40	\$9.05	\$12.75	\$4.50	\$0.00	\$69.70
3	85.00	\$49.19	\$9.05	\$12.75	\$4.50	\$0.00	\$75.49
4	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Apprentice to Journeyworker Ratio: 1:4

JACKHAMMER & PAVING BREAKER OPERATOR	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75

For apprentice rates see "Apprentice- LABORER"

LABORER	6/1/2025	\$47.60	\$9.90	\$9.25	\$9.65	\$0.00	\$76.40
LABORERS	12/1/2025	\$49.10	\$9.90	\$9.25	\$9.65	\$0.00	\$77.90
LABORERS - ZONE 1	6/1/2026	\$50.65	\$9.90	\$9.25	\$9.65	\$0.00	\$79.45
	12/1/2026	\$52.15	\$9.90	\$9.25	\$9.65	\$0.00	\$80.95
	6/1/2027	\$53.75	\$9.90	\$9.25	\$9.65	\$0.00	\$82.55
	12/1/2027	\$55.35	\$9.90	\$9.25	\$9.65	\$0.00	\$84.15
	6/1/2028	\$57.03	\$9.90	\$9.25	\$9.65	\$0.00	\$85.83
	12/1/2028	\$58.70	\$9.90	\$9.25	\$9.65	\$0.00	\$87.50

Apprentice: LABORER							
Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$28.56	\$9.90	\$9.25	\$9.65	\$0.00	\$57.36
2	70.00	\$33.32	\$9.90	\$9.25	\$9.65	\$0.00	\$62.12
3	80.00	\$38.08	\$9.90	\$9.25	\$9.65	\$0.00	\$66.88
4	90.00	\$42.84	\$9.90	\$9.25	\$9.65	\$0.00	\$71.64

Apprentice: LABORER							
Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$29.46	\$9.90	\$9.25	\$9.65	\$0.00	\$58.26

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: LABORER Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
2	70.00	\$34.37	\$9.90	\$9.25	\$9.65	\$0.00	\$63.17
3	80.00	\$39.28	\$9.90	\$9.25	\$9.65	\$0.00	\$68.08
4	90.00	\$44.19	\$9.90	\$9.25	\$9.65	\$0.00	\$72.99
Apprentice to Journeyworker Ratio: 1:5							
LABORER (HEAVY & HIGHWAY)	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.65	\$0.00	\$76.50
LABORERS	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.65	\$0.00	\$78.00
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$50.75	\$9.90	\$9.25	\$9.65	\$0.00	\$79.55
	12/1/2026	\$52.25	\$9.90	\$9.25	\$9.65	\$0.00	\$81.05
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$28.62	\$9.65	\$9.25	\$9.65	\$0.00	\$57.17
2	70.00	\$33.39	\$9.65	\$9.25	\$9.65	\$0.00	\$61.94
3	80.00	\$38.16	\$9.65	\$9.25	\$9.65	\$0.00	\$66.71
4	90.00	\$42.93	\$9.65	\$9.25	\$9.65	\$0.00	\$71.48
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$29.52	\$9.90	\$9.25	\$9.65	\$0.00	\$58.32
2	70.00	\$34.44	\$9.90	\$9.25	\$9.65	\$0.00	\$63.24
3	80.00	\$39.36	\$9.90	\$9.25	\$9.65	\$0.00	\$68.16
4	90.00	\$44.28	\$9.90	\$9.25	\$9.65	\$0.00	\$73.08
Apprentice to Journeyworker Ratio: 1:5							
LABORER: CARPENTER TENDER	6/1/2025	\$47.60	\$9.90	\$9.25	\$9.65	\$0.00	\$76.40
LABORERS	12/1/2025	\$49.10	\$9.90	\$9.25	\$9.65	\$0.00	\$77.90
LABORERS - ZONE 1	6/1/2026	\$50.65	\$9.90	\$9.25	\$9.65	\$0.00	\$79.45
	12/1/2026	\$52.15	\$9.90	\$9.25	\$9.65	\$0.00	\$80.95
	6/1/2027	\$53.75	\$9.90	\$9.25	\$9.65	\$0.00	\$82.55
	12/1/2027	\$55.35	\$9.90	\$9.25	\$9.65	\$0.00	\$84.15
	6/1/2028	\$57.03	\$9.90	\$9.25	\$9.65	\$0.00	\$85.83
	12/1/2028	\$58.70	\$9.90	\$9.25	\$9.65	\$0.00	\$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: CEMENT FINISHER TENDER	6/1/2025	\$47.60	\$9.90	\$9.25	\$9.65	\$0.00	\$76.40
LABORERS	12/1/2025	\$49.10	\$9.90	\$9.25	\$9.65	\$0.00	\$77.90

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS - ZONE 1	6/1/2026	\$50.65	\$9.90	\$9.25	\$9.65	\$0.00	\$79.45
	12/1/2026	\$52.15	\$9.90	\$9.25	\$9.65	\$0.00	\$80.95
	6/1/2027	\$53.75	\$9.90	\$9.25	\$9.65	\$0.00	\$82.55
	12/1/2027	\$55.35	\$9.90	\$9.25	\$9.65	\$0.00	\$84.15
	6/1/2028	\$57.03	\$9.90	\$9.25	\$9.65	\$0.00	\$85.83
	12/1/2028	\$58.70	\$9.90	\$9.25	\$9.65	\$0.00	\$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS LABORERS - ZONE 1	6/2/2025	\$47.75	\$9.90	\$9.25	\$9.65	\$0.00	\$76.55
	12/1/2025	\$49.25	\$9.90	\$9.25	\$9.65	\$0.00	\$78.05
	6/1/2026	\$50.80	\$9.90	\$9.25	\$9.65	\$0.00	\$79.60
	12/7/2026	\$52.30	\$9.90	\$9.25	\$9.65	\$0.00	\$81.10
	6/7/2027	\$53.90	\$9.90	\$9.25	\$9.65	\$0.00	\$82.70
	12/6/2027	\$55.50	\$9.90	\$9.25	\$9.65	\$0.00	\$84.30
	6/5/2028	\$57.18	\$9.90	\$9.25	\$9.65	\$0.00	\$85.98
	12/4/2028	\$58.85	\$9.90	\$9.25	\$9.65	\$0.00	\$87.65
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS LABORERS - ZONE 1	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2025	\$47.95	\$9.90	\$9.25	\$9.65	\$0.00	\$76.75
	12/1/2025	\$49.45	\$9.90	\$9.25	\$9.65	\$0.00	\$78.25
	6/1/2026	\$51.00	\$9.90	\$9.25	\$9.65	\$0.00	\$79.80
	12/1/2026	\$52.50	\$9.90	\$9.25	\$9.65	\$0.00	\$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS LABORERS - ZONE 1	6/1/2025	\$47.60	\$9.90	\$9.25	\$9.65	\$0.00	\$76.40
	12/1/2025	\$49.10	\$9.90	\$9.25	\$9.65	\$0.00	\$77.90
	6/1/2026	\$50.65	\$9.90	\$9.25	\$9.65	\$0.00	\$79.45
	12/1/2026	\$52.15	\$9.90	\$9.25	\$9.65	\$0.00	\$80.95
	6/1/2027	\$53.75	\$9.90	\$9.25	\$9.65	\$0.00	\$82.55
	12/1/2027	\$55.35	\$9.90	\$9.25	\$9.65	\$0.00	\$84.15
	6/1/2028	\$57.03	\$9.90	\$9.25	\$9.65	\$0.00	\$85.83
	12/1/2028	\$58.70	\$9.90	\$9.25	\$9.65	\$0.00	\$87.50
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS LABORERS - ZONE 1	6/1/2025	\$47.60	\$9.90	\$9.25	\$9.65	\$0.00	\$76.40
	12/1/2025	\$49.10	\$9.90	\$9.25	\$9.65	\$0.00	\$77.90
	6/1/2026	\$50.65	\$9.90	\$9.25	\$9.65	\$0.00	\$79.45
	12/1/2026	\$52.15	\$9.90	\$9.25	\$9.65	\$0.00	\$80.95
	6/1/2027	\$53.75	\$9.90	\$9.25	\$9.65	\$0.00	\$82.55
	12/1/2027	\$55.35	\$9.90	\$9.25	\$9.65	\$0.00	\$84.15
	6/1/2028	\$57.03	\$9.90	\$9.25	\$9.65	\$0.00	\$85.83

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2028	\$58.70	\$9.90	\$9.25	\$9.65	\$0.00	\$87.50

This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75

For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$47.95	\$9.90	\$9.25	\$9.65	\$0.00	\$76.75
LABORERS	12/1/2025	\$49.45	\$9.90	\$9.25	\$9.65	\$0.00	\$78.25
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$51.00	\$9.90	\$9.25	\$9.65	\$0.00	\$79.80
	12/1/2026	\$52.50	\$9.90	\$9.25	\$9.65	\$0.00	\$81.30

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

MARBLE & TILE FINISHERS	8/1/2025	\$52.08	\$11.49	\$15.57	\$6.05	\$0.00	\$85.19
BRICKLAYERS LOCAL 3	2/1/2026	\$53.16	\$11.49	\$15.57	\$6.05	\$0.00	\$86.27
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$54.92	\$11.49	\$15.57	\$6.05	\$0.00	\$88.03
	2/1/2027	\$56.04	\$11.49	\$15.57	\$6.05	\$0.00	\$89.15

Apprentice: MARBLE & TILE FINISHERS							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.04	\$11.49	\$15.57	\$6.05	\$0.00	\$59.15
2	60.00	\$31.25	\$11.49	\$15.57	\$6.05	\$0.00	\$64.36
3	70.00	\$36.46	\$11.49	\$15.57	\$6.05	\$0.00	\$69.57
4	80.00	\$41.66	\$11.49	\$15.57	\$6.05	\$0.00	\$74.77
5	90.00	\$46.87	\$11.49	\$15.57	\$6.05	\$0.00	\$79.98

Apprentice: MARBLE & TILE FINISHERS							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.58	\$11.49	\$15.57	\$6.05	\$0.00	\$59.69
2	60.00	\$31.90	\$11.49	\$15.57	\$6.05	\$0.00	\$65.01
3	70.00	\$37.21	\$11.49	\$15.57	\$6.05	\$0.00	\$70.32
4	80.00	\$42.53	\$11.49	\$15.57	\$6.05	\$0.00	\$75.64
5	90.00	\$47.84	\$11.49	\$15.57	\$6.05	\$0.00	\$80.95

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	8/1/2025	\$67.97	\$11.49	\$15.57	\$7.99	\$0.00	\$103.02
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
BRICKLAYERS LOCAL 3	2/1/2026	\$69.32	\$11.49	\$15.57	\$7.99	\$0.00	\$104.37
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$71.52	\$11.49	\$15.57	\$7.99	\$0.00	\$106.57
	2/1/2027	\$72.92	\$11.49	\$15.57	\$7.99	\$0.00	\$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH**Effective Date: 8/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.99	\$11.49	\$15.57	\$7.99	\$0.00	\$69.04
2	60.00	\$40.78	\$11.49	\$15.57	\$7.99	\$0.00	\$75.83
3	70.00	\$47.58	\$11.49	\$15.57	\$7.99	\$0.00	\$82.63
4	80.00	\$54.38	\$11.49	\$15.57	\$7.99	\$0.00	\$89.43
5	90.00	\$61.17	\$11.49	\$15.57	\$7.99	\$0.00	\$96.22

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.66	\$11.49	\$15.57	\$7.99	\$0.00	\$69.71
2	60.00	\$41.59	\$11.49	\$15.57	\$7.99	\$0.00	\$76.64
3	70.00	\$48.52	\$11.49	\$15.57	\$7.99	\$0.00	\$83.57
4	80.00	\$55.46	\$11.49	\$15.57	\$7.99	\$0.00	\$90.51
5	90.00	\$62.39	\$11.49	\$15.57	\$7.99	\$0.00	\$97.44

Apprentice to Journeyworker Ratio: 1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES)	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MECHANICS MAINTENANCE	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 1)	1/6/2025	\$50.47	\$10.08	\$11.47	\$10.25	\$0.00	\$82.27
MILLWRIGHTS LOCAL 1121	1/5/2026	\$52.97	\$10.08	\$11.47	\$10.25	\$0.00	\$84.77
MILLWRIGHTS LOCAL 1121 - Zone 1							

Apprentice: MILLWRIGHT (Zone 1)**Effective Date: 1/6/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$27.76	\$10.08	\$0.00	\$5.64	\$0.00	\$43.48

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
Apprentice: MILLWRIGHT (Zone 1) Effective Date: 1/6/2025 <table><thead><tr><th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr></thead><tbody><tr><td>2</td><td>65.00</td><td>\$32.81</td><td>\$10.08</td><td>\$0.00</td><td>\$6.66</td><td>\$0.00</td><td>\$49.55</td></tr><tr><td>3</td><td>75.00</td><td>\$37.85</td><td>\$10.08</td><td>\$11.47</td><td>\$7.69</td><td>\$0.00</td><td>\$67.09</td></tr><tr><td>4</td><td>85.00</td><td>\$42.90</td><td>\$10.08</td><td>\$11.47</td><td>\$8.71</td><td>\$0.00</td><td>\$73.16</td></tr></tbody></table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	2	65.00	\$32.81	\$10.08	\$0.00	\$6.66	\$0.00	\$49.55	3	75.00	\$37.85	\$10.08	\$11.47	\$7.69	\$0.00	\$67.09	4	85.00	\$42.90	\$10.08	\$11.47	\$8.71	\$0.00	\$73.16								
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
2	65.00	\$32.81	\$10.08	\$0.00	\$6.66	\$0.00	\$49.55																																								
3	75.00	\$37.85	\$10.08	\$11.47	\$7.69	\$0.00	\$67.09																																								
4	85.00	\$42.90	\$10.08	\$11.47	\$8.71	\$0.00	\$73.16																																								
Apprentice: MILLWRIGHT (Zone 1) Effective Date: 1/5/2026 <table><thead><tr><th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr></thead><tbody><tr><td>1</td><td>55.00</td><td>\$29.13</td><td>\$10.08</td><td>\$0.00</td><td>\$5.64</td><td>\$0.00</td><td>\$44.85</td></tr><tr><td>2</td><td>65.00</td><td>\$34.43</td><td>\$10.08</td><td>\$0.00</td><td>\$6.66</td><td>\$0.00</td><td>\$51.17</td></tr><tr><td>3</td><td>75.00</td><td>\$39.73</td><td>\$10.08</td><td>\$11.47</td><td>\$7.69</td><td>\$0.00</td><td>\$68.97</td></tr><tr><td>4</td><td>85.00</td><td>\$45.02</td><td>\$10.08</td><td>\$11.47</td><td>\$8.71</td><td>\$0.00</td><td>\$75.28</td></tr></tbody></table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	1	55.00	\$29.13	\$10.08	\$0.00	\$5.64	\$0.00	\$44.85	2	65.00	\$34.43	\$10.08	\$0.00	\$6.66	\$0.00	\$51.17	3	75.00	\$39.73	\$10.08	\$11.47	\$7.69	\$0.00	\$68.97	4	85.00	\$45.02	\$10.08	\$11.47	\$8.71	\$0.00	\$75.28
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
1	55.00	\$29.13	\$10.08	\$0.00	\$5.64	\$0.00	\$44.85																																								
2	65.00	\$34.43	\$10.08	\$0.00	\$6.66	\$0.00	\$51.17																																								
3	75.00	\$39.73	\$10.08	\$11.47	\$7.69	\$0.00	\$68.97																																								
4	85.00	\$45.02	\$10.08	\$11.47	\$8.71	\$0.00	\$75.28																																								
Apprentice Notes Step 1&2 Appr. indentured after 1/6/2020 receive no pension, Apprentice to Journeyworker Ratio: 1:4																																															
MORTAR MIXER	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65																																								
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15																																								
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70																																								
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20																																								
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80																																								
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40																																								
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08																																								
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75																																								
For apprentice rates see "Apprentice- LABORER"																																															
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	6/1/2025	\$25.97	\$15.30	\$13.15	\$3.25	\$0.00	\$57.67																																								
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$26.63	\$15.30	\$13.15	\$3.25	\$0.00	\$58.33																																								
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$27.22	\$15.30	\$13.15	\$3.25	\$0.00	\$58.92																																								
	12/1/2026	\$27.89	\$15.30	\$13.15	\$3.25	\$0.00	\$59.59																																								
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																															
OILER (TRUCK CRANES, GRADALLS)	6/1/2025	\$31.80	\$15.30	\$13.15	\$3.25	\$0.00	\$63.50																																								
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$32.60	\$15.30	\$13.15	\$3.25	\$0.00	\$64.30																																								
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$33.32	\$15.30	\$13.15	\$3.25	\$0.00	\$65.02																																								
	12/1/2026	\$34.12	\$15.30	\$13.15	\$3.25	\$0.00	\$65.82																																								
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																															
OTHER POWER DRIVEN EQUIPMENT - CLASS II	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73																																								
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17																																								
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45																																								

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS)	7/1/2025	\$58.51	\$10.30	\$11.95	\$12.50	\$0.00	\$93.26
PAINTERS LOCAL 35	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.50	\$0.00	\$94.41
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (BRIDGES/TANKS)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.26	\$10.30	\$0.00	\$0.00	\$0.00	\$39.56
2	55.00	\$32.18	\$10.30	\$0.00	\$6.88	\$0.00	\$49.36
3	60.00	\$35.11	\$10.30	\$0.00	\$7.50	\$0.00	\$52.91
4	65.00	\$38.03	\$10.30	\$0.00	\$8.13	\$0.00	\$56.46
5	70.00	\$40.96	\$10.30	\$11.95	\$8.75	\$0.00	\$71.96
6	75.00	\$43.88	\$10.30	\$11.95	\$9.38	\$0.00	\$75.51
7	80.00	\$46.81	\$10.30	\$11.95	\$10.00	\$0.00	\$79.06
8	90.00	\$52.66	\$10.30	\$11.95	\$11.25	\$0.00	\$86.16

Apprentice: PAINTER (BRIDGES/TANKS)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	7/1/2025	\$49.41	\$10.30	\$11.95	\$12.50	\$0.00	\$84.16
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.	1/1/2026	\$50.46	\$10.35	\$12.00	\$12.60	\$0.00	\$85.41
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.71	\$10.30	\$0.00	\$0.00	\$0.00	\$35.01
2	55.00	\$27.18	\$10.30	\$0.00	\$6.88	\$0.00	\$44.36
3	60.00	\$29.65	\$10.30	\$0.00	\$7.50	\$0.00	\$47.45

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	65.00	\$32.12	\$10.30	\$0.00	\$8.13	\$0.00	\$50.55
5	70.00	\$34.59	\$10.30	\$11.95	\$8.75	\$0.00	\$65.59
6	75.00	\$37.06	\$10.30	\$11.95	\$9.38	\$0.00	\$68.69
7	80.00	\$39.53	\$10.30	\$11.95	\$10.00	\$0.00	\$71.78
8	90.00	\$44.47	\$10.30	\$11.95	\$11.25	\$0.00	\$77.97
Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$25.23	\$10.35	\$0.00	\$0.00	\$0.00	\$35.58
2	55.00	\$27.75	\$10.35	\$0.00	\$6.93	\$0.00	\$45.03
3	60.00	\$30.28	\$10.35	\$0.00	\$7.56	\$0.00	\$48.19
4	65.00	\$32.80	\$10.35	\$0.00	\$8.19	\$0.00	\$51.34
5	70.00	\$35.32	\$10.35	\$12.00	\$8.82	\$0.00	\$66.49
6	75.00	\$37.85	\$10.35	\$12.00	\$9.45	\$0.00	\$69.65
7	80.00	\$40.37	\$10.35	\$12.00	\$10.08	\$0.00	\$72.80
8	90.00	\$45.41	\$10.35	\$12.00	\$11.34	\$0.00	\$79.10
Apprentice to Journeyworker Ratio: 1:1							

PAINTER (SPRAY OR SANDBLAST, REPAINT)	7/1/2025	\$47.47	\$10.30	\$11.95	\$12.50	\$0.00	\$82.22
PAINTERS LOCAL 35	1/1/2026	\$48.52	\$10.35	\$12.00	\$12.60	\$0.00	\$83.47
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.74	\$10.30	\$0.00	\$0.00	\$0.00	\$34.04
2	55.00	\$26.11	\$10.30	\$0.00	\$6.88	\$0.00	\$43.29
3	60.00	\$28.48	\$10.30	\$0.00	\$7.50	\$0.00	\$46.28
4	65.00	\$30.86	\$10.30	\$0.00	\$8.13	\$0.00	\$49.29
5	70.00	\$33.23	\$10.30	\$11.95	\$8.75	\$0.00	\$64.23
6	75.00	\$35.60	\$10.30	\$11.95	\$9.38	\$0.00	\$67.23
7	80.00	\$37.98	\$10.30	\$11.95	\$10.00	\$0.00	\$70.23
8	90.00	\$42.72	\$10.30	\$11.95	\$11.25	\$0.00	\$76.22

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.26	\$10.35	\$0.00	\$0.00	\$0.00	\$34.61
2	55.00	\$26.69	\$10.35	\$0.00	\$6.93	\$0.00	\$43.97
3	60.00	\$29.11	\$10.35	\$0.00	\$7.56	\$0.00	\$47.02
4	65.00	\$31.54	\$10.35	\$0.00	\$8.19	\$0.00	\$50.08
5	70.00	\$33.96	\$10.35	\$12.00	\$8.82	\$0.00	\$65.13
6	75.00	\$36.39	\$10.35	\$12.00	\$9.45	\$0.00	\$68.19
7	80.00	\$38.82	\$10.35	\$12.00	\$10.08	\$0.00	\$71.25
8	90.00	\$43.67	\$10.35	\$12.00	\$11.34	\$0.00	\$77.36

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, NEW) *	7/1/2025	\$48.01	\$10.30	\$11.95	\$12.50	\$0.00	\$82.76
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.	1/1/2026	\$49.06	\$10.35	\$12.00	\$12.60	\$0.00	\$84.01
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.01	\$10.30	\$0.00	\$0.00	\$0.00	\$34.31
2	55.00	\$26.41	\$10.30	\$0.00	\$6.88	\$0.00	\$43.59
3	60.00	\$28.81	\$10.30	\$0.00	\$7.50	\$0.00	\$46.61
4	65.00	\$31.21	\$10.30	\$0.00	\$8.13	\$0.00	\$49.64
5	70.00	\$33.61	\$10.30	\$11.95	\$8.75	\$0.00	\$64.61
6	75.00	\$36.01	\$10.30	\$11.95	\$9.38	\$0.00	\$67.64
7	80.00	\$38.41	\$10.30	\$11.95	\$10.00	\$0.00	\$70.66
8	90.00	\$43.21	\$10.30	\$11.95	\$11.25	\$0.00	\$76.71

Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.53	\$10.35	\$0.00	\$0.00	\$0.00	\$34.88
2	55.00	\$26.98	\$10.35	\$0.00	\$6.93	\$0.00	\$44.26
3	60.00	\$29.44	\$10.35	\$0.00	\$7.56	\$0.00	\$47.35
4	65.00	\$31.89	\$10.35	\$0.00	\$8.19	\$0.00	\$50.43
5	70.00	\$34.34	\$10.35	\$12.00	\$8.82	\$0.00	\$65.51
6	75.00	\$36.80	\$10.35	\$12.00	\$9.45	\$0.00	\$68.60
7	80.00	\$39.25	\$10.35	\$12.00	\$10.08	\$0.00	\$71.68
8	90.00	\$44.15	\$10.35	\$12.00	\$11.34	\$0.00	\$77.84

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PAINTER / TAPER (BRUSH, REPAINT)	7/1/2025	\$46.07	\$10.30	\$11.95	\$12.50	\$0.00	\$80.82
PAINTERS LOCAL 35	1/1/2026	\$47.12	\$10.35	\$12.00	\$12.60	\$0.00	\$82.07
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)**Effective Date: 7/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.04	\$10.30	\$0.00	\$0.00	\$0.00	\$33.34
2	55.00	\$25.34	\$10.30	\$0.00	\$6.88	\$0.00	\$42.52
3	60.00	\$27.64	\$10.30	\$0.00	\$7.50	\$0.00	\$45.44
4	65.00	\$29.95	\$10.30	\$0.00	\$8.13	\$0.00	\$48.38
5	70.00	\$32.25	\$10.30	\$11.95	\$8.75	\$0.00	\$63.25
6	75.00	\$34.55	\$10.30	\$11.95	\$9.38	\$0.00	\$66.18
7	80.00	\$36.86	\$10.30	\$11.95	\$10.00	\$0.00	\$69.11
8	90.00	\$41.46	\$10.30	\$11.95	\$11.25	\$0.00	\$74.96

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)**Effective Date: 1/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.56	\$10.35	\$0.00	\$0.00	\$0.00	\$33.91
2	55.00	\$25.92	\$10.35	\$0.00	\$6.93	\$0.00	\$43.20
3	60.00	\$28.27	\$10.35	\$0.00	\$7.56	\$0.00	\$46.18
4	65.00	\$30.63	\$10.35	\$0.00	\$8.19	\$0.00	\$49.17
5	70.00	\$32.98	\$10.35	\$12.00	\$8.82	\$0.00	\$64.15
6	75.00	\$35.34	\$10.35	\$12.00	\$9.45	\$0.00	\$67.14
7	80.00	\$37.70	\$10.35	\$12.00	\$10.08	\$0.00	\$70.13
8	90.00	\$42.41	\$10.35	\$12.00	\$11.34	\$0.00	\$76.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.65	\$0.00	\$76.50
LABORERS	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.65	\$0.00	\$78.00
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$50.75	\$9.90	\$9.25	\$9.65	\$0.00	\$79.55
	12/1/2026	\$52.25	\$9.90	\$9.25	\$9.65	\$0.00	\$81.05

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)

PANEL & PICKUP TRUCKS DRIVER	8/1/2025	\$41.88	\$15.41	\$20.17	\$0.00	\$0.00	\$77.46
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.88	\$15.41	\$21.78	\$0.00	\$0.00	\$79.07
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	6/1/2026	\$42.88	\$15.41	\$21.78	\$0.00	\$0.00	\$80.07
	8/1/2026	\$42.88	\$15.91	\$21.78	\$0.00	\$0.00	\$80.57
	12/1/2026	\$42.88	\$15.91	\$23.52	\$0.00	\$0.00	\$82.31

PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							

For apprentice rates see "Apprentice- PILE DRIVER"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PILE DRIVER	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							

Apprentice: PILE DRIVER

Effective Date: 8/1/2024

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$25.11	\$10.08	\$0.00	\$2.53	\$0.00	\$37.72
2	55.00	\$30.68	\$10.08	\$0.00	\$5.07	\$0.00	\$45.83
3	70.00	\$39.05	\$10.08	\$11.62	\$7.60	\$0.00	\$68.35
4	80.00	\$44.63	\$10.08	\$11.62	\$10.14	\$0.00	\$76.47

Apprentice to Journeyworker Ratio: 1:5

PIPEFITTER & STEAMFITTER	3/1/2025	\$68.88	\$12.70	\$13.05	\$8.75	\$0.00	\$103.38
PIPEFITTERS LOCAL 537							
PIPEFITTERS LOCAL 537							

Apprentice: PIPEFITTER & STEAMFITTER

Effective Date: 3/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$27.55	\$12.70	\$0.30	\$8.75	\$0.00	\$49.30
2	45.00	\$31.00	\$12.70	\$13.05	\$8.75	\$0.00	\$65.50
3	60.00	\$41.33	\$12.70	\$13.05	\$8.75	\$0.00	\$75.83
4	70.00	\$48.22	\$12.70	\$13.05	\$8.75	\$0.00	\$82.72
5	80.00	\$55.10	\$12.70	\$13.05	\$8.75	\$0.00	\$89.60

Apprentice to Journeyworker Ratio: 1:3

PIPELAYER	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY)	6/1/2025	\$47.95	\$9.90	\$9.25	\$9.65	\$0.00	\$76.75
LABORERS	12/1/2025	\$49.45	\$9.90	\$9.25	\$9.65	\$0.00	\$78.25
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$51.00	\$9.90	\$9.25	\$9.65	\$0.00	\$79.80
	12/1/2026	\$52.50	\$9.90	\$9.25	\$9.65	\$0.00	\$81.30

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

PLUMBERS & GASFITTERS	3/2/2025	\$69.84	\$14.32	\$12.31	\$8.00	\$0.00	\$104.47
PLUMBERS & GASFITTERS LOCAL 12							
PLUMBERS & GASFITTERS LOCAL 12							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PLUMBERS & GASFITTERS Effective Date: 3/2/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	\$24.44	\$14.32	\$4.61	\$2.80	\$0.00	\$46.17
2	40.00	\$27.94	\$14.32	\$5.22	\$3.20	\$0.00	\$50.68
3	55.00	\$38.41	\$14.32	\$7.07	\$4.40	\$0.00	\$64.20
4	65.00	\$45.40	\$14.32	\$8.30	\$5.20	\$0.00	\$73.22
5	75.00	\$52.38	\$14.32	\$9.53	\$6.00	\$0.00	\$82.23
Apprentice to Journeyworker Ratio: 1:2							
PNEUMATIC CONTROLS (TEMP.)	3/1/2025	\$68.88	\$12.70	\$13.05	\$8.75	\$0.00	\$103.38
PIPEFITTERS LOCAL 537							
PIPEFITTERS LOCAL 537							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							
PNEUMATIC DRILL/TOOL OPERATOR	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75
For apprentice rates see "Apprentice- LABORER"							
PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$47.95	\$9.90	\$9.25	\$9.65	\$0.00	\$76.75
LABORERS	12/1/2025	\$49.45	\$9.90	\$9.25	\$9.65	\$0.00	\$78.25
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$51.00	\$9.90	\$9.25	\$9.65	\$0.00	\$79.80
	12/1/2026	\$52.50	\$9.90	\$9.25	\$9.65	\$0.00	\$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWDERMAN & BLASTER	6/1/2025	\$48.60	\$9.90	\$9.25	\$9.65	\$0.00	\$77.40
LABORERS	12/1/2025	\$50.10	\$9.90	\$9.25	\$9.65	\$0.00	\$78.90
LABORERS - ZONE 1	6/1/2026	\$51.65	\$9.90	\$9.25	\$9.65	\$0.00	\$80.45
	12/1/2026	\$53.15	\$9.90	\$9.25	\$9.65	\$0.00	\$81.95
	6/1/2027	\$54.75	\$9.90	\$9.25	\$9.65	\$0.00	\$83.55
	12/1/2027	\$56.35	\$9.90	\$9.25	\$9.65	\$0.00	\$85.15
	6/1/2028	\$58.03	\$9.90	\$9.25	\$9.65	\$0.00	\$86.83
	12/1/2028	\$59.70	\$9.90	\$9.25	\$9.65	\$0.00	\$88.50
For apprentice rates see "Apprentice- LABORER"							
POWDERMAN & BLASTER (HEAVY & HIGHWAY)	6/1/2025	\$48.70	\$9.90	\$9.25	\$9.65	\$0.00	\$77.50
LABORERS	12/1/2025	\$50.20	\$9.90	\$9.25	\$9.65	\$0.00	\$79.00
LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2026	\$51.75	\$9.90	\$9.25	\$9.65	\$0.00	\$80.55
	12/1/2026	\$53.25	\$9.90	\$9.25	\$9.65	\$0.00	\$82.05
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
POWER SHOVEL/DERRICK/TRENCHING MACHINE	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE)	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER)	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER	5/1/2025	\$30.00	\$12.00	\$7.00	\$0.00	\$0.00	\$49.00
TEAMSTERS 42 - J.G. MacLeallan (Wakefield)	5/1/2026	\$30.50	\$12.00	\$7.00	\$0.00	\$0.00	\$49.50
TEAMSTERS 42 - J.G. MacLeallan (Wakefield)							
RECLAIMERS	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
LABORERS - ZONE 1	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75
For apprentice rates see "Apprentice- LABORER"							
ROLLER/SPREADER/MULCHING MACHINE	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
ROOFER (Inc.Roofer Waterproofing &Roofer Damproofg)	8/1/2025	\$53.53	\$13.28	\$12.67	\$9.03	\$0.00	\$88.51
ROOFERS LOCAL 33	2/1/2026	\$54.78	\$13.28	\$12.67	\$9.03	\$0.00	\$89.76
ROOFERS LOCAL 33							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ROOFER (Inc.Roofers Waterproofing &Roofers Damproofg)							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.77	\$13.28	\$6.52	\$9.03	\$0.00	\$55.60
2	60.00	\$32.12	\$13.28	\$12.67	\$9.03	\$0.00	\$67.10
3	65.00	\$34.79	\$13.28	\$12.67	\$9.03	\$0.00	\$69.77
4	75.00	\$40.15	\$13.28	\$12.67	\$9.03	\$0.00	\$75.13
5	85.00	\$45.50	\$13.28	\$12.67	\$9.03	\$0.00	\$80.48
Apprentice: ROOFER (Inc.Roofers Waterproofing &Roofers Damproofg)							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.39	\$13.28	\$6.52	\$9.03	\$0.00	\$56.22
2	60.00	\$32.87	\$13.28	\$12.67	\$9.03	\$0.00	\$67.85
3	65.00	\$35.61	\$13.28	\$12.67	\$9.03	\$0.00	\$70.59
4	75.00	\$41.09	\$13.28	\$12.67	\$9.03	\$0.00	\$76.07
5	85.00	\$46.56	\$13.28	\$12.67	\$9.03	\$0.00	\$81.54
Apprentice Notes							
** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1							
Apprentice to Journeyworker Ratio: 1:5							
ROOFER SLATE / TILE / PRECAST CONCRETE	8/1/2025	\$53.78	\$13.28	\$12.67	\$9.03	\$0.00	\$88.76
ROOFERS LOCAL 33	2/1/2026	\$55.03	\$13.28	\$12.67	\$9.03	\$0.00	\$90.01
For apprentice rates see "Apprentice- ROOFER"							
SHEETMETAL WORKER	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							

Apprentice: SHEETMETAL WORKER							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	42.00	\$25.61	\$14.91	\$6.13	\$0.00	\$0.00	\$46.65
2	42.00	\$25.61	\$14.91	\$6.13	\$0.00	\$0.00	\$46.65
3	47.00	\$28.66	\$14.91	\$11.01	\$1.25	\$1.62	\$57.45
4	47.00	\$28.66	\$14.91	\$11.01	\$1.25	\$1.62	\$57.45
5	52.00	\$31.71	\$14.91	\$11.74	\$1.50	\$1.74	\$61.60
6	52.00	\$31.71	\$14.91	\$11.74	\$1.75	\$1.75	\$61.86
7	60.00	\$36.59	\$14.91	\$12.90	\$2.00	\$1.93	\$68.33
8	65.00	\$39.64	\$14.91	\$13.63	\$2.25	\$2.04	\$72.47

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SHEETMETAL WORKER							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
9	75.00	\$45.74	\$14.91	\$15.09	\$2.75	\$2.28	\$80.77
10	85.00	\$51.83	\$14.91	\$16.55	\$2.75	\$2.49	\$88.53
Apprentice: SHEETMETAL WORKER							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	42.00	\$26.43	\$14.91	\$6.19	\$0.00	\$0.00	\$47.53
2	42.00	\$26.43	\$14.91	\$6.19	\$0.00	\$0.00	\$47.53
3	47.00	\$29.58	\$14.91	\$10.93	\$1.25	\$1.62	\$58.29
4	47.00	\$29.58	\$14.91	\$10.93	\$1.25	\$1.62	\$58.29
5	52.00	\$32.72	\$14.91	\$11.66	\$1.50	\$1.74	\$62.53
6	52.00	\$32.72	\$14.91	\$11.66	\$1.75	\$1.75	\$62.79
7	60.00	\$37.76	\$14.91	\$12.84	\$2.00	\$1.93	\$69.44
8	65.00	\$40.90	\$14.91	\$13.58	\$2.25	\$2.04	\$73.68
9	75.00	\$47.20	\$14.91	\$15.06	\$2.75	\$2.28	\$82.20
10	85.00	\$53.49	\$14.91	\$16.53	\$2.75	\$2.49	\$90.17
Apprentice to Journeyworker Ratio: 1:4							
SPECIALIZED EARTH MOVING EQUIP < 35 TONS	8/1/2025	\$42.34	\$15.41	\$20.17	\$0.00	\$0.00	\$77.92
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$42.34	\$15.41	\$21.78	\$0.00	\$0.00	\$79.53
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	6/1/2026	\$43.34	\$15.41	\$21.78	\$0.00	\$0.00	\$80.53
	8/1/2026	\$43.34	\$15.91	\$21.78	\$0.00	\$0.00	\$81.03
	12/1/2026	\$43.34	\$15.91	\$23.52	\$0.00	\$0.00	\$82.77
SPECIALIZED EARTH MOVING EQUIP > 35 TONS	8/1/2025	\$42.63	\$15.41	\$20.17	\$0.00	\$0.00	\$78.21
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$42.63	\$15.41	\$21.78	\$0.00	\$0.00	\$79.82
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	6/1/2026	\$43.63	\$15.41	\$21.78	\$0.00	\$0.00	\$80.82
	8/1/2026	\$43.63	\$15.91	\$21.78	\$0.00	\$0.00	\$81.32
	12/1/2026	\$43.63	\$15.91	\$23.52	\$0.00	\$0.00	\$83.06
SPRINKLER FITTER	3/1/2025	\$70.80	\$12.25	\$7.40	\$17.00	\$0.00	\$107.45
SPRINKLER FITTERS LOCAL 550							
SPRINKLER FITTERS LOCAL 550 - (Section A) Zone 1							
Apprentice: SPRINKLER FITTER							
Effective Date: 3/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	\$24.78	\$11.51	\$13.35	\$0.00	\$0.00	\$49.64
2	40.00	\$28.32	\$11.51	\$14.20	\$0.00	\$0.00	\$54.03
3	45.00	\$31.86	\$11.51	\$15.05	\$0.00	\$0.00	\$58.42

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SPRINKLER FITTER Effective Date: 3/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	50.00	\$35.40	\$11.51	\$15.90	\$0.00	\$0.00	\$62.81
5	55.00	\$38.94	\$11.51	\$16.75	\$0.00	\$0.00	\$67.20
6	60.00	\$42.48	\$11.51	\$17.60	\$0.00	\$0.00	\$71.59
7	65.00	\$46.02	\$11.51	\$19.30	\$0.00	\$0.00	\$76.83
8	70.00	\$49.56	\$11.51	\$18.85	\$0.00	\$0.00	\$79.92
9	75.00	\$53.10	\$11.51	\$20.15	\$0.00	\$0.00	\$84.76
10	80.00	\$56.64	\$11.51	\$21.00	\$0.00	\$0.00	\$89.15
Apprentice Notes Apprentice entered prior 9/30/10:							
Apprentice to Journeyworker Ratio: 1:3							
STEAM BOILER OPERATOR	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TELECOMMUNICATION TECHNICIAN	9/1/2025	\$52.94	\$13.00	\$13.97	\$6.98	\$0.00	\$86.89
ELECTRICIANS LOCAL 103	3/1/2026	\$53.49	\$13.00	\$14.23	\$7.20	\$0.00	\$87.92
ELECTRICIANS LOCAL 103	9/1/2026	\$55.02	\$13.00	\$14.28	\$7.20	\$0.00	\$89.50
	3/1/2027	\$55.98	\$13.00	\$14.31	\$7.20	\$0.00	\$90.49
	9/1/2027	\$57.50	\$13.00	\$14.36	\$7.20	\$0.00	\$92.06
	3/1/2028	\$58.46	\$13.00	\$14.38	\$7.20	\$0.00	\$93.04
Apprentice: TELECOMMUNICATION TECHNICIAN Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.82	\$13.00	\$0.71	\$0.00	\$0.00	\$37.53
2	45.00	\$23.82	\$13.00	\$0.71	\$0.00	\$0.00	\$37.53
3	50.00	\$26.47	\$13.00	\$13.17	\$3.49	\$0.00	\$56.13
4	50.00	\$26.47	\$13.00	\$13.17	\$3.49	\$0.00	\$56.13
5	55.00	\$29.12	\$13.00	\$13.25	\$3.84	\$0.00	\$59.21
6	60.00	\$31.76	\$13.00	\$13.33	\$4.19	\$0.00	\$62.28
7	65.00	\$34.41	\$13.00	\$13.41	\$4.54	\$0.00	\$65.36

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TELECOMMUNICATION TECHNICIAN							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
8	70.00	\$37.06	\$13.00	\$13.49	\$4.89	\$0.00	\$68.44
9	75.00	\$39.71	\$13.00	\$13.57	\$5.24	\$0.00	\$71.52
10	80.00	\$42.35	\$13.00	\$13.65	\$5.58	\$0.00	\$74.58

Apprentice: TELECOMMUNICATION TECHNICIAN							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$24.07	\$13.00	\$0.72	\$0.00	\$0.00	\$37.79
2	45.00	\$24.07	\$13.00	\$0.72	\$0.00	\$0.00	\$37.79
3	50.00	\$26.75	\$13.00	\$13.43	\$3.60	\$0.00	\$56.78
4	50.00	\$26.75	\$13.00	\$13.43	\$3.60	\$0.00	\$56.78
5	55.00	\$29.42	\$13.00	\$13.51	\$3.96	\$0.00	\$59.89
6	60.00	\$32.09	\$13.00	\$13.59	\$4.32	\$0.00	\$63.00
7	65.00	\$34.77	\$13.00	\$13.67	\$4.68	\$0.00	\$66.12
8	70.00	\$37.44	\$13.00	\$13.75	\$5.04	\$0.00	\$69.23
9	75.00	\$40.12	\$13.00	\$13.83	\$5.40	\$0.00	\$72.35
10	80.00	\$42.79	\$13.00	\$13.91	\$5.76	\$0.00	\$75.46

Apprentice to Journeyworker Ratio: 1:1

TERRAZZO FINISHERS	8/1/2025	\$66.89	\$11.49	\$15.57	\$8.02	\$0.00	\$101.97
BRICKLAYERS LOCAL 3	2/1/2026	\$68.24	\$11.49	\$15.57	\$8.02	\$0.00	\$103.32
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$70.44	\$11.49	\$15.57	\$8.02	\$0.00	\$105.52
	2/1/2027	\$71.84	\$11.49	\$15.57	\$8.02	\$0.00	\$106.92

Apprentice: TERRAZZO FINISHERS							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.45	\$11.49	\$15.57	\$8.02	\$0.00	\$68.53
2	60.00	\$40.13	\$11.49	\$15.57	\$8.02	\$0.00	\$75.21
3	70.00	\$46.82	\$11.49	\$15.57	\$8.02	\$0.00	\$81.90
4	80.00	\$53.51	\$11.49	\$15.57	\$8.02	\$0.00	\$88.59
5	90.00	\$60.20	\$11.49	\$15.57	\$8.02	\$0.00	\$95.28

Apprentice: TERRAZZO FINISHERS							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.12	\$11.49	\$15.57	\$8.02	\$0.00	\$69.20

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
Apprentice: TERRAZZO FINISHERS Effective Date: 2/1/2026 <table><thead><tr><th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr></thead><tbody><tr><td>2</td><td>60.00</td><td>\$40.94</td><td>\$11.49</td><td>\$15.57</td><td>\$8.02</td><td>\$0.00</td><td>\$76.02</td></tr><tr><td>3</td><td>70.00</td><td>\$47.77</td><td>\$11.49</td><td>\$15.57</td><td>\$8.02</td><td>\$0.00</td><td>\$82.85</td></tr><tr><td>4</td><td>80.00</td><td>\$54.59</td><td>\$11.49</td><td>\$15.57</td><td>\$8.02</td><td>\$0.00</td><td>\$89.67</td></tr><tr><td>5</td><td>90.00</td><td>\$61.42</td><td>\$11.49</td><td>\$15.57</td><td>\$8.02</td><td>\$0.00</td><td>\$96.50</td></tr></tbody></table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	2	60.00	\$40.94	\$11.49	\$15.57	\$8.02	\$0.00	\$76.02	3	70.00	\$47.77	\$11.49	\$15.57	\$8.02	\$0.00	\$82.85	4	80.00	\$54.59	\$11.49	\$15.57	\$8.02	\$0.00	\$89.67	5	90.00	\$61.42	\$11.49	\$15.57	\$8.02	\$0.00	\$96.50
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
2	60.00	\$40.94	\$11.49	\$15.57	\$8.02	\$0.00	\$76.02																																								
3	70.00	\$47.77	\$11.49	\$15.57	\$8.02	\$0.00	\$82.85																																								
4	80.00	\$54.59	\$11.49	\$15.57	\$8.02	\$0.00	\$89.67																																								
5	90.00	\$61.42	\$11.49	\$15.57	\$8.02	\$0.00	\$96.50																																								
Apprentice to Journeyworker Ratio: 1:5																																															
TEST BORING DRILLER	6/1/2025	\$51.70	\$9.90	\$9.25	\$9.80	\$0.00	\$80.65																																								
LABORERS	12/1/2025	\$53.20	\$9.90	\$9.25	\$9.80	\$0.00	\$82.15																																								
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$54.75	\$9.90	\$9.25	\$9.80	\$0.00	\$83.70																																								
	12/1/2026	\$56.25	\$9.90	\$9.25	\$9.80	\$0.00	\$85.20																																								
For apprentice rates see "Apprentice- LABORER"																																															
TEST BORING DRILLER HELPER	6/1/2025	\$47.82	\$9.90	\$9.25	\$9.80	\$0.00	\$76.77																																								
LABORERS	12/1/2025	\$49.32	\$9.90	\$9.25	\$9.80	\$0.00	\$78.27																																								
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$50.87	\$9.90	\$9.25	\$9.80	\$0.00	\$79.82																																								
	12/1/2026	\$52.37	\$9.90	\$9.25	\$9.80	\$0.00	\$81.32																																								
For apprentice rates see "Apprentice- LABORER"																																															
TEST BORING LABORER	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.80	\$0.00	\$76.65																																								
LABORERS	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.80	\$0.00	\$78.15																																								
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$50.75	\$9.90	\$9.25	\$9.80	\$0.00	\$79.70																																								
	12/1/2026	\$52.25	\$9.90	\$9.25	\$9.80	\$0.00	\$81.20																																								
For apprentice rates see "Apprentice- LABORER"																																															
TRACTORS/PORTABLE STEAM GENERATORS	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73																																								
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17																																								
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45																																								
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89																																								
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																															
TRAILERS FOR EARTH MOVING EQUIPMENT	8/1/2025	\$42.92	\$15.41	\$20.17	\$0.00	\$0.00	\$78.50																																								
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$42.92	\$15.41	\$21.78	\$0.00	\$0.00	\$80.11																																								
TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	6/1/2026	\$43.92	\$15.41	\$21.78	\$0.00	\$0.00	\$81.11																																								
	8/1/2026	\$43.92	\$15.91	\$21.78	\$0.00	\$0.00	\$81.61																																								
	12/1/2026	\$43.92	\$15.91	\$23.52	\$0.00	\$0.00	\$83.35																																								
TUNNEL WORK - COMPRESSED AIR	6/1/2025	\$59.93	\$9.90	\$9.25	\$10.25	\$0.00	\$89.33																																								
LABORERS	12/1/2025	\$61.43	\$9.90	\$9.25	\$10.25	\$0.00	\$90.83																																								
LABORERS (COMPRESSED AIR)	6/1/2026	\$62.98	\$9.90	\$9.25	\$10.25	\$0.00	\$92.38																																								
	12/1/2026	\$64.48	\$9.90	\$9.25	\$10.25	\$0.00	\$93.88																																								
For apprentice rates see "Apprentice- LABORER"																																															
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	6/1/2025	\$61.93	\$9.90	\$9.25	\$10.25	\$0.00	\$91.33																																								
LABORERS	12/1/2025	\$63.43	\$9.90	\$9.25	\$10.25	\$0.00	\$92.83																																								

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS (COMPRESSED AIR)	6/1/2026	\$64.98	\$9.90	\$9.25	\$10.25	\$0.00	\$94.38
	12/1/2026	\$66.48	\$9.90	\$9.25	\$10.25	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR LABORERS LABORERS (FREE AIR TUNNEL)	6/1/2025	\$52.00	\$9.90	\$9.25	\$10.25	\$0.00	\$81.40
	12/1/2025	\$53.50	\$9.90	\$9.25	\$10.25	\$0.00	\$82.90
	6/1/2026	\$55.05	\$9.90	\$9.25	\$10.25	\$0.00	\$84.45
	12/1/2026	\$56.55	\$9.90	\$9.25	\$10.25	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE) LABORERS LABORERS (FREE AIR TUNNEL)	6/1/2025	\$54.00	\$9.90	\$9.25	\$10.25	\$0.00	\$83.40
	12/1/2025	\$55.50	\$9.90	\$9.25	\$10.25	\$0.00	\$84.90
	6/1/2026	\$57.05	\$9.90	\$9.25	\$10.25	\$0.00	\$86.45
	12/1/2026	\$58.55	\$9.90	\$9.25	\$10.25	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL TEAMSTERS JOINT COUNCIL NO. 10 TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	8/1/2025	\$42.34	\$15.41	\$20.17	\$0.00	\$0.00	\$77.92
	12/1/2025	\$42.34	\$15.41	\$21.78	\$0.00	\$0.00	\$79.53
	6/1/2026	\$43.34	\$15.41	\$21.78	\$0.00	\$0.00	\$80.53
	8/1/2026	\$43.34	\$15.91	\$21.78	\$0.00	\$0.00	\$81.03
	12/1/2026	\$43.34	\$15.91	\$23.52	\$0.00	\$0.00	\$82.77
WAGON DRILL OPERATOR LABORERS LABORERS - ZONE 1	6/1/2025	\$47.85	\$9.90	\$9.25	\$9.65	\$0.00	\$76.65
	12/1/2025	\$49.35	\$9.90	\$9.25	\$9.65	\$0.00	\$78.15
	6/1/2026	\$50.90	\$9.90	\$9.25	\$9.65	\$0.00	\$79.70
	12/1/2026	\$52.40	\$9.90	\$9.25	\$9.65	\$0.00	\$81.20
	6/1/2027	\$54.00	\$9.90	\$9.25	\$9.65	\$0.00	\$82.80
	12/1/2027	\$55.60	\$9.90	\$9.25	\$9.65	\$0.00	\$84.40
	6/1/2028	\$57.28	\$9.90	\$9.25	\$9.65	\$0.00	\$86.08
	12/1/2028	\$58.95	\$9.90	\$9.25	\$9.65	\$0.00	\$87.75
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 1 (HEAVY & HIGHWAY)	6/1/2025	\$47.95	\$9.90	\$9.25	\$9.65	\$0.00	\$76.75
	12/1/2025	\$49.45	\$9.90	\$9.25	\$9.65	\$0.00	\$78.25
	6/1/2026	\$51.00	\$9.90	\$9.25	\$9.65	\$0.00	\$79.80
	12/1/2026	\$52.50	\$9.90	\$9.25	\$9.65	\$0.00	\$81.30
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR OPERATING ENGINEERS LOCAL 4 OPERATING ENGINEERS LOCAL 4	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER PLUMBERS & GASFITTERS LOCAL 12 PLUMBERS & GASFITTERS LOCAL 12	3/2/2025	\$69.84	\$14.32	\$12.31	\$8.00	\$0.00	\$104.47
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CABLE TECHNICIAN (Power Zone) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$29.67	\$9.25	\$0.89	\$1.00	\$0.00	\$40.81
CABLEMAN (Underground Ducts & Cables) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$42.03	\$9.25	\$1.26	\$9.01	\$0.00	\$61.55
DRIVER / GROUNDMAN CDL OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$34.62	\$9.25	\$1.04	\$9.03	\$0.00	\$53.94
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$27.20	\$9.25	\$0.82	\$1.00	\$0.00	\$38.27
EQUIPMENT OPERATOR (Class A CDL) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$42.03	\$9.25	\$1.26	\$13.09	\$0.00	\$65.63
EQUIPMENT OPERATOR (Class B CDL) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$37.09	\$9.25	\$1.11	\$9.76	\$0.00	\$57.21
GROUNDMAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$27.20	\$9.25	\$0.82	\$1.00	\$0.00	\$38.27
GROUNDMAN -Inexperienced (<2000 Hrs.) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$22.25	\$9.25	\$0.82	\$1.00	\$0.00	\$33.32
JOURNEYMAN LINEMAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2020	\$49.45	\$9.25	\$1.48	\$16.00	\$0.00	\$76.18

Apprentice: JOURNEYMAN LINEMAN							
Effective Date: 8/30/2020							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$29.67	\$9.25	\$0.89	\$2.50	\$0.00	\$42.31
2	65.00	\$32.14	\$9.25	\$0.96	\$2.50	\$0.00	\$44.85
3	70.00	\$34.62	\$9.25	\$1.04	\$2.50	\$0.00	\$47.41
4	75.00	\$37.09	\$9.25	\$1.11	\$4.00	\$0.00	\$51.45

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: JOURNEYMAN LINEMAN Effective Date: 8/30/2020							
		Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Step 5	80.00	\$39.56	\$9.25	\$1.19	\$4.00	\$0.00	\$54.00
Step 6	85.00	\$42.03	\$9.25	\$1.26	\$4.00	\$0.00	\$56.54
Step 7	90.00	\$44.51	\$9.25	\$1.34	\$6.00	\$0.00	\$61.10

Apprentice to Journeyworker Ratio: 1:2

TELEDATA CABLE SPLICER OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$30.73	\$4.70	\$0.92	\$2.25	\$0.00	\$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$28.93	\$4.70	\$0.89	\$2.25	\$0.00	\$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$28.93	\$4.70	\$0.89	\$2.25	\$0.00	\$36.77

Additional Apprentice Information

All apprentices must be registered with the Division of Apprenticeship Training(DAS) in accordance with M.G.L.c. 23, §§ 11E-11L. Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the hourly prevailing wage rate established by the Commissioner under the provisions of M.G.L.c. 149, §§ 26-27D.

Apprentice ratios are established by DAS pursuant to M.G.L.c. 23, §§ 11E-11L. Ratios are expressed as the allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified. The ratios listed herein have been taken from relevant private collective bargaining agreements(CBAs) and are provided for illustrative purposes only. They have not been independently verified as being accurate or continuing to be accurate.

Parties having questions regarding what ratio to use should contact DAS.



**THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS
Prevailing Wage Rates**

MAURA HEALY
Governor

KIM DRISCOLL
Lt. Governor

**As determined by the Director under the provisions of the
Massachusetts General Laws, Chapter 149, Sections 26 to 27H**

LAUREN JONES
Secretary
MICHAEL FLANAGAN
Director

Awarding Authority:	MassDOT Highway	City/Town:	HAVERHILL
Contract Number:	132474		
Description of Work:	BURLINGTON-HAVERHILL – Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)		
Job Location:	I-95 over Route 3 and 495 over Amesbury Lint Road		

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, the awarding authority must request an annual update no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. The updated wage schedule must be provided to all contractors, including general and sub-contractors, working on the construction project.
- This annual update requirement is generally not applicable to 27F “rental of equipment” contracts. For such contracts, the prevailing wage rates issued by DLS shall remain in effect for the duration of the contract term. However, if the prevailing wage rate sheet issued does not contain wage rates for each year covered by the contract term, the Awarding Authority must request updated rate sheets from DLS and provide them to the contractor to ensure the correct rates are being paid throughout the duration of the contract. Additionally, if an Awarding Authority exercises an option to renew or extend the contract term, they must request updated rate sheets from DLS and provide them to the contractor.
- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the “Wage Request Number” on all pages of this schedule.
- An Awarding Authority must request an updated wage schedule if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. 149 § 27. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or a sub-contractor.
- Apprentices working on the project are required to be registered with the Massachusetts Division of Apprentice Standards (DAS). Apprentices must keep their apprentice identification card on their persons during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. **Any apprentice not registered with DAS regardless of whether they are registered with another federal, state, local, or private agency must be paid the journeyworker's rate.**
- Every contractor or subcontractor working on the construction project must submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee’s name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. For a sample payroll reporting form go to <http://www.mass.gov/dols/pw>.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Contractors must obtain the wage schedules from awarding authorities. Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and criminal penalties.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may file a complaint with the Fair Labor Division of the office of the Attorney General at (617) 727-3465.

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT	6/1/2025	\$40.95	\$15.57	\$20.17	\$0.00	\$0.00	\$76.69
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$40.95	\$15.57	\$21.78	\$0.00	\$0.00	\$78.30
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$40.95	\$16.17	\$21.78	\$0.00	\$0.00	\$78.90
	6/1/2026	\$41.95	\$16.17	\$21.78	\$0.00	\$0.00	\$79.90
	12/1/2026	\$41.95	\$16.17	\$23.52	\$0.00	\$0.00	\$81.64
	1/1/2027	\$41.95	\$16.77	\$23.52	\$0.00	\$0.00	\$82.24
(3 AXLE) DRIVER - EQUIPMENT	6/1/2025	\$41.02	\$15.57	\$20.17	\$0.00	\$0.00	\$76.76
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.02	\$15.57	\$21.78	\$0.00	\$0.00	\$78.37
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.02	\$16.17	\$21.78	\$0.00	\$0.00	\$78.97
	6/1/2026	\$42.02	\$16.17	\$21.78	\$0.00	\$0.00	\$79.97
	12/1/2026	\$42.02	\$16.17	\$23.52	\$0.00	\$0.00	\$81.71
	1/1/2027	\$42.02	\$16.77	\$23.52	\$0.00	\$0.00	\$82.31
(4 & 5 AXLE) DRIVER - EQUIPMENT	6/1/2025	\$41.14	\$15.57	\$20.17	\$0.00	\$0.00	\$76.88
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.14	\$15.57	\$21.78	\$0.00	\$0.00	\$78.49
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.14	\$16.17	\$21.78	\$0.00	\$0.00	\$79.09
	6/1/2026	\$42.14	\$16.17	\$21.78	\$0.00	\$0.00	\$80.09
	12/1/2026	\$42.14	\$16.17	\$23.52	\$0.00	\$0.00	\$81.83
	1/1/2027	\$42.14	\$16.77	\$23.52	\$0.00	\$0.00	\$82.43
ADS/SUBMERSIBLE PILOT	1/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
For apprentice rates see "Apprentice- PILE DRIVER"							
AIR TRACK OPERATOR	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.11	\$0.00	\$69.35
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.11	\$0.00	\$70.73
LABORERS - ZONE 2	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.11	\$0.00	\$72.17
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.80	\$9.90	\$9.25	\$9.11	\$0.00	\$75.06
	12/1/2027	\$48.25	\$9.90	\$9.25	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.75	\$9.90	\$9.25	\$9.11	\$0.00	\$78.01
	12/1/2028	\$51.25	\$9.90	\$9.25	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
AIR TRACK OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.21	\$0.00	\$69.45
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.21	\$0.00	\$70.83
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.21	\$0.00	\$72.27
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASBESTOS REMOVER - PIPE / MECH. EQUIPT.	6/1/2025	\$43.80	\$14.50	\$4.30	\$6.75	\$0.00	\$69.35
HEAT & FROST INSULATORS LOCAL 6	12/1/2025	\$44.80	\$14.50	\$4.30	\$6.75	\$0.00	\$70.35
HEAT & FROST INSULATORS LOCAL 6 (BOSTON)							
ASPHALT RAKER	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
ASPHALT RAKER (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BACKHOE/FRONT-END LOADER	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
BARCO-TYPE JUMPING TAMPER	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.11	\$0.00	\$69.35
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.11	\$0.00	\$70.73
LABORERS - ZONE 2	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.11	\$0.00	\$72.17
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.80	\$9.90	\$9.25	\$9.11	\$0.00	\$75.06
	12/1/2027	\$48.25	\$9.90	\$9.25	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.75	\$9.90	\$9.25	\$9.11	\$0.00	\$78.01
	12/1/2028	\$51.25	\$9.90	\$9.25	\$9.11	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
BLOCK PAVER, RAMMER / CURB SETTER (HEAVY & HIGHWAY)	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.21	\$0.00	\$69.45
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.21	\$0.00	\$70.83
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.21	\$0.00	\$72.27
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
BOILER MAKER	1/1/2024	\$48.12	\$7.07	\$14.60	\$6.00	\$0.00	\$75.79
BOILERMAKERS LOCAL 29							
BOILERMAKERS LOCAL 29							

Apprentice: BOILER MAKER**Effective Date: 1/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
2	65.00	\$31.28	\$7.07	\$9.32	\$3.90	\$0.00	\$51.57
3	70.00	\$33.68	\$7.07	\$10.03	\$4.20	\$0.00	\$54.98
4	75.00	\$36.09	\$7.07	\$10.74	\$4.50	\$0.00	\$58.40
5	80.00	\$38.50	\$7.07	\$11.45	\$4.80	\$0.00	\$61.82
6	85.00	\$40.90	\$7.07	\$12.18	\$5.10	\$0.00	\$65.25
7	90.00	\$43.31	\$7.07	\$12.88	\$5.40	\$0.00	\$68.66
8	95.00	\$45.71	\$7.07	\$13.62	\$5.70	\$0.00	\$72.10

Apprentice to Journeyworker Ratio: 1:4

BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)	8/1/2025	\$67.95	\$11.49	\$15.57	\$8.02	\$0.00	\$103.03
BRICKLAYERS LOCAL 3	2/1/2026	\$69.30	\$11.49	\$15.57	\$8.02	\$0.00	\$104.38
BRICKLAYERS LOCAL 3 (LYNN)	8/1/2026	\$71.50	\$11.49	\$15.57	\$8.02	\$0.00	\$106.58
	2/1/2027	\$72.90	\$11.49	\$15.57	\$8.02	\$0.00	\$107.98

Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)**Effective Date: 8/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.98	\$11.49	\$15.57	\$8.02	\$0.00	\$69.06
2	60.00	\$40.77	\$11.49	\$15.57	\$8.02	\$0.00	\$75.85
3	70.00	\$47.57	\$11.49	\$15.57	\$8.02	\$0.00	\$82.65
4	80.00	\$54.36	\$11.49	\$15.57	\$8.02	\$0.00	\$89.44
5	90.00	\$61.16	\$11.49	\$15.57	\$8.02	\$0.00	\$96.24

Apprentice: BRICK/STONE/ARTIFICIAL MASONRY (INCL. MASONRY WATERPROOFING)**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.65	\$11.49	\$15.57	\$8.02	\$0.00	\$69.73
2	60.00	\$41.58	\$11.49	\$15.57	\$8.02	\$0.00	\$76.66
3	70.00	\$48.51	\$11.49	\$15.57	\$8.02	\$0.00	\$83.59
4	80.00	\$55.44	\$11.49	\$15.57	\$8.02	\$0.00	\$90.52
5	90.00	\$62.37	\$11.49	\$15.57	\$8.02	\$0.00	\$97.45

Apprentice to Journeyworker Ratio: 1:5

BULLDOZER/GRADER/SCRAPER	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
CAISSON & UNDERPINNING BOTTOM MAN LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$48.85	\$9.90	\$9.25	\$9.80	\$0.00	\$77.80
	12/1/2025	\$50.35	\$9.90	\$9.25	\$9.80	\$0.00	\$79.30
	6/1/2026	\$51.90	\$9.90	\$9.25	\$9.80	\$0.00	\$80.85
	12/1/2026	\$53.40	\$9.90	\$9.25	\$9.80	\$0.00	\$82.35
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING LABORER LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.80	\$0.00	\$76.65
	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.80	\$0.00	\$78.15
	6/1/2026	\$50.75	\$9.90	\$9.25	\$9.80	\$0.00	\$79.70
	12/1/2026	\$52.25	\$9.90	\$9.25	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
CAISSON & UNDERPINNING TOP MAN LABORERS LABORERS - FOUNDATION AND MARINE	6/1/2025	\$48.03	\$9.90	\$9.25	\$9.80	\$0.00	\$76.98
	12/1/2025	\$49.53	\$9.90	\$9.25	\$9.80	\$0.00	\$78.48
	6/1/2026	\$51.08	\$9.90	\$9.25	\$9.80	\$0.00	\$80.03
	12/1/2026	\$52.58	\$9.90	\$9.25	\$9.80	\$0.00	\$81.53
For apprentice rates see "Apprentice- LABORER"							
CARBIDE CORE DRILL OPERATOR LABORERS LABORERS - ZONE 2	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
CARPENTER CARPENTERS CARPENTERS -ZONE 2 (Eastern Massachusetts)	9/1/2025	\$50.35	\$10.33	\$11.47	\$8.50	\$0.00	\$80.65
	3/1/2026	\$51.60	\$10.33	\$11.47	\$8.50	\$0.00	\$81.90
	9/1/2026	\$52.85	\$10.33	\$11.47	\$8.50	\$0.00	\$83.15
	3/1/2027	\$54.10	\$10.33	\$11.47	\$8.50	\$0.00	\$84.40

Apprentice: CARPENTER							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$22.66	\$10.33	\$0.00	\$1.73	\$0.00	\$34.72
2	45.00	\$22.66	\$10.33	\$0.00	\$1.73	\$0.00	\$34.72
3	55.00	\$27.69	\$10.33	\$0.00	\$3.40	\$0.00	\$41.42
4	55.00	\$27.69	\$10.33	\$0.00	\$3.40	\$0.00	\$41.42
5	70.00	\$35.25	\$10.33	\$11.41	\$5.10	\$0.00	\$62.09
6	70.00	\$35.25	\$10.33	\$11.41	\$5.10	\$0.00	\$62.09
7	80.00	\$40.28	\$10.33	\$11.44	\$6.80	\$0.00	\$68.85
8	80.00	\$40.28	\$10.33	\$11.44	\$6.80	\$0.00	\$68.85

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: CARPENTER							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.22	\$10.33	\$0.00	\$1.73	\$0.00	\$35.28
2	45.00	\$23.22	\$10.33	\$0.00	\$1.73	\$0.00	\$35.28
3	55.00	\$28.38	\$10.33	\$0.00	\$3.40	\$0.00	\$42.11
4	55.00	\$28.38	\$10.33	\$0.00	\$3.40	\$0.00	\$42.11
5	70.00	\$36.12	\$10.33	\$11.41	\$5.10	\$0.00	\$62.96
6	70.00	\$36.12	\$10.33	\$11.41	\$5.10	\$0.00	\$62.96
7	80.00	\$41.28	\$10.33	\$11.44	\$6.80	\$0.00	\$69.85
8	80.00	\$41.28	\$10.33	\$11.44	\$6.80	\$0.00	\$69.85

Apprentice to Journeyworker Ratio: 1:5

CARPENTER WOOD FRAME	10/1/2024	\$26.65	\$7.02	\$3.80	\$1.00	\$0.00	\$38.47
CARPENTERS	10/1/2025	\$27.75	\$7.02	\$3.80	\$1.00	\$0.00	\$39.57
CARPENTERS-ZONE 3 (Wood Frame)	10/1/2026	\$28.85	\$7.02	\$3.80	\$1.00	\$0.00	\$40.67
All Aspects of New Wood Frame Work							

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2024							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$15.99	\$7.02	\$0.00	\$0.00	\$0.00	\$23.01
2	60.00	\$15.99	\$7.02	\$0.00	\$0.00	\$0.00	\$23.01
3	65.00	\$17.32	\$7.02	\$0.00	\$1.00	\$0.00	\$25.34
4	70.00	\$18.66	\$7.02	\$0.00	\$1.00	\$0.00	\$26.68
5	75.00	\$19.99	\$7.02	\$3.80	\$1.00	\$0.00	\$31.81
6	80.00	\$21.32	\$7.02	\$3.80	\$1.00	\$0.00	\$33.14
7	85.00	\$22.65	\$7.02	\$3.80	\$1.00	\$0.00	\$34.47
8	90.00	\$23.99	\$7.02	\$3.80	\$1.00	\$0.00	\$35.81

Apprentice: CARPENTER WOOD FRAME							
Effective Date: 10/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
2	60.00	\$16.65	\$7.02	\$0.00	\$0.00	\$0.00	\$23.67
3	65.00	\$18.04	\$7.02	\$0.00	\$1.00	\$0.00	\$26.06
4	70.00	\$19.43	\$7.02	\$0.00	\$1.00	\$0.00	\$27.45
5	75.00	\$20.81	\$7.02	\$3.80	\$1.00	\$0.00	\$32.63
6	80.00	\$22.20	\$7.02	\$3.80	\$1.00	\$0.00	\$34.02
7	85.00	\$23.59	\$7.02	\$3.80	\$1.00	\$0.00	\$35.41
8	90.00	\$24.98	\$7.02	\$3.80	\$1.00	\$0.00	\$36.80

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																																																
Apprentice to Journeyworker Ratio: 1:5																																																																							
CEMENT MASONRY/PLASTERING BRICKLAYERS LOCAL 3 BRICKLAYERS LOCAL 3 (LYNN)	7/1/2024	\$49.19	\$13.35	\$16.43	\$7.78	\$1.80	\$88.55																																																																
Apprentice: CEMENT MASONRY/PLASTERING Effective Date: 7/1/2024 <table> <tr> <th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr> <tr> <td>1</td><td>50.00</td><td>\$24.60</td><td>\$13.35</td><td>\$16.43</td><td>\$0.00</td><td>\$0.00</td><td>\$54.38</td></tr> <tr> <td>2</td><td>60.00</td><td>\$29.51</td><td>\$13.35</td><td>\$16.43</td><td>\$2.78</td><td>\$1.80</td><td>\$63.87</td></tr> <tr> <td>3</td><td>65.00</td><td>\$31.97</td><td>\$13.35</td><td>\$16.43</td><td>\$3.78</td><td>\$1.80</td><td>\$67.33</td></tr> <tr> <td>4</td><td>70.00</td><td>\$34.43</td><td>\$13.35</td><td>\$16.43</td><td>\$4.78</td><td>\$1.80</td><td>\$70.79</td></tr> <tr> <td>5</td><td>75.00</td><td>\$36.89</td><td>\$13.35</td><td>\$16.43</td><td>\$5.78</td><td>\$1.80</td><td>\$74.25</td></tr> <tr> <td>6</td><td>80.00</td><td>\$39.35</td><td>\$13.35</td><td>\$16.43</td><td>\$6.78</td><td>\$1.80</td><td>\$77.71</td></tr> <tr> <td>7</td><td>90.00</td><td>\$44.27</td><td>\$13.35</td><td>\$16.43</td><td>\$7.78</td><td>\$1.80</td><td>\$83.63</td></tr> </table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	1	50.00	\$24.60	\$13.35	\$16.43	\$0.00	\$0.00	\$54.38	2	60.00	\$29.51	\$13.35	\$16.43	\$2.78	\$1.80	\$63.87	3	65.00	\$31.97	\$13.35	\$16.43	\$3.78	\$1.80	\$67.33	4	70.00	\$34.43	\$13.35	\$16.43	\$4.78	\$1.80	\$70.79	5	75.00	\$36.89	\$13.35	\$16.43	\$5.78	\$1.80	\$74.25	6	80.00	\$39.35	\$13.35	\$16.43	\$6.78	\$1.80	\$77.71	7	90.00	\$44.27	\$13.35	\$16.43	\$7.78	\$1.80	\$83.63
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																																																
1	50.00	\$24.60	\$13.35	\$16.43	\$0.00	\$0.00	\$54.38																																																																
2	60.00	\$29.51	\$13.35	\$16.43	\$2.78	\$1.80	\$63.87																																																																
3	65.00	\$31.97	\$13.35	\$16.43	\$3.78	\$1.80	\$67.33																																																																
4	70.00	\$34.43	\$13.35	\$16.43	\$4.78	\$1.80	\$70.79																																																																
5	75.00	\$36.89	\$13.35	\$16.43	\$5.78	\$1.80	\$74.25																																																																
6	80.00	\$39.35	\$13.35	\$16.43	\$6.78	\$1.80	\$77.71																																																																
7	90.00	\$44.27	\$13.35	\$16.43	\$7.78	\$1.80	\$83.63																																																																
Apprentice to Journeyworker Ratio: 1:3																																																																							
CHAIN SAW OPERATOR	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85																																																																
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23																																																																
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67																																																																
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11																																																																
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56																																																																
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01																																																																
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51																																																																
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01																																																																
For apprentice rates see "Apprentice- LABORER"																																																																							
CLAM SHELLS/SLURRY BUCKETS/HEADING MACHINES	6/1/2025	\$59.51	\$15.55	\$13.25	\$3.25	\$0.00	\$91.56																																																																
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$60.98	\$15.55	\$13.25	\$3.25	\$0.00	\$93.03																																																																
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$62.31	\$15.55	\$13.25	\$3.25	\$0.00	\$94.36																																																																
	12/1/2026	\$63.79	\$15.55	\$13.25	\$3.25	\$0.00	\$95.84																																																																
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																																																							
COMPRESSOR OPERATOR	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57																																																																
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52																																																																
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38																																																																
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33																																																																
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																																																							
DELEADER (BRIDGE)	7/1/2025	\$58.51	\$10.30	\$11.95	\$12.50	\$0.00	\$93.26																																																																
PAINTERS LOCAL 35	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.60	\$0.00	\$94.51																																																																
PAINTERS LOCAL 35 - ZONE 2																																																																							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: DELEADER (BRIDGE)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.26	\$10.30	\$0.00	\$0.00	\$0.00	\$39.56
2	55.00	\$32.18	\$10.30	\$0.00	\$6.88	\$0.00	\$49.36
3	60.00	\$35.11	\$10.30	\$0.00	\$7.50	\$0.00	\$52.91
4	65.00	\$38.03	\$10.30	\$0.00	\$8.13	\$0.00	\$56.46
5	70.00	\$40.96	\$10.30	\$11.95	\$8.75	\$0.00	\$71.96
6	75.00	\$43.88	\$10.30	\$11.95	\$9.38	\$0.00	\$75.51
7	80.00	\$46.81	\$10.30	\$11.95	\$10.00	\$0.00	\$79.06
8	90.00	\$52.66	\$10.30	\$11.95	\$11.25	\$0.00	\$86.16

Apprentice: DELEADER (BRIDGE)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29

Apprentice to Journeyworker Ratio: 1:1

DEMO: ADZEMAN	6/2/2025	\$47.75	\$9.90	\$9.25	\$9.65	\$0.00	\$76.55
LABORERS	12/1/2025	\$49.25	\$9.90	\$9.25	\$9.65	\$0.00	\$78.05
LABORERS - ZONE 2	6/1/2026	\$50.80	\$9.90	\$9.25	\$9.65	\$0.00	\$79.60
	12/7/2026	\$52.30	\$9.90	\$9.25	\$9.65	\$0.00	\$81.10
	6/7/2027	\$53.90	\$9.90	\$9.25	\$9.65	\$0.00	\$82.70
	12/6/2027	\$55.50	\$9.90	\$9.25	\$9.65	\$0.00	\$84.30
	6/5/2028	\$57.18	\$9.90	\$9.25	\$9.65	\$0.00	\$85.98
	12/4/2028	\$58.85	\$9.90	\$9.25	\$9.65	\$0.00	\$87.65

For apprentice rates see "Apprentice- LABORER"

DEMO: BACKHOE/LOADER/HAMMER OPERATOR	6/2/2025	\$48.75	\$9.90	\$9.25	\$9.65	\$0.00	\$77.55
LABORERS	12/1/2025	\$50.25	\$9.90	\$9.25	\$9.65	\$0.00	\$79.05
LABORERS - ZONE 2	6/1/2026	\$51.80	\$9.90	\$9.25	\$9.65	\$0.00	\$80.60
	12/7/2026	\$53.30	\$9.90	\$9.25	\$9.65	\$0.00	\$82.10
	6/7/2027	\$54.90	\$9.90	\$9.25	\$9.65	\$0.00	\$83.70
	12/6/2027	\$56.50	\$9.90	\$9.25	\$9.65	\$0.00	\$85.30
	6/5/2028	\$58.18	\$9.90	\$9.25	\$9.65	\$0.00	\$86.98
	12/4/2028	\$59.85	\$9.90	\$9.25	\$9.65	\$0.00	\$88.65

For apprentice rates see "Apprentice- LABORER"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
DEMO: BURNERS	6/2/2025	\$48.50	\$9.90	\$9.25	\$9.65	\$0.00	\$77.30
LABORERS	12/1/2025	\$50.00	\$9.90	\$9.25	\$9.65	\$0.00	\$78.80
LABORERS - ZONE 2	6/1/2026	\$51.55	\$9.90	\$9.25	\$9.65	\$0.00	\$80.35
	12/7/2026	\$53.05	\$9.90	\$9.25	\$9.65	\$0.00	\$81.85
	6/7/2027	\$54.65	\$9.90	\$9.25	\$9.65	\$0.00	\$83.45
	12/6/2027	\$56.25	\$9.90	\$9.25	\$9.65	\$0.00	\$85.05
	6/5/2028	\$57.93	\$9.90	\$9.25	\$9.65	\$0.00	\$86.73
	12/4/2028	\$59.60	\$9.90	\$9.25	\$9.65	\$0.00	\$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: CONCRETE CUTTER/SAWYER	6/2/2025	\$48.75	\$9.90	\$9.25	\$9.65	\$0.00	\$77.55
LABORERS	12/1/2025	\$50.25	\$9.90	\$9.25	\$9.65	\$0.00	\$79.05
LABORERS - ZONE 2	6/1/2026	\$51.80	\$9.90	\$9.25	\$9.65	\$0.00	\$80.60
	12/7/2026	\$53.30	\$9.90	\$9.25	\$9.65	\$0.00	\$82.10
	6/7/2027	\$54.90	\$9.90	\$9.25	\$9.65	\$0.00	\$83.70
	12/6/2027	\$56.50	\$9.90	\$9.25	\$9.65	\$0.00	\$85.30
	6/5/2028	\$58.18	\$9.90	\$9.25	\$9.65	\$0.00	\$86.98
	12/4/2028	\$59.85	\$9.90	\$9.25	\$9.65	\$0.00	\$88.65
For apprentice rates see "Apprentice- LABORER"							
DEMO: JACKHAMMER OPERATOR	6/2/2025	\$48.50	\$9.90	\$9.25	\$9.65	\$0.00	\$77.30
LABORERS	12/1/2025	\$50.00	\$9.90	\$9.25	\$9.65	\$0.00	\$78.80
LABORERS - ZONE 2	6/1/2026	\$51.55	\$9.90	\$9.25	\$9.65	\$0.00	\$80.35
	12/7/2026	\$53.05	\$9.90	\$9.25	\$9.65	\$0.00	\$81.85
	6/7/2027	\$54.65	\$9.90	\$9.25	\$9.65	\$0.00	\$83.45
	12/6/2027	\$56.25	\$9.90	\$9.25	\$9.65	\$0.00	\$85.05
	6/5/2028	\$57.93	\$9.90	\$9.25	\$9.65	\$0.00	\$86.73
	12/4/2028	\$59.60	\$9.90	\$9.25	\$9.65	\$0.00	\$88.40
For apprentice rates see "Apprentice- LABORER"							
DEMO: WRECKING LABORER	6/2/2025	\$47.75	\$9.90	\$9.25	\$9.65	\$0.00	\$76.55
LABORERS	12/1/2025	\$49.25	\$9.90	\$9.25	\$9.65	\$0.00	\$78.05
LABORERS - ZONE 2	6/1/2026	\$50.80	\$9.90	\$9.25	\$9.65	\$0.00	\$79.60
	12/7/2026	\$52.30	\$9.90	\$9.25	\$9.65	\$0.00	\$81.10
	6/7/2027	\$53.90	\$9.90	\$9.25	\$9.65	\$0.00	\$82.70
	12/6/2027	\$55.50	\$9.90	\$9.25	\$9.65	\$0.00	\$84.30
	6/5/2028	\$57.18	\$9.90	\$9.25	\$9.65	\$0.00	\$85.98
	12/4/2028	\$58.85	\$9.90	\$9.25	\$9.65	\$0.00	\$87.65
For apprentice rates see "Apprentice- LABORER"							
DIRECTIONAL DRILL MACHINE OPERATOR	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
DIVER	8/1/2024	\$78.11	\$10.08	\$11.62	\$10.04	\$0.00	\$109.85
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Diver wage 70/80/90 2A \$69.83, 3A \$91.79,4A \$102.14 Total Rate							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
DIVER TENDER PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
as of 8-1-24, Apprentices with diving licenses begin at second year. % of Piledriver wage 70/80/90 2A \$54.20, 3A \$73.93,4A \$82.05 Total Rate							
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	\$83.69	\$10.08	\$11.62	\$12.67	\$0.00	\$118.06
For apprentice rates see "Apprentice- PILE DRIVER"							
DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 PILE DRIVER LOCAL 56 (ZONE 1)	8/1/2024	\$117.16	\$10.08	\$11.62	\$12.67	\$0.00	\$151.53
For apprentice rates see "Apprentice- PILE DRIVER"							
DRAWBRIDGE OPERATOR (Construction) DRAWBRIDGE - SEIU LOCAL 888 DRAWBRIDGE - SEIU LOCAL 888	7/1/2020	\$26.77	\$6.67	\$3.93	\$0.00	\$0.16	\$37.53
ELECTRICIAN ELECTRICIANS LOCAL 103 ELECTRICIANS LOCAL 103	9/1/2025	\$66.17	\$13.00	\$14.37	\$8.72	\$0.00	\$102.26
	3/1/2026	\$66.86	\$13.00	\$14.64	\$9.00	\$0.00	\$103.50
	9/1/2026	\$68.78	\$13.00	\$14.69	\$9.00	\$0.00	\$105.47
	3/1/2027	\$69.97	\$13.00	\$14.73	\$9.00	\$0.00	\$106.70
	9/1/2027	\$71.88	\$13.00	\$14.79	\$9.00	\$0.00	\$108.67
	3/1/2028	\$73.08	\$13.00	\$14.82	\$9.00	\$0.00	\$109.90

Apprentice: ELECTRICIAN**Effective Date: 9/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$26.47	\$13.00	\$0.79	\$0.00	\$0.00	\$40.26
2	40.00	\$26.47	\$13.00	\$0.79	\$0.00	\$0.00	\$40.26
3	45.00	\$29.78	\$13.00	\$13.27	\$3.92	\$0.00	\$59.97
4	45.00	\$29.78	\$13.00	\$13.27	\$3.92	\$0.00	\$59.97
5	50.00	\$33.09	\$13.00	\$13.37	\$4.36	\$0.00	\$63.82
6	55.00	\$36.39	\$13.00	\$13.47	\$4.80	\$0.00	\$67.66
7	60.00	\$39.70	\$13.00	\$13.57	\$5.23	\$0.00	\$71.50
8	65.00	\$43.01	\$13.00	\$13.67	\$5.67	\$0.00	\$75.35
9	70.00	\$46.32	\$13.00	\$13.77	\$6.10	\$0.00	\$79.19
10	75.00	\$49.63	\$13.00	\$13.87	\$6.54	\$0.00	\$83.04

Apprentice: ELECTRICIAN**Effective Date: 3/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$26.74	\$13.00	\$0.80	\$0.00	\$0.00	\$40.54
2	40.00	\$26.74	\$13.00	\$0.80	\$0.00	\$0.00	\$40.54
3	45.00	\$30.09	\$13.00	\$13.53	\$3.92	\$0.00	\$60.54
4	45.00	\$30.09	\$13.00	\$13.53	\$4.05	\$0.00	\$60.67

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: ELECTRICIAN Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	50.00	\$33.43	\$13.00	\$13.63	\$4.50	\$0.00	\$64.56
6	55.00	\$36.77	\$13.00	\$13.73	\$4.95	\$0.00	\$68.45
7	60.00	\$40.12	\$13.00	\$13.83	\$5.40	\$0.00	\$72.35
8	65.00	\$43.46	\$13.00	\$13.93	\$5.85	\$0.00	\$76.24
9	70.00	\$46.80	\$13.00	\$14.03	\$6.30	\$0.00	\$80.13
10	75.00	\$50.15	\$13.00	\$14.13	\$6.75	\$0.00	\$84.03
Apprentice Notes :							
Apprentice to Journeyworker Ratio: 2:3							
ELEVATOR CONSTRUCTOR	1/1/2025	\$74.17	\$16.28	\$10.96	\$10.40	\$0.00	\$111.81
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2026	\$77.26	\$16.38	\$11.06	\$10.70	\$0.00	\$115.40
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$80.55	\$16.48	\$11.16	\$11.00	\$0.00	\$119.19
Apprentice: ELEVATOR CONSTRUCTOR Effective Date: 1/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$37.09	\$0.00	\$0.00	\$0.00	\$0.00	\$37.09
2	55.00	\$40.79	\$16.28	\$10.96	\$10.40	\$0.00	\$78.43
3	65.00	\$48.21	\$16.28	\$10.96	\$10.40	\$0.00	\$85.85
4	70.00	\$51.92	\$16.28	\$10.96	\$10.40	\$0.00	\$89.56
5	80.00	\$59.34	\$16.28	\$10.96	\$10.40	\$0.00	\$96.98
Apprentice: ELEVATOR CONSTRUCTOR Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$38.63	\$0.00	\$0.00	\$0.00	\$0.00	\$38.63
2	55.00	\$42.49	\$16.38	\$11.06	\$10.70	\$0.00	\$80.63
3	65.00	\$50.22	\$16.38	\$11.06	\$10.70	\$0.00	\$88.36
4	70.00	\$54.08	\$16.38	\$11.06	\$10.70	\$0.00	\$92.22
5	80.00	\$61.81	\$16.38	\$11.06	\$10.70	\$0.00	\$99.95
Apprentice to Journeyworker Ratio: 1:1							
ELEVATOR CONSTRUCTOR HELPER	1/1/2025	\$51.92	\$16.28	\$10.96	\$10.40	\$0.00	\$89.56
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2026	\$54.08	\$16.38	\$11.06	\$10.07	\$0.00	\$91.59
ELEVATOR CONSTRUCTORS LOCAL 4	1/1/2027	\$56.39	\$16.48	\$11.16	\$11.00	\$0.00	\$95.03
For apprentice rates see "Apprentice - ELEVATOR CONSTRUCTOR"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
FENCE & GUARD RAIL ERECTOR (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
FIELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY	5/1/2025	\$53.22	\$15.30	\$13.15	\$3.25	\$0.00	\$84.92
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$54.51	\$15.30	\$13.15	\$3.25	\$0.00	\$86.21
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$55.95	\$15.30	\$13.15	\$3.25	\$0.00	\$87.65
	11/1/2026	\$57.24	\$15.30	\$13.15	\$3.25	\$0.00	\$88.94
	5/1/2027	\$58.67	\$15.30	\$13.15	\$3.25	\$0.00	\$90.37
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY	5/1/2025	\$54.82	\$15.30	\$13.15	\$3.25	\$0.00	\$86.52
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$56.12	\$15.30	\$13.15	\$3.25	\$0.00	\$87.82
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$57.57	\$15.30	\$13.15	\$3.25	\$0.00	\$89.27
	11/1/2026	\$58.87	\$15.30	\$13.15	\$3.25	\$0.00	\$90.57
	5/1/2027	\$60.32	\$15.30	\$13.15	\$3.25	\$0.00	\$92.02
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY	5/1/2025	\$26.22	\$15.30	\$13.15	\$3.25	\$0.00	\$57.92
OPERATING ENGINEERS LOCAL 4	11/1/2025	\$26.98	\$15.30	\$13.15	\$3.25	\$0.00	\$58.68
OPERATING ENGINEERS LOCAL 4	5/1/2026	\$27.83	\$15.30	\$13.15	\$3.25	\$0.00	\$59.53
	11/1/2026	\$28.59	\$15.30	\$13.15	\$3.25	\$0.00	\$60.29
	5/1/2027	\$29.44	\$15.30	\$13.15	\$3.25	\$0.00	\$61.14
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FIRE ALARM INSTALLER	9/1/2025	\$66.17	\$13.00	\$14.37	\$9.00	\$0.00	\$102.54
ELECTRICIANS LOCAL 103	3/1/2026	\$66.86	\$13.00	\$14.64	\$9.00	\$0.00	\$103.50
ELECTRICIANS LOCAL 103	9/1/2026	\$68.78	\$13.00	\$14.69	\$9.00	\$0.00	\$105.47
	3/1/2027	\$69.97	\$13.00	\$14.73	\$9.00	\$0.00	\$106.70
	9/1/2027	\$71.88	\$13.00	\$14.79	\$9.00	\$0.00	\$108.67
	3/1/2028	\$73.08	\$13.00	\$14.82	\$9.00	\$0.00	\$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
FIRE ALARM REPAIR / MAINTENANCE	9/1/2025	\$52.94	\$13.00	\$13.97	\$6.98	\$0.00	\$86.89
/ COMMISSIONING	3/1/2026	\$53.49	\$13.00	\$14.23	\$7.20	\$0.00	\$87.92
ELECTRICIANS LOCAL 103	9/1/2026	\$55.02	\$13.00	\$14.28	\$7.20	\$0.00	\$89.50
ELECTRICIANS LOCAL 103	3/1/2027	\$55.98	\$13.00	\$14.31	\$7.20	\$0.00	\$90.49
	9/1/2027	\$57.50	\$13.00	\$14.36	\$7.20	\$0.00	\$92.06
	3/1/2028	\$58.46	\$13.00	\$14.38	\$7.20	\$0.00	\$93.04
For apprentice rates see "Apprentice- TELECOMMUNICATIONS TECHNICIAN"							
FIREMAN (ASST. ENGINEER)	6/1/2025	\$47.02	\$15.55	\$13.25	\$3.25	\$0.00	\$79.07
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$48.19	\$15.55	\$13.25	\$3.25	\$0.00	\$80.24
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$49.25	\$15.55	\$13.25	\$3.25	\$0.00	\$81.30
	12/1/2026	\$50.43	\$15.55	\$13.25	\$3.25	\$0.00	\$82.48
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
FLAGGER & SIGNALER (HEAVY & HIGHWAY)	6/1/2025	\$28.09	\$9.90	\$9.25	\$9.21	\$0.00	\$56.45

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS	12/1/2025	\$28.09	\$9.90	\$9.25	\$9.21	\$0.00	\$56.45
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$29.21	\$9.90	\$9.25	\$9.21	\$0.00	\$57.57
	12/1/2026	\$29.21	\$9.90	\$9.25	\$9.21	\$0.00	\$57.57

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

FLOORCOVERER	9/1/2025	\$57.74	\$10.33	\$11.47	\$8.80	\$0.00	\$88.34
FLOORCOVERERS LOCAL 2168	3/1/2026	\$59.24	\$10.33	\$11.47	\$8.80	\$0.00	\$89.84
FLOORCOVERERS LOCAL 2168 ZONE I	9/1/2026	\$60.74	\$10.33	\$11.47	\$8.80	\$0.00	\$91.34
	3/1/2027	\$62.24	\$10.33	\$11.47	\$8.80	\$0.00	\$92.84

Apprentice: FLOORCOVERER**Effective Date: 9/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$25.98	\$10.33	\$0.00	\$1.76	\$0.00	\$38.07
2	45.00	\$25.98	\$10.33	\$0.00	\$1.76	\$0.00	\$38.07
3	55.00	\$31.76	\$10.33	\$0.00	\$3.52	\$0.00	\$45.61
4	55.00	\$31.76	\$10.33	\$0.00	\$3.52	\$0.00	\$45.61
5	70.00	\$40.42	\$10.33	\$11.47	\$5.28	\$0.00	\$67.50
6	70.00	\$40.42	\$10.33	\$11.47	\$5.28	\$0.00	\$67.50
7	80.00	\$46.19	\$10.33	\$11.47	\$7.04	\$0.00	\$75.03
8	80.00	\$46.19	\$10.33	\$11.47	\$7.04	\$0.00	\$75.03

Apprentice: FLOORCOVERER**Effective Date: 3/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$26.66	\$10.33	\$0.00	\$1.76	\$0.00	\$38.75
2	45.00	\$26.66	\$10.33	\$0.00	\$1.76	\$0.00	\$38.75
3	55.00	\$32.58	\$10.33	\$0.00	\$3.52	\$0.00	\$46.43
4	55.00	\$32.58	\$10.33	\$0.00	\$3.52	\$0.00	\$46.43
5	70.00	\$41.47	\$10.33	\$11.47	\$5.28	\$0.00	\$68.55
6	70.00	\$41.47	\$10.33	\$11.47	\$5.28	\$0.00	\$68.55
7	80.00	\$47.39	\$10.33	\$11.47	\$7.04	\$0.00	\$76.23
8	80.00	\$47.39	\$10.33	\$11.47	\$7.04	\$0.00	\$76.23

Apprentice Notes

Steps are 750 hrs.

Apprentice to Journeyworker Ratio: 1:1

FORK LIFT/CHERRY PICKER	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GENERATOR/LIGHTING PLANT/HEATERS	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)	7/1/2025	\$48.01	\$10.30	\$11.95	\$12.50	\$0.00	\$82.76
GLAZIERS LOCAL 35	1/1/2026	\$49.06	\$10.35	\$12.00	\$12.60	\$0.00	\$84.01
GLAZIERS LOCAL 35 (ZONE 2)							

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)**Effective Date: 7/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.01	\$10.30	\$0.00	\$0.00	\$0.00	\$34.31
2	55.00	\$26.41	\$10.30	\$0.00	\$6.88	\$0.00	\$43.59
3	60.00	\$28.81	\$10.30	\$0.00	\$7.50	\$0.00	\$46.61
4	65.00	\$31.21	\$10.30	\$0.00	\$8.13	\$0.00	\$49.64
5	70.00	\$33.61	\$10.30	\$11.95	\$8.75	\$0.00	\$64.61
6	75.00	\$36.01	\$10.30	\$11.95	\$9.38	\$0.00	\$67.64
7	80.00	\$38.41	\$10.30	\$11.95	\$10.00	\$0.00	\$70.66
8	90.00	\$43.21	\$10.30	\$11.95	\$11.25	\$0.00	\$76.71

Apprentice: GLAZIER (GLASS PLANK/AIR BARRIER/INTERIOR SYSTEMS)**Effective Date: 1/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.53	\$10.30	\$0.00	\$0.00	\$0.00	\$34.83
2	55.00	\$26.98	\$10.30	\$0.00	\$6.88	\$0.00	\$44.16
3	60.00	\$29.44	\$10.30	\$0.00	\$7.50	\$0.00	\$47.24
4	65.00	\$31.89	\$10.30	\$0.00	\$8.13	\$0.00	\$50.32
5	70.00	\$34.34	\$10.30	\$11.95	\$8.75	\$0.00	\$65.34
6	75.00	\$36.80	\$10.30	\$11.95	\$9.38	\$0.00	\$68.43
7	80.00	\$39.25	\$10.30	\$11.95	\$10.00	\$0.00	\$71.50
8	90.00	\$44.15	\$10.30	\$11.95	\$11.25	\$0.00	\$77.65

Apprentice to Journeyworker Ratio: 1:1

HOISTING ENGINEER/CRANES/GRADALLS	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58

Apprentice: HOISTING ENGINEER/CRANES/GRADALLS**Effective Date: 6/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.08	\$0.00	\$0.00	\$0.00	\$0.00	\$32.08

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: HOISTING ENGINEER/CRANES/GRADALLS							
Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
2	60.00	\$35.00	\$15.55	\$13.25	\$3.25	\$0.00	\$67.05
3	65.00	\$37.91	\$15.55	\$13.25	\$3.25	\$0.00	\$69.96
4	70.00	\$40.83	\$15.55	\$13.25	\$3.25	\$0.00	\$72.88
5	75.00	\$43.75	\$15.55	\$13.25	\$3.25	\$0.00	\$75.80
6	80.00	\$46.66	\$15.55	\$13.25	\$3.25	\$0.00	\$78.71
7	85.00	\$49.58	\$15.55	\$13.25	\$3.25	\$0.00	\$81.63
8	90.00	\$52.50	\$15.55	\$13.25	\$3.25	\$0.00	\$84.55
Apprentice: HOISTING ENGINEER/CRANES/GRADALLS							
Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$32.88	\$0.00	\$0.00	\$0.00	\$0.00	\$32.88
2	60.00	\$35.87	\$15.55	\$13.25	\$3.25	\$0.00	\$67.92
3	65.00	\$38.86	\$15.55	\$13.25	\$3.25	\$0.00	\$70.91
4	70.00	\$41.85	\$15.55	\$13.25	\$3.25	\$0.00	\$73.90
5	75.00	\$44.84	\$15.55	\$13.25	\$3.25	\$0.00	\$76.89
6	80.00	\$47.82	\$15.55	\$13.25	\$3.25	\$0.00	\$79.87
7	85.00	\$50.81	\$15.55	\$13.25	\$3.25	\$0.00	\$82.86
8	90.00	\$53.80	\$15.55	\$13.25	\$3.25	\$0.00	\$85.85
Apprentice to Journeyworker Ratio: 1:6							
HVAC (DUCTWORK)	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (ELECTRICAL CONTROLS)	9/1/2025	\$66.17	\$13.00	\$14.37	\$8.72	\$0.00	\$102.26
ELECTRICIANS LOCAL 103	3/1/2026	\$66.86	\$13.00	\$14.64	\$9.00	\$0.00	\$103.50
ELECTRICIANS LOCAL 103	9/1/2026	\$68.78	\$13.00	\$14.69	\$9.00	\$0.00	\$105.47
	3/1/2027	\$69.97	\$13.00	\$14.73	\$9.00	\$0.00	\$106.70
	9/1/2027	\$71.88	\$13.00	\$14.79	\$9.00	\$0.00	\$108.67
	3/1/2028	\$73.08	\$13.00	\$14.82	\$9.00	\$0.00	\$109.90
For apprentice rates see "Apprentice- ELECTRICIAN"							
HVAC (TESTING AND BALANCING - AIR)	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							
For apprentice rates see "Apprentice- SHEET METAL WORKER"							
HVAC (TESTING AND BALANCING -WATER)	3/1/2025	\$68.88	\$12.70	\$13.05	\$8.75	\$0.00	\$103.38
PIPEFITTERS LOCAL 537							
PIPEFITTERS LOCAL 537 (Local 138)							
For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
HVAC MECHANIC PIPEFITTERS LOCAL 537 PIPEFITTERS LOCAL 537 (Local 138)	3/1/2025	\$68.88	\$12.70	\$13.05	\$8.75	\$0.00	\$103.38

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

HYDRAULIC DRILLS LABORERS	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.11	\$0.00	\$69.35
LABORERS - ZONE 2	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.11	\$0.00	\$70.73
	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.11	\$0.00	\$72.17
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.11	\$0.00	\$73.61
	6/1/2027	\$46.80	\$9.90	\$9.25	\$9.11	\$0.00	\$75.06
	12/1/2027	\$48.25	\$9.90	\$9.25	\$9.11	\$0.00	\$76.51
	6/1/2028	\$49.75	\$9.90	\$9.25	\$9.11	\$0.00	\$78.01
	12/1/2028	\$51.25	\$9.90	\$9.25	\$9.11	\$0.00	\$79.51

For apprentice rates see "Apprentice- LABORER"

HYDRAULIC DRILLS (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$41.09	\$9.90	\$9.25	\$9.21	\$0.00	\$69.45
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	\$42.47	\$9.90	\$9.25	\$9.21	\$0.00	\$70.83
	6/1/2026	\$43.91	\$9.90	\$9.25	\$9.21	\$0.00	\$72.27
	12/1/2026	\$45.35	\$9.90	\$9.25	\$9.21	\$0.00	\$73.71

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

INSULATOR (PIPES & TANKS)	9/1/2025	\$60.34	\$14.75	\$9.52	\$10.09	\$0.00	\$94.70
HEAT & FROST INSULATORS LOCAL 6	9/1/2026	\$63.76	\$14.75	\$9.52	\$10.09	\$0.00	\$98.12
HEAT & FROST INSULATORS LOCAL 6 (BOSTON)							

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2025

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$30.17	\$14.75	\$9.27	\$5.05	\$0.00	\$59.24
2	60.00	\$36.20	\$14.75	\$9.32	\$6.05	\$0.00	\$66.32
3	70.00	\$42.24	\$14.75	\$9.37	\$7.06	\$0.00	\$73.42
4	80.00	\$48.27	\$14.75	\$9.42	\$8.07	\$0.00	\$80.51

Apprentice: INSULATOR (PIPES & TANKS)

Effective Date: 9/1/2026

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$31.88	\$14.75	\$9.27	\$5.05	\$0.00	\$60.95
2	60.00	\$38.26	\$14.75	\$9.32	\$6.05	\$0.00	\$68.38
3	70.00	\$44.63	\$14.75	\$9.37	\$7.06	\$0.00	\$75.81
4	80.00	\$51.01	\$14.75	\$9.42	\$8.07	\$0.00	\$83.25

Apprentice to Journeyworker Ratio: 1:4

IRONWORKER/WELDER IRONWORKERS LOCAL 7 IRONWORKERS LOCAL 7 (LAWRENCE AREA)	9/16/2025	\$53.46	\$9.05	\$12.75	\$14.50	\$0.00	\$89.76
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: IRONWORKER/WELDER							
Effective Date: 9/16/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$32.08	\$9.05	\$12.75	\$4.50	\$0.00	\$58.38
2	75.00	\$40.10	\$9.05	\$12.75	\$4.50	\$0.00	\$66.40
3	85.00	\$45.44	\$9.05	\$12.75	\$4.50	\$0.00	\$71.74
4	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
5	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
6	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Apprentice to Journeyworker Ratio: 1:4							
JACKHAMMER & PAVING BREAKER OPERATOR	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
LABORERS - ZONE 2	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76
Apprentice: LABORER							
Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$24.20	\$9.90	\$9.25	\$9.11	\$0.00	\$52.46
2	70.00	\$28.24	\$9.90	\$9.25	\$9.11	\$0.00	\$56.50
3	80.00	\$32.27	\$9.90	\$9.25	\$9.11	\$0.00	\$60.53
4	90.00	\$36.31	\$9.90	\$9.25	\$9.11	\$0.00	\$64.57
Apprentice: LABORER							
Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$9.90	\$9.25	\$9.11	\$0.00	\$53.29

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: LABORER Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
2	70.00	\$29.20	\$9.90	\$9.25	\$9.11	\$0.00	\$57.46
3	80.00	\$33.38	\$9.90	\$9.25	\$9.11	\$0.00	\$61.64
4	90.00	\$37.55	\$9.90	\$9.25	\$9.11	\$0.00	\$65.81
Apprentice to Journeyworker Ratio: 1:5							
LABORER (HEAVY & HIGHWAY)	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.21	\$0.00	\$68.70
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.21	\$0.00	\$70.08
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.21	\$0.00	\$71.52
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.21	\$0.00	\$72.96
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 6/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$24.20	\$9.90	\$9.25	\$9.21	\$0.00	\$52.56
2	70.00	\$28.24	\$9.90	\$9.25	\$9.21	\$0.00	\$56.60
3	80.00	\$32.27	\$9.90	\$9.25	\$9.21	\$0.00	\$60.63
4	90.00	\$36.31	\$9.90	\$9.25	\$9.21	\$0.00	\$64.67
Apprentice: LABORER (HEAVY & HIGHWAY) Effective Date: 12/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$25.03	\$9.90	\$9.25	\$9.21	\$0.00	\$53.39
2	70.00	\$29.20	\$9.90	\$9.25	\$9.21	\$0.00	\$57.56
3	80.00	\$33.38	\$9.90	\$9.25	\$9.21	\$0.00	\$61.74
4	90.00	\$37.55	\$9.90	\$9.25	\$9.21	\$0.00	\$65.91
Apprentice to Journeyworker Ratio: 1:5							
LABORER: CARPENTER TENDER	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
LABORERS - ZONE 2	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: CEMENT FINISHER TENDER	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
LABORERS - ZONE 2	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: HAZARDOUS WASTE/ASBESTOS REMOVER LABORERS LABORERS - ZONE 2	6/2/2025	\$40.43	\$9.90	\$9.25	\$9.17	\$0.00	\$68.75
	12/1/2025	\$41.81	\$9.90	\$9.25	\$9.17	\$0.00	\$70.13
	6/1/2026	\$43.25	\$9.90	\$9.25	\$9.17	\$0.00	\$71.57
	12/7/2026	\$44.69	\$9.90	\$9.25	\$9.17	\$0.00	\$73.01
	6/7/2027	\$46.14	\$9.90	\$9.25	\$9.17	\$0.00	\$74.46
	12/6/2027	\$47.59	\$9.90	\$9.25	\$9.17	\$0.00	\$75.91
	6/5/2028	\$49.09	\$9.90	\$9.25	\$9.17	\$0.00	\$77.41
	12/4/2028	\$50.59	\$9.90	\$9.25	\$9.17	\$0.00	\$78.91
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER LABORERS LABORERS - ZONE 2	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
LABORER: MASON TENDER (HEAVY & HIGHWAY) LABORERS LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
LABORER: MULTI-TRADE TENDER LABORERS LABORERS - ZONE 2	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76
For apprentice rates see "Apprentice- LABORER"							
LABORER: TREE REMOVER LABORERS LABORERS - ZONE 2	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.11	\$0.00	\$68.60
	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.11	\$0.00	\$69.98
	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.11	\$0.00	\$71.42
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.11	\$0.00	\$72.86
	6/1/2027	\$46.05	\$9.90	\$9.25	\$9.11	\$0.00	\$74.31
	12/1/2027	\$47.50	\$9.90	\$9.25	\$9.11	\$0.00	\$75.76
	6/1/2028	\$49.00	\$9.90	\$9.25	\$9.11	\$0.00	\$77.26

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2028	\$50.50	\$9.90	\$9.25	\$9.11	\$0.00	\$78.76

This classification applies to the removal of standing trees, and the trimming and removal of branches and limbs when related to public works construction or site clearance incidental to construction . For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

LASER BEAM OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

MARBLE & TILE FINISHERS	8/1/2025	\$52.08	\$11.49	\$15.57	\$6.05	\$0.00	\$85.19
BRICKLAYERS LOCAL 3	2/1/2026	\$53.16	\$11.49	\$15.57	\$6.05	\$0.00	\$86.27
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$54.92	\$11.49	\$15.57	\$6.05	\$0.00	\$88.03
	2/1/2027	\$56.04	\$11.49	\$15.57	\$6.05	\$0.00	\$89.15

Apprentice: MARBLE & TILE FINISHERS							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.04	\$11.49	\$15.57	\$6.05	\$0.00	\$59.15
2	60.00	\$31.25	\$11.49	\$15.57	\$6.05	\$0.00	\$64.36
3	70.00	\$36.46	\$11.49	\$15.57	\$6.05	\$0.00	\$69.57
4	80.00	\$41.66	\$11.49	\$15.57	\$6.05	\$0.00	\$74.77
5	90.00	\$46.87	\$11.49	\$15.57	\$6.05	\$0.00	\$79.98

Apprentice: MARBLE & TILE FINISHERS							
Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.58	\$11.49	\$15.57	\$6.05	\$0.00	\$59.69
2	60.00	\$31.90	\$11.49	\$15.57	\$6.05	\$0.00	\$65.01
3	70.00	\$37.21	\$11.49	\$15.57	\$6.05	\$0.00	\$70.32
4	80.00	\$42.53	\$11.49	\$15.57	\$6.05	\$0.00	\$75.64
5	90.00	\$47.84	\$11.49	\$15.57	\$6.05	\$0.00	\$80.95

Apprentice to Journeyworker Ratio: 1:5

MARBLE MASONS,TILELAYERS & TERRAZZO MECH	8/1/2025	\$67.97	\$11.49	\$15.57	\$7.99	\$0.00	\$103.02
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
BRICKLAYERS LOCAL 3	2/1/2026	\$69.32	\$11.49	\$15.57	\$7.99	\$0.00	\$104.37
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$71.52	\$11.49	\$15.57	\$7.99	\$0.00	\$106.57
	2/1/2027	\$72.92	\$11.49	\$15.57	\$7.99	\$0.00	\$107.97

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH**Effective Date: 8/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.99	\$11.49	\$15.57	\$7.99	\$0.00	\$69.04
2	60.00	\$40.78	\$11.49	\$15.57	\$7.99	\$0.00	\$75.83
3	70.00	\$47.58	\$11.49	\$15.57	\$7.99	\$0.00	\$82.63
4	80.00	\$54.38	\$11.49	\$15.57	\$7.99	\$0.00	\$89.43
5	90.00	\$61.17	\$11.49	\$15.57	\$7.99	\$0.00	\$96.22

Apprentice: MARBLE MASONS,TILELAYERS & TERRAZZO MECH**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.66	\$11.49	\$15.57	\$7.99	\$0.00	\$69.71
2	60.00	\$41.59	\$11.49	\$15.57	\$7.99	\$0.00	\$76.64
3	70.00	\$48.52	\$11.49	\$15.57	\$7.99	\$0.00	\$83.57
4	80.00	\$55.46	\$11.49	\$15.57	\$7.99	\$0.00	\$90.51
5	90.00	\$62.39	\$11.49	\$15.57	\$7.99	\$0.00	\$97.44

Apprentice to Journeyworker Ratio: 1:5

MECH. SWEEPER OPERATOR (ON CONST. SITES)	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MECHANICS MAINTENANCE	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

MILLWRIGHT (Zone 2)	1/6/2025	\$45.03	\$10.08	\$11.47	\$10.00	\$0.00	\$76.58
MILLWRIGHTS LOCAL 1121	1/5/2026	\$47.36	\$10.08	\$11.47	\$10.00	\$0.00	\$78.91
MILLWRIGHTS LOCAL 1121 - Zone 2							

Apprentice: MILLWRIGHT (Zone 2)**Effective Date: 1/6/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	55.00	\$24.77	\$10.08	\$0.00	\$5.50	\$0.00	\$40.35

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
Apprentice: MILLWRIGHT (Zone 2) Effective Date: 1/6/2025 <table><thead><tr><th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr></thead><tbody><tr><td>2</td><td>65.00</td><td>\$29.27</td><td>\$10.08</td><td>\$0.00</td><td>\$6.50</td><td>\$0.00</td><td>\$45.85</td></tr><tr><td>3</td><td>75.00</td><td>\$33.77</td><td>\$10.08</td><td>\$11.47</td><td>\$7.50</td><td>\$0.00</td><td>\$62.82</td></tr><tr><td>4</td><td>85.00</td><td>\$38.28</td><td>\$10.08</td><td>\$11.47</td><td>\$8.50</td><td>\$0.00</td><td>\$68.33</td></tr></tbody></table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	2	65.00	\$29.27	\$10.08	\$0.00	\$6.50	\$0.00	\$45.85	3	75.00	\$33.77	\$10.08	\$11.47	\$7.50	\$0.00	\$62.82	4	85.00	\$38.28	\$10.08	\$11.47	\$8.50	\$0.00	\$68.33								
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
2	65.00	\$29.27	\$10.08	\$0.00	\$6.50	\$0.00	\$45.85																																								
3	75.00	\$33.77	\$10.08	\$11.47	\$7.50	\$0.00	\$62.82																																								
4	85.00	\$38.28	\$10.08	\$11.47	\$8.50	\$0.00	\$68.33																																								
Apprentice: MILLWRIGHT (Zone 2) Effective Date: 1/5/2026 <table><thead><tr><th>Step</th><th>Percent</th><th>Apprentice Base Wage</th><th>Health</th><th>Pension</th><th>Annuity</th><th>Supplemental Unemployment</th><th>Total Rate</th></tr></thead><tbody><tr><td>1</td><td>55.00</td><td>\$26.05</td><td>\$10.08</td><td>\$0.00</td><td>\$5.50</td><td>\$0.00</td><td>\$41.63</td></tr><tr><td>2</td><td>65.00</td><td>\$30.78</td><td>\$10.08</td><td>\$0.00</td><td>\$6.50</td><td>\$0.00</td><td>\$47.36</td></tr><tr><td>3</td><td>75.00</td><td>\$35.52</td><td>\$10.08</td><td>\$11.47</td><td>\$7.50</td><td>\$0.00</td><td>\$64.57</td></tr><tr><td>4</td><td>85.00</td><td>\$40.26</td><td>\$10.08</td><td>\$11.47</td><td>\$8.50</td><td>\$0.00</td><td>\$70.31</td></tr></tbody></table>								Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate	1	55.00	\$26.05	\$10.08	\$0.00	\$5.50	\$0.00	\$41.63	2	65.00	\$30.78	\$10.08	\$0.00	\$6.50	\$0.00	\$47.36	3	75.00	\$35.52	\$10.08	\$11.47	\$7.50	\$0.00	\$64.57	4	85.00	\$40.26	\$10.08	\$11.47	\$8.50	\$0.00	\$70.31
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate																																								
1	55.00	\$26.05	\$10.08	\$0.00	\$5.50	\$0.00	\$41.63																																								
2	65.00	\$30.78	\$10.08	\$0.00	\$6.50	\$0.00	\$47.36																																								
3	75.00	\$35.52	\$10.08	\$11.47	\$7.50	\$0.00	\$64.57																																								
4	85.00	\$40.26	\$10.08	\$11.47	\$8.50	\$0.00	\$70.31																																								
Apprentice Notes Step 1&2 Appr. indentured after 1/6/2020 receive no pension, Apprentice to Journeyworker Ratio: 1:4																																															
MORTAR MIXER	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85																																								
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23																																								
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67																																								
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11																																								
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56																																								
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01																																								
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51																																								
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01																																								
For apprentice rates see "Apprentice- LABORER"																																															
OILER (OTHER THAN TRUCK CRANES,GRADALLS)	6/1/2025	\$25.97	\$15.30	\$13.15	\$3.25	\$0.00	\$57.67																																								
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$26.63	\$15.30	\$13.15	\$3.25	\$0.00	\$58.33																																								
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$27.22	\$15.30	\$13.15	\$3.25	\$0.00	\$58.92																																								
	12/1/2026	\$27.89	\$15.30	\$13.15	\$3.25	\$0.00	\$59.59																																								
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																															
OILER (TRUCK CRANES, GRADALLS)	6/1/2025	\$31.80	\$15.30	\$13.15	\$3.25	\$0.00	\$63.50																																								
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$32.60	\$15.30	\$13.15	\$3.25	\$0.00	\$64.30																																								
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$33.32	\$15.30	\$13.15	\$3.25	\$0.00	\$65.02																																								
	12/1/2026	\$34.12	\$15.30	\$13.15	\$3.25	\$0.00	\$65.82																																								
For apprentice rates see "Apprentice- OPERATING ENGINEERS"																																															
OTHER POWER DRIVEN EQUIPMENT - CLASS II	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73																																								
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17																																								
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45																																								

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89

For apprentice rates see "Apprentice- OPERATING ENGINEERS"

PAINTER (BRIDGES/TANKS)	7/1/2025	\$58.51	\$10.30	\$11.95	\$12.50	\$0.00	\$93.26
PAINTERS LOCAL 35	1/1/2026	\$59.56	\$10.35	\$12.00	\$12.50	\$0.00	\$94.41
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (BRIDGES/TANKS)**Effective Date: 7/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.26	\$10.30	\$0.00	\$0.00	\$0.00	\$39.56
2	55.00	\$32.18	\$10.30	\$0.00	\$6.88	\$0.00	\$49.36
3	60.00	\$35.11	\$10.30	\$0.00	\$7.50	\$0.00	\$52.91
4	65.00	\$38.03	\$10.30	\$0.00	\$8.13	\$0.00	\$56.46
5	70.00	\$40.96	\$10.30	\$11.95	\$8.75	\$0.00	\$71.96
6	75.00	\$43.88	\$10.30	\$11.95	\$9.38	\$0.00	\$75.51
7	80.00	\$46.81	\$10.30	\$11.95	\$10.00	\$0.00	\$79.06
8	90.00	\$52.66	\$10.30	\$11.95	\$11.25	\$0.00	\$86.16

Apprentice: PAINTER (BRIDGES/TANKS)**Effective Date: 1/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$29.78	\$10.35	\$0.00	\$0.00	\$0.00	\$40.13
2	55.00	\$32.76	\$10.35	\$0.00	\$6.93	\$0.00	\$50.04
3	60.00	\$35.74	\$10.35	\$0.00	\$7.56	\$0.00	\$53.65
4	65.00	\$38.71	\$10.35	\$0.00	\$8.19	\$0.00	\$57.25
5	70.00	\$41.69	\$10.35	\$12.00	\$8.82	\$0.00	\$72.86
6	75.00	\$44.67	\$10.35	\$12.00	\$9.45	\$0.00	\$76.47
7	80.00	\$47.65	\$10.35	\$12.00	\$10.08	\$0.00	\$80.08
8	90.00	\$53.60	\$10.35	\$12.00	\$11.34	\$0.00	\$87.29

Apprentice to Journeyworker Ratio: 1:1

PAINTER (SPRAY OR SANDBLAST, NEW) *	7/1/2025	\$49.41	\$10.30	\$11.95	\$12.50	\$0.00	\$84.16
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.	1/1/2026	\$50.46	\$10.35	\$12.00	\$12.60	\$0.00	\$85.41
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) ***Effective Date: 7/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.71	\$10.30	\$0.00	\$0.00	\$0.00	\$35.01
2	55.00	\$27.18	\$10.30	\$0.00	\$6.88	\$0.00	\$44.36
3	60.00	\$29.65	\$10.30	\$0.00	\$7.50	\$0.00	\$47.45

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
4	65.00	\$32.12	\$10.30	\$0.00	\$8.13	\$0.00	\$50.55
5	70.00	\$34.59	\$10.30	\$11.95	\$8.75	\$0.00	\$65.59
6	75.00	\$37.06	\$10.30	\$11.95	\$9.38	\$0.00	\$68.69
7	80.00	\$39.53	\$10.30	\$11.95	\$10.00	\$0.00	\$71.78
8	90.00	\$44.47	\$10.30	\$11.95	\$11.25	\$0.00	\$77.97
Apprentice: PAINTER (SPRAY OR SANDBLAST, NEW) *							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$25.23	\$10.35	\$0.00	\$0.00	\$0.00	\$35.58
2	55.00	\$27.75	\$10.35	\$0.00	\$6.93	\$0.00	\$45.03
3	60.00	\$30.28	\$10.35	\$0.00	\$7.56	\$0.00	\$48.19
4	65.00	\$32.80	\$10.35	\$0.00	\$8.19	\$0.00	\$51.34
5	70.00	\$35.32	\$10.35	\$12.00	\$8.82	\$0.00	\$66.49
6	75.00	\$37.85	\$10.35	\$12.00	\$9.45	\$0.00	\$69.65
7	80.00	\$40.37	\$10.35	\$12.00	\$10.08	\$0.00	\$72.80
8	90.00	\$45.41	\$10.35	\$12.00	\$11.34	\$0.00	\$79.10
Apprentice to Journeyworker Ratio: 1:1							
PAINTER (SPRAY OR SANDBLAST, REPAINT)	7/1/2025	\$47.47	\$10.30	\$11.95	\$12.50	\$0.00	\$82.22
PAINTERS LOCAL 35	1/1/2026	\$48.52	\$10.35	\$12.00	\$12.60	\$0.00	\$83.47
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.74	\$10.30	\$0.00	\$0.00	\$0.00	\$34.04
2	55.00	\$26.11	\$10.30	\$0.00	\$6.88	\$0.00	\$43.29
3	60.00	\$28.48	\$10.30	\$0.00	\$7.50	\$0.00	\$46.28
4	65.00	\$30.86	\$10.30	\$0.00	\$8.13	\$0.00	\$49.29
5	70.00	\$33.23	\$10.30	\$11.95	\$8.75	\$0.00	\$64.23
6	75.00	\$35.60	\$10.30	\$11.95	\$9.38	\$0.00	\$67.23
7	80.00	\$37.98	\$10.30	\$11.95	\$10.00	\$0.00	\$70.23
8	90.00	\$42.72	\$10.30	\$11.95	\$11.25	\$0.00	\$76.22

Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: PAINTER (SPRAY OR SANDBLAST, REPAINT)							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.26	\$10.35	\$0.00	\$0.00	\$0.00	\$34.61
2	55.00	\$26.69	\$10.35	\$0.00	\$6.93	\$0.00	\$43.97
3	60.00	\$29.11	\$10.35	\$0.00	\$7.56	\$0.00	\$47.02
4	65.00	\$31.54	\$10.35	\$0.00	\$8.19	\$0.00	\$50.08
5	70.00	\$33.96	\$10.35	\$12.00	\$8.82	\$0.00	\$65.13
6	75.00	\$36.39	\$10.35	\$12.00	\$9.45	\$0.00	\$68.19
7	80.00	\$38.82	\$10.35	\$12.00	\$10.08	\$0.00	\$71.25
8	90.00	\$43.67	\$10.35	\$12.00	\$11.34	\$0.00	\$77.36

Apprentice to Journeyworker Ratio: 1:1

PAINTER / TAPER (BRUSH, NEW) *	7/1/2025	\$48.01	\$10.30	\$11.95	\$12.50	\$0.00	\$82.76
* If 30% or more of surfaces to be painted are new construction, NEW paint rate shall be used.	1/1/2026	\$49.06	\$10.35	\$12.00	\$12.60	\$0.00	\$84.01
PAINTERS LOCAL 35							
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 7/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.01	\$10.30	\$0.00	\$0.00	\$0.00	\$34.31
2	55.00	\$26.41	\$10.30	\$0.00	\$6.88	\$0.00	\$43.59
3	60.00	\$28.81	\$10.30	\$0.00	\$7.50	\$0.00	\$46.61
4	65.00	\$31.21	\$10.30	\$0.00	\$8.13	\$0.00	\$49.64
5	70.00	\$33.61	\$10.30	\$11.95	\$8.75	\$0.00	\$64.61
6	75.00	\$36.01	\$10.30	\$11.95	\$9.38	\$0.00	\$67.64
7	80.00	\$38.41	\$10.30	\$11.95	\$10.00	\$0.00	\$70.66
8	90.00	\$43.21	\$10.30	\$11.95	\$11.25	\$0.00	\$76.71

Apprentice: PAINTER / TAPER (BRUSH, NEW) *							
Effective Date: 1/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$24.53	\$10.35	\$0.00	\$0.00	\$0.00	\$34.88
2	55.00	\$26.98	\$10.35	\$0.00	\$6.93	\$0.00	\$44.26
3	60.00	\$29.44	\$10.35	\$0.00	\$7.56	\$0.00	\$47.35
4	65.00	\$31.89	\$10.35	\$0.00	\$8.19	\$0.00	\$50.43
5	70.00	\$34.34	\$10.35	\$12.00	\$8.82	\$0.00	\$65.51
6	75.00	\$36.80	\$10.35	\$12.00	\$9.45	\$0.00	\$68.60
7	80.00	\$39.25	\$10.35	\$12.00	\$10.08	\$0.00	\$71.68
8	90.00	\$44.15	\$10.35	\$12.00	\$11.34	\$0.00	\$77.84

Apprentice to Journeyworker Ratio: 1:1

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PAINTER / TAPER (BRUSH, REPAINT)	7/1/2025	\$46.07	\$10.30	\$11.95	\$12.50	\$0.00	\$80.82
PAINTERS LOCAL 35	1/1/2026	\$47.12	\$10.35	\$12.00	\$12.60	\$0.00	\$82.07
PAINTERS LOCAL 35 - ZONE 2							

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)**Effective Date: 7/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.04	\$10.30	\$0.00	\$0.00	\$0.00	\$33.34
2	55.00	\$25.34	\$10.30	\$0.00	\$6.88	\$0.00	\$42.52
3	60.00	\$27.64	\$10.30	\$0.00	\$7.50	\$0.00	\$45.44
4	65.00	\$29.95	\$10.30	\$0.00	\$8.13	\$0.00	\$48.38
5	70.00	\$32.25	\$10.30	\$11.95	\$8.75	\$0.00	\$63.25
6	75.00	\$34.55	\$10.30	\$11.95	\$9.38	\$0.00	\$66.18
7	80.00	\$36.86	\$10.30	\$11.95	\$10.00	\$0.00	\$69.11
8	90.00	\$41.46	\$10.30	\$11.95	\$11.25	\$0.00	\$74.96

Apprentice: PAINTER / TAPER (BRUSH, REPAINT)**Effective Date: 1/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$23.56	\$10.35	\$0.00	\$0.00	\$0.00	\$33.91
2	55.00	\$25.92	\$10.35	\$0.00	\$6.93	\$0.00	\$43.20
3	60.00	\$28.27	\$10.35	\$0.00	\$7.56	\$0.00	\$46.18
4	65.00	\$30.63	\$10.35	\$0.00	\$8.19	\$0.00	\$49.17
5	70.00	\$32.98	\$10.35	\$12.00	\$8.82	\$0.00	\$64.15
6	75.00	\$35.34	\$10.35	\$12.00	\$9.45	\$0.00	\$67.14
7	80.00	\$37.70	\$10.35	\$12.00	\$10.08	\$0.00	\$70.13
8	90.00	\$42.41	\$10.35	\$12.00	\$11.34	\$0.00	\$76.10

Apprentice to Journeyworker Ratio: 1:1

PAINTER TRAFFIC MARKINGS (HEAVY/HIGHWAY)	6/1/2025	\$40.34	\$9.90	\$9.25	\$9.21	\$0.00	\$68.70
LABORERS	12/1/2025	\$41.72	\$9.90	\$9.25	\$9.21	\$0.00	\$70.08
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.16	\$9.90	\$9.25	\$9.21	\$0.00	\$71.52
	12/1/2026	\$44.60	\$9.90	\$9.25	\$9.21	\$0.00	\$72.96

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)

PANEL & PICKUP TRUCKS DRIVER	6/1/2025	\$40.78	\$15.57	\$20.17	\$0.00	\$0.00	\$76.52
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$40.78	\$15.57	\$21.78	\$0.00	\$0.00	\$78.13
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$40.78	\$16.17	\$21.78	\$0.00	\$0.00	\$78.73
	6/1/2026	\$41.78	\$16.17	\$21.78	\$0.00	\$0.00	\$79.73
	12/1/2026	\$41.78	\$16.17	\$23.52	\$0.00	\$0.00	\$81.47
	1/1/2027	\$41.78	\$16.77	\$23.52	\$0.00	\$0.00	\$82.07

PIER AND DOCK CONSTRUCTOR (UNDERPINNING AND DECK)	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- PILE DRIVER"							
PILE DRIVER	8/1/2024	\$55.79	\$10.08	\$11.62	\$12.67	\$0.00	\$90.16
PILE DRIVER LOCAL 56							
PILE DRIVER LOCAL 56 (ZONE 1)							

Apprentice: PILE DRIVER**Effective Date: 8/1/2024**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$25.11	\$10.08	\$0.00	\$2.53	\$0.00	\$37.72
2	55.00	\$30.68	\$10.08	\$0.00	\$5.07	\$0.00	\$45.83
3	70.00	\$39.05	\$10.08	\$11.62	\$7.60	\$0.00	\$68.35
4	80.00	\$44.63	\$10.08	\$11.62	\$10.14	\$0.00	\$76.47

Apprentice to Journeyworker Ratio: 1:5

PIPEFITTER & STEAMFITTER	3/1/2025	\$68.88	\$12.70	\$13.05	\$8.75	\$0.00	\$103.38
PIPEFITTERS LOCAL 537							
PIPEFITTERS LOCAL 537 (Local 138)							

Apprentice: PIPEFITTER & STEAMFITTER**Effective Date: 3/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	40.00	\$27.55	\$12.70	\$0.30	\$8.75	\$0.00	\$49.30
2	45.00	\$31.00	\$12.70	\$13.05	\$8.75	\$0.00	\$65.50
3	60.00	\$41.33	\$12.70	\$13.05	\$8.75	\$0.00	\$75.83
4	70.00	\$48.22	\$12.70	\$13.05	\$8.75	\$0.00	\$82.72
5	80.00	\$55.10	\$12.70	\$13.05	\$8.75	\$0.00	\$89.60

Apprentice to Journeyworker Ratio: 1:3

PIPELAYER	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
LABORERS - ZONE 2	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01

For apprentice rates see "Apprentice- LABORER"

PIPELAYER (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

PLUMBER	3/2/2025	\$69.84	\$14.32	\$12.31	\$8.00	\$0.00	\$104.47
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
PLUMBERS & GASFITTERS LOCAL 12							
PLUMBERS & GASFITTERS LOCAL 12 (Local 138)							

Apprentice: PLUMBER**Effective Date: 3/2/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	\$24.44	\$14.32	\$4.61	\$2.80	\$0.00	\$46.17
2	40.00	\$27.94	\$14.32	\$5.22	\$3.20	\$0.00	\$50.68
3	55.00	\$38.41	\$14.32	\$7.03	\$4.40	\$0.00	\$64.16
4	65.00	\$45.40	\$14.32	\$8.30	\$5.20	\$0.00	\$73.22
5	75.00	\$52.38	\$14.32	\$9.53	\$6.00	\$0.00	\$82.23

Apprentice Notes**** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr****Apprentice to Journeyworker Ratio: 1:2**

PNEUMATIC CONTROLS (TEMP.)	3/1/2025	\$68.88	\$12.70	\$13.05	\$8.75	\$0.00	\$103.38
PIPEFITTERS LOCAL 537							
PIPEFITTERS LOCAL 537 (Local 138)							

For apprentice rates see "Apprentice- PIPEFITTER" or "PLUMBER/PIPEFITTER"

PNEUMATIC DRILL/TOOL OPERATOR	6/1/2025	\$41.09	\$9.90	\$9.25	\$8.29	\$0.00	\$68.53
LABORERS	12/1/2025	\$42.47	\$9.90	\$9.25	\$8.29	\$0.00	\$69.91
LABORERS - ZONE 2	6/1/2026	\$43.91	\$9.90	\$9.25	\$8.29	\$0.00	\$71.35
	12/1/2026	\$45.35	\$9.90	\$9.25	\$8.29	\$0.00	\$72.79
	6/1/2027	\$46.80	\$9.90	\$9.25	\$8.29	\$0.00	\$74.24
	12/1/2027	\$48.25	\$9.90	\$9.25	\$8.29	\$0.00	\$75.69
	6/1/2028	\$49.75	\$9.90	\$9.25	\$8.29	\$0.00	\$77.19
	12/1/2028	\$51.25	\$9.90	\$9.25	\$8.29	\$0.00	\$78.69

For apprentice rates see "Apprentice- LABORER"

PNEUMATIC DRILL/TOOL OPERATOR (HEAVY & HIGHWAY)	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21

For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"

POWDERMAN & BLASTER	6/1/2025	\$41.34	\$9.90	\$9.25	\$9.11	\$0.00	\$69.60
LABORERS	12/1/2025	\$42.72	\$9.90	\$9.25	\$9.11	\$0.00	\$70.98
LABORERS - ZONE 2	6/1/2026	\$44.16	\$9.90	\$9.25	\$9.11	\$0.00	\$72.42
	12/1/2026	\$45.60	\$9.90	\$9.25	\$9.11	\$0.00	\$73.86
	6/1/2027	\$47.05	\$9.90	\$9.25	\$9.11	\$0.00	\$75.31
	12/1/2027	\$48.50	\$9.90	\$9.25	\$9.11	\$0.00	\$76.76
	6/1/2028	\$50.00	\$9.90	\$9.25	\$9.11	\$0.00	\$78.26
	12/1/2028	\$51.50	\$9.90	\$9.25	\$9.11	\$0.00	\$79.76

For apprentice rates see "Apprentice- LABORER"

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
POWDERMAN & BLASTER (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$41.34	\$9.65	\$9.25	\$9.21	\$0.00	\$69.45
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	\$42.72	\$9.65	\$9.25	\$9.21	\$0.00	\$70.83
	6/1/2026	\$44.16	\$9.65	\$9.25	\$9.21	\$0.00	\$72.27
	12/1/2026	\$45.60	\$9.65	\$9.25	\$9.21	\$0.00	\$73.71
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
POWER SHOVEL/DERRICK/TRENCHING MACHINE OPERATING ENGINEERS LOCAL 4	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (CONCRETE) OPERATING ENGINEERS LOCAL 4	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
PUMP OPERATOR (DEWATERING, OTHER) OPERATING ENGINEERS LOCAL 4	6/1/2025	\$37.52	\$15.55	\$13.25	\$3.25	\$0.00	\$69.57
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$38.47	\$15.55	\$13.25	\$3.25	\$0.00	\$70.52
	6/1/2026	\$39.33	\$15.55	\$13.25	\$3.25	\$0.00	\$71.38
	12/1/2026	\$40.28	\$15.55	\$13.25	\$3.25	\$0.00	\$72.33
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
READY-MIX CONCRETE DRIVER TEAMSTERS 170	5/1/2025	\$30.50	\$11.57	\$6.65	\$0.00	\$0.00	\$48.72
TEAMSTERS 170 - J.G. MacLellan (Lowell)	1/1/2026	\$30.50	\$11.97	\$6.65	\$0.00	\$0.00	\$49.12
RECLAIMERS OPERATING ENGINEERS LOCAL 4	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
RIDE-ON MOTORIZED BUGGY OPERATOR LABORERS	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.11	\$0.00	\$68.85
LABORERS - ZONE 2	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.11	\$0.00	\$70.23
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.11	\$0.00	\$71.67
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.11	\$0.00	\$73.11
	6/1/2027	\$46.30	\$9.90	\$9.25	\$9.11	\$0.00	\$74.56
	12/1/2027	\$47.75	\$9.90	\$9.25	\$9.11	\$0.00	\$76.01
	6/1/2028	\$49.25	\$9.90	\$9.25	\$9.11	\$0.00	\$77.51
	12/1/2028	\$50.75	\$9.90	\$9.25	\$9.11	\$0.00	\$79.01
For apprentice rates see "Apprentice- LABORER"							
ROLLER/SPREADER/MULCHING MACHINE OPERATING ENGINEERS LOCAL 4	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
ROOFER (Inc.Roofer Waterproofng &Roofer Damproofg)	8/1/2025	\$53.53	\$13.28	\$12.67	\$9.03	\$0.00	\$88.51

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
ROOFERS LOCAL 33	2/1/2026	\$54.78	\$13.28	\$12.67	\$9.03	\$0.00	\$89.76
ROOFERS LOCAL 33							

Apprentice: ROOFER (Inc.Roofing Waterproofing &Roofing Damproofg)**Effective Date: 8/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$26.77	\$13.28	\$6.52	\$9.03	\$0.00	\$55.60
2	60.00	\$32.12	\$13.28	\$12.67	\$9.03	\$0.00	\$67.10
3	65.00	\$34.79	\$13.28	\$12.67	\$9.03	\$0.00	\$69.77
4	75.00	\$40.15	\$13.28	\$12.67	\$9.03	\$0.00	\$75.13
5	85.00	\$45.50	\$13.28	\$12.67	\$9.03	\$0.00	\$80.48

Apprentice: ROOFER (Inc.Roofing Waterproofing &Roofing Damproofg)**Effective Date: 2/1/2026**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$27.39	\$13.28	\$6.52	\$9.03	\$0.00	\$56.22
2	60.00	\$32.87	\$13.28	\$12.67	\$9.03	\$0.00	\$67.85
3	65.00	\$35.61	\$13.28	\$12.67	\$9.03	\$0.00	\$70.59
4	75.00	\$41.09	\$13.28	\$12.67	\$9.03	\$0.00	\$76.07
5	85.00	\$46.56	\$13.28	\$12.67	\$9.03	\$0.00	\$81.54

Apprentice Notes

** 1:5, 2:6-10, the 1:10; Reroofing: 1:4, then 1:1

Apprentice to Journeyworker Ratio: 1:5

ROOFER SLATE / TILE / PRECAST CONCRETE	8/1/2025	\$53.78	\$13.28	\$12.67	\$9.03	\$0.00	\$88.76
ROOFERS LOCAL 33	2/1/2026	\$55.03	\$13.28	\$12.67	\$9.03	\$0.00	\$90.01
ROOFERS LOCAL 33							

For apprentice rates see "Apprentice- ROOFER"

SHEETMETAL WORKER	8/1/2025	\$60.98	\$14.91	\$18.74	\$9.53	\$2.98	\$107.14
SHEETMETAL WORKERS LOCAL 17	2/1/2026	\$62.93	\$14.91	\$18.74	\$9.53	\$2.98	\$109.09
SHEETMETAL WORKERS LOCAL 17 - A							

Apprentice: SHEETMETAL WORKER**Effective Date: 8/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	42.00	\$25.61	\$14.91	\$6.13	\$0.00	\$0.00	\$46.65
2	42.00	\$25.61	\$14.91	\$6.13	\$0.00	\$0.00	\$46.65
3	47.00	\$28.66	\$14.91	\$11.01	\$1.25	\$1.62	\$57.45
4	47.00	\$28.66	\$14.91	\$11.01	\$1.25	\$1.62	\$57.45
5	52.00	\$31.71	\$14.91	\$11.74	\$1.50	\$1.74	\$61.60
6	52.00	\$31.71	\$14.91	\$11.74	\$1.75	\$1.75	\$61.86

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SHEETMETAL WORKER Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
7	60.00	\$36.59	\$14.91	\$12.90	\$2.00	\$1.93	\$68.33
8	65.00	\$39.64	\$14.91	\$13.63	\$2.25	\$2.04	\$72.47
9	75.00	\$45.74	\$14.91	\$15.09	\$2.75	\$2.28	\$80.77
10	85.00	\$51.83	\$14.91	\$16.55	\$2.75	\$2.49	\$88.53
Apprentice: SHEETMETAL WORKER Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	42.00	\$26.43	\$14.91	\$6.19	\$0.00	\$0.00	\$47.53
2	42.00	\$26.43	\$14.91	\$6.19	\$0.00	\$0.00	\$47.53
3	47.00	\$29.58	\$14.91	\$10.93	\$1.25	\$1.62	\$58.29
4	47.00	\$29.58	\$14.91	\$10.93	\$1.25	\$1.62	\$58.29
5	52.00	\$32.72	\$14.91	\$11.66	\$1.50	\$1.74	\$62.53
6	52.00	\$32.72	\$14.91	\$11.66	\$1.75	\$1.75	\$62.79
7	60.00	\$37.76	\$14.91	\$12.84	\$2.00	\$1.93	\$69.44
8	65.00	\$40.90	\$14.91	\$13.58	\$2.25	\$2.04	\$73.68
9	75.00	\$47.20	\$14.91	\$15.06	\$2.75	\$2.28	\$82.20
10	85.00	\$53.49	\$14.91	\$16.53	\$2.75	\$2.49	\$90.17
Apprentice to Journeyworker Ratio: 1:4							
SPECIALIZED EARTH MOVING EQUIP < 35 TONS	6/1/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$0.00	\$76.98
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$0.00	\$78.59
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
SPECIALIZED EARTH MOVING EQUIP > 35 TONS	6/1/2025	\$41.53	\$15.57	\$20.17	\$0.00	\$0.00	\$77.27
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.53	\$15.57	\$21.78	\$0.00	\$0.00	\$78.88
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.53	\$16.17	\$21.78	\$0.00	\$0.00	\$79.48
	6/1/2026	\$42.53	\$16.17	\$21.78	\$0.00	\$0.00	\$80.48
	12/1/2026	\$42.53	\$16.17	\$23.52	\$0.00	\$0.00	\$82.22
	1/1/2027	\$42.53	\$16.77	\$23.52	\$0.00	\$0.00	\$82.82
SPRINKLER FITTER	3/1/2025	\$63.72	\$12.25	\$7.40	\$17.00	\$0.00	\$100.37
SPRINKLER FITTERS LOCAL 550							
SPRINKLER FITTERS LOCAL 550 - (Section B) Zone 2							

Apprentice: SPRINKLER FITTER**Effective Date: 3/1/2025**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
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Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: SPRINKLER FITTER Effective Date: 3/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	35.00	\$22.30	\$11.51	\$13.35	\$0.00	\$0.00	\$47.16
2	40.00	\$25.49	\$11.51	\$14.20	\$0.00	\$0.00	\$51.20
3	45.00	\$28.67	\$11.51	\$15.05	\$0.00	\$0.00	\$55.23
4	50.00	\$31.86	\$11.51	\$15.90	\$0.00	\$0.00	\$59.27
5	55.00	\$35.05	\$11.51	\$16.75	\$0.00	\$0.00	\$63.31
6	60.00	\$38.23	\$11.51	\$17.60	\$0.00	\$0.00	\$67.34
7	65.00	\$41.42	\$11.51	\$18.45	\$0.00	\$0.00	\$71.38
8	70.00	\$44.60	\$11.51	\$19.30	\$0.00	\$0.00	\$75.41
9	75.00	\$47.79	\$11.51	\$20.15	\$0.00	\$0.00	\$79.45
10	80.00	\$50.98	\$11.51	\$21.00	\$0.00	\$0.00	\$83.49
Apprentice Notes Apprentice entered prior 9/30/10:							
Apprentice to Journeyworker Ratio: 1:3							
STEAM BOILER OPERATOR	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TAMPERS, SELF-PROPELLED OR TRACTOR DRAWN	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TELECOMMUNICATION TECHNICIAN	9/1/2025	\$52.94	\$13.00	\$13.97	\$6.98	\$0.00	\$86.89
ELECTRICIANS LOCAL 103	3/1/2026	\$53.49	\$13.00	\$14.23	\$7.20	\$0.00	\$87.92
ELECTRICIANS LOCAL 103	9/1/2026	\$55.02	\$13.00	\$14.28	\$7.20	\$0.00	\$89.50
	3/1/2027	\$55.98	\$13.00	\$14.31	\$7.20	\$0.00	\$90.49
	9/1/2027	\$57.50	\$13.00	\$14.36	\$7.20	\$0.00	\$92.06
	3/1/2028	\$58.46	\$13.00	\$14.38	\$7.20	\$0.00	\$93.04
Apprentice: TELECOMMUNICATION TECHNICIAN Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$23.82	\$13.00	\$0.71	\$0.00	\$0.00	\$37.53
2	45.00	\$23.82	\$13.00	\$0.71	\$0.00	\$0.00	\$37.53
3	50.00	\$26.47	\$13.00	\$13.17	\$3.49	\$0.00	\$56.13
4	50.00	\$26.47	\$13.00	\$13.17	\$3.49	\$0.00	\$56.13

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TELECOMMUNICATION TECHNICIAN							
Effective Date: 9/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	55.00	\$29.12	\$13.00	\$13.25	\$3.84	\$0.00	\$59.21
6	60.00	\$31.76	\$13.00	\$13.33	\$4.19	\$0.00	\$62.28
7	65.00	\$34.41	\$13.00	\$13.41	\$4.54	\$0.00	\$65.36
8	70.00	\$37.06	\$13.00	\$13.49	\$4.89	\$0.00	\$68.44
9	75.00	\$39.71	\$13.00	\$13.57	\$5.24	\$0.00	\$71.52
10	80.00	\$42.35	\$13.00	\$13.65	\$5.58	\$0.00	\$74.58
Apprentice: TELECOMMUNICATION TECHNICIAN							
Effective Date: 3/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	45.00	\$24.07	\$13.00	\$0.72	\$0.00	\$0.00	\$37.79
2	45.00	\$24.07	\$13.00	\$0.72	\$0.00	\$0.00	\$37.79
3	50.00	\$26.75	\$13.00	\$13.43	\$3.60	\$0.00	\$56.78
4	50.00	\$26.75	\$13.00	\$13.43	\$3.60	\$0.00	\$56.78
5	55.00	\$29.42	\$13.00	\$13.51	\$3.96	\$0.00	\$59.89
6	60.00	\$32.09	\$13.00	\$13.59	\$4.32	\$0.00	\$63.00
7	65.00	\$34.77	\$13.00	\$13.67	\$4.68	\$0.00	\$66.12
8	70.00	\$37.44	\$13.00	\$13.75	\$5.04	\$0.00	\$69.23
9	75.00	\$40.12	\$13.00	\$13.83	\$5.40	\$0.00	\$72.35
10	80.00	\$42.79	\$13.00	\$13.91	\$5.76	\$0.00	\$75.46
Apprentice to Journeyworker Ratio: 1:1							
TERRAZZO FINISHERS	8/1/2025	\$66.89	\$11.49	\$15.57	\$8.02	\$0.00	\$101.97
BRICKLAYERS LOCAL 3	2/1/2026	\$68.24	\$11.49	\$15.57	\$8.02	\$0.00	\$103.32
BRICKLAYERS LOCAL 3 - MARBLE & TILE	8/1/2026	\$70.44	\$11.49	\$15.57	\$8.02	\$0.00	\$105.52
	2/1/2027	\$71.84	\$11.49	\$15.57	\$8.02	\$0.00	\$106.92
Apprentice: TERRAZZO FINISHERS							
Effective Date: 8/1/2025							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$33.45	\$11.49	\$15.57	\$8.02	\$0.00	\$68.53
2	60.00	\$40.13	\$11.49	\$15.57	\$8.02	\$0.00	\$75.21
3	70.00	\$46.82	\$11.49	\$15.57	\$8.02	\$0.00	\$81.90
4	80.00	\$53.51	\$11.49	\$15.57	\$8.02	\$0.00	\$88.59
5	90.00	\$60.20	\$11.49	\$15.57	\$8.02	\$0.00	\$95.28

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: TERRAZZO FINISHERS Effective Date: 2/1/2026							
Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	50.00	\$34.12	\$11.49	\$15.57	\$8.02	\$0.00	\$69.20
2	60.00	\$40.94	\$11.49	\$15.57	\$8.02	\$0.00	\$76.02
3	70.00	\$47.77	\$11.49	\$15.57	\$8.02	\$0.00	\$82.85
4	80.00	\$54.59	\$11.49	\$15.57	\$8.02	\$0.00	\$89.67
5	90.00	\$61.42	\$11.49	\$15.57	\$8.02	\$0.00	\$96.50
Apprentice to Journeyworker Ratio: 1:5							
TEST BORING DRILLER	6/1/2025	\$51.70	\$9.90	\$9.25	\$9.80	\$0.00	\$80.65
LABORERS	12/1/2025	\$53.20	\$9.90	\$9.25	\$9.80	\$0.00	\$82.15
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$54.75	\$9.90	\$9.25	\$9.80	\$0.00	\$83.70
	12/1/2026	\$56.25	\$9.90	\$9.25	\$9.80	\$0.00	\$85.20
For apprentice rates see "Apprentice- LABORER"							
TEST BORING DRILLER HELPER	6/1/2025	\$47.82	\$9.90	\$9.25	\$9.80	\$0.00	\$76.77
LABORERS	12/1/2025	\$49.32	\$9.90	\$9.25	\$9.80	\$0.00	\$78.27
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$50.87	\$9.90	\$9.25	\$9.80	\$0.00	\$79.82
	12/1/2026	\$52.37	\$9.90	\$9.25	\$9.80	\$0.00	\$81.32
For apprentice rates see "Apprentice- LABORER"							
TEST BORING LABORER	6/1/2025	\$47.70	\$9.90	\$9.25	\$9.80	\$0.00	\$76.65
LABORERS	12/1/2025	\$49.20	\$9.90	\$9.25	\$9.80	\$0.00	\$78.15
LABORERS - FOUNDATION AND MARINE	6/1/2026	\$50.75	\$9.90	\$9.25	\$9.80	\$0.00	\$79.70
	12/1/2026	\$52.25	\$9.90	\$9.25	\$9.80	\$0.00	\$81.20
For apprentice rates see "Apprentice- LABORER"							
TRACTORS/PORTABLE STEAM GENERATORS	6/1/2025	\$57.68	\$15.55	\$13.25	\$3.25	\$0.00	\$89.73
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.12	\$15.55	\$13.25	\$3.25	\$0.00	\$91.17
OPERATING ENGINEERS LOCAL 4	6/1/2026	\$60.40	\$15.55	\$13.25	\$3.25	\$0.00	\$92.45
	12/1/2026	\$61.84	\$15.55	\$13.25	\$3.25	\$0.00	\$93.89
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
TRAILERS FOR EARTH MOVING EQUIPMENT	6/1/2025	\$41.82	\$15.57	\$20.17	\$0.00	\$0.00	\$77.56
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.82	\$15.57	\$21.78	\$0.00	\$0.00	\$79.17
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.82	\$16.17	\$21.78	\$0.00	\$0.00	\$79.77
	6/1/2026	\$42.82	\$16.17	\$21.78	\$0.00	\$0.00	\$80.77
	12/1/2026	\$42.82	\$16.17	\$23.52	\$0.00	\$0.00	\$82.51
	1/1/2027	\$42.82	\$16.77	\$23.52	\$0.00	\$0.00	\$83.11
TUNNEL WORK - COMPRESSED AIR	6/1/2025	\$59.93	\$9.90	\$9.25	\$10.25	\$0.00	\$89.33
LABORERS	12/1/2025	\$61.43	\$9.90	\$9.25	\$10.25	\$0.00	\$90.83
LABORERS (COMPRESSED AIR)	6/1/2026	\$62.98	\$9.90	\$9.25	\$10.25	\$0.00	\$92.38
	12/1/2026	\$64.48	\$9.90	\$9.25	\$10.25	\$0.00	\$93.88
For apprentice rates see "Apprentice- LABORER"							

Construction

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE) LABORERS	6/1/2025	\$61.93	\$9.90	\$9.25	\$10.25	\$0.00	\$91.33
LABORERS (COMPRESSED AIR)	12/1/2025	\$63.43	\$9.90	\$9.25	\$10.25	\$0.00	\$92.83
	6/1/2026	\$64.98	\$9.90	\$9.25	\$10.25	\$0.00	\$94.38
	12/1/2026	\$66.48	\$9.90	\$9.25	\$10.25	\$0.00	\$95.88
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR LABORERS	6/1/2025	\$52.00	\$9.90	\$9.25	\$10.25	\$0.00	\$81.40
LABORERS (FREE AIR TUNNEL)	12/1/2025	\$53.50	\$9.90	\$9.25	\$10.25	\$0.00	\$82.90
	6/1/2026	\$55.05	\$9.90	\$9.25	\$10.25	\$0.00	\$84.45
	12/1/2026	\$56.55	\$9.90	\$9.25	\$10.25	\$0.00	\$85.95
For apprentice rates see "Apprentice- LABORER"							
TUNNEL WORK - FREE AIR (HAZ. WASTE) LABORERS	6/1/2025	\$54.00	\$9.90	\$9.25	\$10.25	\$0.00	\$83.40
LABORERS (FREE AIR TUNNEL)	12/1/2025	\$55.50	\$9.90	\$9.25	\$10.25	\$0.00	\$84.90
	6/1/2026	\$57.05	\$9.90	\$9.25	\$10.25	\$0.00	\$86.45
	12/1/2026	\$58.55	\$9.90	\$9.25	\$10.25	\$0.00	\$87.95
For apprentice rates see "Apprentice- LABORER"							
VAC-HAUL	6/1/2025	\$41.24	\$15.57	\$20.17	\$0.00	\$0.00	\$76.98
TEAMSTERS JOINT COUNCIL NO. 10	12/1/2025	\$41.24	\$15.57	\$21.78	\$0.00	\$0.00	\$78.59
TEAMSTERS JOINT COUNCIL NO. 10 ZONE B	1/1/2026	\$41.24	\$16.17	\$21.78	\$0.00	\$0.00	\$79.19
	6/1/2026	\$42.24	\$16.17	\$21.78	\$0.00	\$0.00	\$80.19
	12/1/2026	\$42.24	\$16.17	\$23.52	\$0.00	\$0.00	\$81.93
	1/1/2027	\$42.24	\$16.77	\$23.52	\$0.00	\$0.00	\$82.53
WAGON DRILL OPERATOR LABORERS	6/1/2025	\$42.00	\$9.65	\$9.00	\$8.70	\$0.00	\$69.35
LABORERS - ZONE 2	12/1/2025	\$43.38	\$9.65	\$9.00	\$8.70	\$0.00	\$70.73
	6/1/2026	\$44.82	\$9.65	\$9.00	\$8.70	\$0.00	\$72.17
	12/1/2026	\$46.26	\$9.65	\$9.00	\$8.70	\$0.00	\$73.61
	6/1/2027	\$47.71	\$9.65	\$9.00	\$8.70	\$0.00	\$75.06
	12/1/2027	\$49.16	\$9.65	\$9.00	\$8.70	\$0.00	\$76.51
	6/1/2028	\$50.66	\$9.65	\$9.00	\$8.70	\$0.00	\$78.01
	12/1/2028	\$52.16	\$9.65	\$9.00	\$8.70	\$0.00	\$79.51
For apprentice rates see "Apprentice- LABORER"							
WAGON DRILL OPERATOR (HEAVY & HIGHWAY) LABORERS	6/1/2025	\$40.59	\$9.90	\$9.25	\$9.21	\$0.00	\$68.95
LABORERS - ZONE 2 (HEAVY & HIGHWAY)	12/1/2025	\$41.97	\$9.90	\$9.25	\$9.21	\$0.00	\$70.33
	6/1/2026	\$43.41	\$9.90	\$9.25	\$9.21	\$0.00	\$71.77
	12/1/2026	\$44.85	\$9.90	\$9.25	\$9.21	\$0.00	\$73.21
For apprentice rates see "Apprentice- LABORER (Heavy and Highway)"							
WASTE WATER PUMP OPERATOR OPERATING ENGINEERS LOCAL 4	6/1/2025	\$58.33	\$15.55	\$13.25	\$3.25	\$0.00	\$90.38
OPERATING ENGINEERS LOCAL 4	12/1/2025	\$59.78	\$15.55	\$13.25	\$3.25	\$0.00	\$91.83
	6/1/2026	\$61.08	\$15.55	\$13.25	\$3.25	\$0.00	\$93.13
	12/1/2026	\$62.53	\$15.55	\$13.25	\$3.25	\$0.00	\$94.58
For apprentice rates see "Apprentice- OPERATING ENGINEERS"							
WATER METER INSTALLER PLUMBERS & GASFITTERS LOCAL 12	3/2/2025	\$69.84	\$14.32	\$12.31	\$8.00	\$0.00	\$104.47
PLUMBERS & GASFITTERS LOCAL 12 (Local 138)							
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GASFITTER"							

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
CABLE TECHNICIAN (Power Zone) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$29.67	\$9.25	\$0.89	\$1.00	\$0.00	\$40.81
CABLEMAN (Underground Ducts & Cables) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$42.03	\$9.25	\$1.26	\$9.01	\$0.00	\$61.55
DRIVER / GROUNDMAN CDL OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$34.62	\$9.25	\$1.04	\$9.03	\$0.00	\$53.94
DRIVER / GROUNDMAN -Inexperienced (<2000 Hrs) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$27.20	\$9.25	\$0.82	\$1.00	\$0.00	\$38.27
EQUIPMENT OPERATOR (Class A CDL) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$42.03	\$9.25	\$1.26	\$13.09	\$0.00	\$65.63
EQUIPMENT OPERATOR (Class B CDL) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$37.09	\$9.25	\$1.11	\$9.76	\$0.00	\$57.21
GROUNDMAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$27.20	\$9.25	\$0.82	\$1.00	\$0.00	\$38.27
GROUNDMAN -Inexperienced (<2000 Hrs.) OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 For apprentice rates see "Apprentice- LINEMAN"	8/30/2020	\$22.25	\$9.25	\$0.82	\$1.00	\$0.00	\$33.32
JOURNEYMAN LINEMAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	8/30/2020	\$49.45	\$9.25	\$1.48	\$16.00	\$0.00	\$76.18

Apprentice: JOURNEYMAN LINEMAN**Effective Date: 8/30/2020**

Step	Percent	Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
1	60.00	\$29.67	\$9.25	\$0.89	\$2.50	\$0.00	\$42.31
2	65.00	\$32.14	\$9.25	\$0.96	\$2.50	\$0.00	\$44.85
3	70.00	\$34.62	\$9.25	\$1.04	\$2.50	\$0.00	\$47.41
4	75.00	\$37.09	\$9.25	\$1.11	\$4.00	\$0.00	\$51.45

Outside Electrical

Classification	Effective Date	Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
Apprentice: JOURNEYMAN LINEMAN Effective Date: 8/30/2020							
		Apprentice Base Wage	Health	Pension	Annuity	Supplemental Unemployment	Total Rate
5	80.00	\$39.56	\$9.25	\$1.19	\$4.00	\$0.00	\$54.00
6	85.00	\$42.03	\$9.25	\$1.26	\$4.00	\$0.00	\$56.54
7	90.00	\$44.51	\$9.25	\$1.34	\$6.00	\$0.00	\$61.10
Apprentice to Journeyworker Ratio: 1:2							
TELEDATA CABLE SPLICER OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$30.73	\$4.70	\$0.92	\$2.25	\$0.00	\$38.60
TELEDATA LINEMAN/EQUIPMENT OPERATOR OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$28.93	\$4.70	\$0.89	\$2.25	\$0.00	\$36.77
TELEDATA WIREMAN/INSTALLER/TECHNICIAN OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104 OUTSIDE ELECTRICAL WORKERS - EAST LOCAL 104	2/4/2019	\$28.93	\$4.70	\$0.89	\$2.25	\$0.00	\$36.77

Additional Apprentice Information

All apprentices must be registered with the Division of Apprenticeship Training(DAS) in accordance with M.G.L.c. 23, §§ 11E-11L. Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the hourly prevailing wage rate established by the Commissioner under the provisions of M.G.L.c. 149, §§ 26-27D.

Apprentice ratios are established by DAS pursuant to M.G.L.c. 23, §§ 11E-11L. Ratios are expressed as the allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified. The ratios listed herein have been taken from relevant private collective bargaining agreements(CBAs) and are provided for illustrative purposes only. They have not been independently verified as being accurate or continuing to be accurate.

Parties having questions regarding what ratio to use should contact DAS.

DOCUMENT A00801

SPECIAL PROVISIONS**BURLINGTON – HAVERHILL****Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3)
and H-12-038 (2X0 & 2WY)**

Labor participation goals for this Project shall be 15.3% for minorities and 6.9% for women for each job category. The goals are applicable to both Contractor's and Subcontractor's on-site construction workforce. Refer to Document 00820 for details.

SCOPE OF WORK

All work under this Contract shall be done in conformance with the *2025 Standard Specifications for Highways and Bridges*, the *Supplemental Specifications* contained in this book, the *Construction Standard Details* in effect as of June, 2025, the *1990 Standard Drawings for Signs and Supports*, the *2015 Overhead Signal Structure and Foundation Standard Drawings*, the *2009 Manual on Uniform Traffic Control Devices (MUTCD) with Revisions 1, 2, and 3* and the *November 2022 Massachusetts Amendments to the MUTCD*, the *1968 Standard Drawings for Traffic Signals and Highway Lighting*, the latest edition of *The American Standard for Nursery Stock*, the Plans and these Special Provisions.

The Work will include but not be limited to:

- 1) Removing the deteriorated concrete from any element of the substructure, including but not limited to pier caps, pier columns, wing walls, backwalls, breastwalls and abutments.
- 2) Jacking and shoring to support pier caps and/or various beams over piers and abutments may be required to allow concrete repairs to the substructure.
- 3) Replacing excavated, spalled, delaminated, or deteriorated concrete, and replacing any broken, missing or deteriorated reinforcing steel.
- 4) Replacing missing or damaged granite or cement concrete slope paving, either in kind or with cement concrete slope paving where needed and as directed by the Engineer.
- 5) Performing structural maintenance repairs (bolted repairs) to deteriorated steel beam ends on bridge: H-12-038 (2X0).
- 6) Cleaning (full removal) and painting of bridges: H-12-038 (2X0 & 2WY).

All work shall be performed within, and accessed by, existing State, City or Town roadway layouts. No rights to enter on, or occupy, private property have been acquired for this project.

SUBSECTION 7.05 INSURANCE REQUIREMENTS

The insurance requirements set forth in this subsection are in addition to the requirements of the Standard Specifications.

7.05.B: Public Liability Insurance 1. and
7.05.B: Public Liability Insurance 2.

The Massachusetts Department of Transportation and applicable railroads shall be named as additional insureds.

LOCATION OF WORK

The following specific bridges are included in this Contract:

<u>Bridge No.</u>	<u>City/Town</u>	<u>Facility Carried</u>	<u>Feature Intersected</u>
B-29-006 (2G2)	Burlington	US 3 SB	I 95/ST 128 & CD
B-29-006 (2G3)	Burlington	US 3 NB	I 95/ST 128 & CD
H-12-038 (2X0)	Haverhill	I 495 SB	Amesbury Line Road
H-12-038 (2WY)	Haverhill	I 495 NB	Amesbury Line Road

No work shall be performed under this Contract until specifically authorized and directed by the Engineer. Furthermore, this Contract does not assign to the Contractor complete maintenance of the bridges owned by the Department. The Department reserves the right to perform such work as it deems best with its own forces, and/or to enter into special contracts for the maintenance of specific items.

CONTRACTOR QUESTIONS AND ADDENDUM ACKNOWLEDGEMENTS

Prospective bidders are required to submit all questions to the Construction Contracts Engineer by 3:00 P.M. on the Tuesday of the previous week before the scheduled bid opening date. Any questions received after this time will not be considered for review by the Department.

Contractors should email questions and addendum acknowledgements to the following email address massdot specifications@dot.state.ma.us The MassDOT proposal number and municipality is to be placed in the subject line.

SCHEDULE OF WORK

All proposed work hours shall conform to Subsection 7.09 and be subject to the written approval of the Engineer.

Night Time Work

All work locations requiring night hours, as approved by the Engineer, are restricted as follows:

Sunday: 8:30 PM to 5:00 AM Monday
Monday: 8:30 PM to 5:00 AM Tuesday
Tuesday: 8:30 PM to 5:00 AM Wednesday
Wednesday: 8:30 PM to 5:00 AM Thursday
Thursday: 8:30 PM to 5:00 AM Friday

Work may not proceed beyond the normal 8-hour day unless prior approval is obtained from the Engineer for that day. Approval to work beyond the scheduled work will only be given when special conditions exist that warrant working beyond the scheduled work, as determined by the Engineer.

The Contractor may schedule night shifts longer than 8-hours with prior approval by the Engineer. No additional compensation will be made for work scheduled during nighttime or longer working hours.

No entrance or exit ramp shall be closed to traffic except between the hours of 8:30 PM and 5:00 AM the following day or as directed. The Contractor shall be required to schedule the work activities such that not more than one ramp shall be closed during any given work period.

These time periods include the "set-up" and "breakdown" of the traffic pattern employed. No operations, personnel, or equipment will be allowed on the roadways except during working hours.

The work hour restrictions do not apply to emergency conditions, as determined by the Engineer.

COORDINATION WITH OTHER PROJECTS

The Contractor shall coordinate his activities with two other MassDOT projects that are within or near the project site so as not to impede or interfere with the work of other contractors working in the same area. The Contractor shall coordinate traffic control, especially temporary traffic control signs, with the other projects to avoid duplicate signs, contradictory messages and conflicting traffic patterns.

The projects are as follows:

1. Project 610719 ~ Contract 129715 Burlington – Tyngsboro Rte 3 Pavement Preservation
2. Project 609516 ~ Contract 129633 Rte 3 Interchange at I-95 and Middlesex

HOLIDAY WORK RESTRICTIONS

(Supplementing Subsection 7.09)

The District Highway Director (DHD) may authorize work to continue during these specified time periods if it is determined by the District that the work will not negatively impact the traveling public. DHD may allow work in those areas on a case by case basis and where work is behind barrier and will not impact traffic

Below are the holiday work restrictions:

New Years Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day. No work on local roadways on the holiday without permission by the DHD and the local police chief.

Martin Luther King's Birthday (Federal Holiday)

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

President's Day (Federal Holiday)

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

Evacuation Day (Suffolk County State Holiday)

No work restrictions due to traffic concerns.

Patriot's Day (State Holiday)

Work restrictions will be in place for Districts 3 and 6 along the entire Boston Marathon route and any other locations that the DHD in those districts determine are warranted so as to not to impact the marathon. All other districts work restrictions will be as per DHD.

Mother's Day

No work on Western Turnpike and Metropolitan Highway System from 5:00 AM on the Friday before, until the normal start of business on the following day.

Memorial Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the Friday before, until the normal start of business on the following day.

Bunker Hill Day (Suffolk County State Holiday)

No work restrictions due to traffic concerns.

Juneteenth

No work restrictions due to traffic concerns, however work on local roadways requires permission by the DHD and local police chief.

HOLIDAY WORK RESTRICTIONS (Continued)**Independence Day (Federal Holiday)**

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day. No work on local roadways on the holiday without permission by the DHD and the local police chief.

Labor Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the Friday before, until the normal start of business on the following day.

Columbus Day (Federal Holiday)

No work on major arterials from 5:00 AM on the Friday before, until the normal start of business on the following day

Veterans' Day (Federal Holiday)

No work restrictions due to traffic concerns.

Thanksgiving Day (Federal Holiday)

No work on major arterials from 5:00 AM two days before until the normal start of business on the following Monday.

Christmas Day (Federal Holiday)

No work on major arterial roadways from 5:00 AM on the day before until the normal start of business on the next subsequent business day.

SUBSECTION 8.02 SCHEDULE OF OPERATIONS

Replace this subsection with the following:

An integrated cost and schedule controls program shall be implemented by the Contractor to track and document the progress of the Work from Notice to Proceed (NTP) through the Contractor Field Completion (CFC) Milestone. The Contractor's schedules will be used by the Engineer to monitor project progress, plan the level-of-effort required by the Department's work force and consultants and as a critical decision-making tool. Accordingly, the Contractor shall ensure that it complies fully with the requirements specified herein and that its schedules are both accurate and updated as required by the specification throughout the life of the project. Detailed requirements are provided in Division II, Section 722 Construction Scheduling.

SUBSECTION 8.14 UTILITY COORDINATION, DOCUMENTATION, AND MONITORING RESPONSIBILITIES

A. GENERAL

In accordance with the provisions of Section 8.00 Prosecution and Progress, utility coordination is a critical aspect to this Contract. This section defines the responsibility of the Contractor and MassDOT, with regard to the initial utility relocation plan and changes that occur as the prosecution of the Work progresses. The Engineer, with assistance from the Contractor shall coordinate with Utility companies that are impacted by the Contractor's operations. To support this effort, the Contractor shall provide routine and accurate schedule updates, provide notification of delays, and provide documentation of the steps taken to resolve any conflicts for the temporary and/or permanent relocations of the impacted utilities. The Contractor shall provide copies to the Engineer of the Contractor communication with the Utility companies, including but not limited to:

- Providing advanced notice, for all utility-related meetings initiated by the Contractor.
- Providing meeting minutes for all utility-related meetings that the Contractor attends.
- Providing all test pit records.
- Request for Early Utility work requirements of this section (see below).
- Notification letters for any proposed changes to Utility start dates and/or sequencing.
- Written notification to the Engineer of all apparent utility delays within seven (7) Calendar Days after a recognized delay to actual work in the field – either caused by a Utility or the Contractor.
- Any communication, initiated by the Contractor, associated with additional Right-of-Way needs in support of utility work.
- Submission of completed Utility Completion Forms.

B. PROJECT UTILITY COORDINATION (PUC) FORM

The utility schedule and sequence information provided in the Project Utility Coordination Form (if applicable) is the best available information at the time of the bid and has been considered in setting the contract duration. The Contractor shall use all of this information in developing the bid price and the Baseline Schedule Submission, inclusive of the individual utility durations sequencing requirements, and any work that has been noted as potentially concurrent utility installations.

C. INITIATION OF UTILITY WORK

The Engineer will issue all initial notice-to-proceed dates to each Utility company based on either the:

- 1) Contractor's accepted Baseline Schedule
- 2) An approved Early Utility Request in the form of an Early Utility sub-net schedule (in accordance with the requirements of this Subsection)
- 3) An approved Proposal Schedule

C.1 - BASELINE SCHEDULE – UTILITY BASIS

The Contractor shall provide a Baseline Schedule submission in accordance with the requirements of Subsection 8.02 and inclusive of all of the information provided in the PUC Form that has been issued in the Contract documents. This is to include the utility durations, sequencing of work, allowable concurrent work, and all applicable considerations that have been depicted on the PUC Form.

SUBSECTION 8.14 (Continued)**C.2 – EARLY UTILITY REQUEST – (aka SUBNET SCHEDULE) PRIOR TO THE BASELINE**

All early utility work is defined as any anticipated/required utility relocations that need to occur prior to the Baseline Schedule acceptance. In all cases of proposed early utility relocation, the Contractor shall present all known information at the pre-construction conference in the form of a ‘sub-net’ schedule showing when each early utility activity needs to be issued a notice-to-proceed. The Contractor shall provide advance notification of this intent to request early utility work in writing at or prior to the Pre-Construction meeting. Prior to officially requesting approval for early utility work, the Contractor shall also coordinate with MassDOT and all utility companies (private, state or municipal) which may be impacted by the Contract. If this request is acceptable to the Utilities and to MassDOT, the Engineer will issue a notice-to-proceed to the affected Utilities, based on these accepted dates.

C.3 – PROPOSAL SCHEDULE - CHANGES TO THE PUC FORM

If the Contractor intends to submit a schedule (in accordance with MassDOT Standard Specifications, Division I, Subsection 8.02) that contains durations or sequencing that vary from those provided in the Project Utility Coordination (PUC) Form, the Contractor must submit this as an intended change, in the form of a Proposal Schedule and in accordance with MassDOT Standard Specifications, Division I, Subsection 8.02. These proposed changes are subject to the approval of the Engineer and the impacted utilities, in the form of this Proposal Schedule and a proposed revision to the PUC form. The Contractor shall not proceed with any changes of this type without written authorization from the Engineer, that references the approved Proposal Schedule and PUC form changes. The submission of the Baseline Schedule should not include any of these types of proposed utility changes and should not delay the submission of the Baseline Schedule. As a prerequisite to the Proposal Schedule submission, and in advance of the utility notification(s) period, the Contractor shall coordinate the proposed utility changes with the Engineer and the utility companies, to develop a mutually agreed upon schedule, prior to the start of construction.

D. UTILITY DELAYS

The Contractor shall notify the Engineer upon becoming aware that a Utility owner is not advancing the work in accordance with the approved utility schedule. Such notice shall be provided to the Engineer no later than seven (7) calendar days after the occurrence of the event that the Contractor believes to be a utility delay. After such notice, the Engineer and the Contractor shall continue to diligently seek the Utility Owner’s cooperation in performing their scope of Work.

In order to demonstrate that a critical path delay has been caused by a third-party Utility, the Contractor must demonstrate, through the requirements of the monthly Progress Schedule submissions and the supporting contract records associated with Subsection 8.02, 8.10 and 8.14, that the delays were beyond the control of the Contractor.

SUBSECTION 8.14 (Continued)

All documentation provided in this section is subject to the review and verification of the Engineer and, if required, the Utility Owner. In accordance with MassDOT Specifications, Division I, Subsection 8.10, a Time Extension will be granted for a delay caused by a Utility, only if the actual duration of the utility work is in excess of that shown on the Project Utility Coordination Form, and only if;

- 1) proper Notification of Delay was provided to MassDOT in accordance with the time requirements that are specified in this Section
- 2) the utility delay is a critical path impact to the Baseline Schedule (or most recently approved Progress Schedule)

E. LOCATION OF UTILITIES

The locations of existing utilities are shown on the Contract drawings as an approximation only. The Contractor shall perform a pre-construction utility survey, including any required test pits, to determine the location of all known utilities no later than thirty (30) calendar days before commencing physical site work in the affected area.

F. POST UTILITY SURVEY – NOTIFICATION

Following completion of a utility survey of existing locations, the Contractor will be responsible to notify the Engineer of any known conflicts associated with the actual location of utilities prior to the start of the work. The Engineer and the Contractor will coordinate with any utility whose assets are to be affected by the Work of this Contract. A partial list of utility contact information is provided in the Project Utility Coordination Form.

G. MEETINGS AND COOPERATION WITH UTILITY OWNERS

The Contractor shall notify the Engineer in advance of any meeting they initiate with a Utility Owner's representative to allow MassDOT to participate in the meeting if needed.

Prior to the Pre-Construction Meeting, the Contractor should meet with all Utility Owners who will be required to perform utility relocations within the first 6 months of the project, to update the affected utilities of the Project Utility Coordination Form and all other applicable Contract requirements that impact the Utilities. The Contractor shall copy the Engineer on any correspondence between the Utility Owner and the Contractor.

H. FORCE ACCOUNT / UTILITY MONITORING REQUIREMENTS

The Engineer will be responsible for recording daily Utility work force reports. The start, suspension, re-start, and completion dates of each of the Utilities, within each phase of the utility relocation work, will be monitored and agreed to by the Engineer and the Contractor as the work progresses.

I. ACCESS AND INSPECTION

The Contractor shall be responsible for allowing Utility owners access to their own utilities to perform the relocations and/or inspections. The Contractor shall schedule their work accordingly so as not to delay or prevent each utility from maintaining their relocation schedule.

COMPLIANCE WITH THE NATIONAL DEFENSE AUTHORIZATION ACT
(Supplementing Subsection 7.01)

On all projects, the “Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment” Regulation (2 CFR 200.216) prohibits the Contractor from using or furnishing the following telecommunications equipment or services:

- Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
- Telecommunications or video surveillance services provided by such entities or using such equipment.
- Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

This prohibition applies to all products manufactured by the aforementioned companies, including any individual components or parts.

By submitting a bid on a project, the Contractor certifies that all work will be in compliance with the terms of 2 CFR 200.216. The Contractor shall submit a COC indicating compliance with the above provisions for all telecommunications equipment or services included in the Contract.

Payment for the item in which the materials are incorporated may be withheld until these COCs are received. Any cost involved in furnishing the certificate(s) shall be borne by the Contractor.

FORMWORK AND SITEWORK

The temporary formwork used for concrete placement shall be removed and disposed of by the Contractor. Any formwork that is not removed within forty-five (45) days after the concrete placement and is reported by Bridge Inspection or other MassDOT personnel will impose a damage of \$500.00 for each form location (On one bridge there may be multiple locations). Payment for removal of concrete forms shall be included in the unit price under the applicable item.

The Contractor is required to broom and clean all work site areas after the removal of excavated debris, regardless of the pre-existing conditions. These include areas excavated under joints such as pier caps and revetment areas. This removal of debris is incidental to the Contract with no additional compensation.

MAINTENANCE OF EXISTING ELECTRICAL CONDUIT IN PLACE

Concrete repair work on Piers #2 and #5 of Bridge Nos. B-29-006 (2G2) and B-29-006 (2G3) includes support of the MassDOT electrical conduit attached to the bridge piers and headers on the Route 3 bridges over I-95. The Contractor shall provide a detailed plan, for the Engineer's approval, to perform the concrete repair and maintain the conduit/lighting. Work to remove and replace deteriorated concrete is expected to require moving the electrical conduits and therefore includes removing and installing new attachments. Depending on the scope of repairs, as determined in the field, any work that requires modifying or replacing the conduit or the wires therein shall be included in this plan for approval.

Any movement of the conduit or junction boxes requires coordination with the District Traffic Section Electrical Supervisor to provide a lockout/tagout, if necessary. The electrical conductors/circuits in the conduit at the pier repairs provide power to lighting towers at the interchange. Lighting on the interchange will only be allowed to be shut down with advanced approval and for a maximum period of 14 consecutive days. Provisions will be required to coordinate this outage with the District Operations Section. For the safety of workers performing the work, MassDOT will not lock out any circuits for the contractor. All lockout procedures by the contractor must follow the guidelines set forth by NFPA 70E LOTO and OSHA 29 CFR 1910.147.

This Work is considered to be incidental to the project and will not be measured for payment.

Temporary access to the junction boxes mounted on the piers or the EMH in the HSL median will be allowed after coordination with the D4 Traffic Electrician and proper lockout/tagout. Wires fed from the EHH in the HSL shoulder may be cut, taped off, and re-spliced. Proper qualifications and inspection will be required for this work.

If removal of the barrier cap is required to acquire additional slack, measurement and payment for removal and replacement of the concrete shall be done using contract items.

Note: Split duct is not to be used. Any new FRE conduit required, or damaged conduit, shall be replaced "in kind."

PREPARATION OF CONCRETE SURFACES:

All concrete surfaces to be patched shall be roughened, cleaned of all laitance, dirt, grease, oil, other contaminants, and all standing water. All reinforcing steel encountered in the excavation shall be thoroughly cleaned by abrasive blasting before being covered with new concrete.

With approval of the Engineer the Contractor may choose one of the following surface preparation methods. In bonding new concrete to already set concrete the surface of the concrete shall be thoroughly cleaned and roughened then

- A) Wetted with clean water, and then flushed with a mortar composed of equal parts of the cement and sand specified for the new concrete, before new concrete is placed adjacent thereto. New concrete shall be placed before mortar has taken initial set.

PREPARATION OF CONCRETE SURFACES(Continued)

- B) Wetted with clean water, and then an epoxy adhesive suitable for bonding fresh concrete to hardened concrete for load bearing applications may be used. The epoxy adhesive shall conform to AASHTO M 235M/M 235 Type V and shall be applied in accordance with the manufacturer's recommendations.
- C) Ponded with clean water to achieve Saturated Surface Dry (SSD) condition then it shall be blown off with oil free compressed air.

CONTAMINATED SOIL

Soil to be removed from the project area shall not be assumed to be uncontaminated and must be evaluated prior to off-site management for potential contamination with hazardous materials. No soil may be disposed of off-site without proper assessment by the contractor and approval from the Resident Engineer (RE), District Environmental Engineer (DEE), or the project designee.

SOIL STOCKPILING DIRECTIVE P-22-001

Any stockpiling of soil must be performed in compliance with Policy Directive P-22-001, Off-Site Stockpiling of Soil from MassDOT Construction Projects. This directive limits the allowable locations for off-site stockpiling of soil generated during MassDOT projects and includes various requirements that must be satisfied by the contractor prior to off-site stockpiling. The Contractor is responsible for identifying a suitable stockpile location.

TRUCK SAFETY DEVICES

(Supplementing Subsection 7.04: Motor Vehicles)

All motor vehicles subject to Section 7 of Chapter 90 to be operated under this Contract shall be equipped with safety devices as provided therein and in 540 CMR 4.00.

By December 31, 2025, the Contractor shall certify to the Registry of Motor Vehicles, in a manner prescribed by the Registrar, that all applicable vehicles are equipped with Lateral Protective Devices, Convex Mirrors, Cross Over Mirror(s) and Back Up Cameras in accordance with the requirements of 540 CMR 4.00.

The Contractor shall provide evidence satisfactory to the Department to demonstrate compliance with the above certification requirement for all applicable vehicles operated under this Contract by the Contractor and its subcontractors and vendors in a manner set forth by the Department. Thereafter, the Contractor shall have an affirmative obligation to continue to provide such evidence of compliance on an ongoing basis and no later than 7 days after certification with the Registry of Motor Vehicles of any additional vehicles operated under this Contract by the Contractor and its subcontractors and vendors.

Non-compliance with respect to a vehicle that is subject to 540 CMR 4.00 may subject the Contractor to statutory fines as established in M.G.L. c. 90, § 7 and/or contractual remedies up to and including termination of the Contract.

EROSION AND SEDIMENT CONTROL

The Engineer has the authority to limit the surface areas of erodible earth material exposed by excavation, borrow and fill or similar operations, and to direct the Contractor to provide immediate, permanent, or temporary control measures to prevent contamination of any drainage systems by installing compost filter tubes, staked hay bales, sedimentation basins, silt fences or other control devices. Work or methods as necessary to control erosion and sedimentation will be paid under related items of work.

The erosion and sediment control features installed by the Contractor shall be satisfactorily maintained by the Contractor until acceptance of work under this Contract.

In the event of conflict between these Specifications and Laws, Rules, or Regulations of local agencies, the more restrictive requirements shall apply.

Failure by the Contractor to control erosion, pollution, and/or siltation shall be cause for the Engineer to employ departmental action and/or outside assistance to provide the necessary corrective measures, the cost of which shall be deducted from the Contractor's monthly progress estimate.

EMERALD ASH BORER ADVISORY

To the extent possible, all trees and brush shall be disposed on site, typically chipped and spread in place. When trees or brush must be removed, such as in urban, or otherwise populated areas, Contractor shall identify proposed location for disposal, and provide written notification to the Engineer for approval. Disposal shall be in city or town of project, or at minimum, within county, of construction operations.

PIGEON WASTE

The Contractor shall remove and dispose of the pigeon waste and any other debris accumulated on the steel members and bridge seats in areas where work is being performed. Pigeon waste and debris material contaminants will require special handling and disposal in accordance with all Federal, state, and local requirements. No separate payment will be made for removal and disposal of pigeon waste. Cost shall be incidental to the contract pay items.

NORTHERN LONG-EARED BAT AND TRICOLORED BAT PROTECTION

The northern long-eared bat (*Myotis septentrionalis*; NLEB) and tricolored bat (*Perimyotis subflavus*; TCB) are listed as federally endangered or proposed endangered, respectfully, under the Endangered Species Act (ESA). The U.S. Fish and Wildlife Service (USFWS) developed this guidance to address ESA compliance and promote conservation of NLEB and TCB. As there is no Federal nexus (Federal funding or permits) for this project, Section 7 consultation was not required or conducted. However, Section 9 of the ESA prohibits anyone from “taking” or harming an endangered species, and the below language shall be adhered to in order to maintain compliance with the ESA.

If any of the project locations require work within U.S. Army Corps of Engineers (ACOE) jurisdictional wetlands, the ACOE will be the lead federal agency for ESA consultation with the U.S. Fish & Wildlife Service (USFWS). Most consultations for the NLEB take 30 days.

The following Avoidance and Minimization Measures (AMMs) must be strictly adhered to in order to protect NLEB and TCB and to be in compliance with the ESA. Contact MassDOT Environmental Services - Wildlife & Endangered Species Unit Supervisor (David Paulson, david.j.paulson@dot.state.ma.us, 857-262-3378) for questions about project limits, restrictions, or conservation measures.

NORTHERN LONG-EARED BAT AND TRICOLORED BAT PROTECTION

(Continued)

The Resident Engineer can check on the status of AMM applicability by sending a locus map of the proposed work to MassDOT Highway Division's Environmental Services Section - Wildlife & Endangered Species Unit Supervisor for review and a determination if some of the AMMs and TOY restriction can be waived.

Required AMM for all projects:

- The Contractor shall ensure all personnel working in on the project site are aware of all environmental commitments related to NLEB and TCB, including all applicable AMMs. NLEB Bat information (<https://www.fws.gov/midwest/endangered/mammals/nleb/> and <https://www.fws.gov/species/tricolored-bat-perimyotis-subflavus>) shall be made available to all personnel.

If temporary lighting is proposed within the project scope, the following AMM is applicable:

Lighting AMM:

- Direct temporary lighting away from suitable habitat during the active season: **April 15 to October 31.**

If the Removal of Trees and/or Woody Vegetation >3-inch in diameter is proposed within the project scope, the following AMMs are applicable:

Tree AMMs:

- If additional cutting is proposed by the Contractor that is outside the scope of this contract, additional review is required by the MassDOT Highway Division's Environmental Services Section, and additional review and restrictions may be required by the USFWS.
- Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).
- In order to protect northern long-eared bats and their young during their active season, **no tree cutting shall be conducted during the Time of Year (TOY) restriction of April 15 to October 31.**
- Do not remove **documented** or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year (<http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/species-information-and-conservation/rare-mammals/northern-long-eared-bat.html>).
- The Contractor shall ensure all personnel working in on the project site are aware of all environmental commitments related to NLEB and TCB, including the **TOY** restriction.

NORTHERN LONG-EARED BAT AND TRICOLORED BAT PROTECTION

(Continued)

If the Bridge Work is proposed within the project scope, the following AMMs are applicable:
Bridge AMMs:

- **Bridge AMM 1** - To completely avoid direct effects to roosting bats, perform any bridge removal, replacement, and/or maintenance work during the winter hibernation period unless a hibernating colony of bats is present (contact your local USFWS Field Office for exact dates). Also, follow Bridge AMM 4.
 - **Note:** Bridge AMM 1 is an avoidance measure for direct effects; the full implementation of which may not always be practicable. **If bridge removal, replacement, and/or maintenance work must be performed outside of the winter hibernation period, then follow Bridge AMMs 2-4.**
- **Bridge AMM 2 - Colony or Assuming Presence of Bats**
 - If assuming presence of bats or if bridge assessment or P/A surveys suggest presence of a colony of bats, and work is conducted during the active season, ensure activity will not disturb bats. The following types of bridge work can generally be conducted with the presence of bats:
 - above deck work where construction equipment or materials do not extend to the underside of deck where bats may be located (e.g., materials that may drip down to underside of deck), or does not include percussives (vibration) or noise levels above general traffic (e.g., road line painting, wing-wall work).
 - below deck work that is conducted away from roosting bats and does not involve percussives or noise level above general traffic (e.g., wing-wall work, some abutment, beam end, scour, or pier repair).
- **Bridge AMM 3 - Small Number of Bats**
 - If bridge assessment or P/A surveys suggest presence of a small number of bats (≤ 5 – not a colony), and work is conducted during the active season, the following types of bridge work can generally be conducted with the presence of bats:
 - above deck work where construction equipment or materials do not extend to the underside of deck where bats may be located (e.g., materials that may drip down to underside of deck), or does not include percussives (vibration) or noise levels above general traffic (e.g., road line painting, wing-wall work).
 - below deck work that is conducted away from roosting bats and does not involve percussives or noise level above general traffic (e.g., wing-wall work, some abutment, beam end, scour, or pier repair).
 - any other bridge removal, replacement, and/or maintenance work (which may include activities with percussives) conducted in the evening while the bats are feeding, starting one hour after sunset, and ending one hour before daylight excluding the hours between 10 p.m. and midnight and keep the light localized.
- **Bridge AMM 4** - If assuming presence of bats, or if bridge assessment or P/A surveys suggest presence of bats, ensure suitable roosting habitat is maintained. Suitable roosting sites may be incorporated into the design of a new bridge.

**GENERAL REQUIREMENTS FOR DEMOLITION AND
WORK INVOLVING PAINTED STEEL**

(02/06/2020)

Demolition and work involving painted steel shall conform to the requirements of Subsection 961 of the Standard Specifications.

Work Involving Painted Steel

Hazardous materials shall be removed in the immediate area of any intended welding, heating, saw cutting or burning of steel. Hazardous material removal is required to allow the demolition of structural steel, railings, drainage systems, utility supports, steel lamp posts, etc.

The contractor shall assume that the coatings on the steel contain lead (Pb), unless otherwise determined by testing. The contractor shall certify in writing to the Engineer the results of all testing, and shall also certify that any lead (Pb) coated steel removed from the project was not reused or buried, but was sent to a scrap metal recycling facility.

Implement and maintain programs and procedures, which comply with the requirements of this specification and all applicable standards and regulations. Comply with all applicable regulations even if the regulation is not specifically referenced herein. If a state or local regulation is more restrictive than the regulation of this specification, follow the more restrictive requirements.

This requirement is intended only for the demolition and preparation prior to repair and does not include provisions for recoating of steel.

Environmental

All applicable portions of Subsections 961.65 “Worker Protection” and 961.66 “Environmental Protection and Monitoring” shall be followed when performing this work.

During chemical stripping a hand washing facility may be used in lieu of a decontamination/changing facility.

Hazardous material shall be collected during the disassembly and disposed of as outlined in Subsection 961.68 “Handling of Hazardous Waste and Reporting Release Programs”.

The applicable submittals shall be according to Subsection 961.69 “Submittals”.

GENERAL REQUIREMENTS FOR DEMOLITION AND WORK INVOLVING PAINTED STEEL (Continued)

Cleaning/Removal

Cutting Or Burning Of Steel

All surfaces to be welded, heated, saw cut or burned shall be cleaned so as to remove all contaminants and/or hazardous materials, which could be discharged to the environment as a function of the subsequent operations.

Lead paint shall be removed in its entirety in an area prescribed by a 6 inch (15 cm) minimum offset from the required work. The paint removal operation may be dry abrasive blasting, wet abrasive blasting or chemical stripping.

Proper level of containment shall be used when performing this work in accordance with Subsection 961.67 "Containment". Full containment is not required during chemical stripping operation however; the Contractor shall install proper shielding and/or tarpaulins under the chemical stripping operations in order to catch all debris generated during this procedure. A cleaned area must be inspected and approved before the demolition operations are started.

During cleaning operations the Contractor shall be required to furnish and erect temporary floodlights illuminating the steel surface at a minimum of 30-foot candles. This lighting shall be used in areas where there is insufficient lighting for proper cleaning operations and inspection. The Contractor shall supply electrical power.

The Contractor shall provide support for interim and final inspection of the bridge during cleaning operations. This support shall include the necessary traffic controls and safe access to the work.

Mechanical Disassembly Of Steel

All surfaces to be mechanically disassembled by shear cutting or removing bolts or rivets shall not require deleading. When shear cutting or removing bolts or rivets, the Contractor shall not use any method that will cause dust and/or particles to be emitted and/or dispersed into the environment to an extent that would expose the workers above the Action Levels of $30\mu\text{g}/\text{m}^3$.

For purposes of limiting the lead (Pb) dust, the Contractor will be required to dampen the lead paint work areas.

The contractor shall install a proper shielding and/or tarpaulins under all lead-paint-coated surfaces to be shear cut or bolts or rivets ordered removed in order to catch any loose lead paint chips, dust or particles.

NOTICE TO OWNERS OF UTILITIES*(Supplementing Subsection 7.13)*

District 4 Utility/Constructability Engineer: Ray Stinson, (857) 368 - 4135

Ray.Stinson@dot.state.ma.us

If available, existing bridge plans indicate the location of the existing known utilities in the vicinity of the work. As the accuracy and completeness of the plans are not guaranteed in any manner, it is the Contractor's responsibility to make their own investigation to assure that no damage to existing structures, drainage lines, traffic signal conduits, etc., will occur.

Written notice shall be given by the Contractor to all public service corporations or officials owning or having charge of publicly or privately owned utilities of the Contractor's intention to commence operations affecting such utilities at least one week in advance of the commencement of such operations and the Contractor shall at that time file a copy of such notice with the Engineer.

A list of public and private utilities can be found on the MassDOT website at:

<https://www.mass.gov/info-details/utility-contacts-by-district-and-municipality>

Select District

Select the City/Town, and then locate the utility

The utility contact list is for guidance only and is not guaranteed to be complete or up to date. Additional site-specific contact information is contained in the PUC form.

NATIONAL GRID EMERGENCY TELEPHONE NUMBERS**GAS:**

Emergency: 1-800-233-5325

New Service: 1- 877-696-4743

Customer Support: 1-800-732-3400

EVERSOURCE EMERGENCY TELEPHONE NUMBERS**ELECTRIC:**

Outage/ Emergency: 800-592-2000 or 844-726-7562

New Service: 1-888-633-3797 (1-888-need pwr)

Customer Support: 1-800-340-9822

NOTIFICATION OF PUBLIC OFFICIALS

Town officials are shown at website <https://www.mass.gov/lists/massachusetts-cities-and-towns> and select the required City/Town website.

State Police are shown at website <https://www.mass.gov/info-details/massachusetts-state-police-troop-boundaries>. Select the area of jurisdiction to find the local station.

The Contractor shall inform the following officials in each area that he is assigned to work in:

Superintendent, Department of Public Works, or Town Engineer. Superintendent, Water Department, Superintendent, Sewer Departments. Police Department, Fire Department, Electric Company, Railroads.

2026 FIFA WORLD CUP – BOSTON, MASSACHUSETTS

The 2026 FIFA World Cup will be held at Gillette Stadium in Foxborough, related events, and significant tourist events such as Sail Boston and the 250th Anniversary of the United States will be held throughout the region. Matches and Fan Fest and other possible 250th Celebration activities are scheduled through June, July and August 2026. The District will be imposing work and/or traffic restrictions as necessary to minimize impacts during these periods when, as determined by MassDOT, the Contractor's operations could impact vehicular traffic, particularly on interstate highways and major arterials throughout the region and local roads near event sites. No additional compensation will be allowed for work restrictions except as determined under Subsection 8.10. nor will the Contractor have any claim for related costs, direct or indirect. The Contract time determinations have accounted for potential work restriction during this period and Contractor's should plan accordingly. Any necessary or emergency work required during this time will require District approval.

CONTRACTOR DESIGN REQUIREMENTS

All design drawings and calculation submittals that are prepared and stamped by a Professional Engineer shall be checked by a second Professional Engineer. Both Professional Engineers shall be registered in the Commonwealth of Massachusetts, and be of the appropriate engineering discipline. All drawings calculation sheets shall contain the "calculated by" or "drawn by", and "checked by" sections with the initials of both Professional Engineers. "

SECTION 722 CONSTRUCTION SCHEDULING DESCRIPTION

722.20 General

The Contractor's approach to prosecution of the Work shall be disclosed to the Department by submission of a Critical Path Method (CPM) schedule and a cost/resource loaded Construction Schedule as defined by the schedule type set forth below. These requirements are in addition to any requirements imposed in other sections.

This section establishes the requirement for scheduling submissions. There are four schedule types identified as types A, B, C and D.

All schedules shall be prepared and submitted in accordance with this specification and the instructions contained in the Construction Schedule Toolkit located on the MassDOT-Highway Division website at <https://www.mass.gov/info-details/massdot-highway-contractors-schedule-toolkit>.

Type A –

- Schedule Planning Session
- Baseline CPM Schedule
- Monthly Update CPM Schedule
- Short-term Construction Schedule
- Contract Schedule Update Meeting
- Cost-loaded & Resource Loaded CPM
- Resources Graphic Reporting
- Cash Flow Projections from the CPM
- Cash Flow Charts
- Monthly Projected Spending Report (PSR)
- Contractor-furnished CPM software and computer

Type B –

- Schedule Planning Session
- Baseline CPM Schedule
- Monthly Update CPM Schedule
- Short-term Construction Schedule
- Contract Schedule Update Meeting
- Cost-loaded & Resource Loaded CPM
- Monthly Projected Spending Report (PSR)
- Contractor-furnished CPM software and computer

Type C –

- Schedule Planning Session
- Baseline CPM Schedule
- Monthly Update CPM Schedule
- Short-term Construction Schedule
- Contract Schedule Update Meeting
- Monthly Projected Spending Report (PSR)
- Contractor-furnished CPM software and computer

SECTION 722 (Continued)**Type D -**

- Bar chart schedule updated monthly or at the request of the Engineer
- Short-term Construction Schedule
- Monthly Projected Spending Report (PSR)

EQUIPMENT, PERSONNEL**722.40 General****A. Software Requirements**

The Contractor shall use Primavera P6 computer scheduling software.

In addition to the requirements of Section 740 – Engineer’s Field Office and Equipment, the Contractor shall provide to the Department one (1) copy of the scheduling software, one (1) software license and one (1) computer capable of running the scheduling software for the duration of the Contract. This computer and software shall be installed in the Engineer’s Field Office. The computer and software shall be maintained and serviced at no additional cost to the Department.

B. Scheduler Requirements

The Scheduler shall be approved by the Engineer.

For Type A, B and C Schedules the name of the Contractor’s Project Scheduler together with his/her qualifications shall be submitted to the Department for approval by the Engineer within seven (7) Calendar Days after NTP. The Project Scheduler shall have a minimum of five (5) years of project CPM scheduling experience, three (3) years of which shall be on projects of similar scope and value as the project for which the Project Scheduler is being proposed. References shall be provided from past projects that can attest to the capabilities of the Project Scheduler.

SCHEDULING METHODS**722.60 General****A. Schedule Planning Session**

The Contractor shall conduct a schedule planning session prior to submission of the Baseline Schedule. This session will be attended by the Department and its consultants. During this session, the Contractor shall present its planned approach to the project including, but not limited to:

1. the Work to be performed by the Contractor and its subcontractors;
2. the planned construction sequence and phasing; planned crew sizes;
3. summary of equipment types, sizes, and numbers to be used for each work activity;
4. all early work related to third party utilities;
5. identification of the most critical submittals and projected submission timelines;
6. estimated durations of major work activities;
7. the anticipated Critical Path of the project and a summary of the activities on that Critical Path;
8. a summary of the most difficult schedule challenges the Contractor is anticipating and how it plans to manage and control those challenges;

SECTION 722 (Continued)

9. a summary of the anticipated quarterly cash flow over the life of the project.

This will be an interactive session and the Contractor shall answer all questions that the Department and its consultants may have. The Contractor shall provide a written summary of the information presented and discussed during the session to the Engineer. The Contractor's Baseline Schedule and accompanying Schedule Narrative shall incorporate the information discussed at this Schedule Planning Session.

B. Schedule Reviews by the Department**1. Baseline Schedule Reviews**

The Engineer will respond to the Baseline Schedule Submission within thirty (30) Calendar Days of receipt providing comments, questions and/or disposition that either accepts the schedule or requires revision and resubmittal. Rejected Baseline Schedules shall be resubmitted within fifteen (15) Calendar Days after receipt of the Engineer's comments.

2. Contract Progress Schedule / Monthly Update Reviews / Recovery Schedules

The Engineer will respond to each submittal within twenty-one (21) Calendar Days. Rejected schedules shall be resubmitted by the Contractor within five (5) Calendar Days after receipt of the Engineer's comments.

The Engineer's review comments shall not be construed as direction to change the Contractor's means and methods. The review and acceptance of the CPM schedule does not relieve the Contractor of the responsibility for accomplishing the work within the contract required completion dates. Omissions and errors in the accepted CPM schedule shall not excuse performance less than that required by the Contract.

722.61 Schedule Content and Preparation Requirements

All schedules shall be prepared and submitted in accordance with the instructions contained in the Construction Schedule Toolkit located on the MassDOT-Highway Division website at:

<https://www.mass.gov/info-details/massdot-highway-contractors-schedule-toolkit>

and the following:

A. LOGIC

The schedules shall divide the Work into activities with appropriate logic ties to show:

1. conformance with the requirements of this Section and Division I, Subsection 8.02 - Schedule of Operations
2. the Contractor's overall approach to the planning, scheduling, and execution of the Work
3. conformance with any additional sequences of Work required by the Contract Documents, including, but not limited to, Subsection 8.03 - Prosecution of Work and Subsection 8.06 – Limitations of Operations.

SECTION 722 (Continued)**B. ACTIVITIES**

The schedule shall clearly define the progression of the Work from the Notice to Proceed (NTP) to Contractor Field Completion (CFC) by using separate activities, or including attributes within appropriate activities, to address each of the following:

1. Notice to Proceed
2. Work Breakdown Structure
3. The Critical Path is clearly defined and organized.
4. Float shall be clearly identified.
5. Detailed activities to satisfy permit requirements.
6. Subcontractor approvals at fifteen (15) Calendar Days from submittal to response
7. The preparation and submission of shop drawings, procedures, and other required submittals, with a planned duration that is to be demonstrated to the Engineer as reasonable.
8. The review and return of shop drawings, procedures, and other required submittals, approved or with comments, the duration of which shall be thirty (30) Calendar Days, unless otherwise specified or as approved by the Engineer.
9. Procurement of fabricated materials and equipment with long lead times, including time for review and approval of submittals required before procuring and fabricating.
10. Each component of the Work defined by specific activities.
11. Right-of-Way (ROW) takings that have been identified in the Contract.
12. Early Utility Relocation (by others) that has been identified in the Contract.
13. Interfaces with adjacent work, utility companies, other public agencies, sensitive abutters, and/or any other third-party work affecting the Contract.
14. Utility work to be performed in accordance with the Project Utility Coordination (PUC) Form as provided in Section 8.14 - Utilities Coordination, Documentation and Monitoring Responsibilities
15. Access Restraints – restrictions on access to areas of the Work that are defined by the Department in the bid package, in Subsection 8.06 – Limitations of Operations or elsewhere in the Contract
16. Limitations of Work – time of year restrictions and any other limitations identified in the contract
17. Traffic work zone set-up and removal, night work and phasing
18. Material Certifications
19. Milestones listed in Subsection 8.03 - Prosecution of Work or elsewhere in the Contract Documents
20. For Type A and B Contracts only: All items to be paid for, including all Unit Price and Lump Sum pay items, shall be identified by activity. This shall include all non-construction activities such as engineering work; purchase of permanent materials and equipment, purchase of structural steel stock, equipment procurement, equipment delivery to the site or storage location and the representative amount of overhead/indirect costs that was included in the Contractor's Bid Prices.

SECTION 722 (Continued)

21. Contractor's request for validation of FBU (ready to open to traffic)
22. Full Beneficial Use (FBU) Contract Milestone per the following requirements:
The majority of contract Work has been completed and the asset(s) has been opened for full multi-modal transportation use, except for limited contract work items that do not materially impair or hinder the intended public use of the transportation facility. All anticipated lane takings have been completed, except for minor, short term work items and as defined in Subsection 8.03 - Prosecution of Work
23. The Department's confirmation of completed work to allow for FBU.
24. Contractor's request for validation of Substantial Completion
25. Department generated punch list of twenty-one (21) Calendar Days
26. Substantial Completion Contract Milestone as defined in the standard specifications.
27. Punch list Completion Period of at least thirty (30) Calendar Days per the requirements of Subsections 5.11 - Final Acceptance, 7.15 - Claims Against Contractors for Payment of Labor, Materials and Other Purposes
28. Contractor confirmation that all punchlist work and documentation has been completed.
29. Physical Completion of the Work Contract Milestone per the requirements of Subsections 5.11 - Final Acceptance and 8.03 - Prosecution of Work
30. Documentation Completion per the requirements of Subsections 5.11 - Final Acceptance and 8.03 - Prosecution of Work
31. Contractor Field Completion Contract Milestone (which can also be considered the completion date) per the following requirements: All physical contract Work is complete including punchlist. The Contractor has fully de-mobilized from field operations and as defined in Subsection 5.11

C. EARLY AND LATE DATES

Early Dates shall be based on proceeding with the Work or a designated part of the Work exactly on the date when the corresponding Contract Time commences. Late Dates shall be based on completing the Work or a designated part of the Work exactly on the corresponding Contract Time, even if the Contractor anticipates early completion.

D. DURATIONS

Activity durations shall be in Work Days. Planned Original Durations shall be established with consideration of resources and production rates that correspond to the Contractor's Bid Price. Within all of the Department-required schedules, the Contractor shall plan the Work using durations for all physical construction activities of no less than one (1) Work Day and no greater than fourteen (14) Work Days, unless approved by the Engineer as part of the Baseline Schedule Review.

SECTION 722 (Continued)

Should there be an activity with a duration that is determined by the Engineer to be unreasonable, the Contractor will be asked to provide a basis of the duration using bid documents, historic production rates for similar work, or other form of validation that is acceptable to the Engineer. Should the Contractor and the Engineer be unable to agree on reasonable activity durations, the Engineer will, at a minimum, note the disagreement in the Baseline Schedule Review along with a duration the Engineer considers reasonable and the basis for that duration. A schedule that contains a substantial number of activities with durations that are deemed unreasonable by the Engineer will not be accepted.

E. MATERIALS ON HAND

The Contractor shall identify in the Baseline Schedule all items of permanent materials (Materials On Hand) for which the Contractor intends to request payment prior to the incorporation of such items into the Work.

F. ACTIVITY DESCRIPTIONS

The Contractor shall use activity descriptions in all schedules that clearly describe the work to be performed using a combination of words, structure numbers, station numbers, bid item numbers, work breakdown structure (WBS) and/or elevations in a concise and compact label.

G. ACTIVITY IDENTIFICATION NUMBERS

The Contractor shall use the activity identification numbering system specified in the MassDOT Highway Division Contractor Construction Schedule Toolkit.

H. ACTIVITY CODES

The Contractor shall use the activity codes specified in the MassDOT Highway Division Contractor Construction Schedule Toolkit.

I. CALENDARS

Different calendars may be created and assigned to all activities or to individual activities. Calendars define the available hours of work in each Calendar Day, holidays and general or project-specific non-Work Days such as Fish Migration Periods, time-of-year (TOY) restrictions and/or area roadway restrictions. All calendars shall extend two years beyond the current project completion date.

Project Special Provisions identify specific calendar restrictions some examples of special calendars include, but are not limited to:

- Winter Shutdown Period, specific work is required by separate special provision to be performed during the winter. See Special Provision 8.03 (if applicable)
- Peak traffic hours on heavily traveled roadways. This shall be from 6:30 am to 9:30 am and from 3:30 pm to 7:00 pm, unless specified differently elsewhere in the Contract.
- Special requirements by sensitive abutters, railroads, utilities and/or other state agencies as defined in the Contract.
- Planting seasons for trees, shrubs and grasses and wetlands mitigation work.

SECTION 722 (Continued)

- Cape Cod and the Islands Summer Roadway Work Restrictions: A general restriction against highway and bridge construction is enforced between Memorial Day and Labor Day, unless otherwise directed by the Engineer. Cape Ann Summer Roadway Work Restrictions: While there are no general restrictions for Cape Ann as there are for Cape Cod and the Islands, project-specific restrictions may be enforced.
- Turtle and/or Fish Migration Periods and/or other in-water work restrictions: Refer to the Project Special Provisions for specific restrictions.
- Working over Waterways Restricted Periods.
- Night-time paving and striping operations, traffic, and temperature restrictions.
- Utility Restrictions shall be as specified within the Contract.

J. FLOAT

For the calculation of float in the CPM schedule, the setting for *Retained Logic* is required for all schedule submissions, starting with the Baseline Schedule Submission. Should the Contractor have a reason to propose that an alternative calculation setting such as *Progress Override* be used, the Contractor shall obtain the Engineer's approval prior to modifying to this setting.

K. COST AND RESOURCE LOADING (Types A and B only)

For all Type A and B Schedules, the Contractor shall provide a cost and resource-loaded schedule with an accurate allocation of the costs and resources necessary to complete the Work. The costs and resources shall be assigned to all schedule activities in order to enable the Contractor to efficiently execute the Contract requirements and the Engineer to validate the original plan, monitor progress, provide cash flow projections, and analyze delays.

1. Each schedule activity shall have an assigned cost that accurately represents the value of the Work. Each schedule activity shall have its resources assigned to it by craft and the anticipated hours to accomplish the work. Each schedule activity's equipment resources shall be assigned to it by equipment type and hours operated. Front-loading or other unbalancing of the cost distribution will not be permitted.
2. The sum of the cost of all schedule activities shall be equal to the Contractor's Bid Price.
3. Indicating the labor hours per individual, per day, by craft and equipment hours/day will be acceptable.
4. The Engineer reserves the right to use the cost-loading as a means to resolve changes, disputes, time entitlement evaluations, increases or decreases in the scope of Work, unit price renegotiations and/or claims.
5. For all Type A and B Schedules, all subnets, fragnets, Proposal Schedules, and Recovery Schedules shall be cost and resource-loaded to help to quickly validate and monitor the duration of the Work to be performed.
6. For Type A Schedules, cost-loading of the schedule will also be used for cash flow projection purposes.
7. The cost-loading of each activity shall indicate the portion of the cost for that activity that is applicable to a specific bid item (cost account.) The total cost for each cost account must equal the bid item price.

SECTION 722 (Continued)**L. NOT TO BE USED IN THE CONTRACTOR'S CPM SCHEDULE**

1. Milestones or constraint dates not specified in the Contract.
2. Scheduled work not required for the accomplishment of a Contract Milestone
3. Use of activity durations, logic ties and/or sequences deemed unreasonable by the Engineer.
4. Delayed starts of follow-on trades.
5. Float suppression techniques.
6. Leads such as leads, lags, SS, SF, & FF relationships without the expressed permission of the Department.

722.62 Submittal Requirements

All schedules shall be prepared and submitted in accordance with the requirements listed below.

Each monthly Contract Progress Schedule submittal shall be uniquely identified.

Each Submission shall, at a minimum, include the following:

- a. Narrative
- b. Schedule submittals shall be signed by the Scheduler
- c. Schedule Printout - All Activities
- d. Schedule Printout - Critical Path Layout
- e. Schedule Printout - Remaining Work
- f. Schedule Printout - Top 3 Float Path
- g. Work Breakdown Structure (WBS) Summary
- h. Project Spending Report (PSR) in Portable Document Format (.PDF)
- i. Project Spending Report (PSR) in Microsoft Excel spreadsheet (.XLS)
- j. Oracle Primavera P6 Schedule File (.XER)

All digital file submittals will be labeled with the following information.

- Contract Number
- Project Number
- Project locations (i.e., town(s))
- Brief description
- Submittal description (i.e., UP07)
- Data Date (MM-DD-YY)
- File Description (i.e., Critical Path)

Example: C110464 (P606309) - Orange Route 2 over 202 – UP23 (07-15-22) - Critical Path

A. Narratives

A written narrative shall be submitted with every schedule submittal. The narrative shall:

1. itemize and describe the flow of work for all activities on the Critical Path in a format that includes any changes made to the schedule since the previous Contract Progress Schedule / Monthly Update or the Baseline Schedule, whichever is most recent.
2. provide a description of any specification requirements that are not being followed. Identify those that are improvements and those that are not considered to be meeting the requirements.

SECTION 722 (Continued)

3. provide all references to any Notice of Delay that has been issued, within the time period of the Contract Progress Schedule Update, by letter to the Engineer. Note that any Notice of Delay that is not issued by letter will not be recognized by the Engineer. See Subsection 722.64.A – Notice of Delay.
4. provide a description of each third-party utility's planned vs. actual progress and note any that are trending late or are late per the durations and commitments as provided in the PUC Form; provide a description of the five (5) most important responses needed from the Department and the need date for the responses in order to maintain the current Schedule of Record.
5. provide a description of all critical issues that are not within the control of the Contractor or the Department (third party) and any impact they had or may have on the Critical Path.
6. provide a description of any possible considerations to improve the probability of completing the project early or on time.
7. compare Early and Late Dates for activities on the Critical Path and describe reasons for changes in the top three (3) most critical paths.
8. describe the Contractor's plan, approach, methodologies, and resources to be employed for completing the various operations and elements of the Work for the top three (3) most critical paths. For update schedules, describe and propose changes to those plans and verify that a Proposal Schedule is not required.
9. describe, in general, the need for shifts that are not 5 days/week, 8 hours/day, the holidays that are inserted into each calendar and a tabulation of each calendar that has been used in the schedule.
10. describe any out-of-sequence logic and provide an explanation of why each out-of-sequence activity does not require a correction, if one has not been provided, and an adequate demonstration that these changes represent the basis of how these activities will be built, including considerations for resources, dependencies, and previously approved production rates.
11. identify any possible duration increases resulting from actual or anticipated unit price item quantity overruns as compared to the baseline duration, with a corresponding suggestion to mitigate any possible delays to the Critical Path. If the delay is anticipated to impact the Critical Path, refer to Subsections 4.06 – Increased or Decreased Contract Quantities and 8.10 – Determination and Extension of Contract Time for Completion and submit a letter to the Engineer notifying of a potential delay.
12. include a schedule log consisting of the name of the schedule, the data date and the date submitted.
13. include and describe any notifications, communications and coordination meetings with third-parties such as utility companies that occurred from the last update including personnel names, job titles and contact information, date of meeting(s)/correspondence(s), topics discussed, and reasons the third party provided for deviations from the PUC form.

SECTION 722 (Continued)**B. CPM Bar Charts**

One (1) timescaled bar chart containing all activities shall be prepared and submitted using a scale that yields readable plots and that meets the requirements of Subsection 722.61 – Schedule Content and Preparation Requirements. Activities shall be linked by logic ties and shown on their Early Dates. Critical Paths shall be highlighted, and Total Float shall be shown for all activities.

A second timescaled bar chart shall also be prepared containing only the Critical Path or, if the Critical Path is not the longest path, the Longest Path using a scale that yields readable plots and that meets the requirements of Subsection 722.61 – Schedule Content and Preparation Requirements. Activities shall be linked by logic ties and shown on their Early Dates. Total Float shall be shown for all activities.

C. Detailed Activity Schedule Comparisons

A Detailed Activity Schedule Comparison (DASC) is a simple reporting tool in the format of a graphical report that will provide Resident Engineers with immediate, timely and up-to-date information. The DASC consists of an updated bar chart that overlays the current time period's bar chart onto the previous time period's bar chart for an easily read comparison of progress during the present and previous reporting periods.

D. Activity Cost Report and Monthly Cash Flow Projections (Type A only)

With each Contractor Quantity Estimate (CQE), the Contractor shall submit an Activity Cost Report and Cash Flow Projection that includes all activities grouped by Contract Bid Item.

The Activity Cost Report shall be generated from the Schedule of Record and shall be the basis of the Monthly Cash Flow Projection. Within each contract Bid Item, activities shall be sequenced by ascending activity identification number and shall show:

1. activity ID and description,
2. forecast start and finish dates for each activity and,
3. when submitted as a revised schedule, actual start, and finish dates for each completed activity.
4. any variance to the estimated contract quantity shall be shown.

E. Resource Graphs (Type A only)

Monthly and cumulative resource graphs for the remaining Contract period using the Early Dates and Late Dates in the Contract Progress Schedule shall be included as part of each schedule submittal.

SECTION 722 (Continued)**F. Projected Spending Reports**

A Projected Spending Report (PSR) shall be prepared and submitted monthly. The PSR shall indicate the monthly spending (cash flow) projection for each month from NTP to Contractor Field Completion (CFC). Each month's actual spending shall be calculated using all CQEs paid during that month. The Projected Spending Report (PSR) shall be depicted in a tabular format and provided in both an .XLS and .PDF.

722.63. Progress Schedule Requirements**A. Baseline Schedule**

The Baseline Schedule shall be due thirty (30) Calendar Days after Notice to Proceed (NTP). The Baseline Schedule shall only reflect the Work awarded to the Contractor and shall not include any additional work involving Extra Work Orders or any other type of alleged delay. The Baseline Schedule shall be prepared and submitted in accordance with Subsections 722.61 - Schedule Content and Preparation Requirements and 722.62 - Submittal Requirements. Once the Baseline Schedule has been accepted by the Engineer, with or without comments, it shall represent the as-planned schedule for the Work and become the Contract Progress Schedule of Record until such time as the schedule is updated or revised under Subsections 722.63.C - Contract Progress Schedules / Monthly Updates, 722.64.C - Recovery Schedules and 722.64.D - Proposal Schedules.

The Cost and Resource-Loading information (Types A and B only) shall be provided by the Contractor within forty-five (45) Calendar Days after NTP.

The Engineer's review comments on the Baseline Schedule and the Contractor's responses to them will be maintained for the duration of the Contract and will be used by the Engineer to monitor the Contractor's work progress by comparing it to the Contract Progress Schedule / Monthly Update.

B. Interim Progress-Only Schedule Submissions

The first monthly update of the Contract Progress Schedule/Monthly Update is due within seventy (70) Calendar Days after Notice to Proceed (NTP.) The Baseline Schedule review period ends at sixty (60) Calendar Days after NTP, see Subsection 722.60.B - Schedule Reviews by the Department. If the Baseline Schedule has not been accepted within sixty (60) Calendar Days after NTP, an Interim Progress-Only Schedule shall be due within seventy (70) Calendar Days after NTP. The purpose of the Interim Progress-Only Schedule is to document the actual progress of all activities, including non-construction activities, from NTP until the Baseline Schedule is accepted.

SECTION 722 (Continued)**C. Contract Progress Schedules / Monthly Updates**

The first Contract Progress Schedule shall be submitted by the Contractor no later than seventy (70) Calendar Days after NTP. The data date for this first Progress Schedule shall be two months (approximately sixty (60) Calendar Days) after NTP. Subsequent Progress Schedules shall be submitted monthly.

Each Contract Progress Schedule shall reflect progress up to the data date. Updated progress shall be limited to asbuilt sequencing and asbuilt dates for completed and inprogress activities. Asbuilt data shall include actual start dates, remaining Work Days and actual finish dates for each activity, but shall not change any activity descriptions, the Original Durations, or the Original Resources (as planned at the time of bid), without the acceptance of the Engineer. If any activities have been completed out-of-sequence, the Contractor shall propose new logic ties for affected in-progress and future activities that accurately reflect the previously approved sequencing. Alternatively, the Contractor may submit to the Engineer for approval an explanation of why an out-of-sequence activity does not require a correction and an adequate demonstration that the changes accurately represent how the activities will be built, including considerations for resources, dependencies, and previously approved production rates. Once approved by the Engineer, the Contractor may incorporate the changes in the next Contract Progress Schedule/Monthly Update with the affected activities clearly identified and explained in the Schedule Narrative.

No revisions to logic ties, sequence, description, or duration of future activities; or planned resource costs shall be made without prior approval by the Engineer.

Any proposed logic changes for in-progress or future activities shall be submitted to the Engineer for approval before being incorporated into a Contract Progress Schedule. The logic changes must be submitted using a Proposal Schedule or a schedule fragnet submission. Once approved by the Engineer, the Contractor may incorporate the logic in the next Contract Progress Schedule/Monthly Update with the affected activities clearly identified and explained in the Schedule Narrative.

For any proposed changes to the original sequence, description or duration of future activities, the Contractor shall submit to the Engineer for approval an explanation of how the proposed description or duration change reflects how the activity will be progressed, including considerations for resources and previously approved production rates. Any description or duration change that does not accurately reflect how the activity will be progressed will not be approved by the Engineer. Once approved by the Engineer, the Contractor may incorporate the changes in the next Contract Progress Schedule/Monthly Update with the affected activities clearly identified and explained in the Schedule Narrative.

Contract Progress Schedules that extend performance beyond the Contract Time or beyond any Contract Milestone shall not be approved by the Engineer. The Contractor shall submit a Recovery Schedule, or a Time Entitlement Analysis, if any Contract Progress Schedule/Monthly Update indicates a failure to meet the Contract Dates.

SECTION 722 (Continued)**D. Short-Term Construction Schedule**

The Contractor shall provide a Short-Term Construction Schedule that details daily work activities, including any multiple shift work that the Contractor intends to conduct, in a spreadsheet format. The daily activities shall directly correspond to the Contract Progress Schedule activities, with a matching reference to the activity identification number in the Contract Progress Schedule and may be at a greater level of detail. The Short-Term Construction Schedule shall be submitted every two weeks. It shall display all work for a thirty-five (35) Calendar Day period consisting of completed work for the two (2) week period prior and all planned work for the following three (3) week period. The initial submission shall be provided no later than thirty (30) Calendar Days after NTP or as required by the Engineer.

The Contractor shall be prepared to discuss the Short-Term Construction Schedule, in detail, with the Engineer in order to coordinate field inspection staff requirements, the schedule of work affecting abutters and any corresponding work with affected utilities. Short-Term Construction Schedules shall be prepared and submitted in accordance with Subsections 722.61 - Schedule Content and Preparation Requirements and 722.62 - Submittal Requirements.

722.64 Impacted Schedule Requirements**A. Notice of Delay**

The Contractor shall notify the Engineer in writing, with copies to the District and State Construction Engineers, within fifteen (15) of the start of any delays to the Critical Path that are caused by actions or inactions that were not within the control of the Contractor. Delay notifications that are not provided in a letter to the Engineer, such as a delay notification in the schedule narrative, will not be recognized as contractual notice in the determination of any Time Extension related to the impacts to the work associated with this specific alleged delay. Should such a delay continue for more than one (1) week, the Contractor shall note it in the Schedule Narrative until the delay is no longer impacting the Critical Path for the completion of the Contract Milestones. The Engineer will evaluate the alleged delay and its impact and will respond to the Contractor within ten (10) Calendar Days after receipt of a notice of delay.

B. Time Entitlement Analysis

A Time Entitlement Analysis (TEA) shall consist of a descriptive narrative, prepared in accordance with Subsection 722.62.A - Narratives, and an as-built CPM schedule, which may be in the form of a schedule fragnet that has been developed from the project's Contract Progress Schedule of Record, and illustrates the impact of a delay to the Critical Path, Contract Milestones and/or Contract Completion Date as required in Subsection 8.10 - Determination and Extension of Contract Time for Completion. TEAs shall also be used to determine the schedule impact of proposed Extra Work Orders (EWO) as also required in Subsection 8.10.

TEAs shall be prepared and submitted in accordance with the requirements of Subsections 722.61 - Schedule Content and Preparation Requirements and 722.62 - Submittal Requirements and shall be based on the Contract Progress Schedule of Record applicable at the start of the delay or impact from an EWO. A TEA fragnet must start with a specific new activity describing the work contained in either a Notice of Delay previously submitted to the Department per Subsection 722.64.A - Notice of Delay or an EWO.

SECTION 722 (Continued)

TEAs shall be submitted:

1. as part of any Extra Work Order that may impact Contract Time,
2. with a request for a Time Extension,
3. within fifteen (15) Calendar Days after a request for a TEA by the Engineer for any other reason.

A TEA shall be submitted to the Engineer before any Time Extension is granted to the Contractor. Time Extensions will not be granted unless the TEA accurately reflects an evaluation of all past delays and the actual events that occurred that impacted the Critical Path. The TEA must also demonstrate a plan for the efficient completion of all of the remaining work through an optimized CPM Schedule. The analysis shall include all delays, including Contractor-caused delays, and shall be subdivided into timeframes and causes of delays.

TEAs shall incorporate any proposed activities, logic ties, resource considerations, and activity costs required to demonstrate the schedule impacts most efficiently in addition to detailing all impacts to existing activities, logic ties, the Critical Path, Contract Milestones, and the Contract Completion Date. In addition, TEAs shall accurately reflect any changes made to activities, logic ties, restraints, and activity costs, necessitated by an Extra Work Order or other schedule impact, for the completion of the remaining work. The Contractor shall provide TEAs that demonstrate that all delays have been mitigated to the fullest extent possible without requiring an Equitable Adjustment to the original bid basis.

All TEAs shall clearly indicate any overtime hours, additional shifts and the resources that are proposed to be incorporated in the schedule. The Engineer shall have final discretion over the use of overtime hours and additional shifts. The Engineer shall have the right to require that overtime hours and/or additional shifts be used to minimize the duration of Time Extensions if it is determined to be in the best interest of the Department to do so.

When accepted, the changes included in a TEA shall be incorporated into the next Contract Progress Schedule per the requirements of Subsection 722.63.C - Contract Progress Schedules / Monthly Updates. During the review of any TEA, all Contract Progress Schedules shall continue to be submitted as required.

The Engineer may request that the Contractor prepare a Proposal Schedule or a Recovery Schedule to further mitigate any delays that are shown in the accepted TEA or Contract Progress Schedule.

C. Recovery Schedules

The Contractor shall promptly report to the Engineer all schedule delays during the prosecution of the Work. Contract Progress Schedules that predict performance extended beyond the Contract Time or beyond any Contract Milestone shall not be approved as the schedule of record. This requirement is critical to the Department's ability to make informed decisions regarding Contract Time and costs.

The Contractor shall submit a Recovery Schedule within fifteen (15) Calendar Days of a Contract Progress Schedule submission that shows failure to meet the Contract Dates unless a recovery schedule is waived by the Department. Waiving the recovery schedule does not relieve the contractor of the responsibility for the delay. The Department may revoke the waiver of a Recovery Schedule, at which time a Recovery Schedule shall be submitted within fifteen (15) Calendar Days of the Contractor being notified.

Changes represented in accepted Recovery Schedules shall be incorporated into the next
Contract Progress Schedule.

SECTION 722 (Continued)**D. Proposal Schedules**

A Proposal Schedule is an alternative schedule used to evaluate proposed changes to the Contract scope or significant alternatives to previously approved approaches to complete the Work, which may include changes to activity durations, logic, and sequence. For Types A and B Schedules, the Proposal Schedule shall be cost and resource loaded.

A Proposal Schedule may be requested by the Department at any time or may be offered by the Contractor. The Engineer may request that the Contractor prepare a Proposal Schedule to further mitigate any delays that are shown in an accepted TEA or Contract Progress Schedule.

The Contractor shall submit the Proposal Schedule within thirty (30) Calendar Days of a request from the Department.

The Proposal Schedule shall not be considered a Schedule of Record until the logic, durations, narrative, and basis of the Proposal Schedule have been accepted by the Engineer. If the Proposal Schedule took the form of a fragnet, it must be incorporated into the Contract Progress Schedule of Record showing the current progress of all other activities and the impacts/results of the changes made by the Proposal Schedule before the Proposal Schedule is accepted by the Department.

Proposal Schedules shall clearly indicate any proposed acceleration including overtime hours, additional shifts, and the resources that are proposed to be incorporated in the schedule. The Engineer shall have final discretion over the use of overtime hours and additional shifts. Proposal Schedules that contain a cost element shall be submitted with a separate Cost Proposal.

Changes represented in the accepted Proposal Schedules shall be incorporated into the next Contract Progress Schedule. During the review of any Proposal Schedule, all Contract Progress Schedules shall continue to be required every month.

E. Disputes

All schedules shall be submitted, reviewed, dispositioned, and accepted in the timely manner specified herein so as to provide the greatest possible benefit to the execution of this Contract.

The Contractor may dispute a decision by the Engineer by filing a claim notice within seven (7) days after the Contractor's request for additional time has been denied or if the Contractor does not accept the number of days granted in a time extension. The Contractor's claim notice shall include a revised time entitlement analysis that sufficiently explains the basis of the time-related claim. Failure to submit the required time entitlement analysis with the claim notice shall result in denial of the Contractor's claim. A determination on the Contractor's claim shall be in accordance with Subsection 7.16 Claims of Contractor for Compensation. Pending resolution of any dispute, the last schedule accepted by the Engineer will remain the Contract Schedule of Record.

SECTION 722 (Continued)**722.65 Schedule Type D Requirements**

This section is to detail the requirements for Type D Schedules and is separate from the requirements listed above. These schedules are intended for a project in which a more formal schedule would not be practical.

Schedules for Type D projects shall be submitted for each work assignment. The Schedule Type D shall be submitted electronically in .XLS and .PDF format and meet the following requirements.

The schedule requirements for work assignments that are anticipated to last three weeks or less shall conform to the requirements for Short-term Construction Schedules below.

Work assignments that are anticipated to last longer than three weeks shall submit a bar chart baseline and provided update schedules upon request of the engineer as required under Bar Chart Schedule below in addition to meeting the Short-term Construction schedule requirements.

A. Bar Chart Schedule

A Bar Chart that shall include the following:

- Work Assignment start date.
- Activities to identify.
 - Major work operations broken down to be no longer than 14 days.
 - Procurement of fabricated materials and equipment with long lead times, including time for review and approval of submittals required before procuring and fabricating.
 - The preparation and submission of shop drawings, procedures, and other required submittals, with a planned duration that is to be demonstrated to the Engineer as reasonable.
 - The review and return of shop drawings, procedures, and other required submittals, approved or with comments, the duration of which shall be shown as thirty (30) Calendar Days,
 - Detailed activities to satisfy permit requirements.
 - Subcontractor approvals at fifteen (15) Calendar Days from submittal to response
 - Project Close out activities including a 21-calendar day creation of a punchlist activity and 30 calendar day minimum completion of punchlist activity.
- Interfaces with adjacent work, utility companies, other public agencies, sensitive abutters, and/or any other third-party work affecting the Contract.
- Access Restraints – restrictions on access to areas of the Work
- Traffic work zone set-up and removal, night work and phasing
- Contract Milestones including Full beneficial Use, Substantial Completion and Contractor Field Completion

The Bar Char Schedule shall be provided at the beginning of the project and updated with each work order created for the project.

SECTION 722 (Continued)**B. Short-Term Construction Schedule**

The Contractor shall provide a Short-Term Construction Schedule that details daily work activities, including any multiple shift work that the Contractor intends to conduct, in a spreadsheet format. The daily activities shall directly correspond to the Contract Progress Schedule activities, with a matching reference to the activity identification number in the Contract Progress Schedule and may be at a greater level of detail. See schedule toolkit for suggested format.

The Short-Term Construction Schedule shall be submitted every two weeks. It shall display all work for a thirty-five (35) Calendar Day period consisting of completed work on the assignment for the two week period prior and all planned work for the following three week period. The initial submission shall be provided no later than thirty (30) Calendar Days after NTP or as required by the Engineer.

The Contractor shall be prepared to discuss the Short-Term Construction Schedule, in detail, with the Engineer in order to coordinate field inspection staff requirements, the schedule of work affecting abutters and any corresponding work with affected utilities.

C. Project Spending Report (PSR)

A Projected Spending Report (PSR) shall be prepared and submitted monthly. The PSR shall be for all active work assignments, broken down by work assignment. The PSR shall indicate the monthly spending (cash flow) projection for each month from NTP to Contractor Field Completion (CFC). Each month's actual spending shall be calculated using all CQEs paid during that month. The Projected Spending Report (PSR) shall be depicted in a tabular format and provided in both an .XLS and .PDF

SECTION 722 (Continued)**COMPENSATION****722.80 Method of Measurement****Schedule of Operations (Type A, B and C)**

The project bid documents specify the fixed-price amounts to be paid to the Contractor for the Project Schedule requirements contained herein. Each bidder shall include this fixed price bid item amounts in their bid. Failure to do so may be grounds for the rejection of the bid.

This fixed price amount is for payment purposes only and is separate from what the Department considers to be the Contractor's General Condition costs. If the Contractor deems it necessary to include additional costs to provide all of the requirements of this section, these additional costs shall be included in the Contractor's overall bid price.

All required schedule-related work, including, but not limited to computers, computer software, the planning and coordination with utilities, training, schedule preparation and schedule submittals will be paid for under the fixed price amount.

Twenty percent (20%) of this pay item will be paid upon the Engineer's acceptance of the Contractor's Baseline Schedule, prepared and submitted in accordance with Subsection 722.63.A.

The remaining eighty percent (80%) of this pay item will be paid in equal monthly installments distributed across the Contract Duration from Notice to Proceed (NTP) to Contractor Field Completion (CFC), less the 2 months required for the submittal and review of the Baseline Schedule in accordance with the following formula:

$$\text{Monthly Payment} = \frac{\text{Remaining Fixed Price amount (80\% of the Item Cost.)}}{\text{Contract Duration in whole months} - 2 \text{ months}}$$

The Schedule of Operations pay item will be adjusted to pay for only the actual quantity of schedules that have been submitted in accordance with this section.

Should there be a Time Extension granted to the Contractor, the Engineer may provide an Equitable Adjustment for additional Contract Progress Schedule Updates at intervals directed by the Engineer. The monthly payment will be the basis for this Equitable Adjustment.

Schedule of Operations (Type D)

For projects assigned with Type D schedule requirements, all scheduling work shall be considered incidental to the project with no separate payment under this section.

SECTION 722 (Continued)**722.81 Basis of Payment**

The timely and accurate submission of the Baseline Schedule is critical to the Contract and the Department's ability to make informed decisions. Only payments under Item 740 - Engineer's Field Office and Item 748 - Mobilization will be made until the Baseline Schedule is accepted by the Engineer.

All required schedule-related work, including, but not limited to computers, computer software, the planning and coordination with utilities, training, schedule preparation and schedule submittals (including monthly progress schedules, short-term schedules, project spending reports, TEAs, recovery schedules or impacted schedules) shall be included in this work.

No payment for any other pay item will be processed beyond seventy-five (75) Calendar Days from Notice to Proceed (NTP) until the Baseline Schedule is accepted by the Engineer. Until the Engineer's acceptance of the Baseline Schedule, the combined total of all payments made to the Contractor will be limited to an amount no greater than the total price for Item 748 - Mobilization or 3% of the contract price, whichever is less.

All Contract Progress Schedule Updates submitted later than ten (10) Calendar Days after the CQE (Contract Quantity Estimate) completion date, or greater than forty (40) Calendar Days from the Data Date of the previous submission, will be deemed to be no longer useful and will not qualify for payment. The late submission of Impacted schedules, including TEAs, recovery schedules and proposal schedules will result in the forfeiture of the monthly payment for the month in which they were due and subsequent months until the submission is made. Late submission of missed submittals will not result in recovery of the previously forfeited portion of the Schedule of Operations Fixed Price Payment Item.

Failure to submit schedules as and when required may result in the forfeiture of that portion of the Schedule of Operations Fixed Price Payment and/or the withholding of the full or partial CQE payments by the Engineer.

Failure to submit schedules that are acceptable to the Engineer may result in the forfeiture of that portion of the Schedule of Operations Fixed Price Payment and/or the withholding of the full or partial CQE payments by the Engineer.

The Schedule of Operations pay item will be adjusted to pay for only the actual quantity of schedules that have been submitted in accordance with this section.

The Contractor's failure or refusal to comply with the requirements of this Section shall be reasonable evidence that the Contractor is not prosecuting the Work with due diligence and may result in the Engineer withholding of full or partial payments of all work performed.

722.82 Payment Items

722.1	SCHEDULE OF OPERATIONS (TYPE A) - FIXED PRICE \$ _____	LUMP SUM
722.2	SCHEDULE OF OPERATIONS (TYPE B) - FIXED PRICE \$ _____	LUMP SUM
722.3	SCHEDULE OF OPERATIONS (TYPE C) - FIXED PRICE \$ _____	LUMP SUM

ITEM 102.21**SELECTIVE CLEARING AND GRUBBING****SQUARE YARD**

The work under this Item shall conform to the relevant provisions of Subsections 101, 751, 765 of the Standard Specifications supplemented with the following:

The work to be done under this item consists of clearing trees and shrubs outside the proposed parapet face of the wingwall and other selected areas directed by the Engineer to provide access for repair, repainting, and inspection work.

All debris shall be removed and properly disposed from the site.

Trees and shrubs that interfere with the clear view of safety signs and existing signs within the limits of work shall be trimmed, as directed by the Engineer. Trees and shrubs growing adjacent to or within the revetment under the bridges shall be removed, as directed by the Engineer.

METHOD OF MEASUREMENT

Item 102.21 will be measured for payment by the Square Yard of selective clearing and grubbing.

BASIS OF PAYMENT

Item 102.21 will be paid for at Contract unit bid price per Square Yard, which price shall include all clearing, grubbing, labor, materials, equipment, removal, disposal costs, and incidental costs required to complete the work.

ITEM 106.88**JACKING AND SHORING****EACH**

The work under this item consists of jacking and supporting existing beams/girders, pier caps and columns as required by work order or the Engineer.

Shoring materials may be new or second hand. The Contractor shall submit a plan of the proposed work showing the details and indicating the materials to be used. The submittal shall include the jacking load calculations and shoring design computations based on the bridge configurations and the working stresses of the materials used, sequence of operations, and all details incidental thereto. Unless otherwise directed by the Engineer, the proposed jacking and shoring system shall be designed to apply force in increments to the existing beam/girder to relieve load from the existing substructure. The jack(s) shall have a locking mechanism preventing the beam/girder from lowering in the event of loss of hydraulic pressure. All components of the system shall have load capacity greater than the total calculated load carried by the existing beam/girder during normal traffic operation, which includes but is not limited to dead load, live load, and impact load.

Bridge Loads: The Contractor shall be responsible for calculating loads (live and impact loads, dead loads...etc.) necessary to design shoring paid under this Item. All materials (except jacks) shall be designed by working stress design (ASD). Type of jacks used and factor of safety shall be per industry standards.

Approval of this submission shall be obtained prior to the commencement of any work under this item. The above plan and computations shall bear the seal and signature of a Professional Engineer of the appropriate discipline registered in Massachusetts.

Materials shall meet the following:

Anchor Bolts, Nuts and Washers:	M8.01.5
Structural Steel:	M8.05.0
Wood Products:	M9.05.1

All treated wood supplied by the Contractor shall meet the requirements of M9.05.1 for Wood Products, including the most recent versions of AWP A U1 and M4, which are incorporated by reference. No new wood shall be treated with inorganic arsenic (including chromated copper arsenate (CCA), ammoniacal copper arsenate (ACA), and ammoniacal copper zinc arsenate (ACZA)), creosote or pentachlorophenol in all project construction.

The Contractor is alerted that some of the concrete encased diaphragms have been temporarily cribbed by MassDOT personnel or by others. At such locations, the Contractor shall install a jacking support system before removing any temporary supports. The cost of removing and stacking of the temporary supports at an on-site location, as directed by the Engineer, shall be considered incidental work hereunder with no additional compensation.

When required by the Engineer extensive repairs require temporarily supporting some of the beams/girders on one or both sides of a pier cap(s), or abutment(s) those beams/girders shall be jacked/shored all at once as one unit for the length of time required.

ITEM 106.88 (Continued)

The work shall be performed as follows:

Erect supports under each beam/girder as required by the Engineer. When possible, all supports shall be located 4'-0" from the centerline of each corresponding pier or centerline of bearing at each corresponding abutment. The cribbing for the support footings shall be of a sufficient size to prevent any settlement or damage to the footings while the superstructure is being adequately supported as required by the Engineer.

In the event of any damage to the structure due to the Contractor's operations, the Contractor shall repair or replace any such damaged components, at no cost to the department.

The support of beams/girders shall remain in place until all the requirements of Item 127.12 Reinforced Concrete Substructure Excavation and Item 905.2 5000 PSI, 3/8 INCH, 710 HP Cement Concrete repair is completed and accepted by the Engineer.

When the repairs are completed and the supports are no longer needed as determined by the Engineer, all supporting materials shall be removed and become the property of the Contractor unless other prior arrangements were previously made with MassDOT.

Each bridge will be kept open to traffic while the beams/girders or pier caps/columns are supported. The expressways and some other roads are heavily traveled high-speed roads with high volumes of truck traffic.

METHOD OF MEASUREMENT

Item 106.88, Jacking and Shoring will be measured for payment by the Each steel beam/girder end jacked and shored as required by the Engineer. Multiple jacking of the same end for the same repair will not be measured separately.

BASIS OF PAYMENT

Items 106.88, Jacking and Shoring will be paid for at the Contract unit price per Each, which price shall include all labor, materials, tools, equipment, engineering services and all incidental costs required to complete the work.

Placement of shoring that is required to support a pier cap during the repair of a pier column will also be compensated under this Item. Jacking and Shoring Removed and Reset will be paid under Item 106.881.

ITEM 106.881 JACKING AND SHORING REMOVED AND RESET EACH

When an assigned work location requires more than one shoring tower and one or more of those towers can be reset at a subsequent repair within the same work location after the initial repair has been completed, those tower(s) shall be removed and reset to the new location as directed by the Engineer. It is not intended for this item to be used when shoring towers are to be transported to a different work location. Bridges adjacent to each other will not be considered as different work locations.

METHOD OF MEASUREMENT

Item 106.881 will be measured for payment by the Each, jacking and shoring removed and reset.

BASIS OF PAYMENT

Item 106.881 will be paid for at the Contract unit price per Each, which price shall include all labor, materials, tools, equipment, and incidentals necessary to disassemble the shoring unit, prepare the bedding on which the tower will be reset, re-assemble the shoring unit and place jack or shims as necessary, and all incidental costs required to complete the work.

**ITEM 127.12 REINFORCED CONCRETE SUBSTRUCTURE CUBIC YARD
EXCAVATION**

The work under this Item shall conform to the relevant Provisions of Subsections 120 and 482 of the Standard Specifications and the following:

The work under this Item consists of the removal and disposal of all deteriorated, spalled, and scaled concrete as required to repair the existing concrete substructure elements to the general lines identified on the drawings and as required by the Engineer. Any concrete excavation necessary to access concrete substructure elements for repair shall be paid for under this Item.

The Contractor shall take all measures necessary to protect pedestrian and vehicular traffic from the construction operations. No debris, tools or incidental equipment of any kind will be permitted to fall into areas where vehicular or pedestrian traffic exists. Any material that accidentally falls into such areas shall be removed.

During the prosecution of the Work, the Engineer may reject the use of any method or equipment which causes undue vibration or possible damage to the structure or any part thereof. Pneumatic hammers heavier than the nominal 25 pounds mass shall not be used unless approved by the Engineer.

ITEM 127.12 (Continued)

Minimum depth of excavation to sound concrete shall be one inch (1") beyond the inner most layer of reinforcing steel, but not less than four inches (4") from the original surface. The Contractor shall stop excavating deteriorated concrete when the depth of excavation reaches six inches (6") and shall notify the Engineer immediately. The edges of the patch shall be cut to neat lines by saw cutting or by methods approved by the Engineer, and the patch areas shall be made rectangular in shape, if possible, with horizontal and vertical edges and avoid over cutting square corners.

The Contractor shall limit extent of excavation of the pier caps and columns as shown on the repair sequence contract drawings. If the Contractor exceeds the limits of excavation as shown on the repair sequence contract drawings, then temporary shoring shall be installed to alleviate loading on the substructure, at no additional cost to the Department. The Contractor may submit an alternate method of reinforced concrete excavation to be approved by the Engineer. The alternate method, if approved by the Engineer, shall not incur any additional costs to the Department, and Item 127.12 Reinforced Concrete Substructure Excavation will be paid at the contract unit price regardless of the method used to complete the work.

The Contractor shall take all precautions necessary so as not to damage those portions of the bridge including reinforcing steel that are to remain. This includes determining the concrete cover to the steel bars at the edge of each patch prior to excavating concrete. Any steel that is unsuitable for further use through no fault of the Contractor shall be replaced under Item 910. Steel Reinforcement for Structures. All reinforcing steel that is loose shall be tied tightly together using epoxy coated wire ties.

Also, included under this Item are all costs in connection with the cleaning, cutting, and bending of the existing reinforcing steel designated to be retained in the proposed repair.

METHOD OF MEASUREMENT

Item 127.12 will be measured for payment by the Cubic Yard of substructure concrete excavated, removed, and properly disposed of.

BASIS OF PAYMENT

Item 127.12 will be paid for at the Contract price per Cubic Yard, which price shall include all labor, tools, equipment, materials, sawcutting, cleaning, disposal of all debris and incidental costs required to complete the work.

New reinforcing steel will be paid under Item 910.

ITEM 740. ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A) MONTH

The work under this Item shall conform to the relevant provisions of Subsection 740 of the Standard Specifications and the following:

A computer system and printer system meeting minimum requirements set forth below including installation, maintenance, power, paper, disks, and other supplies shall be provided at the Resident Engineer's Office:

All equipment shall be UL approved and Energy Star compliant.

The Computer System shall meet the following minimum criteria or better:

Processor:	Intel, 3.5 GHz
System Memory (RAM):	12 GB
Hard Drive:	500 GB
Optical Drive:	DVD-RW/DVD+RW/CD-RW/CD+RW
Graphics Card:	8 GB
Network Adapter:	10/100 Mbit/s
USB Ports:	6 USB 3.0 ports
Keyboard:	Generic
Mouse:	Optical mouse with scroll, MS-Mouse compliant
Video/Audio	the computer system shall be capable of allow video calling and recording:
Video camera	shall be High Definition 1080p widescreen capable video calling and recording with built in microphone. The microphone system shall capture natural audio while filtering out background noise.
Audio	shall be stereo multimedia speaker system delivering premium sound.
OS:	Latest Windows Professional with all security updates
Web Browser:	Latest Internet Explorer with all security updates
Applications:	Latest MS Office Professional with all security updates
	Latest Adobe Acrobat Professional with all security updates
	Latest Autodesk AutoCAD LT
	Antivirus software with all current security updates maintained through the life of the contract.
Monitors:	Two 27" LED with Full HD resolution. Max. resolution 1920 x 1080
Flash drives:	2 (two) - 128GB USB 3.0
Internet access:	High Speed (min. 24 mbps) internet access with wireless router.

ITEM 740. (Continued)

The Multifunction Printer System shall meet the following minimum criteria or better:

Color laser printer, fax, scanner, email and copier all in one with the following minimum capabilities:

- Estimated volume 8,000 pages per month
- LCD touch panel display
- 50 page reversing automatic document feeder
- Reduction/enlargement capability
- Ability to copy and print 11" x 17" paper size
- email and network pc connectivity
- Microsoft and Apple compatibility
- ability to overwrite latent images on hard drive
- 600 x 600 dpi capability
- 30 pages per minute print speed (color),
- 4 Paper Trays Standard (RADF) (not including the bypass tray)
- Automatic duplexing
- Finisher with staple functions
- Standard Ethernet. Print Controller
- Scan documents to PDF, PC and USB
- ability to print with authenticated access protection

The Contractor shall supply a maintenance contract for next day service, and all supplies (toner, staples, paper) necessary to meet estimated monthly usage.

The Engineer's Field Office and the equipment included herein including the computer system, and printer shall remain the property of the Contractor at the completion of the project. Disks, flash drives, and card readers with cards shall become the property of the Department.

Compensation for this work will be made at the contract unit price per month which price includes full compensation for all services and equipment, and incidentals necessary to provide equipment, maintenance, insurance as specified and as directed by the Engineer.

ITEM 853.8**TEMPORARY ILLUMINATION FOR WORK ZONE****DAY**

The work under this Item shall conform to the relevant provisions of Subsection 850 of the Standard Specifications and the following:

The work under this Item shall include furnishing, deploying and maintaining in proper operating condition a LED balloon diffuser lighting system. These portable light towers shall be used throughout the project area for temporary work zone lighting. The use of unshielded high wattage flood lights shall not be permitted.

The Contractor shall illuminate the following work zone areas:

- Change in direction (i.e., work zone entrances and exits, crossovers, etc.)
- Tapered areas
- Actual area where the construction is being performed

Light measurement shall be based on the illuminance method and the lighting levels shall be based on the classification of construction activity that is taking place. At no time shall the light level be below 5 fc and the uniformity shall not exceed 6:1. Task Classifications and recommended illumination levels are shown in Table 1.

Task Classifications	Illumination Level	Average Minimum Maintained Illuminance
All work operations areas, setup of lane or road closures, lane closure tapers, and flagging stations such as Excavation (all types), Embankment Fill and Compaction, Reworking Shoulders, Asphalt Pavement Rolling, Subgrade, Stabilization and Construction, Base Course Rolling, Sweeping, Cleaning and Landscaping.	Level I	5 foot-candles
Areas on or around construction equipment; asphalt paving, milling, and concrete placement and/or removal such as Milling, Removal of Pavement, Asphalt Paving and Resurfacing, Concrete Pavement, Waterproofing and Sealing, Sidewalk Construction, Base Course Grading and Shaping, Surface Treatment, Bridge Decks, Drainage Structures and Drainage Piping, Other Concrete Structures, Barrier Wall and Traffic Separators, Guardrails and Fencing, Striping and Pavement Markings, Repair of Concrete Pavement, Highway Signs, Hole Filling and Repair of Guardrails and Fencing.	Level II	10 foot-candles
Pavement or structural crack/ pothole filling; joint repair, pavement patching and/or repairs, installation of signal/electrical/mechanical equipment such as Traffic Signals, Highway Lighting Systems and Crack Filling	Level III	20 foot-candles

TABLE 1
TASK CLASSIFICATIONS AND ILLUMINATION LEVELS

ITEM 853.8 (Continued)

Prior to commencement of work the Contractor shall submit to MassDOT for approval a description of illumination equipment that is proposed to be used on this project, and shall include photometrics that detail the light levels that are to be provided for the particular operation for the type of equipment, level of luminance, and height to be installed.

Any potential glare from the lighting system should be considered from each direction and on all approaching roadways and opposing lanes of traffic. Glare from the illumination system should be minimized as much as possible for both workers and motorists in adjacent active travel lanes. If required, the Contractor shall provide supplemental hardware such as visors, louvers, shields, glare screen and barrier, to reduce glare in adjacent active travel lanes.

Equipment mounted lighting may be used to supplement light towers to achieve the required lighting levels for the activity involved per Table 1.

METHOD OF MEASUREMENT AND BASIS OF PAYMENT

Item 853.8 will be measured and paid per Subsections 850.80 and 850.81, respectively.

ITEM 854.6**TEMPORARY PORTABLE RUMBLE STRIP****DAY**

The work under this item shall conform to the relevant provisions of Subsection 850 of the Standard Specifications and the following:

Work under this item consists of furnishing, deploying, maintaining in proper operating conditions, and removing temporary portable rumble strips (TPRS) for temporary lane closures of 24 hours or less.

MATERIALS

The TPRS shall be 10' to 11' wide, measured perpendicular to the path of travel, 12" to 16" long, measured parallel to the path of travel, and 0.5" to 0.75" tall. All edges shall be beveled. The surfaces shall be grooved to limit potential hydroplaning.

The TPRS shall lay flat on the road surface without the use of nails, anchors, or adhesives, and shall be flexible so as to conform to the surface profile.

The TPRS shall be able to withstand vehicle weights of up to 80,000 lbs. and operate in temperatures between 0° to 120° F.

The manufacturer shall certify the TPRS to be safe for use on roads with speed limits of at least 70 mph.

TPRS that appear damaged or functioning in an unsafe manner may be order removed by the Engineer and replaced at no additional cost.

ITEM 854.6 (Continued)**CONSTRUCTION METHODS**

The TPRS shall be installed per the plans or at the discretion of the Engineer.

The Contractor shall conform to the manufacturer's specifications for installation and the following:

- A. The road surface shall be cleared of all gravel, sand, and debris.
- B. If RoadQuake 2™ model is used, the modular pieces shall be assembled into 11-foot strips per the manufacturer's instructions in advance of deployment. The interconnected segments shall form a smooth and flat, continuous section.
- C. A Truck-Mounted Attenuator, conforming to Section 850, shall be used as shadow vehicle protection during the deployment and removal of TPRS on any roadway with speeds of 45 mph or greater.
- D. TPRS shall be deployed in conjunction with all other temporary traffic control devices. MA-W28-1 (Rumble Strips Ahead) sign(s) shall be installed per the Temporary Traffic Control Plan.
- E. TPRS deployment:
 - 1. TPRS shall be placed perpendicular to the direction of travel, centered in the lane.
 - 2. Three (3) individual strips are required for a single array.
 - 3. Refer to the Temporary Traffic Control Plan for the location of the array respective to the lane closure.
 - 4. The spacing of the individual strips within the array shall conform to the following table:

Speed Limit	Distance Between Rumble Strips (measured center-to-center)
>55 mph	20 feet
40 mph to 55 mph	15 feet
<40 mph	10 feet

- 5. The TPRS shall be placed without the use of nails, adhesives, or other methods of affixing them to the road surface.
- F. All TPRS shall be maintained in proper condition, alignment, spacing, and location throughout the duration of the lane closure, at no additional cost.
- G. The TPRS shall be removed prior to the removal of the traffic control devices used to close the travel lane.
- H. TPRS shall not be used during snow events.

ITEM 854.6 (Continued)**METHOD OF MEASUREMENT**

An array of three (3) temporary portable rumble strips is considered one (1) unit and will be measured by the day. Each period of up to 24 hours during which this unit is in use will be measured as one day regardless of the number of times the array is deployed, repositioned, or removed.

BASIS OF PAYMENT

Temporary Portable Rumble Strips will be paid for at the contract unit price per day, which shall include full compensation for furnishing, deploying, repositioning, and removing the array of three (3) individual strips as directed by the Engineer.

ITEM 859.1**REFLECTORIZED DRUMS WITH SEQUENTIAL
FLASHING WARNING LIGHTS****DAY**

The work under this Item shall conform the relevant provisions of Subsection 850 of the Standard Specifications and the following:

Work under this item consists of furnishing, installing, maintaining in proper operating conditions, and removing reflectorized drums, and any necessary ballast, equipped with sequential flashing warning lights.

MATERIALS

Reflectorized drums shall be listed on the MassDOT Qualified Traffic Control Equipment List. Reflective sheeting on drums shall meet or exceed ASTM D4956 Type VIII. All drums shall be maintained in a satisfactory manner including the removal of oils, dirt, and debris that may cause reduced retroreflectivity.

The Contractor shall use one of the following sequential flashing warning light systems unless otherwise approved by the Engineer:

1. Empco-Lite LWCS.
2. pi-Lit® Sequential Barricade-Style Lamp; or
3. Unipart Dorman SynchroGUIDE.

Sequential flashing warning lights shall be secured to reflectorized drums per the light manufacturer's specifications.

ITEM 859.1 (Continued)**CONSTRUCTION METHODS**

The first ten (10) drums in any merging or shifting taper as designated in the Temporary Traffic Control Plan shall be equipped with sequential flashing warning lights. These lights shall be operating, at a minimum, between dusk and dawn when the taper is deployed.

The successive flashing of the sequential warning lights shall occur from the upstream end of the merging or shifting taper to the downstream end of the taper in order to identify the desired vehicle path. Each warning light in the sequence shall be flashed at a rate of not less than 55, nor more than 75 times per minute.

Warning lights shall be powered off when drums are not deployed in a taper.

METHOD OF MEASUREMENT

A group of ten (10) reflectorized drums with sequential flashing warning lights is considered one (1) unit and will be measured by the day. Each period of up to 24 hours during which this unit is in use will be measured as one day regardless of the number of times that the drums are positioned, repositioned, removed, or returned to service.

BASIS OF PAYMENT

Reflectorized Drums with Sequential Flashing Warning Lights will be paid for at the contract unit price per day, which shall include full compensation for furnishing, positioning, repositioning, and removing the group of ten (10) drums as directed by the Engineer.

<u>ITEM 866.206</u>	<u>6 INCH REFLECTORIZED WHITE LINE</u>	<u>FOOT</u>
	<u>(POLYUREA) (RECESSED)</u>	
<u>ITEM 867.206</u>	<u>6 INCH REFLECTORIZED YELLOW LINE</u>	<u>FOOT</u>
	<u>(POLYUREA) (RECESSED)</u>	

Work to be completed under these items shall conform to the relevant provisions of Subsection 860 of the Standard Specifications and the following:

Work shall consist of grooving a slot in the pavement surface and the furnishing and installation of wet reflective polyurea pavement markings.

Materials

Wet reflective polyurea pavement markings shall consist of a liquid binder, first drop beads or elements to provide dry and wet retroreflectivity, and second drop glass beads to improve the durability of the pavement marking, reduce track-free times, and provide supplementary dry retroreflectivity.

ITEM 866.206 AND 867.206 (Continued)

The Contractor shall use one of the following binders and first drop beads or elements, or approved equivalents:

1. 3M™ Liquid Pavement Marking Series 5000 with 3M™ All Weather Series 90 elements;
2. Epoplex GLOMARC® 90 with Potters VISIMAX® Glass Bead System; or
3. SWARCO MFUA-12 with SWARCO MEGALUX-BEADS®.

Combination of other binder and first drop bead or element series may only be used at the approval of the Engineer.

Second drop beads shall be manufactured from glass of a composition that is highly resistant to traffic wear and to the effects of weathering. If coating is required to meet the performance requirements, the second drop beads shall be coated to ensure satisfactory embedment and adhesion. Second drop beads retained on a No. 40 U.S. Standard Mesh Sieve shall have a minimum crush strength of 30 lbs. when tested in accordance with ASTM D1213.

Second drop beads shall have a minimum refractive index of 1.51 when tested in accordance with AASHTO M247.

Second drop beads passing the No. 30 sieve shall have a minimum of 75 percent true spheres when tested in accordance with ASTM D1155. All second drop beads retained on the No. 20 and No. 30 sieves shall have a minimum of 80 percent true spheres as determined by ASTM D1155.

Second drop beads shall meet the following gradation requirements when tested in accordance with ASTM D1214:

U.S. Standard Sieve No.	Percent Retained
20	3-10
30	15-35
50	45-75
70	0-10
Pan	0-5

Construction Methods**Installation of Groove**

Prior to cutting out the grooves for all recessed lines, the Contractor shall use a chalk line or other suitable method to layout the proposed pavement markings on the surface course so that the Engineer can inspect the locations. Once the Engineer has inspected and approved the proposed striping layout, the grooves for the proposed pavement markings may be cut. No pavement grooving shall be done without the prior approval of the Engineer.

ITEM 866.206 AND 867.206 (Continued)

Groove position shall be a minimum of 4 inches from the edge of the pavement marking to any longitudinal pavement joints. The groove shall not be installed on bridge joints, on drainage structures, or in other areas identified by the Engineer. The groove shall not be installed continuously for intermittent pavement markings, but only where markings are to be applied.

The use of gang stacked diamond cutting blades to grind a smooth square slot is required for producing all grooves. The spacers between blade cuts shall be such that there will be less than a 10 mil rise in the finished groove between the blades. The acceptability of the surface texture will be determined by the Engineer.

The diamond grinder shall have an articulating head so that the slots are installed correctly on grades and super elevated sections.

Grooves that are ground deeper or wider than the specified allowable limits shall be repaired per the direction of the Engineer at no additional cost. Grooves that are ground too shallow, too narrow, or with unacceptable rises between blade cuts shall be reground to the correct size, depth, and surface finish at no additional cost. Slots ground out of alignment shall be patched using an approved method and materials.

Grooves shall be 1 inch $\pm$ ¼ inch wider than the pavement marking material. Groove depth shall be 100 mils $\pm$ 5 mils, unless otherwise approved by the Engineer. Depth shall be consistent across the full width of the groove. Depth plates shall be provided by the Contractor to the Engineer to assure that desired groove depth is achieved.

Grooves shall be clean, dry and free of laitance, oil, dirt, grease, paint or other foreign contaminants. Shrouds and a vacuum apparatus shall be included as part of the grinder to remove larger pieces of pavement that are ground out. If water is used to clean the groove or the grooving process takes place during rainfall, a minimum of 24 hours of dry time is required prior to the placement of pavement markings.

After the depth, width, length, and surface condition has been approved by the Engineer, an air lance shall be used to remove fine particles from the groove. Air compressors shall initially be blown out away from the application area to prevent compressor condensation build-up from entering the groove. The Contractor shall prevent traffic from traversing the grooves and re-clean grooves, as necessary, prior to application of pavement markings at no additional cost to the Department.

All grooves must be given final approval by the Engineer prior to the placement of pavement markings.

ITEM 866.206 AND 867.206 (Continued)**Installation of Wet Reflective Polyurea**

Installation of wet reflective polyurea pavement markings shall conform to the Manufacturer's specifications and the following:

Application rate for binder and all beads and elements shall consider final pavement surface composition and smoothness in advance of application to ensure proper wet film thickness and embedment of all beads and elements. The Contractor shall provide the Engineer with documentation from the Manufacturer with all recommended application rates in advance of any pavement marking installation.

The minimum uniform wet thickness for the polyurea binder shall be 25-30 mils. The line thickness shall be met across at least the middle $\frac{2}{3}$ of the pavement marking width. Depth plates shall be provided by the Contractor to the Engineer to assure that desired thickness is achieved.

The finished white color shall be free from tint, with good opacity and visibility under both daylight and artificial light. The finished yellow color shall be defined by Federal Test Standard 595 - Color Chip Number 13538, using Federal Test Standard 141 (Method 4252). The finished lines shall be uniform in color and have clean, well-defined edges.

First and second drop beads and/or elements shall be applied in a manner that does not induce rolling or bouncing, to ensure that exposed portions of beads are free of binder material. Beads and elements should be embedded in the binder to a depth of approximately 50% of their diameter.

Drop rate for first drop bead or element shall be per the Manufacturer's specifications.

Drop rate for second drop glass bead shall be 6.4-10.2 lbs. per gallon.

Newly installed pavement markings shall be protected from tracking during the setting period per Subsection 860.63.

Once the installed pavement markings have been open for traffic for a minimum of 48 hours, the Contractor shall perform retroreflectance readings per the measurement and sampling procedures contained in ASTM D7585 (Standard Practice for EvaluatRemove and replace with "Once the installed pavement markings have been open for traffic for a minimum of 48 hours, the Contractor shall perform retroreflectance readings ing Retroreflective Pavement Markings Using Portable Hand-Operated Instruments) using the Referee Evaluation Protocol found in section 6.4. The following tests shall be performed during the measurement and sampling process:

1. ASTM E1710 (*Standard Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer*); and
2. ASTM E2177 (*Standard Test Method for Measuring the Coefficient of Retroreflected Luminance (R_L) of Pavement Markings in a Standard Condition of Wetness*).

ITEM 866.206 AND 867.206 (Continued)

The average initial retroreflectance readings shall exceed the following minimum values:

	*White Markings	*Yellow Markings
ASTM E1710 (Dry)	475 mcd/lux/m ²	375 mcd/lux/m ²
ASTM E2177 (Wet Recovery)	375 mcd/lux/m ²	300 mcd/lux/m ²

*Observation Angle = 1.05°, Entrance Angle = 88.8°

Pavement markings with measured average initial retroreflectance readings that do not meet the specified minimum values using the procedures outlined in subsection 6.4.5 of ASTM D7585 shall be removed by a method approved by the Engineer and reapplied at no additional cost.

Pavement Marking Asset Management

Upon completion of the pavement marking installation, the following data shall be tabulated by the Contractor:

1. Retro reflectance readings, including date(s), time(s), and location(s) where readings took place;
2. Liquid binder type(s) and application rate;
3. Reflective element type and drop rate;
4. Date of groove installation;
5. Lot, batch number, or any other material identifiers and manufacturing information;
6. Date and time of final liquid marking installation;
7. Highway location (including direction) of installation;
8. Air and pavement temperature during application;
9. Measured material application thickness, depth of groove; and
10. Any other pertinent information that may assist MassDOT with Quality Control.

Results for all readings shall be provided within 10 business days of testing to the Engineer, with a second copy sent to:

State Traffic Engineer
Attention: Pavement Marking Installation & Testing
10 Park Plaza, Room 7210
Boston, MA 02116

The cost to prepare and submit this data shall be considered incidental to the cost of the items.

METHOD OF MEASUREMENT

Items 866.206 and 867.206 will be measured per FOOT, complete in place, as specified under Section 860.80.

BASIS OF PAYMENT

Items 866.206 and 867.206 will be paid at the respective contract unit price per FOOT. The contract prices shall include all material, labor, and equipment required or incidental to the satisfactory completion of the work.

ITEM 905.2 **5000 PSI, 3/8 INCH, 710 HP CEMENT CONCRETE** **CUBIC YARD**

The work under this Item shall conform to the relevant provisions of Subsection 901 of the Standard Specifications and the following:

The work under this item shall consist of forming and placing 5000 PSI, 3/8 inch HP Cement Concrete. This item shall be used for patching after all deteriorated and/or unsound concrete is removed under Item 127.12.

The Contractor's attention is directed towards the Repair Procedure as noted in Document A00803.

All existing concrete surfaces that will be in contact with the proposed concrete shall be prepared in accordance with PREPARATION OF CONCRETE SURFACES.

All formwork shall be approved by the Engineer prior to concrete placement.

METHOD OF MEASUREMENT

Item 905.2 will be measured for payment by Cubic Yard of cement concrete furnished and placed, complete in place.

BASIS OF PAYMENT

Item 905.2 will be paid for at the Contract unit price per Cubic Yard, which price shall include all labor, materials, equipment, surface preparation, and all incidental costs required to complete the work.

No separate payment will be made for the installation of subsequent removal of any formwork, coating/patching of the steel reinforcing, but all costs in connection therewith shall be included in the Contract unit price bid.

Where formwork is installed for concrete placement, payment of seventy percent (70%) of the Cubic Yard price of this item will be made upon complete concrete installation. The remaining thirty percent (30%) of the Cubic Yard Price of this Item will be paid only after the complete formwork removal by the Contractor.

ITEM 902.2 CEMENTITIOUS MORTAR FOR PATCHING SQUARE FOOT

The work under this Item shall conform to the relevant provisions of Subsection 901 of the Standard Specifications and the following:

The work under this Item consists of furnishing and placing a polymer-modified, cementitious, fast setting, trowel grade patching mortar to patch vertical surfaces on the existing structures at areas of spalled, delaminated, or cracked concrete as directed by the Engineer.

This Item does not include the repair of any vertical patch that exceeds two (2) inches in depth. The repairs to those patches shall be made using Item 905.2.

MATERIAL

The polymer modified cementitious patching mortar shall conform to the following requirements:

The mortar system shall not contain chlorides, nitrates, added lime, or high silica cements. The system shall be non-combustible, either before or after cure.

<u>TYPICAL PROPERTIES OF CURED MATERIALS</u>	
Finishing Time	20-60 minutes after combining components
Color	Concrete Gray
Abrasion Resistance	6 times that of controlled concrete
Bond Strength	100% concrete substrate failure (Pull off method)
Modulus of Elasticity	4.5 x 10 ⁶ PSI
Surface Scaling	No Deterioration after 120 cycles (deicing salt solution and freeze/thaw)
Compressive Strength (2 hours, 50% RH)	150 PSI minimum
Compressive Strength (28 days, 50% RH)	5,500 PSI minimum
Flexural Strength (28 days, 50% RH)	1,300 PSI minimum

ITEM 909.2 (Continued)

The system shall conform to the ECA/USPHS Standards for surface contact with potable water. The system shall not produce a vapor barrier. The system shall be thermally compatible with concrete.

CERTIFICATION

The Contractor shall furnish notarized certification that all materials conform to the above requirements. If an approved product is not used, then samples of all materials proposed for use shall be submitted to the AASHTO Product Evaluation and Audit Solutions (PEAS). To allow sufficient time for testing, these samples must be submitted at least six weeks prior to scheduled use.

SURFACE PREPARATION

All concrete surfaces shall be prepared in accordance with PREPARATION OF CONCRETE SURFACES.

The Contractor shall remove all deteriorated and spalled areas as designated by the Engineer. All costs to remove the deteriorated and spalled concrete shall be compensated for under Item 127.12.

The Contractor shall have the approval of the Engineer certifying that all spalled and deteriorated concrete has been removed prior to patching deteriorated areas. If the deterioration of the vertical surfaces is deeper than one (1) inch, then the repair will be made in maximum lifts of one (1) inch deep. The preceding lift shall be allowed to reach final set before applying fresh material. The fresh mortar must be scrubbed into the preceding lift.

APPLICATION METHODS

Mortar must be worked into the substrate filling all pores and voids. Force the material against the edge of the repair, working towards the center. After filling, consolidate, then screed.

The maximum thickness of application in one pass shall be one (1) inch. If the depth of patch exceeds one (1) inch, the mortar shall be placed in two passes of approximate equal thickness, with a total thickness not to exceed two (2) inches. Before the first pass has achieved an initial set, the surface shall be prepared for the second pass by scratching with a trowel to form a grid of deformation on the surface.

Prime and work the mix into the substrate, filling all pores and voids. Avoid puddling of the primer on horizontal substrates.

ITEM 909.2 (Continued)**CURING**

Use a fine mist spray of water, wet burlap, or a non-solvent approved curing compound if ambient conditions might cause premature surface drying (high temperature, low humidity, strong winds, etc.). If necessary, protect the newly applied mortar from rain. To prevent freezing, cover with insulating material.

MANUFACTURER'S FIELD REPRESENTATIVE

The Contractor shall arrange with the material's manufacturer or distributor to have the services of a competent field representative at the work site prior to any mixing of components to instruct the work crews in the proper mixing and application procedures.

The manufacturer's field representative must be fully qualified to instruct artisans or perform the work and shall be subject to the approval of the Engineer.

The Contractor shall be completely responsible for the expense and services of the required field representative, and the bid contract price shall be full compensation for all cost in connection therewith.

METHOD OF MEASUREMENT

Item 909.2 will be measured for payment by the Square Foot of patch area, complete in place.

BASIS OF PAYMENT

Item 909.2 will be paid for at the Contract unit price per Square Foot, which price shall include all labor, materials, equipment, certification, samples, curing and all incidental costs required to complete the work.

ITEM 910.01**GALVANIC ANODES****EACH**

The work under this Item shall consist of furnishing and installing Zinc-Anode Galvanic Protection Systems to reinforce steel and mitigate corrosion. The work shall include all necessary materials and electrical connections as specified and as required by the Engineer. Testing for electrical continuity of the reinforcing steel to all elements is required.

MATERIALS**Galvanic Anodes**

Embedded galvanic anodes shall be compact, pre-manufactured, and consist of electrolytic high-grade zinc. They must comply with ISO 12696:2022 and ASTM B 418 - Type II. For acceptance, the following criteria must be met:

Table 1: Galvanic Anode Minimum Service Requirements

Service Life	20 Years
Minimum Current Density at End-of-Life (Low)	0.4 mA/m ² (at 50°F)
Minimum Current Density at End of Life (Moderate)	0.8 mA/m ² (at 50°F)
Minimum Current Density at End of Life (High)	1.6 mA/m ² (at 50°F)
Minimum Current Density at End of Life (Severe)	2.0 mA/m ² (at 50°F)

*Risk Levels are described in this section.

Current Density: The current output per square meter of steel surface in the protected area.

Steel Density: “The ratio of the surface area of steel to the surface area of concrete/ distribution”
ISO 12696:2022

Prior to any galvanic anode product approval, the following must be submitted to the MassDOT Materials section for approval:

1. Measured Current Output (mA) over the required service life from field, laboratory, or both tests.
 - a. Initial Anode Current (mA at 50°F).
 - b. Field testing data for at least 3 years, with multiple projects preferred.
 - c. Lab testing data including assumptions and the process for accelerated aging.
2. Aging term (years) or half-life of the anode (years).
3. Measured Current Output (mA) characteristics at varying temperatures (Degrees Fahrenheit) for the specific anode.

ITEM 910.01 (Continued)

4. Efficiency and Utilization Value of the Zinc Anode determined from testing.
 - a. **Efficiency and Utilization Value:** The percentage of Zinc utilized to produce the total charge delivered compared to the total zinc consumed over the same period. In practice, a large mass of zinc should remain unused beyond the design service life which will continue to produce current but at below the design current density.
5. Equations/process for determining the number of anodes required for a project.
6. Anode spacing requirements in the form of a spacing chart.

If the above criteria are met and specifications reach the minimum requirements listed in Table 1, the product will be accepted.

The number of anodes required for steel reinforcement shall follow the approved producer's product design criteria.

***Risk Levels**

For unknown chloride content, the following risk levels apply:

Low Risk: Areas with minimal winter salt application and low environmental risk from chloride contamination. Environmental risks include, but are not limited to, proximity to surface water bodies (both fresh and saltwater), acidic soils around the project site, concrete structures needing cathodic protection, nearby industrial or agricultural centers, and natural salt deposits. Structures situated away from water sources and with non-acidic subbases are typically considered low risk.

Moderate Risk: Areas with winter salt applications and low environmental risk from chloride contamination. Generally, overland structures under most environmental conditions are considered moderate risk.

High Risk: Areas with significant winter salt applications or moderate environmental risk from chloride contamination. Structures located close to water sources are generally considered high risk.

Severe Risk: Areas with significant winter salt applications and high environmental chloride interaction. Structures located near saltwater sources are generally considered severe risk.

CONSTRUCTION METHODS**General**

For the approved Galvanic Anodes, the Engineer must receive the Anode Manufacturer's written instructions for surface preparation and anode installation at least 7 days prior to the start of related construction activities. Only one brand will be allowed for this project. Follow the anode manufacturer's instructions unless otherwise modified herein.

ITEM 910.01 (Continued)**Surface Preparation**

Surface preparation for Galvanic Anodes shall follow the Anode Manufacturer's guidelines, ACI 515.3R-20 "*Guide for Assessment and Surface Preparation for Application of Protection Systems for Concrete*", and applicable MassDOT specifications.

Installation

The Contractor shall embed Galvanic Anodes in concrete as indicated by the contract documents or as directed by the Engineer. Installation methods must be approved by the Engineer. Qualified individuals will inspect the work. Onsite training may be requested before starting installation, including inspection procedures, quality assurance methods, and documentation.

Steel Continuity

Exposed reinforcing steel shall be checked for electrical continuity through methods specified by the Anode Manufacturer. Once anode is installed continuity between the anode and steel must be measured. Maximum DC resistance between exposed ties and strands shall be less than 1 ohm (Ω) and 0 volts (V). Discontinuous steel shall have continuity re-established by tying to other bars with steel tie wire or other approved means.

The Engineer may request or require testing to ensure anode performance, including polarity and insulation checks.

METHOD OF MEASUREMENT

Item 910.01 will be measured for payment by the Each galvanic anode furnished and installed, complete in place.

BASIS OF PAYMENT

Item 910.01 will be paid for at the Contract unit price per Each, which price shall include furnishing, installation, testing, electrical connections, all labor, materials, tools, equipment, and all incidental costs required to complete the work.

Payment for concrete removal, steel reinforcement repair/replacement, and concrete replacement will be made under their respective items (127.12, 905.2, and 910.) as specified in the contract documents.

ITEM 912.**DRILLING AND GROUTING DOWELS****EACH**

The work under this Item shall conform to the relevant provisions of Subsection 901 of the Standard Specifications and the following:

The work shall consist of drilling holes, furnishing, installing, and grouting of steel dowel reinforcement at the locations shown on the drawings or as required by the Engineer.

The dowel embedment must be adequate to fully develop 125% of the yield strength of the bar. The embedment length, the method and equipment used to drill the dowel holes, and the diameter of the drilled hole shall at a minimum conform to the recommendations of the manufacturer and be submitted to the Engineer for approval.

MATERIALS

The grout to be used for these dowels shall be selected from the MassDOT Qualified Construction Materials List for its specific application. Reinforcing steel dowels shall meet the requirements of AASHTO M31 Grade 60. All reinforcing steel dowels shall be epoxy coated in accordance with ASTM A775. Reinforcing steel dowels shall be incidental to the work under this Item. Reinforcing steel manufacturer shall be listed on the MassDOT Qualified Construction Materials List.

CONSTRUCTION METHODS

All dowel holes shall be air drilled provided that the minimum edge distance of 6 inches is observed. Should, in the Engineer's opinion, air drilling be inappropriate due to questionable strength of the existing /concrete or insufficient edge distance, the dowel holes shall be diamond core drilled. The inner surfaces of the diamond core drilled dowel hole's inner surfaces shall be subject to the approval of the Engineer. The diameter of the drilled dowel holes shall be in accordance with the recommendations of the grout manufacturer. The holes shall be blown clear of any debris and shall have the approval of the Engineer prior to the placement of any grout material. The drilling operation shall be performed without damage to any portion of the existing structure that is to remain in place. Any damage to any portion of the existing structure that is to remain in place shall be repaired to a condition equal to or better than that existing prior to the beginning of the Contractor's operations and shall be repaired at the Contractor's expense.

The Contractor shall strictly follow the recommendations of the manufacturer for mixing and placing the grout material prior to the placement of the dowel. The Contractor shall adhere to the recommendations of the manufacturer regarding minimum and maximum temperatures while placing the grout. Any excessive grout around the hole after placement of the dowel shall be struck off smooth while the grout is still fresh.

ITEM 912. (Continued)

The Contractor shall perform on site a minimum of two (2) tests of the dowels (one test for each side of stage construction) for capacity in tension in each location or component. The test shall be performed in the presence of and to the acceptance of the Engineer. The testing, including the necessary material and equipment to perform the test, is incidental to the work under this Item. The pullout force shall correspond to 90% of the yield strength of the bar. If the test bar pulls out or if the concrete utilized in the test shows signs of fracture, the Contractor shall adjust the hole diameter, embedment length, and/or grout material to meet this requirement. The method of applying the tension load to the dowels shall conform to ASTM E488. Details of the test procedure, materials, and equipment shall be submitted to the Engineer for review and approval prior to commencement of the test. Dowels shall not be ordered until the embedment lengths have been approved by the Engineer.

The Contractor shall arrange with the material's manufacturer or distributor to have the services of a competent field representative at the work site prior to any drilling of the proposed dowel holes to instruct the work crews in proper dowel installation procedures. The field representative shall remain at the job site after work commences and continue to instruct until the representative, the Contractor, and Engineer are satisfied that the crew has mastered the technique of installing the dowels successfully. The representative shall make periodic visits to the project as the work progresses and shall confer on each visit with the Contractor, Inspector and/or Engineer. The manufacture's field representative must be fully qualified to perform the work and shall be subject to the approval of the Engineer.

METHOD OF MEASUREMENT

Item 912. will be measured for payment by the Each dowel installed, complete in place.

BASIS OF PAYMENT

Item 912. will be paid for at the Contract unit price per Each, which price shall include all labor, materials, equipment, furnishing dowels, drilling holes, grouting the dowels regardless of the diameter or depth of the hole, and all incidental costs required to complete the work.

The Contractor is responsible for the expense of the service of the required field representative and the contract unit price shall be considered full compensation for all costs in connection therewith.

ITEM 960.361**STRUCTURAL STEEL REPAIRS - BOLTED****POUND**

The work under this item shall conform to relevant provisions of Subsections 960 of the Standard Specifications, the General Requirements for Demolition and Work Involving Painted Steel, and the following:

The work under this Item consists of repairing the deteriorated steel beam ends, as shown on the plans and directed by the Engineer.

The work consists of surface preparation and application of epoxy paste; fabrication and installation of steel shapes and plates; drilling and bolting; and any other work that may be necessary to complete the steel repairs as shown on the plans and directed by the Engineer. Repairs shall restore the members to their original capacity or function.

Cutting exposed end diaphragm connection plates, grinding smooth beam webs, and fabricating and installing new steel to the damaged areas shall be incidental to this item.

Areas scheduled to be repaired or strengthened that have been previously cleaned and painted will need to be cleaned and prepared in accordance with the specified requirements for faying surfaces.

All costs for permits, dump fees, taxes, special handling of hazardous materials, etcetera, shall be included in the bid price for this item.

The Contractor shall take all precautions necessary not to damage those portions of the superstructure that are to remain. Any portion of the superstructure to remain, which becomes damaged as a result of the Contractor's operations, shall be repaired to the satisfaction of the Engineer and at the Contractor's expense.

Conditions may also vary such that the repairs at each location will require some field measurements and fabrication to ensure proper fit. The Contractor shall satisfy their own investigation and research, regarding all conditions and materials affecting the work to be done. No additional compensation, other than the unit price bid for this item, will be made if the materials or work prove to be different than that inferred or described herein.

The limits of the repairs are to be approved by the Engineer after the repair area has been cleaned of all materials, including all rust, such that the base metal areas can be visually examined and allow the use of an ultrasonic thickness gauge. After inspection, the Engineer may adjust the repair limits as conditions warrant.

Materials

Structural steel shall conform to the requirements of AASHTO M270, Grade 36 or Grade 50 steel. The repair steel shall be considered main members and conform to the Charpy V-notch impact test requirements for AASHTO Temperature Zone T2.

ITEM 960.361 (Continued)

All high strength bolts for bolted connections shall conform to the requirements of ASTM F3125 of the appropriate diameters and installed in accordance with the Standard Specifications. All proposed nuts shall conform to ASTM A563 Standard Specification for Carbon and Alloy Steel Nuts. Washers shall conform to ASTM F463 Standard Specification for Hardened Steel Washers.

The Contractor shall apply an Epoxy Paste where necessary to achieve flush contact between existing steel and proposed steel. Epoxy Paste for structural steel repairs shall be a solvent free, moisture tolerant, epoxy paste adhesive system that is not affected by road de-icing salts. The epoxy paste shall be manufactured specifically for filling, smoothing, sealing, or fairing applications on all metals. The steel surface shall be prepared, and the paste shall be applied in strict accordance with the manufacturer's latest written instructions. The epoxy paste shall have a minimum compressive strength of 8,500 psi once cured.

The Contractor shall apply silicone caulking at all locations where the existing steel and the proposed steel meet after the top coat of paint has fully cured. Silicone caulking shall be recommended, applied, and be compatible with the paint system manufacturers' requirements. At locations where the gap between the existing steel and proposed steel is 1/8" or greater, the silicone caulk shall be tooled into gaps. The silicone caulk and its installation shall be considered incidental to this Item.

Construction Methods

All work shall be done as directed by and to the satisfaction of the Engineer in accordance with the plans and details.

The Contractor shall furnish and install new plates and angle sections as designed and shown on the plans and details.

Existing surfaces in the work area shall be cleaned and prepared in accordance with the procedures detailed in SSPC-SP10 prior to performing repairs. If it is determined, after cleaning, that the limits of repairs at a location need to be extended, the cleaning and painting may be extended at the discretion of the Engineer.

All connections are to be slip critical and all faying surfaces shall be AASHTO Class B. All new steel for repairs shall be brought to the field shop primed and receive the intermediate and finish coats of paint in the field after connection to the structure.

Epoxy paste shall be applied as directed by the Engineer. The epoxy paste should be used as a fairing material as directed by the Engineer in situations where the mating surface between new steel and existing pitted/deteriorated steel does not form a tight fit that would prevent the intrusion of water or on bearing surfaces that would otherwise be too irregular to provide adequate contact area for bearing. The epoxy paste shall be considered incidental to this Item.

ITEM 960.361 (Continued)

The Contractor shall remove, and satisfactorily dispose of reinforced concrete end diaphragms adjacent to the repair area as directed by the Engineer. The costs associated with this removal and sawcutting shall be considered incidental to this Item.

After removal, the Contractor shall patch the exposed concrete with a cementitious mortar as shown on the plans or as directed by the Engineer. The costs associated with the removal and disposal of reinforced concrete and cementitious mortar patching shall be considered incidental to this Item.

Cutting existing steel shall be performed with care to avoid damaging or notching any of the material to remain. In the event the Contractor damages materials to remain during cutting operations, the Contractor shall replace, repair, or reinforce the damaged area as may be required to restore the area to existing conditions prior to damage. The work shall be performed by the Contractor, and as required by the Engineer, at the Contractor's expense.

Cutting may be performed by the carbon air arc cutting method, plasma cutting, or grinding. Flame cutting shall not be allowed. Carbon air arc cutting shall be done in a manner not to create excessive heat in the steel to remain.

The Contractor shall use temperature indicating crayons for 275 deg. F and 300 deg. F to monitor the temperature on the steel. These crayons shall be marked on the surface of the steel one (1) inch from the area being cut as ordered by the Engineer. Cutting shall be discontinued temporarily, to allow cooling, when the temperature in the base steel exceeds 275 deg. F. If the temperature exceeds 300 deg. F in the base steel, then carbon air arc cutting at that particular location shall be stopped permanently and other methods, such as grinding, shall be employed to cut within the same temperature restrictions.

METHOD OF MEASUREMENT

Item 960.361 will be measured for payment by the Pound of new steel actually installed, complete in place, and accepted by the Engineer in accordance with the following:

- Unit weight of steel is 490 pounds per cubic foot.
- No deductions in weight are to be made for material removed for bolt holes, clips, or access holes.
- The weight of bolts, nuts, and washers is considered incidental to the steel and is not included in the calculated weight for payment purposes. There shall be no separate payment made for the supply and installation of high strength bolts.

ITEM 960.361 (Continued)

- Any excess steel material ordered at the Contractor's discretion to facilitate fabrication and installation of the required finished product, as defined by the limits on the drawing, shall not be measured for payment. The quantity of steel to be calculated and paid for shall only include the weight of the steel that meets the repair detail requirements for each location measured separately.

BASIS OF PAYMENT

Item 960.361 will be paid for at the Contract unit price per Pound, which price shall include all labor, materials, equipment, tools, staging, obstacle removal, epoxy paste, silicone caulking, cementitious mortar patching, testing, and incidental costs required to complete the work described.

ITEM 964.3**ELASTOMERIC PROTECTIVE COATING****SQUARE FOOT**

The work under this item shall consist of applying a minimum of two coats of an elastomeric acrylic protective coating to bridge copings and the above grade surfaces of the substructure components and other locations as directed by the Engineer.

A total dry film thickness (DFT) of 16 mils shall be required.

The acrylic protective coating shall be breathable, durable, flexible, and color retentive. It shall provide protection and be resistant to weathering, carbon dioxide, chlorides, UV light, wind driven rain, dirt pick up and mildew. It shall also bridge hairline cracks up to 1/32". The acrylic protective coating system shall be one of the following or an approved equal:

- SikaGard 550W Elastocolor by Sika Corp.
- Flexxide Elastomer by Carboline
- Colorlastic by ChemMasters

The proposed coating product shall be submitted to the Engineer for approval. The Contractor shall submit the proposed application procedures and Manufacturer's Product Data Sheet(s) that completely describe the product. The color of the coating shall be AMS-STD26559 from the AMS Standard 595 Colors.

Preparation and Protection of Surfaces

All vegetation growing adjacent to or within the limits of the concrete surfaces to be coated shall be removed and properly discarded. All debris adjacent to or within the limits of the concrete surfaces to be coated shall be removed and properly discarded.

ITEM 964.3 (Continued)

All surfaces to be coated must be dry, clean, sound, and free of all contaminants that could interfere with adhesion of the coating. All loose material shall be removed. If directed by the Engineer, the contractor shall repair any holes and any spalled and damaged concrete prior to applying the coating. All concrete repair areas shall be cured for a minimum 28 days before coating.

The Contractor shall pressure wash all concrete surfaces to be coated. The pressure washer shall operate at a minimum of 3,000 psi. The protective coating shall not be applied until the surface is dry and the surface preparation has been approved by the Engineer. All concrete to be coated must be tested for the presence of moisture after the surface preparation has been completed and prior to application of coating. Testing shall be in accordance with ASTM D 4263.

Application

Application shall be done by airless sprayer or roller or a combination of both and in accordance with the manufacturer's recommendations. The use of a primer shall not be required unless stipulated for that particular coating by the manufacturer. A minimum of two coats shall be applied to achieve a total DFT of 16 mils. The recommended minimum wet film thickness (WFT) must be maintained during each application. The manufacturer's specified temperature and weather limitations for the application shall be strictly adhered to.

METHOD OF MEASUREMENT

Item 964.3 will be measured for payment by the Square Foot for all concrete surfaces to which the coating is applied, complete in place.

BASIS OF PAYMENT

Item 964.3 will be paid for at the Contract unit price per Square Foot, which price shall include all labor, materials, tools, equipment, preparation and protection of surfaces, wet/dry film thickness gauge for the use by the Engineer, and all incidental costs required to complete the work.

<u>ITEM 987.02</u>	<u>SPECIAL SLOPE PAVING UNDER BRIDGE REMOVED AND RESET</u>	<u>SQUARE YARD</u>
<u>ITEM 987.12</u>	<u>SPECIAL SLOPE PAVING UNDER BRIDGE - QUARRY STONE GROUTED</u>	<u>SQUARE YARD</u>
<u>ITEM 987.3</u>	<u>SPECIAL SLOPE PAVING UNDER BRIDGE - CEMENT CONCRETE</u>	<u>SQUARE YARD</u>

The Work under these Items shall conform to the relevant provisions of Subsections 150, 170 and 983 of the Standard Specifications and the following:

The work under Items 987.12 and 987.3 consists of furnishing and placing special slope paving under bridge as required by the Engineer. The work may include areas of missing or damaged existing special slope paving, or new areas where no paving was originally installed.

The work under Item 987.02 consists of resetting existing slope paving under bridge where required by the Engineer.

MATERIALS

Materials shall meet the requirements specified in the following Subsection of Division III, in addition to those listed in Subsection 983.40:

M1.03.0 Gravel Borrow

The Engineer will determine what type of special slope paving to be used in each area under repair. Generally, if more than 50% of the original special sloped paving is still in place it shall be replenished in kind (Grouted Quarry Stone, Item 987.12). If less than 50% of the original special sloped paving is still in place, full replacement with concrete slope paving should be considered (Item 987.3).

The thickness of the special slope paving shall be equal to the existing quarry stones.

CONSTRUCTION METHODS

The new slope paving shall maintain the original undisturbed section of paved or unpaved slope.

REMOVAL OF EXISTING SLOPE PAVING

For existing slope paving that has settled, has been displaced from its original position or otherwise directed to be removed by the Engineer, that is not designated to be reset under Item 987.02:

- Special slope paving quarry stones shall be removed from the site, transported to and stacked at the nearest MassDOT Maintenance Depot.
- Special slope paving concrete blocks and cement concrete slabs shall become the property of the Contractor and shall be removed and disposed of away from the site.
- Special slope paving consisting of cement grout over hot mix asphalt shall become the property of the Contractor and shall be removed and disposed of away from the site.

METHOD OF MEASUREMENT

Items 987.12 and 987.3 will be measured for payment by the Square Yard of the special slope paving installed, complete in place. Measurements will be taken along the surface of the slope paving.

Item 987.02 will be measured for payment by the Square Yard of the special slope paving removed and reset. Measurements will be taken along the surface of the slope paving.

BASIS OF PAYMENT

Items 987.12 and 987.3 will be paid for at the Contract unit price per Square Yard, which price shall include all labor, materials, equipment, grading and compacting, removal and disposal/transportation of existing paving, and all incidental costs required to complete the work.

Item 987.02 will be paid for at the Contract unit price per Square Yard, which price shall include all labor, materials, equipment, grading and compacting, and all incidental costs required to complete the work.

*****END OF DOCUMENT*****

DOCUMENT A00803

DRAWINGS AND SKETCHES

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BURLINGTON

US 3 NB/SB OVER I 95/ST 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	12

PROJECT FILE NO.	613781
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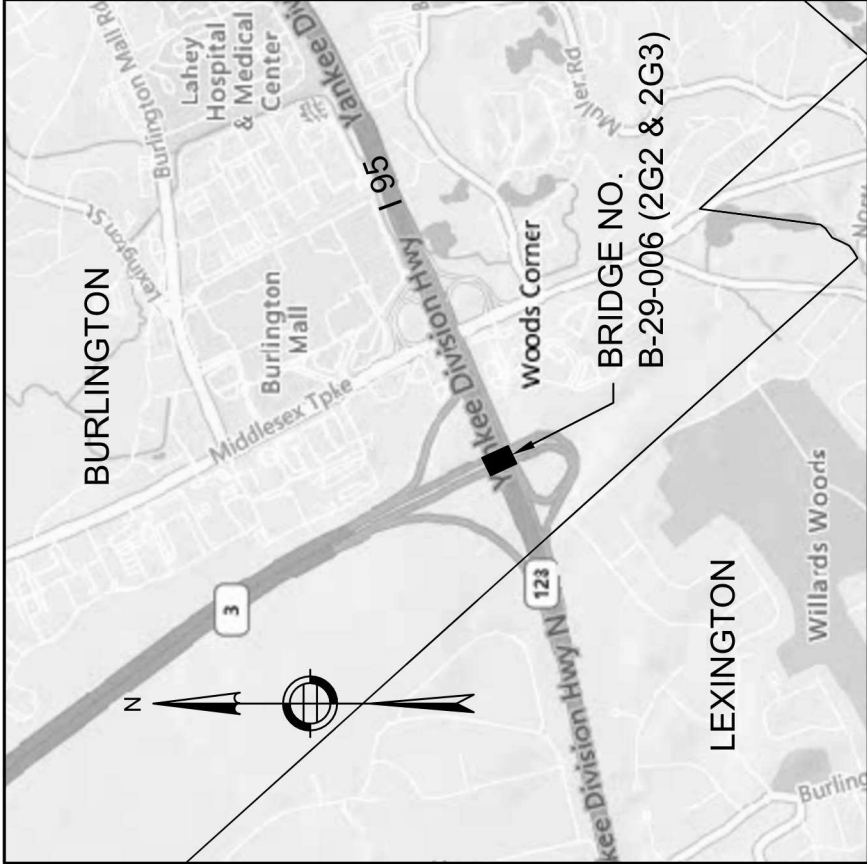
INDEX, LOCUS MAP, GENERAL NOTES, KEY PLAN & QUANTITIES

QUANTITIES:

ITEM	QUANTITY	UNITS
REINFORCED CONCRETE SUBSTRUCTURE EXCAVATION	35	CY
5000 PSI, ¾ IN. 710 HP CEMENT CONCRETE	35	CY
CEMENTITIOUS MORTAR FOR PATCHING	475	SF
STEEL REINFORCEMENT FOR STRUCTURES	1725	LB
GALVANIC ANODE	1850	EA
ELASTOMERIC PROTECTIVE COATING	7300	SF

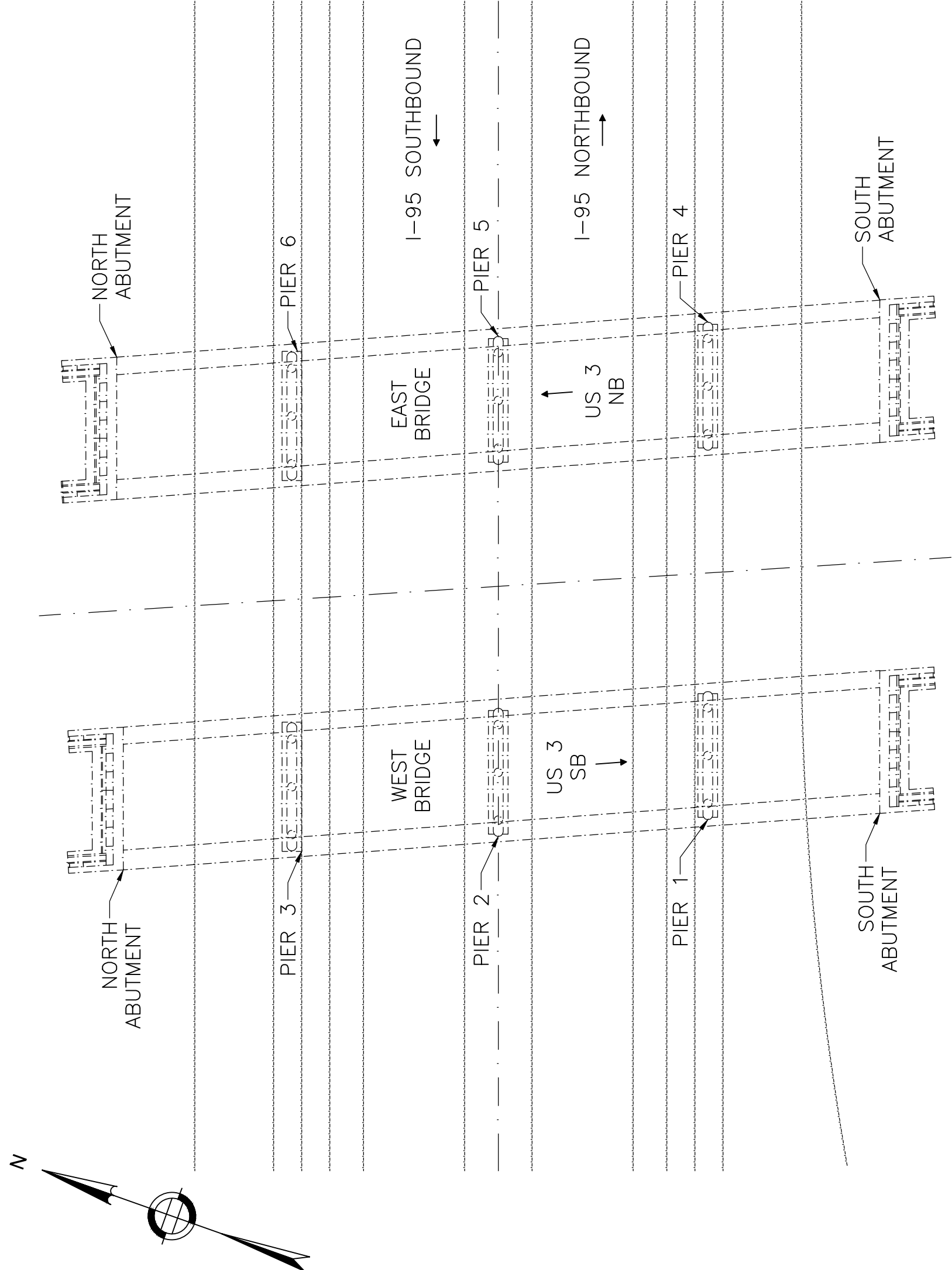
INDEX OF BRIDGE SHEETS

INDEX, LOCUS MAP, GENERAL NOTES, KEY PLAN & QUANTITIES	1
PIER REPAIR LOCATIONS	2-7
ABUTMENT REPAIR LOCATIONS	8-9
PIER CAP REPAIR DETAILS	10
PIER COLUMN REPAIR DETAILS	11
GALVANIC ANODE INSTALLATION & PARTIAL DEPTH REPAIR DETAILS	12



LOCUS MAP

SCALE: 1" = 2000'



KEY PLAN

SCALE: 1" = 40'

GENERAL NOTES:

SCALES:

SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZE PRINTS (A3).

CONCRETE:

ALL CONCRETE SHALL BE 5000 PSI, ¾ IN, 710 HP CEMENT CONCRETE.

REINFORCEMENT:

REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 31 GRADE 60. UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS, ALL BARS SHALL BE LAPPED AS FOLLOWS:

MODIFICATION CONDITION

- NONE
- 12" OF CONCRETE BELOW BAR

ALL BARS SHALL BE UNCOATED BLACK STEEL.

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

#4 BARS	#5 BARS	#6 BARS
16"	19"	23"
20"	25"	30"

DESIGNED BY
A. Florio

DRAWN BY
A. Florio

CHECKED BY
D. Consentino

SPECS BY
A. Florio

APPROVED FOR DESIGN BY
J. Lee

MM/DD/YYYY

ISSUED FOR CONSTRUCTION

SUBSTRUCTURE REPAIRS

BURLINGTON

US 3 NB/SB OVER I 95/ST 128

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

*
2G2
2G3

BURLINGTON

US 3 NB/SB OVER I 95/ST 128

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	12

PROJECT FILE NO.	613781
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PIER REPAIR LOCATIONS (1 OF 6)

REPAIR LOCATIONS:

1. SPALL, 1'-9" LONG X 1'-8" WIDE X 7" DEEP, WITH EXPOSED REBAR & EXTENDING 7" INTO THE SOUTH FACE.
2. SPALL, 9" LONG X 2" HIGH X 1" DEEP, EXTENDING 2" ONTO THE UNDERSIDE OF THE PIER CAP.
3. DELAMINATED AREA, 2'-8" LONG X 6" HIGH.
4. DELAMINATED AREA, 10' LONG X 1' HIGH, WITH A ¼" WIDE HORIZONTAL CRACK.
5. DELAMINATED AREA, 4'-6" LONG X 5" HIGH.
6. SPALL, FULL WIDTH X 3' HIGH X 2" DEEP, WITH EXPOSED REBAR & ADJACENT DELAMINATED AREA ON THE EAST FACE, 1'-8" WIDE X 6' HIGH.
7. SPALL ON THE NORTHWEST FACE, UP TO 1'-6" WIDE X FULL HEIGHT X 3" DEEP, WITH EXPOSED REBAR & AN ADJACENT DELAMINATED AREA ON THE NORTH FACE, 1' WIDE X 5'-7" HIGH, WITH VERTICAL CRACKING. THE REMAINDER OF THE WEST FACE IS DELAMINATED.
8. DELAMINATED AREA ON THE NORTHEAST FACE, 1'-6" WIDE X 7'-2" HIGH X 2" DEEP.
9. DELAMINATED AREA ON THE NORTH FACE, UP TO FULL WIDTH X FULL HEIGHT, EXTENDING INTO THE WEST FACE, FULL WIDTH X 2'-2" HIGH AT THE BOTTOM.
10. SPALL, UP TO 1'-6" WIDE X 7'-10" HIGH X 3" DEEP, EXTENDING FULL WIDTH INTO THE WEST FACE.
11. DELAMINATED AREA AT THE TOP OF THE EAST FACE, FULL WIDTH X 3'-6" HIGH, WITH VERTICAL CRACKING.
12. DELAMINATED AREA ON THE NORTH FACE, FULL WIDTH X FULL HEIGHT, WITH CRACKS & EXTENDING FULL WIDTH X FULL HEIGHT INTO THE WEST FACE.
13. SPALL, 2' LONG X 6" HIGH X 2" DEEP, ABOVE A HOLLOW AREA, 2' LONG X 10" HIGH.
14. SPALL, 7" LONG X 7" HIGH X 1" DEEP, WITH EXPOSED REBAR.
15. HOLLOW AREA, FULL WIDTH X 1'-6" HIGH.
16. VERTICAL CRACK, 4'-3" LONG X ¼" WIDE, ABOVE A DELAMINATED AREA, UP TO FULL WIDTH X 5' HIGH.
17. DELAMINATED AREA, 1' WIDE X 5' HIGH.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

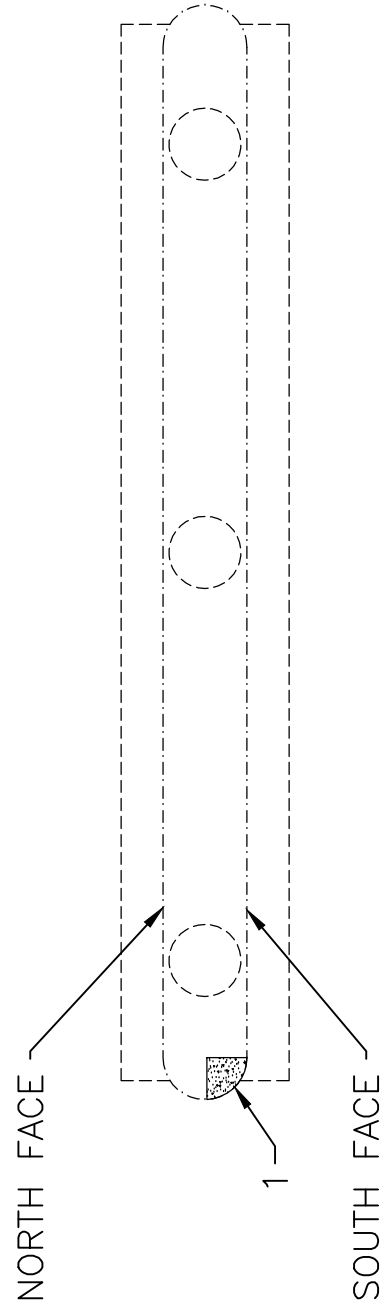
1. WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
2. WHEN THE EXCAVATION ENCROACHES ON THE BEARING DEVICES.
3. WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
4. WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT, AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

NOTES:

SEE SHEETS 10, 11, & 12.

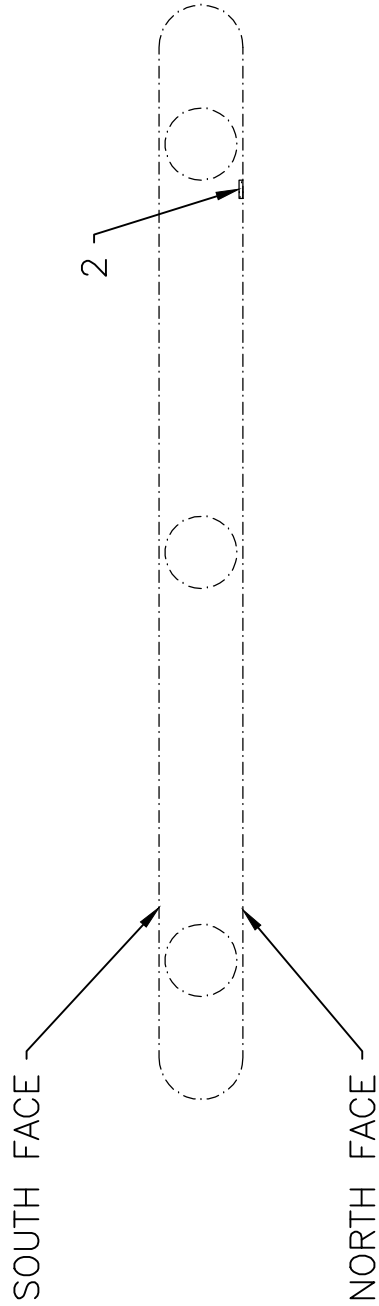
DEFICIENCY LEGEND

- SPALL
- DELAMINATION/HOLLOW AREA
- HORIZONTAL/VERTICAL CRACK



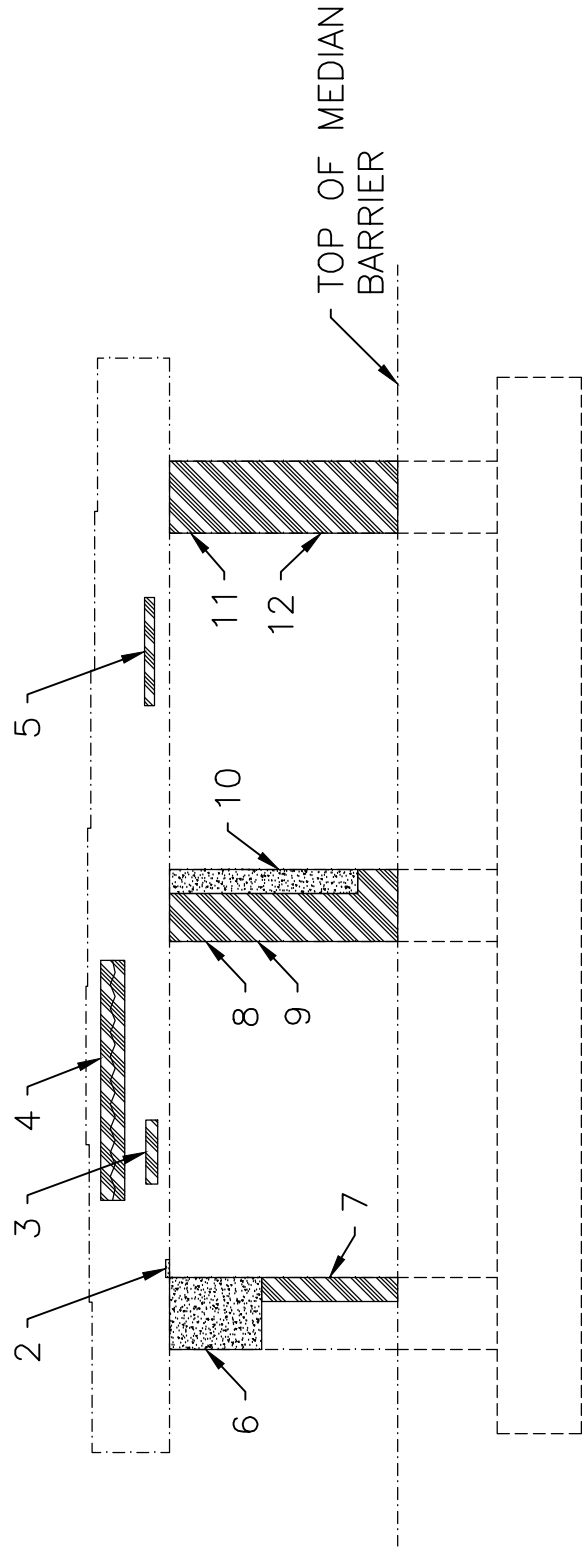
PIER 1 — TOP OF PIER CAP

SCALE: ¾" = 1'-0"



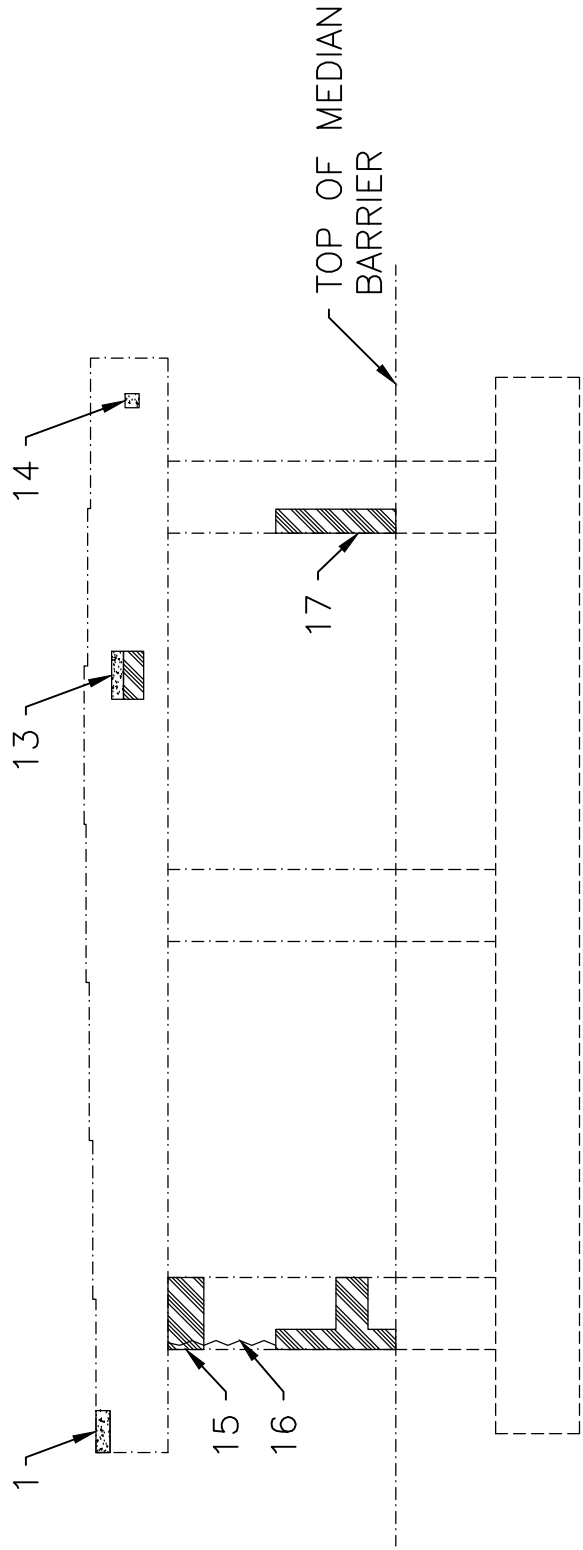
PIER 1 — BOTTOM OF PIER CAP

SCALE: ¾" = 1'-0"



PIER 1 — NORTH FACE

SCALE: ¾" = 1'-0"



PIER 1 — SOUTH FACE

SCALE: ¾" = 1'-0"

*
2G2
2G3

MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

BURLINGTON
US 3 NB/SB OVER I 95/ST 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	3	12
PROJECT FILE NO. 613781			

PIER REPAIR LOCATIONS (2 OF 6)

REPAIR LOCATIONS:

1. HORIZONTAL CRACK, 10' LONG X $\frac{1}{4}$ " WIDE.
2. DELAMINATED AREA/INCIPENT SPALLING, 3' LONG X 1' HIGH.
3. DELAMINATED AREA, FULL WIDTH X 4' HIGH, WITH VERTICAL CRACKING & SCALING.
4. SPALL ON THE WEST FACE, 1'-9" HIGH X 2" DEEP, ABOVE A DELAMINATED AREA, FULL WIDTH X 4'-6" HIGH.
5. VERTICAL CRACK ON THE EAST FACE, 5' HIGH X 1" WIDE, ABOVE A DELAMINATED AREA, 1' WIDE X 3'-9" HIGH.
6. SPALL, FULL WIDTH X UP TO 3'-1" HIGH X 3" DEEP, WITH EXPOSED REBAR & EXTENDING FULL WIDTH X UP TO FULL HEIGHT X 3" DEEP INTO THE WEST FACE. THE REMAINDER OF THE NORTH FACE IS DELAMINATED WITH VERTICAL CRACKING & SCALING.
7. HOLLOW AREA ON THE EAST FACE, 1' WIDE X FULL HEIGHT.
8. VERTICAL CRACK, 6'-6" HIGH X $\frac{1}{4}$ " WIDE.
9. DELAMINATED AREA, FULL WIDTH X 3'-4" HIGH, WITH VERTICAL CRACKING & EXTENDING 2' INTO THE WEST FACE.
10. SPALL ON THE WEST NOSE, FULL WIDTH X 2'-6" HIGH X 4" DEEP, WITH EXPOSED REBAR & EXTENDING INTO THE SOUTH FACE.
11. DELAMINATED AREA, 2' LONG X 8" HIGH, WITH SPALLING.
12. HORIZONTAL CRACKING, UP TO 3' LONG X $\frac{1}{16}$ " WIDE.
13. DELAMINATED AREA, 13'-6" LONG X 2'-6" HIGH, WITH HORIZONTAL CRACKING.
14. SPALL, 1' WIDE X 6'-8" HIGH X 3" DEEP, WITH EXPOSED REBAR & EXTENDING 1' INTO THE WEST FACE.
15. SPALL, 1' WIDE X 3' HIGH X 3" DEEP, WITH EXPOSED REBAR. THE REMAINDER OF THE SOUTH FACE IS DELAMINATED.
16. DELAMINATED AREA, FULL WIDTH X 3'-6" HIGH.
17. VERTICAL CRACK, FULL HEIGHT X $\frac{1}{8}$ " WIDE INSIDE A 1' WIDE DELAMINATED AREA.
18. DELAMINATED AREA ON THE EAST FACE, FULL WIDTH X 5' HIGH, WITH SPALLING.
19. DELAMINATED AREA, FULL WIDTH X 4'-2" HIGH, WITH VERTICAL CRACKING & EXTENDING FULL WIDTH INTO THE EAST FACE.
20. CORNER SPALL, 9" LONG X 5" HIGH X 3" DEEP.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

1. WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
2. WHEN THE EXCAVATION ENDOACHES ON THE BEARING DEVICES.
3. WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
4. WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT. AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

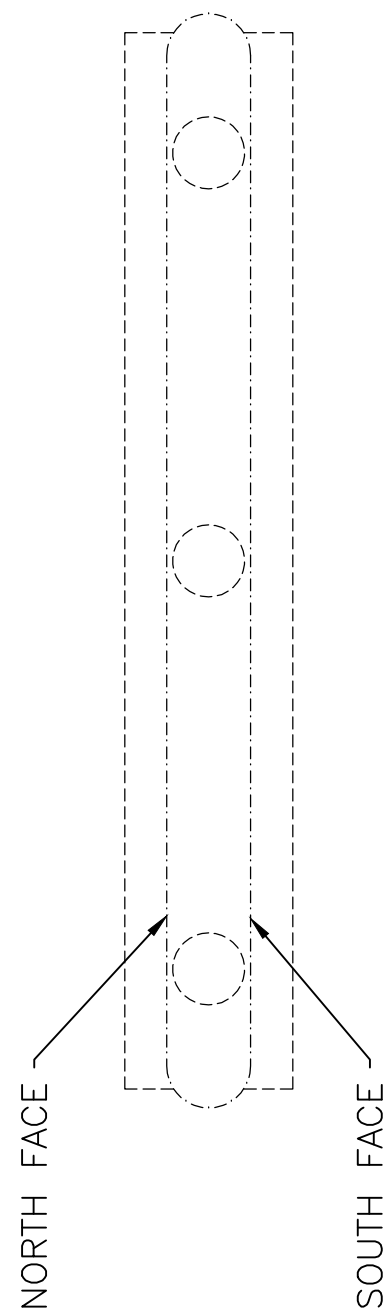
THE CONTRACTOR SHALL PROTECT, DETACH, TEMPORARILY SUPPORT AND REATTACH THE HIGHWAY LIGHTING UTILITY MOUNTED TO THE PIER AS NECESSARY TO COMPLETE THE REPAIR PROCEDURES.

NOTES:

SEE SHEETS 10, 11, & 12.

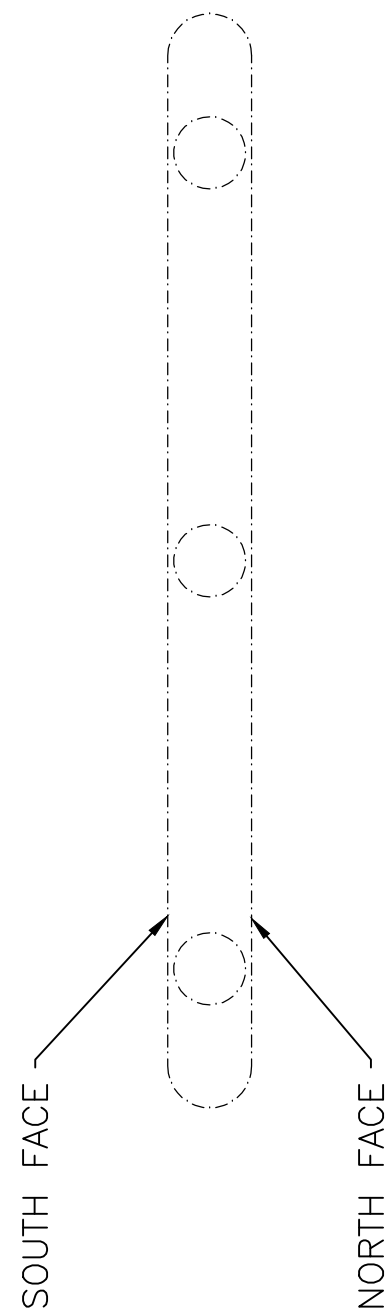
DEFICIENCY LEGEND

- SPALL
- DELAMINATION/HOLLOW AREA
- HORIZONTAL/VERTICAL CRACK

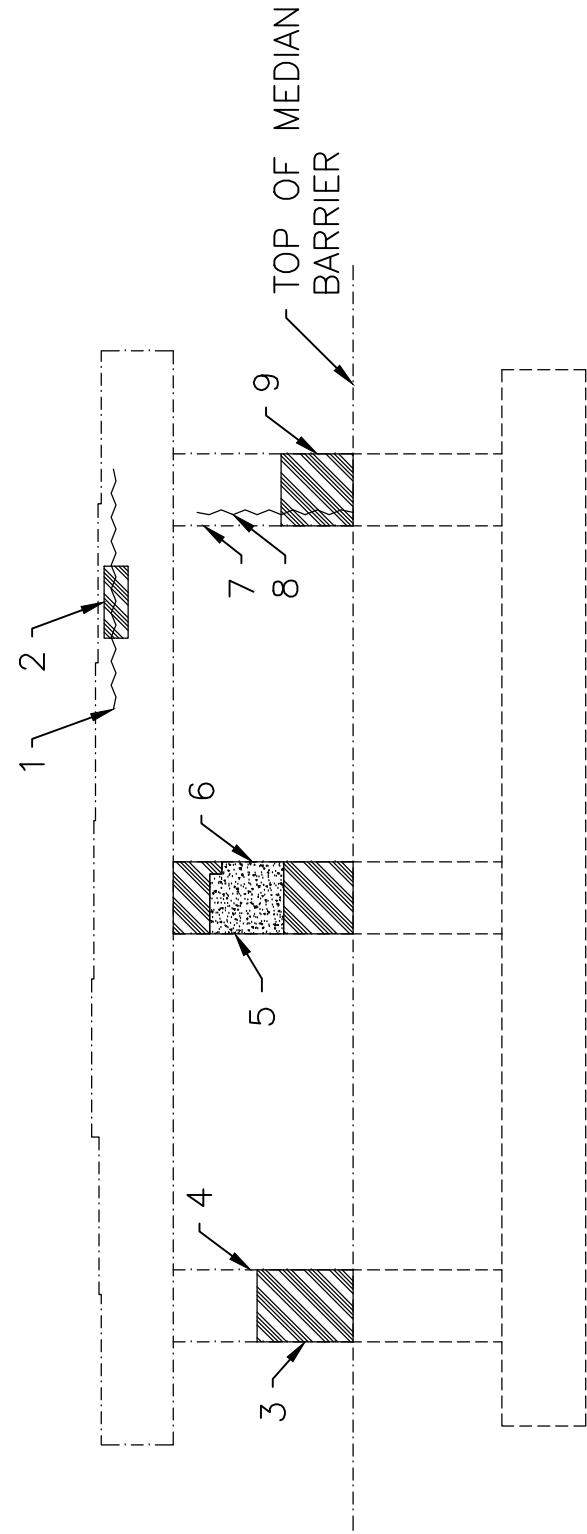


PIER 2 - TOP OF PIER CAP

SCALE: $\frac{1"}{8} = 1'-0"$

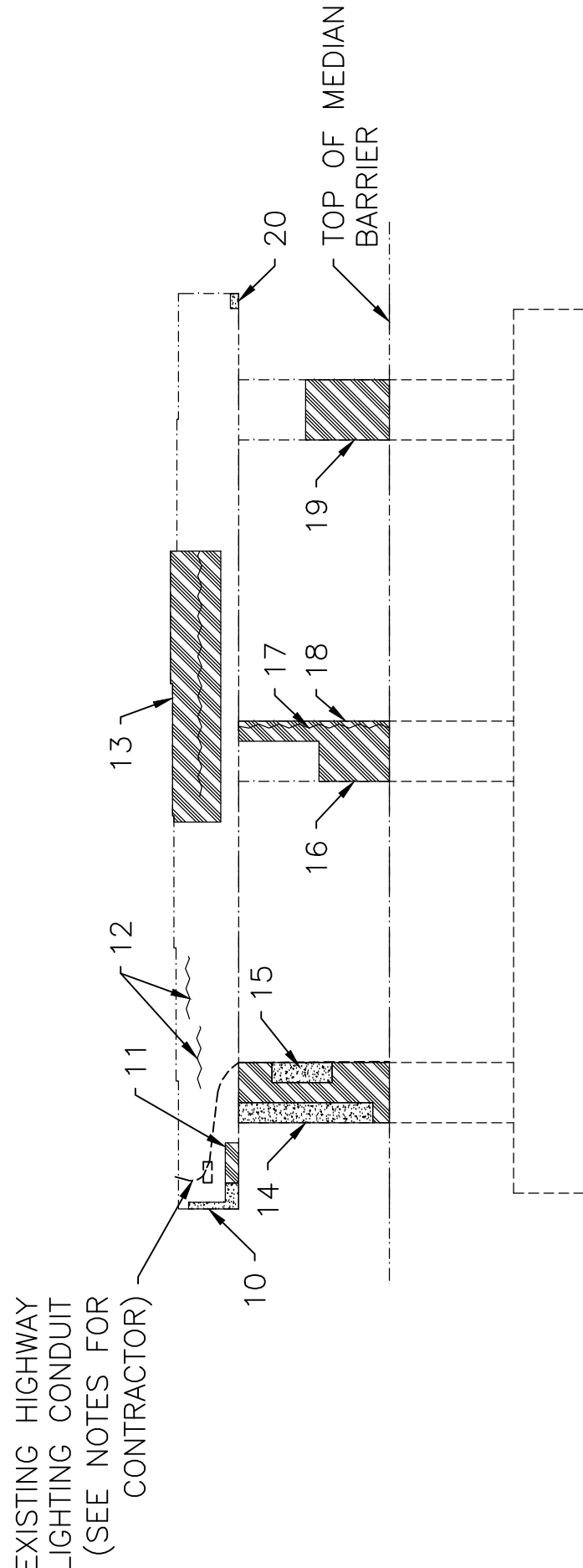


PIER 2 - BOTTOM OF PIER CAP

SCALE: $\frac{1}{8}'' = 1'-0''$ 

PIER 2 - NORTH FACE

SCALE: 1" = 1'-0"



PIER 2 - SOUTH FACE

SCALE: $\frac{1"}{8'} = 1'-0"$

MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

*	2G2 2G3
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BURLINGTON

US 3 NB/SB OVER I 95/ST 128

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	12

PROJECT FILE NO. 613781

PIER REPAIR LOCATIONS (3 OF 6)

REPAIR LOCATIONS:

- SEVERAL SPALLS, UP TO 10" LONG X 8" WIDE X 2" DEEP, WITH AREAS OF EXPOSED REBAR.
- DELAMINATED AREA/INCIPIENT SPALLING, 4' LONG X 2' WIDE.
- HOLLOW AREA, 4'-6" LONG X FULL WIDTH, WITH SPALLING & TWO (2), 6' LONG X ¼" WIDE CRACKS.
- DELAMINATED AREA/INCIPIENT SPALLING, 2' LONG X 2' WIDE.
- SPALL, 3' LONG X 5" HIGH X 2" DEEP.
- DELAMINATED AREA, 4' LONG X 5" HIGH.
- SPALL, 3'-6" LONG X FULL HEIGHT.
- DELAMINATED AREA, FULL WIDTH X UP TO 5' HIGH, WITH A VERTICAL CRACK.
- DELAMINATED AREA ON THE EAST FACE, FULL WIDTH X 6'-6" HIGH, WITH SEVERAL VERTICAL CRACKS & EXTENDING 1' INTO THE NORTH FACE.
- DELAMINATED AREA, 2' WIDE X 2'-6" HIGH, WITH CRACKING.
- DELAMINATED AREA, 20' LONG X 9" HIGH, ABOVE A 25' LONG X 1" WIDE HORIZONTAL CRACK.
- SPALL, 3'-6" LONG X 10" HIGH X 3" DEEP, WITH EXPOSED REBAR.
- SPALL, 2'-8" LONG X 8" HIGH X 2" DEEP.
- HOLLOW AREA, 10' LONG X UP TO 3' HIGH.
- HORIZONTAL CRACK, 6'-6" LONG X ¼" WIDE.
- DELAMINATED AREA ON THE SOUTH FACE, FULL WIDTH X 3' HIGH, WITH SEVERAL CRACKS.
- DELAMINATED AREA ON THE SOUTH FACE, FULL WIDTH X 5' HIGH, WITH SPALLING.
- DELAMINATED AREA ON THE EAST FACE, FULL WIDTH X FULL HEIGHT, WITH SPALLING.
- HOLLOW AREA & HONEYCOMBING ON THE WEST FACE, 3" WIDE X 1' HIGH.
- DELAMINATED AREA ON THE BOTTOM OF THE WEST FACE, 1'-6" WIDE X 4'-8" HIGH, WITH VERTICAL CRACKING.
- SPALL ON THE SOUTHEAST FACE, 2' WIDE X 3' HIGH X 2" DEEP WITH EXPOSED REBAR.
- HOLLOW AREA ON THE EAST FACE, 1' WIDE X 4' HIGH, BELOW THE SPALL ABOVE.
- SPALL, 1'-4" WIDE X 3'-6" HIGH X 2" DEEP, WITH EXPOSED REBAR & SURROUNDED BY DELAMINATION, FULL WIDTH X 4' HIGH.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

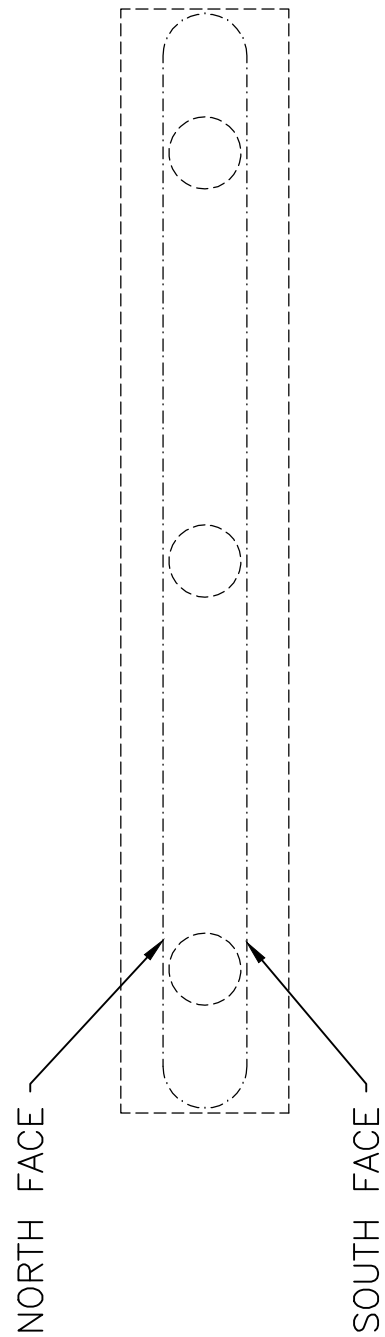
- WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
- WHEN THE EXCAVATION ENCLOSES ON THE BEARING DEVICES.
- WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
- WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT. AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

NOTES:

SEE SHEETS 10, 11, & 12.

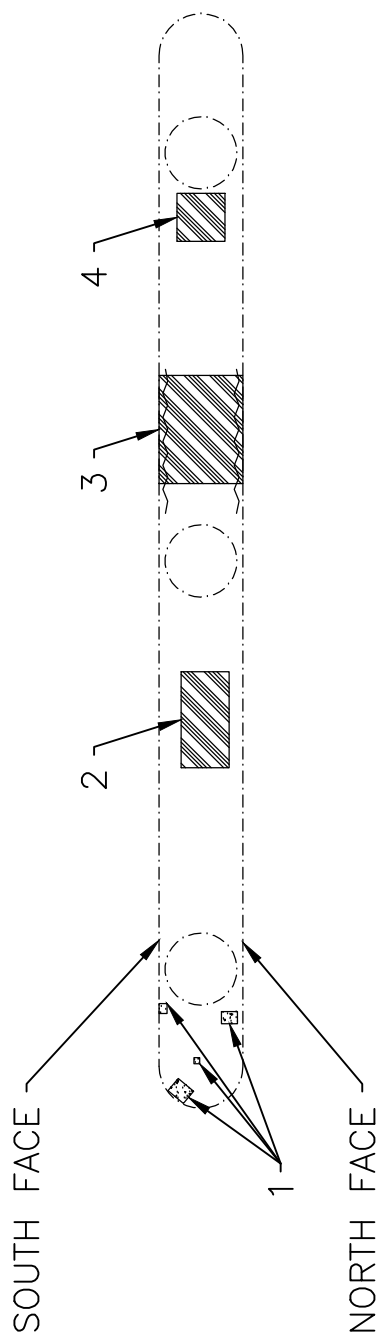
DEFICIENCY LEGEND

-  SPALL
-  DELAMINATION/HOLLOW AREA
-  HORIZONTAL/VERTICAL CRACK



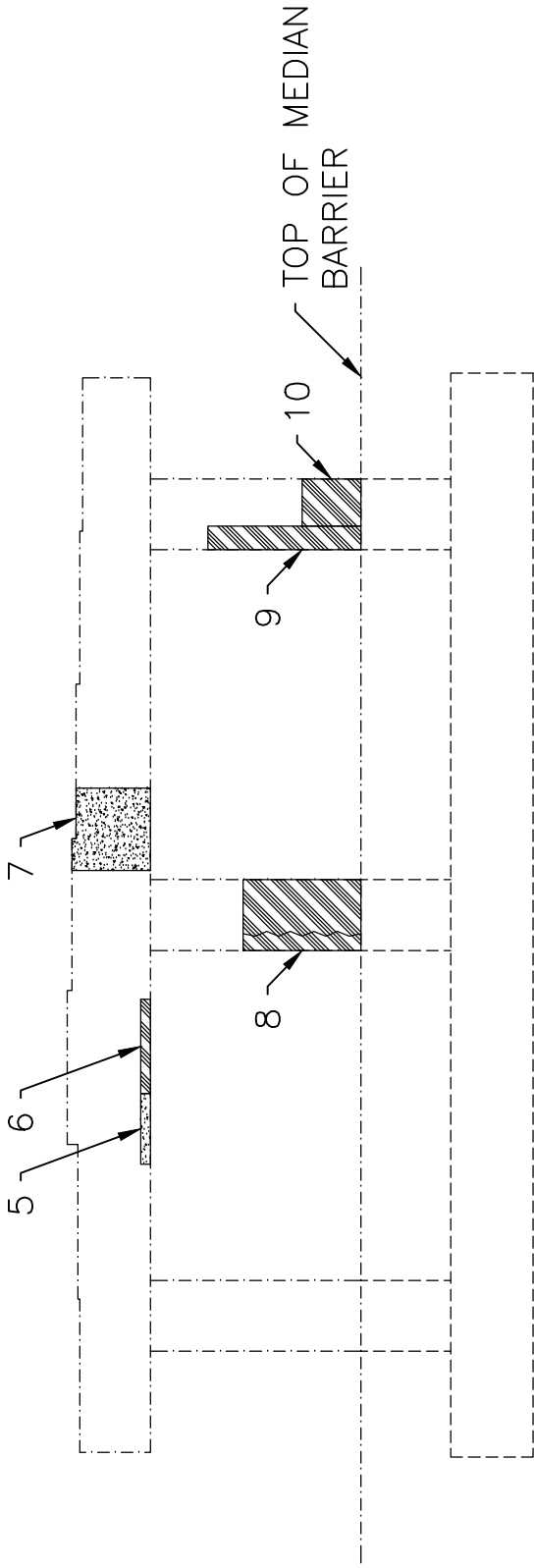
PIER 3 — TOP OF PIER CAP

SCALE: 8" = 1'-0"



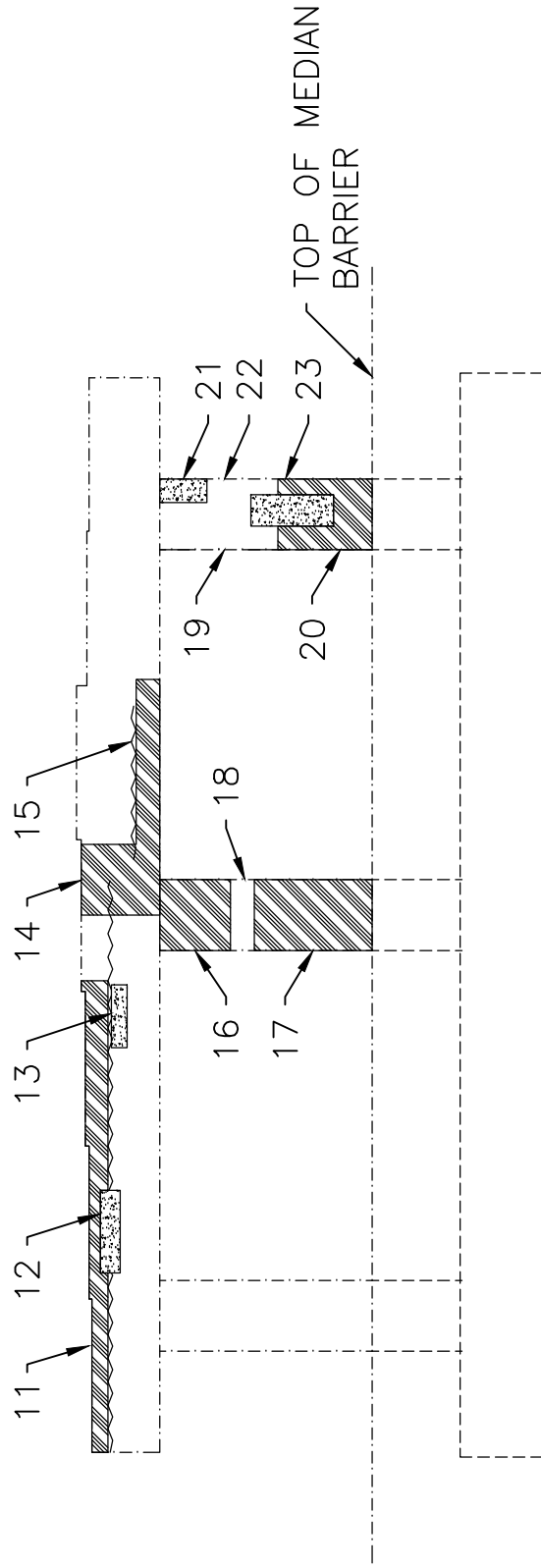
PIER 3 — BOTTOM OF PIER CAP

SCALE: 8" = 1'-0"



PIER 3 — NORTH FACE

SCALE: 8" = 1'-0"

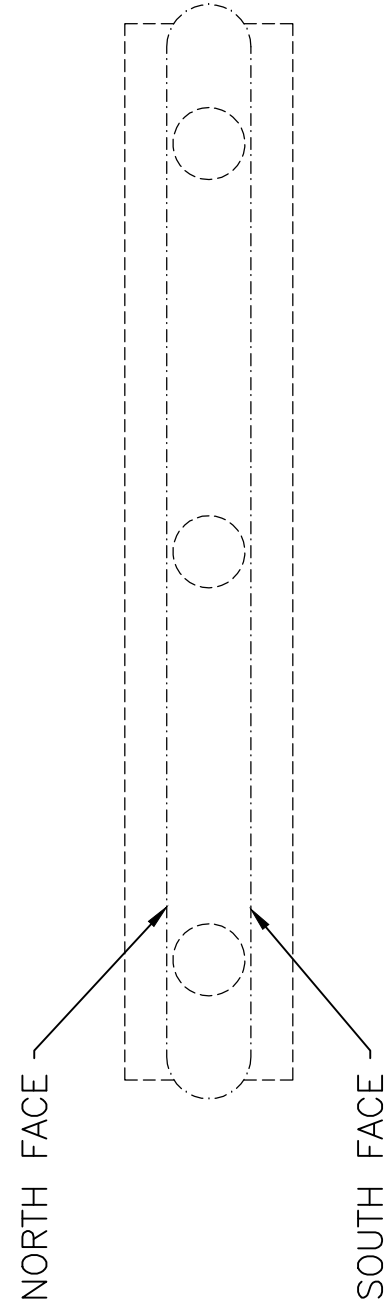


PIER 3 — SOUTH FACE

SCALE: 8" = 1'-0"

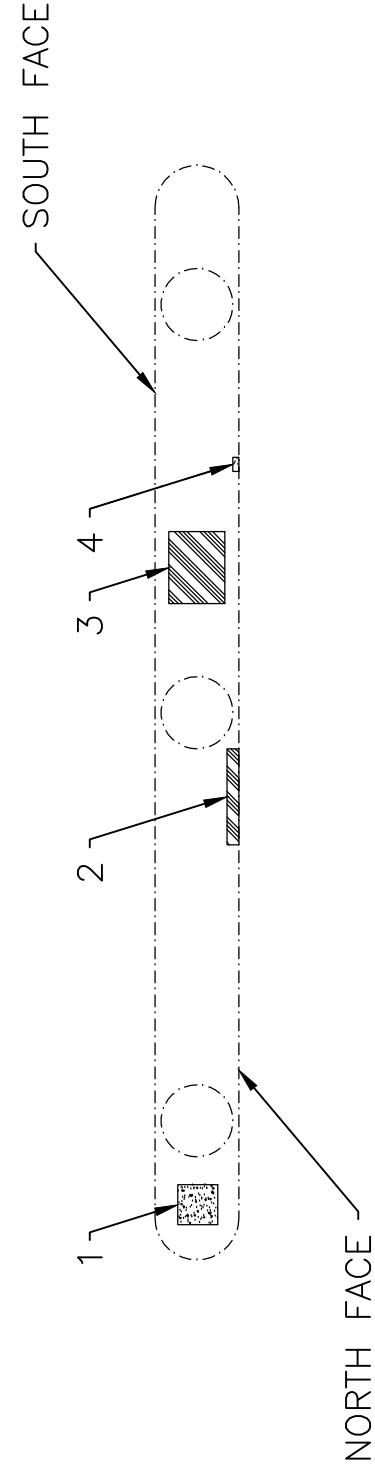
MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	
SHEET 4 OF 12 SHEETS BRIDGE NO. B-29-006 (*)	

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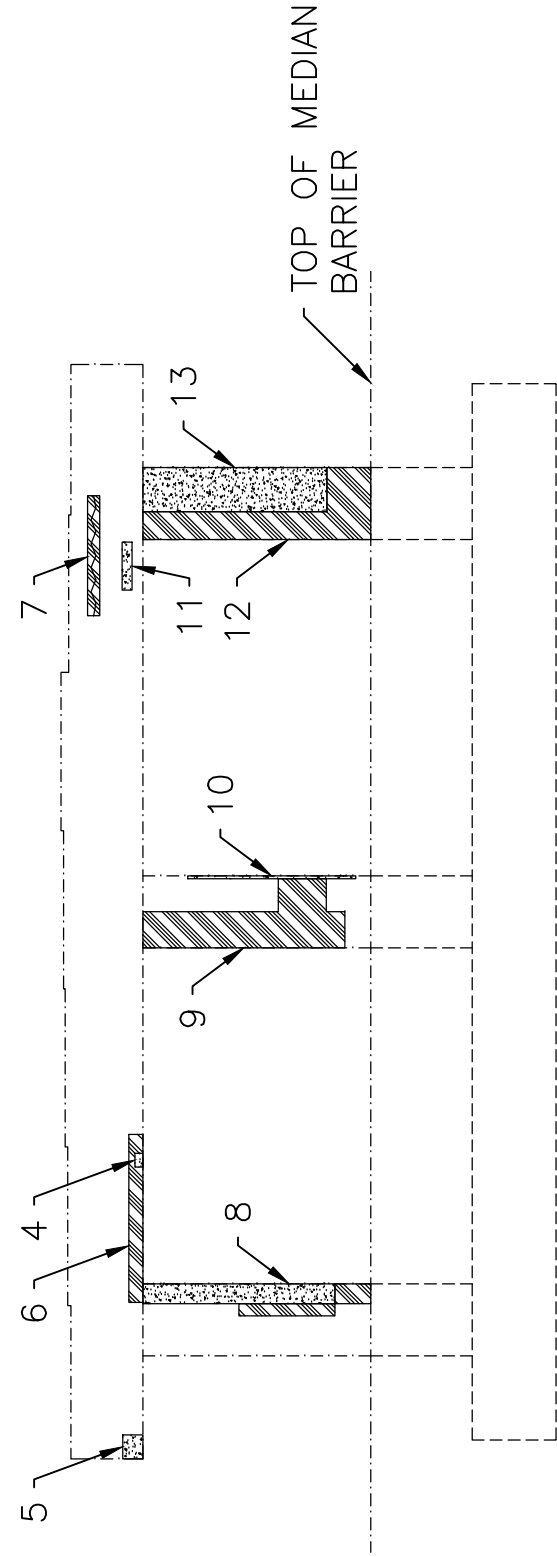
PIER 4 – TOP OF PIER CAP

SCALE: 8" = 1'-0"



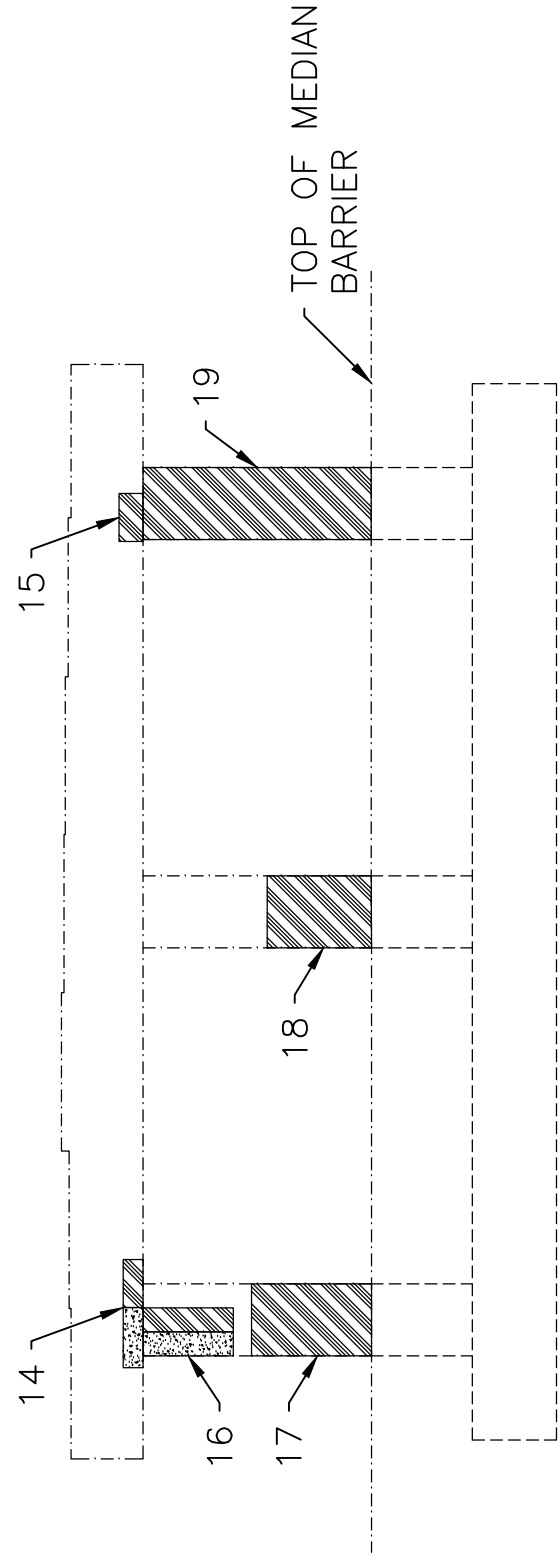
PIER 4 – BOTTOM OF PIER CAP

SCALE: 8" = 1'-0"



PIER 4 – NORTH FACE

SCALE: 8" = 1'-0"



PIER 4 – SOUTH FACE

SCALE: 8" = 1'-0"

BURLINGTON				
US 3 NB/SB OVER I 95/ST 128				
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
MA	NFA	5	12	
PROJECT FILE NO.		813781		

PIER REPAIR LOCATIONS (4 OF 6)

REPAIR LOCATIONS:

1. DELAMINATED AREA WITH SPALLING, 1'-8" LONG X 1'-8" WIDE.
2. HOLLOW AREA, 4" LONG X 6" WIDE, WITH CRACKING.
3. HOLLOW AREA, 3' LONG X 2'-4" WIDE, WITH SPALLING & EXPOSED RUSTED REBAR.
4. SPALL, 7" LONG X 4" HIGH X 1" DEEP, EXTENDING 3" INTO THE UNDERSIDE OF PIER CAP.
5. SPALL, 1' LONG X 6" HIGH X 1" DEEP.
6. HOLLOW AREA, 7' LONG X 7" HIGH.
7. DELAMINATED AREA, 5' LONG X 6" HIGH, WITH A HORIZONTAL CRACK.
8. SPALL ON THE WEST FACE, FULL WIDTH X 7'-5" HIGH X 2" DEEP, WITH EXPOSED REBAR & EXTENDING 10" INTO THE NORTH FACE. THE NORTH FACE HAS AN ADJACENT DELAMINATED AREA, 6" WIDE X 4' HIGH.
9. DELAMINATED AREA, UP TO FULL WIDTH X 8'-5" HIGH, WITH CRACKING.
10. SPALL ON THE WEST FACE, 2' WIDE X 7'-4" HIGH X 3" DEEP, WITH EXPOSED REBAR. THE REMAINDER OF THE WEST FACE IS DELAMINATED.
11. SPALL, 2' LONG X 5" HIGH X 3" DEEP.
12. DELAMINATED AREA, 1'-2" WIDE X FULL HEIGHT, EXTENDING 1' INTO THE WEST FACE.
13. SPALL ON THE NORTH FACE, 1'-10" WIDE X 7'-8" HIGH X 3" DEEP, WITH EXPOSED REBAR & EXTENDING UP TO FULL WIDTH INTO THE WEST FACE. AT THE TOP OF THE WEST FACE, TWO (2) EXPOSED & RUSTED SPIRALS EXHIBIT AN AREA OF 100% SECTION LOSS.
14. SPALL, 2'-6" LONG X 10" HIGH X 3" DEEP, WITH AN ADJACENT DELAMINATED AREA, 2' LONG X 10" HIGH.
15. HOLLOW AREA, 2' LONG X 1' HIGH, WITH CRACKING.
16. SPALL, 1' WIDE X 3'-9" HIGH X 3" DEEP, WITH EXPOSED REBAR & AN ADJACENT HOLLOW AREA, 1' WIDE X 3'-9" HIGH.
17. HOLLOW AREA, FULL WIDTH X 5' HIGH, WITH CRACKING.
18. HOLLOW AREA, FULL WIDTH X 4'-4" HIGH, WITH MINOR SPALLING.
19. DELAMINATED AREA, FULL WIDTH X FULL HEIGHT, WITH SEVERAL VERTICAL CRACKS.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

1. WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
2. WHEN THE EXCAVATION ENCLOSES ON THE BEARING DEVICES.
3. WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
4. WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT, AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

NOTES:

SEE SHEETS 10, 11, & 12.

DEFICIENCY LEGEND

- SPALL
- DELAMINATION/HOLLOW AREA
- HORIZONTAL/VERTICAL CRACK

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DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

US 3 NB/SB OVER I 95/ST 128

STATE

FED AID PROJ. NO.

SHEET NO.

TOTAL SHEETS

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6

12

PROJECT FILE NO.

613781

PIER REPAIR LOCATIONS (5 OF 6)

REPAIR LOCATIONS:

1. SPALL, 1'-8" LONG X 1'-8" WIDE X 2" DEEP, WITH EXPOSED RUSTED REBAR.
2. SPALL ALONG THE NORTH EDGE, 6" LONG X 8" WIDE, WITH EXPOSED REBAR.
3. SPALL, 3' LONG x 6" WIDE x 2" DEEP.
4. AREA OF SPALLING AND DELAMINATION/INCIPIENT SPALLING, 3'-6" LONG X 2' WIDE.
5. SPALL, 7' LONG X 1' HIGH X 3" DEEP, WITH EXPOSED RUSTED REBAR.
6. SPALL, 3'-6" LONG X 10" HIGH X UP TO 3" DEEP, WITH EXPOSED RUSTED REBAR.
7. HORIZONTAL CRACK, 5' LONG X ¼" WIDE.
8. DELMINATED AREA, 9" WIDE X 4' HIGH, WITH VERTICAL CRACKING.
9. SPALL, 2' WIDE X 4' HIGH X 3" DEEP, WITH EXPOSED RUSTED REBAR & ADJACENT HOLLOW AREA ON THE EAST FACE, UP TO 1' WIDE.
10. VERTICAL CRACK ON THE EAST FACE, 4' HIGH X ⅝" WIDE.
11. SPALL, 1'-6" WIDE X 1'-6" HIGH X 2" DEEP, WITH EXPOSED RUSTED REBAR & ADJACENT DELAMINATED AREA, 10" WIDE.
12. SPALL, 1' WIDE X 2'-6" HIGH X 2" DEEP, WITH EXPOSED REBAR & SURROUNDED BY DELAMINATION, UP TO 5'-2" HIGH. THE DELAMINATED AREA EXTENDS FULL WIDTH X 2'-8" HIGH INTO THE WEST FACE.
13. SPALL, 1' LONG X 8" HIGH X 1" DEEP, WITH EXPOSED REBAR.
14. DELAMINATED AREA, 3'-6" LONG X 1'-5" HIGH.
15. HOLLOW AREA, 4' LONG X 1'-8" HIGH.
16. DELAMINATED AREA, 1'-3" WIDE X 2' HIGH, WITH CRACKING.
17. SPALL ON THE SOUTHWEST FACE, 1'-4" WIDE X 3' HIGH X 3" DEEP, WITH EXPOSED REBAR.
18. DELAMINATED AREA, FULL WIDTH X 5'-7" HIGH, WITH SEVERAL VERTICAL CRACKS & EXTENDING 1'-6" INTO THE EAST FACE.
19. DELAMINATED AREA ON THE WEST FACE, FULL WIDTH X UP TO FULL HEIGHT.
20. DELAMINATED AREA, 10" WIDE X 4' HIGH, EXTENDING FULL WIDTH INTO THE WEST FACE.
21. SPALL ON TOP OF THE EAST FACE, 2' WIDE X 3' HIGH X 2" DEEP, WITH EXPOSED REBAR & AN ADJACENT DELAMINATED AREA, 8" WIDE X 3' HIGH ON THE SOUTH FACE.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

1. WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
2. WHEN THE EXCAVATION ENCROACHES ON THE BEARING DEVICES.
3. WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
4. WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT, AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

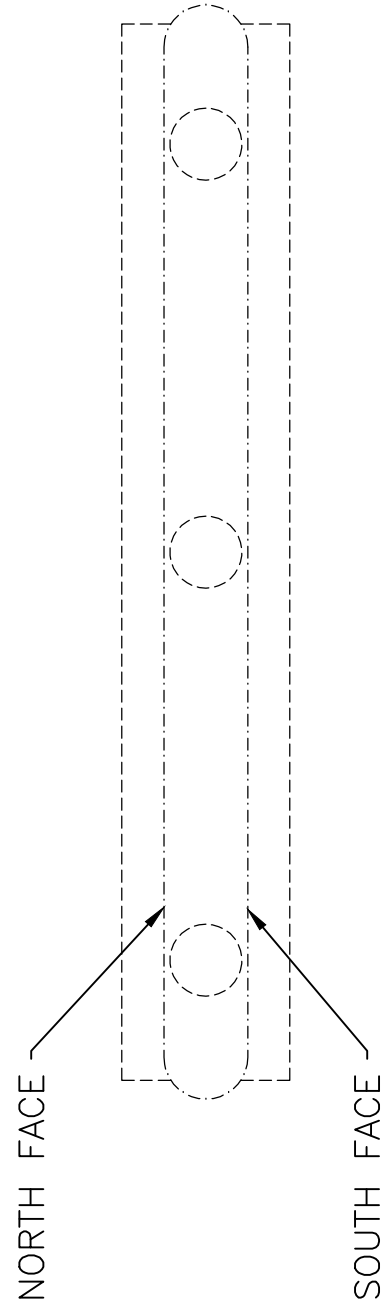
THE CONTRACTOR SHALL PROTECT, DETACH, TEMPORARILY SUPPORT AND REATTACH THE HIGHWAY LIGHTING UTILITY MOUNTED TO THE PIER AS NECESSARY TO COMPLETE THE REPAIR PROCEDURES.

NOTES:

SEE SHEETS 10, 11, & 12.

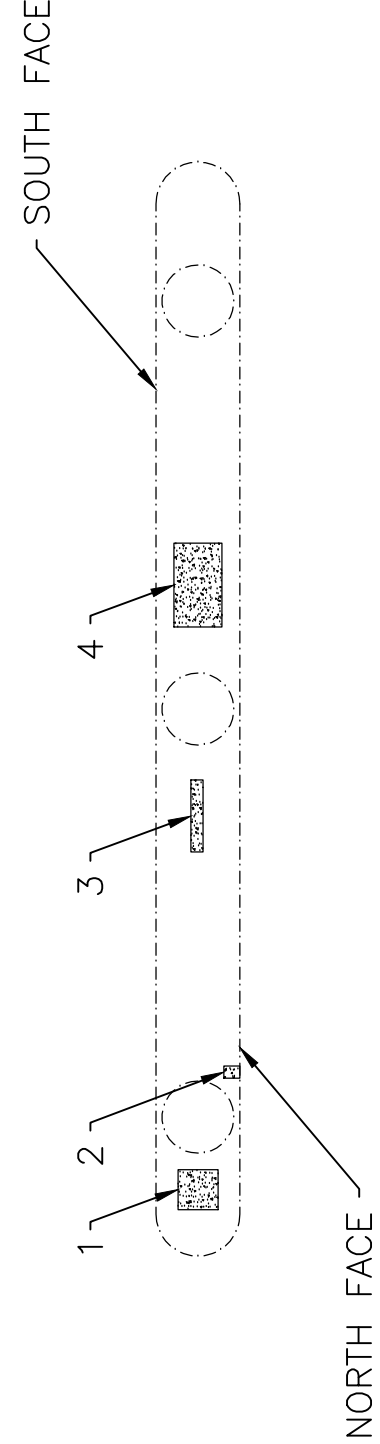
DEFICIENCY LEGEND

- SPALL
- DELAMINATION/HOLLOW AREA
- HORIZONTAL/VERTICAL CRACK



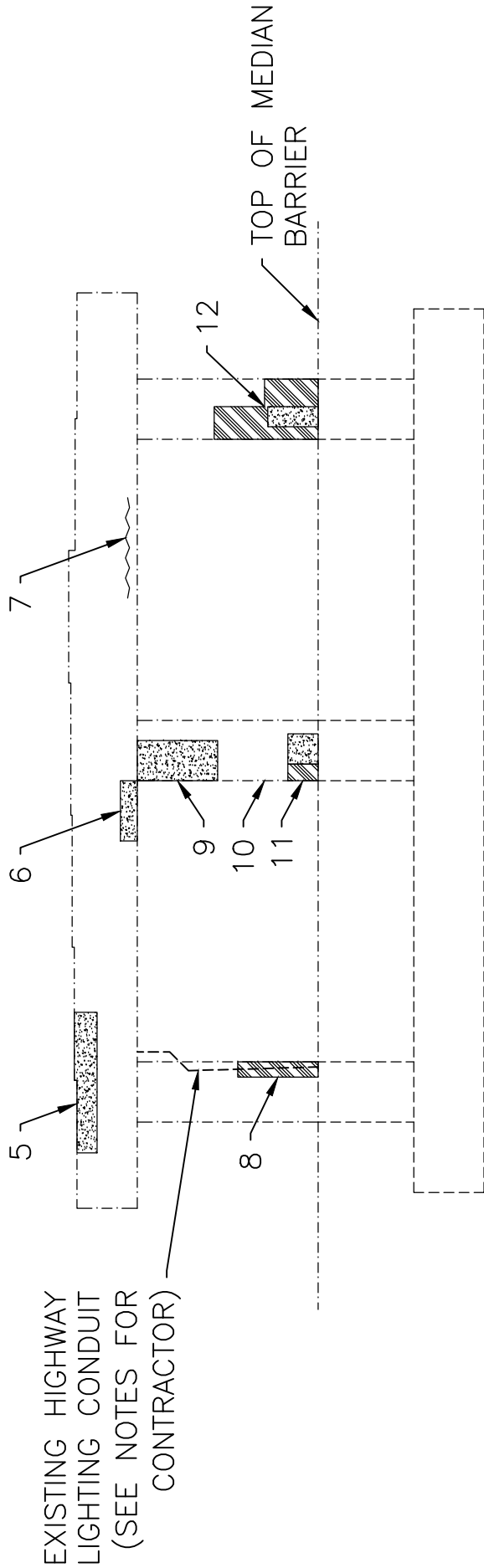
PIER 5 — TOP OF PIER CAP

SCALE: 8" = 1'-0"



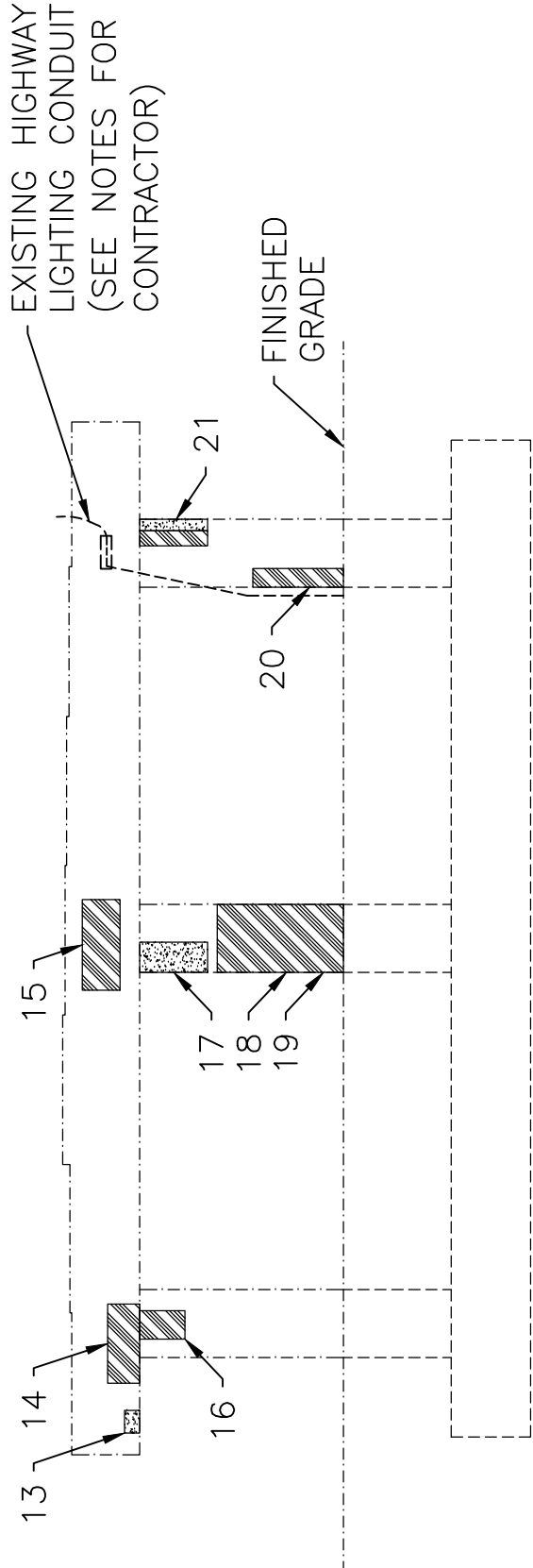
PIER 5 — BOTTOM OF PIER CAP

SCALE: 8" = 1'-0"



PIER 5 — NORTH FACE

SCALE: 8" = 1'-0"



PIER 5 — SOUTH FACE

SCALE: 8" = 1'-0"

MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

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2G3

BURLINGTON

US 3 NB/SB OVER I 95/ST 128

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	7	12
PROJECT FILE NO.		613781	

PIER REPAIR LOCATIONS (6 OF 6)

REPAIR LOCATIONS:

1. SPALL ON THE WEST NOSE, FULL WIDTH X FULL HEIGHT X 5" DEEP, WITH EXPOSED REBAR & EXTENDING ONTO THE TOP OF THE PIER CAP.
2. SPALL, 10" LONG X 1' WIDE X 2" DEEP.
3. DELAMINATED AREA, 2'-6" LONG X 1'-6" WIDE.
4. SPALL, 3'-6" LONG X 10" WIDE X 2" DEEP, SURROUNDED BY MODERATE DELAMINATION/INCIPENT SPALLING.
5. SPALL, 5'-6" LONG X 2' WIDE X 3" DEEP, EXTENDING 8" INTO THE SOUTH FACE.
6. SPALL, 5' LONG X 2' HIGH X 2" DEEP, WITH EXPOSED REBAR & EXTENDING 6" INTO THE UNDERSIDE OF THE PIER CAP.
7. SPALL, 6" LONG X 3" HIGH X ½" DEEP.
8. VERTICAL CRACK ON THE NORTHEAST FACE, 6' HIGH X ⅛" WIDE.
9. DELAMINATED AREA ON THE NORTHWEST FACE, 2' WIDE X 4' HIGH, WITH VERTICAL CRACKING.
10. DELAMINATED AREA, 1'-4" WIDE X 5' HIGH, WITH VERTICAL CRACKING.
11. DELAMINATED AREA, 1' WIDE X 2'-2" HIGH, WITH VERTICAL CRACKING.
12. DELAMINATED AREA, 1'-8" WIDE X 6'-8" HIGH, WITH MULTIPLE VERTICAL CRACKS.
13. SPALL, 3' LONG X 8" HIGH X 3" DEEP, WITH EXPOSED REBAR.
14. SPALL, 10' LONG X UP TO 3' HIGH X 3" DEEP, WITH EXPOSED REBAR.
15. SPALL, 7' LONG X 1' HIGH X 3" DEEP, WITH EXPOSED REBAR & SURROUNDED BY MODERATE DELAMINATION.
16. TWO HORIZONTAL CRACKS, 6' LONG X ½" WIDE EACH.
17. HOLLOW AREA, 1'-6" LONG X 3' HIGH, WITH CRACKING.
18. DELAMINATED AREA, 2'-4 WIDE X FULL HEIGHT, EXTENDING FULL WIDTH X FULL HEIGHT INTO THE WEST FACE.
19. SPALL ON THE EAST FACE, FULL WIDTH X FULL HEIGHT X 3" DEEP, WITH EXPOSED REBAR & EXTENDING 8" INTO THE SOUTH FACE.
20. SPALL, UP TO FULL WIDTH X 2' HIGH X 3" DEEP, WITH EXPOSED REBAR.
21. SPALL ON THE EAST FACE, 2'-8" WIDE X 6'-8" HIGH X 3" DEEP, WITH EXPOSED REBAR.
22. SPALL, UP TO 2' WIDE X UP TO 3'-4' HIGH X 3" DEEP, WITH EXPOSED REBAR. DELAMINATED AREA BELOW, 1' WIDE X 2'-6" HIGH, EXTENDING FULL WIDTH INTO THE EAST FACE.
23. DELAMINATED AREA, FULL WIDTH X 6'-6" HIGH, WITH SEVERAL VERTICAL CRACKS. THE DELAMINATION EXTENDS INTO THE WEST FACE, FULL WIDTH X FULL HEIGHT.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

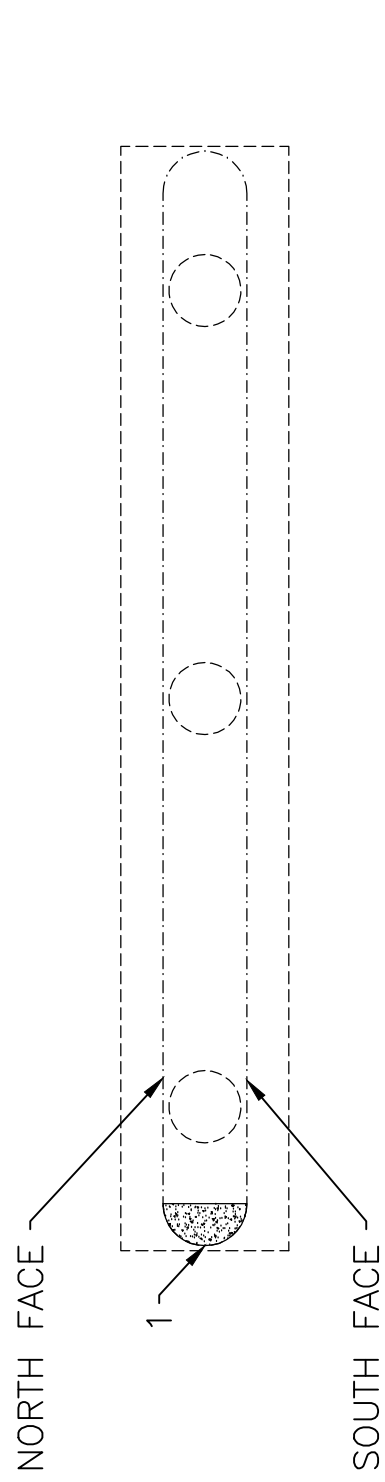
1. WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
2. WHEN THE EXCAVATION ENCROACHES ON THE BEARING DEVICES.
3. WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
4. WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT, AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

NOTES:

SEE SHEETS 10, 11, & 12.

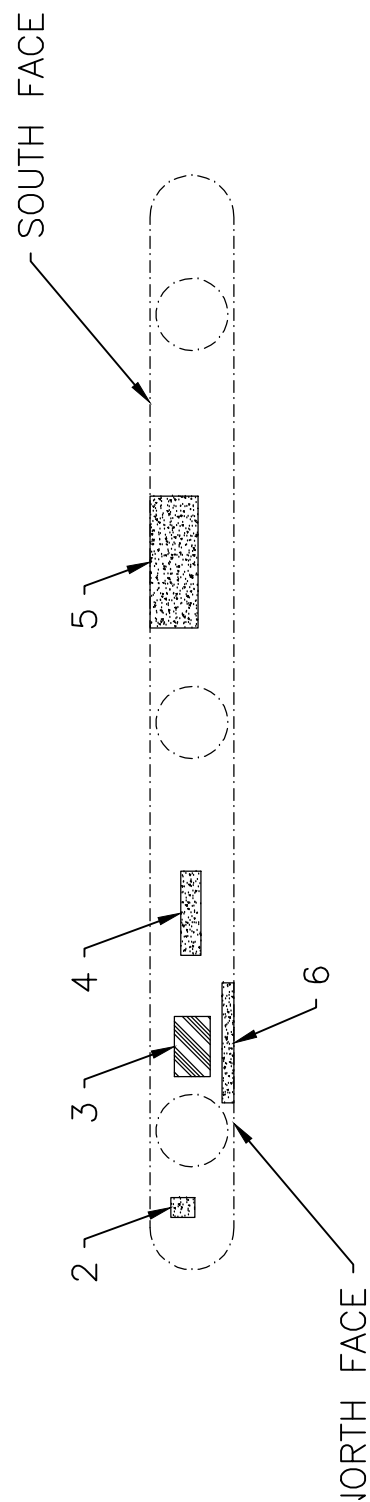
DEFICIENCY LEGEND

-  SPALL
-  DELAMINATION/HOLLOW AREA
-  HORIZONTAL/VERTICAL CRACK



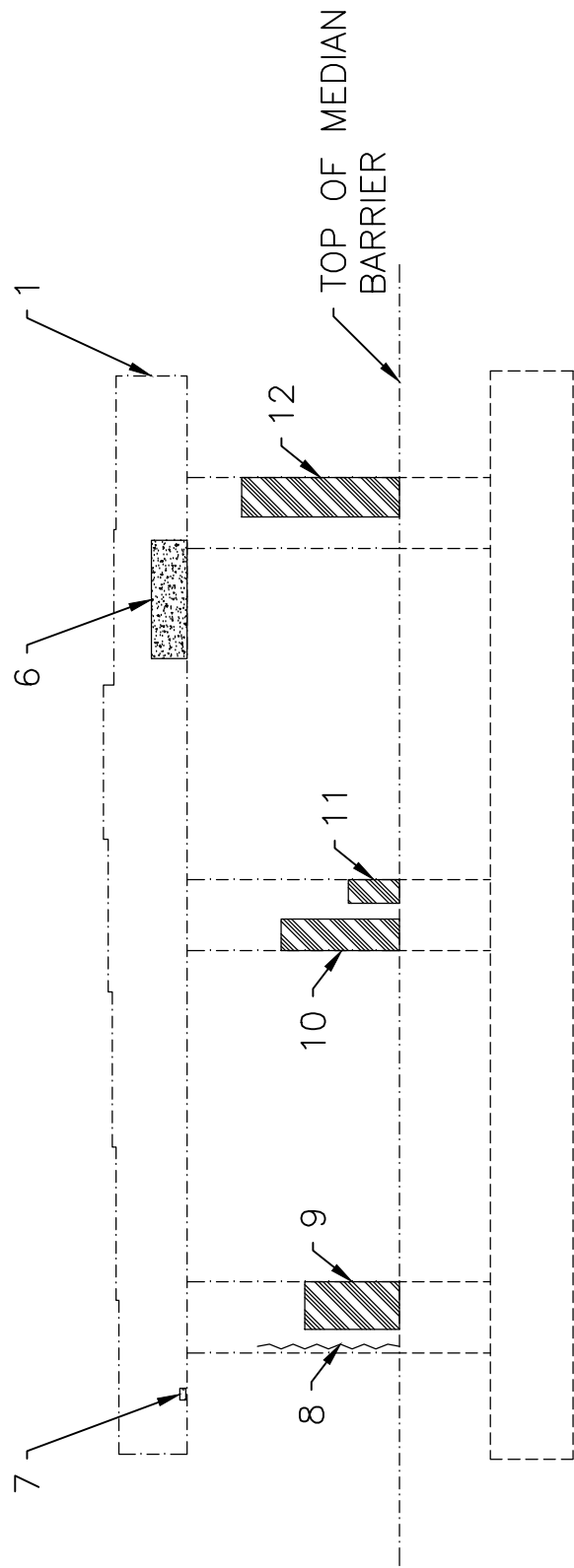
PIER 6 — TOP OF PIER CAP

SCALE: 8" = 1'-0"



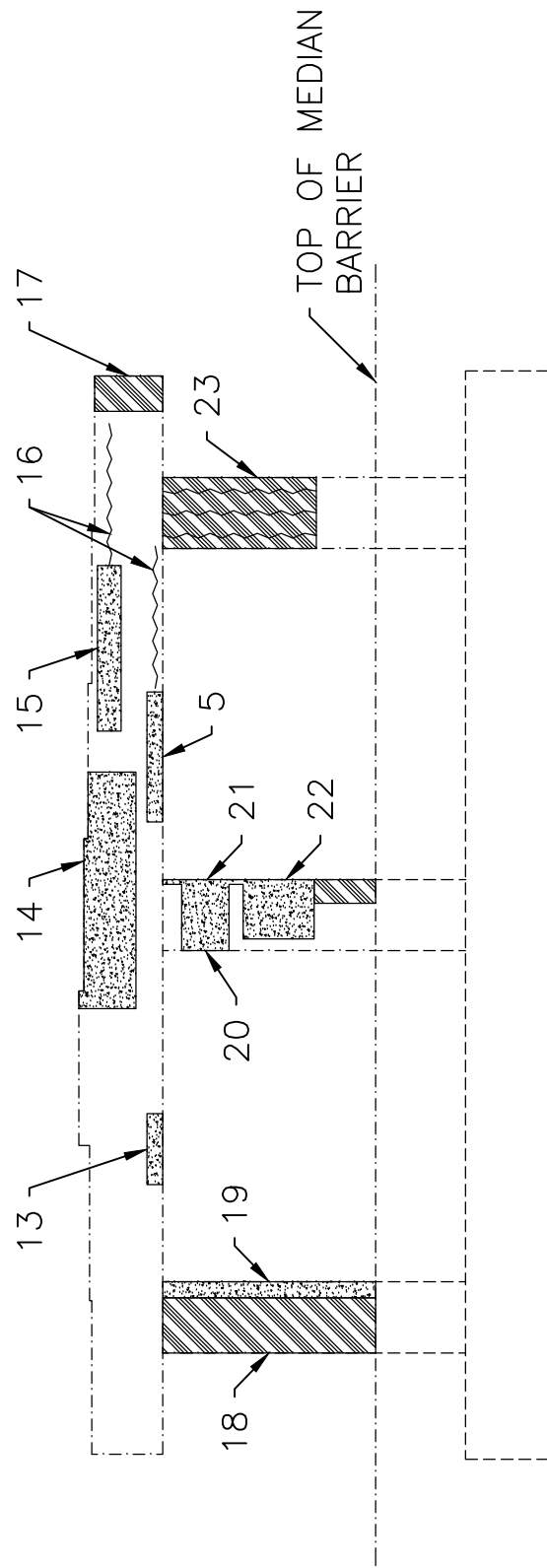
PIER 6 — BOTTOM OF PIER CAP

SCALE: 8" = 1'-0"



PIER 6 — NORTH FACE

SCALE: 8" = 1'-0"



PIER 6 — SOUTH FACE

SCALE: 8" = 1'-0"

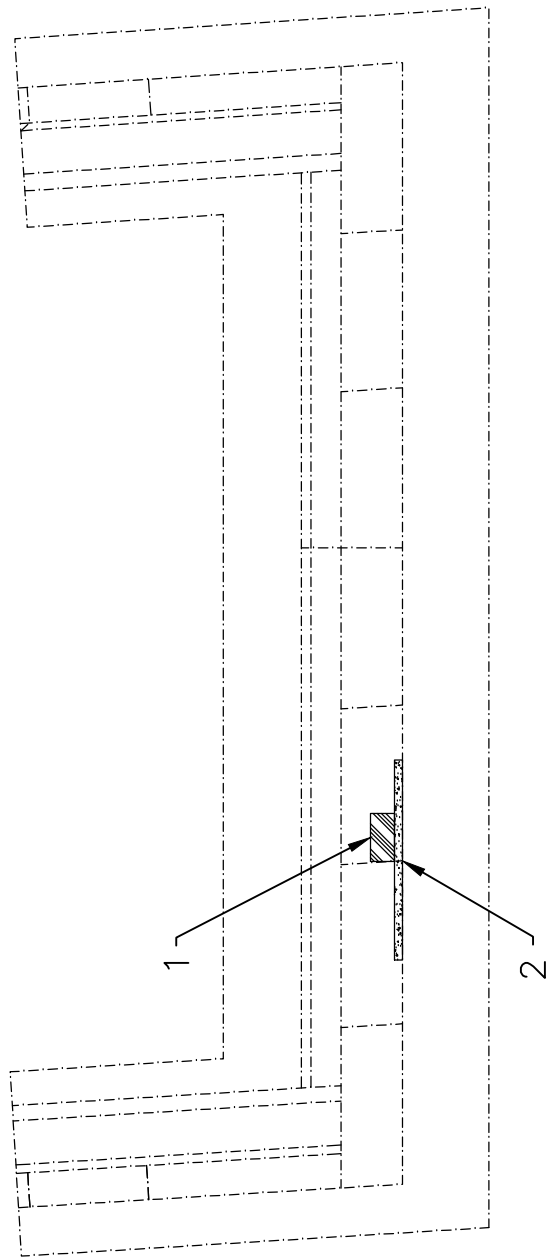
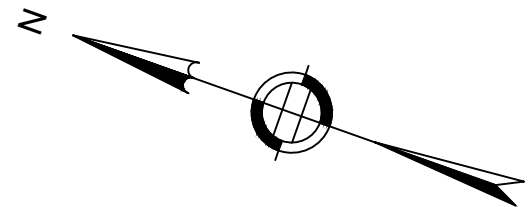
MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

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2G2
2G3

BURLINGTON
US 3 NB/SB OVER I 95/ST 128

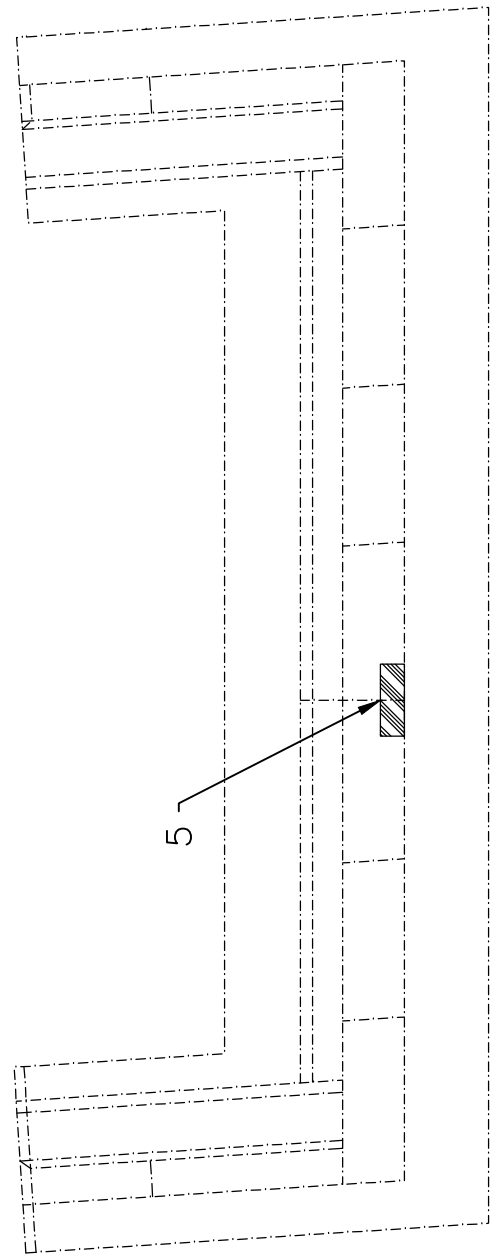
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	8	12
PROJECT FILE NO. 613781			

ABUTMENT REPAIR LOCATIONS (1 OF 2)



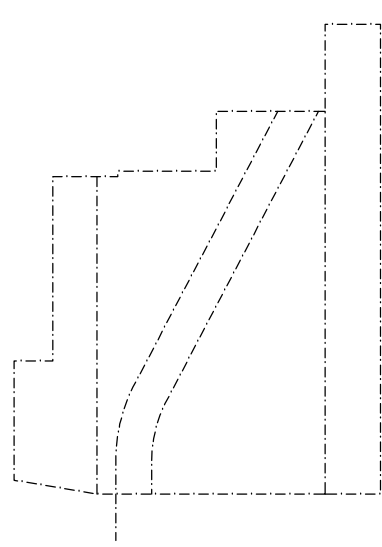
PLAN - NORTH ABUTMENT
WEST BRIDGE

SCALE: $\frac{1"}{80'} = 1" = 0"$

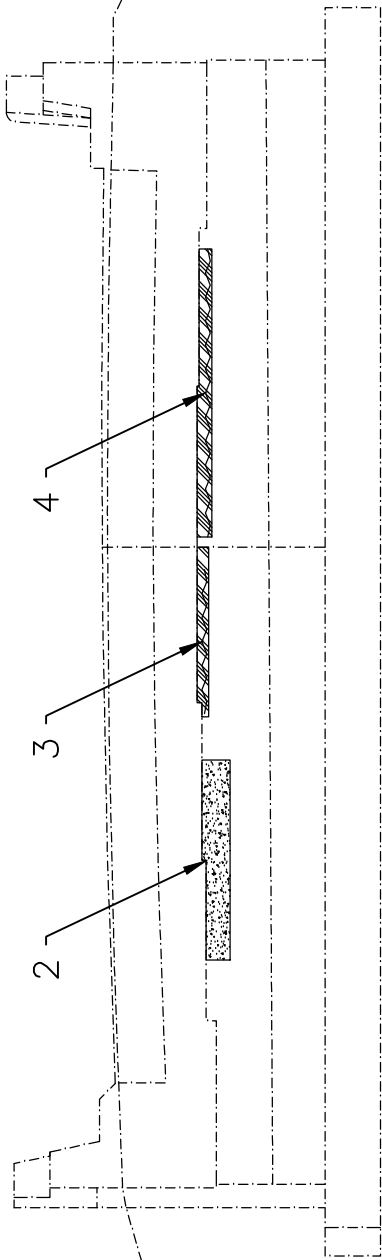


PLAN - NORTH ABUTMENT
EAST BRIDGE

SCALE: $\frac{1"}{80}$ = 1'-0"

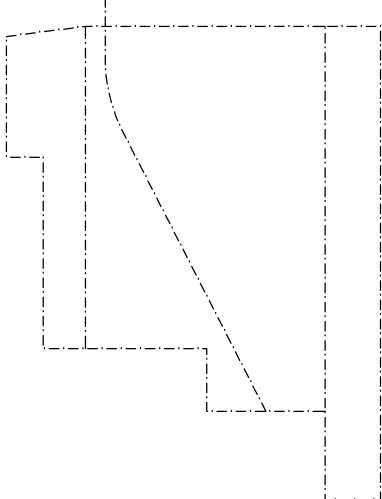


NORTHWEST WINGWALL

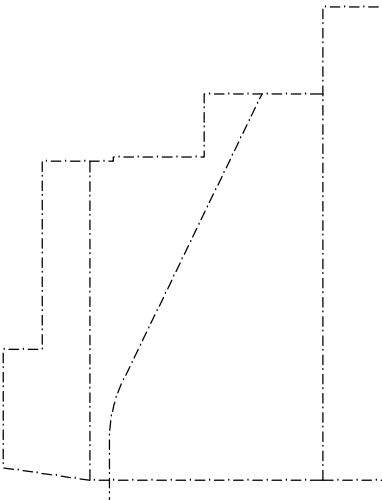


ELEVATION – NORTH ABUTMENT
WEST BRIDGE

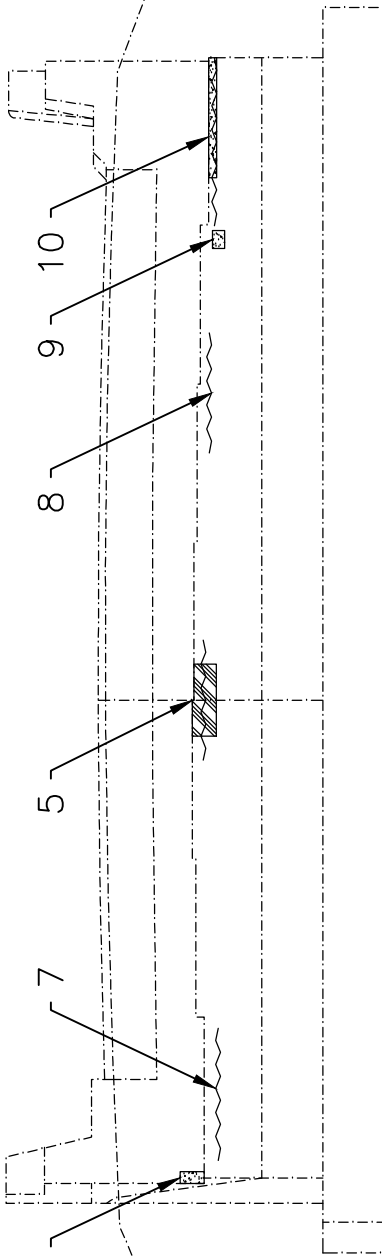
SCALE: 1" = 1' - 0"



NORTHEAST WINGWALL

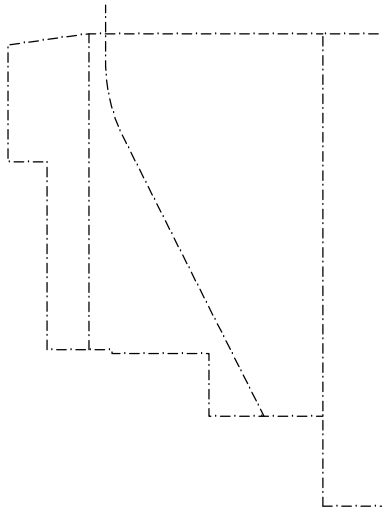


NORTHWEST WINGWALL



ELEVATION – NORTH ABUTMENT
EAST BRIDGE

SCALE: $\frac{1"}{8'} = \frac{1'}{-0"}$



NORTHEAST WINGWALL

REPAIR LOCATIONS:

1. HOLLOW AREA, 2' LONG X 1' WIDE.
2. SPALL ALONG THE TOP EDGE, 8'-4" LONG X 1' HIGH X 4" DEEP, WITH EXPOSED REBAR & EXTENDING 6" INTO THE SEAT.
3. HORIZONTAL CRACK, 6' LONG X $\frac{1}{8}$ " WIDE, WITH DELAMINATION ALONG THE TOP EDGE.
4. HORIZONTAL CRACK, 12' LONG X $\frac{1}{8}$ " WIDE, WITH DELAMINATION ALONG THE TOP EDGE.
5. HOLLOW AREA, 3' LONG X 1' HIGH, EXTENDING 1" INTO THE SEAT.
6. SPALL, 6' LONG X 1' HIGH X 1" DEEP, SURROUNDED BY DELAMINATION.
7. HORIZONTAL CRACK, 5'-6" LONG X $\frac{1}{16}$ " WIDE.
8. HORIZONTAL CRACK, 5' LONG X $\frac{1}{16}$ " WIDE.
9. SPALL, 9' LONG X 6" HIGH X 1" DEEP.
10. SPALL, 5' LONG X 4" HIGH X 2" DEEP, WITH CRACKING.

NOTES:

SEE SHEETS 10 & 12.

DEFICIENCY LEGEND



MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

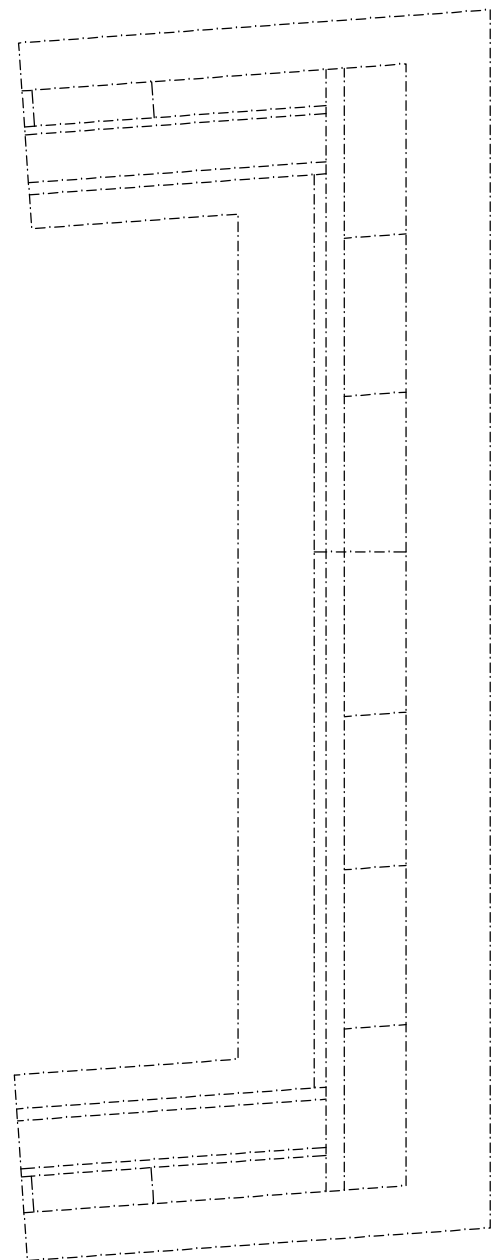
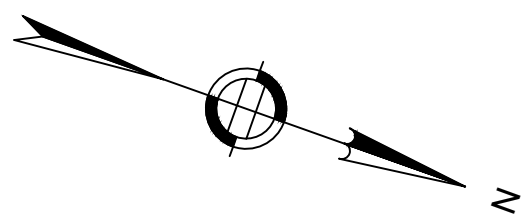
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SHEET 8 OF 12 SHEETS BRIDGE NO. B-29-006 (*)

BURLINGTON
US 3 NB/SB OVER I 95/ST 128

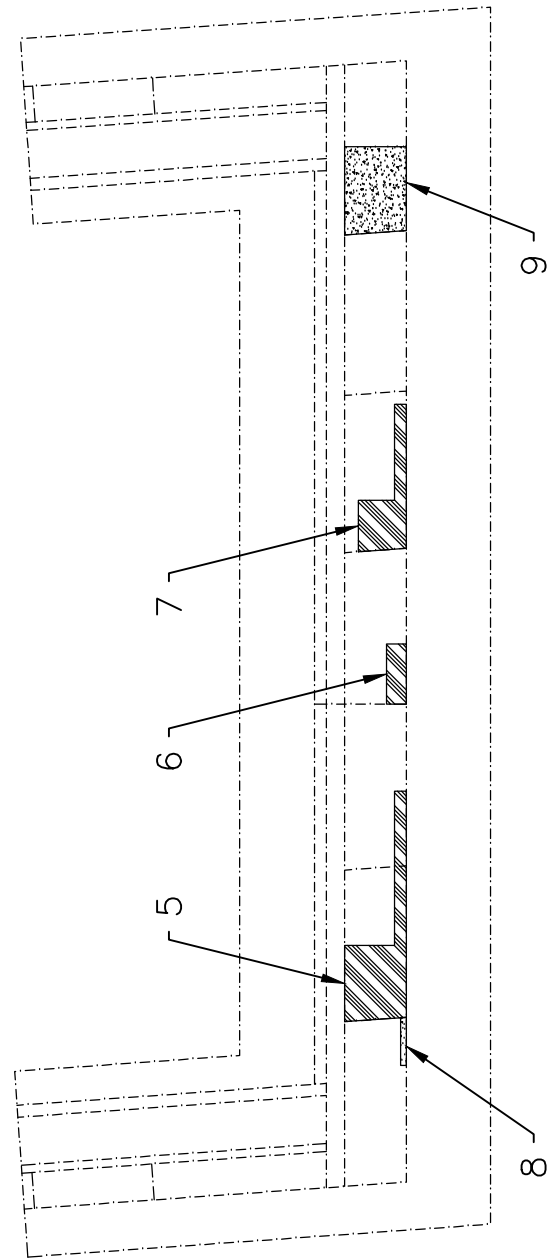
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	12
PROJECT FILE NO. 613781			

ABUTMENT REPAIR LOCATIONS (2 OF 2)



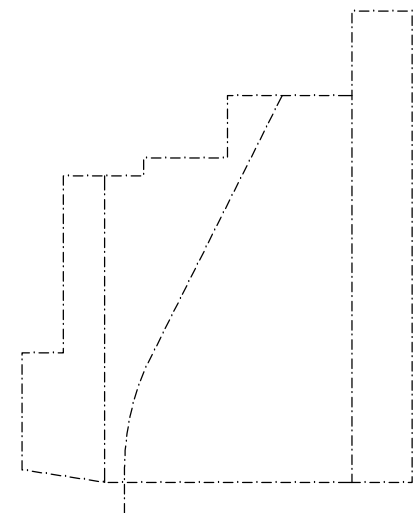
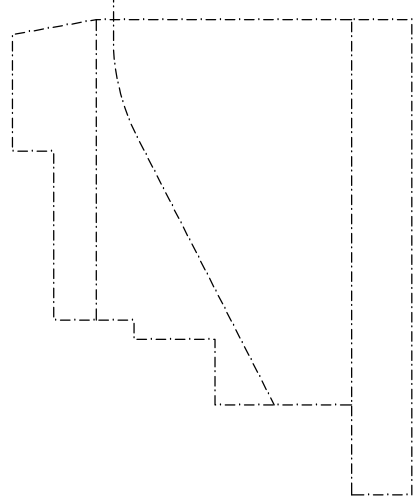
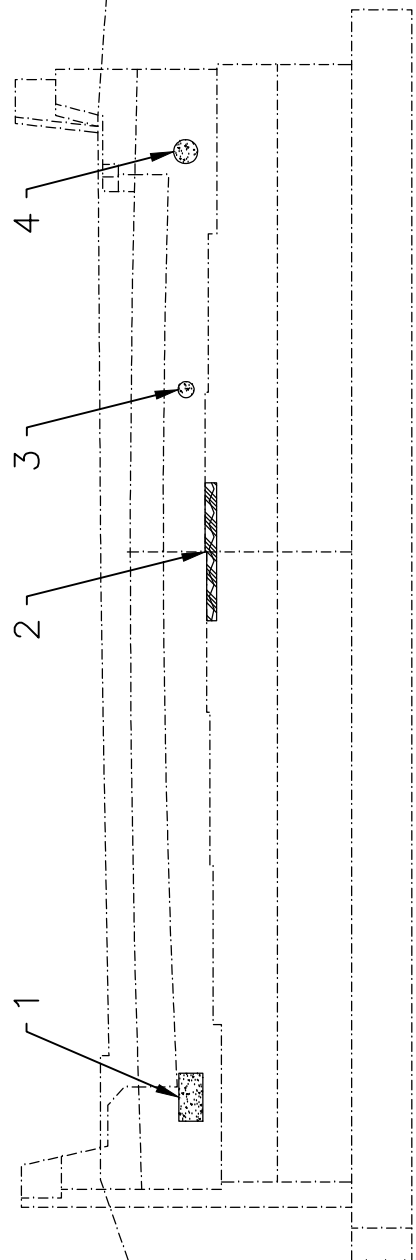
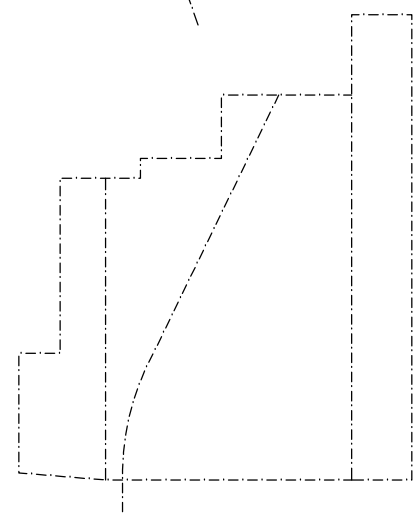
PLAN - SOUTH ABUTMENT
EAST BRIDGE

SCALE: $\frac{1}{8}'' = 1'-0''$



PLAN - SOUTH ABUTMENT
WEST BRIDGE

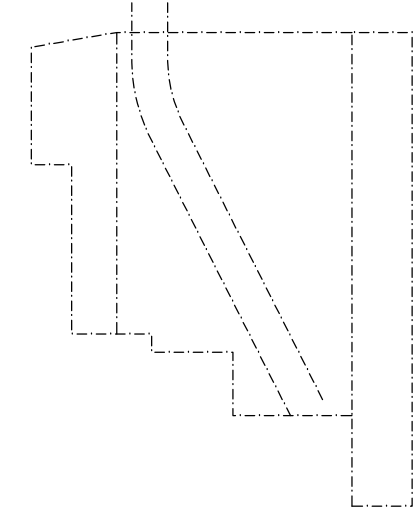
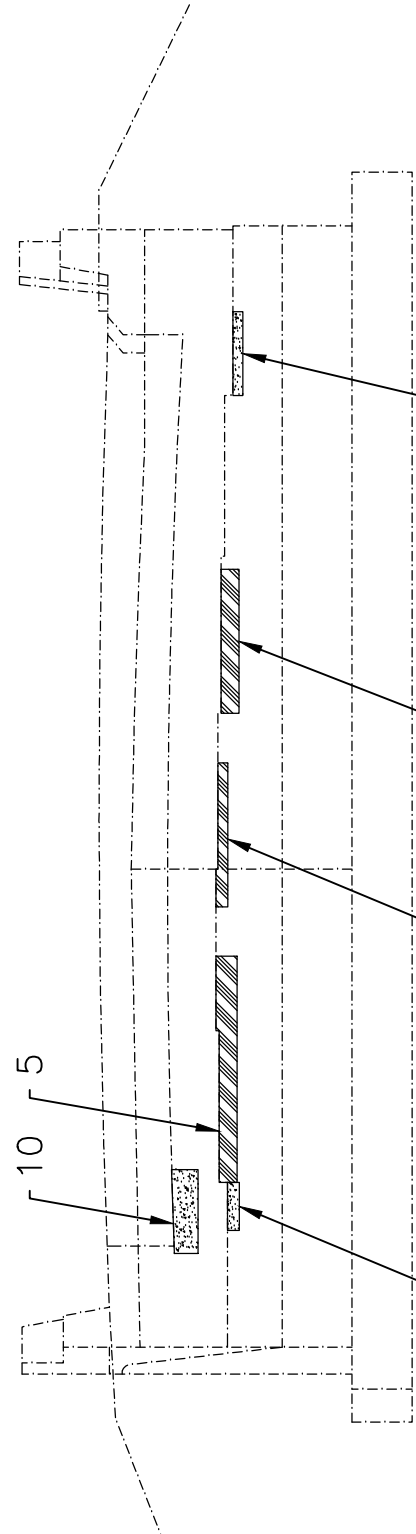
SCALE: $\frac{1"}{8'} = 1'-0"$



SOUTHEAST WINGWALL

ELEVATION - SOUTH ABUTMENT
EAST BRIDGE

SCALE: $\frac{1''}{8'} = 1'-0''$



ELEVATION - SOUTH ABUTMENT
WEST BRIDGE

SCALE: $\frac{1"}{8} = 1'-0"$

REPAIR LOCATIONS:

1. SPALL, 2' LONG X 1' HIGH X 2" DEEP.
2. HORIZONTAL CRACK, 5'-9" LONG X 1" WIDE, WITH A HOLLOW AREA ALONG THE TOP EDGE, 5" HIGH.
3. SPALL, 8" DIAMETER X 1' DEEP.
4. SPALL, 1' DIAMETER X 3" DEEP.
5. HOLLOW AREA ALONG THE TOP EDGE, 9'-5" LONG X 9" HIGH, EXTENDING UP TO FULL WIDTH INTO THE SEAT AREA.
6. HOLLOW AREA ALONG THE TOP EDGE, 6' LONG X 6" HIGH, EXTENDING 10" INTO THE SEAT AREA.
7. HOLLOW AREA, 6' LONG X 9" HIGH, EXTENDING UP TO 2' INTO THE SEAT AREA.
8. SPALL ALONG THE TOP EDGE, 2' LONG X 6" HIGH X 3" DEEP, WITH EXPOSED REBAR & EXTENDING 3" INTO THE SEAT AREA.
9. SPALL ALONG THE TOP EDGE, 3'-6" LONG X 6" HIGH X 3" DEEP, WITH EXPOSED REBAR & EXTENDING FULL WIDTH INTO THE SEAT AREA.
10. SPALL, 3'-6" LONG X UP TO 1' HIGH X 1" DEEP.

DEFICIENCY LEGEND



NOTES:

SEE SHEETS 10 & 12.

MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

*	2G2 2G3
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SHEET 9 OF 12 SHEETS BRIDGE NO. B-29-006 (*)

SUBSTRUCTURE CONCRETE REPAIR NOTES:

- SUBSTRUCTURE REPAIRS SHALL CONSIST OF REMOVING DETERIORATED CONCRETE, PREPARING THE REPAIR SURFACE, FORMING WHERE REQUIRED, PLACING AND FINISHING NEW CONCRETE OR CEMENTITIOUS MORTAR. THE SCOPE OF REPAIRS MAY ALSO REQUIRE APPLYING ELASTOMERIC COATING (ITEM 964.3) TO THE REPAIRED SUBSTRUCTURE UNITS. THE LIMITS FOR THE ELASTOMERIC COATING WILL BE ESTABLISHED BY THE ENGINEER.
- THE REPAIR IS DESIGNATED AS A PARTIAL DEPTH REPAIR WHEN THE EXCAVATED DEPTH TO SOUND CONCRETE EXCEEDS 2" FROM THE FACE OF THE CONCRETE OR REINFORCING STEEL IS ENCOUNTERED. SEE PARTIAL DEPTH REPAIR DETAIL ON SHEET 12.
- THE REPAIR IS DESIGNATED AS SHALLOW DEPTH WHEN THE DEPTH OF SOUND CONCRETE IS REACHED AT OR LESS THAN 2" FROM THE FACE OF THE CONCRETE AND REINFORCING STEEL IS NOT ENCOUNTERED.
- 5000 PSI, $\frac{3}{4}$ INCH, 710 HP CEMENT CONCRETE (ITEM 905.2) SHALL BE USED FOR ALL PARTIAL DEPTH REPAIRS. ALL SHALLOW DEPTH REPAIRS SHALL BE PATCHED WITH CEMENTITIOUS MORTAR FOR PATCHING (ITEM 909.2).
- THE CONTRACTOR SHALL ESTABLISH LIMITS OF REPAIRS AT THE DIRECTION OF THE ENGINEER. THE EXTENT, LOCATION AND REPAIR TYPE (PARTIAL DEPTH REPAIR OR SHALLOW DEPTH REPAIR) ARE TO BE FIELD VERIFIED AND APPROVED BY THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREA. THE AREAS OF REPAIR SHALL BE MADE APPROXIMATELY RECTANGULAR WITH THE SIDES GENERALLY PERPENDICULAR TO THE SURFACE BEING REPAIRED.
- THE DETERIORATED CONCRETE SHALL BE REMOVED AS REQUIRED TO PROVIDE GOOD SOUND CONCRETE ON WHICH NEW CONCRETE CAN BE PLACED AND SATISFACTORILY BONDED TO UNDAMAGED OR UNDISTURBED REINFORCEMENT.
- SAW CUT ALONG NEAT LINES AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION. USE SAW CUT DEPTH OF $\frac{3}{4}$ ", OR AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
- SUBSTRUCTURE REPAIR SHOULD INCLUDE THE REMOVAL OF ALL DETERIORATED, LOOSE, SPALLED, AND HOLLOW SOUNDING CONCRETE. THE DETERIORATED CONCRETE SHALL BE REMOVED FROM WITHIN THE REPAIR AREAS TO THE DEPTH OF SOUND CONCRETE. WHEN REINFORCING STEEL IS UNCOVERED, CARE SHALL BE TAKEN SO AS NOT TO DAMAGE THE STEEL OR ITS BOND TO THE SURROUNDING CONCRETE. MAXIMUM 25 LB. HAMMERS WITH CHISEL POINTS SHALL BE USED FOR CONCRETE REMOVAL. MAXIMUM 15 LB. HAMMERS SHALL BE USED ONCE REINFORCING STEEL IS EXPOSED.
- THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE WHEN A MAXIMUM DEPTH OF 6 INCHES IS REACHED. THE DISTRICT BRIDGE ENGINEER SHALL BE IMMEDIATELY NOTIFIED TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED.
- IF REINFORCING STEEL IS EXPOSED THEN CLEAN BY MECHANICAL CLEANING OR HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED THAT WOULD INHIBIT BONDING, CLEAN STEEL USING ABRAISVE BLASTING METHODS ACCEPTABLE TO THE ENGINEER, THEN PAINT WITH A ZINC-RICH PRIMER CONFORMING TO MASSDOT STANDARD SPECIFICATION NO. M7.04.11.
- AFTER REMOVAL AND EDGE PREPARATIONS ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASIVE BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO ENSURE THAT SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
- EXISTING REINFORCING BARS, WHICH ARE BROKEN OR HAVE LOST 25% OR MORE OF THEIR CROSS SECTIONAL AREA, OR AS ORDERED REPAIRED BY THE ENGINEER, SHALL BE REPAIRED BY SPLICING IN NEW REINFORCING BARS OF THE SAME DIAMETER. SEE EXISTING BRIDGE PLANS FOR BAR SIZES. SPLICE LAPS ARE TO BE AT LEAST 32 BAR DIAMETERS. MISSING OR DETERIORATED REINFORCING STEEL SHALL BE REPLACED AS DIRECTED BY THE ENGINEER AND WILL BE PAID UNDER ITEM 910.
- ALL SURFACES WHERE NEW CONCRETE WILL BE BONDED TO EXISTING CONCRETE SHALL BE PRE-WETTED WITH CLEAN WATER TO SATURATED SURFACE (SSD) CONDITION (WITH NO STANDING WATER) IMMEDIATELY PRIOR TO THE CONCRETE PLACEMENT. IF INDICATED ON THE PLANS OR DIRECTED BY THE ENGINEER, APPLY EPOXY BONDING COMPOUND SUITABLE FOR BONDING FRESH CONCRETE TO HARDENED CONCRETE FOR LOAD BEARING APPLICATIONS TO INTERFACE BETWEEN NEW AND EXISTING CONCRETE. THE EPOXY BONDING COMPOUND SHALL CONFORM TO AASHTO M 235 TYPE V, GRADE AND CLASS SHALL BE SPECIFIED FOR EACH APPLICATION AND SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND THE SPECIAL PROVISIONS. THE COST ASSOCIATED WITH THIS WORK WILL BE INCIDENTAL TO ITEM 905.2 AND ITEM 909.2.
- IN GENERAL, EPOXY BONDING COMPOUND SHALL BE USED FOR ALL SHALLOW DEPTH REPAIR AND HORIZONTAL SURFACES OF PARTIAL DEPTH REPAIR, SUCH AS TOP EXCAVATED SURFACES OF PIER CAP AND BEAM SEAT.
- IF EPOXY BONDING COMPOUND IS USED, THE FORMS SHALL BE INSTALLED AT LEAST ONCE PRIOR TO APPLICATION OF THE EPOXY BONDING COMPOUND IN ORDER TO ENSURE FORMS CAN BE REINSTALLED AND FILLED BEFORE THE EPOXY BONDING COMPOUND HARDENS.
- IF DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL INSTALL CATHODIC PROTECTION ANODES TO THE LIMITS DETERMINED BY THE ENGINEER. ANODE, INSTALLATIONS & TESTING SHOULD BE PAID UNDER ITEM 910.01.
- ALL CONCRETE SURFACES ONCE CURED, SHALL BE RUBBED TO PRODUCE A SMOOTH FINISH TO MATCH EXISTING SURFACES. WET CURING IN ACCORDANCE WITH THE SPECIFICATIONS FOR HIGHWAYS AND BRIDGES SECTION 901.37.B WILL BE REQUIRED.
- CONCRETE PIER CAPS, COLUMNS, ABUTMENT SEATS, AND EXPOSED SECTIONS OF ABUTMENT STEMS SHALL (AS DETERMINED BY THE ENGINEER) RECEIVE A CONCRETE PENETRANT/SEALER OR ELASTOMERIC PROTECTIVE COATING (ITEM 964.3), 30 DAYS AFTER ALL REPAIRS HAVE BEEN MADE. CONCRETE PENETRANT/SEALER IS INCIDENTAL TO ITEM 905.2.
- THE REPAIR OF PIER CAP SHALL BE COMPLETED PRIOR TO THE START OF ANY COLUMN REPAIR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL FOLLOW THE CONCRETE PIER CAPS AND COLUMNS REPAIR SEQUENCE OUTLINED ON THE PLANS. THE CONTRACTOR WILL HAVE THE OPTION TO SUBMIT AN ALTERNATE REPAIR PROCEDURE FOR REVIEW AND APPROVAL. THE CONTRACTOR MAY ALSO USE TEMPORARY SHORING TO COMPLETE THE REPAIRS IN ONE STAGE. IF SHORING IS PROPOSED TO ACCOMMODATE THE CONTRACTOR'S MEANS AND METHODS OR REPAIR SCHEDULE, NO ADDITIONAL COMPENSATION WILL BE ALLOWED. THIS SHALL REQUIRE APPROVAL OF THE ENGINEER AND THE SHORING WILL BE CONSIDERED INCIDENTAL TO THE REPAIR WORK.
- THE REPAIR PHASING AND SEQUENCE MAY BE MODIFIED BY THE ENGINEER SO THAT THE SECTIONS WITH WORSE DETERIORATION ARE REPAIRED FIRST.
- THE SERVICE LOAD (DEAD LOAD + LIVE LOAD) REACTION AT EACH BEARING SHALL BE EQUAL TO 110 KIPS. IF LOADING CONDITIONS ARE TO BE MODIFIED DURING CONSTRUCTION, OR ADDITIONAL CONSTRUCTION LOADS APPLIED, CALCULATIONS OF THE REACTIONS FOR JACKING AND/SHORING SHALL BE SUBMITTED BY THE CONTRACTOR FOR REVIEW.

NOTES:

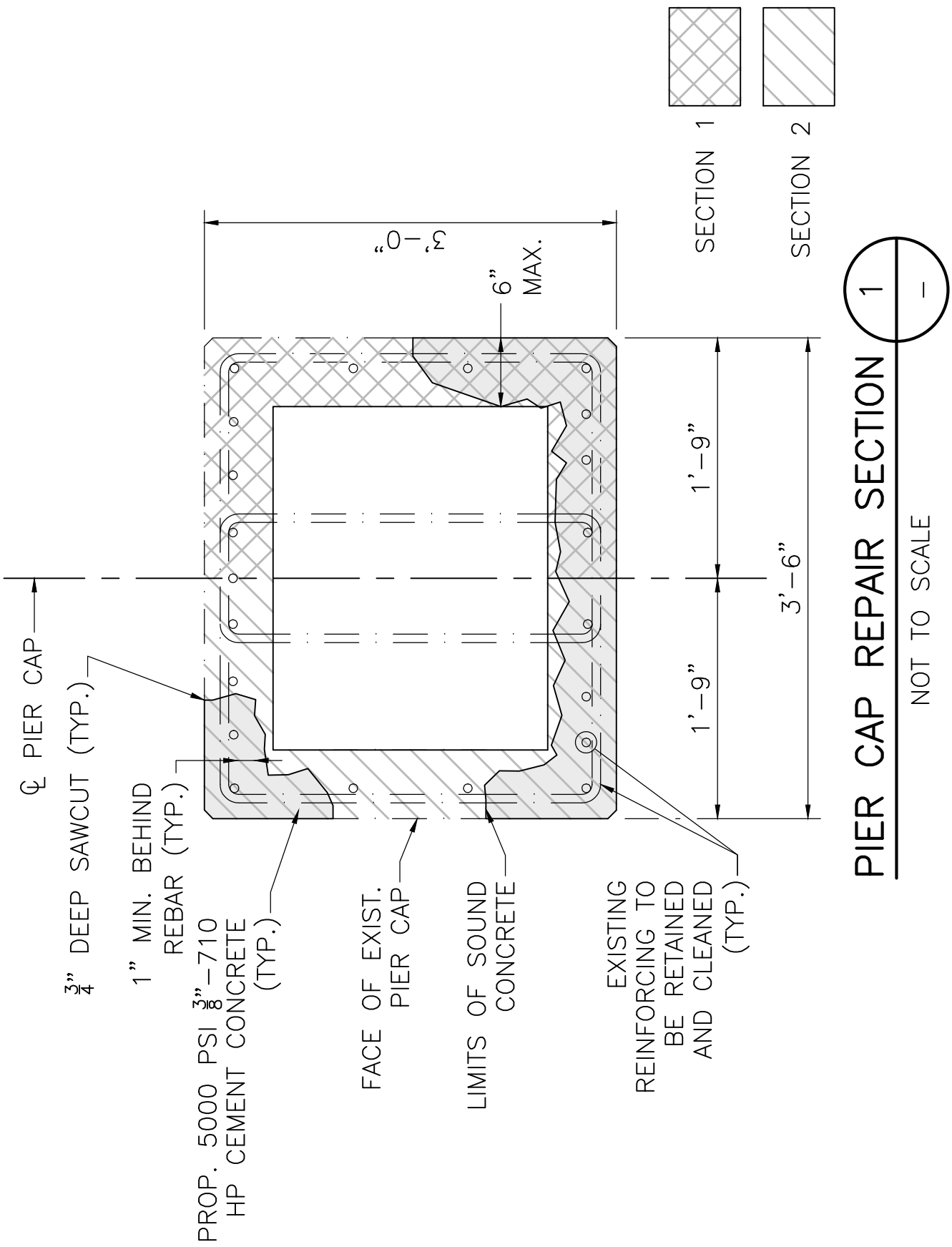
- CONCRETE ELEMENTS ARE DIVIDED INTO SEGMENTS. WORK TO BE PERFORMED ON SECTIONS AS SHOWN.
- THE CONTRACTOR SHALL PROVIDE A TEMPORARY SHORING SYSTEM TO SUPPORT THE PIER CAP DEAD AND LIVE LOADS IF THE EXCAVATION LIMITS ARE TO BE EXTENDED PER EVALUATION OF THE DISTRICT BRIDGE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE A TEMPORARY SHORING SYSTEM TO SUPPORT THE PIER CAP DEAD AND LIVE LOADS IF THE EXCAVATION IS WITHIN 6" OF THE BEARING.
- CONTRACTOR SHALL STAGE THE WORK SO THAT THE SECTIONS IN POOREST CONDITION ARE REPAIRED FIRST, AS APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL NOT WORK ON ADJACENT SECTIONS SIMULTANEOUSLY UNLESS APPROVED BY THE DISTRICT BRIDGE ENGINEER.
- CONTRACTOR SHALL WAIT 72 HOURS AFTER COMPLETING REPAIRS TO A SECTION BEFORE BEGINNING REPAIRS TO ADJACENT SECTIONS, HOWEVER, HE/SHE MAY PERFORM WORK ON OTHER BRIDGE ELEMENTS.
- CONTRACTOR SHALL STOP REMOVING DETERIORATING CONCRETE WHEN A MAXIMUM DEPTH OF 6 IN. IS REACHED. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED IF MORE REMOVAL SEEMS NECESSARY ON THE BRIDGE SECTION.
- EXISTING REINFORCING NOT SHOWN.
- THE CONTRACTOR SHALL SUBMIT AN ALTERNATE REPAIR SEQUENCE FOR APPROVAL OF THE ENGINEER WHEN TEMPORARY SHORING IS UTILIZED DURING REPAIRS.
- MAXIMUM SEGMENT LENGTH SHALL BE LIMITED TO 8 FEET.

BURLINGTON

US 3 NB/SB OVER I 95/ST 128

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	10	12
PROJECT FILE NO. 813781			

PIER CAP REPAIR DETAILS



PIER CAP REPAIR SECTION 1

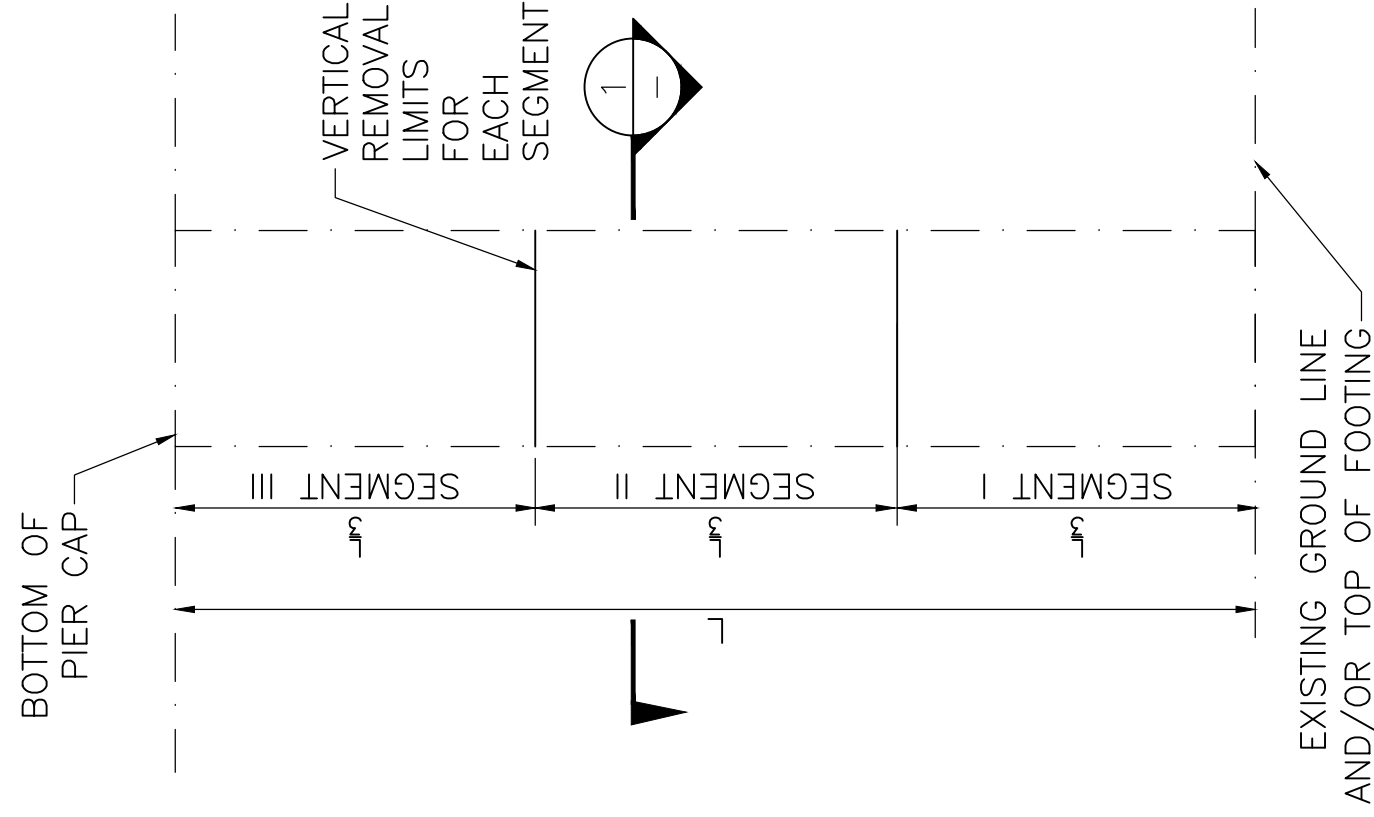
NOT TO SCALE

PIER CAP REPAIR SEQUENCE

NOT TO SCALE

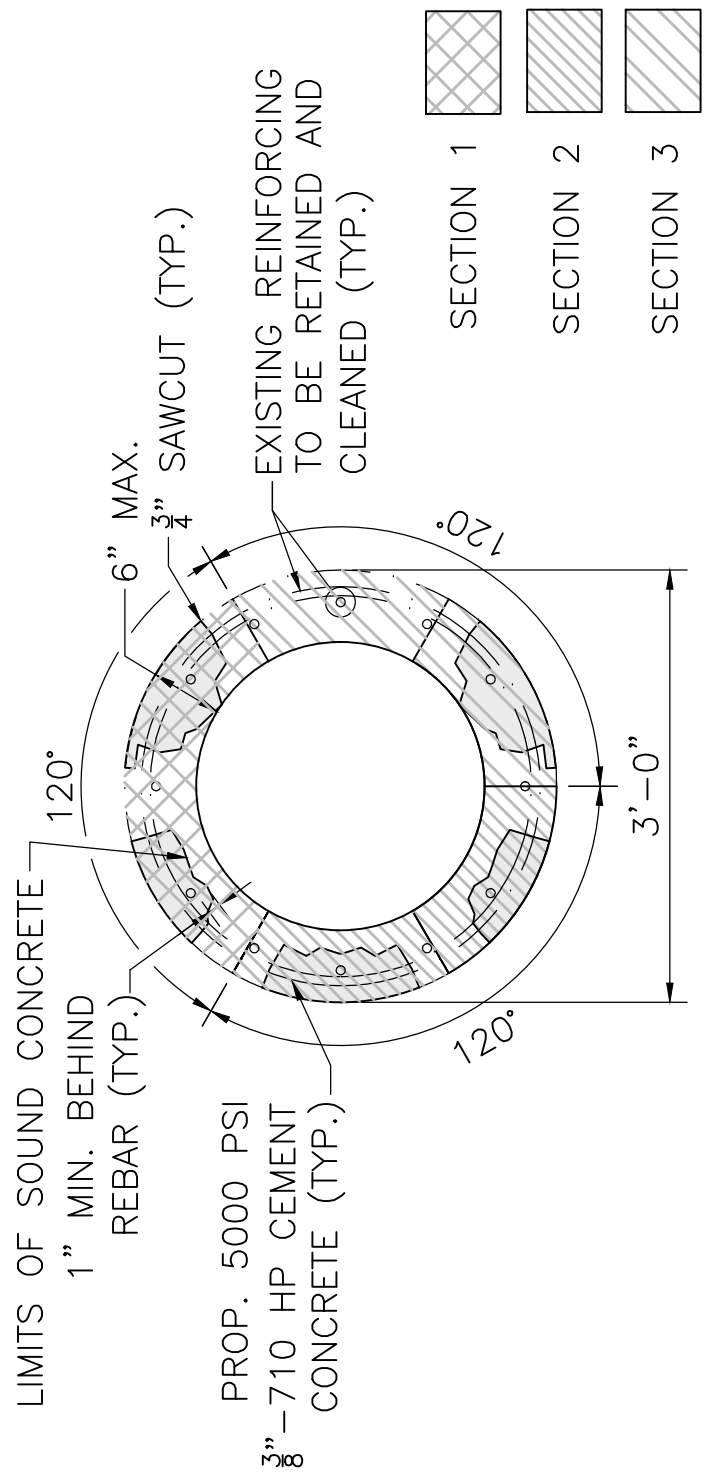
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MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	



PIER COLUMN REPAIR SEQUENCE

NOT TO SCALE



COLUMN REPAIR SECTION 1

NOT TO SCALE

NOTES:

1. CONCRETE ELEMENTS ARE DIVIDED INTO SEGMENTS. WORK TO BE PERFORMED ON SECTIONS AS DEFINED IN THE ABOVE DETAILS.
2. THE CONTRACTOR SHALL PROVIDE A TEMPORARY SHORING SYSTEM TO SUPPORT THE PIER CAP DEAD AND LIVE LOADS IF THE EXCAVATION LIMITS ARE TO BE EXTENDED PER EVALUATION OF THE DISTRICT BRIDGE ENGINEER.
3. NOTE CONTRACTOR SHALL STAGE THE WORK SO THAT THE WORSE SECTIONS ARE REPAIRED FIRST.
4. CONTRACTOR SHALL ONLY WORK ON ONE SECTION OF A COLUMN AT A TIME UNLESS APPROVED OTHERWISE BY THE DISTRICT BRIDGE ENGINEER.
5. CONTRACTOR SHALL NOT WORK ON MULTIPLE COLUMN FACES WHICH ARE ON THE SAME SIDE OF THE PIER SIMULTANEOUSLY.
6. CONTRACTOR SHALL WAIT 72 HOURS AFTER COMPLETING REPAIRS TO A SECTION BEFORE CHIPPING ADJACENT SECTIONS, HOWEVER, HE/SHE MAY PERFORM WORK ON OTHER BRIDGE ELEMENTS.
7. CONTRACTOR SHALL STOP REMOVING DETERIORATING CONCRETE WHEN A MAXIMUM DEPTH OF 6 IN. IS REACHED. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED IF MORE REMOVAL SEEMS NECESSARY.
8. EXISTING REINFORCING NOT SHOWN.
9. THE CONTRACTOR SHALL SUBMIT AN ALTERNATE REPAIR SEQUENCE FOR APPROVAL OF THE ENGINEER WHEN TEMPORARY SHORING IS UTILIZED DURING REPAIRS.

BURLINGTON

US 3 NB/SB OVER I 95/ST 128

STATE	FED AID PROJ NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	11	12
PROJECT FILE NO.		813781	

PIER COLUMN REPAIR DETAILS

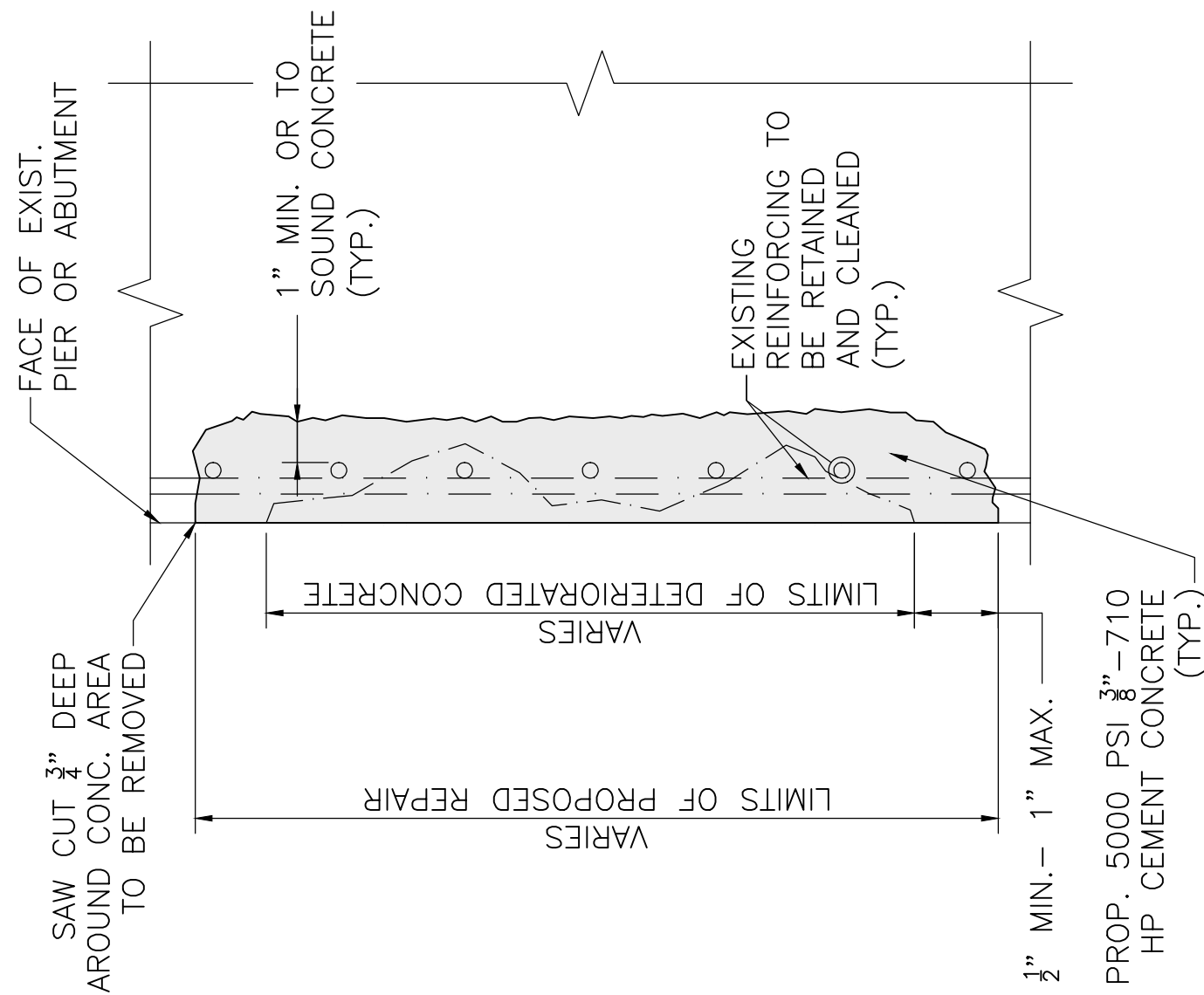
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MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

BURLINGTON
US 3 NB/SB OVER I 95/ST 128

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	12	12
PROJECT FILE NO. 613781			

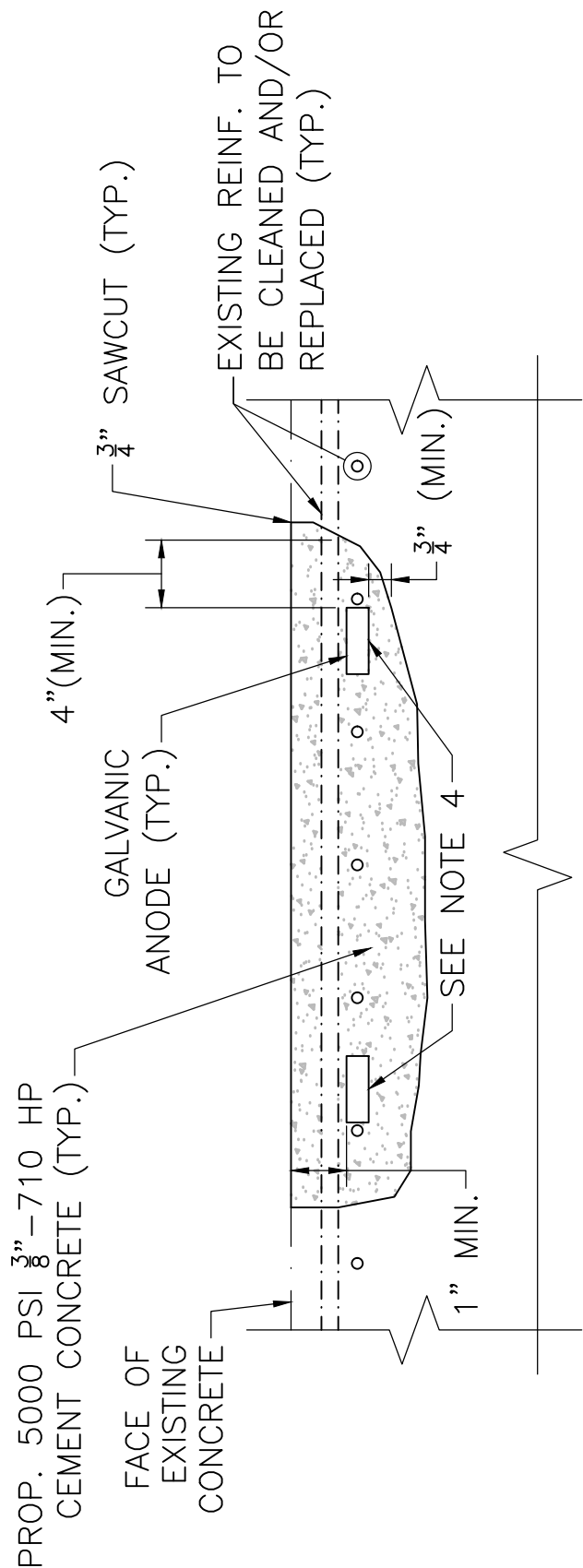
GALVANIC ANODE INSTALLATION & PARTIAL DEPTH REPAIR DETAILS



NOTE: IF THERE IS LESS THAN 1½" CONCRETE COVER, THEN THE CONTRACTOR SHALL BUILD OUT THE FORM TO ENSURE A MINIMUM OF 1½" COVER.

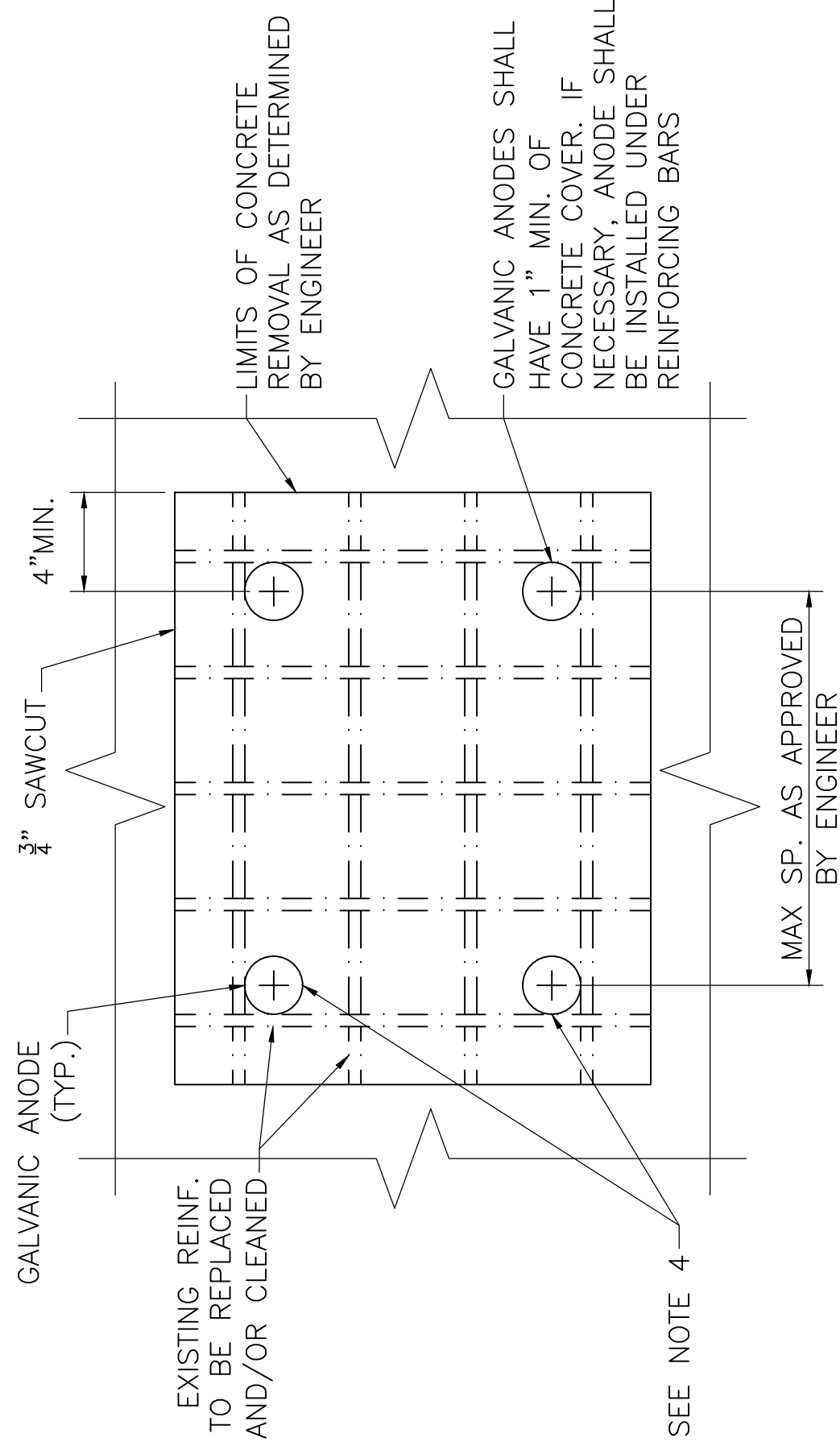
PARTIAL DEPTH REPAIR

NOT TO SCALE



GALVANIC ANODE INSTALLATION SECTION

NOT TO SCALE



GALVANIC ANODE INSTALLATION DETAIL

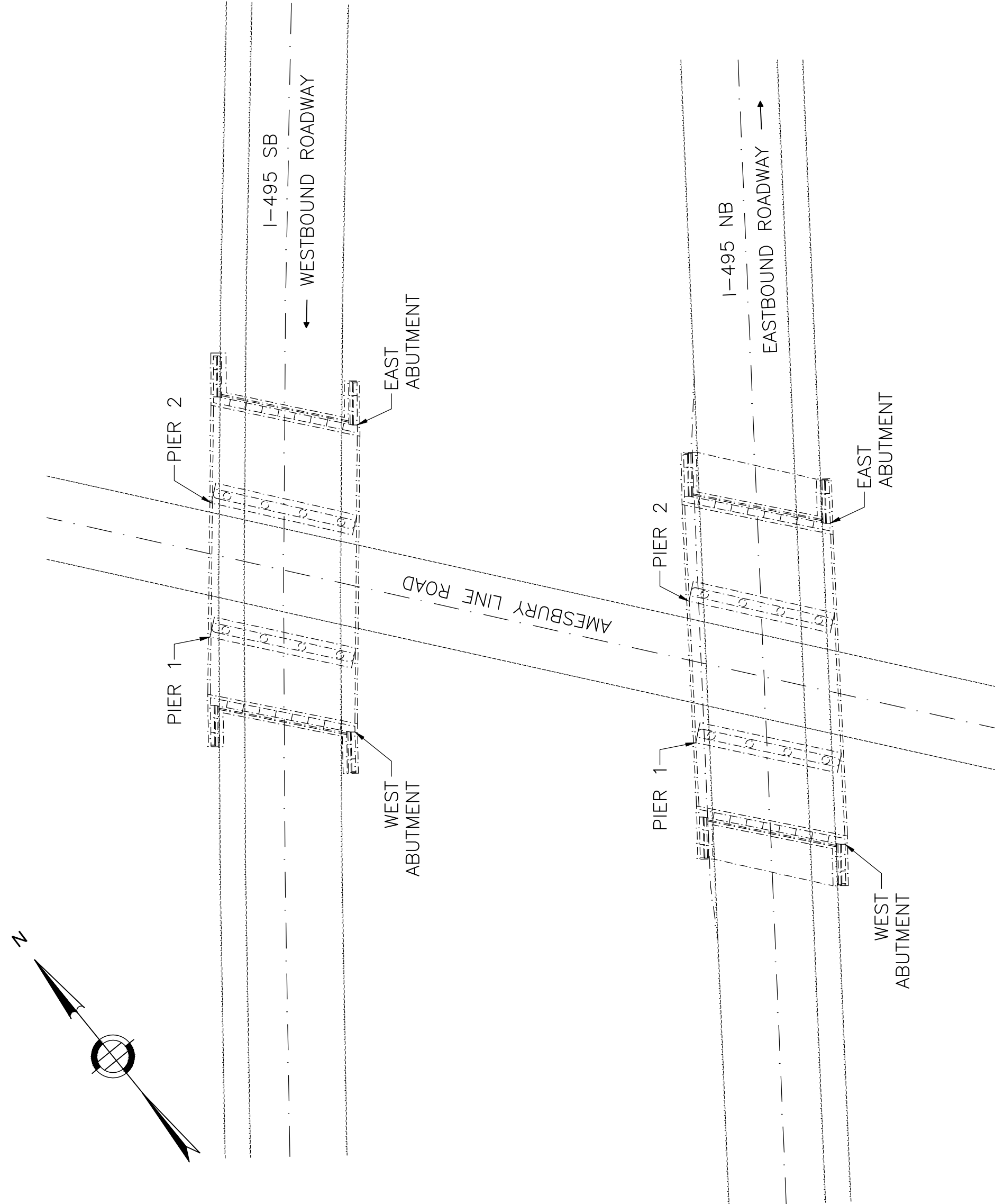
NOT TO SCALE

GALVANIC ANODE NOTES:

1. REMOVE CONCRETE ACCORDING TO DRAWINGS AND CONTRACT SPECIFICATIONS.
2. REPLACE AND/OR CLEAN DAMAGED REINFORCING STEEL. ALL NEW REBAR SHALL BE UNCOATED BLACK STEEL WHEN GALVANIC ANODES ARE USED.
3. ENSURE ALL EXPOSED REINFORCING STEEL IS SECURELY FASTENED TOGETHER WITH TIE WIRE TO PROVIDE ELECTRICAL CONTINUITY.
4. ATTACH GALVANIC ANODE TO CLEAN REINFORCING STEEL WITHIN THE REPAIR AREA AT SPACING APPROVED BY THE ENGINEER AND ACCORDING TO MANUFACTURER'S SPECIFICATIONS. MINIMUM SPACING OF 3/4" BETWEEN ANODES AND EXISTING CONCRETE. A MINIMUM OF 4" EDGE DISTANCE FROM ANY CORNER AND/OR EDGE OF EXCAVATION, AND A MINIMUM OF 1" CONCRETE COVER SHALL BE PROVIDED.
5. TEST THE ELECTRICAL CONTINUITY BETWEEN THE ANODE TIES AND THE REBAR AND BETWEEN THE REBARS ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
6. PLACE REPAIR CONCRETE ACCORDING TO DRAWINGS AND CONTRACT SPECIFICATIONS. WHEN GALVANIC ANODES ARE USED, THE REPAIR MATERIAL USED SHALL BE NON-HP CONCRETE AND APPROVED BY THE ENGINEER.

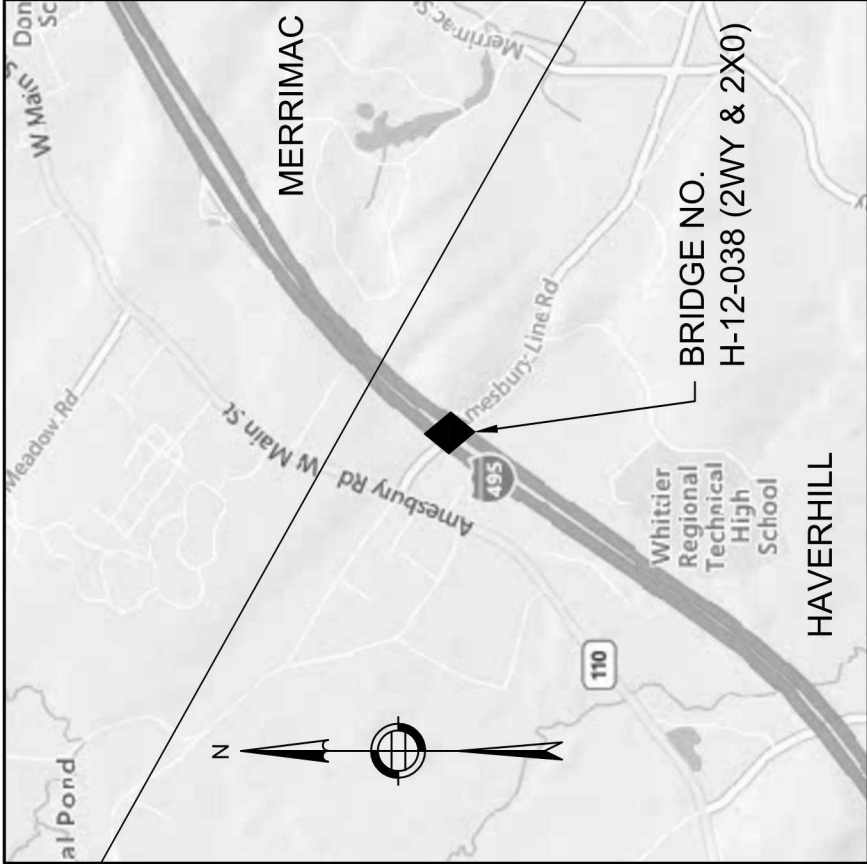
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MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	



KEY PLAN

SCALE: 1" = 40'



LOCUS MAP

SCALE: 1" = 2000'

HAVERHILL
I 495 NB/SB OVER AMESBURY LINE RD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	1	12
PROJECT FILE NO. 613781			

INDEX, LOCUS MAP, GENERAL NOTES,
KEY PLAN & QUANTITIES

QUANTITIES:

ITEM	QUANTITY	UNITS
REINFORCED CONCRETE SUBSTRUCTURE EXCAVATION	30	CY
5000 PSI 3/8 IN. 710 HP CEMENT CONCRETE	30	CY
CEMENTITIOUS MORTAR FOR PATCHING	385	SF
STEEL REINFORCEMENT FOR STRUCTURES	1385	LB
GALVANIC ANODE	1490	EA
STRUCTURAL STEEL REPAIRS – BOLTED	3100	LB
ELASTOMERIC PROTECTIVE COATING	7400	SF
SPECIAL SLOPE PAVING UNDER BRIDGE – OPTION	10	SY

INDEX OF BRIDGE SHEETS

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PIER COLUMN REPAIR DETAILS	9
GALVANIC ANODE INSTALLATION & PARTIAL DEPTH REPAIR DETAILS	10
STRUCTURAL FRAMING PLANS	11
STRUCTURAL BEAM END REPAIRS	12

GENERAL NOTES:

SCALES:

SCALES NOTED ON THE PLANS ARE NOT APPLICABLE TO REDUCED SIZE PRINTS. DIVIDE SCALES BY 2 FOR HALF-SIZE PRINTS (A3).

CONCRETE:

ALL CONCRETE SHALL BE 5000 PSI, 3/8 IN, 710 HP CEMENT CONCRETE.

STRUCTURAL STEEL:

ALL STEEL PLATES AND ANGLES SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 GRADE 36. ALL STEEL SHALL BE CONSIDERED A MAIN MEMBER AND CONFORM TO THE CHARPY V-NOTCH REQUIREMENTS OF AASHTO M270 ZONE 12.

EASTENERS:

- ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M164 (ASTM A325) SLIP CRITICAL BOLTED CONNECTIONS. ALL BOLTS SHALL BE 7/8 INCH DIAMETER IN STANDARD SIZE HOLES.
- ALL CONNECTIONS SHALL BE SLIP CRITICAL AND ALL FAYING SURFACES SHALL BE AASHTO CLASS B.

REINFORCEMENT:

REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 31 GRADE 60. UNLESS OTHERWISE NOTED ON THE CONSTRUCTION DRAWINGS, ALL BARS SHALL BE LAPPED AS FOLLOWS:

MODIFICATION CONDITION

- NONE
- 12" OF CONCRETE BELOW BAR

ALL BARS SHALL BE UNCOATED BLACK STEEL.

ALL OTHER BARS SHALL BE LAPPED AS SHOWN ON THE CONSTRUCTION DRAWINGS.

*
2WY
2X0

DESIGNED BY	MM/DD/YYYY	ISSUED FOR CONSTRUCTION
A. Florio		
DRAWN BY		
A. Florio		
CHECKED BY		
D. Consentino		
SPECS BY		
A. Florio		
APPROVED FOR DESIGN BY		
J. Lee		



SUBSTRUCTURE & BEAM END REPAIRS

HAVERHILL

I 495 NB/SB

OVER AMESBURY LINE RD

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION
HIGHWAY DIVISION
10 PARK PLAZA BOSTON, MASS

HAVERHILL
I 495 NB/SB OVER AMESBURY LINE RD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	2	12
PROJECT FILE NO.		613781	

PIER REPAIR LOCATIONS (1 OF 4)

REPAIR LOCATIONS:

1. DELAMINATED AREA, 2’ LONG X 3’ WIDE.
2. DELAMINATED AREA, 2’-6” LONG X 1’ HIGH, EXTENDING 1’ ONTO THE TOP OF PIER CAP.
3. DELAMINATED AREA, 3’ LONG X 9” HIGH, EXTENDING 8” ONTO THE TOP OF PIER CAP.
4. DELAMINATED AREA, 4’ LONG X 6” HIGH, EXTENDING 8” ONTO THE TOP OF PIER CAP.
5. DELAMINATED AREA, 2’-6” LONG X 2’-8” WIDE.
6. DELAMINATED AREA, 3’-6” LONG X 5” HIGH, EXTENDING 7” ONTO THE UNDERSIDE OF PIER CAP.
7. DELAMINATED AREA, 3’ LONG X 7” WIDE.
8. DELAMINATED AREA, 4’ LONG X 8” WIDE, WITH SEVERAL HORIZONTAL CRACKS.
9. DELAMINATED AREA, 2’-6” LONG X 2’-6” WIDE.
10. DELAMINATED AREA, 6” DIAMETER.
11. DELAMINATED AREA, 2’-3” LONG X 8” WIDE, EXTENDING 4” INTO THE WEST FACE.
12. DELAMINATED AREA, 7’-6” LONG X FULL WIDTH.
13. DELAMINATED AREA, 2’-7” LONG X 1’ HIGH.
14. SPALL, 9” LONG X 6” HIGH X 5” DEEP WITH EXPOSED REBAR.
15. HORIZONTAL CRACK, 3’ LONG X ¾” WIDE.
16. DELAMINATED AREA, 8’-6” LONG X 6” HIGH.
17. SPALL, 1’-2” LONG X FULL HEIGHT OF PEDESTAL X UP TO 5” DEEP, WITH EXPOSED REBAR & EXTENDING 8” ALONG THE SOUTH FACE.
18. DELAMINATED AREA, 6” WIDE X 1’-5” HIGH.
19. DELAMINATED AREA ON THE NORTHWEST FACE, 2’-10” WIDE X 2’-6” HIGH.
20. SPALL ON THE NORTHWEST FACE, 1’-10” WIDE X 1’ HIGH X 2-1/2” DEEP, WITH EXPOSED SPIRALS & ONE (1) EXPOSED VERTICAL BAR.
21. DELAMINATED AREA, FULL WIDTH X 2’-6” HIGH, EXTENDING 1’-6” INTO THE NORTH AND SOUTH FACE.
22. SPALL ON THE NORTH FACE, UP TO 2’-2” WIDE X 7’-6” HIGH X UP TO 3” DEEP, WITH SEVENTEEN (17) EXPOSED SPIRALS.
23. DELAMINATED AREA, FULL WIDTH X 1’-4” HIGH.
24. SPALL ON THE SOUTH FACE, 8” WIDE X 2’-6” HIGH X 2” DEEP.
25. DELAMINATED AREA, 3’ LONG X UP TO 8” HIGH.
26. SPALL, FULL LENGTH X 11” HIGH X 3-1/2” DEEP, EXTENDING 8” INTO THE SOUTH FACE. BEARING UNDERMINED AT SOUTHEAST CORNER, 1” WIDE X 1” LONG.
27. SPALL, 1’ LONG X FULL HEIGHT X 3-1/2” DEEP, EXTENDING 1’ INTO THE SOUTH FACE.
28. DELAMINATED AREA, 1’-6” WIDE X 8’ HIGH, EXTENDING 1’-6” INTO THE SOUTH FACE.
29. SPALL, 1’-4” WIDE X 6’-8” HIGH X 3” DEEP, WITH EIGHTEEN (18) EXPOSED RUSTED REBAR.
30. DELAMINATED AREA, 1’-6” WIDE X 3’ HIGH.
31. DELAMINATED AREA, 4’-9” LONG X 6” HIGH.
32. DELAMINATED AREA, 6’ LONG X 6” HIGH, WITH SEVERAL ¼” WIDE HORIZONTAL CRACKS.
33. SPALL, 1’-8” WIDE X 3’ HIGH X 1-1/2” DEEP, ON THE NORTHEAST FACE, WITH EIGHT (8) EXPOSED SPIRALS.
34. DELAMINATED AREA ON THE NORTHEAST FACE, 1’ WIDE X 2’ HIGH.
35. DELAMINATED AREA, FULL WIDTH X 6’-4” HIGH, EXTENDING 2’ INTO THE NORTH FACE. SPALL ON THE EAST FACE, 11” WIDE X 4’-5” HIGH X 2-1/2” DEEP, WITH SIXTEEN (16) EXPOSED SPIRALS.
36. SPALL, 1’-2” WIDE X 4’-6” HIGH X UP TO 2” DEEP, WITH THREE (3) EXPOSED SPIRALS & AN ADJACENT DELAMINATED AREA.
37. SPALL ON THE SOUTHEAST FACE, 1’ WIDE X 1’ HIGH X 1” DEEP.
38. DELAMINATED AREA ON THE NORTHEAST FACE, 1’-3” WIDE X 1’-4” HIGH.
39. SPALL, 1’-3” WIDE X 1’-10” HIGH X 2” DEEP, WITH FOUR (4) EXPOSED SPIRALS.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

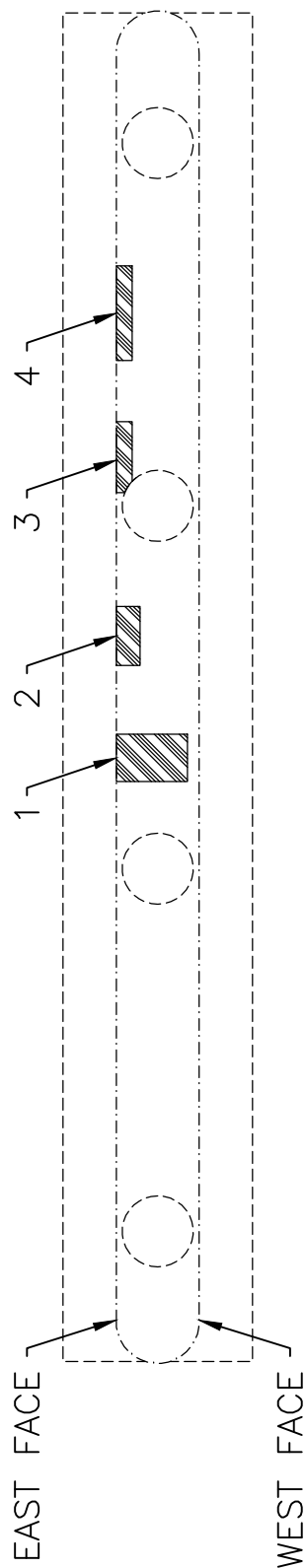
1. WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
2. WHEN THE EXCAVATION ENCROACHES ON THE BEARING DEVICES.
3. WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
4. WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT, AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

NOTES:

SEE SHEETS 8, 9 & 10.

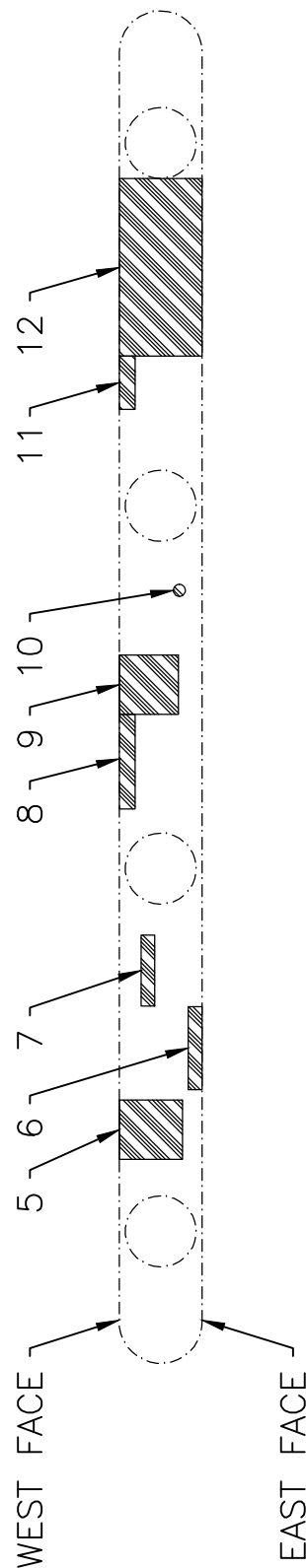
DEFICIENCY LEGEND

-  SPALL
-  DELAMINATION/HOLLOW AREA
-  HORIZONTAL/VERTICAL CRACK



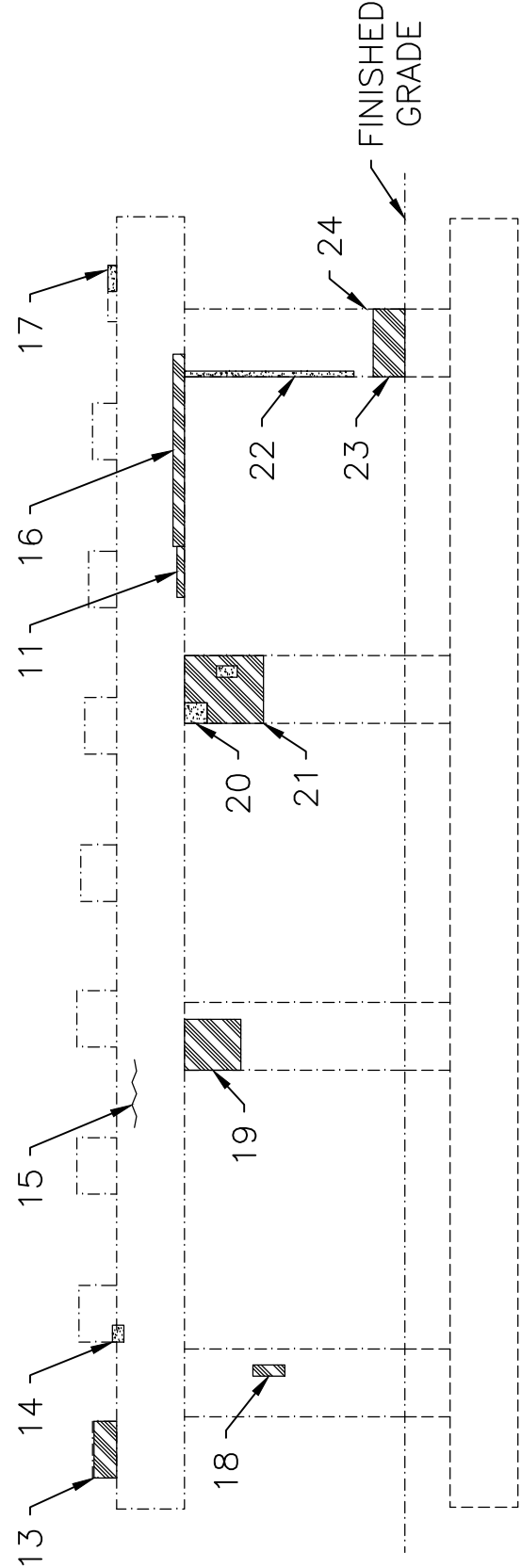
PIER 1 – TOP OF PIER CAP
(EASTBOUND ROADWAY)

SCALE: ¾" = 1'-0"



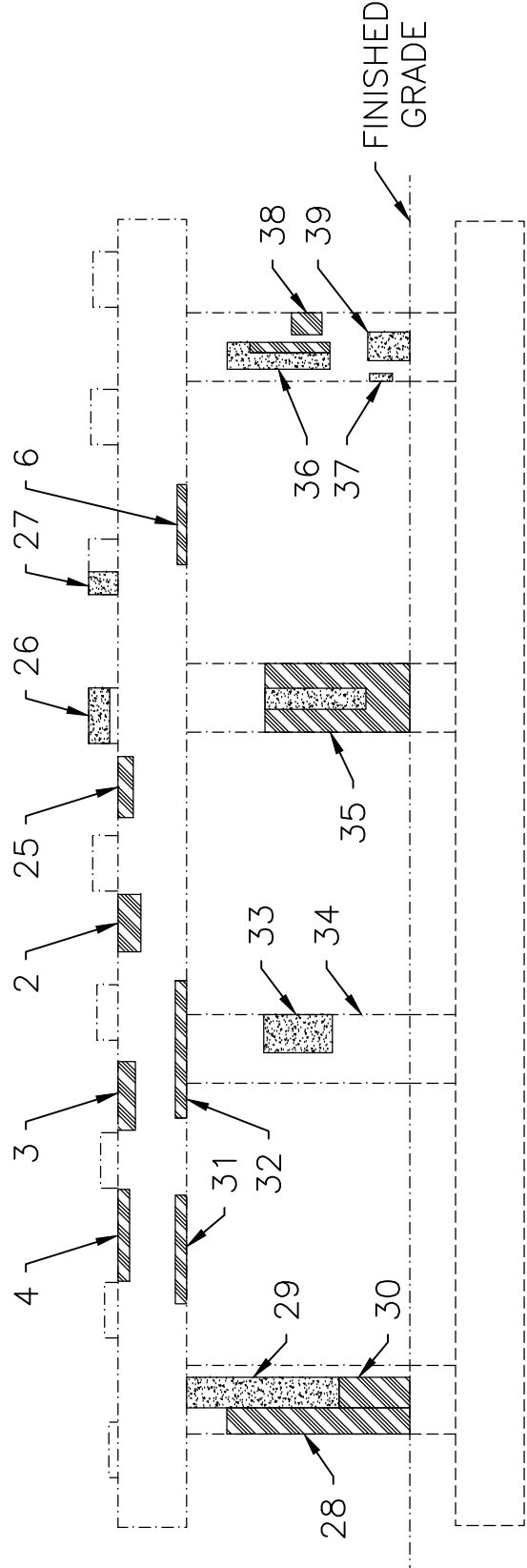
PIER 1 – BOTTOM OF PIER CAP
(EASTBOUND ROADWAY)

SCALE: ¾" = 1'-0"



PIER 1 – WEST FACE
(EASTBOUND ROADWAY)

SCALE: ¾" = 1'-0"



PIER 1 – EAST FACE
(EASTBOUND ROADWAY)

SCALE: ¾" = 1'-0"

MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

*
2WY
2X0

HAVERHILL
I 495 NB/SB OVER AMESBURY LINE RD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	3	12
PROJECT FILE NO.		613781	

PIER REPAIR LOCATIONS (2 OF 4)

REPAIR LOCATIONS:

1. DELAMINATED AREA, 2'-6" LONG X 6" HIGH, EXTENDING 1'-2" ONTO THE TOP OF PIER CAP.
2. DELAMINATED AREA, 12'-4" LONG X FULL WIDTH, WITH TWO (2) SPALLS, 7" LONG X 6" WIDE X 1" DEEP EACH.
3. DELAMINATED AREA, 6' LONG X FULL WIDTH, WITH A 6" DIAMETER SPALL.
4. DELAMINATED AREA, 6' LONG X 3' WIDE, WITH TWO (2) SPALLS, 2' LONG X 5" WIDE X 1-1/2" DEEP & 7" LONG X 5" WIDE X 1" DEEP.
5. SPALL ON THE SOUTH FACE OF THE PEDESTAL, 5" LONG X FULL HEIGHT X 3" DEEP, EXTENDING 4" INTO THE WEST FACE & WITH A HAIRLINE CRACK EXTENDING TO THE TOP OF PEDESTAL.
6. DELAMINATED AREA, 5'-6" LONG X UP TO 1'-8" HIGH.
7. DELAMINATED AREA, 9" WIDE X FULL HEIGHT, WITH A SPALL ON THE NORTH FACE OF THE PEDESTAL, 8" WIDE X 7" HIGH X 3" DEEP. THE DELAMINATION EXTENDS 8" ONTO THE TOP OF THE PEDESTAL.
8. SPALL, 11" LONG X 1' HIGH, EXTENDING 2" ONTO THE PEDESTAL.
9. PEDESTAL SPALL, 2' WIDE X 1' LONG X 2" DEEP, WITH UNDERMINING OF THE BEARING AT THE NORTHWEST CORNER, 5" LONG X 1/8" DEEP.
10. DELAMINATED AREA AT THE TOP OF THE PEDESTALS, UP TO FULL WIDTH X 5" LONG.
11. SPALL ON PEDESTAL, 7" LONG X 6" HIGH X 3" DEEP.
12. DELMINATED AREA, 2'-6" LONG X 2' HIGH.
13. DELAMINATED AREA AT THE TOP OF THE NORTH FACE, FULL WIDTH X 3'-4" HIGH.
14. VERTICAL CRACK AT THE BOTTOM OF THE NORTH FACE, 4'-0" LONG X 1/8" WIDE.
15. DELAMINATED AREA, 1'-6" WIDE X 2' HIGH & A VERTICAL CRACK WITH RUST STAINING, 2'-6" LONG X 3/8" WIDE.
16. DELAMINATED AREA, 4' LONG X 6" HIGH, WITH A HORIZONTAL CRACK.
17. VERTICAL CRACK, 3' LONG X 1/8" WIDE.
18. DELAMINATED AREA, 2' LONG X 6" HIGH.
19. SPALL, 4" WIDE X 1'-6" HIGH X 1-1/2" DEEP, SURROUNDED BY A DELAMINATED AREA AT THE TOP OF THE SOUTH FACE, 2' WIDE X 4' HIGH.
20. DELAMINATED AREA, 5' LONG X 6" HIGH.
21. SPALL, 1'-1" WIDE X 1'-11" HIGH X 1" DEEP, WITH EXPOSED REBAR.
22. DELAMINATED AREA, FULL WIDTH X FULL HEIGHT, WITH CRACKS UP TO FULL HEIGHT X 3/8" WIDE.
23. DELAMINATED AREA, 8' LONG X 6" HIGH, WITH A HORIZONTAL CRACK.
24. DELAMINATED AREA, 6' LONG X 6" HIGH, WITH A HORIZONTAL CRACK.
25. DELAMINATED AREA, 4" WIDE X FULL HEIGHT, AT THE NORTHEAST CORNER OF THE PEDESTAL.
26. DELAMINATED AREA, 6" LONG X 6" WIDE, TOP 1-1/2" OF PEDESTAL AT THE SOUTHEAST CORNER.
27. DELAMINATED AREA, 1' WIDE X FULL HEIGHT.
28. DELAMINATED AREA, 4' LONG X 6" HIGH, WITH A HORIZONTAL CRACK.
29. DELAMINATED AREA ON THE SOUTH FACE, 1'-9" WIDE X 4'-4" HIGH.
30. SPALL ON THE SOUTH FACE, 1'-8" WIDE X 3' HIGH X 3" DEEP, EXTENDING 1'-6" INTO THE EAST FACE & SURROUNDED BY DELAMINATION.
31. DELAMINATED AREA ON THE NORTH FACE, FULL WIDTH X FULL HEIGHT, EXTENDING 1'-6" INTO THE EAST FACE. SPALL ON THE EAST FACE, 9" WIDE X 8' HIGH X 3" DEEP & THIRTY-TWO (32) EXPOSED REBARS, INSIDE THE DELAMINATED AREA.
32. SPALL ON THE SOUTH FACE, 1'-3" WIDE X 2' HIGH X 2" DEEP, WITH EXPOSED REBAR.
33. DELAMINATED AREA, 2'-6" LONG X 6" HIGH.
34. DELAMINATED AREA, 1'-4" WIDE X FULL HEIGHT, EXTENDING INTO THE TOP OF THE NORTH FACE, 10" WIDE X 3'-4" HIGH.
35. SPALL, 8" WIDE X 8' HIGH X 1/2" DEEP, WITH EXPOSED REBAR & A FULL HEIGHT X 1/8" WIDE VERTICAL CRACK.
36. DELAMINATED AREA ON THE TOP OF THE NORTH FACE, 1' WIDE X 4' HIGH.
37. DELAMINATED AREA, 2' WIDE X 1'-8" HIGH.
38. DELAMINATED AREA, FULL WIDTH X 1'-9" HIGH, WITH SEVERAL CRACKS UP TO 1'-8" LONG X 1/2" WIDE.
39. SPALL, 8" WIDE X 5" HIGH, WITH EXPOSED REBAR & A 4' LONG X 1/8" WIDE CRACK EXTENDING DOWNWARD WITH RUST STAINING.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

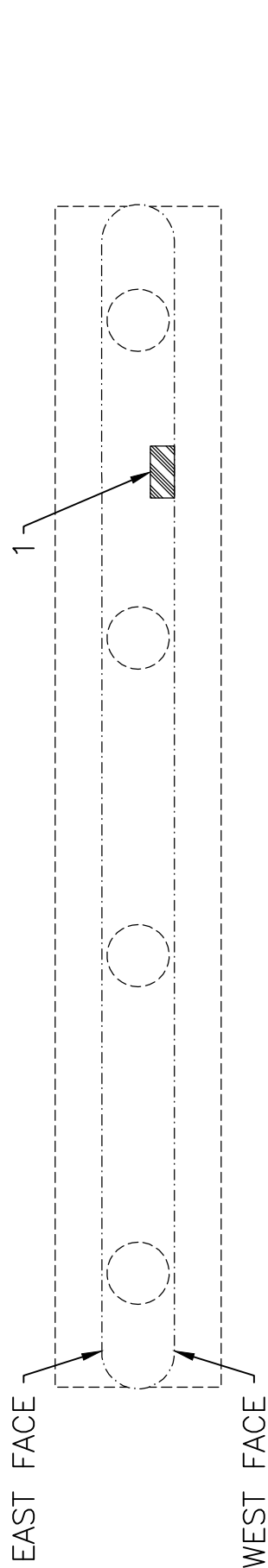
1. WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
2. WHEN THE EXCAVATION ENCROACHES ON THE BEARING DEVICES.
3. WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
4. WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT, AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

NOTES:

SEE SHEETS 8, 9 & 10.

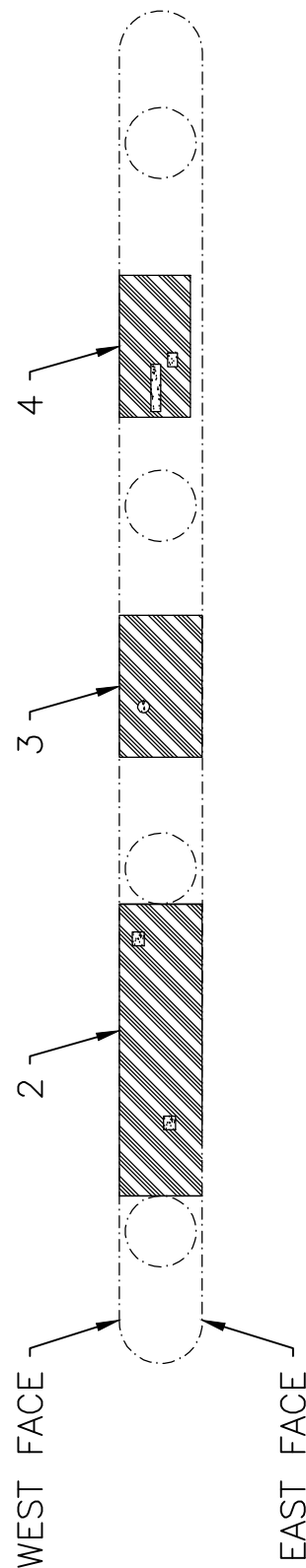
DEFICIENCY LEGEND

-  SPALL
-  DELAMINATION/HOLLOW AREA
-  HORIZONTAL/VERTICAL CRACK



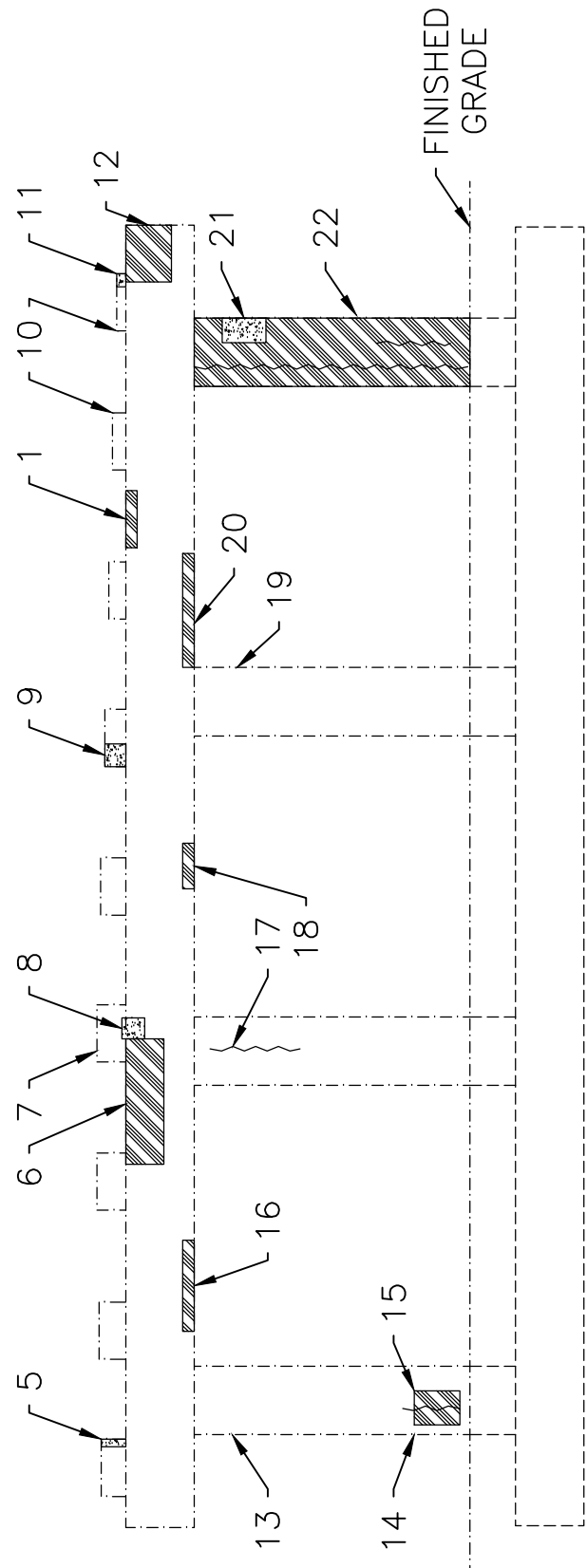
PIER 2 – TOP OF PIER CAP
(EASTBOUND ROADWAY)

SCALE: 3/8" = 1'-0"



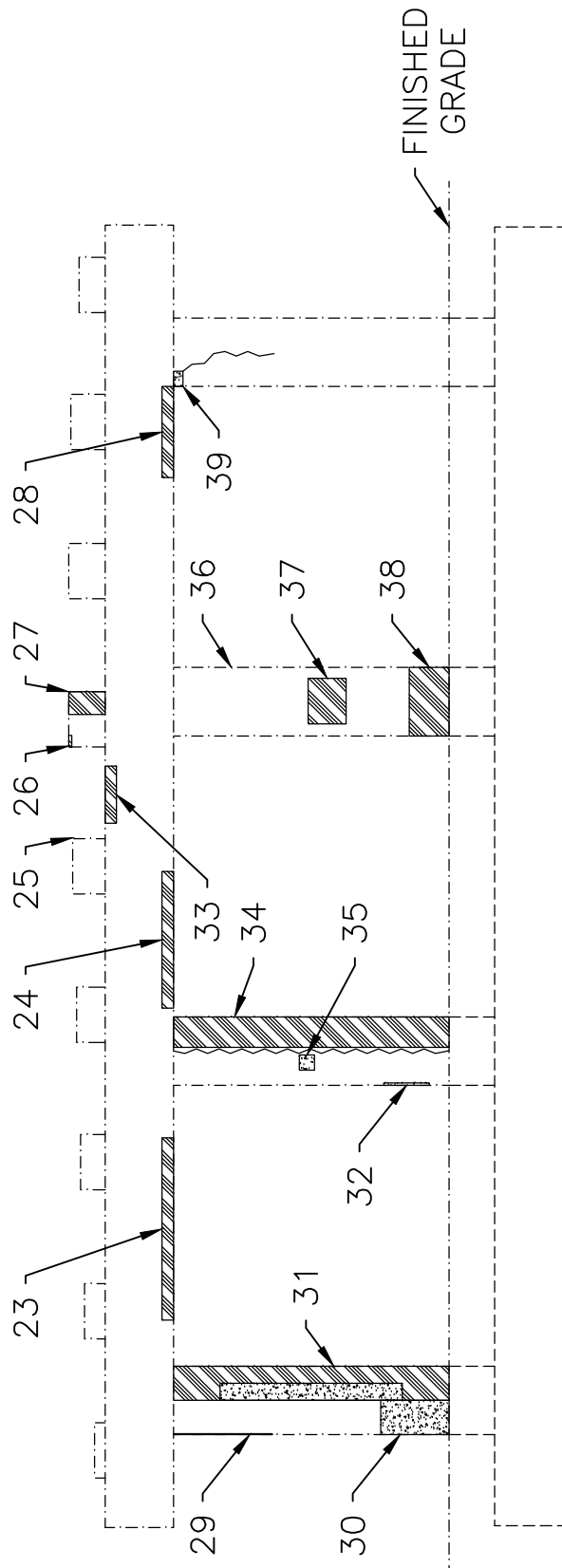
PIER 2 – BOTTOM OF PIER CAP
(EASTBOUND ROADWAY)

SCALE: 3/8" = 1'-0"



PIER 2 – WEST FACE
(EASTBOUND ROADWAY)

SCALE: 3/8" = 1'-0"



PIER 2 – EAST FACE
(EASTBOUND ROADWAY)

SCALE: 3/8" = 1'-0"

MM/DD/YYYY	ISSUED FOR CONSTRUCTION
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*
2WY
2X0

I 495 NB/SB OVER AMESBURY LINE RD

Haverhill

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	4	12

PROJECT FILE NO. 613781

PIER REPAIR LOCATIONS (3 OF 4)

REPAIR LOCATIONS:

- DELAMINATED AREA, 4’ LONG X 8” HIGH, EXTENDING ONTO THE TOP FACE, WITH A 4’ LONG X ½” WIDE HORIZONTAL CRACK.
- DELAMINATED AREA, 2’-6” LONG X 5” HIGH, EXTENDING 7” ONTO THE UNDERSIDE OF CAP, WITH TWO (2) 2” DIAMETER X 1” DEEP EDGE SPALLS.
- SPALL, 2’-3” LONG X 4” HIGH X 3” DEEP, EXTENDING 10” ONTO THE UNDERSIDE OF THE PIER CAP.
- SPALL, 2’-8” LONG X 6” HIGH X 3” DEEP, EXTENDING 10” ONTO THE UNDERSIDE OF THE PIER CAP.
- HOLLOW AREA, FULL WIDTH X 4’ LONG, WITH MINOR 1” DIAMETER SPALLS & CRACKING.
- CORNER SPALL, 7’ LONG X 6” HIGH X 4” DEEP.
- CORNER PEDESTAL SPALL, 3” LONG X 3” WIDE X FULL HEIGHT.
- DELAMINATED AREA ON THE BACKSIDE OF THE PEDESTAL, FULL LENGTH X FULL HEIGHT, WITH A SPALL ON THE NORTH FACE, 8” WIDE X FULL HEIGHT X 5” DEEP & EXPOSED REBAR.
- POPOUT SPALL, 3” WIDE X 6” HIGH X ½” DEEP, WITH EXPOSED REBAR.
- PEDESTAL SPALL, 8” LONG X FULL HEIGHT X 6” DEEP, WITH EXPOSED REBAR AT THE SOUTHEAST CORNER.
- PEDESTAL SPALL, FULL LENGTH X FULL HEIGHT X 3” DEEP, WITH EXPOSED REBAR.
- DELAMINATED AREA ON THE NORTH FACE OF THE PEDESTAL, 10” WIDE X FULL HEIGHT, WITH SEVERAL CRACKS.
- DELAMINATED AREA & HONEYCOMBING, FULL LENGTH X FULL HEIGHT X UP TO 2” DEEP, WITH SPALLS UP TO 5” DEEP & EXPOSED REBAR.
- PEDESTAL SPALL, 8” LONG X 10” HIGH X 4” DEEP.
- PEDESTAL SPALL, 6” LONG X FULL HEIGHT X 3” DEEP.
- PEDESTAL SPALL, FULL LENGTH X FULL HEIGHT X 3” DEEP, EXTENDING UNDER THE WEST EDGE OF THE BEARING MASONRY PLATE, UNDERMINED FULL LENGTH X UP TO 1” DEEP.
- DELAMINATED AREA AT THE TOP OF THE NORTH FACE, 1’-3” WIDE X 2’ HIGH.
- DELAMINATED AREA, 2’ WIDE X 6’-6” HIGH, WITH A FULL HEIGHT X ¼” WIDE CRACK.
- SPALL ON THE WEST FACE, 1’ WIDE X 4’-9” HIGH X 2” DEEP, EXTENDING 1’ INTO THE SOUTH FACE, WITH NINETEEN (19) EXPOSED REBARS & A DELAMINATED AREA BELOW, 2’ WIDE X 2’ HIGH.
- SPALL, 5’ LONG X 5” HIGH X 5” DEEP.
- SPALL, 10” WIDE X 7” HIGH X 1” DEEP.
- DELAMINATED AREA, 4’ LONG X 3” HIGH, WITH HORIZONTAL CRACKING.
- DELAMINATED AREA ON THE WEST FACE, UP TO FULL WIDTH X FULL HEIGHT, EXTENDING 2’ INTO THE SOUTH FACE, WITH THREE (3) SPALLS MEASURING UP TO 1’-6” HIGH X 4” WIDE X 1-1/2” DEEP & A FULL HEIGHT CRACK MEASURING UP TO ¼” WIDE.
- CORNER DELAMINATED AREA, 2’ LONG X 5” HIGH.
- DELAMINATED AREA, 1’-4” WIDE X 3’-4” HIGH, WITH A 3’ LONG VERTICAL CRACK.
- DELAMINATED AREA ON THE NORTH FACE, 2’ WIDE X 3’-6” HIGH, WITH A SPALL, 1’-4” WIDE X 2’-2” HIGH X 2” DEEP.
- APPROXIMATELY 80% OF THE COLUMN SURFACE AREA IS DELAMINATED. WEST FACE HAS A SPALL, 1’ WIDE X 1’-6” HIGH X 3” DEEP WITH EXPOSED REBAR.
- SPALL ON TOP OF THE PEDESTAL, 2’ LONG X FULL HEIGHT X 5” DEEP WITH EXPOSED REBAR, EXTENDING INTO THE ADJACENT PEDESTAL.
- SPALL, FULL LENGTH X FULL HEIGHT X 4” DEEP, WITH EXPOSED REBAR WITH UP TO 50% SECTION LOSS & UNDERMINING OF THE BEARING, 1” X 1” ON THE SOUTHEAST CORNER.
- DELAMINATED AREA, FULL LENGTH X FULL HEIGHT.
- SPALL, 3’-6” LONG X 1’-4” HIGH X 2-1/2” DEEP, WITH ONE (1) HORIZONTAL REBAR WITH 10% SECTION LOSS & A SPALL UNDERMINING THE BEARING AT THE SOUTHEAST CORNER, 2” LONG X ½” INTO THE BEARING.
- APPROXIMATELY 80% OF THE COLUMN SURFACE AREA IS DELAMINATED. EAST FACE HAS A FULL HEIGHT X UP TO 1” WIDE VERTICAL CRACK.
- DELAMINATED AREA, FULL WIDTH X 6’ HIGH, WITH VERTICAL & HORIZONTAL CRACKS.
- HOLLOW AREA, 2’-3” WIDE X 2’-4” HIGH, WITH A 4’ LONG X ⅙” VERTICAL CRACK.
- DELAMINATED AREA, 1’-8” WIDE X 4’ HIGH, WITH VERTICAL CRACKS.
- DELAMINATED AREA ON THE EAST FACE, 1’ WIDE X 4’ HIGH, EXTENDING 1’ INTO THE SOUTH FACE. SPALL, UP TO 2’ HIGH X 1’-8” WIDE X 3” DEEP ON THE EAST FACE.
- DELAMINATED AREA, 2’-3” LONG X 4” HIGH.
- DELAMINATED AREA ON THE NORTH FACE, 1’-4” WIDE X 2’ HIGH.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

- WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
- WHEN THE EXCAVATION ENCROACHES ON THE BEARING DEVICES.
- WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
- WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT, AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

NOTES:

SEE SHEETS 8, 9 & 10.

DEFICIENCY LEGEND

- SPALL

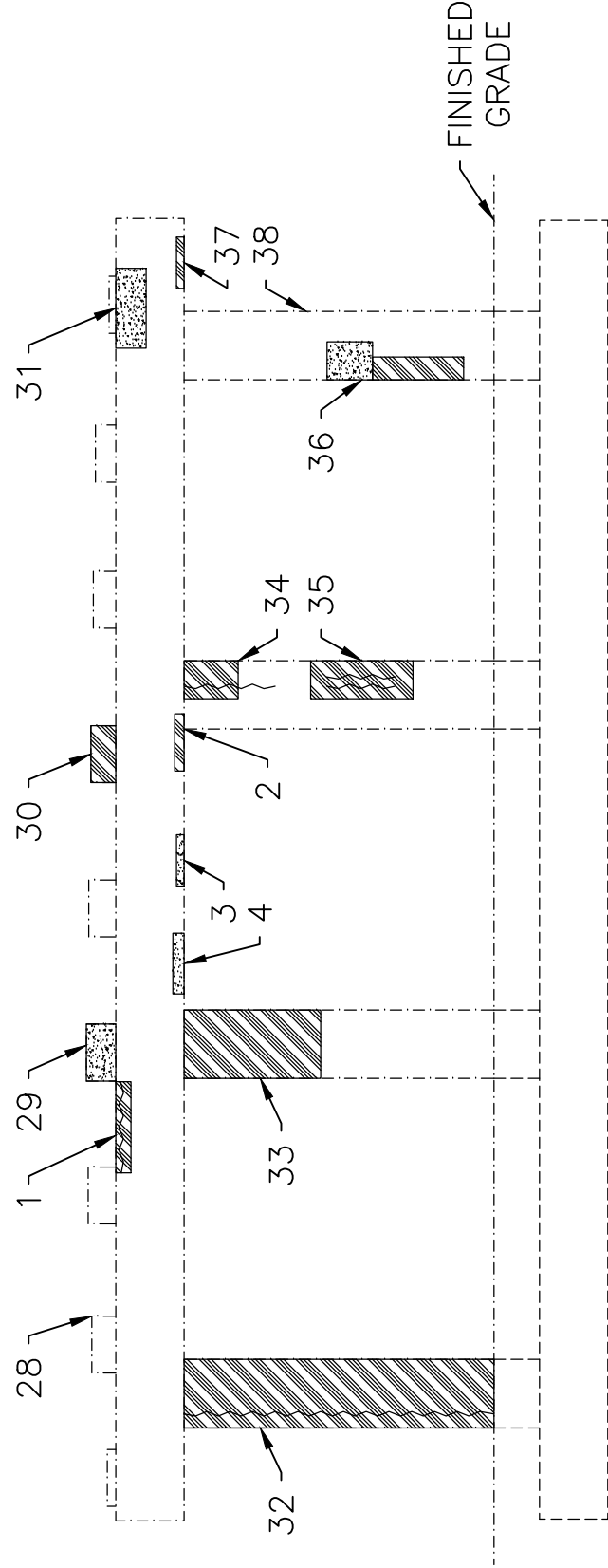
DELAMINATION/HOLLOW AREA

HORIZONTAL/VERTICAL CRACK
- *

2WY
2X0

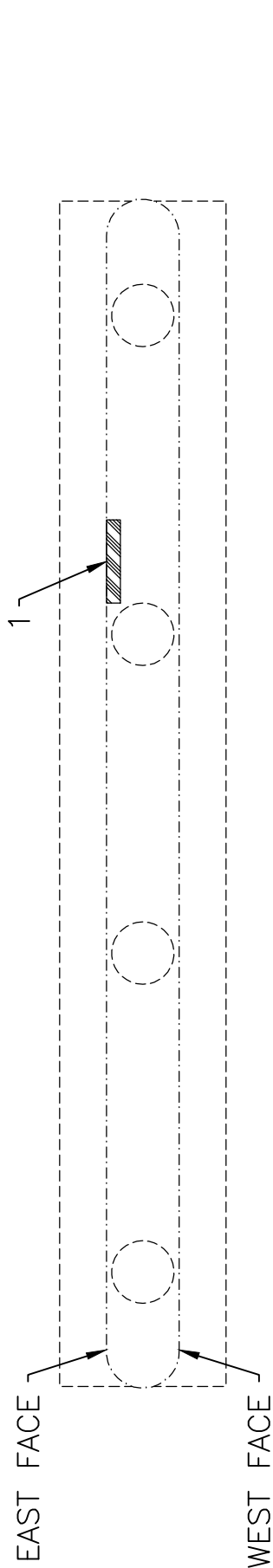
PIER 1 – WEST FACE
(WESTBOUND ROADWAY)

SCALE: ⅛" = 1’-0"



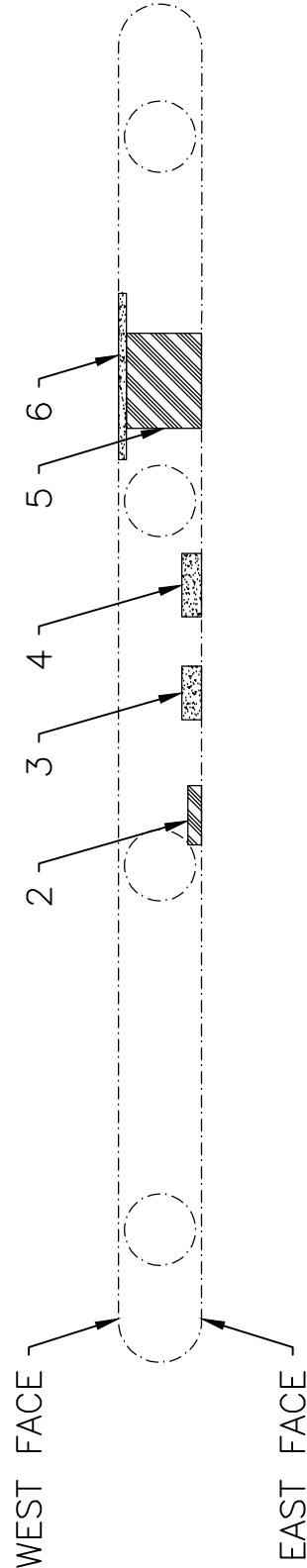
PIER 1 – EAST FACE
(WESTBOUND ROADWAY)

SCALE: ⅛" = 1’-0"



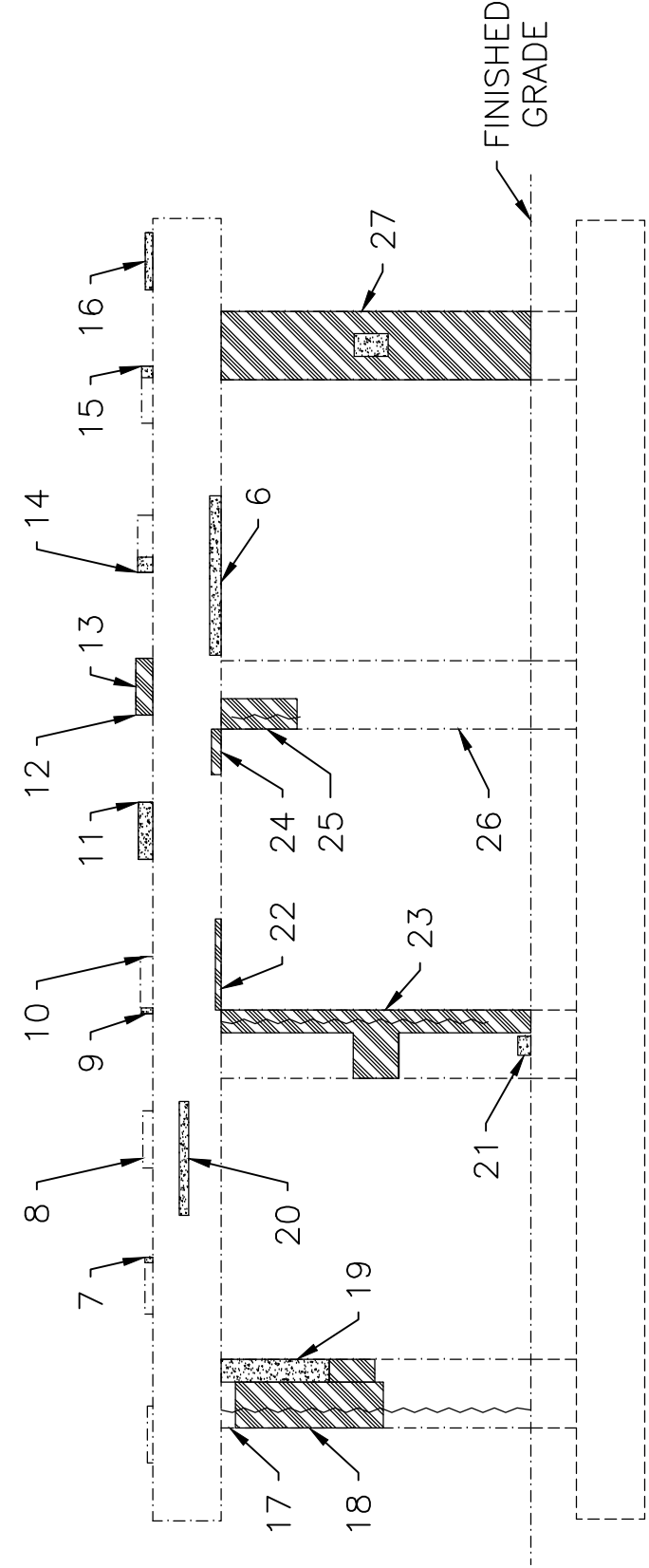
PIER 1 – TOP OF PIER CAP
(WESTBOUND ROADWAY)

SCALE: ⅛" = 1’-0"



PIER 1 – BOTTOM OF PIER CAP
(WESTBOUND ROADWAY)

SCALE: ⅛" = 1’-0"



HAVERHILL
I 495 NB/SB OVER AMESBURY LINE RD

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MA	NFA	5	12
PROJECT FILE NO.		613781	

PIER REPAIR LOCATIONS (4 OF 4)

REPAIR LOCATIONS:

1. DELAMINATED AREA, 6" LONG X 2' WIDE.
2. DELAMINATED AREA, 3'-6" LONG X 5" HIGH, EXTENDING 1' ONTO THE TOP OF THE PIER CAP.
3. SPALL, 1'-10" DIAMETER X 1-1/2" DEEP, WITH EXPOSED REBAR AND RUST STAINING.
4. DELAMINATED AREA, 7' LONG X 2'-6" WIDE, WITH TWO (2) SPALLS UP TO 1'-8" WIDE X 1' LONG X 2" DEEP & EXPOSED REBAR.
5. DELAMINATED AREA, 7' LONG X 4" HIGH, WITH CRACKING & EXTENDING FULL WIDTH ONTO THE UNDERSIDE OF THE PIER CAP.
6. DELAMINATED AREA, 6' LONG X 10" HIGH, EXTENDING 2'-6" WIDE ONTO THE UNDERSIDE OF PIER CAP & BEGINNING TO SPALL BENEATH WITH TWO (2) HORIZONTAL CRACKS MEASURING UP TO ¼" WIDE.
7. DELAMINATED AREA, 5'-6" LONG X 1'-2" HIGH.
8. SPALL, FULL LENGTH X FULL HEIGHT X UP TO 16" DEEP, AT THE EDGE OF THE BEARING WITH ONE (1) EXPOSED REBAR.
9. TWO SPALLS, 1' WIDE X 2" HIGH X 2" DEEP & 7" WIDE X 2" HIGH X 1" DEEP.
10. PEDESTAL SPALL, FULL LENGTH X 7" WIDE X FULL HEIGHT, WITH SEVEN (7) EXPOSED REBAR. UNDERMINING OF THE BEARING MASONRY PLATE UP TO 5" LONG X ½" WIDE. SPALL EXTENDS INTO THE PIER CAP, 2'-8" LONG X 4" HIGH.
11. DELAMINATED AREA ON THE NORTH FACE, 2' WIDE X 3' HIGH.
12. SPALL, 3" WIDE X 4" HIGH X 1-1/2" DEEP.
13. DELAMINATED AREA, 4' LONG X 4" HIGH.
14. FULL HEIGHT PATCH WITH DELAMINATED AREAS FOR UP TO 50% OF THE CIRCUMFERENCE. HAIRLINE CRACKS, EFFLORESCENCE & RUST STAINS.
15. DELAMINATED AREA ON THE SOUTH FACE, FULL WIDTH X 7' HIGH, EXTENDING 1' INTO THE WEST FACE.
16. SPALL AROUND THE TOP ⅓ OF THE CIRCUMFERENCE, 4" HIGH X 2" DEEP.
17. DELAMINATED AREA, FULL WIDTH X UP TO 8'-6" HIGH ON EACH FACE, WITH A SPALL, 4' HIGH X 7" WIDE X 3" DEEP, FOUR (4) EXPOSED SPIRALS & CRACKING ON THE WEST FACE.
18. DELAMINATED AREA, 1' WIDE X 8' HIGH, WITH CRACKING & EXTENDING 1' INTO THE NORTH FACE.
19. DELAMINATED AREA ON THE SOUTH FACE, 1'-2" WIDE X 2'-6" HIGH.
20. DELAMINATED AREA, 1'-9" WIDE X 4'-2" HIGH, WITH A SPALL, 3-1/2" WIDE X 2' HIGH X 1" DEEP.
21. SPALL, UP TO 1'-4" WIDE X 6" HIGH X 2" DEEP.
22. DELAMINATED AREA & SPALLING ON THE SOUTH FACE, 1' WIDE X FULL HEIGHT, EXTENDING UP TO 1'-6" INTO THE WEST FACE.
23. PEDESTAL SPALL, 1' LONG X FULL HEIGHT X 6" DEEP.
24. DELAMINATED AREA, 4' LONG X 9" HIGH, WITH RUST STAINING AND EFFLORESCENCE.
25. HORIZONTAL CRACK, 3' LONG X ⅝" WIDE, WITH RUST STAINING AND EFFLORESCENCE.
26. SPALL, FULL LENGTH X 4" HIGH X 4" DEEP, WITH EXPOSED REBAR AT THE BACK OF THE PEDESTAL.
27. SPALL, 2'-5" WIDE X 3' HIGH X 2-1/2" DEEP WITH SIX (6) EXPOSED SPIRALS & TWO (2) EXPOSED VERTICAL REBAR.
28. DELAMINATED AREA ON THE EAST FACE, FULL WIDTH X UP TO 5'-7" HIGH, EXTENDING 2' INTO THE NORTH FACE.
29. HOLLOW AREA ON THE EAST FACE, FULL WIDTH X 2' HIGH, EXTENDING FULL WIDTH INTO THE NORTH FACE.
30. SPALL, 2'-1" WIDE X 3' HIGH X 2" DEEP WITH TEN (10) EXPOSED SPIRALS, SURROUNDED BY A DELAMINATED AREA, FULL WIDTH X 4'-6" HIGH.
31. HOLLOW AREA, 1'-3" WIDE X 1' HIGH.
32. SPALL, 5" DIAMETER X 1" DEEP, WITH EXPOSED REBAR & RUST STAINING, SURROUNDED BY A 1' WIDE X 1' HIGH HOLLOW AREA.
33. HOLLOW AREA, 1" WIDE X 10" HIGH.
34. DELAMINATED AREA, FULL WIDTH X 5'-5" HIGH, WITH A SPALL, 6" WIDE X 3" HIGH X ½" DEEP WITH EXPOSED REBAR.

NOTES FOR CONTRACTOR:

IF ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED, THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE AND IMMEDIATELY NOTIFY THE DISTRICT BRIDGE ENGINEER TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED:

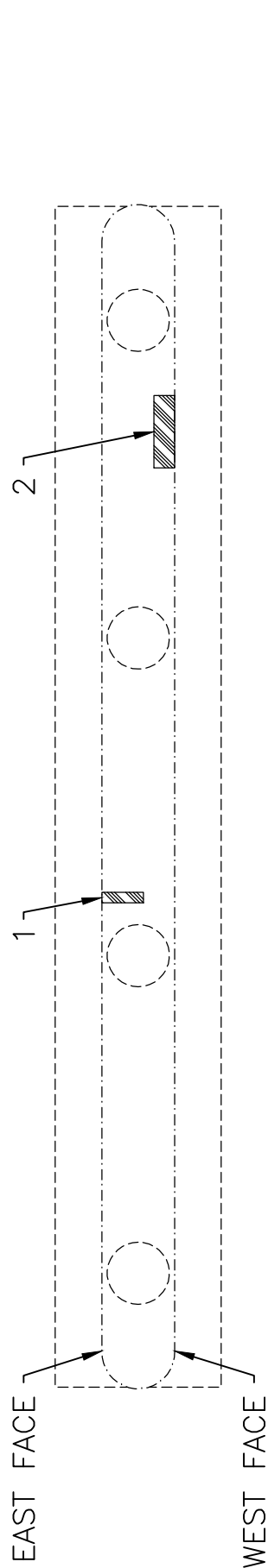
1. WHEN A MAXIMUM EXCAVATION DEPTH OF 6 INCHES IS REACHED IN ANY SUBSTRUCTURE REPAIR.
2. WHEN THE EXCAVATION ENCROACHES ON THE BEARING DEVICES.
3. WHEN MORE THAN TWO ADJACENT BEAMS ARE SUPPORTED BY THE COLUMN BAY IN PIER CAP REPAIR.
4. WHEN THE PIER CAP OVERHANG, (MEASURING FROM THE FACE OF THE COLUMN), IS MORE THAN 4 FT, AND/OR THE BEARING DEVICES ARE WITHIN THE OUTER HALF OF THE OVERHANG IN PIER END CAP REPAIR.

NOTES:

SEE SHEETS 8, 9 & 10.

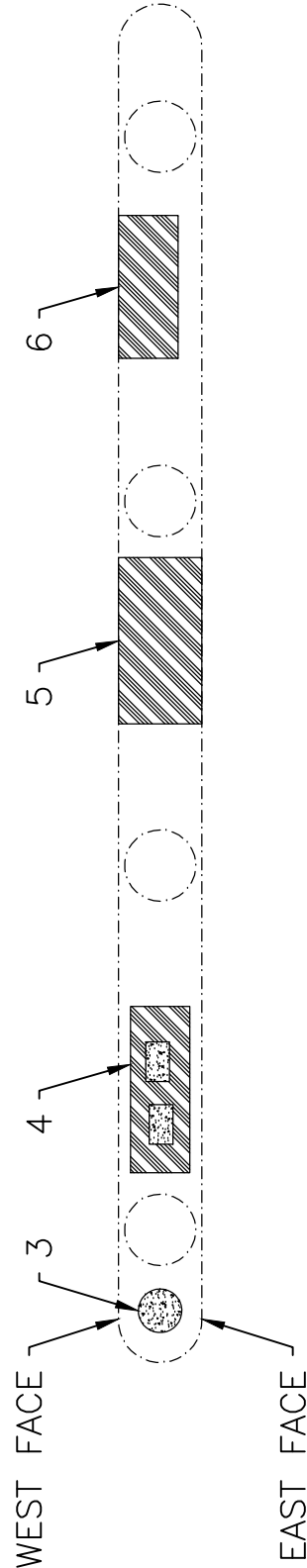
DEFICIENCY LEGEND

- SPALL
- DELAMINATION/HOLLOW AREA
- HORIZONTAL/VERTICAL CRACK



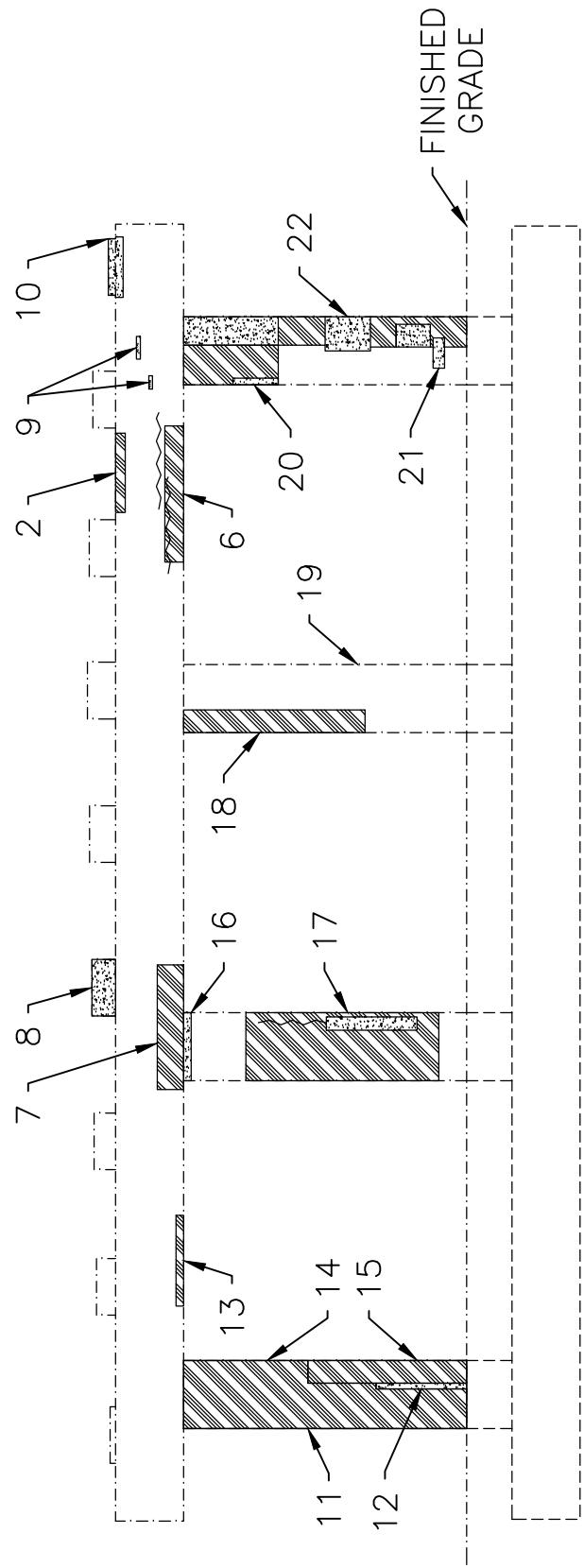
PIER 2 – TOP OF PIER CAP
(WESTBOUND ROADWAY)

SCALE: 1/8" = 1'-0"



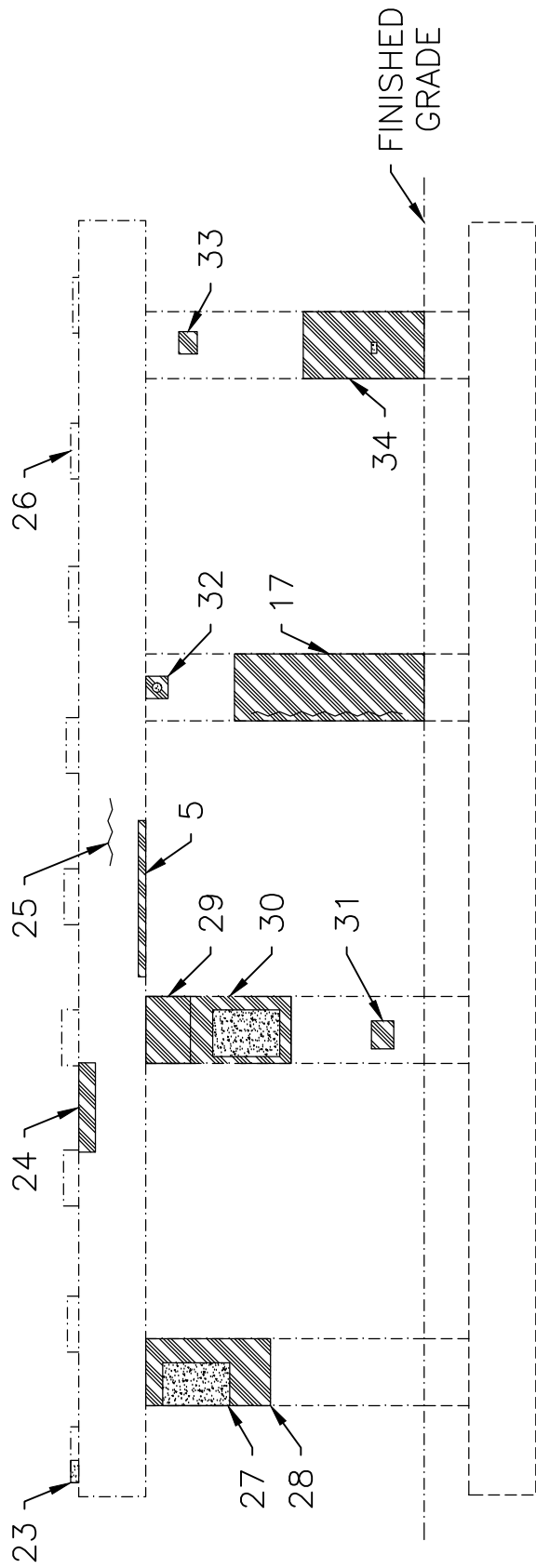
PIER 2 – BOTTOM OF PIER CAP
(WESTBOUND ROADWAY)

SCALE: 1/8" = 1'-0"



PIER 2 – WEST FACE
(WESTBOUND ROADWAY)

SCALE: 1/8" = 1'-0"



PIER 2 – EAST FACE
(WESTBOUND ROADWAY)

SCALE: 1/8" = 1'-0"

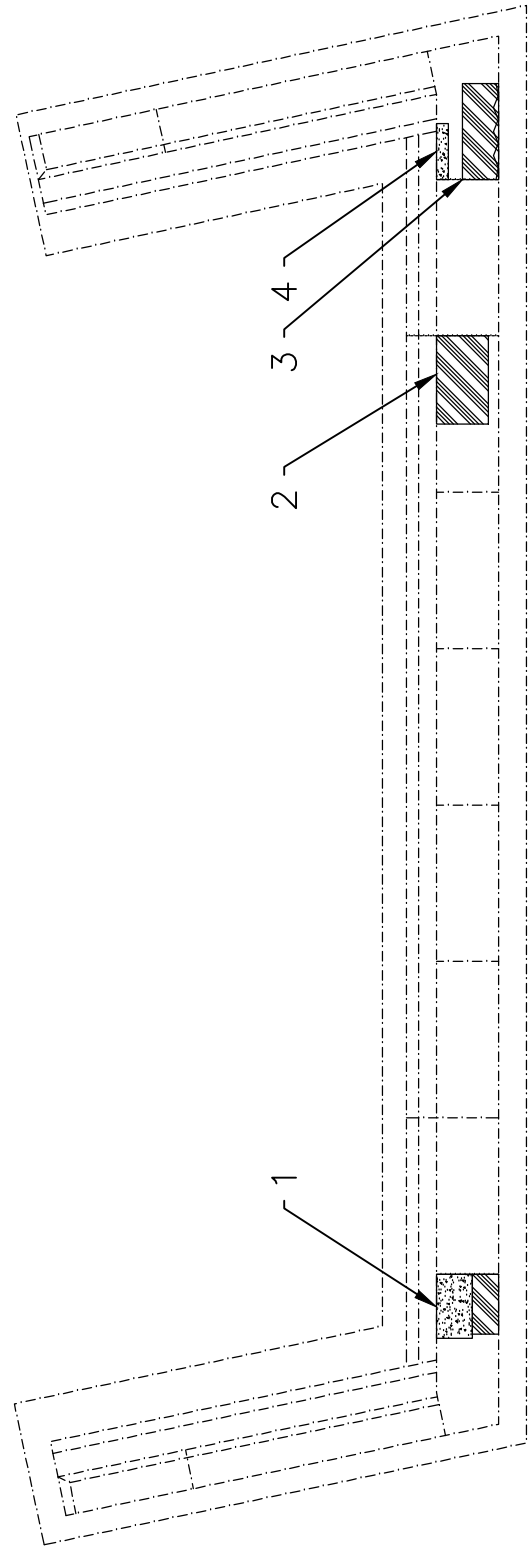
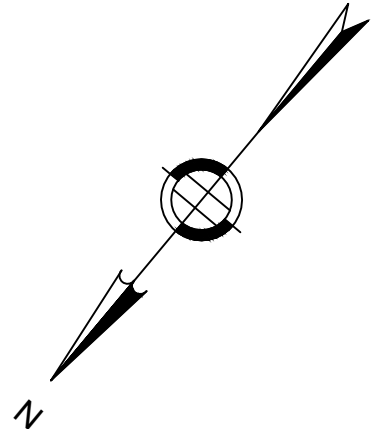
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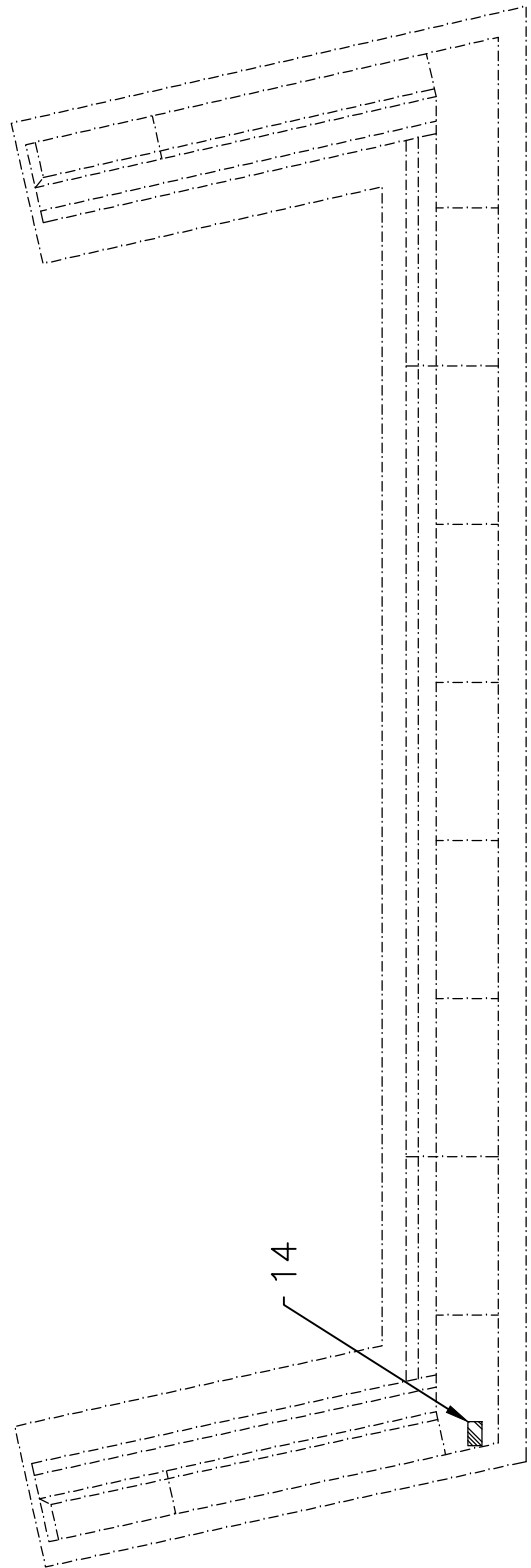
HAVERHILL
I 495 NB/SB OVER AMESBURY LINE RD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	6	12
PROJECT FILE NO. 613781			

ABUTMENT REPAIR LOCATIONS (1 OF 2)

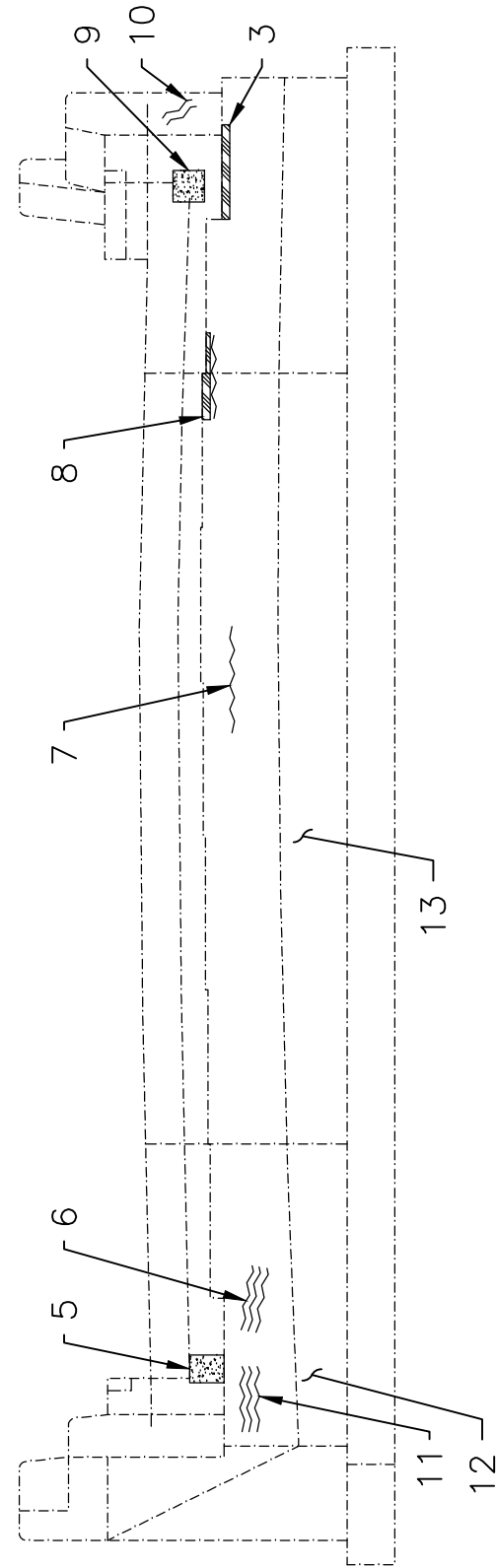


PLAN - EAST ABUTMENT
(WESTBOUND ROADWAY)

SCALE: $\frac{1''}{8' - 0''}$ 

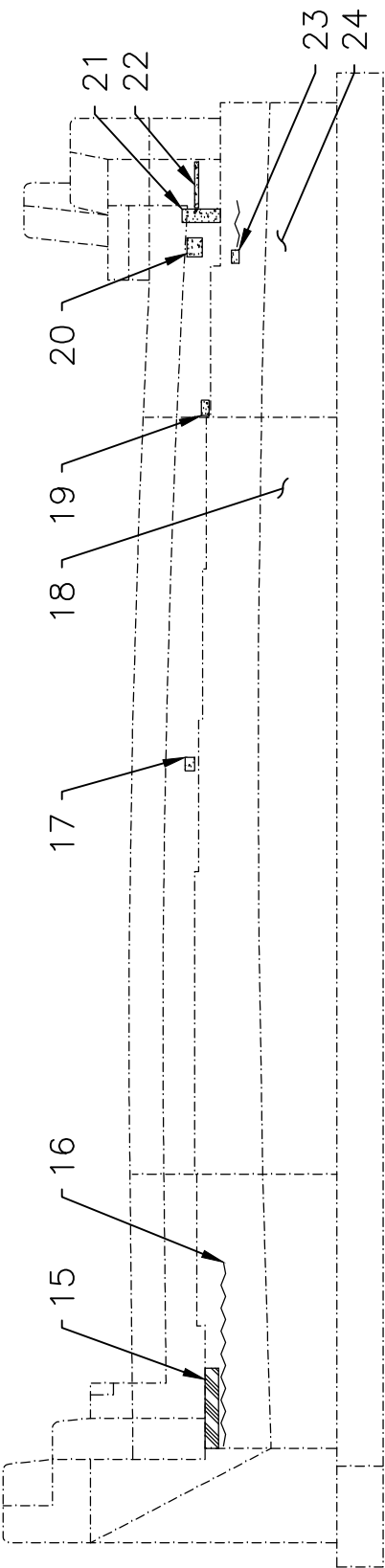
PLAN - EAST ABUTMENT
(EASTBOUND ROADWAY)

SCALE: $\frac{1"}{8} = 1'-0"$



ELEVATION – EAST ABUTMENT
(WESTBOUND ROADWAY)

SCALE: $\frac{1}{8}'' = 1'-0''$



ELEVATION – EAST ABUTMENT
(EASTBOUND ROADWAY)

SCALE: 1" = 1'-0"

REPAIR LOCATIONS:

1. SPALL, 2'-8" LONG X 1'-6" WIDE X 4" DEEP, WITH AN ADJACENT DELAMINATED AREA, 2'-6" LONG X 1' WIDE.
2. DELAMINATED AREA, 3'-8" LONG X 2'-2" WIDE.
3. DELAMINATED AREA, 4' LONG X 1'-6" WIDE, WITH A 4' LONG X 1/4" WIDE SEPARATION CRACK. DELAMINATION EXTENDS 4" INTO BREASTWALL.
4. SPALL, 2'-4" LONG X 6' WIDE X 5" DEEP.
5. SPALL, 1'-2" LONG X FULL HEIGHT X 4" DEEP.
6. AREA OF MAP CRACKING, 4' LONG X FULL HEIGHT, WITH CRACKS UP TO 1/8" WIDE.
7. HORIZONTAL CRACK, 4'-6" LONG X 1/8" WIDE.
8. DELAMINATED AREA, 3'-8" LONG X 4" WIDE, ABOVE A HORIZONTAL SEPARATION CRACK OF UP TO 3/8" WIDE.
9. SPALL, 1'-4" LONG X 1'-6" HIGH X 1-1/2" DEEP, WITH EXPOSED REBAR.
10. MAP CRACKING MEASURING UP TO 1/8" WIDE WITH HEAVY EFFLORESCENCE.
11. AREA OF MAP CRACKING WITH EFFLORESCENCE AND RUST STAINS.
12. AREA OF DEPRESSION IN THE STONES, 2' LONG X 4' HIGH X 2" DEEP.
13. ONE (1) MISSING STONE IN THE SLOPE PAVING.
14. DELAMINATED AREA, 1' LONG X 7" WIDE, WITH A LONGITUDINAL CRACK UP TO 1/8" WIDE.
15. DELAMINATED AREA, 3'-6" LONG X 7" HIGH.
16. HORIZONTAL CRACK, 8' LONG X 3/4" WIDE, WITH RUST AND EFFLORESCENCE.
17. SPALL, 7" LONG X 5" HIGH X 3/4" DEEP.
18. AREA OF SETTLEMENT IN THE STONES, 1' LONG X 7' HIGH X 2" DEEP.
19. SPALL, 8' LONG X 4" HIGH X 1/2" DEEP.
20. SPALL, 10' LONG X 8" HIGH X FULL DEPTH.
21. SPALL, 7" LONG X 1'-8" HIGH X UP TO 4" DEEP.
22. SPALL, 2' LONG X 2" HIGH X 3/4" DEEP.
23. SPALL, 7' LONG X 4" HIGH X 1/2" DEEP, WITH ADJACENT 2' LONG HAIRLINE CRACK.
24. AREA OF SETTLEMENT IN THE STONES, 6' LONG X 6' HIGH X 4" DEEP.

DEFICIENCY LEGEND



SPALL



DEFAMINATION/HOLOW AREA



HORIZONTAL/VERTICAL CRACK

NOTES:

SEE SHEETS 8 & 10.

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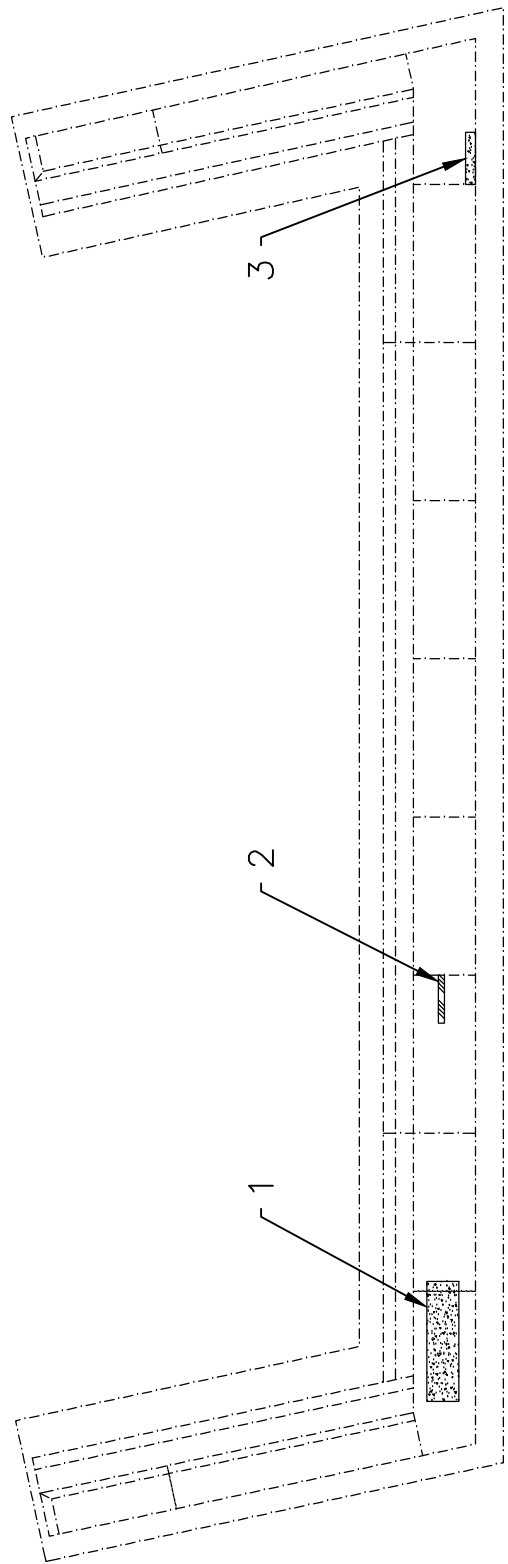
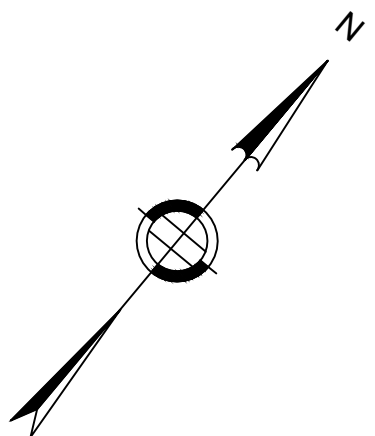
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SHEET 6 OF 12 SHEETS BRIDGE NO. H-12-038 (*)

**HAVERHILL
I 495 NB/SB OVER AMESBURY LINE RD**

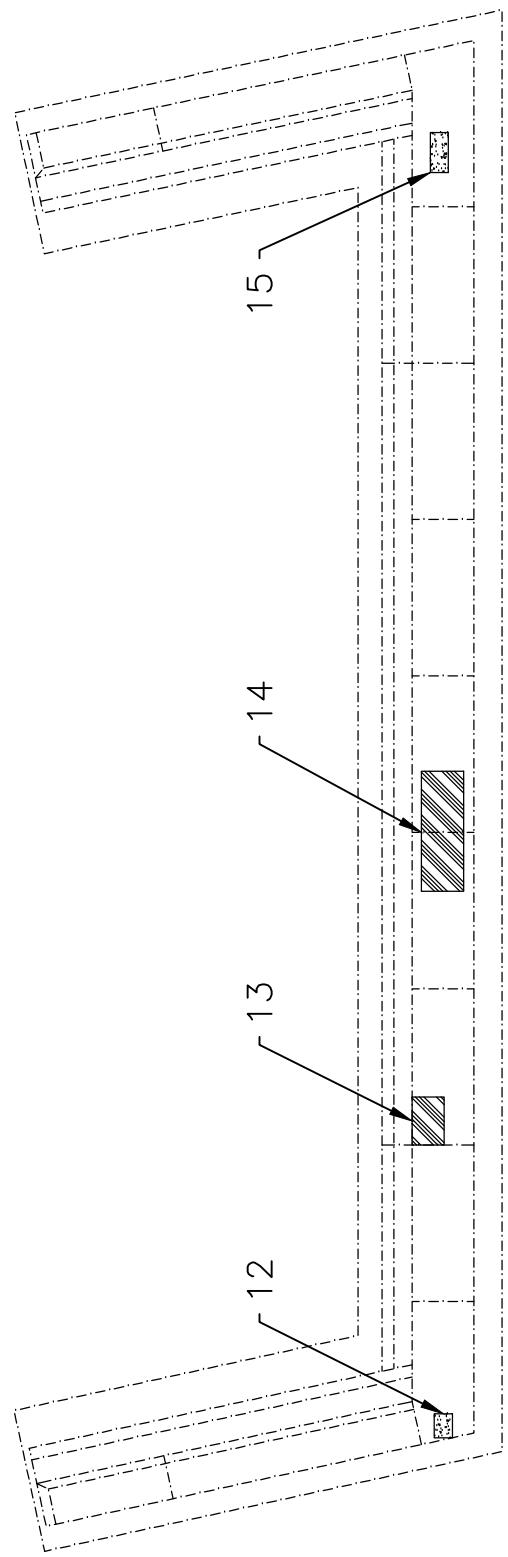
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MA	NFA	7	12
PROJECT FILE NO. 613781			

ABUTMENT REPAIR LOCATIONS (2 OF 2)



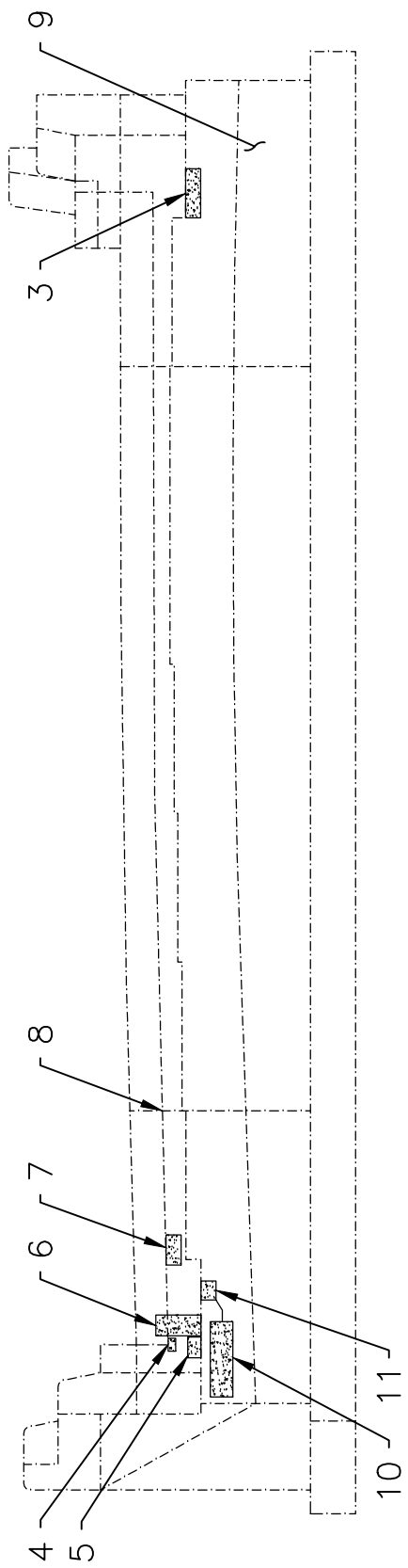
PLAN - WEST ABUTMENT (EASTBOUND ROADWAY)

SCALE: $\frac{1"}{8} = 1'-0"$



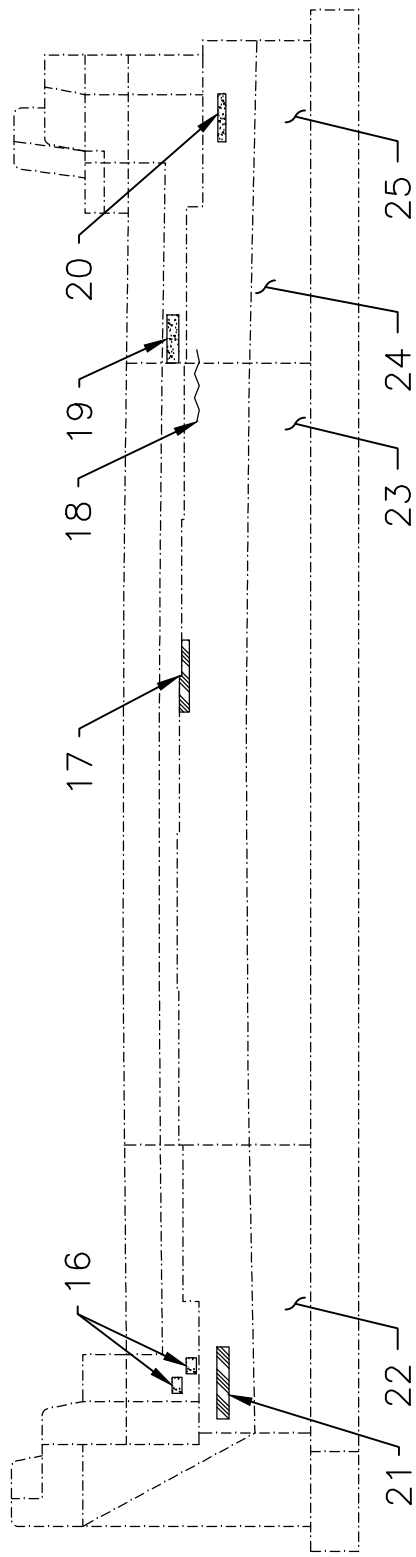
PLAN – WEST ABUTMENT
(WESTBOUND ROADWAY)

SCALE: $\frac{1}{8}'' = 1'-0''$



ELEVATION – WEST ABUTMENT
(EASTBOUND ROADWAY)

SCALE: 1" = 1'-0"



ELEVATION – WEST ABUTMENT
(WESTBOUND ROADWAY)

SCALE: 1" = 1'-0"

REPAIR LOCATIONS:

1. SPALL, 5' LONG X 1'-4" WIDE X 3'-1/2" DEEP, FILLED WITH DEBRIS.
2. DELAMINATED AREA, 2' LONG X 3" DEEP.
3. SPALL, 2'-2" LONG X 8" HIGH X 2" DEEP, EXTENDING 5" INTO THE TOP OF THE BRIDGE SEAT.
4. SPALL, 7' LONG X 4" HIGH X 2" DEEP.
5. SPALL, 11" LONG X 7" HIGH X 2" DEEP.
6. SPALL, 11" LONG X 2' HIGH X 5" DEEP, WITH EXPOSED REBAR.
7. SPALL, 1'-4" LONG X 8" HIGH X 4" DEEP, WITH EXPOSED & DEBONDED REBAR (HIDDEN BY END DIAPHRAGM).
8. MISSING SEAL AT CONSTRUCTION JOINT.
9. AREA OF SETTLEMENT IN THE STONES, 2'-1/2" DEEP.
10. SPALL, 3'-2" LONG X 1' HIGH X UP TO 3" DEEP (CRACK CONNECTS TO NEIGHBORING SPALL).
11. SPALL, 10" LONG X 8" HIGH X 2" DEEP (CRACK CONNECTS TO NEIGHBORING SPALL).
12. SPALL, 1' LONG X 9" WIDE X 3" DEEP.
13. DELAMINATED AREA, 2' LONG X 1'-4" WIDE.
14. DELAMINATED AREA, 5' LONG X 1'-9" WIDE.
15. SPALL, 1'-8" LONG X 9" WIDE X 3" DEEP, FILLED WITH DEBRIS.
16. TWO SPALLS, 8" LONG X 5" HIGH X 3/4" DEEP EACH.
17. DELAMINATED AREA, 3' LONG X 5" HIGH, WITH CRACKING.
18. HORIZONTAL CRACK, 2'-8" LONG X UP TO 1/8" WIDE.
19. SPALL, 2' LONG X 6" HIGH X 1" DEEP.
20. SPALL, 2' LONG X 4" HIGH X 1/2" DEEP, WITH EXPOSED REBAR.
21. DELAMINATED AREA, 3' LONG X 6" HIGH.
22. AREA OF DEPRESSION IN THE STONES, 1'-4" LONG X 4" HIGH X 1" DEEP, AT COLUMN 4.
23. AREA OF DEPRESSION IN THE STONES, 1-4" LONG X 3" HIGH X 2" DEEP, AT COLUMN 2.
24. ONE (1) MISSING STONE IN THE SLOPE PAVING.
25. AREA OF DEPRESSION IN THE STONES, 1' LONG X 1'-9" HIGH X 3/4" DEEP.

NOTES:

SEE SHEETS 8 & 10.

DEFICIENCY LEGEND

SPALL

DELAMINATION/HOLLOW AREA

HORIZONTAL/VERTICAL CRACK

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DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE!	

SUBSTRUCTURE CONCRETE REPAIR NOTES:

- SUBSTRUCTURE REPAIRS SHALL CONSIST OF REMOVING DETERIORATED CONCRETE, PREPARING THE REPAIR SURFACE, FORMING WHERE REQUIRED, PLACING AND FINISHING NEW CONCRETE OR CEMENTITIOUS MORTAR. THE SCOPE OF REPAIRS MAY ALSO REQUIRE APPLYING ELASTOMERIC COATING (ITEM 964.3) TO THE REPAIRED SUBSTRUCTURE UNITS. THE LIMITS FOR THE ELASTOMERIC COATING WILL BE ESTABLISHED BY THE ENGINEER.
- THE REPAIR IS DESIGNATED AS A PARTIAL DEPTH REPAIR WHEN THE EXCAVATED DEPTH TO SOUND CONCRETE EXCEEDS 2" FROM THE FACE OF THE CONCRETE OR REINFORCING STEEL IS ENCOUNTERED. SEE PARTIAL DEPTH REPAIR DETAIL ON SHEET 10.
- THE REPAIR IS DESIGNATED AS SHALLOW DEPTH WHEN THE DEPTH OF SOUND CONCRETE IS REACHED AT OR LESS THAN 2" FROM THE FACE OF THE CONCRETE AND REINFORCING STEEL IS NOT ENCOUNTERED.
- 5000 PSI, $\frac{3}{4}$ INCH, 710 HP CEMENT CONCRETE (ITEM 905.2) SHALL BE USED FOR ALL PARTIAL DEPTH REPAIRS. ALL SHALLOW DEPTH REPAIRS SHALL BE PATCHED WITH CEMENTITIOUS MORTAR FOR PATCHING (ITEM 909.2).
- THE CONTRACTOR SHALL ESTABLISH LIMITS OF REPAIRS AT THE DIRECTION OF THE ENGINEER. THE EXTENT, LOCATION AND REPAIR TYPE (PARTIAL DEPTH REPAIR OR SHALLOW DEPTH REPAIR) ARE TO BE FIELD VERIFIED AND APPROVED BY THE ENGINEER AFTER THE CONTRACTOR HAS SOUNDED AND MARKED OUT THE REPAIR AREA. THE AREAS OF REPAIR SHALL BE MADE APPROXIMATELY RECTANGULAR WITH THE SIDES GENERALLY PERPENDICULAR TO THE SURFACE BEING REPAIRED.
- THE DETERIORATED CONCRETE SHALL BE REMOVED AS REQUIRED TO PROVIDE GOOD SOUND CONCRETE ON WHICH NEW CONCRETE CAN BE PLACED AND SATISFACTORILY BONDED TO UNDAMAGED OR UNDISTURBED REINFORCEMENT.
- SAW CUT ALONG NEAT LINES AROUND REPAIR AREA PRIOR TO CONCRETE EXCAVATION. USE SAW CUT DEPTH OF $\frac{3}{4}$ ", OR AS REQUIRED TO AVOID CUTTING REINFORCING STEEL.
- SUBSTRUCTURE REPAIR SHOULD INCLUDE THE REMOVAL OF ALL DETERIORATED, LOOSE, SPALLED, AND HOLLOW SOUNDING CONCRETE. THE DETERIORATED CONCRETE SHALL BE REMOVED FROM WITHIN THE REPAIR AREAS TO THE DEPTH OF SOUND CONCRETE. WHEN REINFORCING STEEL IS UNCOVERED, CARE SHALL BE TAKEN SO AS NOT TO DAMAGE THE STEEL OR ITS BOND TO THE SURROUNDING CONCRETE. MAXIMUM 25 LB. HAMMERS WITH CHISEL POINTS SHALL BE USED FOR CONCRETE REMOVAL. MAXIMUM 15 LB. HAMMERS SHALL BE USED ONCE REINFORCING STEEL IS EXPOSED.
- THE CONTRACTOR SHALL STOP REMOVING DETERIORATED CONCRETE WHEN A MAXIMUM DEPTH OF 6 INCHES IS REACHED. THE DISTRICT BRIDGE ENGINEER SHALL BE IMMEDIATELY NOTIFIED TO DETERMINE IF THE EXCAVATION CAN BE CONTINUED.
- IF REINFORCING STEEL IS EXPOSED THEN CLEAN BY MECHANICAL CLEANING OR HIGH PRESSURE WASHING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. WHERE ACTIVE CORROSION HAS OCCURRED THAT WOULD INHIBIT BONDING, CLEAN STEEL USING ABRAISVE BLASTING METHODS ACCEPTABLE TO THE ENGINEER, THEN PAINT WITH A ZINC-RICH PRIMER CONFORMING TO MASSDOT STANDARD SPECIFICATION NO. M7.04.11.
- AFTER REMOVAL AND EDGE PREPARATIONS ARE COMPLETE, REMOVE BOND INHIBITING MATERIALS (DIRT, GREASE, LOOSELY BONDED AGGREGATE) BY ABRASIVE BLASTING OR HIGH PRESSURE WATER BLASTING WITH WATER THAT CONTAINS NO DETERGENTS OR BOND INHIBITING CHEMICALS. CHECK THE CONCRETE SURFACES AFTER CLEANING TO ENSURE THAT SURFACE IS FREE FROM ADDITIONAL LOOSE AGGREGATE OR THAT ADDITIONAL DELAMINATIONS ARE NOT PRESENT.
- EXISTING REINFORCING BARS, WHICH ARE BROKEN OR HAVE LOST 25% OR MORE OF THEIR CROSS SECTIONAL AREA, OR AS ORDERED REPAIRED BY THE ENGINEER, SHALL BE REPAIRED BY SPLICING IN NEW REINFORCING BARS OF THE SAME DIAMETER. SEE EXISTING BRIDGE PLANS FOR BAR SIZES. SPLICE LAPS ARE TO BE AT LEAST 32 BAR DIAMETERS. MISSING OR DETERIORATED REINFORCING STEEL SHALL BE REPLACED AS DIRECTED BY THE ENGINEER AND WILL BE PAID UNDER ITEM 910.
- ALL SURFACES WHERE NEW CONCRETE WILL BE BONDED TO EXISTING CONCRETE SHALL BE PRE-WETTED WITH CLEAN WATER TO SATURATED SURFACE (SSD) CONDITION (WITH NO STANDING WATER) IMMEDIATELY PRIOR TO THE CONCRETE PLACEMENT. IF INDICATED ON THE PLANS OR DIRECTED BY THE ENGINEER, APPLY EPOXY BONDING COMPOUND SUITABLE FOR BONDING FRESH CONCRETE TO HARDENED CONCRETE FOR LOAD BEARING APPLICATIONS TO INTERFACE BETWEEN NEW AND EXISTING CONCRETE. THE EPOXY BONDING COMPOUND SHALL CONFORM TO AASHTO M 235 TYPE V, GRADE AND CLASS SHALL BE SPECIFIED FOR EACH APPLICATION AND SHALL BE APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND THE SPECIAL PROVISIONS. THE COST ASSOCIATED WITH THIS WORK WILL BE INCIDENTAL TO ITEM 905.2 AND ITEM 909.2.
- IN GENERAL, EPOXY BONDING COMPOUND SHALL BE USED FOR ALL SHALLOW DEPTH REPAIR AND HORIZONTAL SURFACES OF PARTIAL DEPTH REPAIR, SUCH AS TOP EXCAVATED SURFACES OF PIER CAP AND BEAM SEAT.
- IF EPOXY BONDING COMPOUND IS USED, THE FORMS SHALL BE INSTALLED AT LEAST ONCE PRIOR TO APPLICATION OF THE EPOXY BONDING COMPOUND IN ORDER TO ENSURE FORMS CAN BE REINSTALLED AND FILLED BEFORE THE EPOXY BONDING COMPOUND HARDENS.
- IF DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL INSTALL CATHODIC PROTECTION ANODES TO THE LIMITS DETERMINED BY THE ENGINEER. ANODE, INSTALLATIONS & TESTING SHOULD BE PAID UNDER ITEM 910.01.
- ALL CONCRETE SURFACES ONCE CURED, SHALL BE RUBBED TO PRODUCE A SMOOTH FINISH TO MATCH EXISTING SURFACES. WET CURING IN ACCORDANCE WITH THE SUPPLEMENTAL SPECIFICATIONS FOR HIGHWAYS AND BRIDGES SECTION 901.65, SUB-SECTION A-2 WILL BE REQUIRED.
- CONCRETE PIER CAPS, COLUMNS, ABUTMENT SEATS, AND EXPOSED SECTIONS OF ABUTMENT STEMS SHALL (AS DETERMINED BY THE ENGINEER) RECEIVE A CONCRETE PENETRANT/SEALER OR ELASTOMERIC PROTECTIVE COATING (ITEM 964.3), 30 DAYS AFTER ALL REPAIRS HAVE BEEN MADE. CONCRETE PENETRANT/SEALER IS INCIDENTAL TO ITEM 905.2.
- THE REPAIR OF PIER CAP SHALL BE COMPLETED PRIOR TO THE START OF ANY COLUMN REPAIR, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- THE CONTRACTOR SHALL FOLLOW THE CONCRETE PIER CAPS AND COLUMNS REPAIR SEQUENCE OUTLINED ON THE PLANS. THE CONTRACTOR WILL HAVE THE OPTION TO SUBMIT AN ALTERNATE REPAIR PROCEDURE FOR REVIEW AND APPROVAL. THE CONTRACTOR MAY ALSO USE TEMPORARY SHORING TO COMPLETE THE REPAIRS IN ONE STAGE. IF SHORING IS PROPOSED TO ACCOMMODATE THE CONTRACTOR'S MEANS AND METHODS OR REPAIR SCHEDULE, NO ADDITIONAL COMPENSATION WILL BE ALLOWED. THIS SHALL REQUIRE APPROVAL OF THE ENGINEER AND THE SHORING WILL BE CONSIDERED INCIDENTAL TO THE REPAIR WORK.
- THE REPAIR PHASING AND SEQUENCE MAY BE MODIFIED BY THE ENGINEER SO THAT THE SECTIONS WITH WORSE DETERIORATION ARE REPAIRED FIRST.
- THE SERVICE LOAD (DEAD LOAD + LIVE LOAD) REACTION AT EACH BEARING SHALL BE EQUAL TO 80 KIPS. IF LOADING CONDITIONS ARE TO BE MODIFIED DURING CONSTRUCTION, OR ADDITIONAL CONSTRUCTION LOADS APPLIED, CALCULATIONS OF THE REACTIONS FOR JACKING AND/SHORING SHALL BE SUBMITTED BY THE CONTRACTOR FOR REVIEW.

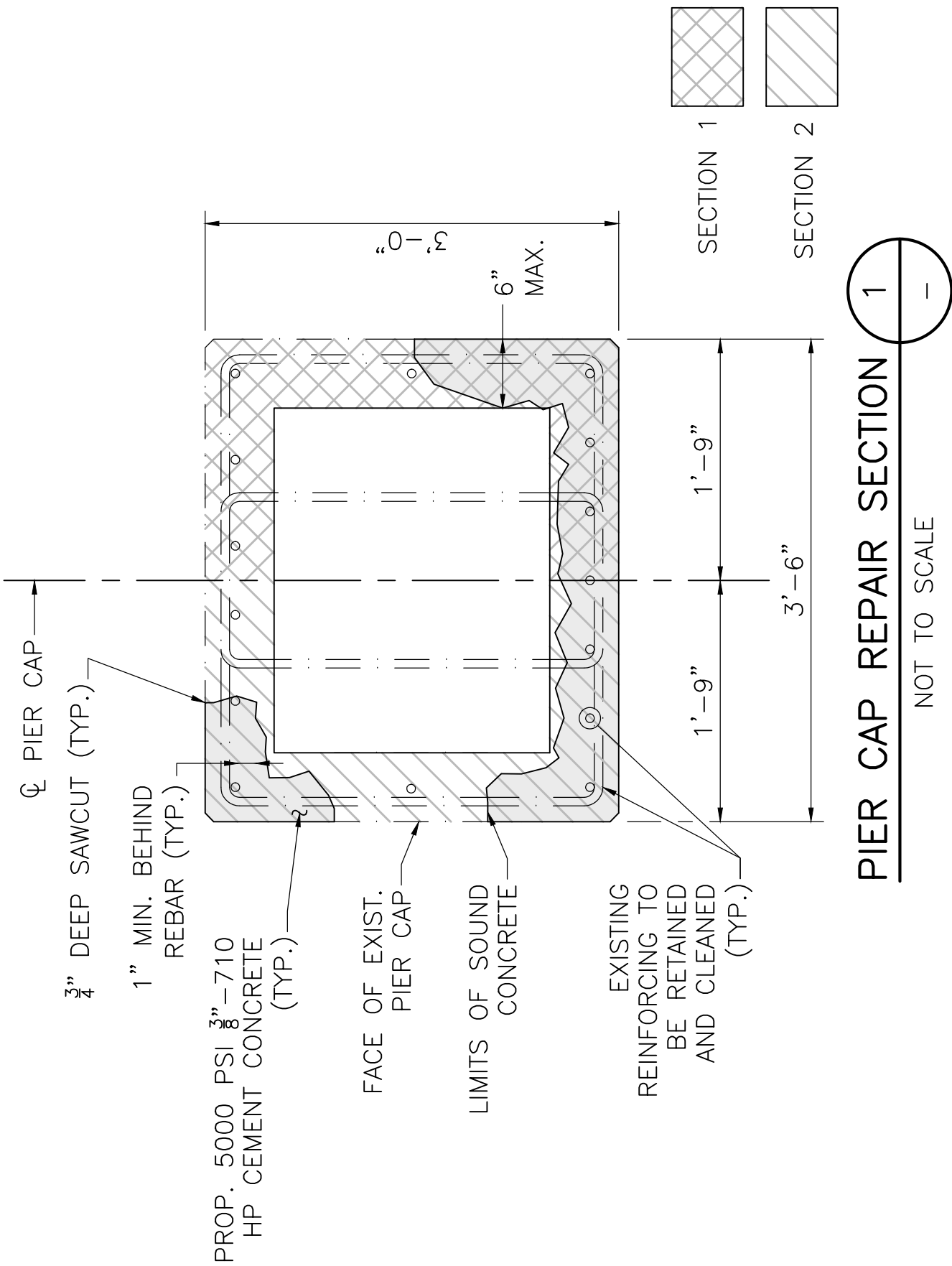
NOTES:

- CONCRETE ELEMENTS ARE DIVIDED INTO SEGMENTS. WORK TO BE PERFORMED ON SECTIONS AS SHOWN.
- THE CONTRACTOR SHALL PROVIDE A TEMPORARY SHORING SYSTEM TO SUPPORT THE PIER CAP DEAD AND LIVE LOADS IF THE EXCAVATION LIMITS ARE TO BE EXTENDED PER EVALUATION OF THE DISTRICT BRIDGE ENGINEER.
- THE CONTRACTOR SHALL PROVIDE A TEMPORARY SHORING SYSTEM TO SUPPORT THE PIER CAP DEAD AND LIVE LOADS IF THE EXCAVATION IS WITHIN 6" OF THE BEARING.
- CONTRACTOR SHALL STAGE THE WORK SO THAT THE SECTIONS IN POOREST CONDITION ARE REPAIRED FIRST, AS APPROVED BY THE ENGINEER.
- CONTRACTOR SHALL NOT WORK ON ADJACENT SECTIONS SIMULTANEOUSLY UNLESS APPROVED BY THE DISTRICT BRIDGE ENGINEER.
- CONTRACTOR SHALL WAIT 72 HOURS AFTER COMPLETING REPAIRS TO A SECTION BEFORE BEGINNING REPAIRS TO ADJACENT SECTIONS, HOWEVER, HE/SHE MAY PERFORM WORK ON OTHER BRIDGE ELEMENTS.
- CONTRACTOR SHALL STOP REMOVING DETERIORATING CONCRETE WHEN A MAXIMUM DEPTH OF 6 IN. IS REACHED. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED IF MORE REMOVAL SEEMS NECESSARY ON THE BRIDGE SECTION.
- EXISTING REINFORCEMENT NOT SHOWN.
- THE CONTRACTOR SHALL SUBMIT AN ALTERNATE REPAIR SEQUENCE FOR APPROVAL OF THE ENGINEER WHEN TEMPORARY SHORING IS UTILIZED DURING REPAIRS.
- MAXIMUM SEGMENT LENGTH SHALL BE LIMITED TO 8 FEET.

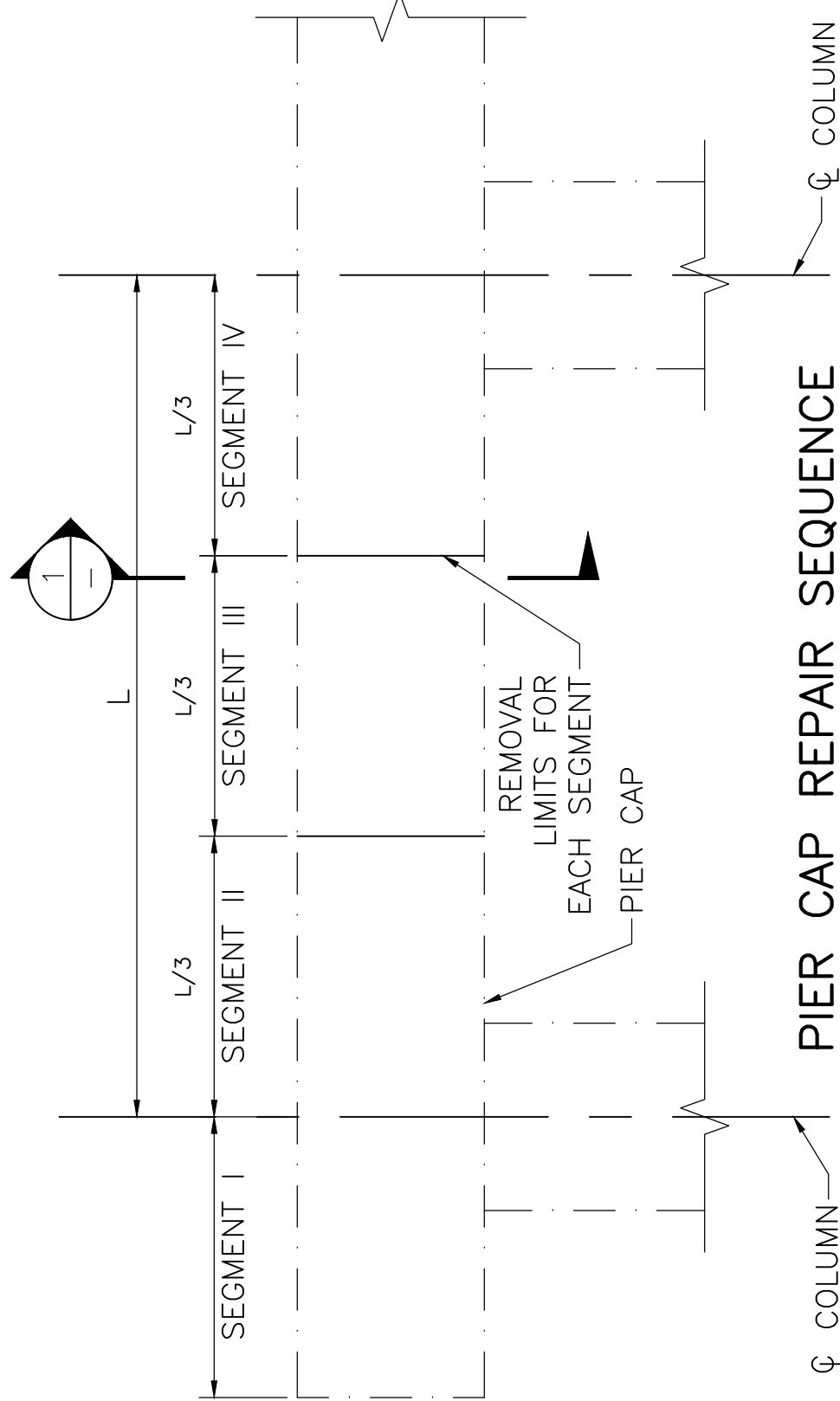
HAVERHILL
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STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	8	12
PROJECT FILE NO. 813781			

PIER CAP REPAIR DETAILS



PIER CAP REPAIR SEQUENCE

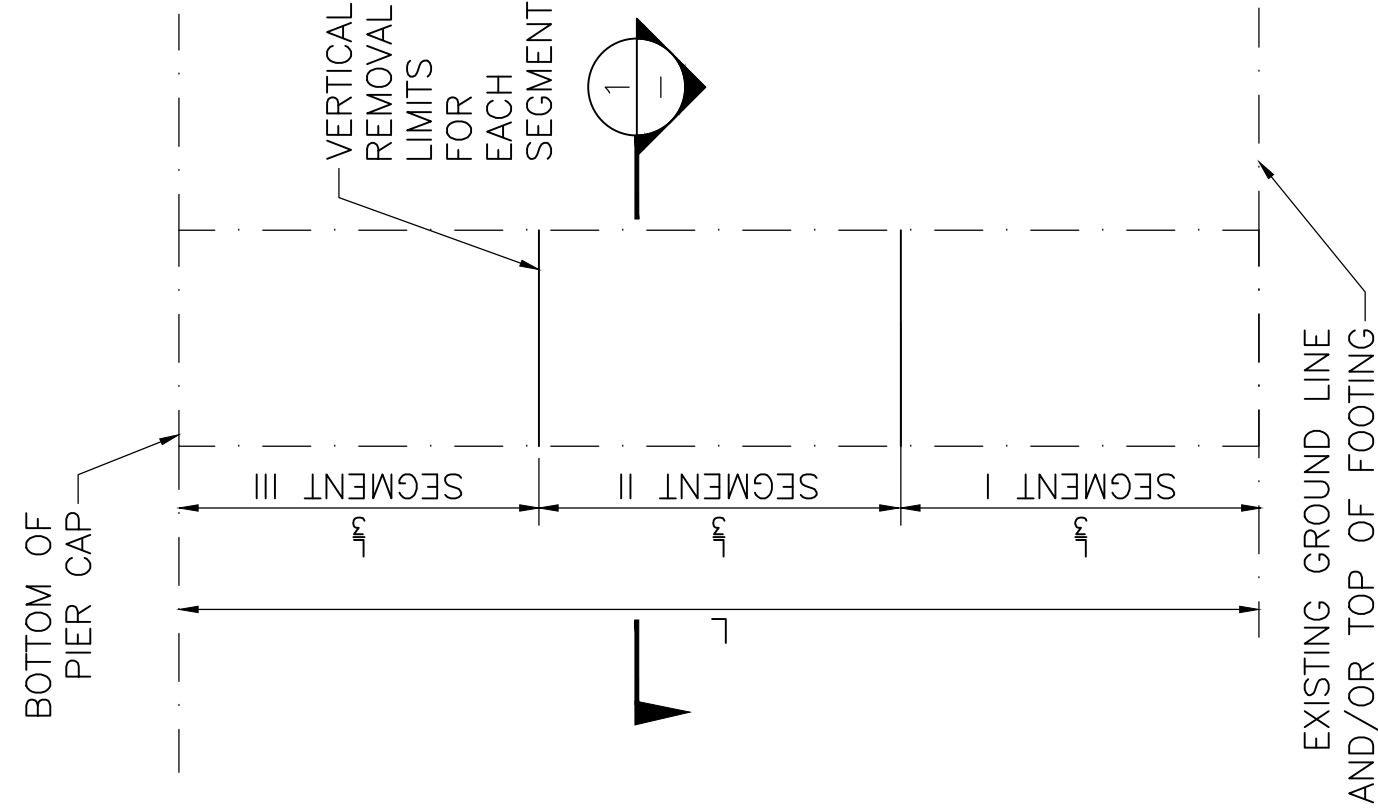


PIER CAP REPAIR SECTION 1

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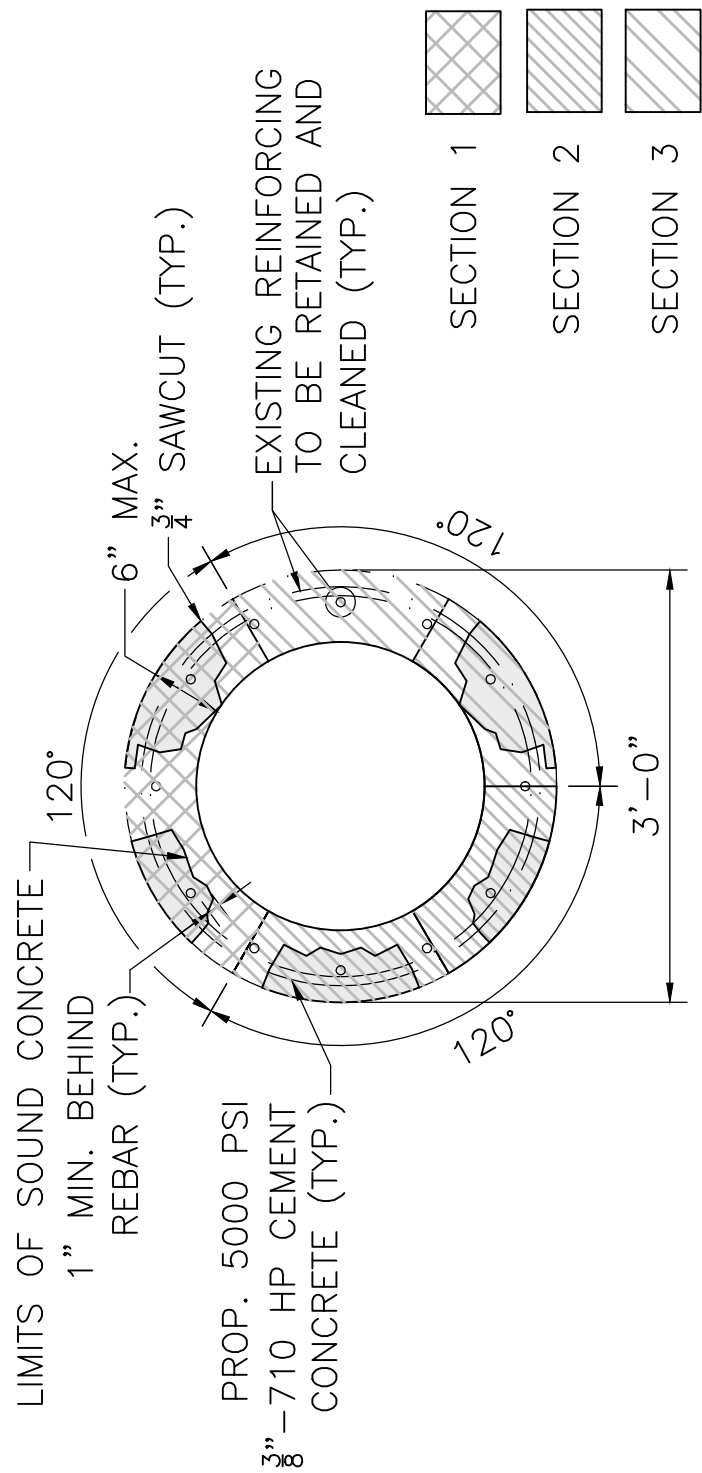
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PIER COLUMN REPAIR SEQUENCE

NOT TO SCALE



COLUMN REPAIR SECTION 1

NOT TO SCALE

NOTES:

1. CONCRETE ELEMENTS ARE DIVIDED INTO SEGMENTS. WORK TO BE PERFORMED ON SECTIONS AS DEFINED IN THE ABOVE DETAILS.
2. THE CONTRACTOR SHALL PROVIDE A TEMPORARY SHORING SYSTEM TO SUPPORT THE PIER CAP DEAD AND LIVE LOADS IF THE EXCAVATION LIMITS ARE TO BE EXTENDED PER EVALUATION OF THE DISTRICT BRIDGE ENGINEER.
3. NOTE CONTRACTOR SHALL STAGE THE WORK SO THAT THE WORSE SECTIONS ARE REPAIRED FIRST.
4. CONTRACTOR SHALL ONLY WORK ON ONE SECTION OF A COLUMN AT A TIME UNLESS APPROVED OTHERWISE BY THE DISTRICT BRIDGE ENGINEER.
5. CONTRACTOR SHALL NOT WORK ON MULTIPLE COLUMN FACES WHICH ARE ON THE SAME SIDE OF THE PIER SIMULTANEOUSLY.
6. CONTRACTOR SHALL WAIT 72 HOURS AFTER COMPLETING REPAIRS TO A SECTION BEFORE CHIPPING ADJACENT SECTIONS, HOWEVER, HE/SHE MAY PERFORM WORK ON OTHER BRIDGE ELEMENTS.
7. CONTRACTOR SHALL STOP REMOVING DETERIORATING CONCRETE WHEN A MAXIMUM DEPTH OF 6 IN. IS REACHED. THE ENGINEER SHALL BE IMMEDIATELY NOTIFIED IF MORE REMOVAL SEEMS NECESSARY.
8. EXISTING REINFORCEMENT NOT SHOWN.
9. THE CONTRACTOR SHALL SUBMIT AN ALTERNATE REPAIR SEQUENCE FOR APPROVAL OF THE ENGINEER WHEN TEMPORARY SHORING IS UTILIZED DURING REPAIRS.

HAVERHILL

I 495 NB/SB OVER AMESBURY LINE RD

STATE	FED AID PROJ NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	9	12
PROJECT FILE NO.		613781	

PIER COLUMN REPAIR DETAILS

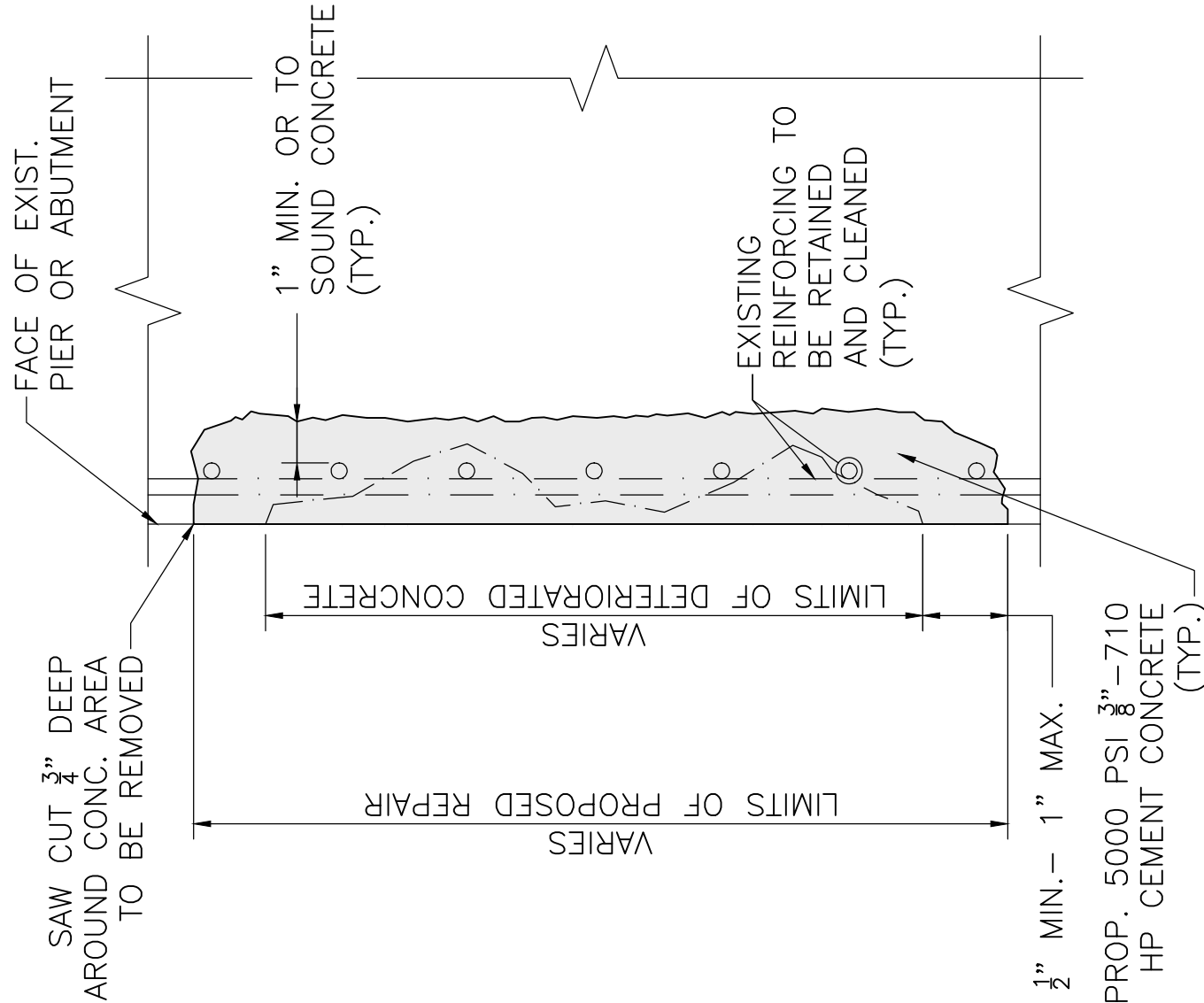
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2WY
2X0

MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
	USE ONLY PRINTS OF LATEST DATE

HAVERHILL
I 495 NB/SB OVER AMESBURY LINE RD

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	10	12
PROJECT FILE NO. 613781			

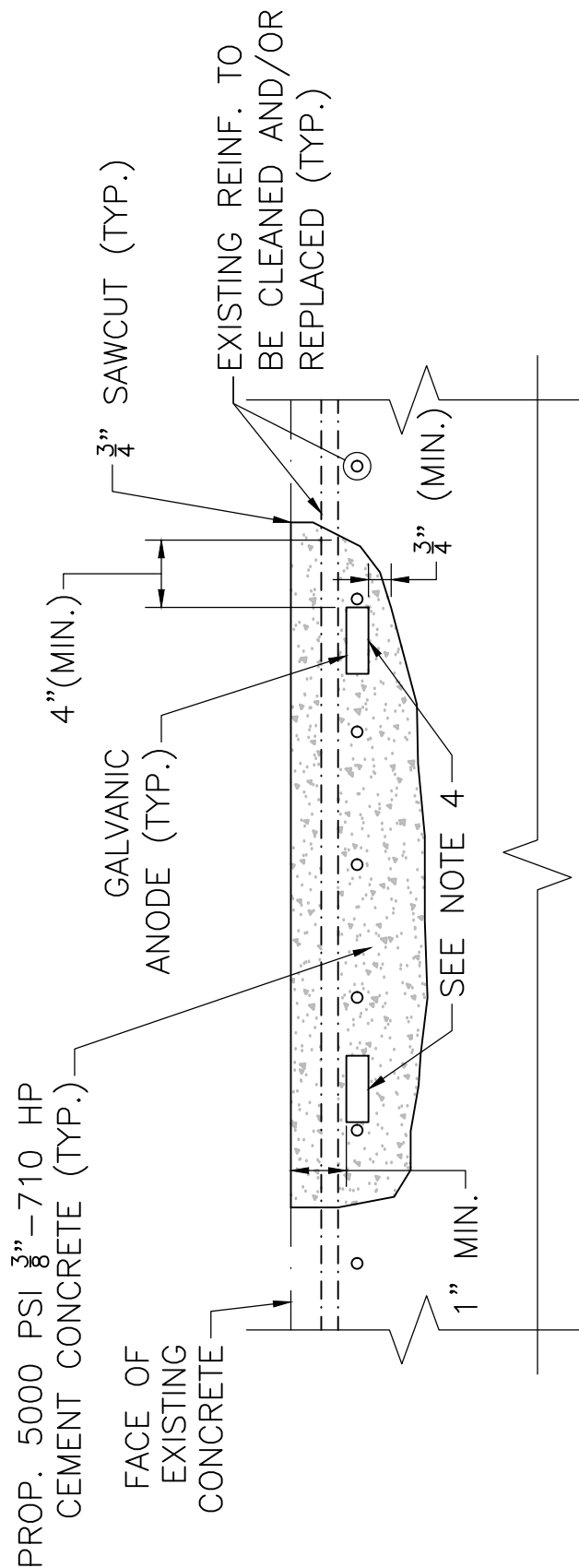
GALVANIC ANODE INSTALLATION & PARTIAL DEPTH REPAIR DETAILS



NOTE: IF THERE IS LESS THAN 1½" CONCRETE COVER, THEN THE CONTRACTOR SHALL BUILD OUT THE FORM TO ENSURE A MINIMUM OF 1½" COVER.

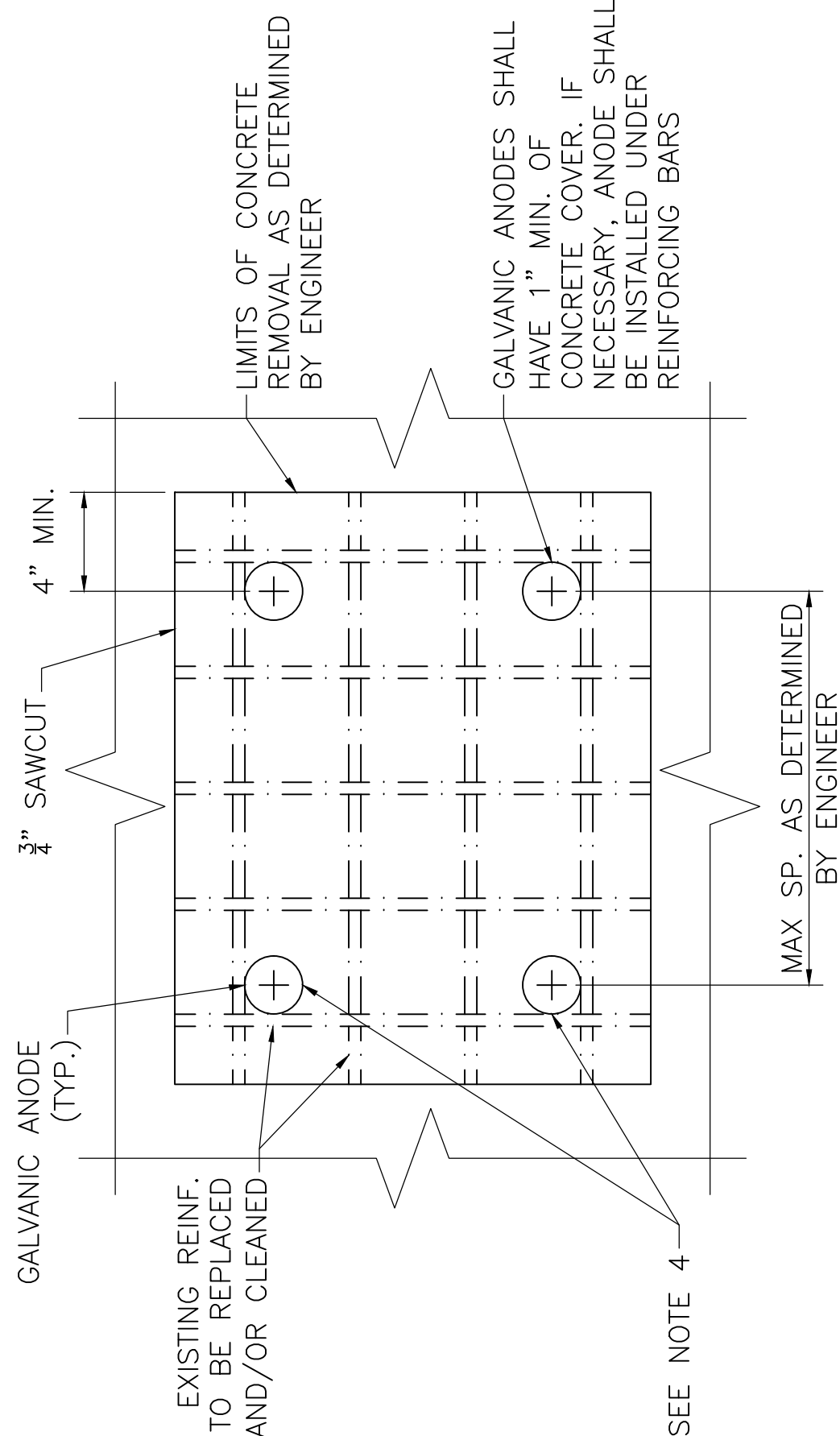
PARTIAL DEPTH REPAIR

NOT TO SCALE



GALVANIC ANODE INSTALLATION SECTION

NOT TO SCALE



GALVANIC ANODE INSTALLATION DETAIL

NOT TO SCALE

GALVANIC ANODE NOTES:

1. REMOVE CONCRETE ACCORDING TO DRAWINGS AND CONTRACT SPECIFICATIONS.
2. REPLACE AND/OR CLEAN DAMAGED REINFORCING STEEL. ALL NEW REBAR SHALL BE UNCOATED BLACK STEEL WHEN GALVANIC ANODES ARE USED.
3. ENSURE ALL EXPOSED REINFORCING STEEL IS SECURELY FASTENED TOGETHER WITH TIE WIRE TO PROVIDE ELECTRICAL CONTINUITY.
4. ATTACH GALVANIC ANODE TO CLEAN REINFORCING STEEL WITHIN THE REPAIR AREA AT SPACING APPROVED BY THE ENGINEER AND ACCORDING TO MANUFACTURER'S SPECIFICATIONS. MINIMUM SPACING OF 3/4" BETWEEN ANODES AND EXISTING CONCRETE. A MINIMUM OF 4" EDGE DISTANCE FROM ANY CORNER AND/OR EDGE OF EXCAVATION, AND A MINIMUM OF 1" CONCRETE COVER SHALL BE PROVIDED.
5. TEST THE ELECTRICAL CONTINUITY BETWEEN THE ANODE TIES AND THE REBAR AND BETWEEN THE REBARS ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.
6. PLACE REPAIR CONCRETE ACCORDING TO DRAWINGS AND CONTRACT SPECIFICATIONS. WHEN GALVANIC ANODES ARE USED, THE REPAIR MATERIAL USED SHALL BE NON-HP CONCRETE AND APPROVED BY THE ENGINEER.

*	2WY 2X0
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MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	

HAVERHILL
I 495 NB/SB OVER AMESBURY LINE RD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	NFA	11	12
PROJECT FILE NO. 613781			

STRUCTURAL FRAMING PLANS

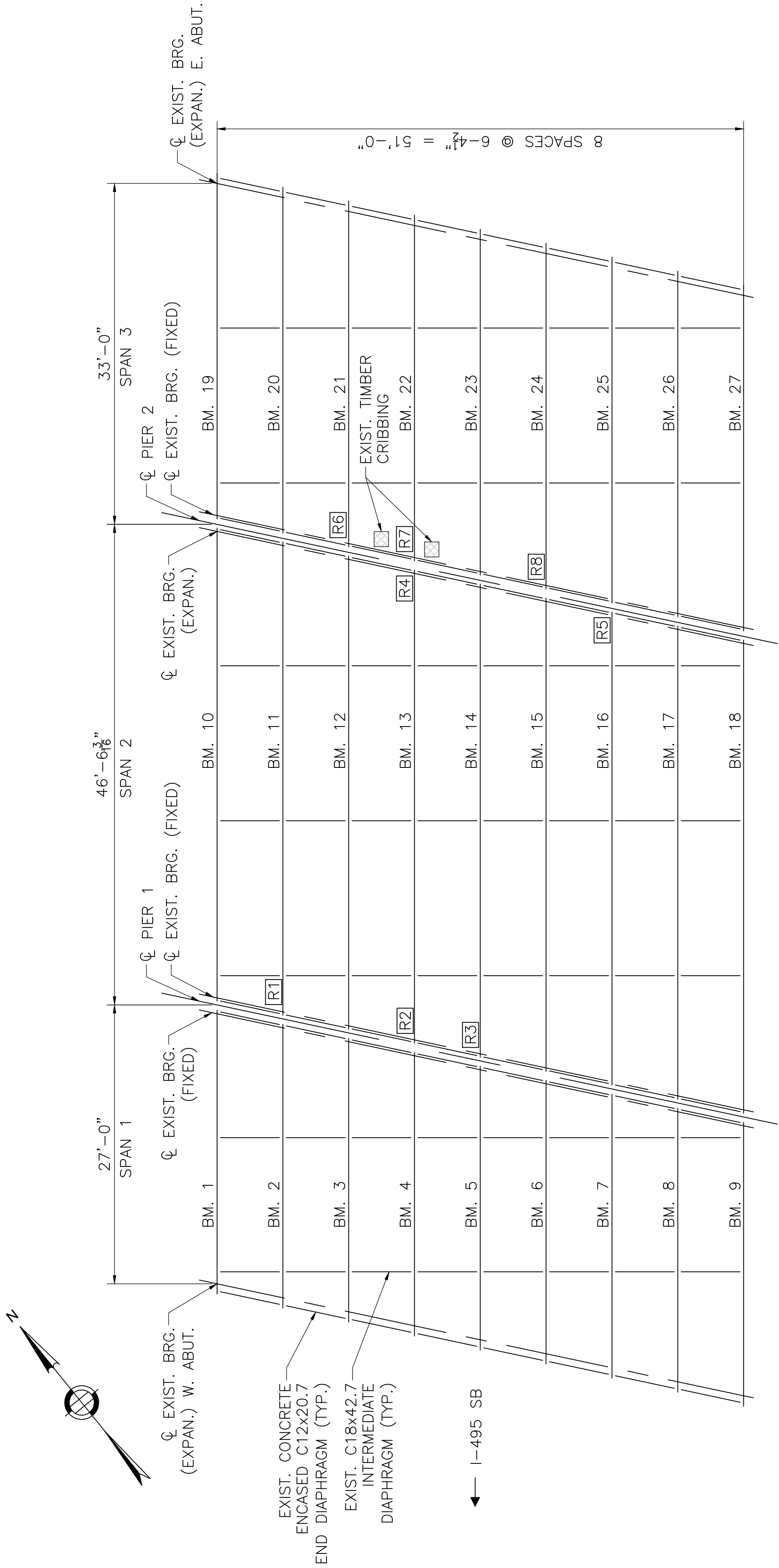
SCHEDULE OF SUPERSTRUCTURE REPAIRS								
REPAIR NO.	BEAM NO.	SPAN NO.	PIER NO.	BEAM SIZE	REPAIR DETAIL	REPAIR LENGTH (IN.)	REPAIR HEIGHT (IN.)	BEAM END REACTION (KIP)
R1	11	2	1	W33x141	D	48	28	79
R2	13	2	1	W33x141	C	40	15	79
R3	14	2	1	W33x141	C	40	15	79
R4	13	2	2	W33x141	C	60	15	79
R5	16	2	2	W33x141	D	44	28	79
R6	21	3	2	W27x94	F	42	24	65
R7	22	3	2	W27x94	F	48	24	65
R8	24	3	2	W27x94	E	60	11	65

NOTES:

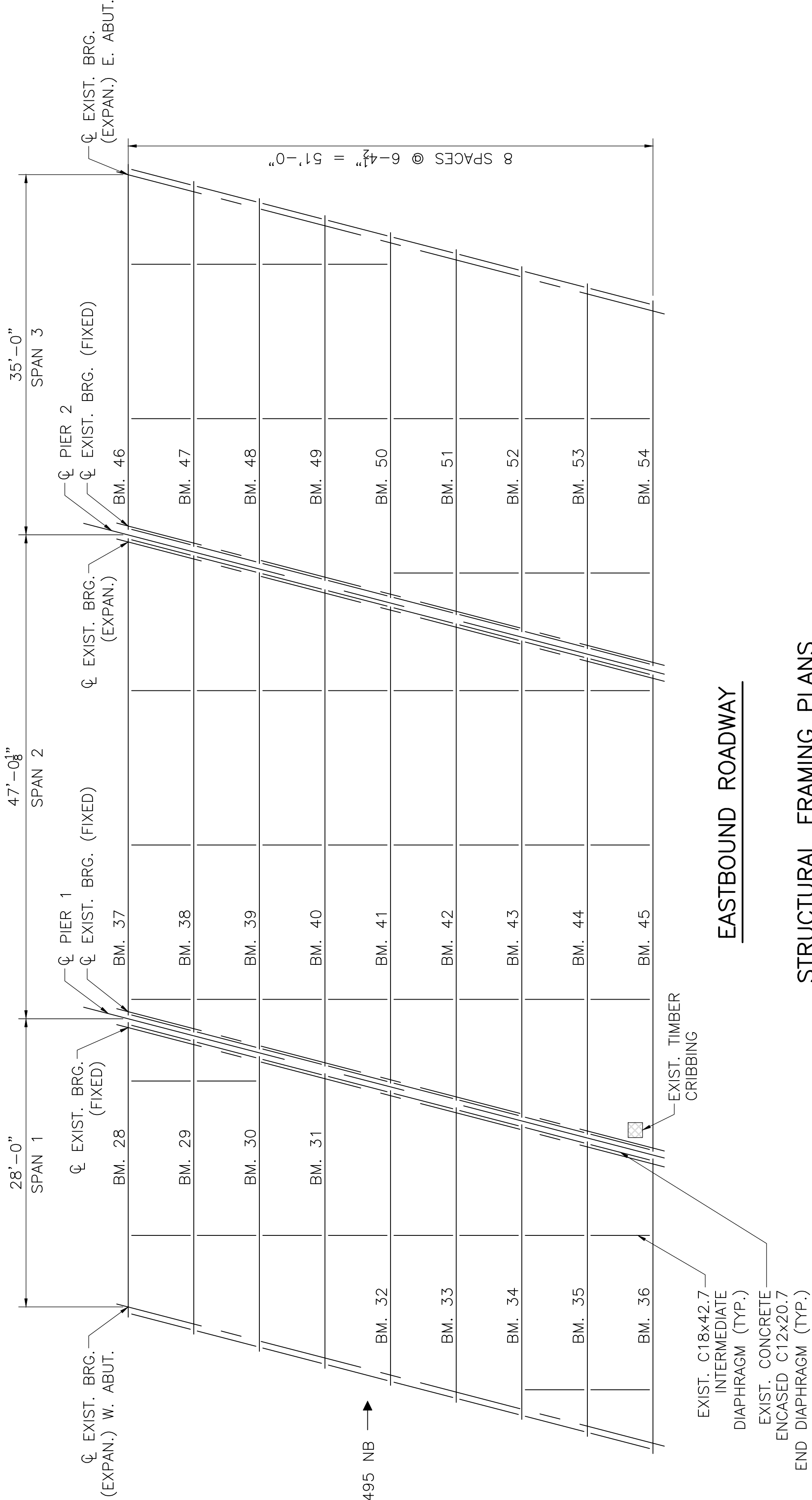
- SEE SHEET 12 FOR TYPE C, D, E & F REPAIR DETAILS.
- REMOVE ANY END DIAPHRAGM CONCRETE AND REINFORCING THAT INTERFERES WITH STEEL REPAIRS.
- CLEAN THE CONTACT SURFACES OF EXISTING STEEL IN ACCORDANCE WITH SPECIAL PROVISIONS. THE CONTACT SURFACES SHALL BE FREE OF PAINT, OIL, AND GREASE, AND SHALL PROVIDE THE NECESSARY SLIP RESISTANCE FOR CLASS B SLIP CRITICAL CONNECTIONS.
- ENGINEER TO INSPECT CLEANED REPAIR AREA AND VERIFY REPAIR LIMITS BASED ON CONDITIONS EXPOSED BY CLEANING.
- THE BEAM SHALL BE INSPECTED FOR DAMAGE DUE TO CONTRACTOR OPERATIONS. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTORS' EXPENSE.
- IN LOCATIONS WHERE HEAVY DETEIORATION HAS OCCURRED OR AS DIRECTED BY THE ENGINEER, EPOXY REPAIR FAIRING COMPOUND SHALL BE APPLIED OVER THE PRIME COAT AS FOLLOWS:
 - THE EPOXY REPAIR COMPOUND SHALL BE APPLIED TO THE DETERIORATED AREAS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL THE METHODS, PROCEDURES, AND MATERIALS TO BE USED FOR THE WORK.
 - THE REPAIR COMPOUND SHALL ONLY BE APPLIED TO THOSE OF THE EXISTING STEEL THAT EXHIBIT SEVERE SECTION LOSS TO COMPLETELY FILL THE IRREGULARITIES IN THE EXISTING STEEL SURFACES SUCH THAT NO VOIDS REMAIN BETWEEN THE PILES OF THE EXISTING STEEL AND THE PROPOSED STRENGTHENING STEEL IN THE FINAL REPAIRED CONDITION.
 - THE PROPOSED REPAIR STEEL SHALL BE PROPERLY POSITIONED AND BROUGHT INTO FIRM CONTACT WITHIN THE WORKING TIME LIMITS OF THE EPOXY REPAIR COMPOUND. THE REPAIR STEEL SHALL BE SECURED IN PLACE USING POSITIONING BOLTS TENSIONED TO A SNUG TIGHT CONDITION AND CLAMPS OR OTHER MECHANICAL MEANS TO BRING THE PILES OF THE EXISTING STEEL AND NEW STEEL INTO FIRM CONTACT. WELDING IS NOT ALLOWED.
 - ONCE THE PROPOSED STEEL HAS BEEN SECURED INTO POSITION WITH THE POSITIONING BOLTS, AND THE EPOXY COMPOUND HAS CURED, THE REMAINING H:S BOLTS SHALL BE INSTALLED FOLLOWING THE PROCEDURE OUTLINED IN THE GENERAL NOTES.
 - EPOXY COMPOUND FOR STRUCTURAL STEEL REPAIRS SHALL BE A SOLVENT FREE, MOISTURE TOLERANT, EPOXY PASTE ADHESIVE SYSTEM. THE EPOXY PASTE SHALL BE DEVELOPED SPECIFICALLY FOR FILLING, SMOOTHING, SEALING, OR FAIRING APPLICATIONS ON METALS. THE PASTE SHALL BE APPLIED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S LATEST WRITTEN INSTRUCTIONS. AND ACCEPTABLE PRODUCE SHALL BE ONE OF THE FOLLOWING OR AN APPROVED EQUAL: ITW PHILADELPHIA RESINS REPAIR COMPOUND MANUFACTURED BY: ITW PHILADELPHIA RESINS, SKIDAWUR 31, HI-MOD GEL MANUFACTURED BY: SIKA CORPORATION, DEVCON PLASTIC STEEL PUTTY (A) MANUFACTURED BY: ITW DEVCON, FX-738 METAL FILLED EPOXY MANUFACTURED BY: SIMPSON STRONG-TIE.
 - STEEL ELEMENTS FOR REPAIR SHALL BE BOLTED TO EXISTING STEEL SURFACES.
 - STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M270 GRADE 36. IT SHALL BE CONSIDERED A MAIN MEMBER AND CONFORM TO THE CHARPY V-NOTCH REQUIREMENTS OF AASHTO M270 ZONE 12.
 - IN THE CASE THAT ANY STEEL REPAIR ANGLE INTERFERES WITH THE EXISTING ANCHOR BOLT, A LEG OF THE ANGLE CAN BE COPED TO PROVIDE CLEARANCE AROUND THE EXISTING ANCHOR BOLT.
 - CLEAN AND PAINT REPAIRED AREA PER SPECIAL PROVISIONS.
 - SEAL PERIMETER OF ALL STEEL WITH SILICONE CAULK.
 - APPLY CEMENTITIOUS MORTAR TO ANY ROUGH CONCRETE FROM PARTIAL END DIAPHRAGM REMOVAL PER SPECIAL PROVISIONS.
 - THE CONTRACTOR SHALL PROVIDE JACKING AND/OR SHORING FOR ALL BEAM END REPAIRS.

*
2WY 2X0

MM/DD/YYYY	ISSUED FOR CONSTRUCTION
DATE	DESCRIPTION
USE ONLY PRINTS OF LATEST DATE	



WESTBOUND ROADWAY



EASTBOUND ROADWAY

STRUCTURAL FRAMING PLANS

SCALE: 1/8" = 1'-0"

DOCUMENT A00805

TRAFFIC MANAGEMENT PLANS

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION

HIGHWAY DIVISION

PLAN AND PROFILE OF

ROUTE 3 RAMPS OVER I-95 AND I-495 OVER AMESBURY LINE ROAD

(BRIDGE NO. B-29-006 (2G2), B-29-006 (2G3) & H-12-038 (2X0), H-12-038 (2WY))

IN THE TOWN /CITY OF

BURLINGTON AND HAVERHILL

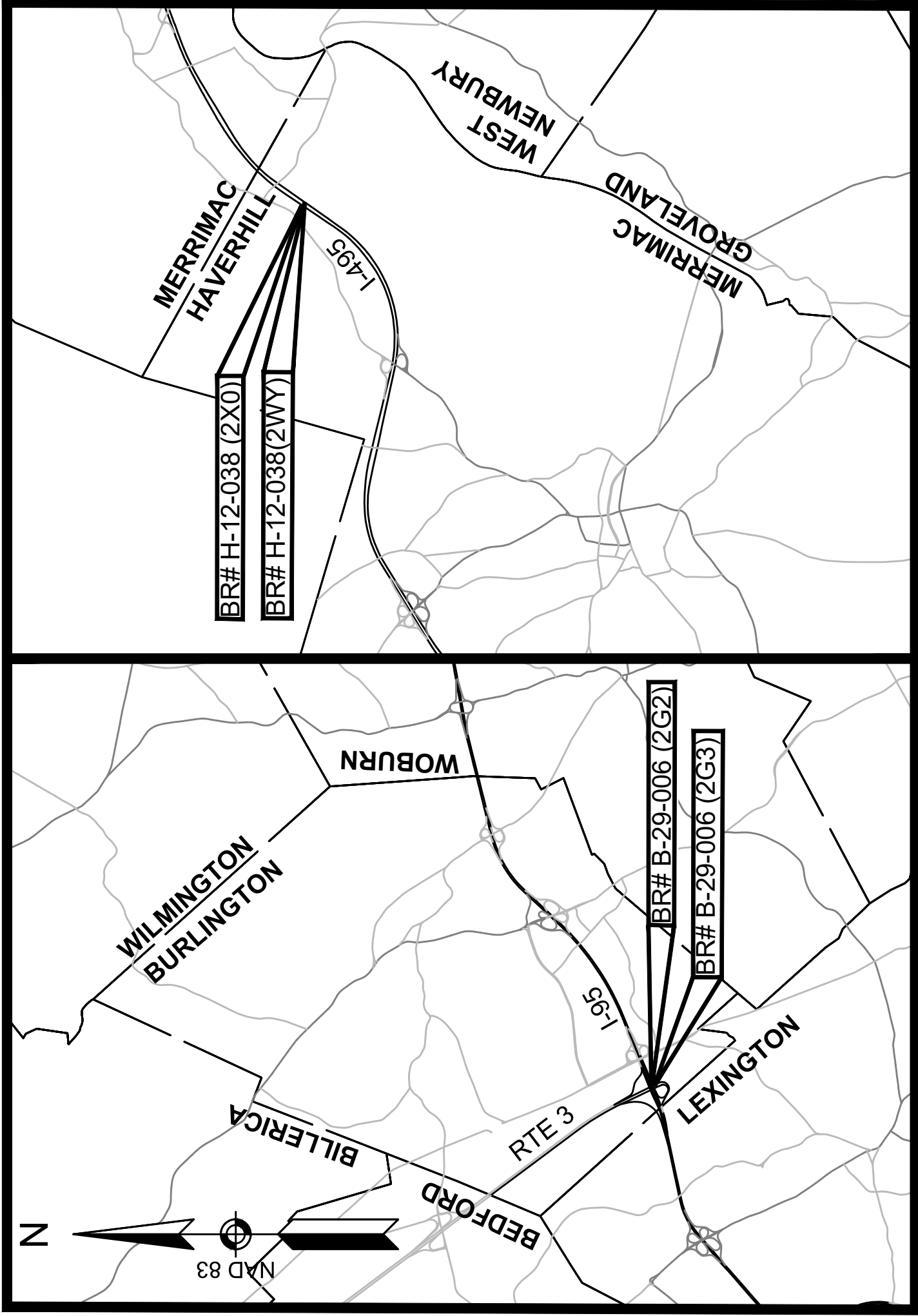
MIDDLESEX AND ESSEX COUNTIES

FEDERAL AID PROJECT NO. ----

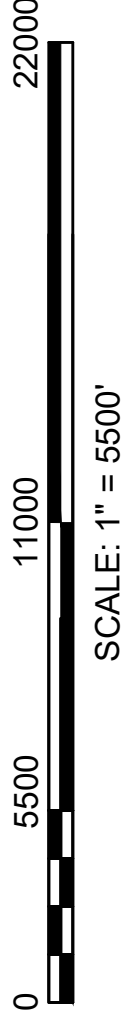
PS&E - HIGHWAY AND TRAFFIC PLANS

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2-12	TEMPORARY TRAFFIC CONTROL PLANS - BURLINGTON
13	CONSTRUCTION SIGN SUMMARY-BURLINGTON
14-15	TEMPORARY TRAFFIC CONTROL PLANS - HAVERHILL
16	CONSTRUCTION SIGN SUMMARY-HAVERHILL
17-18	TEMPORARY TRAFFIC CONTROL PLANS - STANDARD DETAILS
19-20	BURLINGTON PAVEMENT RESTORATION PLAN
21	HAVERHILL PAVEMENT RESTORATION PLAN



LOCUS MAP



	8/1/25	PS&E HIGHWAY AND TRAFFIC	0
	6/16/25	100% HIGHWAY & TRAFFIC	0
	3/28/25	75% HIGHWAY & TRAFFIC	0
	DATE	DESCRIPTION	REV #



APPROVED

TRANS/SYSTEMS

CHIEF ENGINEER

DATE

BURLINGTON/HAVERHILL

ROUTE 3 RAMPS OVER I-95

I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		3	21

PROJECT FILE NO. 613781

TEMPORARY TRAFFIC CONTROL PLANS

BURLINGTON

PIERS BETWEEN SB & SB C-D REPAIR

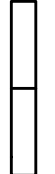
SHEET 1 OF 3

NOTES:

- THIS PLAN DEPICTS THE TRAFFIC MANAGEMENT NECESSARY TO COMPLETE PIER REPAIRS BETWEEN THE INSIDE SHOULDER OF THE I-95 SOUTHBOUND C-D ROADWAY AND THE OUTSIDE SHOULDER OF THE I-95 SOUTHBOUND MAINLINE.
- ADVANCE WARNING SIGNS ARE NOT SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL INSTALL SIGNS AT THE DISTANCE SHOWN.
- TEMPORARY BARRIER AND TEMPORARY IMPACT ATTENUATORS SHALL BE IN PLACE THROUGHOUT THIS STAGE. ADVANCE WARNING SIGNS FOR THE MAINLINE RIGHT SHOULDER CLOSURE SHALL BE DISPLAYED OUTSIDE OF WORK SHIFTS.
- DURING WORK SHIFTS, SIGNS FOR LANE CLOSURES AND LANE SHIFTS SHALL BE DISPLAYED. THESE SIGNS ARE DENOTED BY "(WORKSHIFT ONLY)" AND ARE LOCATED SO THEY CAN BE USED TO COVER THE LONG-TERM SIGNS NOT IN EFFECT DURING THESE WORK SHIFTS.
- REFLECTORIZED DRUMS, TRUCK MOUNTED ATTENUATORS, AND TPRS SHALL ONLY BE PRESENT DURING WORK SHIFTS.
- TEMPORARY ILLUMINATION FOR WORK ZONE SHALL BE UTILITIZED AS DESCRIBED IN SPECIAL PROVISION ITEM 853.8.
- REFER TO SPECIAL PROVISIONS - SCHEDULE OF WORK FOR WORK HOUR RESTRICTIONS.

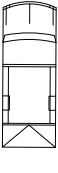
LEGEND:

 WORK ZONE

 TEMPORARY BARRIER

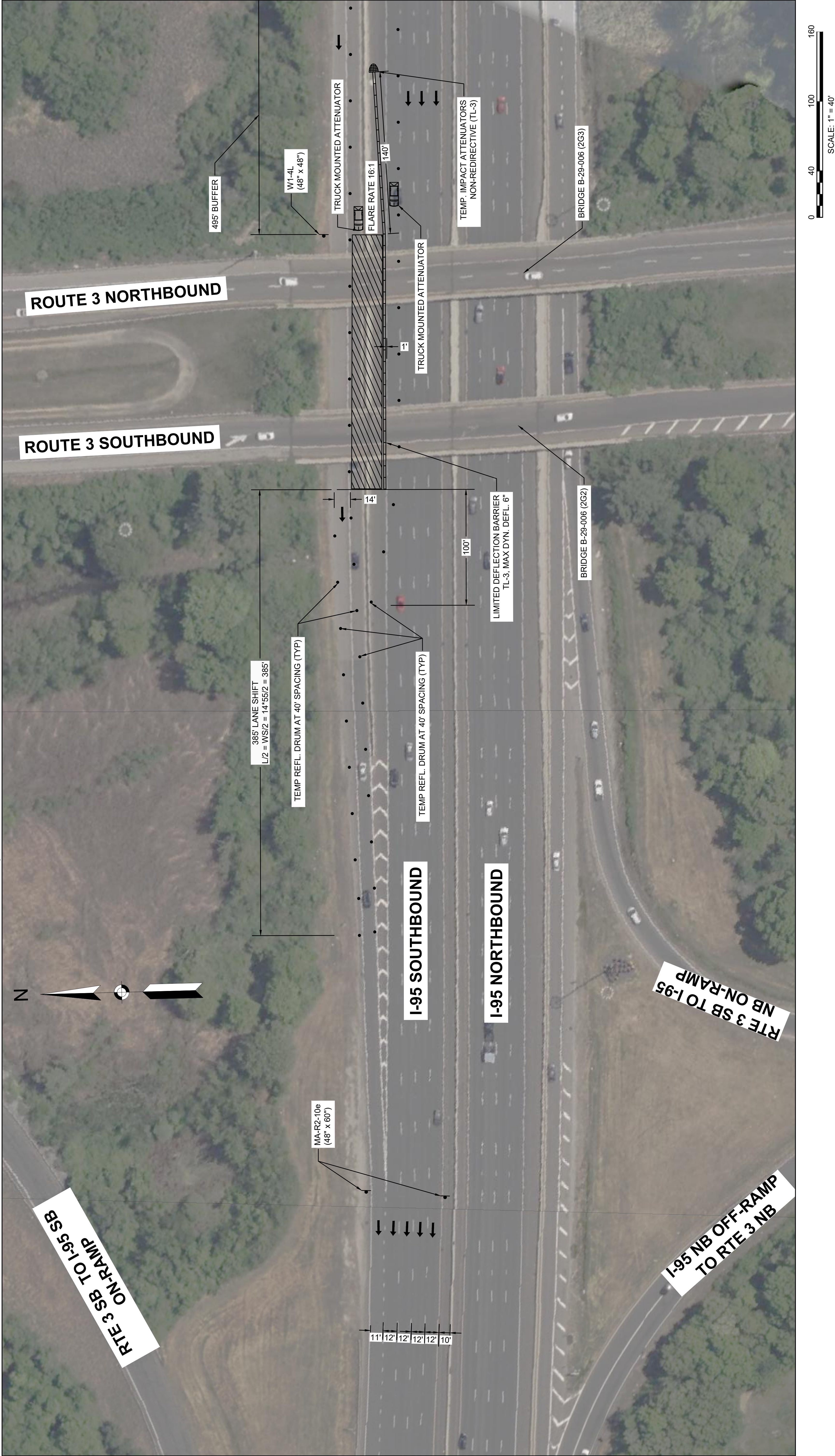
 DIRECTION OF TRAFFIC

 ARROW BOARD

 TRUCK MOUNTED ATTENUATOR

 TEMPORARY REFLECTORIZED DRUM

 TEMPORARY IMPACT ATTENUATOR



CONTINUED ON SHEET 2 OF 3

BURLINGTON/HAVERHILL
ROUTE 3 RAMPS OVER I-95
I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		4	21
PROJECT FILE NO. 613781			

TEMPORARY TRAFFIC CONTROL PLANS
BURLINGTON
PIERS BETWEEN SB & SB C-D REPAIR
SHEET 2 OF 3

- LEGEND:
- WORK ZONE

TEMPORARY BARRIER

DIRECTION OF TRAFFIC

ARROW BOARD

TRUCK MOUNTED ATTENUATOR

TEMPORARY REFLECTORIZED DRUM

TEMPORARY IMPACT ATTENUATOR
-
-
- CONTINUED ON SHEET 1 OF 3
- CONTINUED ON SHEET 3 OF 3
- A00805-5
- BURLINGTON TTCP.DWG
Plotted on 28-Jul-2025 4:52 PM

BURLINGTON/ HAVERHILL

ROUTE 3 RAMP OVER I-95

I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		5	21

PROJECT FILE NO.

613781

TEMPORARY TRAFFIC CONTROL PLANS

BURLINGTON

PIERS BETWEEN SB & SB C-D REPAIR

SHEET 3 OF 3

- LEGEND:
- WORK ZONE

TEMPORARY BARRIER

DIRECTION OF TRAFFIC

ARROW BOARD

TRUCK MOUNTED ATTENUATOR

TEMPORARY REFLECTORIZED DRUM

TEMPORARY IMPACT ATTENUATOR
-
-
- CONTINUED ON SHEET 2 OF 3
- BURLINGTON TTCP.DWG
Plotted on 28-Jul-2025 4:52 PM
- A00805-6

NOTES:

- THIS PLAN DEPICTS THE TRAFFIC MANAGEMENT NECESSARY TO COMPLETE PIER REPAIRS BETWEEN THE INSIDE SHOULDER OF THE I-95 SOUTHBOUND MAINLINE AND THE INSIDE SHOULDER OF THE I-95 NORTHBOUND MAINLINE.
- ADVANCE WARNING SIGNS ARE NOT SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL INSTALL SIGNS AT THE DISTANCE SHOWN.
- EXISTING PAVEMENT MARKINGS SHALL BE MASKED USING A TEMPORARY TAPE SELECTED FROM MASSDOT'S QUALIFIED TRAFFIC CONTROL EQUIPMENT LIST.
- ALL WHITE AND YELLOW TEMPORARY PAVEMENT MARKINGS SHALL BE TAPE, AND SHALL BE SELECTED FROM MASSDOT'S QUALIFIED TRAFFIC CONTROL EQUIPMENT LIST.
- TEMPORARY ILLUMINATION FOR WORK ZONE SHALL BE UTILITIZED AS DESCRIBED IN SPECIAL PROVISION ITEM 853.8.
- REFER TO SPECIAL PROVISIONS - SCHEDULE OF WORK FOR WORK HOUR RESTRICTIONS.

BURLINGTON/HAVERHILL
ROUTE 3 RAMPS OVER I-95
I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		6	21
PROJECT FILE NO. 613781			

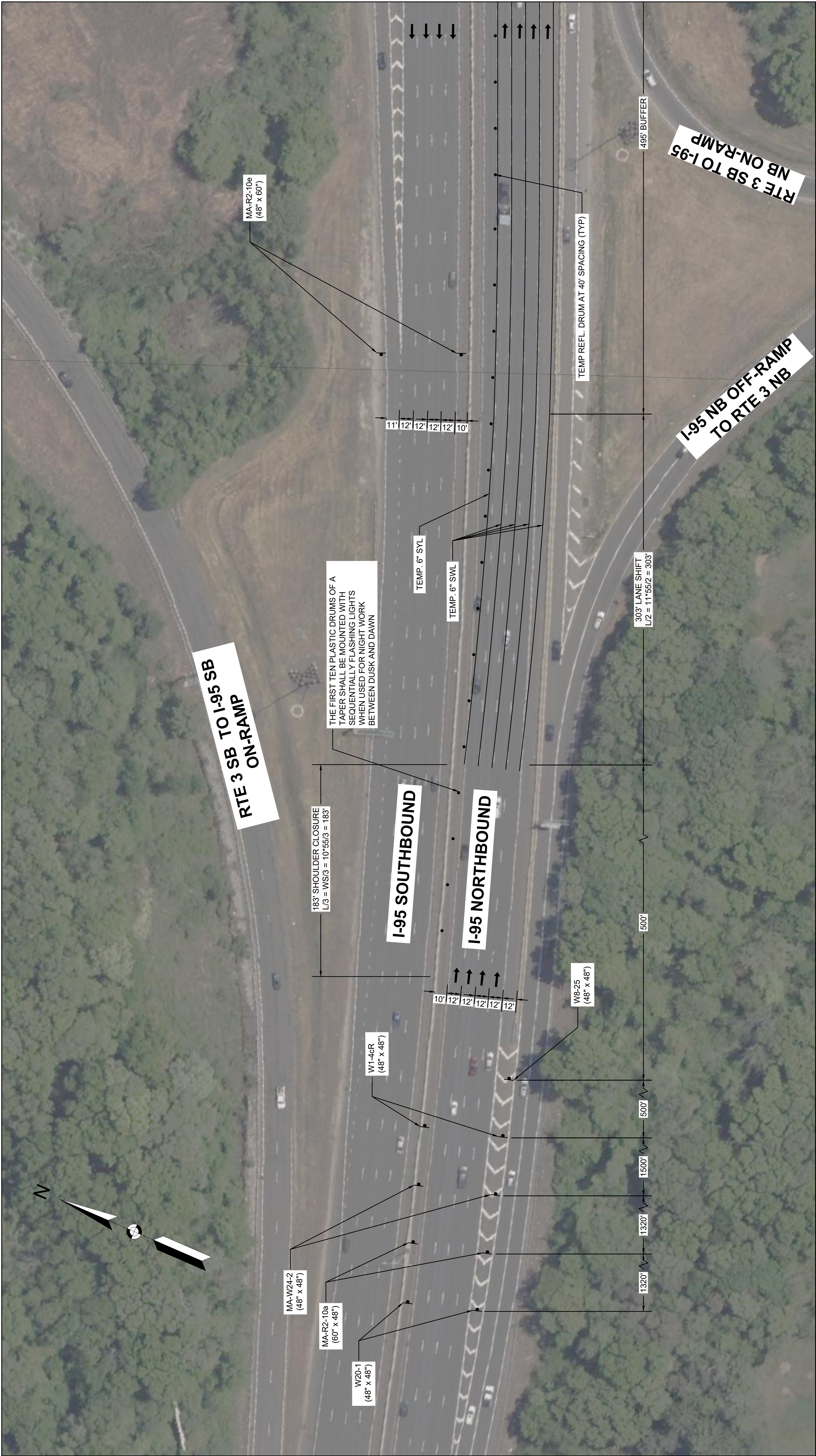
TEMPORARY TRAFFIC CONTROL PLANS
BURLINGTON
MEDIAN PIERS BETWEEN NB & SB REPAIR
SHEET 1 OF 3

- TRUCK MOUNTED ATTENUATOR
- TEMPORARY REFLECTORIZED DRUM
- TEMPORARY IMPACT ATTENUATOR

- WORK ZONE
- TEMPORARY BARRIER
- DIRECTION OF TRAFFIC
- ARROW BOARD

LEGEND:

- WORK ZONE
- TEMPORARY BARRIER
- DIRECTION OF TRAFFIC
- ARROW BOARD

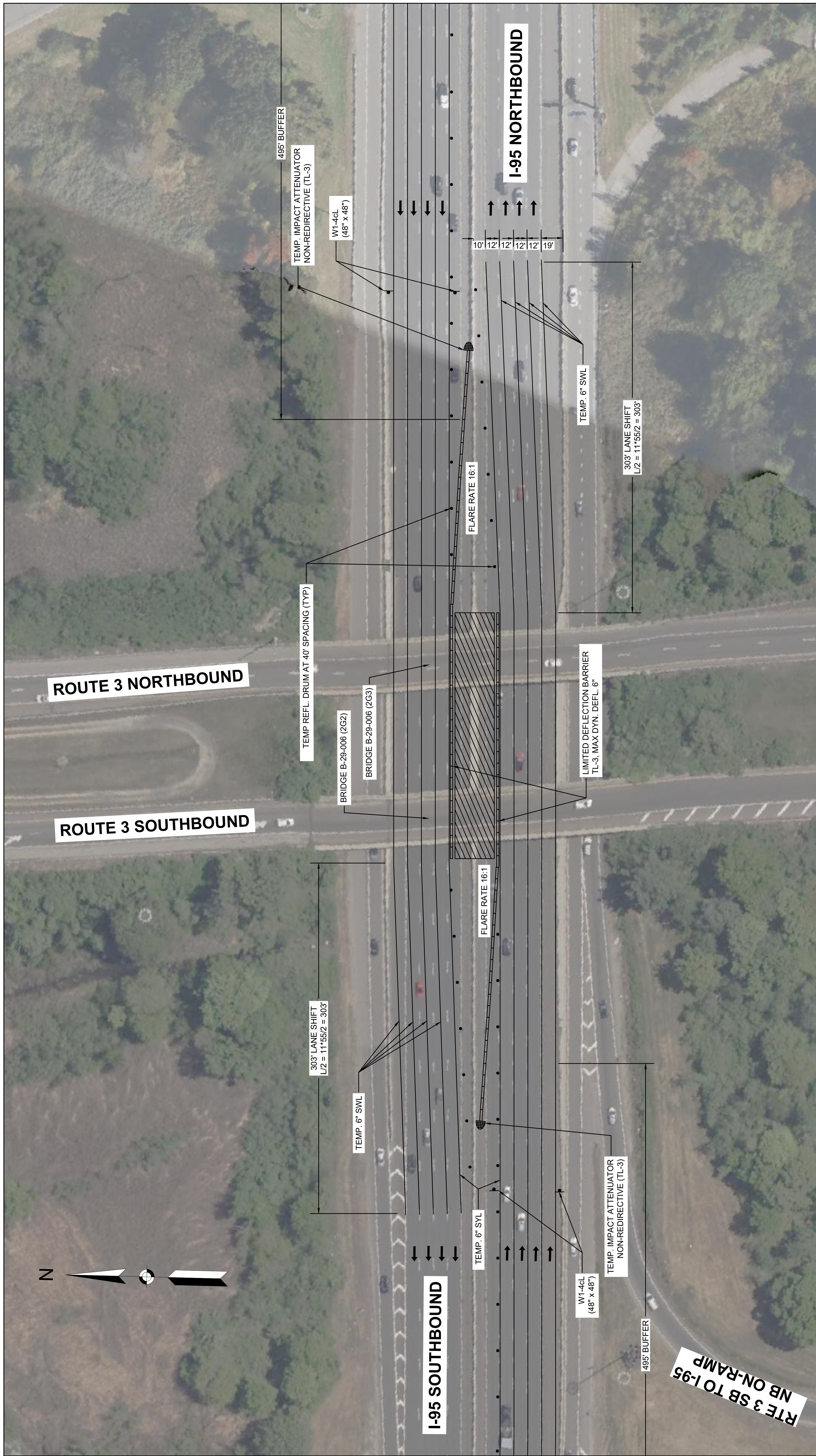


CONTINUED ON SHEET 2 OF 3

**BURLINGTON/HAVERHILL
ROUTE 3 RAMPS OVER I-95
I-495 OVER AMESBURY LINE ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		7	21
PROJECT FILE NO. 613781			

**TEMPORARY TRAFFIC CONTROL PLANS
BURLINGTON
MEDIAN PIERS BETWEEN NB & SB REPAIR
SHEET 2 OF 3**



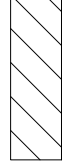
BURLINGTON/HAVERHILL
ROUTE 3 RAMP OVER I-95
I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		8	21

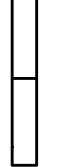
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TEMPORARY TRAFFIC CONTROL PLANS
BURLINGTON
MEDIAN PIERS BETWEEN NB & SB REPAIR
SHEET 3 OF 3

LEGEND:



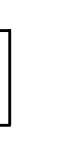
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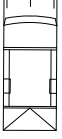
TEMPORARY BARRIER



DIRECTION OF TRAFFIC



ARROW BOARD



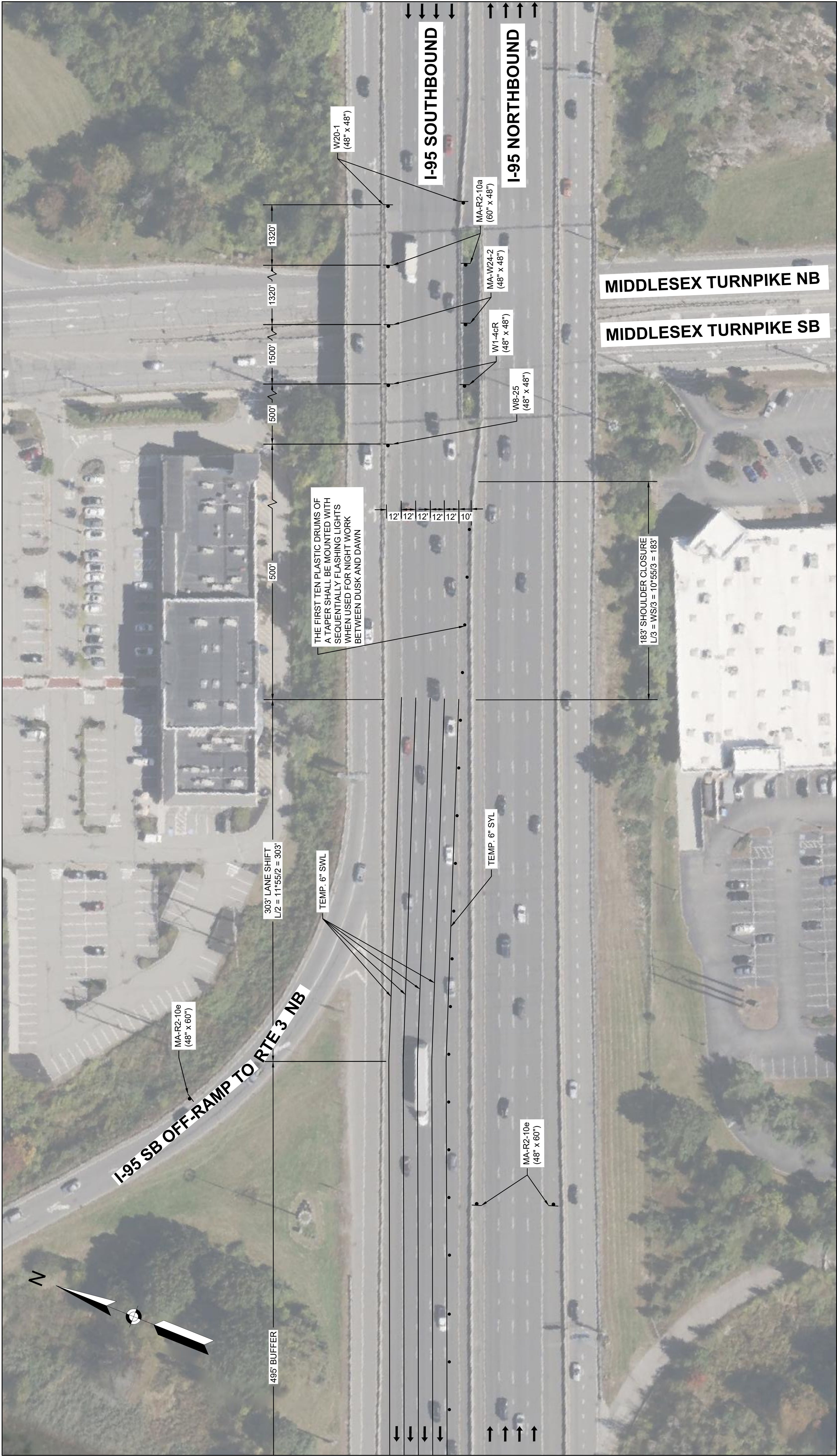
TRUCK MOUNTED ATTENUATOR



TEMPORARY REFLECTORIZED DRUM



TEMPORARY IMPACT ATTENUATOR

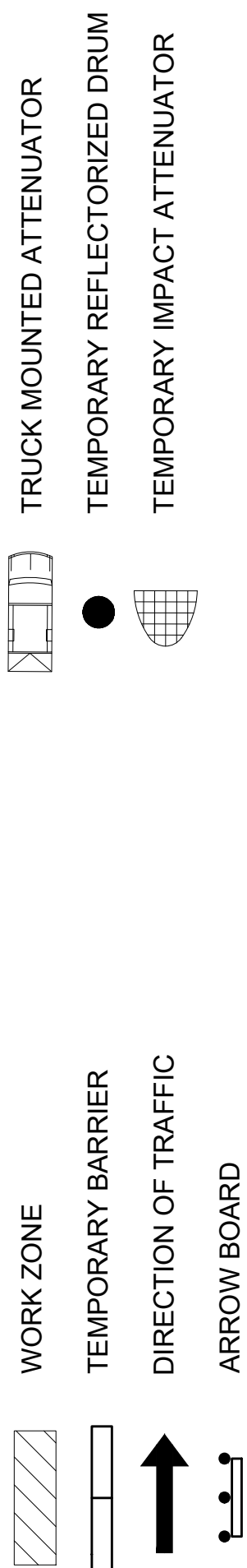


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NOTES:

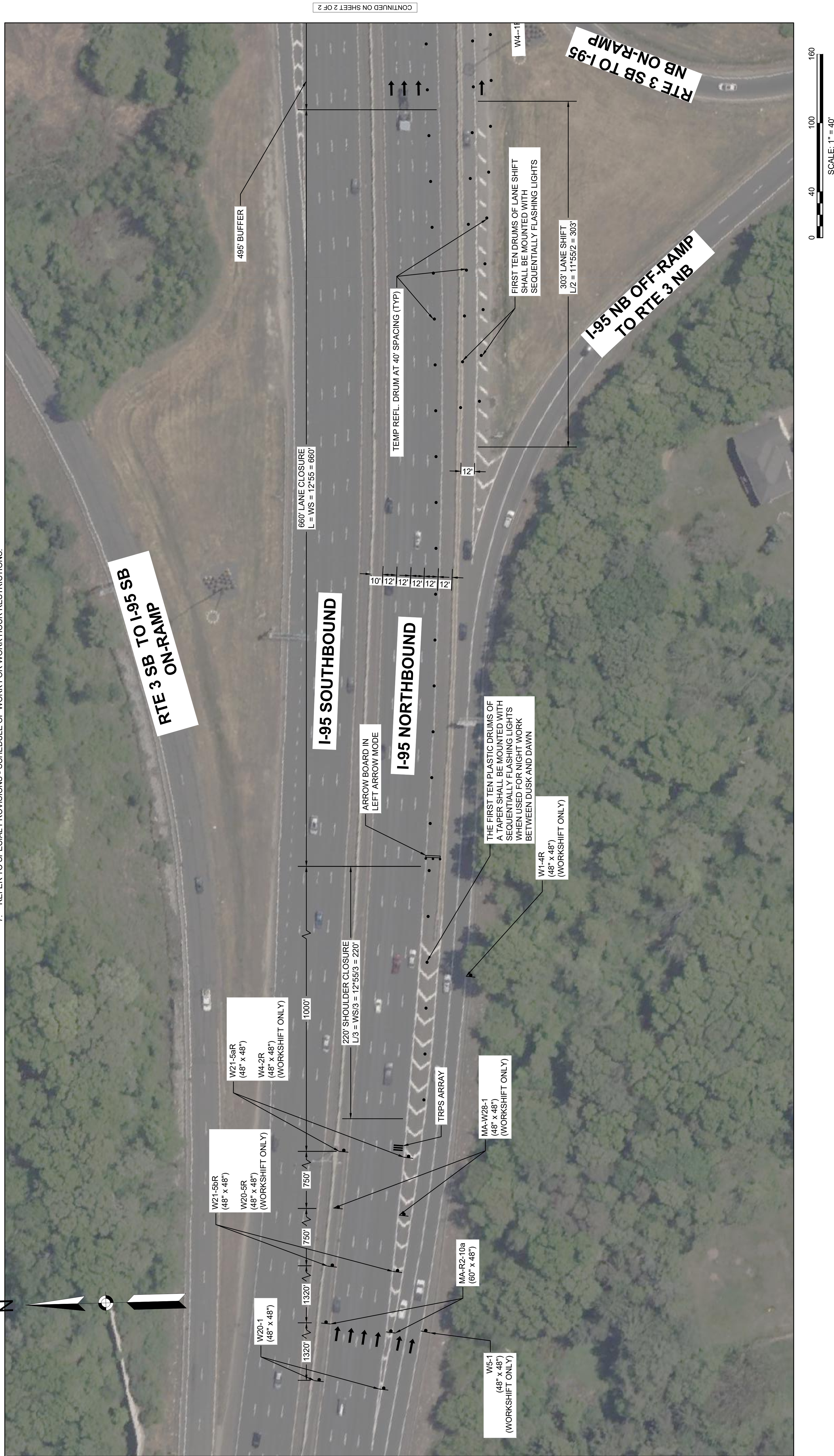
1. THIS PLAN DEPICTS THE TRAFFIC MANAGEMENT NECESSARY TO COMPLETE PIER REPAIRS BETWEEN THE INSIDE SHOULDER OF THE I-95 NORTHBOUND C-D ROADWAY AND THE OUTSIDE SHOULDER OF THE I-95 NORTHBOUND MAINLINE.
2. ADVANCE WARNING SIGNS ARE NOT SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL INSTALL SIGNS AT THE DISTANCE SHOWN.
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7. REFER TO SPECIAL PROVISIONS - SCHEDULE OF WORK FOR WORK-HOUR RESTRICTIONS.



**BURLINGTON/HAVERHILL
ROUTE 3 RAMPS OVER I-95
I-495 OVER AMESBURY LINE ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		9	21
PROJECT FILE NO. 613781			

**TEMPORARY TRAFFIC CONTROL PLANS
BURLINGTON
PIERS BETWEEN NB & NB C-D REPAIR
SHEET 1 OF 2**



BURLINGTON/HAVERHILL

ROUTE 3 RAMP OVER I-95

I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		10	21

PROJECT FILE NO. 613781

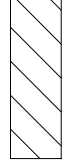
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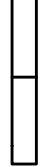
BURLINGTON

PIERS BETWEEN NB & NB C-D REPAIR

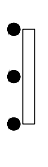
SHEET 2 OF 2

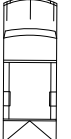
LEGEND:

WORK ZONE

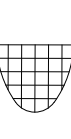
TEMPORARY BARRIER

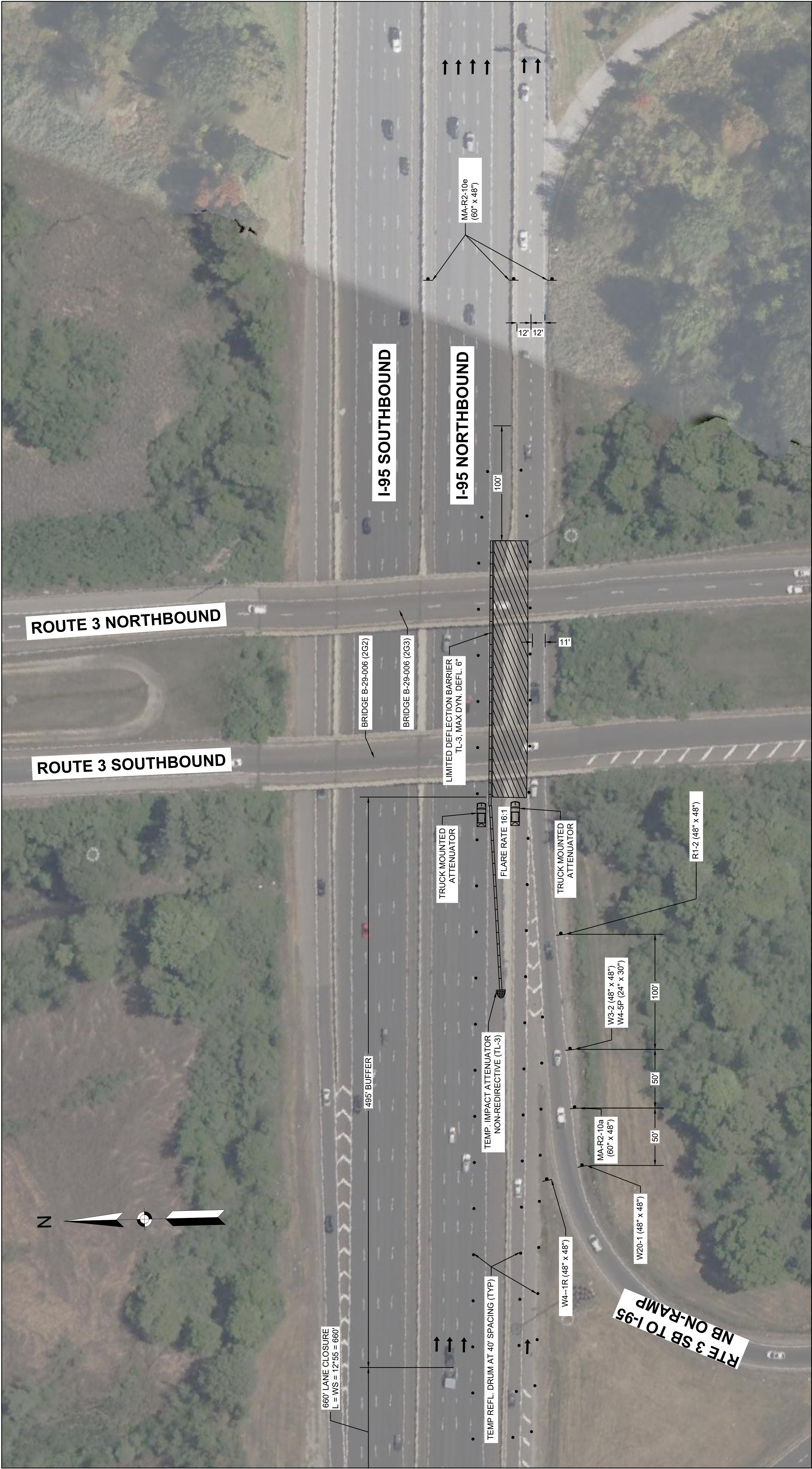
DIRECTION OF TRAFFIC

ARROW BOARD

TRUCK MOUNTED ATTENUATOR

TEMPORARY REFLECTORIZED DRUM

TEMPORARY IMPACT ATTENUATOR



CONTINUED ON SHEET 1 OF 2

**BURLINGTON/HAVERHILL
ROUTE 3 RAMPS OVER I-95**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		11	21
PROJECT FILE NO.			613781

**TEMPORARY TRAFFIC CONTROL PLANS
BURLINGTON
SOUTH ABUTMENT REPAIR
SHEET 1 OF 2**

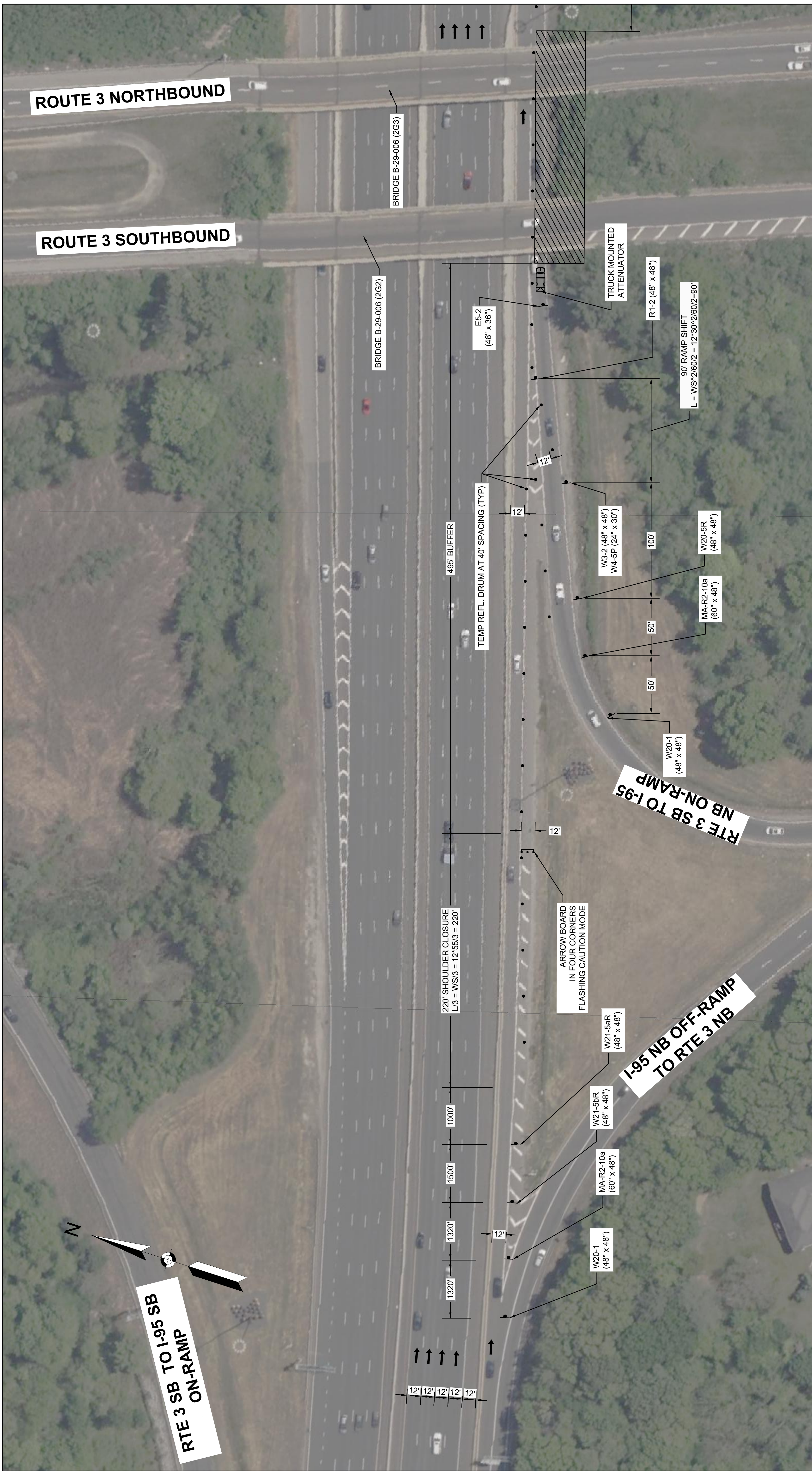
NOTES:

1. THIS PLAN DEPICTS THE TRAFFIC MANAGEMENT NECESSARY TO COMPLETE PIER REPAIRS ALONG THE RIGHT LANE OF THE I-95 NORTHBOUND C-D ROADWAY.
2. TEMPORARY ILLUMINATION FOR WORK ZONE SHALL BE UTILIZED AS DESCRIBED IN SPECIAL PROVISION ITEM 853.8.
3. REFER TO SPECIAL PROVISIONS - SCHEDULE OF WORK FOR WORK HOUR RESTRICTIONS.

	TRUCK MOUNTED ATTENUATOR
	TEMPORARY REFLECTORIZED DRUM
	TEMPORARY IMPACT ATTENUATOR

LEGEND:

	WORK ZONE
	TEMPORARY BARRIER
	DIRECTION OF TRAFFIC
	ARROW BOARD



CONTINUED ON SHEET 2 OF 2



BURLINGTON/HAVERHILL
ROUTE 3 RAMP OVER I-95

I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		12	21
PROJECT FILE NO. 613781			

TEMPORARY TRAFFIC CONTROL PLANS
BURLINGTON
SOUTH ABUTMENT REPAIR
SHEET 2 OF 2

NOTES:

1. THIS PLAN DEPICTS THE TRAFFIC MANAGEMENT NECESSARY TO COMPLETE PIER REPAIRS ALONG THE RIGHT LANE OF THE I-95 NORTHBOUND C-D ROADWAY.

TRUCK MOUNTED ATTENUATOR

TEMPORARY REFLECTORIZED DRUM

TEMPORARY IMPACT ATTENUATOR

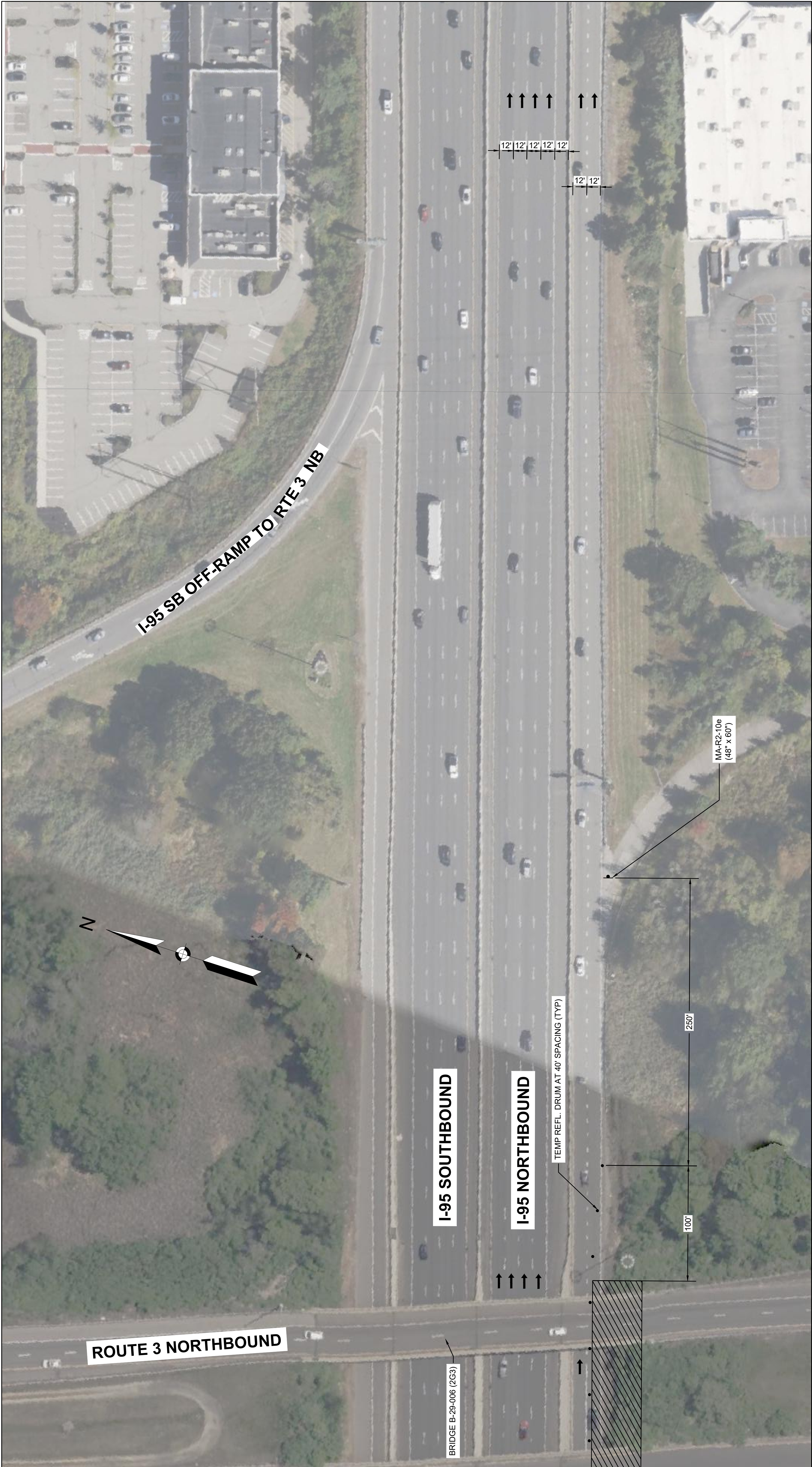
LEGEND:

WORK ZONE

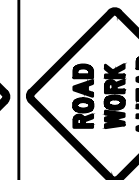
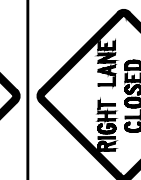
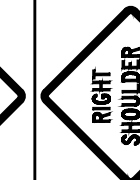
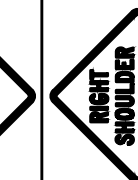
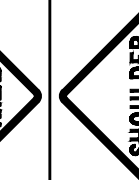
TEMPORARY BARRIER

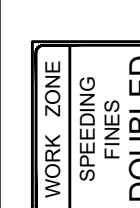
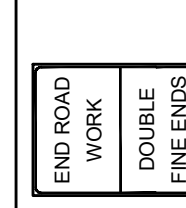
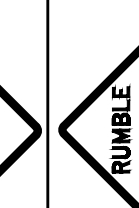
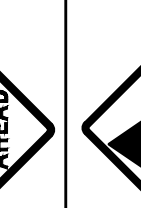
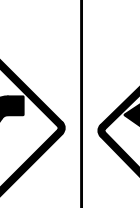
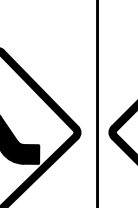
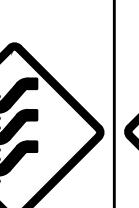
DIRECTION OF TRAFFIC

ARROW BOARD



CONTINUED ON SHEET 1 OF 2

IDENTIFICATION NUMBER	SIZE OF SIGN (IN)		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA (S.F.)	AREA IN SQUARE FEET		
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER				
W4-2R	48	48		MUTCD STANDARD				FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	32.00	
W4-5P	24	30						1	FLUOR-ESCENT ORANGE	BLACK	BLACK	5.00	5.00
W5-1	48	48						1	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	16.00
W20-1	48	48						6	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	96.00
W20-5R	48	48						2	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	32.00
W21-5aR	48	48						2	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	32.00
W21-5bR	48	48						2	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	32.00
W8-25	48	48						2	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	32.00
E5-2	48	36						1	FLUOR-ESCENT ORANGE	BLACK	BLACK	12.00	12.00
R1-2	36	36						1	WHITE	RED	WHITE	9.00	9.00

IDENTIFICATION NUMBER	SIZE OF SIGN (IN)		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA (S.F.)	AREA IN SQUARE FEET								
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER										
MA-R2-10a	60	48		MASSDOT STANDARD									6	FLUOR-ESCENT ORANGE	BLACK	BLACK	20.00	120.00	
MA-R2-10e	48	60											5	FLUOR-ESCENT ORANGE	BLACK	BLACK	20.00	100.00	
MA-W24-2	48	48											4	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	64.00	
MA-W28-1	48	48											2	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	32.00	
W1-4L	48	48		MUTCD STANDARD									1	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	16.00	
W1-4R	48	48											1	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	16.00	
W1-4cL	48	48											4	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	64.00	
W1-4cR	48	48											4	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	64.00	
W3-2	48	48											1	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	16.00	
W4-1R	48	48											1	FLUOR-ESCENT ORANGE	BLACK	BLACK	16.00	16.00	

- NOTES
1.

THE PLAN DEPICTS THE TRAFFIC MANAGEMENT NECESSARY TO COMPLETE THE BEAM END AND SUBSTRUCTURE REPAIR OF I-495 (BLUE STAR MEMORIAL HWY OVER AMESBURY LINE RD) ALONG THE SOUTHERN SHOULDER OF AMESBURY LINE ROAD. ADVANCE WARNING SIGNS ARE NOT SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL INSTALL SIGNS AT THE DISTANCE SHOWN.
3.

EACH LANE SHALL BE NO LESS THAN 11 FEET WIDE.

LEGEND:

SIGN

TEMP IMPACT ATTENUATOR

WORK ZONE

TRAFFIC FLOW ARROW

TEMPORARY BARRIER

REFLECTORIZED TRAFFIC DRUM

BURLINGTON/HAVERHILL

ROUTE 3 RAMP OVER I-95

I-495 OVER AMESBURY LINE ROAD

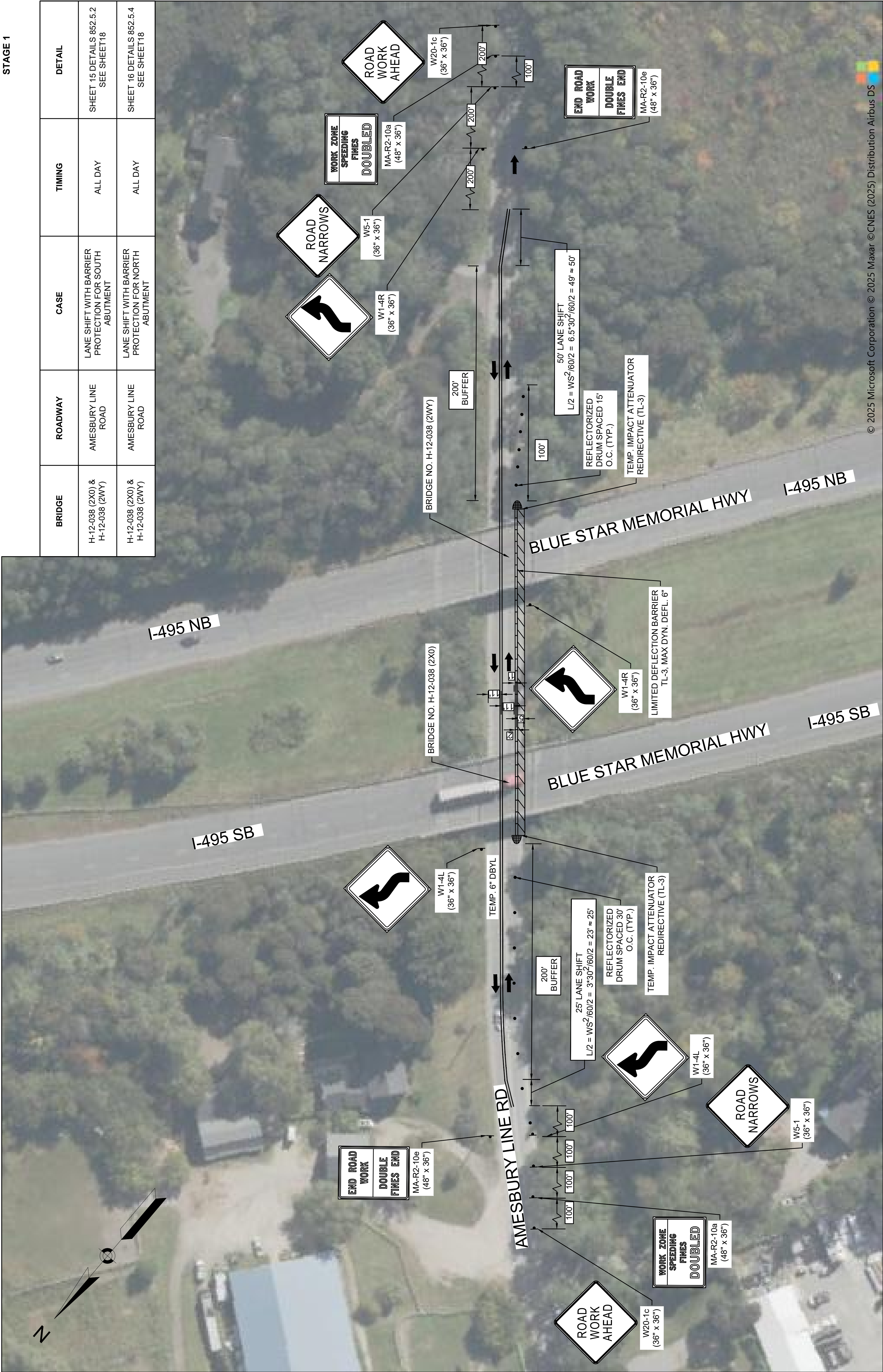
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		14	21
PROJECT FILE NO. 613781			

TEMPORARY TRAFFIC CONTROL PLANS

HAVERHILL

STAGE 1

BRIDGE	ROADWAY	CASE	TIMING	DETAIL
H-12-038 (2X0) & H-12-038 (2WY)	AMESBURY LINE ROAD	LANE SHIFT WITH BARRIER PROTECTION FOR SOUTH ABUTMENT	ALL DAY	SHEET 15 DETAILS 852.5.2 SEE SHEET18
H-12-038 (2X0) & H-12-038 (2WY)	AMESBURY LINE ROAD	LANE SHIFT WITH BARRIER PROTECTION FOR NORTH ABUTMENT	ALL DAY	SHEET 16 DETAILS 852.5.4 SEE SHEET18



- NOTES
1.

THE PLAN DEPICTS THE TRAFFIC MANAGEMENT NECESSARY TO COMPLETE THE BEAM END AND SUBSTRUCTURE REPAIR OF I-495 (BLUE STAR MEMORIAL HWY OVER AMESBURY LINE RD) ALONG THE NORTHERN SHOULDER OF AMESBURY LINE ROAD. ADVANCE WARNING SIGNS ARE NOT SHOWN IN THEIR EXACT LOCATION. CONTRACTOR SHALL INSTALL SIGNS AT THE DISTANCE SHOWN.
3.

EACH LANE SHALL BE NO LESS THAN 11 FEET WIDE.

LEGEND:

SIGN

TEMP IMPACT ATTENUATOR

WORK ZONE

TRAFFIC FLOW ARROW

TEMPORARY BARRIER

REFLECTORIZED TRAFFIC DRUM

BURLINGTON/HAVERHILL

ROUTE 3 RAMP OVER I-95

I-495 OVER AMESBURY LINE ROAD

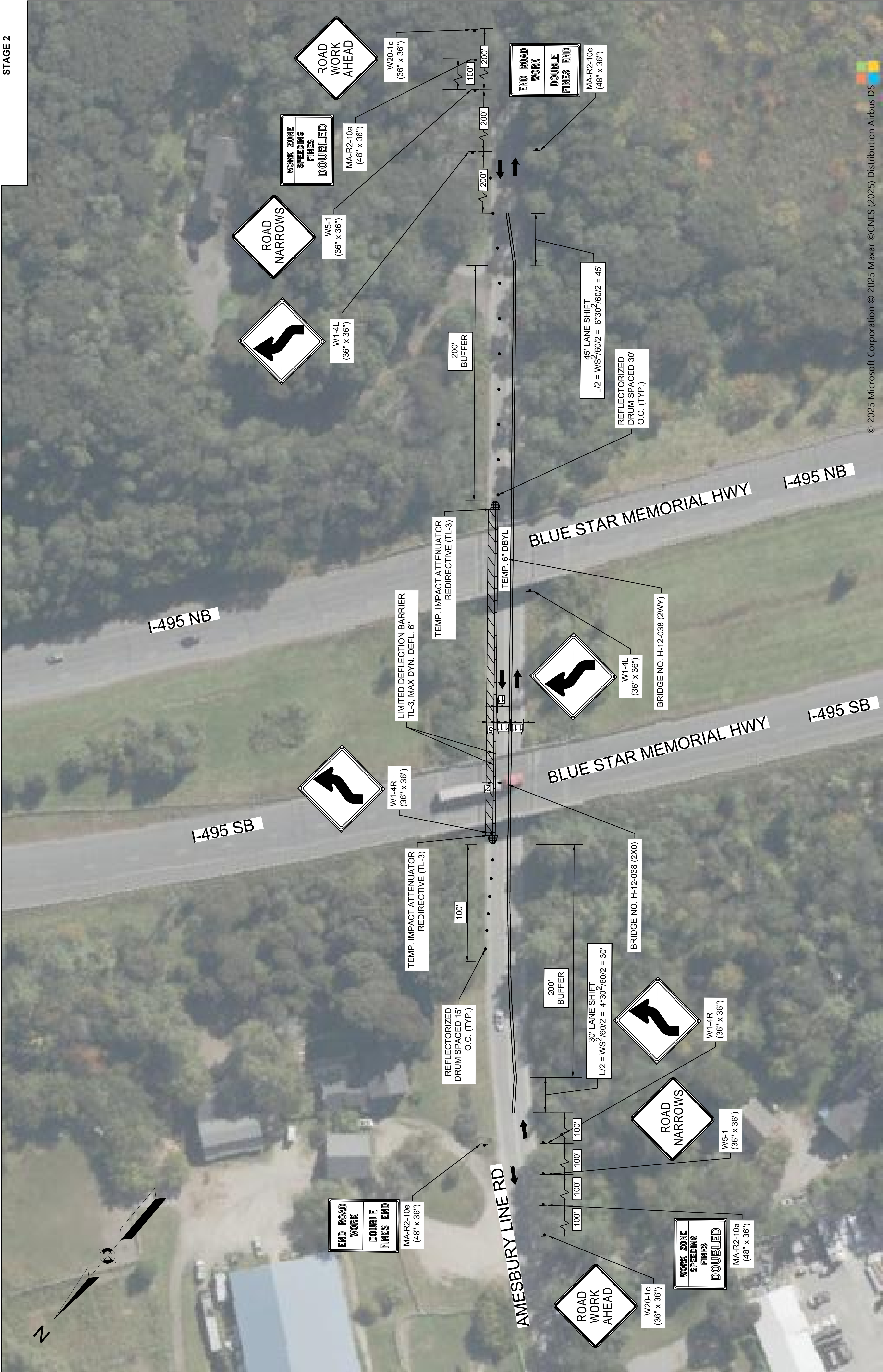
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		15	21

PROJECT FILE NO. 613781

TEMPORARY TRAFFIC CONTROL PLANS

HAVERHILL

STAGE 2

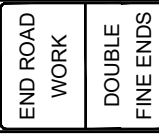


BURLINGTON/ HAVERHILL
ROUTE 3 RAMPS OVER I-95
I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		16	21

PROJECT FILE NO.	613781
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CONSTRUCTION SIGN SUMMARY
HAVERHILL

IDENTIFI- CATION NUMBER	SIZE OF SIGN (IN)		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA (S.F.)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK- GROUND	LEGEND	BORDER		
MA-R2-10a	48	36		MASSDOT STANDARD		2	FLUOR- ESCENT ORANGE	BLACK	BLACK	12.00	24.00
MA-R2-10e	36	48				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	12.00	24.00
W1-4L	36	36				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00
W1-4R	36	36				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00
W5-1	36	36				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00
W20-1C	36	36				2	FLUOR- ESCENT ORANGE	BLACK	BLACK	9.00	18.00

BURLINGTON/ HAVERHILL
ROUTE 3 RAMPS OVER I-95
I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		17	21

PROJECT FILE NO.	613781
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CONTROL DETAILS

TYPICAL TAPER LENGTHS (L ₁ OR L ₃) IN FEET	
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W ₁ OR W ₃) IN FEET
25	10
30	11
35	12
40	12
	104
	115
	125
	135
	145
	155
	165
	180
	204
	225
	245
	267
	283
	320

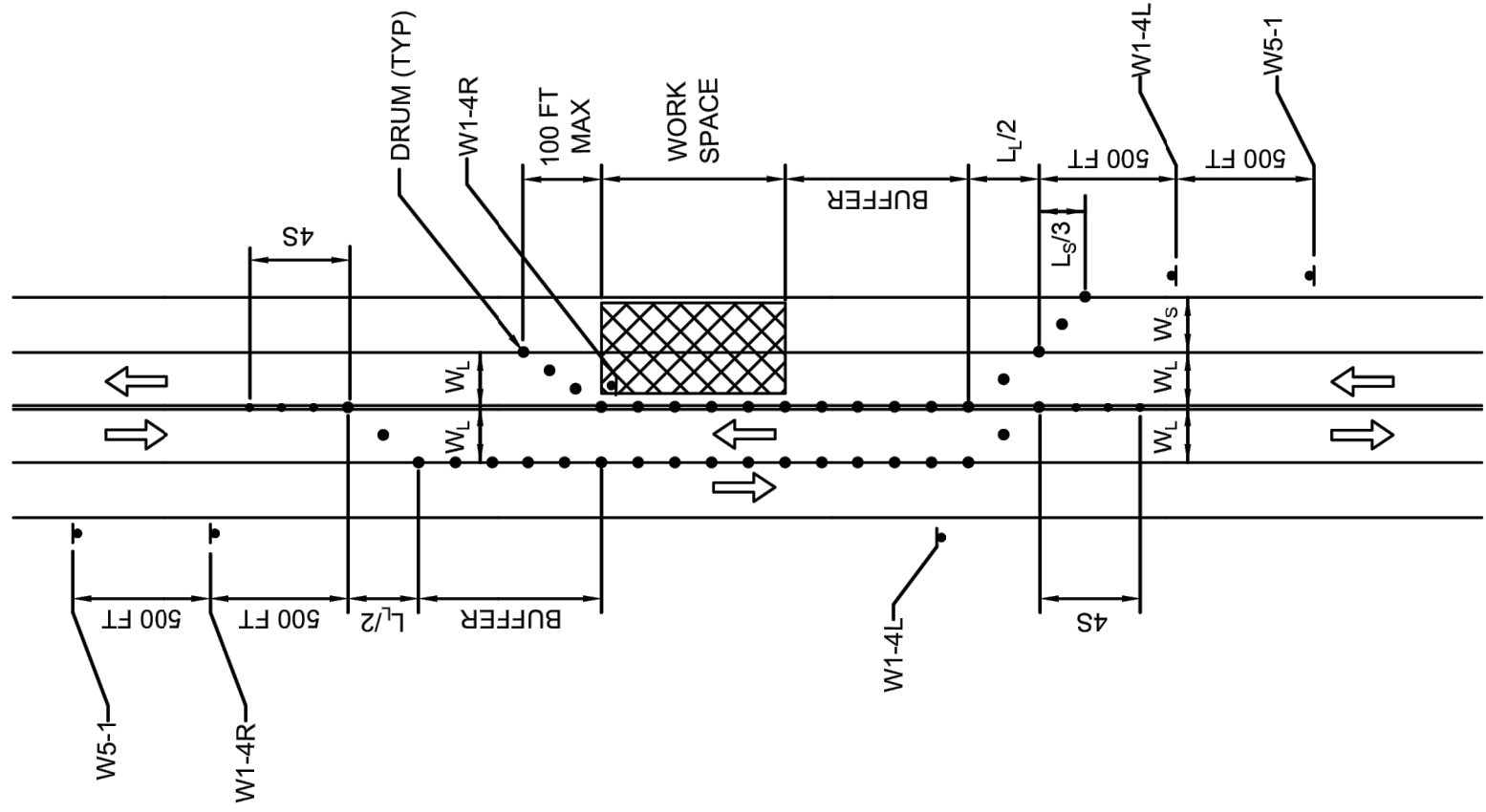
NOTE: FOR SHOULDER WIDTHS NOT LISTED IN TABLE, USE $L_3=WS^2/60$

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED LIMIT AND CAN BE DETERMINED FROM THE FOLLOWING TABLE:

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
25	155
30	200
35	250
40	305

NOTES:

- MAXIMUM DRUM SPACING IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 11 FEET MEASURED FROM THE EDGE OF DRUMS.



TYPICAL TAPER LENGTHS (L₁ OR L₃) IN FEET

TYPICAL TAPER LENGTHS (L ₁ OR L ₃) IN FEET	
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W ₁ OR W ₃) IN FEET
25	10
30	11
35	12
40	12
	104
	115
	125
	135
	145
	155
	165
	180
	204
	225
	245
	267
	283
	320

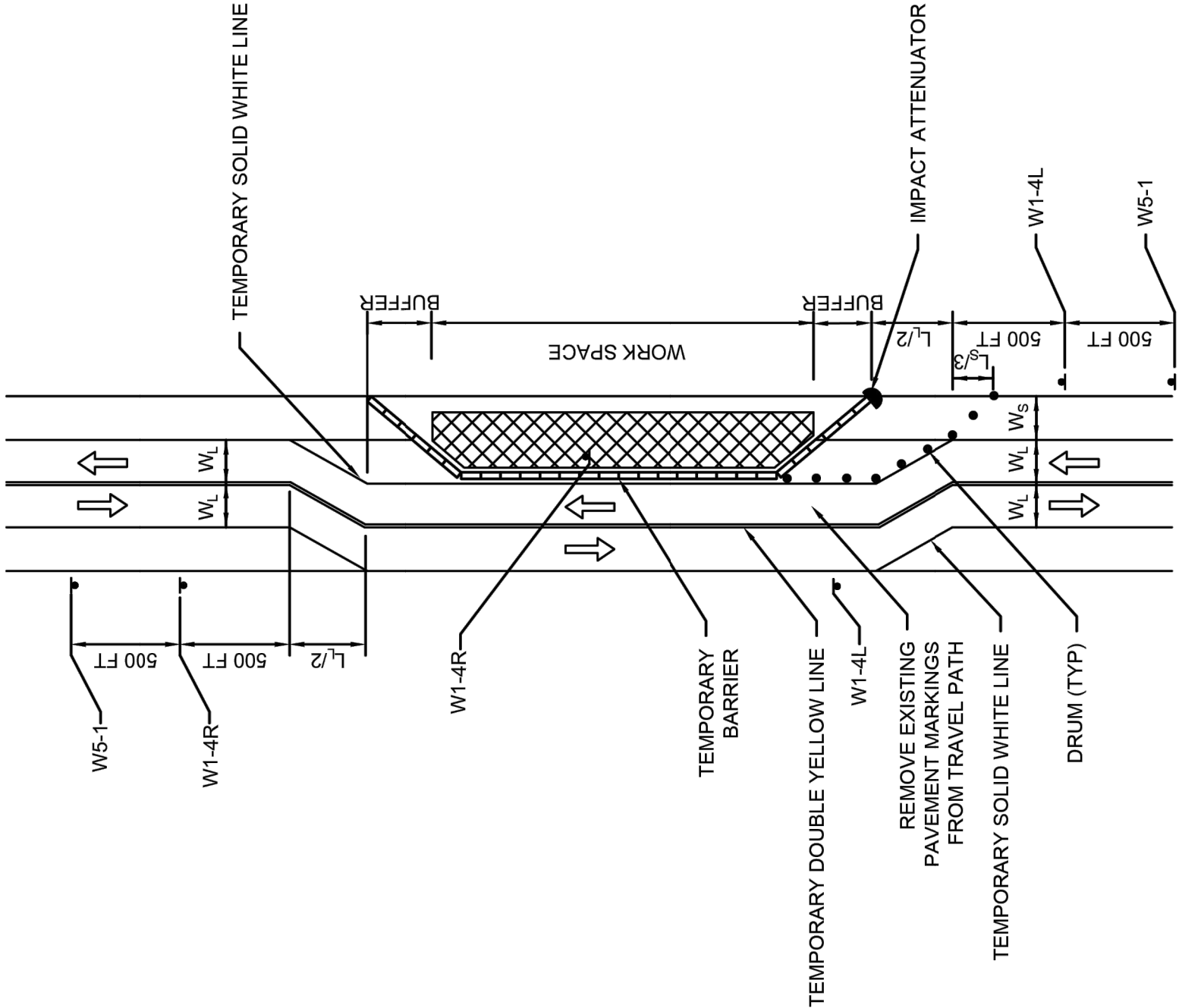
NOTE: FOR SHOULDER WIDTHS NOT LISTED IN TABLE, USE $L_3=WS^2/60$

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED LIMIT AND CAN BE DETERMINED FROM THE FOLLOWING TABLE:

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
25	155
30	200
35	250
40	305

NOTES:

- MAXIMUM DRUM SPACING IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 11 FEET MEASURED FROM THE EDGE OF DRUMS OR 2 FEET OFFSET FROM THE EDGE OF BARRIER.



TWO LANE ROAD HALF OF ROAD CLOSURE WITH DROP-OFF PROTECTION

CONSTRUCTION STANDARDS SECTION 800



CONSTRUCTION STANDARDS SECTION 800



CONSTRUCTION STANDARDS SECTION 800

TWO LANE ROAD HALF ROAD CLOSURE

ISSUE DATE JAN 2025

DRAWING NUMBER 852.5.4

TYPICAL TAPER LENGTHS (L₁ OR L₃) IN FEET

TYPICAL TAPER LENGTHS (L ₁ OR L ₃) IN FEET	
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W) IN FEET
25	10
30	11
35	12
40	12
	104
	115
	125
	135
	145
	155
	165
	180
	204
	225
	245
	267
	283
	320

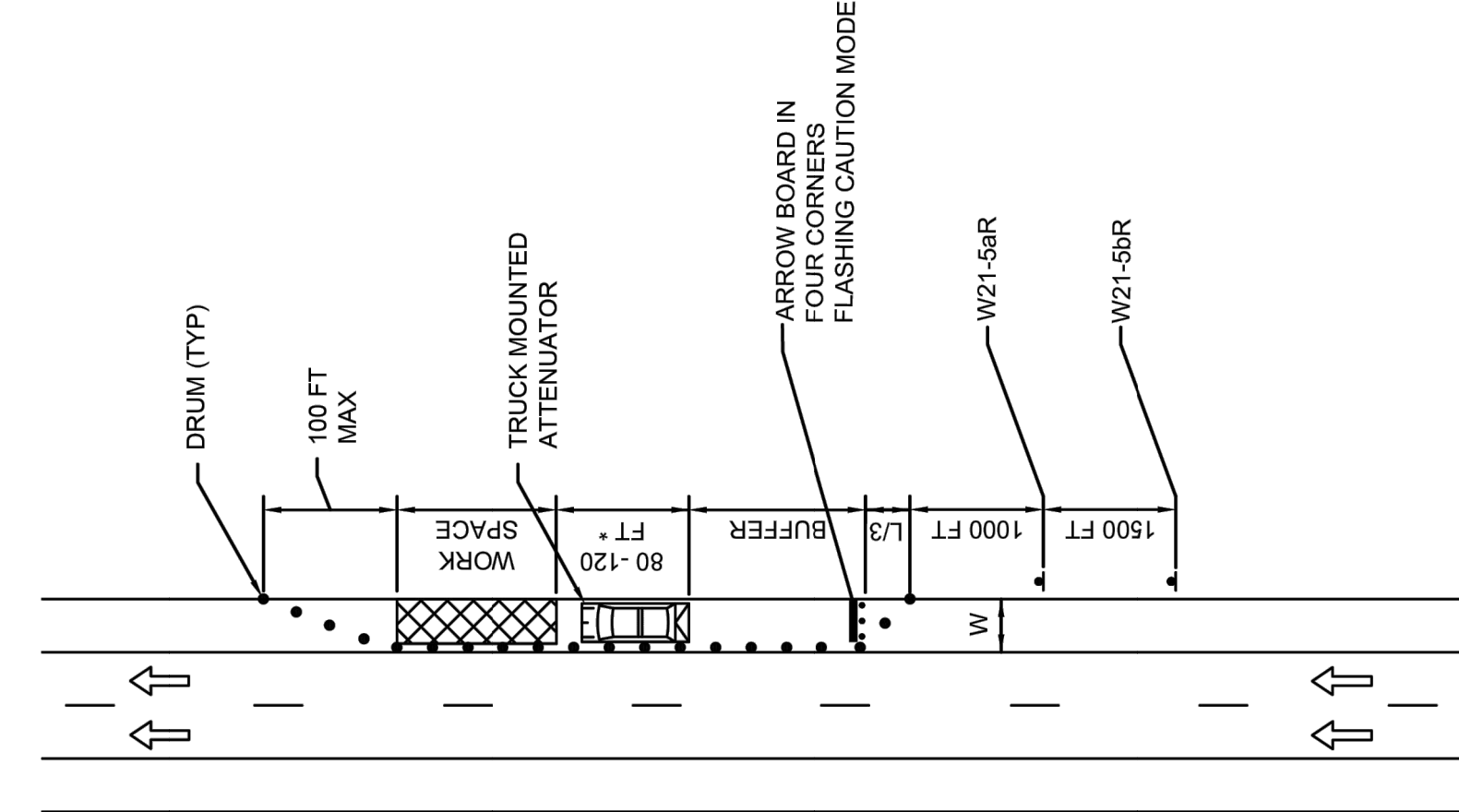
NOTE: FOR SHOULDER WIDTHS NOT LISTED IN TABLE, USE $L = \frac{WS^2}{3}$

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED LIMIT AND CAN BE DETERMINED FROM THE FOLLOWING TABLE:

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
50	425
55	495
60	570
65	645

NOTES:

- MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM DRUM SPACING IN A TAPER IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
- DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.



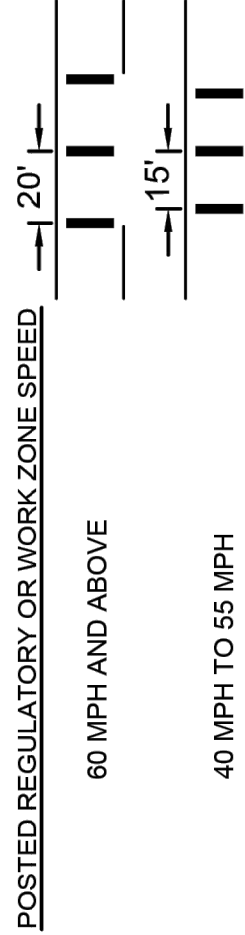
TYPICAL TAPER LENGTHS (L₁ OR L₃) IN FEET

TYPICAL TAPER LENGTHS (L ₁ OR L ₃) IN FEET	
SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W ₁ OR W ₃) IN FEET
25	10
30	11
35	12
40	12
	104
	115
	125
	135
	145
	155
	165
	180
	204
	225
	245
	267
	283
	320

NOTE: FOR SHOULDER WIDTHS NOT LISTED IN TABLE, USE $L_3 = WS$

TEMPORARY PORTABLE RUMBLE STRIP (TPRS)

A TPRS ARRAY SHALL HAVE THREE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:



NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED LIMIT AND CAN BE DETERMINED FROM THE FOLLOWING TABLE:

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
50	425
55	495
60	570
65	645

NOTES:

- THE FIRST TEN DRUMS OF EACH LANE CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
- MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM DRUM SPACING IN A TAPER IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
- DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.

DIVIDED HIGHWAY RIGHT SHOULDER CLOSURE (SHORT TERM)

CONSTRUCTION STANDARDS SECTION 800



CONSTRUCTION STANDARDS SECTION 800



CONSTRUCTION STANDARDS SECTION 800

DIVIDED HIGHWAY RIGHT LANE CLOSURE (SHORT TERM)

ISSUE DATE JAN 2025

DRAWING NUMBER 852.7.3

**BURLINGTON/HAVERHILL
ROUTE 3 RAMPS OVER I-95
I-495 OVER AMESBURY LINE ROAD**

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		18	21
PROJECT FILE NO.			613781

EMPORARY TRAFFIC CONTROL DETAILS

SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W _L OR W _S) IN FEET		
	10	11	12
50	500	550	600
55	500	605	660
60	600	680	720
65	650	715	780

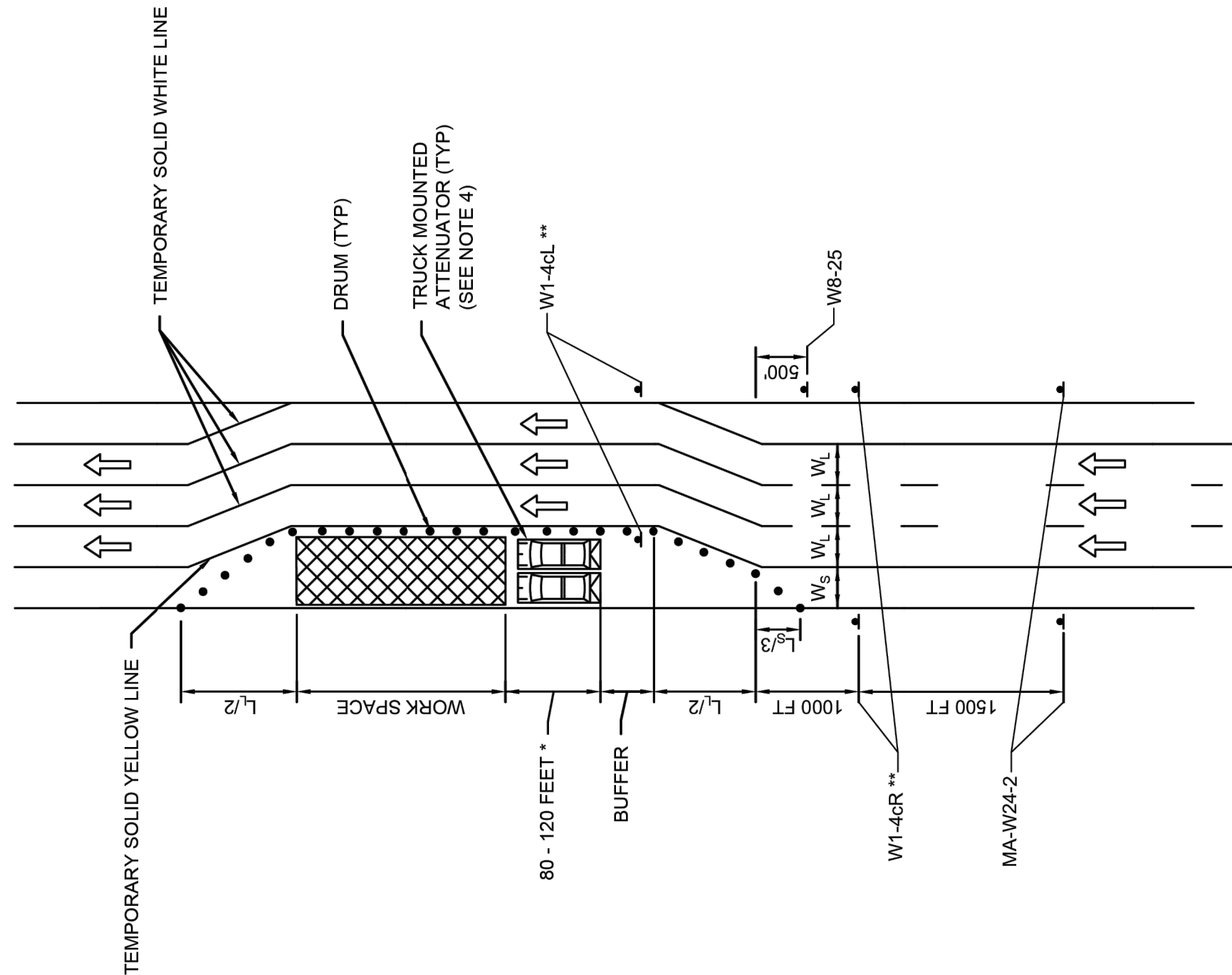
NOTE: FOR SHOULDER WIDTHS NOT LISTED IN TABLE, USE $L_s = WS$

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED LIMIT AND CAN BE DETERMINED FROM THE FOLLOWING TABLE:

STOPPING SIGHT DISTANCE	
SPEED (MPH)	DISTANCE (FT)
50	425
55	495
60	570
65	645

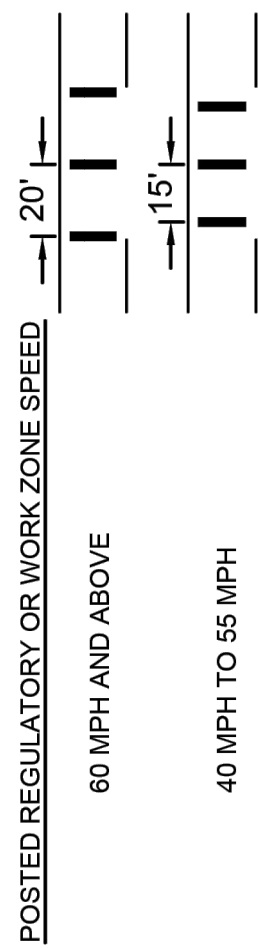
NOTES:

1. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
2. THE SPEED LIMIT IN MPH, MUST BE 11 FEET MEASURED FROM CENTER OF TEMPORARY PAVEMENT MARKING.
3. TRUCK MOUNTED ATTENUATORS MAY BE OMITTED IF TAPER, BUFFER, AND WORK SPACE IS PROTECTED BY TEMPORARY BARRIER.
4. DISTANCE MAY BE USED FOR LONG TERM SETUP ONLY.
- * DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.
- * SIGN TO REFLECT ACTUAL NUMBER OF LANE.



TEMPORARY PORTABLE RUMBLE STRIP (TPRS)

A TPRS ARRAY SHALL HAVE THREE RUMBLE STRIPS. SPACING SHALL BE AS FOLLOWS:



NOTE: TPRS SHALL BE DEPLOYED ONLY FOR SETUPS OF 12 HOURS OR LESS

MINIMUM LENGTH OF LONGITUDINAL BUFFER IS EQUAL TO THE STOPPING SIGHT DISTANCE AT THE POSTED SPEED LIMIT AND CAN BE DETERMINED FROM THE FOLLOWING TABLE:

STOPPING SIGHT DISTANCE	SPEED (MPH)	DISTANCE (FT)
	50	425
	55	495
	60	570
	65	645

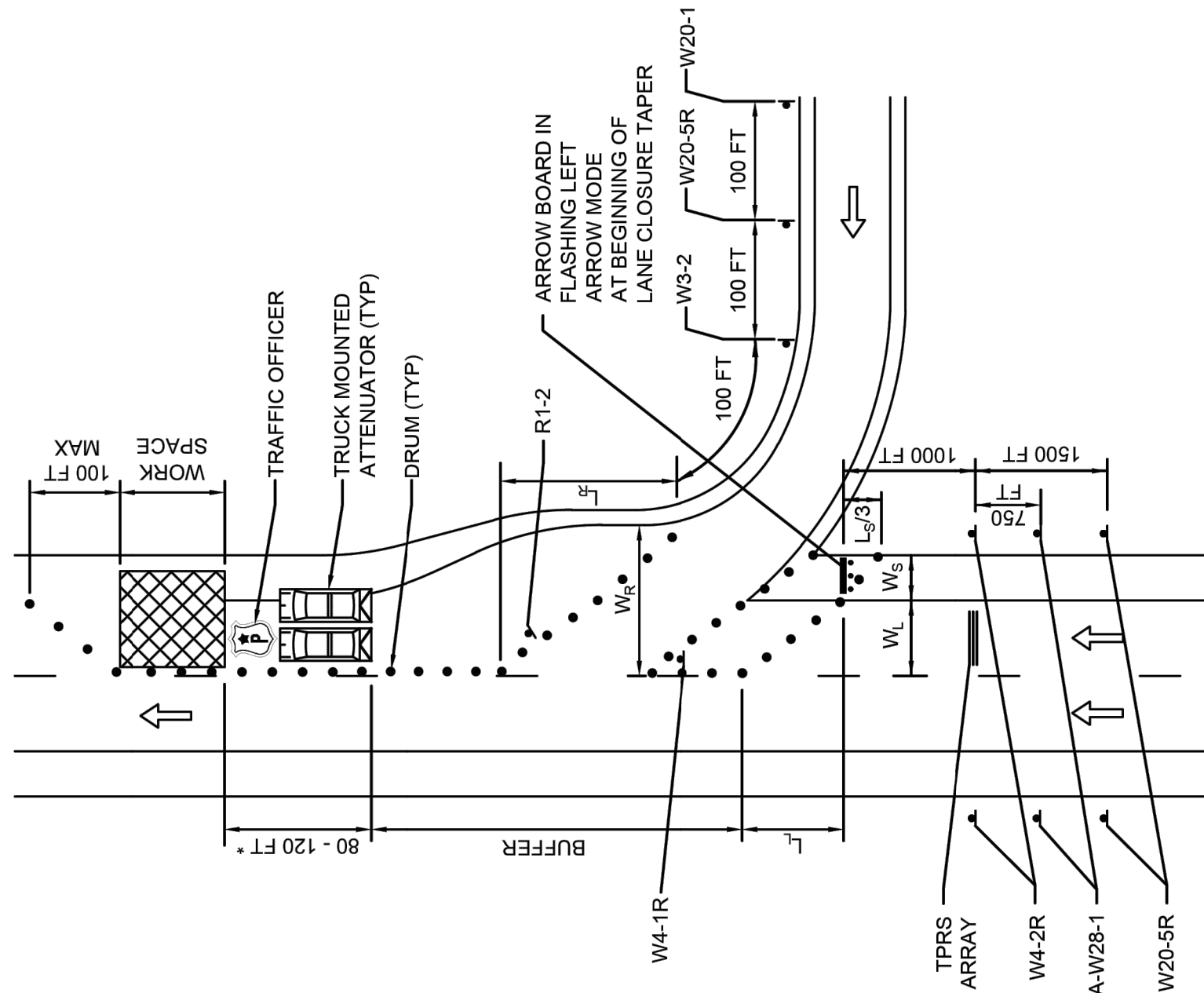
TYPICAL TAPER LENGTHS (L_L , L_S OR L_R) IN FEET

SPEED LIMIT (S) IN MPH	WIDTH OF OFFSET (W_L , W_S OR W_R) IN FEET		
	10	11	12
50	500	550	600
55	550	605	660
60	600	660	720
65	650	715	780

NOTE: FOR WIDTHS NOT LISTED IN TABLE, USE $L = WS$

NOTES:

1. THE FIRST TEN DRUMS OF EACH CLOSURE TAPER SHALL BE MOUNTED WITH SEQUENTIALLY FLASHING LIGHTS IF DEPLOYED BETWEEN DUSK AND DAWN.
 2. MAXIMUM DRUM SPACING IN A TAPER IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH. IN TANGENT SECTIONS, MAXIMUM SPACING IN FEET IS EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH.
- * DISTANCE MAY BE INCREASED IF ADDITIONAL ROLL-AHEAD ALLOWANCE IS NEEDED. REFER TO MANUFACTURER'S SPECIFICATIONS.





massDOT
Massachusetts Department of Transportation
Highway Division

CONSTRUCTION STANDARDS

SECTION 800

DIVIDED HIGHWAY MULTIPLE LANE SHIFT

DRAWING NUMBER



CONSTRUCTION STANDARDS

**ENTRANCE RAMP
WORK DOWNSTREAM**

DRAWING NUMBER

UE DATE

DRAWING NUMBER
852-9-3

BURLINGTON/HAVERHILL

ROUTE 3 RAMP OVER I-95

I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		19	21
PROJECT FILE NO.		613781	

TEMPORARY TRAFFIC CONTROL PLANS

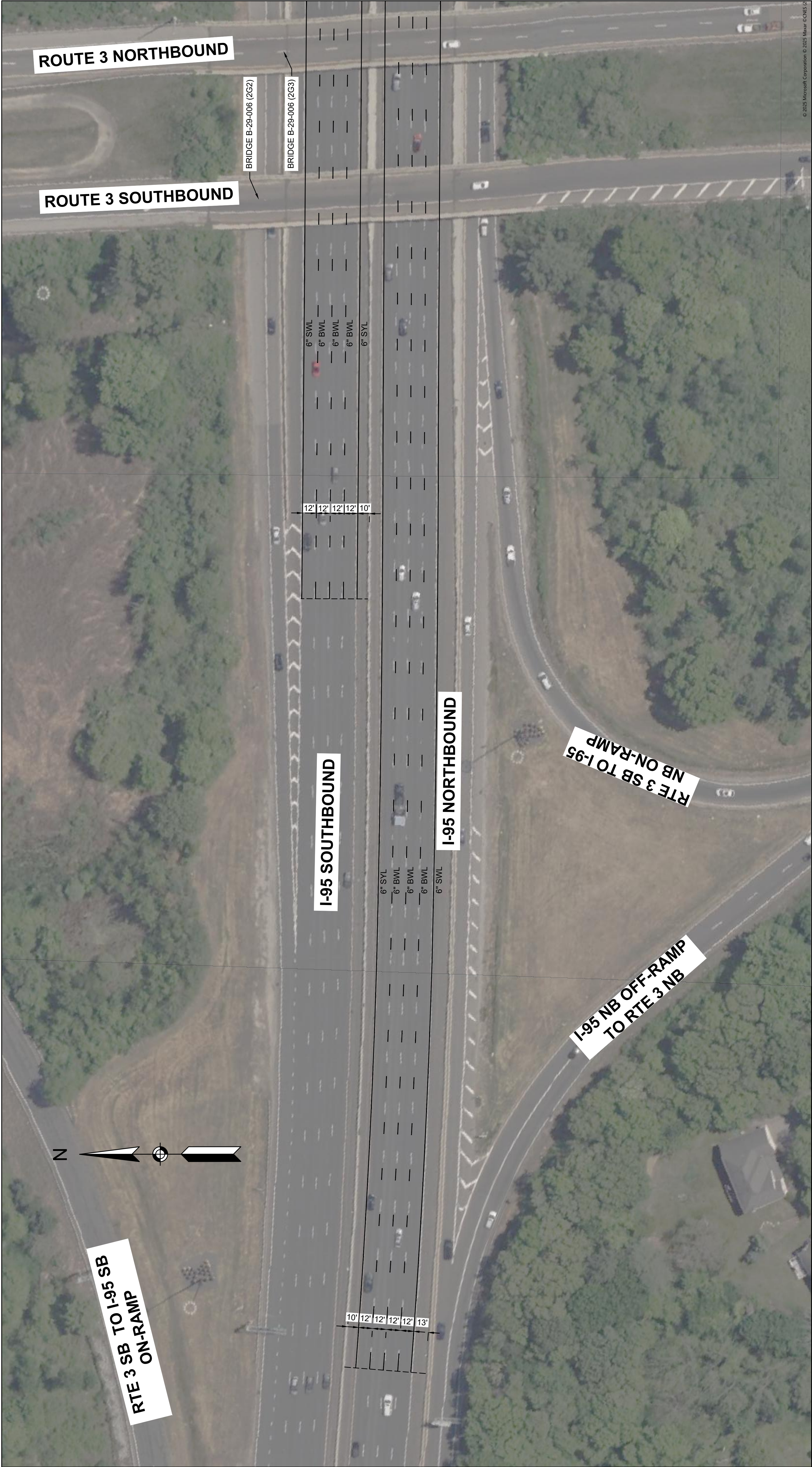
BURLINGTON

PAVEMENT RESTORATION PLAN

SHEET 1 OF 2

- NOTES:
1.

ALL PAVEMENT MARKINGS SHALL BE RECESSED POLYUREA. EXISTING GROOVES SHALL BE UTILIZED WHERE PRESENT.



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SCALE: 1" = 40'

CONTINUED ON SHEET 2 OF 2

BURLINGTON/HAVERHILL

ROUTE 3 RAMP OVER I-95

I-495 OVER AMESBURY LINE ROAD

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA		20	21

PROJECT FILE NO. 613781

TEMPORARY TRAFFIC CONTROL PLANS

BURLINGTON

PAVEMENT RESTORATION PLAN

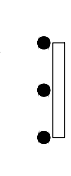
SHEET 2 OF 2

LEGEND:

 WORK ZONE

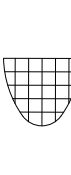
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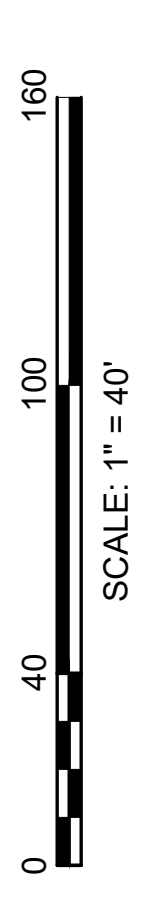
 DIRECTION OF TRAFFIC

 ARROW BOARD

 TRUCK MOUNTED ATTENUATOR

 TEMPORARY REFLECTORIZED DRUM

 TEMPORARY IMPACT ATTENUATOR



CONTINUED ON SHEET 1 OF 2

NOTES:

1. ALL PAVEMENT MARKINGS SHALL BE RECESSED ALL WEATHER THERMOPLASTIC. EXISTING GROOVES SHALL BE UTILIZED WHERE PRESENT.

BURLINGTON/HAVERHILL ROUTE 3 RAMP OVER I-95 I-495 OVER AMESBURY LINE ROAD				
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS	
MA		21	21	
PROJECT FILE NO. 613781				

TEMPORARY TRAFFIC CONTROL PLANS
HAVERHILL
PAVEMENT MARKING RESTORATION
PLAN



DOCUMENT A00808

PROJECT UTILITY COORDINATION FORM



Project Utilities Coordination (PUC) Form

CONTACTS AND GENERAL UTILITY INFORMATION

8/25/2025
Revision
Date:

8/25/2025
PRINTED

City/Town: Burlington Haverhill		Project File #: 613781		PUC Completed by: Kyle LeComte		Utility Pole Set: Vz~Es Burl, NG/Vz Haverhill						
Route/Street: Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)		Resident Engineer: Michael Winnick		Mass DOT PM: Genesis Poz Diaz		Scheduled Ad Date: 9/25/2025						
Consultant: MassDOT Consultant - In-House District4 Bridges		Contact: Consentino, Douglas J. Martin Warrunge		Office #		Total Poles Relocated: NONE						
Cell #		Email		Potential For District Initiated Early Relocation *		Utilities On Bridge/Structure		Utilities Underground (UG) /Aerial (OH)				
Utility Company	Contact	Office #	Email	Scope, Budget, Duration Submitted	Agreement	Non-Reimbile	Notes	YES	NO	YES	NO	OH
MassDOT Lighting	Peder Gfeller Jonathan Soucy	781 844 0815 857 405 5058	Peder Gfeller@dot.state.ma.us Jonathan.Soucy@dot.state.ma.us	X			Coordinate with D4 Traffic for any work impacting Highway Lighting. Existing conduits are attached to the bridge and go through the median. Language was provided in the special provision.		X	X		x
Eversource Electric "A"	Ned Sadowski	(413) 537-6594	ned.sadowski@eversource.com				No Conflict		X		X	
MassDOT ITS	Abraham Haggess Tony Wade Louis Lamoureux	(617) 708-4254 (617) 835-6922 (774) 286-6486	abraham.e.haggess@dot.state.ma.us tony.wade@dot.state.ma.us Louis.Lamoureux@dot.state.ma.us	X			ITS facilities within limits Contact Tony Wade to be sure underground ITS is not affected		X		X	x
Ngrid Elec A	Casey Silva	(617) 428-7787	Casey.Silva@nationalgrid.com	X			In Haverhill Town Line, No facilities in Burlington		X		X	x
Verizon	Paul E. Diamantopoulos Stacy Manseau	(508) 245-5922 (978) 339-5812	paul.e.diamantopoulos@verizon.com smanseau@jike.com	X			In Haverhill Town Line, No facilities in Burlington		X		X	
Asbound	Jennifer O'Neill Alex Ortiz	(617) 756-9881 (617) 636-2845	jennifer.o'Neill@astound.com alex.ortiz@astound.com	X			No Conflict		X		X	
Comcast	Wendy Brown	(603) 541-1082	Wendy.Brown@comcast.com	X			No Conflict		X		X	
FiberLight	Heather Araujo	(207) 432-2045	haraujo@fiberlight.net	X			No Conflict		X		X	
Lighbath	Jeff Harrington	(617) 999-5371	jeff.harrington@lightbathfiber.com	X			No Conflict		X		X	
Burlington Fire Alarm	Michael Hanafin	(781) 238-5640	mhanafin@burlington.org	X			No Conflict		X		X	
MCI-Verizon Business	Stephen Parrelli Tremaine Fernandes	(508) 248-1305 (508) 248-1309	stephen.parrelli@verizon.com tremain.k.fernandes@verizon.com	X			No Conflict		X		X	
Zayo Group	Richard Moran	(978) 844-7525	richard.moran@zayo.com	X			No Conflict		X		X	
Verizon Wireless Small Cell	Liz Glidden	(508) 245-8632	elizabeth.glidden@vzw.com	X			No Conflict		X		X	
MTA	Christine Brennan	(617) 222-3361	cbrennahan@mta.com	X			No Conflict		X		X	
For Information Burlington												
MWRA- Sewer	Kevin McKenna	(617) 305-5956	Kevin.McKenna@mwra.com				No Facilities					
Burlington DPW- Water & Sewer	Brian White	(781) 270-1670	Bwhite@burlington.org				No Facilities					
Burlington DPW- Water & Sewer	Brian White	(781) 270-1670	Bwhite@burlington.org				No Facilities					
Burlington DPW Engineer	Thomas Hayes	(781) 270-1640	thayes@burlington.org									
Lexington Town Engineer	David Pinsonneault	(781) 274-8300	dpinson@lexingtonma.gov									
Lexington DPW-Water & Sewer	David Pavlik	(781) 274-8300	dpavlik@lexingtonma.gov									
MWRA-Water	Ralph Francesconi	(617) 461-3573	Ralph.Francesconi@mwra.com				No Facilities					
For Information Haverhill												
Haverhill Fire Alarm	Michael Lavoie	(978) 373-8460	M.Lavoie@haverhillfire.com									
Haverhill Water	Robert Ward Andrew Carvalho Art Leventis Paul Jesse	(978) 374-2382 (978) 374-2388	ward@haverhillwater.com acarlova@haverhillwater.com art.leventis@haverhillwater.com pjesse@haverhillwater.com									
Haverhill DPW	John Pettis, III	(978) 374-2335	Jpettis@cityofhaverhillpolice.com									
Haverhill Wastewater	Robert Ward Paul Jessel	(978) 374-2382 (978) 374-2382	ward@haverhillwater.com pjessel@haverhillma.gov									
No Facilities or No Conflicts												
Eversource gas	Jocelyn Forcier		jocelyn.forcier@eversource.com				No Conflicts					
National Grid Gas	Melissa Owens	(617) 592-7650	Melissa.Owens@nationalgrid.com				2025 4 4 No Facilities					
Tennessee Gas	David Wood	(860) 763-6005	KMEcontractantsburke@kendermann.com				2025 4 3					
Enbridge	Kathy M. Aruda	(508) 938-7728	kathleen.aruda@enbridge.com				2025 05 21 Informed us there is no conflicts with Enbridge at either location.					
Eversource Fiber	Bechir Khouri	(781) 441-3864	bechir.khouri@eversource.com				2025 05 21 No fiber in highlighted areas.					
Crown Castle	Mark Bonanno Mark Vegnani	(508) 616-7818 (508) 208-9117	mark.bonanno@crownastell.com mark.vegnani@crownastell.com				2025 05 21 No cables within the project limits.					
Raytheon Technologies - in care of AT&T	Douglas Flynn Kevin Michaud	(978) 436-8554 (617) 828-6585	flynn@tx.com Knichaud@MassElinc.com				2025 05 21 Raytheon transitioning ownership of all outside cables to Verizon. They informed us that moving forward we should contact Stephen Parrelli or Tremaine Fernandes for all inquiries concerning outside plant infrastructure of Raytheon.					
AT&T	Erica Hudson	(781) 221-8400	erica.hudson@att.net				2025 06 02 No facilities					

Utility Relocation Notes for MassDOT Contractor	
Unless otherwise noted by Contract, the MassDOT Contractor is to provide the District Construction Office with 7 Calendar Days advance notification in order to validate the current progress and provide the required 30 Days advance notice-to-proceed for the first Utility - and each subsequent Utility. These advance notifications are to be identified in the Contractor's Schedules (Pre-Con preparation, Baseline, Subnets, and Updated/Monthly Schedules) as specified in Subsection 8.02 (for DBB Contracts) and/or Section 9 (of DB Contracts). Note: The durations included below do not include these lead-times. See Additional 'Important Basis notes for Contractor' - on last PUC Form page.	
Additional notes: Lead paint railings, Polcon (ie, gunite)(possible asbestos) The lighting are being led from the Middlesex Turnpike Load Center. Any lockout and tagout would need to be performed by the electrical contractor performing as per NPSA 7.0E and OSHA 29 CFR 1910.147	
Suggested Sequence of Relocation (Based on Consultant proposed construction staging) The sequence as detailed on the following pages is based on the consultants proposed staging plan. This information was compiled through meetings that included all of the utilities listed below along with the designer and the town of Burlington. The information provided is the best available information prior to project advertisement.	

DOCUMENT A00820

**Massachusetts Department of Transportation
Conditions of Custody****REQUEST FOR RELEASE OF MASSDOT AUTOCAD FILES FORM**

(Only to be used following award of contract)

City/Town: BURLINGTON - HAVERHILLProject File Number: 613781Contract Number: 132474Project Description: Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)

All AutoCAD files are provided solely as a courtesy to facilitate public access to information. MassDOT attempts to provide current and accurate information but cannot guarantee so. MassDOT provides such documents, files or other data "as is" without any warranty of any kind, either expressed or implied, including but not limited to, accuracy, reliability, omissions, completeness and currentness. The Commonwealth of Massachusetts and its Consultants shall not be liable for any claim for damages, including lost profits or other consequential, exemplary, incidental, indirect or special damages, relating in any way to the documents, files or other data accessible from this file, including, but not limited to, claims arising out of or related to electronic access or transmission of data or viruses. Because data stored on electronic media can deteriorate undetected or be modified without our knowledge, MassDOT cannot be held liable for its completeness or correctness. MassDOT makes no representation as to the compatibility of these files beyond the version of the stated CAD software.

By signing this form, I agree that it shall be my responsibility to reconcile this electronic data with the conformed contract documents, and that only the conformed contract documents shall be regarded as legal documents for this Project. I understand that this authorization does not give me the right to distribute the files. I agree to the terms above and wish to receive the AutoCAD files.

This signed form shall be emailed to the Highway Design Engineer at the MassDOT -Highway Division at the following email address:

DOTHighwayDesign@dot.state.ma.us

Attn: AutoCAD Files

Name of person requesting AutoCAD files: _____

Affiliation/Company: _____

Address: _____

Telephone number: _____

Email address: _____

Signature/Date: _____

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DOCUMENT A00875

**POLICY DIRECTIVE P-22-001
AND
POLICY DIRECTIVE P-22-002**

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Number: P-22-001
Date: 9/23/22

POLICY DIRECTIVE

Jonathan Gulliver (signature on original)

HIGHWAY ADMINISTRATOR

Off-Site Stockpiling of Soil from MassDOT Construction Projects

Purpose

The purpose of this Policy Directive is to formally establish a policy and procedures for managing and stockpiling soil generated and transported from MassDOT construction projects. This Policy Directive does not supersede any Federal, State, or Local regulations.

Date of Effect

This Policy Directive is effective immediately for all projects, including active construction projects.

For active construction projects and for other projects advertised prior to October 15, 2022, changes to the contract documents needed to implement the requirements of this Policy Directive will be considered on a case-by-case basis and shall be approved by the District Highway Director, as necessary.

For projects advertised on or after October 15, 2022, MassDOT will include the requirements and implementation procedures of this Policy Directive in the construction contract documents.

Policy Requirements

This policy is intended to prevent the off-site relocation of excavated soil generated from MassDOT projects to areas near residential receptors and to control potential fugitive dusts and/or contaminants. To that end, excavated soil may not be moved from the project site without knowledge of the content of the material. Knowledge may include visual field observations for presence of staining, odor, and/or debris, screening with a photoionization detector (PID), laboratory analysis, and/or site history. Pavement millings and other non-soil materials are not subject to the requirements of this Policy Directive.

Moving soil from a MassDOT project site to a temporary off-site storage location must be approved in writing by the District Highway Director.

The Contractor must select a storage location that is at least 500 feet away from residential receptors, as defined herein to include, but not be limited to, residential dwellings, residentially

zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities.

Temporary off-site storage of excavated soil from a MassDOT project is only permissible at a location approved and permitted by MassDOT. The temporary storage location should be located within the same municipality where the soil was excavated, where possible. Stockpiled soil must be securely covered, and appropriate measures must be taken to minimize fugitive dust and erosion.

Signs indicating the source of the soil, the date the soil was generated, and contact information must be erected and maintained until the stockpiled soils are transported to a disposal facility or reused on the project site.

Implementation Procedures

To ensure that off-site storage of excavated soils is managed properly on MassDOT projects, this policy requires the following:

1. Off-Site Stockpile Storage Locations

- a. The Contractor shall provide proposed off-site storage locations to the Engineer for approval at least 30 days prior to transporting soil off site. Off-site storage locations should be in the same municipality as the work site.
- b. The Contractor shall keep excavated soil on site until adequately characterized to the satisfaction of the Engineer.
- c. The Contractor shall provide notification of the approved off-site storage location to the local Board of Health and the Town Manager's/Mayor's Office at least 7-days prior to transporting soil off site.
- d. The Contractor shall provide the Engineer with at least 3-days' notice prior to transporting soil off site.
- e. For off-site storage locations on MassDOT property, the Contractor is required to obtain an Access Permit through the District Permits Office prior to storage of soil or other materials. MassDOT will issue these permits at no cost to the Contractor. Information to be submitted by the Contractor as part of the permit application shall include:
 - i. A description of material to be stored off-site, including available analytical data;
 - ii. A figure of the location with distances to residences and residential receptors; and
 - iii. Anticipated duration of temporary storage.
- f. Stockpile locations should not be within 500 feet of residential receptors (e.g., residential dwellings, residentially zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities).
 - i. If the stockpile location must be within 500 feet of residential receptors, then soil must be less than RCS-1 (per 310 CMR 40.1600) and free of potentially hazardous or regulated items.

- g. For off-site storage locations on non-MassDOT property, the Contractor must notify the property owner(s) at least 7 days prior to transporting material.
- h. Exceptions to these rules will be reviewed by MassDOT and may be approved by the District Highway Director on a case-by-case basis.

2. Off-Site Stockpile Management

- a. The Contractor shall keep soil stockpiles on impermeable surfaces (e.g., asphalt or concrete) or on 10-mil polyethylene sheeting.
- b. The Contractor shall cover soil stockpiles with 10-mil polyethylene sheeting and surround with a berm made of hay bales, straw wattles, or similar.
 - i. Piles that are actively being worked on must be covered and re-secured at the end of the work shift.
- c. The Contractor shall label stockpiles with signs, including:
 - i. Location of origin (including any Release Tracking Numbers)
 - ii. Stockpile ID number (including MassDOT District office-assigned tracking ID, if different)
 - iii. Date of initial accumulation
 - iv. Applicable telephone numbers for the Contractor and MassDOT.
- d. The Contractor shall mitigate fugitive dust at storage locations under the direction of an appropriately trained/certified environmental professional.
- e. The Contractor shall remedy noncompliance with this policy within 48 hours.
- f. The Contractor shall remedy noncompliance with this policy on the SAME DAY for potentially hazardous material, as determined by the Engineer.
- g. The Contractor shall handle excavated soil according to federal, state, and local regulations.
- h. The Contractor shall use appropriate shipping documents for all movements of excavated soil on public roadways (e.g., Bill of Lading, Material Shipping Record, Manifest, Asbestos Waste Shipment Record, etc.).

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Number: P-22-002Date: 9/23/22

POLICY DIRECTIVE

Jonathan Gulliver (signature on original)

HIGHWAY ADMINISTRATOR

Use of MassDOT Property for Staging and other Construction-Related Operations

Purpose

This Policy Directive is intended to address the use of MassDOT property by MassDOT Contractors for construction staging and other construction-related operations that are not specifically defined in the construction contract. Such use of MassDOT property will only be allowed if permitted by the District Office in accordance with 700 CMR 13.00, Approval of Access to MassDOT Highways and Other Property. This includes the use of MassDOT property for staging, laydown, and storage of equipment and materials, including soil excavated from a project site.

This Policy Directive requires the Contractor/applicant to obtain a Non-Vehicular Access Permit from MassDOT to use MassDOT property for these purposes.

This Policy Directive is effective immediately and applies to all MassDOT construction projects.

General Permit Considerations and Conditions

In addition to other normal MassDOT Access Permit procedures, MassDOT shall consider the following during the application, review, implementation and monitoring processes of Access Permits required by this Policy Directive:

- Storage and placement of the Contractor's equipment and materials should not be allowed within the clear zone of the roadway.
- Stockpiled soils should not be located within 500 feet of residential receptors, as defined herein to include, but not be limited to, residential dwellings, residentially zoned property, schools, daycare facilities, playgrounds, parks, recreational areas, hospitals, elderly housing and convalescent facilities.
- The Contractor/applicant shall identify the access/egress locations of the proposed storage areas. MassDOT will only approve locations determined to be safe for roadway users, construction workers and the general public.
- The Contractor may be required to submit a Traffic Management Plan and/or Lighting Plan for MassDOT review and approval as part of the permit application, depending on the proposed use of the area.

- The Contractor shall submit the permit application through MassDOT's online State Highway Access Permit System (SHAPS).
- MassDOT will waive the permit application fee for any application received from a MassDOT Contractor for any permit required by this Policy Directive and will waive any subsequent amendment and extension fees that may otherwise be required.
- MassDOT will review the permit application in accordance with applicable standard procedures and will apply standard permit terms and conditions, as necessary.
- The Resident Engineer will verify that the permit is approved before allowing the Contractor to use the affected area for the requested purpose.
- Areas permitted are for use by the approved applicant only and are not to be shared with or used by other vendors. Subcontractors specifically engaged with the applicant working on the specific MassDOT project will be allowed to use the area in accordance with the terms of the permit.
- Permits are issued on an annual basis and will require the Contractor to file for an extension each year to continue use.

Exemptions from Permit Requirements

Equipment and materials being used for active construction operations and located within the work zone of the construction contract are exempt from this permit requirement, provided they do not interfere with the safety or operation of the roadway or the work zone. Examples of these types of exempt uses are:

- Equipment and materials parked or stored within a protected (barriered) work zone.
- Materials placed in the work zone prior to same-day installation or use.
- Soils excavated temporarily and scheduled to be replaced, such as for trenching operations or for installation of drainage structures.

DOCUMENT B00420

PROPOSAL

BURLINGTON - HAVERHILL

For: **Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3)
and H-12-038 (2X0 & 2WY)**

COMMONWEALTH OF MASSACHUSETTS

LOCATION

The work referred to herein is in the City and Town of BURLINGTON in Middlesex County and HAVERHILL in Essex County, in the Commonwealth of Massachusetts, and is shown by the locus map (Document 00331) in the Proposal Pamphlet, the work locations extend as follows:

Burlington

Bridge B-29-006 (2G2 & 2G3)

Haverhill

Bridge H-12-038 (2X0 & 2WY)

The contract prices shall include the furnishing of all materials (except as otherwise herein specified), the performing of all the labor requisite or proper, the providing of all necessary machinery, tools, apparatus and other means of construction, the doing of all the abovementioned work in the manner set forth, described and shown in the specifications and on the drawings for the work, and in the form of contract, and the completion thereof within **618 CALENDAR DAYS** upon receipt of a Notice to Proceed, except that if the completion date falls between December 1 and March 15 then the same number of days beyond December 1st will be extended after March 15th.

The Work of this project is described by the following Items and quantities.

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Project # 613781		Contract # 132474		
Location : BURLINGTON - HAVERHILL				
Description : Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
102.21	150	SELECTIVE CLEARING AND GRUBBING AT _____ PER SQUARE YARD		
106.88	17	JACKING AND SHORING AT _____ EACH		
106.881	14	JACKING AND SHORING REMOVED AND RESET AT _____ EACH		
120.1	10	UNCLASSIFIED EXCAVATION AT _____ PER CUBIC YARD		
127.12	65	REINFORCED CONCRETE SUBSTRUCTURE EXCAVATION AT _____ PER CUBIC YARD		
151.	10	GRAVEL BORROW AT _____ PER CUBIC YARD		
451.	5	HMA FOR PATCHING AT _____ PER TON		
628.315	4	TEMPORARY IMPACT ATTENUATOR, REDIRECTIVE, TL-3 AT _____ EACH		
628.4	4	TEMPORARY IMPACT ATTENUATOR, REMOVED AND RESET AT _____ EACH		

Project # 613781		Contract # 132474		
Location : BURLINGTON - HAVERHILL				
Description : Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
722.3	1	SCHEDULE OF OPERATIONS (TYPE C) - FIXED PRICE \$28000 AT Twenty Eight Thousand Dollars LUMP SUM	\$28,000.00	\$28,000.00
740.	21	ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A) AT _____ PER MONTH		
748.	1	MOBILIZATION AT _____ LUMP SUM		
851.1	200	TRAFFIC CONES FOR TRAFFIC MANAGEMENT AT _____ PER DAY		
852.	900	SAFETY SIGNING FOR TRAFFIC MANAGEMENT AT _____ PER SQUARE FOOT		
853.21	1,050	TEMPORARY BARRIER REMOVED AND RESET AT _____ PER FOOT		
853.33	1,200	TEMPORARY BARRIER - LIMITED DEFLECTION (TL-3) AT _____ PER FOOT		
853.403	400	TRUCK MOUNTED ATTENUATOR AT _____ PER DAY		
853.8	220	TEMPORARY ILLUMINATION FOR WORK ZONE AT _____ PER DAY		

Project # 613781		Contract # 132474		
Location : BURLINGTON - HAVERHILL				
Description : Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
854.036	24,900	TEMPORARY PAVING MARKINGS - 6 INCH (TAPE) AT _____ PER FOOT		
854.6	180	TEMPORARY PORTABLE RUMBLE STRIP AT _____ PER DAY		
856.	220	ARROW BOARD AT _____ PER DAY		
856.12	50	PORTABLE CHANGEABLE MESSAGE SIGN AT _____ PER DAY		
859.	25,580	REFLECTORIZED DRUM AT _____ PER DAY		
859.1	180	REFLECTORIZED DRUMS WITH SEQUENTIAL FLASHING WARNING LIGHTS AT _____ PER DAY		
866.206	5,300	6 INCH REFLECTORIZED WHITE LINE (POLYUREA) (RECESSED) AT _____ PER FOOT		
867.106	1,600	6 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC) AT _____ PER FOOT		
867.206	3,000	6 INCH REFLECTORIZED YELLOW LINE (POLYUREA) (RECESSED) AT _____ PER FOOT		

Project # 613781		Contract # 132474		
Location : BURLINGTON - HAVERHILL				
Description : Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
905.2	65	5000 PSI, 3/8 INCH, 710 HP CEMENT CONCRETE AT _____ PER CUBIC YARD		
909.2	860	CEMENTITIOUS MORTAR FOR PATCHING AT _____ PER SQUARE FOOT		
910.	3,110	STEEL REINFORCEMENT FOR STRUCTURES AT _____ PER POUND		
910.01	3,340	GALVANIC ANODES AT _____ EACH		
912.	30	DRILLING AND GROUTING DOWELS AT _____ EACH		
960.361	3,100	STRUCTURAL STEEL REPAIRS - BOLTED AT _____ PER POUND		
961.201	1	CLEAN (FULL REMOVAL) AND PAINT STEEL BRIDGE NO. H-12-038 (2X0) AT _____ LUMP SUM		
961.202	1	CLEAN (FULL REMOVAL) AND PAINT STEEL BRIDGE NO. H-12-038 (2WY) AT _____ LUMP SUM		
964.3	14,700	ELASTOMERIC PROTECTIVE COATING AT _____ PER SQUARE FOOT		

Project # 613781		Contract # 132474		
Location : BURLINGTON - HAVERHILL				
Description : Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)				
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
987.02	6	SPECIAL SLOPE PAVING UNDER BRIDGE REMOVED AND RESET AT _____ PER SQUARE YARD		
987.12	1	SPECIAL SLOPE PAVING UNDER BRIDGE - QUARRY STONE GROUTED AT _____ PER SQUARE YARD		
987.3	1	SPECIAL SLOPE PAVING UNDER BRIDGE - CEMENT CONCRETE AT _____ PER SQUARE YARD		
Total Qty:		90,497		

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DOCUMENT B00842

SCHEDULE OF PARTICIPATION
BY MINORITY OR WOMEN BUSINESS ENTERPRISES (M/WBE)

MASSDOT PROJECT NUMBER: 613781PROJECT LOCATION: BURLINGTON - HAVERHILL

DATE OF BID OPENING: _____

NAME OF PRIME BIDDER: _____

Name Address and Phone Number of M/WBE	Name of Activity	(a) M/WBE Contractor Activity Amount	(b) M/WBE Other Business Amount	(c) Total amount eligible for credit under rules in Section VIII of the Special Provisions
Total Bid Amount	TOTALS:	\$		\$
\$	M/WBE Percentage of Total bid:	%		%

Column (a) must be at least one-half of the M/WBE percentage goal.

SIGNATURE: _____ Date: _____ Tel No: _____

NAME AND TITLE (PRINT): _____

BIDDERS ARE CAUTIONED TO REVIEW DOCUMENT 00718 -- SPECIAL PROVISION FOR
PARTICIPATION BY MINORITY OR WOMEN BUSINESS ENTERPRISES AND SERVICE DISABLED
VETERAN OWNED BUSINESS ENTERPRISES.

*** END OF DOCUMENT ***

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DOCUMENT B00843

MINORITY OR WOMEN'S BUSINESS ENTERPRISE PARTICIPATION LETTER OF INTENT
PAGE 1 OF 2MASSDOT PROJECT NUMBER: 613781

PROJECT LOCATION: BURLINGTON - HAVERHILL

DATE OF BID OPENING:

FROM

(Minority or Women's Business Enterprise Company)

TO:

(Name of Prime Contractor)

1. My company is currently certified as an MBE or WBE by the Massachusetts Supplier Diversity Office, formerly known as the State Office of Minority and Women Business Assistance (SOMWBA). There have been no changes affecting the ownership, control or independence of my company since my last certification review.
2. If any such change occurs prior to my company's completion of this proposed work, I will give written notification to your firm and to the Massachusetts Department of Transportation (MassDOT).
3. (For contractor activity only.) My firm will provide to you, upon request, for the purpose of obtaining subcontractor approval from MassDOT; (1) a resume stating the qualifications and experience of the superintendent or foreperson who will supervise on site-work; (2) a list of equipment owned or leased by my firm for use on the project; (3) a list of all projects (public or private) which my firm is currently performing, is committed to perform, or intends to make a commitment to perform. I shall include, for each project, the names and telephone number of a contact person for the contracting organization, the dollar value of the work, a description of the work, and my firm's work schedule for the Project.
4. If you are awarded the Contract, my company intends to enter into an agreement with your firm to perform the items of work or other activity described on the following sheet for the prices indicated.
5. My firm has the ability to manage, supervise and perform the activity described on the following page.

M/WBE Authorized Signature

Date

MINORITY OR WOMEN'S BUSINESS ENTERPRISE PARTICIPATION LETTER OF INTENT
PAGE 2 OF 2MASSDOT PROJECT NUMBER: 613781PROJECT LOCATION: BURLINGTON - HAVERHILL

DATE OF BID OPENING: _____

NAME OF PRIME BIDDER: _____

<u>Item number</u> if applicable	<u>Description of Activity</u> with notations such as Installation Only, Material Only, or Complete	<u>Quantity</u>	<u>Unit</u> <u>Price</u>	<u>Amount</u>
TOTAL AMOUNT:				

M/WBE COMPANY NAME: _____

M/WBE AUTHORIZED SIGNATURE: _____

NAME AND TITLE (PRINT): _____

TELEPHONE NUMBER: _____

FAX NUMBER: _____

*** END OF DOCUMENT ***

Rev'd 9/20/19

DOCUMENT B00846

M/WBE OR SDVOBE JOINT CHECK ARRANGEMENT APPROVAL FORM

*(to be submitted by Prime Contractor)*Contract No: 132474 Project No. 613781Location: BURLINGTON - HAVERHILL Bid Opening Date: _____Project Description: Scheduled Bridge Maintenance Repairs on B-29-006 (2G2 & 2G3) and H-12-038 (2X0 & 2WY)

We have received the attached request for the use of a joint check arrangement from _____, a M/WBE or SDVOBE on the above- referenced Contract and _____, a Material Supplier/Vendor for the subject Contract. The M/WBE or SDVOBE has complied with the requirements of Special Provision Document 00718. In particular, the M/WBE or SDVOBE has:

- a written agreement with the material supplier/vendor;
- applied for credit with the subject material supplier and has supplied the vendor's response;
- shown that it will place all orders to the subject material supplier/vendor;
- made and retains all decision-making responsibilities concerning the materials; and
- provided a Joint Check Agreement that is acceptable to MassDOT;

As the Contractor for the Project, we agree to issue joint checks (made payable to the Material Supplier/Vendor and the M/WBE or SDVOBE) for payment of sums due pursuant to invoices from the Supplier/Vendor and M/WBE or SDVOBE.

Contractor:_____
Company Name_____
Signature
Duly Authorized_____
Printed Name_____
Date_____
Title**SubContractor:**_____
Company Name_____
Signature –
Duly Authorized_____
Printed Name_____
Date_____
Title

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DOCUMENT B00847

JOINT VENTURE AFFIDAVIT

(All Firms)

- All Information Requested By This Schedule Must Be Answered. Additional Sheets May Be Attached.
- If, there is any change in the information submitted, the Joint Venture parties must inform MassDOT Pre-Qualifications Office (and, if one of the companies is a M/WBE or SDVOBE, the Director of Contract Compliance, Office of Civil Rights) *prior* to such change, in writing, either directly or through the Prime Contractor if the Joint Venture is a subcontractor.
- If the Joint Venture Entity will be the bidder on a prime Contract, it must bid and submit all required documents (insurance, worker's compensation, bonds, etc.) in the name of the Joint Venture Entity.

I. Name of Joint Venture: _____

Type of Entity if applicable (Corp., LLC): _____ Filing State _____

Address of joint venture: _____

Phone No(s) for JV Entity: _____ E-mail: _____

Contact Person(s) _____

Tax ID/EIN of Joint Venture: _____ Vendor Code: _____

II. Identify each firm or party to the Joint Venture:

Name of Firm: _____

Address: _____

Phone : _____ E-mail: _____

Contact person(s) _____

Name of Firm: _____

Address: _____

Phone: _____ E-mail: _____

Contact Person(s) _____

III. Describe the role(s) of the each party to the Joint Venture:_____

- IV. Attach a copy of the Joint Venture Agreement.** The proposed Joint Venture Agreement should include specific details including, but not limited to: (1) the contributions of capital and equipment; (2) work items to be performed by each company's forces, (3) work items to be performed under the supervision of any M/WBE or SDVOBE Venturer; (4) the commitment of management, supervisory and operative personnel employed by the M/WBE or SDVOBE to be dedicated to the performance of the Project; and (5) warranty, guaranty, and indemnification clauses.

V. Attach any applicable Corporate or LLC Votes, Authorizations, etc.

VI. Ownership of the Joint Venture:

A. What is the percentage(s) of each company's ownership in the Joint Venture?

ownership percentage(s): _____

ownership percentage(s): _____

B. Specify percentages for each of the following (provide narrative descriptions and other detail as applicable):

1. Sharing of profit and loss: _____

2. Capital contributions:

(a) Dollar amounts of initial contribution: _____

(b) Dollar amounts of anticipated on-going contributions: _____

(c) Contributions of equipment (specify types, quality and quantities of equipment to be provided by each firm): _____

4. Other applicable ownership interests, including ownership options or other agreements, which restrict or limit ownership and/or control:

5. Provide copies of all other written agreements between firms concerning bidding and operation of this Project or projects or contracts.

6. Identify all current contracts and contracts completed during the past two (2) years by either of the Joint Venture partners to this Joint Venture:

VII. Control of and Participation in the Joint Venture. Identify by name and firm those individuals who are, or will be, responsible for and have the authority to engage in the following management functions and policy decisions. (Indicate any limitations to their authority such as dollar limits and co-signatory requirements.):

A. Joint Venture check signing:

B. Authority to enter Contracts on behalf of the Joint Venture:

C. Signing, co-signing and/or collateralizing loans:

D. Acquisition of lines of credit:

E. Acquisition and indemnification of payment and performance bonds:

F. Negotiating and signing labor agreements:

G. Management of contract performance. (*Identify by name and firm only*):

1. Supervision of field operations: _____
2. Major purchases: _____
3. Estimating: _____
4. Engineering: _____

VIII. Financial Controls of Joint Venture:

A. Which firm and/or individual will be responsible for keeping the books of account?

B. Identify the "Managing Partner," if any, and describe the means and measure of their compensation:

C. What authority does each firm have to commit or obligate the other to insurance and bonding companies, financing institutions, suppliers, subcontractors, and/or other parties participating in the performance of this Contract or the work of this Project?

IX. Personnel of Joint Venture: State the approximate number of personnel (by trade) needed to perform the Joint Venture's work under this Contract. Indicate whether they will be employees of the majority firm, M/WBE or SDVOBE firm, or the Joint Venture.

	Firm 1 (number)	Firm 2 (number)	Joint Venture (number)
Trade			
Professional			
Administrative/Clerical			
Unskilled Labor			

Will any personnel proposed for this Project be employees of the Joint Venture?: _____

If so, who: _____

A. Are any proposed Joint Venture employees currently employed by either firm?

Employed by Firm 1: _____ Employed by firm 2 _____

B. Identify by name and firm the individual who will be responsible for Joint Venture hiring: _____

X. Additional Information. Please state any material facts and additional information pertinent to the control and structure of this Joint Venture.

XI. AFFIDAVIT OF JOINT VENTURE PARTIES. The undersigned affirm that the foregoing statements and attached documents are correct and include all material information necessary to identify and explain the terms and operations of our Joint Venture and the intended participation of each firm in the undertaking. Further, the undersigned covenant and agree to provide to MassDOT current, complete and accurate information regarding actual Joint Venture work, payments, and any proposed changes to any provisions of the Joint Venture, or the nature, character of each party to the Joint Venture. We understand that any material misrepresentation will be grounds for terminating any Contract awarded and for initiating action under Federal or State laws concerning false statements.

Firm 1

Firm 2

Signature
Duly Authorized

Signature
Duly Authorized

Printed Name and Title

Printed Name and Title

Date

Date

*** END OF DOCUMENT ***