



**BOARD OF COUNTY COMMISSIONERS  
WARREN COUNTY, OHIO**

*406 Justice Drive, Lebanon, Ohio 45036*

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*Telephone (513) 695-1250*

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**TOM GROSSMANN  
SHANNON JONES  
DAVID G. YOUNG**

21-0745

June 01, 2021

**ENTER INTO CONTRACT WITH LARRY SMITH INCOPORATED FOR THE RIVIERA DRIVE WATER MAIN PROJECT**

WHEREAS, pursuant to Resolution #21-0662, adopted May 18, 2021, this Board approved a Notice of Intent to Award Contract for the Riviera Drive Water Main Project to Larry Smith Incorporated, 5737 Dry Fork Road Cleves, Ohio, for a total contract price of \$420,427.00; and

WHEREAS, all documentation including, performance bonds, insurance certificates, etc., has been submitted by the contractor; and

NOW THEREFORE BE IT RESOLVED, to enter into contract with Larry Smith Incorporated, for said project, for a total contract price of \$420,427.00; as attached hereto and made a part hereof.

Mrs. Jones moved for adoption of the foregoing resolution being seconded by Mr. Young. Upon call of the roll, the following vote resulted:

Mr. Grossmann – absent

Mr. Young – yea

Mrs. Jones – yea

Resolution adopted this 1<sup>st</sup> day of June 2021.

**BOARD OF COUNTY COMMISSIONERS**

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Tina Osborne, Clerk

KP\

cc: c/a—Larry Smith, Inc.  
Water/Sewer (file)  
OMB Bid file



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**TOM GROSSMANN**  
**SHANNON JONES**  
**DAVID G. YOUNG**

21-0662

May 18, 2021

APPROVE NOTICE OF INTENT TO AWARD BID TO LARRY SMITH INCORPORATED FOR RIVIERA DRIVE WATER MAIN PROJECT

WHEREAS, bids were closed at 11:00 a.m., on May 13, 2021, and the bids received were opened and read aloud for the Riviera Drive Water Main Project, and the results are on file in the Commissioners' Office; and

WHEREAS, upon review of such bids by Chris Wojnicz, Deputy Sanitary Engineer, Larry Smith Incorporated has been determined to be the lowest and best bidder; and

NOW THEREFORE BE IT RESOLVED, upon recommendation of the Warren County Sanitary Engineer, that it is the intent of this Board to award the contract to Larry Smith Incorporated, 5737 Dry Fork Road Cleves, Ohio 45002, for a total bid price of \$420,427.00; and

BE IT FURTHER RESOLVED, that the County Administrator is hereby authorized to execute a "Notice of Intent to Award."

Mrs. Jones moved for adoption of the foregoing resolution being seconded by Mr. Grossmann. Upon call of the roll, the following vote resulted:

Mr. Young – yea  
Mr. Grossmann – yea  
Mrs. Jones – yea

Resolution adopted this 18<sup>th</sup> day of May 2021.

BOARD OF COUNTY COMMISSIONERS

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Tina Osborne, Clerk

KP

cc: Water/Sewer (file)  
OMB Bid file



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***TOM GROSSMANN  
SHANNON JONES  
DAVID G. YOUNG***

**BID OPENING**

May 13, 2021

**BID OPENING –**

Bids were closed at 11:00 a.m. this 13<sup>th</sup> day of May and the following bids were received, opened, and read aloud for the Riviera Drive Water Main Project for the Warren County Water & Sewer Department.

Donald W. May Construction, Inc. Leesburg, Ohio	\$462,794.25
Ford Developmental Corp. Cincinnati, Ohio	\$440,396.00
Larry Smith Incorporated Lebanon, Ohio	\$420,427.00
Majors Enterprises Monroe, Ohio	\$553,831.00
Loveland Excavating & Paving Fairfield, Ohio	\$423,816.00
SmithCorp Construction Services Cincinnati, Ohio	\$488,046.00

Chris Wojnicz, Warren County Deputy Sanitary Engineer will review bids for a recommendation at a later date.

cc: Bid File

OMB

W/S (file)

May 7, 2021

**ADDENDUM #1**

**Riviera Drive Watermain Project**

**136 PAGES TOTAL**

This Addendum No. 1 is issued to make certain revisions, additions, and clarifications to the original Contract Documents and shall be incorporated into the original Specifications. This Addendum takes precedence over any and all information previously issued. No other revisions to the Specifications are to be inferred.

**TECHNICAL SPECIFICATIONS**

1. Include the attached Technical Specifications under the Technical Specifications Section in the Bid Documents.

THIS ADDENDUM MUST BE SIGNED AND ATTACHED TO YOUR BID.

\_\_\_\_\_  
Acknowledged by

\_\_\_\_\_  
Date

TECHNICAL SPECIFICATIONS  
FOR  
**RIVIERA DRIVE WATER MAIN**

April 2021

Warren County Water & Sewer Department  
406 Justice Drive  
Lebanon, OH 45036

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## **SECTION 01 11 00**

### **SUMMARY OF WORK**

#### **PART 1 – GENERAL**

##### **1.1 LOCATION OF WORK**

- A. The work for this Contract generally consists of installing approximately 4,100 feet of 6” ductile iron water main along Hamilton-Middletown Road and Riviera Drive in Franklin Township and the City of Middletown.
- B. Specific location of the Project is as indicated on the Construction Drawings.

##### **1.2 GENERAL**

- A. The installing Contractor shall furnish all labor, materials, equipment, tools, services and incidentals to complete all work required by these Specifications and as shown on the Drawings.
- B. The Contractor shall perform the work complete, in place, and ready for continuous service, and shall include repairs, testing, permits, cleanup, replacements and restoration as a result of construction of the work.
- C. All materials, equipment, skills, tools, and labor which is reasonably and properly inferable and necessary for proper completion of the work in a substantial manner and in compliance with the requirements stated or implied by these Specifications or Drawings shall be furnished and installed by the Contractor without additional compensation, whether specifically indicated in the Contract Documents or not.
- D. The Contractor shall comply with all municipal, county, state, federal, and other codes, which are applicable to the proposed construction work.

##### **1.3 SCOPE OF WORK**

- A. Furnish all labor, materials, equipment, and incidentals required for the construction of the Riviera Drive Water Main in its entirety as shown on the Drawings and specified herein.
- B. General Construction work includes all work shown on the contract drawings and specifications, including, but is not limited to, the following:
  - 1. Site work including earthwork, dewatering, piping, paving, and restoration.

##### **1.4 WORK SEQUENCE**

- A. General sequencing of Work shall be discussed at preconstruction meeting.

##### **1.5 CONTRACTOR’S USE OF PREMISES**

- A. Contractor shall limit the use of the premises for his/her Work and for storage to allow

for:

1. Work by other contractors.
  2. Owner occupancy.
- B. Coordinate use of premises with Owner.
- C. Contractor shall assume full responsibility for security of all his/her and his/her subcontractors' materials and equipment stored on the site.
- D. If directed by the Engineer, move any stored items, which interfere with operations of Owner or other contractors.
- E. Obtain and pay for use of additional storage or work areas if needed to perform the Work.

## **1.6 PLANS AND SPECIFICATIONS**

- A. Specifications
1. The General Conditions Section (Section 00 70 30) and the Supplemental Conditions Section (Section 00 80 10) contain the General Requirements which govern the Work.
  2. The Technical Specifications consists of three parts, General, Products, and Execution. Products and Execution modify and supplement these by detailed requirements of the work and shall always govern whenever there appears to be a conflict.

## **1.7 WORK BY OWNER**

- A. Owner will perform the following activities in connection with the Work:
1. Operation of all existing valves, gates, pumps, equipment, and appurtenance that will affect Owner's operation, unless otherwise specified.

## **1.8 EASEMENTS AND RIGHTS-OF-WAY**

- A. Easements and rights-of-way will be provided by OWNER. Confine construction operations within Owner's property, public rights-of-way, and easements obtained by Owner, and the limits shown. Use care in placing construction tools, equipment, excavated materials, and products to be incorporated into the Work to avoid damage to property and interference with traffic. Do not enter private property outside the construction limits without permission from the Owner of the property.
- B. Within Highway and Railroad Right-of-Way: Permits will be obtained by Owner, other work permits to be obtained by Contractor. All work performed and all operations of Contractor and Subcontractors within the limits of railroad and highway rights-of-ways shall conform to the requirements of the railroad or highway authority owner and applicable work permits, or authority having jurisdiction over right-of-way.

**1.9 NOTICES TO OWNERS AND AUTHORIZES OF PROPERTIES ADJACENT TO OR SIGNIFICANTLY IMPACTED BY THE WORK**

- A. Notify owners of adjacent property and utilities when construction of the Work may affect their property, facilities, or use of property.
- B. When it is necessary to temporarily obstruct access to property, or when utility service connection will be interrupted, provide notices sufficiently in advance to enable affected persons to provide their needs. Conform notices to applicable local ordinance and, whether delivered orally or in writing, include appropriate information concerning the interruption and instructions on how to limit inconvenience caused thereby.
- C. Utilities and other concerned agencies shall be notified at least 48 hours prior to cutting or closing streets or other traffic areas or excavating near underground utilities or pole lines.

**PART 2 – PRODUCTS**

Not Used

**PART 3 – EXECUTION**

Not Used

**END OF SECTION**

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## SECTION 01 26 27

### CHANGE ORDER PROCEDURES

#### PART 1 – GENERAL

##### 1.1 CHANGE TO CONTRACT

- A. If the Contractor must undertake additional work occurring after the execution of the Contract, the Contractor, prior to the start of additional work, shall issue a change order request setting forth the additional work that must be undertaken and requesting authorization for additional cost. Any change order issued during the work shall not invalidate the Contract. The cost of such a change order shall be the contractor's actual costs including wages, labor costs other than wages, wage taxes, materials, equipment costs and rentals, insurance, and subcontracts attributable to the additional activity, plus an overhead and profit fee.
1. An overhead and profit fee of 15% shall be permitted for all payroll costs for employees in the direct employment of the Contractor and for all materials and equipment furnished and incorporated into change order work.
  2. An overhead and profit fee of 5% shall be permitted for all change order work performed by subcontractors.
- B. Contractor shall not perform work outside of the Contract without written authorization. Should disputes regarding change order work arise between the Contractor and Owner that cannot be amiably resolved, the venue for any disputes hereunder shall be the Warren County Court of Common Pleas.

##### 1.2 REQUIREMENTS INCLUDED

- A. Promptly implement change order procedures.
1. Provide full written data required to evaluate changes.
  2. Maintain detailed records of work done on a time-and-material/force account basis.
  3. Provide full documentation to Engineer on request.
- B. Designate in writing the member of Contractor's organization:
1. Who is authorized to accept changes in the work?
  2. Who is responsible for informing others in the Contractor's employment of the authorization of changes in the work?
- C. Owner will designate in writing the person who is authorized to execute Change Orders.

##### 1.3 RELATED REQUIREMENTS

- A. Standard General Conditions of the Construction Contract are included in Section 00700.

## **1.4 PRELIMINARY PROCEDURES**

- A. Owner may initiate changes by submitting a Request for Proposal (RFP) to Contractor. Request will include:
  - 1. Detailed description of the Change, Products and location of the change in the project.
  - 2. Supplementary or revised Drawings and Specifications.
  - 3. The projected time span for making the change and a specific statement as to whether overtime work is, or is not, authorized.
  - 4. A specific period of time during which the requested price will be considered valid.
  - 5. Such request is for information only and is not an instruction to execute the changes, nor to stop work in progress.
  
- B. Contractor may initiate changes by submitting a written notice to Owner, containing:
  - 1. Description of the proposed changes.
  - 2. Statement of the reason for making the changes.
  - 3. Statement of the effect on the Contract Sum and the Contract Time.
  - 4. Statement of the effect on the work of separate Contractors.
  - 5. Documentation supporting any change in Contract Sum or Contract Time, as appropriate.

## **1.5 DOCUMENTATION OF PROPOSALS AND CLAIMS**

- A. Support each quotation for a lump sum proposal and for each unit price which has not previously been established, with sufficient substantiating data to allow Owner to evaluate the quotation.
  
- B. On request, provide additional data to support time and cost computations
  - 1. Labor required.
  - 2. Equipment required.
  - 3. Products required.
    - a. Recommended source of purchase and unit cost.
    - b. Quantities required.
  - 4. Taxes, insurance and bonds.
  - 5. Credit for work deleted from Contract, similarly documented.
  - 6. Overhead and profit.
  - 7. Justifications for any change in Contract Time.
  
- C. Support each claim for additional costs and for work done on a time-and-material/force account basis, with documentation as required for a lump sum proposal, plus additional information.

1. Name of the Owner's authorized agent who ordered the work and date of the order.
2. Dates and times work was performed and by whom.
3. Time record, summary of hours worked, and hourly rates paid.
4. Receipts and invoices for:
  - a. Equipment used, listing dates and times of use.
  - b. Products used, listing of quantities.
  - c. Subcontracts.

## **1.6 PREPARATION OF CHANGE ORDERS**

- A. Owner will prepare each Change Order.
- B. Change Order will describe changes in the work, both additions and deletions, with attachments of revised Contract Documents to define details of the change.
- C. Change Order will provide an accounting of the adjustment in the Contract Sum and in the Contract Time.

## **1.7 CORRELATION WITH CONTRACTOR'S SUBMITTALS**

- A. Periodically revise Schedule of Values and Request for Payment forms to record each change as a separate item of work, and to record the adjusted Contract Sum.
- B. Periodically revise the Construction Schedule to reflect each change in Contract Time.
  1. Revise subschedules to show changes for other items of work affected by changes.
- C. Upon completion of work under a Change Order, enter pertinent changes in Record Documents.

## **PART 2 –PRODUCTS**

Not Used.

## **PART 3 –EXECUTION**

Not Used.

**END OF SECTION**

CHANGE ORDER PROPOSAL REQUEST

Contract Title: RIVIERA DRIVE WATER MAIN PROJECT

Purchase Order Number: \_\_\_\_\_

Proposal Number: \_\_\_\_\_

Owner's Name: \_\_\_\_\_

Owner's Address: \_\_\_\_\_

Contractor's Name: \_\_\_\_\_

Contractor's Address: \_\_\_\_\_

Description of Change

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Reason for Change

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Net Increase/Decrease in Contract Price: \_\_\_\_\_

Total Number Added Days: \_\_\_\_\_



FIELD ORDER

PROJECT: RIVIERA DRIVE WATER MAIN PROJECT

FIELD ORDER NO:

DATE:

CONTRACT:

OWNER:

OWNER PROJECT NO.

TO:

CONTRACT DATE:

-----  
This Field Order is issued to interpret/clarify the Contract Documents, order minor changes in the work and/or memorialize trade-off agreements. Both parties hereby agree that the work described by this Field Order is to be accomplished without change in Contract Sum, Contract Time, and/or claims for other costs.  
-----

-  
DESCRIPTION: (Here insert a written description of the interpretation, change or agreement.)

-----  
FIELD ENGINEER:

CONTRACTOR:

BY:

BY:

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## **SECTION 01 29 73**

### **SCHEDULE OF VALUES**

#### **PART 1 – GENERAL**

##### **1.1 DESCRIPTION**

- A. Contractor shall furnish all labor, materials, tools, equipment, appurtenances, and all services to perform all Work required at the Contractor's lump sum or unit prices listed herein and/or on the Bid Form.
- B. No direct or separate payment will be made for providing miscellaneous temporary or accessory work, plants, services, Contractor's field offices, job signs, sanitary requirements, testing, safety devices, approval and record drawings, water supplies, power, maintaining traffic, removal of waste, watchmen, bonds, insurance, etc. unless specifically listed on the Bid Form, this Section or requested by the Engineer. Compensation for all such services, items and materials shall be included in the Contractor's prices bid for the lump sum and unit price pay items listed herein and/or on the Bid Form.
- C. Each lump sum and unit bid price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item, in accordance with the SECTION 00 70 30 GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT.

##### **1.2 ENGINEER'S ESTIMATE OF QUANTITIES**

- A. Engineer's estimated quantities for unit price pay items, as listed in the Bid Form, are approximate only. Owner does not expressly or by implication agree that the nature of the materials encountered below the surface of the ground or the actual quantities of material encountered or required will correspond therewith and reserves the right to increase or decrease any quantity or to eliminate any quantity, as Owner may deem necessary.

##### **1.3 Unit Price Work**

- A. General: All payments based on the as-built measurements.
- B. Unsuitable Soil: If, as determined by the Engineer, the material at or below the grade of the bottom of trench or other excavation is unsuitable as a foundation for its intended purpose, it shall be removed to such depths and widths as ENGINEER may direct and be replaced by the Contractor with approved materials. Payment for this work will be made on a lineal foot price bid on one (1) foot increments of fill for various size pipe unless otherwise stated in the Bid Form. If not listed on the Bid Form, Contractor shall be paid a negotiated amount.
- C. Pressure Pipe (Water):
  - 1. Pipe: Unless otherwise shown on the Bid Form, the unit price bid for each type, size

and class of water main pipe shall include the cost of furnishing and installing the water main pipe including all pipe fittings, restraint systems, anchoring products, thrust blocking, water service lines and connections specified, or shown on the drawings or otherwise required. The length of water main to be used as a basis of payment shall be the actual field measurement taken along the centerline of each type, size and class of pipe as measured along restored ground profile. The measurement shall be through all valves and fitting installed in the pipe line.

- a. Fire Hydrants: The unit price for each type, size and class of water main pipe shall include the cost of furnishing and installing the fire hydrant assemblies in accordance with specifications.
  - b. Valves: The unit price for each type, size and class of water main pipe shall include furnishing and installing the valve, valve keys, valve box and covers in conformity with the specifications.
  - c. Excavation and Backfill: Unless otherwise shown on the Bid Form, the unit price for each type, size and class of water main pipe shall include the cost of excavation (other than suitable material) and backfilling with gravel backfill or controlled density fill as specified, or shown on the drawings or otherwise required.
  - d. Testing and Disinfection: Unless otherwise shown on the Bid Form, the unit price for each type, size, and class of water main pipe shall include the cost of testing and disinfection of the pipe.
2. Taps: All taps to existing water mains are to be made under the authority of the required permit issued by the Warren County Water and Sewer Department. The Contractor under Warren County's guidance and inspection will make taps. This cost shall be included in the Contractor's unit price bid for each type, size and class of water main pipe. Note that some pipe materials require special manufacturer's services for tapping. Contractor shall include all costs for such services in the price bid.

D. Lump Sum Items:

1. Whenever a construction item that requires excavation and backfill is bid on a lump sum basis, the price shall include all work specified to be done on an itemized basis.
2. When a pressure or gravity system is part of a lump sum type proposal, the price quoted shall include the cost of furnishing all labor and material to construct the pressure or gravity system in accordance with these specifications.

**PART 2 – PRODUCTS**

Not Used

**PART 3 – EXECUTION**

Not Used

**END OF SECTION**

## **SECTION 01 29 76**

### **PAYMENT PROCEDURES**

#### **PART 1 – GENERAL**

##### **1.1 REQUIREMENTS INCLUDED**

- A. Submit Applications for Payment to the Owner in accordance with the project schedule contained in the Contract between the Owner and Contractor.
- B. The Contractor shall submit a Schedule of Values to be used as the basis for the Contractor's Application for Payment.

##### **1.2 SUBMITTALS**

- A. Submit to the Owner applications with itemized data typed on 8-½-in by 11-in paper.
- B. Provide itemized data on continuation sheet.
  - 1. The Schedule of Values format, line items and monetary values shall be reviewed and approved by the Owner.

##### **1.3 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT**

###### **A. Application Form**

- 1. Partial payment to the Contractor for work performed under a lump sum project shall be based on a schedule prepared by the Contractor and approved by the Owner who shall apportion the lump sum price to the major components entering into or forming a part of the work under the lump sum price.
- 2. Fill in required information, including that for Change Orders executed prior to date of submittal of application.
- 3. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
- 4. Execute certification with signature of a responsible officer of Contract firm.

###### **B. Continuation Sheets**

- 1. Fill in total list of all scheduled component items of Work, with item number and scheduled dollar value for each item.
- 2. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored.
  - a. Round off values to nearest dollar, or as specified for Schedule of Values.
- 3. List each Change Order executed prior to date of submission, at the end of the continuation sheets.
  - a. List by Change Order Number and description, as for an original component item of work.

4. To receive approval for payment on component material stored on site, submit copies of the original paid invoices with the application for payment.

C. Prevailing Wage and Subcontractor Payments

1. Prior to the first pay request the Contractor shall submit completed Prevailing Wage Notification to Employee Forms for all employees that will work under the Contract.
2. Each pay request shall be accompanied by a notarized Affidavit of Compliance certifying that the Contractor has complied with prevailing wage requirements of Chapter 4115 of the Ohio Revised Code and that no rebates or deductions have been or will be made, directly or indirectly from any wages paid in connection with this project, other than those provided by law.
3. Each pay request shall be accompanied by certified weekly payroll reports documenting the number of hours worked by employee, net pay, tax withholdings, and other deducted amounts provided by law.
4. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

D. Retainage

1. In accordance with ORC Section 153.12 partial payments to the Contractor for labor performed under either a unit or lump sum price contract shall be made at the rate of ninety-two per cent of the estimates prepared by the Contractor and approved by the Engineer. All labor performed after the job is fifty per cent completed shall be paid for at the rate of one hundred per cent of the estimates submitted by the Contractor and approved by the Engineer.
2. When the major portion of the project is substantially completed and occupied, or in use, or otherwise accepted, and there exists no other reason to withhold retainage, the retained percentages held in connection with such portion shall be released and paid to the contractor, withholding only that amount necessary to assure completion.

#### **1.4 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS**

- A. When the Owner requires substantiating data, submit suitable information, with a cover letter identifying.
1. Project
  2. Application number and date.
  3. Detailed list of enclosures.
  4. For stored products:
    - a. Item number and identification as shown on application.
    - b. Description of specific material.

## **1.5 SUBMITTAL PROCEDURE**

- A. Submit Applications for Payment to the Owner at the times stipulated in the Agreement.
- B. Number: Two copies of each Application.
- C. When the Owner finds Application properly completed and correct, he/she will transmit certificate for payment to Owner, with copy to Contractor.

## **PART 2 –PRODUCTS**

Not Used.

## **PART 3 –EXECUTION**

Not Used.

**END OF SECTION**

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## **SECTION 01 31 00**

### **COORDINATION**

#### **PART 1 – GENERAL**

##### **1.1 UTILITIES**

- A. Coordinate Work with various utilities within Project limits in accordance with Section 00700.
- B. Ohio Utilities Protection Service
  - 1. Telephone: 1-800-362-2764
  - 2. Notify at least 48 hours in advance of any construction.

##### **1.2 PROJECT MEETINGS**

- A. Preconstruction Conference:
  - 1. To be held at Warren County Water & Sewer Department.
  - 2. Contractor shall provide to the Owner the following items at or before the Preconstruction Conference:
    - a. List and contact information of Subcontractors
    - b. Schedule of Values
    - c. Preliminary Project Schedule
    - d. Prevailing Wage Employee Notification Forms
  - 3. Contractor shall be prepared to discuss the following subjects, as a minimum:
    - a. Status of Bonds and Insurance.
    - b. Sequencing of critical path work items.
    - c. Project changes and clarification procedures.
    - d. Use of site, access, office and storage areas, security and temporary facilities.
    - e. Major product delivery and priorities.
    - f. Contractor's safety plan and representative.
  - 4. Attendees may include but not limited to:
    - a. Owner.
    - b. Contractor's office representative.
    - c. Contractor's resident superintendent.
    - d. Subcontractors' representatives whom Contractor may desire or Engineer may request to attend.
    - e. Others as appropriate.

### **1.3 OWNER'S OCCUPANCY REQUIREMENTS**

- A. Owner shall occupy the premises during the entire Contract period to conduct its normal operations. Cooperate with Owner in all operations to minimize conflict and to facilitate Owner usage.

### **1.4 OWNER'S FACILITIES**

#### A. Operation and Shutdown of Existing Facilities:

1. The operation of any County owned valves or County owned equipment is strictly prohibited. Valves and County owned equipment shall only be operated by County personnel. For safety purposes, lock-out/tag-out procedures shall be followed for all valves isolating the tank.
2. All work shall be limited to weekdays, excluding County recognized holidays, and shall occur between the hours of 8:00 AM to 5:00 PM. Work conducted outside of regular hours shall occur only with prior written consent of Owner and shall only be approved to meet the project schedule and/or to avoid undesirable weather conditions.
3. Do not proceed with Work affecting the operation without obtaining the Owner's advance approval of the need for and duration of such Work.

### **PART 2 – PRODUCTS**

Not Used.

### **PART 3 – EXECUTION**

Not Used.

**END OF SECTION**

## SECTION 01 31 19

### PRECONSTRUCTION MEETING

#### PART 1 – GENERAL

##### 1.1 DESCRIPTON

- A. A pre-construction meeting will be held for the Project. Contractor shall attend the conference prepared to discuss all items on the agenda. The representatives present for each party shall be authorized to act on their behalf.
- B. Purpose of the meeting is to designate responsible personnel, establish working relationships, and establish administrative provisions for the Project. Matters requiring coordination will be discussed and procedures for handling such matters will be established.
- C. Date, Time and Location: Meeting will be held after execution of the Contract and before Work starts at the Site. Engineer/Owner will determine the date, time, and location of the meeting and advise the interested and involved parties.
- D. Engineer/Owner will distribute an agenda, preside at the meeting, and prepare and distribute meeting minutes to all meeting participants and others as requested.
- E. Contractor shall provide data required and contribute appropriate items for discussion. Unless previously submitted to Engineer, Contractor shall bring to the meeting a draft of each of the following:
  - 1. Progress Schedule.
  - 2. List of required Shop Drawings and submittals
  - 3. Schedule of Values.
  - 4. Contractor's Site-specific health and safety plan.
  - 5. List of emergency contact information.

##### 1.2 REQUIRED ATTENDANCE

- A. Meeting shall be attended by Contractor's project manager, Site superintendent, and major Subcontractors and major equipment Suppliers, as Contractor deems appropriate.
- B. Other attendees will be representatives of:
  - 1. Owner.
  - 2. Engineer
  - 3. Governmental agencies having control or responsibility, if available.
  - 4. Utility companies.
  - 5. Others as requested by Owner, Contractor, or Engineer.

### 1.3 AGENDA

- A. Agenda: A complete agenda will be furnished to Contractor prior to the conference. However, Contractor shall be prepared to discuss the following:
1. Designation of responsible personnel.
  2. Communications and correspondence.
  3. Coordination with other Contractors.
  4. Emergency contact information.
  5. Review of scope of Work.
  6. Review of Contract Times, Milestones, and completion dates.
  7. Subcontractors.
  8. Progress Schedule.
  9. Schedule of Values.
  10. Project coordination and coordination with Owner's operations.
  11. Progress meetings.
  12. Submittals and Shop Drawings: processing and schedule of submittals.
  13. Substitutions.
  14. Owner's tax-exempt status.
  15. Payments, retainage, payrolls, and Substantial Completion.
  16. Processing of Field Orders and Change Order.
  17. Use of premises, security, housekeeping, safety, Contractor's Responsibility for safety and first aid procedures, Site access.
  18. Field offices, trailers, and temporary facilities.
  19. Storage of materials.
  20. Construction photographs.
  21. Record drawings.
  22. Clarifications.
  23. Requirements for copies of Contract Documents and availability.
  24. Contractor correction period.
  25. Layouts and surveys.
  26. Hours of Work and overtime.
  27. Restoration.
  28. Permits.
  29. Insurance in force.
  30. Financing.

31. Disposal of demolition materials.
32. Next meeting.
33. General discussion and questions.
34. Site visit if required.

**PART 2 – PRODCUTUS**

(NOT USED)

**PART 3 – EXECUTION**

(NOT USED)

**END OF SECTION**

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## **SECTION 01 33 00**

### **SUBMITTALS**

#### **PART 1 – GENERAL**

##### **1.1 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specifications, apply to this section.

##### **1.2 SUMMARY**

- A. This Section specifies the general methods and requirements of submissions applicable to Shop Drawings, Product Data, Samples, Mock Ups, and Schedules. Additional general submission requirements are contained in Paragraphs 6.24 and 6.25 of the General Conditions. Detailed submittal requirements are specified in the technical Sections.
- B. All submittals shall be clearly identified by reference to Section Number, Paragraph, Drawing Number or Detail as applicable. Submittals shall be clear and legible and of sufficient size for presentation of data.

##### **1.3 SHOP DRAWINGS, PRODUCT DATA, SAMPLES**

###### **A. Shop Drawings**

1. Contractor shall submit complete information by each specification section. A complete submittal shall include all items listed under the submittal heading for each specification section.
2. Shop drawings as specified in individual Sections shall include, but is not limited to, manufacture data, drawings, and technical data sheets; color charts and samples; manufacture instructions; warranties; applicator and employee experience and certifications; scheduled in information; actual shop work manufacturing instructions; custom templates; coordination drawings; individual system or equipment inspection and test reports; including performance curves and certifications; as applicable to the work.
3. All submittals shall be by the General Contractor. Information prepared by subcontractors shall be sent directly to the General Contractor for checking and submission.
4. Check all shop drawings regarding measurements, size of members, materials and details to make sure that they conform to the intent of the Drawings and related Sections. Return shop drawings found to be inaccurate or otherwise in error to the subcontractors for correction before submission thereof.
5. All details on shop drawings shall show clearly the relation of the various parts to the main members and lines of the structure and where correct fabrication of the work depends upon field measurements, such measurements shall be made and noted on the drawings before being submitted.

## B. Product Data

1. Product data as specified in individual Sections include, standard prepared data for manufactured products (sometimes referred to as catalog data), such as the manufacturer's product specification and installation instructions, availability of colors and patterns, manufacturer's printed statements of compliances and applicability, roughing in diagrams and templates, catalog cuts, product photographs, standard wiring diagrams, printed performance curves and operational range diagrams, production or quality control inspection and test reports and certifications, mill reports, product operating and maintenance instructions and recommended spare parts listing and printed product warranties, as applicable to the work.

## C. Samples

1. Samples specified in individual Sections include, physical examples of the work such as sections of manufactured or fabricated work, small cuts or containers of materials, complete units of repetitively used products, color/texture/pattern swatches and range sets, specimens for coordination of visual effect, graphic symbols and units of work to be used by the Owner for independent inspection and testing, as applicable to the work.

## 1.4 CONTRACTOR'S RESPONSIBILITIES

- A. Review shop drawings, product data and samples, including those by subcontractors, prior to submission to determine and verify the following:
  1. Field measurements
  2. Filed construction criteria.
  3. Catalog numbers and similar data.
  4. Conformance with related Sections.
- B. Notify the Owner in writing, at the time of submittal, of any deviations in the submittals from the requirements of the Contract Documents.
- C. The review and approval of shop drawings, samples or product data by the Owner shall not relieve the Contractor from the responsibility for the fulfillment of the terms of the Contract. All risks of error and omission are assumed by the Contractor and the Owner will have no responsibility therefore.
- D. No portion of the work requiring a shop drawing, sample, or product data shall be started nor shall any materials be fabricated or installed prior to the approval or qualified approval of such item. Fabrication performed, materials purchased or on site construction accomplished which does not conform to approved shop drawings and data shall be at the Contractor's risk. The Owner will not be liable for any expense or delay due to corrections or remedies required to accomplish conformity.
- E. Project work, materials, fabrication, and installation shall conform with approved shop drawings, applicable samples, and product data.



## 1.5 SUBMITTAL PROCEDURES

### A. Submittal Schedule:

1. Prepare and submit a Submittal schedule that identifies the following for each Submittal:
  - a. Submittal Number
  - b. Submittal Description
  - c. Projected date Submittal will be submitted.

### B. Submittal Identification Numbering – The Contractor shall utilize an 8-character submittal identification numbering Format SSSSS-NN-V in the following manner:

1. SSSSS shall be the applicable Section Number.
2. NN shall be the number 01 to 99 to sequentially number each initial separate item or drawing submitted under each specific Section Number.
3. V, the last character shall be a letter, A to Z, indicating the submission, or resubmission of the same Drawing, i.e., “A”=1st submission, “B”=2nd submission, “C”=3rd submission, etc. A typical submittal number would be as follows:

03 30 00 – 08 – B

03 30 00     =     Section for Concrete

08            =     The eighth initial submittal under this section

B             =     The second submission (first resubmission) of that particular shop drawing

### C. Delivery Method:

1. Submittals may be delivered as paper copies or electronic files at Contractor’s option.
2. Advise Engineer of delivery method to be used at the preconstruction meeting.
3. Paper Copies:
  - a. Unless otherwise indicated, submit 2 copies of each Submittal.
  - b. One copy of each Action Submittal will be returned to Contractor.
  - c. Extra copies submitted by Contractor will be discarded.
4. Electronic Files:
  - a. Unless otherwise indicated, submit 1 copy of each Submittal in PDF format.
  - b. Scanned Submittals shall be produced in such a way as to not compromise the graphic quality or accuracy of scale, where applicable; and text shall be searchable.
  - c. One copy of each Action Submittal will be returned to the Contractor.
  - d. Submittals may be transmitted via electronic mail (e-mail) or on a CD or DVD. Submittals that are transmitted electronically may be returned electronically at the Engineer’s discretion.
5. Transmit Submittals to party and address identified by Engineer at preconstruction meeting.

- D. Coordination and Timing: Coordinate preparation and processing of Submittals with performance of construction activities. Contractor is responsible for cost of delays caused by lack of coordination or tardiness of Submittals. Incomplete submittals will be rejected.
1. Coordinate each Submittal with fabrication, purchasing, testing, delivery, other Submittals, and related activities that require sequential activity.
  2. Coordinate transmittal of different types of Submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
    - a. Engineer reserves the right to withhold action on a Submittal requiring coordination with other Submittals until related Submittals are received.
- E. Processing Time: Allow 15 full working days for Engineer to review each Submittal, including Resubmittals. Time for review shall commence on Engineer's receipt of Submittal. No extension of the Contract Time will be authorized because of failure to transmit Submittals enough in advance of the Work to permit processing, including Resubmittals. Engineer will advise Contractor when a Submittal being processed must be delayed for coordination.
- F. Identification: Place a permanent label on each Submittal or generate a separate cover sheet.
1. Indicate the name of firm or entity that prepared Submittal.
  2. Provide space to record Contractor's review and approval markings and action taken by Engineer.
  3. Include the following information:
    - a. Project Name.
    - b. Date
    - c. Name and address of Engineer.
    - d. Name and address of Contractor.
    - e. Name and address of Subcontractor(s).
    - f. Name and address of Supplier(s).
    - g. Name of Manufacturer.
    - h. Submittal Number (as specified in article 1.4.B of this Section)
    - i. Drawing Number and detail references, as applicable.
    - j. Location(s) where product is to be installed, as applicable.
    - k. Other necessary identification
- G. Deviations: Encircle or otherwise specifically identify deviations from the Contract Documents on Submittals. Submittals that include deviations that are not identified may be rejected. Engineer may or may not consider deviations. Deviations are not substitutions.
- H. Transmittal: Package each Submittal individually and appropriately for transmittal and handling. Transmit each Submittal using a transmittal form. Engineer will reject Submittal(s) received from sources other than Contractor.

- I. Resubmittals: Make Resubmittals in same form and number of copies as initial Submittal.
  - 1. Note date and content of previous Submittal.
  - 2. Clearly identify additions and revisions.
  - 3. Resubmit Submittals until they are marked, “Approved” or “Approved with Changes Noted.”
- J. Distribution: Furnish copies of Submittals with mark indicating “Approved” or “Approved with Changes Noted” to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities.
- K. Use for Construction: Unless otherwise indicated by Engineer, use only Submittals with mark indicating, “Approved” or “Approved with Changes Noted.”

## **PART 2 – PRODUCTS**

### **2.1 ACTION SUBMITTALS**

- A. General: Prepare and submit project specific Action Submittals required by individual Specification Sections. Do not use highlighting that would not be reproducible.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale where appropriate. Scale shall be sufficiently large to indicate pertinent features of the item and its methods of connection to the Work.
  - 1. Preparation: Fully illustrate requirements of the Contract Documents. Including the following information, as applicable:
    - a. Dimensions.
    - b. Identification of products.
    - c. Fabrication and installation drawings.
    - d. Colors and materials as applicable.
    - e. Roughing-in and setting diagrams.
    - f. Wiring diagrams showing field-installed wiring, including power, signal, control, and communication wiring. Differentiate between Manufacturer-installed and field-installed wiring.
    - g. Manufacturing instructions
    - h. Templates and patterns.
    - i. Schedules.
    - j. Calculations.
    - k. Compliance with specified standards.
    - l. Notation of coordination requirements.
    - m. Notation of dimensions established by field measurement.
    - n. Relationship to adjoining construction clearly indicated.

2. Sheet Size: Submit Shop Drawings on sheets at least 8-1/2-inches by 11-inches but no larger than 36- inches by 48-inches.
  3. Maintain copy of returned Submittal for Project records.
- C. Product Data: Collect information into a single Submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for Submittal because standard printed data are not suitable for use, submit as Shop Drawings and, not as Product Data.
  2. Mark each copy of each Submittal to indicate which products and options are applicable.
  3. Include the following information, as applicable:
    - a. Manufacturer's written recommendations.
    - b. Manufacturer's product specifications.
    - c. Manufacturer's installation instructions.
    - d. Color charts as required by individual Specification Sections.
    - e. Manufacturer's catalog cuts.
    - f. Wiring diagrams showing factory-installed wiring.
    - g. Printed performance curves.
    - h. Operational range diagrams.
    - i. Mill reports.
    - j. Standard product operation and maintenance manuals.
    - k. Compliance with specified reference standards.
    - l. Testing by recognized testing agency.
    - m. Application of testing agency labels and seals.
    - n. Notation of coordination requirements.
  4. Submit Product Data before or concurrent with Samples.
  5. Maintain copy of returned Submittal for Project Records.
- D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements, and for a comparison of these characteristics between Submittal and actual component as delivered and installed.
1. Transmit Samples that contain multiple, related components, such as accessories, together in one Submittal package.
  2. Identification: On unexposed side of Samples, attach label that includes the following:
    - a. Generic description of Sample.
    - b. Product name and name of Manufacturer
    - c. Sample source
    - d. Number and title of appropriate Specification Section.
  3. Samples from Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner

specified, physically identical with material or product proposed for use, and that show full range of color and texture variations expected.

4. Samples include, but are not limited to, the following: Partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
5. Number of Samples: Unless otherwise indicated, submit 2 sets of Samples. Engineer will retain 1 Sample Set; remainder will be returned.
  - a. Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
  - b. If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least three sets of paired units that show approximate limits of variations.
6. Disposition: Maintain sets of approved Samples at Site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used by Engineer to determine final acceptance of construction associated with each set.
  - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples shall be in an undamaged condition at the time of Substantial Completion.
  - b. Samples not incorporated into the Work, or otherwise designated to become Owner's property, are the property of the Contractor.

## **2.2 INFORMATIONAL SUBMITTALS**

- A. General: Prepare and submit Informational Submittals required by individual Specification Sections. Do not use highlighting that would not be reproducible.
- B. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
- C. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects/engineers and owners, and other information specified.
- D. Installer Certificates: Prepare written statements on Manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by Manufacturer for this Project.
- E. Manufacturer Certificates: Prepare written statements on Manufacturer's letterhead certifying that Manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

- F. Product Certificates: Prepare written statements on Manufacturer's letterhead certifying that product complies with requirements in the Contract documents.
- G. Material Certificates: Prepare written statements on Manufacturer's letterhead certifying that material complies with requirements in the Contract documents.
- H. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- I. Product Test Results: Prepare written reports indicating current product produced by Manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of test performed by Manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by qualified testing agency.
- J. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
  - 1. Name of evaluation organization.
  - 2. Date of evaluation.
  - 3. Time period when report is in effect.
  - 4. Product and manufacturers' names.
  - 5. Description of product.
  - 6. Test procedures and results.
  - 7. Limitations of use.
- K. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- L. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- M. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- N. Manufacturer's Instructions: Prepare written or published information that documents Manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of Manufacturer. Include the following, as applicable:
  - 1. Preparation of substrates.

2. Required substrate tolerances.
  3. Sequence of installation or erection.
  4. Required installation tolerances.
  5. Required adjustments.
  6. Recommendations for cleaning and protection.
- O. Manufacturer's Field Reports: Prepare written information documenting tests and inspections of factory authorized service representative. Include the following, as applicable:
1. Name, address, and telephone number of factory-authorized service representative making report.
  2. Statement of substrate condition and acceptability of substrate for installation or application of product.
  3. Statement that products at Site comply with requirements.
  4. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
  5. Results of operational and other tests and a statement of whether observed performance complies with requirements.
  6. Statement whether conditions, products, and installation will affect warranty.
  7. Document settings in writing.
  8. Other required items indicated in individual Specification Sections.
- P. Safety Data Sheets (SDSs): Submit information directly to Owner; do not submit to Engineer.
1. Engineer will not review Submittals that include SDSs and will return the entire Submittal for Resubmittal.

## **PART 3 – EXECUTION**

### **3.1 CONTRACTOR'S REVIEW**

- A. Review each Submittal and check for coordination with other work of the Contract and for compliance with the Contract Documents. Verify field dimensions and conditions; note corrections as necessary. Mark with approval stamp before submitting to Engineer.
1. Approval Stamp: Stamp each Submittal with an approval stamp. Use the same stamp format for each Submittal. Include Project name and location, Submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that Submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
- B. Submittals that are not approved and stamped by Contractor will be rejected.

## **3.2 ENGINEER'S REVIEW**

- A. Action Submittals: Engineer will review Action Submittals, make marks to indicate corrections or modifications required, and return Submittal. Engineer will stamp each Submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:
1. Approved: Submittal appears to conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
  2. Approved with Changes Noted: Upon incorporation of review comments, it appear that Submittal will conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
  3. Revise and Resubmit: Submittal has one or more specific segments that are incomplete, do not appear to conform to the information given in the Contract Documents, or are incompatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Contractor shall resubmit information for review to demonstrate understanding of comments and portions of Work to be provided. Except as noted, Contractor shall not proceed with work related to Submittal.
  4. Rejected: Submittal as a whole is incomplete, does not appear to conform to the information given in the Contract Documents, or is incompatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Contractor shall resubmit information for review to demonstrate understanding of comments and portions of Work to be provided. Contractor shall not proceed with work related to Submittal.
- B. Informational Submittals: Other Submittals required by the Contract Documents for information only. Engineer will acknowledge receipt of Information Submittals. Such Submittals include, but are not limited to:
1. Qualifications Data.
  2. Certificates.
  3. Test Reports
  4. Manufacturer's Instructions.
  5. Maintenance Data.
  6. Field Reports.
- C. Submittals not required by the Contract Documents will be returned without being reviewed.
- D. Partial Submittals are not acceptable, will be considered non-responsive, and will be rejected.

**END OF SECTION**



## SECTION 01 55 00

### VEHICULAR ACCESS AND PARKING

#### PART 1 – GENERAL

##### 1.1 GENERAL

- A. All streets shall be kept open for the passage of traffic during the construction period unless otherwise approved by the Engineer and authority having jurisdiction over the same.
  - 1. Owner will obtain all right-of-way permits.
  - 2. Contractor shall maintain access for emergency vehicles at all times.
- B. When required to cross, obstruct or temporary close a street, Contractor shall provide and maintain detours for the accommodation of traffic. Closings shall be for the shortest time practical, and passage shall be restored immediately after completion of backfill and temporary paving or plating.
- C. Contractor shall be responsible to contact all local authorities and utilities at least two (2) weeks prior to commencement of work. Local authorities include but are not limited to police, fire, gas, electric, telephone, TV cable, water, sewer, traffic and street department. Contractor shall be responsible to keep all above apprised of Work schedule, actual progress, etc.
- D. Contractor shall give reasonable notice to owners or tenants of private property and commercial or industrial facilities who may be affected by Contractor's operation, minimum of 48 hours in advance.
- E. Contractor shall take all means necessary to prevent accidents. Contractor shall provide signs, signals, barricades, flares, lights, and all other equipment, service, and personnel required to regulate and protect all traffic, and warn of hazards. All such work shall conform to requirements of the Warren County Engineers Office and the Ohio Department of Transportation or authority having jurisdiction and be provided in accordance with ODOT Manual of Uniform Traffic Control Devices, Construction and Maintenance Operations. Remove temporary equipment and facilities when no longer required, restore grounds to original, or to specified conditions.
- F. Contractor shall provide dust control in accordance with Section 01 57 00.

##### 1.2 TRAFFIC SIGNALS AND SIGNS

- A. Provide and operate traffic control and directional signals required to direct and maintain orderly flow of traffic in all areas under Contractor's control or affected by Contractor's operation.
- B. Provide traffic control and directional signs, mounted on barricades or standards posts:
  - 1. At each change of direction of a roadway and at each crossroad.

2. At detours and hazardous areas.
3. At parking areas.
4. As required by approved permit or authority having jurisdiction.

### **1.3 FLAGMEN**

- A. Provide qualified and suitably equipped flagmen, including STOP/SLOW paddles, when construction operation encroach on traffic lanes or prevent adequate sight distance, as required for regulation of traffic and in accordance with the requirements of the authority having jurisdiction.

### **1.4 FLARES AND LIGHTS**

- A. Provide flares and lights during period of low visibility:
  1. To clearly delineate traffic lanes, to guide traffic, and to warn of hazardous areas.
  2. For use by flagmen in directing traffic.

### **1.5 PARKING CONTROL**

- A. Control all construction related vehicular parking within the limits of Work to preclude interference with public traffic or parking, access by emergency vehicles, OWNER'S operations, or construction operations. Provide temporary parking facilities for the public as may be required because of construction or operations.
- B. Monitor parking of all construction and private vehicles:
  1. Maintain free vehicular access to and through parking area.
  2. Prohibit parking on or adjacent to access roads or in non-designated areas.

## **PART 2 – PRODUCTS**

Not Used

## **PART 3 – EXECUTION**

Not Used

**END OF SECTION**

## **SECTION 01 57 00**

### **TEMPORARY CONTROLS**

#### **PART 1 – GENERAL**

##### **1.1 DESCRIPTION OF REQUIREMENTS**

- A. Contractor shall provide and maintain methods, equipment, and temporary construction, as required to provide controls over environmental conditions at the construction site and adjacent areas. Remove physical evidence of temporary facilities at completion of the Work.
- B. Contractor shall obtain all City, County, and State permits required for the construction of the work Hazardous Material Management, Earth Moving/Dust Control and Stormwater Pollution Prevention Permits.

##### **1.2 NOISE CONTROL**

- A. Contractor's vehicles and equipment shall be such as to minimize noise to the greatest degree practicable. Noise levels shall conform to the latest OSHA standards and in no case will noise levels be permitted which interfere with the Work of the Owner or others.

##### **1.3 DUST CONTROL**

- A. Contractor shall be responsible for controlling objectionable dust caused by Contractor's operation of vehicles and equipment, clearing or for any reason whatever. Contractor shall apply water or use other methods subject to Engineer's approval, which will keep dust in the air to a minimum.

##### **1.4 PEST AND RODENT CONTROL**

- A. Provide rodent and pest control as required to prevent infestation of construction or storage areas.
  - 1. Employ methods and use materials that will not adversely affect conditions at the Site or on adjoining properties.

##### **1.5 WATER CONTROL**

- A. Provide methods to control surface water and water from excavations and structures to prevent damage to the Work, the Site, or adjoining properties.
  - 1. Control fill, grading and ditching to direct water away from excavations, pits, tunnels and other construction areas and to direct drainage to proper runoff courses so as to prevent any erosion, damage or nuisance.
- B. Provide, operate and maintain equipment and facilities of adequate size to control surface water.
- C. Dispose of drainage water in a manner to prevent flooding, erosion, or other damage to

any portion of the Site or to adjoining areas and in conformance with all environmental requirements.

## **1.6 POLLUTION CONTROL**

- A. Provide methods, means, and facilitates required to prevent contamination of soil, water, or atmosphere by the discharging of noxious substances for construction operations.
- B. Provide equipment and personnel, perform emergency measures required to contain any spillages, and to remove contaminated soils or liquids.
  - 1. Excavate and dispose of any contaminated earth offsite, and replace with suitable compacted fill and topsoil.
- C. Take special measures to prevent harmful substances from entering public waters.
  - 1. Prevent disposal of wastes, effluents, chemicals, or other such substances adjacent to streams, or in sanitary or storm sewers.
- D. Provide systems for control of atmospheric pollutants.
  - 1. Prevent toxic concentrations of chemicals.
  - 2. Prevent harmful dispersal of pollutants into the atmosphere.
- E. All Contractor's equipment used during construction shall conform to all current federal, state and local laws and regulations.

## **1.7 EROSION CONTROL**

- A. Plan and execute construction and earth work by methods to control surface drainage from cuts and fills, and from borrow and waste disposal areas, to prevent erosion and sedimentation.
  - 1. Hold the areas of bare soil exposed at one time to a minimum.
  - 2. Provide temporary control measures such as berms, dikes and drains.
- B. Construct fills and waste areas by selective placement to eliminate surface silts or clays which will erode.
- C. Periodically inspect earthwork to detect any evidence of the start of erosion; apply corrective measures as required to control erosion.
- D. Coordinate erosion control requirements with the requirements of Article 1.05, above.

## **PART 2 – PRODUCTS**

Not Used

## **PART 3 – EXECUTION**

Not Used

**END OF SECTION**

**SECTION 01 77 00**  
**CLOSEOUT PROCEDURES**

**PART 1 – GENERAL**

**1.1 SCOPE OF WORK**

- A. This Section specifies administrative and procedural requirements for project closeout, including but not limited to:
  - 1. Closeout procedures.
  - 2. Final cleaning.
  - 3. Adjusting.
  - 4. Project record documents.
  - 5. Spare parts and maintenance materials.

**1.2 RELATED WORK**

- A. Warranties and Bonds are included in Section 01 78 00.

**1.3 RECORD DOCUMENTS**

- A. Maintain on site, one set of the following documents; actual revisions to the work shall be recorded in these documents:
  - 1. Contract Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other Modifications to the Contract.
  - 5. Reviewed shop drawings, product data, and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each product section description of actual products installed, including the following:
  - 1. Manufacturer's name and product model and number.
  - 2. Product substitutions or alternates utilized.
  - 3. Changes made by Addenda and Modifications.
- E. Contract Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
  - 1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.

2. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the work.
3. Field changes of dimension and detail.
4. Details not on original Contract Drawings.

F. Submit documents to Owner with Application for Final Payment.

#### **1.4 CLOSEOUT PROCEDURES**

- A. Submit written certification that Contract Documents have been reviewed, work has been inspected and that work is complete in accordance with Contract Documents and ready for Owners's inspection.
- B. Provide submittals to Owner that are required by governing or other authorities.
- C. Submit Application for Final Payment identifying total adjusted Contract Sum, previous payments and sum remaining due.

#### **1.5 FINAL CLEANING**

- A. Complete the following cleaning operations before requesting inspection for Certification of Substantial Completion.
  1. Clean the site of rubbish, litter and other foreign substances. Sweep paved areas broom clean; remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.

#### **1.6 ADJUSTING**

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

#### **PART 2 – PRODUCTS**

Not Used.

#### **PART 3 – EXECUTION**

Not Used.

**END OF SECTION**

## SECTION 01 78 00

### WARRANTIES AND BONDS

#### PART 1 – GENERAL

##### 1.1 SCOPE OF WORK

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.

##### 1.2 RELATED WORK

- A. General closeout requirements are included in Section 01 77 00 Closeout Procedures.
- B. Specific requirements for warranties for the work, products, and installations that are specified to be warranted are included in the individual sections

##### 1.3 SUBMITTALS

- A. Submit written warranties to the Owner prior to the date fixed by the Engineer for Substantial Completion. If the Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the work, or a designation portion of the work, submit written warranties upon request of the Owner.
- B. When a designated portion of the work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Owner within 15 days of completion of that designated portion of the work.
- C. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Engineer for approval prior to final execution.
- D. Refer to individual Sections for specific content requirements for submittal of special warranties.
- E. At Final Completion compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- F. Bond warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents and sized to receive 8-1/2-inch by 11-inch paper.
- G. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project

Manual, with each item identified with the number and title of the Section in which specified and the name of the product or work item.

- H. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the products and the name, address and telephone number of the installer, supplier, and manufacturer.
- I. Identify each binder on the front and the spine with the typed title “Warranties and Bonds”, the project title or name and the name, address, and telephone number of the Contractor.
- J. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

#### **1.4 WARRANTY REQUIREMENT**

- A. **Related Damages and Losses:** When correcting warranted work that has failed, remove and replace other work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted work.
- B. **Reinstatement of Warranty:** When work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. **Replacement Cost:** Upon determination that work covered by a warranty has failed, replace or rebuild the work to an acceptable condition complying with requirements of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective work regardless of whether the Owner has benefited for use of the work through a portion of its anticipated useful service life.
- D. **Owner’s Recourse:** Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
- E. **Rejection of Warranties:** The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the contract Documents.
- F. **Disclaimers and Limitations:** Manufacturer’s disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the work that incorporates the products, nor does it relieve suppliers, manufacturers and subcontractors required to countersign special warranties with the Contractor.
- G. **Separate Prime Contracts:** Each Prime Contractor is responsible for warranties related to its own Contract.



## **1.5 DEFINITIONS**

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend the time limits provided by standard warranties or to provide greater rights to the Owner.

## **PART 2 – PRODUCTS**

Not Used.

## **PART 3 – EXECUTION**

Not Used.

**END OF SECTION**

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## SECTION 310519.13 -GEOTEXTILES FOR EARTHWORK

### PART 1 - GENERAL

#### 1.1 SCOPE

- A. Contractor shall provide all labor, materials, equipment, and services required to provide and place geosynthetics as shown and specified.

#### 1.2 REFERENCES

- A. Standards referenced in this Section are listed below:
  - 1. American Society for Testing and Materials, (ASTM).
    - a. ASTM D4355, Standard Test Method for Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc-Type Apparatus
    - b. ASTM D4491, Standard Test Methods for Water Permeability of Geotextiles by Permittivity
    - c. ASTM D4533, Standard Test Method for Trapezoid Tearing Strength of Geotextiles
    - d. ASTM D4632, Standard Test Method for Grab Breaking Load and Elongation of Geotextiles
    - e. ASTM D4751, Standard Test Methods for Determining Apparent Opening Size of a Geotextile
    - f. ASTM D6241, Standard Test Method for Static Puncture Strength of Geotextiles and Geotextile-Related Products Using a 50-mm Probe

#### 1.3 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:
  - 1. Geotextile manufacturer shall be listed on the Ohio Department of Transportation Office of Materials Management Approved List.
  - 2. Geotextile manufacturer shall be a specialist in the manufacture of geotextile filter fabric, and have produced and successfully installed a minimum of five million square feet.

#### 1.4 SUBMITTALS

- A. Action Submittals: Submit the following:
  - 1. Product Data:
  - 2. Submit geotextile manufacturer's data, specifications, installation instructions and dimensions.

#### 1.5 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Each roll of geotextile delivered to the Site shall be labeled by the manufacturer identifying the manufacturer's name, product identification, lot number, roll number and roll dimensions.
- B. All rolls and packages shall be inspected by Contractor upon delivery to the Site. Contractor shall notify Engineer if any loss or damage exists to geotextile filter fabric. Replace loss and repair damage to new condition, in accordance with manufacturer's instructions.

- C. Geotextile shall be protected from ultraviolet light exposure, precipitation or other inundation, mud, dirt, dust, puncture, cutting or any other damaging or deleterious conditions. Geotextile rolls shall be shipped and stored in relatively opaque and watertight wrappings.

PART 2 - PRODUCTS

2.1 GEOTEXTILE FILTER FABRIC

- A. Provide woven or non-woven fabric composed of polymeric fibers which are formed into a stable network such that the filaments retain their relative position. The fabric shall be inert to biological degradation and naturally encountered chemicals, alkalizes, and acids.

- B. All minimum strengths for geotextile filter fabrics are in the weakest principal direction.

C. Type A: Underdrains and Slope Drains

- 1. Product and Manufacturer: Provide the following:

- a. Mirafi 140 NL by TenCate Geosynthetics,
- b. 0311T by ADS Geosynthetics,
- c. FX-30HS by Carthage Mills,
- d. Or Equal.

- 2. Geotextile filter fabric shall conform to the following:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Minimum tensile strength	80 lb	ASTM D4632
Minimum puncture strength	140 lb	ASTM D6241
Minimum tear strength	25 lb	ASTM D4533
Apparent opening size	≤ 0.3 mm	ASTM D4751
Minimum permittivity	2.0/sec	ASTM D4491
Minimum water flow rate	140 gpm/ft <sup>2</sup>	ASTM D4491

D. Type B: Filter Blankets for Rock Channel Protection

- 1. Product and Manufacturer: Provide the following:

- a. Mirafi 180 N by TenCate Geosynthetics,
- b. 0801T by ADS Geosynthetics,
- c. FX-80HS by Carthage Mills,
- d. Or Equal.

- 2. Geotextile filter fabric shall conform to the following:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Minimum tensile strength	200 lb	ASTM D4632
Minimum elongation	15%	ASTM D4632
Minimum puncture strength	440 lb	ASTM D6241
Minimum tear strength	50 lb	ASTM D4533
Apparent opening size	≤ 0.6 mm	ASTM D4751
Minimum permittivity	0.2/sec	ASTM D4491

E. Type C: Sediment Fences

1. Geotextile filter fabric shall conform to the following:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Minimum tensile strength	120 lb	ASTM D4632
Maximum elongation	50%	ASTM D4632
Minimum puncture strength	275 lb	ASTM D6241
Minimum tear strength	40 lb	ASTM D4533
Apparent opening size	≤ 0.84 mm	ASTM D4751
Minimum permittivity	0.01/sec	ASTM D4491
Ultraviolet exposure strength retention	70%	ASTM D4355

PART 3 - EXECUTION

3.1 INSPECTION:

- A. Contractor shall examine the conditions under which the Work is to be installed and notify the Engineer, in writing, of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General

1. All geotextiles shall be weighted with sandbags or the equivalent when required. Such sandbags shall be installed during placement and shall remain until replaced with cover material or geomembrane.
2. Contractor shall take any necessary precautions to prevent damage to underlying layers during placement of the geotextile.
3. During placement of geotextiles, care shall be taken not to entrap in the geotextile stone, excessive dust, or moisture that could damage the geomembrane, generate clogging, or hamper subsequent seaming.
4. Geotextiles shall not be exposed to precipitation prior to being installed, and shall not be exposed to direct sunlight for more than 15 days.

B. Type A: Underdrains and Slope Drains

1. Place the Geotextile Fabric to completely surround the granular material. Overlap the Geotextile Fabric at the top of the trench. Match the overlap to the trench width. At other seams, overlap Geotextile Fabric a minimum of 12 inches.

C. Type B: Filter Blankets for Rock Channel Protection

1. Prepare the surface to receive the fabric to a relatively smooth surface, free of obstruction and debris. With the long dimension parallel to the flow direction, loosely place the fabric without wrinkles and creases. Where joints are necessary, provide a 12-inch minimum overlap, with the upstream strip overlapping the downstream strip. Place securing pins with washers at a minimum distance apart of 2 feet along the joints and at a minimum distance apart of 5 feet everywhere else.

3.3 GEOTEXTILE REPAIR:

- A. Any holes or tears in the fabric shall be repaired as follows:

1. On slopes: A fabric patch shall be sewn into place using a double sewn lock stitch (1/4-inch to 3/4-inch apart and no closer than 1-inch from any edge). Should any tear exceed ten percent of the width of the roll, that roll shall be removed from the slope and replaced.
2. Non-slopes: A fabric patch shall be spot-seamed in place with a minimum of 24-inches of overlap in all directions.

3.4 PLACEMENT OF COVER MATERIALS:

- A. Contractor shall place all cover materials in such a manner to ensure the geotextile is not damaged; minimal slippage of the geotextile on underlying layers; and no excess tensile stresses in the geotextile.

END OF SECTION 310519.13

## SECTION 312000 - EARTH MOVING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

1. Preparing subgrades for walks, pavements, turf and grasses.
2. Subbase course for concrete walks and pavements.
3. Subbase course for asphalt paving.
4. Excavating and backfilling trenches for utilities and pits for buried utility structures.

- B. Related Requirements:

1. Section 315000 "Excavation Support and Protection" for shoring, bracing, and sheet piling of excavations.
2. Section 329200 "Turf and Grasses" for finish grading in turf and grass areas, including preparing and placing planting soil for turf areas.

#### 1.3 UNIT PRICES – NOT USED

#### 1.4 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

- B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.

- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

- E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

- F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
2. Bulk Excavation: Excavation more than 10 feet in width and more than 30 feet in length.
3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Rock: Rock material in beds, ledges, unstratified masses, conglomerate deposits, and boulders of rock material that exceed 1 cu. yd. for bulk excavation or 3/4 cu. yd. for footing, trench, and pit excavation that cannot be removed by rock-excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting, when permitted:

1. Equipment for Footing, Trench, and Pit Excavation: Late-model, track-mounted hydraulic excavator; equipped with a 42-inch- maximum-width, short-tip-radius rock bucket; rated at not less than 138-hp flywheel power with bucket-curling force of not less than 28,700 lbf and stick-crowd force of not less than 18,400 lbf with extra-long reach boom.

I. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

J. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

K. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.

L. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

## 1.5 PREINSTALLATION MEETINGS – NOT USED

## 1.6 ACTION SUBMITTALS

A. Product Data: For each type of the following manufactured products required:

1. Geotextiles.
2. Controlled low-strength material, including design mixture.
3. Warning tapes.

B. Samples for Verification: For the following products, in sizes indicated below:



1. Geotextile: 12 by 12 inches.
2. Warning Tape: 12 inches long; of each color.

#### 1.7 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:
  1. Classification according to ASTM D2487.
  2. Laboratory compaction curve according to ASTM D698.
- C. Preexcavation Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by earth-moving operations. Submit before earth moving begins.

#### 1.8 QUALITY ASSURANCE

- A. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E329 and ASTM D3740 for testing indicated.

#### 1.9 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.
  1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
  2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing earth moving indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
  1. Do not proceed with work on adjoining property until directed by Architect.
- C. Utility Locator Service: Notify "Call Before You Dig" for area where Project is located before beginning earth-moving operations.
- D. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures specified in Section 311000 "Site Clearing" are in place.
- E. Do not commence earth-moving operations until plant-protection measures specified in Section 015639 "Temporary Tree and Plant Protection" are in place.
- F. The following practices are prohibited within protection zones:
  1. Storage of construction materials, debris, or excavated material.

2. Parking vehicles or equipment.
  3. Erection of sheds or structures.
  4. Impoundment of water.
  5. Excavation or other digging unless otherwise indicated.
- G. Do not direct vehicle or equipment exhaust towards protection zones.
- H. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

## PART 2 - PRODUCTS

### 2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D2487, Groups A-1, A-2-4, A-2-5, and A-3 according to AASHTO M 145, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D2487, Groups A-2-6, A-2-7, A-4, A-5, A-6, and A-7 according to AASHTO M 145, or a combination of these groups.
1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D2940/D2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Drainage Course: Narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.

- I. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch sieve and zero to 5 percent passing a No. 4 sieve.
- J. Sand: ASTM C33/C33M; fine aggregate.
- K. Impervious Fill: Clayey gravel and sand mixture capable of compacting to a dense state.

## 2.2 GEOTEXTILES –NOT USED

## 2.3 CONTROLLED LOW-STRENGTH MATERIAL

- A. Controlled Low-Strength Material: Self-compacting, flowable concrete material produced from the following:
  - 1. Portland Cement: ASTM C150/C150M, **Type I Type II or Type III**.
  - 2. Fly Ash: ASTM C618, Class C or F.
  - 3. Normal-Weight Aggregate: ASTM C33/C33M, **3/4-inch (19-mm)** nominal maximum aggregate size.
  - 4. Water: ASTM C94/C94M.
  - 5. Air-Entraining Admixture: ASTM C260/C260M.
- B. Produce conventional-weight, controlled low-strength material with **80-psi** compressive strength when tested according to ASTM C495/C495M.

## 2.4 GEOFOAM –NOT USED

## 2.5 ACCESSORIES

- A. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored as follows:
  - 1. Red: Electric.
  - 2. Yellow: Gas, oil, steam, and dangerous materials.
  - 3. Orange: Telephone and other communications.
  - 4. Blue: Water systems.
  - 5. Green: Sewer systems.

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

### 3.2 DEWATERING

- A. Provide dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.
- B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- C. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
  - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
- D. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.

### 3.3 EXPLOSIVES – NOT USED

### 3.4 EXCAVATION, GENERAL

- A. Classified Excavation: Excavate to subgrade elevations. Material to be excavated will be classified as earth and rock. Do not excavate rock until it has been classified and cross sectioned by Architect. The Contract Sum will be adjusted for rock excavation according to unit prices included in the Contract Documents. Changes in the Contract Time may be authorized for rock excavation.
  - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; and soil, boulders, and other materials not classified as rock or unauthorized excavation.
    - a. Intermittent drilling; blasting, if permitted; ram hammering; or ripping of material not classified as rock excavation is earth excavation.

2. Rock excavation includes removal and disposal of rock. Remove rock to lines and subgrade elevations indicated to permit installation of permanent construction without exceeding the following dimensions:
  - a. 24 inches outside of concrete forms other than at footings.
  - b. 12 inches outside of concrete forms at footings.
  - c. 6 inches outside of minimum required dimensions of concrete cast against grade.
  - d. Outside dimensions of concrete walls indicated to be cast against rock without forms or exterior waterproofing treatments.
  - e. 6 inches beneath bottom of concrete slabs-on-grade.
  - f. 6 inches beneath pipe in trenches and the greater of 24 inches wider than pipe or 42 inches wide.

### 3.5 EXCAVATION FOR STRUCTURES – NOT USED

### 3.6 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

### 3.7 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
  1. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
  1. Clearance: 12 inches each side of pipe or conduit.
- C. Trench Bottoms: Excavate trenches 4 inches deeper than bottom of pipe and conduit elevations to allow for bedding course. Hand-excavate deeper for bells of pipe.
  1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.

### 3.8 EXCAVATION FOR ELEVATOR CYLINDER – NOT USED

### 3.9 SUBGRADE INSPECTION

- A. Notify Architect when excavations have reached required subgrade.
- B. If Architect determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.

- C. Authorized additional excavation and replacement material will be paid for according to Contract provisions for **changes in the Work**.
- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

### 3.10 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Architect.
  - 1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Architect.

### 3.11 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

### 3.12 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
  - 1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
  - 2. Surveying locations of underground utilities for Record Documents.
  - 3. Testing and inspecting underground utilities.
  - 4. Removing concrete formwork.
  - 5. Removing trash and debris.
  - 6. Removing temporary shoring, bracing, and sheeting.
  - 7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

### 3.13 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

- C. Trenches under Roadways: Provide 4-inch-thick, concrete-base slab support for piping or conduit less than 30 inches below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches of concrete before backfilling or placing roadway subbase course. Concrete is specified in Section 033000 "Cast-in-Place Concrete."
- D. Backfill voids with satisfactory soil while removing shoring and bracing.
- E. Initial Backfill:
  - 1. Soil Backfill: Place and compact initial backfill of satisfactory soil, free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.
    - a. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
  - 2. Controlled Low-Strength Material: Place initial backfill of controlled low-strength material to a height of 12 inches over the pipe or conduit. Coordinate backfilling with utilities testing.
- F. Final Backfill:
  - 1. Soil Backfill: Place and compact final backfill of satisfactory soil to final subgrade elevation.
  - 2. Controlled Low-Strength Material: Place final backfill of controlled low-strength material to final subgrade elevation.
- G. Warning Tape: Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

### 3.14 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
  - 1. Under grass and planted areas, use satisfactory soil material.
  - 2. Under walks and pavements, use satisfactory soil material.
  - 3. Under steps and ramps, use engineered fill.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

### 3.15 GEOFOAM FILL – NOT USED

### 3.16 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

### 3.17 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D698:
  1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
  2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 92 percent.
  3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
  4. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

### 3.18 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
  1. Provide a smooth transition between adjacent existing grades and new grades.
  2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
  1. Turf or Unpaved Areas: Plus or minus 1 inch (25 mm)

### 3.19 SUBSURFACE DRAINAGE – NOT USED

### 3.20 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

- A. Place subbase course on subgrades free of mud, frost, snow, or ice.



- B. On prepared subgrade, place subbase course under pavements and walks as follows:
  - 1. Shape subbase course to required crown elevations and cross-slope grades.
  - 2. Place subbase course 6 inches or less in compacted thickness in a single layer.
  - 3. Place subbase course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
  - 4. Compact subbase course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D698.
  
- C. Pavement Shoulders: Place shoulders along edges of subbase course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase layer to not less than 95 percent of maximum dry unit weight according to ASTM D698.

### 3.21 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE – NOT USED

### 3.22 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
  - 1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
  - 2. Determine that fill material classification and maximum lift thickness comply with requirements.
  - 3. Determine, during placement and compaction, that in-place density of compacted fill complies with requirements.
  
- B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.
  
- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
  
- D. Testing agency will test compaction of soils in place according to ASTM D1556, ASTM D2167, ASTM D2937, and ASTM D6938, as applicable. Tests will be performed at the following locations and frequencies:
  - 1. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every **150 feet (46 m)** or less of trench length but no fewer than two tests.
  
- E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

### 3.23 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
  - 1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
  - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

### 3.24 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 312000

## SECTION 315000 - EXCAVATION SUPPORT AND PROTECTION

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section includes temporary excavation support and protection systems.
- B. Related Requirements:
  - 1. Section 312000 "Earth Moving" for excavating and backfilling, for controlling surface-water runoff and ponding, and for dewatering excavations.

#### 1.3 PREINSTALLATION MEETINGS – NOT USED

#### 1.4 ACTION SUBMITTALS

- A. Delegated-Design Submittal: For excavation support and protection systems, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

#### 1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For the following:
  - 1. Land surveyor.
  - 2. Professional Engineer: Experience with providing delegated-design engineering services of the type indicated, including documentation that engineer is licensed in the state in which Project is located.
- B. Contractor Calculations: For excavation support and protection system. Include analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- C. Existing Conditions: Using photographs, show existing conditions of adjacent construction and site improvements that might be misconstrued as damage caused by inadequate performance of excavation support and protection systems. Submit before Work begins.

#### 1.6 CLOSEOUT SUBMITTALS

- A. Record Drawings: Identify locations and depths of capped utilities, abandoned-in-place support and protection systems, and other subsurface structural, electrical, or mechanical conditions.

## 1.7 FIELD CONDITIONS

- A. Interruption of Existing Utilities: Do not interrupt any utility-serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility according to requirements indicated:
  - 1. Notify **Owner** no fewer than two] days in advance of proposed interruption of utility.
  - 2. Do not proceed with interruption of utility without **Owner's** written permission.
- B. Survey Work: Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements; establish exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks, and record existing elevations.

## PART 2 - PRODUCTS

### 2.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design excavation support and protection systems to resist all lateral loading and surcharge, including but not limited to, retained soil, groundwater pressure, adjacent building loads, adjacent traffic loads, construction traffic loads, material stockpile loads, and seismic loads, based on the following:
  - 1. Compliance with OSHA Standards and interpretations, 29 CFR 1926, Subpart P.
  - 2. Compliance with AASHTO Standard Specification for Highway Bridges or AASHTO LRFD Bridge Design Specification, Customary U.S. Units.
  - 3. Compliance with requirements of authorities having jurisdiction.
  - 4. Compliance with utility company requirements.
  - 5. Compliance with railroad requirements.

### 2.2 MATERIALS – NOT USED

## PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that could develop during excavation support and protection system operations.
  - 1. Shore, support, and protect utilities encountered.

### 3.2 INSTALLATION - GENERAL

- A. Locate excavation support and protection systems clear of permanent construction, so that construction and finishing of other work is not impeded.

- B. Install excavation support and protection systems to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
  - 2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- C. Install excavation support and protection systems without damaging existing buildings, structures, and site improvements adjacent to excavation.

### 3.3 SOLDIER PILES AND LAGGING

- A. Install steel soldier piles before starting excavation.
  - 1. Extend soldier piles below excavation grade level to depths adequate to prevent lateral movement.
  - 2. Space soldier piles at regular intervals not to exceed allowable flexural strength of wood lagging.
  - 3. Accurately align exposed faces of flanges to vary not more than 2 inches from a horizontal line and not more than 1:120 out of vertical alignment.
- B. Install wood lagging within flanges of soldier piles as excavation proceeds.
  - 1. Trim excavation as required to install lagging.
  - 2. Fill voids behind lagging with soil, and compact.
- C. Install wales horizontally at locations indicated on Drawings and secure to soldier piles.

### 3.4 SHEET PILING

- A. Before starting excavation, install one-piece sheet piling lengths and tightly interlock vertical edges to form a continuous barrier.
- B. Accurately place the piling using templates and guide frames unless otherwise recommended in writing by the sheet piling manufacturer.
  - 1. Limit vertical offset of adjacent sheet piling to 60 inches (1500 mm).
  - 2. Accurately align exposed faces of sheet piling to vary not more than 2 inches from a horizontal line and not more than 1:120 out of vertical alignment.
- C. Cut tops of sheet piling to uniform elevation at top of excavation.

### 3.5 TIEBACKS

- A. Drill, install, grout, and tension tiebacks.
- B. Test load-carrying capacity of each tieback, and replace and retest deficient tiebacks.

1. Have test loading observed by a qualified professional engineer responsible for design of excavation support and protection system.
- C. Maintain tiebacks in place until permanent construction is able to withstand lateral earth and hydrostatic pressures.

### 3.6 BRACING

- A. Locate bracing to clear columns, floor framing construction, and other permanent work. If necessary to move brace, install new bracing before removing original brace.
1. Do not place bracing where it will be cast into or included in permanent concrete work unless otherwise approved by Engineer.
  2. Install internal bracing if required to prevent spreading or distortion of braced frames.
  3. Maintain bracing until structural elements are supported by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.

### 3.7 MAINTENANCE

- A. Monitor and maintain excavation support and protection system.
- B. Prevent surface water from entering excavations by grading, dikes, or other means.
- C. Continuously monitor vibrations, settlements, and movements to ensure stability of excavations and constructed slopes and to ensure that damage to permanent structures is prevented.

### 3.8 FIELD QUALITY CONTROL

- A. Survey-Work Benchmarks: Resurvey benchmarks regularly during installation of excavation support and protection systems, excavation progress, and for as long as excavation remains open.
1. Maintain an accurate log of surveyed elevations and positions for comparison with original elevations and positions.
  2. Promptly notify Engineer if changes in elevations or positions occur or if cracks, sags, or other damage is evident in adjacent construction.
- B. Promptly correct detected bulges, breakage, or other evidence of movement to ensure that excavation support and protection system remains stable.
- C. Promptly repair damages to adjacent facilities caused by installation or faulty performance of excavation support and protection systems.

### 3.9 REMOVAL AND REPAIRS

- A. Remove excavation support and protection systems when construction has progressed sufficiently to support excavation and earth and hydrostatic pressures.

1. Remove in stages to avoid disturbing underlying soils and rock or damaging structures, pavements, facilities, and utilities.
2. Remove excavation support and protection systems to a minimum depth of 48 inches below overlying construction, and abandon remainder.
3. Fill voids immediately with approved backfill compacted to density specified in Section 312000 "Earth Moving."
4. Repair or replace, as approved by Engineer, adjacent work damaged or displaced by removing excavation support and protection systems.

B. Leave excavation support and protection systems permanently in place.

END OF SECTION 315000

## SECTION 32 01 30

### SITE RESTORATION AND REHABILITATION

#### PART 1 – GENERAL

##### 1.1 DESCRIPTION

###### A. Scope:

1. The work in this Section shall include the demolition and restoration of pavement, curbs, walks, vegetation, and turf where such items are to be or have been removed for any reason in the course of the work.
2. Contractor shall include the furnishing of all labor, materials, and equipment required to restore the pavement, curbs, walks, vegetation, and turf as provided in these specifications.
3. Demolition and removal of any pavement, curbs, walks, vegetation and turf is strictly limited to the areas delineated on the drawings, directed by the Engineer and otherwise specified. Contractor's attentions is directed to trees, vegetation, structures, utilities and other facilities that are shown on the drawings or otherwise specified to be protected and not shown to be specifically demolished or removed.
4. The Contractor shall provide for protection of existing streets and structures; the maintenance of streets, driveways, sidewalks, curbs, gutters, reseeding and resodding; protection of trees; restoration of agricultural land; the maintenance of the construction area during progress of the Work. Unless otherwise shown on the drawings, specified elsewhere, or allowed by the Engineer, the Contractor shall maintain streets and driveways open and passable at all times.
5. The standards for restoration work included in this Section are the minimum acceptable standards of the Warren County Water and Sewer Department. However the Contractor shall also provide all work in conformance with the standards required by the local governing authority, whichever is more stringent, at no additional compensation.

###### B. Standard Pavement Restoration:

1. It is the intent of these specifications that the existing depth of pavement be replaced to its full depth (including all intermediate layers, base courses, finish courses, etc.) to the minimum standards of the Warren County Water and Sewer Department, but in no case shall the Work be less than the minimum standards of the local authority having jurisdiction. The cost of complying with all such standards shall be paid for by the Contractor.
2. The drawings show pavement restoration details for the project. The Engineer shall provide the necessary interpretation of any conflicts or discrepancies between this Section and the drawings.
3. Unless otherwise shown on the drawings, specified elsewhere or directed by the Engineer, driveways shall be restored with the type of pavement that was removed.



C. Schedule and Restoration Work:

1. Restoration of all surfaces disturbed by Contractor's operations shall be restored to the standards contained in these specifications and to those of the local authority having jurisdiction within sixty (60) days of the date the surface was initially disturbed.
  - a. Engineer shall allow for reasonable extension of the sixty days time frame due to weather-related concerns. However restoration work shall restart as soon as weather permits.
2. For restoration work over pipe trenches, coordinate pavement, sod, seed and all restoration work with the scheduling of trench restoration work stated in Section 31 23 00.

D. Related Sections:

1. Section 31 13 16 – Tree and Shrub Protection and Trimming
2. Section 31 23 00 – Excavation and Fill
3. Section 32 91 19 - Topsoil
4. Section 32 92 00 – Turf and Grasses
5. Section 32 93 00 – Plants

## 1.2 QUALITY ASSURANCE

- A. Reference Standards: Comply with applicable provisions and recommendations of the latest editions of the following, except where otherwise shown or specified:
1. Ohio Department of Transportation (ODOT) "Construction and Material Specifications".
  2. ASTM D 698, Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5-lb (2.49 kg) Hammer and 12-in. (304.8-mm) Drop.
- B. The CONTRACTOR shall provide the services of a professional landscaper to restore specific areas designated or specified as gardens or landscaping to be restored. The landscaper selected shall have a minimum of 5 years of verifiable local experience and show evidence of at least five satisfactory installations.

## 1.3 SUBMITTALS

- A. Evidence satisfactory to Engineer of compliance with paragraph 1.2.B regarding professional landscaper qualifications (if required).
- B. For material(s) provided in accordance with other Section(s), submit all applicable information required by other Section(s).
- C. For material(s) required by this Section to meet requirements of ODOT, submit source or supplier identification and sufficient information and certification by source or supplier to establish compliance with the applicable ODOT standard(s).

## **PART 2 – PRODUCTS**

### **2.1 GENERAL**

A. See paragraph 1.1 for a definition of the Scope of work of this Section.

### **2.2 EARTHWORK**

A. Fill and Backfill Materials:

1. Material: Provide material meeting the requirements of Section 31 23 00. Provide Gravel Backfill where required by these specifications, the drawings and where directed by the Engineer.
2. Install as stated in Part 3 of this Section.

B. Unsuitable Soil:

1. Material: Provide material meeting the requirements of Gravel Backfill material in Section 31 23 00.
2. Install as stated in Part 3 of this Section.

### **2.3 REPLACEMENT PAVEMENT, CURBS, AND WALKS**

A. Asphalt Concrete Pavement:

1. Material: Provide material conforming to ODOT Item 448.
2. Thickness: Install asphalt concrete pavement in 1-1/2 inch or 2 inch thick courses to the total depth required as shown on the details on the drawings and as required by the local authority having jurisdiction.
3. Tack Coat: ODOT Item 407
4. Prime Coat: ODOT Item 408
5. Pavement Joints: ODOT Item 705.04
6. Subbase: ODOT Item 304 Aggregate base
  - a. Provide thickness of base course as shown on the details on the drawings and as required by the local authority having jurisdiction.
7. Base Course: ODOT Item 301 bituminous aggregate base course.
  - a. Provide thickness of base course as shown on the details on the drawings and as required by the local authority having jurisdiction.
8. Install as stated in Part 3 of this section and as shown on the drawings.

B. Concrete Pavement:

1. The concrete pavement shall consist of a single course of plain concrete pavement complying with the standards of ODOT Item 452.

2. Thickness: Provide depth of pavement to the depth required to match existing pavement and the details on the drawings but not less than the minimum required by the local authority having jurisdiction.
3. Material: Comply with the requirements of ODOT Item 499 Class C.
4. Strength: Minimum twenty-eight (28) day compressive strength of 4000 psi.
5. Base Course: Where shown on the drawing, provide ODOT Item 304 aggregate base course.
  - a. Provide thickness of base course as shown on the drawings and as required by the local authority having jurisdiction.
6. Where shown on the drawings or otherwise required, provide a finish course of ODOT Item 448 of the required thickness.
7. Installed as stated in Part 3 of this Section and as shown on the details on the drawing.

C. Gravel Pavement

1. Material: ODOT Item 411.
2. Gravel paved areas shall be restored to a minimum thickness of 12-inches.
3. Install as stated in Part 3 of this Section.

D. Temporary Pavement

1. Provide temporary pavement using 2" of ODOT Item 448.
2. Use a minimum of 12-inch thickness ODOT Item 304 temporary pavement in cold weather if no supplies of ODOT Item 448 are available.
3. Install as stated in Part 3 of this Section.

E. Concrete Curbs:

1. Material: Comply with the requirements of ODOT Item 499 Class C.
2. Curb cross section shall match that of existing curb.
3. Joint Filler: Provide one-half inch of ODOT 705.03 preformed joint filler at the following locations:
  - a. Every 40 linear feet, or less if required by local authority having jurisdiction.
  - b. All curb returns.
  - c. All sides of inlets and catch basins.
  - d. Where shown on drawings.
  - e. Where directed by the ENGINEER.

F. Concrete Walks:

1. Material: Comply with the requirements of ODOT Item 499 Class C.
2. Joint Filler: Provide one-half inch ODOT 705.03 preformed joint filler at the following locations:
  - a. Every 40 linear feet of walk or as required by local authority having jurisdiction.
3. Finish: Match existing using steel trowels for final finish.
4. Concrete walks shall be replaced to the original lines and grade to the limits of excavation. Saw cut unless otherwise shown on the drawings or directed by the ENGINEER.

## 2.4 TURF RESTORATION AND TREE/SHRUB PROTECTION

- A. The Contractor shall restore all lawns, gardens, and landscaping disturbed by Contractor's operations to its original conditions.
- B. Topsoil:
  1. Provide topsoil and soil amendments for restorations in accordance with Section 32 91 19 of the Specifications.
  2. Contractor shall provide a minimum of six (6) inches of top soil unless otherwise shown on the drawings.
- C. Turf:
  1. Turf areas shall be established by seeding and mulching or sodding in accordance with Section 32 92 00.
  2. The extent of seeding, mulching and sodding shall be as shown on the drawings or otherwise specified or directed by the Engineer.
- D. The Contractor shall employ the services of a local registered landscaping professional to provide, restore, and maintain all turf, trees, and landscaping required under this work.
- E. Tree and shrub protection and trimming shall be provided in accordance with Section 31 13 16.

## PART 3 – EXECUTION

### 3.1 GENERAL

- A. Contractor shall provide the Owner any other party who will eventually be responsible for restored areas with explicit written instructions for maintaining restored areas, including shrubs, seed, sod, and landscaping.
- B. Water
  1. Contractor shall provide all water and watering equipment necessary to start and

maintain plant growth.

2. Water obtained from Owner's facilities shall be metered.
  3. Cost of water obtained from Owner's facilities shall be paid by Contractor to OWNER at OWNER'S standard rates.
- C. Existing pavement, gutters, curbs, walks, driveways, and roadways disturbed or damaged by the Contractor's operations shall be restored or replaced as specified in this Section.

### **3.2 EARTHWORK**

A. Fill and Backfill:

1. Install to lines and grades as required to accommodate the specified restoration work.

B. Subgrade:

1. Subgrade shall be brought up to final elevations using approved excavated material.
2. Subgrade preparation shall be limited by prevailing weather and field conditions.

C. Compaction of Subgrades and Finished Grades:

1. Compact all fill and backfill to a firm foundation with compactor. Minimum density shall be 95% of the maximum density as determined in accordance with ASTM-D698.
2. Compaction shall be done in lifts. A lift shall not be placed until the lower lift has achieved required density.
  - a. Maximum lift thickness: 12 inches.
  - b. For trench backfill installation see Section 31 23 00.

D. Unsuitable Soil:

1. Replace all soil material unsuitable for its intended purpose as determined by the ENGINEER with Gravel Backfill as specified in Section 31 23 00.
2. Replace soft spots that develop during compaction and are otherwise detected. The unsuitable materials shall be removed as directed by the ENGINEER and replaced with Gravel Backfill as specified in Section 31 23 00.

E. Preparation of subgrade and subbase over pipe trenches shall be as specified in Section 31 23 00.

### **3.3 RESTORATION OF EXISTING PAVEMENT, CURBS, AND WALKS**

A. Contractor shall place permanent pavement at finished grades immediately after backfilling trenches in paved roadways, driveways, sidewalks, or other existing paved facility.

1. Comply with the schedule in Section 31 23 00 for pavement to be restored over pipe trenches.
2. If permanent pavement cannot be installed, Contractor shall place temporary pavement

as specified in this Section.

B. Compaction:

1. Vibratory compactors shall not weigh less than ten (10) tons.
2. Density: Pavement densities shall be as required by the appropriate ODOT specification.
3. Compaction of pavement base course shall include berms to a minimum width of two (2) feet on each side of the paved area.

C. Restoration of Pavement over Trenches: Comply with the schedule in Section 31 23 00 regarding restoration over trenches.

1. Contractor shall maintain in good and safe condition during progress of the entire Work the surface of the paved area over the trench, and shall promptly fill all depressions over and adjacent to the trench caused by settlement of backfilling.

D. Asphalt Concrete Pavement:

1. Comply with details on the drawings.
2. Provide an application of 0.5 gallons/square yard prime coat between the base course and the asphalt concrete course.
3. Precede each asphalt concrete layer with an application of 0.15 gallon/square yard tack coat.
4. Variation in the surface tolerances shall be corrected in a manner satisfactory to the Engineer.
5. Pavement Joints: Hot seal and sand all pavement joints in accordance with ODOT Item 705.04.

E. Concrete Pavement:

1. Comply with details on the drawings.
2. Forms shall be used on open sides so that the completed pavement has its original shape.
3. Provide anchor bolts to tie the existing pavement to the new pavement.

F. Gravel Pavement

1. Compact gravel pavement in six (6) inch lifts to match existing grade.
2. Contractor shall provide, at no additional cost to the Owner, gravel to refill gravel paved areas if settlement has taken place prior to final acceptance by the Owner.

**3.4 TEMPORARY PAVEMENT AND RESTORATION OF CROSSINGS OF PAVEMENT, CURBS, AND WALKS**

- A. Contractor shall place temporary pavement at finished grades immediately after backfilling trenches in paved roadways, driveways, sidewalks, or other existing paved facilities.

1. Comply with the schedule in Section 31 23 00 for temporary pavement to be placed over pipe trenches.
  2. Tem Pavement: Temporary means shall consist of temporary pavement as specified in Part 2 of this Section. Steel plates, gravel, and similar means may be used if allowed by the Engineer and the authority having jurisdiction over the pavement.
- B. Perpendicular Crossings: Perpendicular crossings of all pavement due to trenching or other operations shall be restored the same day the cut is made using temporary or permanent means as stated in Section 31 23 00.
1. Perpendicular is defined as a trench cut that make an angle between 41 to 90 degrees with the pavement centerline.
  2. For concrete pavement that is to receive a surface course of ODOT Item 448, the surface course shall be placed the same day the concrete is poured. If this is not possible, Contractor shall provide temporary pavement as described in this Section.
- C. Contractor shall maintain temporary pavement until the final pavement is installed.
- D. Immediately prior to construction of permanent pavement and base, Contractor shall remove and dispose of temporary pavement. Provide permanent pavement in accordance with the requirements of this Section.

### **3.5 DEMOLITION AND REMOVAL**

- A. Saw cut all pavement and curbs to full depth of material prior to removal. Limits of sawing for removal shall be a minimum of 24-inches beyond the maximum trench width.
- B. Where pavement cuts are parallel to roadway centerline, remove the pavement remaining outside the pavement cut limits if the remaining existing pavement measures less than 3 feet in width. No additional payment will be made for this pavement removal or restoration.
- C. Remove demolished material and dispose of off site unless otherwise directed by the Engineer.
- D. Pavements, trees, shrubbery, fences, poles, or other property and surface structures which have been damaged, removed or disturbed by the Contractor, whether deliberately or through failure to carry out the requirements of the contract documents, state laws, municipal ordinances, or the specific direction of the Engineer, or through failure to employ usual and reasonable safeguards shall be replaced at the expense of the Contractor.

**END OF SECTION**

## SECTION 321216 - ASPHALT PAVING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes:

- 1. Hot-mix asphalt paving.
- 2. Hot-mix asphalt overlay.
- 3. Cold milling of existing asphalt pavement.
- 4. Hot-mix asphalt patching.
- 5. Asphalt surface treatments.

- B. Related Requirements:

- 1. Section 312000 "Earth Moving" for subgrade preparation, fill material, separation geotextiles, unbound-aggregate subbase and base courses, and aggregate pavement shoulders.
- 2. Section 321313 "Concrete Paving" for concrete pavement and for separate concrete curbs, gutters, and driveway aprons.

#### 1.3 UNIT PRICES – NOT USED

#### 1.4 PREINSTALLATION MEETINGS – NOT USED

#### 1.5 ACTION SUBMITTALS

- A. Product Data: Include technical data and tested physical and performance properties.

- 1. Herbicide.
- 2. Paving geotextile.
- 3. Joint sealant.

- B. Hot-Mix Asphalt Designs:

- 1. For each hot-mix asphalt design proposed for the Work.

- C. Samples for Verification: For the following product, in manufacturer's standard sizes unless otherwise indicated:

- 1. Paving Geotextile: 12 by 12 inches minimum.



## 1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For paving-mix manufacturer and testing agency.
- B. Material Certificates: Include statement that mixes containing recycled materials will perform equal to mixes produced from all new materials.
  - 1. Aggregates.
  - 2. Asphalt binder.
  - 3. Asphalt cement.
  - 4. Cutback prime coat.
  - 5. Emulsified asphalt prime coat.
  - 6. Tack coat.
  - 7. Fog seal.
  - 8. Undersealing asphalt.
- C. Field quality-control reports.

## 1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by authorities having jurisdiction or the DOT of state in which Project is located.
- B. Testing Agency Qualifications: Qualified in accordance with ASTM D3666 for testing indicated.
- C. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of Ohio Department of Transportation (ODOT) for asphalt paving work.
  - 1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

## 1.8 FIELD CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
  - 1. Prime Coat: Minimum surface temperature of 60 deg F.
  - 2. Tack Coat: Minimum surface temperature of 60 deg F.
  - 3. Slurry Coat: Comply with weather limitations in ASTM D3910.
  - 4. Asphalt Base Course: Minimum surface temperature of 40 deg F and rising at time of placement.
  - 5. Asphalt Surface Course: Minimum surface temperature of 60 deg F at time of placement.

## PART 2 - PRODUCTS

### 2.1 AGGREGATES

- A. General: Use materials and gradations that have performed satisfactorily in previous installations.
- B. Coarse Aggregate: ASTM D692/D692M, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.
- C. Fine Aggregate: ASTM D1073 or AASHTO M 29, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.
  - 1. For hot-mix asphalt, limit natural sand to a maximum of 20 percent by weight of the total aggregate mass.
- D. Mineral Filler: ASTM D242/D242M or AASHTO M 17, rock or slag dust, hydraulic cement, or other inert material.

### 2.2 ASPHALT MATERIALS

- A. Asphalt Binder: ASTM D6373 or AASHTO M 320 binder designation PG 64-22.
- B. Asphalt Cement: ASTM D3381/D3381M for viscosity-graded material.
- C. Cutback Prime Coat: ASTM D2027/D2027M, medium-curing cutback asphalt, MC-30 or MC-70.
- D. Emulsified Asphalt Prime Coat: ASTM D977 or AASHTO M 140 emulsified asphalt, or ASTM D2397/D2397M or AASHTO M 208 cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.
- E. Tack Coat: ASTM D977 or AASHTO M 140 emulsified asphalt, or ASTM D2397/D2397M or AASHTO M 208 cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.
- F. Fog Seal: ASTM D977 or AASHTO M 140 emulsified asphalt, or ASTM D2397/D2397M or AASHTO M 208 cationic emulsified asphalt, slow setting, factory diluted in water, of suitable grade and consistency for application.
- G. Water: Potable.
- H. Undersealing Asphalt: ASTM D3141/D3141M; pumping consistency.

### 2.3 AUXILIARY MATERIALS

- A. Recycled Materials for Hot-Mix Asphalt Mixes: Reclaimed asphalt pavement; reclaimed, unbound-aggregate base material; and recycled tires, asphalt shingles, or glass from sources and

gradations that have performed satisfactorily in previous installations, equal to performance of required hot-mix asphalt paving produced from all new materials.

- B. Herbicide: Commercial chemical for weed control, registered by the EPA, and not classified as "restricted use" for locations and conditions of application. Provide in granular, liquid, or wettable powder form.
- C. Sand: ASTM D1073 or AASHTO M 29, Grade No. 2 or No. 3.
- D. Paving Geotextile: AASHTO M 288 paving fabric; nonwoven polypropylene; resistant to chemical attack, rot, and mildew; and specifically designed for paving applications.
- E. Joint Sealant: ASTM D6690, **Type II or III**, hot-applied, single-component, polymer-modified bituminous sealant.

## 2.4 MIXES

### A. Recycled Content

1. Surface Course Limit: Recycled content no more than 10 percent by weight.

B. Hot-Mix Asphalt: Dense-graded, hot-laid, hot-mix asphalt plant mixes [approved by authorities having jurisdiction] [; designed in accordance with procedures in AI MS-2, "Asphalt Mix Design Methods";] and complying with the following requirements:

- 1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
- 2. Base Course: Ohio DOT Item 301.
- 3. Binder Course: Ohio DOT Item 441 Intermediate, Type 2.
- 4. Surface Course: Ohio DOT Item 441 Surface, Type 1.

C. Emulsified-Asphalt Slurry: ASTM D3910, [**Type 2**] or [**Type 3**].

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that subgrade is dry and in suitable condition to begin paving.
- B. Proceed with paving only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Protection: Provide protective materials, procedures, and worker training to prevent asphalt materials from spilling, coating, or building up on curbs, driveway aprons, manholes, and other surfaces adjacent to the Work.

- B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
  - 1. Completely proof-roll subgrade in one direction. Limit vehicle speed to 3 mph.
  - 2. Proof-roll with a loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons.
  - 3. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed.

### 3.3 COLD MILLING – NOT USED

### 3.4 PATCHING

- A. Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.
- B. Portland Cement Concrete Pavement: Break cracked slabs and roll as required to reseal concrete pieces firmly.
  - 1. Undersealing: Pump hot undersealing asphalt under rocking slab until slab is stabilized or, if necessary, crack slab into pieces and roll to reseal pieces firmly.
  - 2. Remove disintegrated or badly cracked pavement. Excavate rectangular or trapezoidal patches, extending into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Recompact existing unbound-aggregate base course to form new subgrade.
- C. Tack Coat: Before placing patch material, apply tack coat uniformly to vertical asphalt surfaces abutting the patch. Apply at a rate of 0.05 to 0.15 gal./sq. yd.
  - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
  - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- D. Placing Two-Course Patch Material: Partially fill excavated pavements with hot-mix asphalt base course mix and, while still hot, compact. Cover asphalt base course with compacted layer of hot-mix asphalt surface course, finished flush with adjacent surfaces.

### 3.5 REPAIRS

- A. Leveling Course: Install and compact leveling course consisting of hot-mix asphalt surface course to level sags and fill depressions deeper than 1 inch in existing pavements.
  - 1. Install leveling wedges in compacted lifts not exceeding 3 inches thick.
- B. Crack and Joint Filling: Remove existing joint filler material from cracks or joints to a depth of 1/4 inch.

1. Clean cracks and joints in existing hot-mix asphalt pavement.
2. Use emulsified-asphalt slurry to seal cracks and joints less than 1/4 inch wide. Fill flush with surface of existing pavement and remove excess.
3. Use hot-applied joint sealant to seal cracks and joints more than 1/4 inch wide. Fill flush with surface of existing pavement and remove excess.

### 3.6 SURFACE PREPARATION

- A. Ensure that prepared subgrade has been proof-rolled and is ready to receive paving. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces.
- B. Herbicide Treatment: Apply herbicide in accordance with manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted-aggregate base before applying paving materials.
  1. Mix herbicide with prime coat if formulated by manufacturer for that purpose.
- C. Cutback Prime Coat: Apply uniformly over surface of compacted unbound-aggregate base course at a rate of 0.15 to 0.50 gal./sq. yd. Apply enough material to penetrate and seal, but not flood, surface. Allow prime coat to cure.
  1. If prime coat is not entirely absorbed within 24 hours after application, spread sand over surface to blot excess asphalt. Use enough sand to prevent pickup under traffic. Remove loose sand by sweeping before pavement is placed and after volatiles have evaporated.
  2. Protect primed substrate from damage until ready to receive paving.
- D. Emulsified Asphalt Prime Coat: Apply uniformly over surface of compacted unbound-aggregate base course at a rate of 0.10 to 0.30 gal./sq. yd. per inch depth. Apply enough material to penetrate and seal, but not flood, surface. Allow prime coat to cure.
  1. If prime coat is not entirely absorbed within 24 hours after application, spread sand over surface to blot excess asphalt. Use enough sand to prevent pickup under traffic. Remove loose sand by sweeping before pavement is placed and after volatiles have evaporated.
  2. Protect primed substrate from damage until ready to receive paving.
- E. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd.
  1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
  2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

### 3.7 INSTALLATION OF PAVING GEOTEXTILE – NOT USED

### 3.8 HOT-MIX ASPHALT PLACEMENT

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
  - 1. Place hot-mix asphalt base course in number of lifts and thicknesses indicated.
  - 2. Place hot-mix asphalt surface course in single lift.
  - 3. Spread mix at a minimum temperature of 250 deg F.
  - 4. Begin applying mix along centerline of crown for crowned sections and on high side of one-way slopes unless otherwise indicated.
  - 5. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.
- B. Place paving in consecutive strips not less than 10 feet wide unless infill edge strips of a lesser width are required.
  - 1. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Overlap mix placement about 1 to 1-1/2 inches from strip to strip to ensure proper compaction of mix along longitudinal joints.
  - 2. Complete a section of asphalt base course before placing asphalt surface course.
- C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

### 3.9 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.
  - 1. Clean contact surfaces and apply tack coat to joints.
  - 2. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
  - 3. Offset transverse joints, in successive courses, a minimum of 24 inches.
  - 4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method in accordance with AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."
  - 5. Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
  - 6. Compact asphalt at joints to a density within 2 percent of specified course density.

### 3.10 COMPACTION

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.
  - 1. Complete compaction before mix temperature cools to 185 deg F.
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
  - 1. Average Density, Marshall Test Method: 96 percent of reference laboratory density in accordance with ASTM D6927 or AASHTO T 245, but not less than 94 percent or greater than 100 percent.
  - 2. Average Density, Rice Test Method: 92 percent of reference maximum theoretical density in accordance with ASTM D2041/D2041M, but not less than 90 percent or greater than 96 percent.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Repairs: Remove paved areas that are defective or contaminated with foreign materials and replace with fresh, hot-mix asphalt. Compact by rolling to specified density and surface smoothness.
- G. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- H. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

### 3.11 ASPHALT CURBS – NOT USED

### 3.12 ASPHALT TRAFFIC-CALMING DEVICES – NOT USED

### 3.13 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce thickness indicated within the following tolerances:
  - 1. Base Course and Binder Course: Plus or minus 1/2 inch.

2. Surface Course: Plus 1/4 inch, no minus.
- B. Pavement Surface Smoothness: Compact each course to produce surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
1. Base Course and Binder Course: 1/4 inch.
  2. Surface Course: 1/8 inch.
  3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

### 3.14 SURFACE TREATMENTS

- A. Fog Seals: Apply fog seal at a rate of 0.10 to 0.15 gal./sq. yd. to existing asphalt pavement and allow to cure. With fine sand, lightly dust areas receiving excess fog seal.
- B. Slurry Seals: Apply slurry coat in a uniform thickness in accordance with ASTM D3910 and allow to cure.
1. Roll slurry seal to remove ridges and provide a uniform, smooth surface.

### 3.15 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Thickness: In-place compacted thickness of hot-mix asphalt courses will be determined in accordance with ASTM D3549/D3549M.
- C. Surface Smoothness: Finished surface of each hot-mix asphalt course will be tested for compliance with smoothness tolerances.
- D. In-Place Density: Testing agency will take samples of uncompacted paving mixtures and compacted pavement in accordance with ASTM D979/D979M or AASHTO T 168.
1. Reference maximum theoretical density will be determined by averaging results from four samples of hot-mix asphalt-paving mixture delivered daily to site, prepared in accordance with ASTM D2041/D2041M, and compacted in accordance with job-mix specifications.
  2. In-place density of compacted pavement will be determined by testing core samples in accordance with ASTM D1188 or ASTM D2726/D2726M.
    - a. One core sample will be taken for every 1000 sq. yd. or less of installed pavement, with no fewer than three cores taken.
    - b. Field density of in-place compacted pavement may also be determined by nuclear method in accordance with ASTM D2950/D2950M and coordinated with ASTM D1188 or ASTM D2726/D2726M.
- E. Replace and compact hot-mix asphalt where core tests were taken.



- F. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.16 WASTE HANDLING

- A. General: Handle asphalt-paving waste in accordance with approved waste management plan required in Section 017419 "Construction Waste Management and Disposal."

END OF SECTION 321216

## SECTION 321313 - CONCRETE PAVING

### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

#### 1.2 SUMMARY

- A. Section Includes Concrete Paving:

1. Driveways.
2. Roadways.
3. Parking lots.
4. Curbs and gutters.
5. Walks.

- B. Related Requirements:

1. None

#### 1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

#### 1.4 PREINSTALLATION MEETINGS – NOT USED

#### 1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Initial Selection: For each type of product, ingredient, or admixture requiring color selection.
- C. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

## 1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer of stamped detectable warnings, ready-mix concrete manufacturer, and testing agency.
- B. Material Certificates: For the following, from manufacturer:
  - 1. Cementitious materials.
  - 2. Steel reinforcement and reinforcement accessories.
  - 3. Fiber reinforcement.
  - 4. Admixtures.
  - 5. Curing compounds.
  - 6. Applied finish materials.
  - 7. Bonding agent or epoxy adhesive.
  - 8. Joint fillers.
- C. Material Test Reports: For each of the following:
  - 1. Aggregates: Include service-record data indicating absence of deleterious expansion of concrete due to alkali-aggregate reactivity.
- D. Field quality-control reports.

## 1.7 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C94/C94M requirements for production facilities and equipment.
  - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").
- B. Testing Agency Qualifications: Qualified according to ASTM C1077 and ASTM E329 for testing indicated.
  - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

## 1.8 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified independent testing agency to perform preconstruction testing on concrete paving mixtures.

## 1.9 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

- B. Cold-Weather Concrete Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:
  - 1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
  - 2. Do not use frozen materials or materials containing ice or snow.
  - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.
  
- C. Hot-Weather Concrete Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
  - 1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
  - 2. Cover steel reinforcement with water-soaked burlap, so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
  - 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

## PART 2 - PRODUCTS

### 2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless otherwise indicated.

### 2.2 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
  - 1. Use flexible or uniformly curved forms for curves with a radius of 100 feet or less.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

### 2.3 STEEL REINFORCEMENT

- A. Plain-Steel Welded-Wire Reinforcement: ASTM A1064/A1064M, fabricated from galvanized-steel wire into flat sheets.
- B. Deformed-Steel Welded-Wire Reinforcement: ASTM A1064/A1064M, flat sheet.
- C. Epoxy-Coated Welded-Wire Reinforcement: ASTM A884/A884M, Class A, plain steel.

- D. Reinforcing Bars: ASTM A615/A615M, Grade 60; deformed.
- E. Galvanized Reinforcing Bars: ASTM A767/A767M, Class II zinc coated, hot-dip galvanized after fabrication and bending; with ASTM A615/A615M, Grade 60 deformed bars.
- F. Epoxy-Coated Reinforcing Bars: ASTM A775/A775M or ASTM A934/A934M; with ASTM A615/A615M, Grade 60 deformed bars.
- G. Steel Bar Mats: ASTM A184/A184M; with ASTM A615/A615M, Grade 60 deformed bars; assembled with clips.
- H. Plain-Steel Wire: ASTM A1064/A1064M, galvanized.
- I. Deformed-Steel Wire: ASTM A1064/A1064M.
- J. Epoxy-Coated-Steel Wire: ASTM A884/A884M, Class A; coated, plain.
- K. Joint Dowel Bars: ASTM A615/A615M, Grade 60 plain-steel bars; zinc coated (galvanized) after fabrication according to ASTM A767/A767M, Class I coating. Cut bars true to length with ends square and free of burrs.
- L. Epoxy-Coated, Joint Dowel Bars: ASTM A775/A775M; with ASTM A615/A615M, **Grade 60** plain-steel bars.
- M. Tie Bars: ASTM A615/A615M, Grade 60; deformed.
- N. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded-wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified, and as follows:
  - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.
  - 2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.
- O. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating, compatible with epoxy coating on reinforcement.
- P. Zinc Repair Material: ASTM A780/A780M.

## 2.4 CONCRETE MATERIALS

- A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project:
  - 1. Portland Cement: ASTM C150/C150M, **gray** portland cement **Type I/II**.
  - 2. Fly Ash: ASTM C618, Class C or Class F.
  - 3. Slag Cement: ASTM C989/C989M, Grade 100 or 120.
  - 4. Blended Hydraulic Cement: ASTM C595/C595M, **Type II, Portland-limestone** cement.

- B. Normal-Weight Aggregates: ASTM C33/C33M, **Class 4S** , uniformly graded. Provide aggregates from a single source with documented service-record data of at least 10 years' satisfactory service in similar paving applications and service conditions using similar aggregates and cementitious materials.
  - 1. Maximum Coarse-Aggregate Size: [1-1/2 inches] nominal.
  - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Exposed Aggregate: Selected, hard, and durable; washed; free of materials with deleterious reactivity to cement or that cause staining; from a single source, with gap-graded coarse aggregate as follows:
  - 1. Aggregate Sizes: 3/4 to 1 inch nominal.
- D. Air-Entraining Admixture: ASTM C260/C260M.
- E. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.
  - 1. Water-Reducing Admixture: ASTM C494/C494M, Type A.
  - 2. Retarding Admixture: ASTM C494/C494M, Type B.
  - 3. Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type D.
  - 4. High-Range, Water-Reducing Admixture: ASTM C494/C494M, Type F.
  - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C494/C494M, Type G.
  - 6. Plasticizing and Retarding Admixture: ASTM C1017/C1017M, Type II.
- F. Color Pigment: ASTM C979/C979M, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, free of carbon black, nonfading, and resistant to lime and other alkalis.
  - 1. Color: As indicated by manufacturer's designation.
- G. Water: Potable and complying with ASTM C94/C94M.

## 2.5 FIBER REINFORCEMENT

- A. Synthetic Fiber: Monofilament polypropylene fibers engineered and designed for use in decorative concrete paving, complying with ASTM C1116/C1116M, Type III, 1/2 to 1-1/2 inches long.
- B. Synthetic Fiber: Fibrillated polypropylene fibers engineered and designed for use in decorative concrete paving, complying with ASTM C1116/C1116M, Type III, 1/2 to 1-1/2 inches long.

## 2.6 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry or cotton mats.
- B. Moisture-Retaining Cover: ASTM C171, polyethylene film or white burlap-polyethylene sheet.

- C. Water: Potable.
- D. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.

## 2.7 RELATED MATERIALS

- A. Joint Fillers: ASTM D1751, asphalt-saturated cellulosic fiber or ASTM D1752, cork or self-expanding cork in preformed strips.
- B. Slip-Resistive Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of fused aluminum-oxide granules or crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials.
- C. Bonding Agent: ASTM C1059/C1059M, Type II, non-redispersible, acrylic emulsion or styrene butadiene.
- D. Epoxy-Bonding Adhesive: ASTM C881/C881M, two-component epoxy resin capable of humid curing and bonding to damp surfaces; of class suitable for application temperature, of grade complying with requirements, and of the following types:
  - 1. Types I and II, nonload bearing or Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
- E. Chemical Surface Retarder: Water-soluble, liquid, set retarder with color dye, for horizontal concrete surface application, capable of temporarily delaying final hardening of concrete to a depth of 1/8 to 1/4 inch.
- F. Pigmented Mineral Dry-Shake Hardener: Factory-packaged, dry combination of portland cement, graded quartz aggregate, color pigments, and plasticizing admixture. Use color pigments that are finely ground, nonfading mineral oxides interground with cement.
  - 1. Color: As indicated by manufacturer's designation
- G. Rock Salt: Sodium chloride crystals, kiln dried, coarse gradation with 100 percent passing 3/8-inch sieve and 85 percent retained on a No. 8 sieve.

## 2.8 STAMPED DETECTABLE WARNING MATERIALS – NOT USED

## 2.9 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.
  - 1. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method.
  - 2. When automatic machine placement is used, determine design mixtures and obtain laboratory test results that comply with or exceed requirements.

- B. Cementitious Materials: Use fly ash, pozzolan, slag cement, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
  - 1. Air Content: **5-1/2** percent plus or minus 1-1/2 percent for 1-1/2-inch nominal maximum aggregate size.
- D. Limit water-soluble, chloride-ion content in hardened concrete to [0.15] [0.30] percent by weight of cement.
- E. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
  - 1. Use water-reducing admixture in concrete as required for placement and workability.
  - 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- F. Synthetic Fiber: Uniformly disperse in concrete mixture at manufacturer's recommended rate, but not less than [1.0 lb/cu. yd.] [1.5 lb/cu. yd.].
- G. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions and to result in hardened concrete color consistent with approved mockup.
- H. Concrete Mixtures: Normal-weight concrete.
  - 1. Compressive Strength (28 Days): [4000 psi .
  - 2. Maximum W/C Ratio at Point of Placement: 0.45 .
  - 3. Slump Limit: 5 inches >, plus or minus 1 inch.

## 2.10 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C94/C94M and ASTM C1116/C1116M. Furnish batch certificates for each batch discharged and used in the Work.
  - 1. When air temperature is between 85 and 90 deg F , reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C94/C94M. Mix concrete materials in appropriate drum-type batch machine mixer.
  - 1. For concrete batches of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
  - 2. For concrete batches larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.



3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixing time, quantity, and amount of water added.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

### 3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

### 3.4 STEEL REINFORCEMENT INSTALLATION

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded-wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.
- E. Zinc-Coated Reinforcement: Use galvanized-steel wire ties to fasten zinc-coated reinforcement. Repair cut and damaged zinc coatings with zinc repair material.
- F. Epoxy-Coated Reinforcement: Use epoxy-coated steel wire ties to fasten epoxy-coated reinforcement. Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D3963/D3963M.

- G. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities, or replace units as required before placement. Set mats for a minimum 2-inch overlap of adjacent mats.

### 3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
  - 1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
  - 1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
  - 2. Provide tie bars at sides of paving strips where indicated.
  - 3. Butt Joints: Use bonding agent or epoxy-bonding adhesive at joint locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
  - 4. Keyed Joints: Provide preformed keyway-section forms or bulkhead forms with keys unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
  - 5. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
  - 1. Locate expansion joints at intervals of 50 feet unless otherwise indicated.
  - 2. Extend joint fillers full width and depth of joint.
  - 3. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
  - 4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
  - 5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
  - 6. During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows, to match jointing of existing adjacent concrete paving:
  - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction

joints after applying surface finishes. Eliminate grooving-tool marks on concrete surfaces.

- a. Tolerance: Ensure that grooved joints are within 3 inches either way from centers of dowels.
  2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch-wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.
    - a. Tolerance: Ensure that sawed joints are within 3 inches either way from centers of dowels.
  3. Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.
- E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 3/8-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.

### 3.6 CONCRETE PLACEMENT

- A. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in.
- B. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.
- F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- G. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
  1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement, dowels, and joint devices.
- H. Screed paving surface with a straightedge and strike off.

- I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleedwater appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- J. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing.
- K. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.
  - 1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.

### 3.7 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleedwater sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
  - 1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
  - 2. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface, perpendicular to line of traffic, to provide a uniform, fine-line texture.
  - 3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

### 3.8 SPECIAL FINISHES – NOT USED

### 3.9 DETECTABLE WARNING INSTALLATION – NOT USED

### 3.10 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.

- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound, or a combination of these as follows:
  - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
    - a. Water.
    - b. Continuous water-fog spray.
    - c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
  - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears occurring during installation or curing period, using cover material and waterproof tape.
  - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating, and repair damage during curing period.

### 3.11 PAVING TOLERANCES

- A. Comply with tolerances in ACI 117 and as follows:
  - 1. Elevation: 3/4 inch.
  - 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
  - 3. Surface: Gap below 10-feet-long; unlevelled straightedge not to exceed 1/2 inch.
  - 4. Alignment of Tie-Bar End Relative to Line Perpendicular to Paving Edge: 1/2 inch per 12 inches of tie bar.
  - 5. Lateral Alignment and Spacing of Dowels: 1 inch.
  - 6. Vertical Alignment of Dowels: 1/4 inch.
  - 7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel.
  - 8. Joint Spacing: 3 inches.
  - 9. Contraction Joint Depth: Plus 1/4 inch, no minus.
  - 10. Joint Width: Plus 1/8 inch, no minus.

### 3.12 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Testing Services: Testing and inspecting of composite samples of fresh concrete obtained according to ASTM C172/C172M shall be performed according to the following requirements:
  - 1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or 5000 sq. ft. or fraction thereof of each concrete mixture placed each day.

- a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
  2. Slump: ASTM C143/C143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
  3. Air Content: ASTM C231/C231M, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
  4. Concrete Temperature: ASTM C1064/C1064M; one test hourly when air temperature is 40 deg F and below and when it is 80 deg F and above, and one test for each composite sample.
  5. Compression Test Specimens: ASTM C31/C31M; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
  6. Compressive-Strength Tests: ASTM C39/C39M; test one specimen at seven days and two specimens at 28 days.
    - a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.
- C. Strength of each concrete mixture will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect.
- G. Concrete paving will be considered defective if it does not pass tests and inspections.
- H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- I. Prepare test and inspection reports.

### 3.13 REPAIR AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.
- B. Drill test cores, where directed by Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.
- C. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 321313

**SECTION 32 92 00**

**TURF AND GRASSES**

**PART 1 – GENERAL**

**1.1 DESCRIPTION**

A. Scope:

1. Contractor shall furnish all labor, materials, equipment and incidentals required and provide erosion control and place topsoil, finish grade, apply lime and fertilizer, hydraulically apply seed and mulch and maintain all seeded areas as shown on the Drawings and as specified herein, including all areas disturbed.
2. All work shall be in accordance with Ohio Environmental Protection Agency (OEPA) requirements.

B. Related Work

1. Site preparation including clearing, grubbing, and stripping is included in Section 31 10 00.
2. Earthwork including excavation, backfill, fill materials, and grading including stockpiling of topsoil is included in Section 31 00 00.
3. Sedimentation and erosion control is included in Section 31 25 00.

**1.2 SUBMITTALS**

- A. Samples of all materials shall be submitted for inspection and acceptance upon Engineer’s request.

**PART 2 – PRODUCTS**

**2.1 MATERIALS**

- A. Topsoil shall be fertile, friable, natural topsoil typical of topsoil of the locality and shall be obtained from a well drained site that is free of flooding. It shall be without admixture of subsoil or slag and free of stones, lumps, plants or their roots, sticks, clay, peat and other extraneous matter and shall not be delivered to the site or used while in a frozen or muddy condition. Topsoil as delivered to the site or stockpiled shall have pH between 6.0 and 7.0 and shall contain not less than 5 percent nor more than 8 percent organic matter as determined by loss of ignition of moisture free samples dried at 100 degrees Celsius. The topsoil shall meet the following mechanical analysis:

	<u>Percentage Finer</u>
1-inch screen opening	100
No. 10 mesh	95 to 100
No. 270 mesh	35 to 75
0.002 mm*	5 to 25

\*Clay size fraction determined by pipette or hydrometer analysis



1. At least 30 days prior to anticipated start of topsoiling operations a one pint sample of topsoil material shall be delivered to the Engineer for testing and approval. Based on tests performed by the Engineer, the topsoil shall be identified as acceptable, acceptable with certain fertilizer and limestone applications or unacceptable. If the topsoil is found acceptable the fertilizer and lime requirements will be as specified or as recommended by the Engineer. If the topsoil is found unacceptable, identify another source of topsoil and incur all expenses associated with testing additional samples. All topsoil incorporated into the site work shall match the sample provided to the Engineer for testing. Topsoil stockpiled under other Sections of this Division may be used subject to the testing and approval outlined above. Be responsible for screening stockpiled topsoil and providing additional topsoil as required at Contractor's expense.
  
- B. Fertilizer shall be commercial mixed free flowing granules or pelleted fertilizer, 10-20-10 (N-P2O5-K2O) grade for lawn and naturalized areas. Fertilizer shall be delivered to the site in original unopened containers each showing the manufacturer's guaranteed analysis conforming to applicable state fertilizer laws. At least 40 percent of the nitrogen in the fertilizer used shall be in slowly available (organic) form.
  
- C. Lime shall be ground limestone containing not less than 85 percent calcium and magnesium carbonates and be ground to such fineness that at least 50 percent shall pass a 100-mesh sieve and at least 90 percent shall pass a 20-mesh sieve.
  
- D. Seed shall be labeled in accordance with USDA Rules and Regulations under the Federal Seed Act and applicable State seed laws. Seed shall be furnished in sealed bags or containers bearing the date of the last germination, which date shall be within a period of 6 months prior to commencement of planting operations. Seed shall be from same or previous year's crop; each variety of seed shall have a purity of not less than 85 percent, a percentage of germination not less than 90 percent, shall have a weed content of not more than 1 percent and contain no noxious weeds. The seed mixtures shall consist of seed proportioned by weight as follows:
  1. Lawn Area Seed Mix:
 

"Rebel II" Tall Fescue	70 percent
"Baron" Kentucky Bluegrass	10 percent
"Palmer" Perennial Ryegrass	20 percent
  
  2. Natural Area Seed Mix (For all slopes):
 

Kentucky 31 Fescue	40 percent
Palmer Perennial Ryegrass	30 percent
Birds Foot Trefoil (Empire Variety)	15 percent
Red Clover	5 percent
White Clover	5 percent
Redtop (Streaker Variety)	5 percent
  
  3. The seed shall be furnished and delivered premixed in the proportions specified above. A manufacturer's certificate of compliance to the specified mixes shall be submitted by the manufacturers for each seed type. These certificates shall include the guaranteed percentages of purity, weed content and germination of the seed and also the net weight and date of shipment. No seed may be sown until the certificates have been submitted.

4. Seed shall be delivered in sealed containers bearing the dealer's guaranteed analysis.
- E. Mulch shall be a specially processed 100 percent Virgin wood fiber mulch containing no growth or germination inhibiting factors. Wood fiber mulch shall be "Second Nature Regenerated wood fiber as by Central Fiber Corporation, Wellsville, KS or equal. It shall be manufactured in such a manner that after addition and agitation in slurry tanks with water, the fibers in the material become uniformly suspended to form a homogeneous slurry. When sprayed on the ground, the material shall allow absorption and percolation of moisture. Each package of the wood fiber shall be marked by the manufacturer to show the air dry weight content and not contain in excess of 10 percent moisture.
- F. Erosion control blanket is specified in Section 31 25 00.
- G. Straw Mulch is specified in Section 31 25 00.
- H. Tackifier is specified in Section 31 25 00.

## **PART 3 – EXECUTION**

### **3.1 APPLICATION**

- A. Unless otherwise shown on the Drawings, topsoil shall be placed to a minimum compacted depth of six (6) inches on all parts of the site not covered with structures, pavement, or existing woodland.
- B. For all areas to be seeded:
  1. Lime shall be applied at the rate of 150 lbs/1,000 sq ft or as determined by the soil test to bring topsoil pH to a range of 6.0 to 7.0.
  2. Fertilizer (10-20-10) shall be applied at the rate of 30 lbs/1,000 sq ft or as determined by the soil test.
  3. Seed shall be applied at the rate of 5 lbs/1,000 sq ft.
  4. Fiber mulch shall be applied at the rate of 45 lbs/1,000 sq ft.
  5. Straw mulch shall be applied to all slopes of 3 horizontal to 1 vertical and steeper at a rate of 75 lbs/1,000 sq ft.
  6. Tackifier shall be installed per manufacturer's instructions and reapplied as necessary to insure the straw mulch is stabilized until reasonable turf growth is established as determined by the Engineer with a minimum rate of 1 gal/1,000 sq ft per application.
- C. If possible, limestone shall be applied 2 to 3 months before the application of fertilizer. Limestone may not be mixed with fertilizer for application and shall be applied a minimum of 2 weeks prior to fertilizer application.
- D. After topsoil is placed and before it is raked to true lines and rooled, limestone shall be spread evenly over the loam surface and thoroughly incorporated by heavy raking to at least one half the depth of topsoil.

- E. The application of fertilizer may be performed hydraulically in one operation with hydroseeding and fiber mulching. Clean all structures and paved areas of unwanted deposits of the hydroseeded material.
- F. Straw Mulch and Tackifier shall be applied immediately following seeding operation (same day) unless otherwise approved by the Engineer.

### 3.2 INSTALLATION

- A. Previously established grades, as shown on Drawings shall be maintained in a true and even condition.
- B. Subgrade shall be prepared by tilling prior to placement of topsoil to obtain a more satisfactory bond between the two layers. Tillage operations shall be across the slope. Tillage shall not take place on slopes steeper than 2 horizontal to 1 vertical or where tillage equipment cannot be operated. Tillage shall be accomplished by disking or harrowing to a depth of 9 in parallel to contours. Tillage shall not be performed when the subgrade is frozen, excessively wet, extremely dry or in other conditions which would not permit tillage. The subgrade shall be raked and all rubbish, sticks, roots and stones larger than 2 in shall be removed. Subgrade surfaces shall be raked or otherwise loosened immediately prior to being covered with loam.
- C. Topsoil shall be placed over approved areas to a depth sufficiently greater than required so that after natural settlement and light rolling, the complete work will conform to the lines, grades and elevations indicated. No loam shall be spread in water or while frozen or muddy.
- D. After topsoil has been spread, it shall be carefully prepared by scarifying or harrowing and hand raking. All stiff clods, lumps, roots, litter and other foreign material shall be removed from the loamed area and disposed of. The areas shall also be free of smaller stones, in excessive quantities, as determine by the Engineer. The whole surface shall then be rolled with a hand roller weighing not more than 100 lbs/ft of width. During the rolling, all depressions caused by settlement of rolling shall be filled with additional loam and the surface shall be regraded and rolled until a smooth and even finished grade is created.
- E. Seeding, mulching and conditioning shall only be performed during those periods within the seasons which are normal for such work as determined by the weather and locally accepted practice, as approved by the ENGINEER. Hydroseed and straw mulch only on a calm day.
- F. Schedules for seeding and fertilizing must be submitted to the Engineer for approval prior to the work. Seeding as specified herein shall be accomplished between the period of April 1 to June 1 or August 15 to October 15. Seeding during the period from October 16 to March 31 shall only be undertaken upon approval of the Engineer. Seeding during the period from June 1 to August 14 shall only be performed if irrigation is provided.
- G. Seeding shall be done within ten days following soil preparation. Seed shall be applied hydraulically at the rates and percentages indicated. The spraying equipment and mixture shall be so designed that when the mixture is sprayed over an area, the grass seed and mulch shall be equal in quantity to the specified rates. Prior to the start of work, furnish the

Engineer with a certified statement as to the number of pounds of materials to be used per 100 gallons of water. This statement shall also specify the number of square feet of seeding that can be covered with the quantity of solution in the hydroseeder. Upon completion of seeding operations, furnish the Engineer with a certified statement on the actual quantity of solution applied.

- H. In order to prevent unnecessary erosion of newly topsoiled and graded slopes and unnecessary siltation of drainageways, carry out seeding and mulching as soon as he has satisfactorily completed a unit or portion of the project. For the purpose of this project a unit is defined as 10,000 sq ft. When protection of newly loamed and graded areas is necessary at a time which is outside of the normal seeding season, protect those areas by what ever means necessary as approved by the Engineer and shall be responsible for prevention of siltation in the areas beyond the limit of work.
- I. Erosion control blankets shall be installed in all drainage swales and ditches as shown on the Drawings and as directed by the Engineer in accordance manufacturer's instructions. The area to be covered shall be properly prepared, fertilized and seeded before the blanket is applied. When the blanket is unrolled, the netting shall be on top and the fibers in contact with the soil over the entire area. The blankets shall be applied in the direction of water flow, butted snugly at the ends and side and stapled. Blankets shall be placed a minimum of three rows (of 4-ft) wide (total 12 ft width) within the drainage swale/ditch and stapled together in accordance with manufacturer's instructions. The staples shall be made of wire, .091 in in diameter or greater, "U" shaped with legs 6 in in length and a 1 in crown. The staples shall be driven vertically into the ground, spaced approximately two linear yards apart, on each side and one row in the center alternately spaced between each size. Adjoining shall not be overlapped and shall utilize a common row of staples to attach.
- J. When newly graded subgrade areas cannot be topsoiled and seeded because of season or weather conditions and will remain exposed for more than 30 days, protect those areas against erosion and washouts by whatever means necessary such as straw applied with a tar tack, wood chips or by other measures as approved by the Engineer. Prior to application of topsoil, any such materials applied for erosion control shall be thoroughly incorporated into the subgrade by discing. Fertilizer shall be applied prior to spreading of topsoil.
- K. On slopes in addition to straw mulch and tackifier, provide against washouts by an approved method. Any washout which occurs shall be regraded and reseeded at the Contractor's expense until a good turf is established.

### **3.3 MAINTENANCE AND PROVISIONAL ACCEPTANCE**

- A. Keep all seeded areas watered and mowed and in good condition, reseeding all seeded areas if and when necessary until a good, healthy, uniform growth is established over the entire area seeded and shall maintain all seeded areas in an approved condition until provisional acceptance.
- B. The Engineer will inspect all work for provisional acceptance at the end of the ten (10) week maintenance period, upon written request received at least ten (10) days before the anticipated date of inspection.

1. The maintenance period must occur during the growing season between March 31 and October 1 and shall include a minimum of three (3) mowings.
- C. A satisfactory turf will be defined as:
1. No bare spots larger than three (3) square feet.
  2. No more than ten (10) percent of total area with bare spots larger than one (1) square foot.
  3. Not more than fifteen (15) percent of total area with bare spots larger than six (6) inch square.
- D. After the inspection has occurred but prior to provisional acceptance, a soil test shall be performed to determine if additional soil fertilization should occur. If necessary additional fertilizer not to exceed 30 lbs/1,000 sq ft of 20-10-10 shall be applied as directed by the Engineer.
- E. Furnish full and complete written instructions for maintenance of the seeded areas to the Owner at the time of provisional acceptance.
- F. The inspection by the Engineer will determine whether maintenance shall continue. Continue maintenance until all areas of the site meet the minimum requires specified above.
- G. After all necessary corrective work and clean-up has been completed, and maintenance instruction have been received by the Owner, the Engineer will certify in writing the provisional acceptance of the turf areas. Maintenance of all turf areas shall cease on receipt of provisional acceptance.

### **3.4 GUARANTEE PERIOD AND FINAL ACCEPTANCE**

- A. All seeded areas shall be guaranteed for not less than 1 full year from the time of provisional acceptance.
- B. At the end of the guarantee period, inspection will be made by the Engineer upon written request submitted at least 10 days before the anticipated date. Seeded areas not demonstrating satisfactory stands as outlined above, as determined by the Engineer, shall be renovated, reseeded and maintained meeting all requirements as specified herein.
- C. After all necessary corrective work has been completed, the Engineer shall certify in writing the final acceptance of the seeded areas.

**END OF SECTION**

**SECTION 33 10 00**  
**WATER UTILITIES**

**PART 1 - GENERAL**

1.01 DESCRIPTION:

- A. Provide water utilities beyond 5 feet from buildings as indicated and in compliance with Contract Documents.
- B. Section includes:
  - 1. Water line valves, fire hydrants, accessories and appurtenances.

1.02 REFERENCES:

- A. American Association of State Highway and Transportation Officials (AASHTO):
  - 1. HS 20-44: Specification for Highway Bridges, 16th Edition.
- B. American Railway Engineering and Maintenance-of-Way Association (AREMA):
  - 1. Manual for Railway Engineering.
- D. American Society of Mechanical Engineers (ASME):
  - 1. B16.1: Cast Iron Pipe Flanges and Flanged Fittings, Class 25, 125, 250, and 800.
  - 2. B16.18: Cast Copper Alloy Solder Joint Pressure Fittings.
  - 3. B16.22: Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings.
  - 4. B18.2.1: Square and Hex Bolts and Screws (Inch Series).
  - 5. B18.2.2: Square and Hex Nuts (Inch Series).
- E. ASTM International (ASTM):
  - 2. A126: Standard Specification for Gray Iron Castings for Valves, Flanges, and Pipe Fittings.
  - 3. A307: Standard Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
  - 4. B88: Standard Specification for Seamless Copper Water Tube.
- F. American Welding Society (AWS):

1. A5.8/A5.8M: Specification for Filler Metals for Brazing and Braze Welding.

G. American Water Works Association (AWWA):

1. C104/A21.4: Cement-Mortar Lining for Ductile-Iron Pipe and Fittings for Water.
2. C105/A21.5: Polyethylene Encasement for Ductile-Iron Pipe Systems.
3. C110/A21.10: Ductile Iron and gray Iron Fittings, 3 Inch Through 48 Inch for Water and Other Liquids.
4. C111/A21.11: Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings.
5. C115/A21.15: Flanged Ductile Iron Pipe with Threaded Flanges.
6. C116/A21.16: Protective Fusion Bonded Epoxy Coatings for the Interior and Exterior Surfaces of Ductile Iron and Gray Iron fittings for Water Supply Service.
7. C150/A21.50: Thickness Design of Ductile Iron Pipe.
8. C151/A21.51: Ductile-Iron Pipe, Centrifugally Cast, for Water.
9. C153/A21.53: Ductile Iron Compact Fittings, k 3 inch through 24 Inch and 54 Inch Through 64 Inch for Water Service.
19. C500: Metal-Seated Gate Valves for Water Supply Service.
20. C502/502a: Dry Barrel Fire Hydrants.
21. C504: Rubber Seated Butterfly Valves.
22. C509: Resilient-Seated Gate Valves for Water Supply Service.
23. C511: Reduced - Pressure Principle Backflow Prevention Assembly.
24. C515: Reduced-Wall, Resilient-Seated Gate Valves for Water Supply Services.
25. C550: Protective Interior Coatings for Valves and Hydrants.
26. C600: Installation of Ductile-Iron Water Mains and Their Appurtenances.
30. C800: Underground Service Line Valves and Fittings.

L. Factory Mutual (FM):

1. FM Approved: Factory Mutual Approval Guide.

M. National Fire Protection Association (NFPA):

1. 24: Installation of Private Fire Service Mains and Their Appurtenances.
- N. Underwriters Laboratories (UL):
1. 246: Hydrants for Fire-Protection Service.
- O. Underwriters' Laboratories of Canada (ULC)
1. S520: Hydrants.
- 1.03 DEFINITIONS:
- A. Appurtenances: Additional piping items as required to provide a complete piping system suitable to convey water as specified and intended. These items may or may not be specified, but are necessary to complete the piping system.
- 1.04 SUBMITTALS:
- A. Submit the following in accordance with the Contract Documents.
1. Pipe materials.
  2. Pipe fittings.
  3. Pipe couplings.
  4. Pipe thrust restraint.
  5. Valves.
  6. Fire Hydrants.
  7. Accessories.
  8. Appurtenances.
- D. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
- E. Instructions: Provide manufacturer's installation instructions for pipe, hydrants, valves and other appurtenances.
- F. Field Test Reports: Provide results for hydrostatic and bacteriological tests, and certified copies of all inspections, reports and analyses of tests of samples for materials furnished.
- G. Project Record Documents: Provide actual locations of piping mains, valves, connections, thrust restraints, and invert elevations. Identify and describe unexpected variations to subsoil conditions or discovery of uncharted utilities.



1.05 QUALITY ASSURANCE:

- A. Comply with the requirements specified in the Contract Documents.
- B. Perform Work in accordance with Warren County standards.
- C. Marking of pipe shall include the manufacturer, country where cast, nominal diameter, class, date of manufacture, weight, and the letters “DI” or “DUCTILE” in accordance with AWWA C151.
- D. Marking of the fittings shall include the manufacturer, country where cast, nominal diameter, class, date of manufacture, in the case of bends the degree of bend, and the letters “DI” or “DUCTILE” in accordance with AWWA C110. In addition, for compact fittings the identity of the AWWA C153 standard shall be marked on the fitting
- E. Valves: Manufacturer’s name and pressure rating marked on valve body.
- F. Materials used for private fire lines shall be UL listed and approved by Factory Mutual.
- G. NSF Approval: Material used in the manufacture of PVC / CPVC pipe and fittings shall be approved by the National Sanitation Foundation (NSF) for conveying potable water. Pipe and fittings shall bear the NSF label.
- H. Qualifications / Experience:
  - 1. All Ductile Iron Pipe and Fittings and pipe specials shall be furnished by a manufacturer who is fully experienced, reputable, and qualified in the manufacture of the ductile iron pipe, including the interior lining materials to be furnished as specified herein. The pipe, fittings and specials shall be designed, constructed and installed in accordance with the best practices and methods and shall comply in all respects with the Contract Drawings and with these specifications.
  - 2. All bidders shall be required to show to the satisfaction of the Owner that the type and size of pipe and fittings they propose to furnish shall be made by a manufacturer whose pipe has been successfully used for like work for a period of not less than five (5) years.

1.06 DELIVERY STORAGE AND HANDLING:

- A. Deliver and store valves in shipping containers with labeling in place.
- B. Transport, deliver, and distribute along the line of the work, the ductile iron pipe, fittings, specials, and appurtenances thereof. All chock blocks shall be securely in place before the release of the pipe restraints. Lifting devices shall be suitable to prevent any damage to the pipe and fitting ends, cement-mortar linings, and coatings. Under no circumstances shall the pipe be rolled off the truck or dropped.

- C. In distributing the pipe along the work, each pipe and fitting shall be placed as close as possible to the point where it is to be laid, and facing in the proper direction. All pipe shall be handled with nylon slings or means as may be satisfactory to the Owner. Iron chains, cables or other equipment likely to cause damage to the pipe wall or coatings shall not be used. Pipe that has been improperly distributed and needs to be moved longitudinally along the trench shall be reloaded on a suitable truck, or relocated by crane or other such means as may be satisfactory to the Owner.
- D. If in the process of manufacture, transportation, or handling, any ductile iron pipe, fitting or special receives any damage to the exterior coating, the interior cement-mortar lining, the pipe wall or end, the repair of which will in any degree affect the serviceability or capability to meet the requirements of the Contract Documents and standards, such pipe, fitting or special shall be rejected and replaced at the Contractor's expense.
- E. Pipe, fittings and specials that are placed in storage should be protected from damage and kept free of dirt or foreign matter. Pipe should be carefully placed onto wood timbers or other suitable supports on level ground, with end pipe of rows secured with chock blocks. Pipe should not be placed directly on the ground. Rubber gaskets should be stored in a cool location out of direct sunlight and out of contact with petroleum products. Pipe shall be so arranged so as to not cause undue interference or inconvenience to vehicle or pedestrian traffic.

1.07 WARRANTY:

- A. Provide standard product warranties for piping materials.

**PART 2 - PRODUCTS**

2.01 MANUFACTURERS:

- A. Water Pipe:
  - 1. American Ductile Iron Pipe
  - 2. U.S. Pipe
  - 3. Clow
  - 4. Or acceptable equivalent.
- B. Valves – Provide valves manufactured by the following:
  - 1. Gate Valves:
    - a. Clow
    - b. Dresser

c. American Darling

C. Fire Hydrants

1. Mueller A-423 Super Centurion
2. Kennedy 81A
3. Darling B62B
4. Clow Medallion

D. Structures – Not Used.

E. Mechanical Joint Restraint: Ebba Iron Megalug, Ford Meter Company, Inc., Griffin Pipe, or acceptable equivalent product.

2.02 WATER PIPE:

A. Ductile Iron Pipe:

1. Pipe: All water mains shall be Ductile Iron conforming with AWWA C-151 Class 52 in sizes 4” to 16” and PSI class 350 for 20” and above.
2. Closure pieces shall be accurately measured and cut in the field and installed using solid sleeves (long pattern) having mechanical bell joints or bolted, sleeve or split-sleeve type couplings. Mechanical bell joint sleeves shall be as specified herein. Bolted, sleeve or split-sleeve type couplings shall be as specified herein.
3. Fittings: Ductile iron, AWWA C110 or C153, match wall thickness of adjacent pipe.
4. Joints:
  - a. Push-on Joints: AWWA C111, styrene butadiene rubber (SBR) gaskets with pressure rating the same as the pipe or fitting(s) of which they are a part.
  - b. Restrained Mechanical Joints:
    - (1) Unless otherwise required, shown on the Contract Drawings, or directly specified, all 16-inch and smaller fittings, and all 16-inch and smaller pipe ends connected to fittings, such as bends, tees, crosses, hydrant branches, etc., shall have Restrained Mechanical Joints, with styrene butadiene rubber (SBR) gaskets, in accordance with AWWA C111. Restrained Mechanical Joints shall be bolted joints of the stuffing-box type, with ductile iron follower glands.
    - (2) Boltless Restrained Push-on Joints may be used in lieu of Restrained Mechanical Joints for 16-inch and smaller fittings, and 16-inch and

smaller pipe ends connected to fittings. Unless otherwise shown on the Contract Drawings, pipe and fittings within the "Restrained Distance" shall be Boltless Restrained Push-on Joints.

- (3) The pressure rating of Restrained Mechanical Joints shall be the same as that of the pipe or fittings of which they are a part.
  - (4) The glands and gaskets shall be marked in accordance with AWWA C111.
  - (5) Pipe and fittings within "Restrained Distance" shown on the Contract Drawings, or where directly specified, shall be furnished with Boltless Restrained Push-on Joints as specified in "Boltless Restrained Push-on Joints."
  - (6) Restrained Mechanical Joints using perpendicular set screws as a means of restraining the follower gland shall not be permitted.
  - (7) Follower glands shall be approved by the Engineer.
- c. Boltless Restrained Push-on Joints:
- (1) Unless otherwise required, shown on the Contract Drawings, or directly specified, all pipe and fittings within the limits shown on the Contract Drawings by "Restrained Distance" shall be of the Boltless Restrained Push-on Joint type, with SBR gaskets, in accordance with AWWA C111. Boltless Restrained Push-on Joints shall have a shop welded retainer ring or segment on the spigot end of the pipe that locks into the bell of the adjacent pipe or fitting when fully assembled providing a positive restrained joint.
  - (2) The pressure rating of Boltless Restrained Push-on Joints shall be the same as that of the pipe or fittings of which they are a part.
  - (3) No field welding of the retainer ring is permitted except where short lengths of pipe, less than nominal length, are required as closures. Recommended field welding procedures are referenced in the DIPRA manual "FIELD WELDING AND CUTTING DUCTILE IRON PIPE" and per pipe manufacturer's welding recommendations and guidelines.
  - (4) The pipe, fittings and gaskets shall be marked in accordance with AWWA C111.
  - (5) Valves within the "Restrained Distance" shall have joints of the type noted on the Contract Drawings.
- d. Bolted, Sleeve Type Couplings and Bolted, Split-Sleeve Type Couplings:

- (1) All Bolted, Sleeve Type Couplings shall be in accordance with AWWA C219, and all Bolted, Split-Sleeve Type Couplings shall be in accordance with AWWA C227. Couplings shall be non-restrained unless otherwise required or shown on the Contract Drawings.
- (2) The pressure rating of couplings shall be the same as that of the pipe or fittings of which they are a part.
- (3) Sleeves or split-sleeves shall be made of carbon steel that meets or exceeds the requirements of ASTM A283. The middle ring shall not be less than 1/2-inch thick.
- (4) Interior and exterior of couplings shall be coated with fusion-bonded epoxy in accordance with AWWA C213.
- (5) Gaskets shall be Buna-N conforming to ASTM D2000.
- (6) Bolts shall be Type 304 stainless steel heavy hex conforming to ASTM F593. Nuts shall be Type 304 stainless steel heavy hex conforming to ASTM F594. Threads shall be coated with an anti-seize compound.
- (7) The couplings shall be marked in accordance with AWWA C219 and AWWA C227, respectively.

e. Flanged Joints:

- (1) Flanged joints shall be installed where shown on the Contract Drawings or where specified. Flanged pipe shall be in accordance with AWWA C115. Flanged fittings shall be in accordance with AWWA C110. All flanges shall be made of ductile iron. All flanges shall be flat-faced and finished smooth. The bolt circle and bolt holes shall be in accordance with the dimensions in AWWA C115, Class 125.
- (2) The back of flanges shall be coated with a shop applied 5 mil minimum bitumastic coating in accordance with AWWA C151. A rust-preventative compound shall be applied to the flange faces and bolt holes after they have been faced and drilled.
- (3) The pressure rating of Flanged Joints shall be the same as the pressure rating of the pipe or fittings of which they are a part.
- (4) All bolts shall be Type 304 stainless steel, heavy hex, conforming to ASTM A193 or "ASTM F593. All nuts shall be Type 304 stainless steel, heavy hex, conforming to ASTM A194 or ASTM F594. Threads shall be coated with an anti-seize compound.

- (5) Flanges shall be marked in accordance with AWWA C115.
  - (6) Gaskets for flanged pipe and fittings shall be SBR, either ring or full-faced, and 1/8-inch thick. Gasket dimensions shall conform to AWWA C111.
  - (7) Where flanged valve insulators or flanged joint insulators are required as shown on the Contract Drawings, each of the flange bolt holes shall be increased by 1/16-inch to accept a bolt insulator sleeve. The Contractor's attention is directed to section titled "Valves." In lieu of insulated flanged joint connections, the Contractor may furnish and install an insulated Bolted, Sleeve Type Coupling or Bolted, Split-Sleeve Type Coupling.
- f. Shouldered Type Joints:
- (1) Where shown on the Valve Assembly Details, the Contractor shall furnish and install shouldered type joints, including couplings, for connection of pipe ends to shouldered end valves. Pipe ends shall have shouldered joints, of either cast pipe or welded end ring, conforming to AWWA C606. When valves are provided without shouldered ends, the Contractor shall provide spool pieces on each side of the valve and shall furnish and install shouldered type couplings. The spool pieces shall have shouldered joints, of either cast pipe or welded end ring, conforming to AWWA C606.
  - (2) The pressure rating of Shouldered Type Joints shall be the same as that of the pipe or fittings of which they are a part.
  - (3) Housings shall be ductile iron conforming to ASTM A536.
  - (4) Gaskets shall be of a pressure responsive design, molded or extruded of an elastomer conforming to ASTM D2000, and meet the physical properties in AWWA C606.
  - (5) The housing and gasket shall be marked in accordance with AWWA C606.
  - (6) Bolts shall be Type 304 stainless steel heavy hex conforming to "ASTM F593. Nuts shall be Type 304 stainless steel heavy hex conforming to ASTM F594. Threads shall be coated with an anti-seize compound.
  - (7) All machined steel surfaces at the ends of pipe to receive Shouldered Type Couplings shall be coated with one shop coat of an approved zinc rich paint. All metal parts of the couplings shall be coated at the shop with one coat of bituminous primer furnished by the same manufacturer who furnishes the coatings.

- (8) The coupling manufacturer's factory trained representative shall provide on-site training to the Contractor's field personnel for Shouldered Type Couplings. The representative shall review that the Contractor is following the manufacturer's recommended practices for installation.
5. Gaskets: For push-on joints and mechanical joints, shall be of and be of a size and shape to provide adequate compressive force after assembly of the joint to effect a positive seal. Gaskets shall be free of porous areas, foreign material and visible defects. The joint lubricant shall be nontoxic and shall have no deteriorating effects on the gasket material. Gaskets for flanged joints shall be of styrene butadiene rubber (SBR).
6. Interior Lining: Cement mortar, AWWA C104, minimum 40 mils (1015 micrometers) thickness.
7. Exterior Coating:
  - a. Asphaltic coating, AWWA C151 for buried pipe and fittings.
  - b. Jackets: AWWA C105 polyethylene jacket. Installed in accordance with Method A.
8. Bolts and Nuts (Aboveground):
  - a. Hex head bolts and nuts:
    - (1) Bolts: ANSI B18.2.1.
    - (2) Nuts: ANSI B18.2.2.
  - b. Number, size, and length: AWWA C115, Table 15.2.
  - c. Material: ASTM A307, low carbon steel.
  - d. Use studs with nuts on each end for pipe sizes 54 inches (1,350 mm) and larger.
9. Bolts and Nuts (Underground):
  - a. Tee head bolts and hexagonal nuts: AWWA C111.
  - b. Number, size, and length: AWWA C111, Table 11.1.
  - c. Material: Low alloy steel or high strength cast iron in accordance with AWWA C111.
  - d. Shall be cleaned and painted with three field coats of Koppers Bitumastic Super Tank Solution, or equivalent.

- B. Copper Tubing: ASTM B 88, Type K, annealed.
  - 1. Fittings: ASME B16.18, cast copper, or ASME B16.22, wrought copper.
  - 2. Joints: Compression connection or AWS A5.8, BCuP silver braze.
  - 3. Only lead-free solder shall be used.
  - 4. Working Pressure: Minimum of 100 psi (690 kPa).

### 2.03 VALVES:

- B. Gate Valves:
  - 1. 3 Inches and Over: 350 psi working pressure. AWWA C509 or C515, Iron body, bronze trim, non-rising stem with square nut, single wedge, resilient seat, mechanical joint ends, control rod, extension box and valve key 3 feet longer than depth of valve nut. Protective interior coating per AWWA C550.
  - 2. Provide one operating wrench of length to operate deepest valve.
- C. Butterfly Valves, From 2 to 24 Inches (50 to 600 mm):
  - 1. AWWA C504, 350 psi working pressure, iron body, mechanical joint ends bronze disc, resilient replaceable seat, water or lug ends, ten position lever handle, tested and passed for leakage in both directions. Open clockwise.
  - 2. Protective interior coating per AWWA C550.

### 2.04 MANUAL OPERATORS:

- A. General:
  - 1. Operator force not to exceed 40 lbf under any operating condition, including initial breakaway. Gear reduction operator when force exceeds 40 lbf.
  - 2. Operator to be self-locking type or be equipped with self-locking device.
  - 3. Provide position indicator on quarter-turn valves.
  - 4. Worm and gear operators to be one-piece design worm-gears of gear bronze material. Worm hardened alloy steel with thread ground and polished. Traveling nut type operators to have threaded steel reach rods with internally threaded bronze or ductile iron nut.
- B. Buried Operator:
  - 1. Buried service operators on valves larger than 2-1/2 inches shall have a 2-inch AWWA operating nut. Buried operators on valves 2-inch (50 mm) and smaller



shall have cross handle for operation by forked key. Enclose moving parts of valve and operator in housing to prevent contact with the soil.

2. Design buried service operators for quarter-turn valves to withstand 450 lbf-ft of input torque at the FULLY OPEN or FULLY CLOSED positions, grease packed and gasketed to withstand a submersion in water to 10 psi.
3. Buried valves shall have extension stems, bonnets, and valve boxes.

#### 2.05 VALVE BOXES:

- A. General: Provide cast-iron valve boxes, rated for vehicular traffic. Provide each valve box with a concrete valve box collar, as per the detail on the plans.
- B. Cast-Iron Boxes: Extension type with screw-type adjustment, flared base and 3/16-inch minimum thickness of metal.
- C. Cast the word "WATER" in cover. Adapt box length, without full extension, to depth of cover required over pipe at valve location.

#### 2.06 VALVE VAULTS:

- A. Reinforced precast concrete structure meeting ASTM C913, designed to withstand an AASHTO HS20-44 live loading in accordance with ASTM C890. Type and dimensions as indicated on standard detail drawings.

#### 2.07 FIRE HYDRANTS:

- A. AWWA C502, UL 246, dry barrel type compression hydrant with double O-ring seals; counter-clockwise rotation to open. Protective interior coating per AWWA C550.
- B. Equip with a 5-1/4 inch valve opening, 6-inch mechanical joint shoe, two 2-1/2 inch hose nozzles, and one 4-1/2 inch nozzle breakaway flange and stem coupling.
- C. Fabricate extensions in multiples of 6 inches with rod and coupling to increase barrel length.
- D. Working Pressure: 350 psi
- E. Provide 1 safety flange repair kit.
- F. UL Listed/FM Approved.

#### 2.08 BEDDING AND COVER MATERIALS:

- A. As specified in the Contract Documents.

## 2.09 THRUST RESTRAINT:

- A. Mechanical Joint Restraint: Wedge action restrained joint retainer gland devices. Mechanical joint restraint incorporated into the design of the follower gland shall be used at valve ends.
- B. Thrust Blocks: Dimensions as indicated on standard details. Concrete type for thrust restraints.
- C. Pipe Clamps and Tie Rods: ANSI/NFPA 24.
- D. Push-On Restrained Joint Pipe: Provide joint restraint and conforming joint to AWWA C111/21.11, fabricated to be easily disassembled. Provide assembly and disassembly kits.

## 2.10 COUPLINGS:

- A. Mechanical Couplings: Dresser Style 38, long sleeve unless shown otherwise; equivalent by Smith-Blair or Baker. Harness when required for thrust restraint.

## 2.11 ACCESSORIES:

- A. Tapping Sleeves: Ductile- or cast-iron, split-sleeve type with flanged or grooved outlet, and with bolts, follower rings and gaskets on each end of sleeve suitable for maximum working pressure of 350 psi. Bolts shall have square heads and hexagonal nuts. Longitudinal gaskets and mechanical joints with gaskets shall be as recommended by manufacturer of sleeve.
- B. Tapping Valves: Provide tapping valves that conform to gate valves, specified herein. Provide tapping valves suitable for installation with tapping sleeves and pipe used, designed for minimum water working pressure of 350 psi, and have clear waterway equal to full nominal diameter of valve.
- C. Corporation Stop: Standard corporation stop thread conforming to AWWA C800 on the inlet end, with compression pattern flared tube coupling.
- D. Service Stops: Water-works inverted-ground-key type, oval or round flow way, tee handle, without drain. Parts shall be bronze with female iron-pipe-size connection design for hydrostatic test pressure at least 200 psi.
- E. Service Clamp: Pressure rating not less than connecting pipe; either single or double flattened strap type. Clamps shall have rubber gasket cemented to galvanized malleable-iron body. Straps and nuts shall be cadmium-plated.
- F. Service Boxes: Cast iron or concrete and shall be extension service boxes of length required for depth of line, with either screw or slide-type adjustment. Boxes shall have housings of sufficient size to completely cover service stop or valve and shall be complete with identifying covers.

- G. Steel Casing: Where required, steel casing shall be uncoated, unprotected steel casing ASTM A-53-89a (AWWA Spec. C-200-91), installed by jacking or boring method. Comply with City of Cleveland Division of Water Standard Details. Reference detail for casing spacers. Wooden skids are not allowed.

2.12 DISINFECTION CHEMICALS:

- A. Refer to Section 33 13 00.

2.13 APPURTENANCES:

- A. Provide appurtenances for a complete piping system suitable for operation, and in conformance with Project Documents.

2.14 SHOP PAINTING/COATINGS:

- A. Unless noted otherwise, provide standard manufacturer paint and coatings for piping, valves, hydrants, and accessories to prevent corrosion for the life of the component.

2.15 SHOP TESTING:

- A. Test pipes, valves, hydrants, and applicable accessories per manufacturer requirements, and as required by referenced Standards.

**PART 3 - EXECUTION**

3.01 EXAMINATION:

- A. Verify existing conditions.
- B. All materials shall be examined by the Contractor for damage immediately before installation, and no pipe or fittings shall be laid that are known to be damaged or defective. Any such damage shall be repaired in the field with material equal to the original or replaced by the Contractor, at his own expense, to the satisfaction of the Owner.

3.02 PREPARATION:

- A. Ream pipe and tube ends and remove burrs.
- B. Remove scale and dirt, on inside and outside, before assembly.
- C. Prepare pipe connections to equipment with flanges or unions.
- D. Excavate pipe trench in accordance with Section 31 23 23 for work of this Section. Hand trim excavation for accurate placement of pipe to elevations indicated.

### 3.03 WATER PIPE INSTALLATION:

#### A. Maintain separation of water main from sewer as follows:

##### 1. Parallel Installation

- a. Under normal conditions water mains shall be laid at least 10 feet (3 m) horizontally from a sewer or sewer manhole. The distance shall be measured edge-to-edge.
- b. Under unusual conditions when local conditions prevent a horizontal separation of 10 feet (3 m) the water main may be laid closer to a sewer or sewer manhole provided that:
- c. The bottom (invert) of the water main shall be at least 18 inches (45 cm) above the top (crown) of the sewer;
- d. Where this vertical separation cannot be obtained, the sewer shall be constructed of AWWA approved water pipe, pressure tested in place without leakage prior to backfilling; and
- e. The sewer manhole shall be of watertight construction and tested in place.

##### 2. Crossing

- a. Under normal conditions water lines crossing sewers shall be laid to provide a separation of at least 18 inches (45 cm) between the bottom of the water line and the top of the sewer whenever possible
- b. Under unusual conditions when local conditions prevent a vertical separation described, the following construction shall be used:
- c. Sewers passing over or under water mains shall be constructed of AWWA approved water pipe, pressure tested in place without leakage prior to backfilling;
- d. Water lines passing under sewers shall, in addition, be protected by providing:
- e. A vertical separation of at least 18 inches (45 cm) between the bottom of the sewer and the top of the water line;
- f. Adequate structural support for the sewers to prevent excessive deflection of the joints and the settling on and breaking of the waterline; and
- g. That the length of the water line be centered at the point of the crossing so that joints shall equidistant and as far as possible from the sewer.

- h. No water pipes shall pass through or come in contact with any part of a sewer manhole.
- B. Install pipes and structures to within tolerance of 1/2-inch of indicated elevations.
- C. Install ductile iron piping and fittings to AWWA C600. Provide proper and suitable tools and implements for the safe and proper handling and laying of the pipe and fittings. Great care shall be taken to prevent the pipe and fittings, cement-mortar lining and exterior coating from being damaged. Pipe shall be carefully lowered into the trench to prevent damage. Under no circumstances shall materials be dropped or dumped into the trench. If any damaged or defective pipe is discovered after having been laid in the trench, it shall be removed and replaced with a sound pipe or fitting by the Contractor, at his own expense, to the satisfaction of the Owner.
- F. All lumps, blisters and excess coating shall be removed from the socket and plain end of each pipe. The outside of the plain end and the inside of the bell shall be clean, dry and free of dirt, sand, grit or foreign material before the pipe is installed. Foreign material shall be prevented from entering the pipe while it is being placed and installed in the trench. No debris, tools, clothing or other materials shall be placed in the pipe at any time.
- G. As each length of pipe is placed in the trench, the joint shall be assembled and the pipe brought to the correct line and grade. Pipe shall be laid to a firm and even bearing for its full length. When pipe laying is not in progress, the open ends of pipes shall be closed by a watertight plug or bulkhead having a means of venting. Care must be taken to prevent pipe flotation if the trench fills with water. Prior to removing the plug, the air and water pressure in the line shall be released.
- H. Connecting to Existing Water Mains:
  - 1. Locate all pipe ends and/or all existing pipe joints where connections are to be made, including where existing mains are to be tapped, along with the next existing pipe joint to determine the exact location and elevation (line and grade) of the existing water main. Expose the existing pipe joints adjacent to where connections are to be made to determine the type of the existing joints and the direction of the existing joints. No pipe fabrication drawing will be approved until this information is submitted to the Owner. All field data shall be obtained in the presence of the Owner.
  - 2. It shall be the responsibility of the Contractor to verify all field dimensions and all design criteria, including design and pressure requirements, prior to preparing the various shop drawing submittals. At the time of each submission, the Contractor shall give the Owner specific written notice of each variation that the Shop Drawings may have from the requirements of the Contract Documents. In addition, the Contractor shall make a specific notation of each such variation on each Shop Drawing submitted to the Owner for review and approval. The Owner's review and approval of Shop Drawings shall not relieve the Contractor from

responsibility for any variation from the requirements of the Contract Documents. The Owner's approval shall not extend to any such variation unless Contractor has, in writing, conspicuously called to the Owner's attention each such variation at the time of the submittal, as required by this paragraph, and the Owner has given written approval of that particular variation by a specific written notation thereof incorporated in or accompanying the Shop Drawing review and/or approval.

3. The field data shall be obtained by the Contractor, and submitted to the Owner sufficiently in advance of the proposed connection to determine if any adjustments to the line and grade of the proposed water main or adjustments to the existing water main are required. The field data shall also be forwarded to the pipe fabricator sufficiently in advance of fabrication to allow for the preparation of revised shop drawings and for fabrication of those pipe and fittings required to make the connection. No extra compensation to the Contractor will be made for any delays and/or additional pipe and fittings, equipment, tools and incidentals, when the Contractor fails to properly obtain and forward the required field data to the Owner and/or the pipe fabricator in a timely manner.

- I. Install joint restraint per manufacturer's instructions.
- J. Form and place concrete for thrust blocks at each elbow or change of direction of pipe main and as indicated.
- K. Establish elevations of buried piping to ensure not less than 4 feet of cover.
- L. Backfill trench in accordance with the Contract Documents.

#### 3.04 VALVES AND HYDRANTS INSTALLATION:

- A. The Contractor shall not send cleaning or lining machines through valves unless authorized by the City to do so. All valves on mains to be cleaned and lined shall be cut out and removed with nipples from the main while cleaning and lining work is proceeding on that section of main.
- B. The Contractor shall replace all existing valves on the main being cleaned and lined with new valves where called to do so on the Contract Drawings. The Contractor shall dispose of all replaced valves. Any inline valve not marked on the Contract Drawings shall be replaced at the unit price for replacing the existing valves, if so directed by the City.
- C. The Contractor shall also install new cut-in valves where no valves currently exist at locations so indicated on the Contract Drawings. All cut-in valves that are indicated on the Contract Drawings shall be furnished and installed by the Contractor at the bid price submitted for new cut-in valves.
- D. The Contractor shall perform all street opening, excavation, backfilling, repaving, main opening, main restoration and all other incidental appurtenant work required

for the new valve installation work in conformity with the other sections of these specifications.

- E. The Contractor shall furnish and install all new valves and valve boxes complete; no reconditioned valves shall be allowed. The valves shall be the same size as the main it will function on, regardless of the size of the old valve that was removed. The valves shall be approved gate valves with mechanical-joint bell ends, conforming to ANSI/AWWA C11/A21.11-80, LEAD JOINTS ARE NOT PERMITTED.
- F. The nipples shall be of new Class 52 Ductile Iron Pipe. The nipples shall be attached to the valve with approved mechanical joints as specified in the preceding paragraph. The nipples shall be attached to the existing water main with either solid Ductile Iron mechanical joint sleeves or Dresser Couplings or approved equal, as ordered by the Owner, and in accordance with the previous section covering Dresser Couplings.
- G. The valves shall be set accurately and carefully at the required locations, in a manner approved by the City.
- H. After the valves have been set in place and ready to operate, the Contractor shall test them under working pressure and conditions. Any valve or joint found to leak shall be made water-tight by the Contractor. If the valve is found to be of faulty construction, the Contractor shall repair or replace it.

- A. Set valves on solid bearing.
- B. Center and plumb valve box over valve. Set box cover flush with finished grade.
- C. Set hydrants plumb and locate pumper nozzle perpendicular to roadway.
- D. Provide drainage pit 36 inches square by 24 inches deep filled with No. 57 aggregate for fire hydrants. Encase elbow of fire hydrant in gravel to 6 inches (150 mm) above drain opening. Wrap drainage pit and gravel with filter fabric. Do not connect drain opening to sewer.
- E. Paint fire hydrants in accordance with AWWA and NFPA 24.
- F. Install tapping sleeves and tapping valves in accordance with manufacturer's recommendations.
- G. Install valves and hydrants according to applicable AWWA Standards and NFPA 24.

### 3.05 DISINFECTION OF DOMESTIC WATER PIPING SYSTEM:

- A. Refer to Section 33 13 00.

3.06 SERVICE CONNECTIONS:

A. General:

1. Where called out in the plans or directed by the Engineer, Contractor shall replace the entire property owner's water service connection from the curb stop to the point of entry into the home or building. The Contractor shall install a new stop and waste valve at the point of entry in to the home or building at an accessible location and tie back into the existing plumbing. This item shall include all excavation and the furnishing and placing of all backfill, all boring, jacking, pushing, and pulling of the service connection, pavement (both temporary and permanent), sidewalks, curbs, underdrains, sodding and/or seeding, protection of trees, shrubbery and lawns and/or their removal and replacement if necessary; seeding and/or sodding; sidewalk removal and replacement; curb removal and replacement; underdrain removal and replacement; removal and replacement of mailboxes; removal and replacement of drainage culverts and/or piping; fence removal and replacement; guard rail removal and replacement; storm and sanitary sewer work; storm and sanitary sewer connection work; protecting and maintaining utilities and utility services; repair of site damage due to construction, including traffic maintenance; final site restoration and all other work as necessary to properly complete the work.

2. Connection Material

All new material shall be used. All connections must be made with approved flare or compressions fittings. Piping material shall be Type K Copper. No intermediate joints shall be permitted between curb valve and the stop and waste valve. The Contractor must supply a stop and waste valve from the following list of approved manufacturers and models:

MANUFACTURER	MODEL
A.Y. McDonald	Inverted Plug Design
A.Y. McDonald	Ball Valve Design
Ford	Inverted Key Curb Stops
Ford	Ball Valve Curb Stops
Mueller	Inverted Key Curb Stops

3. Depth and Clearances

- i. Water Service connections are to be installed a minimum of five and one-half (5 ½) feet deep. A one (1) foot vertical and five (5) foot horizontal clearance from other utilities and facilities shall be maintained at all times.
- ii. The Contractor shall assume each property has gas, electric, water, sewer (sanitary and storm), telephone and cable utility connections. These utility



connections may or may not be shown for each property on the Contract Drawings and if shown their accuracy is not guaranteed. The Contractor shall include in his bid the cost to brace, maintain all utility services to the properties and to relocate and restore utility services where necessary.

- iii. The Contractor shall verify the existence and location of all utilities, duct banks, and utility connections before installation of water service connections.

#### 4. Construction Methods

Whenever possible the new service connection shall be pushed, pulled, bored, or moled between the home/building and the excavation at the curb valve to minimize property disturbance. When obstructions are identified which prevent pushing, boring or moling the service connection. the service shall be installed by open-cutting the property.

#### 5. Excavation and Restoration

- i. All excavation and restoration shall be included under this item. No additional payment will be made for additional excavations needed as a result of obstructions. Damage to Walks, Aprons, Driveways, and lawns are to be restored to existing conditions.
- ii. All work required for the protection of shrubbery and lawns and the replacement thereof; the caring, fertilizing, pruning of trees and their replacement, if so required; and the removal of dead trees or stumps encountered shall be at the expense of the Contractor and shall be deemed to be included in this item.

#### 6. Service Interruptions

If a property is to be without water service or without any other utility service as a result of the service connection installation, the homeowner/business is to be notified in advance and such homeowner/business shall not be without any utility service for more than four (4) hours unless the homeowner/business and the Engineer and Design Engineer extends this time limit. The cost of restoring utility connections, including exploratory excavations and materials required therefore, shall be deemed to be included in this item.

#### 7. Safety / Excavations

No excavations are to remain open or unattended. All unfinished work must be plated and secured.

#### 8. Backfilling

- i. This work includes all backfilling, together with ramming, puddling, and rolling as backfill; the regrading of grounds; the replacing of surface and subsurface structures; the placing and maintaining of temporary sidewalks; the placing and maintaining of temporary driveways; the removal and replacement of mailboxes; the removal and replacement of culverts/drainage pipes; the removal and replacement of fences; the removal and replacement of guardrail; reseeding of lawns; replacing trees and shrubbery damaged by the Contractor; permanent replacement/restoration of sidewalks and pavements; and all appurtenant work incidental thereto.
- ii. The water service connection shall be bedded and backfilled with sand or limestone screenings graded as per O.D.O.T 304.02 or O.D.O.T 411. Whenever possible, a minimum of three (3) inches of bedding and (nine) 9 inches of cover will be required around water service connection. Backfilling shall consist of a sand bedding backfill, and backfill excavated from the trenches, or where required, premium backfill material. Backfill may be made with material excavated from the trenches, providing same is satisfactory to the Engineer. If, in the opinion of the Engineer, the material excavated is unsatisfactory, the Contractor shall furnish, at his own expense, other material suitable for backfill. All backfill shall be free from slag, cinders, rubbish, organic material and other objectionable material. Backfill shall be carefully placed into the trench and not dozed or dumped from the top of the trench.
- iii. The sand used for bedding backfill shall be a natural bank sand, meeting the requirements of O.D.O.T. Item 703, Aggregate, Section 703.02, Aggregate for Portland Cement, graded from fine to coarse, not lumpy or frozen, and free from slag, cinders, ashes, rubbish, or other deleterious or objectionable material. The sand used for bedding backfill shall not contain a total of more than 10% by weight of loam and clay, and all such material must be capable of being passed through a 3/4 inch sieve. Not more than 5% shall remain on a #4 sieve. The Contractor must use special care in placing this portion of the sand bedding backfill, so as to avoid injuring the copper tubing. The sand bedding backfill shall be tamped in thin layers of six (6) inches on each side of the pipe, and thoroughly compacted so as to provide eliminate risk of settling.
- iv. Only after the one (1) foot sand bedding backfill has been satisfactorily compacted, may work proceed in placing the remaining backfill which must be carefully placed and compacted by tamping, puddling, or rolling. All precautions must be taken to eliminate future settlement. The number of men tamping shall be not less than the number backfilling, and additional men shall be kept in the trench to spread the material.
- v. Backfilling shall not be done in freezing weather, except by

permission of the Engineer/Design Engineer, and it shall not be made with frozen material, nor shall any fill be made where the material already in the ditch is frozen.

- vi. All surplus material and such other material as the Engineer may deem unfit for use as backfill, shall be disposed of by the Contractor in a manner so as to give a minimum of inconvenience to the public. In case of settlement after backfill, the Contractor shall supply material of sufficient type and quantity, at his expense, satisfactory to the Engineer, sufficiently compacted, to make up for the deficiency. In the storing of excavated material, which is to be used as backfill, the Contractor shall exercise care so as to avoid inconveniencing the public.

### 3.07 FIELD TESTING:

- A. Bacteriological testing shall be in accordance with AWWA C-651.
- B. Hydrostatic Testing: After valved sections of the pipe, fittings and appurtenances have been installed they shall be pressure tested by the Contractor to the test pressures and in the manner specified in section 33 13 00 of these specifications. The tests shall be continued and repeated as often as necessary to ensure that all leaks have been made tight to the satisfaction of the Owner. The Contractor shall furnish and install all required test bulkheads, appliances, and other materials and taps as required to conduct the test.
- C. Disinfection / Chlorination: The Contractor shall cooperate with the Owner in the disinfection of all ductile iron pipe, fittings, and specials installed in the work. The disinfection procedure shall consist of the (a) the preliminary flushing; (b) the chlorination procedure; (c) final flushing; and (d) sampling, all as described in section 33 13 00 of these specifications.

### 3.08 INSPECTION AND TESTING

All pipe shall be inspected and tested at the manufacturing facility in accordance with AWWA C151, "DUCTILE-IRON PIPE, CENTRIFUGALLY CAST." Each pipe shall be subjected to a hydrostatic test of not less than 500 psi prior to the application of the cement-mortar lining. The Contractor shall furnish eight copies of the manufacturer's certified inspection and testing reports for all pipe and fittings to be furnished and installed in the work.

All ductile iron pipe, fittings, and specials shall be subject to inspection and approval by the Owner after delivery of material to the job site. No misshapen, imperfectly coated, or damaged pipe, fittings, or appurtenances shall be installed in the work.

The Contractor shall furnish to the Owner eight sets of lists of all pipe and fittings and of all appurtenances in each shipment of materials delivered to the job site. The lists shall contain the serial or mark number, weight, size, and description of each item received at the job site.

3.09 FIELD PAINTING/COATINGS:

- A. Repair any shop painting/coatings damaged during storage or installation to Owner's satisfaction.

3.10 ADJUSTING:

- A. Coordinate with Owner for any field adjustments. The Owner reserves the right to reject any field adjustments.

3.11 PROTECTION:

- A. Protect installed water utilities from damage throughout storage, installation, testing, and final approval.

3.12 CLOSEOUT ACTIVITIES:

- A. Provide in accordance with the Contract Documents.

**END OF SECTION**

## SECTION 33 13 00

### DISINFECTING OF WATER UTILITY DISTRIBUTION

#### PART 1 - GENERAL

##### 1.01 DESCRIPTION:

- A. Provide disinfecting of water utility distribution systems as indicated and in compliance with Contract Documents.

##### 1.02 REFERENCES:

- A. American Water Works Association (AWWA):
  1. [C-651](#): Disinfecting Water Mains.

##### 1.03 SEQUENCING:

- A. Basic procedure for disinfecting water mains:
  1. Inspecting materials to be used to ensure their integrity.
  2. Preventing contaminating materials from entering the water main during storage, construction, or repair and noting potential contamination at the construction site.
  3. Removing, by flushing or other means, those materials that may have entered the water main.
  4. Chlorinating any residual contamination that may remain, and flushing the chlorinated water from the main.
  5. Protecting the existing distribution system from backflow caused by hydrostatic pressure test and disinfection procedures.
  6. Documenting that an adequate level of chlorine contacted each pipe to provide disinfection.
  7. Determining the bacteriological quality by laboratory test after disinfection.
  8. Final connection of the accepted new water main to the active distribution system.

##### 1.04 SUBMITTALS:

- A. Submit the following in accordance with Section 01 33 00.
  1. Supervisor qualifications.

2. Equipment list.

1.05 QUALITY ASSURANCE:

- A. Comply with the requirements specified in the Contract Documents.
- B. Regulatory Requirements:
  - 1. Disinfection work shall be acceptable to Owner. If requirements of this section are in conflict with requirements of regulatory agencies, the latter shall govern.
- C. Source Quality Assurance:
  - 1. Perform Work in connection with disinfection under direction of experienced supervisor.
  - 2. Use equipment in proper working condition and adequate for specified Work.
- D. Prior to starting disinfection work, furnish detailed outline of proposed sequence of operation, manner of filling and flushing units, source and quality of water to be used, and disposal of wasted water.
- E. Perform work in connection with disinfection under direction of experienced supervisor.
- F. Use equipment in proper working condition and adequate for specified work.

1.06 DELIVERY STORAGE AND HANDLING:

- A. Comply with the requirements specified in the Contract Documents.

1.07 PROJECT CONDITIONS:

- A. Discharge of chlorinated water into watercourses or surface waters is regulated by the National Pollutant Discharge Elimination System (NPDES). Disposal of the chlorinated disinfection water and the flushing water is the Contractor's responsibility.

**PART 2 - PRODUCTS**

2.01 OWNER-SUPPLIED PRODUCTS:

- A. The Owner will provide potable water for the first disinfection effort. Submit request for use of water from waterlines of Owner 48 hours in advance. If bacteriological testing shows that the first disinfection effort was not successful, the Contractor will be charged, at the Owner's current rates, the cost of additional water for subsequent disinfection efforts.

2.02 MATERIALS:

- A. Water: Use potable water for cleaning and disinfection.
- B. Chlorine: Provide in accordance with AWWA C6512.
  - 1. Liquid Chlorine: Inject with a solution feed chlorinator and a water booster pump. Follow the instructions of the chlorinator manufacturer.
  - 2. Calcium Hypochlorite (Dry): Dissolve in water to a known concentration in a drum and pump into the pipeline at a metered rate. Tablet form calcium hypochlorite may be used only for water mains up to 12 inches (300 mm) in diameter and less than 2,500 feet (760 m) in length.
  - 3. Sodium Hypochlorite (Solution): Further dilute in water to desired concentration and pump into the pipeline at a metered rate.

2.03 EQUIPMENT:

- A. Submit list of equipment used for disinfecting work.

2.04 ACCESSORIES:

- A. Chlorine Residual Test Kit: For measuring chlorine concentration, supply and use a medium range, drop count, DPD drop dilution method kit per AWWA C651, Appendix A.1. Maintain kits in good working order available for immediate test of residuals at point of sampling.

**PART 3 - EXECUTION**

3.01 PREPARATION:

- A. Isolate new work being disinfected from system to avoid possibility of contaminating materials entering distribution system.

3.02 PIPELINE PREPARATION:

- A. After pressure and leakage tests complete, flush units thoroughly to remove foreign material.
- B. Release entrapped air at high points and fill units with disinfecting agent and water to allow disinfecting agent to come in contact with interior surfaces.
- C. If complete venting cannot be accomplished through available outlets, provide necessary corporation cocks and vent piping.

### 3.03 CONTRACTOR'S LABOR

- A. During the entire disinfection procedure the Contractor shall furnish at least two (2) trained workmen to perform all labor under the supervision and direction of the Owner. The Contractor's laborers shall assist the Owner in the duties described above. The Contractor shall provide proper equipment and protective clothing as may be required by the laborers in performing the work required for the disinfection of water mains.
- B. No extra payment will be made to the Contractor for providing labor to assist the Owner during the disinfection procedure, or for providing proper equipment and protective clothing required therefor, but the cost thereof shall be deemed to be included in the price bid per lineal foot of water main furnished and installed under this contract.

### 3.04 TESTING MAINS AND DISINFECTION FOR MAIN REPLACEMENT:

- A. All pipes, valves, fittings, etc., shall be laid in such a manner as to leave all joints watertight. After the pipe is laid, such lengths of the water main as the Owner, or his designate may determine, shall be tested under hydrostatic pressure as specified herein.
- B. The hydrostatic test shall be under the direction of the Owner. The Contractor shall obtain water for testing by observing the rules and regulations enforced by the local municipality. The Owner will furnish a pressure gauge for measuring the pressure on the water main, but the Contractor shall furnish all suitable pump, pipes, test heads, and all appliances, labor, fuel and other appurtenances necessary to make these tests.
- C. Before the hydrostatic pressure test, during the preliminary flushing of the water main, the Contractor shall operate all valves (gate, air relief, drain, etc.) to ensure that each valve is operating correctly. Any valve(s) found leaking, not watertight, or not operating properly shall be satisfactorily repaired or replaced by the Contractor at his own expense.
- D. During the test pressure procedure the Contractor shall provide proper restraint of all blind flanges, plugs or caps to prevent blowoff, and in the case of dead end mains concrete piers will be required.
- E. In pressure testing new mains, the Contractor shall not be permitted to use any part of the existing mains in his test unless otherwise shown on the Contract Drawings or as ordered by the Owner. The Contractor shall provide all blind flanges, plugs or caps, at the test points of the proposed main so that the tested section will be completely independent of existing mains.
- F. The hydrostatic test pressure procedure shall be for a duration of a minimum of two (2) hours with all valves closed during which time the internal pressure shall remain within five (5) psi of the specified test pressure. Should the test pressure drop more than five (5) psi, the Contractor shall recharge the water main to the specified test pressure and locate and repair the leak, at his expense, to the satisfaction of the Owner. Any damaged or defective pipe, pipe joints, fittings, valves, hydrants or appurtenances shall be repaired or replaced with sound material and the hydrostatic test pressure procedure repeated.



- G. After a section of the water main has been tested, the Contractor shall flush the same. Where drain vaults are connected to drain valves or valves, the Contractor shall, within a reasonable time after the test has been completed, pump all water out of the drain vaults and valve vaults. Flushing shall be done in accordance with these specifications.
- H. In cold weather immediately after testing a section of the water main, the Contractor shall open all valves and all air relief valves in the section(s) of the water main, and take all other precautions necessary to prevent injury to water main, valves, and appurtenances due to freezing.
- I. No extra payment will be made to the Contractor for testing, flushing, draining, protecting, locating and repairing leaks, replacing damaged or defective pipe, valves or other appurtenances, retesting, or to provide appurtenances at test points proper restraints, but the entire cost thereof shall be deemed to be included in the price bid per lineal foot of water main furnished and installed under this contract.
- J. Water main disinfection shall consist of: (a) preliminary flushing of water mains after the hydrostatic test and prior to the chlorination procedure; (b) the chlorination procedure; (c) the final flushing; and (d) sampling. All Contractor labor, material, equipment and incidentals required to assist the Owner in the disinfection of water mains shall be deemed to be included in the price bid per lineal foot of water main furnished and installed under this contract.
- K. Preliminary Flushing: Before disinfection all dirt and foreign matter shall be removed from the new water main, or extensions to existing mains, by a thorough flushing through blowoffs, or by other approved means, by the Contractor. Each valve section of the newly laid pipe shall be flushed independently. This shall be done after the pressure test. Flushing shall be in accordance with ANSI/AWWA C-651 Standard for Disinfecting Water Mains. Where the flushing velocity specified therein cannot be attained, flushing rates as determined by the Owner to be sufficient shall be permitted. If in the opinion of the Owner the flushing prior to the chlorination procedure does not remove dirt or other accumulations in the pipe, the pipe shall be cleaned by mechanical means by the Contractor and the flushing shall be repeated.
- L. Chlorination Procedure:
  - 1. Such lengths of the water main as the Owner may determine, shall be chlorinated; however, in no case shall the length exceed that which can be chlorinated satisfactorily in one (1) work day. Such maximum length is generally up to three (3) miles total, including branches and connecting water main(s), for sixteen inch (16") and smaller; and three (3) valve sections, or two (2) miles, for twenty inch (20") or larger water mains.
  - 2. The Contractor shall cooperate with the Owner by operating, only when directed, any required water main appurtenances to assist in the disinfection of such appurtenances and of any pipe branches and to assure that the chlorination solution

is confined to water main being disinfected. The Owner will determine the length of time the chlorine solution is to be held in the water main being disinfected.

M. Final Flushing:

1. The flushing of the chlorination solution shall be done by the Contractor until the chlorine solution is totally flushed out of the system being disinfected. All flushing shall be under the control of the Owner. The Contractor shall obtain water for flushing in the same manner as for pressure test procedure.
2. In flushing, the Contractor shall properly dispose of the chlorination solution. Only points of discharge approved by the Owner shall be utilized without any treatment to chemically neutralize the solution. In cases where direct disposal is not approved, the Contractor shall neutralize the chlorine solution as provided in Appendix B of AWWA C-651. The Contractor shall obtain approval, in writing, of the local municipality, or of those having jurisdiction over the local sewers, before disposing to a sanitary sewer. A copy of such written approval shall be provided to the Owner before any flushing is begun.
3. The Owner will determine when the disinfection solution has been satisfactorily flushed from the main and branches.

N. Sampling:

1. A time period as determined by the Owner shall elapse before water samples are taken from the water main(s) and branch(es) to determine the bacteriological quality of the water therein. In no case, shall the time period be less than twenty-four (24) hours.
2. No samples shall be taken from fire hydrants. The Contractor shall assist the Owner in obtaining samples. The Owner will furnish all containers and control procedures for obtaining samples. The Owner will determine the number and locations of samples to be taken from the disinfected sections.
3. The Owner will determine the bacteriological quality of the water samples. If sampling results in two (2) consecutive positive samples, the procedure of chlorination, flushing and sampling shall be repeated. See Suggested Combination and Sampling Tap in AWWA C-651 for details.
4. In cases where the length of water main is less than 350 feet, after hydrostatic testing, only preliminary flushing and sampling will be done. However, if there are two (2) positive samples, after the preliminary flushing and sampling, the entire procedure of preliminary flushing, chlorination, final flushing and sampling shall be required. The Owner will complete and distribute the chlorination approval form.

### 3.05 ACCESS PITS FOR CHLORINATION

- A. At locations agreed upon by the Owner, the Contractor shall provide tightly wood sheeted access pits for access to all water main appurtenances to be utilized in disinfecting water mains. These access pits shall conform to the latest requirements of the specific safety requirements set forth in 29 Code of Federal Regulations Part 1926 (CFR 1926), and with all applicable rules and regulations of OSHA.
- B. The Contractor shall have on hand, ready for use, pumping equipment to dewater any and all access pits used for disinfecting water mains and shall dewater the access pits when ordered by the Owner.
- C. Upon completion of the chlorination procedure, when access pits are no longer required for use, the Contractor shall remove all sheeted access pits and backfill the excavations in accordance with these specifications.
- D. No extra payment will be made to the Contractor providing access pits, pumping equipment and the dewatering of access pits, or for the removal of the sheeted access pits and backfilling of the excavations, but the cost thereof shall be deemed to be included in the price bid per lineal foot of water main furnished and installed under this contract.

### 3.06 CLOSEOUT ACTIVITIES:

- A. Provide in accordance with the Contract Documents.

**END OF SECTION**

## **PLAN HOLDERS LIST**

### **Riviera Water Main Project**

Individuals or companies can be added to the plan holders list by contacting Krystal Powell at [krystal.powell@co.warren.oh.us](mailto:krystal.powell@co.warren.oh.us)

<b>Name</b>	<b>Company</b>	<b>Phone Number</b>	<b>E-mail Address</b>
Mandy Guenther	JW Brennan Excavating, LLC	513-738-0360	<a href="mailto:JWBrennanExcavating@gmail.com">JWBrennanExcavating@gmail.com</a>
Andrew J. Kloenne	Ford Development Corp.	513-772-1521	<a href="mailto:Akloenne@forddevelopment.com">Akloenne@forddevelopment.com</a>
Eric Hazlett	Loveland Excavating & Paving	513-254-2893	<a href="mailto:ehazlett@lovelandexcavating.com">ehazlett@lovelandexcavating.com</a>
Kelly Simpson	Larry Smith Incorporated	513-367-0215 ext. 121	<a href="mailto:Kelly.simpson@larrysmithinc.com">Kelly.simpson@larrysmithinc.com</a>
	Majors Enterprises	513-539-8212	<a href="mailto:majorssupply@hotmail.com">majorssupply@hotmail.com</a>

CONTRACT DOCUMENTS

**RIVIERA DRIVE WATER MAIN**

WARREN COUNTY WATER & SEWER DEPARTMENT

WARREN COUNTY BOARD OF COMMISSIONERS  
406 JUSTICE DRIVE  
LEBANON, OHIO 45036  
(513) 695-1250

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**SECTION 00 10 10**  
**INVITATION TO BIDDERS**

Separate sealed bids for the Riviera Drive Water Main Project will be received by the Warren County Board of Commissioners at the Office of the Warren County Commissioners, 406 Justice Drive, Lebanon, Ohio 45036, until 11:00 am, Thursday, May 13, 2021 and then at said time publicly be opened and read aloud.

Bid documents, including terms, general conditions, supplemental conditions, drawings and specifications are available online at the Warren County's Website at <https://www.co.warren.oh.us/Commissioners/Bids/Default.aspx>. Questions regarding the technical specifications should be directed to Chris Wojnicz at the Warren County Water and Sewer Department, (513) 695-1646.

The project generally consists of installing approximately 4,100 feet of 6" ductile iron water main along Hamilton-Middletown Road and Riviera Drive in Franklin Township and the City of Middletown. The estimated contract value is \$1,000,000.

A bid guaranty, as required by Ohio Revised Code, Section 153.54, shall accompany each proposal submitted, as follows:

1. A Certified check, cashier's check, or letter of credit equal to ten (10) percent of the bid. A letter of credit may only be revocable by the Owner. Upon entering into a contract with the Owner, the contractor must file a performance bond for the amount of the contract, and the bid guaranty will then be returned to the successful and unsuccessful bidders upon contract execution.

**OR**

2. A form of bid guaranty bond (attached) for the full amount of the bid. Such bond is retained for the successful bidder, but returned to unsuccessful bidders after the contract is executed.

Warren County reserves the right to reject any or all bids submitted, to waive any irregularities in bids, and enter into a contract with the Bidder who in Warren County's consideration offered the lowest and best bid. By order of the Board of County Commissioner, County of Warren, State of Ohio.

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Tina Osborne, Clerk

**SECTION 00 10 20  
BID PROPOSAL**

The undersigned declares that the only persons or parties in this Bid are as stated; that the Bid is made without any collusion with other persons, firms, or corporations; that all the Contract Documents as prepared have been carefully examined; that the undersigned is fully informed in regard to all conditions pertaining to the Work and the place where it is to be done, and from them the undersigned makes this bid. The undersigned do hereby propose to furnish all labor, materials, tools, equipment, etc., necessary to complete the work in Franklin Township in Warren County and the City of Middletown, Ohio and that the bid include all costs including, permit fees, taxes, insurance, overhead, and profit. All material and equipment must comply with the specifications and contract drawings that comprise the Contract Documents.

The premiums for all Bonds required shall be paid by the Contractor and shall be included in the Contract Price. The undersigned Bidder further agrees that the Bid Security accompanying this Bid shall become the property of the County if the Bidder fails to execute the Agreement.

If any addenda are published on Warren County's website at <https://www.co.warren.oh.us/Commissioners/Bids/Default.aspx>, pursuant to SECTION 00 20 00, Paragraph 7, the undersigned acknowledges receipt of the following Addenda:

No. \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_

No. \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_

No. \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_

The Bid shall include the following:

Ref 1 – Item 107 – Temporary Mailbox Relocation and Reinstall

Ref 2 – Item 107 – Guardrail Replacement, Reinstallation of Traffic Signs

Ref 3 – Item 204 – Subgrade Compaction

Ref 4 – Item 252 – Pavement Sawing & Removal

Ref 5 – Item 301 – ODOT-301 Concrete, 4”

Ref 6 – Item 304 – ODOT-304 Aggregate Base, 4”

Ref 7 – Item 448 – ODOT-448 Asphalt Concrete Surface Course, 3”

Ref 8 – Item 452 – ODOT-452 Non-Reinforced Portland Cement Concrete, 4”

Ref 9 – Item 614 – Maintenance of Traffic

Ref 10 – Item 624 – Mobilization & Demobilization



Ref 11 – Item 638 – 6” Valve, Including Valve Boxes and Stems

Ref 12 – Item 639 – Furnish & Install ¾” Type “K’ Copper Service Pipe with Metering Setting

Ref 13 – Item 638 – Reconnect Existing ¾” Copper Service

Ref 14 – Item 638 – Furnish & Install 6” C151 Class 52 Ductile Iron Restrained Joint Pipe, Including Fittings, Plugs, Glands, and Gaskets

Ref 15 – Item 638 – Furnish & Install 6” C151 Class 52 Ductile Iron Pushed Joint Pipe, Including Fittings, Plugs, Glands an Gaskets

Ref 16 – Item 638 – Furnish & Install 6” C151 Class 52 Ductile Iron Anchor Pipe for Hydrant Extensions

Ref 17 – Item 638 – Furnish & Install Fire Hydrant Assembly Including Glands, Gaskets, Restraints, 6’ Gate Valve, Box and Lid

Ref 18 – Item 638 – Connect to Existing 6” Watermain, Including, Coupling, Glands and Gaskets

Ref 19 – Item 653 – Topsoil Furnish and Placed.

Ref 20 – Item 659 = Site Restoration, Including Grading, Seeding, Mulching

Ref 21 – Item XX - Frostproofing

The written/typed Total Bid price is for the convenience of the Owner in comparing bids. Any discrepancy between the actual sum of the line item totals and the written/typed total bid price shall be resolved in favor of the actual sum of the correct individual line item.

The undersigned hereby certifies under the penalty of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person or entity. The bid proposals shall remain in full force and effect for sixty (60) days after the date of opening bids. The full name and address of all persons and parties interested in the foregoing bids as principals are as follows:

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Individual, Partnership, or Corporation

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Signature of Corporate Officer, President, or Owner

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Date

Notice of acceptance should be mail or delivered to the following:

COMPANY NAME: \_\_\_\_\_

CHIEF EXECUTIVE OFFICER: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

\_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

FAX NUMBER: \_\_\_\_\_

PROJECT CONTACT PERSON: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

E-MAIL ADDRESS: \_\_\_\_\_

FEDERAL ID #: \_\_\_\_\_

WEBSITE ADDRESS: \_\_\_\_\_

NOTE: The firm, corporate or individual name of the bidder must be signed in ink in the space provided for the signatures on the proposed blanks. In the case of a corporation, the title of the officer signing must be stated and such officer must be thereunto duly authorized and the seal of said corporation duly affixed. In the case of a partnership, the signature of at least one of the partners must follow the firm name, using the term “member of the firm.” In the case of an individual, use the terms “doing business as”, or “sole owner.”

**SECTION 00 10 30  
BID FORM**

BIDDER agrees to perform all the work described in the Contract Documents for the following prices:

REF. NO.	ITEM NO.	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL COST
1	107	Temporary Mailbox Relocation and Reinstall	10	Ea.		
2	107	Guardrail Replacement, Reinstallation of Traffic Signs	1	LS		
3	204	Subgrade Compaction	377	SY		
4	252	Pavement Sawing & Removal	518	LF		
5	301	ODOT-301 Concrete, 4"	251	SY		
6	304	ODOT-304 Aggregate Base, 4"	126	SY		
7	448	ODOT-448 Asphalt Concrete Surface Course, 3"	229	SY		
8	452	ODOT-452 Non-Reinforced Portland Cement Concrete, 4"	22	SY		
9	614	Maintenance of Traffic	1	LS		
10	624	Mobilization & Demobilization	1	LS		
11	638	6" Valve, Including Valve Boxes and Stems	8	Ea.		
12	638	Furnish & Install 3/4" Type "K" Copper Service Pipe w/ Metering Setting	49	LF		
13	638	Reconnect Ex. 3/4" Copper Service	6	Ea.		
14	638	Furnish & Install 6" C151 Class 52 Ductile Iron Restrained Joint Pipe, Including Fittings, Plugs, Restraints, Glands and Gaskets	1333	LF		
15	638	Furnish & Install 6" C151 Class 52 Ductile Iron Pushed Joint Pipe, Including Fittings, Plugs, Glands and Gaskets	2706	LF		
16	638	Furnish & Install 6" C151 Class 52 Ductile Iron Anchor Pipe for Hydrant Extensions	55	LF		
17	638	Furnish & Install Fire Hydrant Assembly, Including Glands, Gaskets, Restraints 6" Gate Valve, Box and Lid	11	Ea.		
18	638	Connect to Existing 6" WM, Including Couplings, Glands and Gaskets	1	Ea.		
19	653	Topsoil Furnished and Placed	1174	SY		

20	659	Site Restoration, Including Grading, Seeding, Mulching	1174	SY		
21	XX	Frostproofing	1700	CF		

**Total of Bid Items 1 through 21**    \$ \_\_\_\_\_

---

**Total Bid Items 1 through 21 (In Words)**

**SECTION 00 10 50  
EXCEPTION SHEET**

Exceptions: Exceptions to any bid specification must be clearly stated on this sheet. This sheet must be submitted with each bid. If there are no exceptions, please indicate “none” below.

1. \_\_\_\_\_  
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2. \_\_\_\_\_  
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3. \_\_\_\_\_  
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5. \_\_\_\_\_  
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6. \_\_\_\_\_  
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\_\_\_\_\_

**SECTION 00 20 00**  
**GENERAL INSTRUCTION TO BIDDERS**

1. **Receipt and Opening of Bids:** The Warren County Board of Commissioners (herein referred to as “Owner”), invites bides on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be receive by the Owner at the Office of the Warren County Board of Commissioners until 11:00 AM, Thursday May 13, 2021 and then at said office publicly opened and read aloud. The envelopes containing the bids must be sealed, addressed to Warren County Board of Commissioners at 406 Justice Drive, Lebanon, Ohio 45036, and shall be clearly marked as follows:

**Bid Opening**  
**RIVIERA DRIVE WATER MAIN PROJECT**  
**11:00 AM, Thursday May 13, 2021**

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered.

2. **Description of Project:** The project generally consists of installing approximately 4,100 feet of 6” ductile iron water main along Hamilton-Middletown Road and Riviera Drive in Franklin Township and the City of Middletown.

3. **Construction Cost:** The Engineer’s opinion of probable construction cost for the base bid work is \$1,000,000.

4. **Project Funding/Financing:** The project shall be financed only through the Owner’s reserved funds and does not receive financing through any State of Ohio or Federal funding.

5. **Time of Completion and Liquidated Damages:** The Bidder hereby agrees that the Contract Time shall commence on the date stipulated in the Notice to Proceed which will be issued by the Owner within 14 days of contract execution and to complete the work in accordance with the terms as stated in the Contract, and in accordance with the following schedule milestones:

**Substantial Completion:** 90 Days from Notice to Proceed.

**Final Completion:** 120 Days from Notice to Proceed.

Any delays in substantial completion of the work that are within the control of the Contractor, their Subcontractor, or Supplier shall be subject to liquidated damages in the sum of \$200.00 for each consecutive calendar day that the project extends beyond the substantial completion deadline. See the General Conditions and Supplemental Conditions for the definition and requirements of substantial completion.

6. **Bid Documents:** Bid documents, including terms, general conditions, supplemental conditions, drawings, addenda, and other information are available online, free of charge, at the

Warren County's Website at <https://www.co.warren.oh.us/Commissioners/Bids/Default.aspx>. No planholder list will be maintained by the Owner. All Addenda will be posted on the website and shall not be mailed to bidders.

7. **Addenda and Interpretations:** No interpretations of the meaning of the plans, specifications, or other pre-bid documents will be made to any bidder orally. Every request for such interpretation must be in writing to Chris Wojnicz at [Christopher.Wojnicz@co.warren.oh.us](mailto:Christopher.Wojnicz@co.warren.oh.us). To be given consideration all questions must be received by 4:00 pm on Thursday, May 6, 2021. All such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted on the Warren County Commissioners' website <https://www.co.warren.oh.us/Commissioners/Bids/Default.aspx>, no later than three days prior to the date fixed for opening of bids. Failure of any bidder to monitor the website and download any such addendum or interpretations shall not relieve such bidder from any obligation under his/her bid as submitted. All addenda so issued shall become part of the contract documents. Bidders shall be responsible for checking the website prior to submitting their bid.

8. **Required Forms:** Each bid must be submitted on the forms contained in the Contract Documents herein. All blank spaces for bid prices must be completed, in ink or typewritten, in both words and figures, and the foregoing certifications must be fully completed and executed when submitted. Each Bidder shall complete and submit the following forms with his/her bid:

Section 00 10 20	BID PROPOSAL
Section 00 10 30	BID FORM
Section 00 10 50	EXCEPTION SHEET
Section 00 30 10	NONCOLLUSION AFFIDAVIT – FORM 1
Section 00 30 20	NONCOLLUSION AFFIDAVIT – FORM 2
Section 00 30 30	AFFIDAVIT OF NON-DELINQUENCY OF REAL AND/OR PERSONAL PROPERTY TAX
Section 00 30 40	FINDINGS FOR RECOVERY AFFIDAVIT
Section 00 30 50	EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS, BID CONDITIONS, NON-DISCRIMINATION, AND EQUAL EMPLOYMENT OPPORTUNITY AFFIDAVIT
Section 00 40 00	BONDING REQUIREMENTS
Section 00 40 10	BID GUARANTY AND CONTRACT BOND

9. **Modification or Withdraw of Bid:** Bids may be modified or withdrawn by any appropriate document duly executed (in the manner that a bid must be executed) and delivered to the place where bids are to be submitted at any time prior to the opening of bids.

After opening, a Bidder may withdraw their bid from consideration if the price bid was substantially lower than the other bids, provided the bid was submitted in good faith and the reason for the price being substantially lower was a clerical mistake as opposed to a judgment mistake and was actually due to an unintentional omission of a substantial quantity of work, labor or material made directly in the compilation of the bid. Request to withdraw such bid must be made in writing and filed with the Owner within two business days after the opening of bids and prior to the acceptance thereof.

10. **Method of Award:** The Owner may reject all bids or may award the contract on the base bid or on the base bid combined with additions or deductible alternates, to the lowest and best bidder, as produces a net amount which is within the available funds.

To determine lowest and best bidder, the price of the bid will be given equal weight against the totality of the following factors: 1.) the bidder's information provided in the Section 00 50 10 Experience Statement which shall be used to judge responsibility, experience, skill, financial standing, feedback from references or prior clients—which may include Owner; 2.) the Section 00 10 30 Exception Sheet; 3.) availability.

If the total price received from the lowest and best bidder exceeds the amount of funds available to finance the contract, the Owner may:

- a. Reject all bids;
- b. Augment the funds available in the amount sufficient to enable award to the lowest and best bidder or bidders;
- c. Reduce the scope of the work by eliminated certain items of work to produce a total bid which is within the available funds;
- d. Reduce the scope of work by reducing the quantities of certain items of work to produce a total bid which is within the available funds;
- e. Reduce the scope of work by a combination of adjustments as outlined in “c” and “d” above to produce a total bid which is within available funds.
- f. The Owner may reject all bids or may award the contract on the base bid or on the base bid combined with additions or deductible alternative as produces a net amount which is within the available funds.

The Owner may consider informal and may reject any bid not prepared and submitted in accordance with the provisions hereof. The Owner reserves the right to reject all bids, to waive any informalities or irregularities in the bids received, and to accept any bid which is deemed lowest and best.

11. **Qualification of Bidder:** The Owner any make such investigations as he/she deems necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Owner that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated herein; conditional bids will not be accepted.

12. **Conditions of Work:** Each bidder must inform him/herself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his/her obligation to furnish all material and labor necessary to carry out the provisions of his/her contract. Insofar as possible the contractor, in carrying out the work, must employ such methods or means or will not cause any interruption of or interference with the work of any other contractor. No plea of ignorance of conditions that exist or that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work as the result of failure to make such examination and investigation, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill in every



respect, all the requirements of the Contract, nor will the same be accepted as a basis for any claim whatsoever for extra compensation or for an extension of time.

13. **Obligation of Bidder:** Each bidder shall, and is hereby directed to inspect the entire site of the proposed work and judge for him/herself as to all the circumstances affecting the cost and progress of the work and shall assume all patent and latent risks in connection therewith. At the time of the opening of bids each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his/her bid.

14. **Non-Collusion Affidavit:** The successful bidder will be required to submit non-collusion affidavit on the form included in these Bid/Contract Documents (SECTION 00 30 10 and 00 30 20). These affidavits shall be dated and executed as part of this bid.

15. **Real and/or Personal Property Tax Affidavit:** All bidders must complete the Real and/or Personal property tax affidavit (Section 00 30 30) and submit with your bid. This section should be fully completed whether or not you as a vendor/contractor own property in Warren County, Ohio.

16. **EEO Compliance:** Equal Employment Opportunity (EEO) compliance requirements and affidavits are contained in SECTION 00 30 50. Owner contracts that receive state or federal funding including, but not limited to, grants, loans, and debt forgiveness shall not be executed unless the Contractor possesses a current Certificate of Compliance issued by the State EEO Coordinator.

Every contract for or on behalf of the County for the construction, alteration, or repair of any public building or public work shall include an affidavit certifying the contractor complies with EEO requirements specified in Ohio Revised Code Section 153.59.

17. **Bid Security:**

A bid guaranty, as required by Ohio Revised Code, Section 153.54, shall accompany each proposal submitted, as follows:

1. A Certified check, cashier's check, or letter of credit equal to ten (10) percent of the bid. A letter of credit may only be revocable by the Owner. Upon entering into a contract with the Owner, the contractor must file a performance bond for the amount of the contract, and the bid guaranty will then be return to the successful and unsuccessful bidders upon request.

**OR**

2. A form of bid guaranty bond (attached) for the full amount of the bid. Such bond is retained for the successful bidder, but returned to unsuccessful bidders after the contract is executed.

Such cash, checks or bid bonds will be returned to bidders after the Owner has awarded the bid and has executed the contract, or, if no award has been made within 60 days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he/she has not been notified of the acceptance of his/her bid.

Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

18. **Liquidated Damages for Failure to Enter into Contract:** The successful bidder, upon his/her failure or refusal to execute and deliver the contract and bonds required within 10 working days after he/she has received the documents, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the bid security.

19. **Security for Faithful Performance:** Simultaneously with his/her delivery of the executed contract, the Contractor shall furnish a performance (surety) bond as security for faithful performance of this contract and for the payment of all persons performing labor on project under this contract and furnishing materials in connection with the contract. The surety on such bond or bonds shall be duly authorized surety company satisfactory to the Owner. Please note that upon execution of the Contract if a Bid Guaranty/Contract Bond was submitted with your original bid a Performance Bond will not be required.

20. **Required Insurance:** In accordance with the specifications and the Supplemental Conditions, the Contractor, without restricting the obligations and liabilities assumed under the Contract Documents, shall at his own cost and expense purchase and maintaining in force until final acceptance of his work, the forms of insurance coverage as described in Section 00 80 10 Supplemental Conditions 1.2.C. Article 5 – Bonds and Insurance.

Certificates from the insurance carrier stating the limits of liability and expiration date shall be filed with the Owner before operations are begin. Such certificates shall not merely name the types of policy provided, but shall specifically refer to this Contract and shall name the Board of Warren County Commissioners as additionally insured.

All policies as hereinafter required shall be so written that the Owner will be notified of cancellation or restrictive amendment at least sixty days prior to the effective date of such cancellation or amendment.

If any part of the work is sublet, insurance of the same types and limits as required shall be provided by or on behalf of the Subcontractors to cover that part of the work they have contracted to perform including Property Damage Liability Special Hazards coverage if so required by this contract.

21. **Additional Obligations Upon Contract Award:** Upon award of the bid but prior to execution of the final agreement and notice to proceed, the Contractor shall submit all of the following documents, completed as required:

1. Contract
2. Performance Bond
3. Certificates of Insurance

22. **Wage Rates:** In the event that the rate of wages paid for any trade or occupant in the locality where such work is being performed are under current collective agreements or understandings between bona fide organizations of labor and employer, then the wages to be paid shall be not less than such agreed wage rates, nor less than the minimum rates compiled by the Federal Labor Standard Act. Copies of these prevailing wage rates have been included in these specifications. Every Contractor and Subcontractor who is subject to Ohio Revised Code,

Chapter 4115 shall, as soon as he begins performance under his contract with the Owner, supply the Prevailing Wage Coordinator for the Owner a schedule of the dates on which he is required to pay wages to employees. He shall also deliver to the Prevailing Wage Coordinator within three weeks after each pay date, a certified copy of his payroll which shall exhibit for each employee paid any wages, name, current address, social security number, number of hours worked each day of the pay period and the total for each week, hourly rate of pay, job classification, fringe payments, and deductions from wages. The certification of each payroll shall be executed by the Contractor, Subcontractor, or duly appointed agent thereof and shall recite that the payroll is correct and complete and that the wage rate shown is not less than those required by the contract.

In case the Owner orders the Contractor to perform extra or additional work which may make it necessary for the Contractor or any Subcontractor under this contract to employ a person not herein specified, the Contractor will include in the contract change order for such extra or additional work, a minimum wage rate for such trade or occupation, and insofar as such extra or additional work is concerned, there shall be paid to each employee engaged in work of such trade or occupation, not less than the wage so included. Insofar as possible, local labor shall be employed on this work.

23. **Laws and Regulations:** The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities have jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.

24. **Foreign Corporation and Contractors:** "Foreign Corporations" means a corporation incorporated under the laws of another state. No contract shall be entered into with a foreign corporation until the Secretary of State has certified that such corporation is authorized to do business in Ohio: and until, if the bidder so awarded the Contract is a person or partnership, it has filed with the Secretary of State a Power of Attorney designating the Secretary of State as its agent for the purpose of accepting service of summons in any action brought under Ohio Revised Code, Section 153.05 or under Sections 4123.01 to 4123.94, inclusive.

25. **Safety Standards and Accident Prevention:** With respect to all work performed under this Contract, the Contractor shall:

- a. Comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of title 29 of the code of Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, N. 75, Saturday, April 17, 1971.
- b. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.
- c. Maintain at his/her office or other well known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or doctor's care of persons (including employees) who may be injured at the job site. In no case shall employees be permitted to work

at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.

26. **Permits:** Contractor shall keep a copy of all permits at the project site throughout the duration of the work. The permits required for the work, the permit holder, and the entity paying for the permit is outlined below. All obtained permits acquired to date are included in SECTION 00 70 20.

Permit	Agency	Permit Holder	Entity Paying for Permit
Permit to Install	Ohio EPA	Owner	Owner

27. **Subcontracts:** Contractor shall provide upon request of the Owner a list of all subcontractors intended to be used in performance of the work. In the event the Owner does not object, Contractor may have such work performed by a subcontractor. Contractor shall bind every subcontractor to, and every subcontractor must agree to be bound by the terms of the Agreement, as far as applicable to the subcontractor's work particularly pertaining to Prevailing Wages and EEO requirements. Nothing contained in the Agreement shall create any contractual relationship between any subcontractor and Owner, nor create any obligations on the part of the Owner to pay or see to the payment of any sums to any subcontractor.

28. **Subletting of Contract:** The Contractor shall not sublet, sell, transfer or assign any portion of the contract without written consent of the Owner or his designated agent. When such consent is given, the Contractor will be permitted to sublet a portion thereof, but shall perform with his own organization, work amounting to no less than fifty percent of the total contract cost, except that any time designated in the contract before computing the amount of work required to be performed by the Contractor with his own organization, no subcontract, or transfer of contract, shall in any way release the Contractor of his liability under the contract and bonds.

29. **CONFIDENTIAL DOCUMENTS & INFORMATION:** Do not submit confidential documents or documents of any type that contain trade secrets. All materials submitted become public records once opened and may be copied upon request to anybody including competitive bidders.

END OF SECTION

**SECTION 00 30 10  
NONCOLLUSION AFFIDAVIT – FORM 1**

State of \_\_\_\_\_  
\_\_\_\_\_

BID Identification \_\_\_\_\_

CONTRACTOR \_\_\_\_\_ being first duly sworn, deposes and says that he is \_\_\_\_\_ (sole owner, a partner, president, secretary, etc.) of \_\_\_\_\_, the party making the foregoing BID; that such BID is not made in the interest of or on behalf of any undisclosed person, partnership, company, association, organization, or corporation; that such BID is genuine and not collusive or sham; that said BIDDER has not directly or indirectly colluded, conspired, connived or agreed with any BIDDER or any one else to put in a sham BID, or that any one shall refrain from Bidding; that said BIDDER has not in any manner, directly or indirectly, sought by agreement, communication or conference with any one to fix the BID price of said BIDDER or of any other BIDDER, or to fix any overhead, profit, or cost element of such BID price, or of that of any other BIDDER, or to secure any advantage against the OWNER awarding the contract or anyone interested in the proposed contract; that all statement contained in such BID are true; and, further, that said BIDDER has not, directly or indirectly, submitted his BID price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid and will not pay any fee in connection therewith, to any corporation, partnership, company, association, organization, BID depository, or to any member or agent thereof, or to any other individual except to such person or persons who have a partnership or other financial interest with said BIDDER in his general business.

Signed:

\_\_\_\_\_

Subscribed and sworn to before

me this \_\_\_ day of \_\_\_\_\_, 2021.

Seal of Notary

\_\_\_\_\_

**SECTION 00 30 20  
NONCOLLUSION AFFIDAVIT – FORM 2**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

I, \_\_\_\_\_, holding the title and position of \_\_\_\_\_ at the firm \_\_\_\_\_, affirm that I am authorized to speak on behalf of the company, board directors and owners in setting the price on the contract, bid or proposal. I understand that any misstatements in the following information will be treated as fraudulent concealment of true facts on the submission of the contract, bid or proposal.

I hereby swear and depose that the following statements are true and factual to the best of my knowledge:

The contract, bid or proposal is genuine and not made on the behalf of any other person, company or client, INCLUDING ANY MEMBER OF THE WARREN COUNTY BOARD OF COMMISSIONERS.

The price of the contract, bid or proposal was determined independent of outside consultation and was not influenced by other companies, clients or contractors, INCLUDING ANY MEMBER OF THE WARREN COUNTY BOARD OF COMMISSIONERS.

No companies, clients or contractors, INCLUDING ANY MEMBER OF THE WARREN COUNTY BOARD OF COMMISSIONERS have been solicited to propose a fake contract, bid or proposal for comparative purposes.

No companies, clients or contractors, INCLUDING ANY MEMBER OF THE WARREN COUNTY BOARD OF COMMISSIONERS have been solicited to refrain from bidding or to submit any form of noncompetitive bidding.

Relative to sealed bids, the price of the bid or proposal has not been disclosed to any client, company or contractor, INCLUDING ANY MEMBER OF THE WARREN COUNTY BOARD OF COMMISSIONERS, and will not be disclosed until the formal bid/proposal opening date.

\_\_\_\_\_  
AFFIANT

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_ 2021.

\_\_\_\_\_  
(Notary Public),

\_\_\_\_\_ County.

My commission expires \_\_\_\_\_ 20\_\_

**SECTION 00 30 30**  
**AFFIDAVIT OF NON-DELINQUENCY OF REAL AND/OR**  
**PERSONAL PROPERTY TAX**

THIS SECTION SHOULD BE FULLY COMPLETED WHETHER OR NOT YOU AS A VENDOR/CONTRACTOR OWN PROPERTY IN WARREN COUNTY, OHIO. MAKING A FALSE STATEMENT ON THIS AFFIDAVIT MAY BE PUNISHABLE BY A FINE AND/OR IMPRISONMENT.

STATE OF \_\_\_\_\_ )

SS:

COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_ being duly cautioned and sworn, states as follows:

1. That he/she is \_\_\_\_\_ of  
(Title)

\_\_\_\_\_  
(Name of Contracting Party)

2. That \_\_\_\_\_ is not presently charged with any  
(Name of Contracting Party)  
delinquent Real and/or Personal property taxes on the general tax list of Real and/or  
Personal property of Warren County.

-OR-

1. That \_\_\_\_\_ is charged with delinquent Real and/or  
(Name of Contracting Party)

Personal property tax on the general tax list of Real and/or Personal property of Warren  
County. The amount of delinquent Real and/or Personal property tax due and unpaid  
including any due and unpaid penalty and interest is:

\$ \_\_\_\_\_

Further, affiant states not.

\_\_\_\_\_  
Affiant

Sworn to and subscribed in my presence this \_\_\_\_ day of \_\_\_\_\_ 2021.

\_\_\_\_\_  
Notary Public

This instrument was prepared by \_\_\_\_\_.

Note to Fiscal Office: If any Real and/or Personal property taxes are delinquent, you must send a copy of this statement to the County Treasurer within 30 days of the date it is submitted.

**SECTION 00 30 40  
FINDINGS FOR RECOVERY AFFIDAVIT**

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_, SS:

\_\_\_\_\_, upon being duly cautioned and sworn, hereby states the following based on personal knowledge:

- 1) That he/she is \_\_\_\_\_ (title), of \_\_\_\_\_ (name of bidder) and authorized to execute this affidavit; and,
- 2) That \_\_\_\_\_ (name of bidder) is not a person or entity against whom a finding for recovery has been issued by the Auditor of State, which finding for recovery is unresolved as defined in Ohio Revised Code [General Provisions] Section 9.24 (B); and,
- 3) That \_\_\_\_\_ (name of bidder) does not appear in the database of unresolved findings of recovery maintained by the Auditor of State pursuant to Ohio Revised Code [General Provisions] Section 9.24 (D).

\_\_\_\_\_  
Affiant

Sworn to and subscribed in my presence this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
Notary Public

My Commission expires: \_\_\_\_\_



## **Section 00 30 50**

### **EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS, BID CONDITIONS, NON-DISCRIMINATION, AND EQUAL EMPLOYMENT OPPORTUNITY AFFIDAVIT**

Bidders shall submit a copy of a valid Certificate of Compliance issued by the State EEP Coordinator for Owner projects that received state or federal funding. The source of financing and funding for this project is specified in SECTION 00 20 00 – INSTRUCTION TO BIDDERS. Bidders may contact the State of Ohio, Department of Administrative Services, Equal Opportunity Division for information on how to apply online for a certification using the Ohio Business Gateway.

Every contract for or on behalf of the County for the construction, alteration, or repair of any public building or public work shall include an affidavit certifying the contractor complies with EEO requirements specified in Ohio Revised Code Section 153.59. In addition to the affidavit, all bidders agree to the following State of Ohio standard conditions of contract for construction:

1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, disability, Vietnam era Veteran status, ancestry or sex. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, national origin, age, disability, Vietnam era Veteran status, ancestry or sex. Such action shall include, but is not limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The Contractor will in all solicitations or advertisements for employees placed by or on behalf of the prime contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, age, disability, Vietnam era Veteran status, ancestry or sex.
3. The Contractor agrees to fully cooperate with the County, the State Equal Employment Opportunity Coordinator and with any other official or agency, or the State or Federal government which seeks to eliminate unlawful employment discrimination, and with all other State and Federal efforts to assure equal employment practices under its contract and the contractor shall comply promptly with all requests and directions from the County, the State Equal Opportunity Coordinator and any of the State of Ohio officials and agencies in this regard, both before and during construction.
4. Full cooperation as expressed in clause (3), above, shall include, but not be limited to, being a witness and permitting employees to be witnesses and complainants in any proceedings involving questions of unlawful employment practices, furnishing all information requested by the County and the State Equal Employment Opportunity Coordinator, and permitting access to its books, records, and accounts by the County and the State Equal Employment

Opportunity Coordinator for purposes of investigation to ascertain compliance with applicable rules, regulations and orders.

5. In the event of the Contractor's noncompliance with the nondiscrimination clauses of its contract or with any of the said rules, regulations, or orders, its contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further County construction contracts.
6. The Contractor will require the inclusion of language reflecting these same six covenants within every subcontract or purchase order it executes in the performance of its contract unless exempted by rules, regulations or orders of the State Equal Employment Opportunity Coordinator so that these provisions will be binding upon each subcontractor or vendor. The contractor will take such as the County may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in any litigation with a subcontractor, vendor or other party as a result of such direction by the County, the contractor may be requested to protect the interests of the County.

The bidder hereby adopts the foregoing covenants?

\_\_\_\_\_ Yes    \_\_\_\_\_ No

PLEASE NOTE: The bidder's failure to adopt the Bidder's EEO Covenants, will cause the bidder's proposal to be rejected as being non-responsive.

CERTIFICATE OF COMPLIANCE NON-DISCRIMINATION AND EQUAL EMPLOYMENT  
OPPORTUNITY AFFIDAVIT (CONTRACTOR)

STATE OF \_\_\_\_\_ )

SS:

COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_ being first duly sworn, deposes and

says that he/she is \_\_\_\_\_ of \_\_\_\_\_

the party who made the foregoing proposal; that such party as bidder does not and shall not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, disability, Vietnam era Veteran status, ancestry or sex. If awarded the bid and contract under this proposal, said party shall take affirmative action to insure that applicants are employed and that employees are treated, during employment, without regard to their race, color, religion, national origin, age, disability, Vietnam era Veteran status, ancestry or sex.. If successful as the lowest and best bidder under the foregoing proposal, this party shall post non-discrimination notices in conspicuous places available to employees and applicants for employment setting forth the provisions of this affidavit.

Furthermore, said party agrees to abide by the assurances found in Section 153.54 of the Ohio Revised Code in the Contract Provisions with the Owner if selected as the successful bidder by the Owner.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Affiant

\_\_\_\_\_  
Company/Corporation

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip Code

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

(seal)

\_\_\_\_\_  
Notary

CERTIFICATE OF COMPLIANCE NON-DISCRIMINATION AND EQUAL EMPLOYMENT  
OPPORTUNITY AFFIDAVIT (SUB-CONTRACTOR)

STATE OF \_\_\_\_\_ )

SS:

COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_ being first duly sworn, deposes and

says that he/she is \_\_\_\_\_ of \_\_\_\_\_

the party who made the foregoing proposal; that such party as bidder does not and shall not discriminate against any employee or applicant for employment because of race, color, religion, national origin, age, disability, Vietnam era Veteran status, ancestry or sex. If awarded the bid and contract under this proposal, said party shall take affirmative action to insure that applicants are employed and that employees are treated, during employment, without regard to their race, color, religion, national origin, age, disability, Vietnam era Veteran status, ancestry or sex.. If successful as the lowest and best bidder under the foregoing proposal, this party shall post non-discrimination notices in conspicuous places available to employees and applicants for employment setting forth the provisions of this affidavit.

Furthermore, said party agrees to abide by the assurances found in Section 153.54 of the Ohio Revised Code in the Contract Provisions with the Owner if selected as the successful bidder by the Owner.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Affiant

\_\_\_\_\_  
Company/Corporation

\_\_\_\_\_  
Address

\_\_\_\_\_  
City/State/Zip Code

Sworn to and subscribed before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

(seal) \_\_\_\_\_  
Notary

**SECTION 00 40 00**  
**BONDING REQUIREMENTS**

**Bid guaranty**, as required by Ohio Revised Code, Section 153.54, shall accompany each proposal submitted, as follows, either:

1. A Certified check, cashier's check, or letter of credit equal to ten (10) percent of the bid. A letter of credit may only be revocable by the Owner.

OR

2. A form of bid guaranty and contract bond (attached) for the full amount of the bid. Such bond is retained for the successful bidder, but returned to unsuccessful bidders after contract is executed.

**Performance bond** is required upon entering into a contract with the Owner for 100 percent of the contract price when the bid guaranty is a certified check, cashier's check, or letter of credit equal to ten percent. Otherwise the bid guaranty and contract bond shall secure the performance of the contract with a penal sum of 100% of the bid. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

**SECTION 00 40 10**  
**BID GUARANTY AND CONTRACT BOND**

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,

---

(Insert full name or legal title of Contractor and Address)

as Principal and

---

(Insert full name or legal title of Surety)

as Surety, are hereby held and firmly bound unto the Warren County Board of Commissioners hereinafter called the Obligee, in the penal sum of the dollar amount of the bid submitted by the Principal to the Obligee on \_\_\_\_\_ to undertake the project known as:

**RIVIERA DRIVE WATER MAIN PROJECT**

The penal sum referred to herein shall be the dollar amount of the Principal's bid to the Obligee, incorporating any additive or deductive alternate proposals made by the Principal on the date referred to above to the Obligee, which are accepted by the Obligee, In no case shall the penal sum exceed the amount of \_\_\_\_\_ DOLLARS, \$ \_\_\_\_\_. If this item is left blank, the penal sum will be the full amount of the Principal's bid, including alternates. Alternatively, if completed, the amount stated must not be less than the full amount of the bid, including alternates in dollars and cents. A percentage is not acceptable.

For the payment of the penal sum well and truly to be made we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above named Principal has submitted a bid on the above referred to project;

NOW, THEREFORE, if the Obligee accepts the bid of the Principal and the Principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material; and in the event the Principal pays to the Obligee the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid and such larger amount for which the Obligee may in good faith contract with the next lowest bidder to perform the work covered by the bid; or in the event the Obligee does not award the contract to the next lowest bidder and resubmits the project for bidding, the Principal will pay the Obligee the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid, or the costs, in connection with the resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect.

If the Obligee accepts the bid of the Principal and within TEN days after the awarding of the contract, enters into a proper contract in accordance with the bid, plans, details, specifications, and bills of material, which said contract is made a part of this bond the same as though set forth herein; and

IF THE SAID PRINCIPAL SHALL well and faithfully perform each and every condition of such contract; and indemnify the Obligee against all damage suffered by failure to perform such contract according to the provisions thereof and in accordance with the plans, details, specifications, and bills of material therefore; and shall pay all lawful claims of subcontractors, materialmen, and laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said contract: we agreeing and assenting that this undertaking shall be for benefit of any materialman or laborer having a just claim, as well as for the Obligee herein; THEN THIS OBLIGATION SHALL be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

THE SAID surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of said contract or in or to the plans and specifications therefor shall in any wise affect the obligations of said surety on its bond, and it does hereby waive notice of any such modifications, omissions or additions to the terms of the contract or to the work or to the specifications.

SIGNED AND SEALED this \_\_\_\_ day of \_\_\_\_\_ 2021.

\_\_\_\_\_  
PRINCIPAL

\_\_\_\_\_  
SURETY

By: \_\_\_\_\_

By: \_\_\_\_\_

Attorney-in-fact

Title: \_\_\_\_\_

Surety Agent's Name and Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**SECTION 00 40 20  
PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called  
(Corporation, Partnership or Individual)

Principal, and \_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto

WARREN COUNTY OHIO, BOARD OF COMMISSIONERS  
406 Justice Drive  
Lebanon, OH 45036

hereinafter called OWNER, in the penal sum of \_\_\_\_\_ Dollars, \$(\_\_\_\_\_) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2021, a copy of which is hereto attached and made a part hereof for the construction of:

**RIVIERA DRIVE WATER MAIN PROJECT**

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the guaranty period(s), and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition of the terms of the contract or the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in



any way affect its obligation on this BOND, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in counterparts, each one of which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_ 2021.

ATTEST:

\_\_\_\_\_  
(Principal)

\_\_\_\_\_  
(SEAL)

By \_\_\_\_\_

\_\_\_\_\_  
ATTEST:

\_\_\_\_\_  
(SEAL)

\_\_\_\_\_  
(Surety)

IMPORTANT: Pursuant to Ohio Revised Code §122.87(A) defines surety company as, “. . . a company that is authorized by the department of insurance to issue bonds as a surety”.

**SECTION 00 50 10**  
**EXPERIENCE STATEMENT**

The Bidder is required to state in detail in the space provided below, what work they have completed of a character similar to that included in the proposed contract, to give references and such other detailed information as will enable the Owner to judge their responsibility, experience, skill and financial standing. Completion of this statement is required and must be submitted with the Bid in order to qualify for consideration for award of contract.

SUBMITTED FOR:

**RIVIERA DRIVE WATER MAIN PROJECT**

SUBMITTED BY:

Name: \_\_\_\_\_

(Print or Type Name of Bidder)  
(A Corporation / A Partnership / An Individual)  
[Bidder to strike out inapplicable terms.]

Address: \_\_\_\_\_

The undersigned certifies under oath the truth and correctness of all statements and of all answers to questions made hereinafter.

(Note: Attach Separate Sheets as Required)

1.0 How many years has your organization been in business as a construction contractor?

\_\_\_\_\_

2.0 How many years has your organization been in business under its present name?

\_\_\_\_\_

3.0 Has any construction contracts to which you have been a party been terminated by the owner; have you ever terminated work on a construction project prior to its completion for any reason; has any surety which issued a performance bond on your behalf ever completed the work in its own name or financed such completion on your behalf; has any surety expended any monies in connection with a contract for which they furnished a bond on your behalf? If the answer to any portion of this question is "yes", please furnish details of all such occurrences including name, address, phone number, and contact person of owner, engineer, and surety, and name and date of project.

No \_\_\_\_\_ Yes \_\_\_\_\_, If yes, attach details described above.

4.0 Has any officer or partner of your organization ever been an officer or partner of another organization that had construction contracts terminated by the owner; terminated work on a project prior to its completion for any reason; had any surety which issued a performance bond complete the work in its own name or financed such completion; or had any surety expend any monies in connection with a contract for which they furnished a bond? If the answer to any portion of this question is "yes", please furnish details of all such occurrences including name, address, phone number, and contact person of owner, engineer, and surety, and name and date of project.

No \_\_\_\_\_ Yes \_\_\_\_\_, If yes, attach details described above.

5.0 Provide a list of water and wastewater construction projects, their owners, contract amounts, percent complete, short description of work, and scheduled completion that your organization has in process on this date.

6.0 Provide a list of water and wastewater construction projects, their owners, contract amounts, short description of work, and dates of completion that your organization has completed in the past five years.

7.0 Have you personally inspected the site of the proposed work? Describe any anticipated problems with the site and your proposed solutions.

8.0 List name, address and telephone number of a reference for each project listed under Items 5.0 and 6.0, above.

9.0 List name and experience of the principal individuals of your organization.

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10.0 List the states in which your organization is legally qualified to do business.

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11.0 List name, address and telephone number of an individual who represents each of the following and whom OWNER may contact for a financial reference:

11.1 A surety:

Name \_\_\_\_\_

Contact \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_ Phone No. \_\_\_\_\_

Financial Reference \_\_\_\_\_

11.2 A bank:

Name \_\_\_\_\_

Contact \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_ Phone No. \_\_\_\_\_

Financial Reference \_\_\_\_\_

11.3 A major material supplier:

Name \_\_\_\_\_

Contact \_\_\_\_\_

Address \_\_\_\_\_

Phone No. \_\_\_\_\_

Financial Reference \_\_\_\_\_

12.0 Dated at \_\_\_\_\_ this \_\_\_ day of \_\_\_\_\_, 2021.

(Print or Type Name of Bidder)

By: \_\_\_\_\_

(Seal, if corporation)

------(Affidavit for Individual)-----

\_\_\_\_\_, being duly sworn, deposes and says that all of the foregoing qualification information is true, complete, and accurate.

------(Affidavit for Partnership)-----

\_\_\_\_\_, being duly sworn, deposes and says that he/she is a member of the partnership of \_\_\_\_\_ and that all of the foregoing qualification information is true, complete, and accurate.

------(Affidavit for Corporation)-----

\_\_\_\_\_, being duly sworn, deposes and says that he/she is \_\_\_\_\_ of \_\_\_\_\_, and that all of the (Full name of Corporation)

foregoing qualification information is true, complete, and accurate.

------(Affidavit for Joint Venture)-----

\_\_\_\_\_ and \_\_\_\_\_, being duly sworn, deposes and says that they are members of \_\_\_\_\_ (Full Name of Joint Venture)

, and that all of the foregoing qualification information is true, complete, and accurate.

------(Acknowledgment) -----

\_\_\_\_\_, being duly sworn, deposes and says that he/she is  
of \_\_\_\_\_;  
(Name of Bidder)

affidavit and that he/she makes it on behalf of ( ) himself/herself; ( ) said partnership; ( )  
said corporation.

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2021, in the County  
of \_\_\_\_\_, State of \_\_\_\_\_.

(Notary Public)

My commission expires \_\_\_\_\_

(Seal)

**SECTION 00 60 10  
CONTRACT**

THIS AGREEMENT, made this \_\_\_\_\_ day of \_\_\_\_\_, 2021, with the Warren County Board of Commissioners, 406 Justice Drive, Lebanon, Ohio, hereinafter called "Owner" and **CONTRACTOR NAME AND ADDRESS HERE** doing businesses as (an individual, partner, a corporation) hereinafter called "Contractor."

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Owner, the Contractor hereby agrees with the Owner to commence and complete the construction described as follows:

**RIVIERA DRIVE WATER MAIN PROJECT**

hereinafter called the project, for the sum of **\$AMOUNT AND WRITE IT OUT HERE**, and all work in connection therewith, under the terms as stated in the General Conditions and Supplemental Conditions of the Contract; and as his (its or their) own proper cost and expense furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in Contract Documents. "Contract Documents" means and includes the following:

- Addendum
- Division 00 – Contract Requirements
- Division 01 to 48 – Technical Specifications
- General Conditions
- Supplemental Conditions
- Any and All Bid Documents
- Construction Drawings

CONTRACTOR hereby agrees to commence work under this contract on or before a date to be specified in a Written "Notice to Proceed" of the OWNER and shall complete all work within the following requirements:

Substantial Completion: 90 Days from Notice to Proceed.

Final Completion: 120 Days from Notice to Proceed.

Any delays in substantial completion of the work that are within the control of the Contractor, their Subcontractor, or Supplier shall be subject to liquidated damages in the sum of \$200.00 for each consecutive calendar day that the project extends beyond the substantial completion deadline.

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. The nonperforming party shall have fifteen calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party.

OWNER may terminate or suspend performance of this Agreement for OWNER'S convenience upon written notice to the CONTRACTOR. CONTRACTOR shall terminate or suspend performance of the services/work on a schedule acceptable to the OWNER.

The CONTRACTOR will indemnify and save the OWNER, their officers and employees, harmless from loss, expenses, costs, reasonable attorneys fees, litigation expenses, suits at law or in equity, causes of action, actions, damages, and obligations arising from (a) negligent, reckless or willful and wanton acts, errors or omissions by CONTRACTOR, its agents, employees, licensees, consultants, or subconsultants; (b) the failure of the CONTRACTOR, its agents, employees, licensees, consultants or subconsultants to observe the applicable standard of care in providing services pursuant to this agreement; (c) the intentional misconduct of the CONTRACTOR, its agents, employees, licensees, consultants, or subconsultants that result in injury to persons or damage to property. for which the OWNER may be held legally liable.

The CONTRACTOR does hereby agree to indemnify and hold the OWNER harmless for any and all sums for which the OWNER may be required to pay or for which the OWNER may be held responsible for failure of the CONTRACTOR or any subcontractors to pay the prevailing wage upon this project.

The OWNER agrees to pay the CONTRACTOR in the manner and at such times as set forth in the General Conditions and as amended in the Supplemental Conditions and in such amounts as required by the Contract Documents.

This Contract shall be construed under the laws of the State of Ohio, and the parties hereby stipulate to the venue for any and all claims, disputes, interpretations, litigation of any kind arising out of this Contract being exclusively in the Warren County, Ohio Court of Common Pleas (unless both parties mutually agree in writing to alternate dispute resolution), as well as waiving any right to bring or remove such matters in or to any other state or federal court.

This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

Contractor shall bind every subcontractor to, and every subcontractor must agree to be bound by the terms of, this Agreement, as far as applicable to the subcontractor's work particularly pertaining to Prevailing Wages and EEO requirements. Nothing contained in this Agreement shall create any contractual relationship between any subcontractor and Owner, nor create any obligations on the part of the Owner to pay or see to the payment of any sums to any subcontractor.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two counterparts, each of which shall be deemed an original on the date first above written.

WARREN COUNTY BOARD OF COMMISSIONERS  
(Owner)

---

David G. Young, President



ATTEST:

\_\_\_\_\_  
Tom Grossmann, Vice President

\_\_\_\_\_  
Name

\_\_\_\_\_  
Shannon Jones

(Seal)

ATTEST:

**CONTRACTOR NAME HERE**  
(Contractor)

\_\_\_\_\_

By: \_\_\_\_\_  
Name

\_\_\_\_\_  
Title

Approved as to Form:

\_\_\_\_\_  
Assistant Prosecutor

**SECTION 00 70 10**  
**WAGE RATE DETERMINATION**

Prevailing wage rates for the State of Ohio apply to this project. Contractors and Subcontractor(s) shall conform to the State of Ohio Department of Labor requirements, guidelines, and laws. Included in this section is a list of the Ohio Prevailing Wage Rates available at the time of publication. It is the responsibility of the Contractor and Subcontractor(s) to verify the wage rates prior to bidding and throughout the project. A complete list of Ohio Prevailing Wage Rates is available at the Ohio Wage and Hour website or from the Ohio department of Commerce Wage and Hour Bureau.



**Mike DeWine**  
Governor

**Sheryl Maxfield**  
Director

# **PREVAILING WAGE GUIDE**

**WARREN COUNTY**

**OHIO DEPARTMENT OF COMMERCE**

Division of Industrial Compliance  
Bureau of Wage and Hour Administration  
6606 Tussing Road, PO Box 4009  
Reynoldsburg, Ohio 43068-9009  
Phone: 614-644-2239  
Fax: 614-728-8639  
[www.com.ohio.gov](http://www.com.ohio.gov)  
TTY/TDD: 1-800-750-0750

The Ohio Department of Commerce is an Equal Opportunity Employer and Service Provider

This packet of information is provided as a summary of the Prevailing Wage guidelines and responsibilities. The Ohio Revised Code, Chapter 4115 should be referred to for the exact wording of the law. Also included are references and forms which should be helpful in the compliance of the Prevailing Wage Law.

## PACKET INFORMATION INDEX

### A. The Ohio Department of Commerce-Division of Industrial Compliance, Wage and Hour Administration Investigators and their assigned counties

1. The Wage and Hour Investigators for the State of Ohio are listed with their contact information.
  - a. If you have questions or need assistance pertaining to Prevailing Wage, you can contact the Investigator in your area.

### B. Prevailing Wage Guide for Public Authorities

1. Notice of change of the Prevailing Wage Threshold Level.
  - a. A notification will be sent to you when there is a change of the Prevailing Wage threshold level
2. Outline of the Public Authority's responsibilities for Prevailing Wage.
3. Public Authority's Compliance Checklist form.
  - a. A form for tracking the progress of a Prevailing Wage project
4. Request form for Prevailing Wage Rates.
  - a. Prevailing Wage Rates can be obtained on the website [www.com.ohio.gov](http://www.com.ohio.gov)
    - (1) Prevailing Wage Determination Schedule of wages must be attached to and made part of the specifications for the project, and must be printed on the bidding blanks where the work is done by contract.
5. Bid Tabulation form
  - a. A form to be completed and returned to ODOC-DIC-Bureau of Wage and Hour Administration when the contract has been awarded.
6. Prevailing Wage Bonds form
  - a. Information needed to be kept on file by the Prevailing Wage Coordinator when bonds from the Public Authority are used for a project.

### C. Prevailing Wage Guidelines for the Public Authority's Coordinator

1. Guideline for the Prevailing Wage Coordinator
  - a. The Prevailing Wage complaint form and instructions can be obtained on the website [www.com.ohio.gov](http://www.com.ohio.gov)
2. Record of the Certified Payroll Reports Received form
  - a. Helpful form for recording the Certified Payroll Reports and the dates received from the contractors and subcontractors.
3. Employee Interview form
  - a. Helpful form for the use by the Prevailing Wage Coordinator when making on-site visits.
4. Employee vs. Independent Contractor
  - a. Helpful questions when determining if a person is an Employee or an Independent Contractor.

### D. Prevailing Wage Guide for Contractors

(Incorporate this section in the Specifications or supply copies for the pre-construction meeting.)

1. Outline of responsibilities for the Prevailing Wage Contractor
2. Notification form from the Contractor to the Employee
  - a. The contractor must submit to employees a completed and signed notification form.
  - b. Some Prevailing Wage Coordinators may require a copy of the completed Notification to the Employee form be submitted with the Certified Payroll Reports.
3. Certified Payroll Report form
  - a. The contractor can use any form/format he chooses as long as **ALL** the information has been provided.
4. Certified Payroll Report form instruction sheet
5. Corrected Certified Payroll Report Example
6. Affidavit of Compliance form
  - a. No Public Authority shall make final payment unless the **Final Affidavits** have been filed by the contractors and subcontractors.



**Mike DeWine**  
Governor

**Sheryl Maxfield**  
Director

# **INVESTIGATORS CONTACT INFORMATION**

## **OHIO DEPARTMENT OF COMMERCE**

Division of Industrial Compliance  
Bureau of Wage and Hour Administration  
6606 Tussing Road, PO Box 4009  
Reynoldsburg, Ohio 43068-9009  
Phone: 614-644-2239  
Fax: 614-728-8639  
[www.com.ohio.gov](http://www.com.ohio.gov)  
TTY/TDD: 1-800-750-0750

The Ohio Department of Commerce is an Equal Opportunity Employer and Service Provider

OHIO DEPARTMENT OF COMMERCE  
 Division of Industrial Compliance  
 Bureau of Wage and Hour Administration  
 Chief, Stephen Clegg

6606 Tussing Road, PO Box 4009  
 Reynoldsburg, Ohio 43068-9009  
 614-644-2239  
 fax: 614-728-8639  
<http://www.com.ohio.gov>

## INVESTIGATORS and THEIR HEADQUARTER COUNTY

<p><b>#48 Dave Horvath</b>          PO Box 1512          Lima, Ohio 45802-1512          Voice: (419) 302-1200          Fax: (614) 728-8639  <a href="mailto:Dave.Horvath@com.state.oh.us">Dave.Horvath@com.state.oh.us</a></p>	<p>Allen *</p>
<p><b>#30 Mike McKee</b>          P.O. Box 1342          Cambridge, Ohio 43725-2247          Voice/Fax: (740) 432-1987  <a href="mailto:Michael.McKee@com.state.oh.us">Michael.McKee@com.state.oh.us</a></p>	<p>Guernsey*</p>
<p><b>#56 Shawn Miles</b>          P.O. Box 2547          North Canton, Ohio 44720          Voice/Fax: (614) 496-9076  <a href="mailto:Shawn.Miles@com.state.oh.us">Shawn.Miles@com.state.oh.us</a></p>	<p>Stark *</p>
<p><b>#37 David Rice</b>          P.O. Box 41241          Dayton, Ohio 45441          Voice: (740) 502-0883          Fax: (614) 995-7768  <a href="mailto:Dave.Rice@com.state.oh.us">Dave.Rice@com.state.oh.us</a></p>	<p>Montgomery *</p>
<p><b>#35 Sean Seibert</b>          P.O. Box 422          Painesville, Ohio 44077-3938          Voice: (614) 557-8662          Fax: (614) 232-9541  <a href="mailto:Sean.Seibert@com.state.oh.us">Sean.Seibert@com.state.oh.us</a></p>	<p>Lake *</p>
<p><b>#11 Kela D. Thompson</b>          6606 Tussing Rd, PO Box 4009          Reynoldsburg, Ohio 43068-9009          Voice: (614) 728-5007          Fax: (614) 232-9537  <a href="mailto:Kela.Thompson@com.state.oh.us">Kela.Thompson@com.state.oh.us</a></p>	<p>Franklin *</p>

\* **Headquarter County**

<p><b>Stephen Clegg, Chief</b>          6606 Tussing Road, PO Box 4009          Reynoldsburg, Ohio 43068-9009          Voice: (614) 728-8686          Fax: (614) 728-8639  <a href="mailto:Stephen.Clegg@com.state.oh.us">Stephen.Clegg@com.state.oh.us</a></p>	<p><b>#90 Jackie Clark, Supervisor</b>          6606 Tussing Rd, PO Box 4009          Reynoldsburg, Ohio 43068-9009          Voice: (614) 728-5019          Fax: (614) 222-2357  <a href="mailto:Jackie.Clark@com.state.oh.us">Jackie.Clark@com.state.oh.us</a></p>
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**Mike DeWine**  
Governor

**Sheryl Maxfield**  
Director

# **PREVAILING WAGE GUIDE FOR PUBLIC AUTHORITIES**

## **OHIO DEPARTMENT OF COMMERCE**

Division of Industrial Compliance  
Bureau of Wage and Hour Administration  
6606 Tussing Road, PO Box 4009  
Reynoldsburg, Ohio 43068-9009  
Phone: 614-644-2239  
Fax: 614-728-8639  
[www.com.ohio.gov](http://www.com.ohio.gov)  
TTY/TDD: 1-800-750-0750

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# Important Notice Prevailing Wage Threshold Levels

Before advertising for bids, contracting, or undertaking construction with its own forces, to construct a public improvement, the Public Authority shall have the Ohio Department of Commerce-Division of Industrial Compliance, Bureau of Wage and Hour Administration determine the prevailing rates of wages for workers employed on the public improvement. The wage determination must be included in the project specifications and printed on the bidding blanks where work is done by contract.

<b>“New” construction threshold for <i>Building Construction</i>:</b>	<b>\$250,000</b>
<b>“Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting” threshold level for <i>Building Construction</i>:</b>	<b>\$75,000</b>

## As of January 1, 2020:

<b>“New” construction that involves <i>roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction</i> threshold level has been adjusted to:</b>	<b>\$93,292</b>
<b>“Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting” that involves <i>roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction</i> threshold level has been adjusted to:</b>	<b>\$27,950</b>

- A) Thresholds are to be adjusted biennially by the Director of the Ohio Department of Commerce.
- B) Biennial adjustments to threshold levels are made according to the Building Cost for Skilled Labor Index published by McGraw-Hill’s Engineering News-Record, but may not increase or decrease more than 3% for any year.

If there are questions concerning this notification, please contact:

Ohio Department of Commerce  
 Division of Industrial Compliance  
 Bureau of Wage and Hour Administration  
 6606 Tussing Road, PO Box 4009  
 Reynoldsburg, Ohio 43068-9009  
 Phone: 614-644-2239  
 Fax: 614-728-8639  
[www.com.ohio.gov](http://www.com.ohio.gov)



**Public Authority Responsibilities**  
**ORC Chapter 4115: Wages and Hours on Public Works**  
**(Prevailing Wage Coordinator)**

1. Before advertising for bids, contracting, or undertaking construction with its own forces, to construct a public improvement, the public authority shall have the Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration determine the prevailing rates of wages for workers employed on the public improvement. The wage determination must be included in the project specifications and printed on the bidding blanks where work is done by contract.
  - a) "New" construction has a threshold level of **\$250,000**.
  - b) "Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" has a threshold level of **\$75,000**.
  - c) "New" construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction has a threshold level of **\$93,292**.
  - d) "Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction has a threshold of **\$27,950**.
    - i.) Thresholds are to be adjusted biennially by the Director of Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration.
    - ii.) Biennial adjustments to threshold levels are made according to the Price Deflator for Construction Index, United States Department of Commerce, Bureau of the Census, but may not increase or decrease more than 3% for any year.
2. Every contract for public work shall contain a provision that each worker employed by the contractor or subcontractor, or other person about or upon the public work, must be paid the prevailing rate of wages.
3. If contracts are not awarded or construction undertaken within ninety days (90) from the date of the determination of the prevailing wage there shall be a re-determination of the wage rates before the contract is awarded.
4. Within **seven (7) working days** after the receipt of notification of a change in the prevailing wage rates, the public authority shall notify all affected contractors and subcontractors. If it is determined that a contractor or subcontractor has violated sections 4115.03 to 4115.16 of the Ohio Revised Code because they were not notified as required, **the public authority is liable** for any back wages, fines, damages, court costs and attorney's fees for the period of time covering the receipt of wage changes, until they give the required notice.
5. No public authority shall award a contract for a public improvement to any contractor or subcontractor whose name appears on the list of debarred contractors. This list is filed with the Secretary of State by the Ohio Department of Commerce-Division of Industrial Compliance & Labor-Bureau of Wage and Hour Administration **The filing of the notice of conviction with the secretary of state constitutes notice to all public authorities**. These contractors are prohibited from working on public improvements for periods ranging from one to three years. The list of debarred contractors can be located on the website [www.com.ohio.gov/laws](http://www.com.ohio.gov/laws)
6. A public authority must designate and appoint **one of its own employees** to serve as the Prevailing Wage Coordinator during the life of the contract for constructing the public improvement. A Prevailing Wage Coordinator must be appointed no later than ten days before the first payment of wages by contractors to employees working on the public improvement.

## PUBLIC AUTHORITY'S COMPLIANCE CHECKLIST FOR PREVAILING WAGE

Project:		Number:
Department:		Phone#:
PW Coordinator:		Phone#:
Architect/Engineer:		Phone#:
Contractor:		Phone#:
Contact Person:		Title:
General Contractor:		Prime Contractor:
		Construction Mgr:
<b>Date Completed</b>		<b>Compliance Item Description</b>
	1.	Request Prevailing Wage Determination Schedule from ODOC-DIC-Wage & Hour
	2.	Received Prevailing Wage Determination Schedule
	3.	Incorporate Determination Schedule in Specs./Bidding Blanks
	4.	Incorporate notice of Prevailing Wage requirements in Invitation for Bids/Notice to Bidders
	5.	Incorporate Prevailing Wage requirements in Contract
	6.	Submit complete Invitation for Bid to ODOC-DIC-Wage & Hour
	7.	Invitation for Bids
	8.	Bid Opening
	9.	Check Listing of Violators
	10.	Award of Contract. (see note)
	11.	Submit Bid Tabulation/Award to ODOC-DIC-WAGE & HOUR
	12.	Notice to Successful Bidder
	13.	Work Commenced...(see note)
	14.	Appoint Prevailing Wage Coordinator
	15.	Received list of Subcontractors' names, addresses, phone #'s & email's
	16.	Received Payroll Date Schedule
	17.	Received Registered Apprenticeship Agreement Certifications
	18.	Received Deduction Agreements
	19.	Received Payroll Reports with Certification...(see attachment)
	20.	Visited project site
	21.	Received Changes to Determination Schedule
	22.	Notice to Contractors of Determination Schedule change
	23.	Request Final Compliance Affidavit from contractors & subcontractors
	24.	Received Final Affidavits from all contractors & subcontractors
	25.	Certify Final Payment

**Note:** If contract is not awarded or construction undertaken within 90 days from the date of establishment of the Prevailing Wage Rates, a re-determination of the Prevailing Wage Rates is required.

## REQUEST FOR STATE OF OHIO PREVAILING WAGE RATES

Date		(Mark (X) One)		<input type="checkbox"/> ~ Residential	<input type="checkbox"/> ~ Construction
Project Information (only one project and one county per request form please)					
County of Project		Project Name		This form <b>MUST</b> be filled out <b>COMPETELY &amp; CORRECTLY</b> for us to process your request. Forms not completed correctly will be <b>RETURNED TO THE SENDER</b> .	
Site Address		City			
Owner/Public Authority					
				Prevailing Wage Rates can be obtained on the website <a href="http://www.com.ohio.gov">www.com.ohio.gov</a>	
Address		Telephone Number		<b>ODOC-DIC-WAGE &amp; HOUR DATE STAMP</b>	
City		Zip Code			
PW Coordinator		Telephone Number			
Issuing Authority of Bonds		Type of Financing			
Estimated Total Overall Project Cost					
<input type="checkbox"/> New Construction		<input type="checkbox"/> "Old" Construction *			
A copy of this form will be returned to you with your wage rates. You must send that copy to us with your bid tabulations once the contract has been awarded.					
Expected Date of Contract Award				PHONE: (614) 644-2239 FAX: (614) 728-8639	
Projected Completion Date					
Send Wage Rates to: (contractors are charged \$5.00 per county)				<b>ODOC-DIC-W&amp;H DATE STAMP (bid tab)</b>	
<input type="checkbox"/> Mail		<input type="checkbox"/> Pick Up			
<input type="checkbox"/> Federal Express Account Number					
Name		Company or Public Authority			
Address					
City		Zip	Telephone Number		
* "Old" construction is reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting.					

# BID TABULATION SHEET

Please attach a copy of your original dated and stamped **“Request for Prevailing Wage Rates”** with this **Bid Tabulation**. Please check mark which company was awarded the contract for the project.  
**(Note: DO NOT SEND UNTIL THE CONTRACT HAS BEEN OFFICIALLY AWARDED.)**

Ohio Department of Commerce  
 Division of Industrial Compliance, Bureau of Wage & Hour  
 6606 Tussing Road, PO Box 4009  
 Reynoldsburg, Ohio 43068-9009  
 (Phone) 614-644-2239, (Fax) 614-728-8639 [www.com.ohio.gov](http://www.com.ohio.gov)

**Contracting Public Authority:**

**Project Name:**

<b>Project #:</b>	<b>Bid Date:</b>	<b>Estimate:</b>
-------------------	------------------	------------------

**Contract Description:**  General  HVAC  Electrical  Plumbing  Asbestos  Other:

AWARDED TO (CHECK)	LIST OF THE BIDDING CONTRACTORS	TOTAL BID AMOUNT
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
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<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		
<input type="checkbox"/>		

SUBMITTED BY	
<b>Print Name:</b>	<b>Title:</b>
<b>Telephone Number:</b> (       )	<b>FAX #:</b>
<b>Signature:</b>	<b>EMAIL:</b>
	<b>Date:</b>

## INDUSTRIAL DEVELOPMENT BONDS

<b>Bond Projects require the Public Authority to keep the following information on file</b>			
1. Type of Bonds issued:	Amount:		
2. The total cost of the Project:			
3. The other type of financing involved in the project:			
4. Portion of the project being constructed with each type of financing:			
5. Are Prevailing Wage Rates being applied to all construction on the project: <input type="checkbox"/> Yes <input type="checkbox"/> No			
6. The name of the political subdivision who issued the bonds:			
7. When were the bonds issued:			
8. For what purpose were the bonds issued:			
9. Who handles the funds once the bonds are sold:			
10. Who is the lending institution that purchased the bonds:			
11. How are the funds to be paid out:			
12. When are the funds to be paid out:			
13. Who is the Bond Council:			
14. Who has been appointed as the Prevailing Coordinator:			
PWC Address:			
City:	OHIO	Zip:	Telephone #:
15. Obtain a copy of the inducement and other official documents for the issuance of the bonds.			



**Mike DeWine**  
Governor

**Sheryl Maxfield**  
Director

**PREVAILING WAGE GUIDELINES**  
**FOR THE**  
**PUBLIC AUTHORITY'S**  
**PW COORDINATOR**

**OHIO DEPARTMENT OF COMMERCE**

Division of Industrial Compliance and Labor

Bureau of Wage and Hour Administration

6606 Tussing Road, PO Box 4009

Reynoldsburg, Ohio 43068-9009

Phone: 614-644-2239

Fax: 614-728-8639

[www.com.ohio.gov](http://www.com.ohio.gov)

TTY/TDD: 1-800-750-0750

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## Prevailing Wage Coordinator Guidelines

For more detailed information please refer to Chapter 4115 of the Ohio Revised Code

- A. Attend any pre-bid and/or pre-construction meetings.
  - 1. To explain the prevailing wage rate requirements.
  - 2. To explain the contractor's responsibilities.
- B. Set up and maintain files containing all contractors' and subcontractors' payroll reports, affidavits, and related documents. These files must be available for public inspection.
- C. Obtain from each contractor a list of their subcontractors' names, addresses, telephone numbers, and email addresses.
- D. Require each contractor and subcontractor to provide their project dates. This will be used to make a time schedule for receiving their certified payrolls.
- E. Obtain from each contractor, the name and address of their Bonding\Surety Company.
- F. Obtain from out-of-state corporations, the name and address of their Statutory Agent. (This agent must be located in the State of Ohio and registered with the Ohio Secretary of State.)
  - 1. Records made in connection with the public improvement must not be removed from the State of Ohio for the period of one year following the completion of the project.
- G. Supply contractors with any changes in the Prevailing Wage Rates.
- H. Within two weeks after the first pay, obtain a certified payroll report from each contractor. A certified report is one that is sworn to and signed by the contractor.
  - 1. If the job will exceed four months, all reports after the initial report can be filed once per month. (The initial report must be filed within two weeks.)
  - 2. If the job will last less than four months, all reports are to be filed weekly after the initial report.
- I. Establish and follow procedures to monitor compliance by contractors and subcontractors.
  - 1. Visit project to verify posting requirements and job classifications.
  - 2. Review certified payroll reports to ensure they are submitted in a timely fashion and complete with the following information for each employee:
    - a) Name, current address, and their social security number or last 4 when permitted
    - b) Classification (must be specific for laborers and operators, including level)
    - c) Hours worked on the project
    - d) Hourly rate
    - e) Fringe benefits, if applicable
    - f) Total hours worked for the week (all jobs)
    - g) Gross wages, all deductions, net pay
  - 3. Compare rates and fringes reported to rates in prevailing wage schedule.
- J. Upon completion of the project and prior to the final payment, require an affidavit of compliance from each contractor and subcontractor. **No public authority shall make final payment to any contractor or subcontractor unless the final affidavits have been filed by the respective contractor and subcontractor. (O.R.C. section 4115.07)**
- K. Report any non-compliance to Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage & Hour Administration. The PW complaint form and instructions can be obtained on the website [www.com.ohio.gov](http://www.com.ohio.gov).

## RECORD OF THE CERTIFIED PAYROLL REPORTS RECEIVED

<b>Project:</b>		<b>Number:</b>
<b>Contractor:</b>		<b>Phone #:</b> <b>Email:</b>
<b>General Contractor:</b>	<b>Prime Contractor:</b>	<b>Subcontractor:</b>
<b>Date work commenced:</b>	<b>Completed:</b>	<b>Final Affidavit:</b>

Payroll	Payroll Date	Date Received		Payroll	Payroll Date	Date Received
1				33		
2				34		
3				35		
4				36		
5				37		
6				38		
7				39		
8				40		
9				41		
10				42		
11				43		
12				44		
13				45		
14				46		
15				47		
16				48		
17				49		
18				50		
19				51		
20				52		
21				53		
22				54		
23				55		
24				56		
25				57		
26				58		
27				59		
28				60		
29				61		
30				62		
31				63		
32				64		



## PREVAILING WAGE INVESTIGATION\EMPLOYEE INTERVIEW

Failure to complete this interview form may reduce our ability to recover back wages which may be owed to you.

Project:	Case #:
Address:	City: County:

Employee Name:		Last 4 digits of the SS#:	
Address:	City:	State:	Zip:
Telephone #: (Home)	(Work)	Email:	Best time to be reached:

Another source by which we can contact you. (Someone not living at your address):

Name:	Relationship:	Telephone #:
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Contractor's Name:	Telephone #:
Address:	City: State: Zip:

Date hired:	Date started on this project :	Approximate hours - Straight time:	Overtime:
-------------	--------------------------------	------------------------------------	-----------

Method of recording hours:	<input type="checkbox"/> Time Card	<input type="checkbox"/> Called into office	Recorded by:	<input type="checkbox"/> Employee	<input type="checkbox"/> Foreman
----------------------------	------------------------------------	---	--------------	-----------------------------------	----------------------------------

Did you keep a personal record of your hours worked on this project? <input type="checkbox"/> Yes <input type="checkbox"/> No	Do you have check stubs? <input type="checkbox"/> Yes <input type="checkbox"/> No
---	---

Did anyone else keep a personal record ? <input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, who:
---	--------------

List your job classification(s):	<input type="checkbox"/> Journeyman <input type="checkbox"/> Helper <input type="checkbox"/> Apprentice - Level
----------------------------------	--

List your specific job duties:	List tools\equipment used:
--------------------------------	----------------------------

Hourly rate of pay for this project:	Your regular rate of pay:
--------------------------------------	---------------------------

Fringe benefits paid by contractor:	<input type="checkbox"/> None	<input type="checkbox"/> Health Insurance	<input type="checkbox"/> Life Insurance	<input type="checkbox"/> Pension	<input type="checkbox"/> Bonus
~ Vacation - Amount _____	<input type="checkbox"/> Holidays - Amount _____	<input type="checkbox"/> Apprenticeship training	<input type="checkbox"/> Profit Sharing		
~ Other (list):					

Did you work overtime? <input type="checkbox"/> Yes <input type="checkbox"/> No	Were hours over 40 per week paid at time and one half? <input type="checkbox"/> Yes <input type="checkbox"/> No
---	---

When is your pay day?	Method of payment: <input type="checkbox"/> Check <input type="checkbox"/> Cash <input type="checkbox"/> Direct Deposit
-----------------------	---

List names of co-workers on this project:
---

Comments:	Please provide a detailed list of the dates, times and hours worked within each classification that may apply to the work performed on a separate sheet.
-----------	--

<p><b>SIGNATURE AND NOTARY</b></p> <p>Affiant is further informed that Section 2921.13 of the Ohio Revised Code provides a penalty of a misdemeanor of the first degree and that prosecution will be pursued of those persons who "knowingly swear or affirm the truth of a false statement when ...the statement is sworn or affirmed before a notary public..."</p> <p>Sworn to before me and subscribed by the said:</p> <p>_____</p> <p>in my presence this _____ day of _____, 20_____.</p> <p>_____ Notary Public</p>	<p>I hereby certify that this is a true statement to the best of my knowledge and belief.</p> <p>_____ Signature <span style="float: right;">Date</span></p> <p>Return to: Ohio Department of Commerce Division of Industrial Compliance &amp; Labor Bureau of Wage and Hour Administration 6606 Tussing Road P.O. Box 4009 Reynoldsburg, Ohio 43068-9009 (614) 644-2239 <a href="http://www.com.ohio.gov">www.com.ohio.gov</a></p>
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Signature of PW Coordinator:	Date:
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## EMPLOYEE VS. INDEPENDENT CONTRACTOR

EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Does the employer have the right to control and direct worker?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR
EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Does the worker receive instructions about how and where the work is to be done instead of the employer merely specifying the desired result?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR
EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Is payment based on time spent rather than a set price for the work to be performed?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR
EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Does the worker devote virtually all his working time to the employer rather than offering services to the general public?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR
EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Does the worker performing services make their services available to the general public and/or other businesses?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR
EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Is there a continuing relationship between employer and worker?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR
EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Can the worker be discharged at will?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR
EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Did the employer train the worker for the job?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR
EMPLOYEE	↔	<input checked="" type="checkbox"/> YES	Does the employer have employees performing the same work as the independent contractor?	<input type="checkbox"/> NO	↔	INDEPENDENT CONTRACTOR

## EMPLOYEE VS. INDEPENDENT CONTRACTOR-continued

EMPLOYEE ↔  YES Does the worker perform services personally rather than delegating them to others?  NO ↔ INDEPENDENT CONTRACTOR

---

EMPLOYEE ↔  YES Does the employer set a specific time when the individual services are to be performed?  NO ↔ INDEPENDENT CONTRACTOR

---

EMPLOYEE ↔  YES Does the employer furnish the tools and materials used by the worker performing services?  NO ↔ INDEPENDENT CONTRACTOR

---

EMPLOYEE ↔  YES Is the employer assuming all the financial risk, rather than the worker making a significant financial investment in the job and having the opportunity to realize a profit or loss from the work?  NO ↔ INDEPENDENT CONTRACTOR

---

EMPLOYEE ↔  NO Does the individual performing the services publicly advertise these services in for example, the newspaper or yellow pages ?  YES ↔ INDEPENDENT CONTRACTOR

---

EMPLOYEE ↔  NO Does the individual performing the services have a business license?  YES ↔ INDEPENDENT CONTRACTOR

---

EMPLOYEE ↔  NO Does the individual performing the services operate d.b.a. or under a tradename?  YES ↔ INDEPENDENT CONTRACTOR



**Mike DeWine**  
Governor

**Sheryl Maxfield**  
Director

# **PREVAILING WAGE GUIDE FOR CONTRACTORS**

## **OHIO DEPARTMENT OF COMMERCE**

Division of Industrial Compliance  
Bureau of Wage and Hour Administration  
6606 Tussing Road, PO Box 4009  
Reynoldsburg, Ohio 43068-9009  
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OHIO DEPARTMENT OF COMMERCE  
 Division of Industrial Compliance  
 Bureau of Wage and Hour Administration  
 Chief, Stephen Clegg

6606 Tussing Road, PO Box 4009  
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## INVESTIGATORS and THEIR HEADQUARTER COUNTY

<p><b>#48 Dave Horvath</b>          PO Box 1512          Lima, Ohio 45802-1512          Voice: (419) 302-1200          Fax: (614) 728-8639  <a href="mailto:Dave.Horvath@com.state.oh.us">Dave.Horvath@com.state.oh.us</a></p>	<p>Allen *</p>
<p><b>#30 Mike McKee</b>          P.O. Box 1342          Cambridge, Ohio 43725-2247          Voice/Fax: (740) 432-1987  <a href="mailto:Michael.McKee@com.state.oh.us">Michael.McKee@com.state.oh.us</a></p>	<p>Guernsey*</p>
<p><b>#56 Shawn Miles</b>          P.O. Box 2547          North Canton, Ohio 44720          Voice/Fax: (614) 496-9076  <a href="mailto:Shawn.Miles@com.state.oh.us">Shawn.Miles@com.state.oh.us</a></p>	<p>Stark *</p>
<p><b>#37 David Rice</b>          P.O. Box 41241          Dayton, Ohio 45441          Voice/Fax: (740) 502-0883  <a href="mailto:Dave.Rice@com.state.oh.us">Dave.Rice@com.state.oh.us</a></p>	<p>Montgomery *</p>
<p><b>#35 Sean Seibert</b>          P.O. Box 422          Painesville, Ohio 44077-3938          Voice: (614) 557-8662          Fax: (614) 232-9541  <a href="mailto:Sean.Seibert@com.state.oh.us">Sean.Seibert@com.state.oh.us</a></p>	<p>Lake *</p>
<p>#11 Kela D. Thompson          6606 Tussing Rd, PO Box 4009          Reynoldsburg, Ohio 43068-9009          Voice: (614) 728-5007          Fax: (614) 232-9537  <a href="mailto:kela.thompson@com.state.oh.us">kela.thompson@com.state.oh.us</a></p>	<p>Franklin *</p>

\* **Headquarter County**

<p><b>Stephen Clegg, Chief</b>          6606 Tussing Road, PO Box 4009          Reynoldsburg, Ohio 43068-9009          Voice: (614) 728-8686          Fax: (614) 728-8639  <a href="mailto:Stephen.Clegg@com.state.oh.us">Stephen.Clegg@com.state.oh.us</a></p>	<p><b>#90 Jackie Clark, Supervisor</b>          6606 Tussing Rd, PO Box 4009          Reynoldsburg, Ohio 43068-9009          Voice: (614) 728-5019          Fax: (614) 222-2357  <a href="mailto:Jackie.Clark@com.state.oh.us">Jackie.Clark@com.state.oh.us</a></p>
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## PREVAILING WAGE CONTRACTOR RESPONSIBILITIES

**This is a summary of prevailing wage contractors' responsibilities. For more detailed information please refer to Chapter 4115 of the Ohio Revised Code**

### General Information

Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$250,000 for new construction or \$75,000 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting.

Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$91,150 for new construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction or \$27,309 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting of a public improvement that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction.

- a) Thresholds are to be adjusted biennially by the Administrator of Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration
- b) Biennial adjustments to threshold levels are made according to the Price Deflator for Construction Index, United States Department of Commerce, Bureau of the Census\*, but may not increase or decrease more than 3% for any year

### Penalties for violation

Violators are to be assessed the wages owed, plus a penalty of 100% of the wages owed.

### Intentional Violations

If an intentional violation is determined to have occurred, the contractor is prohibited from contracting directly or indirectly with any public authority for the construction of a public improvement. Intentional violation means "a willful, knowing, or deliberate disregard for any provision" of the prevailing wage law and includes but is not limited to the following actions:

- Intentional failure to submit payroll reports as required, or knowingly submitting false or erroneous reports.
- Intentional misclassification of employees for the purpose of reducing wages.
- Intentional misclassification of employees as independent contractors or as apprentices.
- Intentional failure to pay the prevailing wage.
- Intentional failure to comply with the allowable ratio of apprentices to skilled workers as required by the regulations established by Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration.
- Intentionally employing an officer, of a contractor or subcontractor, that is known to be prohibited from contracting, directly or indirectly, with a public authority.



## Responsibilities

- A. Pay the prevailing rate of wages as shown in the wage rate schedules issued by the Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration, for the classification of work being performed.
  1. Wage rate schedules include all modifications, corrections, escalations, or reductions to wage rates issued for the project.
  2. Overtime must be paid at time and one-half the employee's base hourly rate. Fringe benefits are paid at straight time rate for all hours including overtime.
  3. Prevailing wages must be paid in full without any deduction for food, lodging, transportation, use of tools, etc.; unless, the employee has voluntarily consented to these deductions in writing. The public authority and the Director of Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration - must approve these deductions as fair and reasonable. Consent and approval must be obtained before starting the project.
  
- B. Use of Apprentices and Helpers cannot exceed the ratios permitted in the wage rate schedules.
  1. Apprentices must be registered with the U.S. Department of Labor Bureau of Apprenticeship and Training.
  2. Contractors must provide the Prevailing Wage Coordinator a copy of the Apprenticeship Agreement for each apprentice on the project.
  
- C. Keep full and accurate payroll records available for inspection by any authorized representative of the Ohio Department of Commerce, Division of Industrial Compliance, and Labor, Bureau of Wage and Hour Administration or the contracting public authority, including the Prevailing Wage Coordinator. Records should include but are not limited to:
  1. Time cards, time sheets, daily work records, etc.
  2. Payroll ledger\journals and canceled checks\check register.
  3. Fringe benefit records must include program, address, account number, & canceled checks.
  4. Records made in connection with the public improvement must not be removed from the State for one year following the completion of the project.
  5. Out-of-State Corporations must submit to the Ohio Secretary of State the full name and address of their Statutory Agent in Ohio.
  
- D. Prevailing Wage Rate Schedule must be posted on the job site where it is accessible to all employees.
  
- E. Prior to submitting the initial payroll report, supply the Prevailing Wage Coordinator with your project dates to schedule reporting of your payrolls.
  
- F. Supply the Prevailing Wage Coordinator a list of all subcontractors including the name, address, and telephone number for each.
  1. **Contractors are responsible for their subcontractors' compliance with requirements of Chapter 4115 of the Ohio Revised Code.**



- G. Before employees start work on the project, supply them with written notification of their job classification, prevailing wage rate, fringe benefit amounts, and the name of the Prevailing Wage Coordinator for the project. A copy of the completed signed notification should be submitted to Prevailing Wage Coordinator.
- H. Supply all subcontractors with the Prevailing Wage Rates and changes.
- I. Submit certified payrolls within two (2) weeks after the initial pay period. Payrolls must include the following information:
  - 1. Employees' names, addresses, and social security numbers.
    - a. Corporate officers/owners/partners and any salaried personnel who do physical work on the project are considered employees. All rate and reporting requirements are applicable to these individuals.
  - 2. Employees' work classification.
    - a. Be specific about the laborers and/or operators (Group)
    - b. For all apprentices, show level/year and percent of journeyman's rate
  - 3. Hours worked on the project for each employee.
    - a. The number of hours worked in each day and the total number of hours worked each week.
  - 4. Hourly rate for each employee.
    - a. The minimum rate paid must be the wage rate for the appropriate classification. The Department's Wage Rate Schedule sets this rate.
    - b. All overtime worked is to be paid at time and one-half for all hours worked more than forty (40) per week.
  - 5. Where fringes are paid into a bona fide plan instead of cash, list each benefit and amount per hour paid to program for each employee.
    - a. When the amount contributed to the fringe benefit plan and the total number of hours worked by the employee on all projects for the year are documented, the hourly amount is calculated by dividing the total contribution of the employer by the total number of hours worked by the employee.
    - b. When the amount contributed to the fringe benefit is documented but not the total hours worked, the hourly amount is calculated by **dividing the total yearly contribution by 2080**.
  - 6. Gross amount earned on all projects during the pay period.
  - 7. Total deductions from employee's wages.
  - 8. Net amount paid.
- J. The reports shall be certified by the contractor, subcontractor, or duly appointed agent stating that the payroll is correct and complete; and that the wage rates shown are not less than those required by the O.R.C. 4115.
- K. Provide a Final Affidavit to the Prevailing Wage Coordinator upon the completion of the project.



## PREVAILING WAGE NOTIFICATION to EMPLOYEE

4115.05...the contractor or subcontractor shall furnish each employee **NOT covered by a collective bargaining agreement** written notification of the job classification to which the employee is assigned, the prevailing wage determined to be applicable to that classification, separated into the hourly rate of pay and the fringe payments, and the identity of the prevailing wage coordinator appointed by the public authority. The contractor or subcontractor shall furnish the same notification to each affected employee every time the job classification of the employee is changed.

Project Name:	Job Number:
Contractor:	
Project Location:	
<b>Prevailing Wage Coordinator</b>	<b>Employee</b>
Public Authority:	Name:
Name of PWC:	Street:
Street:	City:
City:	State/Zip:
State/Zip:	Phone:
	Email:
Phone:	Last 4 Digits of SS #:

You will be performing work on this project that falls under these classifications. You will be paid the appropriate rate for the type of work you are performing.

Classification:	Prevailing Wage Rate Total Package:	Minus your fringe benefits *:	Your hourly base rate and overtime:
			/
			/
			/
			/
			/
			/

Hourly fringe benefits paid on your behalf by this company (Yearly amount the **company pays** divided by 2080):

Fringe	Amount	Fringe	Amount
Health Insurance		Vacation	
Life Insurance		Holiday	
Pension		Sick Pay	
Other (Specify)		Training	
Other (Specify)		<b>Total Hourly Fringes *</b>	

Contractor's Signature:	Date:
Employee's Signature:	Date:

# INSTRUCTIONS FOR PREPARING CERTIFIED PAYROLL REPORTS

## General

Contractors and subcontractors are required by law to submit certified payroll reports for work on projects covered by Ohio's Prevailing Wage Law. This form meets the reporting requirements established by Ohio Revised Code Chapter 4115. The use of this form is not mandatory; employers may submit their own forms provided that all of the required information is included. This form may be reproduced, or additional copies obtained from:

Ohio Department of Commerce  
Division of Industrial Compliance and Labor  
Bureau of Wage & Hour Administration  
6606 Tussing Rd, P. O. Box 4009  
Reynoldsburg, OH 43068-9009  
Phone: (614) 644-2239  
www.com.ohio.gov

## Certified Payroll Heading

**Employer name and address:** Company's full name and address... Indicate if the company is a subcontractor.

**Subcontractor:** Check and list the name of the General Contractor or Prime.

**Project:** Name and location of the project, including county.

**Contracting Public Authority:** Name and address of the contracting public authority... (Owner of the project).

**Week Ending:** Month, day, and year for the last day of the reporting period.

**Payroll #:** Indicate first, second, third, etc. payroll filed by the company for the project.

**Page Indicator:** number of pages included in the report.

**Project Number:** Determined by the public authority... if there is no number leave it blank.

## Payroll Information by Column

- Employee Name, Address and Social Security number:** This information must be provided for all employees that perform physical labor on the project. Corporate officers, partners, and salaried employees are considered employees and must be paid the prevailing rate. Individual sole proprietors do not have to pay themselves prevailing rate but must report their hours on the project.
- Work Class:** List classification of work actually performed by employee. If unsure of work classification, consult the Ohio department of Commerce, Wage and Hour Bureau. Employees working more than one classification should have separate line entries for each classification. Indicate what year/level for Apprentices. Be specific when using laborer and operator classifications; for example, Backhoe Operator or Asphalt Laborer.
- Hours Worked, Day & Date:** In the first row of column 3 enter days of pay period example; M T W T H F S S. The second row is for the date that corresponds with each day for the pay period. In the employee information section enter the number of hours worked on the prevailing wage project and which day the hours were worked. Separate rows are labeled for (ST) straight time hours and (OT) overtime hours. All hours worked after 40, must be paid at the appropriate overtime rate.
- Project Total Hours:** Total the hours entered for pay period.
- Base Rate:** Enter actual rate per hour paid to the employee. The overtime hourly rate is time and one-half the base rate listed in the prevailing wage schedule plus fringe benefits at straight time rate. The prevailing wage schedule lists the base rate plus fringe benefit amounts. These amounts added together equal the total prevailing wage rate. Employers must pay this total amount in one of three ways.
  - Total rate may be paid in entirety in the base rate to the employee; in which case, the cash designation will be checked for fringe benefits.
  - Total rate may be paid as listed in prevailing wage rate schedule with total fringe amounts paid approved plans.
  - Total rate may be paid with a combination of base rate and fringe payments to approved plans in amounts other than those listed in schedule.
- Project Gross:** Enter total gross wages earned on the project for straight time and overtime. Project hours X base rate should equal project gross.
- Fringes:** If fringe benefits are paid in the hourly base rate, indicate this by marking the **Cash** space. If fringe benefits are paid to approved plans as listed in the prevailing wage rate schedule, mark the space **Approved Plans**. If fringe benefits are paid partially in the base rate and partially to approved plans, mark the space **Cash & Approved plans**. List the hourly amount paid to approved plans for each fringe. If payments are not made on a per hour basis, **calculate the hourly fringe credit by dividing the yearly employer contribution by** the lesser of: hours actually worked in the year (these must be documented) or **2080**. Fringe benefits include: **Employer's share** of health insurance, life insurance, retirement plan, bonus/profit sharing, sick pay, holiday pay, personal leave, vacation, and education/training programs. If unsure of a possible fringe benefit, contact the Ohio Department of Commerce - Division of Industrial Compliance and Labor - Bureau of Wage & Hour Administration.
- Total Hours All Jobs:** Total all hours worked during the pay period including non-prevailing wage jobs.
- Total Gross All Jobs:** Gross amount earned in the pay period for all hours worked.
- Self explanatory.
- Self explanatory.

# Certified Payroll Report

**Report for:**  Check if Subcontractor<sup>1)</sup> Contract No: \_\_\_\_\_ Payroll No: \_\_\_\_\_  
 Company:<sup>1)</sup> \_\_\_\_\_ If Sub, GC/Prime Contractor Name: \_\_\_\_\_  
 Address: \_\_\_\_\_ Project Name & Location: \_\_\_\_\_ Week Ending: \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_ Public Authority (Owner): \_\_\_\_\_  
 Phone No: \_\_\_\_\_ Sheet:<sup>2)</sup> \_\_\_\_\_ of \_\_\_\_\_

1. Employee Name, Address, & SS# (Last 4 digits if permitted)	2. Work Class <sup>3)</sup>	3. Prevailing Wage Project Hours Worked - Day & Date							4. Total Hours	5. Base Rate	6. Project Gross	7. Fringes: <input type="checkbox"/> Cash <input type="checkbox"/> Approved Plans <input type="checkbox"/> Cash & Approved Plans						Weekly Payroll Amount			
								Fringe Rate Your Company Pays Per Hour						8. Total Hrs for all Jobs	9. Total Gross on All Jobs	10. Total Deductions	11. Net Pay on All Jobs				
		H&W	Pens	Vac	Hol	Other	Total														
	OT																				
	ST																				
	OT																				
	ST																				
	OT																				
	ST																				
	OT																				
	ST																				

1) By signing below, I certify that: (1) I pay, or supervise the payment of the employees shown above; (2) during the pay period reported on this form, all hours worked on this project have been paid at the appropriate prevailing wage rate for the class of work done; (3) the fringe benefits have been paid as indicated above; (4) no rebates or deductions have been or will be made, directly or indirectly from the total wages earned, other than permissible deductions as defined in ORC Chapter 4115; and (5) apprentices are registered with the U.S. Dept. of Labor, Bureau of Apprenticeship and Training. I understand that the willful falsification of any of the above statements may subject the Contractor or Subcontractor to civil or criminal prosecution.

Type or Print Name and Title \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**DO NOT REDO FORM AND CHANGE RATES IF AN ERROR HAS BEEN MADE! SUBMIT A CORRECTED REPORT**

Fill out all other areas of the form as usual

\*\*\* CORRECTED \*\*\*

Total Hours being corrected for this indiv.

Difference in base rate & corrected base rate if applicable

### Certified Payroll Report

**Report for:**  Check if Subcontractor<sup>1)</sup> Contract No: \_\_\_\_\_ Payroll No: \_\_\_\_\_  
 Company:<sup>1)</sup> \_\_\_\_\_ If Sub, GC/Prime Contractor Name: \_\_\_\_\_  
 Address: \_\_\_\_\_ Project Name & Location: \_\_\_\_\_ Week Ending: \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_ Public Authority (Owner): \_\_\_\_\_ Sheet<sup>2)</sup> \_\_\_\_\_ of \_\_\_\_\_  
 Phone No: \_\_\_\_\_

1. Employee Name, Address, & SS# (Last 4 digits if permitted)	2. Work Class <sup>3)</sup>	3. Prevailing Wage Project Hours Worked - Day & Date	4. Total Hours	5. Base Rate	6. Project Gross	7. Fringes: <input type="checkbox"/> Cash <input type="checkbox"/> Approved Plans <input type="checkbox"/> Cash & Approved Plans							Weekly Payroll Amount				
						Fringe Rate Your Company Pays Per Hour							8. Total Hrs for all Jobs	9. Total Gross on All Jobs	10. Total Deductions	11. Net Pay on All Jobs	
						H&W	Pens	Vac	Hol	Other	Total						
Name Address Last 4 SSN	Class	OT															
		ST															
		OT															
		ST															
		OT															
		ST															
		OT															
		ST															

Put the period that is being corrected, i.e.: Oct 26 to Nov 02, not individual weekly dates

Difference in fringes & corrected fringes if applicable.

The net paid will be the total of difference paid and the total hours being corrected. Provide check # in the margin.

1 ) By signing below, I certify that: (1) I pay, or supervise the payment of the employees shown above; (2) during the pay period reported on this form, all hours worked on this project have been paid at the appropriate prevailing wage rate for the class of work done; (3) the fringe benefits have been paid as indicated above; (4) no rebates or deductions have been or will be made, directly or indirectly from the total wages earned, other than permissible deductions as defined in ORC Chapter 4115; and (5) apprentices are registered with the U.S. Dept. of Labor, Bureau of Apprenticeship and Training. I understand that the willful falsification of any of the above statements may subject the Contractor or Subcontractor to civil or criminal prosecution.

Type or Print Name and Title \_\_\_\_\_ **Complete** Signature \_\_\_\_\_ **Sign** Date \_\_\_\_\_ **Date**

11/14 jc

<sup>2)</sup>Attach additional sheets as necessary.

<sup>3)</sup>Type in continuous line, text will wrap.

Send cover letter stating what happened along with a signed letter from the employee acknowledging that they were underpaid, received payment, check or transaction number. Contractor provided cancelled endorsed bank check.

**IMPORTANT NOTICE** - This process may be different if the Public Authority is using **LCPtracker** or some other online system to collect Certified Payroll Report from the contractors.



Affidavit of Compliance

Prevailing Wages

I, \_\_\_\_\_ (Name of person signing affidavit) (Title)

do hereby certify that the wages paid to all employees of

\_\_\_\_\_ (Company Name)

for all hours worked on the

\_\_\_\_\_ (Project name and location)

project, during the period from \_\_\_\_\_ to \_\_\_\_\_ are in (Project Dates)

compliance with prevailing wage requirements of Chapter 4115 of the Ohio Revised Code. I further certify that no rebates or deductions have been or will be made, directly or indirectly, from any wages paid in connection with this project, other than those provided by law.


\_\_\_\_\_ (Signature of Officer or Agent)

Sworn to and subscribed in my presence this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_ (Notary Public)

The above affidavit must be executed and sworn to by the officer or agent of the contractor or subcontractor who supervises the payment of employees. This affidavit must be submitted to the owner (public authority) before the surety is released or final payment due under the terms of the contract is made.

## Prevailing Wage Determination Cover Letter

County:    
Determination Date: 03/31/2021  
Expiration Date: 06/30/2021

THE FOLLOWING PAGES ARE PREVAILING RATES OF WAGES ON PUBLIC IMPROVEMENTS FAIRLY ESTIMATED TO BE MORE THAN THE AMOUNT IN O.R.C. SEC. 4115.03 (b) (1) or (2), AS APPLICABLE.

Section 4115.05 provides, in part: "Where contracts are not awarded or construction undertaken within ninety days from the date of the establishment of the prevailing wages, there shall be a redetermination of the prevailing rate of wages before the contract is awarded." The expiration date of this wage schedule is listed above for your convenience only. This wage determination is not intended as a blanket determination to be used for all projects during this period without prior approval of this Department.

Section 4115.04, Ohio Revised Code provides, in part: "Such schedule of wages shall be attached to and made a part of the specifications for the work, and shall be printed on the bidding blanks where the work is done by contract..."

The contract between the letting authority and the successful bidder shall contain a statement requiring that mechanics and laborers be paid a prevailing rate of wage as required in Section 4115.06, Ohio Revised Code.

The contractor or subcontractor is required to file with the contracting public authority upon completion of the project and prior to final payment therefore an affidavit stating that he has fully complied with Chapter 4115 of the Ohio Revised Code.

The wage rates contained in this schedule are the "Prevailing Wages" as defined by Section 4115.03, Ohio Revised Code (the basic hourly rates plus certain fringe benefits). These rates and fringes shall be a minimum to be paid under a contract regulated by Chapter 4115 of the Ohio Revised Code by contractors and subcontractors. The prevailing wage rates contained in this schedule include the effective dates and wage rates currently on file. In cases where future effective dates are not included in this schedule, modifications to the wage schedule will be furnished to the Prevailing Wage Coordinator appointed by the public authority as soon as prevailing wage rates increases are received by this office.

"There shall be posted in a prominent and accessible place on the site of work a legible statement of the Schedule of Wage Rates specified in the contract to the various classifications of laborers, workmen, and mechanics employed, said statement to remain posted during the life of such contract." Section 4115.07, Ohio Revised Code.

Apprentices will be permitted to work only under a bona fide apprenticeship program if such program exists and if such program is registered with the Ohio Apprenticeship Council.

Section 4115.071 provides that no later than ten days before the first payment of wages is due to any employee of any contractor or subcontractor working on a contract regulated by Chapter 4115, Ohio Revised Code, the contracting public authority shall appoint one of his own employees to act as the prevailing wage coordinator for said contract. The duties of the prevailing wage coordinator are outlined in Section 4115.071 of the Ohio Revised Code.

Section 4115.05 provides for an escalator in the prevailing wage rate. Each time a new rate is established, that rate is required to be paid on all ongoing public improvement projects.

A further requirement of Section 4115.05 of the Ohio Revised Code is: "On the occasion of the first pay date under a contract, the contractor shall furnish each employee not covered by a collective bargaining agreement or understanding between employers and bona fide organizations of Labor with individual written notification of the job classification to which the employee is assigned, the prevailing wage determined to be applicable to that classification, separated into the hourly rate of pay and the fringe payments, and the identity of the prevailing wage Coordinator appointed by the public authority. The contractor or subcontractor shall furnish the same notification to each affected employee every time the job classification of the employee is changed."

Work performed in connection with the installation of modular furniture may be subject to prevailing wage.

**THIS PACKET IS NOT TO BE SEPARATED BUT IS TO REMAIN COMPLETE AS IT IS SUBMITTED TO YOU. (Reference guidelines and forms are included in this packet to be helpful in the compliance of the Prevailing Wage law.)**

wh1500

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Asbestos Local 8 Heat & Frost Insulators**

**Change # : LCN01-2021fbAsbLoc8**

**Craft : Asbestos Worker Effective Date : 03/10/2021 Last Posted : 03/10/2021**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
<b>Classification</b>												
Asbestos Insulators	\$31.82		\$7.14	\$9.35	\$0.41	\$0.00	\$2.60	\$0.00	\$0.00	\$0.00	\$51.32	\$67.23
<b>Apprentice</b>	<b>Percent</b>											
1st year	46.67	\$14.85	\$7.14	\$5.10	\$0.41	\$0.00	\$2.60	\$0.00	\$0.00	\$0.00	\$30.10	\$37.53
2nd year	53.58	\$17.05	\$7.14	\$6.65	\$0.41	\$0.00	\$2.60	\$0.00	\$0.00	\$0.00	\$33.85	\$42.37
3rd year	58.30	\$18.55	\$7.14	\$6.65	\$0.41	\$0.00	\$2.60	\$0.00	\$0.00	\$0.00	\$35.35	\$44.63
4th year	63.01	\$20.05	\$7.14	\$6.65	\$0.41	\$0.00	\$2.60	\$0.00	\$0.00	\$0.00	\$36.85	\$46.87

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

- 1 Journeymen to 1 Apprentice
- 2 Journeymen to 2 Apprentice
- 3 Journeymen to 3 Apprentice
- 3 Journeymen to 1 Apprentice there After

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, BROWN, BUTLER\*, CLERMONT, HAMILTON, HIGHLAND, WARREN\*

**Special Jurisdictional Note :** In Butler County:townships of Fairfield,Hanover,Liberty,Milford,Morgan,Oxford,Ripley,Ross,St.Clair,Union & Wayne. In Warren County: Townships of Deerfield,Hamilton,Harlan,Salem,Union & Washington

**Details :**

All work in connection with Asbestos Removal, Abatement, Encapsulation, Lead Abatement, Hazardous Materials and Fire Stopping which is performed by employees in the Mechanic or Apprentice Classification shall be covered under the terms of this Agreement.

# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Asbestos Local 50 Zone 1

Change # : LCN01-2021fbLoc50

Craft : Asbestos Worker Effective Date : 03/10/2021 Last Posted : 03/10/2021

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Asbestos Insulation Mechanic	\$33.32		\$7.70	\$7.60	\$0.44	\$0.00	\$2.50	\$0.15	\$0.00	\$0.00	\$51.71	\$68.37
Firestop Technician	\$33.32		\$7.70	\$7.60	\$0.44	\$0.00	\$2.50	\$0.15	\$0.00	\$0.00	\$51.71	\$68.37
Apprentice	Percent											
1st year	53.12	\$17.70	\$7.46	\$0.00	\$0.40	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$25.71	\$34.56
2nd year	63.58	\$21.18	\$7.46	\$0.95	\$0.40	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$30.14	\$40.74
3rd year	73.12	\$24.36	\$7.46	\$1.90	\$0.40	\$0.00	\$0.30	\$0.15	\$0.00	\$0.00	\$34.57	\$46.76
4th year	83.55	\$27.84	\$7.46	\$1.90	\$0.40	\$0.00	\$0.30	\$0.15	\$0.00	\$0.00	\$38.05	\$51.97

**Special Calculation Note :** Other is Industry Fund.

### Ratio :

1 Journeymen to 1 Apprentice  
4 Journeymen to 1 Apprentice there after

### Jurisdiction ( \* denotes special jurisdictional note ) :

ATHENS, AUGLAIZE, BUTLER\*, CLINTON, CRAWFORD, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GUERNSEY, HARDIN, HOCKING, KNOX, LICKING, LOGAN, MADISON, MARION, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, ROSS, SHELBY, UNION, VINTON, WARREN\*

**Special Jurisdictional Note :** Township of Butler County-Townships of Lemon and Madison. Warren County-Township of Cleer Creek, Franklin, Massie, Turtle Creek and Wayne

### Details :



# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Asbestos Local 207 OH

Change # : LCN01-2018fbLoc207OH

Craft : Asbestos Worker Effective Date : 08/23/2018 Last Posted : 08/23/2018

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>											
Asbestos Abatement	\$25.50	\$7.25	\$6.45	\$0.65	\$0.00	\$0.00	\$0.07	\$0.00	\$0.00	\$39.92	\$52.67
Trainee	\$16.50	\$7.25	\$1.50	\$0.65	\$0.00	\$0.00	\$0.07	\$0.00	\$0.00	\$25.97	\$34.22

### Special Calculation Note :

#### Ratio :

3 Journeymen to 1 Trainee

#### Jurisdiction ( \* denotes special jurisdictional note ) :

ADAMS, ASHLAND, ASHTABULA\*, ATHENS, AUGLAIZE, BROWN, BUTLER\*, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARDIN, HARRISON, HIGHLAND, HOCKING, HOLMES, HURON, KNOX, LAKE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MIAMI, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PORTAGE, PREBLE, RICHLAND, ROSS, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN\*, WAYNE

**Special Jurisdictional Note :** Butler County:( townships of Fairfield,Hanover,Liberty,Milford,Morgan,Oxford,Ripley,Ross,StClair,Union & Wayne.) (Lemon & Madison) Warren County: (townships of: Deerfield, Hamilton, Harlan, Salem, Union & Washington). ( Clear Creek, Franklin, Mossie, Turtle Creek & Wayney). Ashtabula County: (post offices & townships of Ashtabula, Austinburg, Geneva, Harperfield, Jefferson, Plymouth & Saybrook) (townships of Andover, Cherry Valley, Colbrook, Canneaut, Denmark, Dorset, East Orwell, Hartsgrove, Kingville, Lenox, Monroe,Morgan,New Lyme,North Kingsville, Orwell, Pierpoint, Richmond Rock Creek, Rome, Sheffield, Trumbull, Wayne, Williamsfield & Windsor) Erie County: (post offices & townships of Berlin, Berlin Heights,Birmingham,Florence ,Huron, Milan, Shinrock & Vermilion)

**Details :**

Asbestos & lead paint abatement including, but not limited to the removal or encapsulation of asbestos & lead paint, all work in conjunction with the preparation of the removal of same & all work in conjunction with the clean up after said removal. The removal of all insulation materials, whether they contain asbestos or not, from mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) is recognized as being the exclusive work of the Asbestos Abatement Workers.

On all mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) that are going to be demolished, the removal of all insulating materials whether they contain asbestos or not shall be the exclusive work of the Laborers.

An Abatement Journeyman is anyone who has more than 300 hours in the Asbestos Abatement field.

# Prevailing Wage Rate Skilled Crafts

Name of Union: **Boilermaker Local 105**

**Change # : LCN02-2013fbLoc 105**

**Craft : Boilermaker Effective Date : 10/01/2013 Last Posted : 09/25/2013**

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Boilermaker	\$35.26		\$7.07	\$13.28	\$0.89	\$0.00	\$3.00	\$0.55	\$0.00	\$0.00	\$60.05	\$77.68
Apprentice	Percent											
1st 6 months	70.03	\$24.69	\$7.07	\$11.30	\$0.89	\$0.00	\$2.10	\$0.55	\$0.00	\$0.00	\$46.60	\$58.95
2nd 6 months	75.02	\$26.45	\$7.07	\$11.30	\$0.89	\$0.00	\$2.25	\$0.55	\$0.00	\$0.00	\$48.51	\$61.74
3rd 6 months	80.00	\$28.21	\$7.07	\$11.30	\$0.89	\$0.00	\$2.40	\$0.55	\$0.00	\$0.00	\$50.42	\$64.52
4th 6 months	85.02	\$29.98	\$7.07	\$11.30	\$0.89	\$0.00	\$2.55	\$0.55	\$0.00	\$0.00	\$52.34	\$67.33
5th 6 months	87.52	\$30.86	\$7.07	\$13.28	\$0.89	\$0.00	\$2.63	\$0.55	\$0.00	\$0.00	\$55.28	\$70.71
6th 6 months	90.03	\$31.74	\$7.07	\$13.28	\$0.89	\$0.00	\$2.70	\$0.55	\$0.00	\$0.00	\$56.23	\$72.11
7th 6 months	92.50	\$32.62	\$7.07	\$13.28	\$0.89	\$0.00	\$2.78	\$0.55	\$0.00	\$0.00	\$57.19	\$73.49
8th 6 months	95.00	\$33.50	\$7.07	\$13.28	\$0.89	\$0.00	\$2.85	\$0.55	\$0.00	\$0.00	\$58.14	\$74.89

**Special Calculation Note :** Other is Supplemental Health and Welfare

**Ratio :**

5 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ATHENS, BROWN, BUTLER,  
CHAMPAIGN, CLARK, CLERMONT, CLINTON,  
FAIRFIELD, FAYETTE, FRANKLIN, GALLIA,  
GREENE, GUERNSEY, HAMILTON, HIGHLAND,  
HOCKING, JACKSON, LAWRENCE, LICKING,  
MADISON, MEIGS, MIAMI, MONTGOMERY,  
MORGAN, MUSKINGUM, NOBLE, PERRY,  
PICKAWAY, PIKE, PREBLE, ROSS, SCIOTO,  
VINTON, WARREN

**Special Jurisdictional Note :**

**Details :**

# Prevailing Wage Rate Skilled Crafts

Name of Union: **Boilermaker Local 154**

**Change # : LCN01-2012kpLoc 154**

**Craft : Boilermaker Effective Date : 03/22/2012 Last Posted : 03/22/2012**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Boilermaker	\$36.17		\$8.57	\$11.28	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$62.56	\$80.65
Trainee 60%	\$23.25		\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$41.95	\$53.57
Trainee 70%	\$27.13		\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$45.83	\$59.40
Trainee 80%	\$31.00		\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$49.70	\$65.20
Trainee 90%	\$34.88		\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$53.58	\$71.02
<b>Apprentice Registered After 11/01/2005</b>	<b>Percent</b>											
1st 6 months	60.00	\$21.70	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$40.40	\$51.25
2nd 6 months	65.00	\$23.51	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$42.21	\$53.97
3rd 6 months	70.00	\$25.32	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$44.02	\$56.68
4th 6 months	75.00	\$27.13	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$45.83	\$59.39
5th 6 months	80.00	\$28.94	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$47.64	\$62.10
6th 6 months	85.00	\$30.74	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$49.44	\$64.82
7th 6 months	90.00	\$32.55	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$51.25	\$67.53
8th 6 months	95.00	\$34.36	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$53.06	\$70.24

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

5 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BUTLER, COLUMBIANA, FAYETTE,  
JEFFERSON, LAWRENCE, MERCER, WARREN,  
WASHINGTON

**Special Jurisdictional Note :**

**Details :**

Work includes but not limited to: boiler making, acetylene burning, riveting, chipping, caulking, rigging, fitting-up, grinding, reaming, impact machine operating, unloading, and handling of boilermaker's material and equipment. Boilermakers, Blacksmiths, Forgers, Iron Shipbuilders

# Prevailing Wage Rate Skilled Crafts

Name of Union: Bricklayer Local 18

Change # : LCN01-2020fbLoc18

Craft : Bricklayer Effective Date : 07/09/2020 Last Posted : 07/09/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>												
Bricklayer	\$29.77		\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.14	\$60.03
Stone Mason	\$29.77		\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.14	\$60.03
Pointer Caulker Cleaner	\$29.77		\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.14	\$60.03
Refractory Workers	\$30.77		\$9.20	\$5.58	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$46.07	\$61.46
Refractory Worker Hot Pay	\$32.77		\$9.20	\$5.58	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$48.07	\$64.45
Sawman	\$30.02		\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.39	\$60.40
Layout Man	\$30.02		\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.39	\$60.40
Free Standing Chimney	\$30.27		\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.64	\$60.78
<b>Apprentice</b>	<b>Percent</b>											
1st 6 months	60.00	\$17.86	\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.23	\$42.16
2nd 6 months	65.00	\$19.35	\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.72	\$44.40
3rd 6 months	70.00	\$20.84	\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.21	\$46.63
4th 6 months	75.00	\$22.33	\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.70	\$48.86
5th 6 months	80.00	\$23.82	\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.19	\$51.09
6th 6 months	85.00	\$25.30	\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.67	\$53.33
7th 6 months	90.00	\$26.79	\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.16	\$55.56
8th 6 months	95.00	\$28.28	\$9.20	\$5.58	\$0.59	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.65	\$57.79
MASON FINISHER 1st 180 Days	45.00	\$13.40	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13.40	\$20.09
1st Year H&W after 6 months	45.00	\$13.40	\$9.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$22.60	\$29.29
2nd Year	50.00	\$14.89	\$9.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24.08	\$31.53

**Special Calculation Note :** \*\*In order to utilize a Pre-Apprentice, you must have 1 Registered Apprentice in your employ.

**Ratio :**

- 1-2 Journeyman to 1 Apprentice
- 3-4 Journeyman to 2 Apprentice
- 5-6 Journeyman to 2 Apprentice
- 7-10 Journeyman to 3 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, HAMILTON, PREBLE\*, WARREN

- 1 Apprentice permits 1 Mason Trainee
- 2 Apprentice permits 1 Mason Trainee
- 3 Apprentice permits 2 Mason Trainees
- 4 Apprentice permits 2 Mason Trainees

For each additional 5 Journeyman to 1 Apprentice, for every 3 additional Apprentices, 1 Mason Finisher may be added

**Special Jurisdictional Note :** In Preble County the following townships are included: (Dixon, Gasper, Graits, Israel, Lanier and Somers)

**Details :**

MASON FINISHER:duties shall be to work in all aspects of Masonry construction taking direction from the employer and the Journeyman Bricklayer & Stone Mason's working on the job. Mason Finisher's may work on job site only when a registered apprentice is on job and the ratios in table above will strictly be enforced.

Refractory work is classified as working with any of the following materials:  
Acid brick, carbon black brick or carbon black block, firebrick grinding, plastics (with a gun) and any resinous cement.

Fifty cents (\$0.50) per hour above scale shall be paid to employees working on free standing industrial or institutional chimneys which are completely detached from any building structure.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Bricklayer Local 18 Tile Finisher

Change # : LCN01-2020fbLoc18

Craft : Bricklayer Effective Date : 09/01/2020 Last Posted : 08/20/2020

Classification	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Bricklayer Tile Marble Terrazzo Finisher	\$25.74		\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.01	\$53.88
Terrazzo Base Grinder	\$26.24		\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.51	\$54.63
Marble Sander Polisher	\$25.84		\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.11	\$54.03
<b>Apprentices</b>	<b>Percent</b>											
1st 6 months 0-600 hrs	60.00	\$15.44	\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.71	\$38.44
2nd 6 months 601-1200 hrs	65.00	\$16.73	\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$32.00	\$40.37
3rd 6 months 1201-1800 hrs	70.00	\$18.02	\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.29	\$42.30
4th 6 months 1801-2400 hrs	75.00	\$19.30	\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.57	\$44.23
5th 6 months 2401-3000 hrs	80.00	\$20.59	\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.86	\$46.16
6th 6 months 3001-3600	90.00	\$23.17	\$9.47	\$5.29	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.44	\$50.02
1-30 Days Prior to Entering Apprenticeship	50.00	\$12.87	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.87	\$19.30

**Special Calculation Note :** Classification title contains "Bricklayer" because contract originates within the Bricklayer Local.

Note that the classification description is clarified after the local union number at the top of the page. \*\*In order to utilize a Pre-Apprentice, you must have 1 Registered Apprentice in your employ.\*\*

**Ratio :**

- 1 Journeyman to 1 Apprentice
- 5 Journeymen to 1 Apprentice
- 10 Journeymen to 2 Apprentices
- 15 Journeymen to 3 Apprentices
- 20 Journeymen to 4 Apprentices
- 25 Journeymen to 5 Apprentices

**Jurisdiction ( \* denotes special jurisdictional note ) :**

- ADAMS, BROWN, BUTLER, CLERMONT, GALLIA,
- HAMILTON, LAWRENCE, PREBLE\*, SCIOTO,
- WARREN, WARREN\*

**Special Jurisdictional Note :** Warren in the townships of Dixon, Gasper, Isrsel, Somers & Gratis in Prebble County

**Details :**



# Prevailing Wage Rate Skilled Crafts

Name of Union: Bricklayer Local 18 Tile Mechanic

Change # : LCN01-2020fbLoc18

Craft : Bricklayer Effective Date : 09/01/2020 Last Posted : 08/20/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Bricklayer Tile Terrazzo Marble Mason Mechanic	\$30.28		\$9.47	\$5.29	\$0.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.60	\$60.74
Marble Layout Work	\$30.78		\$9.47	\$5.29	\$0.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$46.10	\$61.49
Swing Scaffold Worker	\$31.78		\$9.47	\$5.29	\$0.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$47.10	\$62.99
Apprentice after 2 years (2400 hrs) as Apprentice Finisher												
5th/6 Months 0-600 hrs.	70.00	\$21.20	\$9.47	\$5.29	\$0.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.52	\$47.11
6th/6 months 601-1200 hrs.	75.00	\$22.71	\$9.47	\$5.29	\$0.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.03	\$49.39
7th/6 months 1201-1800 hrs.	80.00	\$24.22	\$9.47	\$5.29	\$0.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.54	\$51.66
8th/6 months 1801-2400 hrs.	90.00	\$27.25	\$9.47	\$5.29	\$0.56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.57	\$56.20

**Special Calculation Note :** Classification title contains "Bricklayer" because contract originates within the Bricklayer Local.

Note that the classification description is clarified after the local union number at the top of the

page.

**Ratio :**

1 Journeyman to 1 Apprentice  
5 Journeymen to 1 Apprentice  
10 Journeymen to 2 Apprentices  
15 Journeymen to 3 Apprentices  
20 Journeymen to 4 Apprentices  
25 Journeymen to 5 Apprentices

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, BROWN, BUTLER, CLERMONT,  
GALLIA, HAMILTON, LAWRENCE, PREBLE\*,  
SCIOTO, WARREN

**Special Jurisdictional Note :** In Preble County the Townships of Dixon, Israel, Gasper, Lanier, Somers and Gratis.

**Details :**

\*\*In order to utilize a Pre-Apprentice, you must have 1 Registered Apprentice in your employ.\*\*

# Prevailing Wage Rate Skilled Crafts

Name of Union: Carpenter & Pile Driver SW District HevHwy

Change # : LCN01-2020fbLoc126

Craft : Carpenter Effective Date : 05/07/2020 Last Posted : 05/07/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Carpenter	\$31.01		\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$49.19	\$64.70
Pile Driver	\$29.34		\$6.63	\$6.95	\$0.40	\$0.00	\$1.97	\$0.10	\$0.00	\$0.00	\$45.39	\$60.06
Apprentice	Percent											
1st 6 Months	60.00	\$18.61	\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$36.79	\$46.09
2nd 6 Months is 1st year	65.00	\$20.16	\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$38.34	\$48.41
3rd 6 Months	70.00	\$21.71	\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$39.89	\$50.74
4th 6 Months is 2 years	75.00	\$23.26	\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$41.44	\$53.07
5th 6 Months	80.00	\$24.81	\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$42.99	\$55.39
6th 6 Months is 3 years	85.00	\$26.36	\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$44.54	\$57.72
7th 6 Months	90.00	\$27.91	\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$46.09	\$60.04
8th 6 Months is 4 years	95.00	\$29.46	\$7.89	\$6.95	\$0.40	\$0.00	\$2.82	\$0.12	\$0.00	\$0.00	\$47.64	\$62.37

**Special Calculation Note :** Other is UBC National Fund.

**Ratio :**

1 Journeymen to 1 Apprentice

An employer shall have the right to employ one (1) Apprentice for one (1) Journeyman Carpenter in its employment for the first Apprentice employed, and 1 (1) Apprentice for two (2) Journeyman Carpenter for additional Apprentices employed.

Thereafter, every third additional carpenter hired shall

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN

be an apprentice, if available, and if practical for the type of work being performed.

**Special Jurisdictional Note :**

**Details :**

Highway Construction, Airport Construction, Heavy Construction but not limited to: (tunnels,subways,drainage projects,flood control,reservoirs). Railroad Construction,Sewer Waterworks & Utility Construction but not limited to: (storm sewers, waterlines, gaslines). Industrial & Building Site, Power Plant, Amusement Park, Athletic Stadium Site, Sewer and Water Plants.

When the Contractor furnishes the necessary underwater gear for the Diver, the Diver shall be paid one and one half (1&1/2) times the journeyman rate for the time spent in the water.

# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Carpenter & Pile Driver  
SW Zone 2

Change # : LCN01-2020fbLoc126

Craft : Carpenter Effective Date : 06/18/2020 Last Posted : 06/18/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Carpenter	\$27.87		\$7.81	\$6.95	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$44.82	\$58.76
Pile Driver	\$25.84		\$6.62	\$6.95	\$0.40	\$0.00	\$0.91	\$0.10	\$0.00	\$0.00	\$40.82	\$53.74
Apprentice	Percent											
1st 3 Months	60.00	\$16.72	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.72	\$25.08
2nd 3 Months	60.00	\$16.72	\$7.81	\$0.00	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$26.72	\$35.08
2rd 6 Months	60.00	\$16.72	\$7.81	\$0.00	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$26.72	\$35.08
3rd 6 Months	65.00	\$18.12	\$7.81	\$0.00	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$28.12	\$37.17
4th 6 Months	65.00	\$18.12	\$7.81	\$0.00	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$28.12	\$37.17
5th 6 Months	70.00	\$19.51	\$7.81	\$6.95	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$36.46	\$46.21
6th 6 Months	75.00	\$20.90	\$7.81	\$6.95	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$37.85	\$48.30
7th 6 Months	80.00	\$22.30	\$7.81	\$6.95	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$39.25	\$50.39
8th 6 Months	85.00	\$23.69	\$7.81	\$6.95	\$0.38	\$0.00	\$1.64	\$0.17	\$0.00	\$0.00	\$40.64	\$52.48

**Special Calculation Note :** Other is for UBC National Fund.

### Ratio :

1 Journeyman to 1 Apprentice  
3 Journeyman to 1 Apprentice  
5 Journeyman to 1 Apprentice

### Jurisdiction ( \* denotes special jurisdictional note ) :

BROWN, BUTLER, CLERMONT, CLINTON,  
HAMILTON, WARREN

### Special Jurisdictional Note :

### Details :

Carpenter duties shall include but not limited to: Pile driving, milling, fashioning, joining, assembling, erecting, fastening, or dismantling of all material of

wood, plastic, metal, fiber, cork, and composition, and all other substitute materials: pile driving, cutting, fitting, and placing of lagging, and the handling, cleaning, erecting, installing, and dismantling of machinery, equipment, and erecting pre-engineered metal buildings.

Pile Drivers work but not limited to: unloading, assembling, erection, repairs, operation, signaling, dismantling, and reloading all equipment that is used for pile driving including pile butts. pile butts is defined as sheeting or scrap piling. Underwater work that may be required in connection with the installation of piling. The diver and his tender work as a team and shall arrive at their own financial arrangements with the contractor. Any configuration of wood, steel, concrete, or composite that is jettied, driven, or vibrated onto the ground by conventional pile driving equipment for the purpose of supporting a future load that may be permanent or temporary.

Driving bracing, plumbing, cutting off and capping of all piling whether wood, metal, pipe piling or composite. loading, unloading, erecting, framing, dismantling, moving, and handling of pile driving equipment. piling used in the construction and repair of all wharves, docks, piers, trestles, caissons, cofferdams, and the erection of all sea walls and breakwaters. All underwater and marine work on bulkheads, wharves, docks, shipyards, caissons, piers, bridges, pipeline work, viaducts, marine cable and trestles, as well as salvage and reclamation work where divers are employed.

Rate shall include carpenters, acoustic, and ceiling installers, drywall installers, pile drivers, and floorlayers.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Carpenter Floorlayer SW District G

Change # : LCR01-2020fbLocSWDayton

Craft : Carpenter Effective Date : 09/10/2020 Last Posted : 09/10/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Carpenter Floorlayer	\$26.36		\$7.80	\$6.95	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$43.33	\$56.51
<b>Apprentice</b>	<b>Percent</b>											
1st 3 months	60.00	\$15.82	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$15.82	\$23.72
2nd 3 months	60.00	\$15.82	\$7.80	\$0.00	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$25.84	\$33.74
2nd 6 months	60.00	\$15.82	\$7.80	\$0.00	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$25.84	\$33.74
3rd 6 months	60.00	\$15.82	\$7.80	\$0.00	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$25.84	\$33.74
4th 6 months	65.00	\$17.13	\$7.80	\$0.00	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$27.15	\$35.72
5th 6 months	70.00	\$18.45	\$7.80	\$6.95	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$35.42	\$44.65
6th 6 months	75.00	\$19.77	\$7.80	\$6.95	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$36.74	\$46.63
7th 6 months	80.00	\$21.09	\$7.80	\$6.95	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$38.06	\$48.60
8th 6 months	85.00	\$22.41	\$7.80	\$6.95	\$0.40	\$0.00	\$1.70	\$0.12	\$0.00	\$0.00	\$39.38	\$50.58

**Special Calculation Note :** Other fs for UBC National Fund and Install

**Ratio :**

1 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN

**Special Jurisdictional Note :**

**Details :**

Scope of work shall include, but not be limited to: receiving,unloading,handling,distribution and installation of all carpeting materials,carpet padding or matting materials and all resilient materials whether for use on

walls, floors, counter, sink, table and all preparation work necessary in connection therewith, including sanding work. the installation of nonstructural under-layment and the work of removing, cleaning waxing of any of the above. Carpeting shall include any floor covering composed of either natural or synthetic fibers that are made in breadths to be sewed, fastened or directly glued to floors or over cushioning sound-proofing materials. Resilient Floors shall consist of and include the laying of all special designs of wood, wood block, wood composition, cork, linoleum, asphalt, mastic, plastic, rubber tile, whether nailed or glued.



# Prevailing Wage Rate Skilled Crafts

**Name of Union: Carpenter Millwright Local 1090 SW Zone I**

**Change # : LCN01-2020fbLoc1066**

**Craft : Carpenter Effective Date : 09/10/2020 Last Posted : 09/10/2020**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Carpenter Millwright	\$32.00		\$7.78	\$6.95	\$0.44	\$0.00	\$6.73	\$0.25	\$0.00	\$0.00	\$54.15	\$70.15
<b>Apprentice</b>	<b>Percent</b>											
1st 6 months	60.00	\$19.20	\$7.78	\$4.27	\$0.44	\$0.00	\$4.04	\$0.25	\$0.00	\$0.00	\$35.98	\$45.58
2nd 6 months	65.00	\$20.80	\$7.78	\$4.61	\$0.44	\$0.00	\$4.37	\$0.25	\$0.00	\$0.00	\$38.25	\$48.65
3rd 6 months	70.00	\$22.40	\$7.78	\$4.94	\$0.44	\$0.00	\$4.71	\$0.25	\$0.00	\$0.00	\$40.52	\$51.72
4th 6 months	75.00	\$24.00	\$7.78	\$5.28	\$0.44	\$0.00	\$5.05	\$0.25	\$0.00	\$0.00	\$42.80	\$54.80
5th 6 months	80.00	\$25.60	\$7.78	\$5.61	\$0.44	\$0.00	\$5.38	\$0.25	\$0.00	\$0.00	\$45.06	\$57.86
6th 6 months	85.00	\$27.20	\$7.78	\$5.95	\$0.44	\$0.00	\$5.72	\$0.25	\$0.00	\$0.00	\$47.34	\$60.94
7th 6 months	90.00	\$28.80	\$7.78	\$6.28	\$0.44	\$0.00	\$6.06	\$0.25	\$0.00	\$0.00	\$49.61	\$64.01
8th 6 months	95.00	\$30.40	\$7.78	\$6.62	\$0.44	\$0.00	\$6.39	\$0.25	\$0.00	\$0.00	\$51.88	\$67.08

**Special Calculation Note :** Other (\$0.25) \$0.10 National Fund, \$0.10. Drug Safety Program \$0.10 and National Millwright Fund \$0.05

**Ratio :**

3 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

**Special Jurisdictional Note :**

**Details :**

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Carpenter NE District Industrial Dock & Door**

**Change # : LCN01-2014fbCarpNEStatewide**

**Craft : Carpenter Effective Date : 03/05/2014 Last Posted : 03/05/2014**

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>												
Carpenter	\$19.70		\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.90	\$35.75
<b>Trainee</b>	<b>Percent</b>											
1st Year	60.00	\$11.82	\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.02	\$23.93
2nd Year	80.20	\$15.80	\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$22.00	\$29.90

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 Journeymen to 1 Trainee

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

**Special Jurisdictional Note :** Industrial Dock and Door is the installation of overhead doors, roll up doors and dock leveling equipment

**Details :**

10/27/10 New Contract jc

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Cement Mason Bricklayer Local 97 HevHwy A**

**Change # : LCN01-2020fbHvyHwy**

**Craft : Bricklayer Effective Date : 06/01/2020 Last Posted : 05/21/2020**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Cement Mason Bricklayer Sewer Water Works A	\$29.96		\$9.50	\$6.77	\$0.47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$46.70	\$61.68
Apprentice	Percent											
1st year	50.00	\$14.98	\$9.50	\$6.77	\$0.47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.72	\$39.21
2nd year	70.00	\$20.97	\$9.50	\$6.77	\$0.47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.71	\$48.20
3rd year	90.00	\$26.96	\$9.50	\$6.77	\$0.47	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.70	\$57.19

**Special Calculation Note : NOT FOR BUILDING CONSTRUCTION.**

**Ratio :**

- 3 Journeymen to 1 Apprentice
- 6 Journeymen to 2 Apprentice
- 9 Journeymen to 3 Apprentice
- 12 Journeymen to 4 Apprentice
- 15 Journeymen to 5 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

- ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEauga, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN

WERT, VINTON, WARREN, WASHINGTON,  
WAYNE

**Special Jurisdictional Note :**

**Details :**

(A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.

(B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control,Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Cement Mason Bricklayer Local 97 HevHwy B**

**Change # : LCN01-2020fbHvyHwy**

**Craft : Bricklayer Effective Date : 06/01/2020 Last Posted : 05/21/2020**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Cement Mason Bricklayer Power Plants Tunnels Amusement Parks B	\$30.95		\$9.50	\$6.77	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$47.70	\$63.17
Apprentice	Percent											
1st year	50.00	\$15.48	\$9.50	\$6.77	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$32.23	\$39.96
2nd year	70.00	\$21.66	\$9.50	\$6.77	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.42	\$49.25
3rd year	90.00	\$27.85	\$9.50	\$6.77	\$0.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.60	\$58.53

**Special Calculation Note : NOT FOR BUILDING CONSTRUCTION.**

**Ratio :**

- 3 Journeymen to 1 Apprentice
- 6 Journeymen to 2 Apprentice
- 9 Journeymen to 2 Apprentice
- 12 Journeymen to 4 Apprentice
- 15 Journeymen to 5 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

- ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEauga, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE

**Special Jurisdictional Note :**

**Details :**

(A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.

(B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control,Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Cement Mason Local 132 (Cincinnati)

Change # : LCN01-2019fbLoc132

Craft : Cement Effective Date : 06/05/2019 Last Posted : 06/05/2019

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
<b>Classification</b>												
Cement Mason	\$24.50		\$6.70	\$6.50	\$0.60	\$0.00	\$0.80	\$0.00	\$0.00	\$0.00	\$39.10	\$51.35
<b>Apprentice</b>	<b>Percent</b>											
1st yr	70.00	\$17.15	\$6.70	\$6.50	\$0.60	\$0.00	\$0.80	\$0.00	\$0.00	\$0.00	\$31.75	\$40.32
2nd yr	80.00	\$19.60	\$6.70	\$6.50	\$0.60	\$0.00	\$0.80	\$0.00	\$0.00	\$0.00	\$34.20	\$44.00
3rd yr	90.00	\$22.05	\$6.70	\$6.50	\$0.60	\$0.00	\$0.80	\$0.00	\$0.00	\$0.00	\$36.65	\$47.68

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

- 1 Journeymen to 1 Apprentice
- 4 Journeymen to 2 Apprentice
- 7 Journeymen to 3 Apprentice
- 10 Journeymen to 4 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

**Special Jurisdictional Note :**

**Details :**

- \*Cement Masons working on silo & slip form work shall receive \$.50 per hour over Journeyman scale.
- \*Cement Masons working on swinging scaffolds shall receive \$.50 per hour over Journeyman scale.
- \*Cement Masons working on high lifts from 20' and above shall receive \$.50 per hour over Journeyman scale.

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Cement Mason Statewide HevHwy Exhibit A District II**

**Change # : LCN01-2020fbCementHevHwy**

**Craft : Cement Mason Effective Date : 05/01/2020 Last Posted : 04/30/2020**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
<b>Classification</b>												
Cement Mason	\$30.11		\$8.25	\$7.15	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$48.41	\$63.46
<b>Apprentice</b>	<b>Percent</b>											
1st Year	70.00	\$21.08	\$8.25	\$7.15	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$39.38	\$49.92
2nd Year	80.00	\$24.09	\$8.25	\$7.15	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$42.39	\$54.43
3rd Year	90.00	\$27.10	\$8.25	\$7.15	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$45.40	\$58.95

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 Journeymen to 1 Apprentice  
2 to 1 thereafter

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, COLUMBIANA, DEFIANCE, ERIE, HAMILTON, HIGHLAND, HURON, LORAIN, MAHONING, MEDINA, OTTAWA, PAULDING, PORTAGE, SANDUSKY, SENECA, STARK, SUMMIT, TRUMBULL, WARREN, WILLIAMS

**Special Jurisdictional Note :** (A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site, Heavy Construction, Airport Construction Or Railroad Construction Work.

**Details :**



# Prevailing Wage Rate Skilled Crafts

**Name of Union: Cement Mason Statewide HevHwy Exhibit B District II**

**Change # : LCN01-2019fbCementHevHwy**

**Craft : Cement Mason Effective Date : 05/01/2020 Last Posted : 04/30/2020**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
<b>Classification</b>												
Cement Mason	\$30.98		\$8.25	\$7.15	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$49.28	\$64.77
<b>Apprentice</b>	<b>Percent</b>											
1st Year	70.00	\$21.69	\$8.25	\$7.15	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$39.99	\$50.83
2nd Year	80.00	\$24.78	\$8.25	\$7.15	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$43.08	\$55.48
3rd Year	90.00	\$27.88	\$8.25	\$7.15	\$0.65	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$46.18	\$60.12

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 Journeymen to 1 Apprentice  
2 to 1 thereafter

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, COLUMBIANA, DEFIANCE, ERIE, HAMILTON, HIGHLAND, HURON, LORAIN, MAHONING, MEDINA, OTTAWA, PAULDING, PORTAGE, SANDUSKY, SENECA, STARK, SUMMIT, TRUMBULL, WARREN, WILLIAMS

**Special Jurisdictional Note :** (B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control,Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

**Details :**

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Electrical Local 71 High Tension Pipe Type Cable**

**Change # : LCN01-2021fbLoc7**

**Craft : Lineman Effective Date : 03/16/2021 Last Posted : 03/16/2021**

Classification		BHR	Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Electrical Lineman	\$45.61	\$6.75	\$1.37	\$0.46	\$0.00	\$10.95	\$0.60	\$0.00	\$0.00	\$65.74	\$88.54	
Certified Lineman Welder	\$45.61	\$6.75	\$1.37	\$0.46	\$0.00	\$10.95	\$0.60	\$0.00	\$0.00	\$65.74	\$88.54	
Certified Cable Splicer	\$45.61	\$6.75	\$1.37	\$0.46	\$0.00	\$10.95	\$0.60	\$0.00	\$0.00	\$65.74	\$88.54	
Operator A	\$40.88	\$6.75	\$1.23	\$0.41	\$0.00	\$9.81	\$0.60	\$0.00	\$0.00	\$59.68	\$80.12	
Operator B	\$36.20	\$6.75	\$1.09	\$0.36	\$0.00	\$8.69	\$0.60	\$0.00	\$0.00	\$53.69	\$71.79	
Operator C	\$29.12	\$6.75	\$0.87	\$0.29	\$0.00	\$6.99	\$0.60	\$0.00	\$0.00	\$44.62	\$59.18	
Groundman 0-12 months Exp	\$22.81	\$6.75	\$0.68	\$0.23	\$0.00	\$5.47	\$0.60	\$0.00	\$0.00	\$36.54	\$47.94	
Groundman 0-12 months Exp w/CDL	\$25.09	\$6.75	\$0.75	\$0.25	\$0.00	\$6.02	\$0.60	\$0.00	\$0.00	\$39.46	\$52.01	
Groundman 1 yr or more	\$25.09	\$6.75	\$0.75	\$0.25	\$0.00	\$6.02	\$0.60	\$0.00	\$0.00	\$39.46	\$52.01	
Groundman 1 yr or more w/CDL	\$29.65	\$6.75	\$0.85	\$0.28	\$0.00	\$6.50	\$0.60	\$0.00	\$0.00	\$44.63	\$59.46	
Equipment Mechanic A	\$36.20	\$6.75	\$1.09	\$0.36	\$0.00	\$8.69	\$0.60	\$0.00	\$0.00	\$53.69	\$71.79	
Equipment Mechanic B	\$32.66	\$6.75	\$0.98	\$0.33	\$0.00	\$7.84	\$0.60	\$0.00	\$0.00	\$49.16	\$65.49	
Equipment Mechanic C	\$29.12	\$6.75	\$0.87	\$0.29	\$0.00	\$6.99	\$0.60	\$0.00	\$0.00	\$44.62	\$59.18	
X-Ray Technician	\$45.61	\$6.75	\$1.37	\$0.46	\$0.00	\$10.95	\$0.60	\$0.00	\$0.00	\$65.74	\$88.54	
<b>Apprentice</b>	<b>Percent</b>											
1st 1000 hrs	60.00	\$27.37	\$6.75	\$0.82	\$0.27	\$0.00	\$6.57	\$0.60	\$0.00	\$0.00	\$42.38	\$56.06
2nd 1000 hrs	65.00	\$29.65	\$6.75	\$0.89	\$0.30	\$0.00	\$7.12	\$0.60	\$0.00	\$0.00	\$45.31	\$60.13

# Electrical Local 71 High Tension Pipe Type Cable

3rd 1000 hrs	70.00	\$31.93	\$6.75	\$0.96	\$0.32	\$0.00	\$7.66	\$0.60	\$0.00	\$0.00	\$48.22	\$64.18
4th 1000 hrs	75.00	\$34.21	\$6.75	\$1.03	\$0.34	\$0.00	\$8.21	\$0.60	\$0.00	\$0.00	\$51.14	\$68.24
5th 1000 hrs	80.00	\$36.49	\$6.75	\$1.09	\$0.36	\$0.00	\$8.76	\$0.60	\$0.00	\$0.00	\$54.05	\$72.29
6th 1000 hrs	85.00	\$38.77	\$6.75	\$1.16	\$0.39	\$0.00	\$9.30	\$0.60	\$0.00	\$0.00	\$56.97	\$76.35
7th 1000 hrs	90.00	\$41.05	\$6.75	\$1.23	\$0.41	\$0.00	\$9.85	\$0.60	\$0.00	\$0.00	\$59.89	\$80.41

**Special Calculation Note :** Other is Health Retirement Account

## Operator "A"

John Henry Rock Drill, D-6 (or equivalent) and above, Trackhoe Digger, (320 Track excavator), Cranes (greater than 25 tons and less than 45 tons).

## Operator "B"

Cranes (greater than 6 tons and up to 25 tons), Backhoes, Road Tractor, Dozer up to D-5, Pressure Digger-wheeled or tracked, all Tension wire Stringing equipment.

## Operator "C"

Trench, Backhoe, Riding type vibratory Compactor, Ground Rod Driver, Boom Truck (6 ton & below), Skid Steer Loaders, Material Handler.

\*All Operators of cranes 45 ton or larger shall be paid the journeyman rate of pay. \$0.30 is for Health Retirement Account.

## Ratio :

1 Journeyman to 1 Apprentice

## Jurisdiction ( \* denotes special jurisdictional note ) :

ADAMS, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE

## Special Jurisdictional Note :

### Details :

Heli - Arc Welding will be paid \$.30 above Journeyman rate. Additional compensation of 10% over the Journeyman Lineman and Journeyman Technician for performing work on structures outside of buildings such as water towers, smoke stacks, radio and television towers, more than 75' above the ground.



Electrical Local 71 Outside Cincinnati

1st 1,000 Hours	60.00	\$24.19	\$6.75	\$0.73	\$0.24	\$0.00	\$4.60	\$0.06	\$0.00	\$0.00	\$36.57	\$48.66
2nd 1,000 Hours	65.00	\$26.20	\$6.75	\$0.79	\$0.26	\$0.00	\$4.98	\$0.06	\$0.00	\$0.00	\$39.04	\$52.14
3rd 1,000 Hours	70.00	\$28.22	\$6.75	\$0.85	\$0.28	\$0.00	\$5.36	\$0.06	\$0.00	\$0.00	\$41.52	\$55.63
4th 1,000 Hours	75.00	\$30.23	\$6.75	\$0.91	\$0.30	\$0.00	\$5.74	\$0.06	\$0.00	\$0.00	\$43.99	\$59.11
5th 1,000 Hours	80.00	\$32.25	\$6.75	\$0.97	\$0.32	\$0.00	\$6.13	\$0.06	\$0.00	\$0.00	\$46.48	\$62.60
6th 1,000 Hours	85.00	\$34.26	\$6.75	\$1.03	\$0.34	\$0.00	\$6.51	\$0.06	\$0.00	\$0.00	\$48.95	\$66.09
7th 1,000 Hours	90.00	\$36.28	\$6.75	\$1.09	\$0.36	\$0.00	\$6.89	\$0.06	\$0.00	\$0.00	\$51.43	\$69.57

**Special Calculation Note :** Other is Safety & Education Fund.

**Ratio :**

1 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, HAMILTON, WARREN

**Special Jurisdictional Note :**

**Details :**

A groundman when directed shall assist a Journeyman in the performance of his/her work on the ground, including the use of hand tools. A Groundman under no circumstances shall climb poles, towers, ladders, or work from an elevated platform or bucket truck.

No more than three (3) Groundmen shall work alone. Jobs with more than three Groundmen shall be supervised by a Groundcrew Foreman, Journeyman Lineman, Journeyman Traffic Signal Technician or an Equipment Operator.

Scope of Work: installation and maintenance of highway and street lighting, highway and street sign lighting, electronic message boards and traffic control systems, camera systems, traffic signal work, substation and line construction including overhead and underground projects for private and industrial work as in accordance with the IBEW Constitution. This Agreement includes the operation of all tools and equipment necessary for the installation of the above projects.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Electrical Local 71 Outside Utility Power

Change # : LCN01-2021fbLoc7

Craft : Lineman Effective Date : 03/16/2021 Last Posted : 03/16/2021

Classification	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)		
Electrical Lineman	\$43.22	\$6.75	\$1.30	\$0.43	\$0.00	\$10.37	\$0.60	\$0.00	\$0.00	\$62.67	\$84.28
Substation Technician	\$43.22	\$6.75	\$1.30	\$0.43	\$0.00	\$10.37	\$0.60	\$0.00	\$0.00	\$62.67	\$84.28
Cable Splicer	\$45.26	\$6.75	\$1.36	\$0.45	\$0.00	\$10.86	\$0.60	\$0.00	\$0.00	\$65.28	\$87.91
Operator A	\$38.75	\$6.75	\$1.16	\$0.39	\$0.00	\$9.30	\$0.60	\$0.00	\$0.00	\$56.95	\$76.32
Operator B	\$34.27	\$6.75	\$1.03	\$0.34	\$0.00	\$8.22	\$0.60	\$0.00	\$0.00	\$51.21	\$68.34
Operator C	\$27.54	\$6.75	\$0.83	\$0.28	\$0.00	\$6.61	\$0.60	\$0.00	\$0.00	\$42.61	\$56.38
Groundman 0-12 months Exp	\$21.61	\$6.75	\$0.65	\$0.22	\$0.00	\$5.19	\$0.60	\$0.00	\$0.00	\$35.02	\$45.82
Groundman 0-12 months Exp w/CDL	\$23.77	\$6.75	\$0.71	\$0.24	\$0.00	\$5.70	\$0.60	\$0.00	\$0.00	\$37.77	\$49.66
Groundman 1 yr or more	\$23.77	\$6.75	\$0.71	\$0.24	\$0.00	\$5.70	\$0.60	\$0.00	\$0.00	\$37.77	\$49.66
Groundman 1 yr or more w/CDL	\$28.09	\$6.75	\$0.84	\$0.28	\$0.00	\$6.74	\$0.60	\$0.00	\$0.00	\$43.30	\$57.35
Equipment Mechanic A	\$34.27	\$6.75	\$1.03	\$0.34	\$0.00	\$8.22	\$0.60	\$0.00	\$0.00	\$51.21	\$68.34
Equipment Mechanic B	\$30.91	\$6.75	\$0.93	\$0.31	\$0.00	\$7.42	\$0.60	\$0.00	\$0.00	\$46.92	\$62.38
Equipment Mechanic C	\$27.54	\$6.75	\$0.83	\$0.28	\$0.00	\$6.61	\$0.60	\$0.00	\$0.00	\$42.61	\$56.38
Line Truck w/uuger	\$30.44	\$6.75	\$0.91	\$0.30	\$0.00	\$7.31	\$0.60	\$0.00	\$0.00	\$46.31	\$61.53
<b>Apprentice</b>	<b>Percent</b>										
1st 1000 hrs	60.00	\$25.93	\$6.75	\$0.78	\$0.26	\$6.22	\$0.60	\$0.00	\$0.00	\$40.54	\$53.51
2nd 1000 hrs	65.00	\$28.09	\$6.75	\$0.84	\$0.28	\$6.74	\$0.60	\$0.00	\$0.00	\$43.30	\$57.35

Electrical Local 71 Outside Utility Power

3rd 1000 hrs	70.00	\$30.25	\$6.75	\$0.91	\$0.30	\$0.00	\$7.26	\$0.60	\$0.00	\$0.00	\$46.07	\$61.20
4th 1000 hrs	75.00	\$32.42	\$6.75	\$0.97	\$0.32	\$0.00	\$7.78	\$0.60	\$0.00	\$0.00	\$48.84	\$65.04
5th 1000 hrs	80.00	\$34.58	\$6.75	\$1.04	\$0.35	\$0.00	\$8.30	\$0.60	\$0.00	\$0.00	\$51.62	\$68.90
6th 1000 hrs	85.00	\$36.74	\$6.75	\$1.10	\$0.37	\$0.00	\$8.82	\$0.60	\$0.00	\$0.00	\$54.38	\$72.75
7th 1000 hrs	90.00	\$38.90	\$6.75	\$1.17	\$0.39	\$0.00	\$9.34	\$0.60	\$0.00	\$0.00	\$57.15	\$76.60

**Special Calculation Note :** Other is Health Retirement Account

Operator "A"

John Henry Rock Drill, D-6 (or equivalent) and above, Trackhoe Digger, (320 Track excavator), Cranes (greater than 25 tons and less than 45 tons).

Operator "B"

Cranes (greater than 6 tons and up to 25 tons), Backhoes, Road Tractor, Dozer up to D-5, Pressure Digger- wheeled or tracked, all Tension wire Stringing equipment.

Operator "C"

Trench, Backhoe, Riding type vibratory Compactor, Ground Rod Driver, Boom Truck (6 ton & below), Skid Steer Loaders, Material Handler.

**Ratio :**

(1) Journeyman Lineman to (1) Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEauga, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE

**Special Jurisdictional Note :** 0.30 is for Health Retirement Account.

**Details :**

Heli - Arc Welding will be paid \$.30 above Journeyman rate. Additional compensation of 10% over the Journeyman Lineman and Journeyman Technician for performing work on structures outside of buildings such as water towers, smoke stacks, radio and television towers, more than 75' above the ground.

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Electrical Local 71 Voice Data Video Outside**

**Change # : LCR01-2017fbLoc71VDV**

**Craft : Voice Data Video Effective Date : 10/18/2017 Last Posted : 10/18/2017**

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>											
Electrical Installer Technician I	\$23.46	\$5.50	\$0.70	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$29.96	\$41.69
Installer Technician II	\$22.37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Equipment Operator I	\$22.37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Equipment Operator II	\$18.43	\$5.50	\$0.55	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$24.78	\$33.99
Installer /Repair Outside	\$22.37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Ground Driver W/CDL	\$15.83	\$5.50	\$0.47	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$22.10	\$30.01
Groundman	\$13.24	\$5.50	\$0.40	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$19.44	\$26.06
Cable Splicer	\$23.46	\$5.50	\$0.70	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$29.96	\$41.69

**Special Calculation Note :**

**Ratio :**

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE



## **Special Jurisdictional Note :**

### **Details :**

**Cable Splicer:** Inspect and test lines or cables, analyze results, and evaluate transmission characteristics. Cover conductors with insulation or seal splices with moisture-proof covering. Install, splice, test, and repair cables using tools or mechanical equipment. This will include the splicing of fiber.

**Journeyman Technician I:** Must know all aspects of telephone and cable work. This is to include aerial, underground, and manhole work. Must know how to climb and run bucket. Must have all the tools required to perform these tasks. Must be able to be responsible for the safety of the crew at all times. Must also have CDL license and have at least 5 years experience.

**Installer/Repairman:** Perform tasks of repairing, installing, and testing phone and CATV services.

**Technician II:** Have at least three years of telephone and CATV experience. Must have the knowledge of underground, aerial, and manhole work. Must be able to climb and operate bucket. Must have CDL. Must have all tools needed to perform these tasks.

**Equipment Operator I:** Able to operate a digger derrick or bucket truck. Have at least 5 years of experience and must have a valid CDL license.

**Equipment Operator II:** Able to operate a digger derrick or bucket truck. Have at least 3 years of experience and must have a valid CDL license.

**Groundman W/CDL:** Must have a valid CDL license and be able to perform tasks such as: climbing poles, pulling downguys, making up material, and getting appropriate tools for the job. Must have at least 5 year's experience.

**Groundman:** Perform tasks such as: climbing poles, pulling downguys, making up material, and getting appropriate tools for the job. Experience 0-5 years.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Electrical Local 82 Inside

Change # : LCN01-2020fbLoc82in

Craft : Electrical Effective Date : 11/30/2020 Last Posted : 11/18/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrician	\$32.15		\$7.45	\$9.31	\$0.55	\$0.00	\$3.20	\$0.00	\$0.00	\$0.00	\$52.66	\$68.73
Apprentice	Percent											
1st period 0 - 1000 hrs	42.00	\$13.50	\$4.07	\$0.61	\$0.23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.41	\$25.16
2nd period 1001-2000 hrs	42.00	\$13.50	\$4.07	\$0.61	\$0.23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.41	\$25.16
3rd period 2001-3500 hrs	47.00	\$15.11	\$6.92	\$4.37	\$0.26	\$0.00	\$1.50	\$0.00	\$0.00	\$0.00	\$28.16	\$35.72
4th period 3501-5000 hrs	52.00	\$16.72	\$6.97	\$4.84	\$0.28	\$0.00	\$1.66	\$0.00	\$0.00	\$0.00	\$30.47	\$38.83
5th period 5001-6500 hrs	62.00	\$19.93	\$7.07	\$5.78	\$0.34	\$0.00	\$1.98	\$0.00	\$0.00	\$0.00	\$35.10	\$45.07
6th period 6501-8000 hrs	77.00	\$24.76	\$7.22	\$7.17	\$0.42	\$0.00	\$2.46	\$0.00	\$0.00	\$0.00	\$42.03	\$54.40

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 to 3 Journeymen to 3 Apprentices  
4 to 6 Journeymen to 6 Apprentices  
per job site

**Jurisdiction ( \* denotes special jurisdictional note ) :**

CLINTON, DARKE, GREENE, MIAMI,  
MONTGOMERY, PREBLE, WARREN\*

**Special Jurisdictional Note :** The following townships in Warren County are included: Clearcreek, Franklin and Wayne.

**Details :**

Only correction made on 6-19-19 was the 5th year Apprentice fb.

# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Electrical Local 82 Inside Lt Commercial South West

Change # : LCNO2-2020fbLoc82in

Craft : Electrical Effective Date : 01/01/2021 Last Posted : 12/24/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Electrician	\$32.15		\$6.35	\$9.31	\$0.68	\$0.00	\$3.20	\$0.00	\$0.00	\$0.00	\$51.69	\$67.76
CE-3 12,001-14,000	\$23.03		\$6.35	\$0.69	\$0.68	\$0.00	\$0.68	\$0.00	\$0.00	\$0.10	\$31.53	\$43.05
CE-2 10,001-12,000 Hrs	\$18.10		\$6.35	\$0.54	\$0.68	\$0.00	\$0.54	\$0.00	\$0.00	\$0.10	\$26.31	\$35.36
CE-1 8,001-10,000 Hrs	\$16.45		\$6.35	\$0.49	\$0.68	\$0.00	\$0.49	\$0.00	\$0.00	\$0.10	\$24.56	\$32.79
CW-4 6,001-8,000 Hrs	\$14.81		\$6.35	\$0.44	\$0.68	\$0.00	\$0.44	\$0.00	\$0.00	\$0.10	\$22.82	\$30.23
CW-3 4,001-6,000 Hrs	\$13.16		\$6.35	\$0.39	\$0.68	\$0.00	\$0.39	\$0.00	\$0.00	\$0.10	\$21.07	\$27.65
CW-2 2,001-4,000 Hrs	\$12.34		\$6.35	\$0.37	\$0.68	\$0.00	\$0.37	\$0.00	\$0.00	\$0.10	\$20.21	\$26.38
CW-1 0-2,000 Hrs	\$11.52		\$6.35	\$0.35	\$0.68	\$0.00	\$0.35	\$0.00	\$0.00	\$0.10	\$19.35	\$25.11
<b>Apprentice</b>	<b>Percent</b>											
1st period 0 - 1000 hrs	42.00	\$13.50	\$4.07	\$0.20	\$0.23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.00	\$24.75
2nd period 1001-2000 hrs	42.00	\$13.50	\$4.07	\$0.20	\$0.23	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.00	\$24.75
3rd period 2001-3500 hrs	47.00	\$15.11	\$6.92	\$3.92	\$0.26	\$0.00	\$1.50	\$0.00	\$0.00	\$0.00	\$27.71	\$35.27
4th period 3501-5000 hrs	52.00	\$16.72	\$6.97	\$4.34	\$0.28	\$0.00	\$1.66	\$0.00	\$0.00	\$0.00	\$29.97	\$38.33
5th period 5001-6500 hrs	62.00	\$19.93	\$7.07	\$5.18	\$0.34	\$0.00	\$1.98	\$0.00	\$0.00	\$0.00	\$34.50	\$44.47
6th period 6501-8000 hrs	77.00	\$24.76	\$7.22	\$6.43	\$0.42	\$0.00	\$2.46	\$0.00	\$0.00	\$0.00	\$41.29	\$53.66

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 to 3 Journeymen to 3 Apprentices  
4 to 6 Journeymen to 6 Apprentices  
per job site

**Jurisdiction ( \* denotes special jurisdictional note ) :**

CLINTON, DARKE, GREENE, MIAMI,  
MONTGOMERY, PREBLE, WARREN\*

**Construction Electrician and Construction Wireman  
Ratio**

There shall be a minimum ratio of one inside  
Journeyman to every (4) employees of different  
classification per jobsite. An inside Journeyman  
Wireman is required on the project as the fifth (5th)  
worker or when apprentices are used.

**Special Jurisdictional Note :** The following townships in Warren County are included: Clearcreek,  
Franklin and Wayne.

The scope of work for the light commercial agreement shall apply to the following facilities not to exceed 200,000 square feet; office buildings, shopping centers, auto sales agencies and garages, churches, funeral homes, nursing homes, hotels, retail and wholesale facilities, small stand-alone manufacturing facilities when free standing and not part of a larger facility (not to exceed 50,000 square feet), solar projects (500 panels or less) unless otherwise covered under the agreement, lighting retrofits (when not associated with remodels involving branch re-circuiting) lighting retrofits shall be defined as the changing of lamps and ballasts in existing light fixtures and shall also include the one for one replacement of existing fixtures, warehouses, gas stations, food service centers, restaurants, entertainment facilities, hospitals, clinics, motels, residential buildings.

**Details :**

# Prevailing Wage Rate Skilled Crafts

Name of Union: Electrical Local 82 Lightning Rod

Change # : LCR01-2020fbLoc82

Craft : **Electrical** Effective Date : **11/30/2020** Last Posted : **11/25/2020**

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>											
Electrical Lightning Rod Technican	\$30.79	\$7.45	\$9.27	\$0.00	\$0.00	\$3.20	\$0.00	\$0.00	\$0.00	\$50.71	\$66.10

**Special Calculation Note :** No Apprentice approved by OSAC.

**Ratio :**

**Jurisdiction ( \* denotes special jurisdictional note ) :**

CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN\*

**Special Jurisdictional Note :** The following townships in Warren County are included:  
(Clearcreek, Franklin and Wayne)

**Details :**

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After 09-04-2018												
1st 0-1000 hours	55.00	\$13.81	\$3.00	\$0.41	\$0.26	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.73	\$24.63
2nd 1001-2000 hours	55.00	\$13.81	\$3.00	\$0.41	\$0.26	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.73	\$24.63
3rd 2001-3000 hours	65.00	\$16.32	\$6.50	\$0.49	\$0.31	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$28.01	\$36.17
4th 3001-4000 hours	65.00	\$16.32	\$6.50	\$0.49	\$0.31	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$28.01	\$36.17
5th 4001-5000 hours	75.00	\$18.83	\$6.53	\$0.56	\$0.36	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$30.68	\$40.09
6th 5001-6000 hours	75.00	\$18.83	\$6.53	\$0.56	\$0.36	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$30.68	\$40.09
7th 6001-7000 hours	80.00	\$20.08	\$6.54	\$0.60	\$0.38	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$32.00	\$42.04
8th 7001 hours	80.00	\$20.08	\$6.54	\$0.60	\$0.38	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$32.00	\$42.04
Cable Puller	50.00	\$12.55	\$3.00	\$0.38	\$0.24	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.42	\$22.69

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 Journeymen to 2 Apprentice  
(Indentured After 9-4-2018)

1 Journeymen to 1 Apprentice  
(Indentured Before 9--03-2018)

**Jurisdiction ( \* denotes special jurisdictional note ) :**

CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN\*

**Special Jurisdictional Note :** The following townships in Warren County are included: (Clearcreek, Franklin and Wayne)

**Details :**

Work covered but not limited to: installation which utilize transmission and/or transference of voice, sound, vision or digital for commercial, education, security and entertainment purposes for the following:

TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multimedia, multiplex, nurse call system, radio page, school intercom, sound and low voltage master clock systems.

Fire Alarm work is excluded on all new construction sites or wherever the fire alarm system is installed in conduit.

All HVAC control work is not covered by this wage rate but by the Inside Electrical wage rate.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Electrical Local 648 Inside

**Change # : LCN01-2020fbLoc648in**

**Craft : Electrical Effective Date : 08/31/2020 Last Posted : 08/28/2020**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Electrician	\$31.00		\$7.25	\$8.40	\$0.47	\$0.00	\$3.00	\$0.93	\$0.00	\$0.00	\$51.05	\$66.55
Apprentice	Percent											
1st period 0-1000 hrs	45.00	\$13.95	\$4.22	\$0.00	\$0.21	\$0.00	\$2.50	\$0.42	\$0.00	\$0.00	\$21.30	\$28.28
2nd period 1001- 2000 hrs	45.00	\$13.95	\$4.22	\$0.00	\$0.21	\$0.00	\$2.50	\$0.42	\$0.00	\$0.00	\$21.30	\$28.28
3rd period 2001- 3500 hrs	50.00	\$15.50	\$7.25	\$4.20	\$0.23	\$0.00	\$2.75	\$0.47	\$0.00	\$0.00	\$30.40	\$38.15
4th period 3501- 5000 hrs	55.00	\$17.05	\$7.25	\$4.62	\$0.26	\$0.00	\$2.78	\$0.51	\$0.00	\$0.00	\$32.47	\$41.00
5th period 5001- 6500 hrs	62.00	\$19.22	\$7.25	\$5.21	\$0.29	\$0.00	\$2.81	\$0.58	\$0.00	\$0.00	\$35.36	\$44.97
6th period 6501- 8000 hrs	71.00	\$22.01	\$7.25	\$5.96	\$0.33	\$0.00	\$2.86	\$0.66	\$0.00	\$0.00	\$39.07	\$50.07

**Special Calculation Note :** Other is NEBF (Natioanl Electrical Benifit Fund.)

**Ratio :**

3 Journeyman to 2 Apprentices or fraction thereof:  
 1-3 Journeymen to 2 Apprentice  
 4-6 Journeymen to 4 Apprentice  
 7-9 Journeymen to 6 Apprentice  
 first person assigned to any job site shall be a  
 journeyman

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BUTLER, WARREN\*

**Special Jurisdictional Note :** In Warren County the following townships are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)



**Details :**

Electricians while splicing cable shall receive \$.50 an hour above the regular electrical rate.

All work that requires the use of gas masks or respirators, shall be paid 50% above the appropriate rate of pay. Work up to & including 40 feet shall be paid \$.50 over the journeyman rate. All work from a Boatswain Chair, Swinging Scaffold, or Barrel shall be at double the Journeyman rate. Workmen required to work 50 feet or more below the surface of the earth will be paid 50% above the Journeyman rate.

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Electrical Local 648 Lt Commercial South West**

**Change # : LCN01-2021fbLoc648in**

**Craft : Electrical Effective Date : 02/17/2021 Last Posted : 02/17/2021**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>												
Electrician	\$31.00		\$7.25	\$8.40	\$0.47	\$0.00	\$3.00	\$0.93	\$0.00	\$0.00	\$51.05	\$66.55
CE-3 12,001- 14,000 Hrs	\$23.03		\$6.35	\$0.69	\$0.68	\$0.00	\$0.69	\$0.27	\$0.00	\$0.00	\$31.71	\$43.23
CE-2 10,001- 12,000 Hrs	\$18.00		\$6.35	\$0.54	\$0.68	\$0.00	\$0.54	\$0.27	\$0.00	\$0.00	\$26.38	\$35.38
CE-1 8,001- 10,000 Hrs	\$16.45		\$6.35	\$0.49	\$0.68	\$0.00	\$0.49	\$0.27	\$0.00	\$0.00	\$24.73	\$32.96
CW-4 6,001-8,000 Hrs	\$14.81		\$6.35	\$0.44	\$0.68	\$0.00	\$0.44	\$0.27	\$0.00	\$0.00	\$22.99	\$30.39
CW-3 4,001-6,000 Hrs	\$13.16		\$6.35	\$0.39	\$0.68	\$0.00	\$0.39	\$0.27	\$0.00	\$0.00	\$21.24	\$27.82
CW-2 2,001-4,000 Hrs	\$12.34		\$6.35	\$0.37	\$0.68	\$0.00	\$0.37	\$0.27	\$0.00	\$0.00	\$20.38	\$26.55
CW-1 0-2,000 Hrs	\$11.52		\$6.35	\$0.35	\$0.68	\$0.00	\$0.35	\$0.27	\$0.00	\$0.00	\$19.52	\$25.28
<b>Apprentice Indentured AFTER 9/1/2006</b>	<b>Percent</b>											
1st period 0-1000 hrs	45.00	\$13.95	\$4.22	\$0.00	\$0.21	\$0.00	\$2.50	\$0.42	\$0.00	\$0.00	\$21.30	\$28.28
2nd period 1001- 2000 hrs	45.00	\$13.95	\$4.22	\$0.00	\$0.21	\$0.00	\$2.50	\$0.42	\$0.00	\$0.00	\$21.30	\$28.28
3rd period 2001- 3500 hrs	50.00	\$15.50	\$7.25	\$4.20	\$0.23	\$0.00	\$2.75	\$0.47	\$0.00	\$0.00	\$30.40	\$38.15
4th period 3501- 5000 hrs	55.00	\$17.05	\$7.25	\$4.62	\$0.26	\$0.00	\$2.78	\$0.51	\$0.00	\$0.00	\$32.47	\$41.00
5th period 5001- 6500 hrs	62.00	\$19.22	\$7.25	\$5.21	\$0.29	\$0.00	\$2.81	\$0.58	\$0.00	\$0.00	\$35.36	\$44.97
6th period 6501- 8000 hrs	71.00	\$22.01	\$7.25	\$5.96	\$0.33	\$0.00	\$2.86	\$0.66	\$0.00	\$0.00	\$39.07	\$50.07

**Special Calculation Note :** Other is for NEBF (National Electrical Benefit Fund)

**Ratio :**

1 Journeymen to 3 Apprentice  
4 Journeymen to 6 Apprentice  
first person assigned to any job site shall be a journeyman

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BUTLER, WARREN\*

**Construction Electrician and Construction Wireman Ratio**

There shall be a minimum ratio of one inside Journeyman to every (4) employees of different classification per jobsite. An inside Journeyman Wireman is required on the project as the fifth (5th) worker or when apprentices are used

**Special Jurisdictional Note :** In Warren County the following townships are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)

The scope of work for the light commercial agreement shall apply to the following facilities not to exceed 200,000 square feet; office buildings, shopping centers, auto sales agencies and garages, churches, funeral homes, nursing homes, hotels, retail and wholesale facilities, small stand-alone manufacturing facilities when free standing and not part of a larger facility (not to exceed 50,000 square fee), solar projects (500 panels or less) unless otherwise covered under the agreement, lighting retrofits (when not associated with remodels involving branch re-circuiting) lighting retrofits shall be defined as the changing of lamps and ballasts in existing light fixtures and shall also include the one for one replacement of existing fixtures, warehouses, gas stations, food service centers, restaurants, entertainment facilities, hospitals, clinics, motels, residential buildings.

**Details :**

Electricians while splicing cable shall receive \$.50 an hour above the regular electrical rate.

All work that requires the use of gas masks or respirators, shall be paid 50% above the appropriate rate of pay. Work up to & including 40 feet shall be paid \$.50 over the journeyman rate. All work from a Boatswain Chair, Swinging Scaffold, or Barrel shall be at double the Journeyman rate. Workmen required to work 50 feet or more below the surface of the earth will be paid 50% above the Journeyman rate.



8th Period 5601-6400	\$20.08	\$6.54	\$0.60	\$0.38	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$32.00	\$42.04	
Cable Puller	\$12.55	\$3.00	\$0.38	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.43	\$22.71	
<b>Apprentice Indentured PRIOR to 09-03-2018</b>	<b>Percent</b>											
1st period 0-800 hrs	50.00	\$12.55	\$6.50	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.90	\$26.18
2nd period 801-1600 hrs	50.00	\$12.55	\$6.50	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.90	\$26.18
3rd period 1601-2400 hrs	60.00	\$15.06	\$6.50	\$0.44	\$0.28	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$26.68	\$34.21
4th period 2401-3200 hrs	65.00	\$16.32	\$6.50	\$0.47	\$0.30	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$27.98	\$36.14
5th period 3201-4000 hrs	70.00	\$17.57	\$6.50	\$0.51	\$0.32	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$29.30	\$38.09
6th period 4001-4800 hrs	75.00	\$18.83	\$6.50	\$0.55	\$0.35	\$0.00	\$4.40	\$0.00	\$0.00	\$0.00	\$30.63	\$40.04
Cable Puller	50.00	\$12.55	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.40	\$22.68

**Special Calculation Note :**

**Ratio :**

1 Technician to 2 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BUTLER, WARREN\*

**Special Jurisdictional Note :** The following townships In Warren County are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)

**Details :**

The following work is excluded from the Teledata Technician work scope:

\*The installation of computer systems in industrial applications such as assembly lines, robotics, computer controller manufacturing systems.

\*The installation of conduit and/or raceways shall be installed by Inside Wireman. On sites where there is no Inside Wireman employed, the

Teledata Technician may install raceway or conduit not greater than 10 ft.

\*Fire Alarm work is excluded on all new construction sites or wherever the fire alarm system is installed in conduit

\*All HVAC control work.

# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Elevator Local 11

Change # : LCN01-2020fbLoc11

Craft : Elevator Effective Date : 01/05/2021 Last Posted : 01/05/2021

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Elevator Mechanic	\$48.82		\$15.88	\$10.46	\$0.64	\$3.91	\$8.85	\$1.56	\$0.00	\$0.00	\$90.12	\$114.53
Probationary Apprentice	50.00	\$24.41	\$0.00	\$0.00	\$0.00	\$1.46	\$0.00	\$0.78	\$0.00	\$0.00	\$26.65	\$38.86
1st year	55.00	\$26.85	\$15.88	\$10.46	\$0.64	\$1.61	\$8.85	\$0.86	\$0.00	\$0.00	\$65.15	\$78.58
2nd year	65.00	\$31.73	\$15.88	\$10.46	\$0.64	\$1.90	\$8.85	\$1.02	\$0.00	\$0.00	\$70.48	\$86.35
3rd year	70.00	\$34.17	\$15.88	\$10.46	\$0.64	\$2.05	\$8.85	\$1.09	\$0.00	\$0.00	\$73.14	\$90.23
4th year	80.00	\$39.06	\$15.88	\$10.46	\$0.64	\$2.34	\$8.85	\$1.25	\$0.00	\$0.00	\$78.48	\$98.00
Helper	70.00	\$34.17	\$15.88	\$10.46	\$0.64	\$2.05	\$8.85	\$1.09	\$0.00	\$0.00	\$73.14	\$90.23
Assistant Mechanic	80.00	\$39.06	\$15.88	\$10.46	\$0.64	\$2.34	\$8.85	\$1.25	\$0.00	\$0.00	\$78.48	\$98.00

Special Calculation Note : Other is Holiday Pay. Vacation calculated at 6%.

**Ratio :**

The total number of Helpers & Apprentices employed shall not exceed the number of Mechanics on any one job, except on jobs where (2) teams or more are working, (1) extra Helper or Apprentice may be employed for the first (2) teams and an extra Helper or Apprentice for each additional (3) teams.

- 1 Journeymen to 1 Apprentice
- 2 Journeymen to 5 Apprentice
- 3 Journeymen to 6 Apprentice

**Special Jurisdictional Note :****Details :****Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, BROWN, BUTLER, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, HIGHLAND, MIAMI, MONTGOMERY, PREBLE, SCIOTO, SHELBY, WARREN

# Prevailing Wage Rate Skilled Crafts

Name of Union: **Glazier Local 387**

**Change # : LCN01-2020fbLoc387**

**Craft : Glazier Effective Date : 11/01/2020 Last Posted : 10/28/2020**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)		
Classification											
Glazier	\$27.93	\$5.67	\$10.10	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.95	\$57.92
Apprentice	Percent										
1st 6 months	53.70	\$15.00	\$5.67	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$20.92	\$28.42
2nd 6 months	65.00	\$18.15	\$5.67	\$6.19	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$30.26	\$39.34
3rd 6 months	70.00	\$19.55	\$5.67	\$6.71	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$32.18	\$41.96
4th 6 months	75.00	\$20.95	\$5.67	\$6.85	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$33.72	\$44.19
5th 6 months	80.00	\$22.34	\$5.67	\$7.43	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$35.69	\$46.87
6th 6 months	85.00	\$23.74	\$5.67	\$7.57	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$37.23	\$49.10
7th 6 months	90.00	\$25.14	\$5.67	\$8.09	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$39.15	\$51.72
8th 6 months	95.00	\$26.53	\$5.67	\$8.68	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$41.13	\$54.40

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

Each employer may employ and train Apprentices in the following ratio to journeymen workers employed.  
1 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, FAYETTE\*, GREENE, HAMILTON, HIGHLAND, MIAMI, MONTGOMERY, PREBLE, SHELBY\*, WARREN

**Special Jurisdictional Note :** Fayette County: Eastern portion of route #41 being the dividing line between locals 372 and 387. Local 387 has jurisdiction of projects built on property which borders route #41 East. Shelby County: Southern portion of routes #47 & 29.

**Details :**

# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Ironworker Local 44

Change # : LCNO1-2020fbLoc44

Craft : Ironworker Effective Date : 06/04/2020 Last Posted : 06/04/2020

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>											
Ironworker Reinforcing	\$30.77	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$52.36	\$67.74
Structural	\$30.27	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.86	\$67.00
Ornamental	\$30.27	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.86	\$67.00
Machine Mover/Rigger	\$30.27	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.86	\$67.00
Conveyer Mechanic	\$30.27	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.86	\$67.00
Maintenance/Heavy Hwy	\$30.27	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.86	\$67.00
Welder A	\$30.52	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$52.11	\$67.37
Welder B	\$30.77	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$52.36	\$67.74
Sheeter	\$30.27	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.86	\$67.00
Fence Erector	\$28.76	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.35	\$64.73
Ironworker	\$30.27	\$8.30	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.86	\$67.00
<b>Apprentice</b>	<b>Percent</b>										
Apprentice											
1st yr A	55.00	\$16.92	\$8.30	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$36.26	\$44.73
1st yr B	60.00	\$18.46	\$8.30	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$37.80	\$47.03
1st yr C	65.00	\$20.00	\$8.30	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$39.34	\$49.34
2nd yr A	70.00	\$21.54	\$8.30	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$40.88	\$51.65
2nd yr B	75.00	\$23.08	\$8.30	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$42.42	\$53.96
3rd yr A	80.00	\$24.62	\$8.30	\$9.50	\$0.60	\$0.00	\$1.50	\$0.19	\$0.00	\$44.71	\$57.01
3rd yr B	85.00	\$26.15	\$8.30	\$9.50	\$0.60	\$0.00	\$1.50	\$0.19	\$0.00	\$46.24	\$59.32
4th yr A	90.00	\$27.69	\$8.30	\$9.50	\$0.60	\$0.00	\$2.25	\$0.19	\$0.00	\$48.53	\$62.38
4th yr B	95.00	\$29.23	\$8.30	\$9.50	\$0.60	\$0.00	\$2.25	\$0.19	\$0.00	\$50.07	\$64.69
4th yr C	100.00	\$30.77	\$8.30	\$9.50	\$0.60	\$0.00	\$2.25	\$0.19	\$0.00	\$51.61	\$66.99

**Special Calculation Note :** Other is Impact Fund Training



**Ratio :**

1 Journeymen to 1 Apprentice  
2 Journeymen to 2 Apprentice  
10 Journeymen to 4 Apprentices

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS\*, BROWN, BUTLER\*, CLERMONT,  
CLINTON\*, HAMILTON, HIGHLAND\*,  
WARREN\*

**Special Jurisdictional Note :** Adams County Twps included: Bratton, Scott, Winchester, Wayne. Butler County Twps included: Oxford, St. Clair, Fairfield, Morgan, Liberty, Union, Ross, Reily, Hanover. West Chester. In Clinton County, Manchester and South West Borrow. Highland County Twps included: Dotson, Salem, Clay, White Oak, Hamer, New Market, Concord, Jackson, Washington. Warren County Twps included: Harlan, Deerfield, Hamilton.

**Details :**

Structural Iron Work but not limited to:field fabrication, all loading to and including the erecting,rigging,assembly,dismantling, placing, temporary and permanent securing by any means of all structural iron,steel,ornamental lead,bronze,brass,copper,aluminum,glass all ferrous and non ferrous metal and composite material, precast prestressed and post-stressed concrete structures. Bridges and bridge rails,bridge viaducts,bucks bulkheads,bumper and bumper post,canopies and unistrut canopies,corrugated ferrous and non ferrous sheets when attached to steel frames,columns,beams,bar-joists,trusses,grinders,roof decking,electrical supports,elevator cars,elevator fronts and enclosures,erection of steel towers,flag poles, gymnasium equipment,stadium and arena seating,jail cell work,jail cell beds,benches,bunks,chairs,tables,mirrors,jail cell access doors,rigging and installation of machinery and equipment(erecting,aligning,anchoring and dismantling, erection and dismantling of tower cranes,derrick monorail systems, Chicago booms,overhead cranes,gantries,material and personnel hoists,tanks,hoppers and conveyors. All pre-engineered metal buildings and their entirety including siding,roofing, gutters, downspouts and erection of all.

Ornamental Iron Work but not limited to:all work in connection with field fabrication,handling including loading/off loading,sorting,cutting,fastening,anchoring,bending,hoisting,placing,burning,welding,and tying,dismantling of all materials used in miscellaneous iron or steel, for stairs,hand railings,rolling doors, rolling gates,rolling shutters,fence,windows,curtain wall,erection and welding of all metal, sash,architectural and ornamental treatments, but not necessarily limited to all sizes and types of ornamental,steel iron,lead,bronze,brass,copper,aluminum,all ferrous and non ferrous metals and composite materials

Fence Erector Iron Worker but not limited to: All work in connection with the field fabrication and erection of chain link fence,which includes but not limited to the loading and of the fence fabric and posts also the installation of the above.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Ironworker Local 290

Change # : LCN01-2021fbLoc290

Craft : Ironworker Effective Date : 01/27/2021 Last Posted : 01/27/2021

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Ironworker Structural	\$29.68		\$8.30	\$9.50	\$0.65	\$0.00	\$4.45	\$0.02	\$0.00	\$0.00	\$52.60	\$67.44
Welder	\$29.68		\$8.30	\$9.50	\$0.65	\$0.00	\$4.45	\$0.02	\$0.00	\$0.00	\$52.60	\$67.44
Fence Erector	\$29.68		\$8.30	\$9.50	\$0.65	\$0.00	\$4.45	\$0.02	\$0.00	\$0.00	\$52.60	\$67.44
Reinforcing Rods	\$29.68		\$8.30	\$9.50	\$0.65	\$0.00	\$4.45	\$0.02	\$0.00	\$0.00	\$52.60	\$67.44
Machinery Mover	\$29.68		\$8.30	\$9.50	\$0.65	\$0.00	\$4.45	\$0.02	\$0.00	\$0.00	\$52.60	\$67.44
Sheeter	\$29.68		\$8.30	\$9.50	\$0.65	\$0.00	\$4.45	\$0.02	\$0.00	\$0.00	\$52.60	\$67.44
Metal Building Erector	\$29.68		\$8.30	\$9.50	\$0.65	\$0.00	\$4.45	\$0.02	\$0.00	\$0.00	\$52.60	\$67.44
Rigger & Erector	\$29.68		\$8.30	\$9.50	\$0.65	\$0.00	\$4.45	\$0.02	\$0.00	\$0.00	\$52.60	\$67.44
<b>Apprentice</b>	<b>Percent</b>											
1st year	65.05	\$19.31	\$8.30	\$9.50	\$0.65	\$0.00	\$2.95	\$0.02	\$0.00	\$0.00	\$40.73	\$50.38
2nd year	75.07	\$22.28	\$8.30	\$9.50	\$0.65	\$0.00	\$2.95	\$0.02	\$0.00	\$0.00	\$43.70	\$54.84
3rd year	85.05	\$25.24	\$8.30	\$9.50	\$0.65	\$0.00	\$2.95	\$0.02	\$0.00	\$0.00	\$46.66	\$59.28
4th year	95.05	\$28.21	\$8.30	\$9.50	\$0.65	\$0.00	\$2.95	\$0.02	\$0.00	\$0.00	\$49.63	\$63.74

**Special Calculation Note :** Other is for Industry Fund.

**Ratio :**

3 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ALLEN\*, AUGLAIZE, BUTLER\*, CHAMPAIGN\*, CLARK, CLINTON, DARKE, FAYETTE\*, GREENE, HARDIN\*, HIGHLAND\*, LOGAN\*, MADISON\*, MERCER\*, MIAMI, MONTGOMERY, PREBLE, SHELBY, VAN WERT\*, WARREN\*

**Special Jurisdictional Note :** Allen County Twps included are: Auglaize, Perry, Shawnee, Amanda, Spencer, Marion, Sugar Creek, American, Bath, Jackson. Butler County Twps included are: Milford, Wayne, Madison, Lemon. Champaign Cnty Twps included are: Union, Urbana, Jackson, Concord, Salem, Mad River, Johnson, Harrison, Adams. Fayette County Twps included are: Green, Jasper, Concord, Jefferson. Hardin County Twps included are: Round Head, Marion,

Liberty. Highland County Twps included are: Fairfield, Penn, Union, Marshall, Liberty, Paint, Brush Creek. Logan County Twps included are: Richland, Stokes, Bloomfield, Washington, Harrison, McArthur, Lake, Liberty, Pleasant, Miami. Madison County Twps included are: Stokes. Mercer County Twps included are: Dublin, Washington, Jefferson, Recovery, Gibson, Union, Liberty, Butler, Granville, Center, Hopewell, Franklin, Marion. VanWert County Twps included are: Jennings. Warren County Twps included are: Franklin, Clear Creek, Turtle Creek, Wayne, Massie, Washington, Salem, Union.

**Details :**

Structural Iron Work but not limited to:field fabrication, all loading to and including the erecting,rigging,assembly,dismantling, placing, temporary and permanent securing by any means of all structural iron,steel,ornamental lead,bronze,brass,copper,aluminum,glass all ferrous and non ferrous metal and composite material, precast prestressed and post-stressed concrete structures. Bridges and bridge rails,bridge viaducts,bucks bulkheads,bumper and bumper post,canopies and unistrut canopies,corrugated ferrous and non ferrous sheets when attached to steel frames,columns,beams,bar-joists,trusses,grinders,roof decking,electrical supports,elevator cars,elevator fronts and enclosures,erection of steel towers,flag poles, gymnasium equipment,stadium and arena seating,jail cell work,jail cell beds,benches,bunks,chairs,tables,mirrors,jail cell access doors,rigging and installation of machinery and equipment(erecting,aligning,anchoring and dismantling, erection and dismantling of tower cranes,derrick monorail systems, Chicago booms,overhead cranes,gantries,material and personnel hoists,tanks,hoppers and conveyors. All pre-engineered metal buildings and their entirety including siding,roofing, gutters, downspouts and erection of all.

Ornamental Iron Work but not limited to:all work in connection with field fabrication,handling including loading/off loading,sorting,cutting,fastening,anchoring,bending,hoisting,placing,burning,welding,and tying,dismantling of all materials used in miscellaneous iron or steel, for stairs,hand railings,rolling doors, rolling gates,rolling shutters,fence,windows,curtain wall,erection and welding of all metal, sash,architectural and ornamental treatments, but not necessarily limited to all sizes and types of ornamental,steel iron,lead,bronze,brass,copper,aluminum,all ferrous and non ferrous metals and composite materials

Fence Erector Iron Worker but not limited to: All work in connection with the field fabrication and erection of chain link fence,which includes but not limited to the loading and of the fence fabric and posts also the installation of the above.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Labor HevHwy 3

Change # : LCN01-2020fbLocalHevHwy3

Craft : Laborer Group 1 Effective Date : 05/14/2020 Last Posted : 05/14/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Laborer Group 1	\$32.62		\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$43.97	\$60.28
Group 2	\$32.79		\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$44.14	\$60.54
Group 3	\$33.12		\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$44.47	\$61.03
Group 4	\$33.57		\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$44.92	\$61.71
Watch Person	\$25.35		\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$36.70	\$49.38
<b>Apprentice</b>	<b>Percent</b>											
0-1000 hrs	60.00	\$19.57	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$30.92	\$40.71
1001-2000 hrs	70.00	\$22.83	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$34.18	\$45.60
2001-3000 hrs	80.00	\$26.10	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$37.45	\$50.49
3001-4000 hrs	90.00	\$29.36	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$40.71	\$55.39
More than 4000 hrs	100.00	\$32.62	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$43.97	\$60.28

**Special Calculation Note :** Watchmen have no Apprentices. Tunnel Laborer rate with air-pressurized add \$1.00 to the above wage rate.

**Ratio :**

- 1 Journeymen to 1 Apprentice
- 3 Journeymen to 1 Apprentice thereafter

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS, SCIOTO, SENECA, SHELBY,

TUSCARAWAS, UNION, VAN WERT, VINTON,  
WARREN, WASHINGTON, WAYNE, WILLIAMS,  
WYANDOT

**Special Jurisdictional Note :** Hod Carriers and Common Laborers - Heavy, Highway, Sewer, Waterworks, Utility, Airport, Railroad, Industrial and Building Site, Sewer Plant, Waste Water Treatment Facilities Construction

**Details :**

Group 1

Laborer (Construction); Plant Laborer or Yardman, Right-of-way Laborer, Landscape Laborer, Highway Lighting Worker, Signalization Worker, (Swimming) Pool Construction Laborer, Utility Man, \*Bridge Man, Handyman, Joint Setter, Flagperson, Carpenter Helper, Waterproofing Laborer, Slurry Seal, Seal Coating, Surface Treatment or Road Mix Laborer, Riprap Laborer & Grouter, Asphalt Laborer, Dump Man (batch trucks), Guardrail & Fence Installer, Mesh Handler & Placer, Concrete Curing Applicator, Scaffold Erector, Sign Installer, Hazardous Waste (level D), Diver Helper, Zone Person and Traffic Control.

\*Bridge Man will perform work as per the October 31, 1949, memorandum on concrete forms, by and between the United Brotherhood of Carpenters and Joiners of America and the Laborers' International Union of North America, which states in; "the moving, cleaning, oiling and carrying to the next point of erection, and the stripping of forms which are not to be re-used, and forms on all flat arch work shall be done by members of the Laborers' International Union of North America."

Group 2

Asphalt Raker, Screwman or Paver, Concrete Puddler, Kettle Man (pipeline), All Machine-Driven Tools (Gas, Electric, Air), Mason Tender, Brick Paver, Mortar Mixer, Skid Steer, Sheeting & Shoring Person, Surface Grinder Person, Screedperson, Water Blast, Hand Held Wand, Power Buggy or Power Wheelbarrow, Paint Stripper, Plastic fusing Machine Operator, Rodding Machine Operator, Pug Mill Operator, Operator of All Vacuum Devices Wet or Dry, Handling of all Pumps 4 inches and under (gas, air or electric), Diver, Form Setter, Bottom Person, Welder Helper (pipeline), Concrete Saw Person, Cutting with Burning Torch, Pipe Layer, Hand Spiker (railroad), Underground Person (working in sewer and waterline, cleaning, repairing and reconditioning). Tunnel Laborer (without air), Caisson, Cofferdam (below 25 feet deep), Air Track and Wagon Drill, Sandblaster Nozzle Person, Hazardous Waste (level B), \*\*\*Lead Abatement, Hazardous Waste (level C)

\*\*\*Includes the erecting of structures for the removal, including the encapsulation and containment of Lead abatement process.

Group 3

Blast and Powder Person, Muckers will be defined as shovel men working directly with the miners, Wrencher (mechanical joints & utility pipeline), Yarner, Top Lander, Hazardous Waste (level A), Concrete Specialist, Curb Setter and Cutter, Grade Checker, Concrete Crew in Tunnels. Utility pipeline Tappers, Waterline, Caulker, Signal Person will receive the rate equal to the rate paid the Laborer classification for which the Laborer is signaling.

Group 4

Miner, Welder, Gunitite Nozzle Person

A.) The Watchperson shall be responsible to patrol and maintain a safe traffic zone including but not limited to barrels, cones, signs, arrow boards, message boards etc.

The responsibility of a watchperson is to see that the equipment, job and office trailer etc. are secure.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Labor Local 534 Building

Change # : LCNO1-2020fbLoc534

Craft : Laborer Effective Date : 06/04/2020 Last Posted : 06/04/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Laborer Group 1	\$28.59	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.94	\$54.24	
Laborer Group 2	\$28.69	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$40.04	\$54.39	
Laborer Group 3	\$28.79	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$40.14	\$54.54	
Laborer Group 4	\$28.92	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$40.27	\$54.73	
Laborer Group 5	\$29.17	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$40.52	\$55.11	
Laborer Group 6	\$28.94	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$40.29	\$54.76	
Laborer Group 7	\$28.14	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.49	\$53.56	
Apprentice	Percent											
0-1000 hrs	60.00	\$17.15	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$28.50	\$37.08
1001-2000 hrs	70.00	\$20.01	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$31.36	\$41.37
2001-3000 hrs	80.00	\$22.87	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$34.22	\$45.66
3001-4000	90.00	\$25.73	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$37.08	\$49.95
4001	100.00	\$28.59	\$7.00	\$3.80	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.94	\$54.24

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 Journeyman to 1 Apprentice  
3 Journeyman to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BUTLER, WARREN

**Special Jurisdictional Note :**

**Details :**

Note:

## Labor Local 534 Building

Group 1: Building & Common Laborer; All general laborers work including all forms of landscaping, Rough Rider - all pump's 4 inch or smaller, Small Pump Portable Generators-Bobcat to Cleanup, Firewatch and Monitor, (Safety Person)

Group 2: Asphalt Raker, Tamper, Smoother, Hand Air Pump, Hand air Tamper, Chisel, Power Tamper, Operator, Switch, Assemblies, Handling & Laying Precast Concrete Floors & Deck Tool Repairman.

Group 3: Concrete Specialist; Skid Steers (with attachments to perform Laborer's duties) Jack Hammer \* Concrete Busterman, Barco Tamper Man, Power Georgia Buggy Man, Power Sweeper Man, Vibrator, Concrete Saw Man, Rail Spikers, Acetylene Burner, Pipelayers, Bos'n Cradleman, Bottom Man, Chipping Hammer Grade Checker, Radio Operator, Form Cleanout & blowout Man, Red Concrete Coloring Man (Electrical Safety)

Group 4: Mason Tender, Mortar Mixers & Scaffold Builders

Group 5: Fork Lift for Mason, all work involving Refractory Materials Including Demolition of Refractory Materials.

Asbestos Removal and Hazardous Waste Removal (handling, control, removal abatement, encapsulation or disposal of asbestos & hazardous waste),

Group 6: Gunnite Man, Sand Blaster, Concrete & Grout Pump & Hose Man, Blast Trac, Miners & Muckers, Free Air, Powderman or Blaster, Mortar or Gypsum Machineman, Welder, Scuba Diver.

Group 7: Watchman & Tool Checker/Toolroom Man

# Prevailing Wage Rate Skilled Crafts

Name of Union: Operating Engineers - Building Local 18 - Zone III

Change # : LCN01-2020fbLoc18zone3

Craft : Operating Engineer Effective Date : 05/14/2020 Last Posted : 05/14/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Operator Class 1	\$38.24		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.69	\$72.81
Class 2	\$38.12		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.57	\$72.63
Class 3	\$37.08		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.53	\$71.07
Class 4	\$35.90		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$51.35	\$69.30
Class 5	\$30.44		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$45.89	\$61.11
Class 6	\$38.49		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.94	\$73.18
Class 7	\$38.74		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$54.19	\$73.56
Class 8	\$39.24		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$54.69	\$74.31
Class 9	\$39.49		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$54.94	\$74.68
<b>Apprentice</b>	<b>Percent</b>											
1st Year	50.00	\$19.12	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$34.57	\$44.13
2nd Year	60.00	\$22.94	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$38.39	\$49.87
3rd Year	70.00	\$26.77	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$42.22	\$55.60
4th Year	80.00	\$30.59	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$46.04	\$61.34
Field Mechanic Trainee												
1st Year	50.00	\$19.12	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$34.57	\$44.13
2nd Year	60.00	\$22.94	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$38.39	\$49.87
3rd Year	70.00	\$26.77	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$42.22	\$55.60
4th Year	80.00	\$30.59	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$46.04	\$61.34

**Special Calculation Note :** Other: Education & Safety \$0.09

**Ratio :**

For every (3) Operating Engineer Journeymen employed by the company there may be employed (1) Registered Apprentice or trainee Engineer through the referral when they are available. An apprentice, while employed as part of a crew per Article VIII, paragraph 77, will not be subject to the apprenticeship ratios in this collective bargaining agreement

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WYANDOT



## Special Jurisdictional Note :

### Details :

\*\*Apprentices will receive a 10% increase on top of the percentages listed above provided they are operating mobile equipment. Mechanic Trainees will receive 10% increase if required to have CDL

Class 1 - Barrier Moving Machine; Boiler Operators or Compressor Operators, when compressor or boiler is mounted on crane (Piggyback Operation); Boom Trucks (all types); Cableways Cherry Pickers; Combination - Concrete Mixers & Towers; All Concrete Pumps with Booms; Cranes (all types) Derricks (all types); Draglines Dredges (dipper, clam or suction) 3-man crew; Elevating Graders or Euclid Loaders; Floating Equipment; Gradalls; Helicopter Operators; hoisting building materials; Helicopter Winch Operators, Hoisting building materials; Hoes (All types); Hoists (with two or more drums in use); Hydraulic Gantry (lift system); Laser Finishing Machines; Lift Slab or Panel Jack Operators; Locomotives (all types); Maintenance Engineers (Mechanic and/or Welder); Mixers, paving (multiple drum); Mobile Concrete Pumps, with booms, Panelboards, (all types on site); Pile Drivers; Power Shovels; Prentice Loader; Rail Tamper (with automatic lifting and aligning device); Rotary Drills (all) used on caissons for foundations and sub-structure work; Side Booms; Slip Form Pavers; Straddle Carriers (Building Construction on site); Tug Boats. Horizontal Directional Drill, Rough Terrain Fork-lift with Winch/Hoist, Laser Screed, and Like equipment; Compact Cranes, track or rubber over 4,000 pound capacity, self-erecting cranes: stationary, track or truck (all configurations) bucket trench machines (over 24 " wide).

Class 2 - Asphalt Pavers; Bobcat-type and/or skid steer loader with hoe attachment greater than 7000 lbs. Bulldozers; CMI type Equipment; Endloaders; Hydro Milling Machine; Kolman-type Loaders (Dirt Loading); Lead Greasemen; Mucking Machines; Pettibone-Rail Equipment; Power Graders; Power Scoops; Power Scrapers; Push Cats; Vermeer Type Concrete Saw; All rotomills, grinders & planers of all types. Articulating/end dumps (minus \$4.00/hour from Class 2 rate)

Class 3 - A Frames; Air Compressors, Pressurizing Shafts or Tunnels; All Asphalt Rollers; Bobcat-type and/or skid steer loader with or without attachments; Boilers (15 lbs pressure and over); All concrete Pumps (without booms with 5 inch system); Fork Lifts (except masonry); Highway Drillers - all types (with integral power); Hoists (with one drum); House Elevators (except those automatic call button controlled); Man lifts; Mud Jacks; Pressure Grouting; Pump Operators (installing or operating Well Points or other types of Dewatering Systems); Pumps (4 inches and over discharge); Railroad Tie Inserter/Remover; Rotator (Lime-Soil Stabilizer); Submersible Pumps (4 inches and over discharge); Switch & Tie Tampers (without lifting and aligning device); Trench Machines (24 inches and under); Utility Operators; Material hoist/elevators.

Class 4 - Ballast Re-locator; Backfillers and Tampers; Batch Plant Operators; Bar and Joint Installing Machines; Bull Floats; Burlap and Curing Machines; Clefplanes; Compressors, on building construction; Concrete Spreader; Conveyors, used for handling building materials; Concrete Mixers, one bag capacity (side loader); Concrete Mixers, capacity more than one bag; Crushers; Deck Hands; Drum Fireman (in Asphalt Plant); Farm type tractors pulling attachments; Finishing Machines; Form Trenchers; Generators; Guniting Machines; Hydro-Seeders; Pavement Breakers (hydraulic or cable); Post Drivers; Post Hole Diggers; Pressure Pumps (over 1/2 inch discharge); Road Widening Trenchers; Rollers (except asphalt); All Concrete pumps (without Boom with 4 inch or smaller systems); Self-Propelled Power Spreaders; Concrete Spreaders; Self-Propelled Sub-graders; Shotcrete Machines; Tire Repairmen; Tractors, pulling sheepfoot rollers or graders; VAC/ALLS; Vibratory Compactors, with integral power; Welder Operators.

Class 5 - Boilers (less than 15 lbs. pressure); Inboard/outboard Motor Boat Launches; Light Plant Operators; Masonry Fork Lifts; Oilers/Helpers; Power Driven Heaters (oil fired); Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Signalmen, Submersible Pumps (under 4 inch discharge). Directional Drill Locator and Allen Screed Concrete Paver. Fueling and greasing (Primary Operator with Specialized CDL Endorsement Add \$3.00/ hour), compact cranes; track or rubber under 4,000 pounds.

Class 6 - Master Mechanic

Class 7 - Boom & Jib 150 - 180 feet

Class 8 - Boom & Jib 180 - 249 feet

Class 9 - Boom & Jib 250 - or over

# Prevailing Wage Rate Skilled Crafts

Name of Union: Operating Engineers - HevHwy Zone II

Change # : LCN01-2020fbLoc18hevhwyl

Craft : Operating Engineer Effective Date : 05/14/2020 Last Posted : 05/14/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Operator Class 1	\$38.24		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.69	\$72.81
Class 2	\$38.12		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.57	\$72.63
Class 3	\$37.08		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.53	\$71.07
Class 4	\$35.90		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$51.35	\$69.30
Class 5	\$30.44		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$45.89	\$61.11
Class 6	\$38.49		\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.94	\$73.18
Apprentice	Percent											
1st Year	50.00	\$19.12	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$34.57	\$44.13
2nd Year	60.00	\$22.94	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$38.39	\$49.87
3rd Year	70.00	\$26.77	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$42.22	\$55.60
4th Year	80.00	\$30.59	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$46.04	\$61.34
Field Mech Trainee Class 2												
1st year	49.85	\$19.06	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$34.51	\$44.04
2nd year	59.80	\$22.87	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$38.32	\$49.75
3rd year	69.77	\$26.68	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$42.13	\$55.47
4th year	79.75	\$30.50	\$8.51	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$45.95	\$61.19

**Special Calculation Note :** Other: Education & Safety Fund is \$0.09 per hour.

**Ratio :**

For every (3) Operating Engineer Journeymen employed by the company , there may be employed (1) Registered Apprentice or Trainee Engineer through the referral when they are available. An apprentice, while employed as part of a crew per Article VIII paragraph 65, will not be subject the apprenticeship ratios in this collective bargaining agreement.

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, TUSCARAWAS, UNION, VAN

## Special Jurisdictional Note :

### Details :

\*\*Apprentices will receive a 10% increase on top of the percentages listed above provided they are operating mobile equipment. Mechanic Trainees will receive 10% increase if they are required to have CDL.

Class 1 - Air Compressors on Steel Erection; Barrier Moving Machine; Boiler Operators, on Compressors or Generators, when mounted on a rig; Cableways, Combination Concrete mixers & Towers; Concrete Pumps; Concrete Plants ( over 4 yd capacity); Cranes (all types, including Boom Trucks, Cherry Pickers); Derricks; Draglines, Dredgers (dipper, clam or suction); Elevating Graders or Euclid Loaders; Floating Equipment (all types); Gradalls, Helicopter Crew (Operator-hoist or winch); Hoes (all types); Hoisting Engines, on shaft or tunnel work; Hydraulic Gantry (lifting system); Industrial - Type Tractors; Jet Engine Dryers (D8 or D9), Diesel Tractors; Locomotives (standard gage); Maintenance Operators (class A); Mixers, paving (single or double drum); Mucking Machines; Multiple Scrapers; Piledriving Machines (all types); Power Shovels, Prentice Loader; Quad 9 (double pusher); Rail Tamper (with automatic lifting and aligning device); Refrigerating Machines (freezer operation); Side Booms; Slip Form Pavers; Tower Dericks; Tree Shredders; Truck Mounted Concrete Pumps; Tug Boats; Tunnel Machines and /or Mining Machines; Wheel Excavators. Rough Terrain Fork-lift with Winch/Hoist; Compact Cranes, track rubber over 4,000 pound capacity, self-erecting cranes; stationary, track or truck (all configurations) Bucket trench machines (over 24 inches wide).

Class 2 - Asphalt Pavers; Automatic Subgrade Machines, self-propelled (CMI-type); Bobcat-type and /or skid steer loader with hoe attachment greater than 7000 lbs.; Boring Machine Operators (more than 48 inches); Bulldozers; Endloaders; Hydro Milling Machine; Kolman-type Loaders (production type-dirt); Lead Greasemen; Maintenance Operators, Class B (Portage and Summit Counties only); Pettibone-Rail Equipment; Power Graders; Power Scrapers; Push Cats; Lighting and Traffic Signal Installation Equipment includes all groups or classifications; Trench Machines (24inch wide and under); Vermeer Type Concrete saw. Material Transfer Equipment (Shuttle buggy) Asphalt; All rotomills,grinders and planers of all types. Horizontal Directional Drill (Over 50,000 ft.lbs.thrust and over)

Class 3 - A-Frames; Air Compressors, on tunnel work (low Pressure); Asphalt Plant Engineers; Bobcat-type and/or skid steer loader with or without attachments; Power Boilers (15 lbs pressure and over); Highway Drills (all types); Rollers, asphalt; Pump Operators (installing or operating well Points); Pumps (4 inch and over discharge); Railroad Tie Inserter/Remover; Rotator (lime-soil Stabilizer), Switch & Tie Tampers (without lifting and aligning device); Locomotives (narrow gage); Mixers, concrete (more than one bag capacity); Mixers, one bag capacity (side loader); Utilities Operators, (small equipment); Welding Machines; Material hoist/elevators. Articulating/straight bed end dumps if assigned (minus \$4.00 per hour).

Class 4 -Ballast Re-locator; Backfillers, Batch Plants; Bar and Joint Installing Machines; Boring Machine Operators (48 inch or less); Bull Floats; Burlap and Curing Machines; Concrete Plants (capacity 4 yd and under); Conveyors (highway); Concrete Saws (multiple); Crushers; Deckhands; Farm type tractors, with attachments (highway), except masonry; Finishing Machines; Firemen, Floating Equipment (all types); Fork Lifts (highway); Form Trenchers; Hydro Hammers; Hydro Seeders; Pavement Breakers; Plant Mixers; Post Drivers; Post Hole Diggers (power auger); Power Brush Burners; Power Form Handling Equipment; Road Widening Trenchers; Rollers (brick, grade, macadam); Self-Propelled Power Spreaders; Self-Propelled Sub-Graders; Tractors, pulling sheepsfoot rollers or graders; Steam Firemen; Vibratory Compactors, with integral power.

Class 5 - Compressors (portable, Sewer, Heavy and Highway); Generators; Inboard-Outboard Motor Boat Launches; Masonry Fork Lifts; Oilers/Helpers; Power Driven Heaters; Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Signalmen; Drum Fireman (in Asphalt Plant); Oil Heaters (Asphalt Plant); Tire Repairmen; VAC/ALLS; Fueling and greasing (Primary Operator with Specialized CDL Endorsement Add \$3.00/ hour), compact cranes: track or rubber under 4,000 pounds.

Class 6 - Master Mechanic

# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Painter Locals 123 & 238

Change # : LCR01-2020fbLoc123-238

Craft : Drywall Finisher Effective Date : 05/14/2020 Last Posted : 05/14/2020

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Painter Drywall Finisher	\$25.30	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.70	\$49.35
Tapers and Finishers	\$25.30	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.70	\$49.35
Apprentice											
1st Year	\$14.19	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$22.49	\$29.58
2nd Year	\$16.88	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.18	\$33.62
3rd Year	\$19.57	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.87	\$37.66
4th Year	\$20.92	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.22	\$39.68

**Special Calculation Note :** Apprentices shall be paid the proper % of the classification above.

### Ratio :

1 Journeyman to 1 Apprentice per job

### Jurisdiction ( \* denotes special jurisdictional note ) :

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

### Special Jurisdictional Note :

### Details :

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-GuardRails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Painter Locals 123 & 238  
Commercial & Industrial

Change # : LCR01-2020fbLoc123

Craft : Painter Effective Date : 05/14/2020 Last Posted : 05/14/2020

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Painter Brush Roll	\$25.30	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.70	\$49.35
Paper Hanger	\$25.30	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.70	\$49.35
Spray Painter	\$25.80	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.20	\$50.10
Sand Blaster Water Blaster	\$26.05	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.45	\$50.48
Elevated Tanks	\$26.30	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.70	\$50.85
Apprentice											
1st Year	\$14.19	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$22.49	\$29.58
2nd Year	\$16.88	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.18	\$33.62
3rd Year	\$19.57	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.87	\$37.66
4th Year	\$20.92	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.22	\$39.68

**Special Calculation Note :** Apprentices shall be paid the proper % of the classification above.

**Ratio :**

(1) Journeymen to (1) Apprentice per jobsite

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, CLINTON,  
HAMILTON, WARREN

**Special Jurisdictional Note :**

**Details :**

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-Guard Rails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Painter Local 123 & 238 Hvy Hwy

**Change # : LCR01-2020fbLoc123**

**Craft : Painter Effective Date : 05/14/2020 Last Posted : 05/14/2020**

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Painter Bridge Class 1	\$33.00	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.40	\$60.90
Bridge Painter, Rigger, Containment Builder, Spot Blaster Class 2	\$27.00	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.40	\$51.90
Equipment Operator/Field Mechanic, Grit Reclamation, Paint Mixer, Traffic Control, Boat Person Class 3	\$27.00	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.40	\$51.90
Concrete Sealing, Concrete Blasting/Power Washing, Etc. Class 4	\$27.00	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.40	\$51.90
Quality Control/Quality Assurance, Traffic Safety, Competent Person Class 5	\$26.00	\$5.69	\$5.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.40	\$50.40
Apprentice											
1st Year	\$17.13	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.43	\$34.00
2nd Year	\$20.25	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28.55	\$38.67
3rd Year	\$23.36	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.66	\$43.34
4th Year	\$24.92	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.22	\$45.68

**Special Calculation Note :** Apprentices shall be paid proper % of the classification above..

**Ratio :**

1 Journeyman to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

## **Special Jurisdictional Note :**

### **Details :**

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-Guard Rails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

Class 1 – Abrasive blasting of any kind.

Class 2 – Bridge painting, coating application of any kind. All steel surface preparation other than abrasive blasting. All necessary rigging and containment building. All remedial/ spot blasting.

Class 3 – Tend to all equipment including but not limited to abrasive blasting, power washing, spray painting, forklifts, hoists, trucks, etc. Load and unload trucks, handle materials, man safety boats, handle traffic control, clean up/ vacuum abrasive blast materials and related tasks.

Class 4 – All aspects of concrete coating/ sealing including but not limited to preparation, containment, etc.

Class 5 – Verify and record that all work is completed according to job specifications. Assure that all health and safety standards are adhered to. Assure all traffic is safely handled.



# Prevailing Wage Rate Skilled Crafts

Name of Union: Painter Local 639

Change # : LCNO1-2015fbLoc639

Craft : Painter Effective Date : 06/10/2015 Last Posted : 06/10/2015

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
<b>Classification</b>											
Painter Metal Finisher/Helpers											
Top Helper Class A	\$19.09	\$3.65	\$0.00	\$0.00	\$0.66	\$0.00	\$0.00	\$0.00	\$0.00	\$23.40	\$32.94
Top Helper Class B	\$19.09	\$3.65	\$0.65	\$0.00	\$1.03	\$0.00	\$0.37	\$0.00	\$0.00	\$24.79	\$34.33
Top Helper Class C	\$19.09	\$3.65	\$1.00	\$0.00	\$1.76	\$0.00	\$0.37	\$0.00	\$0.00	\$25.87	\$35.41
Helper Class A	\$14.69	\$3.65	\$0.00	\$0.00	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$18.85	\$26.19
Helper Class B	\$14.69	\$3.65	\$0.65	\$0.00	\$0.79	\$0.00	\$0.28	\$0.00	\$0.00	\$20.06	\$27.40
Helper Class C	\$14.69	\$3.65	\$1.00	\$0.00	\$1.64	\$0.00	\$0.28	\$0.00	\$0.00	\$21.26	\$28.60
New Hire 90 Days	\$11.00	\$3.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14.65	\$20.15

**Special Calculation Note :** Other is Sick and Personal Time

**Ratio :**

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEauga, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT



## **Special Jurisdictional Note :**

### **Details :**

Top Helper: Shall perform the responsibilities of a Helper and be responsible for the setup, break down, safety and quality of the company's product.

Helper : Shall be responsible for performing tasks in refinishing, compliance with safety procedures, setting up and breaking down job sites, scaffolding and swing stages and preparing surfaces for refinishing including but not limited to, masking and stripping and cleaning, oxidizing, polishing and scratch removal on various surfaces

Class A Workers: Less than 1 Year of Service.

Class B Workers: More than 1 and less than 8 Years of Service.

Class C Workers: More than 8 Years of Service.

Metal Polisher Scope of Work: Polishing, buffing, stripping, coloring, lacquering, spraying, cleaning and maintenance of ornamental and architectural metals, iron, bronze, nickel, aluminum and stainless steel and in mental specialty work, various stone finishes, stone specialty work and any other work pertaining to the finishing of metal, stones, woods, and any window washing/cleaning done in conjunction with this work, using chemicals, solvents, coatings and hand applied lacquer thinner, removing scratches from mirror finished metals, burnishing of bronze, statuary finishes on exterior and interior surfaces and the use of all tools required to perform such work, including but not limited to polishes, spray equipment and scaffolding.

Swing State Rate: All work on scaffold 4 sections or higher, including any boom lifts and swing stage scaffolds including the rigging and derigging of hanging/suspended swing stage systems and rappelling/bolson chair work, ADD \$1.50 per hour.

# Prevailing Wage Rate

## Skilled Crafts

Name of Union: Painter Local 639 Zone 2 Sign

Change # : LCN01-2016fbLoc639

Craft : Painter Effective Date : 08/03/2016 Last Posted : 08/03/2016

Classification	BHR	Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate
	H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Painter Sign Journeyman Tech/Team Leader Class A	\$21.25	\$1.33	\$0.14	\$0.00	\$0.00	\$0.57	\$0.00	\$0.00	\$23.29	\$33.92
Painter Sign Journeyman Tech/Team Leader Class B	\$21.25	\$1.33	\$0.14	\$0.00	\$0.41	\$0.57	\$0.00	\$0.00	\$23.70	\$34.32
Painter Sign Journeyman Tech/Team Leader Class C	\$21.25	\$1.33	\$0.14	\$0.00	\$0.82	\$0.57	\$0.00	\$0.00	\$24.11	\$34.74
Painter Sign Journeyman Tech/Team Leader Class D	\$21.25	\$1.33	\$0.14	\$0.00	\$1.23	\$0.57	\$0.00	\$0.00	\$24.52	\$35.14
Sign Journeyman Class A	\$20.98	\$1.33	\$0.14	\$0.00	\$0.00	\$0.56	\$0.00	\$0.00	\$23.01	\$33.50
Sign Journeyman Class B	\$20.98	\$1.33	\$0.14	\$0.00	\$0.40	\$0.56	\$0.00	\$0.00	\$23.41	\$33.90
Sign Journeyman Class C	\$20.98	\$1.33	\$0.14	\$0.00	\$0.81	\$0.56	\$0.00	\$0.00	\$23.82	\$34.31
Sign Journeyman Class D	\$20.98	\$1.33	\$0.14	\$0.00	\$1.21	\$0.56	\$0.00	\$0.00	\$24.22	\$34.71
Tech Sign Fabrication/Erector Class A	\$15.90	\$1.33	\$0.14	\$0.00	\$0.00	\$0.43	\$0.00	\$0.00	\$17.80	\$25.75
Tech Sign Fabrication/Erector Class B	\$15.90	\$1.33	\$0.14	\$0.00	\$0.31	\$0.43	\$0.00	\$0.00	\$18.11	\$26.06

Painter Local 639 Zone 2 Sign

Tech Sign Fabrication/ Erector Class C	\$15.90	\$1.33	\$0.14	\$0.00	\$0.61	\$0.00	\$0.43	\$0.00	\$0.00	\$18.41	\$26.36
Tech Sign Fabrication/ Erector Class D	\$15.90	\$1.33	\$0.14	\$0.00	\$0.92	\$0.00	\$0.43	\$0.00	\$0.00	\$18.72	\$26.67

**Special Calculation Note :** Other is for paid holidays.

**Ratio :**

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, AUGLAIZE, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GREENE, HAMILTON, HANCOCK, HARDIN, HENRY, HIGHLAND, HOLMES, HURON, JACKSON, KNOX, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MERCER, MIAMI, MONTGOMERY, MORROW, MUSKINGUM, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, WARREN, WAYNE, WILLIAMS, WOOD, WYANDOT

**Special Jurisdictional Note :**

**Details :**

- Class A: less that 1 year.
- Class B: 1-3 years.
- Class C; 3-10 years.
- Class D: More than 10 years.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Plasterer Local 132 (Cincinnati)

**Change # : LCN01-2021fbLoc132**

**Craft : Plasterer Effective Date : 03/10/2021 Last Posted : 03/10/2021**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Plasterer	\$25.90		\$5.80	\$8.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$41.40	\$54.35
<b>Apprentice</b>	<b>Percent</b>											
1st 900 hours	60.00	\$15.54	\$5.80	\$0.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$23.04	\$30.81
2nd 900 hours	65.00	\$16.83	\$5.80	\$0.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$24.33	\$32.75
3rd 900 hours	70.00	\$18.13	\$5.80	\$7.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$32.63	\$41.70
4th 900 hours	75.00	\$19.42	\$5.80	\$7.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$33.92	\$43.64
5th 900 hours	80.00	\$20.72	\$5.80	\$7.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$35.22	\$45.58
6th 900 hours	85.00	\$22.01	\$5.80	\$7.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$36.52	\$47.52
7th 900 hours	90.00	\$23.31	\$5.80	\$7.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$37.81	\$49.46
8th 900 hours	95.00	\$24.60	\$5.80	\$7.00	\$0.70	\$0.00	\$1.00	\$0.00	\$0.00	\$0.00	\$39.11	\$51.41

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

- 1 Journeyman to 1 Apprentice
- 4 Journeyman to 2 Apprentice
- 7 Journeyman to 3 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

**Special Jurisdictional Note :**

**Details :**

Apprentice and Shop Hand Pension are \$1.00 less than Journeyman.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Plumber Pipefitter Local 392

**Change # : LCN01-2020-fbLoc392**

**Craft : Plumber/Pipefitter Effective Date : 06/04/2020 Last Posted : 06/04/2020**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Plumber Pipefitter	\$33.91		\$7.88	\$13.39	\$0.54	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$56.20	\$73.15
Plumber Helper	\$21.33		\$7.30	\$6.59	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.72	\$46.38
Apprentice	Percent											
1st yr	45.00	\$15.26	\$7.68	\$0.95	\$0.54	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$24.91	\$32.54
2nd yr	50.00	\$16.95	\$7.68	\$0.95	\$0.54	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$26.60	\$35.08
3rd yr	55.00	\$18.65	\$7.68	\$7.37	\$0.54	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$34.72	\$44.05
4th yr	60.00	\$20.35	\$7.68	\$7.37	\$0.54	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$36.42	\$46.59
5th yr	75.00	\$25.43	\$7.68	\$13.39	\$0.54	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$47.52	\$60.24

**Special Calculation Note : OTHER IS: SUPPLEMENTAL UNEMPLOYMENT BENEFITS.**

**Ratio :**

- 1 Journeymen to 1 Apprentice
- 2 Journeymen to 4 Apprentices
- 3 Journeymen to 6 Apprentices

**Jurisdiction ( \* denotes special jurisdictional note ) :**

BROWN, BUTLER, CLERMONT, HAMILTON, WARREN

When more than twenty (20) Journeymen are employed additional apprentices may be acquired at a ratio of one (1) apprentice to four (4) journeymen.

**Special Jurisdictional Note :**

**Details :**

Helpers shall be permitted to work on ONLY , Exterior Sewers, Concrete, Vitrified Clay or PVC Pipe and Digging and Backfilling for Piping Work. The ratio shall not exceed 2 helpers to 1 Journeymen when performing the scope of work listed above

# Prevailing Wage Rate Skilled Crafts

Name of Union: Roofer Local 42

Change # : LCNO1-2020fbLoc42

Craft : Roofer Effective Date : 09/02/2020 Last Posted : 09/02/2020

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
<b>Classification</b>												
Roofer	\$28.45		\$8.02	\$7.75	\$0.32	\$0.00	\$0.90	\$0.06	\$0.00	\$0.00	\$45.50	\$59.72
Tradesmen	\$22.76		\$8.02	\$6.20	\$0.00	\$0.00	\$0.90	\$0.03	\$0.00	\$0.00	\$37.91	\$49.29
<b>Apprentice</b>	<b>Percent</b>											
1st period	60.00	\$17.07	\$8.02	\$4.65	\$0.03	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$30.67	\$39.21
2nd period	70.00	\$19.91	\$8.02	\$5.42	\$0.03	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$34.28	\$44.24
3rd period	80.00	\$22.76	\$8.02	\$6.20	\$0.03	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$37.91	\$49.29

**Special Calculation Note :** Other is for Training Fund

**Ratio :**

Employer may employ 1 apprentice for every 2 journeymen in his employment.

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

**Special Jurisdictional Note :**

**Details :**

Any Tradesman Worker completing 2,000 hours in (2) years may move to Journeyman status by utilizing the Training Yard to improve their skills. Tradesman Workers will be tested at these yards to determine their competency for Journeyman status. Tradesman Workers must schedule and successfully complete the industry test battery in order to gain journeyman status.

# Prevailing Wage Rate Skilled Crafts

Name of Union: Sheet Metal Local 24 (Dayton)

Change # : LCR02-2019fbLoc24(Day)

Craft : Sheet Metal Worker Effective Date : 06/19/2019 Last Posted : 06/19/2019

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Sheet Metal Worker	\$27.72	\$8.52	\$14.46	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51.55	\$65.41
<b>Apprentice</b>	<b>Percent</b>											
Apprentice												
5th Year B	80.00	\$22.18	\$8.26	\$11.56	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.85	\$53.93
5th Year A	75.00	\$20.79	\$8.20	\$10.85	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.69	\$51.09
4th Year B	70.00	\$19.40	\$8.13	\$10.13	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.51	\$48.22
4th Year A	65.00	\$18.02	\$8.07	\$9.40	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.34	\$45.35
3rd year B	60.00	\$16.63	\$8.01	\$8.68	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.17	\$42.49
3rd Year A	55.00	\$15.25	\$7.94	\$7.95	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.99	\$39.61
2 Year B	53.78	\$14.91	\$7.90	\$7.02	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.68	\$38.13
2 Year A	52.69	\$14.61	\$7.88	\$6.49	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.83	\$37.13
Probationary 1 Year	51.13	\$14.17	\$7.85	\$5.87	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28.74	\$35.83

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

1 Journeyman to 1 Apprentice then,  
1 Apprentice for every 2 Journeymen thereafter

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ALLEN, AUGLAIZE, BUTLER, CHAMPAIGN,  
CLARK, CLINTON, DARKE, GREENE, HARDIN,  
LOGAN, MERCER, MIAMI, MONTGOMERY,  
PREBLE, SHELBY, VAN WERT, WARREN,  
WYANDOT

**Special Jurisdictional Note :**

**Details :**

# Prevailing Wage Rate Skilled Crafts

Name of Union: Sprinkler Fitter Local 669

Change # : LCN01-2021fbLoc669

Craft : Sprinkler Fitter Effective Date : 04/01/2021 Last Posted : 03/31/2021

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Sprinkler Fitter	\$41.87		\$10.55	\$7.00	\$0.52	\$0.00	\$5.12	\$0.10	\$0.00	\$0.00	\$65.16	\$86.09
Apprentice Indentured after April 1, 2013	Percent											
CILASS 1	45.00	\$18.84	\$7.75	\$0.00	\$0.52	\$0.00	\$0.00	\$0.10	\$0.00	\$0.00	\$27.21	\$36.63
CLASS 2	50.00	\$20.93	\$7.75	\$0.00	\$0.52	\$0.00	\$0.00	\$0.10	\$0.00	\$0.00	\$29.30	\$39.77
CLASS 3	54.40	\$22.78	\$10.55	\$7.00	\$0.52	\$0.00	\$1.15	\$0.10	\$0.00	\$0.00	\$42.10	\$53.49
CLASS 4	59.40	\$24.87	\$10.55	\$7.00	\$0.52	\$0.00	\$1.15	\$0.10	\$0.00	\$0.00	\$44.19	\$56.63
CLASS 5	64.42	\$26.97	\$10.55	\$7.00	\$0.52	\$0.00	\$1.40	\$0.10	\$0.00	\$0.00	\$46.54	\$60.03
CLASS 6	69.40	\$29.06	\$10.55	\$7.00	\$0.52	\$0.00	\$1.40	\$0.10	\$0.00	\$0.00	\$48.63	\$63.16
CLASS 7	74.40	\$31.15	\$10.55	\$7.00	\$0.52	\$0.00	\$1.40	\$0.10	\$0.00	\$0.00	\$50.72	\$66.30
CLASS 8	79.42	\$33.25	\$10.55	\$7.00	\$0.52	\$0.00	\$1.40	\$0.10	\$0.00	\$0.00	\$52.82	\$69.45
CLASS 9	84.40	\$35.34	\$10.55	\$7.00	\$0.52	\$0.00	\$1.40	\$0.10	\$0.00	\$0.00	\$54.91	\$72.58
CLASS 10	89.40	\$37.43	\$10.55	\$7.00	\$0.52	\$0.00	\$1.40	\$0.10	\$0.00	\$0.00	\$57.00	\$75.72

**Special Calculation Note :** \$0.10 for Other is National Fire Sprinkler Association

**Ratio :**

1 Journeyman to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW,



MUSKINGUM, NOBLE, OTTAWA, PAULDING,  
PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE,  
PUTNAM, RICHLAND, ROSS, SANDUSKY,  
SCIOTO, SENECA, SHELBY, STARK, SUMMIT,  
TRUMBULL, TUSCARAWAS, UNION, VAN  
WERT, VINTON, WARREN, WASHINGTON,  
WAYNE, WILLIAMS, WOOD, WYANDOT

**Special Jurisdictional Note :**

**Details :**

Sprinkler Fitter work shall consist of the installation, dismantling, maintenance, repairs, adjustments, and corrections of all fire protection and fire control systems including the unloading, handling by hand, power equipment and installation of all piping or tubing, appurtenances and equipment pertaining thereto, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes and hose connections to sprinkler systems used in connection with sprinkler and alarm systems. Also all tanks and pumps connected thereto, also included shall be CO-2 and Cardox Systems, Dry Chemical Systems, Foam Systems and all other fire protection systems.

# Prevailing Wage Rate Skilled Crafts

**Name of Union: Truck Driver Bldg & HevHwy Class 1  
Locals 20,40,92,92b,100,175,284,438,377,637,908,957**

**Change # : OCRO1-2019fbBldgHevHwy**

**Craft : Truck Driver Effective Date : 09/11/2019 Last Posted : 09/11/2019**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Truck Driver CLASS 1 4 wheel service, dump, and batch trucks, Oil Distributor - Asphalt Distributor-Tandems	\$28.04		\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.14	\$57.16
Apprentice	Percent											
First 6 months	80.00	\$22.43	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.53	\$48.75
7-12 months	85.00	\$23.83	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.93	\$50.85
13-18 months	90.00	\$25.24	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.34	\$52.95
19-24 months	95.00	\$26.64	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.74	\$55.06
25-30 months	100.00	\$28.04	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.14	\$57.16

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

3 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN,

HARRISON, HENRY, HIGHLAND, HOCKING,  
HOLMES, HURON, JACKSON, JEFFERSON,  
KNOX, LAWRENCE, LICKING, LOGAN,  
LORAIN, LUCAS, MADISON, MAHONING,  
MARION, MEDINA, MEIGS, MERCER, MIAMI,  
MONROE, MONTGOMERY, MORGAN,  
MORROW, MUSKINGUM, NOBLE, OTTAWA,  
PAULDING, PERRY, PICKAWAY, PIKE,  
PORTAGE, PREBLE, PUTNAM, RICHLAND,  
ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY,  
STARK, SUMMIT, TRUMBULL, TUSCARAWAS,  
UNION, VAN WERT, VINTON, WARREN,  
WASHINGTON, WAYNE, WILLIAMS, WOOD,  
WYANDOT

**Special Jurisdictional Note :**

**Details :**

\*\* Asphalt - Oil spray bar man when operating from cab shall receive \$0.20 cents per hour above their Basic Hourly Rate.

# Prevailing Wage Rate

## Skilled Crafts

**Name of Union: Truck Driver Bldg & HevHwy Class 2  
Locals 20,40,92,92b,100,175,284,438,377,637,908,957**

**Change # : LCRO1-2019-fbBldgHevHwy**

**Craft : Truck Driver Effective Date : 10/16/2019 Last Posted : 10/16/2019**

	BHR		Fringe Benefit Payments					Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)			MISC (*)
Classification												
Truck Driver CLASS 2 Tractor Trailer-Semi Tractor Trucks-Pole Trailers-Ready Mix Trucks-Fuel Trucks-Asphalt-Oil Spray bar men- 5 Axle & Over -Belly Dumps-End Dumps-Articulated Dump Trucks-Low boys-Heavy duty Equipment (irrespective of load carried) when used exclusively for transportation-Truck Mechanics (when needed)	\$28.46		\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.56	\$57.79
<b>Apprentice</b>	<b>Percent</b>											
First 6 months	80.00	\$22.77	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.87	\$49.25
7-12 months	85.00	\$24.19	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.29	\$51.39
13-18 months	90.00	\$25.61	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.71	\$53.52
19-24 months	95.00	\$27.04	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.14	\$55.66
25-30 months	100.00	\$28.46	\$7.00	\$7.90	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.56	\$57.79

**Special Calculation Note :** No special calculations for this skilled craft wage rate are required at this time.

**Ratio :**

3 Journeymen to 1 Apprentice

**Jurisdiction ( \* denotes special jurisdictional note ) :**

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

**Special Jurisdictional Note :**

**Details :**

\*\* Asphalt - Oil spray bar man when operating from cab shall receive \$0.20 cents per hour above their Basic Hourly Rate.

**SECTION 00 70 20**  
**PERMITS**

Contractor shall keep a copy of all permits at the project site throughout the duration of the work.



Mike DeWine, Governor  
Jon Husted, Lt. Governor  
Laurie A. Stevenson, Director

May 6, 2020

RE: Warren Co. Franklin Area PWS  
Plan  
Approval  
Classification: Detail Plans  
Drinking Water Program  
Warren County  
PWSID: OH8301603  
Package Number: 1339777

Warren County Board of Commissioners  
406 Justice Drive  
Lebanon, Ohio 45036

**Subject: Application No. 1339777-WS; Detail Plans for Riviera Drive Water Main Extension; Plans Received from AECOM USA, Inc. - Columbus**

Ladies and Gentlemen:

The Ohio Environmental Protection Agency has reviewed the enclosed plans submitted pursuant to Ohio Revised Code Sections 6109.07 et. seq., or accepted the certification of plan review by an authorized professional engineer pursuant to a contract therefore. These plans are approved subject to the condition of compliance with all applicable laws, rules, regulations, and standards. The applicant is responsible for obtaining all other necessary approvals, waivers or releases required by state, federal or local law prior to implementing this plan. Further, all construction must be supervised by a registered engineer, if required by law, or expert qualified in such work.

The enclosed report or project summary sheet(s) contains a description of the facilities approved which may include information regarding approved operating rates, capacities, and requirements, and is incorporated herein.

This approval shall become void five years from the date of this letter unless the facilities are constructed as proposed by that date. By accepting this approval, the applicant acknowledges that this deadline shall not be considered or construed as extending or having any effect whatsoever on any compliance schedule or deadline set forth in any administrative or court order issued to or binding upon the applicant, and the applicant shall abide by such compliance schedules or deadlines to avoid the initiation of additional legal action by the Ohio Environmental Protection Agency.

This approval covers only the water supply facilities proposed. Sanitary waste handling facilities may need a separate approval by the Ohio Environmental Protection Agency. Other aspects of the project may need approval by the Ohio Department of Health and/or the local health department.

Lead solder and flux that exceeds 0.2 percent lead content and any pipe or pipe fitting that exceeds a 0.25 percent lead content shall not be used in the installation of the proposed facilities.

The owner shall provide for the proper maintenance and operation of the water supply and distribution system.

Necessary measures shall be taken to ensure that there will be no cross connections between the public water supply and any private water supply. The local health department shall be notified of any private water wells which will no longer be used as sources of potable water and which should be abandoned.

The supplier of water shall ensure that no person shall install or maintain a water service connection where a booster pump has been installed, unless an approved method is in place and operational to maintain a minimum suction pressure in accordance with Ohio Administrative Code Rule 3745-95-07.

The owner shall contact the appropriate district of the U.S. Army Corps of Engineers regarding each stream or wetland crossing proposed as part of this project. If a 404 permit is determined to be necessary by the Corps of Engineers, the owner shall acquire a Section 404 Permit and 401 Water Quality Certification, before impacting any waters of the state as a part of this project.

Any well, well point, pit, or other device installed for the purpose of lowering the ground water level to facilitate construction of this project shall be properly abandoned in accordance with the provisions of Rule 3745-9-10 of the Ohio Administrative Code or in accordance with the provisions of this plan or as directed by the director of the Ohio Environmental Protection Agency or his representative. In addition, a well sealing report shall be filed with the Ohio Department of Natural Resources, Division of Water, within 30 days of completion, in accordance with Section 1521.01 of the Ohio Revised Code.

Any person installing any well, well point, pit, or other device used for the purpose of removing ground water from an aquifer shall complete and file a Well Log and Drilling Report form with the Ohio Department of Natural Resources, Division of Water, within 30 days of the well completion in accordance with the Ohio Revised Code, Section 1521.01 and 1521.05. In addition, any such facility that has a capacity to withdraw waters of the state in an amount greater than 100,000 gallons per day from all sources shall be registered by the owner with the Chief of the Division of Water, Ohio Department of Natural Resources, within three months after the facility is completed in accordance with Section 1521.16 of the Ohio Revised Code. For copies of the necessary well log, drilling report, or registration forms, please contact:

Division of Water  
Ohio Department of Natural Resources  
Fountain Square  
Columbus, OH 43224-1387  
(614) 265-6717

Air Pollution Control Requirements: Fugitive dust generated by this water line project shall be controlled as specified in OAC 3745-17-08(B).

A National Pollutant Discharge Elimination System (NPDES) permit will be required if the construction project results in a disturbance greater than or equal to one acre. As a requirement of the permit, a Storm Water Pollution Prevention Plan (SWPPP) must be developed before submitting the Notice of Intent (NOI) for coverage under the permit. The NOI must be submitted 45 days prior to beginning construction. To obtain the application form and relevant information, please contact Ohio EPA's storm water coordinator at (937) 285-6357.

The proposed facility may be constructed only in accordance with plans approved by the director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the agency. Any deviation from the approved plans or the above conditions may lead to sanctions and penalties provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

If a Water Supply Revolving Loan Account (WSRLA) loan is desired, it will be necessary to comply with the requirements of Ohio Revised Code 6109.22. If compliance with WSRLA requirements necessitates any revisions to the plans as herein approved, a resubmittal and approval of the plans will be required before construction.

Should there be any questions regarding the requirements, meaning, or interpretation of any of the above which we may clarify, please contact the Division of Drinking and Ground Waters, Southwest District Office, Ohio Environmental Protection Agency.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with



the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Treasurer of the State of Ohio", which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
30 East Broad Street, 4<sup>th</sup> Floor  
Columbus, OH 43215

Ohio EPA has developed a customer service survey to get feedback from regulated entities that have contacted us for regulatory assistance, or worked with the Agency to obtain a permit, license or other authorization. Ohio EPA's goal is to provide our customers with the best possible customer service, and your feedback is important to us in meeting this goal. Please take a few minutes to complete this survey and share your experience with us at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx).

Sincerely,



Laurie A. Stevenson  
Director

ec: Tanushree Courlas, CO-DDAGW  
Susan Shell, CO-DDAGW  
Jeff Davidson, SWDO-DDAGW  
Matt Nolker, P.E., AECOM USA, Inc  
Chris Wojnicz  
Warren County Health Department



John R. Kasich, Governor  
 Mary Taylor, Lt. Governor  
 Craig W. Butler, Director

**PROJECT SUMMARY SHEET FOR PLAN REVIEW OF  
 PROPOSED WATERLINE EXTENSIONS**

Water System Name Warren

Project Title (same as listed on water supply data sheet): Riviera Drive Water Main Extension

The following is a summary of the proposed waterline:

PIPE MATERIAL	DIAMETER (INCHES)	LENGTH (FEET)	LOCATION	APPLICABLE STANDARDS*	CLASS	PRESSURE RATING
DI	12	4035	Riviera Drive	AWWA C-151	52	350

\*Material and installation, JUSTIFY IF NOT AN AWWA STANDARD (See policy ENG-08-002)

1. Will all pipe, fittings, valves and fire hydrants conform to the latest standards issued by AWWA and/or NSF? Yes  No
2. Will all packing and jointing materials used for pipe joints conform to the requirements of AWWA? Yes  No
3. If in an area of groundwater contaminated by organic compounds, **N/A**
  - a. are the pipe and joint materials such that they do not allow penetration of the organic compounds? Yes  No
  - b. are all portions of the system, including pipe, joint materials, hydrant leads and service connections, of non-permeable materials? Yes  No

4. Will all waterlines be pressure tested and tested for leakage in accordance with applicable AWWA Standards? Yes  No
- a. Test to be performed by Contractor
- b. Test to be supervised by Engineer
5. Is a continuous and uniform bedding provided in the trench for all buried pipe? Yes  No
6. Are all tees, bends, plugs, and hydrants provided with reaction blocking, tie rods, or joints designed to prevent movement? Yes  No
7. Will all waterlines be disinfected in accordance with AWWA Standard C651? Yes  No
- a. Disinfection to be performed by Contractor
- b. Disinfection to be supervised by Engineer
- c. Microbiological samples to be analyzed at Contractor's Lab
8. Is the system designed to maintain a minimum pressure of 20 psi at ground level at all points in the system under all conditions of flow? Yes  No
9. Will the normal working pressure in the system be not less than 35 psi? (TSS 8.2.1 recommends 60 – 80 psi) Yes  No
10. Is the system designed to provide fire protection? Yes  No
- a. The design fire flow will be 1,000 gpm minimum at 60 psi pressure.
- b. What is the maximum spacing of the hydrants? 500 ft.
- c. Will hydrant drains be plugged? Yes  No
- d. Is the minimum size of all waterlines at least six inches? Yes  No
11. Will a backflow prevention program be implemented or followed to prevent cross connections with unapproved sources? Yes  No

12. Are there any master meters to be installed as part of this project? Yes  No

NOTE: If the answer above is yes, contact your Ohio EPA district office to determine if the entity being served by a master meter is an exempt public water system.

13. Is at least four feet of cover provided to protect the waterline from freezing? Minimum cover 3.3 feet. Yes  No

14. What is the maximum spacing between shutoff valves? 1,000' (each intersection and 800 feet maximum recommended, 500 feet in commercial areas)

15. Have the number of dead end mains been minimized? Yes  No

16. Where dead end mains occur, has a means of flushing the main been provided? (2.5 fpm minimum) Yes  No

17. Will all waterlines have at least 10 feet horizontal separation (edge to edge) from sanitary and storm sewers? Yes  No

18. Will all waterlines which cross sanitary and storm sewers have a minimum vertical separation (outside to outside) of 18 inches? Yes  No

19. Will a reliable means to detect leakage at surface water crossings wider than 15 feet be provided? **N/A** Yes  No

20. Will a minimum cover of five feet be provided over the water crossing pipe? **N/A** Yes  No

21. Will piping at water crossing have flexible watertight joints? **N/A** Yes  No

22. Are air relief valves provided (attach summary sheet)? Yes  No

Provide a justification for any of the above questions which are answered "no".

No master meters are required, this is an extension of an existing water line. 4.5' minimum cover is used wherever possible. A minimum cover of 3.3' was used at 2 culvert crossing. At those locations we have a detail for frost proofing provided. No air releases are required for this relatively short extension of an existing waterline. This water line will only be serving 10 customers; therefore shutoff valves are proposed every 1,000 feet.

Name: Matthew Noelker Date: 03/18/2020

*Matt Noelker*



**SECTION 00 70 30**  
**STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT**

The Warren County Water and Sewer Department has adopted the Standard General Conditions of the Construction Contract prepared by the Engineers Joint Contract Documents Committee and issued and published by the American Consulting Engineers Council, the National Society of Professional Engineers, and the American Society of Civil Engineers. This document, contained herein, shall be made part of the Contract and shall be used during the performance of the work, except as modified by the following SECTION 00 80 10 Supplemental Conditions.

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

**ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE**

and

Issued and Published Jointly By



PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE  
*a practice division of the*  
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

AMERICAN COUNCIL OF ENGINEERING COMPANIES

AMERICAN SOCIETY OF CIVIL ENGINEERS

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The Associated General Contractors of America



Construction Specifications Institute

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1420 King Street, Alexandria, VA 22314

American Council of Engineering Companies  
1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers  
1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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## GENERAL CONDITIONS

### ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

---

#### 1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.

1. *Addenda*--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.

2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.

3. *Application for Payment*--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

4. *Asbestos*--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

6. *Bidder*--The individual or entity who submits a Bid directly to Owner.

7. *Bidding Documents*--The Bidding Requirements and the proposed Contract Documents (including all Addenda).

8. *Bidding Requirements*--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

9. *Change Order*--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

11. *Contract*--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.

12. *Contract Documents*-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.

13. *Contract Price*--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).

14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.

15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.

16. *Cost of the Work*--See Paragraph 11.01.A for definition.

17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

18. *Effective Date of the Agreement*--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

19. *Engineer*--The individual or entity named as such in the Agreement.

20. *Field Order*--A written order issued by Engineer which requires minor changes in the Work but which does

not involve a change in the Contract Price or the Contract Times.

21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.

22. *Hazardous Environmental Condition*--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.

23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

24. *Laws and Regulations; Laws or Regulations*--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.

26. *Milestone*--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

27. *Notice of Award*--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.

28. *Notice to Proceed*--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.

29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.

30. *PCBs*--Polychlorinated biphenyls.

31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.

32. *Progress Schedule*--A schedule, prepared and maintained by Contractor, describing the sequence and

duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.

33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.

35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.

37. *Resident Project Representative*--The authorized representative of Engineer who may be assigned to the Site or any part thereof.

38. *Samples*--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

39. *Schedule of Submittals*--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.

40. *Schedule of Values*--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

41. *Shop Drawings*--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

42. *Site*--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

43. *Specifications*--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.

44. *Subcontractor*--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.

45. *Substantial Completion*--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. *Successful Bidder*--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.

48. *Supplier*--A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.

49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

50. *Unit Price Work*--Work to be paid for on the basis of unit prices.

51. *Work*--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.

52. *Work Change Directive*--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by

Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

## 1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

### B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

### C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

### D. Defective

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:

a. does not conform to the Contract Documents, or

b. does not meet the requirements of any applicable inspection, reference standard, test, or

approval referred to in the Contract Documents, or

c. has been damaged prior to Engineer's - recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

#### E. *Furnish, Install, Perform, Provide*

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.

3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.

4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.

F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

## ARTICLE 2 - PRELIMINARY MATTERS

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### 2.01 *Delivery of Bonds and Evidence of Insurance*

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.

B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which

Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

### 2.02 *Copies of Documents*

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

### 2.03 *Commencement of Contract Times; Notice to Proceed*

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

### 2.04 *Starting the Work*

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

### 2.05 *Before Starting Construction*

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

### 2.06 *Preconstruction Conference*

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other

submittals, processing Applications for Payment, and maintaining required records.

### 2.07 *Initial Acceptance of Schedules*

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.

2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

## ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

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### 3.01 *Intent*

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

### 3.02 *Reference Standards*

#### A. Standards, Specifications, Codes, Laws, and Regulations

1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

### 3.03 *Reporting and Resolving Discrepancies*

#### A. Reporting Discrepancies

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

#### B. Resolving Discrepancies

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

- a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
- b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

#### 3.04 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.

B. The requirements of the Contract Documents may be supplemented and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;
2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or
3. Engineer's written interpretation or clarification.

#### 3.05 *Reuse of Documents*

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:

1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

#### 3.06 *Electronic Data*

A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.

B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.

C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

#### ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

#### 4.01 *Availability of Lands*

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor



may make a Claim therefor as provided in Paragraph 10.05.

B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.

C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

#### 4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

#### 4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
2. is of such a nature as to require a change in the Contract Documents; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. *Possible Price and Times Adjustments*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
  - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
  - b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

c. Contractor failed to give the written notice as required by Paragraph 4.03.A.

3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

#### 4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:

a. reviewing and checking all such information and data,

b. locating all Underground Facilities shown or indicated in the Contract Documents,

c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

#### B. *Not Shown or Indicated*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 4.05 *Reference Points*

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

*A. Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

*B. Limited Reliance by Contractor on Technical Data*

*Authorized:* Contractor may rely upon the general accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Supplementary Conditions. Except for such reliance on such “technical data,” Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor’s purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any “technical data” or any such other data, interpretations, opinions or information.

*C.* Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

*D.* If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

*E.* Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice:

(i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

*F.* If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner’s own forces or others in accordance with Article 7.

*G.* To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual’s or entity’s own negligence.

*H.* To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual’s or entity’s own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

## ARTICLE 5 - BONDS AND INSURANCE

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### 5.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

### 5.02 *Licensed Sureties and Insurers*

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

### 5.03 *Certificates of Insurance*

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence

of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

### 5.04 *Contractor's Liability Insurance*

A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
  - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
  - b. by any other person for any other reason;
5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

B. The policies of insurance required by this Paragraph 5.04 shall:

1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclu-

sion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

3. include completed operations insurance;

4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;

5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);

6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and

7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.

a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

#### 5.05 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

#### 5.06 *Property Insurance*

A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured;

2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);

4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;

5. allow for partial utilization of the Work by Owner;

6. include testing and startup; and

7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.

B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and

any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.

D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

#### 5.07 *Waiver of Rights*

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and,

in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:

1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.

#### 5.08 *Receipt and Application of Insurance Proceeds*

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make

settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

#### 5.09 *Acceptance of Bonds and Insurance; Option to Replace*

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

#### 5.10 *Partial Utilization, Acknowledgment of Property Insurer*

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

### ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

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#### 6.01 *Supervision and Superintendence*

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques,

sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.

#### 6.02 *Labor; Working Hours*

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

#### 6.03 *Services, Materials, and Equipment*

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.

1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.

2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and "Or-Equals"*

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. "*Or-Equal*" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

3) it has a proven record of performance and availability of responsive service; and

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times, and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.

b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.

d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:

1) shall certify that the proposed substitute item will:

a) perform adequately the functions and achieve the results called for by the general design,

b) be similar in substance to that specified, and

c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;



- b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
  - c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
- 3) will identify:
- a) all variations of the proposed substitute item from that specified, and
  - b) available engineering, sales, maintenance, repair, and replacement services;
- 4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,

*B. Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

*C. Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.

*D. Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

*E. Engineer's Cost Reimbursement:* Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute

item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.

*F. Contractor's Expense:* Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

#### 6.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.

B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:

- 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.

E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.

F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

#### 6.07 *Patent Fees and Royalties*

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or

royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

#### 6.08 *Permits*

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

#### 6.09 *Laws and Regulations*

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on

entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

#### 6.10 Taxes

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

#### 6.11 Use of Site and Other Areas

##### A. Limitation on Use of Site and Other Areas

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.

2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.

3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

##### B. Removal of Debris During Performance of the Work:

During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the

Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

#### 6.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

#### 6.13 Safety and Protection

A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

1. all persons on the Site or who may be affected by the Work;
2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.

B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or

indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

#### 6.14 *Safety Representative*

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

#### 6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

#### 6.16 *Emergencies*

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

#### 6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

### 1. Shop Drawings

a. Submit number of copies specified in the General Requirements.

b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples*: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.

a. Submit number of Samples specified in the Specifications.

b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

### C. Submittal Procedures

1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;

c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the

requirements of the Work and the Contract Documents.

2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.

3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

#### D. Engineer's Review

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

#### E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to

revisions other than the corrections called for by Engineer on previous submittals.

#### 6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

#### 6.19 *Contractor's General Warranty and Guarantee*

A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.

B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
2. normal wear and tear under normal usage.

C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

1. observations by Engineer;
2. recommendation by Engineer or payment by Owner of any progress or final payment;
3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
4. use or occupancy of the Work or any part thereof by Owner;
5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
6. any inspection, test, or approval by others; or
7. any correction of defective Work by Owner.

## 6.20 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:

1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

## 6.21 *Delegation of Professional Design Services*

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures.

Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

## ARTICLE 7 - OTHER WORK AT THE SITE

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### 7.01 *Related Work at Site*

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

1. written notice thereof will be given to Contractor prior to starting any such other work; and
2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

#### 7.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:

1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
2. the specific matters to be covered by such authority and responsibility will be itemized; and
3. the extent of such authority and responsibilities will be provided.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

#### 7.03 *Legal Relationships*

A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.

B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and

disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

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## ARTICLE 8 - OWNER'S RESPONSIBILITIES

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### 8.01 *Communications to Contractor*

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

### 8.02 *Replacement of Engineer*

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

### 8.03 *Furnish Data*

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

### 8.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

### 8.05 *Lands and Easements; Reports and Tests*

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

### 8.06 *Insurance*

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

### 8.07 *Change Orders*

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 *Limitations on Owner's Responsibilities*

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 *Evidence of Financial Arrangements*

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

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9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 *Visits to Site*

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to

check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 *Project Representative*

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the



Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

#### 9.06 *Shop Drawings, Change Orders and Payments*

A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.

B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.

C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

#### 9.07 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

#### 9.08 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

#### 9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.

E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

10.01 *Authorized Changes in the Work*

A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).

C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

1. deny the Claim in whole or in part,
2. approve the Claim, or
3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

## ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

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### 11.01 *Cost of the Work*

A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.

2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All

cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.

5. Supplemental costs including the following:

a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.

c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.

d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.

e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone

directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.

g. The cost of utilities, fuel, and sanitary facilities at the Site.

h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

**B. Costs Excluded:** The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.

5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.

**C. Contractor's Fee:** When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

**D. Documentation:** Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

#### 11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

#### B. Cash Allowances

1. Contractor agrees that:

a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and

b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

#### C. Contingency Allowance

ARTICLE 12 - CHANGE OF CONTRACT PRICE;  
CHANGE OF CONTRACT TIMES

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1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.

B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.

C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:

1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
2. there is no corresponding adjustment with respect any other item of Work; and
3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

12.01 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:

1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).

C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:

1. a mutually acceptable fixed fee; or
2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
  - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
  - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
  - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier

Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

## 12.02 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

## 12.03 *Delays*

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

## ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

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### 13.01 *Notice of Defects*

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

### 13.02 *Access to Work*

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

### 13.03 *Tests and Inspections*

A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections,

tests, or approvals required by the Contract Documents except:

1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and
3. as otherwise specifically provided in the Contract Documents.

C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

#### 13.04 *Uncovering Work*

A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.

B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.

D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

#### 13.06 *Correction or Removal of Defective Work*

A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

#### 13.07 *Correction Period*

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. repair such defective land or areas; or
2. correct such defective Work; or
3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.

B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.

#### 13.08 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

#### 13.09 *Owner May Correct Defective Work*

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to



an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

## ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

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### 14.01 *Schedule of Values*

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

### 14.02 *Progress Payments*

#### A. Applications for Payments

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.

2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

#### B. *Review of Applications*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.

2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

a. the Work has progressed to the point indicated;

b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and

c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

3. By recommending any such payment Engineer will not thereby be deemed to have represented that:

a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or

b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment,

including final payment, will impose responsibility on Engineer:

- a. to supervise, direct, or control the Work, or
- b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
- c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
- d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
- e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

#### C. *Payment Becomes Due*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

#### D. *Reduction in Payment*

1. Owner may refuse to make payment of the full amount recommended by Engineer because:

- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or
- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.

2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

#### 14.03 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

#### 14.04 *Substantial Completion*

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

B. Promptly after Contractor's notification, , Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

#### 14.05 *Partial Utilization*

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue

a certificate of Substantial Completion for that part of the Work.

2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.

3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

#### 14.06 *Final Inspection*

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 14.07 *Final Payment*

##### A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

- a. all documentation called for in the Contract Documents, including but not limited to the

evidence of insurance required by Paragraph 5.04.B.7;

b. consent of the surety, if any, to final payment;

c. a list of all Claims against Owner that Contractor believes are unsettled; and

d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

#### B. Engineer's Review of Application and Acceptance

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

#### C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and , will be paid by Owner to Contractor.

#### 14.08 *Final Completion Delayed*

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

#### 14.09 *Waiver of Claims*

A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

### ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

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#### 15.01 *Owner May Suspend Work*

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will justify termination for cause:

1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
3. Contractor's disregard of the authority of Engineer; or
4. Contractor's violation in any substantial way of any provisions of the Contract Documents.

B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:

1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),
2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and
3. complete the Work as Owner may deem expedient.

C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.

E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 *Owner May Terminate For Convenience*

A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):

1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
4. reasonable expenses directly attributable to termination.

B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment

within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

## ARTICLE 16 - DISPUTE RESOLUTION

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### 16.01 *Methods and Procedures*

A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.

B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.

C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or
2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

## ARTICLE 17 - MISCELLANEOUS

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### 17.01 *Giving Notice*

A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:

1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or
2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

### 17.02 *Computation of Times*

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

### 17.03 *Cumulative Remedies*

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

### 17.04 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

### 17.05 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

**SECTION 00 80 10  
SUPPLEMENTAL CONDITIONS**

**PART 1 GENERAL**

**1.1 GENERAL**

- A. These Supplementary Conditions shall modify and supplement the Standard General Conditions of the Construction Contract (Section 00 70 30, EJCDC C-700), and shall govern whenever they conflict. All provisions which are not so amended or supplemented remain in full force and effect.

**1.2 MODIFICATIONS TO ARTICLES OF THE GENERAL CONDITIONS**

**A. ARTICLE 1 – DEFINITIONS**

1. Paragraph 1.01.A.19 is supplemented with the following: Where the term “Engineer” is used in the Specification for the approval of materials or work, it shall be understood to mean Warren County Water & Sewer. Contractor acknowledges that Engineer is a full-time employee appointed by Owner, and Engineer is not an independent third party, rather is a department of the governmental entity of Owner (Warren County Board of Commissioners) a political subdivision of Ohio.
2. Paragraph 1.01.A.29 is supplemented with the following: Whenever the term “Owner” is used in the Contract Documents, it shall refer to Warren County Board of Commissioners on behalf of Warren County Water & Sewer, or its authorized representative.

**B. ARTICLE 2 – PRELIMINARY MATTERS**

1. Paragraph 2.03 – Commencement of Contract Time: Notice to Proceed is amended as follows: Delete the last sentence.

**C. ARTICLE 4 – AVAILABILITY OF LANDS; SURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS**

1. Paragraph 4.06(G) shall be deleted.

**D. ARTICLE 5 – BONDS AND INSURANCE**

1. Paragraph 5.01.A – Amend the second sentence to read: “ ...These bonds shall remain in effect not less than one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents ....”
2. Paragraph 5.01.D – Add the following paragraph:



“D. If the Contractor provided a certified or cashier’s check or letter of credit as Bid Security, he shall furnish a Performance Bond in an amount at least equal to 100% of the Contract Price as security for the faithful performance of this agreement.”

3. Paragraph 5.04.C – Add the following new paragraph immediately after 5.04.B:

“C. The Contractor shall, at his own expense, purchase and maintain the following minimum coverage:

1. Workers Compensation, for claims for bodily injury, sickness, disease or death as follows:
  - a. Coverage A Statutory Benefits as described by the applicable law.
  - b. Coverage B Employer’s Liability
    - i. \$500,000 Bodily Injury by Accident – each employee
    - ii. \$500,000 Bodily Injury by disease – each employee
    - iii. \$500,000 Bodily Injury by disease – policy limit

The Contractor shall provide a copy of a certificate of premium payment from the Industrial Commission and Bureau of Workers Compensation, State of Ohio, for the period of time specified during which construction commences and copies of renewal certificates for subsequent periods, so long as the project continues.

2. Comprehensive General Liability Coverage for Bodily Injury and Property Damage – occurrence form.

General Aggregate	\$2,000,000	Each occurrence, combined single limit for Bodily Injury and Property Damager
Products – Completed Operations	\$1,000,000	Each occurrence
Aggregate	\$2,000,000	
Personal and Advertising Liability per Occurrence	\$1,000,000	Combined Single Limit for Bodily Injury and Property Damager

Coverage shall be extended to include the following:

- a. Per project and per location aggregate.
- b. Premises and operations coverage.
- c. Coverage for liability and independent contractors.
- d. Products and completed operations.
- e. Coverage for explosion, collapse and underground hazards.

- f. Stop-Gap Liability: All monopolistic states - \$1,000,000.
- g. Owner as additional insureds.
- h. Waiver of Subrogation against Owner
- i. 60-Day Notice of Cancellation or material change.

3. Comprehensive Automobile Liability Insurance – Occurrence Form

Any Automobile	\$1,000,000	Bodily Injury and Property Damage, Combined Single Limit
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Borrowed, Non-Owned	\$1,000,000	Bodily Injury and Hired Automobile Property Damage, Combined Single Limit
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Coverage shall be extended to include:

- a. Contractual liability for assumed liability.
- b. Owner as additional insureds.
- c. Waiver of Subrogation against Owner
- d. 60 Day Notice of Cancellation or material change.
- e. Motor Carrier Act Endorsement MCS-90
- f. Extra Wide/Extra Heavy Hauling Permit Endorsement

4. Any Umbrella Liability or Excess Liability Policy over primary comprehensive General and Automobile Liability shall be carried in a minimum amount of:

\$5,000,000 Each Occurrence  
 \$5,000,000 Aggregate

The Umbrella or Excess Policy shall be following the form of:

- a. Any Additional Insured under primary policy.
- b. Per project and per location aggregates.
- c. Explosion, Collapse, or Underground Hazards
- d. Stop-Gap Liability
- e. Waiver of Subrogation against Owner.
- f. Watercraft (when employed to perform the work).
- g. Aircraft (when employed to perform the work).
- h. 60-Day Notice of Cancellation or material change.

4. Paragraph 5.06 – *Property Insurance* – shall be DELETED in its entirety.

D. ARTICLE 6 – CONTRACTOR’S RESPONSIBILITIES

1. Paragraph 6.01.A – After the first sentence add: “Contractor’s Work shall be performed according to the standards of care normally exercised by construction organizations within Ohio that are engaged in performing comparable services devoting such attention thereto and applying such skills as may be necessary to perform the work in accordance with the Contract Documents.”
2. Paragraph 6.02.C – Add a new paragraph as follows:
  - “C. If the Contractor does not perform the work in accordance with the Contractor’s construction schedule and the project construction schedule, and it becomes apparent that the work may not be completed within the contract times, the Contractor shall, at no additional cost to the Owner, as necessary to improve the Contractor’s progress: (a) increase the number of employees in such crafts as will regain lost scheduled progress; and (b) increase the number of working hours per shift, shifts per work day, working days per week, the amount of equipment, or any combination of the foregoing measures to regain lost scheduled progress. Contractor shall furnish such employees, materials, facilities, and equipment, and shall work such hours, including extra shifts, overtime operations, and Sundays and holidays, as may be necessary to insure the prosecution and completion of the work in accordance with the Contractor’s construction schedule and the project construction schedule.”
3. Paragraph 6.02.D – Add a new paragraph as follows:
  - “D. Contractor shall at all times maintain good discipline and order at the site. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. If the Owner deems any employee of the Contractor or a subcontractor unsatisfactory, the Contractor must transfer or require its subcontractor to transfer such employee from the project immediately.”
4. Paragraph 6.05(E) - shall be deleted.
5. Paragraph 6.08 – Replace this Paragraph with the following:
  - “A. Permit requirements are specified in Section 0020 00 – INSTRUCTIONS TO BIDDERS, and 00 70 20 – PERMITS.
6. Paragraph 6.10 – Taxes, is amended as follows:
  - “A. OWNER, being a public body, is exempt from taxes on material incorporated into the work. CONTRACTOR, therefore, is not

required to pay such materials taxes. The OWNER will provide the tax exemption forms. These forms are to contain all necessary information required by the State. CONTRACTOR shall be responsible for payment of any applicable commercial activity tax.

- B. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated to the Work.
- C. Contractor is specifically required to abide by all local tax requirements, if any, including income tax requirements to withhold at source. Contractor acknowledges that the Contract work may take place in various cities and taxing districts, and further acknowledges different tax burdens may be imposed by each. Contractor shall indemnify, defend, and hold Owner harmless for any federal, state, or local tax liabilities incurred as a result of Contractor performing the Work."

- 6. Paragraphs 6.13 and 6.14 – Safety and Protection, are supplemented with the following: "All construction work under this Agreement is subject to Chapter XVII of Title 29, Code of Federal Regulations (CFR) Part 1926 (formerly Chapter XVII of Title 29, Part 1518) titled, "Safety and Health Regulations for Construction" and subsequent amendments."

E. ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION

- 1. Paragraph 9.01 – Add the following sentence: The parties acknowledge and agree that ENGINEER is a full time employee of OWNER and is not an independent third party, however, ENGINEER shall perform any duties under this agreement in good faith and adhere to a standard of professional care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality.

F. ARTICLE 10 – CHANGES IN THE WORK; CLAIMS

- 1. Paragraph 10.03.A.4 – Add the following paragraph:
  - "4. In no event is the Contractor entitled to reserve any rights or take other similar action with respect to a change order if the effect or intent of such reservation or action would be to accommodate a further adjustment in the contract times, contract price, or both, after the Contractor executes the change order. By executing a change order, the Contractor irrevocably certifies that the elements of the change order described are completely satisfied and waives all rights to seek further adjustment of the contract times, contract price, or both, at a later date with respect to the associated change in the work."

E. ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

1. Paragraph 11.01(A)(3) – Amend the Second Sentence as follows: DELETE the phrase “If required by Owner”. Add Sentence OWNER requires CONTRACTOR to competitively bid work from subcontractors.

2. Paragraph 11.01(D) Add the following Sentence: This agreement shall be subject to open book pricing, CONTRACTOR shall make any all bids, invoices, receipts, any and all documentation for expenses and costs available for inspection by OWNER immediately upon request.

Paragraph 11.01.B.1 – Add project manager and project executive to the list of excluded compensation and payroll costs.

E. ARTICLE 12 – CHANGE OF CONTRACT PRICE, CHANGE OF CONTRACT TIMES

1. Paragraph 12.01.C.2.e – Add the following to the end of paragraph 12.01.C.2.e: “Any change that results in a net decrease in cost shall include the appropriate overhead and profit added thereto calculated as set forth in ARTICLE 12 of the General Conditions.”

2. Paragraph 12.01.D – Insert new paragraph as follows: “D. In no event shall Contractor be entitled to any increase in the Contract Price on account of any adverse weather.”

3. Paragraph 12.02.B – Replace Paragraph 12.02.B with the following:

“B. If the Contractor wishes to make a claim for an increase in contract times, prompt written notice as provided herein shall be given. The Contractor’s claim shall include an estimate of cost and of probable effect of delay on progress of the work, a detailed schedule which indentifies the critical portions of the work impacted by the delaying event and the dates of such impact, and a statement from Contractor that the increase requested is the entire increase in the contract time associated with the claim. The failure to provide such information and statement within the time period established in Paragraph 10.05.B shall constitute an irrevocable waiver of the claim. In the case of a continuing delay occurring on consecutive days, only one claim is necessary, provided, however, that within ten (10) days of the cessation of the cause of the continuing delay, the Contractor shall notify the Owner in writing that the cause of the delay has ceased. The failure to give notice of the cessation of the cause of the continuing delay shall constitute an irrevocable waiver of any claim based upon the continuing delay.”

4. Add the following paragraph as Paragraph 12.02.C:

“In addition to the requirements of Paragraph 12.02.B, if adverse weather conditions are the basis for a claim for additional time, the contractor shall

support such claim with data acceptable to the Owner and Engineer that substantiates that weather conditions were significantly abnormal for the period of time and could not have reasonably been anticipated and that weather conditions had an adverse effect on a critical element of the scheduled construction. Notwithstanding any other provisions of the Contract Documents to the contrary, the project times will not be adjusted on account of the impact of an normal adverse weather or any of the work or on account of the impact of any abnormal adverse weather on non-critical elements of the work. The support for the evaluation of all adverse-weather claims resulting in lost work days shall be based upon criteria as provided for in the State of Ohio Department of Transportation (ODOT) Construction and Material Specifications dated January 1, 2013. ODOT Specification 108.06.C lists the number of days that the Contractor may expect to be lost due to weather as follows:

<b>Month</b>	<b>Number of Days Lost Due to Weather</b>
January	8
February	8
March	7
April	6
May	5
June	5
July	4
August	4
September	5
October	6
November	6
December	6

5. Paragraph 12.03.F – Add new paragraph as follows:

“F. Any proposed time extensions for delays requested because of abnormal weather conditions shall be subject to Paragraph 12.02.C.”

6. Paragraph 12.03.G. – Add new paragraph as follows:

“G. Delays beyond the substantial completion date attributable to and within the control of the Contractor, their Subcontractor, or Supplier shall be subject to liquidated damages in the amounts specified in SECTION 00 60 10 – CONTRACT.”

F. ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

1. Paragraph 15.01.A. – Delete the sentence that states: “Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

REPLACE the above sentence with the following: Contractor shall be granted an extension of the Contract Times directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

2. Paragraph 15.03.A(3) – shall be DELETED in its entirety.

G. ARTICLE 14 – PAYMENT TO CONTRACTOR AND COMPLETION

1. Add new Paragraph 14.02.A.4 as follows:

“4. In accordance with ORC Section 153.12 partial payments to the Contractor for labor performed under either a unit or lump sum price contract shall be made at the rate of ninety-two per cent of the estimates prepared by the Contractor and approved by the Engineer. All labor performed after the job is fifty percent completed shall be paid for at the rate of one hundred per cent of the estimates submitted by the Contractor and approved by the Engineer. A Contract shall be considered 50 percent complete when the Contractor has been paid an amount equal to 50 percent of the total cost of the labor of the Contract and 50 percent of the total cost of the material of the Contract.

All materials furnished and delivered but not actually included in the construction and approved by the Owner, after the work under this contract is 50 percent complete, shall be paid for at the rate of 92 percent of the invoiced value of the materials. The balance of such estimates shall be paid when the material is incorporated into and becomes a part of the building construction.

When the major portion of the project is substantially completed and occupied, or in use, or otherwise accepted, and there exists no other reason to withhold retainage, the retained percentages held in connection with such portion shall be released and paid to the contractor, withholding only that amount necessary to assure completion.

All retained payments shall be deposited into an escrow account at the 1<sup>st</sup> National Bank, 1160 E. Main Street, Lebanon Ohio (513) 932-3221, Contact: Gail Haines. The Contractor may waive their right to deposit the payments in an escrow account by written request to the Owner. Retained payments not deposited into an escrow account will be held by the Owner for future payment to the Contractor.”

2. Amend Paragraph 14.02.C to read: “Thirty days after presentation .....”

G. ARTICLE 16 – DISPUTE RESOLUTION

1. Delete Paragraphs 16.01.A, 16.01.B, and 16.01.C and replace with the following:

“1. This Contract shall be construed under the laws of the State of Ohio, and the parties hereby stipulate to the venue for any and all claims, disputes, interpretations, litigation of any kind arising out of this Contract being exclusively in the Warren County, Ohio Court of Common Pleas (unless both parties mutually agree in writing to alternate dispute resolution), as well as waiving any right to bring or remove such matters in or to any other state or federal court.”

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

END OF SECTION



**SECTION 00 10 10**  
**INVITATION TO BIDDERS**

Separate sealed bids for the Riviera Drive Water Main Project will be received by the Warren County Board of Commissioners at the Office of the Warren County Commissioners, 406 Justice Drive, Lebanon, Ohio 45036, until 11:00 am, Thursday, May 13, 2021 and then at said time publicly be opened and read aloud.

Bid documents, including terms, general conditions, supplemental conditions, drawings and specifications are available online at the Warren County's Website at <https://www.co.warren.oh.us/Commissioners/Bids/Default.aspx>. Questions regarding the technical specifications should be directed to Chris Wojnicz at the Warren County Water and Sewer Department, (513) 695-1646.

The project generally consists of installing approximately 4,100 feet of 6" ductile iron water main along Hamilton-Middletown Road and Riviera Drive in Franklin Township and the City of Middletown. The estimated contract value is \$1,000,000.

A bid guaranty, as required by Ohio Revised Code, Section 153.54, shall accompany each proposal submitted, as follows:

1. A Certified check, cashier's check, or letter of credit equal to ten (10) percent of the bid. A letter of credit may only be revocable by the Owner. Upon entering into a contract with the Owner, the contractor must file a performance bond for the amount of the contract, and the bid guaranty will then be returned to the successful and unsuccessful bidders upon contract execution.

**OR**

2. A form of bid guaranty bond (attached) for the full amount of the bid. Such bond is retained for the successful bidder, but returned to unsuccessful bidders after the contract is executed.

Warren County reserves the right to reject any or all bids submitted, to waive any irregularities in bids, and enter into a contract with the Bidder who in Warren County's consideration offered the lowest and best bid. By order of the Board of County Commissioner, County of Warren, State of Ohio.

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Tina Osborne, Clerk