

ADDENDUM NO. 1

Donnelsville Water System Rebid
Clark County, Ohio

Project No. 223879.01

Index of Contents

Addendum No. 1, 10 Item, 135 pages total

Attachments

American Steel Acknowledgement
Addendum Drawing #1
Addendum Drawing #2
02211 Rock Excavation(3)
00810 Supplementary Conditions (5)
11160 – GR Packaged Water Booster Station (20)
16220 Engine Generators (10)
Bowser Morner Report (48)
Prevailing Wage Rates (42)

July 9, 2026

I hereby certify that this Addendum was prepared by me or under my direct supervision and that I am a duly registered Engineer under the Laws of the State of Ohio.

ACCESS ENGINEERING SOLUTIONS, LLC



07-8-2026

TO: ALL BIDDERS OF RECORD

ADDENDUM NO. 1 to Drawings and Specifications for the Donnelsville Water System Rebid Project, Clark County, Ohio; as prepared by Access Engineering Solutions, Celina, Ohio.

This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum and acknowledge the receipt of said addendum on the bid forms.

ITEM NO. 1– Section 00003 of the Project Manual: TABLE OF CONTENTS

DELETE: 00511 – Certification of Auditor and Fiscal Officer Form

INSERT: 02211 Rock Excavation

DELETE: 13593 Telemetry

This item is being covered under the Telemetry Allowance in the Bid

ITEM NO. 2– Section 00312 of the Project Manual: EPA BIDDING REQUIRMENTS

INSERT: AMERICAN IRON & STEEL REQUIRMEMENT

The American Iron and Steel Acknowledgement is required and to be submitted with the Bid. Form is attached to the addendum.

There are no BABA Requirements for this project.

ITEM NO. 3– Section 00810 of the Project Manual: SUPPLEMENTARY CONDITIONS - EJCDC

INSERT: Specification Section 00810 is to replace the original section in the Specifications Book. The new section is attached.

ITEM NO. 4– Section 00830 of the Project Manual: PREVAILING WAGE RATES

DELETE:

<u>General Decision #</u> <u>Date</u>	<u>Const. Type</u>	<u>Counties</u>	<u>Modification #</u>	<u>Decision</u>
OH20250001	Heavy/Highway	All	0	1/2/2026

INSERT:

<u>General Decision #</u>	<u>Const. Type</u>	<u>Counties</u>	<u>Modification #</u>	<u>Decision Date</u>
OH20250001	Heavy/Highway	All	3	6/25/2026

ITEM NO.5– Section 11160 of the Project Manual: GR PACKAGED WATER BOOSTER PUMPING SYSTEM

INSERT: Specification Section 11160 is to replace the original section in the Specifications Book. The new section is attached, the only change is the comment section to the side of the document was removed.

ITEM NO. 6– Section 00200 of the Project Manual: INFORMATION AVAILABLE TO BIDDERS

INSERT:

Soil Study for Proposed Water Tower “BOWSER MORNER”
Re: Soil Exploration for Proposed Water Tower, Ingling Drive, Donnelsville, Ohio.
48 page report attached

ITEM NO. 7– Section 11175 of the Project Manual: EFI PACKAGED WATER BOOSTER PUMPING SYSTEM (ALTERNATE BID)

DELETE:

DIESEL GENERATOR SET SECTION
AUTOMATIC TRANSFER SWITCH

ITEM NO.8– Section 16320 of the Project Manual: ENGINE GENERATORS

INSERT: Specification Section 16320 is to replace the original section in the Specifications Book. The new section is attached. Change from a diesel to a natural gas generator.

ITEM NO.9– Section 16340 of the Project Manual: TRANSFER SWITCHES

DELETE:

Part 2 Products
2.1 Manufactures
A. Manufacturers:
2. Emerson: ASCO Power Technologies
3. Generac Power Systems Inc.

DELETE:

Part 2 Products
2.2 General Transfer Switch product Requirements
H. Enclosures: NEMA 4X stainless steel

INSERT:

Part 2 Products
2.2 General Transfer Switch product Requirements
H. Enclosures: NEMA 3R

INSERT:

Part 2 Products

2.3 Automatic Transfer Switch service rated with 200A fully rated breaker.

ITEM NO. 10– CONSTRUCTION DRAWINGS – DONNELSVILLE WATER SYSTEM – ADDENDUM
DRAWING #1 & #2

Electrical notes and drawings to be included in with the Bid Documents.

Clarifications:

The County is good with Mueller Centurion hydrant as an equal.

Tap saddle are not required for the ductile water line.

All service saddles used for C900 waterline shall be Romac 306 stainless steel service saddle or equivalent.

AMERICAN IRON AND STEEL ACKNOWLEDGEMENT

The Contractor acknowledges to and for the benefit of the Clark County Commissioners ("Purchaser") and the State of Ohio (the "State") that it understands the goods and services under this Agreement are being funded with monies made available by the Clean Water State Revolving Fund and/or Drinking Water State Revolving Fund that have statutory requirements commonly known as "American Iron and Steel;" that requires all of the iron and steel products used in the project to be produced in the United States ("American Iron and Steel Requirement") including iron and steel products provided by the Contractor pursuant to this Agreement. The Contractor hereby represents and warrants to and for the benefit of the Purchaser and the State that (a) the Contractor has reviewed and understands the American Iron and Steel Requirement, (b) all of the iron and steel products used in the project will be⁴ and/or have been produced in the United States in a manner that complies with the American Iron and Steel Requirement, unless a waiver of the requirement is approved, and (c) the Contractor will provide any further verified information, certification or assurance of compliance with this paragraph, or information necessary to support a waiver of the American Iron and Steel Requirement, as may be requested by the Purchaser or the State. Notwithstanding any other provision of this Agreement, any failure to comply with this paragraph by the Contractor shall permit the Purchaser or State to recover as damages against the Contractor any loss, expense, or cost (including without limitation attorney's fees) incurred by the Purchaser or State resulting from any such failure (including without limitation any impairment or loss of funding, whether in whole or in part, from the State or any damages owed to the State by the Purchaser). While the Contractor has no direct contractual privity with the State, as a lender to the Purchaser for the funding of its project, the Purchaser and the Contractor agree that the State is a third-party beneficiary and neither this paragraph (nor any other provision of this Agreement necessary to give this paragraph force or effect) shall be amended or waived without the prior written consent of the State.

Signature

Date

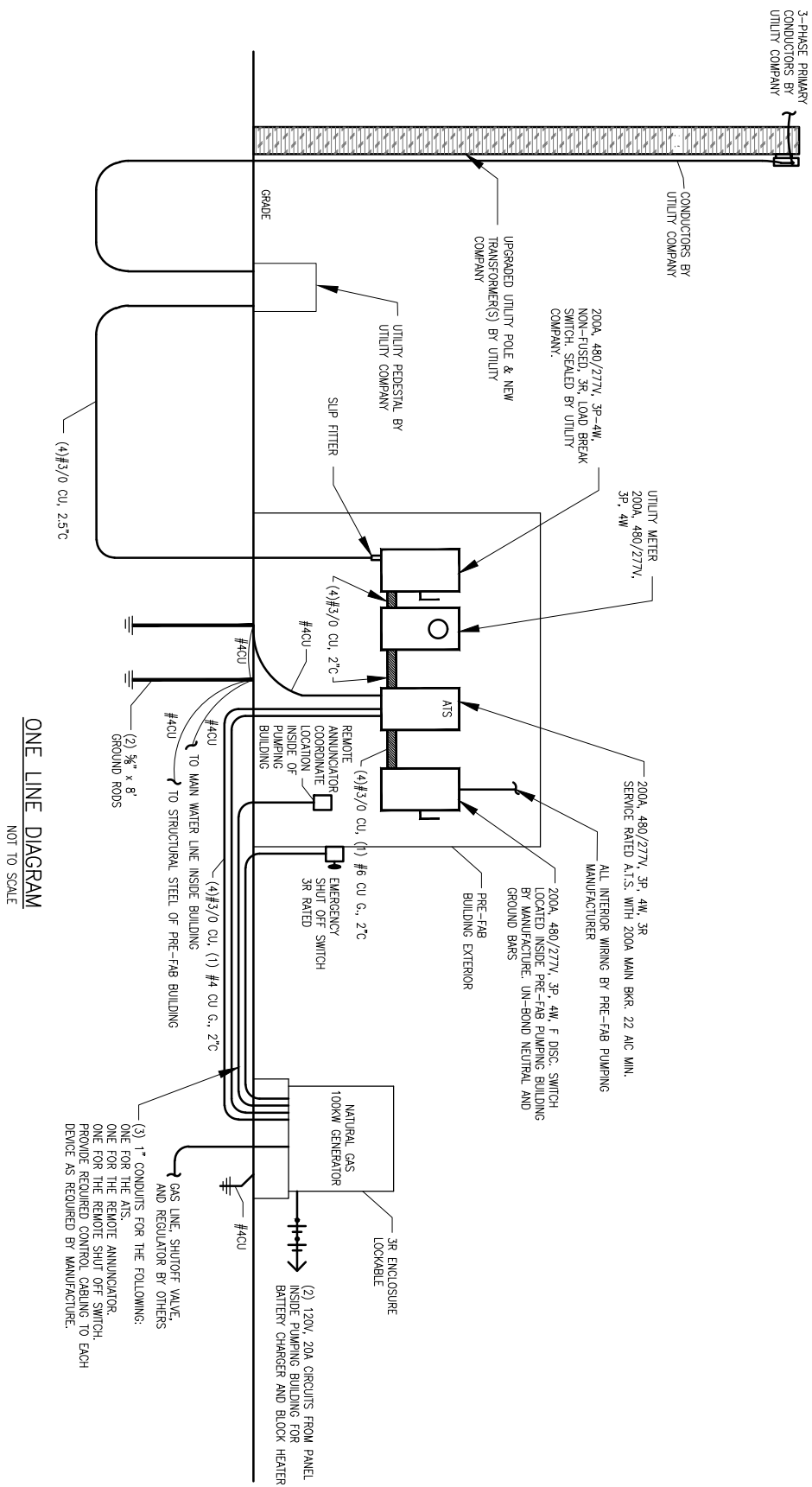
Name and Title of Authorized Signatory, Please Print or Type

Bidder's Firm

☐

Check here if the WPCLF or WSRLA applicant will be requesting an individual waiver for non- American made iron and steel products. Please note that the waiver box does not need to be marked for nationwide waivers.

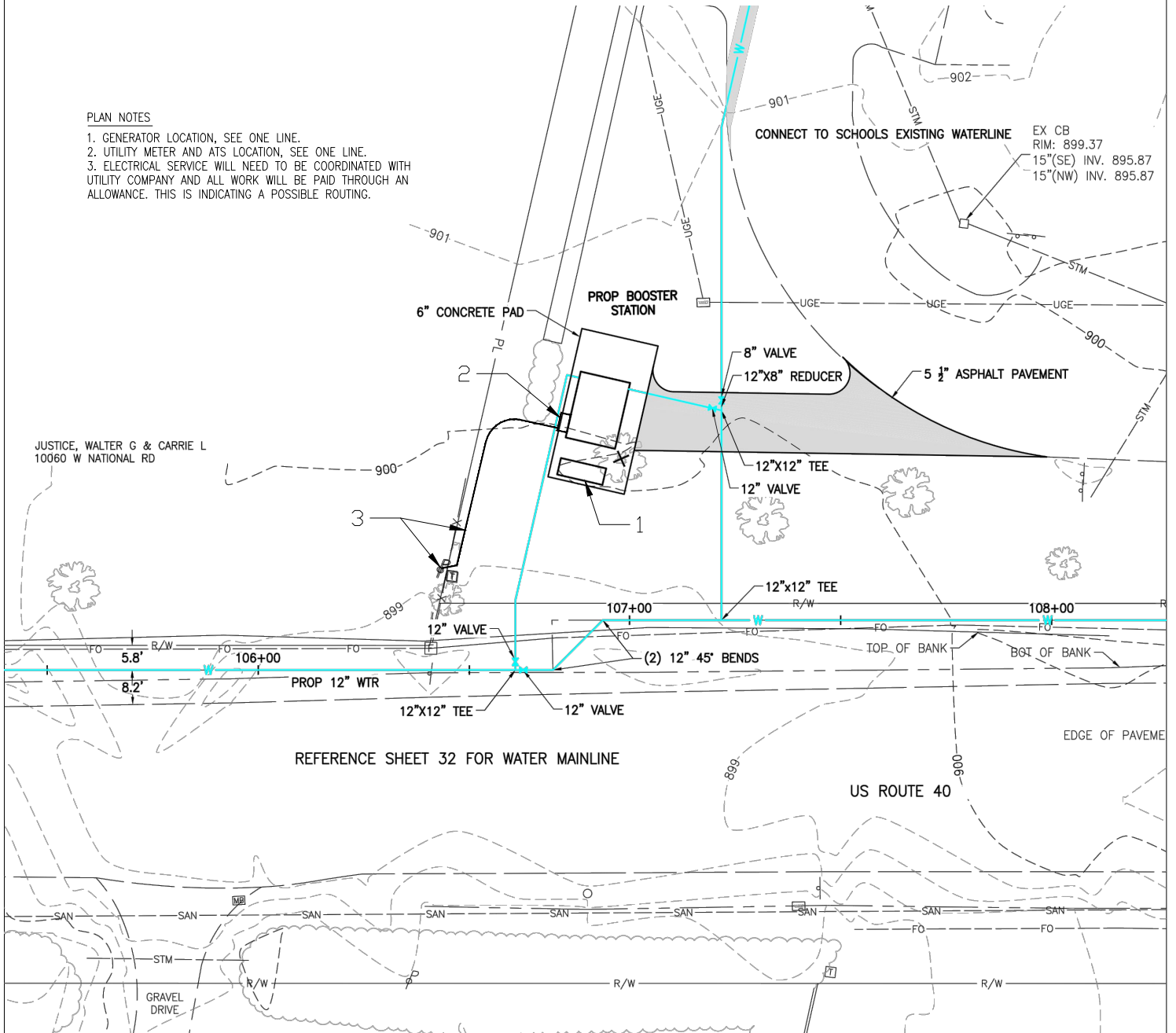
ADDENDUM DRAWING #1



ADDENDUM DRAWING #2

PLAN NOTES

1. GENERATOR LOCATION, SEE ONE LINE.
2. UTILITY METER AND ATS LOCATION, SEE ONE LINE.
3. ELECTRICAL SERVICE WILL NEED TO BE COORDINATED WITH UTILITY COMPANY AND ALL WORK WILL BE PAID THROUGH AN ALLOWANCE. THIS IS INDICATING A POSSIBLE ROUTING.



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DRAWN BY
JTL

DATE
JULY 2026

COMM. NO.
223879.01

**DONNELSVILLE WATER
SYSTEM**

**VILLAGE OF DONNELSVILLE /
CLARK COUNTY**

SECTION 02211
ROCK EXCAVATION

PART 1 GENERAL

1.01 DESCRIPTION

- A. Scope: CONTRACTOR shall furnish all labor, materials, equipment, incidentals, and compliance comply with all laws and regulations necessary for rock excavation for construction of structures and pipelines as shown and specified. Hauling and disposal of excavated rock material is included.
- B. Definition of Rock:
 - 1. Rock is defined as solid ledge rock, boulders, or buried concrete structure which requires drilling and blasting or means other than normal excavating equipment for its removal (use of "rock teeth" and/or a larger machine are considered normal).
 - 2. The following material will not be measured nor allowed for payment as rock excavation:
 - a. Soft, weathered or disintegrated rock which can be removed by normal excavation equipment.
 - b. Loose or previously blasted rock.
 - c. Broken stone in rock fills.
 - d. Any rock which may fall into the excavation trench from outside the limits of excavation specified.
 - e. Boulders which can be removed without drilling and blasting.
 - f. Concrete, asphalt or masonry pavements, walks and gutters.
 - g. Manholes and catch basins.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 ROCK UNCOVERED FOR PAYMENT MEASUREMENT

- A. Rock shall be uncovered prior to removal in sections acceptable to the ENGINEER so that it may be measured. Rock shall not be blasted, broken in any manner or excavated before measurement is made and approval given by the ENGINEER. Payment for rock excavation shall be per cubic yard (CY), unless specified.

3.02 LIMITS OF ROCK EXCAVATION

A. Limits of rock excavation shall be as follows:

1. Structures: The limit for all structures shall be bounded by:
 - a. The bottom of the footing, drainage course material, or compacted backfill.
 - b. The original surface of the rock.
 - c. And Vertical planes located 12 inches outside the footing.
2. Pipe Trenches: The width of trenches shall be established as the outside diameter of the pipe plus 12 inches minimum, 16 inches maximum, exclusive of bells, branches, hubs, spurs or cradles. The sides of the trench shall be considered as vertical.
 - a. The depth of the trench shall be established as a point 6 inches below the outside of the pipe.
 - b. The length shall be equal to the laid length of pipe, measured horizontally.
 - c. Additional width in pipe trenches at field joints or beyond the lines described above will be considered outside the pay limits described.

3.03 BLASTING

- A. All blasting operations shall be conducted in strict accordance with existing applicable Federal, State and Local laws, ordinances and regulations relative to rock blasting and the storage and use of explosives. Submit notification plans to ENGINEER for review.
- B. Rock excavation adjacent to existing utilities, if allowed by utility owner, shall be done with utmost care and only after proper notification and coordination with the utility owner and regulatory authority.
- C. Blasting shall be conducted so as not to endanger persons or property nor to damage or weaken adjacent foundations, structures, sheeting, bracing, or other facility. Blasting shall be covered or otherwise suitably confined.
- D. CONTRACTOR shall be wholly responsible for damage caused by CONTRACTOR's blasting, and shall repair or replace all damage immediately.
- E. CONTRACTOR shall keep records of all blasts including date, location, depth, number, and diameter of drill holes, type and amount of explosive and other pertinent data. Records shall be furnished to the ENGINEER when requested.
- F. Blasting will only be allowed with the approval of the ENGINEER.

3.04 HAND REMOVAL

- A. Where hazardous conditions exist, or clearances with existing piping or structure are very small, or strong possibility of damage to persons or property exists, blasting shall not be used. CONTRACTOR shall remove rock in these areas by hand methods (no blasting).

3.05 UNAUTHORIZED ROCK EXCAVATION

- A. All rock excavation outside the limits described and which is not approved by the ENGINEER, together with its removal, disposal and refill will be at the CONTRACTOR's expense.
- B. Unauthorized excavation below pipe or foundation shall be refilled with compacted gravel backfill or concrete, as directed by the ENGINEER. Other unauthorized excavation shall be backfilled with material as specified in Section 02221.

END OF SECTION

DOCUMENT 00810

SUPPLEMENTARY CONDITIONS - EJCDC

1.1 SUMMARY

- A. Document Includes:
 - 1. Supplementary Conditions.
- B. Related Documents:
 - 1. Document 00500 - Agreement - EJCDC.
 - 2. Document 00700 - General Conditions - EJCDC.

1.2 SUPPLEMENTARY CONDITIONS

- A. These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC No. 1910-8 1996 Edition, and other provisions of the Contract Documents as indicated below. All provisions which are not so amended or supplemented remain in full force and effect.
- B. The terms used in these Supplementary Conditions which are defined in the Standard General Conditions of the Construction Contract, EJCDC No. 1910-8 1996 Edition, have the meanings assigned to them in the General Conditions.

SC-1.01.A Add the following new paragraph immediately after paragraph 1.01.A.33

- 33A. Products: Means materials and equipment that Contractor furnishes and provides, other than labor and services.

SC-2.03.A Amend the first sentence of paragraph 2.03A to read as follows:

Contract Times are identified in Document 00300- Bid Form.

SC-3.01.D Add the following new paragraph immediately after paragraph 3.01.C:

Sections of Division 1 - General Requirements govern the execution of the work of all sections of the specifications.

SC-5.01.A Amend paragraph 5.01.A to require bond values as follows:

Furnish a 100 percent Performance Bond.

Furnish a 100 percent Payment Bond.

SC-5.01.B Add the following language at the end of paragraph 5.01.B:

- 1. Furnish Performance Bond a standard surety bond form.

2. Furnish Payment Bond a standard surety bond form.

SC-5.04B Add the following new paragraph immediately after paragraph 5.04.B:

C. The limits of liability for the insurance required by Paragraph 5.04 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations:

1. Workers' Compensation, and related coverages under Paragraphs 5.04.A.1 and A.2 of the General Conditions:

a. State: Statutory

b. Applicable Federal (e.g., Longshoreman's): Statutory

c. Employer's Liability:

\$500,000 Bodily Injury by Accident – each employee

\$500,000 Bodily Injury by disease – each employee

\$500,000 Bodily Injury by disease – policy limit

The Contractor shall provide a Worker's Compensation Certificate showing current workers' compensation coverage for Ohio or a letter of exemption.

2. Contractor's General Liability under Paragraphs 5.04.A.3 through A.6 of the General Conditions which shall include completed operations and product liability coverages and eliminate the exclusion with respect to property under the care, custody and control of Contractor:

a. General Aggregate: \$2,000,000 Each occurrence, combined single limit for Bodily Injury and Property Damage

b. Products – Completed Operations Aggregate: \$1,000,000 Each occurrence

c. Personal and Advertising Injury: \$1,000,000 Each occurrence

d. Each Occurrence \$1,000,000 (Bodily Injury and Property Damage)

e. Property Damage liability insurance will provide Explosion, Collapse, and Underground coverages where applicable.

f. Excess or Umbrella Liability (over and above Commercial General Liability)

1) General Aggregate \$ 2,000,000

2) Each Occurrence \$ 1,000,000

3. Automobile Liability under Paragraph 5.04.A.6 of the General Conditions:

- a. Bodily Injury:
 - Each person \$ 1,000,000
 - Each Accident \$ 1,000,000
- b. Property Damage:
 - Each Accident \$ 1,000,000
- c. Combined Single
 - Limit of \$1,000,000
- 4. The Board of Clark County Commissioners, the Clark County Department of Utilities, and Access Engineering Solutions shall be included at "Additional Insured" on all policies.
- 5. All policies shall cover any and all subcontractors if any are used.
- 6. The Board of Clark County Commissioners and the Clark County Department of Utilities, its officers and employees assume no responsibility for the adequacy of limits and coverages in the event of any claim(s) against the Contractor, its officers, employees, subcontractors or any sub-subcontractor or agent of any of them. The types, forms, and amounts of insurance specified should be considered minimal, and in no way does the Board of Clark County Commissioners or the Clark County Department of Utilities imply expressly or otherwise that the coverages specified will cover all exposures to loss and are in amounts sufficient to assure the Contractor, any subcontractor, or sub-subcontractor that uncovered losses will not occur or insurance limits will be adequate. The Contractors shall seek outside insurance counsel to determine adequate insurance for their particular operations.

SC-5.06A Delete Paragraph 5.06.A in its entirety and insert the following in its place:

A. Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof.

1. This insurance shall:

- a. include the interests of Owner, Contractor, Subcontractors, Engineer and any other individuals or entities identified herein, and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured; insurance for physical loss and damage to the Work, temporary buildings, falsework, 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 that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
- b. in addition to the individuals and entities specified, include as additional insureds, the following:
 - 1) Clark County Board of Commissioners and the Clark County Department of Utilities;
- c. be written on a Builder's Risk "all risk" or open peril or special causes of loss policy form that shall at least include property (including but not limited to fees and charges of engineers and architects);

- d. include expenses incurred in the repair or replacement of any insured
- e. 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;
- f. allow for partial utilization of the Work by Owner;
- g. include testing and startup; and
- h. 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.

2. Contractor shall be responsible for any deductible or self-insured retention.

3. The policies of insurance required to be purchased and maintained by Contractor in accordance with this Paragraph SC-5.06. A shall comply with the requirements of paragraph 5.06.C of the General Conditions.

SC-5.06E Delete Paragraph 5.06.E in its entirety.

SC-6.08 Add the following new paragraph immediately after paragraph 6.08.A:

- B. The Owner has or will obtain the following permits:
 - 1. Ohio EPA Plan Approval.
 - 2. ODOT Plan Approval

SC-6.10 Add the following new paragraph immediately after paragraph 6.10.A:

- B. The Owner will obtain an exemption certificate for the Contractor for taxes on certain Products or items, for purchasing Products or items for the Work.

SC-6.19 Add the following new paragraph immediately after paragraph 6.19.B:

- C. Contractor shall guarantee all the work for a period of one (1) year from the date of the Final Estimate against defects resulting from the use of inferior materials, equipment or workmanship. This guarantee period shall be covered by the "Contract Bond" as agreed upon between the Owner and the Contractor prior to the final payment for the work.
- D. The Contractor will be required during the life of this guarantee to make all repairs or changes in the guaranteed work, that in the opinion of the Owner are necessary as the result of the use of materials, equipment, or workmanship that are inferior, defective, or not in accordance with the terms of the Contract Documents.
- E. The Contractor shall, upon receipt of notice from the Owner and without expense to the Owner, promptly remove and replace all unsatisfactory work with suitable materials and equipment.

- F. Failure by the Contractor to proceed with the terms of the guarantee shall be sufficient reason for the Owner to have the defects corrected, and the Contractor and the Contractor's Surety shall be liable for all expenses incurred to make the corrections.
- G. Any or all special guarantees applicable to definite parts of work or equipment shall also be subject to the terms of this section during the first year of the life of such special guarantees.

SC-6.20 Add the following new paragraph immediately after paragraph 6.20.C:

- D. The Contractor understands and agrees that it is an independent Contractor and agrees to indemnify and hold the County harmless from liability of any and all claims, demands, or suits, in contract or in tort, actual or threatened, and from damages or payments including, but not limited to, costs and expenses arising out of breach of contract or the acts or omissions of the Contractor.
- E. The Contractor shall assume full responsibility for and shall indemnify the County for any damage to or loss of any County property, including building, fixtures, furnishings, equipment, supplies, accessories or part resulting in whole or part from any negligent acts or omissions of the Contractor or any employee, agent or representative of the Contractor.

SC-17.06 Add the following new section:

17.06 Prevailing Wage Rates and Reports

- A. The Federal Prevailing Wage Rate requirements found in Section 00830 are applicable to this project. The Contractor shall ensure that all mechanics and laborers be paid a prevailing rate of wage as required. A schedule of wages is attached to and made a part of the specifications for this work.
- B. 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.
- C. Submit all required Wage reports to:
Clark County Department of Utilities
PO Box 1303
3130 East Main Street
Springfield, Ohio 45501-1303
Attn: Mr. Chuck Bauer, PE
Email: cbauer@clarkcountyohio.gov

END OF DOCUMENT

SECTION 11160 – GR PACKAGED WATER BOOSTER PUMPING SYSTEM

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. Work under this section includes, but is not limited to, furnishing and installing a factory built duplex pump station as indicated on the project drawings, herein specified, as necessary for proper and complete performance.

1.02 REFERENCES

- A. Publications listed below form part of this specification to extent referenced in the text by basic designation only. Consult latest edition of publication unless otherwise noted.

1. American National Std. Institute (ANSI) / American Water Works Assoc. (AWWA)
 - a. ANSI B16.1 Cast iron pipe flanges and flanged fittings.
 - b. ANSI/AWWA C115/A21.51 Cast/ductile iron pipe with threaded flanges.
 - c. ANSI 253.1 Safety Color Code for Marking Physical Hazards.
 - d. ANSI B40.1 Gages, Pressure and Vacuum.
 - e. AWWA C508 Single Swing Check Valves
2. American Society for Testing and Materials (ASTM)
 - a. ASTM A48 Gray Iron Castings.
 - b. ASTM A126 Valves, Flanges, and Pipe Fittings.
 - c. ASTM A307 Carbon Steel Bolts and Studs.
 - d. ASTM A36 Structural Steel.
3. Institute of Electrical and Electronics Engineers (IEEE)
 - a. ANSI/IEEE Std 100 Standard Dictionary of Electrical Terms.
 - b. ANSI/IEEE Std 112 Test Procedure for Polyphase Induction Motors.
 - c. IEEE Std 242 Protection of Industrial and Control Power Systems.
4. National Electric Code (NEC) / National Electrical Manufacturers Assoc. (NEMA)
 - a. NEC National Electric Code.
 - b. NEC 701 National Electric Code article 701.
 - c. NEMA Std MG1 Motors and Generators.
5. Miscellaneous References
 - a. Ten-State Standards Recommended Standards for Sewage Works.
 - b. Hydraulic Institute Std for Centrifugal, Rotary and Reciprocating Pumps.
 - c. NMTBA and JIC Std. National Machine Tool Builders Association and Joint Industrial Council Standards
 - d. ISO 9001 International Organization for Standardization.

1.03 SYSTEM DESCRIPTION

- A. Contractor shall furnish and install one factory built, automatic pressure booster pump station with integral base. The station shall be complete with all equipment specified herein, factory assembled on a common steel baseplate.
- B. In addition to the steel base, principle items of equipment shall include two pumps, motors, internal piping, valves, motor control panel and internal wiring.
- C. panel with thermal magnetic circuit breakers, motor starters, automatic control systems for normal and standby operation, and internal wiring.
- D. Factory built pump station design, including materials of construction, pump features, valves and piping, and motor controls shall be in accordance with requirements listed under PART 2 - PRODUCTS of this section.

1.04 PERFORMANCE CRITERIA

- A. The (vertical in-line) pump(s) shall have a rated capacity of 260 GPM when boosting pressure 130' / 57 PSI. Minimum suction pressure is 93' / 40 PSIG. Motor and pump speed shall not exceed 3600 RPM.

Design Condition

	GPM	TDH
MAX DESIGN PRESSURE		
MIN DESIGN PRESSURE		
MAX INLET PRESSURE		
MIN INLET PRESSURE		

B. Station Power Requirements

- 1. Site power furnished to pump station shall be 3 phase, 60 hertz, 480 volts, 4 wire, maintained within industry standards. The available fault current provided at the pump station control panel is 22 kA rms symmetrical. Voltage tolerance shall be plus or minus 10 percent. Phase-to-phase unbalance shall not exceed 1% average voltage as set forth in NEMA Standard MG-1. Control voltage shall not exceed 132 volts.

1.05 SUBMITTALS

A. Product Data

- 1. Prior to fabrication, pump station manufacturer shall submit submittal data in portable document format (.pdf) form for review and approval.

B. Shop drawings shall provide layout of mechanical equipment and anchor bolt locations for equipment baseplate. The electrical ladder logic drawings shall illustrate motor branch and pressure control circuits to extent necessary to validate function and integration of circuits to form a complete working system.

C. Operations Maintenance Manuals

- 1. Installation shall be in accordance with written instructions provided by the pump station manufacturer. Comprehensive instructions supplied at time of shipment shall enable personnel to properly operate and maintain all equipment supplied. Content and instructions shall assume operating personnel are familiar with pumps, motors, piping and valves, but lack experience on exact equipment supplied.
- 2. Documentation shall be specific to the pump station supplied and collated in functional sections. Each section shall combine to form a complete system manual covering all aspects of equipment supplied by

the station manufacturer. Support data for any equipment supplied by others, even if mounted or included in overall station design, shall be provided by those supplying the equipment. Instructions shall include the following as a minimum:

- a. Functional description of each major component, complete with operating instructions.
 - b. Instructions for operating pumps, pump controls in all modes of operation.
 - c. Calibration and adjustment of equipment for initial start-up, replacement of control components, or as required for routine maintenance.
 - d. Support data for commercially available components not produced by the station manufacturer, but supplied in accordance with the specifications, shall be supported by literature from the prime manufacturer and incorporated as appendices.
 - e. Electrical schematic diagram of the pump station circuits shall be in accordance with NFPA70. Schematics shall illustrate, to the extent of authorized repair, pump motor branch, control and alarm system circuits including interconnections. Wire numbers and legend symbols shall be shown. Schematic diagrams for individual components, not normally repairable by the station operator, need not be included. Details for such parts shall not be substituted for an overall system schematic. Partial schematics, block diagrams, and simplified schematics shall not be provided in lieu of an overall system diagram.
 - f. Mechanical layout drawing of the pump station and components, prepared in accordance with good commercial practice, shall provide installation dimensions and location of all pumps, motors, valves and piping.
3. Operation and maintenance instructions which rely on vendor cut-sheets and literature which include general configurations, or require operating personnel to selectively read portions of the manual shall not be acceptable. Operation and maintenance instructions must be specific to equipment supplied in accordance with these specifications.

1.06 QUALITY ASSURANCE

- A. The pumps and pump station manufacturer must be ISO 9001:2000 revision certified, with scope of registration including design control and service after sales activities.
- B. The pumps and pump station manufacturer must be registered to the ISO 14001 Environmental Management System standard and as such is committed to minimizing the impact of its activities on the environment and promoting environmental sustainability by the use of best management practices, technological advances, promoting environmental awareness and continual improvement.
- C. Upon request from the engineer, the pump station manufacturer shall prove financial stability and ability to produce the station within the specified delivery schedules. Evidence of facilities, equipment and expertise shall demonstrate the manufacturer's commitment to long term customer service and product support.
- D. Manufacturer must show proof of original product design and testing. Products violating intellectual property regulations shall not be allowed, as they may violate international law and expose the user or engineer to unintended liabilities. "Reverse-engineered" products fabricated to substantially duplicate the design of original product shall not be allowed, as they may contain substantial differences in tolerances and material applications addressed in the original design, which may contribute to product failure.
- E. The term "pump manufacturer" or "pump station manufacturer" shall be defined as the entity which designs, machines, assembles, hydraulically tests and warranties the final product. Any entity that does not meet this definition will not be considered a "pump manufacturer" or "pump station manufacturer" and is not an acceptable supplier. For quality control reasons and future pump and parts availability, all major castings of the pump shall be sourced and machined in North America.
- F. Pump Performance Certifications
 1. Certified Pump Performance Test

Tests shall be conducted using a dynamometer in accordance with Hydraulic Institute Standards (ANSI/HI) 14.6.3.4 acceptance grade 1U. A minimum of five test points shall be measured. Test

point data shall include flow, head, pump shaft input speed and torque. Efficiency and horsepower shall be calculated using the measured test point data. Performance test data evaluation shall be in accordance with ANSI/HI 14.6.3.4.2.

- a. For pumps utilizing up to (13 HP) motors; but larger than (1.3 HP), tests shall be conducted in accordance with Hydraulic Institute Standards (ANSI/HI) 14.6.3.4.1, as the specified head, capacity, rated speed and horsepower.

G. Factory System Test

1. All components including the pumps, motors, valves, piping and controls will be tested as a complete working system at the manufacturer's facility. Factory operational test shall duplicate actual performance anticipated for the complete station.
2. The manufacturer's technical representative shall inspect the completed installation, correct or supervise the correction of any defect or malfunction, and instruct operating personnel in the proper operation and maintenance of the equipment as described in Part 3 of this section.

1.07 MANUFACTURER'S WARRANTY

- A. The pump station manufacturer shall warrant all equipment to be of quality construction, free of defects in material and workmanship. A written warranty shall include specific details described below.
 1. In addition to defects in material and workmanship, fiberglass reinforced polyester station enclosures (where applicable) are warranted for sixty (60) months to be resistant to rust, corrosion, corrosive soils, effects of airborne contamination or physical failures occurring in normal service for the period of the pump station warranty.
 2. All other equipment, apparatus, and parts furnished shall be warranted for sixty (60) months, excepting only those items that are normally consumed in service, such as light bulbs, oils, grease, packing, gaskets, O rings, etc. The pump station manufacturer shall be solely responsible for warranty of the station and all components.
- B. Components failing to perform as specified by the engineer, or as represented by the manufacturer, or as proven defective in service during the warranty period, shall be replaced, repaired, or satisfactorily modified by the manufacturer.
- C. It is not intended that the station manufacturer assume liability for consequential damages or contingent liabilities arising from failure of any vendor supplied product or part which fails to properly operate, however caused. Consequential damages resulting from defects in design, or delays in delivery are also beyond the manufacturer's scope of liability.
- D. Equipment supplied by others and incorporated into a pump station or enclosure is not covered by this limited warranty. Any warranty applicable to equipment selected or supplied by others will be limited solely to the warranty, if any, provided by the manufacturer of the equipment.
- E. This limited warranty shall be valid only when installation is made and use and maintenance is performed in accordance with manufacturer recommendations. A start-up report completed by an authorized manufacturer's representative must be received by manufacturer within thirty (30) days of the initial date the unit is placed into service. The warranty shall become effective on the date of acceptance by the purchaser or the purchaser's authorized agent, or sixty (60) days after installation, or ninety (90) days after shipment from the factory, whichever occurs first.

PART 2 – PRODUCT

2.01 UNITARY RESPONSIBILITY

- A. The pump station systems integrator must be ISO 9001:2000 revision certified, with scope of registration including design control and service after sales activities.
- B. In order to unify responsibility for proper operation of the complete pumping station, it is the intent of these Specifications that all system components be furnished by a single supplier (unitary source). The pumping station must be of standard catalog design, totally warranted by the manufacturer. Under no circumstances will a system consisting of parts compiled and assembled by a manufacturer's representative or distributor be accepted.

2.02 MANUFACTURER

- A. The specifications and project drawings depict equipment and materials manufactured by The Gorman-Rupp Company which are deemed most suitable for the service anticipated. It is not intended, however, to eliminate other products of equal quality and performance. The contractor shall prepare his bid based on the specified equipment for purposes of determining low bid. Award of a contract shall constitute an obligation to furnish the specified equipment and materials.
- B. After execution of the contract, the contractor may offer substitutions to the specified equipment for consideration. The equipment proposed for substitution must be superior in construction and performance to that specified in the contract, and the higher quality must be demonstrated by a list of current users of the proposed equipment in similar installations.
- C. In event the contractor obtains engineer's approval for equipment substitution, the contractor shall, at his own expense, make all resulting changes to the enclosures, buildings, piping or electrical systems as required to accommodate the proposed equipment. Revised detail drawings illustrating the substituted equipment shall be submitted to the engineer prior to acceptance.
- D. It will be assumed that if the cost to the contractor is less for the proposed substitution, then the contract price shall be reduced by an amount equal to the savings.

2.03 PUMP DESIGN

- A. The pump(s) shall be Vertical In-Line centrifugal back pull-out design and shall be a Patterson 2" x 2" Model V2B7A-CC Patterson Vertical In Line Pump. Performance criteria shall be in accordance with requirements listed under PART 1 - GENERAL of this section. Pumps shall be horizontal, self-priming centrifugal type, designed specifically for handling raw, unscreened, domestic sanitary sewage. Pump solids handling capability and performance criteria shall be in accordance with requirements listed under PART 1 - GENERAL of this section.
- B. Materials and Construction Features
 - 1. Pump casing: Casing shall be cast iron Class 30 with integral volute scroll. Casing shall incorporate following features:
 - a. Pump casing shall be of close grain cast iron type ASTM 48, class 40, designed for heavy-duty service. The casing shall be horizontally split, (dual) (single) volute type of the back pull-out design with the suction and discharge flanges cast integrally with the lower half in order that the upper part may be removed for inspection of the rotating element without disturbing pipe connections. The joint between halves of the casing shall be heavily flanged and bolted, and provided with dowel pins to insure accurate alignment.
 - b. The upper half-casing flange shall have tapped holes for jackscrews. The interior shall be smooth and free from surface defects.
 - c. Thickness, diameter and drilling dimensions of suction flanges shall be Class (125) (250) ANSI standard. Discharge flanges shall be Class (125) (250) ANSI standard. Suction and discharge

connections shall be displaced 180 degrees with centerlines concentric on the same horizontal plane. Pump casings shall have a minimum 4" suction and a 6" discharge connections. Casings shall be drilled and tapped for priming, gauge, and drain connections. Suitable lifting lugs or eyebolts shall be provided.

- d. The bottom of the volute shall be drilled to accept a standard 125-lb. pipe flange arrangement, which shall allow the use of common pipe and flanges to support the pump at any desired elevation with elaborate fabrication of support structures.

1. Impeller

- a. Impeller shall be of the single suction enclosed type made entirely of ASTM B584-836, die cast bronze finished smooth all over and of ample strength and stiffness for maintaining the maximum capacity of the unit.
- b. It shall be statically and dynamically balanced and shall be keyed to the shaft and securely held in axial position on the shaft by means of an impeller nut.
- c. Balance holes on the backside of the impeller shall be provided to reduce thrust with the hydraulic balancing of pressures.

2. Wear Rings

- a. The volute and volute cover shall be fitted with a replaceable wear ring of ASTM B505-927 bronze, positioned in the volute and locked against rotation. Adjustment of the impeller face clearance (distance between impeller and wear plate) shall be accomplished by external means.

3. Pump / Motor Shaft

- a. The shaft shall be made of AISI 1045 alloy steel.
- b. The shaft shall be accurately machined over its entire length. The first critical speed of the rotating assembly shall occur at not less than 150% of the rated speed.
- c. The shaft shall be protected by a 304 stainless steel shaft sleeve which shall be keyed to the shaft with a stainless steel key and shall be sealed with an o-ring to prevent leakage between the shaft and shaft sleeve.

4. Stuffing Boxes (Mechanically Sealed)

- a. The stuffing boxes shall be provided with mechanical seals having incorporated the following features:
- b. Stuffing boxes shall accept packing or mechanical seals without modification to the stuffing box.
- c. Mechanical seals shall be furnished with a carbon seal ring, ceramic mating ring, viton elastomers and 316 stainless steel metal parts.
- d. Mechanical seals shall be rated for 250 PSIG pressure. The elastomers shall be rated for temperatures ranging from -20 °F to 400°F.
- e. Pump shaft sleeves shall be furnished with a pre-machined groove designed to accept a setting ring that shall eliminate the need for set collars or stop collars. Seals requiring stop or set collars are not acceptable.
- f. The rotating seal ring shall be provided with a 360 degree rubber encasement to provide a positive drive for the seal face without the need for metal drive notches which may cause face distortion or notch wear. The seal rings shall be permanently fixed in place and full flatness maintained by a precision crimp in the outer seal case.
- g. The mechanical seal shall be of a convoluted design, which permit free movement providing constant adjustment for shaft endplay and seal face-wear. Positive face contact with the stationary seat shall be maintained at all times.
- h. To insure positive sealing by free movement of the seal head, the seal shall feature a hex style outer shell and drive band which shall absorb start-up and running torque and shall eliminate stress on the diaphragm. Metal components shall freely engage and shall not be subject to lock down due to friction wear.

- i. The stuffing box shall have a removable gland, which shall permit inspection of the mechanical seal faces. The gland shall be provided with a 1/4" NPT flush water connection.
- j. Suitably valved connecting lines or passages shall be provided on the upper half casing leading from the discharge volute to the stuffing box for lubricating the stuffing boxes with the liquid being pumped.
- k. The seal shall be warranted in accordance with requirements listed under PART 1 - GENERAL of this section.

5. Motors

- a. The pump shall be driven by a JP shaft, close-coupled pump motor.
- b. Motors shall be (ODP) (TEFC), squirrel cage induction motors rated for 20 HP, 3600 RPM, 480 Volt, 3-Phase, 60-Hertz.
- c. Motors shall be furnished with class F insulation, however they shall be limited to a class B temperature rise at rated load.
- d. Motors shall be furnished with a 1.15 service factor.
- e. Motors shall be tested in accordance with provisions of ANSI/IEEE Std. 112, Method B.
- f. The bearings are part of the motor. Standard JP frame motors are designed for this service by NEMA and Hydraulic Institute. The integral drive system insures uniformity of tolerances, bearings sized for the job and minimum shaft deflection for long packing and pump life.
- g. Motors shall include Thermostats, one per winding, and be wired back to PLC.

C. Serviceability

- 1. The pump manufacturer shall demonstrate to the engineer's satisfaction that consideration has been given to reducing maintenance costs by incorporating the following features.
- 2. No special tools shall be required for replacement of any components within the pump.

2.04 Valves and Piping:

- A. Check valves shall be of the silent operating type, as manufactured by Val-Matic Valve and Manufacturing Corporation, that begins to close as the forward flow diminishes and is fully closed at zero velocity preventing flow reversal and resultant water hammer or shock.
 - 1. Globe style valves shall be provided in sizes 2 inch through 48 inch and have flanges in accordance ANSI B16.1 for Class 125 or Class 250 iron flanges and ANSI B16.5 for Class 150 or Class 300 steel flanges. Iron flanges shall be flat faced. Sizes 10 inch and smaller shall be capable of mating directly to a water butterfly valve without disc interference.
 - 2. Wafer style valves shall be provided in sizes 2 inch through 10 inch for installation between ANSI B16.1 Class 125 or Class 250 iron flanges or ANSI B16.5 Class 150 or Class 300 steel flanges.
 - 3. The valve design shall incorporate a center guided, spring loaded disc, guided at opposite ends and having a short linear stroke that generates a flow area equal to the pipe size.
 - 4. The operation of the valve shall not be affected by the position of installation. The valve shall be capable of operating in the horizontal or vertical positions with the flow up or down. Heavy duty springs for vertical flow down installations shall be provided when specified on 14 inch and larger valves.
 - 5. All component parts shall be field replaceable without the need of special tools. A replaceable guide bushing shall be provided and held in position by the spring. The spring shall be designed to withstand 100,000 cycles without failure and provide a cracking pressure of 0.5 psi and to fully open at a flow velocity of 4 ft/sec.
 - 6. The valve disc shall be concave to the flow direction providing for disc stabilization, maximum strength, and a minimum flow velocity to open the valve.

7. The valve disc and seat shall have a seating surface finish of 32 micro-inch or better to ensure positive seating at all pressures. The leakage rate shall not exceed one-half of the allowable rate for metal seated valves allowed by AWWA Standard C508 or 0.5 oz. Per hour per inch of valve diameter.
 8. The valve flow way shall be contoured and unrestricted to provide full flow areas at all locations within the valve.
- B. Isolation Valves: Isolation valves shall be butterfly type with resilient seat designed for installation between ANSI B16.1 Class 125 flanges. Valves shall have cast iron body with Buna-N liner. Ductile iron disc with one-piece stainless steel shaft and PTFE bushings. Butterfly valves shall be Crane Centerline Series 200 or approved equal. Materials and Construction Features
- C. Gauge Kit: Two gauges shall be installed on each pump with ball valves for shut-off and piping so that each gauge is clearly visible from the suction side of the station. Suction pressure must be monitored by a spring suspended movement type compound gauge, and discharge pressure by a spring suspended movement type pressure gauge. Gauges to be at least 3 inches in diameter graduated in pounds per square inch. Suction Pressure gauge shall be graduated 0 to ____ PSI. Discharge Pressure gauge to be graduated 0 to ____ PSI.
- D. Piping
- a. Steel Piping - Fusion Bonded Epoxy Coating
 - 1) Piping shall be steel and conform to material specification ASTM A-53 (CW) for nominal pipe size four (4) inches and smaller, and ASTM A-53 (ERW) Grade B for nominal pipe size five (5) inches and larger. Steel butt-welding fittings shall conform to material specification ASTM A-234 Grade WPB and to the dimensions and tolerances of ANSI Standards B16.9 and B16.28 respectively.
 - 2) Forged steel flanges shall conform to material specification ASTM A-105 Class 60 and/or ASTM A-181 for carbon steel forgings and to the dimensions and tolerances of ANSI Standards B16.5 as amended in 1992 for Class 150 and Class 300 flanges.
 - 3) The piping sizes shall be as shown on the drawing.
 - Size 10" and below – Schedule 40
 - Size 12" and above – Standard weight (.375" wall)
 - 4) Certified welders employed by the pump station manufacturer shall perform all pipe welds. As part of the equipment submittal, the pump station manufacturer shall provide copies of the welding certificates of the employees who are to perform the pipe welds.
 - 5) Piping six 6-inches diameter and larger shall require a minimum of two- (2) weld passes to complete each weld. The first pass, or root pass, shall be applied at the bottom of the bevel cut using the short circuit transfer-welding mode. The second pass, or cap pass, shall be applied over the root pass using the spray or pulse arc transfer welding modes to insure that at a minimum the total weld thickness shall be equal to thinnest of the two pieces being welded together.
 - 6) Steel piping shall have applied to it a fusion bonded epoxy coating on the interior pipe surface that conforms to AWWA C-213-91 for steel water pipelines. The powder-coating product shall be National Sanitation Foundation (NSF) Standard 61 certified material. The final product shall be capable of meeting salt spray resistance ASTM B117 (1000 hour) with no blistering, undercutting, or rust bleed; humidity resistance ASTM D2247 (1000 hour) with no blistering, undercutting, or rust bleed; and impact resistance of ASTM G14-72 (160 in. lbs.) The fusion-bonded epoxy coating shall provide a total dry thickness of 12.0 to 14.0 mils.
- E. Supports and Thrust Blocks: Contractor must insure all pipes connected to the pump station are supported to prevent piping loads from being transmitted to pumps or station piping. Pump station discharge force main piping shall be anchored with thrust blocks where shown on the contract drawings.

2.07 FINISH

- A. Pumps, piping, and exposed steel framework shall be cleaned prior to coating using an approved solvent wipe or phosphatizing cleaner. The part must thoroughly dry before paint application. Open joints shall be caulked

with an approved polyurethane sealant. Exposed surfaces shall be applied with one coat of Tnemec Series 69 Polyimide Epoxy Primer and one finish coat of Series 73 Aliphatic Acrylic Polyurethane for a total dry film thickness of 4-6 mils. Finish coat shall be semi-gloss white for optimum illumination and enhancement. The coating shall be corrosion, moisture, oil, and solvent resistant when completely dry. The factory finish shall allow for over-coating and touch-up for 6 months after coating. Thereafter, it will generally require sanding to accept a topcoat or touch-up coating.

2.08 ELECTRICAL COMPONENTS

- F. The pump station control panel will be tested as an integral unit by the pump station manufacturer. The control panel shall also be tested with the pump station as a complete working system at the pump station manufacturer's facility.
- G. The electrical control components shall be provided by the pump station supplier and shall be provided with the following features.
- H. Panel enclosure
 - 1. Enclosure shall be constructed in conformance with applicable section of National Electrical Manufacturers Association (NEMA) standards for type 1 electrical enclosures. Enclosure shall be fabricated of 304 stainless steel having a minimum thickness of not less than 0.075 Inch (14 gauge). All seams shall be continuously welded, and shall be free of burrs and voids. There shall be no holes through the external walls of the enclosure for mounting the enclosure or any components contained within the enclosure. Panel enclosure up to XX" H x XX" W x XX" D shall be mounted on floor stands and secured to pump base.
 - 2. Enclosure shall be sealed around its perimeter. Door shall be held closed with clamps that are quick and easy to operate. The door shall accommodate the mounting of switches and indicators.
 - 3. Enclosure shall be furnished with a removable back panel, fabricated of steel having a thickness of not less than 0.106 Inch (12 gauge), which shall be secured to the enclosure with collar studs. Such panel shall be of adequate size to accommodate all basic components.
 - 4. All control components shall be securely fastened to a removable back panel with screws and lock washers. Switches, indicators and instruments shall be mounted through the control panel door. All control devices and instruments shall be secured to the sub-plate with machine screws and lock washers. Mounting holes shall be drilled and tapped; Self tapping screws shall not be used to mount any components. All connections from the back panel to door mounted or remote devices shall be made through terminal blocks. All control devices shall be clearly labeled to indicate function.
- I. UL Label Requirement
 - 1. Pump station controls shall conform to third party safety certification. The panel shall bear a serialized UL label listed for "Enclosed Industrial Control Panels". The enclosure, and all components mounted on the sub-panel or control cover shall conform to UL descriptions and procedures.
- J. 750 VA Control Power Transformer
 - 1. The lift station shall be equipped with a 750 VA step-down transformer to supply 115 volt, AC, single phase for the control equipment.
- K. 5 kVA Auxiliary Power Transformer
 - 1. The lift station shall be equipped with a 5 KVA step-down transformer to supply 115 volt, AC, single phase for the control and auxiliary equipment. The primary and secondary side of the transformer to be protected by a thermal magnetic circuit breaker, sized to meet the power requirements of the transformer. An operating mechanism shall penetrate the control panel door and a padlockable operator handle shall be secured on the exterior surface. Interlocks must prevent opening the door until circuit breakers are in "OFF" position. An additional mechanism(s) shall be provided on the circuit breaker permitting the breaker to be operated and/or locked with the control panel door in the open position.

L. Motor Branch Circuit Components

1. Main Connections

- a. A main terminal block and ground lug shall be furnished for field connection of the electrical supply. The connections shall be designed to accept copper conductors of sufficient size to serve the pump station loads. The main terminal block shall be mounted to allow incoming wire bending space in accordance with article 373 of the National Electric Code (NEC). A separate terminal strip shall be provided for 115 volt, single phase control power and shall be segregated from the main terminal block. Ten percent of the control terminals shall be furnished as spares.
- b. All motor branch and power circuit components shall be of highest industrial quality. The short circuit current rating of all power circuit devices shall be a tested combination or evaluated per the National Electrical Code Article 409. The lowest rated power circuit component shall be the overall control panel short circuit rating and shall not be less than the fault current available. The minimum control panel rating shall not be less than 10 kA, rms symmetrical. Control assemblies operating at 120 volts nominal or less may be provided with transformers which limit the fault current and may be rated less than the minimum required short circuit rating.

2. Circuit Breakers and Operating Mechanisms

- a. A properly sized heavy duty air circuit breaker shall be furnished for each pump motor. All circuit breakers shall be sealed by the manufacturer after calibration to prevent tampering.
- b. A padlocking operating mechanism shall be installed on each motor circuit breaker. Operator handles for the mechanisms shall be located on the exterior of the control compartment door, with interlocks which permit the door to be opened only when circuit breakers are in the "off" position. An additional mechanism(s) shall be provided on the circuit breaker permitting the breaker to be operated and/or locked with the control panel door in the open position.

3. Motor Starters

4. The variable frequency drive shall be capable of operation under any combination of the following conditions without mechanical or electrical damage. Ambient Temperature: 0 to + 40 degrees C

- a. Relative Humidity: Less than 95% non-condensing
- b. Altitude: Less than 1,000M (3300 ft) above sea level
- c. Vibration: .006 inches displacement, 1G peak
- d. Shock: 15G peak for 11mS (+/- 1.0mS)
- e. Control Specification
- f. Control System: Sinusoidal pulse width modulated voltage waveform
- g. Frequency Accuracy: +/- 0.4% of max. frequency
- h. Volts/Hertz Ratio: V/Hz user programmable
- i. Operation Frequency: 0 to 400 Hz
- j. Overload Capacity: 110% Overload capability for up to 1 minute, 150% Overload capability for up to 3 seconds

5. Digital Readout and Monitor

- a. Interface to the drive is provided via a module with integral LCD display. Unit is a 7 line by 21 character backlit LCD display with graphics capability. It is used to display drive operating conditions, fault / alarm indications and programming information with full text support in multiple languages, including but not limited to English, German, French, Italian, Spanish, Portuguese and Dutch. The unit will display standby status (power on, not running), output frequency (drive run), set-up parameters and fault. With keypad, user can monitor current, voltage, frequency, acceleration and deceleration time, minimum frequency and maximum frequency. Readout also provides inverter status and protective circuit status.

6. Protection

- a. The variable speed drive system shall include a diode or fully gated bridge rectifier, capacitor filter, and transistorized inverter section. Base driver signals to control firing of the power transistors will be designed with optically coupled isolators for maximum protection of the control circuits from high voltage and noise. The output will be a sinusoidal, pulse width modulated, voltage waveform for reduced harmonic heating in the motor.
7. The system protection will provide the following:
 - a. Intermittent overload - 50 to 150%
 - b. Current limit - 50 to 115%
 - c. Overcurrent - 220-300% of rated output current
 - d. Inverse time overload - 50 to 100%
 - e. Short circuit - Phase to phase or phase to ground
 - f. Overvoltage - 10% above input line or DC bus voltage
 - g. Undervoltage - 10% below line voltage
 - h. Power loss ride-through - 500mS
8. When the inverter trips out on a fault, the fault relay shall activate and the display shall indicate the reason for the trip as follows:
 - a. Overcurrent
 - b. Short circuit
 - c. Overload
 - d. Overvoltage
 - e. Undervoltage
 - f. Overheat
 - g. Ground fault
 - h. Motor stalled
 - i. Power supply fault
9. Auto restart shall occur when the inverter faults. Auto restart shall be adjustable up to 9 attempts with a 0.5 to 30 second interval. Auto restart will not be attempted for ground fault, output shorted, transistor shorted or internal microprocessor fault but will trip out immediately, activate the fault relay and make the appropriate indication on the display.
10. In the event of a fault trip, the microprocessor shall save the status of the inverter at the time of the fault and make that information available on the digital display. Information regarding the last 4 faults is maintained in event of a power loss.
11. Operational Functions:
 - a. Acceleration and deceleration time independently adjustable from 0.1 to 3600.0 seconds (selectable ranges).
 - b. Volts/Hertz patterns user selectable.
 - c. Maximum and minimum frequency limit adjustments.

M. Three Phase Voltage Monitor

1. The control panel shall be equipped to monitor the incoming power and shut down the pump motors when required to protect the motor(s) from damage caused by phase reversal, phase loss, high voltage, low voltage, and voltage unbalance. An adjustable time delay shall be provided to minimize nuisance trips. The motor(s) shall automatically restart, following an adjustable time delay, when power conditions return to normal.

N. Surge Protective Device

1. All Control Panels shall have Surge Protective Devices installed immediately after the main overcurrent device or immediately after the supply conductors to the panel have been terminated. The Surge Protective Device(s) shall follow IEEE C62.41 recommendation for cascading to protect all voltage levels to and including 24 volts AC/DC and shall be as follows:
 1. Be UL 1449 3rd Edition Recognized for UL Type 2 applications except at 48 volts AC/DC and below may be UL 1449 3rd Edition for Type 3 applications.
 2. Provide suppression for both normal mode (L-N [Wye]) and common mode (L+N-G [Wye] or L-G [Delta]).
 3. Have a Surge Current Capacity (Imax) of at least 40kA.
 4. Have a Nominal Surge Current Rating (In) of 20kA.
 5. Have SCCRs of 200kA, except that 347Y/600V, 240/480V High leg Delta and 347V single-phase SPDs shall have a minimum SCCR of 125kA.
 6. Use MOV technology with thermal disconnect.
 7. Be RoHS compliant.
 8. SPD status monitoring shall be provided by local visual indication and, if needed, by remote contact signaling using an optional Form C contact relay.
 9. Hardwired Listed Type 1 or Type 2 Surge Protective Devices Shall:
 - a. All Type 1 or Type 2 surge protective devices shall be manufactured by a single ISO-9001 registered company normally engaged in the design, development and manufacture of such devices for electrical distribution system/ equipment protection. Surge protective devices shall be UL Listed with a Short-Circuit Current Rating of 200kA, Nominal Discharge Current (In) of 20kA, and Surge Current Capacity (Imax) of 120kA, 200kA, 300kA or 400kA. These SPDs shall be installed in accordance with the NEC® and/or local code requirements. The said manufacturer shall offer a minimum five (5) year warranty for its Type 1 and Type 2 surge protective devices.
 - b. The hardwired surge protective device shall have specifications as shown below:
 - 1) The Maximum Continuous Operating Voltage (MCOV) shall not exceed 25% on Wye and 40% on Delta systems of the nominal voltage (system voltage) in the configuration being used
 - 2) Prewired NEMA 1 or NEMA 4X factory sealed enclosure suitable for the intended installation location
 - 3) Shall have a two color LED status indicator per phase
 - 4) Have an operating temperature range of at least -40°C to +50°C
 - 5) Only use thermally protected MOV technology, such as Bussmann SurgePOD™.
 - c. Surge Protective Device Agency Information: SPDs shall be "Listed" by Underwriters Laboratories, Inc. to UL 1449 3rd Edition as a Type 1 or Type 2 device and shall exhibit the UL Listing mark for the UL category VZCA for USA and/or VZCA2 for Canada; and must have CSA certification.
 - d. Manufacturers must provide verification of performance data for UL and CSA standards.
 - e. All SPDs must be RoHS compliant.
 - f. Surge protective devices shall be installed and located in accordance with the all applicable agency, NEC® and local code requirements. The SPDs must be suitable for the particular installation, be it on the upstream side (Type 1) or downstream side (Type 1 or Type 2) of service entrance Overcurrent Protective Device (OCPD).
 - g. All SPDs shall match voltage and system specific requirements as provided by the manufacturer.
 - h. All SPDs shall provide surge protection for both normal mode (L-N [Wye], L-L [Delta]) and common mode (L+N-G [Wye] or L-G [Delta]).

- i. Surge protective device shall be clearly marked with specifications as required by UL 1449 3rd Edition along with UL holographic label on the SPD.
- j. Each surge protective device should be serial numbered along with barcode for easy identification and traceability.

O. Programmable Automation Controller

1. The programmable automation controller (PAC) shall be part of a modular system with expansion capability. The available expansion shall be local I/O modules or distributed (remote) I/O connected through a network.
2. All system modules shall be designed to operate in:
 - a. An industrial environment with an ambient temperature of 0°C to 60°C (32°F to 140°F) and with a relative humidity range of 5% to 95%, non-condensing.
 - b. A free airflow environment (convection cooling only, no fans or other air moving devices shall be required).
3. All system modules, and local and remote chassis shall be designed and tested to operate in high electrical noise environments.
4. The system shall support up to 8 (or 16, 31) local expansion modules, along with remote I/O expansion via network.
 - a. Power shall begin at the PAC and pass across the local I/O module internal circuitry via power buses.
 - b. The manufacturer shall have available a variety of I/O modules, including digital input, digital output, analog output, isolated relay output, address reserve, universal analog input, and high-speed counter.

P. PAC

1. The programmable automation controller (PAC) shall be a self-contained unit and will be capable of providing control program execution, supporting remote and local programming, controlling all I/O scanning and inter-controller and peripheral communication and diagnostic functions.
 - a. 32 tasks (1000 programs per task). Interrupt mechanism shall adhere to IEC 61131-3 definition of pre-emptive multitasking. Tasks shall include:
 - 1) Continuous – 1 allowed.
 - 2) Periodic – Run via an interrupt at a user-defined interval in 1 μ s increments from 0.1 ms to 2000 s.
 - 3) Event – Triggers include –
 - Module input data change-of-state
 - Consumed tag trigger
 - Event instruction
 - Axis trigger
 - Motion event trigger
 - b. Network connections: 40 (or 55, 80) EtherNet/IP network nodes
 - c. The PAC shall be capable of sharing produced and consumed tags with other controllers on the same network.
2. The PAC shall have an embedded Energy Storage Module (ESM) that provides enough power for the

controller to write all program and variable data to internal nonvolatile memory during loss of power.

3. For clock support and backup of memory at power down, the PAC shall have:
 - a. A clock value in the form of a predefined tag, accessible via logic or remotely.
 - b. A capacitor-based ESM.
 - c. A memory card capable of storing current tag data in the state it was when the nonvolatile memory was last saved.
4. The PAC shall have dual EtherNet/IP ports that are configurable for Device Level Ring (DLR) or Dual IP modes.
5. The front of the PAC shall have:
 - a. A 4-digit display.
 - b. Power status indicators for MOD and SA power.
 - c. Green, red and yellow LED indicators with sequences for OK (module status), Force, Run, SD, Net A1 and Net A2 (network connection status), and Link A1 and Link A2 (EtherNet/IP network activity).
 - d. A USB port, 2.0 full-speed, Type B.
 - e. Terminal connections for MOD and SA power.
6. The PAC shall support firmware updates.

Q. SECURITY

1. It shall be possible to determine if the configuration of a programmable automation controller (PAC) has been modified quickly, on the order of one second after the modification has been made.
 - a. It shall be possible to make this determination from another PAC or from personal computer-based software monitoring the PAC.
 - b. The PAC shall keep a log of its most recent configuration changes and expose the log for use by personal computer-based software.
 - c. The PAC shall allow the following features to be disabled programmatically:
 - 1) Scrolling LCD display messages
 - 2) HTTP server (Embedded webpage)
 - 3) Embedded Ethernet port

R. COMMUNICATION

1. The PAC shall have at a minimum:
 - a. USB 2.0, Type B port to support programming, configuration, firmware flash, and on-line edits at full speed (12 Mbps).
 - b. EtherNet/IP embedded switch and dual 10/100/1000 MB/s EtherNet/IP ports.
2. An Allen-Bradley PanelView Plus 1000 10.4" electronic operator interface shall be provided for data entry and display. The Operator Interface Display size will be at least 10 inches with Color active matrix,

thin film transistor (TFT), liquid crystal display (LCD). The operator interface shall have an 18-Bit color graphic resolution with backlight CCFL of 50,000 hours minimum. The operator interface shall be mounted on the front of the control panel with other operator controls and shall be compatible with the PLC communication protocol. The operator interface shall be a backlit, touch-screen terminal. The operator interface program shall be stored externally on a Secure Digital (SD) card.

3. Indicating lights shall be provided on the operator Interface terminal to alert the user of the following conditions:

- 1) Pump Run
- 2) Pump Fault
- 3) Alarm Conditions
- 4) Pressure Alarm Conditions

- b. Physical indicating lights shall be oil tight type and equipped with integral step down transformers for long lamp life. Lamps shall be incandescent type rated 14 volts or less. Lamps shall be replaceable from the front without opening the control panel door and without the use of tools. Physical indicating lights will be provided for the following functions:

- 1) General Alarm

4. Wiring

- a. The pump station components, as furnished by the manufacturer, shall be completely pre-wired. (Note: If control panel is opted to be shipped loose, the pump station as furnished by the manufacturer shall be completely pre-wired except for the power feeder lines and final connections to pump motors, and remote alarm devices. The interconnecting wire, conduit, and other materials required shall be furnished and installed by the electrical contractor.)

- b. All wiring, workmanship, and schematic wiring diagrams shall be in compliance with applicable standards and specifications for industrial controls set forth by the Joint Industrial Council (JIC), National Machine Tool Builders Association (NMTBA), and the National Electric Code (NEC).

- c. All user serviceable wiring shall be type MTW or THW, 600 volts, and shall be color coded as follows:

- 1) Line and load circuits, AC or DC power black
- 2) AC control circuit less than line voltage red
- 3) Interlock control circuit, from external source yellow
- 4) Equipment grounding conductor green
- 5) Current carrying ground white
- 6) Hot with circuit breaker open orange

5. Wire Identification and Sizing

- a. Control circuit wiring inside the panel, with the exception of internal wiring of individual components, shall be 16 gauge minimum, type MTW or THW, 600 volts. Wiring in conduit shall be 14 gauge minimum. Motor branch wiring shall be 10 gauge minimum.

- b. Motor branch conductors and other power conductors shall not be loaded above the temperature rating of the connected termination. Wires shall be clearly numbered at each end in conformance with applicable standards. All wire connectors in the control panel shall be of the ring tongue type with nylon insulated shanks. All wires on the sub plate shall be bundled and tied. All wires extending from components mounted on door shall be terminated on a terminal block mounted on the back panel. All wiring outside the panel shall be installed in conduit

6. Control conductors connecting components mounted on the enclosure door shall be bundled and tied in accordance with good commercial practice. Bundles shall be made flexible at the hinged side of the enclosure. Adequate length and flex shall be allowed so that the door can swing to its full open position without undue mechanical stress or abrasion on the conductors or insulation. Bundles shall be clamped and held in place with mechanical fastening devices on each side of the hinge.

- S. Conduit requirements are as follows:

1. All conduit and fittings shall be UL listed.

2. Liquid tight flexible metal conduit shall be constructed of a smooth, flexible galvanized steel core with smooth abrasion resistant, liquid tight, polyvinyl chloride cover.
3. Conduit shall be supported in accordance with articles 346, 347, and 350 of the National Electric Code.
4. Conduit shall be sized according to the National Electric Code.

T. Grounding

1. The pump station manufacturer shall ground all electrical equipment to the enclosure back panel. The mounting surface of all ground connections shall have any paint removed before making final connections.
2. The contractor shall provide an earth driven ground connection to the control panel at the main ground lug in accordance with the National Electric Code (NEC).

U. Equipment Marking

1. Permanent corrosion resistant name plate(s) shall be attached to the control and include following information:
 - a. Equipment serial number
 - b. Control panel short circuit rating
 - c. Supply voltage, phase and frequency
 - d. Current rating of the minimum main conductor
 - e. Electrical wiring diagram number
 - f. Motor horsepower and full load current
 - g. Motor overload heater element (if applicable)
 - h. Motor circuit breaker trip current rating
 - i. Name and location of equipment manufacturer
2. Control components shall be permanently marked using the same identification keys shown on the electrical diagram. Labels shall be mounted adjacent to device being identified.
3. Switches, indicators, and instruments mounted through the control panel door shall be labeled to indicate function, position, etc. Labels shall be mounted adjacent to, or above the device.

V. Control logic shall be accomplished using programmable controllers. Electromechanical relays may be used when necessary. However, the primary control logic shall be performed by the PLC.

1. The O&M manual shall be provided with complete ladder logic program documentation including English names, rung comments, and coil/contact cross-references.
2. The control shall be pre-programmed or wired to provide the following routines:
3. Pump alternation at lead stop
4. Excessive pump run time alternation
5. Jump to next pump on lead failure
6. Start/stop pumps at normal pressure settings
7. Pump start delays when called simultaneously
8. General alarm pilot light activation: Quick flashing alarm/slow flashing acknowledge/ steady on reset/off when clear
9. Station trouble alarm(115vac and normally open dry contact)
10. High and low pressure alarms
11. Pump start/stop pressure control
12. Drive speed/pressure control (If supplied with VFDs)

13. Pump high temperature shutdown (If provided with the pumps)
14. Drive fault alarm

W. The operator interface shall be equipped with the following displays and functions:

1. Main Menu
2. System Pressure
3. Pressure Simulation
4. Low Pressure Alarm Status
5. High Pressure Alarm Status
6. Pump High Temperature Status #1, #2 (If Provided)
7. Drive Fault Status #1, #2 (If VFDs are supplied)
8. Pump Fault Status #1, #2 (If FVNR or RVSS starters are supplied)
9. Pump Sequence Selection
10. Alarm Silence
11. Alarm Reset
12. General Alarm Lamp Test
13. Lead Pressure Start/Stop Setpoints
14. Lag Pressure Start/Stop Setpoints
15. Low Pressure Alarm Setpoints
16. High Pressure Alarm Setpoints
17. Speed/Pressure Setpoints 1 pump running (Speed settings if VFDs are supplied)
18. Speed/Pressure Setpoints 2 pumps running (Speed settings if VFDs are supplied)
19. Power-up Delay Setpoint
20. Alarm Delay Setpoint
21. Pump Start Delay Setpoint
22. Alternation Time Interval Setpoint
23. Pressure Transmitter Calibration

2.09 PRESSURE CONTROL SYSTEM

- A. The manufacturer of the pressure control system must be ISO 9001:2000 revision certified, with scope of registration including design control and service after sales activities.
- B. Sequence of Operation
 1. The system pressure is measured by a transducer, which provides a signal to the PLC proportional to pressure. The desired pressure is set by the operator on the operator interface and is adjustable. The PLC system uses a PID algorithm to modulate the pump speed and maintain system pressure at the set-point
 2. The pressure control system shall start and stop the pump motors in response to changes in system pressure, as set forth herein. The pressure control system shall utilize the PLC sequencer to select first

one pump, then the second pump, to run as lead pump for a pumping cycle. Alternation shall occur at the end of a pumping cycle or if one pump runs as the lead pump for an excessive time.

3. Upon operator selection of automatic operation, the PLC shall start the motor for one pump when the system pressure drops to the "lead pump start setpoint". When pressure rises to the "lead pump stop set point", the PLC shall stop this pump. These actions shall constitute one pumping cycle. Should the pressure continue to drop, the PLC shall start the second pump when the pressure reaches the "lag pump start set point" so that both pumps are operating.

C. Alarms and shutdown routines shall operate as follows:

1. Condition abnormal: The general alarm pilot light will quick flash until acknowledged, then slow flash until reset, then glow steady until condition returns to normal, then off. The operator interface will display the alarm when acknowledged. The external alarms will be active until silenced, and then off.
2. Condition abnormal then returns to normal: The general alarm pilot light will quick flash until silenced, then slow flash until reset, then off. The operator interface will display the alarm when acknowledged. The external alarms will be active until silenced, and then off.
3. Subsequent alarms will re-alarm when silenced or reset.

2.10 STATION FIBERGLASS ENCLOSURE AND BASE

A. Station Construction and Design:

1. The station shall incorporate a fiberglass enclosure and steel base. The station shall be supplied as a complete, weathertight unit with all pump, piping and controls installed and wired by the pump manufacturer.
2. The enclosure and base is to be rectangular with outside dimensions of 18' long by 12' wide and having a maximum outside height of 9'-6" at the roof peak. The internal height of the enclosure shall be 8'-6".
3. A minimum of (4) four lifting eyes provided on the station base shall be provided to ease handling and installation onto a concrete pad furnished by the contractor.
4. Enclosure walls and roof shall be seamless, one-piece sprayed fiberglass panels laminated to form a structural composite as follows: 1/8" thick fiberglass outside surface, minimum 2" thick urea foam polyurethane core, 7/16" oriented strand board (OSB), and 3/32" thick fiberglass inside surface. OSB shall replace foam at all cut-out openings and penetration points.
5. Each wall panel shall overlap at the corner and form an internal connection joint using stainless steel hardware. All panel joints shall be thoroughly sealed with silicone caulk. The enclosure shall have a minimum R10 insulation factor and shall be capable of withstanding 150 mph wind loads.
6. The pump station enclosure shall incorporate an optional insulation package which increases the standard R10 insulation rating to R20 by doubling the thickness of the urea foam polyurethane core in the wall and roof panels.
7. The exterior of the enclosure shall be covered with an aesthetically pleasing simulated brick façade, consisting of polyurethane panels affixed to the exterior fiberglass enclosure with industrial grade urethane adhesive and mechanical fasteners. The polyurethane panels shall be manufactured from highly durable weather proof material with near zero UV degradation. The insulation factor (R-value) of the polyurethane panels shall achieve a minimum of an R-2 factor. The polyurethane material used in the manufacturing of the panels shall be tested in accordance with ASTM test methods.
8. All interior surfaces shall be sprayed white isophthalic gel coat finish offering the same characteristics as the exterior surfaces.
9. The roof panel shall be an arched, one-piece design incorporating the same materials of construction as the side walls. The roof shall be removable as a unit, allowing for complete access to the pumping equipment with a crane. The pitch of the roof shall be sufficient for good moisture drainage, and withstand a minimum snow load of 40 pounds per square foot.

10. The station shall be furnished with one (1) 3'0" wide x 6'8" high entrance door(s) shall be constructed of the same laminated fiberglass and foam core materials as the remainder of the station. OSB will replace the insulation in areas where auxiliary equipment will be mounted. Each door shall be hung with (3) three stainless steel ball bearing type hinges incorporating a three point closure system with a lockable door handle. An adjustable door positioner and holder shall be mounted at the top of the door. A gasket consisting of solid rubber and sponge shall seal the door while closed. The door and all hardware shall be mounted to withstand 150 MPH winds. A wall mounted drip molding will be installed above each door.
11. The station enclosure shall be furnished with one (1) extra wide doors. A double hung door design with 3-point locking hardware, door closer, and hinges on each section shall allow complete access to the 6'-0" x 6'-8" full door opening without the need for a center sill.
12. The design shall resist deformation of the structure during shipping, lifting, or handling. Base shall incorporate drainage provisions, and an opening sized to permit installation of piping and service connections to the wet well. After installation, the opening shall serve as a grout dam to be utilized by the contractor. The base shall incorporate anchor points for securing the complete station to a concrete pad (supplied by the contractor) in accordance with the project plans.
13. Pumps and motor stands shall bolt directly to the station base eliminating the need for a pump skid.
14. Holes through the base shall be provided for suction and discharge lines. Holes for the suction and discharge lines shall be provided with a grout dam incorporated in a grout retention cavity which the contractor shall fill at installation with suitable grout to seal each pipe to base joint against the entrance of hazardous gases from the wet well.
15. The station base shall be coated with a non-slip surface.
16. The walls of the fiberglass enclosure shall be mounted to the steel base with mechanical fasteners in two foot intervals. The connection between the enclosure walls and the steel base shall be sealed with a neoprene gasket.
17. The station shall be positioned on the concrete mounting pad supplied by others.

B. Enclosure Functional Equipment:

1. The interior of the station shall be illuminated by factory installed 120 volt LED light fixtures. All lights will be prewired and run to a load center through PVC conduit and a weatherproof switch shall be installed adjacent to each station entrance. The lighting circuit shall be protected by a thermal-magnetic circuit breaker.
2. A thermostatically controlled 120 VAC exhaust fan with screen and weatherproof shutters shall be installed in the wall approximately opposite the fresh air intake vent. The fan shall have a minimum capacity of 1600 CFM at free air and be capable of changing the air in the enclosure a minimum of six times per hour. The exhaust fan shall be protected by a thermal-magnetic circuit breaker.
3. The enclosure will be complete with one (1) set of exhaust louvers. The exhaust louvers will be completely self-contained and shall not require the use of motors, solenoids, or other electrically operated devices. Exhaust louver will consist of four (2) 15" wide and 18-7/8" high shutters that open automatically at 75° F, and close at 60° F. Shutter operation will be the result of the expansion and contraction of wax in an enclosed plunger which shall drive the louver vanes through a mechanical linkage. The exhaust shutter will have the actuator mounted in the flow of the exhaust air and shall maintain the shutter vanes in the open position. Exhaust shutter frame will be constructed of anodized aluminum with zinc plated steel actuator mounting and linkage. The shutter vanes will pivot on plastic bearings. The four (4) intake shutters will be mounted in two aluminum fixed vane louver assemblies to prevent the entrance of rain or snow.
4. A high capacity electric blower type station heater shall be provided for the protection of the pumping equipment. The heater shall maintain an inside/outside differential temperature of 60 degrees F while operating on the primary voltage supplied to the station. The heater shall be provided with an adjustable thermostat, circuit breaker, and contactor.

5. One wall mounted duplex GFI utility receptacle providing 120 volt AC power shall be installed and prewired through PVC conduit with the station lighting. The receptacle shall be protected by thermal magnetic circuit breaker.
6. Consists of a three piece assembly including duck bill check valve, SST strainer top, and PVC spacer to provide a gas and water tight drain receptacle for use in concrete pad within Modular Enclosure. (Note: A 4" PVC drain pipe and PVC coupling shall be required to be provided and installed by others.)
7. Station enclosure shall be provided with a «Pump station enclosure heater 5 KW, thermostatically controlled electric heater. Heater shall include a circuit breaker, mounting bracket, conductors and conduit. Heater shall be shipped loose for contractor mounting on pre-installed support bracket.

**SECTION 16220
ENGINE GENERATORS**

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. This Section includes packaged engine-generator sets for emergency power supply with the following features:
 - 1. Natural Gas engine.
 - 2. Unit-mounted cooling system.
 - 3. Unit-mounted control and monitoring.
 - 4. Outdoor enclosure.
- B. Related Sections include the following:
 - 1. Division 16 Section "Transfer Switches" for transfer switches including sensors and relays to initiate automatic-starting and -stopping signals for engine-generator sets.

1.3 DEFINITIONS

- A. EGSA: Electrical Generator Systems Association; Boca Raton, Florida.
- B. Operational Bandwidth: The total variation from the lowest to highest value of a parameter over the range of conditions indicated, expressed as a percentage of the nominal value of the parameter.
- C. Natural Gas Fuel, regulator and shut off valve by others.

1.4 SUBMITTALS

- A. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 1. Dimensioned outline plan and elevation drawings of engine-generator set and other components specified.
 - 2. Design Calculations: Computer generated load summary indicating starting kVA and voltage-dip for each load step for loads indicated.
 - a. Demonstrate starting capability with loads indicated on the drawings. 89.29 SKVA @ 25% dip.maximum.
 - 3. Vibration Isolation Base Details: Signed and sealed by a qualified professional engineer. Detail fabrication, including anchorages and attachments to structure and to supported equipment. Include base weights.
 - 4. Wiring Diagrams: Power, signal, and control wiring.
- B. Quality Assurance/Control Submittals:
 - 1. Product Data: For each type of packaged engine generator indicated. Include rated capacities, operating characteristics, and furnished specialties and accessories. In addition, include the following:
 - a. Thermal damage curve for generator.
 - b. Time-current characteristic curves for generator protective device.
- C. Closeout Submittals:
 - 1. Operation and Maintenance Data: For packaged engine generators to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:

- a. List of tools and replacement items recommended to be stored at Project for ready access. Include part and drawing numbers, current unit prices, and source of supply.
2. Warranty: Special warranty specified in this Section.
3. Extra Materials: Receipt for extra materials.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
 1. Maintenance Proximity: Not more than two hours' normal travel time from Installer's place of business to Project site.
 2. Installer shall be EGSA Certified Electrical Generator Systems Technician.
- B. Manufacturer Qualifications: A qualified manufacturer. Maintain within 100 miles of Project site, a service center capable of providing training, parts, and emergency maintenance repairs within a response period of less than eight hours from time of notification.
- C. Source Limitations: Obtain packaged generator sets and auxiliary components through one source from a single manufacturer.
- D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- E. Comply with ASME B15.1.
- F. Comply with NFPA 37.
- G. Comply with NFPA 70.
- H. Comply with NFPA 110 requirements for Level 1 emergency power supply system.
- I. Comply with UL 2200.
- J. Engine Exhaust Emissions: Comply with applicable state and local government requirements.

1.6 PROJECT CONDITIONS

- A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service according to requirements indicated:
 1. Notify A/E no fewer than two days in advance of proposed interruption of electrical service.
 2. Do not proceed with interruption of electrical service without A/E's written permission.
- B. Environmental Conditions: Engine-generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:
 1. Ambient Temperature: Minus 15 to plus 40 deg C.
 2. Relative Humidity: 0 to 95 percent.
 3. Altitude: Sea level to 1000 feet.

1.7 COORDINATION

- A. Coordinate size and location of concrete bases for package engine generators. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 03. Location of the pad to be specified in the field. The pad will be 12'L x 6'W, 6" thick with #4 rebar 18" on center min., or as require by generator manufacturer.

1.8 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: One year from date of Substantial Completion.

1.9 MAINTENANCE SERVICE

- A. Initial Maintenance Service: Beginning at Substantial Completion, provide 12 months' full maintenance by skilled employees of manufacturer's designated service organization. Include quarterly exercising to check for proper starting, load transfer, and running under load. Include routine preventive maintenance as recommended by manufacturer and adjusting as required for proper operation. Provide parts and supplies same as those used in the manufacture and installation of original equipment.

1.10 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Fuses: One for every 10 of each type and rating, but no fewer than one of each.
 - 2. Indicator Lamps: Two for every six of each type used, but no fewer than two of each.
 - 3. Filters: One set each of lubricating oil, fuel, and combustion-air filters.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Caterpillar; Engine Div.
 - 2. Kohler Co.; Generator Division.
 - 3. Onan/Cummins Power Generation; Industrial Business Group.
- B. Products of other manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of the specified product. The "Substitution Request Form" and complete technical data for evaluation must accompany requests for A/E's approval. All materials for evaluation must be received by the Project Manager and Specification Department at least 10 days prior to bid due date. Additional approved manufacturers will be issued by Addendum.

ENGINE-GENERATOR SET

2.2

- A. Factory-assembled and -tested, engine-generator set.
- B. Mounting Frame: Maintain alignment of mounted components without depending on concrete foundation; and have lifting attachments.
- C. Capacities and Characteristics:
 - 1. Power Output Ratings: Nominal ratings as indicated, with capacity as required to operate as a unit as evidenced by records of prototype testing.
 - 2. Output Connections: 480/277v Three-phase,.
 - 3. Nameplates: For each major system component to identify manufacturer's name and address, and model and serial number of component.
- D. Generator-Set Performance:
 - 1. Steady-State Voltage Operational Bandwidth: 3 percent of rated output voltage from no load to full load.

2. Transient Voltage Performance: Not more than 20 percent variation for 50 percent step-load increase or decrease. Voltage shall recover and remain within the steady-state operating band within three seconds.
3. Steady-State Frequency Operational Bandwidth: 0.5 percent of rated frequency from no load to full load.
4. Steady-State Frequency Stability: When system is operating at any constant load within the rated load, there shall be no random speed variations outside the steady-state operational band and no hunting or surging of speed.
5. Transient Frequency Performance: Less than 5 percent variation for 50 percent step-load increase or decrease. Frequency shall recover and remain within the steady-state operating band within five seconds.
6. Output Waveform: At no load, harmonic content measured line to line or line to neutral shall not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined according to NEMA MG 1, shall not exceed 50 percent.
7. Sustained Short-Circuit Current: For a 1-phase, bolted short circuit at system output terminals, system shall supply a minimum of 250 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.
8. Excitation System: Provide permanent magnet excitation for power source to voltage regulator.
9. Start Time: Comply with NFPA 110, Type 10, system requirements.
10. Manufacturer to pre-certify that generator is EPA compliant.

2.3 ENGINE

- A. Fuel: Natural Gas
- B. Lubrication System: The following items are mounted on engine or skid:
 1. Filter and Strainer: Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.
 2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
 3. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.
- C. Engine Fuel System:
 1. Natural Gas line, shut off valve and regulator by others.
- D. Coolant Jacket Heater: Electric-immersion type, factory installed in coolant jacket system. Comply with NFPA 110 requirements for Level 1 equipment for heater capacity.
- E. Governor: Electronic adjustable isochronous, with speed sensing.
- F. Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine-generator-set mounting frame and integral engine-driven coolant pump.
 1. Coolant: Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.
 2. Size of Radiator: Adequate to contain expansion of total system coolant from cold start to 110 percent load condition.
 3. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.
 4. Coolant Hose: Flexible assembly with inside surface of nonporous rubber and outer covering of aging-, ultraviolet-, and abrasion-resistant fabric.
 - a. Rating: 50-psig maximum working pressure with coolant at 180 deg F , and noncollapsible under vacuum.
 - b. End Fittings: Flanges or steel pipe nipples with clamps to suit piping and equipment connections.

- G. Muffler/Silencer: Critical type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.
 - 1. Minimum sound attenuation of 25 dB at 500 Hz.
 - 2. Sound level measured at a distance of 10 feet from exhaust discharge after installation is complete shall be 85 dBA or less.
- H. Air-Intake Filter: Standard-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.
- I. Starting System: 12 or 24-V electric, with negative ground.
 - 1. Components: Sized so they will not be damaged during a full engine-cranking cycle with ambient temperature at maximum specified in Part 1 "Project Conditions" Article.
 - 2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
 - 3. Cranking Cycle: As required by NFPA 110 for system level specified.
 - 4. Battery: Adequate capacity within ambient temperature range specified in Part 1 "Project Conditions" Article to provide specified cranking cycle at least twice without recharging.
 - 5. Battery Cable: Size as recommended by engine manufacturer for cable length indicated. Include required interconnecting conductors and connection accessories.
 - 6. Battery Compartment: Factory fabricated of metal with acid-resistant finish and thermal insulation. Thermostatically controlled heater shall be arranged to maintain battery above 10 deg C regardless of external ambient temperature within range specified in Part 1 "Project Conditions" Article. Include accessories required to support and fasten batteries in place.
 - 7. Battery-Charging Alternator: Factory mounted on engine with solid-state voltage regulation and 35-A minimum continuous rating.
 - 8. Battery Charger: Current-limiting, automatic-equalizing and float-charging type. Unit shall comply with UL 1236 and include the following features:
 - a. Operation: Equalizing-charging rate of 10 A shall be initiated automatically after battery has lost charge until an adjustable equalizing voltage is achieved at battery terminals. Unit shall then be automatically switched to a lower float-charging mode and shall continue to operate in that mode until battery is discharged again.
 - b. Automatic Temperature Compensation: Adjust float and equalize voltages for variations in ambient temperature from minus 40 deg C to plus 60 deg C to prevent overcharging at high temperatures and undercharging at low temperatures.
 - c. Automatic Voltage Regulation: Maintain constant output voltage regardless of input voltage variations up to plus or minus 10 percent.
 - d. Ammeter and Voltmeter: Flush mounted in door. Meters shall indicate charging rates.
 - e. Safety Functions: Sense abnormally low battery voltage and close contacts providing low battery voltage indication on control and monitoring panel. Sense high battery voltage and loss of ac input or dc output of battery charger. Either condition shall close contacts that provide a battery-charger malfunction indication at system control and monitoring panel.

2.5 CONTROL AND MONITORING

- A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of generator set. When mode-selector switch is switched to the on position, generator set starts. The off position of same switch initiates generator-set shutdown. When generator set is running, specified system or equipment failures or derangements automatically shut down generator set and initiate alarms. Operation of a remote emergency-stop switch also shuts down generator set.
- B. Configuration: Operating and safety indications, protective devices, basic system controls, and engine gages shall be grouped in a common control and monitoring panel mounted on the generator set. Mounting method shall isolate the control panel from generator-set vibration.
- C. Indicating and Protective Devices and Controls: As required by NFPA 110 for Level 1 system, and the following:
 - 1. AC voltmeter.
 - 2. AC ammeter.
 - 3. AC frequency meter.
 - 4. DC voltmeter (alternator battery charging).
 - 5. Engine-coolant temperature gage.
 - 6. Engine lubricating-oil pressure gage.
 - 7. Running-time meter.
 - 8. Ammeter-voltmeter, phase-selector switch(es).
 - 9. Generator-voltage adjusting rheostat.
- D. Supporting Items: Include sensors, transducers, terminals, relays, and other devices and include wiring required to support specified items. Locate sensors and other supporting items on engine or generator, unless otherwise indicated.
- E. Remote Emergency-Stop Switch: Flush; wall mounted, unless otherwise indicated; and labeled. Push button shall be protected from accidental operation. Locate emergency stop switch with input from the authority having jurisdiction.
- F. Provide a communicator connected to the pumping stations Telemetry System to report the following to an off site phone number as indicated by the Owner. Verify the correct protocol is being used for the two systems to communicate.
 - 1. Power loss
 - 2. Generator running
 - 3. Generator failed to start
- G. Remote Annunciator (verify location in pumping station building with owner)
 - 1. Remotely monitor system conditions
 - 2. Meets NFPA 110 for critical facilities
 - 3. Monitor generator faults and status
 - 4. RS-485 Serial Modbus RTU communication Standard
 - 5. Five user-defined inputs
 - 6. Start and stop a remote test

2.6 GENERATOR OVERCURRENT AND FAULT PROTECTION

- A. Generator 150amp Circuit Breaker: Molded-case, thermal-magnetic type; 100 percent rated; complying with NEMA AB 1 and UL 489.
 - 1. Tripping Characteristic: Designed specifically for generator protection.
 - 2. Trip Rating: Matched to generator rating.
 - 3. Shunt Trip: Connected to trip breaker when generator set is shut down by other protective devices.
 - 4. Mounting: Adjacent to or integrated with control and monitoring panel.

2.7 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

- A. Comply with NEMA MG 1.
- B. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.
- C. Electrical Insulation: Class H or Class F.

- D. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required.
- E. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to 125 percent of rating, and heat during operation at 110 percent of rated capacity.
- F. Enclosure: 3R Rated, Drip proof.
- G. Instrument Transformers: Mounted within generator enclosure.
- H. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified.
 - 1. Adjusting rheostat on control and monitoring panel shall provide plus or minus 5 percent adjustment of output-voltage operating band.

2.8 OUTDOOR GENERATOR-SET ENCLOSURE

- A. Description: Vandal-resistant, weatherproof steel housing, wind resistant up to 100 mph. Multiple panels shall be lockable and provide adequate access to components requiring maintenance. Panels shall be removable by one person without tools. Instruments and control shall be mounted within enclosure.
- B. Engine Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at 110 percent of rated load for 2 hours with ambient temperature at top of range specified in system service conditions.
 - 1. Louvers: Fixed-engine, cooling-air inlet and discharge. Storm-proof and drainable louvers prevent entry of rain and snow.
 - 2. Muffler Location: Within enclosure.

2.9 FINISHES

- A. Indoor and Outdoor Enclosures and Components: Manufacturer's standard finish over corrosion-resistant pretreatment and compatible primer.

2.10 SOURCE QUALITY CONTROL

- A. Prototype Testing: Factory test engine-generator set using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.
 - 1. Tests: Comply with NFPA 110, Level 1 Energy Converters and with IEEE 115.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine areas, equipment bases, and conditions, with Installer present, for compliance with requirements for installation and other conditions affecting packaged engine-generator performance.
- B. Examine roughing-in of piping systems and electrical connections. Verify actual locations of connections before packaged engine-generator installation.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with NECA 404.
- B. Comply with packaged engine-generator manufacturers' written installation and alignment instructions and with NFPA 110.

- C. Install packaged engine generator to provide access, without removing connections or accessories, for periodic maintenance.
- D. Install packaged engine generator with elastomeric isolator pads or restrained spring isolators having a minimum deflection of 1 inch on 4-inch- high concrete base. Secure sets to anchor bolts installed in concrete bases. Construct concrete base to the manufacturer's recommendation.
- E. Electrical Wiring: Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.

3.3 CONNECTIONS

- A. Ground equipment according to Division 16 Section "Grounding and Bonding for Electrical Systems."
- B. Connect wiring according to Division 16 Section "Low-Voltage Electrical Power Conductors and Cables."

3.4 IDENTIFICATION

- A. Identify system components according to Division 16 Section "Identification for Electrical Systems."

3.5 FIELD QUALITY CONTROL

- A. Perform tests and inspections and prepare test reports.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- B. Tests and Inspections:
 - 1. Perform tests recommended by manufacturer and each electrical test and visual and mechanical inspection for "AC Generators and for Emergency Systems" specified in NETA Acceptance Testing Specification. Certify compliance with test parameters.
 - 2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here including, but not limited to, single-step full-load pickup test.
 - 3. Battery Tests: Equalize charging of battery cells according to manufacturer's written instructions. Record individual cell voltages.
 - a. Measure charging voltage and voltages between available battery terminals for full-charging and float-charging conditions. Check electrolyte level and specific gravity under both conditions.
 - b. Test for contact integrity of all connectors. Perform an integrity load test and a capacity load test for the battery.
 - c. Verify acceptance of charge for each element of the battery after discharge.
 - d. Verify that measurements are within manufacturer's specifications.
 - 4. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
 - 5. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine-generator system before and during system operation. Check for air, exhaust, and fluid leaks.
 - 6. Exhaust-System Back-Pressure Test: Use a manometer with a scale exceeding 40-inch wg. Connect to exhaust line close to engine exhaust manifold. Verify that back pressure at full-rated load is within manufacturer's written allowable limits for the engine.
 - 7. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 and 100 percent step-load increases and decreases, and verify that performance is as specified.
 - 8. Harmonic-Content Tests: Measure harmonic content of output voltage under 25 percent and at 100 percent of rated linear load. Verify that harmonic content is within specified limits.

9. Noise Level Tests: Measure A-weighted level of noise emanating from generator-set installation, including engine exhaust and cooling-air intake and discharge, at four locations on the property line, and compare measured levels with required values.
- C. Coordinate tests with tests for transfer switches and run them concurrently.
- D. Test instruments shall have been calibrated within the last 12 months, traceable to standards of NIST, and adequate for making positive observation of test results. Make calibration records available for examination on request.
- E. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
- F. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
- G. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- H. Remove and replace malfunctioning units and retest as specified above.
- I. Retest: Correct deficiencies identified by tests and observations and retest until specified requirements are met.
- J. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.
- 3.6 DEMONSTRATION
- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION

**Soil Study for Proposed Water Tower,
Ingling Drive, Donnelsville, Ohio**

Submitted To:

**Board of Clark County Commissioners c/o Clark
County Utilities Department**

Attn: Mr. Chuck Bauer

3130 East Main Street

Springfield, Ohio 45503

Report No. 20009322-0626-146

June 19, 2026

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June 19, 2026

Board of Clark County Commissioners
c/o Clark County Utilities Department
Attention: Mr. Chuck Bauer, P.E., Director Utilities Department & Solid Waste District
3130 East Main Street
Springfield, Ohio 45503

Re: Report No. 20009322-0626-146; Soil Study for
Proposed Water Tower, Ingling Drive,
Donnelsville, Ohio

Dear Mr. Bauer:

Bowser-Morner, Inc. is pleased to submit our report of the soil study for the above-referenced project. The purpose of this study is to determine the physical characteristics of the soil strata and allowable bearing capacity for the proposed water tower and booster station. Also noted are other conditions that could affect the design and/or construction of the structures.

The samples collected that were not used to perform the laboratory tests will be kept in our laboratory for 30 days unless you advise us otherwise. If you have any questions or if we can help you in any way on this project or future work, please call us.

This document has been provided in an electronic format to expedite delivery of results and/or recommendations to BOWSER-MORNER's Client. A wet-signed original is maintained at our Dayton office at 4518 Taylorsville Rd., Dayton, OH 45424. Because electronic documents can be altered, if there is any question about the validity of this document, please contact our office to view the wet-signed original.

Christopher
her Ryan

Digitally signed by Christopher Ryan
DN: C=US, S=Ohio, O="Bowser-Morner, Inc.", SN=Ryan, G=Christopher, CN=Christopher Ryan, E=cryan@bowser-morner.com
Reason: I am the author of this document
Location:
Date: 2026.06.24 08:06:36-04'00'
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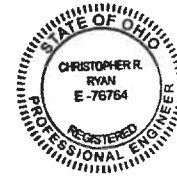
Respectfully submitted,
BOWSER-MORNER, INC.



Daniel M. Otieno
Geotechnical Engineer



Chris R. Ryan, M.S.C.E., P.E.
Sr. Geotechnical Engineer



DMO/CRR/an
3-Client
2-File

Civil & Geotechnical
Engineering

Environmental
Consulting

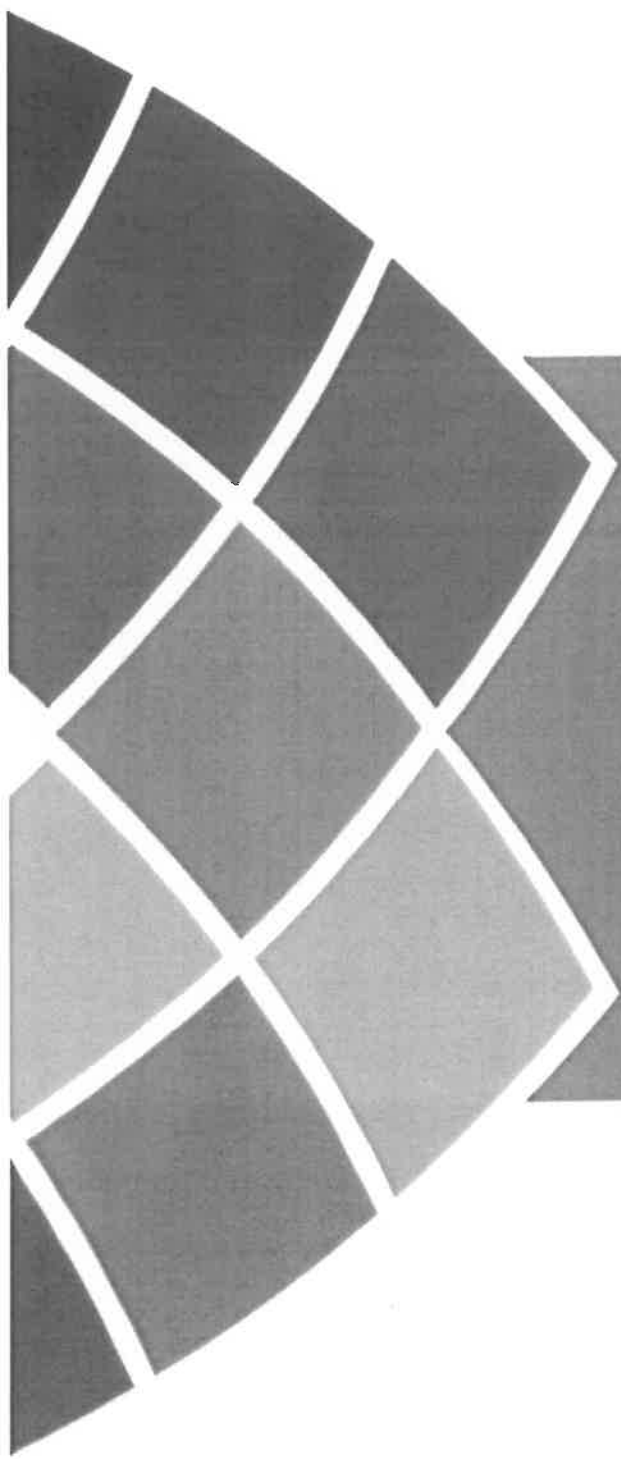
Construction QA/QC &
Special Inspections

Analytical, Construction Materials &
Geotechnical Laboratories

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TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE NO.</u>
I TEXT	
1.0 INTRODUCTION	1
2.0 WORK PERFORMED.....	1
2.1 FIELD WORK	1
2.2 LABORATORY WORK	1
3.0 SOIL AND GROUNDWATER CONDITIONS	2
3.1 GEOLOGIC SOIL PROFILE	2
3.2 SUBSURFACE CONDITIONS	5
4.0 DISCUSSION AND RECOMMENDATIONS.....	6
4.1 PROJECT DESCRIPTION.....	6
4.2 FOUNDATION RECOMMENDATIONS.....	7
4.3 SUBGRADE SOIL CLASSIFICATION FOR TRENCH EXCAVATION.....	12
4.4 LATERAL EARTH PRESSURE FOR BOOSTER STATION WALL DESIGN	13
4.5 COMPACTION REQUIREMENTS.....	14
4.6 PIT SLAB ON-GRADE	14
4.7 FOUNDATION EXCAVATIONS	15
4.8 TRENCH EXCAVATIONS	16
4.9 CONSTRUCTION DEWATERING	17
4.10 DRAINAGE	17
5.0 CLOSURE.....	17
5.1 BASIS OF RECOMMENDATIONS	17
5.2 LIMITATIONS AND ADDITIONAL SERVICES.....	18
5.3 WARRANTY	19
II SUGGESTED SPECIFICATIONS	
CLEARING AND GRADING	
III BORING LOG TERMINOLOGY, BORING LOGS, LABORATORY DATA, AND PRINTS	



Section I

Text

1.0 INTRODUCTION

An estimated 100,000-gallon, elevated water storage tank will be constructed on the southeast side of Ingling Drive in Donnelsville, Ohio. A booster station will also be constructed as part of this project. The proposed booster station will be located on the southwest side of the Tecumseh Middle School complex, on the north side of West National Road. A vicinity map (Figure 1) is included in Section III of this report. Our findings on the soil conditions and groundwater levels with respect to the potential construction problems, and recommendations for the allowable bearing capacity for the construction of the elevated water tank and booster station and are given in this report.

Authorization to proceed with this soil study was given by Board of Clark County Commissioners c/o Clark County Utilities Department in a signed proposal acceptance sheet dated April 22, 2026. The work was to proceed in accordance with our proposal and agreement, Quotation No. 26-312-038 dated April 15, 2026. The draft soil boring logs and preliminary foundation recommendations were emailed to Mr. Chuck Bauer on May 14, 2026.

2.0 WORK PERFORMED

2.1 Field Work

Four (4) soil borings were made at the locations shown on the boring location plan, Figure 2 in Section III. Borings 1, 2, and 3 were performed in the proposed water storage tank area, whereas Boring 4 was performed in the proposed booster station area. The boring logs and boring location plan are included in Section III. The borings were made with an ATV boring rig using hollow-stem augers and standard penetration resistance methods. The standard penetration tests were performed in accordance with ASTM D1586, which includes a 140-pound hammer, 30-inch drops, and two-inch-O.D. split-spoon samplers driven at maximum depth intervals of five feet or at major changes in stratum, whichever occurred first. The disturbed split-spoon samples were visually classified, logged, sealed in moisture-proof jars, and taken to the Bowser-Morner, Inc. laboratory for study. The depths where these "SS"-type split-spoon samples were collected are noted on the corresponding boring logs.

2.2 Laboratory Work

Plasticity Testing: Two (2) Atterberg limits test was performed in accordance with ASTM D4318 to determine the liquid and plastic limits on the most visibly plastic cohesive soil or as needed for soil classification. Plasticity testing is commonly performed to assess seasonal volume change potential of subsurface cohesive materials for use as structural fill and foundation support materials.

Moisture Contents: In addition, 18 moisture content determinations were made in accordance with ASTM D2216. The results of the laboratory tests are summarized in Table 2-1 and included in Section III of this report.

Table 2-1. Summary of Laboratory Test Results

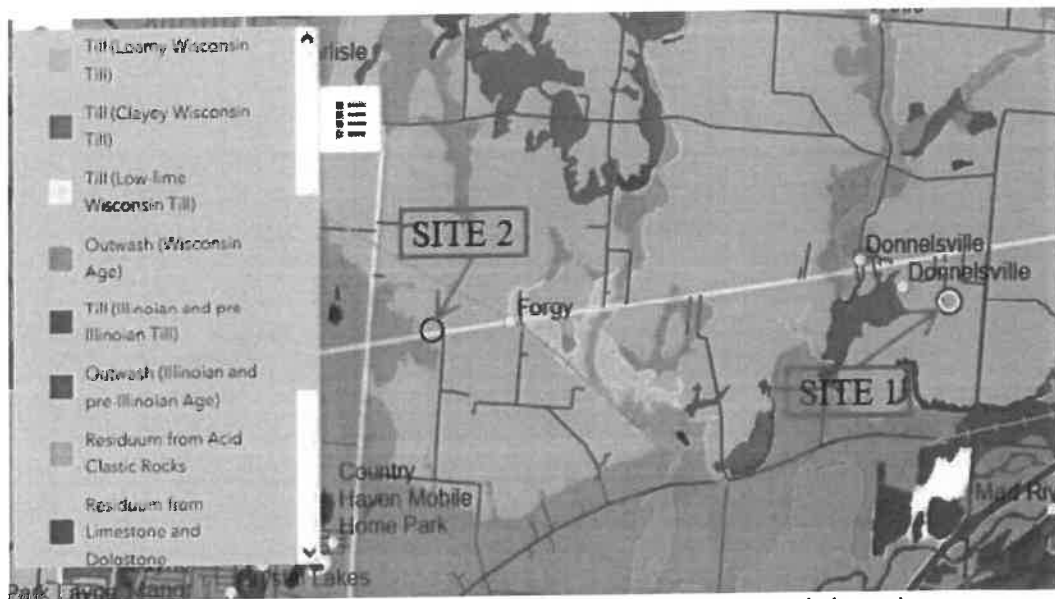
Boring No.	Depth (ft.)	Moisture Content (%)	Atterberg Limits		
			LL	PL	PI
1	1.0 – 2.5	21.5			
	3.5 – 5.0	14.4	23	14	9
	6.0 – 7.5	14.0			
	8.5 – 10.0	17.2			
	13.5 – 15.0	6.9			
2	1.0 – 2.5	22.0			
	3.5 – 5.0	11.7			
	6.0 – 7.5	12.9			
	8.5 – 10.0	15.4			
	13.5 – 15.0	11.4			
3	1.0 – 2.5	21.2			
	3.5 – 5.0	14.9			
	6.0 – 7.5	22.1			
	8.5 – 10.0	11.7			
4	1.0 – 2.5	16.0			
	3.5 – 5.0	10.7	24	14	10
	6.0 – 7.5	10.2			
	8.5 – 10.0	4.7			

3.0 SOIL AND GROUNDWATER CONDITIONS

3.1 Geologic Soil Profile

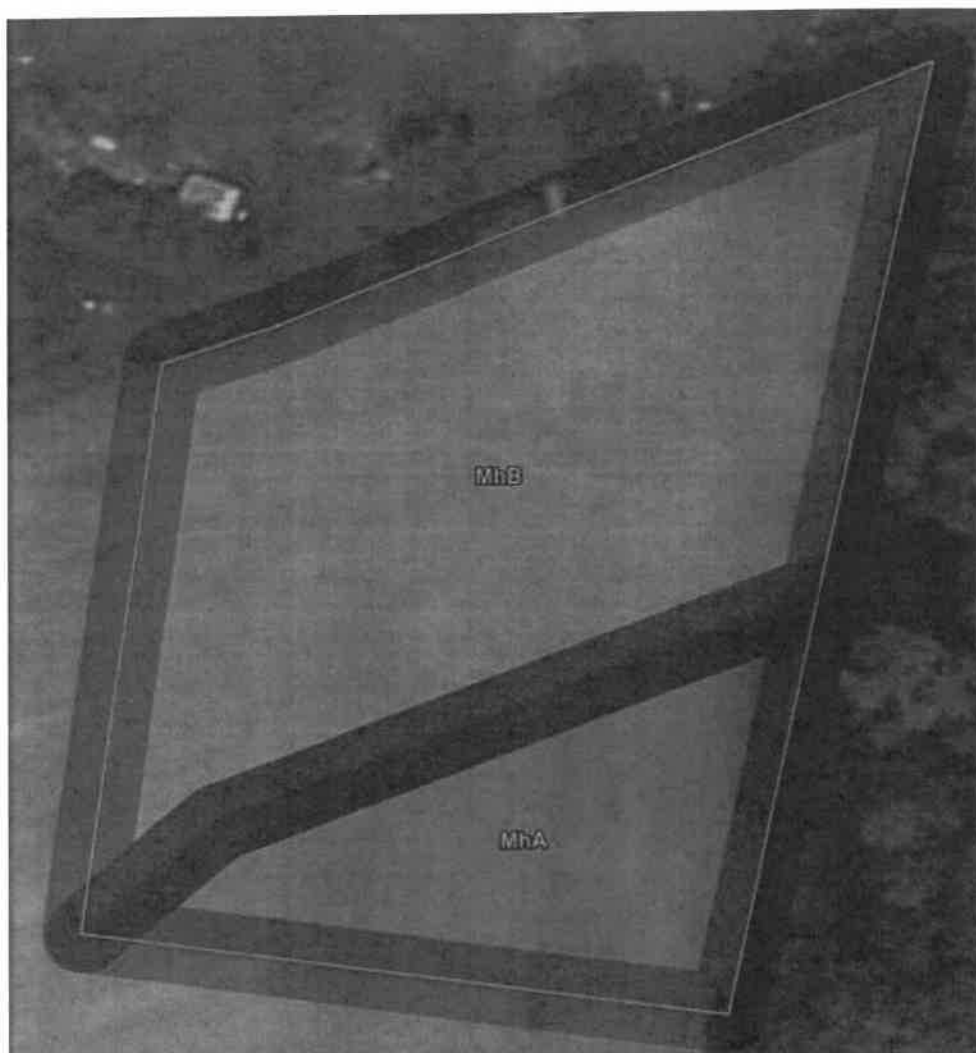
Geologically, the sites are situated in Clark County which consists of Wisconsin Age glacial deposits which include glacial till, outwash, associated loess or silty windblown deposits, and lacustrine clays and silts. The bedrock in Clark County includes limestone and shale of Ordovician age and the Silurian age.

The glacial soils in the vicinity of the site are what is known as glacial till, which tend to be fairly strong deposits consisting of mixtures of silt, clay, sand, gravel and coarser particles that were left behind once the glaciers retreated from the region. The glacial till soils at the two sites are loamy Wisconsin till. They are shaded tan in the diagram below.

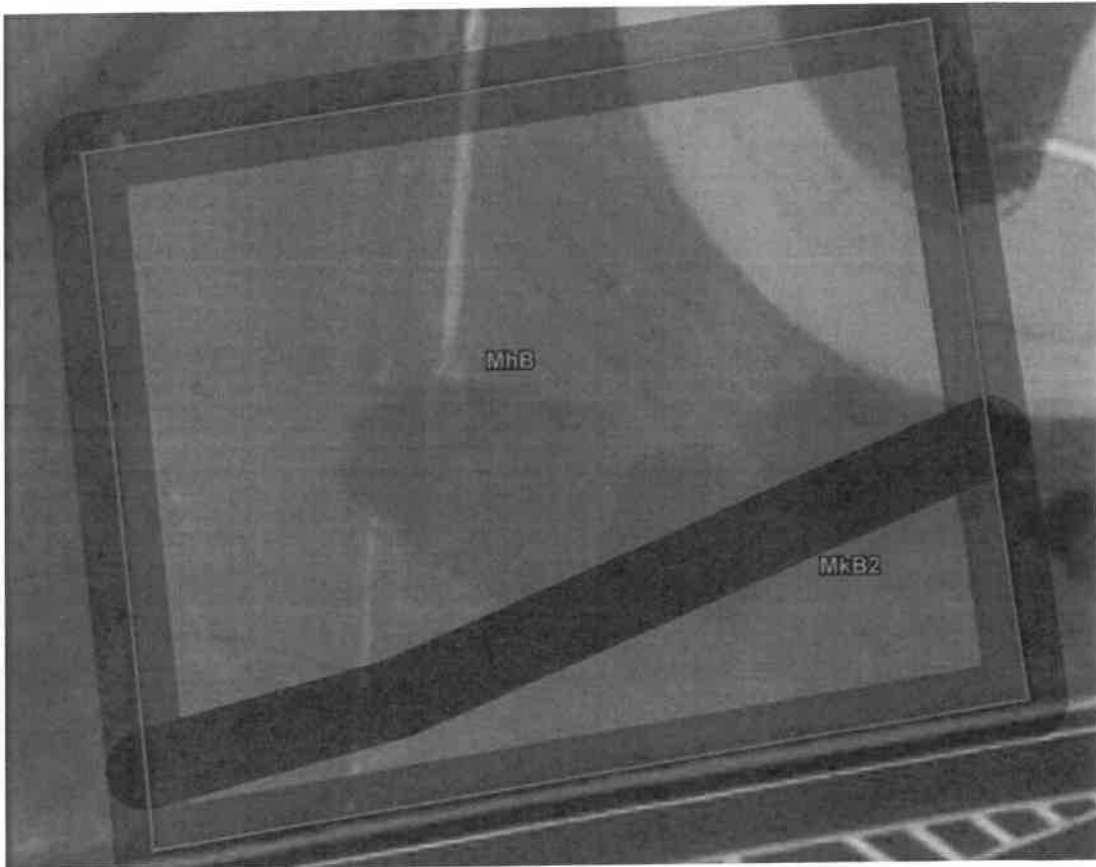


(References: Soil Explorer. Online at <http://SoilExplorer.net>. Accessed 6/6/2026.)

The U.S. Department of Agriculture Soil Survey mapping of the two sites indicate that the variation of glacial drift on the property where Borings 1, 2, and 3 were drilled are MhA (Miamian silt loam, 0 to 2 percent slopes) and MhB (Miamian silt loam, 2 to 6 percent slopes). Additionally, at the property where Boring 4 was drilled, the variations of glacial drift are MhB (Miamian silt loam, 2 to 6 percent slopes), and Mkb2 (Miamian silty clay loam, 2 to 6 percent slopes, eroded). According to the USDA mapping, the MhB and Mkb2 surface deposits at the site tend to be the mostly clayey, whereas the MhA deposits tend to be mostly silty.



Location of Borings 1, 2, and 3



Location of Boring 4

3.2 Subsurface Conditions

Based on the information from the four borings made for this study, the subgrade soil conditions are described in descending order below:

STRATUM 1: TOPSOIL: Encountered from Surface to depth of ± 5.0 to ± 6.0 inches.

Topsoil extending to a depth of approximately five to six inches. Topsoil consists of the semi-organic surface layer of soil that is often mixed with root matter and vegetative materials. Because the organic matter in this soil layer has a high potential for degradation and future volume change, it is not considered to be a reliable stratum for support of buildings or structures. Any surface layer with more than 4% organics (as a percentage of the total dry weight of the soil) should be considered topsoil and should be removed from use for structural fill purposes.

STRATUM 2: GLACIAL DRIFT: Encountered below stratum 1 to depths of ± 9.0 to ± 13.0 feet.

Medium stiff-to-hard, brown sandy lean clay with traces of silt, gravel, and cobbles interspersed throughout the stratum.

STRATUM 3: Weathered LIMESTONE ROCK: Encountered below stratum 2 from depths of ± 9.0 to ± 13.0 feet to bottoms of boring.

Light gray weathered limestone. The layer extends to the bottom of all four borings upon auger refusal at a depth of 13.7 feet in Boring 1, 12.3 feet in Boring 2, and at 10.5 feet in Borings 3 and 4.

Free groundwater was encountered during the advancement of the borings at the depths and elevations summarized in Table 3-1.

Table 3-1. Summary of Groundwater Observations

Boring No.	Depth Groundwater First Observed (ft)		Groundwater Observations at Completion of Boring	
	Depth	Elevation*	Depth	Elevation*
1	No Water		No Water	
2	8.0	977.1	4.5	980.6
3	No Water		No Water	
4	No Water		No Water	

* In reference to surface elevation based on Ohio South State Plane Coordinate System.

Free groundwater is defined as water that seeps into an open borehole before it is backfilled. Groundwater observations were made during the boring operations by noting the depth of water on the boring tools and in the open boreholes following withdrawal of the boring augers. However, it should be noted that short-term water level readings are not necessarily a reliable indication of the groundwater level and that significant fluctuations may occur due to variations in rainfall and other factors. For specific questions on the soil conditions, please refer to the individual boring logs in Section III.

4.0 DISCUSSION AND RECOMMENDATIONS

4.1 Project Description

An estimated 100,000-gallon, elevated water storage tank will be constructed on the southeast side of Ingling Drive in Donnelsville, Ohio. The proposed tank will be approximately 130 feet in height. We understand that no final design or loading has been decided. Additionally, a booster station will also be constructed as part of this project. The proposed booster station will be located on the southwest side of the Tecumseh Middle School complex, on the north side of West National Road. The proposed booster station will be approximately 18 feet wide and 20 feet long, and will be approximately five feet deep. No design loading information was provided for this report.

The following recommendations are based on this information. If the above statements are incorrect or changes are made, Bowser-Morner, Inc. should be notified so that the new data can be reviewed and additional recommendations and services can be given if required to meet the needs of your project.

4.2 Foundation Recommendations

4.2.1 Water Storage Tank

Again, Borings 1, 2, and 3 were performed in the proposed water storage tank area. Based on the subgrade soil conditions indicated in the three (3) borings made at this site, the site is covered with topsoil, and/or weaker soil that extends to the approximate depths outlined in Table 4-1. Based on the results of the standard penetration tests (SPT) in the borings, the recommended net allowable bearing capacities and the depths to bearing strata at each boring are also tabulated in Table 4-1.

Table 4-1. Depths and Elevations to Bearing Strata

Boring No.	Depth to Bearing Strata (ft)	Elevation* of Bearing Strata (ft)	Topsoil or Fill, and/or Weak Soil	Recommended Net Allowable Bearing Capacity (psf)
1	0.5	985.4	Topsoil	1,500
	6.0	979.9	Topsoil and Weak Soil	2,000
	8.5	977.4	Topsoil and Weak Soil	3,000
2	0.5	984.6	Topsoil	1,500
	3.5	981.6	Topsoil and Weak Soil	2,000
	8.5	976.6	Fill and Weak Soil	4,000
3	0.5	983.8	Topsoil	1,500
	9.0	975.3	Topsoil and Weak Soil	4,000

* In reference to surface elevation based on Ohio South State Plane Coordinate System.

The topsoil is unreliable to support the foundations of the proposed elevated water storage tank and should be removed. The topsoil can be stockpiled for landscaping purposes. Within the tank construction limits, the topsoil, and the weaker soil should be removed to the suitable depths with the desired allowable bearing capacities as outlined in Table 4-1 and replaced with compacted backfill.

The bottoms of the foundation excavations should extend to the suitable depths with the desired allowable bearing capacities as outlined in Table 4-1. After the foundation excavations extend to the suitable depths, the over-excavation can be filled with compacted backfill. The bottoms of footing foundations should be placed at least 36 inches below the final adjacent grades to protect against frost penetration and heaving.

The base of each excavation should extend one lateral foot for every foot of excavation below the bottom of the footing foundation as shown in Figure 3 in Section III. If an excavation will extend more than five feet below the existing grade, a maximum allowable side slope of 1 (horizontal) to 1 (vertical) should be maintained in any excavation for stability and for the safety of the workers.

After the foundation excavations extend to the desired grade, the top foot at the bottom of each excavation should be compacted to at least 90% of the maximum dry-unit weight as determined by the modified Proctor test (ASTM D1557) before any new fill or foundation is placed. Any soft soil pockets should be undercut and replaced with newly compacted fill. Any lean clay soils to be imported as backfill or removed from the project site probably will have significantly different Proctor values. Consequently, samples to be tested by the Proctor method should be obtained from a representative area and from the same elevation as the design subgrade.

After the bottoms of the excavations have been compacted, structural fill can be placed to bring the bottoms of the excavations to reach the desired final grade. The fill placed below the bottom of the footing foundations should be placed in eight-inch-thick lifts and compacted to at least 95% of the maximum dry-unit weight as determined by the modified Proctor test (ASTM D1557). Fill placed above the bottom of the footing foundations to serve as the subgrade for the floor slab should be compacted to at least 90% of the maximum dry-unit weight as determined by the modified Proctor test (ASTM D1557). Structural fill should be placed in accordance with the recommendations given in Section 4.5.

The footing foundations for the proposed water storage tank can be supported on the original subgrade soil or newly compacted backfill extending to the depths outlined in Table 4-1. The foundations can be designed with the corresponding net allowable bearing capacities outlined in Table 4-1. For these recommended allowable bearing capacities outlined in Table 4-1 for the original soil layer or for the newly compacted backfill, the total estimated amount of settlement of the foundations will be about one inch with differential settlement of about 3/4 inch over a distance of 40 feet.

The soil removed from this site that is free of organic or objectionable materials as defined by a field technician who is qualified in soil material identification and compaction procedures can be reused as fill. Objectionable or undesirable soils are defined as those materials that cannot meet design placement specifications or materials that will deteriorate with time.

When determining the geometric size (the "footprint") of the footing foundation, the total system loads applied to the tops of the foundations should be considered in the bearing pressure calculations.

The bearing capacities recommended in Table 4-1 for foundations supported on structural fill applies to well-graded granular soils, low-to-medium plastic clays, clayey sands, and some silty sands that are placed and compacted in accordance with the recommendations given in this report. However, uniformly graded or gap-graded granular soils (GP or SP), silts (ML), silty fine sands (SM), and high plasticity clays (CH) will be difficult to place and compact, and may result in a reduced bearing capacity. If these soils will be used as backfill, Bowser-Morner should be notified before the soils are placed so that the proposed placement methods and bearing capacity recommendations can be reviewed.

The bearing capacity of a soil is not a unique physical property of the soil. Instead, it depends explicitly on several factors including the footing type, size, and shape; the depth of embedment; the eccentricity and inclination of the applied load; the footing base inclination; the stiffness of the footing; the proximity of the footing to open cuts or slopes; the relative distance between the bottom of the footing and the water table; and the allowable amounts of settlement. The recommended allowable bearing capacity is based on the foundation design parameters given above and the assumptions that the applied load is vertical with no eccentricity, the base is horizontal and level, the footing is rigid, the footing is not close to an open cut or slope, and the water table is below the bottom of footing. If the actual conditions vary from the parameters and assumptions stated above, Bowser-Morner should be notified so that the new information can be reviewed and additional recommendations and services can be given to meet the needs of your project.

Foundations supported on soil settle as the result of externally applied loads. While the foundations should be expected to settle, the amount of settlement should be within the tolerable limits for the structure.

Limestone bedrock was encountered in all three of the water storage tank borings performed for this study. Based on the limestone samples obtained in the borings and the depths where auger refusal occurred, the depths to apparent bedrock are also tabulated in Table 4-2.

Table 4-2. Depth to Bedrock

Boring No.	Depth to Top of Bedrock (ft)	Elevation* at Top of Bedrock (ft)	Depth to Auger Refusal (ft)	Elevation* at Auger Refusal (ft)
1	13.0	972.9	13.7	972.2
2	12.0	973.1	12.3	972.8
3	9.0	975.3	10.5	973.8

*In reference to surface elevation based on Ohio South State Plane Coordinate System.

To avoid differential settlement, if any foundations for the water storage tank will be supported on bedrock, all of the foundations for the addition should be supported on bedrock. Alternatively, the bedrock can be over-excavated to at least one foot below the bottoms of the foundations. One foot of compacted backfill should be placed over the bedrock surface, and the foundations for the water tank should be supported on the overburden soil layer or on the newly compacted backfill layer. Alternatively, all of the foundation excavations can extend to bedrock. The over-excavation should be backfilled with lean concrete. The foundations can be partially supported on bedrock and partially supported on cured, lean concrete fill. The footing foundations for the water storage tank can be supported on the limestone bedrock extending to the depths and elevations to auger refusal outlined in Table 4-2 and can be designed with a net allowable bearing capacity of 8,000 psf. Foundations supported on more than 3 feet of compacted backfill should be limited to 4,000 psf.

Alternatively, the weaker soil can remain in-place. The weak subgrade soil can be modified by installing Geopiers® for the construction of the elevated water tank. The Geopier® method is a patented method that includes the placement and the compaction of sand and gravel in pre-augered holes. With this method, the sand and gravel fill will be compacted in lifts using a drop hammer. The Geopiers® will be constructed in a pre-set pattern.

The structure can simply be supported on spread-footing foundations over the Geopier®-improved subgrade soil. If the Geopier® method is selected, the Geopier® Foundation Company, Inc. will perform the design of the Geopier® system including the spacing of the piers and the allowable bearing capacity on top of the Geopiers®.

The footing foundations supported on the Geopier®-improved subgrade can be designed with the allowable bearing capacity specified by the Geopier® Foundation Company, Inc. Based on our experiences with other projects, the allowable bearing capacities are about 3,000 to 5,000 pounds per square foot (psf) with Geopier® modified subgrade soil for these type of projects. Additionally, the installation of **Geopiers® can also provide tie-down anchors** in each of the Geopiers® for providing the capacity against any up-lift force.

In general, for the selection or the installation of any type of aggregate piers, the compaction performed with a hammer should provide vertical impact to the granular fill. Each lift of aggregate should be 12 to 26 inches thick and should be placed starting from the bottom of the hole.

If stone-column methods other than the Geopier® method are selected, the compaction of the stone columns should be verified with a dynamic cone-penetration test through the aggregate piers. The “N” values can be obtained continuously through the full length of the aggregate piers. After the tests are completed and the aggregate is still loose, the piers should be recompacted using the installer’s equipment. Based on our experience with other projects, a top-feed method of placing the granular material with a vibration device in the open hole cannot achieve the required compaction. The top-feed method with a vibration device is not acceptable and cannot be considered as equal to the Geopiers®.

The Geopier® Foundation Company, Inc. will design the Geopiers® including the length, diameter, and spacing of the piers and the allowable bearing capacities of the improved subgrade soil or with foundations supported directly on top of the piers. If the Geopier® subgrade-improvement method with a displacement mandrel will be used, temporary steel casings will not be needed to extend through the existing topsoil and weak soil to keep the shafts from caving in. If the Geopier® subgrade-improvement method will be considered, we can contact and provide our study to Geopier® Foundation Company, Inc. on behalf of the client to obtain a preliminary cost estimate for this project.

4.2.2 Site Classification For Seismic Design

Based on the results of the standard penetration tests (SPT) in the borings made for this study, the average "N" values range from 16 to 23 blows per foot for the soil layer within 10.5 to 13.7 feet of the existing grade. Based on the results of the average "N" value, it is our opinion that the site will be classified as a "D" type in accordance with the *Ohio Building Code*.

4.2.3 Booster Station

A booster station will also be constructed as part of this project. The proposed booster station will be located on the southwest side of the Tecumseh Middle School complex, on the north side of West National Road. The proposed booster station will be approximately 18 feet wide and 20 feet long, and will be approximately five feet deep.

Based on the information from Boring 4 performed in the vicinity of the booster station, this site is covered with topsoil and weak soil that extends to the approximate depths and elevations outlined in Table 4-3. Based on the results of the standard penetration tests (SPT) in the borings, the net allowable bearing capacities and the depths to bearing strata at the boring location are also outlined in Table 4-3.

Table 4-3. Depths and Elevations to Bearing Strata

Boring No.	Depth to Bearing Strata (ft)	Elevation* of Bearing Strata (ft)	Topsoil or Fill, and/or Weak Soil	Recommended Net Allowable Bearing Capacity (psf)
4	0.5	900.2	Topsoil	2,000
	3.5	897.2	Topsoil and Weak Soil	4,000

* In reference to surface elevation based on Ohio South State Plane Coordinate System.

The topsoil is unreliable to support the booster station and should be removed. The topsoil can be stockpiled for landscaping purposes. The booster pump station should be watertight. It should also be designed against floatation due to any groundwater encountered. The bottoms of the foundation excavations should extend to the suitable depths with the desired allowable bearing capacities as outlined in Table 4-3.

After the excavation extends to the desired grade, the top foot of the exposed ground surface, in soil, should be compacted to 90% of the maximum dry unit weight as defined by the modified Proctor test (ASTM D1557). Any soft soil pockets should be undercut and replaced with compacted fill. Consequently, samples to be tested by the Proctor method should be obtained from a representative area and from the same elevation as the design booster station subgrade.

After the bottom of the excavation has been compacted, structural fill can be placed in any over-excavation area to bring the excavation to the desired final grade. Structural fill should be placed in accordance with the recommendations given under foundation preparation for the booster station. The soil removed from this site that is free of organic or objectionable materials as defined by a field technician who is qualified in soil material identification and compaction procedures can be reused as backfill. Objectionable or undesirable soils are defined as those materials that cannot meet design placement specifications or materials that will deteriorate with time. It should be noted that lean clay and fat clay soils may require reworking to adjust the moisture content to meet the compaction criteria. For the recommended allowable bearing capacities outlined in Table 4-3 for the original soil layer or for the newly compacted backfill, the total estimated amount of settlement of the foundations will be about one inch.

We understand that the bottoms of the booster station foundations and the invert of the pipe will be more than 36 inches below the final adjacent grades. As a result, frost penetration and heaving should not be a problem for the pump station foundations.

Foundations supported on soil settle as the result of externally applied loads. While the foundations of the booster station should be expected to settle, the amount of settlement should be within the tolerable limits for the structures.

Based on the results of the soil boring, bedrock was encountered at the depth and elevation tabulated in Table 4-4.

Table 4-4. Depth to Bedrock

Boring No.	Depth to Top of Bedrock (ft)	Elevation* at Top of Bedrock (ft)	Depth to Auger Refusal (ft)	Elevation* at Auger Refusal (ft)
4	9.0	891.7	10.5	890.2

*In reference to surface elevation based on Ohio South State Plane Coordinate System.

The rippability of the bedrock will depend on the type of equipment. We recommend that the earth contractor use his own equipment to perform the test pits and to form his own opinion about the rippability.

4.3 Subgrade Soil Classification for Trench Excavation

Based on Occupational Safety and Health Administration (OSHA) Subpart P-Excavations (29 CFR PART 1926), cohesive soil with an unconfined compressive strength of 3,000 pounds per square foot (psf) or greater can be classified as Type "A" soil. Cohesive soil with an unconfined compressive strength greater than 1,000 psf but less than 3,000 psf can be classified as Type "B" soil, and cohesive soil with an unconfined compressive strength of 1,000 psf or less can be classified as Type "C" soil. Dense or very dense granular soil with no water can be classified as Type "B" soil; the other granular soils should be classified as Type "C" soil. Previously disturbed soil (fill) should not be classified as Type "A" soil. Soil that is fissured shall not be classified as Type "A" soil. Based on the standard penetration test (SPT) results from this study, the subgrade soils in the vicinity of the proposed booster pump station are classified as shown in Table 4-5.

Table 4-5. Subgrade Soil Classification (OSHA)

Boring No.	Depth (ft.)	OSHA Soil Type
4	0.0 – 3.5	B
	3.5 – 9.0	A
	9.0 – 10.5	Rock

If weaker soil is encountered below stronger soil, the classifications of all of the stronger soil above the weaker soil layer will have to be lowered to the weaker soil classification. At the time of our study, free groundwater was not encountered in Boring 4. Any groundwater encountered should be lowered to at least three feet below the bottom of the maximum excavation in the granular soil layer and to the bottom of the maximum excavation in the silty and clayey soil layer using sumps and pumps. Otherwise, the bottoms of the trench excavation will be very soft due to the groundwater seepage. All submerged soil or soil from which water is freely seeping should be classified as Type "C" soil.

The side slopes of the trench excavations should be maintained in accordance with OSHA trench excavation regulations for stability and for safety of the worker. The sloping and benching method can be used during the installation of the line. For type "A" soil, a side slope of 3/4 (horizontal) to 1 (vertical) should be provided; For type "B" soil, a side slope of 1 (horizontal) to 1 (vertical) should be provided; and For type "C" soil, a side slope of 1-1/2 (horizontal) to 1 (vertical) should be provided.

As an alternative to the sloping and benching method, a trench box can be used to keep the side walls from caving in and for the safety of the workers. The trench box should be rated in accordance with OSHA regulations. Tabulated data for the trench box that identify the registered professional engineer who approved the data should be kept on the job site. For more detailed information on the OSHA regulations, please refer to OSHA Subpart P-Excavations (29 CFR PART 1926).

During the trench excavations, the subsurface conditions should be verified. A "competent person" as defined by OSHA should be present throughout the sewer line trench excavations to verify the soil types and soil conditions. The sloping and benching or trench box design should be adjusted with changes in the subgrade soil in accordance with OSHA regulations.

4.4 Lateral Earth Pressure for Booster Station Wall Design

The booster station pit walls should be designed as retaining walls to resist the lateral earth pressure. Free-draining granular materials should be placed behind the perimeter walls. Water should not be allowed to accumulate behind the walls. With the retaining walls to be backfilled with free-draining granular backfill, an "at-rest," lateral earth-pressure coefficient of 0.5 should be used to determine the lateral earth pressure against the walls. A lateral soil pressure of 63 pounds per square foot per foot depth can be used in the design of the walls. If water will be allowed to accumulate behind the walls, a static water pressure of 62.4 psf per foot depth should

be added onto the design lateral pressure against the walls. The design of the booster station pit walls is beyond the scope of the study.

4.5 Compaction Requirements

Structural fill placed below the foundation bearing elevation should be compacted to at least 95% of the maximum dry unit weight with moisture contents within 2% of the optimum moisture content as determined by the modified Proctor test (ASTM D1557). Fill placed above the bottoms of the foundations or under pavement areas should be compacted to at least 90% of the maximum dry unit weight with moisture contents within 2% of the optimum moisture content as determined by the modified Proctor test (ASTM D1557). The compaction should be accomplished by placing the fill in successive, horizontal, approximately six- to eight-inch-thick loose lifts and mechanically compacting each lift to at least the specified minimum dry density. Field density tests should be performed at a minimum rate of one per 2,500 square feet of fill area and for each lift to verify that adequate compaction is achieved. Backfill for utility trenches, foundation excavations, etc., within structures or paved areas, is considered structural fill and should be placed in accordance with these recommendations.

It must be emphasized that the excavation and compaction of soil fill are highly influenced by weather conditions. Performing the earthwork under wet and frozen conditions is generally very difficult. As a result, compaction of wet silty and clayey soil should be avoided during wet and frozen conditions because the wet soil cannot be compacted to the required unit weight without drying or other soil stabilization methods. Alternatively, granular soil can be used as backfill to facilitate the backfill and compaction work during winter and wet weather conditions. The construction cost during the winter and wet weather conditions will be higher by the purchase of granular soil from the sand and gravel pits.

Puddling or jetting of the backfill material, including the utility trenches, should not be allowed as a compaction method. Silty or clayey soils encountered above foundation depth will often soften, and the bearing capacity may be reduced if water ponds in the excavation.

Lean concrete that is placed below the bottom of foundation should have a minimum 28-day compressive strength of 2,000 pounds per square inch (psi).

4.6 Pit Slab On-Grade

The booster station pit slab on-grade can be supported on the original subgrade soils or on compacted fill placed over bedrock in accordance with the recommendations given above. If compacted fill will be placed over the bedrock as the subgrade for the slab on-grade, we recommend that the backfill be a well-graded, angular, granular material such as crushed sand and gravel or crushed stone with fines less than 10% to help distribute concentrated loads under the slabs.

There also will be a potential for surface water to infiltrate behind the pit wall. The pump pit will have to be designed as a watertight structure. An underdrain system with a sump pit is recommended outside the pump pit to lower the water accumulation behind the wall. If water will accumulated behind the pit wall, the pit floor should be designed to handle the uplift force applied by the water and the pit should be anchored to bedrock against the floating of the pump pit. The slab should be a structural slab connected with the pit-wall foundations and the pit walls. An adequate amount of reinforced steel should be provided between the pit walls and the bottom pit slab. Otherwise, the groundwater will lift up the pit slab.

Topsoil, fill, and/or other deleterious materials encountered during the site preparation should be removed and wasted. For any over-excavations, the soil should be replaced with select engineered fill that is compacted to the specifications outlined above.

4.7 Foundation Excavations

During the foundation excavations, the subsurface conditions should be verified. Changes in subsurface conditions other than what are shown on the boring logs warrant additional subsurface investigation before the water tower and booster station foundations are constructed.

The foundation excavations should be observed to ensure that the loose, soft, or otherwise undesirable materials are removed and that the foundations will be supported directly on an acceptable surface. At the time of this observation, it may be necessary to use a hand penetration device in the base of the foundation excavation to ensure that the soils immediately below the foundation base are satisfactorily prepared to support the foundations. Please note that such shallow observations do not replace an adequate deep-boring program and structural fill compaction QA/QC records. The overall performance of the foundations is governed by the soils below the bottom of the footing foundation.

If pockets of soft, loose, or otherwise unsuitable materials are encountered in the footing excavations and it is inconvenient to lower the footings, the proposed footing elevations may be reestablished by backfilling after the undesirable materials have been removed. The excavation under each footing should extend to suitable soils, and the base of the excavation should extend one lateral foot for every foot of excavation below the bottom of the footing foundation as shown in Figure 3 in Section III. The entire excavation should then be refilled with well-compacted, engineered fill. Special care should be taken to remove the sloughed, loose, or soft materials near the base of the excavation slopes. Extra care should also be taken to tie-in the compacted fill with the excavation slopes, with benches as necessary, to ensure that no pockets of loose or soft materials are left along the excavation slopes below the foundation bearing level. The contractor should maintain temporary cut slopes in accordance with the current OSHA regulations governing trenching and slope stability.

Soils exposed at the bases of satisfactory foundation excavations should be protected against any detrimental change in condition such as from construction disturbances, rain, and freezing. Surface runoff should be drained away from the excavation and not allowed to pond. If possible, foundation concrete should be placed the same day the excavation is made. If this is not practical, the foundation excavations should be adequately protected. Also, for this reason, proper drainage should be maintained after construction. It must be emphasized that all excavations must conform to all state, federal, and local regulations relative to slope geometry.

4.8 Trench Excavations

During the trench excavations, the subsurface conditions should be verified. Changes in subsurface conditions other than what are shown on the boring logs warrant additional subsurface investigation before the booster station and pipe foundation are constructed.

The trench excavations should be observed to ensure that the loose, soft, or otherwise undesirable materials are removed and that any foundations will be supported directly on an acceptable surface. At the time of this observation, it may be necessary to use a hand penetration device in the base of the trench excavation to ensure that the soils immediately below the foundation base are satisfactorily prepared to support the foundations. Please note that such shallow observations do not replace an adequate deep-boring program and structural fill compaction QA/QC records. The overall performance of the foundations is governed by the soils below the bottom of the foundation.

If pockets of soft, loose, or otherwise unsuitable materials are encountered at the bottom of the trench excavation, the proposed line elevations may be reestablished by backfilling after the undesirable materials have been removed. The excavation should extend to suitable soils, and the base of the excavation should extend one lateral foot for every foot of excavation below the bottom of the foundation. The entire excavation should then be refilled with well-compacted, engineered fill. Special care should be taken to remove the sloughed, loose, or soft materials near the base of the excavation slopes. Extra care should also be taken to tie-in the compacted fill with the excavation slopes, with benches as necessary, to ensure that no pockets of loose or soft materials are left along the excavation slopes below the foundation bearing level. The contractor should maintain temporary cut slopes in accordance with the current OSHA regulations governing trenching and slope stability.

Soils exposed at the bases of satisfactory foundation excavations should be protected against any detrimental change in condition such as from construction disturbances, rain, and freezing. Surface runoff should be drained away from the excavation and not allowed to pond. It must be emphasized that all excavations must conform to all state, federal, and local regulations relative to slope geometry.

4.9 Construction Dewatering

At the time of our study, free groundwater was encountered in Boring 2 at a depth of between 4.5 and 8.0 feet below the existing grade as outlined in Table 3-1. No free groundwater was encountered in the rest of the borings. Any groundwater encountered should be lowered to at least three feet below the bottom of the maximum excavation in sand and gravel layers and to the bottom of the maximum excavation in silt and clay layers using sumps and pumps. Sumps can consist of perforated pipes installed vertically in the relatively permeable granular soils and surrounded with free-draining sand and gravel. The perforations of the pipe should be covered with a layer of filter fabric to prevent silt and fine sand from pumping through the sumps. Care must be exercised when pumping from sumps that extend into silts or other granular soils since general deterioration of the bearing soils and a localized "quick" condition could result. The groundwater should be kept at a level below the fill operation during the placement and compaction of the backfill materials during the construction of the foundations.

For the Geopiers® method, any groundwater seepage can be intercepted by lowering a submersible pump into the cased open holes. The water can be pumped from the bottoms of the Geopier® excavations. Casings would then be required to keep the shafts from caving in.

The amount and type of dewatering required during construction will depend on the weather and groundwater levels at the time of construction, and the effectiveness of the contractor's techniques in preventing surface runoff from entering open excavations. Typically, groundwater levels are highest during winter and spring, and lower in summer and early fall.

4.10 Drainage

Adequate drainage should be provided at the site to minimize any increase in moisture content of the foundation soils during and after construction. The exterior grade including all pavements or parking areas should be sloped away from the new water tower and booster station foundations to keep water from ponding. All permanent foundation, wall, and below-grade floor drains should provide positive discharge away from the structures.

5.0 CLOSURE

5.1 Basis of Recommendations

The evaluations, conclusions, and recommendations in this report are based on our interpretation of the field and laboratory data obtained during the exploration, our understanding of the project and our experience with similar sites and subsurface conditions. Data used during this exploration included, but were not necessarily limited to:

- Four exploratory borings performed during this study.
- Observations of the project site by our staff.
- The results of the laboratory soil tests.
- The site plan provided by Board of Clark County Commissioners c/o Clark County Utilities Department.

- Limited interaction with Mr. Chuck Bauer, P.E., Director Utilities Department and Solid Waste District of Board of Clark County Commissioners c/o Clark County Utilities Department.
- Published soil or geologic data of this area.

In the event that changes in the project characteristics are planned, or if additional information or differences from the conditions anticipated in this report become apparent, Bowser-Morner, Inc. should be notified so that the conclusions and recommendations contained in this report can be reviewed and, if necessary, modified or verified in writing.

5.2 Limitations and Additional Services

The subsurface conditions discussed in this report and those shown on the boring logs represent an estimate of the subsurface conditions based on interpretation of the boring data using normally accepted geotechnical engineering judgments. Although individual test borings are representative of the subsurface conditions at the boring locations on the dates shown, they are not necessarily indicative of subsurface conditions at other locations or at other times.

Regardless of the thoroughness of a subsurface exploration, there is the possibility that conditions between borings will differ from those at the boring locations, that conditions are not as anticipated by designers, or that the construction process has altered the soil conditions. As variations in the soil profile are encountered, additional subsurface sampling and testing may be necessary to provide data required to reevaluate the recommendations of this report. Consequently, after submission of this report, it is recommended that Bowser-Morner, Inc. be authorized to perform additional services to work with the designer(s) to minimize errors and omissions regarding the interpretation and implementation of this report.

Before construction begins, we recommend that Bowser-Morner, Inc.:

- Work with the designers to implement the recommended geotechnical design parameters into plans and specifications.
- Consult with the design team regarding interpretation of this report.
- Establish criteria for the construction observation and testing for the soil conditions encountered at this site.
- Review final plans and specifications pertaining to geotechnical aspects of design.

During construction, we recommend that Bowser-Morner, Inc.:

- Observe the construction, particularly the site preparation, fill placement, and foundation excavation or installation.
- Perform in-place density testing of all compacted fill.
- Perform materials testing of soil and other materials as required.
- Consult with the design team to make design changes in the event that differing subsurface conditions are encountered.

If Bowser-Morner, Inc. is not retained for these services, we shall assume no responsibility for construction compliance with the design concepts, specifications or recommendations.

5.3 Warranty

Our professional services have been performed, our findings obtained and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices. No other warranty, express or implied, is made.

The scope of this study did not include an environmental assessment for the presence or absence of hazardous or toxic materials in the soil, surface water, groundwater or air, on, within or beyond the site studied. Any statements in the report or on the boring logs regarding odors, staining of soils or other unusual items or conditions observed are strictly for the information of our client.

To evaluate the site for possible environmental liabilities, we recommend an environmental assessment, consisting of a detailed site reconnaissance, a record review, and report of findings. Additional subsurface drilling and sampling, including groundwater sampling, may be required. Bowser-Morner, Inc. can provide this service and would be pleased to provide a cost proposal to perform such a study, if requested.

This report has been prepared for the exclusive use of Board of Clark County Commissioners c/o Clark County Utilities Department for specific application to the water tower on Ingling Drive in Donnelsville, Ohio (see Figure 1 in Section III of this report). Specific design and construction recommendations have been provided in the various sections of the report. The report shall therefore, be used in its entirety. This report is not a bidding document and shall not be used for that purpose. Anyone reviewing this report must interpret and draw their own conclusions regarding specific construction techniques and methods chosen. Bowser-Morner, Inc. is not responsible for the independent conclusions, opinions or recommendations made by others based on the field exploration and laboratory test data presented in this report.

Section II
Specifications

CLEARING AND GRADING SPECIFICATIONS

I. GENERAL CONDITIONS

The contractor shall furnish all labor, materials, and equipment, and perform all work and services necessary to complete in a satisfactory manner the site preparation, excavation, filling, compaction and grading as shown on the plans and as described therein.

This work shall consist of all clearing and grading, removal of existing structures unless otherwise stated, preparation of the land to be filled, filling of the land, spreading and compaction of the fill, and all subsidiary work necessary to complete the grading of the cut and fill areas to conform with the lines, grades, slopes, and specifications.

This work is to be accomplished under the constant and continuous supervision of the Owner or his designated representative.

In these specifications the terms "approved" and "as directed" shall refer to directions to the Contractor from the Owner or his designated representative.

II. SUBSURFACE CONDITIONS

Prior to bidding the work, the Contractor shall examine, investigate and inspect the construction site as to the nature and location of the work, and the general and local conditions at the construction site, including, without limitation, the character of surface or subsurface conditions and obstacles to be encountered on and around the construction site; and shall make such additional investigation as he may deem necessary for the planning and proper execution of the work. Borings and/or soil investigations shall have been made. Results of these borings and studies will be made available by the Owner to the Contractor upon his request, but the Owner is not responsible for any interpretations or conclusions with respect thereto made by the Contractor on the basis of such information, and the Owner further has no responsibility for the accuracy of the borings and the soil investigations.

If conditions other than those indicated are discovered by the Contractor, the Owner should be notified immediately. The material which the Contractor believes to be a changed condition should not be disturbed so that the Owner can investigate the condition.

III. SITE PREPARATION

Within the specified areas, all trees, brush, stumps, logs, tree roots, and structures scheduled for demolition shall be removed and disposed of.

All cut and fill areas shall be properly stripped. Topsoil will be removed to its full depth and stockpiled for use in finish grading. Any rubbish, organic and other objectionable soils, and other deleterious material, shall be disposed of off the site, or as directed by the Owner or his designated representative if on site disposal is provided. In no case shall such objectionable material be allowed in or under the fill unless specifically authorized in writing.

Prior to the addition of fill, the original ground shall be compacted to job specifications as outlined below. Special notice shall be given to the proposed fill area at this time. If wet spots, spongy conditions, or ground water seepage is found, corrective measures must be taken before the placement of fill.

IV. FORMATION OF FILL AREAS

Fills shall be formed of satisfactory materials placed in successive horizontal layers of not more than eight (8) inches in loose depth for the full width of the cross section. The depth of lift may be increased if the Contractor can demonstrate the ability to compact a larger lift. If compaction is accomplished using hand-tamping equipment, lifts will be limited to 4-inch loose lifts.

All material entering the fill shall be free of organic matter such as leaves, grass, roots, and other objectionable material.

The operations on earth work shall be suspended at any time when satisfactory results cannot be obtained because of rain, freezing weather, or other unsatisfactory conditions. The Contractor shall keep the work areas graded to provide the drainage at all times.

The fill material shall be of the proper moisture content before compaction efforts are started. Wetting or drying of the material and manipulation to secure a uniform moisture content throughout the layer shall be required. Should the material be too wet to permit proper compaction or rolling, all work on all portions of the embankment thus affected shall be delayed until the material has dried to the required moisture content. The moisture content of the fill material should be no more than two (2) percentage points higher or lower than optimum unless otherwise authorized. Sprinkling shall be done with equipment that will satisfactorily distribute the water over the disced area.

Compaction operations shall be continued until the fill is compacted to not less than 90% above foundation elevation and 95% below foundation elevation, of the maximum density as determined in accordance with the latest ASTM D-1557 (Modified). Any areas inaccessible to a roller shall be consolidated and compacted by mechanical tampers. The equipment shall be operated in such a manner that hardpan, cemented gravel, clay or other chunky soil material will be broken up into small particles and become incorporated with the other material in the layer.

In the construction of filled areas, starting layers shall be placed in the deepest portion of the fill, and as placement progresses, additional layers shall be constructed in horizontal planes. If directed, original slopes shall be continuously, vertically benched to provide horizontal fill planes. The size of the benches shall be formed so that the base of the bench is horizontal and the back of the bench is vertical. As many benches as are necessary to bring the site to final grade shall be constructed. Filling operations shall begin on the lowest bench, with the fill being placed in horizontal eight (8) inch loose lifts unless otherwise authorized. The filling shall progress in this manner until the entire first bench has been filled, before any fill is placed on the succeeding benches. Proper

drainage shall be maintained at all times during benching and filling of the benches, to insure that all water is drained away from the fill area.

When rock and other embankment material are excavated at approximately the same time, the rock shall be incorporated into the outer portion of the areas. Stones or fragmentary rock larger than four (4) inches in their greatest dimensions will not be allowed in the fill unless specifically authorized in writing. Rock fill shall be brought up in layers as specified or as directed, and every effort shall be exerted to fill the voids with the finer material to form a dense, compact mass. Rock or boulders shall be disposed of as deleterious material per Item III.

Frozen material shall not be placed in the fill nor shall the fill be placed upon frozen material.

The Contractor shall be responsible for the stability of all fills made under the contract, and shall replace any portion, which in the opinion of the Owner or his designated representative, has become displaced due to carelessness or negligence on the part of the Contractor. Fill damaged by inclement weather shall be repaired at the Contractor's expense.

V. SLOPE RATIO AND STORM WATER RUN-OFF

Slopes shall not be greater than 2 (horizontal) to 1 (vertical) in both cut and fill, and storm water shall not be drained over the slopes.

VI. GRADING

The Contractor shall furnish, operate, and maintain such equipment as is necessary to construct uniform layers, and control smoothness of grade for maximum compaction and drainage.

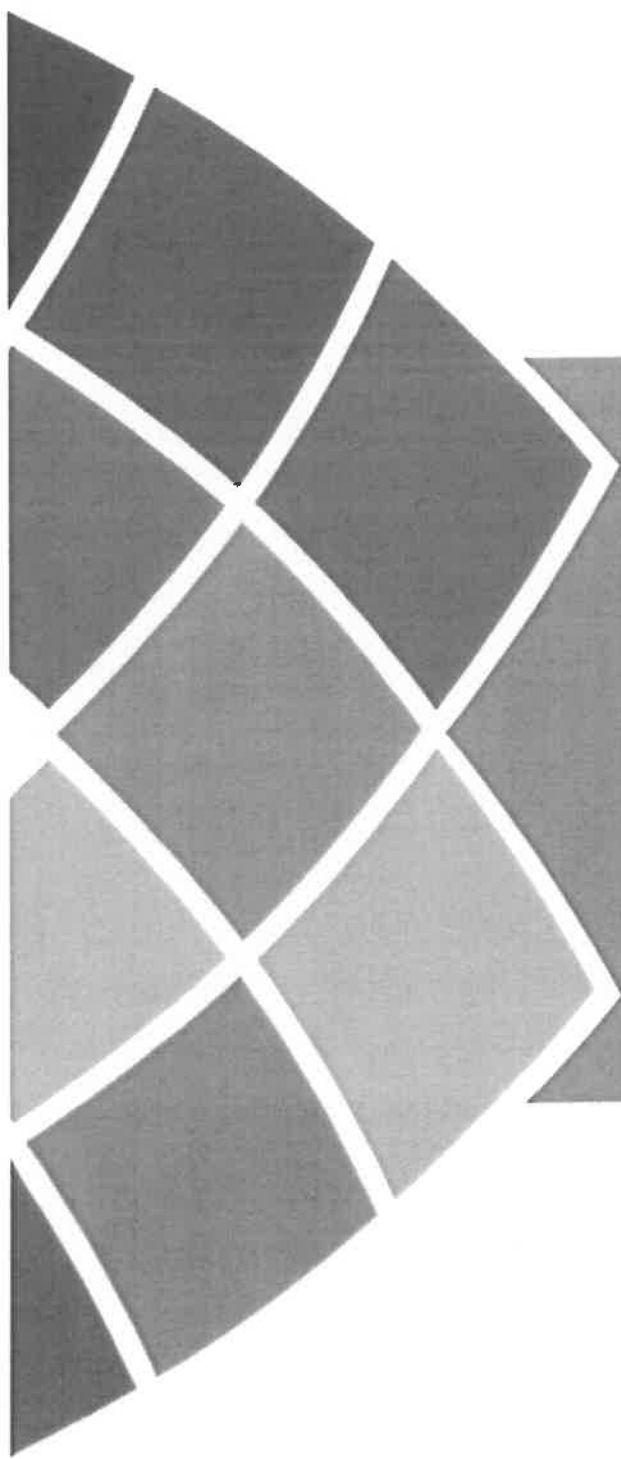
VII. COMPACTING

The compaction equipment shall be approved equipment of such design, weight, and quantity to obtain the required density in accordance with these specifications.

VIII. TESTING AND INSPECTION SERVICES

Testing and inspection services will be provided by the Owner.

IX. SPECIAL CONDITIONS



Section III

**Boring Log Terminology, Boring Logs,
Laboratory Data, And Prints**

BORING LOG TERMINOLOGY

Stratum Depth:

Distance in feet and/or inches below ground surface.

Stratum Elevation:

Elevation in feet below ground surface elevation.

Description of Materials:

Major types of soil material existing at boring location. Soil classification based on one of the following systems: Unified Soil Classification System, Ohio State Highway Classification System, Highway Research Board Classification System, Federal Aviation Authority Classification System, Visual Classification.

Sample No.:

Sample numbers are designated consecutively, increasing with depth for each boring.

Sample Type:

"A" Split spoon, 2" O.D., 1-3/8" I.D., 18" in length.

"B" Rock Core

"C" Shelby Tube 3" O.D. except where noted

"D" Soil Probe

"E" Auger Cuttings

"F" Sonic

Sample Depth:

Depth below top of ground at which appropriate sample was taken.

Blows per 6" on Sampler:

The number of blows required to drive a 2" O.D., 1-3/8" I.D., split spoon sampler, using a 140 pound hammer with a 30-inch free fall, is recorded for 6" drive increments. (Example: 3/8/9).

"N" Blows/Ft.:

Standard penetration resistance. This value is based on the total number of blows required for the last 12" of penetration. (Example: 3/8/9: $N = 8 + 9 = 17$)

Water Observations:

Depth of water recorded in test boring is measured from top of ground to top of water level. Initial depth indicates water level during boring, completion depth indicates water level immediately after boring, and depth after "X" number hours indicates water level after letting water rise or fall over a time period. Water observations in pervious soil are considered reliable ground water levels for that date. Water observations in impervious soils can not be considered accurate ground water measurements for that date unless records are made over several days' time. Factors such as weather, soil porosity, etc., will cause the ground water level to fluctuate for both pervious and impervious soils.

SOIL DESCRIPTION

Color:

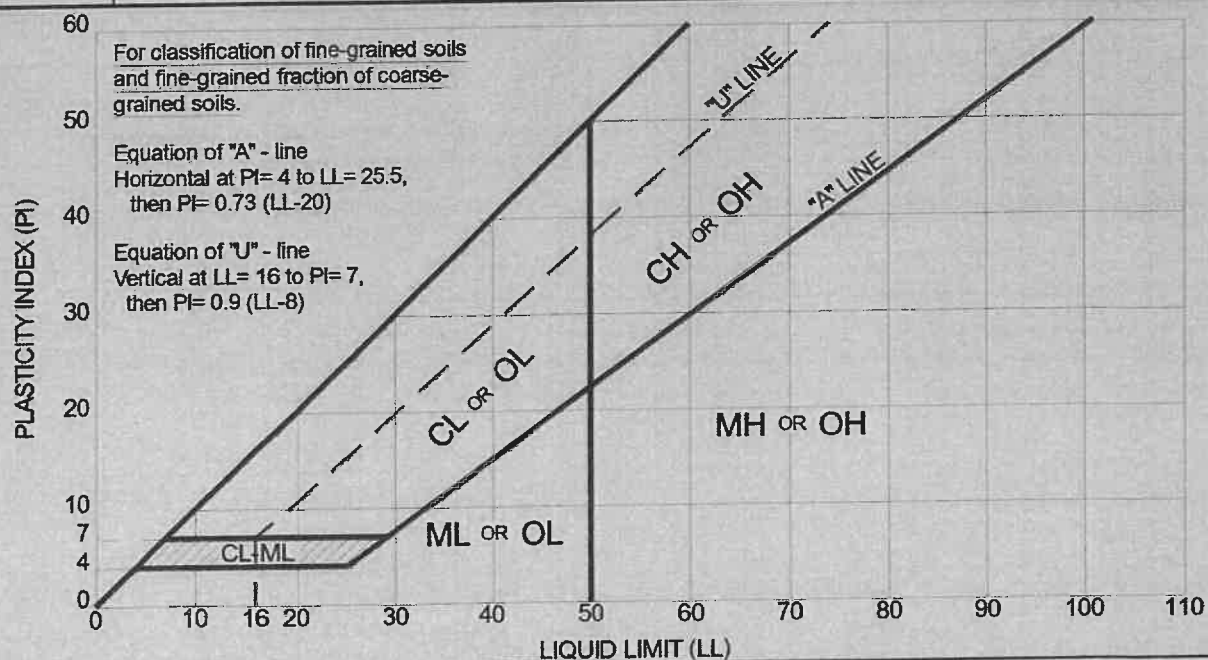
When the color of the soil is uniform throughout, the color recorded will be such as brown, gray, or black and may be modified by adjectives such as light and dark. If the soil's predominant color is shaded by a secondary color, the secondary color precedes the primary color, such as: gray-brown, yellow-brown. If two major and distinct colors are swirled throughout the soil, the colors will be modified by the term mottled, such as: mottled brown and gray.

Particle Size	Visual	Soil Components	
		Major Component:	Minor Component Term
Boulders	Larger than 8"	Gravel	Trace 1-10%
Cobbles	8" to 3"	Sand	Some 11-35%
Gravel - Coarse	3" to 3/4"	Silt	And 36-50%
- Fine	2 mm. To 3/4"	Clay	
Sand - Coarse	2 mm. - 0.6 mm. (Pencil lead size)		
- Medium	0.6 mm. - 0.2mm. Table sugar and salt size)		
- Fine	0.2 mm. - 0.06 mm. (Powdered sugar and human hair size)		
Silt	0.06 mm. - 0.002 mm.		
Clay	0.002 and smaller (Particle size of both Silt and Clay not visible To naked eye)		
		Moisture Content	
		Term	Relative Moisture
		Dry	Powdery
		Damp	Moisture content below plastic limit
		Moist	Moisture content above plastic limit but below liquid limit
		Wet	Moisture content Above liquid limit

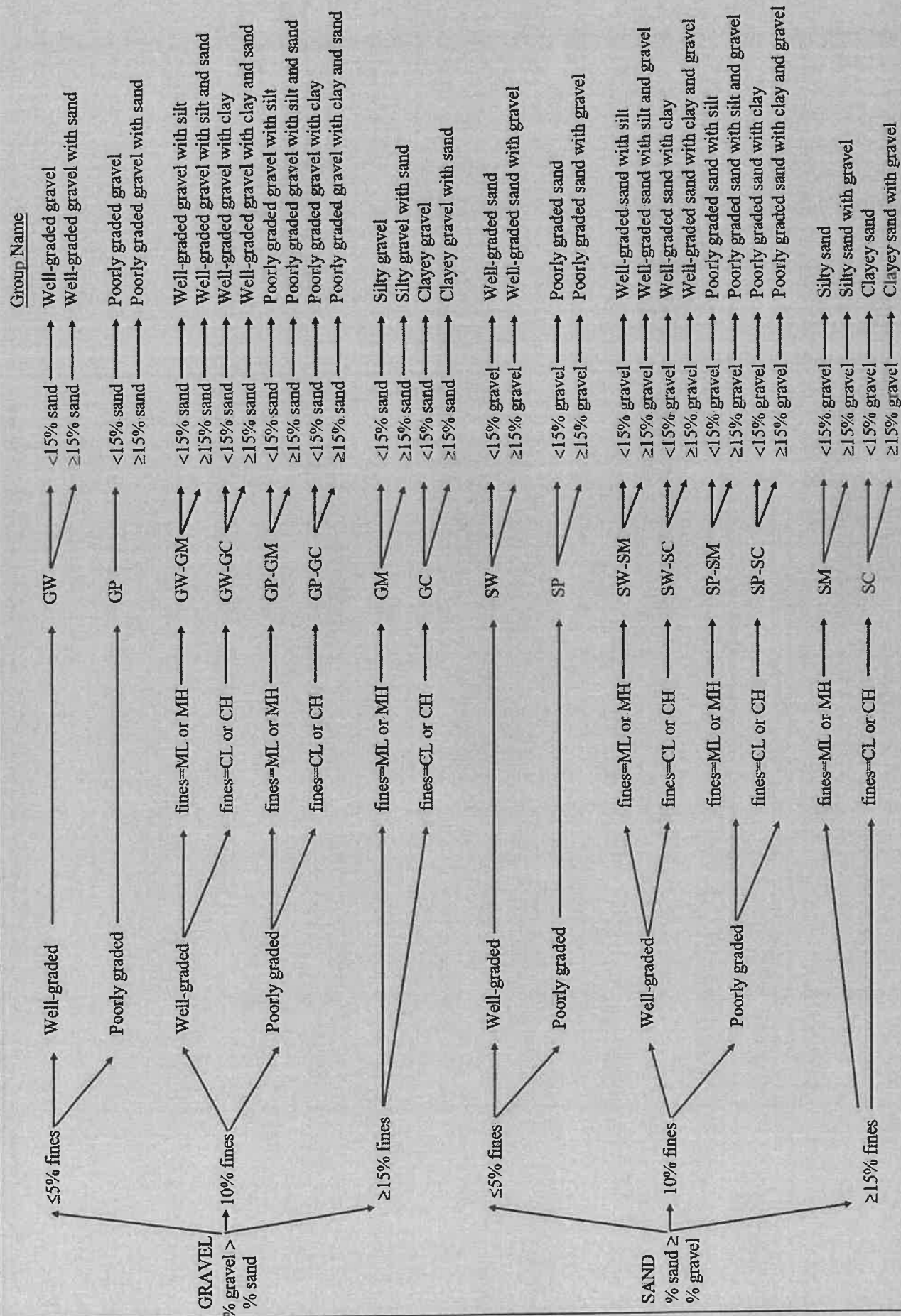
Condition of Soil Relative to Compactness Granular Material		Condition of Soil Relative to Consistency Cohesive Material	
Very Loose	5 blows/ft. or less	Very Soft	3 blows/ft. or less
Loose	6 to 10 blows/ft.	Soft	4 to 5 blows/ft.
Medium Dense	11 to 30 blows/ft.	Medium Stiff	6 to 10 blows/ft.
Dense	30 to 50 blows/ft.	Stiff	11 to 15 blows/ft.
Very Dense	51 blows/ft. or more	Very stiff	16 to 30 blows/ft.
		Hard	31 blows/ft. or more

UNIFIED CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GRAPH SYMBOL	LETTER SYMBOL	TYPICAL DESCRIPTIONS	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVEL WELL-GRADED GRAVEL WITH SAND	
				GP	POORLY GRADED GRAVEL POORLY GRADED GRAVEL WITH SAND	
		MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	GRAVELS WITH FINES APPRECIABLE AMT. OF FINES)		GM	SILTY GRAVEL SILTY GRAVEL WITH SAND
					GC	CLAYEY GRAVEL CLAYEY GRAVEL WITH SAND
	SAND AND SANDY SOILS	CLEAN SAND (LITTLE OR NO FINES)		SW	WELL-GRADED SAND WELL-GRADED SAND WITH GRAVEL	
				SP	POORLY GRADED SAND POORLY GRADED SAND WITH GRAVEL	
	MORE THAN 50% OF COARSE FRACTION PASSING NO. 4 SIEVE	SANDS WITH FINES (APPRECIABLE AMT. OF FINES)		SM	SILTY SAND SILTY SAND WITH GRAVEL	
				SC	CLAYEY SAND CLAYEY SAND WITH GRAVEL	
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILT AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	SILT, SILT WITH SAND, SANDY SILT GRAVELLY SILT, GRAVELLY SILT WITH SAND	
				CL	LEAN CLAY WITH SAND, SANDY LEAN CLAY GRAVELLY LEAN CLAY WITH SAND	
				OL	ORGANIC CLAY, SANDY ORGANIC CLAY ORGANIC SILT, SANDY ORGANIC SILT WITH GRAVEL	
	SILT AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	ELASTIC SILT WITH SAND, SANDY ELASTIC SILT GRAVELLY ELASTIC SILT WITH SAND	
				CH	FAT CLAY WITH SAND, SANDY FAT CLAY GRAVELLY FAT CLAY WITH SAND	
				OH	ORGANIC CLAY WITH SAND, SANDY ORGANIC CLAY, ORGANIC SILT, SANDY ORGANIC SILT	
	HIGHLY ORGANIC SOILS		PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS		

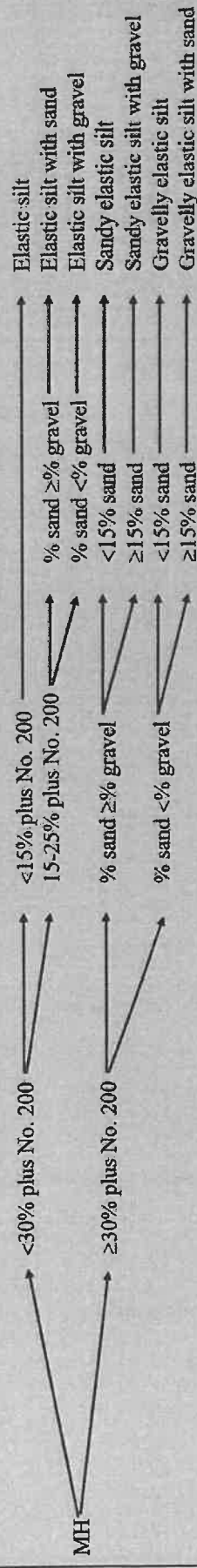
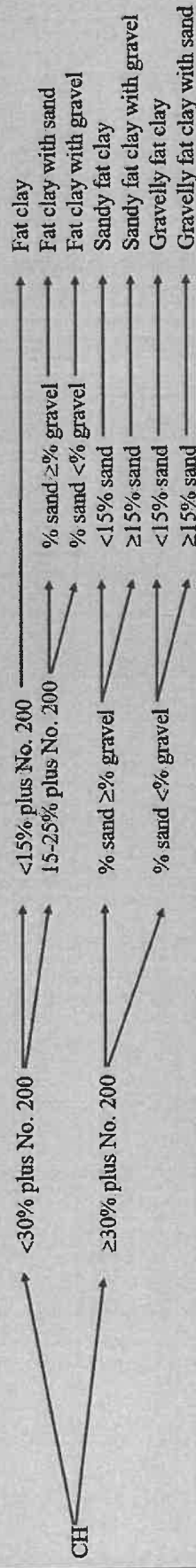
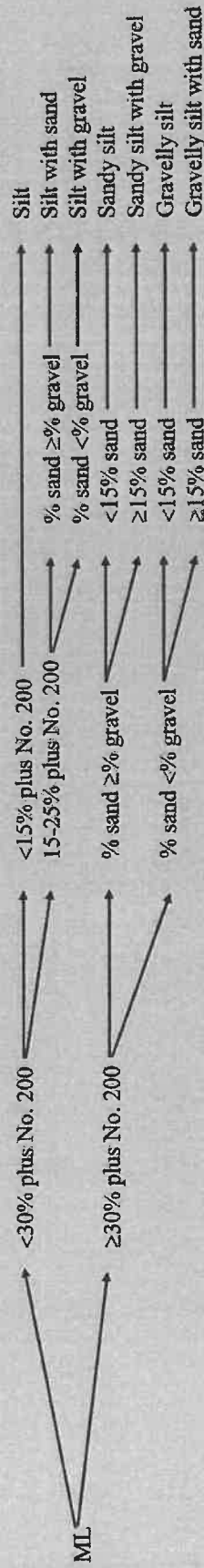
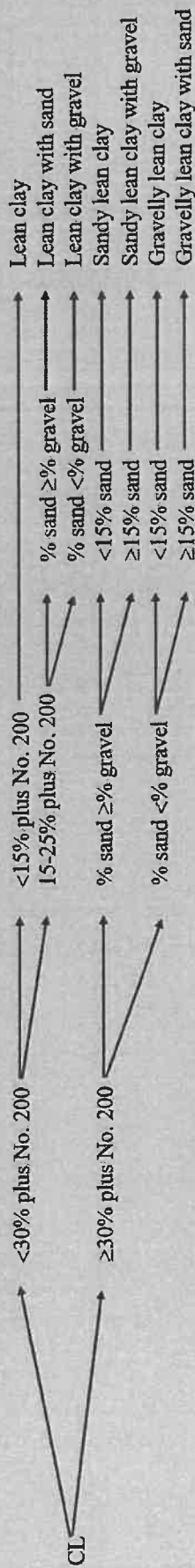


Flow Chart for Visually Identifying Soils Based on ASTM D-2488



Flow Chart for Visually Identifying Soils Based on ASTM D-2488

Group Name



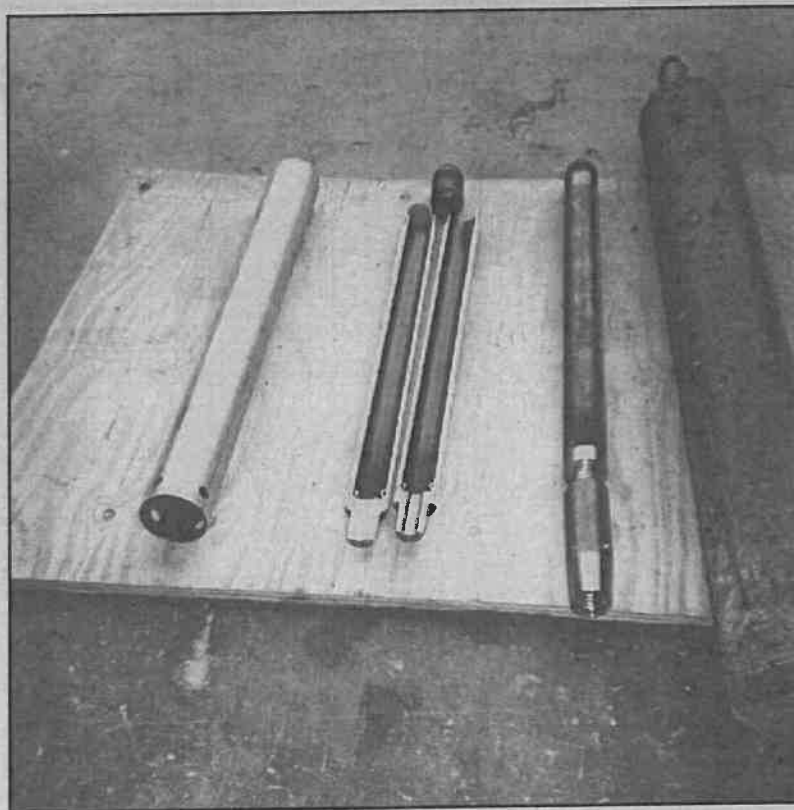
STANDARD PENETRATION RESISTANCE (ASTM D1586)

The purpose of this test is to determine the relative consistency of the soils in a boring, or from boring over the site. This method consists of making a hole in the ground and driving a 2-inch O.D. split spoon sampler into the soil with a 140-pound hammer dropped from a height of 30 inches. The sampler is driven 18 inches and the number of blows recorded for each 6 inches of penetration. Values of standard penetration (N) are determined in blows per foot, summarizing the flows required for the last two 6-inch increments of penetration.

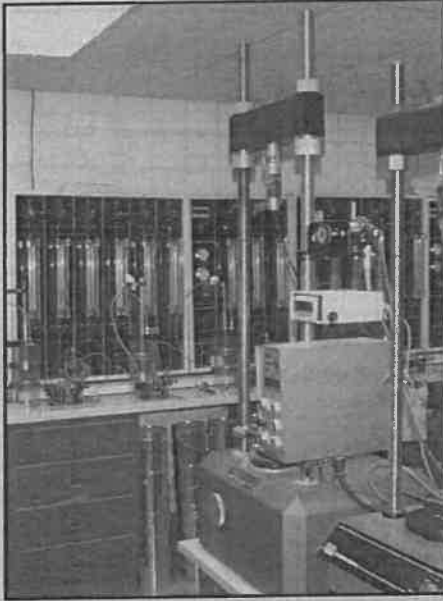
Example : 2-6-8; N = 14

THIN-WALLED SAMPLER (ASTM D1587)

The purpose of the thin-walled sampler is to recover a relatively undisturbed soil sample for laboratory tests. The sampler is a thin-walled seamless tube with a 3-inch outside diameter, which is hydraulically pressed into the ground, at a constant rate. The ends are then sealed to prevent soil moisture loss, and the tube is returned to the laboratory for tests.

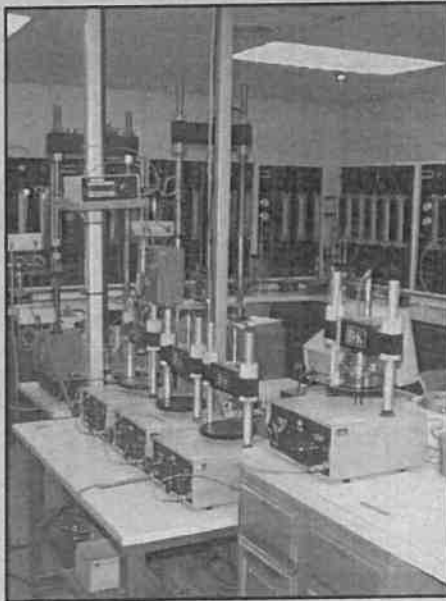


UNCONFINED COMPRESSION OR TRIAXIAL TESTS (ASTM D 2166)



The unconfined compression test and the triaxial tests are performed to determine the shearing strength of the soil, to use in establishing its safe bearing capacity. In order to perform the unconfined compression test, it is necessary that the soil exhibit sufficient cohesion to stand in an unsupported cylinder. These tests are normally performed on samples which are 6.0 inches in height and 2.85 inches in diameter. In the triaxial test, various lateral stresses can be applied to more closely simulate the actual field conditions. There are several different types of triaxial tests. These are, however, normally performed on constant strain apparatus with a deformation rate of 0.05 inches per minute.

CONSOLIDATION TEST (ASTM D 2435)



The purpose of this test is to determine the compressibility of the soil. This test is performed on a sample of soil which is 2.5 inches in diameter and 1.0 inch in height, and has been trimmed from relatively "undisturbed" samples. The test is performed with a lever system or an air activated piston for applying load. The loads are applied in increments and allowed to remain on the sample for a period of 24 hours. The consolidation of the sample under each individual load is measured and a curve of void ratio vs. Pressure is obtained. From the information obtained in this manner and the column loads of the structure, it is possible to calculate the settlement of each individual building column. This information, together with the shearing strength of the soil, is used to determine the safe bearing capacity for a particular structure.

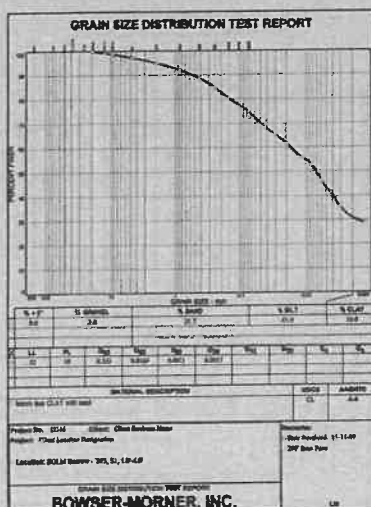
REVISED TO ASTM D4318
ATTERBERG LIMITS (ASTM D423 AND D424)

These tests determine the liquid and plastic limits of soils having a predominant percentage of fine particle (silt and clay) sizes. The liquid limit of a soil is the moisture content expressed as a percent at which the soil changes from a liquid to a plastic state, and the plastic limit is the moisture content at which the soil changes from a plastic to a semi-solid state. Their difference is defined as the plasticity index ($P.I. = L.L. - P.L.$), which is the change in moisture content required to change the soil from a "semi-solid" to a liquid. These tests furnish information about the soil properties which is important in determining their relative swelling potential and their classifications.



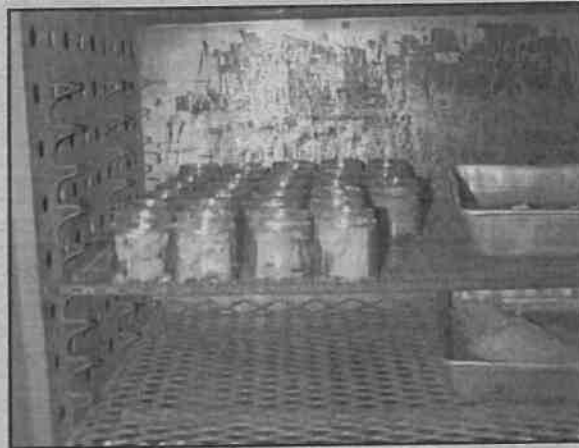
MECHANICAL ANALYSIS (ASTM D422)

This test determines the percent of each particle size of a soil. A sieve analysis is conducted on particle sizes greater than a No. 200 sieve (0.074 mm), and a hydrometer test on particles smaller than the No.200 sieve. The gradation curve is drawn through the points of cumulative percent of particle size, and plotted on semi-logarithmic paper for the combined sieve and hydrometer analysis. This test, together with the Atterberg Limits tests, is used to classify a soil.



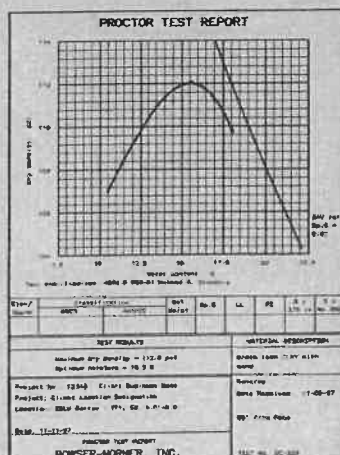
NATURAL MOISTURE CONTENT (ASTM D2216)

The purpose of this test is to indicate the range of moisture contents present in the soil. A wet sample is weighed, placed in the constant temperature oven at 105° for 24 hours, and re-weighed. The moisture content is the change in weight divided by the dry weight.



PROCTOR TESTS

The purpose of these tests is to determine the maximum density and optimum moisture content of a soil. The Modified Proctor test is performed in accordance with ASTM D1557. The test is performed by dropping a 10-pound hammer 25 times from an 18-inch height on each of 5 equal layers of soil in a 1/30 cubic foot mold, which represents a compaction effort of 56,250 foot pounds per cubic foot. The moisture content is then raised, and this procedure is repeated. A moisture density curve is then plotted, with the density on the ordinate axis and the moisture on the abscissa axis. The moisture content at which the maximum density requirement can be achieved with a minimum compactive effort is designated as the optimum moisture content (O.M.C.). The Standard Proctor test is performed in accordance with ASTM D698. This test is similar to the Modified Proctor test and is performed by dropping a 5.5 pound hammer 25 times from a height of 12 inches on 3 equal layers of soil in a 1/30 cubic foot mold, which represents a compaction effort of 12,375 foot pounds per cubic foot. This test gives proportionately lower results than the Modified Proctor test.



CLIENT Board of Clark County Commissioners				JOB NO. 20009322		B-1 Boring No. Sheet 1 OF 1	
PROJECT Proposed Water Tower, Ingling Drive, Donnelsville, Ohio				BORING STARTED 5/7/26 COMPLETED 5/7/26			
				DRILLER Central Star Drilling			
				TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
							0 10 20 30 40 50 60 70 80 90 100		
1.0	SS-1		18		TOPSOIL (5")	3			
					3	6			
2.0					3				
4.0	SS-2		18		Medium stiff, brown, sandy lean CLAY (trace silt, some gravel) - moist	3			
					2	10			
5.0					4				
6.0	SS-3		18			3			
					4	15			
7.0					5				
8.0	SS-4		18		(Stiff at 8.5')				
					4	13			
9.0					6				
10.0									
					7				
11.0									
12.0									
13.0	SS-5		2		Light gray weathered LIMESTONE - wet	50/2"	50		
					B-1 Refusal at 13.7 Ft				

WATER LEVEL MEASUREMENTS				A — SPLIT SPOON B — ROCK CORE C — SHELBY TUBE D — SOIL PROBE E — AUGER CUTTINGS F — SONIC		Bowser-Morner, Inc.	
DEPTH		DATE				Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 BOWSER MORNER.	
INITIAL N/A		N/A					
AT COMPLETION N/A		N/A					
OTHER N/A		N/A					

CLIENT Board of Clark County Commissioners					JOB NO. 20009322		B-2 Boring No. Sheet 1 OF 1	
PROJECT Proposed Water Tower, Ingling Drive, Donnelsville, Ohio					BORING STARTED 5/7/26 COMPLETED 5/7/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
							0 10 20 30 40 50 60 70 80 90 100		
1.0	SS-1		18		TOPSOIL (5")				
					Medium stiff, brown, sandy lean CLAY (trace silt, some gravel)	3			
2.0					– moist	3			
3.0	SS-2		18						
4.0						3			
5.0						4			
6.0	SS-3		18						
7.0						5			
8.0						4			
9.0	SS-4		18		(Water encountered at 8.0') (Some limestone fragments encountered. Very stiff at 8.5')				
10.0						9			
11.0						14			
12.0	SS-5		3		Light gray weathered LIMESTONE – wet				
						50/3"			
					B-2 Refusal at 12.3 Ft				

WATER LEVEL MEASUREMENTS				A – SPLIT SPOON B – ROCK CORE C – SHELBY TUBE D – SOIL PROBE E – AUGER CUTTINGS F – SONIC		Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 BOWSER MORNER.	
DEPTH		DATE					
INITIAL <u>8</u>		<u>05/07/2026</u>					
AT COMPLETION <u>4.5</u>		<u>05/07/2026</u>					
OTHER N/A		N/A					

CLIENT Board of Clark County Commissioners				JOB NO. 20009322		B-3 Boring No. Sheet 1 OF 1	
PROJECT Proposed Water Tower, Ingling Drive, Donnelsville, Ohio				BORING STARTED 5/7/26 COMPLETED 5/7/26			
				DRILLER Central Star Drilling			
				TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
							0 10 20 30 40 50 60 70 80 90 100		
1.0	SS-1		18		TOPSOIL (5")	3			
2.0					Medium stiff, brown, sandy lean CLAY (trace silt, some gravel) – moist	3			
3.0					3				
4.0	SS-2		18			3			
5.0					4				
6.0					5				
7.0	SS-3		18			3			
8.0					3				
9.0					3				
9.0	SS-4		13		(Hard at 8.5")	6			
10.0					Light gray LIMESTONE – dry	31			
						50/1"			
					B-3 Refusal at 10.5 Ft				

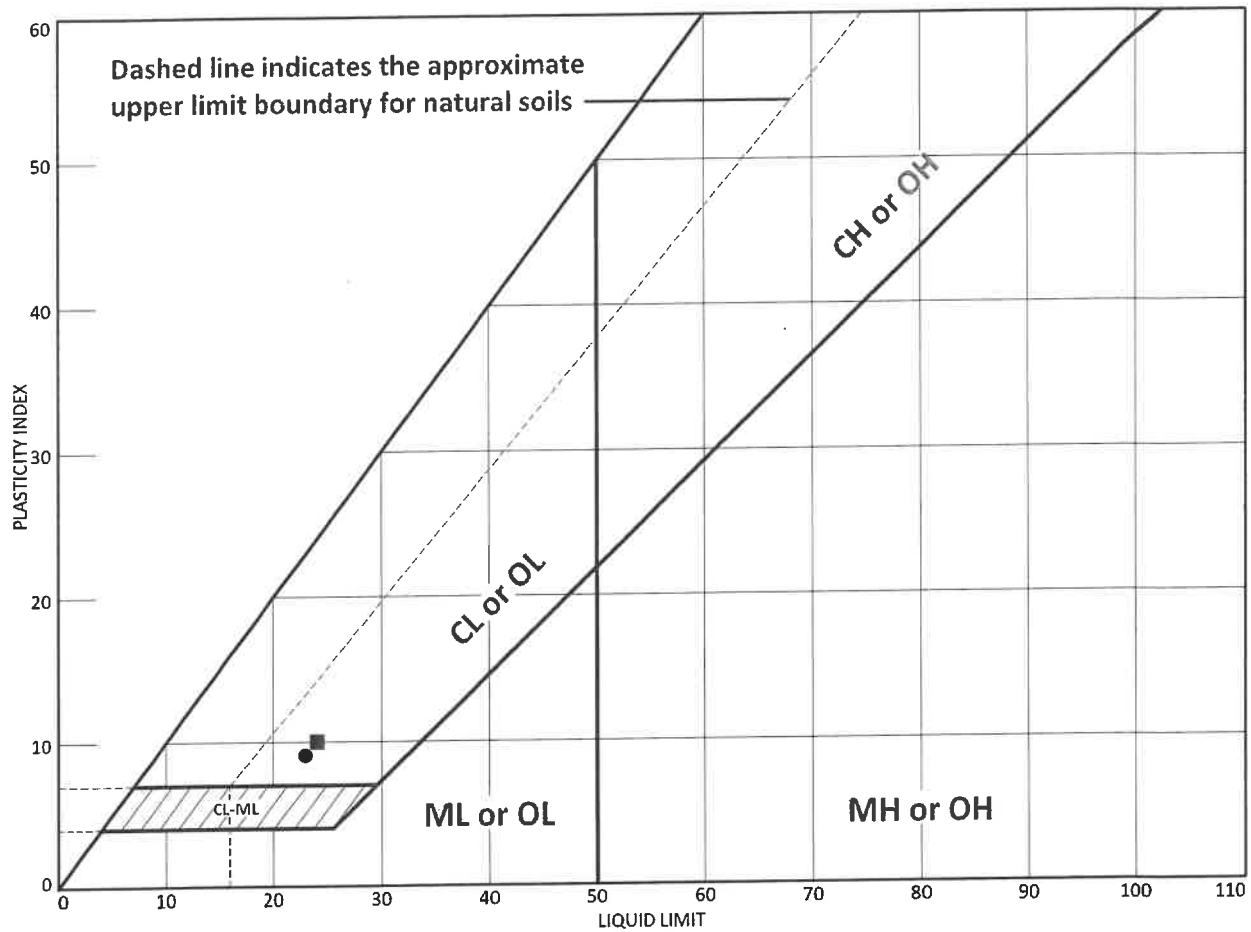
WATER LEVEL MEASUREMENTS			A – SPLIT SPOON B – ROCK CORE C – SHELBY TUBE D – SOIL PROBE E – AUGER CUTTINGS F – SONIC	Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 BOWSER MORNER.
DEPTH	DATE			
INITIAL N/A		N/A		
AT COMPLETION N/A		N/A		
OTHER N/A		N/A		

CLIENT Board of Clark County Commissioners					JOB NO. 20009322		B-4 Boring No. Sheet 1 OF 1	
PROJECT Proposed Water Tower, Ingling Drive, Donnelsville, Ohio					BORING STARTED 5/7/26 COMPLETED 5/7/26			
					DRILLER Central Star Drilling			
					TYPED BY DO			

DEPTH (ft. BGL)	SAMPLE NO.	SAMPLER TYPE	RECOVERY (in.)	GRAPHIC LOG	VISUAL CLASSIFICATION OF THE MATERIAL	BLOW COUNTS	N VALUE, blows/ft. ♦	WATER	REMARKS
							0 10 20 30 40 50 60 70 80 90 100		
1.0	SS-1		18		TOPSOIL (6")	3			
2.0					4	9			
3.0					5				
4.0	SS-2		18		(Very stiff at 3.5')	5			
5.0					7	10			
6.0					12				
7.0	SS-3		18			10	18		
8.0					10				
9.0					8				
9.0	SS-4		18		(Hard at 8.5')	21			
10.0					20	47			
					27				
					B-4 Refusal at 10.5 Ft				

WATER LEVEL MEASUREMENTS				A — SPLIT SPOON B — ROCK CORE C — SHELBY TUBE D — SOIL PROBE E — AUGER CUTTINGS F — SONIC		Bowser-Morner, Inc. Dayton Telephone: (937) 236-8805 Toledo Telephone: (419) 691-4800 BOWSER MORNER.	
DEPTH		DATE					
INITIAL N/A		N/A					
AT COMPLETION N/A		N/A					
OTHER N/A		N/A					

LIQUID AND PLASTIC LIMITS TEST REPORT



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
●	B-1, SS 2	23	14	9			
■	B-4, SS 2	24	14	10			

Project No. 20009322 Client: Board of Clark County Commissioners

Project: Proposed Water Tower

● Location: B-1 Depth: 3.5'-5.0' Sample Number: SS-2

■ Location: B-4 Depth: 3.5'-5.0' Sample Number: SS-2

Remarks:

● As Received Moisture Content: 14.4%

■ As Received Moisture Content: 10.7%

BOWSER-MORNER, INC.

Dayton, Ohio

Tested By: CC Checked By: BLC

Moisture Content of Soil

ASTM (D-2216)



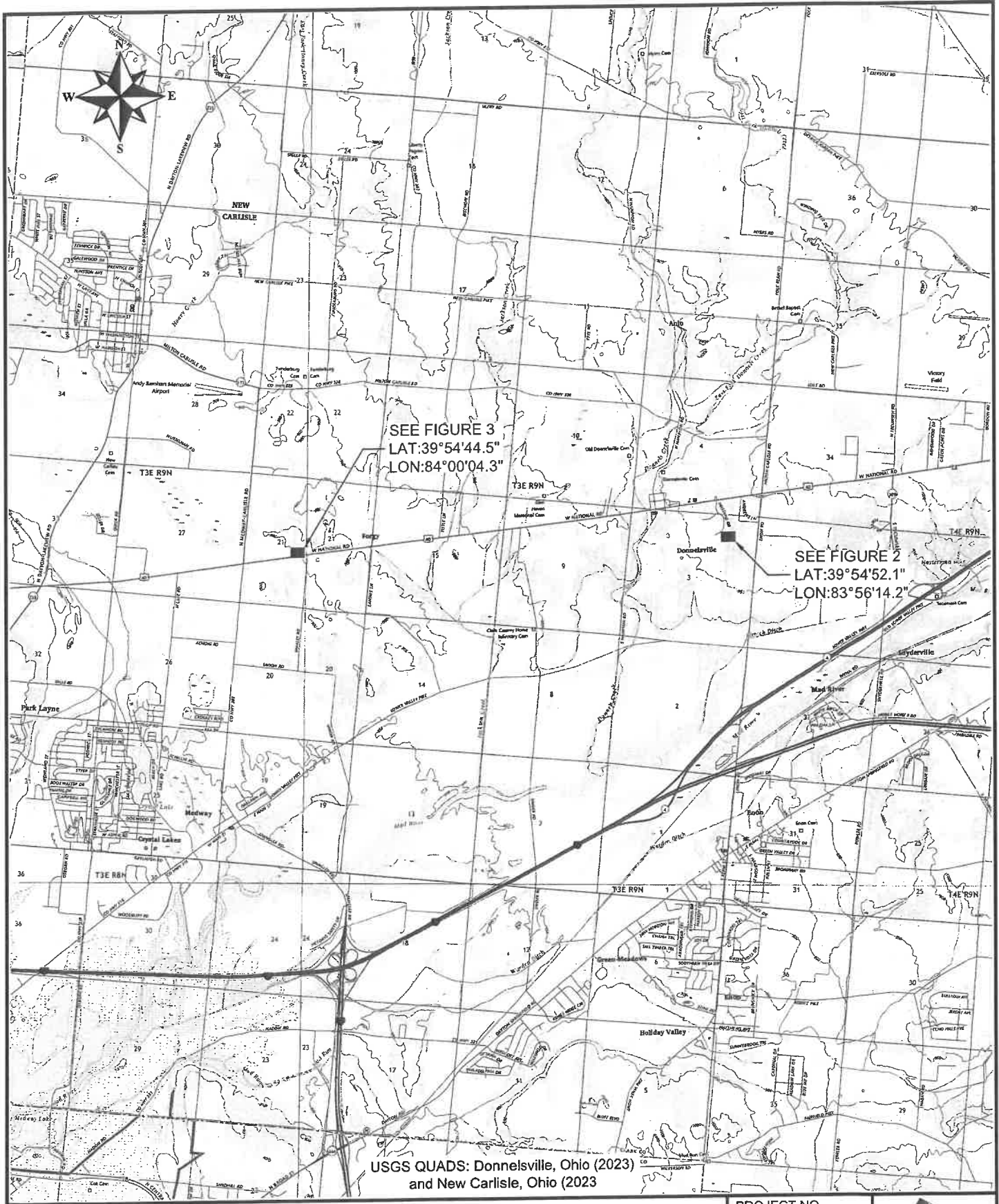
Client: Board of Clark County Commissioners

Project: Proposed Water Tower

Work Order No.: 20009322

Date: 05/23/26

Boring Number	Sample Number	Depth, (ft)	Depth, (m)	Moisture Content, (%)
B-1	SS 1	1.0 - 2.5	0.3 - 0.8	21.5
	SS 2	3.5 - 5.0	1.1 - 1.5	14.4
	SS 3	6.0 - 7.5	1.8 - 2.3	14.0
	SS 4	8.5 - 10.0	2.6 - 3.0	17.2
	SS 5	13.5 - 15.0	4.1 - 4.6	6.9
B-2	SS 1	1.0 - 2.5	0.3 - 0.8	22.0
	SS 2	3.5 - 5.0	1.1 - 1.5	11.7
	SS 3	6.0 - 7.5	1.8 - 2.3	12.9
	SS 4	8.5 - 10.0	2.6 - 3.0	15.4
	SS 5	13.5 - 15.0	4.1 - 4.6	11.4
B-3	SS 1	1.0 - 2.5	0.3 - 0.8	21.2
	SS 2	3.5 - 5.0	1.1 - 1.5	14.9
	SS 3	6.0 - 7.5	1.8 - 2.3	22.1
	SS 4	8.5 - 10.0	2.6 - 3.0	11.7
B-4	SS 1	1.0 - 2.5	0.3 - 0.8	16.0
	SS 2	3.5 - 5.0	1.1 - 1.5	10.7
	SS 3	6.0 - 7.5	1.8 - 2.3	10.2
	SS 4	8.5 - 10.0	2.6 - 3.0	4.7



USGS QUADS: Donnelsville, Ohio (2023)
and New Carlisle, Ohio (2023)

VICINITY MAP

Soil Study for Proposed Water Tower
Ingling Drive & West National Road
Donnelsville, Clark County, Ohio

For: Clark County Commissioners

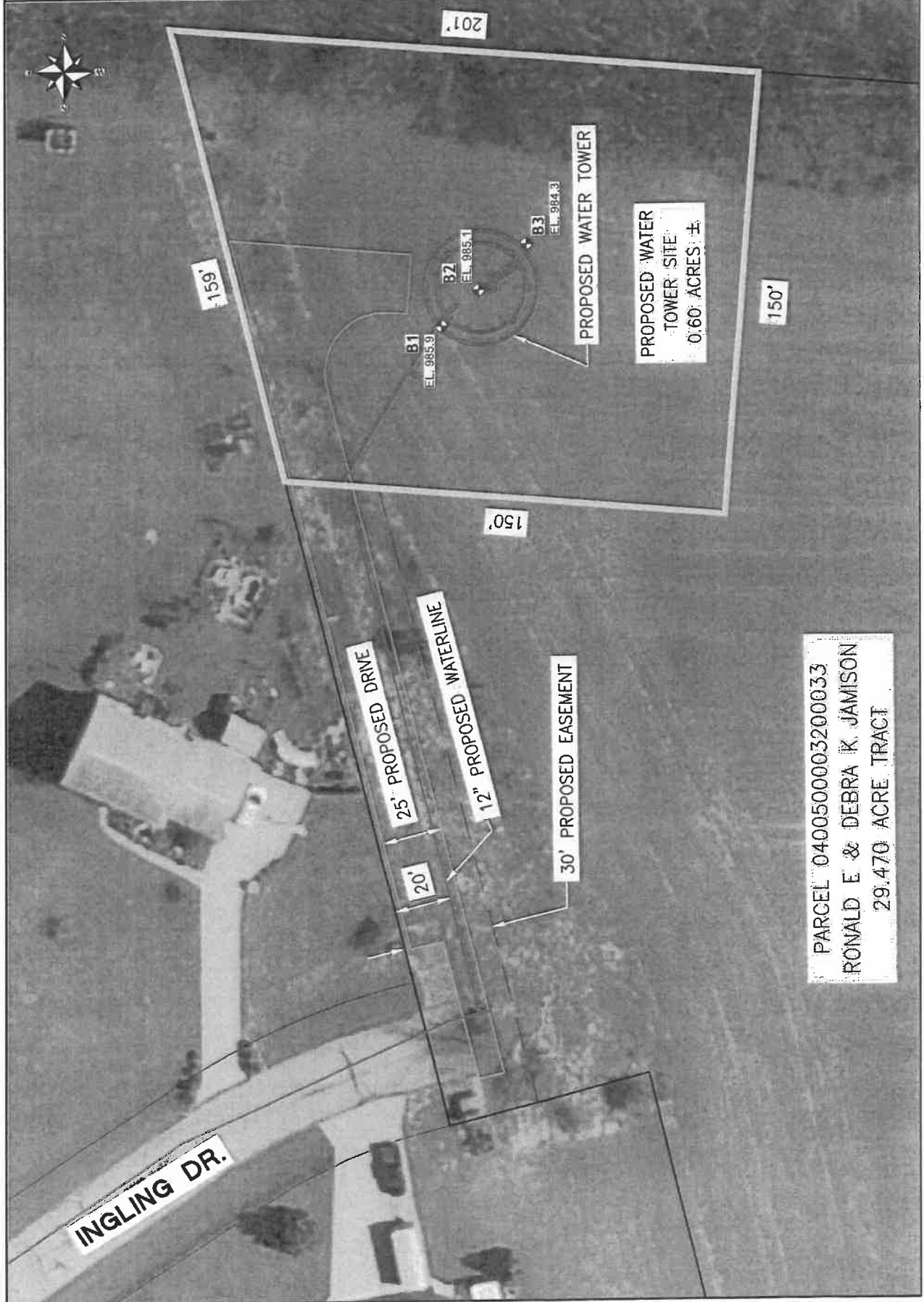
PROJECT NO.
20009322

SCALE
1" = 1/2 Mile

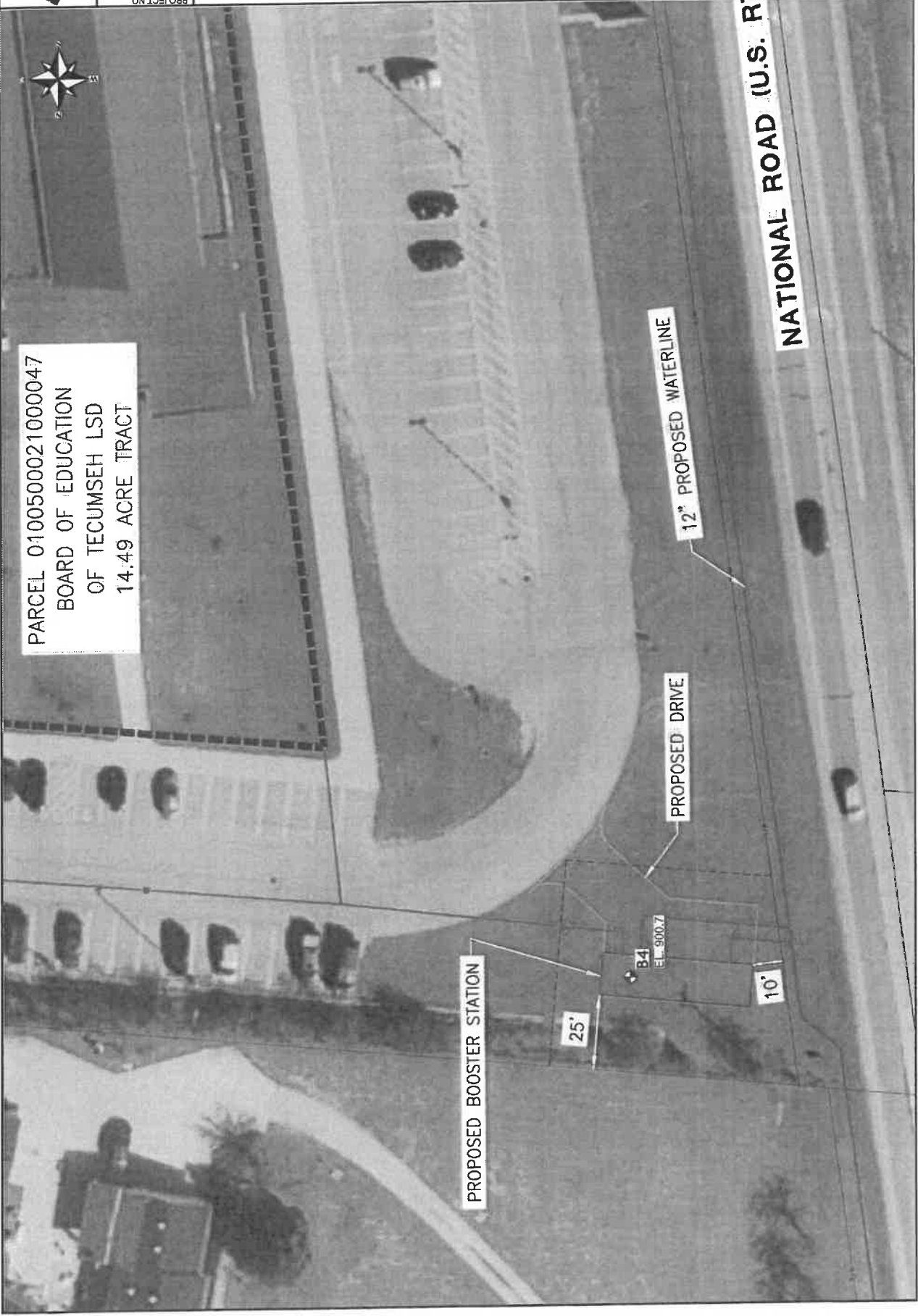
FIGURE NO.
1

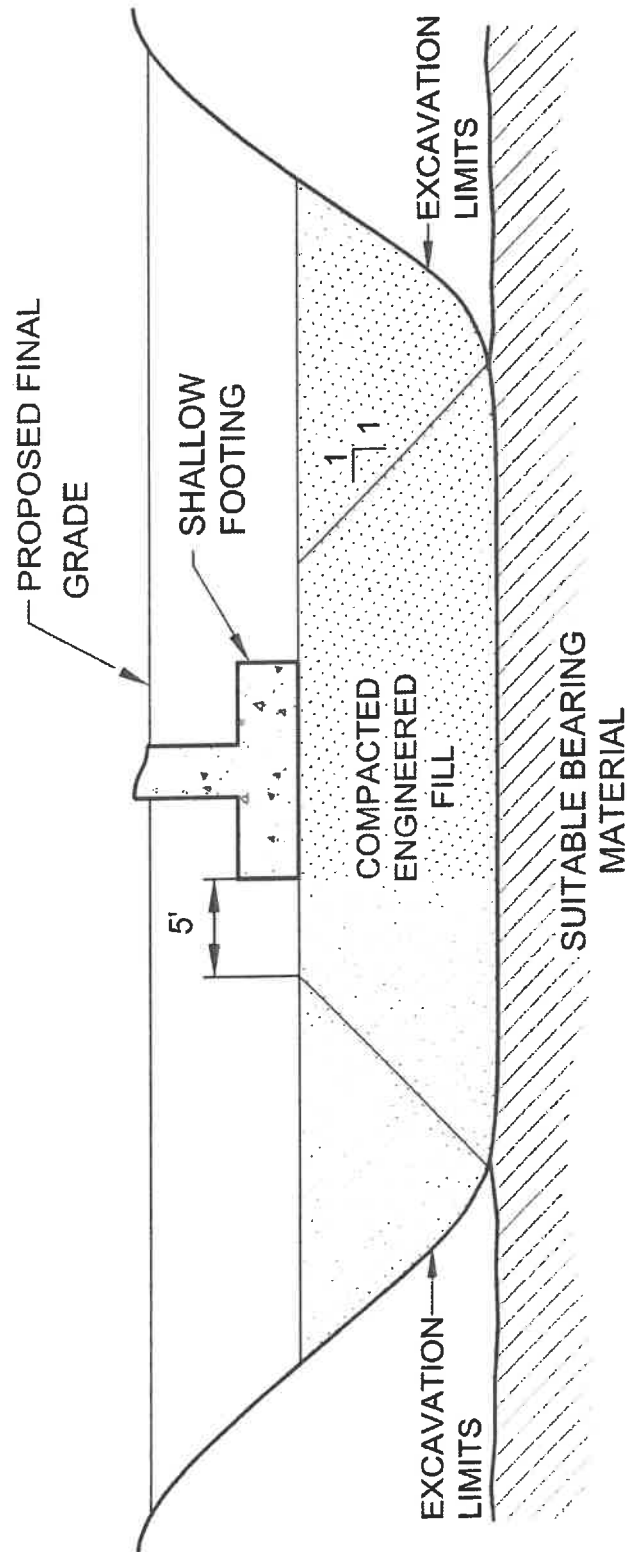
06-2026-EM





PARCEL 0400500003200033
 RONALD E & DEBRA K JAMISON
 29.470 ACRE TRACT





DESIGN ILLUSTRATION SHALLOW FOOTINGS IN AN UNDERCUT AREA

SCALE
NONE

FIGURE NO.
3



**BOWSER
MORNER**

ENGINEERING & ENVIRONMENTAL SERVICES:

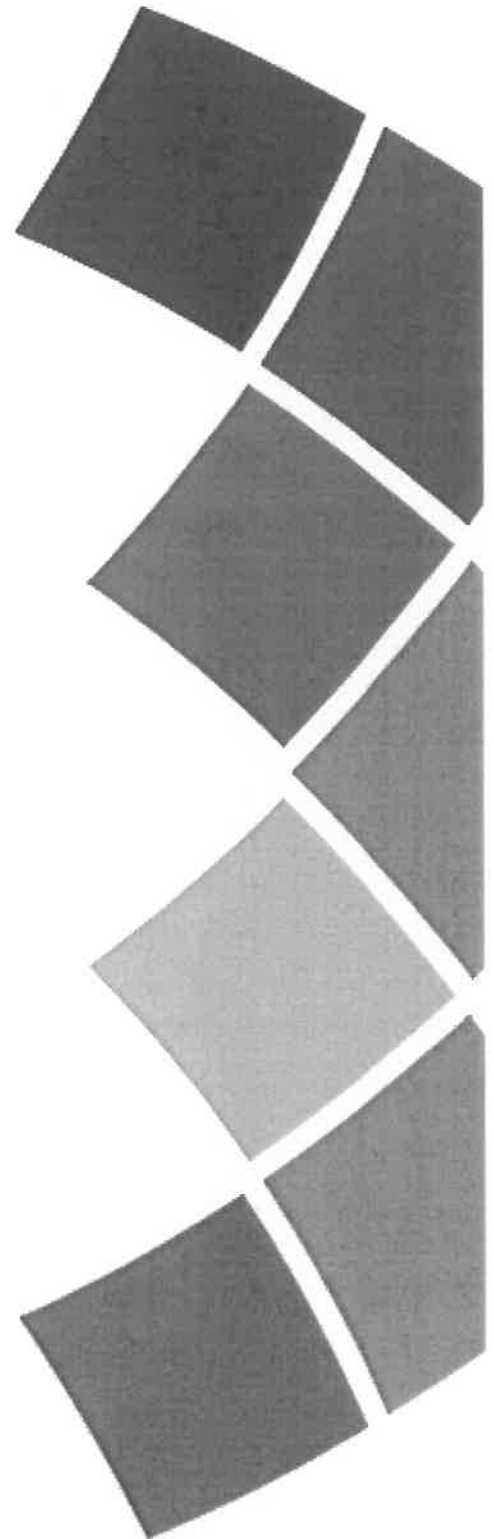
- Geotechnical Engineering
- Subsurface Exploration
- Civil Engineering
- Environmental Services
- Due Diligence
- Permitting

LABORATORY SERVICES:

- Geotechnical Laboratories
- Construction Materials Laboratories
- Mineral Aggregates
- Concrete
- Stone & Masonry
- Asphalt
- Analytical Services Laboratories
- Industrial Minerals
- Product Testing
- Mechanical/Metallurgical Testing
- Calibration Services
- Chemistry Laboratory
- Consulting Geology
- Radon Reference Laboratory

CONSTRUCTION SUPPORT SERVICES:

- General Construction
- Construction Quality Assurance
- Building Code Special Inspections
- Transportation Projects:
 - Contractor QA/QC
 - Material Supplier QA/QC
 - Owner Quality Assurance
- Materials Consulting:
 - Construction Engineering



State: Ohio

Construction Types: Heavy and Highway

Counties: Ohio Counties of
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 and Wyandot

Heavy Construction

Highway Construction

Modification Number	Publication Date
0	01/02/2026
1	05/18/2026
2	05/20/2026
3	06/25/2026

BROH0001-001 06/01/2024

	Rates	Fringes
BRICKLAYER, STONEMASON (DEFIANCE, FULTON (EXCLUDING FULTON, AMBOY & SWAN CREEK TOWNSHIPS), HENRY (EXCLUDING MONROE, BARTLOW, LIBERTY, WASHINGTON, RICHFIELD, MARION, DAMASCUS & TOWNSHIPS & THAT PART OF HARRISON TOWNSHIP OUTSIDE CORPORATE LIMITS OF CITY OF NAPOLEON), PAULDING, PUTNAM AND WILLIAMS COUNTIES).....	\$ 33.39	20.06

BROH0001-004 06/01/2023

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER.....	\$ 32.40	19.30

BROH0003-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (FULTON (TOWNSHIPS OF AMBOY, SWAN CREEK & FULTON), HENRY (TOWNSHIPS OF WASHINGTON, DAMASCUS, RICHFIELD, BARTLOW, LIBERTY, HARRISON, MONROE, & MARION), LUCAS AND WOOD (TOWNSHIPS OF PERRYSBURG, ROSS, LAKE, TROY, FREEDOM, MONTGOMERY, WEBSTER, CENTER, PORTAGE, MIDDLETON, PLAIN, LIBERTY, HENRY, WASHINGTON, WESTON, MILTON, JACKSON & GRAND RAPIDS) COUNTIES)...	\$ 33.39	20.06

BROH0005-003 06/01/2020		
	Rates	Fringes
BRICKLAYER: BRICKLAYERS; CAULKERS; CLEANERS; POINTERS; & STONEMASONS (CUYAHOGA, LORAIN & MEDINA (HINCKLEY, GRANGER, BRUNSWICK, LIVERPOOL, MONTVILLE, YORK, HOMER, HARRISVILLE, CHATHAM, LITCHFIELD & SPENCER TOWNSHIPS AND THE CITY OF MEDINA)).....	\$ 36.64	17.13
BRICKLAYER: SANDBLASTERS (CUYAHOGA, LORAIN & MEDINA (HINCKLEY, GRANGER, BRUNSWICK, LIVERPOOL, MONTVILLE, YORK, HOMER, HARRISVILLE, CHATHAM, LITCHFIELD & SPENCER TOWNSHIPS AND THE CITY OF MEDINA)).....	\$ 36.39	17.13
BRICKLAYER: SEWER BRICKLAYERS & STACK BUILDERS (CUYAHOGA, LORAIN & MEDINA (HINCKLEY, GRANGER, BRUNSWICK, LIVERPOOL, MONTVILLE, YORK, HOMER, HARRISVILLE, CHATHAM, LITCHFIELD & SPENCER TOWNSHIPS AND THE CITY OF MEDINA)).....	\$ 36.64	17.13
BRICKLAYER: SWING SCAFFOLDS (CUYAHOGA, LORAIN & MEDINA (HINCKLEY, GRANGER, BRUNSWICK, LIVERPOOL, MONTVILLE, YORK, HOMER, HARRISVILLE, CHATHAM, LITCHFIELD & SPENCER TOWNSHIPS AND THE CITY OF MEDINA)).....	\$ 37.14	17.13

BROH0006-005 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (CARROLL, COLUMBIANA (KNOX, BUTLER, WEST & HANOVER TOWNSHIPS), STARK & TUSCARAWAS).....	\$ 33.39	20.06

BROH0007-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (LAWRENCE).....	\$ 33.39	20.06

BROH0007-005 06/01/2023		
	Rates	Fringes
BRICKLAYER (PORTAGE & SUMMIT).....	\$ 32.40	19.30

BROH0007-010 06/01/2024		
	Rates	Fringes
MASON - STONE (PORTAGE & SUMMIT).....	\$ 33.39	20.06

BROH0008-001 06/01/2024		
	Rates	Fringes
BRICKLAYER (COLUMBIANA (SALEM, PERRY, FAIRFIELD, CENTER, ELK RUN, MIDDLETON, & UNITY TOWNSHIPS AND THE CITY OF NEW WATERFORD), MAHONING & TRUMBULL)....	\$ 33.39	20.06

BROH0009-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (BELMONT & MONROE COUNTIES AND THE TOWNSHIPS OF WARREN & MT. PLEASANT AND THE VILLAGE OF DILLONVALE IN JEFFERSON COUNTY).....	\$ 33.39	20.06
REFRACTORY (BELMONT & MONROE COUNTIES AND THE TOWNSHIPS OF WARREN & MT. PLEASANT AND THE VILLAGE OF DILLONVALE IN JEFFERSON COUNTY).....	\$ 31.45	19.01

BROH0010-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (COLUMBIANA (ST. CLAIR, MADISON, WAYNE, FRANKLIN, WASHINGTON, YELLOW CREEK & LIVERPOOL TOWNSHIPS) & JEFFERSON (BRUSH CREEK & SALINE TOWNSHIPS)).....	\$ 33.39	20.06

BROH0014-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (HARRISON & JEFFERSON (EXCEPT MT. PLEASANT, WARREN, BRUSH CREEK, SALINE & SALINEVILLE TOWNSHIPS & THE VILLAGE OF DILLONVALE))..	\$ 33.39	20.06

BROH0016-002 06/01/2023		
	Rates	Fringes
BRICKLAYER, STONEMASON (ASHTABULA, GEAUGA, AND LAKE COUNTIES).....	\$ 32.40	19.30

BROH0018-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (BROWN, BUTLER, CLERMONT, HAMILTON, PREBLE (GASPER, DIXON, ISRAEL, LANIER, SOMERS & GRATIS TOWNSHIPS) & WARREN COUNTIES:)).....	\$ 33.39	20.06

BROH0022-004 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, HIGHLAND, LOGAN, MIAMI, MONTGOMERY, PREBLE (JACKSON, MONROE, HARRISON, TWIN, JEFFERSON & WASHINGTON TOWNSHIPS) AND SHELBY COUNTIES).....	\$ 33.39	20.06

BROH0032-001 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (GALLIA & MEIGS).....	\$ 33.39	20.06

BROH0035-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (ALLEN, AUGLAIZE, MERCER AND VAN WERT COUNTIES).....	\$ 33.39	20.06

BROH0039-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (ADAMS & SCIOTO).....	\$ 33.39	20.06

BROH0040-003 06/01/2024		
	Rates	Fringes

BRICKLAYER, STONEMASON (ASHLAND, CRAWFORD, HARDIN, HOLMES, MARION, MORROW, RICHLAND, WAYNE AND WYANDOT (EXCEPT CRAWFORD, RIDGE, RICHLAND & TYMOCHTEE TOWNSHIPS) COUNTIES) FOOTNOTE: LAYOUT MAN AND SAWMAN RATE: \$1.00 PER HOUR ABOVE JOURNEYMAN RATE. FREE STANDING STACK WORK GROUND LEVEL TO TOP OF STACK; SANDBLASTING AND LAYING OF CARBON MASONRY MATERIAL IN SWING STAGE AND/OR SCAFFOLD; RAMMING AND SPADING OF PLASTICS AND GUNNITING: \$1.50 PER HOUR ABOVE JOURNEYMAN RATE. ""HOT"" WORK: \$2.50 ABOVE JOURNEYMAN RATE.....	\$ 33.39	20.06
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BROH0044-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (COSHOCOTON, FAIRFIELD, GUERNSEY, HOCKING, KNOX, KICKING, MORGAN, MUSKINGUM, NOBLE (BEAVER, BUFFALO, SENECA & WAYNE TOWNSHIPS) & PERRY COUNTIES:).....	\$ 33.39	20.06

BROH0045-002 06/01/2023		
	Rates	Fringes
BRICKLAYER, STONEMASON (FAYETTE, JACKSON, PIKE, ROSS AND VINTON COUNTIES).....	\$ 35.39	17.47

BROH0046-002 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (ERIE, HANCOCK, HURON, OTTAWA, SANDUSKY, SENECA, WOOD (PERRY & BLOOM TOWNSHIPS) AND WYANDOT (TYMOCHTEE, CRAWFORD, RIDGE & RICHLAND TOWNSHIPS) COUNTIES & THE ISLANDS OF LAKE ERIE NORTH OF SANDUSKY) FOOTNOTE: LAYOUT MAN AND SAWMAN RATE: \$1.00 PER HOUR ABOVE JOURNEYMAN RATE. FREE STANDING STACK WORK GROUND LEVEL TO TOP OF STACK; SANDBLASTING AND LAYING OF CARBON MASONRY MATERIAL IN SWING STAGE AND/OR SCAFFOLD; RAMMING AND SPADING OF PLASTICS AND GUNNITING: \$1.50 PER HOUR ABOVE JOURNEYMAN RATE. ""HOT"" WORK: \$2.50 ABOVE JOURNEYMAN RATE.....	\$ 33.39	20.06

BROH0052-001 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (ATHENS COUNTY).....	\$ 33.39	20.06

BROH0052-003 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (NOBLE (BROOKFIELD, NOBLE, CENTER, SHARON, OLIVE, ENOCH, STOCK, JACKSON, JEFFERSON & ELK TOWNSHIPS) AND WASHINGTON COUNTIES).....	\$ 33.39	20.06

BROH0055-003 06/01/2024		
	Rates	Fringes
BRICKLAYER, STONEMASON (DELAWARE, FRANKLIN, MADISON, PICKAWAY AND UNION COUNTIES).....	\$ 33.39	20.06

CARP0002-024 05/01/2025		
	Rates	Fringes
CARPENTER & PILEDRIVERMEN (BROWN, BUTLER,		

CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY & WARREN).....	\$ 35.94	23.59
DIVER (BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY & WARREN).....	\$ 40.58	9.69

CARP0171-001 05/01/2025		
	Rates	Fringes
CARPENTER (MAHONING & TRUMBULL).....	\$ 33.19	25.02

CARP0171-002 05/01/2025		
	Rates	Fringes
CARPENTER (BELMONT, COLUMBIANA, HARRISON, JEFFERSON & MONROE).....	\$ 32.50	26.19

CARP0200-002 05/01/2025		
	Rates	Fringes
CARPENTER (ADAMS, ATHENS, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GUERNSEY, HIGHLAND, HOCKING, JACKSON, LAWRENCE, LICKING, MADISON, MARION, MEIGS, MORGAN, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, ROSS, SCIOTO, UNION, VINTON AND WASHINGTON COUNTIES).....	\$ 35.94	23.59
DIVER (ADAMS, ATHENS, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GUERNSEY, HIGHLAND, HOCKING, JACKSON, LAWRENCE, LICKING, MADISON, MARION, MEIGS, MORGAN, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, ROSS, SCIOTO, UNION, VINTON AND WASHINGTON COUNTIES).....	\$ 39.41	10.40
PILEDRIVERMAN (ADAMS, ATHENS, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GUERNSEY, HIGHLAND, HOCKING, JACKSON, LAWRENCE, LICKING, MADISON, MARION, MEIGS, MORGAN, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, ROSS, SCIOTO, UNION, VINTON AND WASHINGTON COUNTIES).....	\$ 35.94	23.59

CARP0285-001 05/01/2025		
	Rates	Fringes
CARPENTER (CARROLL, STARK, TUSCARAWAS AND WAYNE)....	\$ 34.07	24.28

CARP0285-002 05/01/2025		
	Rates	Fringes
CARPENTER (COSHOCOTON, HOLMES, KNOX & MORROW).....	\$ 33.38	24.69

CARP0285-008 05/01/2025		
	Rates	Fringes
CARPENTER (MEDINA, PORTAGE & SUMMIT).....	\$ 37.18	25.07

CARP0351-005 05/01/2025		
	Rates	Fringes
CARPENTER (LUCAS & WOOD).....	\$ 35.44	27.56

CARP0351-006 05/01/2025		
	Rates	Fringes
CARPENTER (DEFIANCE, FULTON, HANCOCK, HENRY, PAULDING & WILLIAMS COUNTIES).....	\$ 32.05	26.13

CARP0372-002 05/01/2025		
	Rates	Fringes
CARPENTER (ALLEN, AUGLAIZE, HARDIN, MERCER, PUTNAM & VAN WERT).....	\$ 31.80	26.33

CARP0435-005 05/01/2025		
	Rates	Fringes
CARPENTER (ASHTABULA, CUYAHOGA, GEAUGA & LAKE).....	\$ 38.57	24.64

CARP0735-001 05/01/2025		
	Rates	Fringes
CARPENTER (ASHLAND, HURON & RICHLAND).....	\$ 34.67	23.57

CARP0735-002 05/01/2025		
	Rates	Fringes
CARPENTER (LORAIN).....	\$ 38.42	24.01

CARP0735-004 05/01/2025		
	Rates	Fringes
CARPENTER (ERIE).....	\$ 36.71	24.14

CARP0744-001 05/01/2025		
	Rates	Fringes
CARPENTER (CRAWFORD, OTTAWA, SANDUSKY, SENECA & WYANDOT).....	\$ 33.74	27.05

CARP1090-002 05/01/2025		
	Rates	Fringes
PILEDRIWMEN & DIVER'S TENDER (ALLEN, AUGLAIZE, HARDIN, MERCER, PUTNAM, VAN WERT & WYANDOT) DIVERS - \$250.00 PER DAY.....	\$ 35.94	28.39

CARP1090-003 05/01/2025		
	Rates	Fringes
DIVER, WET (BELMONT, HARRISON, & MONROE).....	\$ 58.52	24.91
PILEDRIWMEN; DIVER, DRY (BELMONT, HARRISON, & MONROE).....	\$ 39.01	24.91

CARP1090-004 05/01/2025		
	Rates	Fringes
DIVER, WET (CARROLL, STARK, TUSCARAWAS & WAYNE).....	\$ 49.82	25.40
PILEDRIWMEN; DIVER, DRY (CARROLL, STARK, TUSCARAWAS & WAYNE).....	\$ 33.21	25.40

CARP1090-005 05/01/2025		
	Rates	Fringes
DIVER, WET (ASHLAND, ASHTABULA, CUYAHOGA, ERIE, GEAUGA, HURON, LAKE, LORAIN, MEDINA, PORTAGE, RICHLAND & SUMMIT).....	\$ 54.51	27.50
PILEDRIWMEN; DIVER, DRY (ASHLAND, ASHTABULA, CUYAHOGA, ERIE, GEAUGA, HURON, LAKE, LORAIN, MEDINA, PORTAGE, RICHLAND & SUMMIT).....	\$ 36.34	27.50

CARP1090-006 05/01/2025		
	Rates	Fringes
DIVER, WET (COSHOCOTON, HOLMES, KNOX & MORROW).....	\$ 54.36	22.54
PILEDRIVERMEN; DIVER, DRY (COSHOCOTON, HOLMES, KNOX & MORROW).....	\$ 36.24	22.54

CARP1090-007 05/01/2025		
	Rates	Fringes
DIVER, WET (MAHONING & TRUMBULL).....	\$ 50.85	24.82
PILEDRIVERMEN; DIVER, DRY (MAHONING & TRUMBULL).....	\$ 33.90	24.82

CARP1090-008 05/01/2025		
	Rates	Fringes
PILEDRIVERMAN (COLUMBIANA & JEFFERSON).....	\$ 39.01	24.91

CARP1090-009 05/01/2025		
	Rates	Fringes
PILEDRIVERMEN & DIVER'S TENDER (CRAWFORD, DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING, SANDUSKY, SENECA, WILLIAMS & WOOD) DIVERS - \$250.00 PER DAY.....	\$ 37.98	28.63

ELEC0008-002 05/27/2024		
	Rates	Fringes
CABLE SPLICER (DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS & WOOD).....	\$ 38.98	18.96
ELECTRICIAN (DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS & WOOD).....	\$ 48.40	25.24

ELEC0032-003 06/01/2025		
	Rates	Fringes
ELECTRICIAN (ALLEN, AUGLAIZE, HARDIN, LOGAN, MERCER, SHELBY, VAN WERT & WYANDOT (CRAWFORD, JACKSON, MARSEILLES, MIFFLIN, RIDGELAND, RIDGE & SALEM TOWNSHIPS)).....	\$ 39.17	23.60

ELEC0038-002 04/28/2025		
	Rates	Fringes
ELECTRICIAN, EXCLUDING SOUND & COMMUNICATIONS WORK. (CUYAHOGA, GEAUGA (BAINBRIDGE, CHESTER & RUSSELL TOWNSHIPS) & LORAIN (COLUMBIA TOWNSHIP)) FOOTNOTES: A. 6 PAID HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. B. 1 WEEK'S PAID VACATION FOR 1 YEAR'S SERVICE; 2 WEEKS' PAID VACATION FOR 2 OR MORE YEARS' SERVICE.....	\$ 46.63	24.92

ELEC0038-008 04/28/2025		
	Rates	Fringes
SOUND & COMMUNICATION TECHNICIAN: COMMUNICATIONS TECHNICIAN (CUYAHOGA, GEAUGA (BAINBRIDGE, CHESTER & RUSSELL TOWNSHIPS) & LORAIN (COLUMBIA TOWNSHIP)) FOOTNOTES: A. 6 PAID HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. B. 1 WEEK'S PAID VACATION FOR 1 YEAR'S SERVICE; 2 WEEKS' PAID		

VACATION FOR 2 OR MORE YEARS' SERVICE.....	\$ 34.30	14.95
SOUND & COMMUNICATION TECHNICIAN: INSTALLER TECHNICIAN (CUYAHOGA, GEAUGA (BAINBRIDGE, CHESTER & RUSSELL TOWNSHIPS) & LORAIN (COLUMBIA TOWNSHIP)) FOOTNOTES: A. 6 PAID HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. B. 1 WEEK'S PAID VACATION FOR 1 YEAR'S SERVICE; 2 WEEKS' PAID VACATION FOR 2 OR MORE YEARS' SERVICE.....		
	\$ 33.05	14.91

ELEC0064-003 11/30/2025

	Rates	Fringes
ELECTRICIAN (COLUMBIANA (BUTLER, FAIRFIELD, PERRY, SALEM & UNITY TOWNSHIPS) MAHONING (AUSTINTOWN, BEAVER, BERLIN, BOARDMAN, CANFIELD, ELLSWORTH, COITSVILLE, GOSHEN, GREEN, JACKSON, POLAND, SPRINGFIELD & YOUNGSTOWN TOWNSHIPS), & TRUMBULL (HUBBARD & LIBERTY TOWNSHIPS)).....	\$ 41.49	21.81

ELEC0071-005 01/06/2025

	Rates	Fringes
LINE CONSTRUCTION: EQUIPMENT OPERATOR: DOT/TRAFFIC SIGNAL & HIGHWAY LIGHTING PROJECTS (ASHTABULA, CUYAHOGA, GEAUGA, LAKE & LORAIN).....	\$ 39.97	18.79
LINE CONSTRUCTION: EQUIPMENT OPERATOR: MUNICIPAL POWER/TRANSIT PROJECTS (ASHTABULA, CUYAHOGA, GEAUGA, LAKE & LORAIN).....	\$ 49.46	21.60
LINE CONSTRUCTION: GROUNDMAN: DOT/TRAFFIC SIGNAL & HIGHWAY LIGHTING PROJECTS (ASHTABULA, CUYAHOGA, GEAUGA, LAKE & LORAIN).....	\$ 31.10	16.40
LINE CONSTRUCTION: GROUNDMAN: MUNICIPAL POWER/TRANSIT PROJECTS (ASHTABULA, CUYAHOGA, GEAUGA, LAKE & LORAIN).....	\$ 38.47	18.64
LINE CONSTRUCTION: LINEMEN/CABLE SPLICER: DOT/TRAFFIC SIGNAL & HIGHWAY LIGHTING PROJECTS (ASHTABULA, CUYAHOGA, GEAUGA, LAKE & LORAIN).....	\$ 43.89	19.85
LINE CONSTRUCTION: LINEMEN/CABLE SPLICER: MUNICIPAL POWER/TRANSIT PROJECTS (ASHTABULA, CUYAHOGA, GEAUGA, LAKE & LORAIN).....	\$ 54.96	23.09

ELEC0071-010 01/06/2025

	Rates	Fringes
LINE CONSTRUCTION: EQUIPMENT OPERATOR	\$ 40.44	17.71
LINE CONSTRUCTION: GROUNDMAN	\$ 29.07	14.97
LINE CONSTRUCTION: LINEMAN & CABLE SPLICERS	\$ 46.02	19.04

ELEC0082-002 12/02/2024

	Rates	Fringes
ELECTRICIAN (CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE & WARREN (WAYNE, CLEAR CREEK & FRANKLIN TOWNSHIPS)).....	\$ 38.00	22.49

ELEC0082-006 11/25/2024

	Rates	Fringes
SOUND & COMMUNICATION TECHNICIAN: CABLE PULLER (CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE & WARREN (WAYNE, CLEAR CREEK & FRANKLIN TOWNSHIPS)).	\$ 13.85	5.30
SOUND & COMMUNICATION TECHNICIAN: INSTALLER/TECHNICIAN (CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE & WARREN (WAYNE, CLEAR		

CREEK & FRANKLIN TOWNSHIPS)).....\$ 27.70	15.71

ELEC0129-003 02/24/2025	
	Rates Fringes
ELECTRICIAN (LORAIN (EXCEPT COLUMBIA TOWNSHIP) & MEDINA (LITCHFIELD & LIVERPOOL TOWNSHIPS)).....\$ 42.95	18.81

ELEC0129-004 02/24/2025	
	Rates Fringes
ELECTRICIAN (ERIE & HURON (LYME, RIDGEFIELD, NORWALK, TOWNSEND, WAKEMAN, SHERMAN, PERU, BRONSON, HARTLAND, CLARKSFIELD, NORWICH, GREENFIELD, FAIRFIELD, FITCHVILLE & NEW LONDON TOWNSHIPS)).....\$ 42.95	18.81

ELEC0141-003 06/02/2025	
	Rates Fringes
CABLE SPLICER (BELMONT COUNTY).....\$ 42.94	27.74
ELECTRICIAN (BELMONT COUNTY).....\$ 39.25	31.23

ELEC0212-003 11/26/2018	
	Rates Fringes
SOUND & COMMUNICATION TECHNICIAN (BROWN, CLERMONT & HAMILTON).....\$ 24.35	10.99

ELEC0212-005 06/02/2025	
	Rates Fringes
ELECTRICIAN (BROWN, CLERMONT, AND HAMILTON COUNTIES).....\$ 38.05	22.97

ELEC0245-001 08/26/2024	
	Rates Fringes
LINE CONSTRUCTION: EQUIPMENT OPERATOR (ALLEN, HARDIN, VAN WERT & WYANDOT (CRAWFORD, JACKSON, MARSEILLES, MIFFLIN, RICHLAND, RIDGE & SALEM TOWNSHIPS)) FOOTNOTE: A. HALF DAY'S PAID HOLIDAY: THE LAST 4 HOURS OF THE WORKDAY PRIOR TO CHRISTMAS OR NEW YEAR'S DAY.....\$ 32.95	17.08
LINE CONSTRUCTION: GROUNDMAN TRUCK DRIVER (ALLEN, HARDIN, VAN WERT & WYANDOT (CRAWFORD, JACKSON, MARSEILLES, MIFFLIN, RICHLAND, RIDGE & SALEM TOWNSHIPS)): FOOTNOTE: A. HALF DAY'S PAID HOLIDAY: THE LAST 4 HOURS OF THE WORKDAY PRIOR TO CHRISTMAS OR NEW YEAR'S DAY.....\$ 20.59	13.62
LINE CONSTRUCTION: LINEMAN (ALLEN, HARDIN, VAN WERT & WYANDOT (CRAWFORD, JACKSON, MARSEILLES, MIFFLIN, RICHLAND, RIDGE & SALEM TOWNSHIPS)) FOOTNOTE: A. HALF DAY'S PAID HOLIDAY: THE LAST 4 HOURS OF THE WORKDAY PRIOR TO CHRISTMAS OR NEW YEAR'S DAY.....\$ 47.07	21.03

ELEC0245-003 01/01/2025	
	Rates Fringes
LINE CONSTRUCTION: CABLE SPLICER (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) : FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A	

RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....	\$ 53.90	23.19
LINE CONSTRUCTION: GROUNDMAN/TRUCK DRIVER (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....		
	\$ 20.51	13.84
LINE CONSTRUCTION: HELI-ARC WELDING (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....		
	\$ 47.17	21.31
LINE CONSTRUCTION: LINEMAN (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....		
	\$ 46.87	21.22
LINE CONSTRUCTION: OPERATOR - CLASS 1 (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....		
	\$ 37.50	18.60
LINE CONSTRUCTION: OPERATOR - CLASS 2 (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....		
	\$ 32.81	17.29
LINE CONSTRUCTION: TRAFFIC SIGNAL & LIGHTING TECHNICIAN (DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, AND WOOD COUNTIES) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....		
	\$ 42.18	19.91

	Rates	Fringes
LINE CONSTRUCTION: CABLE SPLICER (ERIE COUNTY) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....	\$ 53.90	23.19
LINE CONSTRUCTION: GROUNDMAN/TRUCK DRIVER (ERIE COUNTY) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....	\$ 20.51	13.84
LINE CONSTRUCTION: LINEMAN (ERIE COUNTY) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....	\$ 46.87	21.22
LINE CONSTRUCTION: OPERATOR - CLASS 1 (ERIE COUNTY) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....	\$ 37.50	18.60
LINE CONSTRUCTION: OPERATOR - CLASS 2 (ERIE COUNTY) FOOTNOTE: A. 6 OBSERVED HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; INDEPENDENCE DAY; LABOR DAY; THANKSGIVING DAY; & CHRISTMAS DAY. EMPLOYEES WHO WORK ON A HOLIDAY SHALL BE PAID AT A RATE OF DOUBLE THEIR APPLICABLE CLASSIFIED STRAIGHT-TIME RATES FOR THE WORK PERFORMED ON SUCH HOLIDAY.....	\$ 32.81	17.29

ELEC0246-001 10/28/2024

	Rates	Fringes
ELECTRICIAN (CARROLL, COLUMBIANA, HARRISON AND JEFFERSON COUNTIES) FOOTNOTE: A. 1 1/2 PAID HOLIDAYS: THE LAST SCHEDULED WORKDAY PRIOR TO CHRISTMAS & 4 HOURS ON GOOD FRIDAY.....	\$ 44.00	37.68

ELEC0306-005 05/27/2024

	Rates	Fringes
CABLE SPLICER (MEDINA (BRUNSWICK, CHATHAM, GRANGER, GUILFORD, HARRISVILLE, HINCKLEY, HOMER, LAFAYETTE, MEDINA, MONTVILLE, SHARON, SPENCER, WADSWORTH, WESTFIELD & YORK TOWNSHIPS), PORTAGE (ATWATER, AURORA, BRIMFIELD, DEERFIELD, FRANKLIN, MANTUA, RANDOLPH, RAVENNA, ROOTSTOWN, SHALERSVILLE, STREETSBORO & SUFFIELD TOWNSHIPS), SUMMIT & WAYNE (BAUGHMAN, CANAAN, CHESTER, CHIPPEWA, CONGRESS, GREEN, MILTON, & WAYNE TOWNSHIPS)).....	\$ 46.81	20.95
ELECTRICIAN (MEDINA (BRUNSWICK, CHATHAM, GRANGER, GUILFORD, HARRISVILLE, HINCKLEY, HOMER, LAFAYETTE, MEDINA, MONTVILLE, SHARON, SPENCER, WADSWORTH, WESTFIELD & YORK TOWNSHIPS), PORTAGE (ATWATER, AURORA, BRIMFIELD, DEERFIELD, FRANKLIN, MANTUA, RANDOLPH, RAVENNA, ROOTSTOWN, SHALERSVILLE, STREETSBORO & SUFFIELD TOWNSHIPS), SUMMIT & WAYNE (BAUGHMAN, CANAAN, CHESTER, CHIPPEWA, CONGRESS,		

GREEN, MILTON, & WAYNE TOWNSHIPS)).....	\$ 42.55	20.95

ELEC0317-002 06/02/2025		
	Rates	Fringes
CABLE SPLICER (GALLIA & LAWRENCE).....	\$ 32.68	18.13
ELECTRICIAN (GALLIA & LAWRENCE).....	\$ 41.15	29.35

ELEC0540-005 06/30/2025		
	Rates	Fringes
ELECTRICIAN (CARROLL (NORTHERN HALF, INCLUDING FOX, HARRISON, ROSE & WASHINGTON TOWNSHIPS), COLUMBIANA (KNOX TOWNSHIP), HOLMES, MAHONING (SMITH TOWNSHIP), STARK, TUSCARAWAS (NORTH OF AUBURN, CLAY, RUSH & YORK TOWNSHIPS), AND WAYNE (SOUTH OF BAUGHMAN, CHESTER, GREEN & WAYNE TOWNSHIPS) COUNTIES).....	\$ 39.86	29.19

ELEC0573-003 06/01/2025		
	Rates	Fringes
ELECTRICIAN (ASHTABULA (COLEBROOK, WAYNE, WILLIAMSFIELD, ORWELL & WINDSOR TOWNSHIPS), GEAUGA (AUBURN, MIDDLEFIELD, PARKMAN & TROY TOWNSHIPS), MAHONING (MILTON TOWNSHIP), PORTAGE (CHARLESTOWN, EDINBURG, FREEDOM, HIRAM, NELSON, PALMYRA, PARIS & WINDHAM TOWNSHIPS), AND TRUMBULL (EXCEPT LIBERTY & HUBBARD TOWNSHIPS)).....	\$ 42.20	23.37

ELEC0575-001 05/29/2023		
	Rates	Fringes
ELECTRICIAN (ADAMS, FAYETTE, HIGHLAND, HOCKING, JACKSON (BLOOMFIELD, FRANKLIN, HAMILTON, JEFFERSON, LICK, MADISON, SCIOTO, COAL, JACKSON, LIBERTY, MILTON & WASHINGTON TOWNSHIPS), PICKAWAY (DEER CREEK, PERRY, PICKAWAY, SALT CREEK & WAYNE TOWNSHIPS), PIKE (BEAVER, BENTON, JACKSON, MIFFLIN, PEBBLE, PEEPEE, PERRY, SEAL, CAMP CREEK, NEWTON, SCIOTO, SUNFISH, UNION & MARION TOWNSHIPS), ROSS, SCIOTO & VINTON (CLINTON, EAGLE, ELK, HARRISON, JACKSON, RICHLAND & SWAN TOWNSHIPS)).....	\$ 37.00	22.26

ELEC0648-001 09/01/2025		
	Rates	Fringes
CABLE SPLICER (BUTLER AND WARREN COUNTIES (DEERFIELD, HAMILTON, HARLAN, MASSIE, SALEM, TURTLE CREEK, UNION & WASHINGTON TOWNSHIPS)).....	\$ 30.50	18.23
ELECTRICIAN (BUTLER AND WARREN COUNTIES (DEERFIELD, HAMILTON, HARLAN, MASSIE, SALEM, TURTLE CREEK, UNION & WASHINGTON TOWNSHIPS)).....	\$ 38.00	24.16

ELEC0673-004 05/26/2025		
	Rates	Fringes
CABLE SPLICER (ASHTABULA (EXCLUDING ORWELL, COLEBROOK, WILLIAMSFIELD, WAYNE & WINDSOR TOWNSHIPS), GEAUGA (BURTON, CHARDON, CLARIDON, HAMBDEN, HUNTSBURG, MONTVILLE, MUNSON, NEWBURY & THOMPSON TOWNSHIPS) AND LAKE COUNTIES).....	\$ 33.81	21.47
ELECTRICIAN (ASHTABULA (EXCLUDING ORWELL, COLEBROOK, WILLIAMSFIELD, WAYNE & WINDSOR TOWNSHIPS), GEAUGA (BURTON, CHARDON, CLARIDON,		

HAMBDEN, HUNTSBURG, MONTVILLE, MUNSON, NEWBURY & THOMPSON TOWNSHIPS) AND LAKE COUNTIES).....\$ 41.17	24.58
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ELEC0683-002 06/02/2025

Rates	Fringes
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CABLE SPLICER (CHAMPAIGN, CLARK, DELAWARE, FAIRFIELD, FRANKLIN, MADISON, PICKAWAY (CIRCLEVILLE, DARBY, HARRISON, JACKSON, MADISON, MONROE, MUHLENBERG, SCIOTO, WALNUT & WASHINGTON TOWNSHIPS), AND UNION COUNTIES).....\$ 44.00	26.40
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ELECTRICIAN (CHAMPAIGN, CLARK, DELAWARE, FAIRFIELD, FRANKLIN, MADISON, PICKAWAY (CIRCLEVILLE, DARBY, HARRISON, JACKSON, MADISON, MONROE, MUHLENBERG, SCIOTO, WALNUT & WASHINGTON TOWNSHIPS), AND UNION COUNTIES).....\$ 43.00	26.37
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ELEC0688-003 05/30/2022

Rates	Fringes
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ELECTRICIAN (ASHLAND, CRAWFORD, HURON (RICHMOND, NEW HAVEN, RIPLEY & GREENWICH TOWNSHIPS), KNOX (LIBERTY, CLINTON, UNION, HOWARD, MONROE, MIDDLEBERRY, MORRIS, WAYNE, BERLIN, PIKE, BROWN & JEFFERSON TOWNSHIPS), MARION, MORROW, RICHLAND AND WYANDOT (SYCAMORE, CRANE, EDEN, PITT, ANTRIM & TYMOCHTEE TOWNSHIPS) COUNTIES).....\$ 32.30	21.83
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ELEC0972-002 06/01/2024

Rates	Fringes
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CABLE SPLICER (ATHENS, MEIGS, MONROE, MORGAN, NOBLE, VINTON (BROWN, KNOX, MADISON, VINTON & WILKESVILLE TOWNSHIPS), AND WASHINGTON COUNITES)...\$ 40.25	33.33
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ELECTRICIAN (ATHENS, MEIGS, MONROE, MORGAN, NOBLE, VINTON (BROWN, KNOX, MADISON, VINTON & WILKESVILLE TOWNSHIPS), AND WASHINGTON COUNITES).....\$ 40.00	33.32
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ELEC1105-001 05/27/2024

Rates	Fringes
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ELECTRICIAN (COSHOCTON, GUERNSEY, KNOX (JACKSON, CLAY, MORGAN, MILLER, MILFORD, HILLIAR, BUTLER, HARRISON, PLEASANT & COLLEGE TOWNSHIPS), LICKING, MUSKINGUM, PERRY, AND TUSCARAWAS (AUBURN, YORK, CLAY, JEFFERSON, RUSH, OXFORD, WASHINGTON, SALEM, PERRY & BUCKS TOWNSHIPS) COUNTIES).....\$ 39.60	24.41
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ENGI0018-003 05/01/2024

Rates	Fringes
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POWER EQUIPMENT OPERATOR: GROUP 1- AIR COMPRESSOR
ON STEEL ERECTION; BARRIER MOVING MACHINE; BOILER
OPERATOR ON COMPRESSOR OR GENERATOR WHEN MOUNTED ON
A RIG; CABLEWAY; COMBINATION CONCRETE MIXER &
TOWER; CONCRETE PLANT (OVER 4 YD. CAPACITY);
CONCRETE PUMP; CRANE (ALL TYPES, INCLUDING BOOM
TRUCK, CHERRY PICKER); CRANE-COMPACT, TRACK OR
RUBBER OVER 4,000 LBS. CAPACITY; CRANES-SELF
ERECTING, STATIONARY, TRACK OR TRUCK (ALL
CONFIGURATIONS); DERRICK; DRAGLINE; DREDGE (DIPPER,
CLAM OR SUCTION); ELEVATING GRADER OR EUCLID
LOADER; FLOATING EQUIPMENT (ALL TYPES); GRADALL;
HELICOPTER CREW (OPERATOR-HOIST OR WINCH); HOE (ALL
TYPES); HOISTING ENGINE ON SHAFT OR TUNNEL WORK;

HYDRAULIC GANTRY (LIFTING SYSTEM); INDUSTRIAL-TYPE TRACTOR; JET ENGINE DRYER (D8 OR D9) DIESEL TRACTOR; LOCOMOTIVE (STANDARD GAUGE); MAINTENANCE OPERATOR CLASS A; MIXER, PAVING (SINGLE OR DOUBLE DRUM); MUCKING MACHINE; MULTIPLE SCRAPER; PILEDRIVING MACHINE (ALL TYPES); POWER SHOVEL; PRENTICE LOADER; QUAD 9 (DOUBLE PUSHER); RAIL TAMPER (WITH AUTO LIFTING & ALIGNING DEVICE); REFRIGERATING MACHINE (FREEZER OPERATION); ROTARY DRILL, ON CAISSON WORK; ROUGH TERRAIN FORK LIFT WITH WINCH/HOIST; SIDE-BOOM; SLIP-FORM PAVER; TOWER DERRICK; TREE SHREDDER; TRENCH MACHINE (OVER 24" WIDE); TRUCK MOUNTED CONCRETE PUMP; TUG BOAT; TUNNEL MACHINE AND/OR MINING MACHINE; WHEEL EXCAVATOR; AND ASPHALT PLANT ENGINEER (CLEVELAND DISTRICT ONLY). (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....	\$ 45.63	16.41
POWER EQUIPMENT OPERATOR: GROUP 2- ASPHALT PAVER; AUTOMATIC SUBGRADER MACHINE, SELF-PROPELLED (CMI TYPE); BOBCAT TYPE AND/OR SKID STEER LOADER WITH HOE ATTACHMENT GREATER THAN 7,000 LBS.; BORING MACHINE MORE THAN 48"; BULLDOZER; ENDLOADER; HORIZONTAL DIRECTIONAL DRILL (OVER 50,000 FT LBS THRUST); HYDRO MILLING MACHINE; KOLMAN-TYPE LOADER (PRODUCTION TYPE-DIRT); LEAD GREASEMAN; LIGHTING & TRAFFIC SIGNAL INSTALLATION EQUIPMENT (INCLUDES ALL GROUPS OR CLASSIFICATIONS); MATERIAL TRANSFER EQUIPMENT (SHUTTLE BUGGY) ASPHALT; PETTIBONE-RAIL EQUIPMENT; POWER GRADER; POWER SCRAPER; PUSH CAT; ROTOMILL (ALL), GRINDERS & PLANERS OF ALL TYPES; TRENCH MACHINE (24" WIDE & UNDER); VERMEER TYPE CONCRETE SAW; AND MAINTENANCE OPERATORS (PORTAGE AND SUMMIT COUNTIES ONLY). (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....	\$ 45.53	16.41
POWER EQUIPMENT OPERATOR: GROUP 3- A-FRAME; AIR COMPRESSOR ON TUNNEL WORK (LOW PRESSURE); ASPHALT PLANT ENGINEER (PORTAGE AND SUMMIT COUNTIES ONLY); BOBCAT-TYPE AND/OR SKID STEER LOADER WITH OR WITHOUT ATTACHMENTS; HIGHWAY DRILLS (ALL TYPES); LOCOMOTIVE (NARROW GAUGE); MATERIAL HOIST/ELEVATOR; MIXER, CONCRETE (MORE THAN ONE BAG CAPACITY); MIXER, ONE BAG CAPACITY (SIDE LOADER); POWER BOILER (OVER 15 LBS. PRESSURE) PUMP OPERATOR INSTALLING & OPERATING WELL POINTS; PUMP (4" & OVER DISCHARGE); ROLLER, ASPHALT; ROTOVATOR (LIME SOIL STABILIZER); SWITCH & TIE TAMPERS (WITHOUT LIFTING & ALIGNING DEVICE); UTILITY OPERATOR (SMALL EQUIPMENT); WELDING MACHINES; AND RAILROAD TIE INSERTER/REMOVER; ARTICULATING/STRAIGHT BED END DUMPS IF ASSIGNED (MINUS \$4.00 PER HOUR). (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....	\$ 44.49	16.41
POWER EQUIPMENT OPERATOR: GROUP 4- BACKFILLER; BALLAST RE-LOCATOR; BARS, JOINT & MESH INSTALLING MACHINE; BATCH PLANT; BORING MACHINE OPERATOR (48" OR LESS); BULL FLOATS; BURLAP & CURING MACHINE; CONCRETE PLANT (CAPACITY 4 YD. & UNDER); CONCRETE SAW (MULTIPLE); CONVEYOR (HIGHWAY); CRUSHER; DECKHAND; FARM-TYPE TRACTOR WITH ATTACHMENTS (HIGHWAY); FINISHING MACHINE; FIREPERSON, FLOATING EQUIPMENT (ALL TYPES); FORKLIFT; FORM TRENCHER; HYDRO HAMMER EXPECT MASONARY; HYDRO SEEDER; PAVEMENT BREAKER; PLANT MIXER; POST DRIVER; POST		

HOLE DIGGER (POWER AUGER); POWER BRUSH BURNER; POWER FORM HANDLING EQUIPMENT; ROAD WIDENING TRENCHER; ROLLER (BRICK, GRADE & MACADAM); SELF-PROPELLED POWER SPREADER; SELF-PROPELLED POWER SUBGRADER; STEAM FIREPERSON; TRACTOR (PULLING SHEEPFOOT, ROLLER OR GRADER); AND VIBRATORY COMPACTOR WITH INTEGRAL POWER. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....\$ 43.27	16.41
POWER EQUIPMENT OPERATOR: GROUP 5- COMPRESSOR (PORTABLE, SEWER, HEAVY & HIGHWAY); DRUM FIREPERSON (ASPHALT PLANT); GENERATOR; MASONRY FORK LIFT; INBOARD-OUTBOARD MOTOR BOAT LAUNCH; OIL HEATER (ASPHALT PLANT); OILER/HELPER; POWER DRIVEN HEATER; POWER SWEEPER & SCRUBBER; PUMP (UNDER 4"" DISCHARGE); SIGNALPERSON; TIRE REPAIRPERSON; VAC/ALLS; CRANES - COMPACT, TRACK OR RUBBER UNDER 4,000 POUND CAPACITY; FUELING AND GREASING; AND CHAINMEN. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).\$ 37.98	16.41
POWER EQUIPMENT OPERATOR: GROUP 6- MASTER MECHANIC & BOOM FROM 150 TO 180. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).....\$ 46.63	16.41
POWER EQUIPMENT OPERATOR: GROUP 7- BOOM FROM 180 AND OVER. (ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA, PORTAGE, AND SUMMIT COUNTIES).\$ 46.63	16.41

ENGI0018-004 05/01/2024

Rates

Fringes

POWER EQUIPMENT OPERATOR: GROUP 1- AIR COMPRESSOR
ON STEEL ERECTION; BARRIER MOVING MACHINE; BOILER
OPERATOR ON COMPRESSOR OR GENERATOR WHEN MOUNTED ON
A RIG; CABLEWAY; COMBINATION CONCRETE MIXER &
TOWER; CONCRETE PLANT (OVER 4 YD. CAPACITY);
CONCRETE PUMP; CRANE (ALL TYPES, INCLUDING BOOM
TRUCK, CHERRY PICKER); CRANE-COMPACT, TRACK OR
RUBBER OVER 4,000 LBS. CAPACITY; CRANES-SELF
ERECTING, STATIONARY, TRACK OR TRUCK (ALL
CONFIGURATIONS); DERRICK; DRAGLINE; DREDGE (DIPPER,
CLAM, OR SUCTION); ELEVATING GRADER OR EUCLID
LOADER; FLOATING EQUIPMENT (ALL TYPES); GRADALL;
HELICOPTER CREW (OPERATOR-HOIST OR WINCH); HOE (ALL
TYPES); HOISTING ENGINE ON SHAFT OR TUNNEL WORK;
HYDRAULIC GANTRY (LIFTING SYSTEM); INDUSTRIAL-TYPE
TRACTOR; JET ENGINE DRYER (D8 OR D9) DIESEL
TRACTOR; LOCOMOTIVE (STANDING GAUGE); MAINTENANCE
OPERATOR CLASS A; MIXER, PAVING (SINGLE OR DOUBLE
DRUM); MUCKING MACHINE; MULTIPLE SCRAPER;
PILEDIVING MACHINE (ALL TYPES); POWER SHOVEL;
PRENTICE LOADER; QUAD 9 (DOUBLE PUSHER); RAIL
TAMPER (WITH AUTO LIFTING & ALIGNING DEVICE);
REFRIGERATING MACHINE (FREEZER OPERATION); ROTARY
DRILL, ON CAISSON WORK; ROUGH TERRAIN FORK LIFT
WITH WINCH/HOIST; SIDE-BOOM; SLIP-FORM PAVER; TOWER
DERRICK; TREE SHREDDER; TRENCH MACHINE (OVER 24""
WIDE); TRUCK MOUNTED CONCRETE PUMP; TUG BOAT;
TUNNEL MACHINE AND/OR MINING MACHINE; AND WHEEL
EXCAVATOR. (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 WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, AND YANDOT COUNTIES).....\$ 44.14

16.41

POWER EQUIPMENT OPERATOR: GROUP 2- ASPHALT PAVER; AUTOMATIC SUBGRADER MACHINE, SELF-PROPELLED (CMI TYPE); BOBCAT TYPE AND/OR SKID STEER LOADER WITH HOE ATTACHMENT GREATER THAN 7,000 LBS.' BORING MACHINE MORE THAN 48"; BULLDOZER; ENDLOADER; HYDRO MILLING MACHING; HORIZONTAL DIRECTIONAL DRILL (OVER 50,000 FT. LBS. THRUST); KOLMAN-TYPE LOADER (PRODUCTION TYPE-DIRT); LEAD GREASEMAN; LIGHTING & TRAFFIC SIGNAL INSTALLATION EQUIPMENT (INCLUDES ALL GROUPS OR CLASSIFICATIONS); MATERIAL TRANSFER EQUIPMENT (SHUTTLE BUGGY); ASPHALT; PETTIBONE-RAIL EQUIPMENT; POWER GRADER; POWER SCRAPER; PUSH CAT; ROTOMILL (ALL), GRINDERS & PLANERS OF ALL TYPES; TRENCH MACHINE (24" WIDE & UNDER); AND VERMEER TYPE CONCRETE SAW. (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 WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, AND YANDOT COUNTIES).....\$ 44.02

16.41

POWER EQUIPMENT OPERATOR: GROUP 3- A-FRAME; AIR COMPRESOR ON TUNNEL WORK (LOW PRESSURE); ASPHALT PLANT ENGINEER; BOBCAT-TYPE AND/OR SKID STEER LOADER WITH OR WITHOUT ATTACHMENTS; HIGHWAY DRILLS (ALL TYPES); LOCOMOTIVE (NARROW GAUGE); MATERIAL HOIST/ELEVATOR; MIXER, CONCRETE (MORE THAN ONE BAG CAPACITY); MIXER, ONE BAG CAPACITY (SIDE LOADER); POWER BOILER (OVER 15 LBS. PRESSURE) PUMP OPERATOR INSTALLING & OPERATING WELL POINTS; PUMP (4" & OVER DISCHARGE); RAILROAD TIE INSERTER/REMOVER; ROLLER, ASPHALT; ROTOVATOR (LIME SOIL STABILIZER); SWITCH & TIE TAMPERS (WITHOUT LIFTING & ALIGNING DEVICE); UTILITY OPERATOR (SMALL EQUIPMENT); AND WELDING MACHINES; ARTICULATING/STRAIGHT BED END DUMPS IF ASSIGNED (MINUS \$4.00 PER HOUR). (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 WERT,

VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, AND YANDOT COUNTIES).....\$ 42.98	16.41
POWER EQUIPMENT OPERATOR: GROUP 4- BACKFILLER; BALLAST RE-LOCATOR; BARS, JOINT & MESH INSTALLING MACHINE; BATCH PLANT; BORING MACHINE OPERATOR (48" OR LESS); BULL FLOATS; BURLAP & CURING MACHINE; CONCRETE PLANT (CAPACITY 4 YD. & UNDER); CONCRETE SAW (MULTIPLE); CONVEYOR (HIGHWAY); CRUSHER: DECKAHD: FARM-TYPE TRACTOR WITH ATTACHMENTS (HIGHWAY); FINISHING MACHINE; FIREPERSON, FLOATING EQUIPMENT (ALL TYPES); FORK LIFT; FORM TRENCHER; HYDRO HAMMER EXCEPT MASONARY; HYDRO SEEDER; PAVEMENT BREAKER; PLANT MIXER; POST DRIVER; POST HOLE DIGGER (POWER AUGER); POWER BRUSH BURNER; POWER FORM HANDLING EQUIPMENT; ROAD WIDENING TRENCHER; ROLLER (BRICK, GRADE, & MACADAM); SELF-PROPELLED POWER SPREADER; SELF-PROPELLED POWER SUBGRADER; STEAM FIREPERSON; TRACTOR (PULLING SHEEPFOOT, ROLLER, OR GRADER); AND VIBRATORY COMPACTOR WITH INTEGRAL POWER. (ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCKTON, 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 WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, AND YANDOT COUNTIES).....\$ 41.80	
	16.41
POWER EQUIPMENT OPERATOR: GROUP 5- COMPRESSOR (PORTABLE, SEWER, HEAVY & HIGHWAY); DRUM FIREPERSON (ASPHALT PLANT); GENERATOR; MASONARY FORKLIFT; INBOARD-OUTBOARD MOTOR BOAT LAUNCH; OIL HEATER (ASPHALT PLANT); OILER/HELPER; POWER DRIVEN HEATER; POWER SWEEPER & SCRUBBER; PUMP (UNDER 4" DISCHARGE); SIGNALPERSON; TIRE REPAIRPERSON; VAC/ALLS; CRANES-COMPACT, TRACK, OR RUBBER UNDER 4,000 POUND CAPACITY; FUELING AND GREASING; AND CHAINMEN. (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 WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, AND YANDOT COUNTIES).....\$ 36.34	
	16.41
POWER EQUIPMENT OPERATOR: GROUP 6- MASTER MECHANIC & BOOM FROM 150 TO 180. (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 WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, AND YANDOT COUNTIES).....	\$ 45.14	16.41
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POWER EQUIPMENT OPERATOR: GROUP 7- BOOM FROM 180 AND OVER. (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 WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, AND YANDOT COUNTIES).....	\$ 45.14	16.41
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ENGI0066-023 06/01/2023

	Rates	Fringes
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 1- RIG, PILE DRIVER OR CAISSON TYPE; & RIG, PILE HYDRAULIC UNIT ATTACHED. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 37.19	24.30
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 2 - ASPHALT HEATER PLANER; BACKFILLER WITH DRAG ATTACHMENT; BACKHOE; BACKHOE WITH SHEAR ATTACHED; BACKHOE-REAR PIVOTAL SWING; BATCH PLANT-CENTRAL MIX CONCRETE; BATCH PLANT, PORTABLE CONCRETE; BERM BUILDER-AUTOMATIC; BOAT DERRICK; BOAT-TUG; BORING MACHINE ATTACHED TO TRACTOR; BULLCLAM; VULLDOZER; C.M.I. ROAD BUILDER & SIMILAR TYPE; CABLE PLACER &LATYER; CARRIER-STRADDLE; CARRYALL-SCRAPER OR SCOPP; CHICAGO BOOM; COMPACTOR WITH BLAD ATTACHED; CONCRETE SAW (VERMEER OR SIMILAR TYPE); CONCRETE SPREADER FINISHER; COMBINATION, BIDWELL MACHINE; CRANE; CRANE-ELECTRIC OVERHEAD; CRANE-ROUGH TERRAIN; CRANE-SIDE BOOM; CRANE-TRUCK; CRANE-TOWER; DERRICK-BOOM; DERRICK-CAR; DIGGER -WHEEL (NOT TRENCHER OR ROAD WIDENER); DOUBLE NINE; DRAG LINE; DREDGE; DRILL-KENNY OR SIMILAR TYPE; EASY POUR MEDIAN BARRIER MACHINE (OR SIMILAR TYPE); ELECTROMATIC; FRANKIE PILE; GRADALL; GRADER; GURRY; SELF-PROPELLED; HEAVY EQUIPMENT ROBOTICS OPERATOR/MECHANIC; HOIST-MONORAIL; HOIST-STATIONARY & MOBILE TRACTOR; HOIST, 2 OR 3 DRUM; HORIZONTAL DIRECTIONAL DRILL OPERATOR; JACKALL; JUMBO MACHINE; KOCAL & KUHLMAN; LAND-SEAGOING VEHICLE; LOADER, ELEVATING; LOADER, FRONT END; LOADER, SKID STEER; LOCOMOTIVE; MECHANIC/WELDER; METRO CHIP HARVESTER WITH BOO; MUCKING MACHINE; PAVER-ASPHALT FINISHING MACHINE; PAVER-ROAD CONCRETE; PAVER-SLIP FORM (C.M.I. OR SIMILAR); PLACE CRETE MACHINE WITH BOOM; POST DRIVER (CARRIER MOUNTED); POWER DRIVEN HYDRAULIC PUMP & JACK (WHEN USED IN SLIP FORM OR LIFT SLAB CONSTRUCTION); PUMP CRETE MACHINE;		

REGULATOR-BALLAST; HYRAULIC POWER UNIT NOT ATTACHED TO RIG FOR PILE DRILLINGS; RIGS-DRILLING; ROTO MILL OR SIMILAR FULL LANE (8' WIDE & OVER); ROTO MILL OR SIMILAR TYPE (UNDER 8'); SHOVEL; SLIP FORM CURB MACHINE; SPEEDWING; SPIKEMASTER; STONECRUSHER; TIE PULLER & LOADER; TIE TAMPER; TRACTOR-DOUBLE BOOM; TRACTOR WITH ATTACHMENTS; TRUCK-BOOM; TRUCK-TIRE; TRENCH MACHINE; TUNNEL MACHINE (MARK 21 JAVA OR SIMILAR) & WHIRLEY (OR SIMILAR TYPE) (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 36.92	24.30
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 3 - ASPHALT PLANT; BENDING MACHINE (PIPELINE OR TYPE); BORING MACHINE, MOTOR DRIVEN; CHIP HARVESTER WITHOUT BOOM; CLEANING MACHINE, PIPELINE TYPE; COATING MACHINE, PIPELINE TYPE; COMPACTOR; CONCRETE BELT PLACER; CONCRETE FINISHER; CONCRETE PLANER OR ASPHALT; CONCRETE SPREADER; ELEVATOR; FORK LIFT (HOME BUILDING ONLY); FORK LIFT & LULLS; FORK LIFT WALK BEHIND (HOISTING OVER 1 BUCK HIGH); FORM LINE MACHINE; GREASE TRUCK OPERATOR; GROUT PUMP; GUNNITE MACHINE; HORIZONTAL DIRECTIONAL DRILL LOCATOR; SINGLE DRUM HOIST WITH OR WITHOUT TOWER; HUCK BOLTING MACHINE; HYDRAULIC SCAFFOLD (HOISTING BUILDING MATERIALS); PAVING BREAKER (SELF-PROPELLED OR RIDDEN); PIPE DREAM; POT FIREPERSON (POWER AGITATED); REFRIGERATION PLANT; ROAD WIDENER; ROLLER; SASGEN DERRICK; SEEDING MACHINE; SOIL STABILIZER (PUMP TYPE); SPRAY CURE MACHINE, SELF-PROPELLED; STRAW BLOWER MACHINE; SUB-GRADER; TUBE FINISHER OR BROOM C.M.I. OR SIMILAR TYPE; & TUGGER HOIST. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....		
	\$ 32.06	24.30
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 4 - AIR CURTAIN DESTRUCTOR & SIMILAR TYPE; BATCH PLANT-JOB RELATED; BOILER OPERATOR; COMPRESSOR; CONVEYOR; CURB BUILDER, SELF-PROPELLED; DRILL WAGON; GENERATOR SET; GENERATOR-STEAM; HEATER-PORTABLE POWER; HYDRAULIC MANIUPULATOR CRANE; JACK-HYDRAULIC POWER DRIVEN; JACK-HYARAULIC (RAILROAD); LADAVATOR; MINOR MACHINE OPERATOR; MIXER-CONCRETE; MULCHING MACHINE; PIN PULLER; POWER BROOM; PULVERIZER; PUMP; ROAD FINISHING MAHINC (PULL TYPE); SAW-CONCRETE-SELF-PROPELLED (HIGHWAY WORK); SIGNAL PERSON; SPRAY CURE MACHINE-MOTOR POWERED; STUMP CUTTER; TRACTOR; TRENCHER FORM; WATER BLASTER; STEAM JENNY; SYPHON; VIBRATOR-GASOLINE; & WELDING MACHINE. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....		
	\$ 28.77	24.30
POWER EQUIPMENT OPERATOR: ALL OTHER WORK GROUP 5 - BRAKEPERSON; FIREPERSON; & OILER. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....		
	\$ 25.94	24.30
POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC WASTE PROJECTS GROUP 1 - A & B- RIG, PILE DRIVER OR CAISSON TYPE; & RIG, PILE HYDRAULIC UNIT ATTACHED. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....		
	\$ 44.63	24.30
POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC WASTE PROJECTS GROUP 2 - A & B - ASPHALT HEATER PLANER; BACKFILLER WITH DRAG ATTACHMENT; BACKHOE; BACKHOE WITH SHEAR ATTACHED; BACKHOE-REAR PIVOTAL SWING; BATCH PLANT-CENTRAL MIX CONCRETE; BATCH PLANT, PORTABLE CONCRETE; BERM BUILDER-AUTOMATIC; BOAT DERRICK; BOAT-TUG; BORING MACHINE ATTACHED TO TRACTOR; BULLCLAM; VULLDOZER; C.M.I. ROAD BUILDER & SIMILAR TYPE; CABLE PLACER &LATYER;		

CARRIER-STRADDLE; CARRYALL-SCRAPER OR SCOPP;
 CHICAGO BOOM; COMPACTOR WITH BLAD ATTACHED;
 CONCRETE SAW (VERMEER OR SIMILAR TYPE); CONCRETE
 SPREADER FINISHER; COMBINATION, BIDWELL MACHINE;
 CRANE; CRANE-ELECTRIC OVERHEAD; CRANE-ROUGH
 TERRAIN; CRANE-SIDE BOOM; CRANE-TRUCK; CRANE-TOWER;
 DERRICK-BOOM; DERRICK-CAR; DIGGER -WHEEL (NOT
 TRENCHER OR ROAD WIDENER); DOUBLE NINE; DRAG LINE;
 DREDGE; DRILL-KENNY OR SIMILAR TYPE; EASY POUR
 MEDIAN BARRIER MACHINE (OR SIMILAR TYPE);
 ELECTROMATIC; FRANKIE PILE; GRADALL; GRADER; GURRY;
 SELF-PROPELLED; HEAVY EQUIPMENT ROBOTICS
 OPERATOR/MECHANIC; HOIST-MONORAIL; HOIST-STATIONARY
 & MOBILE TRACTOR; HOIST, 2 OR 3 DRUM; HORIZONTAL
 DIRECTIONAL DRILL OPERATOR; JACKALL; JUMBO MACHINE;
 KOCAL & KUHLMAN; LAND-SEAGOING VEHICLE; LOADER,
 ELEVATING; LOADER, FRONT END; LOADER, SKID STEER;
 LOCOMOTIVE; MECHANIC/WELDER; METRO CHIP HARVESTER
 WITH BOO; MUCKING MACHINE; PAVER-ASPHALT FINISHING
 MACHINE; PAVER-ROAD CONCRETE; PAVER-SLIP FORM
 (C.M.I. OR SIMILAR); PLACE CRETE MACHINE WITH BOOM;
 POST DRIVER (CARRIER MOUNTED); POWER DRIVEN
 HYDRAULIC PUMP & JACK (WHEN USED IN SLIP FORM OR
 LIFT SLAB CONSTRUCTION); PUMP CRETE MACHINE;
 REGULATOR-BALLAST; HYRAULIC POWER UNIT NOT ATTACHED
 TO RIG FOR PILE DRILLINGS; RIGS-DRILLING; ROTO MILL
 OR SIMILAR FULL LANE (8' WIDE & OVER); ROTO MILL OR
 SIMILAR TYPE (UNDER 8'); SHOVEL; SLIP FORM CURB
 MACHINE; SPEEDWING; SPIKEMASTER; STONECRUSHER; TIE
 PULLER & LOADER; TIE TAMPER; TRACTOR-DOUBLE BOOM;
 TRACTOR WITH ATTACHMENTS; TRUCK-BOOM; TRUCK-TIRE;
 TRENCH MACHINE; TUNNEL MACHINE (MARK 21 JAVA OR
 SIMILAR) & WHIRLEY (OR SIMILAR TYPE) (COLUMBIANA,
 MAHONING & TRUMBULL COUNTIES).....\$ 44.30 24.30
 POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC
 WASTE PROJECTS GROUP 3 - A & B - ASPHALT PLANT;
 BENDING MACHINE (PIPELINE OR TYPE); BORING MACHINE,
 MOTOR DRIVEN; CHIP HARVESTER WITHOUT BOOM; CLEANING
 MACHINE, PIPELINE TYPE; COATING MACHINE, PIPELINE
 TYPE; COMPACTOR; CONCRETE BELT PLACER; CONCRETE
 FINISHER; CONCRETE PLANER OR ASPHALT; CONCRETE
 SPREADER; ELEVATOR; FORK LIFT (HOME BUILDING ONLY);
 FORK LIFT & LULLS; FORK LIFT WALK BEHIND (HOISTING
 OVER 1 BUCK HIGH); FORM LINE MACHINE; GREASE TRUCK
 OPERATOR; GROUT PUMP; GUNNITE MACHINE; HORIZONTAL
 DIRECTIONAL DRILL LOCATOR; SINGLE DRUM HOIST WITH
 OR WITHOUT TOWER; HUCK BOLTING MACHINE; HYDRAULIC
 SCAFFOLD (HOISTING BUILDING MATERIALS); PAVING
 BREAKER (SELF=PROPELLED OR RIDDEN); PIPE DREAM; POT
 FIREPERSON (POWER AGITATED); REFRIGERATION PLANT;
 ROAD WIDENER; ROLLER; SASGEN DERRICK; SEEDING
 MACHINE; SOIL STABILIZER (PUMP TYPE); SPRAY CURE
 MACHINE, SELF-PROPELLED; STRAW BLOWER MACHINE;
 SUB-GRADER; TUBE FINISHER OR BROOM C.M.I. OR
 SIMILAR TYPE; & TUGGER HOIST(COLUMBIANA, MAHONING
 & TRUMBULL COUNTIES).....\$ 38.47 24.30
 POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC
 WASTE PROJECTS GROUP 4 - A & B - AIR CURTAIN
 DESTRUCTOR & SIMILAR TYPE; BATCH PLANT-JOB RELATED;
 BOILER OPERATOR; COMPRESSOR; CONVEYOR; CURB
 BUILDER, SELF-PROPELLED; DRILL WAGON; GENERATOR
 SET; GENERATOR-STEAM; HEATER-PORTABLE POWER;
 HYDRAULIC MANIUPLATOR CRANE; JACK-HYDRAULIC POWER
 DRIVEN; JACK-HYARAULIC (RAILROAD); LADAVATOR; MINOR
 MACHINE OPERATOR; MIXER-CONCRETE; MULCHING MACHINE;

PIN PULLER; POWER BROOM; PULVERIZER; PUMP; ROAD FINISHING MAHINC (PULL TYPE); SAW-CONCRETE-SELF-PROPELLED (HIGHWAY WORK); SIGNAL PERSON; SPRAY CURE MACHINE-MOTOR POWERED; STUMP CUTTER; TRACTOR; TRENCHER FORM; WATER BLASTER; STEAM JENNY; SYPHON; VIBRATOR-GASOLINE; & WELDING MACHINE. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 34.52	24.30
POWER EQUIPMENT OPERATOR: ASBESTOS; HAZARDOUS/TOXIC WASTE PROJECTS GROUP 5 - A & B - BRAKEPERSON; FIREPERSON; & OILER. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 31.13	24.30
POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 1 - C & D - RIG, PILE DRIVER OR CAISSON TYPE; & RIG, PILE HYDRAULIC UNIT ATTACHED. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 40.91	24.30
POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 2 - C & D - ASPHALT HEATER PLANER; BACKFILLER WITH DRAG ATTACHMENT; BACKHOE; BACKHOE WITH SHEAR ATTACHED; BACKHOE-REAR PIVOTAL SWING; BATCH PLANT-CENTRAL MIX CONCRETE; BATCH PLANT, PORTABLE CONCRETE; BERM BUILDER-AUTOMATIC; BOAT DERRICK; BOAT-TUG; BORING MACHINE ATTACHED TO TRACTOR; BULLCLAM; VULLDOZER; C.M.I. ROAD BUILDER & SIMILAR TYPE; CABLE PLACER & LATYER; CARRIER-STRADDLE; CARRYALL-SCRAPER OR SCOPP; CHICAGO BOOM; COMPACTOR WITH BLAD ATTACHED; CONCRETE SAW (VERMEER OR SIMILAR TYPE); CONCRETE SPREADER FINISHER; COMBINATION, BIDWELL MACHINE; CRANE; CRANE-ELECTRIC OVERHEAD; CRANE-ROUGH TERRAIN; CRANE-SIDE BOOM; CRANE-TRUCK; CRANE-TOWER; DERRICK-BOOM; DERRICK-CAR; DIGGER -WHEEL (NOT TRENCHER OR ROAD WIDENER); DOUBLE NINE; DRAG LINE; DREDGE; DRILL-KENNY OR SIMILAR TYPE; EASY POUR MEDIAN BARRIER MACHINE (OR SIMILAR TYPE); ELECTROMATIC; FRANKIE PILE; GRADALL; GRADER; GURRY; SELF-PROPELLED; HEAVY EQUIPMENT ROBOTICS OPERATOR/MECHANIC; HOIST-MONORAIL; HOIST-STATIONARY & MOBILE TRACTOR; HOIST, 2 OR 3 DRUM; HORIZONTAL DIRECTIONAL DRILL OPERATOR; JACKALL; JUMBO MACHINE; KOCAL & KUHLMAN; LAND-SEAGOING VEHICLE; LOADER, ELEVATING; LOADER, FRONT END; LOADER, SKID STEER; LOCOMOTIVE; MECHANIC/WELDER; METRO CHIP HARVESTER WITH BOO; MUCKING MACHINE; PAVER-ASPHALT FINISHING MACHINE; PAVER-ROAD CONCRETE; PAVER-SLIP FORM (C.M.I. OR SIMILAR); PLACE CRETE MACHINE WITH BOOM; POST DRIVER (CARRIER MOUNTED); POWER DRIVEN HYDRAULIC PUMP & JACK (WHEN USED IN SLIP FORM OR LIFT SLAB CONSTRUCTION); PUMP CRETE MACHINE; REGULATOR-BALLAST; HYRAULIC POWER UNIT NOT ATTACHED TO RIG FOR PILE DRILLINGS; RIGS-DRILLING; ROTO MILL OR SIMILAR FULL LANE (8' WIDE & OVER); ROTO MILL OR SIMILAR TYPE (UNDER 8'); SHOVEL; SLIP FORM CURB MACHINE; SPEEDWING; SPIKEMASTER; STONECRUSHER; TIE PULLER & LOADER; TIE TAMPER; TRACTOR-DOUBLE BOOM; TRACTOR WITH ATTACHMENTS; TRUCK-BOOM; TRUCK-TIRE; TRENCH MACHINE; TUNNEL MACHINE (MARK 21 JAVA OR SIMILAR) & WHIRLEY (OR SIMILAR TYPE) (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 40.61	24.30
POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 3 - C & D - ASPHALT PLANT; BENDING MACHINE (PIPELINE OR TYPE); BORING MACHINE, MOTOR DRIVEN; CHIP HARVESTER WITHOUT BOOM; CLEANING MACHINE, PIPELINE TYPE; COATING MACHINE, PIPELINE TYPE; COMPACTOR; CONCRETE BELT PLACER; CONCRETE		

FINISHER; CONCRETE PLANER OR ASPHALT; CONCRETE SPREADER; ELEVATOR; FORK LIFT (HOME BUILDING ONLY); FORK LIFT & LULLS; FORK LIFT WALK BEHIND (HOISTING OVER 1 BUCK HIGH); FORM LINE MACHINE; GREASE TRUCK OPERATOR; GROUT PUMP; GUNNITE MACHINE; HORIZONTAL DIRECTIONAL DRILL LOCATOR; SINGLE DRUM HOIST WITH OR WITHOUT TOWER; HUCK BOLTING MACHINE; HYDRAULIC SCAFFOLD (HOISTING BUILDING MATERIALS); PAVING BREAKER (SELF=PROPELLED OR RIDDEN); PIPE DREAM; POT FIREPERSON (POWER AGITATED); REFRIGERATION PLANT; ROAD WIDENER; ROLLER; SASGEN DERRICK; SEEDING MACHINE; SOIL STABILIZER (PUMP TYPE); SPRAY CURE MACHINE, SELF-PROPELLED; STRAW BLOWER MACHINE; SUB-GRADER; TUBE FINISHER OR BROOM C.M.I. OR SIMILAR TYPE; & TUGGER HOIST(COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 35.27	24.30
POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 4 - C & D - AIR CURTAIN DESTRUCTOR & SIMILAR TYPE; BATCH PLANT-JOB RELATED; BOILER OPERATOR; COMPRESSOR; CONVEYOR; CURB BUILDER, SELF-PROPELLED; DRILL WAGON; GENERATOR SET; GENERATOR-STEAM; HEATER-PORTABLE POWER; HYDRAULIC MANIUPULATOR CRANE; JACK-HYDRAULIC POWER DRIVEN; JACK-HYARAULIC (RAILROAD); LADAVATOR; MINOR MACHINE OPERATOR; MIXER-CONCRETE; MULCHING MACHINE; PIN PULLER; POWER BROOM; PULVERIZER; PUMP; ROAD FINISHING MAHINC (PULL TYPE); SAW-CONCRETE-SELF-PROPELLED (HIGHWAY WORK); SIGNAL PERSON; SPRAY CURE MACHINE-MOTOR POWERED; STUMP CUTTER; TRACTOR; TRENCHER FORM; WATER BLASTER; STEAM JENNY; SYPHON; VIBRATOR-GASOLINE; & WELDING MACHINE. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 31.65	24.30
POWER EQUIPMENT OPERATOR: HAZARDOUS/TOXIC WASTE PROJECTS GROUP 5 - C & D - BRAKEPERSON; FIREPERSON; & OILER. (COLUMBIANA, MAHONING & TRUMBULL COUNTIES).....	\$ 28.53	24.30

IRON0017-002 05/01/2024

Rates

Fringes

IRONWORKER: ORNAMENTAL, REINFORCING, & STRUCTURAL (ASHTABULA (NORTH OF ROUTE 6, STARTING AT THE GEAUGA COUNTY LINE, PROCEEDING EAST TO STATE ROUTE 45), CUYAHOGA, ERIE (EASTERN 2/3), GEAUGA, HURON (EAST OF A LINE DRAWN FROM THE NORTH BORDER THROUGH MONROEVILLE & WILLARD), LAKE, LORAIN, MEDINA (NORTH OF OLD RTE. #224), PORTAGE (WEST OF A LINE FROM MIDDLEFIELD TO SHALERSVILLE TO DEERFIELD), AND SUMMIT (NORTH OF OLD RTE. #224, INCLUDING CITY LIMITS OF BARBERTON) COUNTIES).....	\$ 36.83	29.01
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IRON0017-010 05/01/2024

Rates

Fringes

IRONWORKER: STRUCTURAL, INCLUDING METAL BUILDING ERECTION & REINFORCING (ASHTABULA (EASTERN PART FROM LAKE ERIE ON THE NORTH TO ROUTE #322 ON THE SOUTH TO INCLUDE CONNEAUT, KINGSVILLE, SHEFFIELD, DENMARK, DORSET, CHERRY VALLEY, WAYNE, MONROE, PIERPONT, RICHMOND, ANDOVER & WILLIAMSFIELD TOWNSHIPS)).....	\$ 36.83	29.01
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IRON0044-001 06/01/2025

	Rates	Fringes
IRONWORKER, REINFORCING (ADAMS (WESTERN PART), BROWN, BUTLER (SOUTHERN PART), CLERMONT, CLINTON (SOUTH OF A LINE DRAWN FROM BLANCHESTER TO LYNCHBURG), HAMILTON, HIGHLAND (EXCLUDING EASTERN ONE-FIFTH & PORTION OF COUNTY INSIDE LINES DRAWN FROM MARSHALL TO LYNCHBURG FROM THE NORTHERN COUNTY LINE THROUGH E. MONROE TO MARSHALL) AND WARREN (SOUTH OF A LINE DRAWN FROM BLANCHESTER THROUGH MORROW TO THE WEST COUNTY LINE) COUNTIES).....	\$ 38.27	23.90

IRON0044-002 06/01/2025

	Rates	Fringes
IRONWORKER: FENCE ERECTOR (CLINTON (SOUTH OF A LINE DRAWN FROM BLANCHESTER TO LYNCHBURG), HAMILTON, HIGHLAND (EXCLUDING EASTERN ONE-FIFTH & PORTION OF COUNTY INSIDE LINES DRAWN FROM MARSHALL TO LYNCHBURG FROM THE NORTHERN COUNTY LINE THROUGH E. MONROE TO MARSHALL) & WARREN (SOUTH OF A LINE DRAWN FROM BLANCHESTER THROUGH MORROW TO THE WEST COUNTY LINE)).....	\$ 35.88	23.90
IRONWORKER: ORNAMENTAL; STRUCTURAL (CLINTON (SOUTH OF A LINE DRAWN FROM BLANCHESTER TO LYNCHBURG), HAMILTON, HIGHLAND (EXCLUDING EASTERN ONE-FIFTH & PORTION OF COUNTY INSIDE LINES DRAWN FROM MARSHALL TO LYNCHBURG FROM THE NORTHERN COUNTY LINE THROUGH E. MONROE TO MARSHALL) & WARREN (SOUTH OF A LINE DRAWN FROM BLANCHESTER THROUGH MORROW TO THE WEST COUNTY LINE)).....	\$ 37.77	23.90

IRON0055-003 07/01/2024

	Rates	Fringes
IRONWORKER: ALL OTHER WORK (CRAWFORD (AREA BETWEEN LINES DRAWN FROM WHERE HWY #598 & #30 MEET THROUGH N. LIBERTY TO THE NORTHERN BORDER & FROM SAID HWY JUNCTION POINT DUE WEST TO THE BORDER), DEFIANCE (S. OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), ERIE (WESTERN 1/3), FULTON, HANCOCK, HARDIN (NORTH OF A LINE DRAWN FROM MAYSVILLE TO A POINT 4 MILES SOUTH OF THE NORTHERN LINE ON THE EASTERN LINE), HENRY, HURON (WEST OF A.....	\$ 29.77	21.30
IRONWORKER: FENCE ERECTOR (CRAWFORD (AREA BETWEEN LINES DRAWN FROM WHERE HWY #598 & #30 MEET THROUGH N. LIBERTY TO THE NORTHERN BORDER & FROM SAID HWY JUNCTION POINT DUE WEST TO THE BORDER), DEFIANCE (S. OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), ERIE (WESTERN 1/3), FULTON, HANCOCK, HARDIN (NORTH OF A LINE DRAWN FROM MAYSVILLE TO A POINT 4 MILES SOUTH OF THE NORTHERN LINE ON THE EASTERN LINE), HENRY, HURON (WEST OF A.....	\$ 29.77	21.30
IRONWORKER: FLAT ROAD MESH (CRAWFORD (AREA BETWEEN LINES DRAWN FROM WHERE HWY #598 & #30 MEET THROUGH N. LIBERTY TO THE NORTHERN BORDER & FROM SAID HWY JUNCTION POINT DUE WEST TO THE BORDER), DEFIANCE (S. OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), ERIE (WESTERN 1/3), FULTON, HANCOCK, HARDIN (NORTH OF A LINE DRAWN FROM MAYSVILLE TO A POINT 4 MILES SOUTH		

OF THE NORTHERN LINE ON THE EASTERN LINE), HENRY, HURON (WEST OF A.....\$ 26.40	24.62
IRONWORKER: TUNNES & CAISSONS UNDER PRESSURE (CRAWFORD (AREA BETWEEN LINES DRAWN FROM WHERE HWY #598 & #30 MEET THROUGH N. LIBERTY TO THE NORTHERN BORDER & FROM SAID HWY JUNCTION POINT DUE WEST TO THE BORDER), DEFIANCE (S. OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), ERIE (WESTERN 1/3), FULTON, HANCOCK, HARDIN (NORTH OF A LINE DRAWN FROM MAYSVILLE TO A POINT 4 MILES SOUTH OF THE NORTHERN LINE ON THE EASTERN LINE), HENRY, HURON (WEST OF A.....\$ 35.50	
	29.20

IRON0147-002 06/01/2025

	Rates	Fringes
IRONWORKER (ALLEN (NORTHERN HALF), DEFIANCE (NORTHERN PART, EXCLUDING SOUTH OF A LINE DRAWN FROM WHERE RTE. #66 MEETS THE NORTHERN LINE THROUGH INDEPENDENCE TO THE EASTERN COUNTY BORDER), MERCER (NORTHERN HALF), PAULDING, PUTNAM (WESTERN PART, EXCLUDING EAST OF A LINE DRAWN FROM THE NORTHERN BORDER DOWN THROUGH MILLER CITY TO WHERE #696 MEETS THE SOUTHERN BORDER), VAN WERT, AND WILLIAMS (WESTERN PART, EXCLUDING EAST OF A LINE DRAWN FROM PIONEER THROUGH STRYKER TO THE SOUTHERN BORDER) COUNTIES).....\$ 38.00		26.39

IRON0172-002 06/01/2025

	Rates	Fringes
IRONWORKER (CHAMPAIGN (EASTERN ONE-THIRD), CLARK (EASTERN ONE-FOURTH), COSHOCTON (WEST OF A LINE BEGINNING AT THE NORTHWESTERN COUNTY LINE GOING THROUGH WALHONDING & TUNNEL HILL TO THE SOUTHERN COUNTY LINE), CRAWFORD (SOUTH OF RTE. #30), DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, HARDIN (EXCLUDING A LINE DRAWN FROM ROUNDHEAD TO MAYSVILLE), HIGHLAND (EASTERN ONE-FIFTH), HOCKING, JACKSON (NORTHERN HALF), KNOX, LICKING, LOGAN (EASTERN ONE-THIRD), MADISON, MARION, MORROW, MUSKINGUM (WEST OF A LINE.....\$ 40.87		23.15

IRON0207-004 06/01/2025

	Rates	Fringes
IRONWORKER: LAYOUT; SHEETER (ASHTABULA (SOUTHERN PART STARTING AT THE GEAUGA COUNTY LINE), COLUMBIANA (E. OF A LINE FROM DAMASCUS TO HIGHLANDTOWN), MAHONING (N. OF OLD ROUTE #224), PORTAGE (E. OF A LINE FROM MIDDLEFIELD TO SHALERSVILLE TO DEERFIELD) & TRUMBULL).....\$ 37.26		28.16
IRONWORKER: ORNAMENTAL; REINFORCING; STRUCTURAL (ASHTABULA (SOUTHERN PART STARTING AT THE GEAUGA COUNTY LINE), COLUMBIANA (E. OF A LINE FROM DAMASCUS TO HIGHLANDTOWN), MAHONING (N. OF OLD ROUTE #224), PORTAGE (E. OF A LINE FROM MIDDLEFIELD TO SHALERSVILLE TO DEERFIELD) & TRUMBULL).....\$ 36.26		28.16

IRON0290-002 06/01/2025

	Rates	Fringes
IRONWORKER (ALLEN (SOUTHERN HALF), AUGLAIZE, BUTLER (NORTH OF A LINE DRAWN FROM EAST TO THE WEST		

COUNTY LINE GOING THROUGH OXFORD, DARRTOWN & WOODSDALE), CHAMPAIGN (EXCLUDING EAST OF A LINE DRAWN FROM CATAWLA TO THE POINT WHERE #68 INTERSECTS THE NORTHERN COUNTY LINE), CLARK (WESTERN TWO-THIRDS), CLINTON (EXCLUDING SOUTH OF A LINE DRAWN FROM BLANCHESTER TO LYNCHBURG), DARKE, GREENE, HIGHLAND (INSIDE LINES DRAWN FROM MARSHALL TO LYNCHBURG & FROM THE NORTHERN COUNTY LINE THROUGH EA.....	\$ 37.39	25.35
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IRON0549-003 12/01/2022

Rates

Fringes

IRONWORKER (BELMONT, GUERNSEY, HARRISON, JEFFERSON, MONROE & MUSKINGUM (EXCLUDING PORTION WEST OF A LINE STARTING AT ADAMS MILL GOING TO ADAMSVILLE AND GOING FROM ADAMSVILLE THROUGH BLUE ROCK TO THE SOUTH BORDER)).....	\$ 35.19	25.66
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IRON0550-004 05/01/2024

Rates

Fringes

IRONWORKERS: STRUCTURAL, ORNAMENTAL AND REINFORCING (ASHLAND, CARROLL, COLUMBIANA (W. OF A LINE FROM DAMASCUS TO HIGHLANDTOWN), COSHOCTON (E. OF A LINE BEGINNING AT NW CO. LINE GOING THROUGH WALHONDING & TUNNEL HILL TO THE SOUTH CO. LINE), HOLMES, HURON (S. OF OLD RTE. #224), MAHONING (S. OF OLD RTE. #224), MEDINA (S. OF OLD RTE. #224), PORTAGE (S. OF OLD RTE. #224), RICHLAND, STARK, SUMMIT (S. OF OLD RTE. #224, EXCLUDING CITY LIMITS OF BARBERTON), TUSCARAWAS, & WAYNE).....	\$ 34.70	22.88
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IRON0769-004 06/01/2025

Rates

Fringes

IRONWORKER (ADAMS (EASTERN HALF), GALLIA, JACKSON (SOUTHERN HALF), LAWRENCE & SCIOTO).....	\$ 39.70	29.59
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IRON0787-003 06/01/2025

Rates

Fringes

IRONWORKER (ATHENS, MEIGS, MORGAN, NOBLE, AND WASHINGTON COUNTIES).....	\$ 36.10	24.65
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LAB00265-008 05/01/2024

Rates

Fringes

LABORER GROUP 1- ASPHALT LABORER; CARPENTER TENDER; CONCRETE CURING APPLICATOR; DUMP MAN (BATCH TRUCK); GUARDRAIL AND FENCE INSTALLER; JOINT SETTER; LABORER (CONSTRUCTION); LANDSCAPE LABORER; MESH HANDLERS & PLACER; RIGHT-OF-WAY LABORER; RIPRAP LABORER & GROUTER; SCAFFOLD ERECTOR; SEAL COATING; SURFACE TREATMENT OR ROAD MIX LABORER; SIGN INSTALLER; SLURRY SEAL; UTILITY MAN; BRIDGE MAN; HANDYMAN; WATERPROOFING LABORER; FLAGPERSON; HAZARDOUS WASTE (LEVEL D); DIVER TENDER; ZONE PERSON & TRAFFIC CONTROL (REMAINING COUNTIES OF OHIO) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....	\$ 35.52	14.45
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GUARDRAIL AND FENCE INSTALLER; JOINT SETTER; LABORER (CONSTRUCTION); LANDSCAPE LABORER; MESH HANDLERS & PLACER; RIGHT-OF-WAY LABORER; RIPRAP LABORER & GROUTER; SCAFFOLD ERECTOR; SEAL COATING; SURFACE TREATMENT OR ROAD MIX LABORER; SIGN INSTALLER; SLURRY SEAL; UTILITY MAN; BRIDGE MAN; HANDYMAN; WATERPROOFING LABORER; FLAGPERSON; HAZARDOUS WASTE (LEVEL D); DIVER TENDER; ZONE PERSON & TRAFFIC CONTROL (CUYAHOGA, GEauga & LAKE COUNTIES) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....\$ 37.18	14.45
LABORER GROUP 1- ASPHALT LABORER; CARPENTER TENDER; CONCRETE CURING APPLICATOR; DUMP MAN (BATCH TRUCK); GUARDRAIL AND FENCE INSTALLER; JOINT SETTER; LABORER (CONSTRUCTION); LANDSCAPE LABORER; MESH HANDLERS & PLACER; RIGHT-OF-WAY LABORER; RIPRAP LABORER & GROUTER; SCAFFOLD ERECTOR; SEAL COATING; SURFACE TREATMENT OR ROAD MIX LABORER; SIGN INSTALLER; SLURRY SEAL; UTILITY MAN; BRIDGE MAN; HANDYMAN; WATERPROOFING LABORER; FLAGPERSON; HAZARDOUS WASTE (LEVEL D); DIVER TENDER; ZONE PERSON & TRAFFIC CONTROL (ASHTABULA, ERIE, HURON, LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....\$ 35.95	14.45
LABORER GROUP 2- ASPHALT RAKER; CONCRETE PUDDLER; KETTLE MAN PIPELINE); MACHINE DRIVEN TOOLS (GAS, ELECTRIC, AIR); MASON TENDER; BRICK PAVER; MORTAR MIXER; POWER BUGGY OR POWER WHEELBARROW; PAINT STRIPER; SHEETING & SHORING MAN; SURFACE GRINDER MAN; PLASTIC FUSING MACHINE OPERATOR; PUG MILL OPERATOR; & VACUUM DEVICES (WET OR DRY); RODDING MACHINE OPERATOR; DIVER; SCREWMAN OR PAVER; SCREED PERSON; WATER BLAST, HAND HELD WAND; PUMPS 4" & UNDER (GAS, AIR OR ELECTRIC) & HAZARDOUS WASTE (LEVEL C); AIR TRACK AND WAGON DRILL; BOTTOM PERSON; COFFERDAM (BELOW 25 FT. DEEP); CONCRETE SAW PERSON; CUTTING WITH BURNING TORCH; FORM SETTER; HAND SPIKER (RAILROAD); PIPELAYER; TUNNEL LABORER (WITHOUT AIR) & CAISSON; UNDERGROUND PERSON (WORKING IN SEWER AND WATERLINE, CLEANING, REPAIRING & RECONDITIONING); SANDBLASTER NOZZLE PERSON; & HAZARDOUS WASTE (LEVEL B) (REMAINING COUNTIES OF OHIO) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....\$ 35.69	14.45
LABORER GROUP 2- ASPHALT RAKER; CONCRETE PUDDLER; KETTLE MAN PIPELINE); MACHINE DRIVEN TOOLS (GAS, ELECTRIC, AIR); MASON TENDER; BRICK PAVER; MORTAR MIXER; POWER BUGGY OR POWER WHEELBARROW; PAINT STRIPER; SHEETING & SHORING MAN; SURFACE GRINDER MAN; PLASTIC FUSING MACHINE OPERATOR; PUG MILL OPERATOR; & VACUUM DEVICES (WET OR DRY); RODDING MACHINE OPERATOR; DIVER; SCREWMAN OR PAVER; SCREED PERSON; WATER BLAST, HAND HELD WAND; PUMPS 4" & UNDER (GAS, AIR OR ELECTRIC) & HAZARDOUS WASTE (LEVEL C); AIR TRACK AND WAGON DRILL; BOTTOM PERSON; COFFERDAM (BELOW 25 FT. DEEP); CONCRETE SAW	

PERSON; CUTTING WITH BURNING TORCH; FORM SETTER; HAND SPIKER (RAILROAD); PIPELAYER; TUNNEL LABORER (WITHOUT AIR) & CAISSON; UNDERGROUND PERSON (WORKING IN SEWER AND WATERLINE, CLEANING, REPAIRING & RECONDITIONING); SANDBLASTER NOZZLE PERSON; & HAZARDOUS WASTE (LEVEL B) (CUYAHOGA, GEAUGA & LAKE COUNTIES) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....\$ 37.35	14.45
LABORER GROUP 2- ASPHALT RAKER; CONCRETE PUDDLER; KETTLE MAN PIPELINE); MACHINE DRIVEN TOOLS (GAS, ELECTRIC, AIR); MASON TENDER; BRICK PAVER; MORTAR MIXER; POWER BUGGY OR POWER WHEELBARROW; PAINT STRIPER; SHEETING & SHORING MAN; SURFACE GRINDER MAN; PLASTIC FUSING MACHINE OPERATOR; PUG MILL OPERATOR; & VACUUM DEVICES (WET OR DRY); RODDING MACHINE OPERATOR; DIVER; SCREWMAN OR PAVER; SCREED PERSON; WATER BLAST, HAND HELD WAND; PUMPS 4" & UNDER (GAS, AIR OR ELECTRIC) & HAZARDOUS WASTE (LEVEL C); AIR TRACK AND WAGON DRILL; BOTTOM PERSON; COFFERDAM (BELOW 25 FT. DEEP); CONCRETE SAW PERSON; CUTTING WITH BURNING TORCH; FORM SETTER; HAND SPIKER (RAILROAD); PIPELAYER; TUNNEL LABORER (WITHOUT AIR) & CAISSON; UNDERGROUND PERSON (WORKING IN SEWER AND WATERLINE, CLEANING, REPAIRING & RECONDITIONING); SANDBLASTER NOZZLE PERSON; & HAZARDOUS WASTE (LEVEL B) (ASHTABULA, ERIE, HURON, LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.\$ 36.12	14.45
LABORER GROUP 3- BLASTER; MUCKER; POWDER PERSON; TOP LANDER; WRENCHER (MECHANICAL JOINTS & UTILITY PIPELINE); YARNER; HAZARDOUS WASTE (LEVEL A); CONCRETE SPECIALIST; CONCRETE CREW IN TUNNELS (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); CURB SETTER & CUTTER; GRADE CHECKER; UTILITY PIPELINE TAPPER; WATERLINE; AND CAULKER (REMAINING COUNTIES OF OHIO) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....\$ 36.02	14.45
LABORER GROUP 3- BLASTER; MUCKER; POWDER PERSON; TOP LANDER; WRENCHER (MECHANICAL JOINTS & UTILITY PIPELINE); YARNER; HAZARDOUS WASTE (LEVEL A); CONCRETE SPECIALIST; CONCRETE CREW IN TUNNELS (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); CURB SETTER & CUTTER; GRADE CHECKER; UTILITY PIPELINE TAPPER; WATERLINE; AND CAULKER (CUYAHOGA, GEAUGA & LAKE COUNTIES) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....\$ 37.68	14.45
LABORER GROUP 3- BLASTER; MUCKER; POWDER PERSON; TOP LANDER; WRENCHER (MECHANICAL JOINTS & UTILITY PIPELINE); YARNER; HAZARDOUS WASTE (LEVEL A); CONCRETE SPECIALIST; CONCRETE CREW IN TUNNELS (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); CURB SETTER & CUTTER; GRADE CHECKER; UTILITY PIPELINE TAPPER; WATERLINE; AND CAULKER (ASHTABULA, ERIE, HURON,	

LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....	\$ 36.45	14.45
LABORER GROUP 4- MINER (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); & GUNITE NOZZLE PERSON (ASHTABULA, ERIE, HURON, LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....	\$ 36.90	14.45
LABORER GROUP 4- MINER (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); & GUNITE NOZZLE PERSON (CUYAHOGA, GEAUGA & LAKE COUNTIES) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....	\$ 38.13	14.45
LABORER GROUP 4- MINER (WITH AIR-PRESSURIZED - \$1.00 PREMIUM); & GUNITE NOZZLE PERSON (REMAINING COUNTIES OF OHIO) TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.....	\$ 36.47	14.45
LABORER: SEWAGE PLANTS, WASTE PLANTS, WATER TREATMENT FACILITIES, PUMPING STATIONS, & ETHANOL PLANTS CONSTRUCTION (CUYAHOGA AND GEAUGA COUNTIES ONLY).....	\$ 38.56	14.45

PAIN0006-002 05/01/2023

Rates

Fringes

PAINTER COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS: GROUP 1- BRUSH; & ROLLER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 30.75	18.95
PAINTER COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS: GROUP 2- SANDBLASTING & BUFFING (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 31.15	18.95
PAINTER COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS: GROUP 3- SPRAY PAINTING; CLOSED STEEL ABOVE 55 FEET; BRIDGES & OPEN STRUCTURAL STEEL; TANKS - WATER TOWERS; BRIDGE PAINTERS; BRIDGE RIGGERS; CONTAINMENT BUILDERS (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 31.45	18.95
PAINTER COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS: GROUP 4- BRIDGE BLASTER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE))	\$ 37.01	18.95
PAINTER COMMERCIAL REPAINT GROUP 1- BRUSH; & ROLLER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 29.25	18.95
PAINTER COMMERCIAL REPAINT GROUP 2- SANDBLASTING &		

BUFFING (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. OF THE EAST-WEST TURNPIKE) & SUMMIT (N. OF THE EAST-WEST TURNPIKE)).....	\$ 29.65	18.95
PAINTER COMMERCIAL REPAINT GROUP 3- SPRAY PAINTING..	\$ 29.95	18.95

PAIN0007-002 07/01/2025

Rates

Fringes

PAINTER NEW COMMERCIAL WORK GROUP 1- BRUSH; SPRAY & SANDBLASTING POT TENDER. REPAINT IS 90% OF GROUP RATE.....	\$ 33.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 2- REFINERIES & REFINERY TANKS; SURFACES 30 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 3- SWING STAGE & CHAIR (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 4- LEAD ABATEMENT (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 5- ALL METHODS OF SPRAY (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 6- SOLVENT-BASED CATALIZED EPOXY MATERIALS OF 2 OR MORE COMPONENT MATERIALS, TO INCLUDE SOLVENT-BASED CONVERSION VARNISH (EXCLUDING WATER BASED) (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 7- SPRAY SOLVENT BASED MATERIAL; SAND & ABRASIVE BLASTING (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 8- TOWERS; TANKS; BRIDGES; STACKS OVER 30 FEET (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....	\$ 34.66	23.88
PAINTER: NEW COMMERCIAL WORK: GROUP 9- EPOXY SPRAY (EXCLUDING WATER BASED) (FULTON, HENRY, LUCAS, OTTAWA (EXCLUDING ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH,		

ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOVA) & WOOD) REPAINT IS 90% OF GROUP RATE.....\$ 34.66	23.88
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PAIN0012-008 05/01/2019

	Rates	Fringes
PAINTER: GROUP 1- BRIDGE EQUIPMENT TENDER; BRIDGE/CONTAINMENT BUILDER (BUTLER COUNTY).....\$ 21.95		10.20
PAINTER: GROUP 2- BRUSH & ROLLER (BUTLER COUNTY)....\$ 25.30		10.20
PAINTER: GROUP 3- SPRAY (BUTLER COUNTY).....\$ 25.80		10.20
PAINTER: GROUP 4- SANDBLASTING; & WATERBLASTING (BUTLER COUNTY).....\$ 26.05		10.20
PAINTER: GROUP 5- ELEVATED TANKS; STEEPLEJACK WORK; BRIDGE; & LEAD ABATEMENT (BUTLER COUNTY).....\$ 26.30		10.20

PAIN0012-010 05/01/2019

	Rates	Fringes
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING BRIDGE EQUIPMENT TENDER AND CONTAINMENT BUILDER (BROWN, CLERMONT, HAMILTON & WARREN).....\$ 21.95		10.20
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING BRIDGES WHEN HIGHEST POINT OF CLEARANCE IS 60 FEET OR MORE; & LEAD ABATEMENT PROJECTS (BROWN, CLERMONT, HAMILTON & WARREN).....\$ 26.30		10.20
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING BRUSH & ROLLER (BROWN, CLERMONT, HAMILTON & WARREN).....\$ 25.30		10.20
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING SANDBLASTING & HOPPER TENDER; WATER BLASTING (BROWN, CLERMONT, HAMILTON & WARREN).....\$ 26.05		10.20
PAINTER HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING SPRAY (BROWN, CLERMONT, HAMILTON & WARREN).....\$ 25.80		10.20

PAIN0093-001 12/01/2024

	Rates	Fringes
PAINTER: BRIDGES; LOCKS; DAMS; TENSION TOWERS; & ENERGIZED SUBSTATIONS (ATHENS, GUERNSEY, HOCKING, MONROE, MORGAN, NOBLE AND WASHINGTON COUNTIES).....\$ 36.44		24.46
PAINTER: POWER GENERATING FACILITIES (ATHENS, GUERNSEY, HOCKING, MONROE, MORGAN, NOBLE AND WASHINGTON COUNTIES).....\$ 33.29		24.46

PAIN0249-002 05/01/2025

	Rates	Fringes
PAINTER: GROUP 1: BRUSH & ROLLER (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....\$ 29.15		13.97
PAINTER: GROUP 2: SWING, SCAFFOLD BRIDGES; STRUCTURAL STEEL; OPEN ACID TANK; HIGH TENSION ELECTRICAL EQUIPMENT; & HOT PIPES (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....\$ 33.09		13.97
PAINTER: GROUP 3: SPRAY; SANDBLAST; STEAMCLEAN; LEAD ABATEMENT (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....\$ 29.90		13.97
PAINTER: GROUP 4: STEEPLEJACK WORK (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....\$ 30.10		13.97
PAINTER: GROUP 5: COAL TAR (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....\$ 30.65		13.97
PAINTER: GROUP 6: BRIDGE EQUIPMENT TENDER & OR		

CONTAINMENT BUILDER (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE).....	\$ 37.86	13.97
PAINTER: GROUP 7: TANKS, STACKS & TOWERS (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE)..	\$ 33.86	13.97
PAINTER: GROUP 8: BRIDGE BLASTER, RIGGER (CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE)..	\$ 40.86	13.97

PAIN0356-002 09/01/2009

	Rates	Fringes
PAINTER: BRIDGE EQUIPMENT TENDERS AND CONTAINMENT BUILDERS (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 27.93	7.25
PAINTER: BRIDGES; BLASTERS; AND RIGGERS (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 34.60	7.25
PAINTER: BRUSH AND ROLLER (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 20.93	7.25
PAINTER: SANDBLASTING; STEAM CLEANING; WATERBLASTING; AND HAZARDOUS WORK (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 25.82	7.25
PAINTER: SPRAY (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 21.40	7.25
PAINTER: STRUCTURAL STEEL AND SWING STAGE (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 25.42	7.25
PAINTER: TANKS; STACKS; AND TOWERS (KNOX, LICKING, MUSKINGUM, AND PERRY).....	\$ 28.63	7.25

PAIN0438-002 12/01/2023

	Rates	Fringes
PAINTER: BRIDGES, LOCKS, DAMS, TENSION TOWERS & ENERGIZED SUBSTATIONS (BELMONT, HARRISON AND JEFFERSON COUNTIES).....	\$ 36.09	19.49
PAINTER: POWER GENERATING FACILITIES (BELMONT, HARRISON AND JEFFERSON COUNTIES).....	\$ 32.94	19.49

PAIN0476-001 06/01/2025

	Rates	Fringes
PAINTER: GROUP 1- PAINTERS, BRUSH & ROLLER (COLUMBIANA, MAHONING, AND TRUMBULL COUNITIES).....	\$ 30.64	18.36
PAINTER: GROUP 2- BRIDGES (COLUMBIANA, MAHONING, AND TRUMBULL COUNITIES).....	\$ 40.27	18.36
PAINTER: GROUP 3- STRUCTURAL STEEL (COLUMBIANA, MAHONING, AND TRUMBULL COUNITIES).....	\$ 40.27	18.36
PAINTER: GROUP 4- SPRAY, EXCEPT BAR JOIST/DECK (COLUMBIANA, MAHONING, AND TRUMBULL COUNITIES).....	\$ 31.14	18.36
PAINTER: GROUP 5- EPOXY/MASTIC; SPRAY- BAR JOIST/DECK; WORKING ABOVE 50 FEET; AND SWINGSTAGES (COLUMBIANA, MAHONING, AND TRUMBULL COUNITIES).....	\$ 31.29	18.36
PAINTER: GROUP 6- TANKS; SANDBLASTING (COLUMBIANA, MAHONING, AND TRUMBULL COUNITIES).....	\$ 35.27	18.36
PAINTER: GROUP 7- TOWERS; STACKS (COLUMBIANA, MAHONING, AND TRUMBULL COUNITIES).....	\$ 32.64	18.36

PAIN0555-002 01/01/2025

	Rates	Fringes
PAINTER: GROUP 1- CONTAINMENT BUILDER (ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO).....	\$ 33.32	21.54
PAINTER: GROUP 2- BRUSH; ROLLER; POWER TOOLS, UNDER 40 FEET (ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO)..	\$ 35.02	21.54
PAINTER: GROUP 3- SAND BLASTING; SPRAY; STEAM CLEANING; PRESSURE WASHING; EPOXY & TWO COMPONENT MATERIALS; LEAD ABATEMENT; HAZARDOUS WASTE; TOXIC MATERIALS; BULK & STORAGE TANKS OF 25,000 GALLON		

CAPACITY OR MORE; ELEVATED TANKS (ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO).....	\$ 36.72	21.54
PAINTER: GROUP 4- STACKS; BRIDGES (ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO).....	\$ 40.03	21.54

PAIN0639-001 05/01/2011

Rates

Fringes

SIGN PAINTER & ERECTOR FOOTNOTES: A. 7 PAID HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; JULY 4TH; LABOR DAY; THANKSGIVING DAY; CHRISTMAS DAY & 1 FLOATING DAY B. VACATION PAY: AFTER 1 YEAR'S SERVICE - 5 DAYS' PAID VACATION; AFTER 2, BUT LESS THAN 10 YEARS' SERVICE - 10 DAYS' PAID VACATION; AFTER 10, BUT LESS THAN 20 YEARS' SERVICE - 15 DAYS' PAID VACATION; AFTER 20 YEARS' SERVICE - 20 DAYS' PAID VACATION C. FUNERAL LEAVE UP TO 3 DAYS MAXIMUM PAID LEAVE FOR DEATH OF MOTHER, FATHER, BROTHER, SISTER, SPOUSE, CHILD, MOTHER-IN-LAW, FATHER-IN-LAW, GRANDPARENT AND INLAW PROVIDED EMPLOYEE ATTENDS FUNERAL.....

	\$ 20.61	3.50
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PAIN0788-002 06/01/2024

Rates

Fringes

PAINTER: BRUSH & ROLLER (ASHLAND, CRAWFORD, ERIE, HANCOCK, HURON, MARION, MORROW, OTTAWA (ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOA), RICHLAND, SANDUSKY, SENECA & WYANDOT) WINTER REPAINT: BETWEEN DECEMBER 1 TO MARCH 31 - 90%JR \$.50 PER HOUR SHALL BE ADDED TO THE RATE OF PAY FOR THE CLASSIFICATION OF WORK: WHILE WORKING SWINGSTAGE, BOATSWAIN CHAIR, NEEDLE BEAM AND HORIZONTAL CABLE. WHILE OPERATING SPRAYGUNS, SANDBLASTING, COBBLASTING AND HIGH PRESSURE WATERBLASTING (4000PSI). \$1.00 PER HOUR SHALL BE ADDED TO THE RATE OF PAY FOR THE CLASSIFICATION OF WORK: FOR THE APPLICATION OF CATALIZED EPOXY, INCLUDING LATEX EPOXY THAT IS DEEMED HAZARDOUS, LEAD ABATEMENT, OR FOR WORK OR MATERIAL WHERE SPECIAL PRECAUTIONS BEYOND NORMAL WORK DUTIES MUST BE TAKEN. FOR WORKING ON STACKS, TANKS, AND TOWERS OVER 40 FEET IN HEIGHT.....

	\$ 29.13	17.52
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PAINTER: STRUCTURAL STEEL (ASHLAND, CRAWFORD, ERIE, HANCOCK, HURON, MARION, MORROW, OTTAWA (ALLEN, BAY, BONO, CATAWBA ISLAND, CLAY CENTER, CURTICE, DANBURY, EAGLE BEACH, ELLISTON, ELMORE, ERIE, FISHBACK, GEM BEACH & GENOA), RICHLAND, SANDUSKY, SENECA & WYANDOT) WINTER REPAINT: BETWEEN DECEMBER 1 TO MARCH 31 - 90%JR \$.50 PER HOUR SHALL BE ADDED TO THE RATE OF PAY FOR THE CLASSIFICATION OF WORK: WHILE WORKING SWINGSTAGE, BOATSWAIN CHAIR, NEEDLE BEAM AND HORIZONTAL CABLE. WHILE OPERATING SPRAYGUNS, SANDBLASTING, COBBLASTING AND HIGH PRESSURE WATERBLASTING (4000PSI). \$1.00 PER HOUR SHALL BE ADDED TO THE RATE OF PAY FOR THE CLASSIFICATION OF WORK: FOR THE APPLICATION OF CATALIZED EPOXY, INCLUDING LATEX EPOXY THAT IS DEEMED HAZARDOUS, LEAD ABATEMENT, OR FOR WORK OR MATERIAL WHERE SPECIAL PRECAUTIONS BEYOND NORMAL WORK DUTIES MUST BE TAKEN. FOR WORKING ON STACKS, TANKS, AND TOWERS OVER 40 FEET IN HEIGHT.....

	\$ 30.73	17.52
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PAIN0813-005 12/01/2008		
	Rates	Fringes
PAINTER: BASE RATE (GALLIA, LAWRENCE, MEIGS & VINTON).....	\$ 24.83	10.00
PAINTER: BRIDGES, LOCKS, DAMS & TENSION TOWERS (GALLIA, LAWRENCE, MEIGS & VINTON).....	\$ 27.83	10.00

PAIN0841-001 07/01/2025		
	Rates	Fringes
PAINTERS: GROUP 1- BRUSH, ROLLER & PAPERHANGER (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....	\$ 31.93	18.15
PAINTERS: GROUP 2- EPOXY APPLICATION (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....	\$ 32.58	18.15
PAINTERS: GROUP 3- SWING SCAFFOLD, BOSUM CHAIR, & WINDOW JACK (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....	\$ 32.68	18.15
PAINTERS: GROUP 4- SPRAY GUN OPERATOR OF ANY & ALL COATINGS (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....	\$ 32.78	18.15
PAINTERS: GROUP 5- SANDBLAST, PAINTING OF STANDPIPES, ETC. FROM SCAFFOLDS, BRIDGE WORK AND/OR OPEN STRUCTURAL STEEL, STANDPIPES AND/OR WATER TOWERS (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....	\$ 33.18	18.15
PAINTERS: GROUP 6- PUBLIC & COMMERCE TRANSPORTATION, STEEL OR GALVANIZED, BRIDGES, TUNNELS & RELATED SUPPORT ITEMS (CONCRETE) (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....	\$ 38.60	18.15
PAINTERS: GROUP 7- SYNTHETIC EXTERIOR, DRYWALL FINISHER AND/OR TAPER, DRYWALL FINISHER AND FOLLOW-UP MAN USING AUTOMATIC TOOLS (MEDINA, PORTAGE (SOUTH OF AND INCLUDING OHIO TURNPIKE), AND SUMMIT (SOUTH OF AND INCLUDING OHIO TURNPIKE) COUNTIES).....	\$ 33.18	18.15

PAIN0841-002 07/01/2025		
	Rates	Fringes
PAINTER: BRIDGES; TOWERS, POLES & STACKS; SANDBLASTING STEEL; STRUCTURAL STEEL & METALIZING (CARROLL, COSHOCTON, HOLMES, STARK, TUSCARAWAS & WAYNE).....	\$ 33.18	18.15
PAINTER: BRUSH & ROLLER (CARROLL, COSHOCTON, HOLMES, STARK, TUSCARAWAS & WAYNE).....	\$ 31.93	18.15
PAINTER: SPRAY; TANK INTERIOR & EXTERIOR (CARROLL, COSHOCTON, HOLMES, STARK, TUSCARAWAS & WAYNE).....	\$ 32.78	18.15

PAIN1020-002 07/01/2025		
	Rates	Fringes
PAINTER: BRUSH & ROLLER (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS		

COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$1.00 PREMIUM	APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....\$ 27.59	18.54
PAINTER: DRYWALL FINISHING & TAPING (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES): LL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$1.00 PREMIUM	APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....\$ 28.34	18.54
PAINTER: LEAD ABATEMENT (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$1.00 PREMIUM	APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....\$ 29.34	18.54
PAINTER: SPRAY, SANDBLASTING PRESSURE CLEANING, & REFINERY (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$1.00 PREMIUM	APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....\$ 28.34	18.54
PAINTER: SWING STAGE, CHAIR, SPIDERS, & CHERRY PICKERS (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$1.00 PREMIUM	APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....\$ 27.84	18.54
PAINTER: WALLCOVERINGS (ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT, AND WILLIAMS COUNTIES) ALL SURFACES 40 FT. OR OVER WHERE MATERIAL IS APPLIED TO OR LABOR PERFORMED ON, ABOVE GROUND LEVEL (EXTERIOR), FLOOR LEVEL (INTERIOR) - \$1.00 PREMIUM	APPLYING COAL TAR PRODUCTS - \$1.00 PREMIUM.....\$ 28.34	18.54

PAIN1275-002 05/01/2025		
	Rates	Fringes
PAINTER: BRIDGES (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....\$ 37.26		15.16
PAINTER: BRUSH; ROLLER (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....\$ 30.20		15.16
PAINTER: SANDBLASTING; STEAMCLEANING; WATERBLASTING (3500 PSI OR OVER)& HAZARDOUS WORK (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....\$ 32.35		15.16
PAINTER: SPRAY (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....\$ 32.15		15.16
PAINTER: STACKS; TANKS; & TOWERS (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....\$ 34.46		15.16
PAINTER: STRUCTURAL STEEL & SWING STAGE (DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS & UNION).....\$ 30.50		15.16

PLAS0109-001 06/01/2025		
	Rates	Fringes
PLASTERER (MEDINA, PORTAGE, STARK, AND SUMMIT COUNTIES).....	\$ 33.00	23.83

PLAS0109-003 06/01/2025		
	Rates	Fringes
PLASTERER (CARROLL, HOLMES, TUSCARAWAS, AND WAYNE COUNTIES).....	\$ 33.00	23.83

PLAS0132-002 07/01/2025		
	Rates	Fringes
PLASTERER (BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN COUNTIES).....	\$ 31.35	17.65

PLAS0404-002 05/01/2018		
	Rates	Fringes
PLASTERER (ASHTABULA, CUYAHOGA, GEAUGA, AND LAKE COUNTIES).....	\$ 29.63	17.11

PLAS0404-003 05/01/2018		
	Rates	Fringes
PLASTERER (LORAIN COUNTY).....	\$ 28.86	17.11

PLAS0526-022 05/01/2018		
	Rates	Fringes
PLASTERER (COLUMBIANA, MAHONING, AND TRUMBULL COUNTIES).....	\$ 28.86	17.11

PLAS0526-023 05/01/2018		
	Rates	Fringes
PLASTERER (BELMONT, HARRISON, AND JEFFERSON COUNTIES).....	\$ 28.21	17.11

PLAS0886-001 07/01/2025		
	Rates	Fringes
PLASTERER (FULTON, HANCOCK, HENRY, LUCAS, PUTNAM, AND WOOD COUNTIES).....	\$ 36.65	25.60

PLAS0886-003 07/01/2025		
	Rates	Fringes
PLASTERER (DEFIANCE, ERIE, HURON, OTTAWA, PAULDING, SANDUSKY, AND SENECA).....	\$ 36.65	25.60

PLAS0886-004 07/01/2025		
	Rates	Fringes
PLASTERER (ALLEN, AUGLAIZE, HARDIN, LOGAN, MERCER, AND VAN WERT).....	\$ 35.29	23.07

PLUM0042-002 07/01/2025		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (ASHLAND, CRAWFORD, ERIE, HURON, KNOX, LORAIN, MORROW,		

RICHLAND & WYANDOT).....\$ 43.02	26.45

PLUM0050-002 06/30/2025	
	Rates Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS & WOOD).....\$ 51.00	32.56

PLUM0055-003 05/05/2025	
	Rates Fringes
PLUMBER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, MEDINA (N. OF RTE. #18 & SMITH ROAD) & SUMMIT (N. OF RTE. #303, INCLUDING THE CORPORATE LIMITS OF THE CITY OF HUDSON)).....\$ 44.86	30.03

PLUM0083-001 07/01/2023	
	Rates Fringes
PLUMBER AND STEAMFITTER (BELMONT & MONROE (NORTH OF RTE. #78)).....\$ 35.94	37.35

PLUM0094-002 05/01/2025	
	Rates Fringes
PLUMBER/PIPEFITTER (CARROLL (NORTHERN HALF), STARK, AND WAYNE COUNTIES).....\$ 47.48	27.14

PLUM0120-002 05/01/2025	
	Rates Fringes
PIPEFITTER (ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN (THE C.E.I. POWER HOUSE IN AVON LAKE), MEDINA (N. OF RTE. #18) & SUMMIT (N. OF #303)).....\$ 49.17	28.55

PLUM0162-002 06/01/2024	
	Rates Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (CHAMPAIGN, CLARK, CLINTON, DARKE, FAYETTE, GREENE, MIAMI, MONTGOMERY & PREBLE).....\$ 43.05	27.18

PLUM0168-002 06/01/2025	
	Rates Fringes
PLUMBER/PIPEFITTER (MEIGS, MONROE (SOUTH OF RTE. #78), MORGAN (SOUTH OF RTE. #78) & WASHINGTON).....\$ 40.92	37.20

PLUM0189-002 06/01/2025	
	Rates Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (DELAWARE, FAIRFIELD, FRANKLIN, HOCKING, LICKING, MADISON, MARION, PERRY, PICKAWAY, ROSS & UNION).....\$ 53.00	27.59

PLUM0219-002 06/01/2025	
	Rates Fringes
PLUMBER AND STEAMFITTER (MEDINA (RTE. #18 FROM EASTERN EDGE OF MEDINA CO., WEST TO EASTERN CORPORATE LIMITS OF THE CITY OF MEDINA, & ON THE COUNTY ROAD FROM THE WEST CORPORATE LIMITS OF MEDINA RUNNING DUE WEST TO AND THROUGH COMMUNITY OF RISLEY TO THE WESTERN EDGE OF MEDINA COUNTY - ALL	

TERRITORY SOUTH OF THIS LINE), PORTAGE, AND SUMMIT (S. OF RTE. #303) COUNTIES).....	\$ 46.87	28.39

PLUM0392-002 06/01/2025		
	Rates	Fringes
PLUMBER/PIPEFITTER (BROWN, BUTLER, CLERMONT, HAMILTON & WARREN).....	\$ 43.30	27.40

PLUM0396-001 06/01/2025		
	Rates	Fringes
PLUMBER/PIPEFITTER (COLUMBIANA (EXCLUDING WASHINGTON & YELLOW CREEK TOWNSHIPS & LIVERPOOL TWP. - SECS. 35 & 36 - WEST OF COUNTY ROAD #427), MAHONING AND TRUMBULL COUNTIES).....	\$ 40.55	29.25

PLUM0495-002 06/01/2025		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (CARROLL (ROSE, MONROE, UNION, LEE, ORANGE, PERRY & LOUDON TOWNSHIPS), COLUMBIANA (WASHINGTON & YELLOW CREEK TOWNSHIPS & LIVERPOOL TOWNSHIP, SECS. 35 & 36, WEST OF COUNTY RD. #427), COSHOCTON, GUERNSEY, HARRISON, HOLMES, JEFFERSON, MORGAN (SOUTH TO STATE RTE. #78 & FROM MCCONNELSVILLE WEST ON STATE RTE. #37 TO THE PERRY COUNTY LINE), MUSKINGUM, NOBLE, AND TUSCARAWAS COUNTIES).....	\$ 39.32	37.60

PLUM0577-002 06/01/2025		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (ADAMS, ATHENS, GALLIA, HIGHLAND, JACKSON, LAWRENCE, PIKE, SCIOTO & VINTON).....	\$ 42.65	28.56

PLUM0776-002 07/01/2025		
	Rates	Fringes
PLUMBER, PIPEFITTER, STEAMFITTER (ALLEN, AUGLAIZE, HARDIN, LOGAN, MERCER, SHELBY AND VAN WERT COUNTIES).....	\$ 42.76	30.81

TEAM0377-003 05/01/2025		
	Rates	Fringes
TRUCK DRIVER: GROUP 1- ASPHALT DISTRIBUTOR; BATCH; 4- WHEEL SERVICE; 4-WHEEL DUMP; OIL DISTRIBUTOR & TANDEM (STATEWIDE, EXCEPT CUYAHOGA, GEAUGA & LAKE).....	\$ 34.26	18.85
TRUCK DRIVER: GROUP 2- TRACTOR-TRAILER COMBINATION: FUEL; POLE TRAILER; READY MIX; SEMI-TRACTOR; & ASPHALT OIL SPRAYBAR MAN WHEN OPERATED FROM CAB; 5 AXLES & OVER; BELLY DUMP; END DUMP; ARTICULATED DUMP; HEAVY DUTY EQUIPMENT; LOW BOY; & TRUCK MECHANIC (STATEWIDE, EXCEPT CUYAHOGA, GEAUGA & LAKE).....	\$ 35.26	18.85

TEAM0436-002 05/01/2025		
	Rates	Fringes
TRUCK DRIVER: GROUP 1- STRAIGHT & DUMP, STRAIGHT FUEL (CUYAHOGA, GEAUGA & LAKE).....	\$ 34.92	19.30
TRUCK DRIVER: GROUP 2- SEMI FUEL, SEMI TRACTOR,		

EUCLIDS, DARTS, TANK, ASPHALT SPREADERS, LOW BOYS,
CARRY-ALL, TOURNA-ROCKERS, HI-LIFTS, EXTRA LONG
TRAILERS, SEMI-POLE TRAILERS, DOUBLE HOOK-UP
TRACTOR TRAILERS INCLUDING TEAM TRACK & RAILROAD
SIDING, SEMI-TRACTOR & TRI-AXLE TRAILER, TANDEM
TRACTOR & TANDEM TRAILER, TAG ALONG TRAILER,
EXPANDABLE TRAILER OR TOWING REQUIRING ROAD
PERMITS, READY-MIX (AGITATOR OR NON-AGITATOR), BULK
CONCRETE DRIVER, DRY BATCH TRUCK, ARTICULATED END
DUMP (CUYAHOGA, GEauga & LAKE).....\$ 35.73 19.30

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a

supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than "SU", "UAVG", "SA", or "SC" denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The "SU" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The "SA" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007

01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an

interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"