SPECIFICATIONS AND CONTRACT DOCUMENTS

FOR

INDUSTRIAL DRIVE

Owner:

Zanesville - Muskingum County
Port Authority
205 North Fifth Street
Zanesville, OH 43701



Bid Documents Prepared By:



59 Grant Street Newark, Ohio 43055 P: 740.344.5451 F: 740.344.5746 www.hullinc.com

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NOTICE TO BIDDERS

Zanesville – Muskingum County Port Authority ("Owner"), will receive competitive sealed bids for the following project:

Industrial Drive and Public Infrastructure

until 3:00pm on Thursday June 18th, 2020 at the Zanesville — Muskingum County Port Authority 205 North Fifth Street Zanesville, OH 43701.

This project involves construction of a new lift station and forcemain, over 2,600LF of gravity sanitary sewer, over 2,900LF of 12" watermain and 3,300LF of new roadway (Industrial Road).

Bidding documents as prepared by Hull & Associates may be examined at the following location ("Issuing Office"):

Hull & Associates 59 Grant Street Newark, Ohio 43055 740-344-5451

Complete sets of bidding documents will be issued to bidders only through **Hull & Associates Inc.** Bidders may obtain bidding documents upon payment of \$75.00 per set (non-refundable) in the form of cash or a commercial bank check payable to **Hull & Associates, Inc.** Bid documents may also be obtained by mail upon receipt of \$75.00 plus \$25.00 shipping fees at the above office. Bidding documents can be picked up beginning at 12pm May 28th, 2020.

Bids are to be addressed to the Zanesville – Muskingum County Port Authority, Attn: Matt Abbott, 205 North Fifth Street Zanesville, OH 43701, and shall be marked "Sealed Bid – Industrial Drive and Public Infrastructure"

Bidders who submit a bid must be registered as a plan holder of record at the Issuing Office ("Plan Holder"). Bids from Bidders who are not on the Plan Holders list may be returned as being non-responsive.

Plan Holders are required to provide an e-mail address to receive addenda and other information electronically. Plan Holders are required to designate whether they are a prime contractor, subcontractor, or supplier on the Plan Holders list.

The Owner reserves the right to reject any or all Bid Proposals, to waive any technicality, and to award the contract to the Bidder that is determined to have submitted the lowest and best Bid for the Work. All Bids remain subject to acceptance for 30 days after the time set for receiving Bids.

The Hull & Associates Project Engineer is Ethan Bode, and may be contacted at 59 Grant Street, Newark, Ohio 43055, email: ebode@hullinc.com regarding the project.

To be advertised:

The Daily Reporter - 5/28, 6/4, 6/11

Notice to Bidders ii-1

END OF SECTION

Notice to Bidders ii-2

INSTRUCTIONS TO BIDDERS

1. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- A. Bidders are cautioned to review carefully the Site and all parts of the Contract Documents made available to each bidder, including, but not limited to, the Notice to Bidders, Instructions to Bidders, Bid Form, Owner-Contractor Agreement, General Conditions of the Contract for the Project, Special Conditions for the Project (if any), Drawings, and Specifications. The Contract Documents, as defined in the Owner-Contractor Agreement, shall govern the relationship between the successful Bidder and the Owner upon execution of an Owner-Contractor Agreement by the Owner and the successful Bidder.
- B. No allowance will be made subsequently for any omission, error, or negligence of the Bidder.
- C. All Bidders shall be familiar with the existing conditions in the material and labor markets, as well as the conditions related to the Work, and the fact that a Bid is submitted will be construed by the Owner as an agreement by the Bidder to carry out the improvements in full conformance with the Specifications and other Contract Documents, notwithstanding the existing conditions.
- D. Each Bidder shall be responsible for coordinating its Work with the Work of other bid packages that require integration of the Bidder's Work.
- E. The accuracy or completeness of any soil boring data referenced in the General Conditions is not guaranteed by the Owner or the Engineer, and in no event is such information to be considered part of the Contract Drawings or Specifications. The successful Bidder shall assume all responsibility regarding such conditions related to the Project and the Work for which the Bidder submits a bid; the Bidder shall make its own investigation of existing conditions. Neither the Owner nor the Engineer shall be responsible for any additional compensation for Work performed under the Contract due to a Bidder's reliance upon such information prepared solely for the Owner's use. Failure of a Bidder to attend the pre-bid meeting, which failure to attend results in the Bidder not fully being familiar with the existing conditions and Project requirements, shall not be considered a basis for additional compensation to the successful Bidder for the Work.

2. OWNER & ENGINEER

A. The Owner is: Zanesville - Muskingum County Port Authority

Attn: **Matt Abbott** 250 North 5th Street Zanesville, OH 43701 Phone: 740.455.0742

B. The Engineer is: Hull & Associates, Inc.

59 Grant Street Newark, OH 43055

Telephone Number: 740.344.5451
Project Contact: **Ethan Bode**

3. PROJECT

The Project consists of all labor, materials, and services necessary for the timely and proper completion of the **Industrial Drive and Public Infrastructure**, all in accordance with the Contract Documents.

4. PREBID MEETING

A pre-bid meeting will be held on June 11th, 2020 at 10am at the Zanesville – Muskingum County Port Authority Office located at 250 North 5^{th} Street Zanesville, OH 43701.

5. WORK

The Project is a single bid package. At this time, bids are being solicited for the bid package listed below, as identified in the bid form:

Bid Package #1: Industrial Drive and Public Infrastructure

6. ESTIMATE OF CONSTRUCTION COST

The estimated cost of the entire scope of work is \$3,634,337.21.

7. CONTRACT DOCUMENTS

The Contract Documents for the Project may be examined at the following locations:

Hull & Associates, Inc. 59 Grant Street Newark, OH 43055 740.344.5451

Complete sets of bidding documents will be issued to bidders only through Hull & Associates, Inc and Zanesville Muskingum County Port Authority. Bidders may obtain bidding documents upon payment of \$75.00 per set (non-refundable) in the form of cash or a commercial bank check payable to Hull & Associates, Inc. Bid documents may also be obtained by mail upon receipt of \$75.00 plus \$25.00 shipping fees at the above office.

Bidders shall use complete sets of Contract Documents in preparing bids. Neither the Owner nor the Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Contract Documents.

The Owner or the Engineer, in making the Contract Documents available on the above terms, do so only for the purpose of obtaining bids on the Work and do not confer a license or grant for any other use.

8. PREPARATION OF BIDS

- A. All Bids must be submitted on the "Bid Form" furnished with the Contract Documents.
- B. All blank spaces shall be filled in, in ink or typewritten, in words and figures, and in figures only where no space is provided for words, and signed by the Bidder. The wording on the Bid Form shall be used without change, alteration, or addition. Any change in the wording or omission of specified accompanying documents may cause the Bid to be rejected. If both numbers and words are requested for any Bid item, the amount in words shall prevail if there is an inconsistency between the numbers and words written.
- C. Bidders shall note receipt of Addenda on the Bid Form. If the Bidder fails to acknowledge receipt of each Addendum, the Bid shall be deemed non-responsive, unless the Bid amount reflects receipt of the Addendum or the Addendum involves only a matter of form and does not affect the price, quantity or quality of the Work to be performed.
- D. Each Bidder shall submit one (1) original copy of its Bid to the Owner. The Bid Form shall be signed with the name typed or printed below the signature. A Bid shall not be submitted by facsimile transmission. A Bidder that is a corporation shall sign its Bid with the legal name of the corporation followed by the name of the state of incorporation and the legal signature of an officer authorized to bind the corporation to a contract.
- E. Each Bid shall be enclosed in a sealed opaque envelope with the Bidder's name and the title of the Project printed in the upper left hand corner and addressed as follows: CT Investors, as agents to the Board of Directors of the JEDD, 2100 McKinney Ave. Suite 1050, Dallas, TX 75201, and shall be marked "Sealed Bid Industrial Drive and Public Infrastructure." Bids must be received at the designated location for the bid opening before 3:00pm on Thursday June 18th, 2020 250 North 5th Street Zanesville, OH 43701.
- F. The completed Bid Form shall be accompanied by the following documents:
 - The Bid Guaranty (see Section 9 below);
 - 2) Non-Collusion Affidavit;
 - 3) Bidder's Equal Employment Opportunity Certification;
- G. The Bidder shall take the following precautions in preparing its bid:

- Sign the Bid and check to insure all blank spaces have been filled in with requested information and that the specified accompanying documents (listed in Item F above) have been included in a sealed opaque envelope addressed as described in Item E above.
- 2) When the Bid Form provides for quoting either an addition or deduction for an Alternate item, indicate whether the sum named is an addition or deduction.
- When the Bid Form provides for quoting a unit price, the Bidder should quote the unit price as set forth in the Bid Documents.
- 4) When applicable, make sure that the Bid Guaranty is properly executed and signed by:
 - a) The Bidder
 - b) The Surety or Sureties
- 5) Make sure that the amount of the Bid Guaranty (if the Bid Guaranty is in the form of a certified check, letter of credit, or cashier's check) is for a specific sum in an amount as instructed in Section 9 below. If the Bid Guaranty is in the form of the Bid Guaranty and Contract Performance and Payment Bond, the amount may be left blank; if an amount is inserted, it must equal the total of the base bid and all add alternates included. Failure to state an amount equal to the total of the base bid and all add alternates shall make the bid non-responsive if the Owner selects alternates not included in the amount.
- 6) Make sure that the appropriate bid package and scope of work is inserted in the correct space on the Bid Guaranty and Contract Performance and Payment Bond Form. Failure to include work covered by the bid submitted may make the bid non-responsive.

9. BONDS AND GUARANTEES

- A. Bid Guaranty: Bidder shall furnish a Bid Guaranty, as prescribed in Sections 153.54, 153.57, and 153.571 of the Ohio Revised Code, in the form of either: (1) a bond for the full amount of the bid in the form of the Bid Guaranty and Contract Bond included in the Bid Documents; or (2) a certified check, cashier's check, or irrevocable letter of credit in an amount equal to 10% of the bid. Bid amount shall be the total of all sums bid, including all add alternatives, but excluding all deduct alternatives. NOTE: AIA Bid Bond forms are not acceptable.
- B. Contract Performance and Payment Bond: The successful Bidder who, as a Bid Guaranty, submits a certified check, cashier's check, or irrevocable letter of credit in an amount equal to 10% of the bid, shall furnish a Contract Performance and Payment Bond in the form Contract Performance and Payment Bond included in the Bid Documents in an amount equal to 100% of the Contract Sum. **NOTE: AIA Bond forms are not acceptable.**
- C. The bond must be issued by a surety company ("Surety") authorized by the Ohio Department of Insurance to transact business in the State of Ohio and acceptable to the Owner. The bond must be issued by a Surety capable of demonstrating a record of competent underwriting, efficient management, adequate reserves, and sound investments. These criteria will be deemed to be met if the Surety currently has an A.M. Best Company Policyholders Rating of "A-" or better and has or exceeds the Best Financial Size Category of Class VI. Other sureties may be acceptable to the Owner, in its sole discretion.
- D. All bonds shall be signed by an authorized agent of an acceptable Surety and by the Bidder.
- E. Bonds shall be supported by credentials showing the Power of Attorney of the agent, a certificate showing the legal right of the Surety to do business in the State of Ohio, and a financial statement of the Surety.
- F. The Bid Guaranty, as applicable, shall be in the name of or payable to the order of the Owner.
- G. The name and address of the Surety and the name and address of the Surety's Agent should be typed or printed on each bond.

10. BIDDER'S EXAMINATION AND REPRESENTATION

- A. Before submitting a Bid, each Bidder should carefully examine the Contract Documents and the construction Site and inform itself of the limitations and conditions related to the Work covered by the Bid and shall include in its Bid a sum to cover the cost of such items. Bidders awarded contracts will not be given extra payments for conditions that could have been determined by examining the Site and Contract Documents.
- B. It is the purpose and intent of the Contract Documents that a complete job be accomplished. It shall be each Bidder's responsibility to include costs necessary to provide labor and materials for that portion of the Work bid upon, including incidentals, whether or not specifically called for in the Specifications and Drawings.

11. CLARIFICATION OF BIDDERS' QUESTIONS

- A. Questions for this Project shall be directed to the Engineer via email.
- B. Each Bidder is responsible for calling to the attention of the Engineer any ambiguities, inconsistencies, errors, or omissions which occur in the Contract Documents for its part of the Work. If the Bidder fails to request clarification, the Bidder will be expected to overcome such conditions without additions to the bid amount.
- C. Prospective Bidders with questions as to the true meaning of any part of the Drawings, Specifications, or other Contract Documents shall submit to the Engineer not less than ten (10) days prior to the closing time for acceptance of bids, a written request for interpretation and clarification.
- D. Bidders are instructed to request interpretations and the issuance of addenda if the Contract Documents call for materials, equipment, or methods that adversely affect the cost or quality of the Project or are unavailable.

12. METHOD OF AWARD

- A. All Bids shall remain open for acceptance for sixty (60) days following the day of the Bid opening, but the Owner may, in its sole discretion, release any Bid and return the Bid Guaranty prior to that date. The Bid Guaranty shall be subject to forfeiture, as provided in the Ohio Revised Code, if a Bid is withdrawn during the period the bids are being held.
- B. The Owner reserves the right to reject any, part of any, or all Bids and to waive any informalities and irregularities. The Bidder expressly acknowledges this right of the Owner to reject any or all Bids, or to reject any incomplete or irregular Bid. The Owner will award a single contract for each of the Bid Packages listed above or one or more combined contracts for combinations of the Bid Packages. Bidders must furnish all information requested on or accompanying the Bid Form. Failure to do so may result in disqualification of the Bid.
- C. Determination of Lowest and Best Bid. Subject to the right of the Owner to reject any or all bids, the Owner will Award the Contract for the Work to the Bidder submitting the lowest and best bid, taking into consideration accepted alternates. As a fundamental aspect of determining the lowest and best bidder, the Owner, in its sole discretion, will determine whether a bid or bidder is responsible. In evaluating Bids, the Owner shall consider the qualifications of the bidders, whether or not the bids comply with the prescribed requirements, and alternatives and unit prices, if requested, in the Bid Form. The Owner may also consider the qualifications and experience of suppliers and distributors. The Owner may conduct such investigations as are deemed necessary to establish the responsibility, qualifications and financial ability of the Bidders, proposed distributors and other persons and organizations to do the work in accordance with the Contract Documents to the Owner's satisfaction within the prescribed time. The Owner reserves the right to reject the bid of any Bidder that does not pass any such evaluation to the Owner's satisfaction. The factors to be considered by the Owner in making its determination as to whether a Bidder is the lowest and best bidder include the following as the Owner, in its discretion, deems appropriate; the Owner may give such weight to each factor as it deems appropriate:
 - 1) The Bidder's Work History. The Bidder should have a record of consistent customer satisfaction and of consistent completion of projects, including projects which are comparable to or larger and more complex than the Owner's Project, on time and in accordance with the applicable Contract Documents. If the Bidder's management operates or has operated another construction company, the Owner may consider the work history of that company in determining responsibility

of the Bidder.

The Owner will consider the Bidder's prior experience on other projects of the Owner and Engineer including the Bidder's demonstrated ability to complete its work on these projects in accordance with the Contract Documents and on time, and its ability to work with the Owner and Engineer.

The Bidder authorizes the Owner and its representatives to contact the owners and design professionals (and construction managers, if applicable) on projects on which the Bidder has worked, and authorizes and requests such owners and design professionals (and construction managers) to provide the Owner with a candid evaluation of the bidder's performance. By submitting its Bid, the Bidder agrees that if it or any person, directly or indirectly, brings an action against any of such owners or design professionals (or construction managers) or the employees of any of them as a result of or related to such candidate evaluation and such action is not successful, the Bidder will reimburse such owners, design professionals and construction managers, and the employees of each of them, for all legal fees and expenses incurred by them related to such legal action. This obligation is expressly intended for the benefit of such owners, design professionals, and construction managers, and the employees of each of them.

- 2) The Bidder's financial ability to complete the Contract successfully and on time, without resort to its Surety.
- 3) The Bidder's prior experience with similar work on comparable or more complex projects;
- 4) The Bidder's equipment and facilities;
- 5) The adequacy, in numbers and experience, of the Bidder's work force to complete the Contract successfully and on time;
- 6) The Bidder's compliance with federal, state, and local laws, and regulations, including but not limited to the Occupational Safety and Health Act; and
- 7) The ability of the Subcontractors the Bidder intends to use on the Project to meet all criteria in this Section.
- 8) The Bidder's participation in a drug-free workplace program acceptable to the Owner, and the Bidder's record for both resolved and unresolved findings for recovery as defined in Ohio Revised Code Section 9.24; and/or
- 9) Depending upon the type of the Work, other essential factors, as the Owner may determine.
- D. The apparent low bidder will provide the Engineer with such additional information as the Engineer may request regarding the Bidder's responsibility. Additionally, upon request from the Engineer, any other Bidder will provide the Engineer with such additional information as the Engineer may request regarding the Bidder's responsibility. A Bidder will submit any requested information within three (3) business days of the date of the request.
- E. The failure to submit requested information on a timely basis may result in the determination that the Bidder is not responsible.
- F. By submitting its Bid, the Bidder agrees that the Owner's determination of the lowest and best bid shall be final and conclusive, and that if the Bidder or any person challenges such determination in any legal proceeding and such challenge is not successful, the Bidder will reimburse the Owner for all legal fees and expenses incurred by the Owner that are related to such challenge, including the cost of collection.
- G. Within three (3) business days of the Owner's receipt of the Bids or such longer time as may be permitted in writing by the Engineer, the apparent low bidder will submit the following information:
 - 1) A list of all proposed Subcontractors, suppliers, and manufacturers, including the contract amount for each proposed Subcontractor, supplier, and manufacturer that will provide either labor, material or a combination of labor and material in excess of \$20,000.00 for the project; and

 Experience qualification statements for all proposed Subcontractors, suppliers, and manufacturers that will provide either labor, material or a combination of labor and material in excess of \$20,000.00 for the project.

After approval by the Owner and Engineer of the list of proposed Subcontractors, suppliers, and manufacturers submitted by the successful Bidder, the list shall not be changed unless written approval of the change is authorized by the Owner and Engineer.

- H. Affidavit as to Property Taxes. The successful Bidder will be required to submit, prior to the time of the entry into the Contract for the Work, an affidavit in the form required by Section 5719.042, Ohio Revised Code, regarding the status of the Bidder's personal property taxes. A copy of the form of affidavit is included in the Contract Documents.
- I. No Bidder may withdraw its Bid within sixty (60) days after the date the Bids are opened.
- J. The Owner reserves the right to disqualify Bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices on the part of the Bidder.

13. SUBSTITUTIONS/NON-SPECIFIED PRODUCTS

No substitutions will be considered or accepted prior receipt of the Bids. Upon execution of the Agreement, substitutions will only be made in accordance with the General Conditions.

14. ALTERNATES

- A. The Owner may request Bids on Alternates. If the Owner requests Bids on Alternates, the Bidder should include the cost of the Alternates requested on its Bid Form.
- B. At the time of awarding the Contract, the Owner will select or reject Alternates as it determines is in its best interest. A Bidder's failure to include in its Bid Form the cost of an Alternate selected by the Owner and applicable to the Bidder's work may render the bid non-responsive and be grounds for the rejection of the Bid. Otherwise, the failure to include the cost of an Alternate will not be deemed material. If a Bidder fails to include a cost of an alternate in its Bid Form, the bidders bid amount for that alternate will be \$0.00.
- C. The Bidder acknowledges that although there is an estimate for the cost of the Project, the market conditions may and frequently do result in the estimate being different from the sum of the Bids received, either higher or lower. The Bidder understands that the Owner may include Alternates, which may include deduct Alternates as well as add Alternates, to give it the flexibility in building the Project with the funds that are available. The Bidder further understands and acknowledges that use of add and deduct Alternates is a long held customary practice in the construction industry in the State of Ohio. The Bidder also acknowledges that the Owner will not make a decision about the Alternates on which to base the award of contracts until the bids are received, and the Owner can compare its available funds with the Base Bids and the cost or savings from selecting different Alternates. The Bidder understands that the award to the lowest and best Bidder will be based on the lowest Base Bid plus selected Alternates, and may result in an award to a Bidder other than the Bidder that submitted the lowest Base Bid.
- D. If, during the progress of the Work, the Owner desires to reinstate any alternate not included in the contract, the Owner reserves the right to reinstate the alternate at the price bid by the contractor provided that such action is taken in sufficient time so as not to delay the progress of the work or cause the contractor additional expense.

15. UNIT PRICES

Where unit prices are requested in the Bid Form for a Prime Contract on which the Bidder submits a Bid, the Bidder shall quote a unit price. Unless otherwise expressly provided in the Contract Documents, such unit prices shall include all labor, materials and services necessary for the timely and proper installation of the item for which the unit prices are requested. The unit prices quoted in the Bid shall be the basis for any Change Orders entered into under the Owner-Contractor Agreement, unless the Engineer determines that the use of such unit prices will cause substantial inequity to either the Contractor or the Owner.

16. ADDENDA

- A. The Owner reserves the right to issue Addenda changing, altering, or supplementing Contract Documents prior to the time set for receiving bids. The Engineer will issue the Addenda to clarify Bidders' questions, to change, alter, or supplement the Contract Documents.
- B. Any explanation, interpretation, correction or modification of the Contract Documents will be issued in writing in the form of an Addendum, which shall be the only means considered binding. Explanations or interpretations made by any other means shall **NOT** be legally binding. All Addenda shall become a part of the Contract Documents.
- C. Bidders must submit questions to the Engineer in sufficient time in advance of the Bid opening to allow the Engineer to respond. All Addenda will be issued, except as hereinafter provided, and mailed or otherwise issued to persons who have obtained Contract Documents for the Project, at least seventy-two (72) hours prior to the published time for the opening of bids, excluding Saturdays, Sundays and legal holidays. If any Addendum is issued within such seventy-two (72) hour period, then the time for opening of Bids shall be extended one (1) week with no further advertising of bids required.
- D. Copies of each Addendum will be sent only to the Contractors to whom Contract Documents have been issued. Receipt of Addenda shall be indicated by Bidders in the space provided on the Bid Form. Bidders are responsible for acquiring issued Addenda in time to incorporate them into their Bid. Bidders should contact the Engineer prior to the Bid opening to verify the number of Addenda issued.
- E. If a Bidder fails to indicate receipt of all Addenda issued by the Engineer on its Bid Form, the Bid of such Bidder will be deemed to be responsive only if:
 - The Bid received clearly indicates that the Bidder received the Addendum, such as where the Addendum added another item to be bid upon and the Bidder submitted a bid on that item; or
 - 2) The Addendum involves only a matter of form or is one that has either no effect or merely a trivial or negligible effect on price, quantity, quality, or delivery of the item bid upon.

17. INTERPRETATION

- A. If a Contractor contemplating submitting a Bid for the proposed project is in doubt as to the true meaning of any part of the Specifications or Contract Documents, it may submit a written request for an interpretation thereof to the Engineer at the numbers listed on the first page of these Instructions to Bidders. Any interpretation of the Contract Documents will be made by Addendum only, duly signed, and a copy of such Addendum will be mailed or delivered to each person receiving a set of Contract Documents. The Owner will not be responsible for any other explanation or interpretation of the proposed documents.
- B. In interpreting the Contract Documents, words describing materials that have a well-known technical or trade meaning, unless otherwise specifically defined in the Contract Documents, shall be construed in accordance with the well-known meaning recognized by the trade.
- C. Bidders are responsible for notifying the Engineer in a timely manner of any ambiguities, inconsistencies, errors or omissions in the Contract Documents. The Bidder shall not, at any time after the execution of the Contract, be compensated for a claim alleging insufficient data, incomplete Contract Documents, or incorrectly assumed conditions regarding the nature or character of the Work, if no request for
- D. interpretation was made by the Bidder prior to the bid opening.

18. TAX STATUS

The Owner is a political subdivision of the State of Ohio and is exempt from taxation under the Ohio Sales Tax and Use Tax Laws. Building materials that the successful Bidder purchases for incorporation into the Project will be exempt from state sales and use taxes if the successful Bidder provides a properly completed sales tax exemption certificate, executed by the successful Bidder and the Owner, to the vendors or suppliers when the materials are acquired. The Owner will execute properly completed certificates on request.

19. DATE FOR COMPLETION/LIQUIDATED DAMAGES

A. Milestone Completion. To the extent the Contract Documents include Milestone Completion Dates, each successful Bidder shall have its required Work completed by the respective Milestone Completion Date(s) (if any) set forth in the Contract Documents. The work required to be completed by the Milestone Completion Date(s) is defined in the Contract Documents. By submitting a Bid for the Work, the Bidder agrees that the periods for performing the Work are reasonable, and that the Bidder can complete the required Work by the applicable Milestone Completion Date(s).

If the successful Bidder does not have its Work on the Project completed by the Milestone Completion Date(s) (if any) for its portion of the Work as established in the Contract Documents, the Owner shall be entitled to retain or recover from the successful Bidder, as Liquidated Damages, and not as a penalty in compliance with Ohio Revised Code Section 153.19, the amounts set forth in the Contract Documents for each and every calendar day beyond the Milestone Completion Date(s) as extended in accordance with the Contract Documents. The Owner's right to recover Liquidated Damages shall not substitute for any right of recovery for additional costs incurred should the successful Bidder fail to complete the Contract according to the Contract Documents. Liquidated Damages are necessary in that it is impossible to precisely calculate the monetary loss to the Owner as the result of any delay in implementation

B. not used

C. Substantial Completion. Each successful Bidder shall have its work substantially completed by the respective Date for Substantial Completion set forth in the Contract Documents. The Project Time Schedule will be finalized after award of the contracts for the Work, as described in the Contract Documents, and is subject to review and acceptance by the Owner and Engineer. The term Substantial Completion is defined in the Contract Documents. For purposes of the Contract Documents applicable to the Contractor, the term Substantial Completion shall refer to the date of completion for the Contractor's portion of the Work as established in the Project Time Schedule. By submitting a Bid for the Work, the Bidder agrees that the periods for performing the Work are reasonable, and that the Bidder's Work can be substantially complete by its applicable date for Substantial Completion.

If the successful Bidder does not have its Work on the Project completed by the Date for Final Completion for its portion of the Work as established in the Contract Documents, the Owner shall be entitled to retain or recover from the successful Bidder, as Liquidated Damages, and not as a penalty in compliance with Ohio Revised Code Section 153.19, the amounts set forth in the Contract Documents for each and every calendar day beyond the date of Final Completion as extended in accordance with the Contract Documents. The Owner's right to recover Liquidated Damages shall not substitute for any right of recovery for additional costs incurred should the successful Bidder fail to complete the Contract according to the Contract Documents. Liquidated Damages are necessary in that it is impossible to precisely calculate the monetary loss to the Owner as the result of any delay in implementation.

D. Final Completion. Each successful Bidder shall have its work fully completed by the Dates for Final Completion set forth in the Contract Documents. By submitting a Bid for the Work, the Bidder agrees that the periods for performing the Work are reasonable, and that the Bidder's Work can be fully completed by the date for Final Completion.

If the successful Bidder does not have its Work on the Project completed by the Date for Final Completion for its portion of the Work as established in the Contract Documents, the Owner shall be entitled to retain or recover from the successful Bidder, as Liquidated Damages, and not as a penalty in compliance with Ohio Revised Code Section 153.19, the amounts set forth in the Contract Documents for each and every calendar day beyond the date of Final Completion as extended in accordance with the Contract Documents. The Owner's right to recover Liquidated Damages shall not substitute for any right of recovery for additional costs incurred should the successful Bidder fail to complete the Contract according to the Contract Documents. Liquidated Damages are necessary in that it is impossible to precisely calculate the monetary loss to the Owner as the result of any delay in implementation.

E. The Bidder acknowledges by submitting its Bid and entering into a contract with the Owner that such amounts of Liquidated Damages represent a reasonable estimate of the actual damages that the Owner would incur if the work were not completed by the foregoing dates. These Liquidated Damages are damages for loss of use of the Project, and the successful Bidder in addition to the Liquidated Damages will be obligated to indemnify and hold the Owner harmless from any claims, and if the Work on the Project is accelerated because of delay, for all costs related to the acceleration of the Work, as provided in the Contract Documents.

20. PREVAILING WAGE

N/A

21. OWNER'S RIGHT TO WAIVE DEFECTS AND IRREGULARITIES

- A. The Owner reserves the right to waive any and all irregularities provided that the defects and irregularities do not affect the amount of the Bid in any material respect or otherwise give the Bidder a competitive advantage.
- B. By submitting its Bid, the Bidder agrees that (i) the Owner's determination of whether a defect or irregularity affects the amount of the Bid in any material respect or otherwise gives the Bidder a competitive advantage will be final and conclusive; and (ii) the Bidder will pay the Owner's attorneys and consultants' fees related to any challenge to the bid procedure or process, brought directly or indirectly by the Bidder and/or any of its affiliates, which is unsuccessful.

22. EXECUTION OF THE CONTRACT

Within seven (7) calendar days of the Award of the Contract, or such other time designated by the Engineer, the successful Bidder shall execute and deliver to the Engineer the required number of the following documents:

- A. The Owner-Contractor Agreement Form;
- B. Contract Performance and Payment Bond, if the Bidder did not submit a Bid Guaranty and Contract Performance and Payment Bond with its bid;
- C. Insurance Certificates;
- D. Valid Workers' Compensation Certificate
- E. Stormwater Pollution Prevention Program; and
- F. Any other documents identified in the Contract Documents for submission with the signed agreement.

The failure of the successful bidder to execute and deliver the required documents shall constitute a default that entitles the Owner to the Bidder's bid guaranty, as provided in the Ohio Revised Code.

23. MODIFICATION/WITHDRAWAL OF BIDS

A. Modification. A Bidder may modify its Bid by written communication to the Owner addressed to the Owner, attention of the Clerk/Administrator, at the Owner's address at any time prior to the scheduled closing time for receipt of Bids, provided such written communication is received by the Clerk/Administrator prior to the Bid deadline. The written communication shall not reveal the Bid price, but should provide the addition or subtraction or other modification so that the final prices or terms will not be known until the sealed Bid is opened. If the Bidder's written instructions with the change in Bid reveal the Bid amount in any way prior to the Bid opening, the Bid may be rejected as non-responsive.

- B. Withdrawal Prior to Bid Deadline. A Bidder may withdraw its Bid at any time for any reason prior to the Bid deadline established in the Notice to Bidders. The request to withdraw shall be made in writing and submitted to the Owner, attention of the Clerk/Administrator, at the Owner's address. The request for withdrawal must be received by the Clerk/Administrator prior to the time of the Bid opening.
- C. Withdrawal After Bid Deadline.
 - All Bids shall remain valid and open for acceptance for a period of at least 60 days after the Bid opening; provided, however, that a Bidder may request to withdrawal its Bid from consideration after the Bid deadline when all of the following apply:
 - a) the price of the Bid was substantially lower than the other Bids;
 - the reason for the Bid being substantially lower was a clerical mistake, rather than a
 mistake in judgment, and was due to an unintentional and substantial error in arithmetic or
 an unintentional omission of a substantial quantity of work, labor, or material;
 - the Bid was submitted in good faith;
 - d) the Bidder provides written notice to the Owner, to the attention of the Clerk/Administrator, within two (2) business days after the Bid opening for which the right to withdraw is claimed.
 - 2) No Bid may be withdrawn under this provision if the result would be the awarding of the contract on another Bid for the Bid Package from which the Bidder is withdrawing its Bid to the same Bidder.
 - 3) No Bidder who is permitted to withdraw a bid shall for compensation supply any material or labor to, or perform any subcontract or other work agreement for, the person to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted, without the approval of the Owner. The person to whom the contract was awarded and the withdrawing Bidder are jointly liable to the Owner in an amount equal to any compensation paid to or for the benefit of the withdrawing Bidder without such approval, in addition to the penalty provided in Section 2913.31 of the Ohio Revised Code.
 - 4) If a Bid is withdrawn under this provision, the Owner may award the Contract to another Bidder determined by the Owner to be the lowest and best Bidder or the Owner may reject all Bids and advertise for other Bids. In the event the Owner advertises for other Bids, the withdrawing Bidder shall pay the costs incurred in connection with the rebidding by the Owner, including the cost of printing new Contract Documents, required advertising, and printing and mailing notices to prospective bidders, if the Owner finds that such costs would not have been incurred but for such withdrawal.

24. EQUAL EMPLOYMENT OPPORTUNITY/NO DISCRIMINATION

A. Minority, female, and disadvantaged businesses will be afforded full opportunity to submit Bids, and Bidders will not be discriminated against on the grounds of race, color, religion, sex, age, handicap, ancestry, or national origin in the consideration of an award. The successful Bidder(s) shall follow the EEO/nondiscrimination requirements, as applicable to the Project, that are contained in the Owner-Contractor Agreement.

END OF SECTION

1.0 BID PROPOSAL

BID FORM

1.01	BID SUBMITTED BY:
	(Contractor)
	DATED:, 2020
1.02	DELIVER TO:
	Zanesville – Muskingum County Port Authority Attn: Matt Abbott 250 North Fifth Street Zanesville, OH 43701
1.03	Having reviewed the Contract Documents for the Project entitled:
	Industrial Drive and Public Infrastructure
	For Zanesville – Muskingum County Port Authority and having also received, read and taken into account the following Addenda:
	Addendum No, dated;
	and likewise having inspected the Site and the conditions affecting and governing the Project and confirmed the location of the site utilities and all existing structures, the undersigned hereby proposes to furnish all materials and to perform all labor, as specified and described in the said Contract Documents for all work necessary to complete the Project on a timely basis and in accordance with the Contract Documents regardless of whether expressly provided for in such Specifications and Drawings.
1.04	Before completing the Bid Form, the undersigned represents that it has carefully reviewed the Contract Documents, including but not limited to the Notice to Bidders, Instructions to Bidders, Bid Form, Form of Bid Guaranty and Contract Performance and Payment Bond, Contractor's Affidavit (ORC 5719.042), Owner-Contractor Agreement, General Conditions of the Contract (EJCDC C-700, 2002 edition, as modified), Special Conditions (if any), Project Description and Supplemental Specifications, and the Schedule. Failure to comply with provisions of the Contract Documents may be cause for disqualification of the Bid.
1.05	BONDS AND CONTRACT:
	If the undersigned is notified of Bid acceptance, it agrees to furnish required bonds as indicated in Instructions to Bidders.
1.06	COMPLETION OF WORK:
	In submitting a Bid, the undersigned agrees to execute the Owner-Contractor Agreement in the form included in the Contract Documents and to complete its work as required by the Contract Documents.

NOTE A: The wording of the Bid Form shall be used throughout, without change, alteration, or addition. Any change

may cause it to be rejected.

NOTE B: Bidder is cautioned to bid only on the "Brands" specified.

2.01 BID:

All labor and material for the contracts listed below. Bidder is to fill in all blanks related to the Bid Package for which a Bid is being submitted. If no Bid is submitted for an item, then insert "NO BID" in the blank. For alternate items, indicate whether the amount stated is in addition to or a deletion from the base bid amount.

		ZAN012 - INDUSTRIAL DRIVE	HULL & A	SSOCIAT	ES			
Line No.	Item	Description	Qty	Unit	Labor	Unit Price Materials	Total	Extended Price
		EARTHWORK						
1	201	CLEARING AND GRUBBING	LUMP	SUM				
2	202	GUARDRAIL REMOVAL	276	LIN FT				
3	202	ASPHALT PAVEMNT REMOVAL	80	SY				
4	203	EXCAVATION, AS PER PLAN	LUMP	SUM				
5	203	EMBANKMENT, AS PER PLAN	LUMP	SUM				
6	203	EXCAVATION, AS DIRECTED BY ENGINEER	50	CY				
7	203	EMBANKMENT, AS DIRECTED BY ENGINEER	50	CY				
8	204	SUBGRADE COMPACTION	13,939	SQ YD				
9	204	PROOF ROLLING	17	HOUR				
10	255	FULL DEPTH PAVEMENT SAWING	280	LIN FT				
		EROSION CONTROL						
11	601	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	110	CU YD				
12	601	CRUSHED AGGREGATE SLOPE PROTECTION	900	SQ YD				
13	659	SEEDING AND MULCHING, CLASS 2	37,240	SQ YD				
14	659	REPAIR SEEDING AND MULCHING	1,862	SQ YD				
15	659	WATER	202	M GAL				
16	659	COMMERCIAL FERTILIZER	6	TON				
17	659	LIME	7.7	ACRE				
18	670	SLOPE EROSION PROTECTION	750.0	SQ YD				
19	832	EROSION CONTROL, AS PER PLAN	LUMP	SUM				

		ZAN012 - INDUSTRIAL DRIVE	HULL & A	SSOCIAT	ES			
Line No.	Item	Description	Qty	Unit	Labor	Unit Price Materials	Total	Extended Price
		DRAINAGE						
20	602	CONCRETE MASONRY, AS PER PLAN (FULL HEIGHT HEADWALLS)	25	CU YD				
21	602	CONCRETE MASONRY, AS PER PLAN (HALF HEIGHT HEADWALLS)	2	CU YD				
22	611	12" CONDUIT, TYPE B	129	LIN FT				
23	611	18" CONDUIT, TYPE B	176	LIN FT				
24	611	36" CONDUIT, TYPE B	174	LIN FT				
25	611	60" CONDUIT, TYPE B	140	LIN FT				
26	611	CATCH BASIN, NO. 2-3	4	EACH				
27	611	CATCH BASIN, NO. 2-4	1	EACH				
28	611	CATCH BASIN, NO. 2-4, AS PER PLAN (OUTLET STRUCTURE)	2	EACH				
		PAVEMENT						
29	301	ASPHALT CONCRETE BASE, PG64-22	1,883	CU YD				
30	304	AGGREGATE BASE	3,908	CU YD				
31	407	NON-TRACKING TACK COAT	1,647	GAL				
32	441	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 70-22M	589	CU YD				
33	441	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448), PG70-22M	922	CU YD				
34	617	COMPACTED AGGREGATE, 5"	209	CU YD				
35	606	GUARDRAIL, TYPE MGS	150	LIN FT				
36	606	GUARDRAIL, TYPE MGS HALF POST SPACING	625	LIN FT				
37	606	ANCHOR ASSEMBLY, MGS TYPE T	2	EACH				
		MAINTENANCE OF TRAFFIC						
38	614	MAINTAINING TRAFFIC	LUMP	SUM				

		ZAN012 - INDUSTRIAL DRIVE	HULL & A	SSOCIAT	ES			
Line No.	Item	Description	Qty	Unit	Labor	Unit Price Materials	Total	Extended Price
		SIGNAGE & STRIPING						
39	621	RPM	90	EACH				
40	621	RPM REFLECTOR	90	EACH				
41	630	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	1	EACH				
42	630	GROUND MOUNTED SUPPORTED, NO. 3 POST	280	LIN FT				
43	630	SIGN, FLAT SHEET	97	SQ FT				
44	644	STOP LINE	36	LIN FT				
45	644	EDGE LINE, 4"	1.30	MILE				
46	644	CENTER LINE	0.63	MILE				
47	644	CHANNELIZING LINE, 8"	223	LIN FT				
48	644	TRANSVERSE/DIAGONAL LINE	326	LIN FT				
49	644	LANE ARROW	4	EACH				
50	SPEC	FIRE LANE POST, AS PER PLAN	4	EACH				
		WATER MAIN WORK					•	
51	638	12" WATERMAIN PVC PIPE & FITTINGS, AWWA C900, DR18	2,918	LIN FT				
52	638	8" WATERMAIN PVC PIPE & FITTINGS, AWWA C900, DR18	299	LIN FT				
53	638	8" GATE VALVE WITH ACCESSORIES	5	EACH				
54	638	12" GATE VALVE WITH ACCESSORIES	9	EACH				
55	638	FIRE HYDRANT, TYPE A	9	EACH				
56	638	18"X12" TAPPING SLEEVE & VALVE	1	EACH				
57	638	PLUG & THRUST BLOCK	6	EACH				

	ZAN012 - INDUSTRIAL DRIVE HULL & ASSOCIATES							
Line No.	Item	Description	Qty	Unit	Labor	Unit Price Materials	Total	Extended Price
	<u> </u>	SANITARY SEWER WORK	_					
58	611	12" CONDUIT, TYPE B, AS PER PLAN	2638	LIN FT				
59	611	8" CONDUIT, TYPE B, AS PER PLAN	192	LIN FT				
60	611	MANHOLE, NO. 3	10	EACH				
61	638	8" SANITARY FORCEMAIN PVC PIPE & FITTINGS, AWWA C900 DR18	2,774	LIN FT				
62	638	VIA DIRECTIONAL BORE 8" SANITARY FORCEMAIN PVC PIPE & FITTINGS, AWWA C900 RJ DR18	254	LIN FT				
63	SPEC	8" PLUG VALVE, COMPLETE FURNISH AND INSTALL PER PLAN	2	EACH				
64	SPEC	8" SWING CHECK VALVE, COMPLETE FURNISH AND INSTALL PER PLAN	2	EACH				
65	SPEC	AUTO AIR VALVE, COMPLETE FURNISH AND INSTALL PER PLAN	3	EACH				
66	SPEC	LIFT STATION AND SITE, COMPLETE	LUMP	SUM				
INCIDENTALS								
67	SPEC	PERFORMANCE BOND	LUMP	SUM				
68	624	MOBILIZATION	LUMP	SUM				
69	623	CONSTRUCTION LAYOUT STAKES AND SURVEYING	LUMP	SUM				
						TO	OTAL BASE BID	

Line No.	Item	Description	Qty	Unit	Labor	Unit Price Materials	Total	Extended Price
ALTERNATE #1 - UNDERDRAINS								
1	605	6" BASE PIPE UNDERDRAINS	6,840	LIN FT				
2	611	PRECAST REINFORCED CONCRETE OUTLET	10	EACH				
TOTAL ALTERNATE #1 BID								

Line	Item	Description	Qty	Unit		Unit Price		Extended Price
No.	iteiii	Description	Qty	Offic	Labor	Materials	Total	Extended Price
		ALTERNATE #2 - OFF ROADWAY GRADING						
1	203	EXCAVATION, AS PER PLAN	LUMP	SUM				
2	203	EMBANKMENT, AS PER PLAN	LUMP	SUM				
		ALTERNATE #2 - EROSION CONTROL						
3	659	SEEDING AND MULCHING, CLASS 2	65,700	SQ YD				
4	659	REPAIR SEEDING AND MULCHING	3,285	SQ YD				
5	659	WATER	355	M GAL				
6	659	COMMERCIAL FERTILIZER	9	TON				
7	659	LIME	13.6	ACRE				
8	832	EROSION CONTROL, AS PER PLAN	LUMP	SUM				
				•				
	TOTAL ALTERNATE #2 BID							

3.01 INSTRUCTIONS FOR SIGNING

- A. The person signing for a sole proprietorship must be the sole proprietor or his authorized representative. The name of the sole proprietor must be shown below.
- B. The person signing for a partnership must be a partner or his authorized representative.
- C. The person signing for a corporation must be the president, vice president or other authorized representative; or he must show authority, by affidavit, to bind the corporation.
- D. The person signing for some other legal entity must show his authority, by affidavit, to bind the legal entity.
- 4.01 BIDDER CERTIFICATIONS. The Bidder hereby acknowledges that the following representations in this Bid are material and not mere recitals:
 - The Bidder has read and understands the Contract Documents and agrees to comply with all requirements of the Contract Documents, regardless of whether the Bidder has actual knowledge of the requirements and regardless of any statement or omission made by the Bidder which might indicate a contrary intention.
 - 2. The Bidder represents that the Bid contains the name of every person interested therein and is based upon the Standards specified by the Contract Documents.
 - 3. The Bidder has visited the Project Site, become familiar with local conditions and has correlated personal observations about the requirements of the Contract Documents. The Bidder has no outstanding questions regarding the interpretation or clarification of the Contract Documents.
 - 4. The Bidder and each person signing on behalf of the Bidder certifies, and in the case of a Bid by joint venture, each member thereof certifies as to such member's entity, under penalty of perjury, that to the best of the undersigned's knowledge and belief: (a) the Base Bid, any Unit Prices and any Alternate bid in the Bid have been arrived at independently without collusion, consultation, communication or agreement, or for the purpose of restricting competition as to any matter relating to such Base Bid, Unit Prices or Alternate bid with any other Bidder; (b) unless otherwise required by law, the Base Bid, any Unit Prices and any Alternate bid in the bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to the Bid opening, directly or indirectly, to any other Bidder who would have any interest in the Base Bid, Unit Prices or Alternate bid; (c) no attempt has been made or will be made by the Bidder to induce any other Person to submit or not to submit a bid for the purpose of restricting competition; and (d) the statements made in the Bidder's Affidavit's included in the Contract Documents are true and correct, to the best of the Bidder's knowledge and information.
 - 5. The Bidder will execute the form of Owner-Contractor Agreement in the form included with the Contract Documents, if a Contract is awarded on the basis of this Bid, and if the Bidder does not execute the Owner-Contractor Agreement for any reason, other than as authorized by law, the Bidder and the Bidder's Surety are liable to the Owner as provided in the Instructions to Bidders.
 - 6. The Bidder will execute the Owner-Contractor Agreement Regarding the Ohio Job Ready Sites Program Grant in the form included with the Contract Documents, if a Contract is awarded on the basis of this Bid, and if the Bidder does not execute the Owner-Contractor Agreement Regarding the Ohio Job Ready Sites Program Grant for any reason, other than as authorized by law, the Bidder and the Bidder's Surety are liable to the Owner as provided in the Instructions to Bidders.
 - 7. The Bidder will execute the Development and Compensation Agreement in the form included with the Contract Documents, if a Contract is awarded on the basis of this Bid, and if the Bidder does not execute the Development and Compensation Agreement for any reason, other than as authorized by law, the Bidder and the Bidder's Surety are liable to the Owner as provided in the Instructions to Bidders.
 - 8. The Bidder certifies that the upon the award of a Contract, the Contractor will make a good faith effort to ensure that all of the Contractor's employees, while working on the Project site, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.

- 9. The Bidder agrees to furnish any information requested by the Engineer or the Owner's authorized representative to evaluate that the Bidder is responsible and that the Bid is responsive to the specifications.
- 10. The Bidder agrees to furnish the submittals required by the Instructions to Bidders for execution of the Owner/Contractor Agreement within seven (7) calendar days of the date of the Notice of Award.
- 11. The Bidder certifies that it has no unresolved findings for recovery issued by the Auditor of State.

NOTE: The Bidder should review the Contract Documents and the Site and conditions under which the Work will be performed so that he can give the acknowledgments contained above.

nership, corporation, or ot	DER TO A CONTRACT:
SIGNATURE:	Title
ADDRESS:	
TELEPHONE:	
FAX:	
FEDERAL TAX I.D. #	
DATE SIGNED	
_	
Ā	ddress
_	
_	
Ā	ddress
_	
_	
	TELEPHONE: FAX: FEDERAL TAX I.D. # DATE SIGNED re, state name and addre

BID GUARANTY AND CONTRACT PERFORMANCE AND PAYMENT BOND

(O.R.C. § 153.571)

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned
("Contractor") as principal and
as sureties are hereby held and firmly bound
unto Zanesville – Muskingum County Port Authority in the penal sum of the dollar amount of the bid submitted by the principa
to the obligee on, 2020, to undertake the Industrial Drive and Public Infrastructure . The penal sum referred
to herein shall be the dollar amount of the principal's bid to the obligee, incorporating any additive or deductive Alternates
made by the principal on the date referred to above to the obligee, which are accepted by the obligee. In no case shall the
penal sum exceed the amount of
Dollars (\$). (If the foregoing blank is not filled in, the penal sum will be the ful
amount of the principal's bid, including add Alternates. Alternatively, if the blank is filled in the amount stated must not be less
than the full amount of the bid including add Alternates, in dollars and cents. A percentage is not acceptable.) For the payment
of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators
successors, and assigns.
Signed this day of, 2020.
THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that whereas the above named principal has submitted a bid for

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH that whereas the above named principal has submitted a bid for work on the Project.

Now, therefore, if the obligee accept the bid of the principal and the principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material; and in the event the principal pays to the obligee the difference not to exceed ten percent (10%) of the penalty hereof between the amount specified in the bid and such larger amount for which the obligee may in good faith contract with the next lowest bidder to perform the work covered by the bid; or in the event the obligee do not award the contract to the next lowest bidder and resubmits the project for bidding, the principal pays to the obligee the difference not to exceed ten percent (10%) of the penalty hereof between the amount specified in the bid, or the costs, in connection with the resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect; if the obligee accept the bid of the principal and the principal within ten (10) days after the awarding of the contract enters into a proper contract in accordance with the bid, plans, details, specifications, and bills of material, which said contract is made a part of this bond the same as though set forth herein.

Now also, if the said principal shall well and faithfully do and perform the things agreed by said principal to be done and performed according to the terms of said contract; and shall pay all lawful claims of subcontractors, materialmen, and laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said contract; we agreeing and assenting that this undertaking shall be for the benefit of any materialman or laborer having a just claim, as well as for the obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; and surety shall indemnify the obligee against all damage suffered by failure of the principal to perform the contract according to its provisions and in accordance with the plans, details, specifications, and bills of material therefor and to pay all lawful claims of subcontractors, materialmen, and laborers for labor performed or material furnished in carrying forward, performing, or completing the contract and surety further agrees and assents that this undertaking is for the benefit of any subcontractor, material man, or laborer having a just claim, as well as for the obligee; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

The said surety hereby stipulates and agrees that no modifications, omissions, or additions in or to the terms of the said contract or in or to the plans or specifications therefore shall in any wise affect the obligations of said surety on its bond. The said surety further stipulates that it is authorized to execute bonds in the State of Ohio and that the liability incurred is within the limits of Section 3929.02 of the Ohio Revised Code.

Signed and sealed	d this day of, 201
_	(PRINCIPAL) (Seal)
Е	Зу:
F	Printed Name & Title:
-	
	(SURETY) (Seal)
Е	Зу:
F	Printed Name & Title:
-	
1	NAME OF SURETY'S AGENT
5	Surety's Agent's Address:
-	
5	Surety's Agent's Telephone Number:
5	Surety's Agent's Fax Number:

NON-COLLUSION AFFIDAVIT

State of Ohio)		
) SS County of)		
Bid Identification		
Contractor,	, being f	irst duly sworn, deposes and says that he is
	of	-
(sole owner, a partne	er, president, secretary, etc.)	
partnership, company, association, organibidder has not directly or indirectly inductional indirectly colluded, conspired, connived, orefrain from bidding; that said bidder has conference with anyone to fix the bid price of such bid price, or of that of any other banyone interested in the proposed contract not, directly or indirectly, submitted his bid data relative thereto, or paid and will re-	ization, or corporation; that such bid is ed or solicited any other bidder to put is or agreed with any bidder or anyone eas not in any manner, directly or indirectly or of any other bidder, bidder, or to secure any advantage agact; that all statements contained in such a different pay any fee in connection therewith or to any member or agent thereof, or	of or on behalf of any undisclosed person, genuine and not collusive or sham; that said in a false or sham bid, and has not directly or lise to put in a sham bid, or that anyone shall ectly, sought by agreement, communication or or to fix any overhead, profit, or cost element ainst the public body awarding the contract or bid are true; and, further that said bidder has be contents thereof, or divulged information or th, to any corporation, partnership, company, to any other individual except to such person general business.
	SIGNED	
	TITLE	
Subscribed and sworn to before me this _	day of	, 201
(SEAL)		

Notary Public

and

NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY AFFIDAVIT

(THIS AFFIDAVIT IS PART OF THE BID)

STATE OF	_		
COUNTY OF	SS -		
	being first dul	sworn, deposes and s	ays that
he is	y as bidder does not and creed, color, sex, age, re posal, said party shall to during employment, with Il post non-discrimination	I shall not discriminate of igion, handicap, familio ke affirmative action to out origin. If successful onotices in conspicuous p	against any employee or al status or national origin. If o insure that applicants are as the lowest and best bidder
Furthermore, said party agrees to a Contract Provisions with the Owner if selected		by the Owner.	of the Ohio Revised Code in the
		Signature Affiant	
		Company/Corporation	
		Address	
		City/State/Zip Code	
Sworn to and subscribed before me this	day of	,:	2020.
(Seal)		Notary Public	

END OF SECTION

2.0 AGREEMENT

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OWNER-CONTRACTOR AGREEMENT

OWNER:

Zanesville – Muskingum County Port Authority Attn: Matt Abbott 250 North Fifth Street Zanesville, OH 43701

CONTRACTOR:

Name:		
Address:		
Phone:		
Contact:		
Email:		

PROJECT:

Industrial Drive and Public Infrastructure

This document is an agreement between the Owner and the Contractor for the Work described in the Contract Documents related to the Contract identified above for the Project and is entered into as of the date set forth above ("Agreement").

The Owner and the Contractor agree as set forth in the following paragraphs:

- 1. **CONTRACT DOCUMENTS.** The Contract Documents consist of the following documents:
 - A. Notice to Bidders;
 - B. Instructions to Bidders;
 - C. Bid Form;
 - D. Owner-Contractor Agreement;
 - E. General Conditions of the Owner Contractor Agreement (including the insurance requirements therein);
 - F. Drawings;
 - G. Project Description and Supplemental Specifications;
 - H. Addenda issued;
 - I. Contractor's Non-Collusion Affidavit;
 - J. Contractor's Qualifications Statement;
 - K. Contractor's Personal Property Tax Affidavit (R.C. 5719.042);
 - L. Contractor's Non-Discrimination and Equal Employment Opportunity Affidavit;
 - M. Minority and Women's Business Participation Policy, Data Sheets I, II and III;
 - N. Contractor's Payment Application Checklist;
 - O. Statement of Claim Form;
 - P. Modifications issued after the execution of the contract, including:
 - i. A written amendment to the Agreement signed by both parties;
 - ii. A Change Order; or,
 - iii. A Work Change Directive.
- 2. <u>ENGINEER RELATIONSHIP</u>. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Engineer and the Contractor or any Subcontractor or Material Supplier to the Project. The Engineer, however, shall be entitled to performance of the obligations of the Contractor intended for their benefit and to enforcement of such obligations, but nothing contained herein shall be

deemed to give the Contractor or any third party any claim or right of action against the Engineer which does not otherwise exist without regard to this Contract. The Contractor and its Subcontractors shall not be deemed to be beneficiaries of any of the acts or services of the Engineer, which are performed for the sole benefit of the Owner. The Contractor shall forward all communications to the Owner through the Engineer and hereby acknowledges and agrees that any instructions, reviews, advice, approvals, orders or directives that are rendered to it by the Engineer are specifically authorized and directed by the Owner to the Contractor through the Engineer acting on behalf of the Owner.

2.1 The Engineer is: Hull & Associates

Attn: Ethan Bode 59 Grant Street Newark, OH 43055 (P) 740-344-5451 (F) 740-344-5746

3. TIME FOR COMPLETION AND PROJECT COORDINATION.

- 3.1 <u>DATE FOR COMMENCEMENT</u>. The date for commencement of the Work shall be the date established in the written Notice to Proceed issued by the Owner to the Contractor. The planned date for commencement, and the date used to establish milestone dates is **July 6**th, **2020**.
- 3.2 <u>MILESTONE COMPLETION DATES</u>. The Milestone Completion Dates for the Project are as follows: Paving to be completed by **October 25**th, **2020**;
- 3.3 <u>DATE FOR SUBSTANTIAL COMPLETION</u>. The deadline for Substantial Completion of the Project is November 23rd, 2020; the contractor shall schedule a walk through with the appropriate agencies per the general notes and that shall be scheduled within 7 days of substantial completion;
- 3.4 <u>DATE FOR FINAL COMPLETION</u>. The deadline for Final Completion of the Project is 14 days after the walk through.
- 3.5 <u>LIQUIDATED DAMAGES</u>. If the Contractor does not have its Work on the Project complete by each applicable date set forth in Sections 3.2, 3.3 and 3.4 above, the Contractor shall pay the Owner (and the Owner may set off from sums coming due the Contractor) liquidated damages in the per diem amounts as set forth below:
- 3.5.1 Milestone Date(s).
 - 3.5.1.1 For each calendar day for which Contractor has not yet completed its Work required for each Milestone set forth in Section 3.2 above, Owner may without Change Order, deduct the sum specified herein from any amount due the Contractor, not as a penalty, but as liquidated damages. The Owner and Contractor agree that in the event of such delay in reaching the Milestone Date(s), Owner may incur damages that are difficult to calculate, and the liquidated damages provided for herein are reasonable.
 - 3.5.1.2 Schedule of Liquidated Damages for Milestones.

Original Contract Amount	Original Contract Amount (Total Amount of the Bid)	
From More Than	To and Including	be deducted for each Calendar
		Day of Overrun in Time
\$1.00	\$50,000.00	\$150.00
\$50,000.01	\$150,000.00	\$250.00
\$150,000.01	\$500,000.00	\$500.00
\$500,000.01	\$2,000,000.00	\$1,000.00
\$2,000,000.01	\$5,000,000.00	\$2,000.00
\$5,000,000.01	\$10,000,000.00	\$2,500.00

- 3.5.2 Substantial Completion.
 - 3.5.2.1 For each calendar day for which Contractor has not yet achieved Substantial Completion beyond the deadline set forth in Section 3.3 above, Owner may without Change Order, deduct the sum specified herein from any amount due the Contractor, not as a penalty, but as liquidated damages. The Owner and Contractor agree that in the event of such delay in reaching Substantial Completion, Owner may incur damages that are difficult to calculate, and the liquidated damages provided for herein are reasonable.
 - 3.5.2.2 Schedule of Liquidated Damages for Substantial Completion.

Original Contract Amount (Total Amount of the Bid)		Amount of Liquidated Damages to
From More Than	To and Including	be deducted for each Calendar
		Day of Overrun in Time
\$1.00	\$50,000.00	\$150.00
\$50,000.01	\$150,000.00	\$250.00
\$150,000.01	\$500,000.00	\$500.00
\$500,000.01	\$2,000,000.00	\$1,000.00
\$2,000,000.01	\$5,000,000.00	\$2,000.00
\$5,000,000.01	\$10,000,000.00	\$2,500.00

- 3.5.3 Final Completion.
 - 3.5.3.1 For each calendar day for which Contractor has not yet achieved Final Completion beyond the deadline set forth in Section 3.4 above, Owner may without Change Order, deduct the sum specified herein from any amount due the Contractor, not as a penalty, but as liquidated damages. The Owner and Contractor agree that in the event of such delay in reaching Final Completion, Owner may incur damages that are difficult to calculate, and the liquidated damages provided for herein are reasonable.
 - 3.5.3.2 Schedule of Liquidated Damages for Final Completion.

Original Contract Amount (Original Contract Amount (Total Amount of the Bid)	
From More Than	To and Including	be deducted for each Calendar
		Day of Overrun in Time
\$1.00	\$50,000.00	\$150.00
\$50,000.01	\$150,000.00	\$250.00
\$150,000.01	\$500,000.00	\$500.00
\$500,000.01	\$2,000,000.00	\$1,000.00
\$2,000,000.01	\$5,000,000.00	\$2,000.00
\$5,000,000.01	\$10,000,000.00	\$2,500.00

In addition to the Owner's right to Liquidated Damages above and the Owner's other rights to indemnity as provided in the Contract Documents, the Contractor shall indemnify, defend, and hold the Owner and its employees harmless from any delay, acceleration, loss of productivity, or other claims relating to or resulting from delays caused by the Contractor and from all costs and expenses incurred as a result of such claims, including but not limited to attorneys' and consultants' fees. Permitting Contractor to continue and complete the Work or any part thereof after any specified Contract Time will in no way operate as a waiver of any right of the Owner under this Agreement.

3.6 PROGRESS SCHEDULE. The Progress Schedule shall be developed as provided in the Contract Documents. The Contractor's obligation to furnish requested scheduling information and coordinate the schedule for the Work with the Engineer and Owner's related work on or near the Site is a material term of the Agreement, the breach of which may be justification for withholding payment otherwise due the Contractor, or termination of this Agreement. Inclusion of the proper staffing levels in the Progress Schedule shall not constitute approval of such staffing levels. The Contractor shall continuously monitor the Progress Schedule so as to be familiar with the timing, phasing, and

sequence of operations of the Work and of other Work on the Project and shall execute the Work in accordance with the requirements of the Progress Schedule, including any revisions thereto.

4.	CONTRACT SUM. The lump sum Contract Sum to be paid by the Owner to the Contractor, as provided herein, for the satisfactory performance and completion of the Work and all of the duties, obligations and
	responsibilities of the Contractor under this Agreement and the other Contract Documents will be, subject to additions and
	deductions as provided in the Contract Documents. The Contract Sum includes all federal, state, county, municipal, and other taxes imposed by law, including but not limited to any sales, use, and personal property taxes payable by or levied against the Contractor on account of the Work or the materials incorporated into the Work. The Contractor will pay any such taxes. The Contract Sum includes the following:
	Base Bid Amount: \$
	Without prejudice to any of the Owner's rights and remedies under the Contract Documents, if the

Contractor fails to submit payment applications and any required documentation, and the Owner has provided written notice of such failure, but the Contractor has not responded, then, not less than ninety (90) days after the written notice to the Contractor to do so has been provided to the Contractor, the balance of the Contract Sum shall remain and become the sole possession of the Owner.

- 5. **RETAINAGE.** Retainage applicable to the Contract by Ohio Revised Code Sections 153.12, .13, and .14 will be withheld as defined in the General Conditions.
- <u>LIMITATION ON LIABILITY</u>. Under no circumstances will the owners, directors, shareholders, elected
 officials, officers, employees, trustees, board members, or agents of the Owner be personally liable for any
 obligations or claims arising out of or related to this Agreement.

7. GENERAL.

- 7.1 <u>MODIFICATION</u>. No modification or waiver of any of the terms of this Agreement or of any other Contract Documents will be effective against a party unless set forth in writing and signed by or on behalf of a party, which in the case of the Owner will require the signature of the Owner or the individual authorized by the Owner to execute such documents on behalf of the Owner. Under no circumstances will forbearance, including the failure or repeated failure to insist upon compliance with the terms of the Contract Documents, constitute the waiver or modification of any such terms. The parties acknowledge that no person has authority to modify this Agreement or the other Contract Documents or to waive any of its or their terms, except as expressly provided in this paragraph.
- 7.2 <u>ASSIGNMENT</u>. The Contractor may not assign this Agreement without the written consent of the Owner, which the Owner may withhold in its sole discretion.
- 7.3 <u>LAW AND JURISDICTION</u>. All questions regarding the validity, intention, or meaning of this Agreement or any modifications of it relating to the rights and obligation of the parties will be construed and resolved under the laws of the State of Ohio. Any suit, which may be brought to enforce any provision of this Agreement or any remedy with respect hereto, shall be brought in the Licking County Common Pleas Court, Licking County, Ohio, and each party hereby expressly consents to the jurisdiction of such court.
- 7.4 <u>CONSTRUCTION</u>. The parties acknowledge that each party has reviewed this Agreement and the other Contract Documents and voluntary entered into this Agreement. Accordingly, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party will not be employed in the interpretation of this Agreement, the other Contract Documents, or any amendments or exhibits to it or them.
- 7.5 <u>APPROVALS</u>. Except as expressly provided herein, the approvals and determinations of the Owner and Engineer will be subject to the sole discretion of the respective party and be valid and binding on the Contractor, provided only that they be made in good faith. If the Contractor challenges any such approval or determination, the Contractor will have the burden of proving by clear and convincing evidence that it was not made in good faith.
- 7.6 <u>PARTIAL INVALIDITY</u>. If any term or provision of this Agreement is found to be illegal, unenforceable, or in violation of any laws, statutes, ordinances, or regulations of any public authority having

jurisdiction, then, notwithstanding such term or provision, this Agreement will remain in full force and effect and such term will be deemed stricken; provided this Agreement will be interpreted, when possible, so as to reflect the intentions of the parties as indicated by any such stricken term or provision.

- 7.7 COMPLIANCE WITH LAWS AND AND NON-DISCRIMINATION. The Contractor, at its expense, will comply with all applicable federal, state, and local laws, rules, and regulations applicable to the Work, including but not limited to Sections 153.59 and 153.60 of the Ohio Revised Code, and any other requirements of the Contract Documents which prohibit discrimination in the hiring and treatment of employees.
- 7.8 JOB MEETINGS. The Contractor or one of its representatives with authority to bind the Contractor will attend job meetings as provided in the Specifications and ensure that its Subcontractors also hold regular job meetings at which safety issues and job matters are discussed as these relate to the Work being performed. The Specifications define the agenda for the meetings and designate responsibilities for taking minutes and maintaining records of such meetings. Job meetings include, but are not limited to, preconstruction meetings, weekly job meetings, weekly safety toolbox meetings, and monthly safety meetings.
- 7.9 <u>PROPERTY TAX AFFIDAVIT</u>. The Contractor's affidavit given under Section 5719.042, Ohio Revised Code, is incorporated herein.
- 7.10 <u>PARTNERING</u>. Contractor agrees that it will participate, as part of the Contract Sum, in any partnering sessions scheduled by Owner.
- 7.11 <u>ENTIRE AGREEMENT</u>. This Agreement and the other Contract Documents constitute the entire agreement among the parties with respect to their subject matter and will supersede all prior and contemporaneous, oral or written, agreements, negotiations, communications, representations, and understandings with respect to such subject matter, and no person is justified in relying on such agreements, negotiations, communications, representations, or understandings.
- 7.12 NOTICES. Submission of Applications for Payment and Claims shall be via personal delivery or U.S. Mail only. All other notices given under the Contract Documents shall be in writing and shall be either (a) sent by certified mail, return receipt requested, in which case notice shall be deemed delivered three business days after deposit, postage prepaid in the U.S. Mail, (b) sent by overnight delivery using a nationally recognized overnight courier, in which case it shall be deemed delivered one business day after deposit with such courier, (c) via email, if approved in advance in writing by Owner or Engineer, or (d) sent by personal delivery, addressed as follows:
- 7.12.1 If to the Owner:

Zanesville – Muskingum County Port Authority Attn: Matt Abbott 250 North Fifth Street Zanesville, OH 43701

with a copy to:

Hull & Associates Attn: Ethan Bode 59 Grant Street Newark, OH 43055 Phone: 740-344-5451

7.12.2 If to the Contractor:

Name Contact Address Phone

7.12.3 If to the Engineer:

Hull & Associates

Attn: Ethan Bode 59 Grant Street Newark, OH

Telephone: 740-344-5451 E-Mail: <u>ebode@hullinc.com</u>

or to such other address or addressee as any party entitled to receive notice hereunder shall designate to all other parties in the manner provided herein for the service of notice.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their properly authorized representatives and agree that this Agreement is effective as of the date first set forth above.

OWNER: Zanesville — Muskingum County Port Authority		
TITLE:		
DATE:		
CONTRACTOR:		
BY:		
TITLE:		
DATE:		

CONTRACTOR AFFIDAVIT

(To be completed and executed if the Contractor is a Corporation)

STATE OF:	_)
COUNTY OF:)) SS
, being duly sworn,	, deposes and says that he/she is secretary of
	a corporation organized and existing
under and by virtue of the laws of the state of	
, and having its principal offi	ces at:
(address)	(city)
(county	(state)
Affiant further says that he/she is familiar with the rec	cords, minute books, and by-laws of
(name o	f corporation)
Affiant further says he that (name of corp	oorate officer)
of the (corporate title)	corporation and is duly authorized
to sign the Agreement to Pickaway County, Ohio for th	ne improvement project
Industrial D	Prive and Public Infrastructure
For said corporation by virtue of	
	dated .
(State whether by a provision of by-laws or a resol	
	Affiant
Sworn to before me and subscribed in my presence this o	day of, 2020.
	Notary Public
My commission expires:	•
my commission expires:	

CONTRACTOR'S PERSONAL PROPERTY TAX AFFIDAVIT

(O.R.C. § 5719.042)

State of Ohio					
County of	, ss:				
		, being first o	duly sworn, deposes	and says that he	e is the
	(Name)	,	, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,	
	of			with offices lo	ocated at
(Title)		(Contractor)			
				, and	as its duly
	(,	Address of Contractor)			,
authorized repr	esentative, states that	effective this c	lay of	, 20	20,
(Name of Contra	ctor)				
() is charged with delinquent personal property taxes on the general list of persona forth below:					onal property as
	<u>County</u>	Amount (includ	le total amount pen	alties and interes	t thereon)
	Count	у \$			
	Count	у \$			
	Count	y \$			
()	is not charged with any Ohio county.	delinquent personal p	roperty taxes on th	e general list of	personal property
				(Affiant)	
Sworn to and su	bscribed before me k	by the above-named o	affiant this d	ay of	, 2020
				(Notary Public)	
			My commission	expires	
					, 2020

CONTRACT PERFORMANCE AND PAYMENT BOND

(O.R.C. § 153.57)

KNOW ALL PERSONS BY THES	E PRESENTS, that we, the undersigned ("Contractor") as principal and as sureties, are hereby held and firmly
bound unto Zanesville – Muskingum Cour	nty Port Authority as obligee, in the penal sum of
	Dollars
(\$), for the payme ourselves, our heirs, executors, administra	ent of which well and truly to be made, we hereby jointly and severally bind ators, successors, and assigns.
Signed this day of	, 2020.
the day of, 2020, Industrial Drive and Public Infrastructure	VE OBLIGATION IS SUCH that whereas, the above-named principal did on enter into a contract with Zanesville — Muskingum County Port Authority for Bid Package in connection with the construction of roadway and ("Project") , which said contract is made a part of this bond the
be done and performed according to the materialmen, and laborers, for labor procompleting of said contract; we agree materialman or laborer having a just of otherwise the same shall remain in full for the surety for any and all claims hereustated. The said surety hereby stipulate of the said contract or in or to the plan surety on its bond. The surety further stipulate of the said contract or in or to the plan surety on its bond. The surety further stipulate of the said contract or in or to the plan surety on its bond.	all well and faithfully do and perform the things agreed by the Contractor to the terms of said contract; and shall pay all lawful claims of subcontractors, performed and materials furnished in the carrying forward, performing, or eing and assenting that this undertaking shall be for the benefit of any claim, as well as for the obligee herein; then this obligation shall be void; brice and effect; it being expressly understood and agreed that the liability of inder shall in no event exceed the penal amount of this obligation as herein es and agrees that no modifications, omissions, or additions, in or to the terms as or specifications therefore shall in any wise affect the obligations of said tipulates that it is authorized to execute bonds in the State of Ohio and that
the liability incurred is within the limits of Signed and sealed this do	ay of, 2020.
	(PRINCIPAL) (Seal)
	Ву:
	Printed Name & Title:
	(SURETY) (Seal)
	Ву:
	Printed Name & Title:
	NAME OF SURETY'S AGENT
	Surety's Agent's Address:
	Surety's Agent's Telephone Number:
	Surety's Agent's Fax Number:

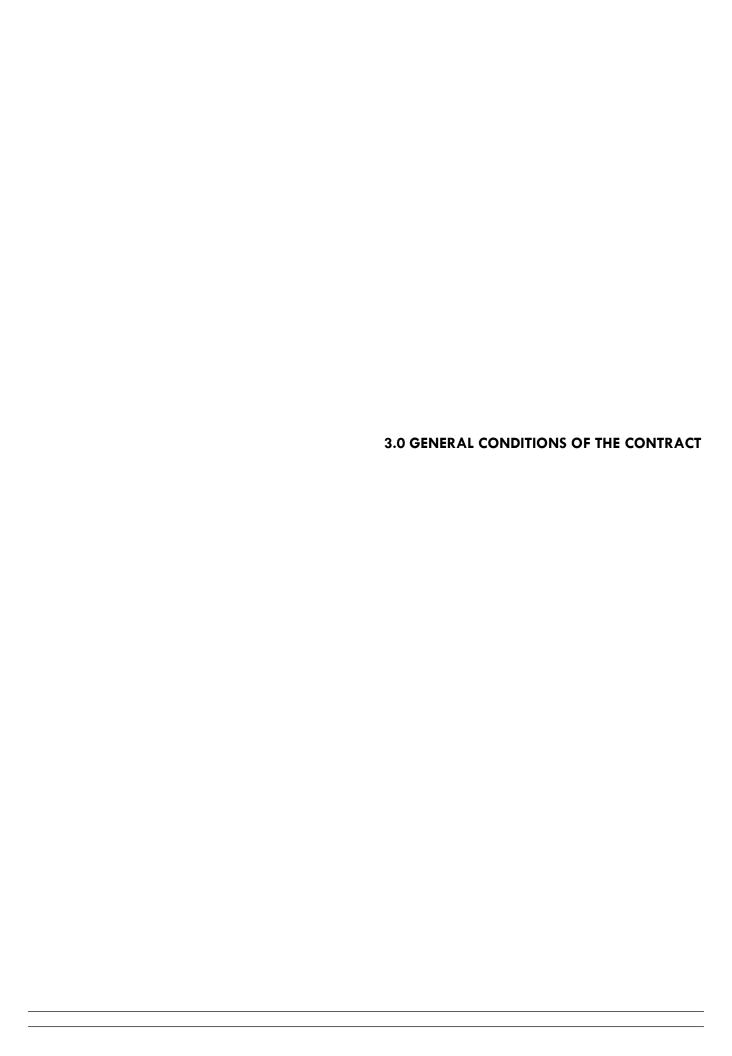




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1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters or with all capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
- 2. Agreement or Owner-Contractor Agreement-The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
- 3. Application for Payment--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 4. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. Bid--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. Bidder--The individual or entity who submits a Bid directly to Owner.
- 7. Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda).
- 8. Bidding Requirements--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.
- 9. Change Order--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times or other term of the Contract Documents, issued on or after the Effective Date of the Agreement.
- 10. Claim--A demand or assertion by Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.

- 11. Contract -- The Contract Documents form the Contract for construction of the Project and full performance of the Work. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by Change Order or other written modification executed by both the Owner and Contractor. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Engineer and Contractor, (2) between the Owner and a Subcontractor or (3) between any persons or entities other than the Owner and Contractor. The Engineer shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Engineer's duties.
- 12. Contract Documents-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 13. Contract Price--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
- 14. Contract Times--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
- $15.\ Contractor$ --The individual or entity with whom Owner has entered into the Agreement.
- 16. Cost of the Work--See Paragraph 11.01.A for definition.
- 17. Drawings--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- 18. Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. Engineer--The individual or entity named as such in the Agreement.
- 20. Field Order--A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

- 21. General Requirements--Sections of Division 1, if any, of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 22. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 23. Hazardous Waste--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 24. Laws and Regulations; Laws or Regulations--Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 25. Liens--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 26. Milestone--A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 27. Notice of Award--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
- 28. Notice to Proceed--A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
- 29. Owner--The entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed. Neither the officers, owners, directors, partners, shareholders, trustees nor employees of the Owner assume any personal liability for obligations entered into by on or on behalf of the Owner.
 - 30. PCBs--Polychlorinated biphenyls.
- 31. Petroleum.-Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 32. Progress Schedule--A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 33. *Project--*The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.

- 34. Project Manual--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 35. Radioactive Material--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 36. Related Entity -- An officer, director, partner, employee, agent, consultant, or subcontractor.
- 37. Resident Project Representative--The authorized representative of Engineer who may be assigned to the Site or any part thereof.
- 38. Samples--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 39. Schedule of Submittals--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 40. Schedule of Values--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 41. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- 42. Site--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
- 43. Specifications--That part of the Contract Documents consisting of the Project Description and Supplemental Specifications and all other specifications referenced therein and all written requirements for materials, equipment, systems, standards and workmanship referenced therein and as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
- 44. Subcontractor--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
- 45. Substantial Completion--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes

for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

46. Successful Bidder--The Bidder submitting a responsive Bid to whom Owner makes an award.

47. INTENTIONALLY DELETED

- 48. Supplier.-A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.
- 49. Underground Facilities--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 50. Unit Price Work--Work to be paid for on the basis of unit prices.
- 51. Work--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 52. Work Change Directive--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of

professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

- 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents, or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents, or
 - c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

2.01 Delivery of Bonds and Evidence of Insurance

A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds, insurance certificates, insurance endorsements, and other documents as Contractor may be required to furnish under the Contract Documents.

B. Evidence of Insurance: Before any Work at the Site is started, Contractor shall deliver to the Owner, with copies to each additional insured identified in the Contract Documents, Owner-approved copies of certificates of insurance, copies of endorsements, and other evidence of insurance which either of them or any additional insured may reasonably request, which Contractor is required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence on the issuance of a Notice to Proceed, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement.

2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. Preliminary Schedules: Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;

2. a preliminary Schedule of Submittals; and

3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during

performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work. The total of the schedule of values prepared for the Work, as required by the General Conditions, shall not exceed the Bid submitted for the Work, unless such amount is adjusted as provided in the Contract Documents.

4. The Contractor shall provide a list of any proposed substitutions in accordance with Paragraph 6.06 of the General Conditions.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

- 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
- 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
- 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: AMENDING, REUSE

INTENT,

3.01 Intent

A. The Contract Documents are complementary; what is required by one is as binding as if required by all.

B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to

be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.

C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 Reference Standards

- A. Standards, Specifications, Codes, Laws, and Regulations
- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

- 1. Contractor's Review of Contract Documents Before Starting Work: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
- 2. Contractor's Review of Contract Documents During Performance of Work: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.17.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. If Contractor proceeds with work that Contractor had actual knowledge or should have known that a conflict, error, ambiguity, or discrepancy existed as indicated above, correction of work constructed without such notification to Engineer shall be at Contractor's expense, (except in an emergency as authorized by Paragraph 6.17.A.).

B. Resolving Discrepancies

- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).
- 2. Within the Contract Documents, requirements of the Agreement shall take precedence over the General Conditions, which shall take precedence over the Specifications, which shall take precedence over the Drawings.
- 3. Within a particular Contract Document, figure dimensions on Drawings shall take precedence over general Drawings. Specific instructions or specifications shall take precedence over general instructions or specifications.

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive issued by the Owner.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:

1. A Field Order;

- 2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.18.D.3); or
 - 3. Engineer's written interpretation or clarification.

3.05 Reuse of Documents

A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of

the Work under a direct or indirect contract with Contractor, shall not:

- 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or
- reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adoption by Engineer.
- B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 Electronic Data

- A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities.

- B. Owner will furnish Contractor with a Notice of Commencement prepared for the Project, conforming with the provisions of Ohio Revised Code Section 1311.04.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 Subsurface and Physical Conditions

A. Reports and Drawings: 4.02C identifies:

- those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
- 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in Paragraph 4.02C or otherwise provided in the Specifications or an Addendum. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
- 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
- 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information. For example, all interpolations and extrapolations of data performed by Contractor to estimate locations or quantities of subsurface strata are independent factual assumptions which Owner does not warrant.
- C. Documents which indicate subsurface physical conditions at the Site shall be part of the Specifications or provided as an Addendum.

4.03 Differing Subsurface or Physical Conditions

A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:

- 1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
- 2. is of such a nature as to require a change in the Contract Documents; or
- 3. differs materially from that shown or indicated in the Contract Documents; or
- 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, within two (2) days after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.17.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so. Contractor understands and agrees that failure to provide such notice as required herein, or disturbing the differing condition without express authorization, shall be an irrevocable waiver of Contractor's right to any form of additional compensation, be it in time or money, arising out of the differing subsurface or physical condition.

B. Engineer's Review: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. Possible Price and Times Adjustments

- 1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
 - b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.
- $\hbox{$2$. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if: } \\$
 - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or

b. the existence of such condition could reasonably have been discovered or revealed as a result of

- any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
- c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
- 3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 Underground Facilities

- A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided elsewhere in these General Conditions:
- Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
- 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. protecting all Underground Facilities in a manner at least as cautious and protective of safety and of underground facilities as those methods identified in Ohio Revised Code Sections 3781.25 et seq.
 - b. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and
 - c. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.17.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any,

to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel. Contractor is referred to the General Requirements for additional requirements for laying out the work.

4.06 Hazardous Environmental Condition at Site

A. Reports and Drawings: Reference is made in 4.06B(4) for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.

B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:

1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or

- 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
- 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- 4. The only documents which indicate Hazardous Environmental Conditions at the Site are as follows: No reports or drawings related to Hazardous Environmental Conditions are known to the Owner or Engineer.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.17.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.

E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.

F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

G. To the fullest extent permitted by law, Contractor shall indemnify and hold harmless Owner and Engineer, and their officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this paragraph shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

H. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 Performance, Payment, and Other Bonds

Contractor shall furnish a Contract Performance and Payment Bond in the amount of the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. Such bond shall be in the form included in the Project Manual or such other form that meets the requirements of the Ohio Revised Code. If the Contractor submitted a satisfactory combined Bid Guaranty and Contract Performance and Payment Bond with its bid for the Work, that form of Bond shall satisfy the Contractor's requirement to provide a Contract Performance and Payment Bond as described herein. Contractor shall cause the Zanesville - Muskingum County Port Authority to be named as obligee under the Performance and Payment Bond. Contractor shall also furnish such other bonds as are required by the Contract Documents.

- B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.
- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.
 - D. Material Default or Termination. If the

Owner notifies the Contractor's surety that the Contractor is in material default, the surety will complete its investigation of the claimed material default within 21 days. The surety is advised to immediately seek a replacement contractor upon notice of material default. As part of its investigation, the surety shall promptly visit the offices of the Contractor, Engineer, and Owner to inspect and copy the available Project records. The Owner, Engineer, and Contractor, upon written request by the surety, shall make such records available during regular business hours for such inspection and copying. The Owner and Engineer's making such records available as provided herein shall satisfy the Owner's obligation to the surety to furnish documents for the investigation. The surety will provide the Owner with the results of its investigation, including any written report or documents.

If the Owner terminates the Contract and the surety proposes to takeover the Work, the surety shall do so no later than the later of the expiration of the 21-day investigation period or 10 days after the date the Owner terminates the Contract, whichever is later. If the Owner terminates the Contract, and the surety proposes to provide a replacement contractor, the replacement contractor shall be fully capable of performing the Work in accordance with the Contract Documents. If the Contractor is terminated for cause, the replacement contractor shall not be the Contractor or its employees, unless the Owner agrees in writing. In the event the Surety takes over the Project, the surety's obligation shall not be limited to the penal sum of the Bond.

If the surety does not propose an acceptable contractor as required by this Paragraph 5.01.D, the Owner may complete the Work by such means as it deems appropriate. In the event the Owner agrees to accept a replacement contractor, the replacement contractor shall furnish its own bond for the replacement contractor's scope of work, and neither the Contractor nor the surety shall be relieved of their obligations under the Contract Documents.

This Paragraph 5.01.D is in addition to any other rights of the Owner under the Contract Documents and is not intended to create any rights of the surety, including but not limited to the right to take over the Contractor's obligations.

In the event of the Contractor's termination and if the surety does not takeover the Work as provided in this Paragraph 5.01.D., the Owner may take possession of and use all materials, facilities and equipment at the Project Site or stored off-site for which Owner has paid in whole or in part.

5.02 Licensed Sureties and Insurers

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the General Conditions.

5.03 Certificates of Insurance

- A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Contract Documents, certificates of insurance, copies of endorsements, and other evidence of insurance requested by Owner or any other additional insured, which Contractor is required to purchase and maintain.
- B. The additional insured endorsements required herein shall be ISO 20 10 11 85 or its equivalent so that Completed Operations liability extends to the additional insureds after the completion of the Project.
- C. Failure of Owner to demand such certificates or other evidence of full compliance with these insurance requirements or failure of Owner to identify a deficiency from evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. By requiring such insurance and insurance limits herein, Owner does not represent that coverage and limits will necessarily be adequate to protect Contractor, and such coverage and limits shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 Contractor's Liability Insurance

- A. During the term of this Contract and for such additional time as may be further required, Contractor shall provide, pay for, and maintain in full force and effect the insurance outlined herein covering claims arising out of or in connection with the Work or service performed by or on behalf of Contractor. CONTRACTOR SHALL CONTRACTUALLY CAUSE ALL SUBCONTRACTORS OR ANYONE FOR WHOSE ACTS THEY ARE LIABLE TO PURCHASE AND MAINTAIN INSURANCE IN COVERAGE TYPES, LIMITS AND ENDORSEMENTS AS REQUIRED HEREIN AND PROVIDE PROOF OF SUCH COVERAGE UPON REQUEST AND IN A FORM ACCEPTABLE TO OWNER.
- B. Workers' or Workmen's Compensation Minimum Limits:
 - 1. Statutory requirement per law.
 - 2. Employer's Liability:
 - (a) \$500,000 per accident
 - (b) \$500,000 disease, each employee
 - (c) \$500,000 disease, policy limit.
- 3. Waiver of Subrogation under Workers' Compensation shall be included in favor of Owner to the full extent permitted by law.
- C. Commercial General Liability (including Premises-Operations; Independent Contractors' Protective; Products and Completed Operations; Broad Form Property Damage) written on an Occurrence Basis with the following Minimum Limits:
- 1. Personal Injury, Bodily Injury and Property Damage: \$1,000,000 each occurrence, \$2,000,000 aggregate.
- 2. Products and Completed Operations to be maintained for three (3) years after final payment: \$1,000,000 each occurrence, \$2,000,000 aggregate.

- 3. Property Damage Liability Insurance shall provide explosion, collapse and underground hazards coverage.
- 4. Property Damage Coverage shall include Completed Operations.
- 5. Contractual Liability (Personal Injury, Bodily Injury & Property Damage) \$1,000,000 each occurrence/\$2,000,000 aggregate.
- 6. Additional Insureds: Zanesville Muskingum County Port Authority
- D. Business Auto Liability (including owned, nonowned and hired vehicles) Minimum Limits:
- 1. Bodily Injury and Property Damage: \$1,000,000 Combined Single Limit

E. Umbrella Excess Liability Minimum Limits:

- \$10,000,000, each occurrence over each primary insurance outlined for Employer's Liability, Commercial General Liability, and Business Auto Liability above.
 - 2. \$10,000,000.00 Aggregate
- 3. Limit level applicable to Contractor only. Contractor is responsible for ensuring subcontractors maintain sufficient excess liability limits.

F. Builder's Risk Coverage

- 1. Broad Form Builders Risk Insurance in the amount of the total project costs.
- 2. Policy must include a permit to occupy or equivalent coverage.
- 3. Coverage shall be all risk, on a replacement cost basis including but not limited to the perils of fire, extended coverage, theft, vandalism, malicious mischief, water damage, earth movement (including subsidence), collapse, falsework, temporary buildings and debris removal. Policy shall also insure flood, earthquake and tier one wind damages as required by project location
- 4. Other coverage as may be required by lenders, ground lessors, joint venture partners and/or customarily purchased by real estate owners for similar projects and geographic region.
- 5. Policy must remain in force until the work has been completed and accepted by Owner.
- 6. Owner, its affiliates, and other designees as may be designated by Owner, are to be included as Loss Payee and Additional Named Insured under the Builder's Risk coverage.

5.05 Additional Requirements for Policies

A. Contractor shall contractually cause all subcontractors or anyone for whose acts they are liable to purchase and maintain insurance in coverage types, limits and endorsements as shown here and provide proof of such coverage upon request and in a form acceptable to owner. Contractor shall furnish Owner and each other additional insured identified in the Contract Documents, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

C. The specific Project name and address shall be to be listed in "Description of Operations."

amounts, each may purchase and maintain it at the

- E. Coverage required herein by contractor is primary and non-contributory to any coverage placed by Owner.
- F. If Contractor maintains lower limits for any of the required coverages, Umbrella/Excess liability limits can be applied in addition with the primary insurance. Occurrence limits (General Liability plus Umbrella) must total at least \$11,000,000. Aggregate limits (General Liability plus Umbrella) must total at least \$12,000,000.
- G. Certificate holder shall be Zanesville Muskingum County Port Authority

5.06 Owner's Liability Insurance

purchaser's own expense.

A. In addition to the insurance required to be provided by Contractor under the Contract Documents, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.07 Waiver of Subrogation Rights

- A. To the fullest extent permitted by law, Contractor waives all rights against the Owner and its affiliates, agents, and employees for damages to the extent cover by any insurance, except rights to the proceeds of that insurance. All policies shall accomplish this waiver of subrogation by endorsement or otherwise satisfactory evidence to the Owner.
- B. Owner and Contractor waive all rights against each other for damages cause by fire or other perils to the extent of actual recovery of any insurance proceeds under any property insurance, inland marine insurance, or Builder's Risk insurance applicable to the Work.

5.08 Receipt and Application of Insurance Proceeds

A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order

B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Section 5.04 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall

consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 Review of Contract Documents and Field Conditions

A. Before starting each portion of the work, the Contractor shall carefully study and compare the various Contract Documents relative to that portion of the work, shall take field measurements of any existing conditions related to that portion of the work, and shall observe any conditions at the site affecting it.

B. If Contractor finds any perceived ambiguity, conflict, error, omission, or discrepancy on or between any of the Contract Documents, or between any of the Contract Documents and any applicable law, Contractor, before proceeding with the work, shall promptly submit a request for interpretation to the Architect for an interpretation or clarification.

6.02 Supervision and Superintendence

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

- B. At all times during the progress of the Work, Contractor shall assign a competent project superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.
- C. Contractor's project superintendent and any other representatives of Contractor, as may be deemed necessary by the Owner or Engineer, shall be available for progress meetings according to a schedule determined by Owner or Engineer.

6.03 Labor; Working Hours

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, Shut Down Dates as defined in Paragraph 17.10 or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.04 Services, Materials, and Equipment

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment. Suppliers shall be deemed to impliedly warrant that their products and all component materials incorporated into them are suitable and fit for the intended use of such products and shall be free from defect in material, workmanship or design, such warranty to run to the benefit of Owner and Engineer. The foregoing applies whether the products or their component materials are specified in the Contract Documents or are of Supplier's design.

C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.05 Progress Schedule

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.
- 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
- 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

B. THE PERIODS OF TIME IN THE PROJECT CONSTRUCTION SCHEDULE ARE OF THE ESSENCE TO

THIS CONTRACT. THE CONTRACTOR SHALL PROSECUTE ITS WORK IN ACCORDANCE WITH THE CURRENT PROJECT CONSTRUCTION SCHEDULE.

1. Notice of Delays. The Contractor shall give the Owner and the Engineer verbal notice of any delay affecting its Work within two (2) days of the commencement of the delay. In addition, the Contractor shall give the Owner and Engineer written notice of the delay within ten (10) calendar days of the commencement of the delay with specific recommendations about how to minimize the effect of the delay. The written notice of the delay shall conspicuously state that it is a "NOTICE OF DELAY." A notice of a delay shall not constitute the submission of a Claim. The failure to give either of the required notices will be an irrevocable waiver of the Contractor's right to seek an extension of time and/or compensation or damages for the delay. Any extensions of time will only be granted pursuant to the procedures set forth under Paragraph 12.02. The Contractor acknowledges and agrees that timely notice of delays gives the Owner the opportunity to take action to minimize the cost and/or effect of delays.

6.06 Substitutes and "Or-Equals"

A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. "Or-Equal" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.06.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:

a. in the exercise of reasonable judgment Engineer determines that:

- 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
- 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,
- 3) it has a proven record of performance and availability of responsive service; and

- b. Contractor certifies that, if approved and incorporated into the Work:
- 1) there will be no increase in cost to the Owner or increase in Contract Times, and
- it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

- a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.06.A.1, it will be considered a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
- c. The requirements for review by Engineer will be as set forth in Paragraph 6.06.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
- 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design,
 - b) be similar in substance to that specified, and
 - c) be suited to the same use as that specified;
 - 2) will state:
 - a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;
 - b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and

- c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
- 3) will identify:
- a) all variations of the proposed substitute item from that specified, and
- b) available engineering, sales, maintenance, repair, and replacement services;
- 4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.06.A.2.
- C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.06.A and 6.06.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.
- D. Special Guarantee: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.06.A.2 and 6.06.B Whether or not Engineer approves a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- F. Contractor's Expense: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.

- 6.07 Subcontractors, Suppliers, and Others
- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.07.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection. If Owner or Engineer after due investigations has reasonable objections to any proposed Subcontractor, Supplier, or other individual or entity, either may request Contractor submit an acceptable substitute without an increase in Contract Price.
- B. If the Contract Documents require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Contract Documents, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.
- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
- 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor
- 2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing

or furnishing any of the Work to communicate with Engineer through Contractor.

- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an approagreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance required by the Contract Documents, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, and all other individuals or entities identified in the Contract Documents to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.
- H. Contingent Assignment of Subcontracts. Each subcontract agreement for a portion of the Work shall be assigned, at the Owner's discretion, by the Contractor to the Owner provided that: (1) assignment is effective only after termination of by the Owner for cause pursuant to Section 15.02 and only for those subcontract agreements which the Owner accepts by notifying the Subcontractor in writing; and (2) assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

6.08 Patent Fees and Royalties

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.
- B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other

professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.09 Permits

A. Unless otherwise indicated in the General Requirements, Owner will obtain and pay for permits for construction on or across railroad company property, if any, for permits from municipalities and agencies, for work in highways, waterways, and wetlands, and for permits required for construction in public right-of-way. See General Requirements for listing and specific requirements of permits obtained by Owner.

6.10 Laws and Regulations

A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work, including but not limited to all Prevailing Wage Laws and Regulations required by Chapter 4115 of the Ohio Revise Code. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.11 Taxes

- A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.
- B. Materials purchased for incorporation into the proposed Work will be exempt from the State of Ohio Sales Tax, as provided in Section 5739.02 of the Ohio Revised Code, and also from the State of Ohio Use Tax, as

provided in Section 5741.01 of the Ohio Revised Code. The Owner will provide the Contractor with a Construction Tax Exempt Certificate upon request, made through the Engineer.

- C. Purchases by the Contractor of expendable items, such as form lumber, tools, oil, greases, fuel, or equipment rentals, are subject to the application of Ohio Sales or Use Taxes.
- D. Contractor shall withhold all income taxes due to the State of Ohio and Zanesville Muskingum County Port Authority for wages, salaries and commissions paid to its employees for Work done under this Agreement and further agrees that any of its subcontractors shall, by the terms of its subcontract, be required to withhold any such income taxes due for work performed under this Agreement.

6.12 Use of Site and Other Areas

A. Limitation on Use of Site and Other Areas

- 1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- 3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.
- B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. Cleaning: Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and

surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.13 Record Documents

A. Contractor shall maintain in a safe place at the Site two record copies of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, samples, and shop drawings shall be delivered by Contractor to Owner.

6.14 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to or resulting from:
- 1. all persons on the Site or who may be affected by the Work;
- 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site;
- 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction; and
- 4. work being performed that would include an open flame or producing heat and/or sparks, including, without limitation, when welding, cutting, brazing, grinding, soldering, or using a torch to thaw piping or heat material ("Hot Works"). Contractor shall establish a Hot Works Program that requires, at a minimum, precautionary and safeguard checklists and proper instruction on the implementation to monitor and safeguard the area where such work is being performed.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.

- C. All damage, injury, or loss to any property referred to in Paragraph 6.14.A.2, 16.14.A.3 or 6.14.A.4 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer, or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).
- D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.15 Safety Representative

- A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.
- B. Contractor shall keep at the Site at all times during the progress of the Work a competent person to comply with OSHA trenching and excavation requirements. The competent person shall be one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions that are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

6.16 Hazard Communication Programs

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.17 Emergencies

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.18 Shop Drawings and Samples

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.18.D.
- 2. Samples: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.
 - a. Submit number of Samples specified in the Specifications.
 - b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.18.D.
- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

- 1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified, including in-field personal verifications, as necessary:
 - a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
 - c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and

- d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.
- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample Submittal and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

- 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.18.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.18.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.19 Continuing the Work

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or

disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.20 Contractor's General Warranty and Guarantee

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
- 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 - 1. observations by Engineer;
- recommendation by Engineer or payment by Owner of any progress or final payment;
- the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
- 4. use or occupancy of the Work or any part thereof by Owner;
- 5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
 - 6. any inspection, test, or approval by others; or
 - 7. any correction of defective Work by Owner.

6.21 Indemnification

A. To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner (and, to the extent Owner is a joint venture or partnership, any partner or joint venturer in such partnership or joint venture), Engineer, and the Owner's and Engineer's consultants, and agents, and the directors, officers, employees, partners, shareholders, members, property managers, agents, affiliates, representatives, mortgagees, and insurers, of any of them, and their successors and assigns (each, an "Owner Entity," and collectively, the "Owner Entities"), from and against any and all claims, damages, losses, liabilities, demands, causes of action,

administrative or regulatory proceedings, liens, settlements, judgments and expenses, including but not limited to attorneys' fees (including attorney's fees and costs and expenses incurred in enforcing this indemnity provision), investigative costs and any insurance deductibles, directly or indirectly arising out of or resulting from (a) bodily injury, sickness, disease, personal injury, or death of any employees of the Contractor, its subcontractors, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, while at the site where work is conducted, or elsewhere, while engaged in the performance of the Work under this Agreement, which indemnification obligation shall in no way be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or its subcontractors under any worker's or workmen's compensation acts, disability benefit acts or other employee benefit acts, (b) bodily injuries or death to any person or persons who are not employees of the Contractor, (c) property damage, (d) property destruction (including loss of use thereof), (e) intangible pecuniary loss, sustained or alleged to have been sustained by any business, organization or person, including employees of Contractor and any subcontractors, (f) any claim by any laborer, materialman or subcontractor for materials furnished or labor performed in connection with the Work, (g) any infringement of any patent arising out of or in connection with the performance of the Work or the use of materials and equipment furnished for or in connection with the Work, or (h) any breach of this Agreement by Contractor or any of its subcontractors, arising out of or in connection with the performance of the Work or this Agreement by Contractor, its agents, servants, employees, subcontractors or independent contractors retained or hired by Contractor; provided, however, that Contractor shall have no indemnity obligation to the extent that damages, losses, or liabilities are caused by or result from the negligence of an Owner Entity. This provision shall survive the termination of this Agreement.

B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.21.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.

- C. The indemnification obligations of Contractor under Paragraph 6.21.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:
- D. For any matter for which Engineer is indemnified under Paragraph 6.21.A, Contractor shall pay for Engineer's reasonable defense, including, but not limited to, all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other

dispute resolution costs or awards until Engineer is found negligent.

6.22 Delegation of Professional Design Services

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.

B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.

C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.

D. Pursuant to this Paragraph 6.22, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.18.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 Related Work at Site

A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:

 written notice thereof will be given to Contractor prior to starting any such other work; and

- 2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 Coordination

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Contract Documents:
- 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
- 2. the specific matters to be covered by such authority and responsibility will be itemized; and
- 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Contract Documents, Owner shall have sole authority and responsibility for such coordination.

7.03 Legal Relationships

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is

liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

7.04 Claims By Other Contractors

- A. Should Contractor cause damage to the work or property of any separate contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Contractor, Contractor shall promptly attempt to settle with such other contractor by agreement or to otherwise resolve the dispute by arbitration or at law.
- B. Should Contractor cause damage to the work or property of any separate contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Owner or Engineer, Contractor shall indemnify Owner and Engineer as required under Paragraph 6.21.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 Communications to Contractor

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 Replacement of Engineer

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 Furnish Data

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 Pay When Due

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site

that have been utilized by Engineer in preparing the Contract Documents.

8.06 Insurance

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 Change Orders

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

8.08 Inspections, Tests, and Approvals

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 Limitations on Owner's Responsibilities

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 Owner's Representative

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 Visits to Site

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work. Engineer's efforts will be directed

toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 Project Representative

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Contract Documents and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Contract Documents.

- B. Resident Project Representative personnel on this project may include personnel furnished by Owner, Engineer, or both. The duties and responsibilities of the Resident Project Representative(s) include the following:
- 1. Review schedules as required in Paragraph 2.05.A of the General Conditions and amendment thereto.
- 2. Attend conferences and meetings with Contractor.
- 3. Serve as liaison between Engineer and Contractor and help Engineer serve as liaison between Owner and Contractor.
 - 4. Conduct on-site observation of the work.
- 5. Observe tests, equipment, and system startups.
- 6. Report to Engineer when clarifications and interpretations of the Contract Documents are needed. Consider, evaluate, and report to Engineer, Contractor's requests for modification.
- 7. Maintain orderly records, keep a daily log (when on a part-time basis, keep log for days visiting site), and furnish periodic reports to Engineer of the progress of the Work.
 - 8. Before project completion, prepare final

list of items to be completed or corrected and make recommendations to Engineer concerning acceptance of the Work.

9. Review Payment Applications from Contractor.

The Resident Project Representatives shall not:

- 1. Authorize any deviation from the Contract Documents or substitutions of materials or equipment.
- 2. Exceed limitations of Engineer's authority as set forth in the Contract Documents.
- 3. Undertake any of the responsibilities of Contractor, Subcontractor, or Contractor's superintendent.
- 4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences, or procedures of construction.
- 5. Advise on, issue directions regarding, or assume control over safety precautions and programs in connection with the Work.
- 6. Accept shop drawing or sample submittals from anyone other than Contractor.
- 7. Authorize Owner to occupy the Project in whole or in part.
- 8. Participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by Engineer.

9.04 Authorized Variations in Work

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 Rejecting Defective Work

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

- 9.06 Shop Drawings, Change Orders and Payments
- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.18.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.22.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.
- D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 Determinations for Unit Price Work

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor, if the Contract is entered into on a Unit Price basis. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

B. Unit Price Work for which a typical cross section or other detail from the Contract Documents applies shall be paid only up to the quantity determined by using the dimensions provided in the typical cross section or other detail. By way of example only, and not implying any limitation, this provision means that if a typical trench width detail in the Drawings shows a maximum width of 30-inches, all pay quantities associated with the actual work of constructing the detail shall be calculated using a trench width not greater than 30-inches. This means that the actual pay quantity could also be less than that based upon a 30inch wide trench, if the actual trench width is smaller and otherwise in conformance with the Contract Documents, but the Contractor would not be paid more if the actual trench width exceeds 30 inches. Contractor is responsible for determining what actual trench width may be required due to field conditions and applicable laws and regulations existing at the time of its bid.

9.08 Decisions on Requirements of Contract Documents and Acceptability of Work

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question

- B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.
- C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, when documented by written acceptance of both parties, subject to the provisions of Paragraph 10.05.
- D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.
- 9.09 Limitations on Engineer's Authority and Responsibilities
- A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

10.01 Authorized Changes in the Work

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 Unauthorized Changes in the Work

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.17 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
- 1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
- 2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
- 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.19.A.

10.04 Notification to Surety

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or

Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change. Failure to provide notice to the surety of any such change shall not exonerate the surety from its obligations under the bond.

10.05 Claims

A. Engineer's Decision Required: All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.

B. Notice: Claims shall be made by delivering to the Engineer and the opposing party, within 21 days after the start of the event giving rise to the Claim, a fully completed Statement of Claim Form, a copy of which is included in the Project Manual or otherwise provided. The Contractor shall be responsible for substantiating its Claim. Failure to provide and submit the properly completed Statement of Claim form shall be an irrevocable waiver of Contractor's right to any form of additional compensation, be it in time or money, arising out of the Claim or the circumstances underlying the Claim.

C. Engineer's Action: Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:

- 1. deny the Claim in whole or in part,
- 2. approve the Claim, or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.

E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor commences an action in a court of exclusive jurisdiction as set forth in Paragraph 16.01.A.2 within 30 days of such action or denial.

F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

G. Claim Certification: Contractor shall not knowingly (as "knowingly" is defined in the Federal False Claims Act, 31 USC Section 3729 et seq.), present or cause to be presented a false or fraudulent Claim. As a condition

precedent to Contractor making a Claim, the written notice of Claim (made using the Statement of Claim Form included in the Contract Documents) shall be accompanied by an affidavit sworn before a notary public or other person authorized to administer oaths in the State of Ohio and executed by an authorized representative of Contractor, which states that:

The Claim that is submitted herewith complies with Section 10.05 of the General Conditions, which provide that the Contractor shall not knowingly present or cause to be presented a false or fraudulent Claim.

Failure to submit such affidavit with Statement of Claim Form shall constitute an irrevocable waiver of the Contractor's Claim.

H. Claim Documentation: Within ten (10) days of written request from the Owner, Contractor shall make available to Owner or its representative any books, records, or other documents in its possession or to which it has access, including but not limited to Contractor's daily logs/reports, original estimates of Work and applicable agreements, correspondence with subcontractors and suppliers, internal correspondence (including e-mail), accounting records, and other information from which the Contractor's costs may be derived. To the extent permitted by law, the Owner shall keep the Project accounting records and estimate for the Project confidential. As requested by the Owner, the Contractor shall provide such documents and information in paper copies and/or computer format (including the format of the Contractor's accounting software and/or ASCII format). The Contractor's provision of the requested documents and information shall be a condition precedent to any further proceeding under the Contract Documents or to payment of an Application for **Payment**

Failure to provide the requested documents shall be a material breach of the Contract, and Contractor shall indemnify Owner for all of Owner's costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to Contractor's failure to comply with this provision. If the Contractor fails to provide the requested documents, the Contractor shall be precluded from presenting such documents in any subsequent dispute resolution proceedings, if the data was reasonably available at the time of the request.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 Cost of the Work

A. Costs Included: The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or

when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.

- 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include, without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
- 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
- 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
- 4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
 - 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

- b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
- c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.
- e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.
- B. Costs Excluded: The term Cost of the Work shall not include any of the following items:
- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety

managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.
- C. Contractor's Fee: If the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.
- D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

1. Contractor agrees that:

- a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
- b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and

other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

- 1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement

- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
- 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
- 2. there is no corresponding adjustment with respect any other item of Work; and
- 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.
- E. Notwithstanding any other provision in the Contract Documents (except for 9.07 of these General Conditions) for Unit Price Work, Contractor shall be paid by calculating Contractor's Unit Price bid by actual quantities up to and including 110% of the Engineer's estimated quantity, provided that such quantities are

confirmed by Engineer and such Work is otherwise in conformance with the technical requirements of the Contract Documents. Contractor shall not be paid for any Unit Price Work that represents an actual quantity greater than 110% of the Engineer's estimated quantity, without a Change Order. It is the Contractor's responsibility to track actual in-progress quantities of Work in anticipation of the applicability of this provision.

F. Owner may, without alteration or modification of this Contract, increase, diminish, or omit the work covered by any item of this Contract. When such item is covered by a unit price the amount actually required will be paid for; if a lump sum price is applicable, the net addition or deduction, representing the actual value of the work added or dispensed with, shall be agreed upon before the work is done, and if agreement cannot be reached, the work shall be completed pursuant to a Work Change Directive under Article 10 of the General Conditions. No claim for loss of anticipated profits shall be made or allowed on account of such changes, and the validity of the Contract or bond shall not be affected thereby.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 Change of Contract Price

A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
- 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
- 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
- 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. Contractor's Fee: The Contractor's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or

- if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
 - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
 - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 Delays

A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay, except for weather delays resulting in workdays lost from March 1 to June 30, if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by

Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God. When the Contractor's accepted Progress Schedule depicts Work on the critical path occurring during the period from December 1 to April 30 and the Contractor is prevented from completing any part of the Work within the Contract Times due to a abnormal weather conditions, then the Contract Times will be extended by one (1) day for each weather day lost in excess of those in the following table:

Month	Number of Workdays Lost
	Due To Weather
November	4
December	4
January	4
February	3

The Contract Times will be extended for every workday that abnormal weather conditions reduce production by more than 50 percent on items of Work on the critical path. Weekends, Shutdown Days as defined in Paragraph 17.10, if any, and holidays will not be considered as lost workdays unless the Contractor normally works those days or unless the Contractor is directed to work those days.

B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.

D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

A. All Work is subject to testing to indicate compliance with Contract Document requirements. Duplicate copies of test results of all tests required shall be submitted to Engineer. Testing laboratories are subject to the approval of Engineer. Tests and inspection of work may be conducted by Owner or an independent laboratory employed by Owner. Tests may also be performed in the field by Engineer as a basis for acceptance of the Work. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests. Samples required for testing shall be furnished by Contractor at no cost to Owner. In the event that completed Work does not conform to specification requirements during the initial test, the Work shall be corrected and retested for conformance. The entire cost of retesting completed Work shall be borne by Contractor. This shall include the extra cost for inspection to Owner which will be deducted from the final amount due Contractor.

- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
- 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
- 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and
- 3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body,

Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.

- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 Uncovering Work

- A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.
- B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.
- C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
- D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 Owner May Stop the Work

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 Correction or Removal of Defective Work

- A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 Correction Period

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.12.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

- 1. repair such defective land or areas; or
- 2. correct such defective Work; or
- 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
- 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited

to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications .

D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or limitation upon, or a waiver of the provisions of any applicable statute of limitation or repose.

13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 Owner May Correct Defective Work

If Contractor fails within two (2) days of a written notice from Engineer, or such longer time as may be stated in such notice, to correct, or take reasonable steps to commence to correct, defective Work or to remove and replace, or take reasonable steps to remove and replace, rejected Work as required by Engineer in accordance with Paragraph 13.06.A., or if Contractor fails to perform the Work in accordance with the Contract Documents, Owner may correct or remedy any such deficiency. In such case an appropriate Change Order shall be issued deducting from

payments then or thereafter due the Contractor the reasonable costs arising out of or related to the investigation and correction of correcting such deficiencies, including Owner's attorneys' and consultants' fees and expenses and other expenses and compensation for the Engineer's additional services made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. The Contractor irrevocably designates the Owner as the Contractor's attorney-in-fact to execute the Change Orders provided for in this Subparagraph.

B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.

C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress

payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments

- 1. At least by the 20th day of the month (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment (including a Schedule of Values described in Paragraph 2.05.A.3 of the General Conditions) filled out and signed by Contractor covering the Work completed as of the date of the Application, and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
- 3. Retainage. Partial payments to Contractor for labor performed shall be made at the rate of 92 percent of the amount invoiced through the Application for Payment that shows the total Contract Completion at 50 percent or greater, pursuant to Ohio Revised Code Section 153.14. After the Work is 50 percent complete, as evidenced by payments in the amount of at least 50 percent of the Contract Price to Contractor, Owner may, at Owner's sole discretion, reduce retainage pursuant to Ohio Revised Code Section 153.80.
- 4. Contractor shall submit with each pay request Contractor's partial waiver of lien for the full amount of the requested payment. Beginning with the second pay request, and with each succeeding pay request, Contractor shall submit partial waivers of lien for each Subcontractor and Supplier showing that the amount paid to date to each is at least equivalent to the total value of Subcontractor's or Supplier's work, less retainage, included on the previous pay request. Contractor shall submit with each pay request a signed Waiver of Lien Log clearly documenting the following:
- a. The names of all Subcontractors/Suppliers on the project.
- b. Contract amounts for each Subcontractor/Supplier.
- c. Amount paid to date to each Subcontractor/Supplier.

- d. Lien waivers provided with current pay application for previous month's payments.
- e. Amount to be paid to each Subcontractor/Supplier included in the pending pay request.
- f. Remaining balance for each Subcontractor/Supplier.
- g. All Prevailing Wage affidavits and certifications required by the Contract Documents and applicable Laws and Regulations.
- 5. Contractor shall submit one original and five copies (unless a different quantity is otherwise agreed upon) on 8-1/2 by 11 paper of each lien waiver submitted.
- 6. Contractor shall submit five (5) copies (unless a different quantity is otherwise agreed upon) of each pay request for approval.

7. [Intentionally Omitted.]

- 8. All stored equipment and materials for which payment is requested shall have six copies (unless a different quantity is otherwise agreed upon) of invoices included with the pay request. Equipment shall be identified thoroughly on the invoices, including serial numbers.
- 9. Payment for the stored equipment and material which are on the site shall not exceed the invoiced amount for each item, less the Contract retainage. The overhead and profit for the stored items shall not be invoiced until the item is installed. Contractor shall only be entitled to payment for equipment and material actually incorporated into the Work on Site and shall credit Owner for any excess equipment or material paid for but not actually incorporated. Contractor shall be entitled to reasonable charges for re-stocking and shall provide satisfactory evidence of such charges.
- 10. Payment for off-site storage is normally reserved for sensitive or very large pieces of equipment that in Engineer's opinion would not be practical to have stored on the site. Payment for off-site stored items shall be limited to 75% of the invoiced value of the item, less Contract retainage. Contractor shall reimburse Owner the Cost of inspecting off-site stored items. When off-site storage is approved, Contractor shall provide insurance certificates and documents demonstrating ownership to Owner.

B. Review of Applications

1. Engineer will, within five (5) days after receipt of an Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the entire Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor shall make the necessary corrections and resubmit the entire Application which will be re-reviewed within five (5) days after receipt.

- 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated;
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
 - 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
 - b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
 - 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
 - a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.

- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:
- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

- 1. Twenty Five (25) days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.
- D. Reduction in Payment
- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
- a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
- b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
- c. there are other items entitling Owner to a set-off against the amount recommended; or
- d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay

Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.

- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections. Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid

recommendation will be binding on Owner and Contractor until final payment.

- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.
- F. Time for Completion of Items on Tentative List and Remedies. The time fixed by the Engineer for the completion of all items on the list accompanying the tentative certificate of Substantial Completion shall be for a reasonable time necessary for completion of the items, but in no case greater than thirty (30) days, unless the Owner approves a longer time in writing. The Contractor shall complete all items on the list within the specified time period. If the Contractor fails to do so, the Owner in its discretion may perform the Work by itself or others and the cost thereof shall be charged to the Contractor. The Contractor irrevocably designates the Owner as the Contractor's attorney-in-fact to execute a Change Order deducting such cost from the balance of the Contract Price and also any additional costs or expenses incurred by the Owner arising out of or related to the failure of the Contractor to complete such items, including but not limited to attorneys', consultants', and Engineer's fees. The Contractor's warranties under the Contract Documents shall remain in full force and effect and cover any remedial Work, even if performed by others. If more than one inspection by the Engineer for purposes of evaluating corrected Work is required, it will be performed at the Contractor's expense.

14.05 Partial Utilization

A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.

- 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
- 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
- 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify

Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

- 4. Owner may at any time request Contractor in writing to permit Owner to take over operation of any part of the Work although it is not substantially complete. A copy of such request will be sent to Engineer, and within a reasonable time thereafter, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If Contractor does not object in writing to Owner and Engineer that such part of the Work is not ready for separate operation by Owner, Engineer will finalize the list of items to be completed or corrected and will deliver such lists to Owner and Contractor together with a written recommendation as to the division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, maintenance, utilities, insurance, warranties, and guarantees for that part of the Work which will become binding upon Owner and Contractor at the time when Owner takes over such operation (unless they shall have otherwise agreed in writing and so informed Engineer). During such operation and prior to Substantial Completion of such part of the Work, Owner shall allow Contractor reasonable access to complete or correct items on said list and to complete other related Work.
- 5. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.

- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.7;
 - b. consent of the surety, if any, to final payment;
 - a list of all Claims against Owner that Contractor believes are unsettled;
 - d. complete and legally effective releases or waivers (satisfactory to Owner) from all entities undertaking any portion of the Work, of all Lien rights arising out of, or that could arise out of, or Liens filed in connection with, the Work;
 - e. all Warranties and Guarantees required under Contract Documents - To be electronic with one copy delivered to Architect and one to the Owner, unless Owner requests otherwise;
 - f. as-built Drawings and Specifications (to be delivered in electronic format, unless Owner requests otherwise);
 - g. a final list of all Subcontractors, Subsubcontractors and Material Suppliers (to be delivered in electronic format, unless Owner requests otherwise);
 - assignment and/or transfer of all guarantees and warranties from Subcontractors, vendors, suppliers and manufacturers; and
 - a list of the names, addresses and phone numbers of all Subcontractors and other persons providing guarantees and warranties.
 - j. a signed Certificate of Substantial Completion.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. Contractor's request for final payment shall also include Contractor's final waiver of lien which shall be for the full amount of Contract, including any change orders thereto. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.
- B. Engineer's Review of Application and Acceptance
- 1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and

accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 Final Completion Delayed

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

A. The making and acceptance of final payment will constitute:

- 1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
- 2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

14.10 Payment to Subcontractors and Suppliers

A. Contractor shall make payments to Subcontractors in

accordance with applicable law, including ORC Section 4113.61, that include the requirements described under this Article 14. If a Subcontractor requests payment in time to allow Contractor to include the request in its Application for Payment, Contractor shall pay within 10 days after receipt of payment from the Owner.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period reasonably determined by Owner, by notice in writing to Contractor and Engineer. Contractor shall resume the Work within a reasonable time after notice by Owner. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 Owner May Terminate for Cause

- A. The occurrence of any one or more of the following events will justify termination for cause:
- 1. Contractor's failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time in accordance with the Contract Documents);
- 2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
- 3. Contractor's disregard of the authority of Engineer;
- 4. Contractor's violation in any substantial way of any provisions of the Contract Documents; or
- 5. If Contractor shall institute proceedings or consent to proceedings requesting relief or arrangement under the Federal Bankruptcy Act or any similar or applicable federal or state law, or if a petition under any federal or state bankruptcy or insolvency law is filed against the Contractor, or if the Contractor admits in writing his inability to pay his debts generally as they become due, or if he makes a general assignment for the benefit of his creditors, or if a receiver, liquidator, trustee or assignee is appointed on account of his bankruptcy or insolvency; or if a receiver of all or any substantial portion of the Contractor's properties is appointed or the Contractor fails to provide the Owner with written notice promptly upon the occurrence of any material adverse change in the financial condition of the Contractor.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) three days written notice of its intent to terminate the services of Contractor:

- 1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),
- 2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and
- 3. complete the Work as Owner may deem expedient.

Such termination shall be effective as of the date stated in the termination notice provided to Contractor.

- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor cures such default within seven days of receipt of notice of intent to terminate.
- E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.

15.03 Owner May Terminate For Convenience

- A. Upon three days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. Such termination shall be effective as of the date stated in the written notice. In such case, Contractor shall be paid for (without duplication of any items):
- 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

- 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.
- C. Contractor shall require similar provisions contained in Paragraph 15.03 in each of its subcontracts to protect Contractor from claims by Subcontractors arising from the Owner's termination for convenience, or to minimize claims by such subcontractors. The remedy provided to Contractor under this Paragraph 15.03 shall be the Contractor's sole remedy in the event of termination for convenience by Owner.

15.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 45 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 45 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

15.05 Owner's Right to Carry Out the Work

A. If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case an appropriate Change Order or credit shall be issued deducting from payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Engineer's additional services and expenses made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner upon demand.

16.01 Venue and Jurisdiction

A. Any dispute, Claim or other matter not settled by negotiation or other means as mutually agreed upon by Owner, Contractor, and surety where applicable, shall be determined by the Court of Common Pleas for **Muskingum County**, **Ohio**, which shall have exclusive venue and jurisdiction over such matters and claims.

16.02 Joinder and Consolidation

A. At Owner's sole discretion, Owner may join and consolidate any dispute with a separate party or any separate arbitration, case, or other proceeding arising from or related the Project with any case between Owner and Contractor arising from or related to the Contract Documents or Project.

ARTICLE 17 - MISCELLANEOUS

17.01 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
- 1. delivered in person to the designated individual of the firm identified in the Contract Documents or to an officer of the corporation authorized to accept service under applicable law, or
- 2. delivered by registered or certified mail, postage prepaid, to the designated individual of the firm identified in the Contract Documents or to an officer of the corporation authorized to accept service under applicable law.

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 Controlling Law

A. This Contract shall be governed by the law of the State of Ohio.

17.06 Headings

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

17.07 Equal Employment Opportunity and Non-Discrimination. The Contractor shall comply with, and shall require all Subcontractors and suppliers of any tier to comply with, the applicable equal employment opportunity and non-discrimination statutes and regulations of the State of Ohio, including Ohio Revised Code Section 153.59.

A. As required under ORC Section 153.59, the Contractor agrees to both of the following:

"in the hiring of employees for the performance of work under the contract or any subcontract, no contractor, subcontractor, or any person acting on a contractor's or subcontractor's behalf, by reason of race, creed, sex, disability or military status as defined in section 4112.01 of the Revised Code, or color, shall discriminate against any citizen of the state in the employment of labor or workers who is qualified and available to perform the work to which the employment relates; and"

"no contractor, subcontractor, or any person on a contractor's or subcontractor's behalf, in any manner, shall discriminate against or intimidate any employee hired for the performance of work under the contract on account of race, creed, sex, disability or military status as defined in section 4112.01 of the Revised Code, or color."

- B. The Contractor shall cooperate fully with any official or agency of the State or federal government which seeks to eliminate unlawful employment discrimination, and with all other State and federal efforts to assure equal employment practices under the Contract.
- C. In the event the Contractor fails to comply with these nondiscrimination clauses, Owner or Engineer shall deduct from the amount payable to the Contractor a forfeiture of the statutory penalty pursuant to ORC 153.60 for each person who is discriminated against or intimidated in violation of this section.
- 17.08 Contract Work Hours and Safety Standard Act. All Contractors and Subcontractors, of any tier, shall comply with the applicable federal regulations for contract work

hours and safety standards.

17.09 Clean Air Act. All Contractors and Subcontractors, of any tier, shall comply with the applicable standards, orders, or regulations issued pursuant to the Clean Air Act of 1970 (42 U.S.C. 1857, et seq.) and the Federal Water Pollution Control Act (33 U.S. C. 1251, et seq.), as amended.

17.10 Shutdown Dates. [Not Applicable.]

- 17.11 Use of Non-National Workforce. Any non-national working for the Contractor or Sub-Contractor (s) shall comply will all local, state and federal laws and regulations regarding immigration and labor.
- 17.12 Employment of Children. The Contractor and Sub-Contractor(s) shall abide by the Fair Labor Standards Act.
- 17.13 Successors and Assigns. The Owner and Contractor respectively bind themselves, their partners, successors, assigns and legal representatives to the other party hereto and to partners, successors, assigns and legal representatives of such other party in respect to covenants, agreements and obligations contained in the Contract Documents. The Contractor shall not assign the Contract as a whole, or the right to income under the Contract, without the prior written consent of the Owner. Any such attempted assignment in violation of the foregoing shall be void. The Owner shall have the right to assign the Contract and all warranties and guaranties delivered in connection herewith to any tenant in or purchaser of the Project and the Contractor hereby consents to any such assignment. Notwithstanding any such assignment, the Owner hereby reserves its rights and remedies against the Contractor hereunder and under any such warranties and guaranties.

17.14 Rights and Remedies.

- A. Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.
- B. No action or failure to act by the Owner, Contractor, or Engineer shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

5.0 PROJECT DESCRIPTION & SUPPLEMENTAL SPECIFICATIONS

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PROJECT DESCRIPTION & SUPPLEMENTAL SPECIFICATIONS

A. General:

The current requirements of Muskingum County and the current Construction and Materials Specifications of the Ohio Department of Transportation, including all supplements thereto, as well as the manufacturer's recommendations for installation shall govern the materials and workmanship to complete the improvements set forth in the construction documents unless specified otherwise in the construction documents.

The contractor shall provide for the construction and completion of every detail of the work described. The contractor shall perform all items of work covered and stipulated in this proposal and perform altered and extra work, furnish all labor, equipment, materials, tools, transportation, and supplies required to complete the work in accordance with the specifications and terms of the Contract Documents. Should any misunderstanding arise as to the intent or meaning of the plans, specifications, and special provisions of this proposal, or any discrepancy appear, the decision of the Owner or its authorized representative shall be final and conclusive.

B. Maintenance of Traffic (MOT):

Maintenance of traffic will be supplied by the contractor as necessary and detailed in the construction plans. All MOT and signage shall be in accordance with ODOT Item 614 and the Ohio Manual of Uniform Traffic Control Devices (OMUTCD) and shall be included in the unit bid cost for the individual item requiring the MOT.

C. Description of Project and Related Work at Site:

This project consists of construction of a new roadway, santiary sewer, watermain, forcemain and lift station for the future development of an industrial park located along US Route 40 in Muskingum County.

D. Standard Construction Drawings:

ODOT standard construction drawings have been listed in the plans and can be found online at: http://www.dot.state.oh.us/drrc/Pages/default.aspx

E. Permits:

The owner, and their engineer, will provide to the general contractor permits from the county engineer and county sewer district for construction. The owner and engineer will also provide USACE permit to allow the culvert construction and OEPA permits for earth disturbance as well as the OEPA permits for santiary and watermain construction. The general contractor, and all subcontractors, will be required to file as co-permittees on the project.

F. Geotechnical Engineer:

Pavement design has been provided by GCI and included in the construction plans. A geotechnical memo and report prepared by Hull and Associates under a due diligence contract has been provided for review. The contractor shall make themselves familiar with the documentation provided for the site.

G. Contingency Quantities:

Contingency quantities have been included in the bid. If those quantities are not used, they will be non-performed, and no payment will be made for them.

H. Pre-Qualified Requirements:

Asphalt contractors shall be ODOT pre-qualified.

I. Income Tax Withholdings:

This project is located within a JEDD and therefore the employees who work on site and meet state requirements, will be subject to income tax withholdings. The contractor is responsible for ensuring that the appropriate income taxes are withheld from their eligible employees.

J. Shop Drawing Review:

The contractor shall provide to the owner and engineer, for their review and coordination with any jurisdiction that requires review, shop drawings for all items included in this project. Below is a list of shop drawings to be provided and is meant to be a guide for the contractor to use and does not alleviate the contractor of his/her responsibility of preparing and submitting shop drawings that are in accordance with the engineering design plans, the construction and materials specifications as well as the manufacturer's recommendations.

WATER: Pipe, Valves, Hydrants, Tapping Sleeves, MJ Fitting, MJ Restraints, MJ T-Bolts, Underground Detectable Tap, Tracer Wire and Tracer Wire Connectors, Pipe Bedding Material, Pipe Backfill Material, Concrete Backing Material.

SANITARY: Pipe, Manhole Structures, Manhole Connection Boots, manhole Epoxy Line, Manhole Castings, Manhole Chimney Seals, Manhole Inflow Dishes, Manhole Interior Drop Anchor Straps, Fittings/Caps/Plugs, Cleanout Castings, Underground Detectable Tape, Pipe Bedding Material, Pipe Backfill Material

STORM SEWER: Pipe, Manhole Structures, Manhole Connection Boots, Manhole Castings & Lids, Manhole Interior Drop Anchor Straps, Fittings/Caps/Plugs, Pipe Bedding Material, Pipe Backfill Material

ROADWAY: Asphalt Mix Design, Concrete Mis Design, Aggregate Shoulder, Aggregate, Tack Coat, Detectable Warnings, Signs, Pavement Markings,





Memorandum

TO: Mr. Phil Smith, Project Manager (JobsOhio)

CC: Dave Mustafaga, P.G.

FROM: Shawn McGee, P.E.

DATE: March 21, 2019

RE: Executive Summary for the Preliminary Geotechnical Exploration Report for the JobsOhio

National Road Business Park Project Located in Zanesville, Muskingum County, Ohio,

JO0001.0031.

Hull & Associates, Inc. (Hull) has prepared this Executive Summary to accompany the Preliminary Geotechnical Exploration Report for the National Road Business Park Site Development Project (Hull Word Document #JOO001.0031) dated March 21, 2019. This summary provides relevant findings and considerations in the context of future development of the commercial property at the Site:

- According to the USDA Web Soil Survey, the onsite surficial soils consist of Aaron silt loam, Alford silt loam, Coshocton-Westmoreland silt loams, Rigley channery loam, Wellston silt loam, and Zanesville silt loam. These soils are all residual upland soils that form on ridges, hills, and hillslopes derived from sandstone, shale, and siltstone.
- Based on a review of available information provided by the Ohio Department of Natural Resources (ODNR) Mines of Ohio Online GIS Web Application, the Site does not appear to be in an area of past or present surface or underground mining activities.
- Hull completed a field exploration that consisted of advancing 20 geotechnical borings spatially distributed across the Site on February 25 and 26, 2019.
- Topsoil, when encountered, was present at thicknesses ranging from approximately 3.5 to 7.2 inches. The predominant soil types observed at the Site include an upper medium stiff to very stiff lean clays and sandy lean clays with varying amounts of sand and rock fragments, underlain by sandstone, siltstone, and shale bedrock encountered at variable depths. The sand and rock fragments are indicative of saprolitic (soils derived from completely weathered bedrock) materials.
- Static groundwater levels were observed in borings B19-4-4, B19-4-5, B19-4-7, B19-4-9, and B19-4-19 that ranged from 5.5 to 17.5 feet bgs. Hydrostatic groundwater levels and upper (perched) saturation zones should be expected to fluctuate seasonally due to variations in rainfall, runoff, evapotranspiration, and other factors. Consequently, any measured groundwater levels shown on the boring logs only represent conditions at the time the readings were collected and may thus be different at the time of construction. Furthermore, the actual groundwater levels, seepage, and localized saturated conditions may be observed at shallower depths during periods of heavy precipitation.

- Based on the observations from the exploration, the on-site surface soils contain a high percentage of fine-grained materials which are highly moisture sensitive due to their clay minerology. It should also be noted that liquid limits for the tested cohesive materials found soils that ranged from 18 to 42 and plasticity indices ranged from 3 to 24.
- Based on the field observations and limited laboratory test results; we are of the opinion that the site soils can be suitable for the support of the anticipated commercial and warehouse structures using conventional shallow foundations consisting of continuous (strip) or spread (column) footings when founded in the medium stiff to stiff lean clay and sandy lean clay (extends through soft and unsuitable layers). Preliminary indications are that foundations could be designed for a maximum net allowable bearing pressure between 3,000 to 4,000 pounds per square foot (psf). A few of the borings (borings B19-4, B19-7, and B19-19) encountered a potential softer, more compressible layer near the anticipated footing depth as compared to the other borings. Consequently, development within these localized areas of the Site may require designing with a lower maximum net allowable bearing pressure (i.e., 1,000 to 2,000 psf), extending the footing depth to more competent material, additional site preparation and earthwork effort, including mass excavation and replacement with compacted fill, or intermediate foundation systems (e.g., rammed aggregate piers) to provide additional bearing capacity.
- The preliminary observations presented in the Report are based on information disclosed by the limited number of borings that were spatially distributed across the Site. The purpose of this preliminary exploration was to provide basic information to assist others in the preliminary designing and planning phases of the project. Additional borings will be required at the specific location of the building once known, to develop a detailed foundation design (structural) or economic analysis of foundation alternatives. The initial information provided in this report should not be relied upon for preparing final design and construction specifications.

If you have any questions or comments, please feel free to contact Dave Mustafaga at (614) 793-8777 at your first opportunity.



March 21, 2019

Mr. Phil Smith, Project Manager JobsOhio 41 South High Street #1500 Columbus, Ohio 43215

RE: Preliminary Geotechnical Exploration Report for the JobsOhio National Road Business Park Project Located in Zanesville, Muskingum County, Ohio; JOO001.0031.

Dear Mr. Smith:

Hull & Associates, Inc. (Hull) is pleased to present the attached Preliminary Geotechnical Exploration Report (Report) for the National Road Business Park Site Development Project located in Zanesville, Muskingum County, Ohio. The work was performed by Hull as requested by JobsOhio and in accordance with Hull's proposal dated August 14, 2019 and the subsequent authorization to proceed. This Report summarizes our understanding of the proposed site development, describes the drilling and testing procedures, discusses our observations, and presents the findings and preliminary recommendations related to earthwork construction for the planned development. Attached is the Report as a PDF electronic file being provided via email for your distribution.

Soil samples collected during this exploration will be stored at our material testing laboratory for 90 days from the date of this Report, unless directed otherwise by you.

Please do not hesitate to contact Dave Mustafaga with any questions or comments you may have regarding the Report at (614) 793-8777.

Sincerely

Andy Hillier Hydrogeologist I

Shawn D. McGee, P.E.

Geotechnical Engineering Practice Leader

Attachments

cc: Dave Mustafaga, Hull & Associates, Inc.

PRELIMINARY GEOTECHNICAL EXPLORATION REPORT

FOR THE:

NATIONAL ROAD BUSINESS PARK DEVELOPMENT SITE ZANESVILLE, MUSKINGUM COUNTY, OHIO

PREPARED FOR:

JOBSOHIO 41 SOUTH HIGH STREET #1500 COLUMBUS, OHIO 43215

PREPARED BY:

HULL & ASSOCIATES, INC. 4 HEMISPHERE WAY BEDFORD, OHIO 44146

MARCH 2019



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1.0 INTRODUCTION

A preliminary geotechnical evaluation of the subsurface conditions has been conducted for the National Road Business Park Project located in Zanesville, Muskingum County, Ohio (Site). The Site currently consists of agricultural fields and several isolated forested areas. Grading plans and design documents were not available at the time of the writing of this Geotechnical Exploration Report (Report). The exploration presented in this Report has been performed in accordance with Hull's proposal dated August 14, 2019 and the subsequent authorization to proceed.

The purpose of this preliminary exploration was to provide basic information to assist in preliminary design and planning phases of future site development. Additional borings will be required at specific locations of structures and foundations once locations are determined, to assist to the developer's structural designer in the development of a detailed foundation design (structural) or economic analysis of foundation alternatives. The initial information provided in this Report should not be relied upon for preparing final design and construction specifications.

A total of twenty (20) borings were advanced to 20 feet below the existing ground surface (bgs) and were spatially distributed across the Site with the intention of determining the general soil conditions. Soil samples were examined and laboratory index testing was assigned by a geotechnical engineer prior to being transported to a geotechnical/materials testing laboratory for testing (e.g., moisture content, hydrometer/sieve analysis, and Atterberg limits).

A geotechnical engineer has planned and supervised the performance of the geotechnical engineering services, considered the findings, and prepared this Report in accordance with generally accepted geotechnical engineering practices. This report was prepared solely for the use of JobsOhio for the specific purposes mentioned above. No other warranties, either expressed or implied, are made as to the professional advice included in this Report.

Once finalized building locations and final grading plans are provided, more focused explorations should be performed in order to assess the subsurface conditions for each building/structure foundation so that more specific earthwork and foundation construction recommendations may be made.

2.0 DESCRIPTION OF SITE

2.1 Site Location

The Site is located at 4700 East Pike, Zanesville, Muskingum County, Ohio 43701, approximately 5.8 miles east of downtown Zanesville, Ohio. The Site is bounded to the north by several residential domiciles and several isolated forested areas as well as East Pike Road, to the east by several residential domiciles and Hicks Road, to the south by Old Wheeling Road, and to the east by forested land. A Site Map is included with Figure 1.

2.2 Site Topography, Drainage, and Surface Features

The Site is an approximately 203-acre area consisting of agricultural fields and several isolated forested areas. Established vegetation is present and widespread. One perennial stream is present in the center of the site, flowing eastward. Water onsite likely inundates and infiltrates into the onsite soils, while excess surface water runoff is directed to the existing stream and surrounding drainage ditches and roads away from the site.

2.3 General Area Geology

Based on publicly available geological records, bedrock in the area is reported to consist of Pennsylvanian (323.2-298.9 Ma) aged Conemaugh Group, consisting of partly calcareous, thin to non-bedded, marine shales, mudstones, and siltstones, locally conglomeratic and calcareous, thin to massive cross bedded sandstones, limestone, and coal (USGS, Data Series 1052, 2017). Review of ODNR water well logs show bedrock depth as highly variable, ranging from 15'-20' below the existing ground surface (bgs) along the Eastern edge of the site and from 40'-50' bgs along the Western edge of the site. Based on testing of select samples collected onsite, the predominant soil type found onsite was lean clay.

According to the USDA Web Soil Survey (see Appendix C), the onsite surficial soils consist of Aaron silt loam, Alford silt loam, Coshocton-Westmoreland silt loams, Rigley channery loam, Wellston silt loam, and Zanesville silt loam. These soils are all residual upland soils that form on ridges, hills, and hillslopes derived from sandstone, shale, and siltstone.

According to a review of available information provided by the Ohio Department of Natural Resources Mines of Ohio Online GIS Web Application (see Appendix D), the Site does not appear to be in an area of past or present surface or underground mining activities. The ODNR map shows a mine symbol on the property, Hull evaluated this data point with the ODNR and the data does not represent a mine but a core sample from 1917.

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3.0 FIELD EXPLORATION AND LABORATORY TESTING PROGRAM

3.1 Field Exploration

Hull completed a field exploration which consisted of advancing twenty (20) geotechnical borings using a track-mounted drilling rig operated by Geotechnical Consultants, Inc. (GCI) on February 25 and 26, 2019. The borings were advanced to 20 feet bgs. Boring locations were staked in the field by Hull personnel utilizing a Trimble GPS with sub-foot accuracy at the locations shown on the Boring Plan, Figure 1. The Ohio Utility Protection Service (Ohio811) was notified at least 48-hours prior to drilling for clearance of underground utilities.

The borings were monitored by GCI during the drilling activities who examined and described the soils encountered, retained representative soil samples, observed groundwater conditions, and prepared a detailed field log of each test hole. Borings were drilled utilizing 3.25-inch inner diameter hollow stem augers, used to advance the hole and provide an annular space in which to lower the split spoon sampler to the appropriate sample depths. The soils encountered in the borings were generally sampled at approximately 2.5-foot intervals for the top 10 feet, then at 5.0-foot vertical intervals thereafter to the borings' termination depth using the Standard Penetration Test (SPT) Method (American Society of Testing and Materials [ASTM] D1586). The disturbed samples were obtained by driving the split spoon sampler 18 inches into the soil with a 140-pound automatic hammer free-falling 30 inches. The number of blows required for each 6 inches of penetration was recorded separately. The blow count ("N-value") of the soil was calculated as the number of blows required for the final 12 inches of penetration. The SPT N-value serves as an indicator of relative consistency for cohesive soils and relative density of granular soils. All borings were advanced to their respective target depths or auger or sampler (N-value greater than 50 blows over a 2-inch or less penetration with the split spoon sampler) refusal, whichever occurred first. Where very dense soil conditions precluded driving the full 18 inches, the penetration resistance for the partial penetration was entered on the logs. The blow counts are shown on the boring logs in Appendix A at the respective sample depths.

Table 1 summarizes the coordinates, existing ground surface elevations, topsoil thickness, depth to apparent top of bedrock, and termination depths at each boring location. The soil borings were immediately backfilled with drill cuttings upon completion of drilling.

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Table 1 - Summary of Borings

Boring	Boring I	Boring Locations		Topsoil Thickness	Depth to Apparent Top	Termination Depth
Number	Latitude	Longitude	Ground Surface ¹	(inches)	of Bedrock (ft. bgs²)	(ft. bgs²)
B19-4-1	39.963195	-81.905426	838	8.5	11.75	20
B19-4-2	39.961779	-81.905066	860	4	16.75	20
B19-4-3	39.960814	-81.907112	884	N/A	12.5	20
B19-4-4	39.959743	-81.905068	891	4.5	19.0	20
B19-4-5	39.957906	-81.910577	893	N/A	7.5	20
B19-4-6	39.957769	-81.904195	893	5.5	11.75	20
B19-4-7	39.958819	-81.907725	904	5.5	19.0	20
B19-4-8	39.956099	-81.909478	887	N/A	11.75	20
B19-4-9	39.957005	-81.906608	880	5	7.5	20
B19-4-10	39.954520	-81.909564	881	5	18.5	20
B19-4-11	39.954906	-81.906737	881	5	16.75	20
B19-4-12	39.952691	-81.909691	899	3.5	1.8.5	20
B19-4-13	39.950891	-81.909743	884	4.8	11.75	20
B19-4-14	39.953277	-81.906751	880	7.2	16.5	20
B19-4-15	39.949347	-81.909794	884	7.2	11.75	20
B19-4-16	39.951763	-81.906950	882	6	16.75	20
B19-4-17	39.947747	-81.909993	835	N/A	11.75	20
B19-4-18	39.949905	-81.907040	871	7.2	16.75	20
B19-4-19	39.946567	-81.908369	831	4.8	16.5	20
B19-4-20	39.947720	-81.907759	855	4.8	8.0	20

^{1.} Elevations for borings are approximate and were interpolated from readily available topographic information based on county LiDAR data – the elevations are rounded to the nearest foot.

Refer to the boring logs in Appendix A for more detailed descriptions of subsurface units, sample data, SPT results, groundwater conditions, pocket penetrometer test results, and other pertinent information. See Figure 1 for a map that illustrates the locations of the "as drilled" borings. It should be noted that environmental studies were not performed as part of this scope of work, and, as such, no recommendations relative to environmental issues are included in this Report.

^{2.} bgs = below existing ground surface

^{3.} N/A = not encountered

3.2 Laboratory Testing Program

All samples were examined by a senior geotechnical engineer from Hull and described based on the visual-manual examination (ASTM D 2488) soil classification system. In addition, select samples were subjected to grain-size analyses (ASTM D422), moisture content determinations (ASTM D2216), and Atterberg limits tests (ASTM D4318). All phases of the laboratory-testing program were conducted in general accordance with applicable American Society for Testing and Materials (ASTM) specifications. Copies of the laboratory results are provided in Appendix B. Soil samples will be stored at the laboratory for 90 days from the date of this Report unless otherwise directed by the Client.

4.0 EXPLORATION FINDINGS

The following sections present the generalized subsurface conditions observed during the field exploration. During the field activities, the field logger also made observations of existing soil cover/topsoil thicknesses, groundwater conditions, surface features, and other site observations deemed important to the planned site development. Refer to the boring logs in Appendix A for more detailed descriptions of the subsurface conditions.

4.1 General Subsurface Conditions

Topsoil, when encountered, was present to approximately 3.5 to 7.2 inches below the existing ground surface. Below the topsoil, a brown to gray lean clay with varying amounts of sand and rock fragments was present in the upper portion of the borings. Shale, sandstone, and siltstone bedrock was encountered at relatively shallow depths ranging from 7.5 to 19.0 feet bgs. Competent bedrock was not encountered in borings B19-4-07, B19-4-10, B19-4-12, and B19-4-14, although the materials encountered below the top lean clay and lean sandy clay layers consisted of saprolitic material, indicating that bedrock depth is likely highly variable across the site due to variations in weathering. The consistency of the upper cohesive soils generally ranged from medium stiff to very stiff. The degree of bedrock weathering typically decreased with depth, although the type of rock encountered and weathering was overall highly variable across the Site.

Laboratory testing indicated that the split spoon samples tested on the overburden were classified as lean clay (CL), sandy lean clay (CL), and lean clay with sand (CL) under the Unified Soil Classification System (USCS). Atterberg limit testing indicated that overburden clayey samples had liquid limits that ranged from 18 to 42, and plasticity indices that ranged from 3 to 24 – based on the testing we further estimate the soils to be lean clay and sandy lean clay (CL). Moisture contents as received by the laboratory were also completed for select overburden samples and ranged from 11.7 to 32.6 percent.

4.2 Groundwater Observations

Water levels in each soil boring were measured immediately upon the completion of drilling. Static groundwater levels were observed in borings B19-4, B19-5, B19-7, B19-9, and B19-19. See Table 2 for a summary of groundwater data including boring location, depth bgs, and associated elevation of the recorded water level. The boreholes were subsequently backfilled with soil cuttings on the same day. The depths of seepage or significant changes in moisture conditions within the borings were also noted on the boring logs, when observed.

Table 2 - Groundwater Measurements

Boring	Measurement Date	Depth of Static Water Level (ft bgs)	Water Elevation (ft)
B19-4-4	2/26/2019	16.5	874.5
B19-4-5	2/26/2019	15.0	878.0
B19-4-7	2/26/2019	5.5	898.5
B19-4-9	2/26/2019	17.5	862.5
B19-4-19	2/25/2019	15	816.0

Hydrostatic groundwater levels and upper (perched) saturation zones should be expected to fluctuate seasonally due to variations in rainfall, runoff, evapotranspiration, and other factors. Consequently, any measured groundwater levels shown on the boring logs only represent conditions at the time the readings were collected and may thus be different at the time of construction. Furthermore, the actual groundwater levels, seepage, and localized saturated conditions may be observed at shallower depths during periods of heavy precipitation.

5.0 CONSTRUCTION CONSIDERATIONS

5.1 Site Preparation and Compaction Requirements

Based on our assumption that minimal cut/fill will be required to achieve final grades, field observations, laboratory test results, and Hull's experience with similar projects and geologic settings, as well as our engineering analyses; we are of the opinion that the subsurface conditions should be able to support the development of the lightly loaded, commercial structures and warehouses using conventional shallow foundations consisting of continuous (strip) or spread (column) footings when the subgrade is prepared as discussed below.

5.2 Preliminary Pavement and Building Design Considerations

Hull understands that specific site development plans have not been completed as of the writing of this Report. Therefore, actual structural/foundation drawings, grading plans, or structural loads were not available or provided to Hull.

Based on the field observations and limited laboratory test results; we are of the opinion that the site soils can be suitable for the support of the anticipated commercial and warehouse structures using conventional shallow foundations consisting of continuous (strip) or spread (column) footings when founded in the medium stiff to stiff lean clay and sandy lean clay (extends through soft and unsuitable layers). Based on preliminary estimations, foundations may be able to be designed for a maximum net allowable bearing pressure between 3,000 to 4,000 pounds per square foot (psf) when the Site is properly prepared and the footing excavation passes the inspection of a geotechnical engineer. A few of the borings (borings B19-4, B19-7, and B19-19) encountered a potential softer, more compressible layer near the anticipated footing depth as compared to the other borings. Consequently, development within these localized areas of the Site may require designing with a lower maximum net allowable bearing pressure (i.e., 1,000 to 2,000 psf), extending the footing depth to more competent material, additional site preparation and earthwork effort, including mass excavation and replacement with compacted fill, or intermediate foundation systems (e.g., rammed aggregate piers) to provide additional bearing capacity. All exterior footings should be extended to local frost bearing depth or to a stable bearing depth, whichever is deeper. Interior footings in heated areas, if present, may be placed at a convenient depth below building floor slab level, provided they bear on suitable material. The final choice of the foundation type and size should be based on the relative economic, design feasibility, and construction advantages.

Based on the results of the soil testing, either a Portland cement concrete or asphalt concrete pavement design may be employed by the proposed development if needed. Subgrade soil with a CBR of 5 and a subgrade modulus of 125 pci may be used for the design of flexible (asphalt) and rigid (concrete)

pavements, respectively. This is valid if the subgrade is properly compacted and prepared as outlined below. In localized areas of poor soil condition is present, the subgrade may need to be undercut up to 24 inches (or greater) and backfilled with an approved engineered coarse aggregate. If soft or poor soils are found to extend further than 24", additional undercutting or another method of subgrade stabilization should be considered.

5.3 Subgrade Preparation Considerations

On-site material, with the exception of any topsoil, crop debris, organic contaminated soil or other deleterious materials, appear to be satisfactory for use as engineered fill for support of pavements and vehicular traffic. The subgrade surfaces will need to be subject to compactive effort and possible adjustment of moisture to achieve specified density requirements of the subgrade. The actual stripping depth should be determined in the field during construction. Once the site is cleared and grubbed, and the topsoil layer is removed, the soil subgrade should be compacted, proofrolled, examined, and approved by the geotechnical engineer, or a designated representative prior to fill placement or the addition of subsequent pavement. Any identified unstable zones should be stabilized as determined in the field based on observed visible conditions of the proof roll.

Based on the observations from the exploration, the on-site soils contain a high percentage of fine-grained materials, and are cohesive soils, which are particularly moisture sensitive due to their clay minerology. When the moisture content of these soils is more than a few percent above the optimum moisture content, these soils become muddy and unstable, operation of equipment on these soils will be difficult, and it will be difficult to meet the required compaction criteria. Additionally, disturbance of near-surface soils should be expected if earthwork is completed during periods of wet weather. Stabilization of soft subgrades by disking, aerating/drying, and recompaction may be feasible during drier times of year. During wet seasons, partial undercutting and replacement of wet soils with structural fill, drying with soil additives such as lime or use of geosynthetics (e.g., triaxial geogrids, woven fabrics, etc.) may be needed to create a stable subgrade. The use of soil additives such as lime, cement, etc. should be reviewed by Hull or a contractor specializing in chemical stabilization prior to use. The contractor will need to take precautions to protect the subgrade during periods of wet weather.

Colder temperatures generally hinder the ability to properly moisture condition materials being placed as controlled fill and compaction of materials becomes more difficult. Further, during prolonged periods of below freezing temperatures, frozen material may accumulate during earthwork which must be removed from the working fill surface and/or within the fill soils prior to the placement of controlled fill.

It is recommended that Proctor testing be performed prior to construction in order to determine the maximum dry densities and optimum moisture contents of onsite soils and to determine moisture-density relationships. The samples should be taken from areas of the Site that represent materials to be used as embankment fill (e.g., cut areas, storm water pond, etc.) once the grading plans are established.

5.4 Drainage

Adequate drainage should be established at the Site to minimize any increase in the moisture content of the subgrade material. Positive drainage of the Site should be created by gently sloping the surface away from structures and towards the road or drainage swales. Surface water runoff should be properly controlled and drained away from the Site. Subgrade soils, particularly high plasticity clays, are subject to shrinking and swelling whenever their seasonal moisture contents vary.

5.5 Groundwater Control

The contractors should be prepared to deal with any seepage or surface water that may accumulate in excavations. As a relatively high groundwater table was observed around the Site, dewatering may be required during earthwork construction if excavations extend below the water table. Fluctuations in the ground water may occur seasonally and due to variations in rainfall, construction activity, surface runoff, and other factors. Since such variations are anticipated, we recommend that any design drawings and specifications accommodate such possibilities and that construction planning be based on the assumption that such variations can occur.

5.6 Next Steps

The preliminary observations presented in this Report are based on information obtained from the limited number of borings that were spatially distributed across the Site. The boring information must be extrapolated to determine the subsurface conditions occurring over the entire project. This extrapolation is based on the limited understanding of previous Site operations, knowledge of soil forming geological processes, and on past experience. Therefore, the observations presented in this Report are based in part on the assumption that certain natural conditions will actually be encountered and not be altered during construction.

As previously discussed, the purpose of this preliminary exploration was to provide basic information to assist in the preliminary designing and planning phases of the project. Additional borings will be required at the specific location of any buildings or structures once known, to develop a detailed foundation design (structural) or economic analysis of foundation alternatives. The initial information provided in this Report should not be relied upon for preparing final design and construction specifications.

HULL & ASSOCIATES, INC. 10 MARCH 2019
BEDFORD, OHIO JO0001.0031

6.0 STANDARD OF CARE AND LIMITATIONS

The conclusions and recommendations presented herein are based on the level of effort and investigative techniques using that degree of care and skill ordinarily exercised under similar conditions by reputable members of the profession practicing in the same or similar locality at the time of service. No other warranties, expressed or implied, is made or intended by this report. An evaluation of past or present compliance with federal, state, or local environmental or land use laws or regulations has not been conducted. Conclusions presented by Hull regarding the Site are consistent with the Scope of Work, level of effort specified, and investigative techniques employed. Reports, opinions, letters and other documents do not evaluate the presence or absence of any compound or parameter not specifically analyzed and reported. Hull makes no guarantees regarding the completeness or accuracy of any information obtained from public or private files. In addition, Hull makes no guarantees on the condition of the Site or changes in Site records after the date reviewed as indicated in the Report.

Furthermore, this Report is prepared for, and made available for the sole use of JobsOhio. The contents thereof may not be used or relied upon by any other person or entity, without the express written consent and authorization of JobsOhio and Hull.

FIGURES

HULL & ASSOCIATES, INC. BEDFORD, OHIO



B19-1

— — — — PROPERTY BOUNDARY

GEOTECHNICAL BORING LOCATION



1. OSIP II GEOTIFF AERIAL RETRIEVED FROM OGRIP ON MARCH 15, 2019.



Environment / Energy / Infrastructure

Hull & Associates, Inc. 4 Hemisphere Way Bedford, OH 44146 Phone: (216) 352 Fax: (440) 232-8 www.hullinc.com

roject Title:

IATIONAL ROAD BUSINESS PARK DEVELOPMENT GEOTECHNICAL EXPLORATION REPORT ZANESVILLE

Owner

JOBSOHIO

41 SOUTH HIGH STREET #1500 COLUMBUS, OHIO 43215

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Project No.:	J00001
Plot Date:	3/15/19
Layout By:	JRS
Drawn By:	JRS
Check By:	SDM
Scale:	1" = 250'

MARCH 2019

Sheet Title:

FIGURE 1
GEOTECHNICAL BORING
LOCATIONS

eet Number:

1 OF 1

APPENDIX A

General Information, Drilling Procedures, and Logs of Borings Definition of Terms Used to Describe Subsurface Materials on Boring Logs (20 Borings)



GENERAL INFORMATION, DRILLING PROCEDURES AND LOGS OF BORINGS

Drilling and sampling were conducted in accordance with procedures generally recognized and accepted as standardized methods of investigation of subsurface conditions concerning geotechnical engineering considerations. Borings were drilled with either a truck-mounted or ATV-mounted drill rig.

Drive split-barrel sampling was performed in 1.5-foot increments at intervals not exceeding 5 feet. In the event the sampler encountered resistance to penetration of 6 inches or less after 50 blows of the drop more representative samples were preserved from each sampling increment.

In borings where rock was cored, NXM or NQ sized diamond coring tools were used.

Depth of water recorded in the boring is measured from the top of existing ground surface to the top of water level. Initial water level measurement indicates the water level observed during the drilling activities and the static water level indicates the water level observed immediately after drilling. In relatively pervious soils, such as sandy soils, the indicated depth is considered a reliable groundwater level for that date. Seasonal variations, temperature and recent rainfall conditions may influence the levels of the groundwater table and volumes of water will depend on the permeability of the soils. In fine-grained soils, such as clay and silt, such readings are less reliable.

In the laboratory, all samples were described based on the visual-manual examination soil classification system in accordance with ASTM D2488. Moisture contents of representative fine-grained soil samples were determined. A limited number of samples, considered representative of foundation materials present, were selected for performance of grain-size analyses and plasticity characteristics test.

The boring logs included in the Attachment have been prepared on the basis of the field record of drilling and sampling, and the results of the laboratory examination and testing of samples. Stratification lines on the boring logs indicating changes in soil stratigraphy represent depths of changes approximated by the driller, by sampling effort and recovery, and by laboratory test results. Actual depths to changes may differ somewhat from the estimated depths, or transitions may occur gradually and not be sharply defined. The boring logs presented in this report therefore contain both factual and interpretative information and are not an exact copy of the field log.

Although it is considered that the borings have disclosed information generally representative of actual site conditions, it should be expected that between borings conditions may occur which are not precisely represented by any one of the borings. Soil deposition processes and natural geologic forces are such that soil and rock types and conditions may change in short vertical intervals and horizontal distances.

Soil/rock samples will be stored at Hull & Associates Inc.'s laboratory for a period of 90 days. After this period of time, they will be discarded, unless notified to the contrary by the client.



DEFINITION OF TERMS USED TO DESCRIBE SUBSURFACE MATERIALS ON BORING LOGS

DESCRIPTION OF SOILS

The soil descriptions on the boring logs are based on visual-manual examination (ASTM D 2488) of soil samples, Standard Penetration Test (ASTM D 1586) results, and the results of laboratory testing on selected soil samples. Soils are described as to density or consistency, color, grain size distribution, moisture condition, and other pertinent properties, in that order. SAA indicates material can be described as "Same As Above", with any differences noted. Soil descriptions are according to the following criteria, with the principal constituent, written in capital letters.

Standard Penetration Test (ASTM D 1586)

In the Standard Penetration Test, a 2.0-inch outside diameter, 1.375-inch inside diameter split-spoon sampler is driven 18 inches into soil by means of a 140-pound hammer falling freely through a vertical distance of 30 inches. The sampler is normally driven in three successive 6-inch increments. The total number of blows required to drive the split spoon sampler over 12 inches of penetration during the second and third successive increments is the Standard Penetration Test N-Value. If the blow count for any half foot increment exceeded 50, the SPT was stopped and the distance the sampler was driven was measured and recorded (e.g., 50/2 indicates 50 blows were recorded for a 2-inch penetration).

Sampling method abbreviations

Methods by which soil samples are collected for analysis are abbreviated as follows:

AS - Auger Sample - directly from auger flight

SP - Split Spoon Sample

ST - Shelby Tube Sample

RC - Rock Core

DP - Direct Push Sample

Density of cohesionless soils

Density of cohesionless soils is based upon results of Standard Penetration Tests as indicated below:

Density Term	N-Value (Blows per foot)
Very loose	0-4
Loose	5-10
Medium Dense	11-30
Dense	31-50
Very Dense	Over 50

Consistency of cohesive soils

Consistency of cohesive soils is based on Standard Penetration Test results and the unconfined compressive strength.

Consistency Term	N-Value	Unconfined Compressive Strength
	(Blows per foot)	(tons per square foot)
Very soft	<2	<0.25
Soft	2-4	0.25-0.5
Medium stiff	5-8	0.5-1.0
Stiff	9-15	1.0-2.0
Very stiff	16-30	2.0-4.0
Hard	>30	>4.0

Color

Soil color is described in basic terms, such as brown, black, red, grey, and yellow. If the soil is a uniform color throughout, the term is single, modified by adjectives such as light and dark. If the predominant color is shaded by a secondary color, the secondary color precedes the primary color. If two major and distinct colors are swirled throughout the soil, the colors are modified by the term "mottled".

Component definitions by grain size (ASTM D 653)

Material	Definitions	Fractions	Sieve	Limits
Material	Definitions	Fractions	Upper	Lower
Boulders	Material too large to pass through an opening 12 in. square.			
Cobbles	Material passing through a 12 in. square opening and retained on the 3-inch sieve.			
Gravel	Material passing the 3 in. sieve and retained on $1/4$ in. (No. 4) sieve.	Coarse Fine	3 in 3/4 in.	3/4 in No. 4 (1/4in.)
Sand	Material passing the No. 4 sieve and retained on the No. 200 Sieve.	Coarse Medium Fine	No. 4 (1/4") No. 10 (1/8") No. 40 (1/32")	No. 10 (1/8") No. 40 (1/32") No. 200
Silt	Material passing the No. 200 sieve, which is usually non-plastic or very slightly plastic in character and exhibits little or no strength when air dried.		No. 200	
Clay	Material passing the No. 200 sieve, which can also be made to exhibit plasticity within a certain range of moisture contents and which exhibits considerable strength when air dried.		No. 200	

Soil constituents may be stated in terms of percentages (by weight) of gravel, sand, and fines, as follows:

Trace - particles of a given size range present, but present at <5%

Few - 5 to 15% Little - 15 to 25% Some - 30 to 45% Mostly - 50 to 100%

Moisture condition

Moisture contents may be written as dry, moist or wet as described below:

Dry Absence of moisture, dusty, dry to the touch

Moist Damp but no visible moisture

Wet Visible free water, usually soil below the water table

DESCRIPTION OF ROCK

The following terms are used to describe the degree of weathering of the rock specimen relative to that of the comparable unweathered parent rock. (Do not confuse relative strength/hardness with weathering.):

<u>Unweathered</u> No evidence of any chemical or mechanical alternation of the rock mass. Mineral crystals have a bright

appearance with no discoloration. Fractures show little or no staining on surfaces.

Slightly Weathered <10% of rock volume altered. Slight discoloration of the surface w/minor alterations along open

fractures.

Moderately Weathered Portions of the rock mass are discolored as evident by a dull appearance. Surfaces may have a pitted

appearance. Isolated zones of varying rock strengths due to alteration may be present. 10 to 15

percent of the rock volume presents alterations.

Highly Weathered Entire rock mass appears discolored and dull. Some pockets of slightly to moderately weathered rock

may be present and some areas of severely weathered materials may be present.

Severely Weathered Majority of the rock mass reduced to a soil-like state with visible relict rock texture. Zones of more

resistant rock may be present, but the material can generally be molded and crumbled by hand

pressures.

The following terms are used to describe the relative strength/hardness of the bedrock:

Very Weak Can be easily scratched by fingernail or knife. Pieces 1 inch (25 mm) or more in thickness can be broken by

finger pressure.

Weak Can be grooved or gouged readily by a knife or pick. Can be excavated in small fragments by moderate

blows of a pick point. Small, thin pieces can be broken by finger pressure.

Moderately Strong Can be scratched with a knife or pick. Grooves or gouges to ¼" (6mm) deep can be excavated by hand

blows of a geologist's pick. Requires moderate hammer blows to detach specimen.

Strong Can be scratched with a knife or pick only with difficulty. Requires hard hammer blows to detach specimen.

Very Strong Cannot be scratched by a knife or sharp pick. Breaking of hand specimens requires hard repeated blows of

the geologist hammer.

Rock Quality Designation, RQD – This value is expressed in percent and is an indirect measure of rock soundness. It is obtained by summing the total length of all core pieces which are at least four inches long, and then dividing this sum by the total length of the core recovered.

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BORING NUMBER B19-4-01 PAGE 1 OF 1

Environn	nent / En	rergy / Infrastructure Telephone: (440) 232-9945											
CLIEN	T Jo	obsOhio F	PROJEC	T NAME	Natio	nal Road E	Busine	ss Par	k Site	Devel	opme	nt	
						Zanesville,							
		RTED <u>2/26/19</u> COMPLETED <u>2/26/19</u> F										838 ft	
		CONTRACTOR Geotechnical Consultants, Inc.											
		METHOD 3 1/4" Hollow Stem Auger				LING							
		Y N/A CHECKED BY S. McGee				. ING N							
		TES 39.963195, -81.905426											
										AT1	ERBE	RG	<u> </u>
о ОЕРТН (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	LIMITS	PLASTICITY INDEX	FINES CONTENT (%)
	1/ N	8.5" TOPSOIL.		\									
		Stiff to very stiff, brown, LEAN CLAY, trace of rock fragment moist. USCS: LEAN CLAY with SAND	ts,	SS SP-1	100	2-4-5 (9)	2.5		25.5	34	20	14	
				\square				1					
					100	6-8-11 (19)	4.5		17.9	36	18	18	83
				/ \		(10)							
								-					
_				V ss	100	5-7-10	4.5						
_ 5				SP-3	100	(17)	4.5						
				/ V				1					
		Very stiff, gray to red, LEAN CLAY, trace of rock fragments,	, moist.										
								-					
				V ss	100	9-16-18	4.5						
10				SP-4	100	(34)	4.5						
10				/ V									
_													
	//////	SHALE, brown, severely weathered, very weak, fissile.											
				1									
				SS SP-5	100	21-28-33							
15				/\ SP-5		(61)							
				, <u> </u>									
				ss	400	20.50/4"	1						
				SS SP-6	100	30-50/4"	-						
20													

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BORING NUMBER B19-4-02 PAGE 1 OF 1

Environ	ment / En	Bedford, Ohio, 44146 regy/Infrastructure Telephone: (440) 232-9945											
CLIEN	IT <u>Jo</u>	bsOhio	PROJEC	T NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opme	nt	
PROJ	ECT N	UMBER JOO001	PROJEC	T LOCAT	ION _	Zanesville,	Muski	ngum	Count	ty, OH			
DATE	STAR	TED <u>2/26/19</u> COMPLETED <u>2/26/19</u>	RIG TYP	E Track	-Moun	ted	(GROU	IND EL	_EVAT	ION _	860 ft	
DRILL	ING C	ONTRACTOR Geotechnical Consultants, Inc.	GROUNI	WATER	LEVE	LS: CA	VE-IN	DEP	гн:	-			
DRILL	ING N	ETHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRILI	_ING							
LOGG	ED B	CHECKED BY S. McGee	AT	END OF	DRILL	ING N	one Ol	bserve	ed				
COOF	RDINA	TES 39.961779, -81.905066	AF	TER DRII	LING								
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIMIT LIMIT	PLASTIC HIMIT		FINES CONTENT (%)
0	7 <u>1 1</u> 8. 7 <u>1</u>	4" TOPSOIL.		1									ш.
		Soft to Stiff, brown, LEAN CLAY, trace of rock fragments	, moist.	SS SP-1	100	1-1-2 (3)	0.75		32.6				
				SS SP-2	100	2-3-5 (8)	1.0		22.2	35	19	16	
5 				SS SP-3	100	4-5-8 (13)	2.0						
 - 10		Very stiff, brown to gray, Sandy LEAN CLAY, some rock fragments, moist.		SS SP-4	100	7-10-15 (25)	2.5						
				SS SP-5	100	10-13-18 (31)	4.5						
		SHALE, gray, severely weathered, very weak, fissile.											
				SS SP-6	100	13-22-43 (65)	-						

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BORING NUMBER B19-4-03 PAGE 1 OF 1

Environ	ment / En	ergy / Infrastructure Telephone: (440) 232-9945											
CLIEN	IT _Jo	bsOhio F	ROJEC	T NAME	Natio	nal Road E	usines	ss Par	k Site	Devel	opmer	nt	
PROJ	ECT N		ROJEC	T LOCAT	ION _	Zanesville,	Muski	ngum	Count	ty, OH			
DATE	STAR	TED <u>2/26/19</u> COMPLETED <u>2/26/19</u> F	RIG TYP	E Track	-Moun	ted	(GROU	IND EL	EVAT	ION _	884 ft	
DRILL	ING C	CONTRACTOR Geotechnical Consultants, Inc.	ROUNE	WATER	LEVE	LS: CA	VE-IN	DEP1	ГН: <u></u> -				
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRIL								
LOG	ED B	Y N/A CHECKED BY S. McGee	AT	END OF	DRILL	ING N	one ob	serve	d				
COOF	RDINA.	TES 39.960814, -81.907112	AF	TER DRII	LING								
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC WE SERVE TIMIT		FINES CONTENT (%)
		Stiff to very stiff, brown, LEAN CLAY, trace of rock fragmen moist. USCS: LEAN CLAY	ts,	SS SP-1	100	3-5-7 (12)			27.5	36	22	14	94
				SS SP-2	100	9-15-18 (33)			17.9				
5				SS SP-3	100	5-7-12 (19)							
		Very stiff, gray, Sandy LEAN CLAY, some rock fragments, r	moist.	\ /									
10				SS SP-4	100	8-15-20 (35)							
 - 15 	× × × × × × × × × × × × × × × × × × ×	SILTSTONE, brown, severely weathered, very weak, fissile blocky, arenaceous.	to	SS SP-5	(100)	50/1"							
	x x y y x x y x x x y x x x y x x x y x x x y x x x y x x x y x x x x y x			SS SP-6	100	50/1"							

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BORING NUMBER B19-4-04 PAGE 1 OF 1

Environ	ment / En	Bedford, Ohio, 44146 Telephone: (440) 232-9945										
CLIEN	NT Jo	bsOhio PRO	JECT NAME	Natio	nal Road B	usines	ss Par	k Site	Devel	opmer	nt	
			JECT LOCAT									
			TYPE Track								891 ft	
DRILL	ING C	CONTRACTOR Geotechnical Consultants, Inc. GRO	UND WATER	LEVE	LS: CA	VE-IN	DEP1	ГН:	-			
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT TIME OF	DRIL								
LOGG	SED B	Y N/A CHECKED BY S. McGee	AT END OF	DRILL	ING 16.50) ft / E	lev 87	4.50 ft				
COOF	RDINA	TES <u>39.959743, -81.905068</u>	AFTER DRII	LLING								
			й	%		Ż.	T.	(9)	ATT	ERBE		ïN⊤
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
0	. 7 <u>1 1^N . 7, 1</u>	4.5" TOPSOIL.									_	正
		Soft to medium stiff, brown, LEAN CLAY, moist.	SS SP-1	100	1-1-1 (2)	0.5		28.7	34	23	11	
			SS SP-2	100	2-2-3 (5)	0.5						
5			SS SP-3	100	WOH-5-5 (10)	0.5		21.6				
		Very stiff, red, Sandy LEAN CLAY, some rock fragments, saprolitic, moist.										
			SS SP-4	100	6-11-16 (27)	3.75						
 <u>15</u> 		Ţ	SS SP-5	100	10-15-22 (37)	3.75						
		SHALE, red, completely weathered, very weak, saprolitic, fissile	SS SP-6	100	16-23-41 (64)	3.75						

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BORING NUMBER B19-4-05 PAGE 1 OF 1

DATE DRILL	NT JO JECT N STAR LING O LING N	Telephone: (440) 232-9945 bsOhio IUMBER JOO001 ITED 2/26/19 COMPLETED 2/26/19 CONTRACTOR Geotechnical Consultants, Inc. IETHOD 3 1/4" Hollow Stem Auger Y N/A CHECKED BY S. McGee TES 39.957906, -81.910577	PROJECT RIG TYPE GROUNI AT	T LOCAT E Track D WATER TIME OF	-Moun LEVE DRILL	LING .ING _15.0	Muski	ingum GROU I DEP	Coun	ty, OH _EVA 1 	ı	893 ft	
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC PLASTIC LIMIT	S 	FINES CONTENT
		Stiff, brown, LEAN CLAY, trace of sand and silt, moist.	:-4	SS SP-1	100	2-4-6 (10)	1.5		25.1				
		Medium dense, brown, fine to medium, clayey SAND, mo	nst.	SS SP-2	100	9-10-12 (22)			11.7	18	15	3	
NATIONAL RD.GPJ		Very stiff, brown, Sandy LEAN CLAY, trace of rock fragm moist.	ents,	SS SP-3	100	7-10-10 (20)	3.5						
ECTS/JO0001-P	<i>(/////</i>	SANDSTONE, brown, completely to severely weathered, weak, locally argillaceous.	very				_						
CLIENTS/ACTIVE/GINT/PROJE				SS SP-4	100	14-22-27 (49)	_						
US LAB.GDT - 3/19/19 23:40 - F:\		¥		SS SP-5	100	50/5"							
GEOTECH BH COLUMNS - GINT STD US LAB GDT - 3/19/19 23:40 - F:\CLIENTS\ACTIVE\GINT\PROJECTS\UO0001-NATIONAL RD.GPJ 0				SS SP-6	(100)	50/1"							

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BORING NUMBER B19-4-06 PAGE 1 OF 1

Environ	ment / En	ergy / Infrastructure Telephone: (440) 232-9945											
CLIEN	NT _Jo	bsOhio	PROJEC	T NAME	Natio	nal Road E	Busine	ss Par	k Site	Devel	opmei	nt	
		UMBER JOO001				Zanesville,					-		
DATE	STAR	TED <u>2/26/19</u> COMPLETED <u>2/26/19</u>	RIG TYP	E Track	-Moun	ted		GROU	IND EL	_EVAT	ION _	893 ft	
DRILL	ING C	ONTRACTOR Geotechnical Consultants, Inc.	GROUNE	WATER	LEVE	LS: CA	VE-IN	DEP1	ГН:	-			
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRILI	LING							
LOGG	SED BY	CHECKED BY S. McGee	AT	END OF	DRILL	. ING N	one O	bserve	ed				
COOF	RDINA	TES _39.957769, -81.904195	AF	TER DRII	LLING								
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC HIMIT LIMIT	S 	FINES CONTENT (%)
0	(\ 1. \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	F FILTOPOOLI		<u> </u>	_		_	_	ļ _			<u>-</u>	됴
		5.5" TOPSOIL.Soft to very stiff, brown, LEAN CLAY, trace of rock fragme moist.	ents,	SS SP-1	100	1-2-2 (4)	0.5		27.9	35	23	12	
				SS SP-2	100	2-3-4 (7)	1.5						
5				SS SP-3	100	3-5-7 (12)	2.0						
		Very stiff, red, LEAN CLAY with silt, trace of rock fragmen moist. USCS: LEAN CLAY	ts,										
10		USCS. ELAN CLAT		SS SP-4	100	6-9-14 (23)	4.5		14.4	42	18	24	95
	× × × × × × × × × × × × × × × × × × ×	SILTSTONE, brown, severely weathered, very weak, fissil- blocky, arenaceous.	e to										
	× × × × × × × × × × × × × × × × × × ×			SS SP-5	100	21-38-40 (78)							
15	× × × × × × × × × × × × × × × × × × ×			/ V									
	× × × × × × × × × × × × × × × × × × ×			⊠ SS SP-6	100	50/4"							

Hull & Associates, INC. 4 Hemisphere Way

BORING NUMBER B19-4-07 PAGE 1 OF 1

Environ	nent / En	Bedford, Ohio, 44146 Telephone: (440) 232-9945											
		- , , ,	PROJEC	T NAME	Natio	nal Road E	usine	ss Par	k Site	Devel	opmer	nt	
PROJ	ECT N		PROJEC	T LOCAT	ION _	Zanesville,	Muski	ngum	Count	y, OH			
DATE	STAR	RTED <u>2/26/19</u>	RIG TYP	E Track	-Moun	ted	(GROU	ND EL	.EVAT	ION _	904 ft	
DRILL	ING C	CONTRACTOR Geotechnical Consultants, Inc.	GROUNI	WATER	LEVE	LS: CA	VE-IN	DEP1	ГН: <u></u>	-			
DRILL	ING N	METHOD _3 1/4" Hollow Stem Auger	AT	TIME OF	DRIL	LING							
LOGG	ED B	Y N/A CHECKED BY S. McGee	▼ AT	END OF	DRILL	ING <u>5.50</u>	ft / Ele	ev 898	.50 ft				
COOF	RDINA.	TES 39.958819, -81.907725	AF	TER DRII	LING								
, DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	L	PLASTIC MESTIC MISSES TIMIT		FINES CONTENT (%)
0	11 N 1	5.5" TOPSOIL.		1								_	
		Stiff to very stiff, brown, LEAN CLAY, trace of rock fragmen moist.	nts,	SS SP-1	100	1-1-1 (2)	0.5		24.6	35	22	13	
				SS SP-2	100	1-2-1 (3)	1.0		29.1				
5		▼		SS SP-3	100	WOH-1-2 (3)	0.5						
10				SS SP-4	100	5-9-11 (20)	2.0						
		Very stiff to hard, brown, LEAN CLAY, saprolitic, moist.											
15				SS SP-5	100	10-14-19 (33)	2.5						
		Transitioning to shale bedrock at 19' bgs.		SS SP-6	100	15-24-35 (59)	3.0						

Hull & Associates, INC. 4 Hemisphere Way Bedford, Ohio, 44146

BORING NUMBER B19-4-08 PAGE 1 OF 1

Environ	ment / Ene	regy / Infrastructure Telephone: (440) 232-9945											
CLIEN	IT <u>Jol</u>	osOhio F	PROJECT	NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opmer	nt	
PROJ	ECT N		PROJECT	LOCAT	ION _	Zanesville,	Muski	ngum	Count	y, OH			
DATE	STAR	TED <u>2/26/19</u>	RIG TYPE	_Track	-Moun	ted	(GROU	ND EL	.EVAT	ION _	887 ft	
DRILL	ING C	ONTRACTOR Geotechnical Consultants, Inc.	GROUND	WATER	LEVE	LS: CA	VE-IN	DEPT	TH:	-			
DRILL	ING M	ETHOD _3 1/4" Hollow Stem Auger	AT	TIME OF	DRIL	LING							
LOGG	ED BY	N/A CHECKED BY S. McGee	AT	END OF	DRILL	.ING N	one Ol	oserve	ed				
COOF	RDINAT	TES 39.956099, -81.909478	AF1	ER DRII	LING								
, DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC WEST	3 	FINES CONTENT (%)
_ 0		Medium stiff to stiff, brown, LEAN CLAY, moist.	/	SS SP-1	100	1-2-3 (5)	1.5		26.1	35	22	13	ш.
			<u> </u>	SS SP-2	100	3-5-6 (11)	2.0						
5				SS SP-3	100	5-9-11 (20)	3.5		25.8				
		Stiff to very stiff, brown, Sandy LEAN CLAY with silt, some fragments, moist.	rock	SS SP-4	100	7-8-6 (14)							
15 	××××××××××××××××××××××××××××××××××××××	SILTSTONE, tan, severely weathered, very weak, blocky to	fissile.	⊠ SS SP-5	100	50/4"							
		, , , , , , , , , , , , , , , , , , ,		SS SP-6	100 /	50/2"							

Hull & Associates, INC. 4 Hemisphere Way

BORING NUMBER B19-4-09 PAGE 1 OF 1

Environ	ment / En	Bedford, Ohio, 44146 Telephone: (440) 232-9945											
CLIEN	IT <u>Jo</u>	bsOhio	PROJECT	NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opme	nt	
PROJ	ECT N	IUMBER JOO001	PROJECT	LOCAT	ION _	Zanesville,	Muski	ngum	Count	y, OH			
DATE	STAR	TED <u>2/26/19</u>	RIG TYPE	Track-	Mount	ted	(GROU	ND EL	.EVAT	ION _	880 ft	
DRILL	ING C	CONTRACTOR Geotechnical Consultants, Inc.	GROUND	WATER	LEVE	LS: CA	VE-IN	DEP1	ГН: <u></u> -	-			
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT 1	TIME OF	DRILL								
LOGG	ED B	Y N/A CHECKED BY S. McGee	_ ¥AT E	END OF	DRILL	ING _17.5	0 ft / E	lev 86	2.50 ft	t			
COOF	RDINA	TES _39.957005, -81.906608	AFT	ER DRII	LING								
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC TIMIT	PLASTICITY SA INDEX	FINES CONTENT (%)
0				S)	<u>~</u>		ا م	□	O	_	Δ.	3	E
		5" TOPSOIL. Soft to stiff, brown, LEAN CLAY, trace of sand, moist.		SS SP-1	100	1-2-2 (4)	1.5		27.1				
			\ 	SS SP-2	100	3-5-7 (12)	2.0		22.1	29	19	10	
 _ 5			\ 	SS SP-3	100	4-5-7 (12)	2.5						
		SANDSTONE, brown, severely weathered, very weak.	\	/ 88									
10			/	SS SP-4	100	25-50/5"							
 15			3	SS SP-5	100	50/1"							
		¥	3	SS SP-6	100)	50/1"							

Hull & Associates, INC. 4 Hemisphere Way

BORING NUMBER B19-4-10 PAGE 1 OF 1

Environ	ment / En	Bedford, Ohio, 44146 ergy/Infrastructure Telephone: (440) 232-9945											
CLIEN	IT Jo	bsOhio	PROJECT NA	AME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opme	nt	
		UMBER JOO001	PROJECT LO										
DATE	STAR	TED <u>2/25/19</u>	_ RIG TYPE _	Γrack-	Mount	ed	(GROU	IND EL	.EVAT	ION _	881 ft	
DRILL	ING C	ONTRACTOR Geotechnical Consultants, Inc.	_ GROUND WA	ATER	LEVE	LS: CA	VE-IN	DEP	гн:	-			
DRILL	ING M	ETHOD 3 1/4" Hollow Stem Auger	_ AT TIM	IE OF	DRILL								
LOGG	ED BY	Y N/A CHECKED BY S. McGee	_ AT EN	D OF	DRILL	I NG N	one Ol	oserve	ed				
COOF	RDINA	TES 39.954520, -81.909564	_ AFTER	DRIL	LING								
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION	AMPI F TYPE	NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)		PLASTIC INMIT LIMIT		FINES CONTENT (%)
0			v.)	~		₾.	Δ	0		ш	7	듵
		5" TOPSOIL. Medium stiff to stiff, brown, LEAN CLAY, moist.		SS SP-1	100	2-2-4 (6)	0.25		27.5				
				SS SP-2	100	3-5-5 (10)	2.0		22.4	41	20	21	
 <u>5</u>				SS SP-3	100	4-5-6 (11)	1.5						
			M	SS		7-9-13							
10		Very stiff, yellow to gray, LEAN CLAY, moist.	\\\	SP-4	100	(22)	2.75						
 15				SS SP-5	100	12-17-19 (36)	4.5						
		Hard, red to gray, LEAN CLAY with silt, moist.											
		Transitioning to shale bedrock at 18.5' bgs		SS SP-6	100	29-33-44 (77)	4.0						

Hull & Associates, INC. 4 Hemisphere Way

BORING NUMBER B19-4-11 PAGE 1 OF 1

Environ	ment / En	Bedford, Ohio, 44146 Telephone: (440) 232-9945											
CLIEN	NT <u>Jo</u>	bsOhio P	ROJEC	Г NАМЕ	Natio	nal Road E	Busines	ss Par	k Site	Devel	opmer	nt	
PROJ	ECT N	UMBER JOO001 P	ROJEC	T LOCAT	ION _	Zanesville,	Muski	ngum	Count	y, OH			
DATE	STAR	TED <u>2/25/19</u>	RIG TYPI	Track	-Moun	ted	(GROU	ND EL	.EVAT	ION _	881 ft	
DRILL	ING C	CONTRACTOR Geotechnical Consultants, Inc.	ROUND	WATER	LEVE	LS: CA	VE-IN	DEP1	ГН: <u></u>	-			
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRILI	LING							
LOGO	SED BY	CHECKED BY S. McGee	AT	END OF	DRILL	. ING N	one Ol	bserve	ed				
COOF	RDINA	TES <u>39.954906, -81.906737</u>	AF	TER DRII	LLING								
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC IMIT LIMIT		FINES CONTENT (%)
0				Ś	<u>~</u>		P	ă	_ O	_	Ф	9_	E N
	7. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	5" TOPSOIL.		\									
		Medium stiff to stiff, brown, LEAN CLAY, moist.		SS SP-1	100	3-3-9 (12)	0.5		26.6	34	24	10	
				SS SP-2	100	4-6-5 (11)	0.75						
		Stiff, red, LEAN CLAY, minor rock fragments, moist.		/ \									
5				SS SP-3	100	4-6-7 (13)	1.5		20.7				
		Very stiff, gray, Sandy LEAN CLAY with silt, some rock fragi moist.	ments,										
 - 10 			,	SS SP-4	100	10-11-14 (25)	2.25						
		INTERBEDDED SHALE and SILTSTONE, severely weather very weak, blocky to friable.	red,	SS SP-5	100	13-17-22 (39)	3.5						
				⊠ SS SP-6	100	50/4"							

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BORING NUMBER B19-4-12 PAGE 1 OF 1

Environ	ment / En	Bedford, Ohio, 44146 regy/Infrastructure Telephone: (440) 232-9945											
CLIEN	IT <u>Jo</u>	bsOhio	PROJEC	T NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opmeı	nt	
PROJ	ECT N	UMBER JOO001	PROJEC	T LOCAT	ION _	Zanesville,	Muski	ngum	Count	ty, OH			
DATE	STAR	TED <u>2/25/19</u> COMPLETED <u>2/25/19</u>	RIG TYP	E Track	-Moun	ted	(GROU	IND EL	_EVAT	ION _	899 ft	
DRILL	ING C	ONTRACTOR Geotechnical Consultants, Inc.	GROUNI	WATER	LEVE	LS: CA	VE-IN	DEP	ГН: <u></u>				
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	АТ	TIME OF	DRILI	LING							
LOGG	ED B	CHECKED BY S. McGee	АТ	END OF	DRILL	. ING N	one Ol	oserve	ed				
COOF	RDINA	TES <u>39.952691, -81.909691</u>	AF	TER DRII	LLING								
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC HIMIT LIMIT		FINES CONTENT (%)
0				δ	<u> </u>		PC	ä	-8	-	룹	<u> </u>	E N
	<u> </u>	3.5" TOPSOIL.		1									
		Medium stiff, brown, LEAN CLAY, moist.		SS SP-1	100	2-2-2 (4)	1.0		29.1				
				SS SP-2	100	4-3-4 (7)	1.25		21.0	38	18	20	
5				SS SP-3	100	3-3-4 (7)	2.25						
 		Very stiff, yellow to brown, Sandy LEAN CLAY, some rock fragments, moist.		SS SP-4	100	7-12-13 (25)	3.75						
 		Very stiff to hard, gray, red, and brown, Sandy LEAN CLA rock fragments (SHALE), moist.	Y with	SS SP-5	100	13-15-19 (34)	4.0						
		Transitioning to shale bedrock at 18.5' bgs		SS SP-6	100	29-37- 50/4"	>4.5						

Hull & Associates, INC. 4 Hemisphere Way

BORING NUMBER B19-4-13 PAGE 1 OF 1

Environ	ment / En	Bedford, Ohio, 44146 Telephone: (440) 232-9945											
CLIEN	IT <u>Jo</u>	bsOhio P	ROJEC	T NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opmer	nt	
PROJ	ECT N	IUMBER JOO001 P	ROJEC	T LOCAT	ION _	Zanesville,	Muski	ngum	Count	y, OH			
DATE	STAR	RTED <u>2/25/19</u>	IG TYPI	Track	-Moun	ted	(GROU	ND EL	.EVAT	ION _	884 ft	
DRILL	ING C	CONTRACTOR Geotechnical Consultants, Inc. G	ROUND	WATER	LEVE	LS: CA	VE-IN	DEP1	ГН:	-			
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRILI	LING							
LOGG	ED B	Y N/A CHECKED BY S. McGee	AT	END OF	DRILL	ING N	one Ol	bserve	ed				
COOF	RDINA	TES 39.950891, -81.909743	AF	TER DRII	LLING								
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	L	ERBE IMITS		FINES CONTENT (%)
	GR/ L			MN	S (F)		S S	 ≿	Š L	LIQUID	PLASTIC LIMIT	ST	ES (
0				S	꿉	•	M	占	28		П	<u> </u>	N N
	1/ 1/N . 1/1	4.8" TOPSOIL.		\ /									
		Medium stiff, brown, LEAN CLAY, moist.		SS SP-1	100	3-3-3 (6)	0.25		27.2	37	23	14	
				SS SP-2	100	3-4-5	1.0						
				/\\SP-2		(9)							
5				SS SP-3	100	4-5-5 (10)	1.5		16.2				
				,									
		Very stiff, gray, LEAN CLAY, moist.											
10				SS SP-4	100	7-11-15 (26)	3.0						
	× × ; × × ; × × ;	SILTSTONE, tan, severely weathered, very weak, blocky to	fissile.										
 15	X			SS SP-5	(100)	50/1"	/						
	× × × × × × × × × × × × × × × × × × ×			SS SP-6		50/0"							

Hull & Associates, INC. 4 Hemisphere Way Bedford, Ohio, 44146

BORING NUMBER B19-4-14 PAGE 1 OF 1

Environ	ment / En	ergy / Infrastructure Telephone: (440) 232-9945											
			ROJEC	T NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opme	nt	
						Zanesville,					-		
		TED 2/25/19 COMPLETED 2/25/19 RI										880 ft	
		CONTRACTOR Geotechnical Consultants, Inc.					VE-IN						
		IETHOD _3 1/4" Hollow Stem Auger				LING							
		Y N/A CHECKED BY S. McGee				.ING N							
		TES _39.953277, -81.906751		TER DRII									
				111						ATT	ERBE		<u></u>
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC WILLIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	1	7.2" TOPSOIL.		\ /									
		Medium stiff, brown, LEAN CLAY, moist.		SS SP-1	100	2-2-3 (5)	1.5		25.8				
				SS SP-2	100	3-3-3 (6)	0.25		28.6	34	21	13	
		Stiff, red, LEAN CLAY, moist.											
5				SS SP-3	100	3-4-5 (9)	1.5						
		Very stiff, yellow, gray, and purple, LEAN CLAY, moist.											
 10				SS SP-4	100	6-7-9 (16)	2.0						
				SS SP-5	100	10-14-33 (47)	2.5						
15				/ N									
		Hard, dark brown, red, and purple, LEAN CLAY and SHALE,	moist.	SS SP-6	100	50/5.5"							
				<u> </u>			1						

Hull & Associates, INC. 4 Hemisphere Way Bedford, Ohio, 44146

BORING NUMBER B19-4-15 PAGE 1 OF 1

Environr	nent / Er	Decirity, Offic, 44 146 Telephone: (440) 232-9945											
CLIEN	IT Jo	obsOhio P	PROJEC1	NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opmei	nt	
PROJ	ECT N	NUMBER JOO001 P	PROJECT	LOCAT	ION _	Zanesville,	Muski	ngum	Coun	ty, OH			
DATE	STAF	RTED <u>2/25/19</u>	RIG TYPE	Track	-Moun	ted	(GROU	ND EL	EVAT	ION _	884 ft	
DRILL	ING C	CONTRACTOR Geotechnical Consultants, Inc.	GROUND	WATER	LEVE	LS: CA	AVE-IN	DEP1	ГН:	-			
DRILL	ING N	METHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRILI	_ING							
LOGG	ED B	Y N/A CHECKED BY S. McGee	AT	END OF	DRILL	ING N	one Ol	bserve	ed				
COOR	RDINA	TES 39.949347, -81.909794	AF1	ER DRII	LLING								
				111	. 0					ATT	ERBE		F
о DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC III		FINES CONTENT (%)
	71 1	7.2" TOPSOIL.		. /									
		Medium stiff to stiff, brown, LEAN CLAY, moist.	4	SS SP-1	100	3-4-5 (9)	0.75		24.6				
				SS SP-2	100	5-5-7 (12)	2.75						
5			N	SS SP-3	100	5-7-10 (17)	2.75						
			<u> </u>										
10		Soft to stiff, gray and red, Sandy LEAN CLAY, some rock fragments, moist. USCS: SANDY LEAN CLAY		SS SP-4	100	4-8-20 (28)	0.75		17.7	40	24	16	60
	× × × × × × × × × × × × × × × × × × ×	SILTSTONE, tan, severely weathered, very weak, blocky to arenaceous.	fissile,	SS SP-5	100)	50/2"							
· - 	x x x x x x x x x x x x x x x x x x x			SS SP-6		50/0"							

Hull & Associates, INC. 4 Hemisphere Way Bedford, Ohio, 44146

BORING NUMBER B19-4-16 PAGE 1 OF 1

Environ	nent / En	ergy / Infrastructure Telephone: (440) 232-9945											
CLIEN	I T Jo	bsOhio I	PROJEC ⁻	Г NAME	_Natio	nal Road E	Busines	ss Par	k Site	<u>De</u> vel	<u>op</u> mer	nt_	
						Zanesville,							
		COMPLETED 2/25/19 COMPLETED 2/25/19	RIG TYPE	Track	- Moun	ted		GROU	ND EL	.EVAT	ION	882 ft	
		CONTRACTOR Geotechnical Consultants, Inc.											
		IETHOD 3 1/4" Hollow Stem Auger				LING							
		Y N/A CHECKED BY S. McGee				.ING N							
		TES <u>39.951763, -81.906950</u>		TER DRII	LLING								
				111						ATT	ERBE	RG	늘
, DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC WE LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
0	71 1 ^N . 71	6" TOPSOIL.	1	\									ъ.
		Medium stiff to stiff, brown, LEAN CLAY, moist.		SS SP-1	100	2-3-4 (7)	1.0		27.7				
				. 1									
				SS SP-2	100	3-5-7 (12)	1.25		22.3	29	17	12	
5				SS SP-3	100	5-5-8 (13)	3.25						
			ľ	′ \									
		Very stiff, brown to gray, LEAN CLAY, trace of rock fragme	nts,										
		moist.		√ ss		26-13-13							
				SP-4	100	(26)	3.0						
10				′ \									
		Very stiff, gray, Sandy LEAN CLAY, some rock fragments,	moist.										
				\		10 15 00							
				SS SP-5	100	12-15-20 (35)	3.75						
15				′ \									
	//////////////////////////////////////	SILTSTONE, tan, severely weathered, very weak, fissile,											
	× × × × × × × × × × × × × × × × × × ×	arenaceous.											
	× × ×												
	× × × × × × × × × × × × × × × × × × ×			X SS SP-6	100	50/5"							
20	× × × × ×												

Hull & Associates, INC. 4 Hemisphere Way Bedford, Ohio, 44146

BORING NUMBER B19-4-17 PAGE 1 OF 1

Environ	ment / En	ergy / Infrastructure Telephone: (440) 232-9945											
CLIEN	IT _Jo	bsOhio	PROJEC [*]	Г NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opmer	nt	
PROJ	ECT N	IUMBER JOO001	PROJEC	LOCAT	ION _	Zanesville,	Muski	ngum	Count	y, OH			
DATE	STAR	TED 2/25/19 COMPLETED 2/25/19	RIG TYPI	Track	-Moun	ted		GROU	ND EL	.EVAT	ION _	835 ft	
DRILL	ING C	CONTRACTOR Geotechnical Consultants, Inc.	GROUND	WATER	LEVE	LS: CA	VE-IN	DEP1	ГН: <u></u> -	-			
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRILI	_ING							
LOGO	SED B	Y N/A CHECKED BY S. McGee	AT	END OF	DRILL	I NG N	one Ol	bserve	ed				
COOF	RDINA	TES <u>39.947747, -81.909993</u>	AF	TER DRII	LING								
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC LIMIT		FINES CONTENT (%)
		Stiff to very stiff, brown, LEAN CLAY, moist.		SS SP-1	100	4-4-5 (9)	2.5		18.6	39	18	21	
				SS SP-2	100	5-6-10 (16)	4.0						
5				SS SP-3	100	7-9-10 (19)	4.0		16.2				
10		Hard, yellow to tan, Sandy LEAN CLAY with silt, some roo fragments (SHALE), moist.	ck ,	SS SP-4	100	19-23-31 (54)	4.5						
 15		SHALE, gray, severely weathered, very weak, fissile.		XSS SP-5/	100	50/5"							
				⊠ SS SP-6	100)	50/3"							

Hull & Associates, INC. 4 Hemisphere Way Bedford, Ohio, 44146

BORING NUMBER B19-4-18 PAGE 1 OF 1

Environ	ment / En	ergy / Infrastructure Telephone: (440) 232-9945											
CLIEN	IT <u>Jo</u>	bsOhio	PROJECT	NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opmer	nt	
						Zanesville,					-		
DATE	STAR	TED <u>2/25/19</u> COMPLETED <u>2/25/19</u>	RIG TYPE	_Track	-Moun	ted	(GROU	ND EL	.EVAT	ION _	871 ft	
		ONTRACTOR Geotechnical Consultants, Inc.											
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRIL	LING							
LOGG	ED B	Y N/A CHECKED BY S. McGee	AT	END OF	DRILL	. ING N	one Ol	oserve	ed				
COOF	RDINA	TES _39.949905, -81.907040	AF7	TER DRII	LLING								
				Ш	%			Ŀ		ATT	ERBE	RG	۲
DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY 9 (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC I	PLASTICITY NO INDEX	FINES CONTENT (%)
0	71 18. 17	7.2" TOPSOIL.		. /									
		Stiff to very stiff, brown, LEAN CLAY, moist.		SS SP-1		3-5-5 (10)	2.0		24.9				
			Ī	\									
			4	SS SP-2		4-6-7 (13)	4.25						
			Ň	V ss		7-7-9							
5			4	SP-3		(16)	3.0		16.4				
		Very stiff, red to gray, Sandy LEAN CLAY with rock fragme moist.	ents,										
			Ņ	\/ ss		10-11-13							
10			4	SS SP-4		(24)	3.0						
		Stiff, gray, Sandy LEAN CLAY with rock fragments, moist.											
			Ī	. /									
 15				SS SP-5		15-17-21 (38)	4.0						
		SHALE, severely weathered, very weak, fissile.											
		·											
				√ ss		50/1"	_						
20				SP-6		JU/ 1							

HULL Environment / Energy / Infrastructure

Hull & Associates, INC. 4 Hemisphere Way Bedford, Ohio, 44146 Telephone: (440) 232-9945

BORING NUMBER B19-4-19

PAGE 1 OF 1

	NI JOI					nai Road E						ıt	
						Zanesville,							
						ted	(GROU	ND EL	EVAT	ION _	831 ft	
		ONTRACTOR Geotechnical Consultants, Inc. GRO	OUND WA	ATER	LEVE	LS: CA	VE-IN	DEP1	ГН: <u></u>	-			
DRILL	ING M	ETHOD 3 1/4" Hollow Stem Auger				LING							
LOGO	SED BY	CHECKED BY S. McGee	AT ENI	D OF	DRILL	ING 15.0	0 ft / E	lev 81	6.00 f	t			
COOF	RDINAT	ES 39.946567, -81.908369	AFTER	RDRIL	LING								
			Щ	.	%		_ <u>-</u>	<u>.</u> .	(9)	ATT	TERBE LIMITS	ERG	FINES CONTENT (%)
Ξ	GRAPHIC LOG		}	NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)			≥	I H
DEPTH (ft)	LOG AP	MATERIAL DESCRIPTION	Щ	∄B BB	꽃岁	A A L	(tsf)	Por C	STI	₽	 	들쬬	000
Ω	GR _		AME	[Z) E	m O Z	00	Σ	Q NO	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX	ES
0			S)		~		Д.		0		Ь	7	를
	<u> </u>	4.8" TOPSOIL.	//	ss		2-3-3							
		Very soft to stiff, brown, LEAN CLAY, moist. USCS: LEAN CLAY	X :	SP-1	100	(6)	1.0		28.9				
			/ \										
			V	ss	100	4-7-4	0.25		27.3	35	20	15	97
			\\\	SP-2		(11)							
			\mathbb{N}	ss		3-4-5							
_ 5			X :	SP-3	100	(9)	1.5		19.0				
GP.			/ \										
۲ - R													
Ž N													
-N- 													
0000													
TS/JC													
DIEC -			\mathbb{N}	ss		5-6-8							
I/PR(SP-4	100	(14)	2.75						
<u>N</u> 10			/ V										
STIVE													
TS/AC													
_ EN													
P.'C													
3:40		Variatiff growth and LEANICIAN come real fragments main	int.										
1192		Very stiff, gray to red, LEAN CLAY, some rock fragments, mois	ISI.										
- 3/18			V	ss	100	12-17-21	3.5						
15 15		_		SP-5	100	(38)	0.0						
- FA		<u>.</u>											
S O O													
T ST													
GEOTECH BH COLUMNS - GINT STD US LAB. GDT - 3/19/19 23:40 - F:\CLIENTS\ACTIVE\GINT\PROJECTS\UGO001-NATIONAL RD.GPJ 0	X X X	SILTSTONE, tan to brown, severely weathered, very weak, fiss	sile										
SN M	XXX	to blocky, arenaceous.											
	XXX												
H	XXX		×	SS	100	50/3"	,						
THO	XXX		\	SP-6									
Ö 20	XXX												

Hull & Associates, INC. 4 Hemisphere Way Bedford, Ohio, 44146

BORING NUMBER B19-4-20 PAGE 1 OF 1

Environ	ment / En	ergy / Infrastructure Telephone: (440) 232-9945											
CLIEN	NT <u>Jo</u>	bsOhio	PROJEC	T NAME	Natio	nal Road E	Busines	ss Par	k Site	Devel	opme	nt	
PROJ	ECT N		PROJEC	T LOCAT	ION _	Zanesville,	Muski	ngum	Count	y, OH			
DATE	STAR	TED <u>2/25/19</u> COMPLETED <u>2/25/19</u>	RIG TYP	E Track	-Moun	ted	(GROU	ND EL	.EVAT	ION _	855 ft	
DRILL	ING C	ONTRACTOR Geotechnical Consultants, Inc.	GROUNE	WATER	LEVE	LS: CA	VE-IN	DEPT	H:	-			
DRILL	ING N	IETHOD 3 1/4" Hollow Stem Auger	AT	TIME OF	DRILI	LING							
		CHECKED BY S. McGee	AT	END OF	DRILL	ING N	one Ol	oserve	d				
COOF	RDINA	TES <u>39.947720, -81.907759</u>	AF	TER DRII	LING								
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC LIMIT		FINES CONTENT (%)
	<u>11.16</u>	4.8" TOPSOIL. Medium stiff to stiff, brown, LEAN CLAY, trace of rock frag moist.	ments,	SS SP-1	100	2-4-5 (9)	0.5		21.7				
				SS SP-2	100	5-6-7 (13)	1.5		16.6	26	20	6	
 <u>5</u>				SS SP-3	100	6-6-7 (13)	1.5						
		SHALE, brown, severely weathered, very weak, fissile.											
10				SS SP-4	100	22-25-27 (52)							
				SS SP-5	100	45							
		SHALE, gray, severely weathered, very weak, fissile.											
		CHALL, gray, Severely weathered, very weak, lissue.		SS SP-6	100	50/2"							

APPENDIX B

Geotechnical Laboratory Testing Results

HULL & ASSOCIATES, INC. BEDFORD, OHIO

Summary of Laboratory Results

National Road Business Park Zanesville, Ohio GCI Job Number: 19-G-22629

Test Hole	Depth	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Fines (< #200 Sieve)	% Clay (< 0.005 mm)	ASTM Class- ification	ASTM Description
B19-1	0.0	25.5	34	20	14				
B19-2	2.0	17.9	36	18	18	82.9	46	CL	Lean Clay With Sand
B19-2	0.0	32.6							
B19-2	2.0	22.2	35	19	16				
B19-3	0.0	27.5	36	22	14	94.1	34	CL	Lean Clay
B19-3	2.0	17.9							
B19-4	0.0	28.7	34	23	11				
B19-4	4.0	21.6							
B19-5	0.0	25.1							
B19-5	2.0	11.7	18	15	3				
B19-6	0.0	27.9	35	23	12				
B19-6	8.5	14.4	42	18	24	95.2	68	CL	Lean Clay
B19-7	0.0	24.6	35	22	13				
B19-7	2.0	29.1							
B19-8	0.0	26.1	35	22	13				
B19-8	4.0	25.8							
B19-9	0.0	27.1							
B19-9	2.0	22.1	29	19	10				
B19-10	0.0	27.5							
B19-10	2.0	22.4	41	20	21				·

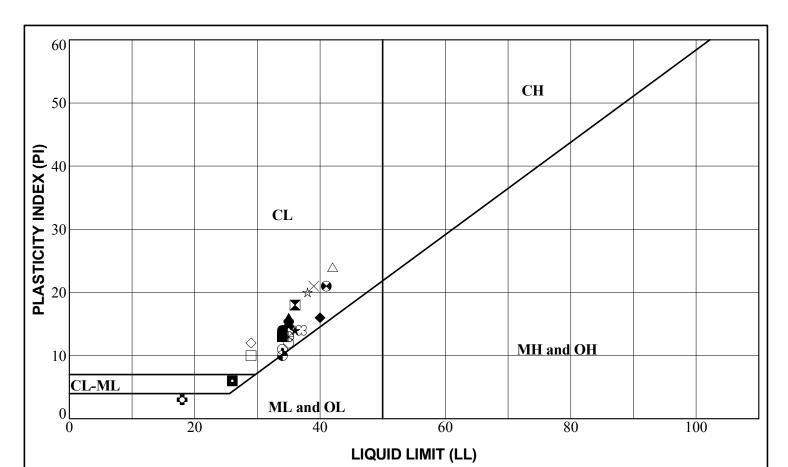


Summary of Laboratory Results

National Road Business Park Zanesville, Ohio GCI Job Number: 19-G-22629

Test Hole	Depth	Water Content (%)	Liquid Limit	Plastic Limit	Plasticity Index	% Fines (< #200 Sieve)	% Clay (< 0.005 mm)	ASTM Class- ification	ASTM Description
B19-11	0.0	26.6	34	24	10				
B19-11	4.0	20.7							
B19-12	0.0	29.1							
B19-12	2.0	21.0	38	18	20				
B19-13	0.0	27.2	37	23	14				
B19-13	4.0	16.2							
B19-14	0.0	25.8							
B19-14	2.0	28.6	34	21	13				
B19-15	0.0	24.6							
B19-15	8.5	17.7	40	24	16	59.6	29	CL	Sandy Lean Clay
B19-16	0.0	27.7							
B19-16	2.0	22.3	29	17	12				
B19-17	0.0	18.6	39	18	21				
B19-17	4.0	16.2							
B19-18	0.0	24.9							
B19-18	4.0	16.4							
B19-19	0.0	28.9							
B19-19	2.0	27.3	35	20	15	97.3	31	CL	Lean Clay
B19-19	4.0	19.0							
B19-20	0.0	21.7	-						
B19-20	2.0	16.6	26	20	6				





LEGEND:

	TEST HOLE	DEPTH	<u>W</u> n	<u>LL</u>	<u>PL</u>	<u>PI</u>	ASTM CLASSIFICATION
•	B19-1	0.0	25.5	34	20	14	
	B19-1	2.0	17.9	36	18	18	CL
	B19-2	2.0	22.2	35	19	16	
*	B19-3	0.0	27.5	36	22	14	CL
\odot	B19-4	0.0	28.7	34	23	11	
0	B19-5	2.0	11.7	18	15	3	
\bigcirc	B19-6	0.0	27.9	35	23	12	
\triangle	B19-6	8.5	14.4	42	18	24	CL
\otimes	B19-7	0.0	24.6	35	22	13	
\oplus	B19-8	0.0	26.1	35	22	13	
	B19-9	2.0	22.1	29	19	10	
Θ	B19-10	2.0	22.4	41	20	21	
lacksquare	B19-11	0.0	26.6	34	24	10	
\Rightarrow	B19-12	2.0	21.0	38	18	20	
\mathbb{S}	B19-13	0.0	27.2	37	23	14	
	B19-14	2.0	28.6	34	21	13	
•	B19-15	8.5	17.7	40	24	16	CL
\Diamond	B19-16	2.0	22.3	29	17	12	
\times	B19-17	0.0	18.6	39	18	21	
×	B19-19	2.0	27.3	35	20	15	CL

Job No: 19-G-22629

B19-20

2.0

ATTERBERG LIMITS TEST RESULTS

26

16.6

20

6

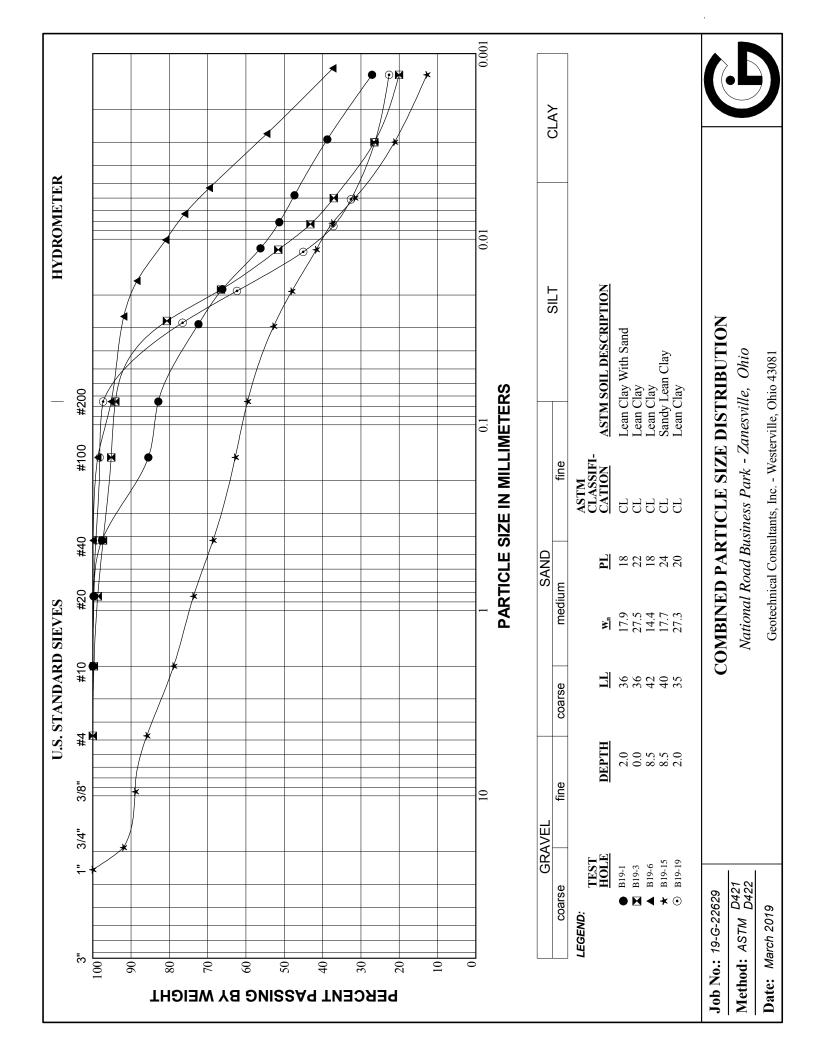
Method: ASTM D4318

National Road Business Park
Zanesville, Ohio

Date: March 2019

Geotechnical Consultants, Inc. - Westerville, Ohio 43081

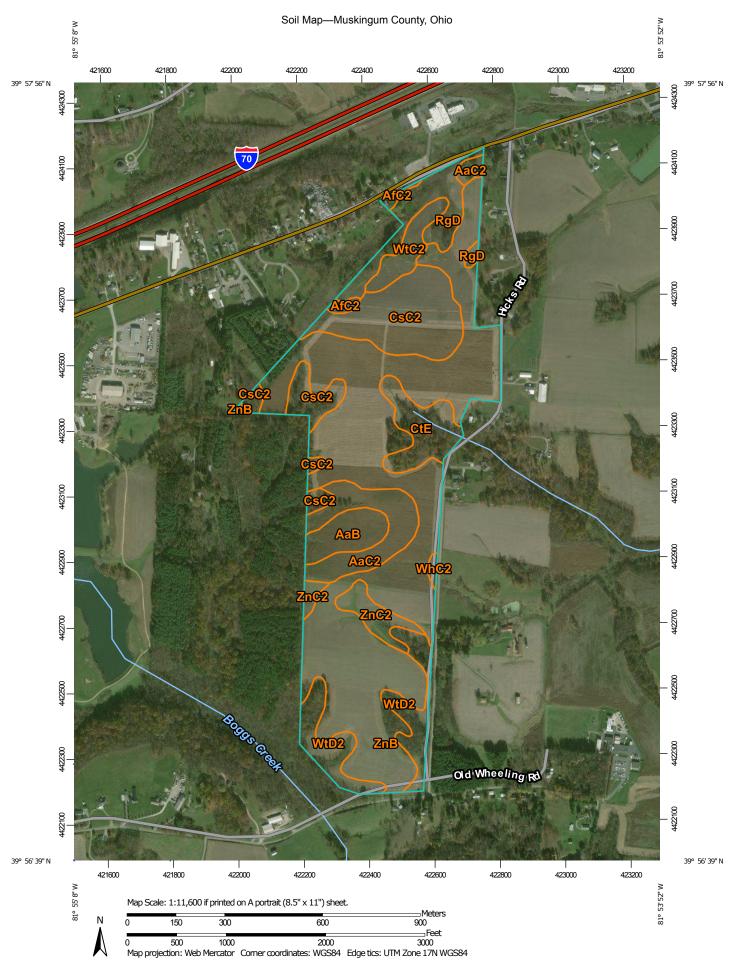




APPENDIX C

USDA Web Soil Survey Map

HULL & ASSOCIATES, INC. BEDFORD, OHIO



MAP LEGEND

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Water Features

Transportation

Background

Spoil Area

Stony Spot

Wet Spot

Other

Rails

US Routes

Major Roads

Local Roads

Very Stony Spot

Special Line Features

Streams and Canals

Interstate Highways

Aerial Photography

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons



Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

... Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

→ Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15.800.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Muskingum County, Ohio Survey Area Data: Version 14, Sep 17, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 5, 2012—Mar 22, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



Map Unit Legend

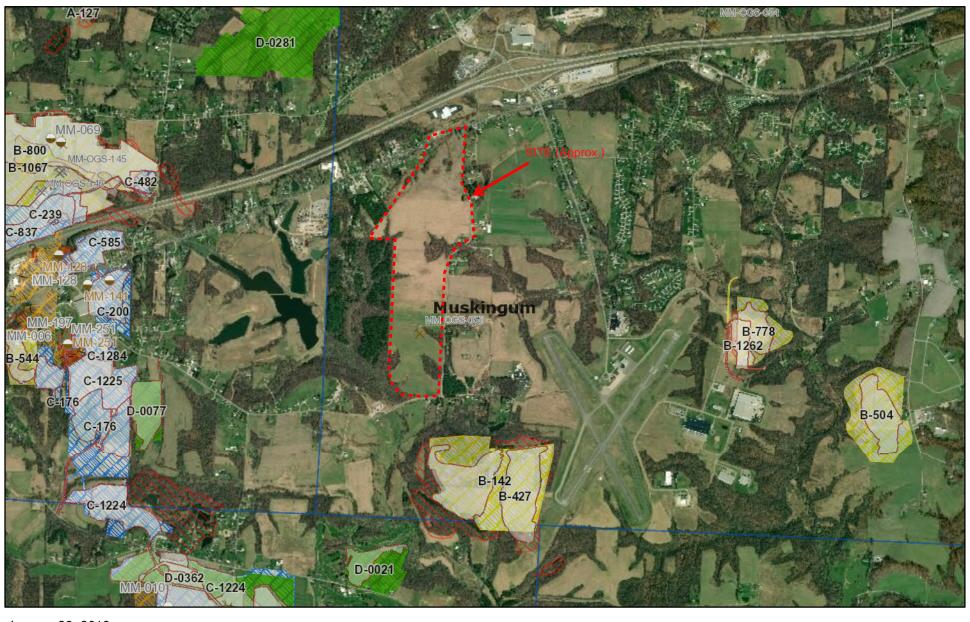
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AaB	Aaron silt loam, 2 to 8 percent slopes	6.9	3.5%
AaC2	Aaron silt loam, 8 to 15 percent slopes, eroded	13.9	7.0%
AfC2	Alford silt loam, 8 to 15 percent slopes, eroded	1.4	0.7%
CsC2	Coshocton silt loam, 8 to 15 percent slopes, eroded	26.8	13.5%
CtE	Coshocton-Westmoreland silt loams, 25 to 40 percent slopes	9.5	4.8%
RgD	Rigley channery loam, 15 to 25 percent slopes	10.9	5.5%
WhC2	Wellston silt loam, 8 to 15 percent slopes	0.6	0.3%
WtC2	Westmoreland silt loam, 8 to 15 percent slopes	5.4	2.7%
WtD2	Westmoreland silt loam, 15 to 25 percent slopes	14.4	7.2%
ZnB	Zanesville silt loam, 3 to 8 percent slopes	102.8	51.8%
ZnC2	Zanesville silt loam, 8 to 15 percent slopes	5.9	3.0%
Totals for Area of Interest		198.3	100.0%

APPENDIX D

ODNR Mine Map

HULL & ASSOCIATES, INC. BEDFORD, OHIO

Mines of Ohio





7.0 CONTRACTURAL ADMINISTRATIVE FORMS

Notice to Proceed

Project: Industrial Drive -	Owner: Zanesville – Muskingum	Owner's Contract No.:
Public Infrastructure	County Port Authority	
Contract:		Engineer's Project No.: ZAN012
Contractor:		
Contractor's Address:		
after that date, you are to start pe	imes under the above contract will commenc rforming your obligations under the Contract	e to run on, 2020. On o
You are notified that the Contract T after that date, you are to start pe Agreement. (Contractor)	Times under the above contract will commence of the contract will be contract will contract will be contract.	e to run on, 2020. On o
after that date, you are to start pe Agreement <u>.</u>	rforming your obligations under the Contract	Documents. In accordance with the
after that date, you are to start pe Agreement <u>.</u> (Contractor)	rforming your obligations under the Contract Owner Given by:	Documents. In accordance with the
after that date, you are to start pe Agreement <u>.</u> (Contractor)	rforming your obligations under the Contract Owner Given by:	Documents. In accordance with the

Contractual Administrative Forms

Work Change Directive No. _____

Date of Issuance:		Effective Date:	Effective Date:				
Project: Industrial Dri Public Infrast		Owner: Zanesville – Muskingum County Port Authority	Owner's Co	ntract No.:			
Contract:			Date of Contro	nct:			
Contractor:			Engineer's Proj	ect No.: ZAN012			
You are directed to procee	ed promptly with the foll	owing change(s):					
Item No.	Description						
Attachments (list document	nts supporting change):						
Purpose for Work Change	Directive:						
		to proceed on the basis of Cost of the Work	due to:				
Nonagree	ement on pricing of propo	sed change.					
Necessity	Necessity to expedite Work described herein prior to agreeing to changes on Contract Price and Contract Time.						
Estimated change in Contr	ract Price and Contract T	imes:					
Contract Price \$	(i	ncrease/decrease) Contract T	ime	(increase/decrease)			
If the change involves an in	crease, the estimated am	ounts are not to be exceeded without further	authorization				
Recommended for Approval by E	Engineer:			Date			
Authorized for Owner by:				Date			
Accepted for Contractor by:				Date			
Approved by Funding Agency (if	applicable):		1	Date:			

Field Order No Effective Date:							
Date of Issuance:							
Project: Industrial Drive -	Owner:		Owner's Contract No.:				
Public Infrastructure	Zanesville – County Port	- Muskingum Authority					
Contract:			Date of Contract:				
Contractor:			Engineer's Project No.:				
			ZAN012				
Attention: You are hereby directed to promptly execute this Fin the Work without changes in Contract Price or please notify the Engineer immediately and before Reference:	Contract Times.	If you consider that c	General Conditions Paragraph 9.04A., for minor changes a change in Contract Price or Contract Times is required,				
(Specification Se	ection(s))		(Drawing(s) / Detail(s))				
Description:							
Attachments:							
		Engineer:					
Receipt Acknowledged by (Contractor):			Date:				

Contractual Administrative Forms

Copy to Owner

Change Order No. _____

Date of Issuance:		Effective Date	:
Project: Industrial Drive - Public Infrastruct	ure _{Owner:} Za Authorit		Owner's Contract No.:
Contract:			Date of Contract:
Contractor:			Engineer's Project No: ZAN012
The Contract Documents are modified as follows	upon execution	n of this Change Order:	
Description:			
Attachments: (List documents supporting change):			
CHANGE IN CONTRACT PRICE:		CHANGE IN	CONTRACT TIMES:
Original Contract Price:		Original Contract Times: Wor	rking days Calendar days
\$	-	Ready for final payment (days or date):
[Increase] [Decrease] from previously approved Ch No:			· ·
Contract Price prior to this Change Order:	-	Contract Times prior to this Change Orde	
Community prior to min change crack		•	
\$	-	Ready for final payment (days or date):
[Increase] [Decrease] of this Change Order:		[Increase] [Decrease] of this Change Orc	
\$	-	Ready for final payment (days or date):
Contract Price incorporating this Change Order:		Contract Times with all approved Chang Substantial completion (days or date):	
\$	-	Ready for final payment (days or date):
RECOMMENDED:	ACCEPTED:	AG	CCEPTED:
Ву:	Ву:	Ву	
Engineer (Authorized Signature)	•	Owner (Authorized Signature)	Contractor (Authorized Signature)
Date: Approved by Funding Agency (if applicable):	Date:		ite:ite:

Change Order Instructions

A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or Contract Times, a Field Order should be used.

B. COMPLETING THE CHANGE ORDER FORM

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.

CONTRACTOR'S PAYMENT APPLICATION CHECKLIST

THE CONTRACTOR MUST COMPLETE THIS CHECKLIST AND SUBMIT IT TO THE ENGINEER WITH ITS PAYMENT APPLICATION AND ALL REQUIRED DOCUMENTATION. SEE SUBPARAGRAPH 14.02 OF THE GENERAL CONDITIONS FOR THE PROJECT.

Name:		Title:	
Office Teleph	none No.: ()		
Payment App	lication Number and Date:		
No		Date:	, 2020
	or certifies that it has submitted the do nnot do so, the Contractor should exp		
1	Five (5) copies of a properly con completed and executed Schedu		pplication for Payment with a properly each;
.2	Current list of the Contractor's sul amount paid, and amount due;	ocontractors and supplie	ers showing their respective contract sums
3	Contractor's Affidavit of Paymen	t of Debts and Claims;	
.4		s and suppliers current t	ses in a format approved by the Owner hrough the date of the Contractor's
5	Schedule of all materials and eq	uipment stored on-site;	
6	For materials and equipment stor	ed off-site:	
	with the Project (which s	hall be clearly identified invoices and reasons wh	and stored off-site in connection d), giving the place of storage, y the materials and equipment
	Certification that all iter they will not be used fo		or delivery to the Project and that
		hat payment to the Con	empany indicating agreement to tractor shall not relieve either Y;
	Evidence of adequate in which shall name the Ov		aterial and equipment in storage, ed;
	found that all the mater represented to be store	ials and equipment set t d off-site are stored at r to inspect material and	actor's place of storage and forth in the payment request and the place of storage (any costs d equipment in off-site storage
	Itemization of the mater on previous Pay Applica		their cost, which were approved in off-site storage.
.7	Contractor's and subcontractors of	affidavits of compliance	with Prevailing Wage Obligations.

	8.	Other documentation/infor	mation required by the Engineer or Owner.	
	Reason why re	quired documentation is not sul	bmitted:	
TE:		ubmit required documentation, al payment, and/or late payn	, regardless of the reason, may result in non- nent.	
			Signature	-
			Signature	
			Printed Name	-
			Date	-
INE	ER'S REVIEW			
_	Checklist and d	locumentation complete.		
_	Checklist and d	locumentation incomplete.		
			Signature	-
				-
			Printed Name	_
			Date	

			Contro	ıctor's Applic	cation For Payment	No.
		Application Period:			Application Date:	
To (Owner): Zanesville – Muskingum County Port Authority		ority From (Contractor):			Via (Engineer)	
Project: Industrial Drive - P	ublic Infrastructure	Contract:				
Owner's Contract No.:		Contractor's Project N	lo.:		Engineer's Project No.: ZAN012	
APPLICATION FOR PAYME	NT Change Order Summary					
Approved Change Orders			1. ORIGINAL CONTRA	CT PRICE	\$	
Number	Additions	Deductions				
			3. CURRENT CONTRA	CT PRICE (Line 1 ± 2)	\$	
			4. TOTAL COMPLETED	AND STORED TO DATE		
			(Column F on Progr	ess Estimate)	\$	
			5. RETAINAGE:			
			a % x \$	Work Com	pleted\$	
					terial \$	
			l l		\$	
			l l		\$	
TOTALS					Application)\$	
					\$	
NET CHANGE BY			9. BALANCE TO FINIS			
CHANGE ORDERS			(Column G on Prog	ress Estimate + Line 5 above	e)\$	
CONTRACTOR'S CERTIFICA	ATION					
The undersigned Contractor certifies that: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior			Payment of:	\$(Line 8 or other - atta	ach explanation of other amount)	
Applications for Payment; (2) title Work or otherwise listed in or co			is recommended by:			
time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.					(Engineer)	(Date)
			Payment of:	\$(Line 8 or other - atta	ach explanation of other amount)	
			is approved by:			
					(Owner)	(Date)
Ву:	Da	te:	Approved by:			
				Fundi	ng Agency (if applicable)	(Date)

Progress Estimate

Contractor's Application

For (contract):					Application Number:					
Application Period:				Application Date:						
	A	B Work Comple		pleted	E	F		G		
Specification Section No.	ltem Description	Scheduled Value	C From Previous Application (C + D)	D This Period	Materials Presently Stored (not in C or D)	Total Completed and Stored to Date (C + D + E)	% (<u>F</u>) B	Balance to Finish (B - F)		
	Totals									

Progress Estimate

Contractor's Application

For (contract):	or (contract):						Application Number:				
Application Period	Ŀ				Applica	tion Date:					
	A			В	С	D	Е	F	F		
Bid Item No.	Item Description	Bid Quantity	Unit Price	Bid Value	Estimated Quantity Installed	Value	Materials Presently Stored (not in C)	Total Completed and Stored to Date (D + E)	% (<u>F</u>) B	Balance to Finish (B - F)	
										ı	
										1	
										1	
										ı	
										1	
										1	
										1	
										ı	
										ı	
										1	
										ı	
										1	
	Totals										

Stored Material Summary

Contractor's Application

For (contract):	:				Application N	umber:			
Application Po	eriod:				Application De	ate:			
Α	В	С	D			E	F		G
<u> </u>	Shop Drawing		Stored Previou	ısly		his Month	Incorporated	in Work	
Invoice No.	Transmittal No.	Materials Description		Amount (\$)	Amount (\$)	Subtotal	Date (Month/Year)	Amount (\$)	Materials Remaining in Storage (\$) (D + E - F)
		Totals							



STATE OF OHIO DEPARTMENT OF TAXATION CONSTRUCTION CONTRACT EXEMPTION CERTIFICATE

Identification of Contract:

callon of Confract:	
Contractee's (Owner's) name Zanesvil	le – Muskingum County Port Authority
Exact location of job/project	
Name of job/project as it appears on contract documentation I	ndustrial Drive – Public Infrastructure
dersigned hereby certifies that the tangible sed for incorporation into:	personal property purchased under this exemption certificate was
real property under a construction contraction on Ohio political subdivision.	et with the United States government, its agencies, the State of Ohio. or
	ccepted for ownership at the time of completion, by the United States o, or an Ohio political subdivision.
a house of public worship or religious edu	cation.
•	purposes by a nonprofit organization operated exclusively for charitable (12) of the Revised Code.
the original construction of a sports facility	under section 307.696 of the Revised Code.
a hospital facility entitled to exemption ur	nder section 140.08 of the Revised Code.
prime contractor. Copies must be mainta	the owner/contractee and/or government official and must be retained ined by the owner/contractee and all subcontractors. When copies are ach copy must be signed by the contractor or subcontractor making the
Prime Contractor	Owner/Contractee
Name	Name <u>Zanesville – Muskingum County Port Authroity</u>
Signed by	Signed by
Title	Title:
Address	Address: 250 North Fifth Street
City, State, Zip	City, State, Zip: Zanesville, OH 43701
Date	Date
Subcontractor	Political Subdivision
Name	Name
Signed by	
Title	Title
Address	
Date	Date
	Contractee's (Owner's) nameZanesvil Exact location of job/project



Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

	Name (as shown on your income tax return)								
ge 2.	Business name/disregarded entity name, if different from above	Business name/disregarded entity name, if different from above							
Print or type See Specific Instructions on page	Check appropriate box for federal tax classification: ☐ Individual/sole proprietor ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate ☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶								
Print or type	☐ Other (see instructions) ►								
cifi	Address (number, street, and apt. or suite no.)	equester's name and address (optional)							
See Sp.	City, state, and ZIP code								
	List account number(s) here (optional)								
Pa	art I Taxpayer Identification Number (TIN)								
	er your TIN in the appropriate box. The TIN provided must match the name given on the "Name" lii								
resic entit	void backup withholding. For individuals, this is your social security number (SSN). However, for a dent alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other ies, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a</i> on page 3.								
	e. If the account is in more than one name, see the chart on page 4 for guidelines on whose	Employer identification number							
	ber to enter.	-							
Pa	rt II Certification								
Und	er penalties of perjury, I certify that:								
1. T	he number shown on this form is my correct taxpayer identification number (or I am waiting for a	number to be issued to me), and							
S	am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or o longer subject to backup withholding, and								
3. I	am a U.S. citizen or other U.S. person (defined below).								
beca inter gene	tification instructions. You must cross out item 2 above if you have been notified by the IRS that ause you have failed to report all interest and dividends on your tax return. For real estate transact rest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to erally, payments other than interest and dividends, you are not required to sign the certification, but ructions on page 4.	ions, item 2 does not apply. For mortgage in individual retirement arrangement (IRA), and							

General Instructions

Signature of

U.S. person ▶

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

Sign

Here

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
 - 2. Certify that you are not subject to backup withholding, or
- 3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States,
- An estate (other than a foreign estate), or

Date ▶

• A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership income.

Form **W-9** (Rev. 12-2011)

	Certif	icate of Substantial Completion
Project: Industrial Drive Public Infrastructure	Owner: Zanesville – Muskingum County Port Authority	Owner's Contract No.:
Contract:		Date of Contract:
Contractor:		Engineer's Project No.: ZAN012
This [tentative] [definitive] Certificate of Substantial All Work under the Contract Documents:	Completion applies to: The following specified	portions:
	_	Date of Substantial Completion
complete. The Date of Substantial Completion of the lapplicable warranties required by the Contract Docum. A [tentative] [revised tentative] [definitive] list of item.	spected by authorized representatives of Owner, Control Project or portion thereof designated above is hereby denents, except as stated below. In the completed or corrected, is attached hereto. This sibility of the Contractor to complete all Work in accorded	eclared and is also the date of commencement of
The responsibilities between OWNER and CONTRA as provided in the Contract Documents except as an	CTOR for security, operation, safety, maintenance, he nended as follows:	at, utilities, insurance and warranties shall be
Amended Responsibilities	Not Amended	
Owner's Amended Responsibilities:		
Contractor's Amended Responsibilities:		
The following documents are attached to and made po	art of this Certificate:	
This Certificate does not constitute an acceptance of V complete the Work in accordance with the Contract Do	Vork not in accordance with the Contract Documents nor is ocuments.	s it a release of Contractor's obligation to
Execu	ted by Engineer	Date
Accep	ted by Contractor	Date
Accep	ted by Owner	Date

CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

PROJEC	T: Indust	rial Drive and Public Infrastructure	CONTRACT F	OR: [insert]
CONTRA	ACT DATE	ES: [insert]		
TO OW	NER:	Zanesville – Muskingum County Port Authority 250 North Fifth Street Zanesville, OH 43701		
STATE C		: : SS		
otherwis known ir	e been s ndebtedn ontract re	hereby certifies that, except as listed below, p atisfied for all materials and equipment furnish ess and claims against the Contractor for dame eferenced above for which the Owner or Owne	ed, for all wo iges arising ir	rk, labor, and services performed, and for all any manner in connection with the performance
EXCEPTI	ONS:			
	SUPPOR	RTING DOCUMENTS ATTACHED HERETO:	CONTRACTO	OR: [insert name and address]
	1. Whenev	Consent of Surety to Final Payment. ver Surety is involved, Consent of Surety is d.		
	Indicate	Attachment □ Yes □ No		
		owing supporting documents should be d hereto if required by the Owner:	BY: (Sig	nature of authorized representative) C
	1.	Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.	_	(Printed name and title)
	2.	Separate Releases or Waivers of Liens	Subscribed ar	nd sworn to before me on this date:
	from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.			
	3.	Contractor's Affidavit of Release of Lien	Notary Public My Commissio	

CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

PROJECT: Indus	strial Drive and Public Infrastructure		CONTRACT FOR: [insert]		
CONTRACT DA	TED: [insert]				
TO OWNER:	Zanesville – Muskingum County Port 250 North Fifth Street Zanesville, OH 43701	t Authority			
STATE OF	: SS				
below, the Rele and equipment,	ases or Waivers of Lien attached here and all performers of Work, labor or ncumbrances against any property of	eto include services v	gned's knowledge, information and belief, except as listed the Contractor, all Subcontractors, all suppliers of materials who have or may have liens or encumbrances or the right to r arising in any manner out of the performance of the Contract		
EXCEPTIONS:					
SUPPORTING D	OCUMENTS ATTACHED HERETO:	CONTR	ACTOR: [insert name and address]		
	actor's Release or Waiver of Liens, upon receipt of final payment.				
from Subco equipment	ate Releases or Waivers of Liens ontractors and material and suppliers, to the extent required by a companied by a list thereof.	BY:	(Signature of authorized representative)		
			(Printed name and title)		
S		Subscrib	ed and sworn to before me on this date:		
		Notary F My Com	Public: mission Expires:		

STATEMENT OF CLAIM FORM

Claim No. ___ for Contractor

1.	Name of Contractor:	·					
2.	Date written claim given:						
3.	Contractor's representative to contact regarding the claim:						
	Name:	Title:					
	Telephone No (office)	FAX No					
	E-mail:						
4.	General description of claim:						
		any part or provision in the Contract Documents, including but not e Specifications, Owner-Contractor Agreement, General Conditions e upon which parts or provisions the claim is based:					
6.	Delay claims:						
	6.1 Date delay commenced:						
	6.4 Expected impact of the delay and recommend	dations for minimizing such impact:					
7. with re	Additional compensation. Set forth in detail all ad espect to this claim:	Iditional compensation to which the Contractor believes it is entitled					
Contro or fro	ugh review and to the best of his or her knowledge are actor is entitled to recover the compensation in paragradulent claim. The Contractor by its authorized reply public. CONTRACTOR By:	ntractor and its representative certify that after conscientious and had belief a) the information in this State of Claim is accurate, b) the graph 7, and c) the Contractor has not knowingly presented a false presentative must acknowledge this Statement of Claim before a					
	Name and lift Date:	le:					

INSTRUCTIONS FOR COMPLETING THE STATEMENT OF CLAIM FORM

- 1. Completing the Statement of Claim Form ("Claim Form") is a material term of the Contract. The Claim Form tells the Owner and Engineer that the Contractor is making a Claim and that they need to act promptly to mitigate the effects of the occurrence giving rise to the Claim. The Claim Form also provides them with information so that they can mitigate such effects. The Contractor acknowledges that constructive knowledge of the conditions giving rise to the Claim through job meetings, correspondence, site observations, etc. is inadequate notice, because knowledge of these conditions does not tell the Owner and Engineer that the Contractor will be making a Claim and most often is incomplete.
- 2. The Contractor must provide preliminary information in all blanks in the Claim Form, except for paragraph 7, within the ten (10) day period required by the Contract Documents. After providing the preliminary information, the Contractor must supplement the Claim Form with complete and detailed information within thirty (30) days of submitting the Claim Form. If the space provided in the Claim Form is insufficient, the Contractor, as necessary to provide complete and detailed information, must attach pages with the required information to the Claim Form.
- 3. Paragraph 4. The Contractor must state what it wants, i.e., time and/or compensation, and the reason why it is entitled to time and/or compensation.
- 4. Paragraph 5. The Contractor must identify the exact provisions of the Contract Documents it is relying on in making its Claim. For example, if the Claim is for a change in the scope of the Contractor's Work, the Contractor must identify the specific provisions of the Specifications, and the Plan sheets and details that provide the basis for the scope change.
- 5. Paragraph 6. This paragraph applies to delay claims, including delays that the Contractor believes result in constructive acceleration. The Contractor must identify the cause of the delay, party or parties responsible, and what the party did or did not do that caused the delay, i.e., specific work activities. The Contractor acknowledges that general statements are not sufficient, and do not provide the Owner with sufficient information to exercise the remedies available to the Owner or to mitigate the effects of the delay.
 - For example, if the Contractor claims a slow response time on submittals caused a delay, the Contractor must identify the specific submittals, all relevant dates, and then show on the applicable schedule, by circling or highlighting, the activities immediately affected by the delays. Also for example, if the Contractor claims it was delayed by another Contractor, the Contractor must identify the delaying Contractor, specifically what the delaying Contractor did or did not do that caused the delay, and then show on the applicable schedule, by circling or highlighting, the activities immediately affected by the delays. Further by example, if the Contractor seeks an extension of time for unusually severe weather, the Contractor must submit comparative weather data along with a record of the actual weather at the job site and job site conditions.
- 6. Paragraph 6.4. Time is of the essence under the Contract Documents. If there is a delay, it is important to know what can be done to minimize the impact of the delay. It therefore is important that the Contractor provide specific recommendations on how to do so.
- 7. Paragraph 7. The Contractor must provide a specific and detailed breakdown of the additional compensation it seeks to recover. For future compensation, the Contractor shall provide its best estimate of such compensation.
- 8. Paragraph 8 and Acknowledgment. In completing the Claim Form, the Contractor and its representative certify that after conscientious and thorough review and to the best of its knowledge and belief (a) the information in this Claim Form is accurate, (b) the Contractor is entitled to recover the compensation in Paragraph 7, and (c) the Contractor has not knowingly presented a false or fraudulent claim. The Contractor by its authorized representative must acknowledge this Statement of Claim before a notary public at the time of the preliminary submission and also when making the supplemental submission.

End of Instructions

CONTRACTOR'S ACKNOWLEDGMENT

State of Ohio	
County of, ss:	
first	being sworn, states that after conscientious and thorough review the
statements made in attached Statement of Claim	Form are true to the best of his or her knowledge and belief.
Sworn to before me a notary public by	on , 201 .
Sworn to before the a florary public by	
	No. D. H.
	Notary Public

WHEN COMPLETED, FORWARD A COPY OF THIS NOTICE AND STATEMENT OF CLAIM FORM TO THE OWNER AND ENGINEER AS DESCRIBED IN THE INSTRUCTIONS FOR COMPLETING THE NOTICE AND STATEMENT OF CLAIM FORM.