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# CITY OF MILWAUKEE

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## DEPARTMENT OF PUBLIC WORKS

INFRASTRUCTURE SERVICES DIVISION

STREET AND BRIDGES UNIT

STRUCTURAL DESIGN

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IMPACT DAMAGE REPAIRS

AT THE

35<sup>TH</sup> STREET AND

HOWELL AVENUE BRIDGES OVER THE

UNION PACIFIC RAILROAD

LOCATED IN

MILWAUKEE, WISCONSIN

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JOB NUMBER: BR100140108 & BR100140109

OFFICIAL NOTICE NUMBER: 58-1-2014

DATE: MAY, 2014

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00 01 07/1

CITY OF MILWAUKEE, WISCONSIN  
DEPARTMENT OF PUBLIC WORKS  
INFRASTRUCTURE SERVICES DIVISION

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Specifications

Governing

IMPACT DAMAGE REPAIRS  
AT THE  
35<sup>TH</sup> STREET AND THE  
HOWELL AVENUE BRIDGES OVER THE  
UNION PACIFIC RAILROAD

Milwaukee, Wisconsin

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Job No. BR100140108 & BR100140109

MAY, 2014



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**END OF SECTION 00 01 10**



**SECTION 00 01 15 – LIST OF DRAWING SHEETS**

The following listed Drawings accompany and form a part of the project contract documents along with these specifications and generally illustrate the nature of the work.

<u>Sheet No.</u>	<u>Title</u>
T1	Title Sheet
1	General Notes
2	Structure P-40-509 Traffic Control Plan 1 of 2
3	Structure P-40-509 Traffic Control Plan 2 of 2
4	Structure P-40-848 Traffic Control Plan
5	Miscellaneous Quantities
6	Inlet Protection
HS1	Structure P-40-509 General Plan and Elevation
HS2	Typical Section and Quantities
HS3	Framing Plan
HS4	Steel Details
S1	Structure P-40-848 General Plan and Elevation
S2	Typical Section and Quantities
S3	Demolition Plan
S4	Temporary Shoring and Demolition Staging 1 of 3
S5	Temporary Shoring and Demolition Staging 2 of 3
S6	Temporary Shoring and Demolition Staging 3 of 3
S7	Framing Plan
S8	Girder Details 1 of 3
S9	Girder Details 2 of 3
S10	Girder Details 3 of 3
S11	Superstructure Details
S12	Deck Elevations
S13	Parapet Details

**END OF SECTION 00 01 15**



**CITY OF MILWAUKEE  
GENERAL OFFICIAL NOTICE TO CONTRACTORS**

Separate sealed bids for each project will be received until 10:30 a.m. of the bid opening date at which time bids will be publicly opened and read for furnishing all material and doing all work for each project in accordance with the requirements of the respective Official Notice on the bid form furnished in accordance with plans, specifications, contract documents, and proposed form of contract on file in the office of the Department of Public Works, Frank P. Zeidler Municipal Building, Room 507, Milwaukee, WI 53202.

PROSPECTIVE BIDDERS ARE TO CAREFULLY EXAMINE AND REVIEW ALL CONTRACT DOCUMENTS AND MATERIALS IN SAID OFFICE BEFORE SUBMITTING BID.

Affidavits of No Interest must accompany the bids, and the failure of prospective bidders to comply with these requirements may disqualify the bid.

The Contractor/Lessee agrees to comply with all applicable requirements of the American with Disabilities Act of 1990, 42 U.S.C. Section 12101, Et. Seq. the TDD Number for Public Works is (414) 286-2025.

As a part of the bid each bidder shall submit a full and complete list of all the proposed subcontractors and the class of work to be performed by each, which list shall not be added to nor altered without the written consent of the Commissioner of Public Works.

All Contractors and subcontractors are required to furnish or have on file a certificate of insurance in accordance with the insurance provisions of the General Specifications.

All Contractor(s) and subcontractor(s) are subject to the prevailing wage rates and hours of labor as prescribed by the Common Council of the City of Milwaukee consistent with provisions of Section 66.293 of the Wisconsin Statutes.

Copies of the actual work classifications and wage and fringe benefit rates enforced on this project are available in Room 516 of the Frank P. Zeidler Municipal Building.

Corporate surety will be required on performance and payment bonds for all projects listed in the following Official Notice. All applicable charter and statutory provisions and ordinances, all the provisions of this official notice, invitation to bid, general and detailed specifications, special provisions, proposal, schedule of fixed prices, addendum and plans for this project and all other contract documents set forth in the invitation to bid will be incorporated and made part of the contract as if therein set forth in full.

Tie bids, when the lowest ones, will be decided by the Commissioner of Public Works.

The Commissioner of Public Works reserves the right to reject any or all bids.

**END OF SECTION 00 11 14**





THE CONTRACTOR SHALL SPECIFICALLY NOTE THE SMALL BUSINESS ENTERPRISE, RESIDENCY AND APPRENTICESHIP FORMS FOR THIS PROJECT. IF THE FORMS ARE NOT FILLED OUT PROPERLY, IT WILL BE CAUSE FOR REJECTION OF THE BID.

Bid Security Required: Bond (either Electronic thru Bid Express or Paper), Certified Check, Cashier's Check, or Cash to accompany bid: 10% of the Contractor's Base Bid. For those bids being submitted through BID EXPRESS and using a Paper Bond, the contractor may fax a signed/executed copy of the bid bond to the Department of Public Works Contract Office at 414-286-8110. HOWEVER, THE FAXED COPY OF THE BOND MUST BE RECEIVED BY NO LATER THAN 10:30 A.M. ON THE SAME DATE THAT THE BIDS ARE DUE FOR THAT SPECIFIC OFFICIAL NOTICE, or the bid will be considered non responsive. The original bid bond document will then need to be submitted by the contractor the Department of Public Works Contract Office, Rm. 506, Municipal Building, immediately upon being notified that they are the apparent low bidder.

Plans and specifications will be furnished to the prospective bidders upon payment of a \$10.00 non-refundable fee in Room 507, Frank P. Zeidler Municipal Building, 841 North Broadway, Milwaukee, Wisconsin 53202.

A \$10.00 per set additional non-refundable fee is required to obtain bid documents by mail.

Contractor must comply with all provisions of the CITY OF MILWAUKEE GENERAL OFFICIAL NOTICE TO CONTRACTORS published above.

THE TRAINING INCENTIVE **WILL NOT** APPLY TO THIS PROJECT.

Plans and project manual for this project may be viewed in the Infrastructure Services Division, Structural Design Unit, Room 907, Frank P. Zeidler Municipal Building, 841 North Broadway, Milwaukee, WI.

**END SECTION 00 11 17**

## **SECTION 00 21 13 – INSTRUCTIONS TO BIDDERS**

### **PART 1 – GENERAL**

#### **1.1 SUMMARY**

- A. See also Instructions to Bidders in the “General Specifications” of the Department of Public Works, City of Milwaukee, Wisconsin, dated January 31, 1992, and all subsequent addenda.

#### **1.2 BID FORM**

- A. Submit a unit price for each item of work as indicated on the drawings and specified herein, complete in every respect.
- B. Bids will not be accepted in any form except on the bid form included with these specifications.
- C. The Contractor must recognize and abide by the right of the Owner (City of Milwaukee) to accept or reject any or all bids in the best interests of the City.

#### **1.3 CONTRACT AWARD**

- A. In case of discrepancy between the total Base Bid indicated in the proposal and that obtained by adding the products of the quantities of work and the unit prices, the unit prices shall govern. Any errors found in the total Base Bid indicated will be corrected, and the contract award shall be made to the lowest responsible bidder based on the corrected total Base Bid.
- B. The Commissioner of Public Works will award the contract based on the Base Bid only.

#### **1.4 CONTRACT BREAKDOWN**

- A. Shortly after the award of the contract, each Contractor shall submit a list showing the cost breakdown of the items in his contract. This list will be used as a basis for estimates of work completed for partial payment.

#### **1.5 SITE VISIT**

- A. All Contractors shall visit the site, consult the drawings and specifications, be familiar with the work of other Contractors and determine for himself all conditions affecting the work.
- B. Failure by a Contractor to be familiar with the project shall not release him from any obligation under this contract to complete the work in strict conformity with the plans and specifications and all City, State and Federal codes or regulations pertaining to the work.

#### **1.6 TIME FOR COMPLETION**

- A. The time allowed for completion is stated in the Specific Official Notice and shall start with the date on the Notice to proceed which will be sent to the Contractor directly following the signing of the

00 21 13/2

contract. The time allowed includes the time required for fabricating and procuring material and doing the work at the 35<sup>th</sup> Street Bridge and the Howell Avenue Bridge.

**PART 2 – PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION** (Not Applicable)

**PART 4 – MEASUREMENT AND PAYMENT** (Not Applicable)

**END OF SECTION 00 21 13**

## SECTION 00 72 00 – GENERAL CONDITIONS

### PART 1 – GENERAL

#### 1.1 DEPARTMENT OF PUBLIC WORKS GENERAL SPECIFICATIONS

- A. Provisions of the Department of Public Works General Specifications dated January 31, 1992, and all subsequent addenda, shall apply to all contractors and subcontractors working on the project. Copies of the General Specifications may be obtained from the Department of Public Works General Office, Room 516, Frank P. Zeidler Municipal Building, 841 North Broadway, Milwaukee, Wisconsin.

#### 1.2 DEFINITIONS

- A. Commissioner: Commissioner of Public Works
- B. Division: Infrastructure Services Division.
- C. City Engineer: The City Engineer of the Infrastructure Services Division.
- D. Project Inspector: The authorized representative of the Commissioner assigned to make detailed inspection of any or all portions of the work and materials thereof.
- E. Addenda: Writing or graphic instruments issued prior to the execution of the contract which modify or interpret the bidding documents, including drawings and specifications by additions, deletions, clarifications or corrections. Addenda will become part of the contract documents when the contract is executed.
- F. Contract Drawings: Drawings of the work to be done as listed hereafter in the List of Drawing Sheets.
- G. Base Bid: Amount of money stated in the Bid Form as the sum of which the bidder offers to perform the work.
- H. Additive Alternate: Additional amount of money stated in the Bid Form as the sum of which the bidder offers to perform the alternate work.

#### 1.3 CONTROL OF WORK AND MATERIALS

- A. Detail and Shop Drawings: Shop drawings and other additional drawings which may be required for each branch of the work shall be prepared by each respective contractor unless otherwise directed by the City Engineer. Prints shall be the same size as contract documents when practical. Prints of each drawing shall be submitted to the City Engineer for approval before proceeding with the work. Changes ordered by the City Engineer shall be made and revised prints submitted as above. The City Engineer's approval of drawing shall not relieve the contractor of responsibility for errors.

- B. Primary Lines and Grades: Will be established by the Contractor.
- C. Construction Lines and Grades: The Contractor must bear sole responsibility for the correct transfer of all construction lines and grades from the primary lines and grade points. He shall take such measurements from existing work as may be necessary to ensure the proper construction of his work.
- D. Material Orders and Shipping Statements: The Contractor shall furnish to the City Engineer at least two (2) copies of all material orders and shipping statements. Itemized weights of the materials and individual units of finished work shall be shown.
- E. Weighing of Materials and Fabricated Units: The weighing of materials and fabricated units such as structural steel, casing, etc., when required, shall be done in the presence of the Commissioner's representative. The Contractor shall be responsible for the satisfactory weighing of such materials and units.
- F. Consignment and Delivery of Materials: The materials for the work shall be consigned to the contractor and he shall be responsible for the delivery of all materials required for the completion of the contract.

#### 1.4 SAMPLES AND TESTS

- A. Method of Sampling: Samples of materials proposed or furnished for work may be taken by the Commissioner at any time, at the point of manufacture, point of delivery, or site of work. They will be selected, as far as practicable, in accordance with standard methods of sampling such materials as specified in the standard of ASTM International. All sampling shall be done by authorized representatives of the Commissioner. Selections will be in an orderly and systematic manner, ensuring samples representative of the lot.
- B. ASTM Standards: Wherever the abbreviation ASTM is used in connection with the number of a standard specification, the specification referred to shall be the standard of ASTM International, designated by that number, including all revisions in effect on the date of award of the contract. Should a revised or amended standard be issued by ASTM International which, in the opinion of the Commissioner, conflict with or causes undesirable changes in the herein referred to standards, the Commissioner reserves the right, by means of addenda to the specifications, to continue under the provisions of the herein referred to pertinent standard.
- C. Cost of Test Specimens and Samples: All test specimens of metals and all samples of non-metals required for tests shall be furnished by the Contractor without cost to the City.
- D. Cost of Tests: All tests on test specimens of metals will be made at the expense of the Contractor and the original test on samples of non-metals will be made at the expense of the City. In all cases, the testing procedure will be in accordance with standard ASTM tests for such materials. Subsequent tests of non-metals requested by the Contractor, or when such tests are permitted by ASTM Specification and approved by the Commissioner or subsequent tests ordered by the Commissioner will be made at the expense of the Contractor.

## 1.5 PROJECT COORDINATION

- A. Contractors are required, so far as possible; to arrange work and to dispose of materials so as not to interfere with the work or storage of materials of other contractors or City forces engaged upon the work.
- B. Contractor shall give full cooperation to other trades and furnish any information necessary to permit the work of all trades to be installed satisfactorily and with the least possible interference or delay.
- C. Where the work of a contractor will be installed in close proximity to the work of other trades, or where there is evidence that the work of a contractor will interfere with the work of other trades, he shall assist in working out space conditions to make satisfactory adjustments.
- D. If a contractor installs work before coordinating it with other trades or so as to cause interference with work of other trades, he shall make necessary changes in his work to correct the condition without extra charge.
- E. Contractors are required to join their work to that of others in a proper manner, and in accordance with the spirit of the plans and specifications, and to perform the work in the proper sequence in relation to that of other contractors, and as may be directed by the Project Inspector.

## 1.6 TECHNICAL SPECIFICATIONS AND DRAWINGS

- A. All contractors shall have complete sets of plans and specifications on the job site at all times.
- B. Anything mentioned in the Technical Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Technical Specifications shall be as if shown on or mentioned in both. In case of difference between Drawings and Technical Specifications, the Technical Specifications shall govern. In case of any discrepancy in drawings or Technical Specifications, the matter shall be immediately submitted to the City for decision. Said discrepancy shall not be adjusted by the contractor.

## 1.7 SAFETY REGULATIONS

- A. All work shall be done in accordance with the safety requirements set up by the Wisconsin Administrative Code Rules and the Occupational Safety and Health Administration (OSHA).

## 1.8 CODE RULES

- A. The rulings, regulations and laws of the following shall be complied with in the completion of this project:
  - 1. Wisconsin Administrative Code
  - 2. Occupational Safety and Health Administration (OSHA)

3. Plumbing and Drainage Codes of the City of Milwaukee
4. City of Milwaukee Building Codes
5. Ordinances of the City of Milwaukee

## **1.9 APPROVALS**

- A. Wherever the words “or equal”, or “approved equal”, or similar terms are used, it shall mean as approved by the Commissioner of Public Works or his agent. All drawings, bulletins, and data necessary for an approval shall be submitted in quadruplicate to the City Engineer. Such approval shall apply to design only and shall in no way relieve this contractor from his responsibility for the full performance of his contract. Evaluation of “or equal” products will be made at the time of shop drawing submission.

## **1.10 GENERAL SPECIFICATIONS**

- A. When the General Specifications of the Department of Public Works are in conflict with any other specification referenced herein, the General Specifications of the Department of Public Works shall govern.

## **1.11 SAVINGS CLAUSE**

- A. If any clause, item or other part of these specifications shall be deemed illegal or in conflict with code only that item or clause shall be deemed null and void within the specifications. All other items will remain in effect.

## **1.12 CONSTRUCTION PROGRESS MEETINGS**

- A. The City reserves the right to schedule periodic construction progress meetings requiring the attendance of the contractors’ and subcontractors’ representatives as deemed necessary by the City.

## **1.13 MATERIAL HAULING**

- A. All trucks involved in the hauling of removals, granular backfill, crushed aggregate, bituminous concrete pavement or any other construction material subject to spillage, either by wind or vibration, to or from the project on any highway or street shall be equipped with tail gates, adequate sideboards and canvas covers which will seal the truck box against spillage.
- B. The Contractor shall not perform work on nor haul materials of any kind along or across any portion of the project or adjacent streets on any holidays unless he shall notify and receive permission from the City Engineer.

#### **1.14 REMOVAL OF STRUCTURES AND OBSTRUCTIONS**

- A. The Contractor shall remove existing bridges, and other structures or parts thereof within the roadway right-of-way, which are replaced or which interfere with new construction, unless otherwise provided in the contract. Such removal shall be incidental to other bid items, unless a separate bid is taken on removal of old structures as hereinafter provided, or unless portions of existing structure units fall within the limits of the excavation for structures.
- B. Structures beyond the limits of the right-of-way shall remain in place unless otherwise specified in the contract.

#### **1.15 PLANS AND WORKING DRAWINGS**

- A. The approved plans will be supplemented by such working drawings and computations as are necessary to adequately control the work. It is mutually agreed that all authorized alterations of the approved plans shall be in writing. No changes shall be made on any plan or drawing after the same has been approved by the City Engineer, except by direction of the City Engineer.
- B. Working drawings for structures shall be furnished by the contractor and shall consist of such detailed plans and computations as may be required for the prosecution of the work and which are not included in the plans furnished by the engineer. Such working drawings shall be approved by the engineer. Plans may also be required and in such cases shall be likewise subject to approval, unless approval is waived by the City Engineer.
- C. It is expressly understood, however, that approval by the City Engineer of the contractor's working drawings does not relieve the contractor of any responsibility for accuracy of dimensions and details or conformity of his working drawings with the approved plans and specifications.
- D. The contract price shall include the cost of furnishing all working drawings and the contractor will be allowed no extra compensation for such drawings.

#### **1.16 CONFORMITY WITH PLANS AND SPECIFICATIONS**

- A. All work performed and all materials furnished will be in reasonably close conformity with the lines, grades, cross sections, dimensions and material requirements shown on the plans or indicated in the specifications. It shall be finished to produce quality work and appearance within limits of precision reasonably expected of good construction.
- B. Specific specification values and prescribed tolerance amounts or limits or minimum or maximum values may be specified. Whenever such tolerances or ranges are specified, the production and processing of material or performance of the work shall be so controlled that the material or work will substantially meet the specific value or fall substantially within the specified range or limits and shall only occasionally be of borderline quality or dimensions.
- C. Whenever tolerances, limits or minimum and maximum values are not specified, reasonable and accepted standards or established manufacturing or construction tolerances will be permitted.

- D. The lines, grades, typical sections, and dimensions shown on the plans are subject to adjustment by the engineer during construction, but any deviation of a character not contemplated or provided for in the plans, specifications or working drawings that may be required by the exigencies of construction or otherwise will be determined by the engineer and authorized by him in writing.
- E. In the event the engineer finds materials which are incorporated in the work, or the finished product in which the materials are used, to be not within reasonably close conformity with the plans and specifications, he will then make a determination whether or not reasonably acceptable work has been produced and can be accepted and remain in place. If the engineer determines that reasonably acceptable work has been produced and can be accepted and remain in place, he will document the basis of acceptance by contract modification or as provided elsewhere in these specifications which will provide for an appropriate adjustment in the contract price for such work or materials, either as he deems necessary to conform to his determination based on engineering judgment, or as specifically provided for elsewhere in these specifications.
- F. In the event the engineer finds that the materials, the finished product in which the materials are used, or the work performed are not in reasonably close conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the contractor.

#### **1.17 COORDINATION OF PLANS, SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS**

- A. These specifications, the supplemental specifications, the plans, special provisions and all supplemental documents are essential parts of the contract and a requirement occurring in one is binding as though occurring in all. They are intended to be cooperative, to describe and provide for a complete work. In the event of a discrepancy between the drawing and the figured dimensions thereon, the figured dimensions, unless obviously incorrect, shall govern over scaled dimensions. In the case of a discrepancy between the supplemental specifications and these specifications, the supplemental specifications shall govern; between the plans and these specifications or the supplemental specifications, the plans shall govern; and between the special provisions and these specifications, supplemental specifications or the plans, the special provisions shall govern.
- B. The contractor shall take no advantage of any apparent error or omission in the plans or specifications, and the engineer shall be permitted to make such corrections and interpretations, as may be deemed necessary for the fulfillment of the intent of the plans and specifications.

#### **1.18 PERSONAL LIABILITY OF PUBLIC OFFICIALS**

- A. In carrying out any of the provisions of this contract or in exercising any power or authority granted to them thereby, there shall be no personal liability upon the Department, its agents and employees, it being understood that in such matters they act as agents and representatives of the City. Any right of action by the contractor against the Department, or its agents or employees, is hereby expressly waived.

### 1.19 CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES

- A. The contractor shall give notice to the proper authorities in charge of street, gas and water pipes, electric and other conduits, railroad, poles, manholes, catch basins, sewers and all other property that may be affected by the contractor's operations, at least three days excluding Saturday, Sunday and legal holidays, before breaking ground.
- B. The contractor shall not hinder or interfere with any persons in the protection of such property, or with the operations or utilities, at any time. The contractor must obtain all necessary information in regard to existing utilities. He shall protect such utilities from damage and unnecessary exposure.
- C. The contractor must also obtain all necessary information in regard to the planned installation of new utilities and make proper provision and give proper notification so that new utilities can be installed at the proper time without delay to the contractor or unnecessary inconvenience to the owner. The location of new underground utilities, planned to be installed concurrently with the highway improvements, shall not be covered with pavement prior to the installation of such facilities.

### 1.20 MEASUREMENT OF QUANTITIES

- A. General: All work completed under the contract will be measured by the engineer according to United States standard measure. The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

The completed work will be measured for final payment by the engineer, as specified for the various items elsewhere in these specifications, to determine the quantities of such items of work performed, except when agreements have been made providing for compensation on the basis of plan quantities as hereinafter provided or when contract change orders have been executed providing for other methods of measurement. The contractor will be paid for the actual amount of work performed in accordance with the contract, as shown by the final measurements or upon the basis of plan quantities.

If the contractor and the engineer agree in writing that the quantities of certain items or portions of items of work as set forth in the contract or on the plans, as originally drawn or subsequently corrected or revised, are in substantial agreement with the actual quantities of work performed, compensation therefore will be made based on the quantities set forth in the contract or on the plans, as originally drawn or subsequently corrected or revised, without measurement thereof, and the contractor shall accept such compensation as full payment for such items or portions of items.

When standard manufactured items are specified such as fences, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gage, unit weight, sections dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.

- B. Volume: All materials which are specified for measurement by the cubic yard in the vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. No allowance will be made for the settlement of material in transit.

The measurement of the material, the type and size of vehicle, the determination of capacity and the marking of the vehicle for identification shall conform to the requirements of Section 617 of the standard specification.

When permitted elsewhere in these specifications, or in the special provisions, material specified to be measured by the cubic yard may be weighed and the weights will be converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the engineer and shall be agreed to by the contractor before such method of measurement of pay quantities is used.

- C. Weight: All aggregates and bituminous mixtures which are specified for measurement by the ton (2,000 lbs.) shall be weighed on platform scales or other approved scales, furnished by and at the expense of the contractor. Said scales shall be satisfactory to the engineer and they shall be tested by the engineer or by authorized testing firms or agencies as often as the engineer may deem necessary to ensure their accuracy.

When materials are weighed in the hauling vehicle, gross weights shall be measured by the ton may be measured by the cubic yard and the cubic yards will be converted to tons for payment purposes. Factors for conversion from volume measurement to weight measurement will be determined by the engineer and shall be agreed to by the contractor before such method of measurement of pay quantities is used.

## **1.21 GUARANTEE**

- A. The contractor shall guarantee to replace or repair promptly at his own expense, as directed by the Commissioner of Public Works or his agent, all workmanship or materials in which defects may develop within one (1) year from the date of final acceptance of his work. This guarantee includes all damage done by the operator due to faulty equipment, poor installation or poor construction. The City shall also receive any extended guarantees or warranties normally supplied by any vendor or manufacturer for material or equipment incorporated in the work.

## **1.22 ENVIRONMENTAL PROTECTION**

- A. The Contractor shall establish and carry out a program for immediate removal of debris during the bridge rehabilitation in order to prevent the accumulation of unsightly, deleterious and/or potentially polluting materials in the river
- B. Utilize construction methods which will minimize local erosion or siltation.
- C. Place excess dredged or excavated materials in a confined area in such a manner as to preclude the return of polluted materials to the river by surface runoff or by leaching.
- D. Place excess dredged or excavated materials in a confined area in such a manner as to preclude the return of polluted materials to the river by surface runoff or by leaching.
- E. Take special care to avoid any spillage of oil, fuels, or any other types of pollutants while working within or along the banks of the river.

00 72 00/9

**PART 2 – PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION** (Not Applicable)

**PART 4 – MEASUREMENT AND PAYMENT** (Not Applicable)

**END OF SECTION 00 72 00**



**SECTION 00 73 01 – INSPECTION CHARGES**

**PART 1 – GENERAL**

**1.1 INSPECTION CHARGES**

- A. The Contractor will be charged a fee for inspection for each and every day such inspection is required after the time allowed for completion has expired.
- B. The amount of the fee for inspection shall be \$500 per day.
- C. The date of completion is stated in the Specific Official Notice and shall start with the date on the Notice to Proceed which will be sent to the Contractor directly following the signing of the contract. The time allowed includes the time required for fabricating and procuring material and doing the work at the site.

**PART 2 – PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION** (Not Applicable)

**PART 4 – MEASUREMENT AND PAYMENT** (Not Applicable)

**END OF SECTION 00 73 01**



00 73 43/1  
**PREVAILING WAGE RATE DETERMINATION**  
 Issued by the State of Wisconsin  
 Department of Workforce Development  
 Pursuant to s. 66.0903, Wis. Stats.  
 Issued On: 01/06/2014  
 Last Amended On: 02/28/2014

**DETERMINATION NUMBER:** 201400011

**EXPIRATION DATE:** Prime Contracts MUST Be Awarded or Negotiated On Or Before 12/31/2014. If NOT, You MUST Reapply.

**PROJECT NAME:** ALL PUBLIC WORKS PROJECTS UNDER SEC 66.0903, STATS - CITY OF MILWAUKEE

**PROJECT LOCATION:** MILWAUKEE CITY, MILWAUKEE COUNTY, WI

**CONTRACTING AGENCY:** CITY OF MILWAUKEE-DEPT OF PUBLIC WORKS

<b>CLASSIFICATION:</b>	Contractors are responsible for correctly classifying their workers. Either call the Department of Workforce Development (DWD) with trade or classification questions or consult DWD's Dictionary of Occupational Classifications & Work Descriptions on the DWD website at: <a href="http://dwd.wisconsin.gov/er/prevailing_wage_rate/Dictionary/dictionary_main.htm">dwd.wisconsin.gov/er/prevailing_wage_rate/Dictionary/dictionary_main.htm</a> .
<b>OVERTIME:</b>	<p>Time and one-half must be paid for all hours worked:</p> <ul style="list-style-type: none"> <li>- over 10 hours per day on prevailing wage projects</li> <li>- over 40 hours per calendar week</li> <li>- Saturday and Sunday</li> <li>- on all of the following holidays: January 1; the last Monday in May; July 4; the 1st Monday in September; the 4th Thursday in November; December 25;</li> <li>- The day before if January 1, July 4 or December 25 falls on a Saturday;</li> <li>- The day following if January 1, July 4 or December 25 falls on a Sunday.</li> </ul> <p>Apply the time and one-half overtime calculation to whichever is higher between the Hourly Basic Rate listed on this project determination or the employee's regular hourly rate of pay. Add any applicable Premium or DOT Premium to the Hourly Basic Rate before calculating overtime.</p> <p>A DOT Premium (discussed below) may supersede this time and one-half requirement.</p>
<b>FUTURE INCREASE:</b>	When a specific trade or occupation requires a future increase, you MUST add the full hourly increase to the "TOTAL" on the effective date(s) indicated for the specific trade or occupation.
<b>PREMIUM PAY:</b>	If indicated for a specific trade or occupation, the full amount of such pay MUST be added to the "HOURLY BASIC RATE OF PAY" indicated for such trade or occupation, whenever such pay is applicable.
<b>DOT PREMIUM:</b>	This premium only applies to highway and bridge projects owned by the Wisconsin Department of Transportation and to the project type heading "Airport Pavement or State Highway Construction." DO NOT apply the premium calculation under any other project type on this determination.
<b>APPRENTICES:</b>	Pay apprentices a percentage of the applicable journey person's hourly basic rate of pay and hourly fringe benefit contributions specified in this determination. Obtain the appropriate percentage from each apprentice's contract or indenture.
<b>SUBJOURNEY:</b>	Subjourney wage rates may be available for some of the trades or occupations indicated below with the exception of laborers, truck drivers and heavy equipment operators. Any employer interested in using a subjourney classification on this project MUST complete Form ERD-10880 and request the applicable wage rate from the Department of Workforce Development PRIOR to using the subjourney worker on this project.

This document **MUST BE POSTED** by the **CONTRACTING AGENCY** in at least one conspicuous and easily accessible place **on the site of the project**. A local governmental unit may post this document at the place normally used to post public notices if there is no common site on the project. This document **MUST** remain posted during the entire time any worker is employed on the project and **MUST** be physically incorporated into the specifications and all contracts and subcontracts. If you have any questions, please write to the Equal Rights Division, Labor Standards Bureau, P.O. Box 8928, Madison, Wisconsin 53708 or call (608) 266-6861.

**The following statutory provisions apply to local governmental unit projects of public works and are set forth below pursuant to the requirements of s. 66.0903(8), Stats.**

**s. 66.0903 (1) (f) & s. 103.49 (1) (c) "PREVAILING HOURS OF LABOR"** for any trade or occupation in any area means 10 hours per day and 40 hours per week and may not include any hours worked on a Saturday or Sunday or on any of the following holidays:

1. January 1.
2. The last Monday in May.
3. July 4.
4. The first Monday in September.
5. The 4th Thursday in November.
6. December 25.
7. The day before if January 1, July 4 or December 25 falls on a Saturday.
8. The day following if January 1, July 4 or December 25 falls on a Sunday.

**s. 66.0903 (10) RECORDS; INSPECTION; ENFORCEMENT.**

(a) Each contractor, subcontractor, or contractor's or subcontractor's agent performing work on a project of public works that is subject to this section shall keep full and accurate records clearly indicating the name and trade or occupation of every person performing the work described in sub. (4) and an accurate record of the number of hours worked by each of those persons and the actual wages paid for the hours worked.

**s. 66.0903 (11) LIABILITY AND PENALTIES.**

(a) 1. Any contractor, subcontractor, or contractor's or subcontractor's agent who fails to pay the prevailing wage rate determined by the department under sub. (3) or who pays less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor is liable to any affected employee in the amount of his or her unpaid wages or his or her unpaid overtime compensation and in an additional amount as liquidated damages as provided under subd. 2., 3., whichever is applicable.

2. If the department determines upon inspection under sub. (10) (b) or (c) that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the department shall order the contractor to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages within a period specified by the department in the order.

3. In addition to or in lieu of recovering the liability specified in subd. 1. as provided in subd. 2., any employee for and in behalf of that employee and other employees similarly situated may commence an action to recover that liability in any court of competent jurisdiction. If the court finds that a contractor, subcontractor, or contractor's or subcontractor's agent has failed to pay the prevailing wage rate determined by the department under sub. (3) or has paid less than 1.5 times the hourly basic rate of pay for all hours worked in excess of the prevailing hours of labor, the court shall order the contractor, subcontractor, or agent to pay to any affected employee the amount of his or her unpaid wages or his or her unpaid overtime compensation and an additional amount equal to 100 percent of the amount of those unpaid wages or that unpaid overtime compensation as liquidated damages.

5. No employee may be a party plaintiff to an action under subd. 3. unless the employee consents in writing to become a party and the consent is filed in the court in which the action is brought. Notwithstanding s. 814.04 (1), the court shall, in addition to any judgment awarded to the plaintiff, allow reasonable attorney fees and costs to be paid by the defendant.

<b>BUILDING OR HEAVY CONSTRUCTION</b>
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Includes sheltered enclosures with walk-in access for the purpose of housing persons, employees, machinery, equipment or supplies and non-sheltered work such as canals, dams, dikes, reservoirs, storage tanks, etc. A sheltered enclosure need not be "habitable" in order to be considered a building. The installation of machinery and/or equipment, both above and below grade level, does not change a project's character as a building. On-site grading, utility work and landscaping are included within this definition. Residential buildings of four (4) stories or less, agricultural buildings, parking lots and driveways are NOT included within this definition.

<b>SKILLED TRADES</b>
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<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u>	<u>HOURLY FRINGE BENEFITS</u>	<u>TOTAL</u>
		\$	\$	\$
101	Acoustic Ceiling Tile Installer Future Increase(s): Add \$1.25/hr on 6/2/2014.	33.68	19.81	53.49
102	Boilermaker	31.91	26.47	58.38
103	Bricklayer, Blocklayer or Stonemason Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	35.37	18.00	53.37
104	Cabinet Installer	30.48	15.90	46.38
105	Carpenter Future Increase(s): Add \$1.25/hr on 6/2/2014. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.68	19.81	53.49
106	Carpet Layer or Soft Floor Coverer	32.93	19.71	52.64
107	Cement Finisher	32.07	17.53	49.60
108	Drywall Taper or Finisher	29.87	19.99	49.86
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.82	22.61	55.43
110	Elevator Constructor	43.21	26.06	69.27
111	Fence Erector	16.00	3.33	19.33
112	Fire Sprinkler Fitter	38.50	19.65	58.15
113	Glazier	34.19	18.25	52.44
114	Heat or Frost Insulator	33.68	24.31	57.99
115	Insulator (Batt or Blown)	15.00	9.50	24.50

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
116	Ironworker Future Increase(s): Add \$.80/hr on 6/1/2014. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	30.52	23.47	53.99
117	Lather	32.93	19.81	52.74
118	Line Constructor (Electrical)	38.25	17.63	55.88
119	Marble Finisher	26.89	19.18	46.07
120	Marble Mason	35.80	16.87	52.67
121	Metal Building Erector	22.05	8.08	30.13
122	Millwright	28.53	24.98	53.51
123	Overhead Door Installer	20.95	4.94	25.89
124	Painter	29.52	18.84	48.36
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver Premium Increase(s): Add \$.65/hr for Piledriver Loftsman; Add \$.75/hr for Sheet Piling Loftsman. DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	29.56	25.71	55.27
127	Pipeline Fuser or Welder (Gas or Utility)	31.82	19.74	51.56
129	Plasterer	31.56	18.18	49.74
130	Plumber	37.97	17.30	55.27
132	Refrigeration Mechanic	39.26	19.30	58.56
133	Roofer or Waterproofofer	29.40	17.05	46.45
134	Sheet Metal Worker	36.17	18.04	54.21
135	Steamfitter Future Increase(s): Add \$1.70/hr on 6/1/2014.	39.76	21.09	60.85
137	Teledata Technician or Installer Future Increase(s): Add \$.85/hr on 6/1/2014; Add \$.86/hr on 6/1/2015. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	24.89	17.15	42.04

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
138	Temperature Control Installer	17.39	4.18	21.57
139	Terrazzo Finisher	26.89	19.18	46.07
140	Terrazzo Mechanic	30.20	18.42	48.62
141	Tile Finisher	23.85	17.18	41.03
142	Tile Setter	29.45	16.30	45.75
143	Tuckpointer, Caulker or Cleaner	34.57	16.42	50.99
144	Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38
146	Well Driller or Pump Installer	25.32	15.65	40.97
147	Siding Installer	25.92	18.04	43.96
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	29.16	14.34	43.50
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.04	11.74	32.78

**TRUCK DRIVERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle	33.82	17.60	51.42
203	Three or More Axle	18.50	18.42	36.92
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$1.60/hr on 5/30/2016.	33.02	18.10	51.12
205	Pavement Marking Vehicle	18.50	18.42	36.92
207	Truck Mechanic	18.50	18.42	36.92

**LABORERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer Premium Increase(s): Add \$.11 for mortar mixer, fork lift operator, air and electric equipment and power buggy operators; Add \$.22 for jackhammer operator, certified welder, gunite machineman.	28.31	16.62	44.93
302	Asbestos Abatement Worker	19.00	0.00	19.00
303	Landscaper	14.28	8.24	22.52
310	Gas or Utility Pipeline Laborer (Other Than Sewer and Water)	19.78	17.04	36.82
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased) Premium Increase(s): DOT PREMIUMS: Pay two times the hourly basic rate on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	17.71	16.01	33.72
314	Railroad Track Laborer	13.50	4.06	17.56
315	Final Construction Clean-Up Worker	28.31	16.62	44.93

**HEAVY EQUIPMENT OPERATORS  
SITE PREPARATION, UTILITY OR LANDSCAPING WORK ONLY**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
501	Air Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Asphalt Milling Machine; Boring Machine (Directional, Horizontal or Vertical); Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Backhoe (Track Type) Having a Mfgr's Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Crane, Shovel, Dragline, Clamshells; Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Grader or Motor Patrol; Master Mechanic; Mechanic or Welder; Robotic Tool Carrier (With or Without Attachments); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Tractor (Scraper, Dozer, Pusher, Loader); Trencher (Wheel Type or Chain Type Having Over 8 Inch Bucket). Future Increase(s): Add \$1.00/hour 6/2/2014; Add \$1.50/hour 6/1/2015; Add \$1.60/hour 5/30/2016.	34.07	18.10	52.17

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
502	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Environmental Burner; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Jeep Digger; Screed (Milling Machine); Skid Rig; Straddle Carrier or Travel Lift; Stump Chipper; Trencher (Wheel Type or Chain Type Having 8 Inch Bucket & Under). Future Increase(s): Add \$1.00/hour 6/2/2014; Add \$1.50/hour 6/1/2015; Add \$1.60/hour 5/30/2016.	34.07	18.10	52.17
503	Air Compressor (&/or 400 CFM or Over); Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Greaser; High Pressure Utility Locating Machine (Daylighting Machine); Mulcher; Oiler; Post Hole Digger or Driver; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	30.82	18.96	49.78
504	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	18.98	57.78
505	Work Performed on the Great Lakes Including Crane or Backhoe Operator; Assistant Hydraulic Dredge Engineer; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder; 70 Ton & Over Tug Operator.	38.80	18.98	57.78
506	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	18.98	53.48
507	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	18.98	53.48

**HEAVY EQUIPMENT OPERATORS  
EXCLUDING SITE PREPARATION, UTILITY, PAVING LANDSCAPING WORK**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
508	Boring Machine (Directional); Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Future Increase(s): Add \$1.25/hr on 6/1/2014; Add \$1.55/hr on 6/1/2015. Premium Increase(s): Crane Operators with CCO certification add \$.50/hr. Cranes with boom length over 200 ft. not exceeding 300 ft. OR lifting capacity over 200 ton not exceeding 300 ton add \$.50/hr. Over 300 ton OR 300 ft. add \$.01/hr. per foot OR ton whichever is greater.	40.36	19.15	59.51
509	Backhoe (Track Type) Having a Mfgr's Rated Capacity of 130,000 Lbs. or Over; Boring Machine (Horizontal or Vertical); Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Pile Driver; Versi Lifts, Tri-Lifts & Gantrys (20,000 Lbs. & Over). Future Increase(s): Add \$1.25/hr on 6/1/2014; Add \$1.55/hr on 6/1/2015. Premium Increase(s): Crane Operators with CCO certification add \$.50/hr.	39.86	19.15	59.01
510	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. & Under); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Dredge (NOT Performing Work on the Great Lakes); Forklift (Machinery Moving or Steel Erection, 25 Ft & Over); Gradall (Cruz-Aire Type); Hydro-Blaster (10,000 PSI or Over); Milling Machine; Skid Rig; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.25/hr on 6/1/2014; Add \$1.55/hr on 6/1/2015. Premium Increase(s): Crane Operators with CCO certification add \$.50/hr.	39.36	19.15	58.51

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
511	Air, Track, Rotary or Percussion Drilling Machine &/or Hammers, Blaster; Bulldozer or Endloader (Over 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Pump (46 Meter & Under), Concrete Conveyor (Rotec or Bidwell Type); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Environmental Burner; Gantrys (Under 20,000 Lbs.); Grader or Motor Patrol; High Pressure Utility Locating Machine (Daylighting Machine); Manhoist; Material or Stack Hoist; Mechanic or Welder; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tining or Curing Machine; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket). Future Increase(s): Add \$1.25/hr on 6/1/2014; Add \$1.55/hr on 6/1/2015.	38.67	19.15	57.82
512	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Grout Pump; Hoist (Tugger, Automatic); Industrial Locomotives; Jeep Digger; Lift Slab Machine; Mulcher; Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames. Future Increase(s): Add \$1.25/hr on 6/1/2014; Add \$1.55/hr on 6/1/2015.	31.64	19.15	50.79
513	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Boatmen (NOT Performing Work on the Great Lakes); Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Elevator; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Forklift; Generator (&/or 150 KW or Over); Greaser; Heaters (Mechanical); Loading Machine (Conveyor); Oiler; Post Hole Digger or Driver; Prestress Machine; Pump (3 Inch or Over) or Well Points; Refrigeration Plant or Freeze Machine; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack. Future Increase(s): Add \$1.25/hr on 6/1/2014; Add \$1.55/hr on 6/1/2015.	31.64	19.15	50.79
514	Gas or Utility Pipeline, Except Sewer & Water (Primary Equipment).	36.34	21.14	57.48
515	Gas or Utility Pipeline, Except Sewer & Water (Secondary Equipment). Future Increase(s): Add \$1.60/hr on 06/01/2014; Add \$1.65/hr on 06/01/2015	33.26	18.55	51.81
516	Fiber Optic Cable Equipment Future Increase(s): Add \$1.75/hr on 02/01/2014.	27.89	17.20	45.09



<b>SEWER, WATER OR TUNNEL CONSTRUCTION</b>
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Includes those projects that primarily involve public sewer or water distribution, transmission or collection systems and related tunnel work (excluding buildings).

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**SKILLED TRADES**

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<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		
		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	35.10	18.40	53.50
105	Carpenter Future Increase(s): Add \$1.25/hr on 6/2/2014. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.68	19.81	53.49
107	Cement Finisher Future Increase(s): Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	33.51	16.13	49.64
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.82	22.61	55.43
111	Fence Erector	16.00	3.33	19.33
116	Ironworker	31.25	19.46	50.71
118	Line Constructor (Electrical)	38.25	17.63	55.88
125	Pavement Marking Operator	16.00	7.35	23.35
126	Piledriver	30.98	15.90	46.88
130	Plumber	33.75	14.07	47.82
135	Steamfitter	37.76	19.99	57.75
137	Teledata Technician or Installer	24.75	16.08	40.83

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
143	Tuckpointer, Caulker or Cleaner	34.57	16.42	50.99
144	Underwater Diver (Except on Great Lakes)	38.80	18.98	57.78
146	Well Driller or Pump Installer	25.32	15.65	40.97
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	29.16	14.34	43.50
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.04	11.74	32.78

**TRUCK DRIVERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle	30.00	15.00	45.00
203	Three or More Axle	16.00	7.35	23.35
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	32.89	18.96	51.85
205	Pavement Marking Vehicle	16.00	7.35	23.35
207	Truck Mechanic	16.00	7.35	23.35

**LABORERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer Premium Increase(s): Add \$1.92 for bottomman; Add \$2.03 for concrete manhole builder, bracer, jointman, or pipelayer; Add \$4.83 for blaster. Add \$2.00 for all tunnel work under 15 lbs. compressed air; Add \$2.00 for 0-30 lbs. compressed air; Add \$3.00 for over 30 lbs. compressed air.	28.84	17.12	45.96
303	Landscaper	25.28	11.46	36.74
304	Flagperson or Traffic Control Person	17.41	10.10	27.51
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.69	15.50	33.19
314	Railroad Track Laborer	13.50	4.06	17.56

**HEAVY EQUIPMENT OPERATORS  
SEWER, WATER OR TUNNEL WORK**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
521	<p>Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &amp;/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Master Mechanic; Pile Driver.</p> <p>Future Increase(s): Add \$1.05/hr on 6/2/2014; Add \$1.55/hr on 6/1/2015.</p> <p>Premium Increase(s): Add \$.25/hr for operating tower crane.</p>	36.84	19.45	56.29
522	<p>Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. &amp; Under); Boring Machine (Directional); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump (Over 46 Meter), Concrete Conveyor (Rotec or Bidwell Type); Concrete Spreader &amp; Distributor; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &amp;/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. &amp; Under; Dredge (NOT Performing Work on the Great Lakes); Milling Machine; Skid Rig; Telehandler; Traveling Crane (Bridge Type).</p> <p>Future Increase(s): Add \$1.05/hr on 6/2/2014; Add \$1.55/hr on 6/1/2015.</p> <p>Premium Increase(s): Add \$.25/hr for operating tower crane.</p>	36.06	19.45	55.51
523	<p>Air Track, Rotary or Percussion Drilling Machine &amp;/or Hammers, Blaster; Boring Machine (Horizontal or Vertical); Bulldozer or Endloader (Over 40 hp); Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Concrete Pump (46 Meter &amp; Under), Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb &amp; Gutter Machine; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Manhoist; Material or Stack Hoist; Mechanic or Welder; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yd or More Capacity; Screed (Milling Machine); Sideboom; Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type Having Over 8-Inch Bucket).</p> <p>Future Increase(s): Add \$1.05/hr on 6/2/2014; Add \$1.55/hr on 6/1/2015.</p> <p>Premium Increase(s): Add \$.25/hr for operating tower crane.</p>	35.11	19.45	54.56

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
524	Backfiller; Broom or Sweeper; Bulldozer or Endloader (Under 40 hp); Compactor (Self-Propelled 85 Ft Total Drum Width & Over, or Tractor Mounted, Towed & Light Equipment); Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Finishing Machine (Road Type); Environmental Burner; Fireman (Pile Driver & Derrick NOT Performing Work on the Great Lakes); Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Hoist (Tugger, Automatic); Grout Pump; Jeep Digger; Lift Slab Machine; Mulcher; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Screw or Gypsum Pumps; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Stump Chipper; Tining or Curing Machine; Trencher (Wheel Type or Chain Type Having 8-Inch Bucket & Under); Winches & A-Frames. Future Increase(s): Add \$1.05/hr on 6/2/2014; Add \$1.55/hr on 6/1/2015. Premium Increase(s): Add \$.25/hr for operating tower crane.	35.11	19.45	54.56
525	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical & Horizontal); Compactor (Self-Propelled 84 Ft Total Drum Width & Under, or Tractor Mounted, Towed & Light Equipment); Crusher, Screening or Wash Plant; Farm or Industrial Type Tractor; Fireman (Asphalt Plant NOT Performing Work on the Great Lakes); Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Loading Machine (Conveyor); Post Hole Digger or Driver; Refrigeration Plant or Freeze Machine; Rock, Stone Breaker; Skid Steer Loader (With or Without Attachments); Vibratory Hammer or Extractor, Power Pack.	30.19	20.94	51.13
526	Boiler (Temporary Heat); Forklift; Greaser; Oiler.	30.44	19.10	49.54
527	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	18.98	57.78
528	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	18.98	57.78
529	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	18.98	53.48
530	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under), Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	18.98	53.48

<b>AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION</b>
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Includes all airport projects (excluding buildings) and all projects awarded by the Wisconsin Department of Transportation (excluding buildings).

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**SKILLED TRADES**

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<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		
		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		<b>\$</b>	<b>\$</b>	<b>\$</b>
103	Bricklayer, Blocklayer or Stonemason	35.80	16.87	52.67
105	Carpenter Future Increase(s): Add \$1.25/hr on 6/2/2014. Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	33.68	19.81	53.49
107	Cement Finisher Future Increase(s): Add \$1.87 on 6/1/14; Add \$1.87 on 6/1/15; Add \$1.75 on 6/1/16. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.40/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	31.56	18.53	50.09
109	Electrician Premium Increase(s): DOT PREMIUM: Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day.	32.82	22.61	55.43
111	Fence Erector	16.00	3.33	19.33
116	Ironworker	30.51	23.23	53.74
118	Line Constructor (Electrical)	38.25	17.63	55.88
124	Painter	21.87	11.37	33.24
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver	27.67	25.64	53.31
133	Rofer or Waterproofer	29.40	15.55	44.95
137	Teledata Technician or Installer	24.75	16.08	40.83
143	Tuckpointer, Caulker or Cleaner	34.57	16.42	50.99
144	Underwater Diver (Except on Great Lakes)	34.48	15.90	50.38

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	15.07	45.67
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.58	40.36
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.04	11.74	32.78

**TRUCK DRIVERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle	34.22	19.90	54.12
203	Three or More Axle	25.24	15.20	40.44
204	Articulated, Euclid, Dumptor, Off Road Material Hauler Future Increase(s): Add \$1.75/hr on 6/1/14; Add \$1.25/hr on 6/1/15; Add \$1.30/hr on 6/1/16; Add \$1.25/hr on 6/1/17. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a> .	29.27	20.40	49.67
205	Pavement Marking Vehicle	25.24	15.20	40.44
206	Shadow or Pilot Vehicle	34.22	19.90	54.12
207	Truck Mechanic	25.24	15.20	40.44

## LABORERS

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Increase(s): Add \$.15/hr for air tool operator, joint sawer and filler (pavement), vibrator or tamper operator (mechanical hand operated), chain saw operator and demolition burning torch laborer; Add \$.35/hr for bituminous worker (raker and luteman), formsetter (curb, sidewalk and pavement) and strike off man; Add \$.50/hr for line and grade specialist; Add \$.65/hr for blaster and powderman; Add \$2.01/hr for topman; Add \$2.46/hr for bottomman; Add \$3.23/hr for pipelayer. / DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	26.06	19.43	45.49
302	Asbestos Abatement Worker	19.00	0.00	19.00
303	Landscaper Future Increase(s): Add \$1.60/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	26.06	19.43	45.49
304	Flagperson or Traffic Control Person Future Increase(s): Add \$1.60/hr on 6/1/2014. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr when the Wisconsin Department of Transportation or responsible governing agency requires that work be performed at night under artificial illumination with traffic control and the work is completed after sunset and before sunrise.	22.55	19.43	41.98

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.69	15.50	33.19
314	Railroad Track Laborer	13.50	4.06	17.56

**HEAVY EQUIPMENT OPERATORS  
AIRPORT PAVEMENT OR STATE HIGHWAY CONSTRUCTION**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
531	Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Traveling Crane (Bridge Type). Future Increase(s): Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a> .	36.72	20.40	57.12
532	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With A Lifting Capacity Of 4,000 Lbs., & Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a> .	36.22	20.40	56.62

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
533	<p>Air Track, Rotary or Percussion Drilling Machine &amp;/or Hammers, Blaster; Asphalt Heater, Planer &amp; Scarifier; Asphalt Milling Machine; Asphalt Screed; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. &amp; Under); Bituminous (Asphalt) Plant &amp; Paver, Screed; Boatmen (NOT Performing Work on the Great Lakes); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb &amp; Gutter Machine; Concrete Spreader &amp; Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches &amp; A-Frames.</p> <p>Future Increase(s):            Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015;            Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s):            DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a>.</p>	35.72	20.40	56.12

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
534	<p>Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed &amp; Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver &amp; Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a>.</p>	35.46	20.40	55.86
535	<p>Air Compressor (&amp;/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical &amp; Horizontal); Automatic Belt Conveyor &amp; Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&amp;/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.</p> <p>Future Increase(s): Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a>.</p>	35.17	20.40	55.57
536	Fiber Optic Cable Equipment.	26.69	16.65	43.34
537	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	18.98	57.78
538	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	18.98	57.78

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b><u>CODE</u></b>	<b><u>TRADE OR OCCUPATION</u></b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
539	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or More); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	18.98	53.48
540	Work Performed on the Great Lakes Including Deck Equipment Operator, Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks-Great Lakes ONLY.	34.50	18.98	53.48

<b>LOCAL STREET OR MISCELLANEOUS PAVING CONSTRUCTION</b>
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Includes roads, streets, alleys, trails, bridges, paths, racetracks, parking lots and driveways (except residential or agricultural), public sidewalks or other similar projects (excluding projects awarded by the Wisconsin Department of Transportation).

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**SKILLED TRADES**

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Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
103	Bricklayer, Blocklayer or Stonemason	35.80	16.87	52.67
105	Carpenter	32.93	19.99	52.92
107	Cement Finisher	30.09	17.53	47.62
109	Electrician	31.27	22.81	54.08
111	Fence Erector	16.00	3.33	19.33
116	Ironworker	30.51	22.97	53.48
118	Line Constructor (Electrical)	38.25	17.63	55.88
124	Painter	29.52	18.84	48.36
125	Pavement Marking Operator	30.00	0.00	30.00
126	Piledriver	29.06	25.46	54.52
133	Rofer or Waterproofer	29.40	15.55	44.95
137	Teledata Technician or Installer	24.75	16.08	40.83
143	Tuckpointer, Caulker or Cleaner	34.57	16.42	50.99
144	Underwater Diver (Except on Great Lakes)	38.80	18.98	57.78
150	Heavy Equipment Operator - ELECTRICAL LINE CONSTRUCTION ONLY	34.43	15.24	49.67
151	Light Equipment Operator -ELECTRICAL LINE CONSTRUCTION ONLY	30.60	14.86	45.46
152	Heavy Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	26.78	13.63	40.41
153	Light Truck Driver - ELECTRICAL LINE CONSTRUCTION ONLY	24.86	12.97	37.83
154	Groundman - ELECTRICAL LINE CONSTRUCTION ONLY	21.04	11.74	32.78

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**TRUCK DRIVERS**

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Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		HOURLY BASIC RATE OF PAY	HOURLY FRINGE BENEFITS	TOTAL
<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	\$	\$	\$
201	Single Axle or Two Axle	30.00	15.00	45.00

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
203	Three or More Axle	18.00	0.00	18.00
204	Articulated, Euclid, Dumptor, Off Road Material Hauler	32.89	18.96	51.85
205	Pavement Marking Vehicle	18.00	0.00	18.00
206	Shadow or Pilot Vehicle	30.00	15.00	45.00
207	Truck Mechanic	18.00	0.00	18.00

**LABORERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer	23.07	18.07	41.14
303	Landscaper Future Increase(s): Add \$1.60/hr on 6/1/14. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.25/hr for work on projects involving temporary traffic control setup, for lane and shoulder closures, when work under artificial illumination conditions is necessary as required by the project provisions (including prep time prior to and/or cleanup after such time period).	29.04	14.63	43.67
304	Flagperson or Traffic Control Person	17.41	10.10	27.51
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.69	15.50	33.19
314	Railroad Track Laborer	13.50	4.06	17.56

**HEAVY EQUIPMENT OPERATORS  
CONCRETE PAVEMENT OR BRIDGE WORK**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
541	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self-Erecting Tower Crane With a Lifting Capacity Of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic. Future Increase(s): Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a> .	36.72	20.40	57.12
542	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity of 4,000 Lbs. & Under; Crane, Tower Crane Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a> .	36.22	20.40	56.62

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
543	<p>Air Track, Rotary or Percussion Drilling Machine &amp;/or Hammers, Blaster; Automatic Subgrader (Concrete); Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. &amp; Under); Boring Machine (Directional, Horizontal or Vertical); Bridge (Bidwell) Paver; Bulldozer or Endloader; Concrete Batch Plant, Batch Hopper; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb &amp; Gutter Machine; Concrete Spreader &amp; Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Straddle Carrier or Travel Lift; Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches &amp; A-Frames.</p> <p>Future Increase(s):            Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015;            Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s):            DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.50/hr night work premium.            See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a>.</p>	35.72	20.40	56.12
544	<p>Backfiller; Belting, Burlap, Texturing Machine; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed &amp; Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Pile Driver &amp; Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler; Tining or Curing Machine.</p>	33.96	19.79	53.75
545	<p>Air Compressor (&amp;/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Automatic Belt Conveyor &amp; Surge Bin; Boiler (Temporary Heat); Concrete Proportioning Plant; Crusher, Screening or Wash Plant; Generator (&amp;/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.</p>	30.32	18.46	48.78
546	Fiber Optic Cable Equipment.	26.69	16.65	43.34

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>				
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		<b>\$</b>	<b>\$</b>	<b>\$</b>
547	Work Performed on the Great Lakes Including Diver; Wet Tender or Hydraulic Dredge Engineer.	38.80	18.98	57.78
548	Work Performed on the Great Lakes Including 70 Ton & Over Tug Operator; Assistant Hydraulic Dredge Engineer; Crane or Backhoe Operator; Hydraulic Dredge Leverman or Diver's Tender; Mechanic or Welder.	38.80	18.98	57.78
549	Work Performed on the Great Lakes Including Deck Equipment Operator or Machineryman (Maintains Cranes Over 50 Tons or Backhoes 115,000 Lbs. or more); Tug, Launch or Loader, Dozer or Like Equipment When Operated on a Barge, Breakwater Wall, Slip, Dock or Scow, Deck Machinery.	34.50	18.98	53.48
550	Work Performed on the Great Lakes Including Deck Equipment Operator; Machineryman or Fireman (Operates 4 Units or More or Maintains Cranes 50 Tons or Under or Backhoes 115,000 Lbs. or Under); Deck Hand, Deck Engineer or Assistant Tug Operator; Off Road Trucks - Great Lakes ONLY.	34.50	18.98	53.48

**HEAVY EQUIPMENT OPERATORS  
ASPHALT PAVEMENT OR OTHER WORK**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>				
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
		<b>\$</b>	<b>\$</b>	<b>\$</b>
551	Crane, Tower Crane, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of Over 100 Tons, Self Erecting Tower Crane With a Lifting Capacity of Over 4,000 Lbs., Crane With Boom Dollies; Crane, Tower Crane, Pedestal Tower or Derrick, With Boom, Leads and/or Jib Lengths Measuring 176 Ft or Over; Master Mechanic.	39.16	19.10	58.26
552	Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of 130,000 Lbs. or Over; Caisson Rig; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With or Without Attachments, With a Lifting Capacity of 100 Tons or Under, Self-Erecting Tower Crane With a Lifting Capacity Of 4,000 Lbs. & Under; Crane, Tower Crane, Portable Tower, Pedestal Tower or Derrick, With Boom, Leads &/or Jib Lengths Measuring 175 Ft or Under; Dredge (NOT Performing Work on the Great Lakes); Licensed Boat Pilot (NOT Performing Work on the Great Lakes); Pile Driver. Future Increase(s): Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015; Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017. Premium Increase(s): DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day & Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a> .	36.22	20.40	56.62

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
553	<p>Air, Track, Rotary or Percussion Drilling Machine &amp;/or Hammers, Blaster; Asphalt Heater, Planer &amp; Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type) Having a Mfgr.'s Rated Capacity of Under 130,000 Lbs., Backhoe (Mini, 15,000 Lbs. &amp; Under); Bituminous (Asphalt) Plant &amp; Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Conveyor System; Concrete Laser/Screed; Concrete Slipform Placer Curb &amp; Gutter Machine; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Forestry Equipment, Timbco, Tree Shear, Tub Grinder, Processor; Gradall (Cruz-Aire Type); Grader or Motor Patrol; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Post Hole Digger or Driver; Railroad Track Rail Leveling Machine, Tie Placer, Extractor, Tamper, Stone Leveler or Rehabilitation Equipment; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Sideboom; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Trencher (Wheel Type or Chain Type); Tube Finisher; Tugger (NOT Performing Work on the Great Lakes); Winches &amp; A-Frames.</p> <p>Future Increase(s):            Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015;            Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p>	35.17	20.05	55.22
554	<p>Backfiller; Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed &amp; Light Equipment); Concrete Finishing Machine (Road Type); Environmental Burner; Farm or Industrial Type Tractor; Fireman (Asphalt Plant, Pile Driver &amp; Derrick NOT Performing Work on the Great Lakes); Forklift; Greaser; Hoist (Tugger, Automatic); Jeep Digger; Joint Sawyer (Multiple Blade); Launch (NOT Performing Work on the Great Lakes); Lift Slab Machine; Mechanical Float; Mulcher; Power Subgrader; Robotic Tool Carrier (With or Without Attachments); Roller (Rubber Tire, 5 Ton or Under); Self-Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Telehandler.</p> <p>Future Increase(s):            Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015;            Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p>	35.17	20.05	55.22

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
555	<p>Air Compressor (&amp;/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Augers (Vertical &amp; Horizontal); Automatic Belt Conveyor &amp; Surge Bin; Boiler (Temporary Heat); Crusher, Screening or Wash Plant; Generator (&amp;/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Mudjack; Oiler; Prestress Machine; Pug Mill; Pump (3 Inch or Over) or Well Points; Rock, Stone Breaker; Screed (Milling Machine); Stump Chipper; Tank Car Heaters; Vibratory Hammer or Extractor, Power Pack.</p> <p>Future Increase(s):            Add \$1.75/hr on 6/1/2014; Add \$1.25/hr on 6/1/2015;            Add \$1.30/hr on 6/1/2016; Add \$1.25/hr on 6/1/2017.</p> <p>Premium Increase(s):            DOT PREMIUMS: 1) Pay two times the hourly basic rate on Sunday, New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day &amp; Christmas Day. 2) Add \$1.50/hr night work premium. See DOT's website for details about the applicability of this night work premium at: <a href="http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm">http://roadwaystandards.dot.wi.gov/hcci/labor-wages-eeo/index.shtm</a>.</p>	35.17	20.40	55.57
556	Fiber Optic Cable Equipment.	26.69	16.65	43.34

<b>RESIDENTIAL OR AGRICULTURAL CONSTRUCTION</b>
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Includes single family houses or apartment buildings of no more than four (4) stories in height and all buildings, structures or facilities that are primarily used for agricultural or farming purposes, excluding commercial buildings. For classification purposes, the exterior height of a residential building, in terms of stories, is the primary consideration. All incidental items such as site work, driveways, parking lots, private sidewalks, private septic systems or sewer and water laterals connected to a public system and swimming pools are included within this definition. Residential buildings of five (5) stories and above are NOT included within this definition.

<b>SKILLED TRADES</b>
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<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	Fringe Benefits Must Be Paid On <u>All</u> Hours Worked		
		<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
101	Acoustic Ceiling Tile Installer Future Increase(s): Add \$1.25/hr on 6/2/2014.	33.68	19.81	53.49
102	Boilermaker	26.00	4.73	30.73
103	Bricklayer, Blocklayer or Stonemason	23.74	8.31	32.05
104	Cabinet Installer	25.00	0.00	25.00
105	Carpenter	21.00	15.34	36.34
106	Carpet Layer or Soft Floor Coverer	13.00	0.00	13.00
107	Cement Finisher	23.50	13.19	36.69
108	Drywall Taper or Finisher	25.00	5.00	30.00
109	Electrician	25.00	2.43	27.43
110	Elevator Constructor	43.21	26.06	69.27
111	Fence Erector	18.00	1.38	19.38
112	Fire Sprinkler Fitter	52.82	5.54	58.36
113	Glazier	37.13	12.29	49.42
114	Heat or Frost Insulator	30.00	0.00	30.00
115	Insulator (Batt or Blown)	17.00	0.50	17.50
116	Ironworker	31.25	19.46	50.71
117	Lather	21.00	15.34	36.34
119	Marble Finisher	26.89	19.18	46.07
120	Marble Mason	23.74	8.31	32.05
121	Metal Building Erector	17.00	3.82	20.82
123	Overhead Door Installer	19.00	0.13	19.13
124	Painter	29.52	2.52	32.04

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
125	Pavement Marking Operator	30.00	0.00	30.00
129	Plasterer	22.00	0.00	22.00
130	Plumber	37.97	19.84	57.81
132	Refrigeration Mechanic	19.75	8.83	28.58
133	Roofer or Waterproofer	29.40	16.35	45.75
134	Sheet Metal Worker	25.92	13.12	39.04
135	Steamfitter	31.72	16.10	47.82
137	Teledata Technician or Installer	24.75	10.87	35.62
138	Temperature Control Installer	18.00	0.50	18.50
139	Terrazzo Finisher	26.89	19.18	46.07
140	Terrazzo Mechanic	30.20	18.42	48.62
141	Tile Finisher	23.77	16.50	40.27
142	Tile Setter	30.00	0.00	30.00
143	Tuckpointer, Caulker or Cleaner	28.00	0.00	28.00
146	Well Driller or Pump Installer	27.60	0.00	27.60
147	Siding Installer	16.00	0.62	16.62

**TRUCK DRIVERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
201	Single Axle or Two Axle	17.25	4.56	21.81
203	Three or More Axle	23.17	13.32	36.49
205	Pavement Marking Vehicle	23.17	13.32	36.49
207	Truck Mechanic	19.00	1.85	20.85

**LABORERS**

<b>Fringe Benefits Must Be Paid On <u>All</u> Hours Worked</b>		<b>HOURLY BASIC RATE OF PAY</b>	<b>HOURLY FRINGE BENEFITS</b>	<b>TOTAL</b>
<b>CODE</b>	<b>TRADE OR OCCUPATION</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
301	General Laborer	18.00	10.64	28.64
302	Asbestos Abatement Worker	17.00	3.86	20.86

**Fringe Benefits Must Be Paid On All Hours Worked**

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
303	Landscaper	14.20	1.37	15.57
311	Fiber Optic Laborer (Outside, Other Than Concrete Encased)	17.69	15.50	33.19
315	Final Construction Clean-Up Worker	28.32	16.11	44.43

**HEAVY EQUIPMENT OPERATORS  
RESIDENTIAL OR AGRICULTURAL CONSTRUCTION**

**Fringe Benefits Must Be Paid On All Hours Worked**

<u>CODE</u>	<u>TRADE OR OCCUPATION</u>	<u>HOURLY BASIC RATE OF PAY</u> \$	<u>HOURLY FRINGE BENEFITS</u> \$	<u>TOTAL</u> \$
557	Asphalt Heater, Planer & Scarifier; Asphalt Milling Machine; Asphalt Screed; Backhoe (Track Type); Backhoe (Mini, 15,000 Lbs. & Under); Bituminous (Asphalt) Plant & Paver, Screed; Boring Machine (Directional, Horizontal or Vertical); Bulldozer or Endloader; Concrete Breaker (Large, Auto, Vibratory/Sonic, Manual or Remote); Concrete Bump Cutter, Grinder, Planing or Grooving Machine; Concrete Conveyor System; Concrete Laser/Screed; Concrete Paver (Slipform); Concrete Pump, Concrete Conveyor (Rotec or Bidwell Type); Concrete Slipform Placer Curb & Gutter Machine; Concrete Spreader & Distributor; Crane (Carry Deck, Mini) or Truck Mounted Hydraulic Crane (10 Tons or Under); Crane With a Lifting Capacity of 25 Tons or Under; Crane, Shovel, Dragline, Clamshells; Forestry Equipment, TImbco, Tree Shear, Tub Grinder, Processor; Grader or Motor Patrol; Grout Pump; Hydro-Blaster (10,000 PSI or Over); Loading Machine (Conveyor); Manhoist; Material or Stack Hoist; Mechanic or Welder; Milling Machine; Roller (Over 5 Ton); Scraper (Self Propelled or Tractor Drawn) 5 cu yds or More Capacity; Shoulder Widener; Skid Rig; Stabilizing or Concrete Mixer (Self-Propelled or 14S or Over); Tractor (Scraper, Dozer, Pusher, Loader); Tractor or Truck Mounted Hydraulic Backhoe; Tractor or Truck Mounted Hydraulic Crane (10 Tons or Under); Trencher (Wheel Type or Chain Type); Winches & A-Frames.	22.00	6.89	28.89
558	Air Compressor (&/or 400 CFM or Over); Air, Electric or Hydraulic Jacking System; Backfiller; Belting, Burlap, Texturing Machine; Boiler (Temporary Heat); Broom or Sweeper; Compactor (Self-Propelled or Tractor Mounted, Towed & Light Equipment); Concrete Finishing Machine (Road Type); Farm or Industrial Type Tractor; Forklift; Generator (&/or 150 KW or Over); Heaters (Mechanical); High Pressure Utility Locating Machine (Daylighting Machine); Jeep Digger; Lift Slab Machine; Mulcher; Oiler; Post Hole Digger or Driver; Power Subgrader; Pump (3 Inch or Over) or Well Points; Robotic Tool Carrier (With or Without Attachments); Rock, Stone Breaker; Roller (Rubber Tire, 5 Tons or Under); Screed (Milling Machine); Self Propelled Chip Spreader; Shouldering Machine; Skid Steer Loader (With or Without Attachments); Stump Chipper; Telehandler; Vibratory Hammer or Extractor, Power Pack.	16.15	1.93	18.08

\*\*\*\*\* END OF RATES \*\*\*\*\*



**SECTION 00 83 00 – PARTIAL PAYMENTS FOR STORED MATERIALS**

**PART 1 – GENERAL**

- 1.1 As stated in the General Conditions, the Commissioner of Public Works may grant an estimate of the amount of properly stored fabricated or manufactured materials and components specified, previously paid for by the Contractor. Said payments will be made in accordance with “Procedure Rules of the Commissioner of Public Works for Progress Estimates”.
- 1.2 For inspection of properly stored materials located outside Milwaukee County, the City shall be reimbursed by the Contractor for all transportation costs, travel time wages, meals and lodging, overtime and incidental expenses for City employees performing said inspection.

**PART 2 – PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION** (Not Applicable)

**PART 4 – MEASUREMENT AND PAYMENT** (Not Applicable)

**END OF SECTION 00 83 00**



## **SECTION 01 11 00 – SUMMARY OF WORK**

### **PART 1 – GENERAL**

#### **1.1 GENERAL REQUIREMENTS**

- A. The Contractor for this work shall refer to the “General Specifications” of the Department of Public Works dated January 31, 1992 and all subsequent addenda, as he shall be held responsible for all requirements listed herein. The Contractor shall visit the site, consult the drawings and specifications, be familiar with the project, and determine for himself all conditions affecting the work.
- B. Failure by a Contractor to be familiar with the project shall not release him from any obligation undertaken under the contract to complete the work in strict conformity with the plans and specifications and all City, State or Federal codes or regulations pertaining thereto.
- C. The State of Wisconsin Department of Transportation, Division of Highways, Standard Specifications for Highway and Structure Construction – 2014 Edition, Part 2 through Part 7, and Part 1 specifically referenced herein, revised by these specifications and included in the special provisions.
- D. The drawings accompanying these specifications illustrate the nature and intent of the work and with the specifications form a part of the contract documents. Wherever the clauses “as shown”, “as directed” or similar expressions are used, it shall be understood that reference to drawings is made.

#### **1.2 WORK COVERED BY CONTRACT DOCUMENTS**

- A. It is understood that the submittal of a proposal shall include all labor, materials, equipment and incidentals necessary for completion of the work required, including that which may not be directly shown on the drawings or in the specifications but are necessary for proper operation and approval.
- B. The contractor shall locate and be responsible for all lines, elevations and measurements of the structure and other work executed by the Contractor under the contract. The Contractor must exercise proper precaution to verify areas to be worked on the drawing before laying out work and will be held responsible for any error resulting from failure to exercise such precaution.
- C. Contractor shall verify grades, lines, levels, locations and dimensions as shown on drawings and report any errors or inconsistencies to the Engineer before commencing work or fabrication of materials. Starting of work by the Contractor shall imply acceptance of existing conditions.

#### **1.3 DEFINITIONS**

- A. The word provide, when used in this specification shall mean that the provider shall furnish and install complete the referenced item or items.

## **1.4 DESCRIPTION OF PROJECT**

- A. This project involves furnishing and installing, complete in every detail, and every aspect whether specified or not, all removals, concrete deck replacement, steel girder replacement, sandblasting and painting steel members, bearing replacement, heat straightening girders, and additional work as detailed in the contract drawings and specifications required for the completion of the Impact Damage Repairs at the 35<sup>th</sup> Street and Howell Avenue Bridges over the Union Pacific Railroad.

## **PART 2 – PRODUCTS (Not Applicable)**

## **PART 3 – EXECUTION**

### **3.1 HOURS OF WORK**

- A. The contractor shall coordinate hours of work with the City of Milwaukee.
- B. The hours of work shall be between 7:00 a.m. and 9:00 p.m.

### **3.2 EXAMINATION OF SITE**

- A. All existing conditions, elevations and dimensions shall be verified at the site by the Contractor. Prior to submitting his proposal, the Contractor shall visit the site, consult the drawings and specifications and determine for himself all conditions affecting the work.
- B. Contractor shall become acquainted with the location of concealed services, utilities, structures, overhead conduits and piping, etc. which may be encountered or be affected by the Contractor's work, and shall be responsible for any damage caused by neglect to provide proper precautions or protection.
- C. Information pertaining to existing conditions that appear on the drawings is based on original construction. While such data has been collected with reasonable care, there is no expressed or implied guarantee that conditions so indicated are entirely representative of those actually existing or that unforeseen developments may not occur. They are merely provided to assist the Contractor in the investigation of conditions.
- D. Contractor shall obtain complete data at the site and inspect the area that is to receive the work before proceeding with fabricating, assembling, fitting, or erecting his work.
- E. Contractor shall notify the Engineer in case of discrepancies between existing work and drawings, and defects in such surfaces that are to receive the Contractors work. The Engineer will direct such work or surfaces to be remedied.
- F. Damage to the structure not documented prior to the rehabilitation work will be the Contractor's responsibility to repair.

### **3.3 SUPERVISION OF WORK**

- A. The Contractor shall provide all necessary supervision, scheduling, planning and control to perform the work and coordinate the work of all trades on the project.
- B. The contractor shall furnish the services of an experienced superintendant at all times when work is being performed.
- C. The superintendant shall be constantly in charge of the installation of the work together with all subcontractors, skilled workman, helpers, and labor required to perform the work.
- D. The Contractor shall be thoroughly acquainted with and be responsible for the various Subcontractors' work so that it is properly coordinated and supervised to the satisfaction of the Commissioner of Public Works or his representative.
- E. Upon written notice to the Contractor of the lack of such coordination and supervision, the Commissioner of Public Works may authorize such services as may be required and deduct the cost of this service at an hourly rate of \$100.00 per hour per person from the contract for the work.

### **3.4 STORAGE OF MATERIALS**

- A. The contractor shall assume full responsibility for the protection and safekeeping of products stored on the premises.
- B. The contractor shall store materials within the confines of his work space or in other areas or locations negotiated by the Contractor.
- C. Materials are to be so stored as to assure the preservation of their quality and fitness for the work. When considered necessary, materials shall be placed on wooden platforms or other hard, clean surfaces, and not on the ground, and they shall be placed under cover. Materials stored at the site shall not damage the structure in any way. Oil, grease, or gasoline spills shall be cleaned up immediately.
- D. Stored materials shall be located so as to facilitate prompt inspection.

### **3.5 PROTECTION AND REPAIRS**

- A. The Contractor shall continuously maintain adequate protection of all his work and materials, whether worked or unworked, on or off the site of the project, and shall protect the work and materials of all other Contractors and the City of Milwaukee's property from damage arising in connection with their contracts.
- B. The Contractor shall be responsible for any damages caused by his operations to vehicles, landscaping, persons or property. The contractor, during all operations shall take precautions necessary for the full protection of traffic, parked vehicles, property upon and in the vicinity of the structures and utilities.

- C. Whenever damage or destruction of property of any character resulting from neglect, misconduct or omission due to the manner or method of execution or non-execution of the work or caused by defective work or the use of improper materials, the Contractor shall be held responsible and not released until the work shall have been corrected, completed, and the requirements and intent of these documents complied with.
- D. All damages of each and every kind resulting from neglect or refusal of the Contractor to protect such work materials, and property during erection, construction and completion of the project shall be made good by the Contractor to the satisfaction of the City.
- E. No damaged or imperfect materials, equipment accessories, etc., will be accepted. All materials, equipment, accessories, etc. furnished or installed by this Contractor must function perfectly and as designed. If any argument should arise in regard to this requirement, the City will replace the parts and deduct the costs from the contract price.
- F. The Contractor shall repair all damages that he, any of his employees or his subcontractors may do to any other work or any other parts of the bridge structure. Repairs must be done in a neat and workmanlike manner to match existing construction and must meet with the approval of the Commissioner of Public Works or his representative.
- G. If any faults are found with the Contractor's work, he shall repair or replace any of the parts he has furnished or installed as directed without any additional costs to the City.
- H. The Contractor shall restore, repair, refinish or replace, as part of this contract any surfaces that are damaged or left incomplete or unsightly as a result of the removal of existing equipment.

**PART 4 – MEASUREMENT AND PAYMENT (Not Applicable)**

**END OF SECTION 01 11 00**

## **SECTION 01 22 00 – UNIT PRICES**

### **PART 1 – GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General Conditions, Cleaning and Project Closeout, and other Division 1 Specifications Sections apply to this section.

#### **1.2 SUMMARY**

- A. This Section includes administrative and procedural requirements for unit prices.

#### **1.3 DEFINITIONS**

- A. Unit price is an amount proposed by bidders, stated on the Bid Form, as a price per unit of measurement for materials or services.

#### **1.4 EXTRA WORK**

- A. Extra work shall be performed in accordance with the Department of Public Works General Specifications Section 2.6.0 “Extra Work and Credits”

#### **1.5 PROCEDURES**

- A. Unit prices include all necessary material, plus cost for delivery, installation, labor, insurance, overhead, profit, and applicable taxes.
- B. Measurement and Payment:
  - 1. All work completed under the contract will be measured by the Engineer according to United States standard measure. The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.
  - 2. The completed work will be measured for final payment by the Engineer, as specified for the various items elsewhere in these specifications, to determine the quantities of such items of work performed, except when agreements have been made providing for compensation on the basis of plan quantities as hereinafter provided or when contract change orders have been executed providing for other methods of measurement. The Contractor will be paid for the actual amount of work performed in accordance with the contract, as shown by the final measurements or upon the basis of plan quantities.
  - 3. If the Contractor and the Engineer agree in writing that the quantities of certain items or portions of items of work as set forth in the contract or on the plans, as originally drawn or

subsequently corrected or revised, are in substantial agreement with the actual quantities of work performed, compensation therefore will be made based on the quantities set forth in the contract or on the plans, as originally drawn or subsequently corrected or revised, without measurement thereof, and the contractor shall accept such compensation as full payment for such items or portions of items.

4. When standard manufactured items are specified such as fences, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gage, unit weight, section, dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.
- C. The items listed in the bid documents shall be considered as sufficient to complete the work in accordance with the plans and specifications. Any portion of the work not listed in the bid form shall be deemed to be a part of the item which it is most closely associated with and shall be included in the cost of the unit shown on the bid form. Payment for the unit shown on the bid form shall be considered to cover the cost of all labor, material, equipment and performing all operations necessary to complete the work in place. The unit of measurement shall be the unit shown on the bid form. Payment shall be based upon the actual quantity multiplied by the unit prices. Where work is to be performed at a lump sum price, the lump sum shall include all operations and elements necessary to complete the work. No payment will be made for any material wasted, unused, rejected, or used for the convenience of the Contractor.
- D. Quantities and measurement of work completed shall be agreed to by both the Contractor and Project Inspector prior to submission of progress payment(s).
- E. The Owner reserves the right to add or remove quantities of work from the project after the project is awarded.
- F. Final payment and release of retainage will be processed following final acceptance by the Engineer. Payment will only be released once all contract requirements are fulfilled and punch-list items are marked as acceptably completed. Punch-list work is incidental to the project quantities.

**PART 2 – PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION** (Not Applicable)

**PART 4 – MEASUREMENT AND PAYMENT** (Not Applicable)

**END OF SECTION 01 22 00**

## **SECTION 01 26 00 – CONTRACT MODIFICATION PROCEDURES**

### **PART 1 – GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings, special provisions, and general provisions of the contract, including General Conditions and other Division 1 specification sections, apply to this section.

#### **1.2 SUMMARY**

- A. This section specifies administrative and procedural requirements for handling and processing contract modifications.

#### **1.3 MINOR CHANGES IN THE WORK**

- A. The engineer will issue supplemental instructions authorizing minor changes in the work, not involving adjustment to the contract sum or contract time.

#### **1.4 CHANGE ORDERS**

- A. Change orders shall be requested and processed in accordance with Department of Public Works General Specifications, Chapter 2.1.26 and as herein specified.
- B. The Contractor shall submit all change order requests to the City in a timely manner. Each request should include a description of the proposed change, the reason for the change, and a complete breakdown of the proposed cost including supporting information to substantiate the claim.
- C. The Contractor shall include with the change order request the impact, if any, the proposed change will have on the Contractor's schedule. If a time extension to the schedule is requested, then the Contractor shall include supporting information to substantiate the claim.
- D. All change order requests shall be submitted as soon as possible after the above information can be compiled. Change order requests submitted after one month of occurrence may not be granted.
- E. Change orders requested to be paid on a time and material basis shall have all work documented on a daily basis. Contractor's superintendent and the Project Inspector shall sign off on a daily basis all labor hours and materials used and charged to the change orders.

- F. Approval of the change order work and method and/or amount of payment shall be approved prior to Contractor proceeding with change order as outlined in the Department of Public Works General Specification.

**PART 2 – PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION** (Not Applicable)

**PART 4 – MEASUREMENT AND PAYMENT** (Not Applicable)

**END OF SECTION 01 26 00**

## **SECTION 01 31 13 – PROJECT COORDINATION**

### **PART 1 – GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the contract, including General Conditions and other Division 1 specification sections, apply to this section.

#### **1.2 SUMMARY**

- A. The General Contractor shall assume and take responsible charge of the project and shall coordinate the work of each Subcontractor so as to complete the project in an orderly and timely manner.
- B. Each Contractor shall:
  - 1. Coordinate the work of his own employees
  - 2. Expedite his work to assure compliance with schedules.
  - 3. Coordinate the work with that of other Contractors and City of Milwaukee.

#### **1.3 SPECIAL REQUIREMENTS**

- A. The required time of completion.
  - 1. The Contractor shall complete all work within the time for completion as stated in the Official Notice.

### **PART 2 – PRODUCTS (Not Applicable)**

### **PART 3 – EXECUTION**

#### **3.1 COORDINATION PROCEDURES**

- A. Cooperate with the City and other persons of all trades engaged in the work in such a manner and to such extent as will best facilitate the work of each and the prompt completion of the work.
- B. Maintain progress of the work, order materials and let subcontracts promptly, and schedule and expedite work so as to avoid delay.
- C. Notify other Contractors, trades and City of Milwaukee whose work is in any way connected to, combined with, or influenced by the Contractor's work and allow them reasonable time to complete their work.
- D. Carefully examine the drawings and specifications to ascertain the extent of the work of all trades.

- E. Coordinate access to and use of the site, and storage of materials on the site with the subcontractors.
- F. Coordinate Contractor's work with adjacent work and cooperate with all other trades so as to facilitate the general progress of the project. Afford all other trades every reasonable opportunity for the installation of their work and for the storage of their material. In no case exclude from the premises or work, any other Contractor or Subcontractor or their employees; nor interfere with any Contractor or Subcontractor in the execution or installation of his work.
- G. Perform work in proper sequence in relation to that of other trades. Pay all costs caused by defective or ill-timed work.
- H. Arrange work and dispose of materials so as not to interfere with the work or storage of materials of other Contractors and join his work to that of others in accordance with the intent of the drawings, special provisions, and specifications.
- I. Notify the City of unforeseen conditions found in the field.

### **3.2 EXAMINATION OF DRAWINGS**

- A. Examine all drawings together with the specifications, or special provisions applicable to the contract.
- B. After examination of the contract documents, bring to the attention of the City any questions with regard to the intent of these documents, in a timely manner, prior to commencing with the work.

### **PART 4 – MEASUREMENT AND PAYMENT (Not Applicable)**

**END OF SECTION 01 31 13**

## **SECTION 01 31 19 – PROJECT MEETINGS**

### **PART 1 – GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the contract, including General Conditions and other Division 1 specification sections, apply to this section.

#### **1.2 SUMMARY**

- A. This section specifies administrative and procedural requirements for project conferences and meetings, including, but not limited to, the following:
  - 1. Pre-Construction Conference
  - 2. Progress Meetings
- B. Related Sections: The following sections contain requirements that relate to this section:
  - 1. Division 1 Section 01 31 13 “Project Coordination” for procedures for coordinating project meetings with other construction activities.
  - 2. Division 1 Section 01 33 01 “Submittals/Permits” for submitting the contractor’s construction schedule.

### **PART 2 – PRODUCTS (Not Applicable)**

### **PART 3 – EXECUTION**

#### **3.1 PRE-CONSTRUCTION CONFERENCE**

- A. Soon after award of contract and prior to the start of construction, the Contractor shall attend a Pre Construction Conference with representatives of the City.
- B. The Contractor shall have at the conference responsible representatives from subcontractors who are to furnish the required materials and perform work on the project.
- C. The purpose of the conference is to discuss in detail the plans and specifications. The discussion shall include but is not limited to:
  - 1. Schedule
  - 2. Equipment
  - 3. Material storage

4. Inspection requirements
  5. Inspection reports
  6. Protection procedures for the structure adjacent facilities, environment, and personnel
- D. The Contractor shall submit the construction schedule to the Engineer at this conference. It must include all of the Contractor's work and all the work of subcontractors. Copies of this schedule shall be submitted to the City for review. The schedule shall include the following:
1. List of starting and completion dates for each major item
  2. Running schedule of a week-by-week charting and allowing for charting of:
    - a. Expected progress on major items
    - b. Actual progress on major items
    - c. Critical path items
- E. Contractor shall describe in detail when each portion of the work is to be accomplished and subcontractors shall participate in the discussion. The Engineer will serve to interpret the contract documents should such questions arise.
- F. Any other questions that the Contractor/Subcontractors have about the work or its scheduling shall be raised at this conference.
- G. Requirements for contract administration and construction operations will be defined for participants.
- H. Time, date and place of the conference will be determined by the Engineer.

### **3.2 PROGRESS MEETINGS**

- A. Weekly progress meetings will be held at the project site by the City's representative for the purpose of coordinating and expediting the work progress.
- B. Attendance at progress meetings by the Contractor is mandatory. These meetings shall also be attended by representatives of each Subcontractor who is either working at the site or is affected by work being done at the site.
- C. Contractors shall give written reports of progress on the project, discuss the work schedule for the coming period and present all conflicts, discrepancies, or other difficulties for resolution.
- D. The Contractor shall submit an updated construction schedule at each progress meeting with the expected progress of major items, actual progress on major items and critical path items outlined. A short narrative should be written describing the cause of any delays and intended action to

01 31 19/3

remedy delays. On a monthly basis, provide an overall project schedule tracking the actual progress of major and critical path items, expected progress of remaining major and critical path items, and anticipated completion date.

**PART 4 – MEASUREMENT AND PAYMENT** (Not Applicable)

**END OF SECTION 01 31 19**



## **SECTION 01 33 01 – SUBMITTALS AND PERMITS**

### **PART 1 – GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings, special provisions, and general provisions of the contract, including General Conditions and other Division 1 specification sections, apply to this section.

#### **1.2 SUMMARY**

- A. This section includes administrative and procedural requirements for submittals and permits required for performance of the work.
- B. The rulings, regulations and laws of the following shall be complied with in the completion of this project.
  - 1. United States Department of Labor – Occupational Safety and Health Administration (OSHA)
  - 2. Wisconsin Department of Workforce Development
  - 3. City of Milwaukee Building Code
  - 4. Wisconsin Administrative Code
  - 5. Ordinances of the City of Milwaukee
  - 6. National Electrical Code
  - 7. American Association of State and Highway Transportation Officials (AASHTO)
  - 8. Federal Navigation Regulations including U.S. Coast Guard Regulations

### **PART 2 – PRODUCTS (Not Applicable)**

### **PART 3 – EXECUTION**

#### **3.1 SUBMITTALS AND SAMPLES**

- A. Comply with the requirements of the Department of Public Works General Conditions and as follows:
  - 1. Forward submittals not more than 30 calendar days after the Award of Contract for all materials to be used on the project. No work, indicated on any one shop drawing, hardware list, etc., shall be started until such information has been approved.

2. Include with each submittal a transmittal letter signed by the Contractor containing the following:
  - a. Name of Contractor
  - b. Name of Project
  - c. List of Submittals with Specification Section references
  - d. Name of Manufacturer or Supplier
  - e. Additional information as required for the items being provided.
3. Coordinate transmittal of different types of submittals for related elements of the work so processing will not be delayed by the need to review submittals concurrently for coordination.
  - a. The Engineer reserves the right to withhold action on a submittal requiring coordination with other submittals until all related submittals are received.
4. Processing: No specific time periods are established herein for submittals or for the engineers review. To avoid the need to delay installation as a result of the time required to process submittals, allow sufficient time for submittal review, including time for resubmittals.
  - a. Allow up to 21 days for initial review. Allow additional time if the Engineer must delay processing to permit coordination with subsequent submittals.
  - b. If an intermediate submittal is necessary, process the same as the initial submittal.
  - c. Allow up to 21 days for reprocessing each submittal.
  - d. No extension of Contract Time will be authorized because of failure to transmit submittals to the Engineer sufficiently in advance of the work to permit processing.
5. Questions on the plans and project specifications during the contract bidding phase should be directed to:

Mr. Craig Liberto  
Structural Design Manager  
Infrastructure Services Division  
Room 907, Frank P. Zeidler Municipal Building  
841 North Broadway  
Milwaukee, WI 53202  
(414) 286-3294  
Craig.liberto@milwaukee.gov

All correspondence including submittals, payment requests (4 copies), change order proposals, construction time letters (delays, suspensions), and any construction related matters shall be addressed as follows:

Construction Supervisor (To be determined)  
Infrastructure Services Division  
Room 701, Frank P. Zeidler Municipal Building  
841 North Broadway  
Milwaukee, WI 53202

Note: A specific Construction Supervisor will be assigned to the project prior to the start of construction and contact information will be shared at the preconstruction conference.

All correspondence concerning the following items; Small Business Enterprise program Reports, Residency Preference Program, Apprentice Program, Wage and Hour Reports, Insurance Certificates, Subcontractor Approval Forms, and all affidavits should be sent to:

Ms. Barbara A Tribble  
Department of Public Works  
Room 507, Frank P. Zeidler Municipal Building  
841 North Broadway  
Milwaukee, WI 53202  
(414) 286-3309  
Barbara.Tribble@milwaukee.gov

- B. Approvals: Wherever the words "or equal" or "approved equal" or similar terms are used, it shall mean as approved by the Commissioner of Public Works or agent. All shop drawings, bulletins, manufacturer's cut sheets and data necessary for an approval shall be submitted with four (4) copies sent to the City Engineer. Three (3) copies are required for the City's use, and one (1) copy will be returned to the Contractor.
- C. Approval shall apply to general conformance only, and shall in no way relieve this Contractor from his/her responsibility for the full performance of contract.

### **3.2 CODES AND PERMITS**

- A. The contractor shall obtain and pay for all permits, charges, fees and licenses, if any are necessary for the prosecution of the work.
- B. The contractor shall comply with all laws, ordinances, rules and regulations bearing in the conduct of the work including the giving of notices.
- C. The cost of special equipment, enclosures, protective coverings, etc., as may be required to comply with codes and ordinances shall be included in the appropriate price bid for the work.

- D. If any material or work is specified contrary to such rules or omitted from the specifications or drawings but required by such rules, it shall be altered as required by the contractor to meet these rules and regulations.
- E. Attention is directed to the Milwaukee County Air Pollution Control Ordinances and the Department of Natural Resources relative to the specific sections which are applicable to sandblasting and spray painting.

**PART 4 – MEASUREMENT AND PAYMENT (Not Applicable)**

**END OF SECTION 01 33 01**

## **SECTION 01 50 00 – TEMPORARY FACILITIES AND CONTROLS**

### **PART 1 – GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the contract, including General Conditions and other Division 1 specification sections, apply to this section.

#### **1.2 SUMMARY**

- A. This section includes requirements for construction facilities and temporary controls, including temporary utilities, support facilities, and security and protection.
- B. Temporary utilities may include, but are not limited to, the following:
  - 1. Water service and distribution
  - 2. Temporary electric power and light
  - 3. Temporary heat
  - 4. Ventilation
  - 5. Telephone service
- C. Support facilities may include, but are not limited to, the following:
  - 1. Temporary enclosures
  - 2. Hoists and scaffolding
  - 3. Temporary project identification signs and bulletin boards
  - 4. Waste disposal services
  - 5. Construction aids and miscellaneous services and facilities
- D. Security and protection facilities may include, but are not limited to, the following:
  - 1. Barricades, warning signs, and lights
  - 2. Enclosure fence for the site
  - 3. Environmental protection

### **PART 2 – PRODUCTS (Not Applicable)**

## **PART 3 – EXECUTION**

### **3.1 TEMPORARY OR TRIAL USAGE**

- A. The owner shall have the right to make temporary or trial usage of any mechanical device, machinery, apparatus, equipment, work, material, or construction supplied under contract before final completion or acceptance of the work, and the same shall not be construed as evidence of acceptance of the work by the owner.

### **3.2 TEMPORARY POWER**

- A. The Contractor shall provide all power required, and be responsible for payment for all utility bills beginning at the start date for the duration of the project.
  - 1. OSHA regulations require that employers use either ground fault circuit interrupters or an assured equipment grounding conductor program in addition to any other regulation or equipment ground connectors.

### **3.3 TEMPORARY LIGHTING**

- A. Temporary lighting shall be provided and maintained by the Contractor.
- B. Furnish, install, and maintain temporary lighting during construction.
  - 1. Lighting shall be sufficient to enable all trades to complete their work. Illumination in all areas shall meet or exceed State Code requirements. (See IND 35.38). Provide at least one 200 watt lamp for each 400 square feet of floor space.
  - 2. Remove the temporary lighting when the job is completed.

### **3.4 BULLETIN BOARD**

- A. Furnish and maintain a 4-feet 0-inch by 4-feet 0-inch bulletin board for the posting of wage employment data, etc.

### **3.5 FIELD OFFICE**

- A. The location of a field office shall be coordinated with the City of Milwaukee for the Impact Damage Repairs at the 35<sup>th</sup> Street and Howell Avenue Bridges over the Union Pacific Railroad.

## **PART 4 – MEASUREMENT AND PAYMENT (Not Applicable)**

**END OF SECTION 01 50 00**

## **SECTION 01 60 01 – MATERIALS AND EQUIPMENT**

### **PART 1 – GENERAL**

#### **1.1 MATERIALS**

- A. Furnish materials of the type, qualities and characteristics specified. The specification of a trade name and catalog number is intended to establish quality, type, character and operating characteristics of the material required. Materials by other manufacturer's meeting the approval of the Engineer of equal specifications will be considered excepting as may be specifically stated otherwise. Evaluating of other manufacturer's products will be made at the time of shop drawing submission. Samples and/or demonstrations may be requested.
- B. Materials and equipment shall be delivered adequately protected, in merchantable condition and in original unbroken packages if normally packaged. They shall be stored and handled so as to protect and maintain their merchantable condition. Packages shall have stamped on them the date of manufacture and shelf life, if applicable.
- C. The Commissioner of Public Works or his representative shall have the right to reject material not in compliance with specifications as well as damaged material and the Contractor shall remove such material from the construction site when as directed.

#### **1.2 MATERIAL STORAGE**

- A. Storage areas are available within the Contractor's occupancy limits.
- B. Refer to Section 01 11 00 Summary of Work, Storage of Materials.

#### **1.3 EQUIPMENT**

- A. Internal combustion engine and compressors shall be equipped with mufflers to reduce noise to a minimum, and shall not be operated in enclosed areas without adequate ventilation.
- B. All materials and work procedures used shall be in accordance with all air pollution control regulations in effect at the work site.

**PART 2 – PRODUCTS** (Not Applicable)

**PART 3 – EXECUTION** (Not Applicable)

**PART 4 – MEASUREMENT AND PAYMENT** (Not Applicable)

**END OF SECTION 01 60 01**



## **SECTION 01 70 01 – CLEANING AND PROJECT CLOSE-OUT**

### **PART 1 – GENERAL**

#### **1.1 RELATED DOCUMENTS**

- A. Drawings, special provisions, and general provisions of the contract, including General Conditions and other Division 1 specification sections, apply to this section.
- B. Article 2.5.4 of the General Specifications of the City of Milwaukee Department of Public Works shall be supplemented as specified hereafter.

#### **1.2 SUMMARY**

- A. This section includes administrative and procedural requirements for cleaning and project closeout including, but not limited to, the following:
  - 1. Project record document submittal
  - 2. Submittal of warranties
  - 3. Final cleaning

#### **1.3 AS-BUILT DRAWINGS**

- A. At the completion of work and prior to final payment, the contractor shall provide the City with a marked up set of “as-built” drawings showing all changes or variations from contract drawings, including those specified on change order drawings heretofore issued. Contractors providing buried or concealed piping, conduit or similar items shall locate such items by dimensions and elevations.
- B. Marked up sets of prints will be acceptable providing they are in first class condition for record purposes. Each contractor shall be responsible for accuracy of record drawings.

#### **1.4 GUARANTEE**

- A. The Contractor shall guarantee to replace or repair promptly at his own expense, as directed by the Commissioner of Public Works or his agent, all workmanship, materials, or equipment in which defects may develop within a minimum one (1) year warranty period from the date of final acceptance of his work excepting as may be hereinafter specified. This guarantee includes all damage done by the City due to faulty equipment, poor installation or poor construction caused by the Contractor. The City shall also receive any extended guarantees or warranties normally supplied by any vendor or manufacturer for material or equipment incorporated in the work.

### **PART 2 – PRODUCTS (Not Applicable)**

### **PART 3 – EXECUTION**

### **3.1 SAFETY CLEANING**

- A. Safety cleaning: Each Contractor is responsible for safety cleaning, which includes but is not limited to the following:
  - 1. Work areas, passageways, stairs, must be kept free of debris and scrap.
  - 2. Form and scrap lumber shall have nails withdrawn or bent over and lumber shall be stacked or removed.
  - 3. Spills of paint, oil, grease, or other liquids shall be removed immediately.

### **3.2 PROGRESS CLEANING**

- A. Prime Contractor and subcontractor shall remove his rubbish and debris from the site promptly upon its accumulation.
- B. Combustible waste shall be stored in fire resistive containers and disposed of regularly.
- C. Oily, flammable or hazardous wastes such as caustics, acids, harmful dusts, etc., shall be stored in appropriate covered containers.
- D. The Contractor is not allowed to wash debris or other harmful contaminants into the Menomonee River or down drains that would be discharged into City Sewers. Filters shall be inserted in the drain where it is likely debris may accumulate.

### **3.3 DISPOSAL**

- A. All demolished materials required for this work shall be carefully collected and removed from site.
- B. No burning or rubbish or debris will be allowed at the site. No rubbish shall be thrown from heights without proper protection. When dust will be generated or flying debris is likely to occur, provide dust tight chutes or other means to control dust.
- C. Containers: Contractor shall provide mobile industrial type waste containers in the number and size required, placed at adequate locations to handle debris or provide other methods of disposing of debris.

### **3.4 FINAL CLEANING**

- A. Complete final cleaning immediately prior to substantial completion.
- B. Contractors shall expedite or perform thorough cleaning, sweeping, and washing of work to remove from work area and equipment under his contract, all foreign matter, dust, debris, spots and soil, so as to put all such work and equipment including finishes, in a complete and finished condition ready for acceptance and use intended.

- C. Remove debris from drains and flush clean.
- D. Employ trained experienced workmen for the final cleaning.

**3.5 CHARGES**

- A. If Prime Contractors do not remove rubbish or clean the project site as specified above, the City reserves the right to have work done by others at Contractor's expense.
- B. Employees of the City who are required to clean up any rubbish will record all hours involved to complete such work.
- C. The cost incurred by the City for this special cleaning shall be charged against the contract price of the Contractor as determined by the City.

**PART 4 – MEASUREMENT AND PAYMENT (Not Applicable)**

**END OF SECTION 01 70 01**



## Special Provisions

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## **SPECIAL PROVISIONS**

### **1. General.**

Perform the work under this construction contract for the 35th Street/ Howell Avenue over UPRR, Impact Damage Repairs at the 35th Street Bridge and Howell Avenue Bridges over the Union Pacific Railroad, Milwaukee, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2014 Edition, and these special provisions. The city considers only city and department standard specifications, supplemental specifications and interim supplemental specifications issued directly from the city as valid for this contract.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

The City of Milwaukee is referred as the city; the Wisconsin Department of Transportation is referred as the department; and the Union Pacific Railroad (UPRR) is referred as the railroad in this specification.

### **2. Scope of Work.**

The work under this contract shall consist of repair of the Howell Avenue Bridge P-40-509 and the 35th Street Bridge P-40-848 including partial demolition, partial girder replacement, painting, partial deck replacement, heat straightening and all incidental items necessary to complete the work as shown on the plans and included in the proposal and contract.

### **3. Prosecution and Progress.**

Begin work within ten calendar days after the engineer issues a written notice to do so.

Provide the start date and construction start date to the engineer in writing within 10 days after executing the contract. Upon approval, the engineer will issue the notice to proceed within 7 calendar days before the approved start date.

The completion dates for the project are as stated in the official notice.

The contract time for completion is based on an expedited work schedule and may require extraordinary forces and equipment.

Prior to beginning operations under this contract, submit in writing the proposed schedule of operations to the engineer for approval.

Replace standard spec 108.10.2.2(1) as follows:

- (1) The engineer will award a time extension for severe weather on calendar day and completion date contracts. Submit a request for severe weather days if the number of adverse weather days, as defined in standard spec 101.3, exceeds the anticipated number of adverse weather days tabulated below.

Total Anticipated Adverse Weather Days for Each Calendar Month<sup>[2]</sup>

Jan <sup>[1]</sup>	31	Aug	5
Feb <sup>[1]</sup>	28	Sept	6
Mar <sup>[1]</sup>	31	Oct	8
April	7	Nov 1 through 15	5
May	6	Nov 16 through 30 <sup>[1]</sup>	15
June	6	Dec <sup>[1]</sup>	31
July	5		

<sup>[1]</sup> Includes an anticipated winter suspension from November 16 through March 31.

<sup>[2]</sup> The number of days will be modified in the special provision for year-round and painting contracts.

#### **4. Traffic**

Use drums, barricades or temporary concrete barrier to direct vehicular and pedestrian traffic in the work zone as shown in the traffic control plans. Modifications to the traffic control plan may be required by the engineer to accommodate construction conditions.

At the 35th Street Bridge, P-40-848, the two southbound lanes of the bridge have been closed, with bi-directional traffic using the northbound lanes of the bridge. The City of Milwaukee will maintain the traffic control for traffic. The contractor shall provide traffic control, as shown on the plans, to secure the work zone.

At the Howell Avenue Bridge, P-40-509, the contractor shall set new traffic control as shown on the plans to close the northbound sidewalk and parking lane during construction. Existing traffic control in place by the City of Milwaukee will be removed by the city at the start of construction. Coordinate traffic control with the City of Milwaukee to ensure the sidewalk and parking lane remain closed until all repairs are completed. Contact Rick Lacy – Bridge Maintenance Supervisor, cell (414) 708-3207, office (414) 286-5504.

No additional lane or shoulder closures will be permitted beyond what is shown on the traffic control plans.

#### **5. Protection of Workers**

Handle and manage all waste materials from paint removal operations as “hazardous.” In this regard, direct attention to subsection 107.1 of the standard specifications on Safety, Health, and Sanitation.

Provide and require all employees to wear all personal protective equipment required for the environment to which the workers are subjected, and provide medical monitoring as required for those employees in the work area. The requirement includes, but is not limited to, air-supplied respirators, eye protection, ear protections, fall protection, protective clothing and other such items. Provide for the decontamination of workers and authorized persons in the work area so that no lead contamination leaves the work area on the bodies or clothing of those persons.

## **6. Labeling and Disposal of Waste Material**

Properly label the hazardous waste materials generated from the construction site and dispose that material by following the guidelines of the Environmental Protection Agency. Unlike standard Wisconsin Department of Transportation let projects, the contractor will be responsible to find suitable landfill and the cost of Labeling and Disposal of Waste Material will be paid as an incidental to the Containment and Collection of Waste Materials P-40-509 and P-40-848 bid items.

## **7. Public Convenience and Safety**

*Revise standard spec 107.8(6) as follows:*

Check for and comply with local ordinances governing the hours of operation of construction equipment. Do not operate motorized construction equipment from 9:00 p.m. until the following 7:00 a.m., unless prior written approval is obtained from the engineer.

## **8. Railroad Insurance and Coordination.**

### **A Description**

Comply with standard spec 107.17 for all work affecting Union Pacific Railroad Company property and any existing tracks.

### **A.1 Railroad Insurance Requirements**

In addition to standard spec 107.26, provide railroad protective liability insurance coverage as specified in standard spec 107.17.3. Insurance is filed in the name of Union Pacific Railroad Company.

Notify evidence of the required coverage, and duration to John Venice at 101 N. Wacker Drive, Suite 1920, Chicago IL. Telephone (312) 777-2043, [jnvenice@up.com](mailto:jnvenice@up.com). Include the following information on the insurance document:

Project Id: BR100-14-0108/109  
Route Name: South 35th Street, Milwaukee County  
& South Howell Avenue, Milwaukee County  
Railroad Subdivision: Milwaukee Subdivision  
Railroad Milepost: 81.2 (Howell Ave); 84.2 (35th Street)

## **A.2 Work by Railroad**

The railroad will perform the work described in this section, except for work described in other special provisions and will be accomplished without cost to the contractor: None.

## **A.3 Names and addresses of Railroad Representatives for Consultation and Coordination**

Contact UPRR: John Venice, Manager of Special Projects - Industry & Public Projects Manager-Industry & Public Projects Engineering, 101 N. Wacker Drive, Suite 1920, Chicago IL. Telephone (312) 777-2043, jnvenice@up.com for consultation on railroad requirements during construction.

Amend standard spec 108.4 to include the railroad in the distribution of the initial bar chart, and monthly schedule updates. The bar chart shall specifically show work involving coordination with the railroad.

## **A.4 Temporary Grade Crossing**

If a temporary grade crossing is desired, submit a written request to the railroad representative named in A.3 one week prior to the time needed. The contractor shall identify grade crossing locations required. Approval is subject to the discretion of the railroad. The city has made no arrangements for a temporary grade crossing.

The railroad will provide spare ties or grade crossing panels across tracks where the contractor identifies a need to cross tracks at grade.

## **A.5 Train Operation**

Approximately 0 passenger trains and 15 through freight trains operate daily through the construction sites. Passenger trains operate at up to 35 mph. Through freight trains operate at up to 35 mph. Through train activity is limited to below span 7 of bridge P-40-848 and span 2 of bridge P-40-509.

Between the hours of 7:00 a.m. and 4:00 p.m., approximately 7 through freight trains operate daily through the construction sites. However, there is no regular schedule for freight train operations so the number of trains may vary.

A switching area / train yard is located below bridge spans 8 and 9 of bridge P-40-848. This area is lightly used for train operations and will be open to train traffic during construction.

The contractor shall exercise caution when working in the vicinity of the tracks, and protect them from damage.

## **A.6 Temporary Clearances During Construction**

Replace subparagraphs (3) 4.1 and (3) 4.2 of standard spec 107.17.1 with the following:

Provide 12 feet 0 inches plus 1.5 inches per degree of track curvature, measured horizontally from the track center line.

Provide 19 feet 3 inches plus compensation for super-elevated track, measured vertically above the top of the highest rails.

The clearances listed above apply to all railroad tracks within the project limits, including both mainline through tracks and the switching / train yard area.

## **A.7 Coordination of Railroad Operations**

Coordinate the work schedule with Union Pacific Railroad to determine when track windows are required if temporary clearances cannot be maintained, and for demolition work.

Union Pacific Railroad may adjust train operations to accommodate bridge repairs.

## **B Railroad Flagging**

Arrange with the railroad for the flagging of trains and safety of railroad operations when working between the clearance fences specified. The following conditions may also warrant flagging:

1. Cranes swinging or handling materials or equipment within 25 feet of the centerline of any track.
2. Construction operations that are in proximity of power lines or railroad signal and communication lines, underground cables, fuel oil facilities or pipe lines and which might result in fire or damage to such facilities, danger to railroad operations or danger to the public in the transaction of business on railroad premises.
3. Excavation, tunneling, blasting, pile driving, placing, or removing cofferdams or sheeting, or similar activities might cause the railroad's tracks or buildings to be undermined, heaved out of normal level, shifted out of alignment, or otherwise impaired.
4. Bridge painting activities including rigging of falsework, scaffolding or similar activities within 25 feet of the centerline of any track.
5. Deck removal activities within 25 feet of the centerline of any track.
6. Pouring of bridge decks in spans over an operated track.

7. At any other time, in railroad representative's judgment, the contractor's work or operations constitute an intrusion into the track zone and create an extraordinary hazard to railroad traffic and at any other time when flagging protection is necessary for safety to comply with the operating rules of the railroad.
8. Heat straightening of girders within 25 feet of the centerline of any track.

Projects with concurrent activity may require more than one flagger.

Projects with heavy contractor activity within 25 feet of the centerline of any track or unusual or heavy impact on railroad facilities will normally require a full-time flagger.

The city and railroad will monitor operations for compliance with the above flagging requirements. Violations may result in removal from railroad property until arrangements to adhere to the flagging requirements are satisfied. If the railroad imposes additional flagging requirements beyond the above flagging requirements due to the previous violations, the contractor shall bear all costs of the additional flagging requirements.

## **C Flagging – Railroad Pays Flagging Costs**

### **C.1 General**

Replace paragraph (3) of standard spec 107.17.1 with the following:

Comply with the railroad's rules and regulations regarding operations on railroad right-of-way. If the railroad's chief engineering officer requires, arrange with the railroad to obtain the services of qualified railroad employees to protect railroad traffic through the work area. Notify the railroad's chief engineering officer in writing at least 10 business days before starting work near a track. Provide the specific time planned to start the operations. The railroad will bear the cost for flagging, including at private crossings, except that the contractor shall pay the railroad directly for the excluded condition.

### **C.2 Excluded Condition**

The city will not reimburse any of the cost for additional flagging attributable to the following:

Additional flagging requirements imposed by the railroad beyond the flagging requirements provided in subsection B above due to violations by the contractor.

The contractor shall bear all costs of the additional flagging requirements for the excluded condition.

## **D Rail Security Awareness and Contractor Orientation**

Prior to entry on railroad right-of-way, the contractor shall arrange for on-line security awareness and contractor orientation training and testing, and be registered through "e-RAILSAFE" for all contractor and subcontractor employees working on railroad

right-of-way. See e-railsafe.com “Information”. The security awareness and contractor orientation training is shown under the railroad’s name. The contractor shall secure right of entry to railroad property; neither the contractor nor subcontractors or their employees will be required to sign a right-of-entry form. The security awareness and contractor orientation certification is valid for 1 year(s) and must be renewed for projects that will carry over beyond the 1 year period. Contractor and subcontractor employees shall wear the identification badge issued by e-RAILSAFE when on railroad right-of-way. Costs associated with training and registration are incidental to other items in the contract.

## **9. Union Pacific Railroad Company Requirements**

### **A General**

In addition to requirements of the standard specifications and other articles within these special provisions, comply with the following requirements of Union Pacific Railroad Company (UPRR).

### **B Request for Information / Clarification**

All requests for information (RFI) involving work within UPRR right-of-way shall be in accordance to the procedures listed elsewhere in the special provisions. Submit all RFIs to the engineer for submittal to UPRR. Allow 7 days for UPRR’s review after receipt from the engineer.

### **C Plans / Specifications**

Changes to the plans or specifications are subject to the approval of UPRR. Submit all change requests to the engineer. Allow 7 days for UPRR review time after receipt of a change request from the engineer.

### **D Construction Submittals**

Submit six sets of the following to the engineer. All design submittals shall be stamped and signed by a professional engineer registered in the State of Wisconsin. The engineer will submit four sets of each submittal, along with any review comments to UPRR. A satisfactory submittal review does not relieve the contractor of responsibility and liability.

The railroad will provide reviews of the required submittals, at no cost to the contractor.

The engineer and UPRR may review the submittals. If the engineer or UPRR finds a submittal unsatisfactory, make all required changes and resubmit it. A satisfactory submittal review does not relieve the contractor of responsibility and liability of complying with the plans, specifications and the special provisions and for the structural integrity and proper functioning of the item that is the subject of the submittal. Allow 7 days for UPRR’s review time after receipt of a submittal from the engineer.

<b>Item</b>	<b>Description of Submittal Item</b>	<b>Notes</b>
1	Shoring Design and Details	
2	Falsework Design and Details	
3	Drainage Design Provisions	
4	Erection Diagrams and Sequence	
5	Demolition Diagram and Sequence	
6	Shop Drawings	Steel and concrete members.

Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to UPRRs designated representative for review. Review by UPRR shall not relieve the contractor from liability.

### **E Infringement On Minimum Clearances**

Submit to the engineer requests for infringement upon the minimum horizontal or vertical clearance requirements of 107.17.1 (2) 4. of the standard specifications. The engineer will submit the requests to UPRR's designated representative. Allow 7 days for UPRR's review time after receipt of a submittal from the engineer. Do not infringe upon the minimum clearances unless they are first approved in writing by UPRR.

### **F Approval of Details**

Submit details of construction affecting UPRR tracks, structure, and right-of-way not included in the plans to the engineer for UPRR review before undertaking such work. Allow 7 days for UPRR's review after receipt from the engineer.

### **G Site Inspections By UPRR**

UPRR may make site inspections at any time. Provide the engineer a schedule of anticipated dates for the following activities; the engineer will furnish the schedule to UPRR:

1. Shoring
2. Demolition
3. Falsework
4. Erection of superstructure
5. Completion of the bridge structure.

Update the schedule weekly, or more frequently if necessary, so that site visits may be scheduled.

### **I Construction Excavations and Demolition**

Construction excavations shall meet OSHA and American Railway Engineering and Maintenance-of-Way Association (AREMA) requirements and the UPRR "Guidelines for Temporary Shoring" (GTS).

Demolition shall be done in accordance with Union Pacific's Guidelines for Preparation of a Bridge Demolition and Removal Plan for Structures over Railroad (GPBDRP)

The GTS and the GPBDRP are available for review from the Southeast Region's Railroad Coordinator at the department's Southeast Regional Office located at 141 N.W. Barstow Street, Waukesha, Wisconsin 53187-0798.

## 10. Utilities

There are utility facilities within the construction limits of this project, though no conflicts have been identified between the proposed work and the existing utilities. At structure P-40-848 new conduits are required to be installed and connected with existing City of Milwaukee conduits.

The contractor shall take care to protect any existing utilities that are encountered during construction operations.

Utility contacts are shown in the plans. Utilities with confirmed facilities on or below the bridge are as follows:

### **Howell Ave. Bridge P-40-509**

**We Energies - Gas** has an active gas main located near the girders to be heat straightened. All work at this location must be coordinated with We Energies to ensure the gas main is adequately protected during construction.

Mr. Jon Meiers  
333 W. Everett St. – A299  
Milwaukee, WI 53203  
(414) 944-5791  
[jon.meiers@we-energies.com](mailto:jon.meiers@we-energies.com)

**City of Milwaukee Lighting/Signals** has conduit embedded in the bridge sidewalk and conduits hanging below the bridge for street lighting and traffic signals. These utilities are not anticipated to conflict with the construction.

Mr. Robert Bryson  
841 N. Broadway, Room 920  
Milwaukee, WI 53202  
(414) 286-3244  
[robert.bryson@milwaukee.gov](mailto:robert.bryson@milwaukee.gov)

**AT&T Corporation** has two sets of communications ducts below the bridge, which are not anticipated to conflict with construction.

Mr. Jay Bulanek  
7721 W. Fond du Lac Avenue  
Milwaukee, WI 53218  
(414) 535-7407  
[jb5175@att.com](mailto:jb5175@att.com)

### **Railroad Fiber Optic Lines**

#### **Union Pacific Railroad Company Fiber Optic Lines**

Call “Diggers Hotline” and additionally contact the Union Pacific Railroad Company “call before you dig” office at 1-800-336-9193. Normal business hours are 7:00 a.m. to 9:00 p.m., Central Time, Monday through Friday, except holidays. Reference Milwaukee, Wisconsin, Mile Post 81.2 on the Milwaukee Subdivision to verify the location of fiber optic lines located on railroad right-of-way at the construction site. Calls will be routed at all times in case of an emergency.

### **35th Street Bridge P-40-848**

**We Energies** has buried utilities beneath the bridge, east of spans 7 and 8. These utilities are not anticipated to conflict with construction activities.

Mr. Jon Meiers  
333 W. Everett St. – A299  
Milwaukee, WI 53203  
(414) 944-5791  
[jon.meiers@we-energies.com](mailto:jon.meiers@we-energies.com)

**City of Milwaukee Lighting/Communications** has conduit embedded in the bridge sidewalk and parapet. The city will be relocating the wiring prior to the start of construction and replacing when the new conduit is in place. The contractor should coordinate with the city prior to the start of construction to coordinate the work with the embedded conduits within the project limits.

Mr. Robert Bryson  
841 N. Broadway, Room 920  
Milwaukee, WI 53202  
(414) 286-3244  
[robert.bryson@milwaukee.gov](mailto:robert.bryson@milwaukee.gov)

## **Railroad Fiber Optic Lines**

### **Union Pacific Railroad Company Fiber Optic Lines**

Call “Diggers Hotline” and additionally contact the Union Pacific Railroad Company “call before you dig” office at 1-800-336-9193. Normal business hours are 7:00 a.m. to 9:00 p.m., Central Time, Monday through Friday, except holidays. Reference Milwaukee, Wisconsin, Mile Post 84.2 on the Milwaukee Subdivision to verify the location of fiber optic lines located on railroad right-of-way at the construction site. Calls will be routed at all times in case of an emergency.

The locations of existing utilities on the plans are approximate and may not be all-inclusive. The utilities shown are based on existing utility maps and as-built plans. There may be other utilities in the project area which are not shown. The contractor shall field verify the location of all utilities within the project limits, including underground facilities.

## **11. Work Done by Others**

City crews will re-route the existing lighting conduits around the work zone at the 35th Street Bridge prior to the start of construction. Provide a minimum of one week’s notice to City Street Lighting for re-routing of the conduit. Provide new conduits as part of this contract.

City crews will install new wiring for street lighting in the new conduits and connect with existing light poles at the 35th Street Bridge. Coordinate with City Street Lighting to accommodate installation of the new wiring in the conduits installed in the sidewalk and parapet.

To coordinate the removal and reinstallation of the street light wiring at the 35th Street Bridge contact: George Berdine at (414) 708-4245 (cell) / (414) 286-5943 (office) or Dennis Miller at (414) 708-4251 (cell) / (414) 286-5942 (office). If neither Mr. Berdine nor Mr. Miller is available, then the contractor shall contact the dispatcher at (414) 286-5944.

City Communication crews will re-route the existing communications wiring around the work zone at the 35th Street Bridge prior to the start of construction. Provide a minimum of one week’s notice to the City Communications Section for re-routing of the wiring. Provide new conduits as part of this contract.

City Communication crews will install new wiring for communications in the new conduits once they have been installed. Coordinate with the City Communications Section to accommodate installation of the new wiring in the conduits installed in the sidewalk.

To coordinate the removal and reinstallation of the communications wiring at the 35th Street Bridge contact Bryan Pawlak at (414) 708-2118 (cell) / (414) 286-5970 (office). If Mr. Pawlak is unavailable, then the contractor shall contact the dispatcher at (414) 286-3686.

Existing traffic control is in place at the 35th Street Bridge closing the southbound lanes of the bridge. The traffic control will be maintained by the city throughout construction.

Existing traffic control is in place at the Howell Avenue Bridge, closing the northbound sidewalk and parking lane. The existing traffic control will be removed by the city prior to construction, as the new traffic control is put in place.

## **12. Shop Drawings and Submittals**

### **A Description**

This special provision describes specific requirements for shop drawings and other submittals.

### **B Materials**

#### **B.1 General**

Submit construction drawings, erection diagrams, shop details, and other pertinent information for review as specified herein, in city specifications, and as specified in other special provisions.

Review by the engineer of shop drawings, methods of installation or contractor's construction details does not relieve the contractor of the responsibility of compliance with the contract specifications; and does not relieve the contractor of the responsibility for providing adequate quality control measures; and does not relieve the contractor of the responsibility for providing proper and sufficient materials, equipment and labor to complete the approved work in accordance with the contract documents.

Unless otherwise stated in the contract documents, do not commence any portion of the work requiring shop drawings or a sample of the work until the submission has been approved by the engineer.

Unless otherwise stated in the contract documents, review of shop drawings, erection plans, and demolition plans will begin only after the submission of a complete set of information required to complete a discrete item of work.

Special requirements apply to submittals made to the Union Pacific Railroad, which is described elsewhere in the specifications.

#### **B.2 Submittal Materials**

Submit all data on paper measuring either 8-1/2-inch x 11-inch, 11-inch x 17-inch, or 24-inch x 36-inch as is appropriate. Where appropriate, bind individual sheets measuring 8-1/2-inch x 11-inch into sets with a cover, title sheet, and table of contents.

Submit to the engineer samples of materials for selection of paint and stain colors to ensure they match the existing colors. Product samples become the property of the City of Milwaukee unless determined otherwise by the engineer.

### **B.3 Submitting and Review Process**

The review process will consist of two or more steps. The first step is to submit four (4) copies of sets of materials to the engineer, or his designated agent, for preliminary review. The engineer, or his designated agent, will return one copy or set of submitted materials with instruction for correction and re-submittal. When instructed by the engineer, resubmit four (4) copies or sets of materials for further review. When instructed by the engineer, the final step is to submit materials to the engineer, or his designated agent for distribution. The engineer will return one to three (1-3) copies or sets of materials to the contractor with a stamp denoting general conformance to the plans and specifications. The review process will be expedited to maintain the project schedule.

Drawings that are not initialed as having been checked or obviously have not been completed or are not clear and legible will not be accepted for review. The contractor will be notified that the subject drawings must be properly completed and resubmitted for review.

The title box of each shop drawing must carry the job number and structure and control section numbers, and the name and address of the fabricator, foundry, or manufacturer. The title sheet of each bound set of product information sheets must carry the job, control, and structure identification numbers, and the name and address of the supplier. Each sheet in a bound set must clearly identify the product or products being used and carry the name of the manufacturer.

A unique drawing and/or sheet number must be placed on each sheet so that similar items with subtle differences will not be confused with one another. When data is returned by the engineer to the contractor for correction and re-submission, each revised sheet needs to be marked with a revision number, indicating the number of times the sheet has been revised since the first submission and with the date of each revision. Each change on the sheet must also be marked with the appropriate revision number, shown on a small triangle, placed next to the change.

Drawings on data sheets that contain information for items or options other than those intended for use on this project must be clearly marked so as to indicate which items or options are intended for use on this project. Line or cross out those items or options that do not apply, or by circling or highlighting those items or options that do apply. Whatever method is used it must be done in a manner that clearly indicated which items apply to the project.

The contractor is responsible to make sure that everyone, including suppliers, furnishes complete product and shop detail data for review by the engineer. The data must include, but is not limited to, the following:

1. Drawings including information on the exact number of units, exact unit to be furnished, and all of the equipment options to be furnished with the unit. Dimensions, material grades fits, finishes applicable standards (ASTM,

AASHTO, ANSI, and other applicable standards) and all other data sufficient to meet the requirements of the contract documents.

2. Complete catalog data and specifications including the name of the manufacturer.
3. Complete installation and maintenance instructions.
4. Drawings and catalog data must indicate the pertinent bid item.

If a submission is incomplete, it may be returned without review or comment. If so, it must be completed before re-submittal. The contractor is advised to keep an accurate record of all shop drawing transmittals and to maintain constant contact with all suppliers to obtain prompt re-submittal of drawings and data returned for correction and completion. Significant time lapses between the return and re-submittals of data could delay the project and shall be avoided.

#### **B.4 Submittal and Review Time**

It is the contractor's responsibility to ensure that all shop details and data are submitted for approval in a timely manner. The preparation of construction drawings, shop details compilation of the technical data, transmittals, review, revision, and re-submittals constitutes a time consuming process.

Although no specific time periods are established herein for submittals or for the engineers review, the contractor should anticipate that each review may take up to approximately 10 days. The engineer, or his designated agent, will endeavor to complete each review in the shortest practical time. Delays in submitting, reviewing, or approving submittals will not be cause for additional compensation.

#### **B.5 As-Built Drawings**

Furnish final shop drawings in electronic format and hard copy. Also furnish a copy of any other data required by the articles of the special provisions clearly marked that these items of work are included in the final work. The words "As-Built" and the date are acceptable for this identification.

#### **C (Vacant)**

#### **D (Vacant)**

#### **E Payment**

The city will not pay for any costs associated with shop drawings or other submittals. Include all costs for preparation, handling, shipping, storage, or other expenses associated with shop drawings, erection drawings, calculations, and "As-Built Drawings" in the costs of the bid items with which the submittals are associated.

The city reserves the right to charge reasonable expenses for the review of submittals where the contractor substitutes items, at his option, for items previously submitted and

approved for use in the project. Re-submittals requested by the city will not be back chargeable, except in the cases where the contractor obviously has not addressed previous review comments.

**13. Conduit Rigid Non Metallic Schedule 40, 2-Inch; Conduit Rigid Non Metallic Schedule 40, 4-Inch.**

**A Description**

Supplement section 652 of the standard specifications with the following:

Furnish and install a total of four 4-inch diameter PVC conduits and one 2-inch diameter PVC conduit. The four 4-Inch conduit will be installed in the west sidewalk, and the one 2-Inch conduit will be installed in the west parapet. Install the conduits as shown in the plans, in accordance to the pertinent requirements of section 652 of the standard specifications, and as hereinafter provided.

Furnish schedule 40 polyvinyl chloride (PVC) conduits. The city will accept the conduit on the basis of the manufacturer's Certificate of Compliance and field inspection by the engineer upon delivery to the project.

PVC conduit and all fittings shall conform to the requirements of the standard specifications for Smooth-Wall Poly Vinyl Chloride (PVC) Conduit and Fittings for Underground Installation, ASTM Designation: F512 (latest edition).

Direct all materials questions regarding the city conduits to Mr. Tom Manzke at (414) 286-3265.

1. Placing of duct: Inspect all ducts before placing to see that the bores are clean and free from mud, sand, and detritus. Only use ducts with a smooth bore, free from burrs, and rough projections. Smooth off burrs or other rough areas found in the duct that is likely to damage cable. Smooth them off by rasping or scraping.
2. A 3/8-inch nylon pull rope is to be installed in each pipe.
3. All conduits are to be connected to the adjacent existing conduit to the north and south of the deck removal area.

Inspection: Contact George Berdine at (414) 708-4245 (cell) / (414) 286-5943 (office) or Dennis Miller at (414) 708-4251 (cell) / (414) 286-5942 (office). If neither Mr. Berdine nor Mr. Miller is available, then the contractor shall contact the dispatcher at (414) 286-5944.

## **14. DTM and/or GPS Information**

Digital design file information/existing surface data, including design surface DTMs and/or coordinate GPS information will not be available for this project.

## **15. Debris Containment Special P-40-848, Item 203.0225.S.**

### **A Description**

This special provision describes providing a containment system for the specified structure to prevent debris resulting from removal and reconstruction operations from falling to the ground. Using this containment system does not relieve the contractor of the requirements under 107.17 of the standard specifications or the requirements under a U.S. Army Corps of Engineers Section 404 Permit.

### **B (Vacant)**

### **C Construction**

#### **C.1 Debris Containment Plan**

Before starting work, submit a debris containment plan to the engineer for review. Conform to "Guidelines for Preparation of a Bridge Demolition and Removal Plan for Structures Over Railroad" published by the Union Pacific Railroad Company and available from:

Office of Chief Engineer Design  
1416 Dodge Street  
Omaha, NE 68179

Also incorporate engineer-requested modifications. Do not start working over railroad or other facilities until the engineer approves the debris containment plan.

#### **C.2 Debris Containment System**

Maintain adequate protection for people and property within the potential fall zone throughout construction. Ensure that a containment system capable of preventing construction debris from falling to the ground is in place and functioning properly before beginning deck repair, parapet removal, or other operations that may generate falling debris. At least 15 working days before conducting potential debris generating operations, contact the following owners or leasees:

Union Pacific Railroad Company  
101 North Wacker Drive  
Chicago, IL 60606  
Attn: John Venice  
Manager of Special Projects - Industry & Public Projects  
Phone: (312) 777-2043

Milwaukee Department of Public Works  
841 North Broadway, Room 907  
Milwaukee WI 53202  
Attn: Craig Liberto, Project Manager  
Phone: (414) 286-3294

**D Measurement**

The department will measure Debris Containment Special P-40-848 as a single lump sum unit for each structure acceptably completed.

**E Payment**

The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
203.0225.S.	Debris Containment Special P-40-848	LS

Payment for Debris Containment Special P-40-848 is full compensation for furnishing, installing, maintaining, and removing a debris containment system.

**16. Crack Sealing Epoxy, Item 502.0717.S.**

**A Description**

This special provision describes sealing all transverse and longitudinal cracks in the decks as shown on the plans and as hereinafter provided.

**B Materials**

Provide a penetrating sealant that is listed on the department's approved product listing, "Low Viscosity Crack Sealers".

**C Construction**

Clean the cracks to be sealed by the use of high pressure air prior to sealing.

Pour the epoxy sealant into the cracks to be sealed. Place the sealant in as narrow a band as possible. Tape off edges of the concrete to prevent spills and runoff from staining adjacent surfaces.

At no expense to the city, clean all spills and clean all areas of too wide a band of sealant.

**D Measurement**

The city will measure Crack Sealing Epoxy in length by the linear foot of cracks sealed and accepted.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
502.0717.S	Crack Sealing Epoxy	LF

Payment is full compensation for furnishing and placing the epoxy sealant, including any required cleaning.

**17. Structure Repainting General.**

**A General**

**A.1 Inspection**

On all structures in this contract, notify the engineer of any missing or broken bolts or nuts, any missing or broken rivets, or of any cracks or flaws in the steel members while cleaning or painting.

**A.2 Date Painted**

Painting date is not required to be painted on the girders, as is standard practice, since this is not a complete re-painting project.

The Howell Avenue Bridge, P-40-509, was last re-painted in 2010. The 35th Street Bridge, P-40-848, was last re-painted in 1998.

**B (Vacant)**

**C Construction**

**C.1 Repainting Methods**

Do not perform blasting, cleaning and painting on days of high winds. Prevailing winds in excess of 15 mph (25 km/hr) shall be considered high winds.

Prior to final acceptance, completely clean and free from spent abrasive and other waste materials resulting from the contractor's operation the bridge deck surfaces, gutter lines, drains, curbs, bridge seats, pier caps, slope paving, roadway below, and all structural members and assemblies.

Place the final field coat of paint on the exterior of the exterior beams as a continuous painting operation. Stop at splices, vertical stiffeners or other appropriate locations so that lap marks are not evident or noticeable.

**C.2 Inspection**

*Supplement standard spec 105.9 as follows:*

Furnish, erect and move scaffolding and other appropriate equipment to permit the inspector the opportunity to closely observe all affected surfaces. The scaffolding, with appropriate safety devices, shall meet the approval of the engineer.

## **18. Preparation and Coating of Top Flanges P-40-848, Item 517.0900.S.**

### **A Description**

This special provision describes thoroughly cleaning and coating the top surface and edges of the top flanges, removing loose paint, rust, mill scale, dirt, oil, grease, or other foreign substances until the specified finish is obtained.

This special provision applies to the top of the existing girder flanges exposed after partial demolition of the deck at bridge P-40-848. It does not apply to the new steel girders.

### **B (Vacant)**

### **C Construction**

In accordance to SSPC SP-2 or SP-3, clean all areas of rust and loose paint on the top surface and edges of the top flanges, which have paint on them, by wire brushing, grinding or other mechanical means. Wash the top surface and edges of the top flanges and give them one coat of an approved zinc-rich primer.

Where plans call for the cleaning of other painted structural steel including hanger assemblies, bearings, field splices, and connections, clean areas of loose paint and rust by wire brushing, grinding, or other mechanical means as necessary and in accordance to SSPC SP-2, SP-3, or SP-11. Sound paint need not be removed with the exception of an area 12-inches on either side of hanger assembly centerlines. Clean this area to base metal in accordance to SSPC SP-10, or SP-11.

In accordance to SSPC SP-2, or SP-3, thoroughly clean by wire brushing, grinding or other mechanical means as necessary the surface area of exposed steel members that are to be imbedded in the new concrete, and wash and give one coat of an approved zinc rich primer to these areas.

Furnish and erect tarpaulins or other materials to collect all of the spent paint containing material resulting from blasting or hand and power tool cleaning and coating. Minimize dust during all clean-up activities. Collect and store waste material at the end of each work day or more often if needed. Store waste materials in the hazardous waste containers provided. Lock and secure all waste containers at the end of each work day. Cover the container(s) at all times except when adding or removing waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain or exposed to standing water. Transportation and disposal of such waste material will be the responsibility of the department.

Damage to existing painted surfaces as a result of construction operations, shall be restored to the approval of the engineer at the contractor's expense.



## **C Construction**

### **C.1 General**

Furnish, prepare, apply, cure, and store all materials in accordance to the product manufacturer's specifications for the type and condition of application required.

Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining.

### **C.2 Preparation of Concrete Surfaces**

Provide a sack rubbed finish in accordance to standard spec 502.3.7.5, using mortar as indicated above on concrete surfaces with open voids or honeycombing.

Following the sack rubbing, clean all concrete surfaces that are to be coated to ensure that the surface is free of all laitance, dirt, dust, grease, efflorescence, and any foreign material and that the surface will accept the coating material according to product requirements. As a minimum, clean the surface using a 3000-psi water blast. Hold the nozzle of the water blaster approximately 6 inches from the concrete surface and move it continuously in a sweeping motion. Give special attention to smooth concrete surfaces to produce an acceptable surface texture. Correct any surface problems resulting from the surface preparation methods. Grit blasting of the concrete surface is not allowed.

### **C.3 Staining Concrete Surfaces**

Apply the concrete stain in accordance to the manufacturer's recommendations.

Apply the concrete stain when the temperature of the concrete surface is 45° F or higher, or as given by the manufacturer.

The color of the stain shall match the existing color of the adjacent concrete parapet (white). Tint the base coat to match the finish coat; the two coats shall be compatible with each other. Provide color samples for city approval, prior to staining.

Do not begin staining the structure until earthwork operations are completed to a point where this work can begin without receiving damage. Where this work is adjacent to exposed soil or pavement areas, provide temporary covering protection from overspray or splatter.

### **C.4 Test Areas**

Prior to applying stain to the structure, apply the stain to sample panels measuring a minimum of 48-inches x 48-inches and constructed to demonstrate workmanship in the use of the form liner specified on the structure if applicable. Match or exceed the stain manufacturer's minimum recommended curing time of the concrete or 28 days, whichever is greater, prior to staining. Prepare the concrete surfaces of the sample panels and apply stain using the same materials and in the same manner as proposed for the structure, including staining of the joints between the stones produced by the form liner if applicable. Do not apply stain to the structure until the city approves the test panels.

**C.5 Surfaces to be Coated.**

Apply concrete stain to the surfaces in accordance to the plan.

**D Measurement**

The city will measure Concrete Staining P-40-848 in area by the square foot of surface, acceptably prepared and stained.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
517.1010.S	Concrete Staining P-40-848	SF

Payment is full compensation for furnishing and applying the two coat system; for preparing the concrete surface; and for preparing the sample panels.

**20. Structure Repainting Recycled Abrasive P-40-509, Item 517.1800.S.**

**A Description**

This special provision describes surface preparation and painting of the metal surfaces in accordance to the manufacturer’s recommendations and as hereinafter provided.

**A.1 Areas to be Cleaned and Painted**

All structural metal surfaces of:

1. Structure P-40-509, 575 SF

Areas are approximate and given for informational purposes only.

Clean and paint the two damaged girders after heat straightening is complete. The painting limits are between the two piers for a length of 45’-9” at each girder.

**B Materials**

**B.1 Coating System**

Furnish a complete coating system from the department’s approved list. The color for the finish coating material shall match the color number shown below in accordance with Federal Standard Number 595C, as printed in 2008. Supply the engineer with the product data sheets before any coating is applied. The product data sheets shall indicate the mixing and thinning directions, the recommended spray nozzles and pressures, and the minimum drying time between coats.

Finish Color: Brown (Federal Color #10055).

The color of the primer must be such that a definite contrast between it and the color of the blasted steel is readily apparent. There shall be a color contrast between all

subsequent coats for the paint system selected. Submit color samples of the primer to the engineer for approval.

## **C Construction**

### **C.1 Surface Preparation**

Lead Paint was removed in a previous re-painting project in 2010. Therefore negative pressure containment of waste materials and a portable decontamination facility are not required for this work.

Prior to blast cleaning, solvent clean all surfaces to be coated in accordance to SSPC-SP1. A No. 10 Near White Blast Cleaning according to Steel Structures Painting Council Specification Ten will be required on all metal surfaces to be painted. Prime the same day all metal surfaces receiving a No. 10 blast or re-blast before application.

The steel grit and any associated equipment brought to the site and used for blast cleaning shall be clean. Remove immediately dirty grit or equipment brought to the site at no expense to the department. Furnish an abrasive that has a gradation such that it will produce a uniform surface profile between 1 to 3 mils on the steel surface, as measured with extra profile course Testex Replica Tape. Use a minimum air pressure for abrasive blasting, measured at the nozzle, of 90 psi.

The abrasive blasting and recovery system shall be a completely integrated self-contained system for abrasive blasting and recovery. It shall be an open blast and recovery system that will allow no emissions from the recovery operation. The recovery equipment shall be such that the amount of contaminants in the clean recycled steel grit shall be less than 1 percent by weight.

Remove by grinding all fins, tears, slivers, and burred or sharp edges that are present on any steel member, or that appear during the blasting operation, and re-blast the area to give a 1 to 3 mils surface profile.

Remove all spent material and paint residue from steel surfaces with a good commercial grade vacuum cleaner equipped with a brush-type cleaning tool, and hand wipe the steel surfaces with a clean soft cloth. The airline used for surface preparation shall have an in-line water trap and the air shall be free of oil and water as it leaves the airline.

Take care to protect freshly coated surfaces from subsequent blast cleaning operations. Thoroughly wire brush damaged primed surfaces with a non-rusting tool, or if visible rust occurs, re-blast to a near white condition. Clean and re-prime the brushed or blast cleaned surfaces within the time recommended by the manufacturer.

### **C.2 Coating Application**

Apply paint in accordance to the manufacturer's recommendations in a neat workmanlike manner. Paint application shall normally be by airless spray.

The engineer may allow the use of conventional spray equipment after satisfactory demonstration by the contractor of the proper technique and handling of that equipment.

Mix the paint or coatings in accordance to the manufacturer's directions to a smooth lump-free consistency. After mixing and during application, continuously stir the paint or coating under constant slow speed agitation by use of a jiffy mixer.

Prior to applying the prime coat, stripe with primer all edges, rivet and bolt heads, nuts and washers by either brush or spray application.

Remove all dry spray by vacuuming, wiping, or sanding if necessary.

If the application of the coating at the required thickness in one coat produces runs, bubbles, or sags; apply a "mist-coating" in multiple passes of the spray gun; separate the passes by several minutes. Where excessive coating thickness produces "mud-cracking", remove such coating back to soundly bonded coating and re-coat the area to the required thickness.

The resultant paint film shall be smooth and uniform, without skips or areas of excessive paint.

The coating is supplied for normal use without thinning. If in cool weather it is necessary to thin the coating for proper application, thin in accordance to the manufacturer's recommendations.

During surface preparation and coating application the ambient and steel temperature shall be between 39 degrees F and 100 degrees F. The steel temperature shall be at least 5 degrees F above the dew point temperature. (This requires the steel to be dry and free of any condensation or ice regardless of the actual temperature of the steel.) The relative humidity shall not exceed 85%.

Paint thickness shall be as follows:

Dry Film Thickness	
Prime Coat	3 mils min.
Intermediate Coat	3 mils
Top Coat	3 mils

Time to recoat shall be according to the manufacturer's recommendations.

The dry film thickness will be determined by use of a magnetic film thickness gage. The gage shall be calibrated for dry film thickness measurement in accordance to SSPC-PA 2. Dry film thickness in each area measured will be based on an average of three gage readings, after calibration of the gage to account for surface profile of the bare steel as a result of surface preparation.

**D Measurement**

The city will measure Structure Repainting Recycled Abrasive P-40-509, completed in accordance to the contract and accepted, as a single complete unit of work.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
517.1800.S	Structure Repainting Recycled Abrasive P-40-509	LS

Payment is full compensation for preparing and cleaning the designated surfaces; furnishing and applying the paint; and for providing the listed equipment.

**21. Structure Overcoating Cleaning and Priming P-40-509, Item 517.3000.S.01; Structure Overcoating Cleaning and Priming P-40-848, Item 517.3000.S.02;**

**A Description**

This special provision describes cleaning and painting with three coats of paint the metal surfaces as hereinafter provided.

**A.1 Areas to be Cleaned and Painted**

Structure P-40-509:

1. Three Coat Area:

275 SF with SP 3 cleaning.

Painted areas for P-40-509 include existing girder bottom flanges over mainline railroad tracks, Line 1 and Line 2, and any required touchup painting to repair areas damaged by construction operations and new steel connections.

Structure P-40-848:

2. Three Coat Area:

240 SF with SP 3 cleaning.

Painted areas for P-40-848 include existing girder bottom flanges over mainline railroad tracks, Line 1 and Line 2, and any required touchup painting to repair areas damaged by construction operations and new steel connections. Painting also includes bearings 8 & 9 at pier 9.

**B (Vacant)**

**C Construction**

**C.1 Surface Preparation**

Prior to overcoating or power tool cleaning, solvent clean all surfaces to be coated in accordance to SSPC-SP1. A SSPC-SP 3 Power Tool Cleaning according to Steel Structures Painting Council Specification 3 will be required on all metal surfaces to be painted with a three-coat system. Prime the same day, or re-clean before application, all metal surfaces receiving a No. 3 cleaning.

Identify gouges or other minor section loss to the steel members resulting from previous train impact within the re-painting limits. For gouges less than 1/8" in depth grind out the damaged material. Grind smooth, in the direction of primary stress in the member. Taper the grind at a 10:1 minimum slope from the location of maximum depth. All grinding shall be approved by the engineer before beginning the work, and after the work is complete.

Remove all abrasive or paint residue from steel surfaces with a High Efficiency Particulate Abatement (HEPA-VAC) vacuum cleaner equipped with a brush-type cleaning tool, or by double blowing. If the double blowing method is used, vacuum the exposed top surfaces of all structural steel, including flanges, longitudinal stiffeners, splices, plates, and hangers, after the double blowing operations are completed. The air line used for blowing the steel clean shall have an inline water trap and the air shall be free of oil and water as it leaves the air line.

Take care to protect freshly coated surfaces from subsequent cleaning operations. Thoroughly wire brush damaged primed surfaces with a non-rusting tool. Clean and re-prime the brushed surfaces within the time recommended by the manufacturer.

## **C.2 Painting**

Paint by applying three coats of an approved coating system as specified herein to the surfaces as described in A.1 from the department's approved products list.

## **C.3 Coating Application**

Apply paint in a neat, workmanlike manner. The resultant paint film shall be smooth and uniform without skips or areas of excessive paint. Apply coating in accordance to the manufacturer's recommendations.

Prior to applying the prime coat, coat with primer all edges, rivet and bolt heads, nuts and washers by using either a brush, roller, or spray application.

Dry Film Thickness per coat shall be a minimum of 3-mil. The dry film thickness shall be determined by use of a magnetic film thickness gage. The gage shall be calibrated for dry film thickness measurement in accordance to SSPC-PA 2.

During surface preparation and coating application, the ambient and steel temperature shall be between 39 and 100 degrees F. The steel temperature shall be at least 5 degrees F above the dew point temperature, and the relative humidity shall not exceed 85%.

**D Measurement**

The city will measure Structure Overcoating Cleaning and Priming P-40-509 and P-40-848, completed in accordance with the contract and accepted, as a single complete unit of work.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
517.3000.S.01	Structure Overcoating Cleaning and Priming P-40-509	LS
517.3000.S.02	Structure Overcoating Cleaning and Priming P-40-848	LS

Payment is full compensation for preparing and cleaning the designated surfaces; and for furnishing and applying the paint.

**22. Containment and Collection of Waste Materials P-40-509, Item 517.4000.S.01; Containment and Collection of Waste Materials P-40-848, Item 517.4000.S.02;**

**A Description**

This special provision describes furnishing and erecting tarpaulins to contain, collect and store the spent material from surface preparation of steel surfaces, collecting such spent material, and labeling and storing the spent material in waste containers in accordance to the contract and as hereinafter provided.

This special provision applies to all field painting work, including the “Structure Overcoating Cleaning and Priming P-40-509 and P-40-848” and “Structure Repainting Recycled Abrasive P-40-509 and P-40-848” bid items.

**B Materials**

Provide 5-gallon lidded plastic containers for containing the spent material.

**C Construction**

Erect tarpaulins or other materials to collect all of the spent material from power tool cleaning. Consider and treat all spent material as hazardous waste because it contains lead.

Collect and store all waste material collected by this operation at the bridge site for disposal. Collect and store all waste materials at the end of each workday or more often if needed. Store materials in 5-gallon lidded plastic containers.

Label each container with the date the first waste was placed in the container and the words “Hazardous Waste – EPA Waste Code D008.” Lock and secure all containers at the end of each workday. Keep the containers covered at all times except to add or remove waste material. Store the containers in an accessible and secured area, not located in a storm water runoff course, flood plain or exposed to standing water.

Collect the spent debris by vacuuming, shoveling, sweeping, or by channeling it directly to disposal containers. The enclosure shall be thoroughly cleaned at the end of each work day.

**D Measurement**

The city will measure Containment and Collection of Waste Materials P-40-509 and P-40-848, completed in accordance to the contract and accepted, as a single complete unit of work for each structure designated in the contract.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
517.4000.S.01	Containment and Collection of Waste Materials P-40-509	LS
517.4000.S.02	Containment and Collection of Waste Materials P-40-848	LS

Payment is full compensation for designing, erecting, operating, maintaining and disassembling the containment devices; collecting, labeling and storing spent materials in appropriate containers.

**23. Painting Epoxy System P-40-509; Painting Epoxy System P-40-848**

**A Description**

This special provision describes work that shall be in accordance to standard spec 517 and as hereinafter provided.

All new steel members shall be painted under this specification, including new girders, diaphragms, connection plates, and splice plates. Existing steel members to be repainted are included under the “Structure Overcoating Cleaning and Priming P-40-509 and P-40-848” and “Structure Repainting Recycled Abrasive P-40-509 and P-40-848” bid items.

**B Materials**

**B.1 Coating System**

Furnish a complete coating system from the department’s approved list. The color of epoxy shall be white and the urethane coating material shall match the color number shown on the plans in accordance to Federal Standard Number 595C, as printed in 2008. Supply the engineer with the product data sheets before any coating is applied. The product data sheets shall indicate the mixing and thinning directions, the recommended spray nozzles and pressures, the minimum drying time for shop applied coats, and the recommended procedures for coating galvanized bolts, nuts, and washers.

For both structures match the color of the existing girders. The colors anticipated are shown on the plans. Provide paint samples to the City of Milwaukee for approval prior to beginning the work to verify a matching color.

**C Construction**

Modify the fourth paragraph of standard spec 517.3.1.7.2 to read:

On all other areas including the outside surfaces of splice plates, the minimum dry film thickness above the surface profile for the primer coat shall be 3.0 mils (0.076 mm).

**24. Replacing High Strength Bolts P-40-509, Item SPV.0060.01.**

**A Description**

This special provision describes removing and replacing existing high strength bolts at locations shown in the plans. This special provision is applicable to the replacement of field splice bolts at bridge P-40-509.

**B Materials**

Furnish high strength bolts, nuts and washers that are according to the pertinent requirements of standard spec 506.2.5.

**C Construction**

Remove and replace high strength bolts, nuts and washers at the locations shown on the plans. Install according to the requirements of standard spec 506.3.12.3 for fully tensioned bolts.

Remove and replace the bolts 1 at a time, fully tensioning prior to removing the next bolt.

**D Measurement**

The city will measure Replacing High Strength Bolts P-40-509 as each individual bolt and accompanying washers and nut acceptably removed and replaced.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.01	Replacing High Strength Bolts P-40-509	EACH

Payment is full compensation for removing the existing bolts, nuts and washers; furnishing new bolts nuts and washers; installing the new bolts nuts and washers; and for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the work.

Payment for bolt replacement at existing diaphragms on bridge P-40-848 is paid separately under the bid item "Remove and Reinstall Existing Diaphragms."

Payment for bolts at new connections is paid separately under the bid item “Structural Steel HS.”

**25. Remove and Reinstall Existing Diaphragms, Item SPV.0060.02.**

**A Description**

This special provision describes removing and re-installing existing steel diaphragms in the locations shown on the plans for bridge P-40-848.

**B Materials**

Furnish high strength bolts, nuts and washers according to the pertinent requirements of standard spec 506.2.5.

**C Construction**

Perform work according to the pertinent provisions of standard spec 506.3, and as described in this special provision.

Remove existing diaphragms in the locations shown in the plans to accommodate erection of the replacement girders. Save the diaphragms for re-installation. Use care when handling to minimize damage to the existing paint system.

After the new girders are erected, re-install the existing diaphragms using new high strength bolts, nuts and washers. Do not re-use the existing bolts.

**D Measurement**

The city will measure Remove and Reinstall Existing Diaphragms as each individual diaphragm acceptably removed and re-installed.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.02	Remove and Reinstall Existing Diaphragms	EACH

Payment is full compensation for furnishing new bolts, nuts and washers; removing and re-installing the existing diaphragms; and for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the work.

**26. Re-Mobilization P-40-509, Item SPV.0060.03.**

**A Description**

This special provision describes re-mobilizing heat straightening equipment and labor as a result of interruptions due to train service.

**B Materials**

Vacant

**C Construction**

De-mobilize and re-mobilize heat straightening equipment as a result of railroad traffic interruptions to the project work. Coordinate with the railroad to determine when track windows are available for heat straightening operations.

**D Measurement**

The city will measure Re-Mobilization P-40-509 as each interruption of heat straightening work due to train traffic requiring de-mobilization and subsequent re-mobilization. One train will be counted as one re-mobilization.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0060.03	Re-Mobilization P-40-509	EACH

Payment is full compensation for de-mobilizing and re-mobilizing heat straightening materials, equipment, and labor related to interruptions from railroad traffic below the bridge.

Payment for re-mobilization of other operations, besides heat straightening, is included with the bid items associated with that work.

**27. Parapet Concrete Type ‘TX’, Item SPV.0090.01.**

**A Description**

This special provision describes construction of a decorative concrete parapet in accordance with section 501, 502, and 505 of the Standard Specifications, as shown on the plans, and as hereinafter provided. The concrete mix used for this parapet shall include polypropylene fibers.

**B Materials**

The polypropylene fibers shall be engineered synthetic reinforcing fibers of 100% polypropylene collated fibers.

The physical properties of the fibers shall be as follows:

Specific Gravity:	0.91
Denier:	Less than 100
Modulus of Elasticity:	0.5x10 <sup>6</sup> to 0.7x10 <sup>6</sup> psi
Tensile Strength:	70 to 110 ksi
Length:	1/2 to 2-1/2 inches

The polypropylene fiber manufacturer shall certify in writing that all polypropylene fibers are specifically manufactured for use in concrete from virgin polypropylene and the physical properties are within the limits specified above.

If the fiber manufacturer is other than the brand name listed on the literature and/or packaging, the certification must be from the original manufacturer of the polypropylene fibers.

The fiber length shall be determined by the manufacturer to be compatible with the concrete mix design.

**C Construction**

The polypropylene fiber manufacturer or authorized distributor shall provide the services of a qualified engineer or employee for a pre-construction meeting and initial job start up.

Use polypropylene fibers at the rate of one bag weighing 1.5 to 1.6 pounds per cubic yard of concrete. The fibers may be added with the fine and coarse aggregates or in the mixer after all ingredients have been blended and mixed in accordance with manufacturer's recommendations.

**D Measurement**

The city will measure Parapet Concrete Type 'TX' by the linear foot of parapet acceptably completed.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0090.01	Parapet Concrete Type 'TX'	LF

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the work including concrete, steel reinforcement and polypropylene fibers.

**28. Mobilization P-40-509, Item SPV.0105.01; Mobilization P-40-848, Item SPV.0105.02**

**A Description**

This special provision describes the work and operations necessary to move personnel, equipment, supplies and incidentals to the project site and to establish all of the contractor's offices, buildings, sanitary accommodations and other facilities necessary to work on the project. It also includes all other work and operations whose performance is required, or for costs necessarily incurred before beginning work on various items on the project site.

**B Materials**

Vacant

**C Construction**

Vacant

**D Measurement**

The city will measure Mobilization P-40-509 and P-40-848 as a single complete unit of work for each structure designated in the contract.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.01	Mobilization P-40-509	LS
SPV.0105.02	Mobilization P-40-848	LS

Payment is full compensation for supplying and providing all materials, facilities, and services, and for performing all work necessary to complete this contract bid item.

Re-mobilizing for heat straightening work will be paid for separately under bid item “Re-Mobilization P-40-509.”

Payment for re-mobilization of other operations, besides heat straightening, is included with the bid items associated with that work.

**29. Heat Straighten Girders P-40-509, Item SPV.0105.03.**

**A Description**

This special provision describes heat straightening and repair of steel girders damaged by a train impact.

**A.1 Qualifications**

The contractor’s organization shall have at least 5 years of experience in conducting heat-straightening repairs for damaged steel structures. During the preceding three year period, the contractor shall have conducted an average of at least 3 heat-straightening projects per year. Experience documentation shall include: date of project, location, bridge owner, number and type of members straightened, and duration of projects. Provide before and after photographs of heat straightening repairs made for the projects documented.

The field personnel performing the heat straightening repairs shall also have previous experience with at least 3 similar projects. Experience documentation shall include: date of project, location, bridge owner, number and type of members straightened, and duration of projects.

## **A.2 Site Visit**

Dimensions quantifying the lateral translation of the girders impacted are shown on the plans. Photographs of the impacted girders are posted with the other bid documents for review. However, the photographs provided by may not be all-inclusive of the damage to be repaired. Therefore, a site visit is highly recommended prior to bidding on the project to observe the damaged steel first hand, so the contractor can make accurate determinations of the effort required to heat straighten the girders.

## **A.3 Submittals**

Submit a record of the contractor's qualifications to the engineer for approval within 7 days of the executed contract. Qualifications shall include that of the field personnel performing the work.

Submit to the engineer a work plan as described in section C.4 of this specification. The documentation shall be submitted to the engineer for acceptance at least 10 days before beginning repairs. Modifications due to changing conditions shall be submitted to the engineer for approval.

## **A.4. Railroad Coordination**

The damaged girders are located directly above mainline tracks for the Union Pacific Railroad. The contractor shall coordinate with the railroad prior to construction to determine when track windows will be made available to perform the heat straightening work. When track windows are not available, the contractor's equipment must remain outside of the required railroad construction clearances.

## **B Materials**

Furnish any materials required for repair according to section 506 of the standard specifications.

## **C Construction**

Heat straighten the damaged girders in the locations shown in the plans and according to the following requirements. Perform straightening using methods which will not permanently damage the metal's material properties. Sharp kinks and bends may be cause for rejection of the work. Heat members using: controlled jacking, pulling or restraining forces; specified heating patterns; and controlled temperatures that result in controlled shrinkage to straighten the member.

All heat straightening work shall be performed according to the recommendations of NCHRP Report 604, 2008, and these special provisions.

### **C.1 Equipment**

Heating shall be with an oxygen-fuel combination. The fuel may be propane, acetylene or other similar fuel as may be selected by the contractor, subjected to the engineer's approval.

Heat application shall be by single or multiple orifice tips only. The size of the tip shall be proportional to the thickness of the heated material. As a guide, the tip sizes shown in table C1 are recommended. No cutting torch heads are permitted.

**Table C1. Recommended torch tips for various material thicknesses.**

<b>Steel</b>	<b>Orifice</b>	<b>Size</b>
< 1/4"	Single	3
3/8"	Single	4
1/4"	Single	5
5/8"	Single	7
3/4"	Single	8
1"	Single	8
	Rosebud	3
2"	Single	8
	Rosebud	4
3"	Rosebud	5
> 4"	Rosebud	5

Jacks, come-alongs or other force application devices shall be gauged and calibrated so that the force exerted by the device may be controlled and measured. No external force shall be applied to the structure by the contractor unless it is measured.

**C.2 Surface Preparation**

Prior to heating, remove existing paint according to SSPC-SP 15 Commercial Grade Power Tool Cleaning or equal. Remove all existing paint except that tight rust or mill scale may remain. Humidity and temperature restrictions do not apply. Remove paint as necessary to perform straightening work and to the engineer’s satisfaction.

Collection of waste materials from paint removal is included with the bid item “Containment and Collection of Waste Materials P-40-509 and P-40-848.”

Grind edges of flange smooth at all locations of planned work to prevent edge cracking during the straightening work and to the engineer’s satisfaction.

Identify gouges or other minor section loss to the steel members resulting from impact. For gouges less than 1/4” in depth grind out the damaged material. Grind smooth, in the direction of primary stress in the member. Taper the grind at a 10:1 minimum slope from the location of maximum depth.

All grinding shall be approved by the engineer before beginning the work, and after the work is complete.

### **C.3 Heat Application**

The temperature of the steel during heat straightening shall not exceed the following:

1,200°F for Carbon Steels, A7, A36, A709 (gr. 36, 50 and 50W)

1,100°F for A514 and A709 (gr. 100 and 100W)

1,050°F for A709 gr. 70W steel

The steel grade for the existing girders is shown on the plans.

Bring the steel within the pattern to the desired temperature as rapidly as possible without overheating. The city will require investigative testing of the steel properties for any procedure which causes the internal steel temperature to exceed the specified maximum temperature.

The contractor shall use one or more of the following methods for routine ongoing, documented temperature verification during heat straightening:

1. Temperature sensitive crayons
2. Pyrometer
3. Infrared non-contact thermometer

Material should be heated in a single pass following the specified pattern and allowed to cool to below 250°F prior to re-heating. Do not accelerate cooling with water, water mist or other cooling accelerators. After the steel surface temperature is less than 600°F cooling may be accelerated with compressed air.

Heating patterns and sequences shall be selected to match the type of damage and cross-section shape. Perform heating using four basic heating patterns: Strip, Line, Spot or Vee. Prior to applying heat, mark the steel with chalk or soap the location, shape, and limits of the heating patterns.

Vee heats shall be shifted over the yield zone on successive heating cycles.

Simultaneous vee heats may be used provided that the clear spacing between vees is greater than the width of the plate element.

Repair of previously heat straightened members in the same region of damage may be conducted once. Further repairs are not recommended unless approved by the engineer. Bridge P-40-509 has not been previously heat straightened.

### **C.4 Application of Jacking Forces**

Do not heat members then use large jacks or pullers which mechanically hot work the material. Mechanical hot work permanently damages the metal's material properties.

Jacks shall be placed so that forces are relieved as straightening occurs during cooling.

Jacking shall be limited so that the maximum bending moment in the heated zone shall be less than 50 percent of the plastic moment capacity of the member or major bending element. For local damage, the jacking force shall be limited to 50 percent of initial yield of the element.

The jacking force shall be adjusted so that the sum of jacking-induced moments and estimated residual moments shall be less than 50 percent of the plastic moment capacity of the member. As an alternative to considering residual moments, the moment due to jacking forces can be limited to 25 percent of the plastic moment capacity of the member during the first two heating cycles. For additional heating cycles, the limit of 50 percent may again be used.

Provide pressure gages or load cells to control jacks, pullers or restraining forces. Secure jacks, pullers or restraining forces so they do not dislodge during cooling. Apply jacks, pullers or restraining forces prior to heating. Do not apply additional jacking, pulling or restraining forces after beginning the application of heat. Do not apply the next cycle of jacking, pulling or restraining forces until the steel has cooled below 250 °F.

The contractor shall determine and document the maximum jacking force for each damage location, and the proposed sequence of jacking and heating for the work plan. Include the following items in the work plan:

1. Sequence of work
2. Shape, size and temperature of heating patterns
3. Location and limits of jacking, pulling, or restraining forces
4. Calculations of member stresses from jacking, pulling or restraining forces.

Copies of the work plan documentation shall be submitted to the engineer for acceptance before beginning repairs. Modifications due to changing conditions shall be submitted to the engineer. The maximum jacking force may be controlled by measuring the deflection resulting from the jacking force.

The calibration of jacks and electronic temperature monitoring equipment shall be performed and documented prior to beginning work. Load cells used for calibration must be certified within a two year period. Include calibration documentation with the work plan submittal.

Monitor jacking forces throughout the operation to ensure that limits are not exceeded.

### C.5 Straightening Tolerances

The dimensions of heat-straightened structural members shall conform to the tolerances specified in table C4 except as noted below. Do not measure dimensional tolerances for final acceptance until all heating operations are completed and the member has cooled to 160 °F or less.

**Table C4. Tolerances for Heat Straightening Repair.**

<b>Member</b>	
Beams, Truss Members or Columns	Overall alignment: ½ inch over 20 ft At impact point: ¾ inch over 20 ft
Local Web Deviations	d/100 or ¼ inch maximum
Local Flange Deviations	b/100 or ¼ inch maximum

d = member depth in inches, b = flange width in inches

Tolerance limits may be relaxed at the discretion of the engineer, based on one or more of the following considerations:

- a) Type and location of damage in the member
- b) Time considerations resulting from the nature of traffic congestion during the repair
- c) Cost of repair
- d) Degree of restoration required to restore structural integrity

### C.6 Field Welding

Field welding to existing steel members is not allowed. Cracks or other damage in the steel observed shall be discussed with the engineer.

### C.7 Inspection

The city will perform a final arm's length inspection of the completed work, prior to acceptance.

### D Measurement

The city will measure Heat Straighten Girders P-40-509 completed in accordance to the contract and accepted, as a single complete unit of work for each structure designated in the contract.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.03	Heat Straighten Girders P-40-509	LS

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to complete the work including surface preparation, heat straightening of girders to the required tolerance; monitoring heating temperatures; monitoring jacking forces; grinding; and coordination with the railroad.

**30. Temporary Shoring Superstructure P-40-848, Item SPV.0105.04.**

**A Description**

This special provision describes designing and providing temporary support to the girders and deck of the bridge to facilitate safe demolition.

**B Materials**

The locations of required temporary shoring for the bridge superstructure will be shown on the contract plans. Provide a shoring design for each required temporary shoring. The adequacy of each shoring design shall be verified by a professional engineer registered in the State of Wisconsin and knowledgeable of the specific site conditions and requirements.

Submit to the engineer for documentation one copy of each superstructure shoring design that is signed and sealed by the same professional engineer verifying the design. Approval by the Union Pacific Railroad is required for shoring designs which span over its facilities.

Shoring concepts, as shown on the plans, are conceptual in nature and represent one possible means of shoring the bridge deck and girders. The concept shown on the plans will allow minimal interference with railroad operations below the bridge. The contractor may propose other alternatives as long as they meet the railroad temporary clearance requirements for all tracks, and are approved by the railroad.

Clearance requirements must be met for the switching area / train yard tracks below span 8, unless lesser clearances are approved by the railroad upon request.

**C Construction**

Shoring is required to ensure safe demolition of the existing deck, due to the damaged girders supporting it. Shoring is also required to support the free ends of girders 8 & 9 after the damaged sections have been removed.

Construct or install the temporary shoring at a required location in accordance with the design developed for that location. Shoring towers or support members must meet the temporary railroad clearance requirements as shown on the plans.

Upon completion of the need for the temporary shoring at a required location, the shoring shall be removed.

**D Measurement**

The city will measure Temporary Shoring Superstructure P-40-848 as a single complete unit of work for each structure designated in the contract.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.04	Temporary Shoring Superstructure P-40-848	LS

Payment is full compensation for providing a verified design of the shoring; providing a copy of the design; furnishing and hauling materials to each location; installing or constructing the shoring; maintaining the shoring as needed; removing the shoring when required by the design; coordinating for railroad approval of shoring design; and for furnishing all labor, tools, equipment, and incidentals needed to complete the contract work.

**31. Gas Main Protection P-40-509, Item SPV.0105.05.**

**A Description**

This special provision describes providing thermal insulation to the existing gas main to protect it from heat straightening operations.

**B Materials**

Furnish heat shields, heat blankets or other insulating materials as required to protect the adjacent gas main.

**C Construction**

The We Energies owned 6” gas main is directly adjacent to the area of heat straightening. The contractor shall provide heat shielding and/or heat blankets to ensure that the temperature at the surface of the pipe is less than 200 °F. Higher temperatures may cause damage to the pipe coating or combustion of the natural gas.

Provide a means of accurately measuring the outside pipe temperature throughout the heat straightening operation.

The gas pipe will remain in service through construction.

Coordinate work at least 14 days in advance of construction with We Energies. Contact information is provided on the plans and in the Utilities section of the project specifications. Submit documentation on the proposed insulating/shielding methods proposed as well as how pipe temperatures will be monitored for We Energies approval.

**D Measurement**

The city will measure Gas Main Protection P-40-509 as a single complete unit of work for each structure designated in the contract.

**E Payment**

The city will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
SPV.0105.05	Gas Main Protection P-40-509	LS

Payment is full compensation for furnishing all labor, tools, equipment, materials, and incidentals necessary to protect the gas main during heat straightening operations.