



Bid Submittal and Contract Document for the

City of Dublin

Dublin Road Multi-Use Path

Hertford Lane to Rings Road



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I. BIDDING REQUIREMENTS

A. INVITATION FOR BIDS

The CITY OF DUBLIN, Ohio will receive sealed bids for the materials and labor necessary for the construction of the DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD PROJECT. Bids shall be received by CITY OF DUBLIN at 5800 Shier-Rings Road, Dublin, Ohio 43016 until 11:00 A.M. local time on Tuesday, March 26, 2013, at which time all bids will be opened and read aloud.

The CITY OF DUBLIN may choose to not award the bid—and bidders shall hold bids open—until sixty days after the bid opening. The work for which bids are invited consists of:

Approximately 1,230 ft of 8-ft wide asphalt multi-use path; concrete ramps; stone walls and pre-fabricated pedestrian bridge.

The cost estimate for the Project is \$320,000.00.

Copies of the Contract Documents are on file at 5800 Shier-Rings Road, Dublin, Ohio 43016, where they are available for inspection by prospective **ODOT pre-qualified** bidders. Paper copies of the Contract Documents are available for a NONREFUNDABLE charge of \$75.00 during business hours at the same address. Please make any check payable to the CITY OF DUBLIN.

Each bidder is required to furnish with its proposal a Bid Guaranty in accordance with Section 153.54 of the Ohio Revised Code. Bid security furnished in Bond form shall be issued by a surety company or corporation licensed in the State of Ohio to provide said surety.

Each proposal must contain the full name of the party or parties submitting the proposal and all persons interested therein. Each bidder must submit evidence of its experience on projects of similar size and complexity. The owner intends and requires that this project be completed by August 16, 2013.

All contractors and subcontractors involved with the project will to the extent practicable use Ohio products, materials, services and labor in the implementation of their project. **Payment of Prevailing Wages IS required for this Project.**

The CITY OF DUBLIN reserves the right to accept or reject any or all bids, to waive any informalities or irregularities in the bidding process and to enter into a contract with the bidder whom, in its opinion, offers the lowest and best bid.

Each bidder must ensure that all employees and applicants for employment are not discriminated against based on race, color, religion, sex, or national origin.

By order of the Council of the CITY OF DUBLIN, Ohio. Ordinance number N/A.

Publish dates: Tuesday, March 12, 2013
 Tuesday, March 19, 2013

B. INSTRUCTIONS TO BIDDERS

1. PRELIMINARY MATTERS

- a. The Project owner is the CITY OF DUBLIN, Ohio. The Owner's Representative is Paul A. Hammersmith P.E., Director of Engineering / City Engineer. Telephone: 614-410-4621 and 614-410-4631; Email: msweder@dublin.oh.us and krichardson@dublin.oh.us.
- b. In connection with the Legal Notice, the CITY OF DUBLIN (hereinafter called the "City"), issues this Request for Bids for all labor, material, and services necessary for constructing the DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD PROJECT (the "Project"), as more fully described in the Contract Documents.
- c. Definitions. The word uses here shall have the following meanings:
 - i. "City" or "Owner" shall mean the CITY OF DUBLIN, Ohio.
 - ii. "Bidder" or "Contractor" shall all mean an entity or person that submits a bid for the Project and ultimately the entity or person awarded the contract as applicable.
 - iii. "Contract Documents" shall mean the documents included with this bid solicitation and listed as Contract Documents in the City/Contractor Agreement.
 - iv. "O.R.C." shall mean the OHIO REVISED CODE.
- d. The Project consists of the following contract(s) for the work on the Project:
 - i. General Contract
- e. Estimate of Cost [O.R.C. 153.12(A)].
 - i. The total estimated construction cost for the base bid Work for the Project for which the City is soliciting bids at this time is \$320,000.00.

2. CONTRACTOR QUALIFICATIONS, REGISTERED CONTRACTORS, INCOME TAX, PERMITTING

- a. A Bidder may be a person, private entity, or any combination of such entities supported by a letter of intent to enter into an agreement or under an existing agreement in association in the form of a joint venture or other consortium. In the case of a joint venture or other consortium:
 - i. All members shall be jointly and severally liable for the execution of the Contract, and
 - ii. The association shall nominate a representative who shall have the authority to conduct all business for and on behalf of any and all the members of the joint venture or the consortium during the bidding process and, in the event the joint venture or consortium is awarded the Contract, during Contract execution.
- b. Threshold Qualifications. Every Contractor, before entering a contract with the City, must demonstrate the following:
 - i. Registered Contractors. Any person or company (including subcontractors) intending to do work under these Contract Documents shall be required to meet

the CITY OF DUBLIN laws for Contractor Registration, if any, contained in the Codified Ordinances of the CITY OF DUBLIN as applicable to the particular classification of work to be performed.

- ii. Licensed Contractors. Bidders and subcontractors for work requiring licenses under the O.R.C. shall submit evidence of such licensing in accordance with O.R.C. Chapter 4740.
 - iii. Foreign Corporations. Business entities formed outside of the state of Ohio shall present proof of registry with the Ohio Secretary of State and demonstrate the existence of an Ohio statutory agent.
- c. Income Taxes. All persons or entities performing work under these Contract Documents shall comply with the requirements set forth in the Codified Ordinances of the CITY OF DUBLIN.
- d. Permits and Regulations - Unless otherwise previously or subsequently specified, the Contractor shall procure and pay for all permits, licenses, inspections and approvals necessary for the execution of his contract. The City will obtain the required building permit for permanent structure.
- i. The Contractor shall comply with all laws, ordinances, rules, orders and regulations relating to the performance of the work required to complete the Project.
 - ii. The Contractor's attention is directed to the "Safety and Health Regulations for Construction" of the Occupational Safety and Health Administration, U.S. Department of Labor and to its responsibilities thereunder.

3. GENERAL INSTRUCTIONS

- a. City expects the Bidder to examine all instructions, forms, terms, and specifications in the Request for Bids. Each Bidder is solely responsible for conducting its own due diligence and investigation in support of the preparation of Bids, negotiation of agreements, and the subsequent delivery of all services it will provide. Bidder's failure to furnish all information or documentation required by the Bidding Documents may result in the City rejecting the Bid.
- b. Public Information. The City considers all information, documentation and other materials requested to be submitted in response to this solicitation to be a non-confidential and/or non-proprietary nature and therefore subject to public disclosure under the Ohio Public Records Laws except as specifically exempted by those laws. [O.R.C. Chapter 149].
- c. Bidder should carefully read the information contained herein. It is the Bidder's responsibility to submit a complete response to all requirements and questions. Any information submitted by Bidders shall become the property of the City and submitted at the Bidder's sole expense. The City shall not pay any stipend for any submissions related to the bidding process. The City will not provide compensation to Bidders for any expenses incurred for Bid preparation or for any presentations made.

- d. The City may disqualify bids that are qualified with conditional clauses, or alterations, or items not called for in the bid documents, or irregularities and deviations from the requirements of the Contract Documents.
- e. The City makes no guarantee that an award will be made because of this bid, and reserves the right to accept or reject any or all bids, waive any formalities or minor technical inconsistencies, or delete any item/requirements from this bid or resulting contract when deemed to be in the City's best interest.

4. INTERPRETATION

- a. If a Bidder contemplating submitting a Bid for the proposed Project is in doubt as to the true meaning of any part of the Contract Documents, it may **submit a written request for an interpretation thereof to Mike Sweder P.E. and Ken Richardson P.E.,P.S. ,** in writing on the form included with the Contract Documents. Inquiries **shall be faxed to 614-410-4699 to the attention of Mike Sweder P.E. and Ken Richardson P.E.,P.S. .** The City will make any interpretation of the proposed documents by Addendum only, duly signed by the City, and a copy of such Addendum will be mailed or delivered to each Bidder receiving a set of Contract Documents and each plan room where the City maintains the Contract Documents. The City will not be responsible for any other explanation or interpretation of the proposed documents.
- b. In interpreting the Contract Documents, the Bidder shall interpret words describing materials that have a well-known technical or trade meaning, unless otherwise specifically defined in the Contract Documents, in accordance with the well-known meaning recognized by the trade.

5. CONTRACT DOCUMENTS

- a. The Contract Documents consist of the documents listed in the City/Contractor Agreement and included with these Bid Submittal and Contract Documents for the Project. Bidders shall use complete sets of the Contract Documents in preparing Bids. The City assumes no responsibility for errors or misinterpretations resulting from the use of incomplete sets of Contract Documents. The City, in making the Contract Documents available on the above terms, does so only for obtaining Bids on the Work and does not confer a license or grant for any other use.
- b. The Construction and Material Specifications for this Project shall be the CITY OF DUBLIN Division 100 and the current version of the Columbus Specification CMS, excluding Columbus Specification's Division 100—all of which are incorporated into and made part of the Contract Documents for this Project.

6. DOCUMENTS TO SUBMIT WITH BID

- a. The Bidder shall submit the following completed forms with its response to this Request for Bids:
 - i. Bid Form
 - ii. Bid Guaranty and Contract Bond
 - iii. Affidavit of Authority (if applicable)

- iv. Personal Property Tax Affidavit
 - v. Bidder's Qualification Statement
 - vi. Insurance Certificate
 - vii. Noncollusion affidavit
 - viii. State of Ohio Bureau of Workers' Compensation Certificate
 - ix. Proposed Supervisory Personnel List
 - x. Proposed Subcontractor List
 - xi. Bidder's and Subcontractors' Certificate(s) of licensure, if applicable
- b. In addition to the foregoing requirements, Bids submitted by a joint venture or other consortium shall include a copy of the joint venture/consortium agreement entered into by all members. Alternatively, a binding letter of intent or similar irrevocable instrument to execute a joint venture/consortium agreement in the event of a successful Bid shall be signed by all members and submitted with the Bid, together with a copy of the proposed joint venture/consortium agreement.
- c. Each Bidder shall submit the following number of copies of its Bid to the City: 3 and one additional copy in electronic PDF form. The PDF form must exactly match the hard copy and must be provided within 24 hours after the Bid opening. 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 shall sign its Bid in the form required under Ohio law to bind the Bidder's particular type of business entity to a contract.
- d. Each Bid shall be enclosed and delivered 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: **ATTN: Paul A. Hammersmith P.E., Director of Engineering / City Engineer, 5800 Shier-Rings Road, Dublin, Ohio 43016.** The Bidder shall be responsible for delivering its Bid to this office and address for the Bid opening before the deadline set forth in the Legal Notice—as extended by any addenda. The City will not open Bids that arrive after the deadline regardless of how the Bidder delivers the Bid.
- e. After the City opens the Bids, it may require the Bidders to submit additional financial information. The City shall keep additional financial information it receives pursuant to a request under this paragraph confidential to the extent possible, except under proper order of a court. The additional financial information should not be a public record under section 149.43 of the Revised Code. (See O.R.C. 9.312).

7. CLARIFICATION OF BIDS

- a. To assist in the examination, evaluation, and comparison of the Bids and the qualifications of the Bidders, the City may ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder that is not in response to a request by the City shall not be considered. The City's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the City in the evaluation of the Bids.

8. BONDS

- a. Bid, Payment, and Performance Security. Each bidder shall submit one of the statutorily required forms of bid security as set forth in O.R.C. Section 153.54 and the winning bidder must also submit Payment and Performance bonds as required by the O.R.C. and on the forms included with the Contract Documents. There are two ways to meet these requirements:
 - i. **OPTION #1:** Submit the Combined Bid/Performance/Payment Bond on the form included with the Contract Documents along with the Bid; or,
 - ii. **OPTION #2:** Submit a certified check, cashier's check, or letter of credit pursuant to Chapter 1305 of the Revised Code, conditioned to provide that if the bid is accepted, the bidder, after the awarding or the recommendation for the award of the contract, whichever the contracting authority designates, will enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material. Any letter of credit shall be revocable only at the option of the City. The amount of the certified check, cashier's check, or letter of credit shall be equal to ten per cent of the bid. Any of the foregoing instruments shall be submitted with the CITY OF DUBLIN listed as the payee or beneficiary. If the Bidder chooses option ii and is awarded the Contract, the Bidder shall then submit a Payment and Performance Bond using the form included with the Contract Documents.
- b. With any Bond required here, the Bidder shall submit or ensure:
 - i. *Ohio Department of Insurance Certificate.* Proof that the bond is 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 City in the form of a certificate.
 - ii. *A Financial Statement.* Proof that the bond is 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-" better and has or exceeds the Best Financial Size Category of Class VI. Other Sureties may be acceptable to the City, in its sole discretion.
 - iii. *Proper signatures, credentials, and Power of Attorney.* The bond shall be signed by an authorized agent of an acceptable Surety and by the Bidder; and, include credentials showing the Power of Attorney of the agent.
 - iv. The name, address, and telephone and fax numbers of the Surety and the Surety's Agent should be typed or printed on each bond.

9. EXECUTION OF CONTRACT

- a. Within 10 days after award of the Contract, the successful Bidder shall execute and deliver to the City an original of the City/Contractor Agreement, based upon the City's form. Such contract shall include the terms required by Ohio law and documents

required by the Instructions to Bidders and Contract Documents for the Project. The successful Bidder shall have no property interest or rights under the City/Contractor Agreement until the Agreement is properly executed by the City.

10. STATE SALES AND USE TAXES

- a. The City 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 Ohio Department of Taxation Demolition Contract Exemption Certificate to the vendors or suppliers when acquiring the materials. The City will execute properly completed certificates on request.

11. DATE FOR SUBSTANTIAL COMPLETION/LIQUIDATED DAMAGES

- a. Date for Substantial Completion. Each successful Bidder shall have its Work on the Project Substantially Complete (as Substantial Completion is defined in the Contract Documents) as follows: **August 16, 2013**. The Contract Time shall run from the date of the Notice to Proceed or if there is no Notice to Proceed from the Effective Date of the City/Contractor Agreement. The Date for Substantial Completion and the Contract Time may be extended only as set forth in the Contract Documents. By submitting its Bid, each Bidder agrees that the period for performing its Work is reasonable.
- b. Liquidated Damages. If the successful Bidder does not have its Work Substantially Complete by its Date for Substantial Completion, the successful Bidder shall pay the City and the City may set off from amounts otherwise due the successful Bidder any Liquidated Damages. The daily amounts of Liquidated Damages are set forth in the Contract Documents. The total amounts of Liquidated Damages will be calculated based on the total number of calendar days beyond the Date for Substantial Completion that the Bidder's Work is not Substantially Complete. In addition to such Liquidated Damages, the Bidder shall indemnify, defend, and hold the City and its employees and agents harmless from any and all claims, whether or not such claims are proven, and from all costs and expenses incurred as a result of such claims, including but not limited to attorneys' and experts' fees and expenses, and additional inspection costs that arise out of or are related to the Bidder's failure to Substantially Complete its Work by its Date for Substantial Completion. The Bidder's obligations under this Section are joint and several.

12. MODIFICATION/WITHDRAWAL OF BIDS

- a. Modification. A Bidder may modify its Bid by written communication to the City addressed to the City's Representative at any time before the scheduled closing time for receipt of Bids, provided such written communication is received by City's Representative before 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 to the City until the sealed Bid is opened. If the Bidder's written instructions with the change in Bid reveal the Bid amount in any way before the Bid opening, the Bid may be rejected as non-responsive.

- b. Withdrawal. Bids may be withdrawn with permission of the City or in strict accordance with O.R.C. Section 9.31 which generally commands that Bidders may withdraw their bids from consideration if the price of the bid was substantially lower than the other bids, providing the bid was submitted in good faith, and the reason for the price bid being substantially lower was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor, or material made directly in the compilation of the bid. Notice of a claim of right to withdraw such bid must be made in writing filed with the City within two business days after the conclusion of the bid opening procedure.

13. PREVAILING WAGES

- a. This Project is horizontal construction with an estimated cost of **\$320,000.00**, and the **Bidder IS required to comply with all applicable Ohio Prevailing Wage requirements and labor laws for this Project.**
- b. If Prevailing Wage applies to this Project, the determination of the prevailing rates of wages of mechanics and laborers in accordance with section 4115.05 of the Revised Code for the class of work called for by the Project, in the locality where the work is to be performed, shall be attached to and made part of the Contract Documents.
- c. If Prevailing Wage applies to this Project, the Contractor must pay at least the wage rates subsequently listed in the Wage determinations. The Contractor must submit properly executed copies of the Contractor's and subcontractor's payrolls to the City's Prevailing Wage Coordinator in accordance with the requirements of Section 4115.071 of the O.R.C.. Payroll records shall be kept current as failure to do so will delay the Owner's approval for payment of any pending estimates.

14. ALTERNATES

- a. The City may request bids on alternates. If the City 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 City 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 City 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.
- 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 City may include alternates, which may include deduct alternates as well as add alternates, to give it flexibility to build the Project with the funds 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 City will not make a decision about the alternates on which to base the award of contracts until the bids are received, and the City 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 Bidder submitting the lowest and best bid will be based on the lowest and best base bid plus selected alternates, and may result in an award to a Bidder other than the Bidder that submitted the lowest base bid. The bidder also acknowledges that its, and other bidders', bids may become responsive or non-responsive based on whether the bidders bid and are qualified for all base work and alternates; and, the City's selection of alternates. The City will evaluate bids to determine the lowest and best bid after it selects the alternates.

- d. If, during the progress of the Work, the City desires to reinstate any alternate not included in the Contract, the City reserves the right to reinstate the alternate at the price bid by the Contractor if 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

- a. Where unit prices are requested in the Bid Form, the Bidder should quote a unit price. Unless otherwise expressly provided in the Bid 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 City/Contractor Agreement, unless the Design Professional determines that the use of such unit prices will cause substantial inequity to either the Contractor or the City.
- b. The estimated quantities shown herein are approximate only and the City assumes no responsibility for the accuracy of the estimates. Bidders are cautioned to make their own investigations and determinations of the conditions under which the work will be performed and to base their bids accordingly.

16. ADDENDA

- a. The City reserves the right to issue Addenda changing, altering, or supplementing the Contract Documents before the time set for receiving bids. The City will issue the Addenda to clarify bidders' questions and/or 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. Any explanations, interpretations, or other representations made by any other means shall not be legally binding. All Addenda shall become a part of the Contract Documents.
- c. Bidders shall submit written questions to the City in sufficient time in advance of the bid opening to allow sufficient time for the City to respond. All Addenda will be issued, except as hereafter provided, and mailed or otherwise furnished to persons who have obtained Contract Documents for the Project, before the published time for the opening of bids.
- d. Copies of each Addendum will be sent only to the Bidders to whom Contract Documents have been issued and to Plan Rooms where copies of the Contract Documents are maintained. 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 City before the bid opening to verify the number of Addenda issued.

- e. Each Bidder shall carefully read and review the Contract Documents and immediately bring to the attention of the City any error, omission, inconsistency, or ambiguity therein.
- f. If a Bidder fails to indicate receipt of all Addenda through the last Addendum issued by the Design Professional on its Bid Form, the bid of such Bidder will be deemed to be responsive only if:
 - i. 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
 - ii. The Addendum involves only a matter of form or is one that has either no effect or has merely a trivial or negligible effect on price, quantity, quality, or delivery of the item bid upon.

17. PREFERENCE FOR PUBLIC IMPROVEMENT CONTRACTS (As Selected)

- a. With respect to the award of this Contract, the City shall give preference to a contractor having its principal place of business in Ohio over a contractor having its principal place of business in a state that provides a preference in favor of contractors of that state for the same type of work. Where a preference is provided by another state for contractors of that state, a contractor having its principal place of business in Ohio is to be granted by the City the same preference over them in the same manner and on the same basis and to the same extent as the preference is granted in letting contracts for the same type of work by the other state. If one party to a joint venture is a contractor having its principal place of business in Ohio, the joint venture shall be considered as having its principal place of business in Ohio.
- b. With respect to the award of this Contract, the City shall not give preference to a contractor having its principal place of business in Ohio over other contractors.

18. METHOD OF AWARD

- a. In evaluating Bids, the City may conduct such investigations as are deemed necessary to establish the qualifications and financial ability of the Bidder and its subcontractors and suppliers. The Bidder authorizes the City and its representatives to contact the owners, design professionals, and others having knowledge (collectively "Contacts") on projects on which the Bidder has worked and authorizes and requests such Contacts to provide the City 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, on its behalf or for its benefit brings an action against any of such Contacts or the employees of any of them as a result of or related to such candid evaluation, the Bidder will indemnify and hold such Contacts and the employees of any of them from any claims whether or not proven that are part of or are related to such action and from all legal fees and expenses incurred by any of them arising out of or related to such legal action. This obligation is expressly intended for the benefit of such Contacts and the employees of each of them.

- b. All Bids shall remain open for acceptance for 60 days following the day of the Bid opening, but the City may, in its sole discretion, release any Bid and return the Bid Guaranty before that date.
- c. The City 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 City to reject any or all Bids or to reject any incomplete or irregular Bid. The City will award a single contract for each of the Bid packages listed above, unless it determines to reject one or more Bid packages. Bidders must furnish all information requested. Failure to do so may result in disqualification of the Bid.
- d. Determination of the Bidder Submitting the Lowest and Best Bid. Subject to the right of the City to reject any or all Bids, the City will award the Contract for the Work to the Bidder submitting the lowest and best Bid, taking into consideration accepted alternates.
 - i. Buy Ohio/American and Ohio Contractor Bid Preference. If selected above, the City shall apply a domestic Ohio bid preference as outlined below.
 - 1. Bids will first be evaluated to determine that a bidder's offering is for a domestic source end product as defined in 41 C.F.R. section 1-6.101(D). Information furnished by the Bidder in its Bid shall be relied upon in making this determination. Any Bidder's offering that does not offer a domestic source end product shall be rejected, except where the City determines that certain articles, materials and supplies are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality.
 - a. Following the determination as to domestic source end products, remaining bids and proposals shall be evaluated as set forth below, so as to give preference to Ohio bids or bidders who are located in a border state, provided that the border state imposes no greater restrictions than contained in this rule.
 - 2. Buy Ohio Act compliance
 - a. Where the preliminary analysis of bids identifies the apparent low bid as an Ohio bid or a bid from a border state, the City shall proceed with its standard contract award practices and procedures as set forth in the Instructions to Bidders.
 - b. Where the preliminary analysis identifies the apparent low bid as one other than an Ohio bid or bid from a border state, the City shall consider the following factors:
 - i. Whether the goods or services can be procured in-state in sufficient and reasonably available quantities and of a satisfactory quality;
 - ii. Whether an Ohio bid has been submitted;

- iii. Whether the lowest Ohio bid, if any, offers a price to the City deemed to be an excessive price (defined as a price that exceeds by more than five per cent the lowest non-Ohio bid submitted);
 - iv. Whether the lowest Ohio bid, if any, offers a disproportionately inferior product or service.
 - c. Where the City determines that selection of the lowest Ohio bid, if any, will not result in an excessive price or disproportionately inferior product or service, the City shall include that Bidder in its lowest and best analysis.
 - d. Where the City otherwise determines it is advantageous to propose the award of a contract to other than an Ohio bidder or bidder from a border state, the City shall include that Bidder in its lowest and best analysis.
 - ii. In addition to the forgoing, City may consider the following criteria in determining the lowest and best bidder; and, in its discretion, may consider and give such weight to these criteria as it deems appropriate:

1. Past Contract Performance

- a. Whether Bidder has failed to perform a contract within the last five years from the date of Bid submission based on all information including fully settled disputes or litigation. A fully settled dispute or litigation is one that has been resolved in accordance with the dispute resolution mechanism under the respective contract, and where all appeal instances available to the Bidder have been exhausted.
- b. Whether Bidder has failed to sign a contract after submitting a bid security in the past five years.
- c. All pending litigation shall in total not represent more than ten percent (10%) of the Bidder's net worth and shall be treated as resolved against the Bidder.
- d. Bidder's history of making claims against others or having claims made against it; and, if the Bidder's management operates or has operated another construction company, the work history of that company in determining whether the Bidder submitted the lowest and best Bid.

2. Financial Ability

- a. The Bidder's financial ability to complete the Contract successfully and on time without resort to its Surety.
- b. Submission of audited financial statements including balance sheets, income statements, and cash flow statements, or other

financial statements acceptable to the City, for the last three years to demonstrate the current soundness of the Bidder's financial position and its prospective long term profitability.

- i. The Bidder's average coefficient of Current ratio (Current Assets/Current Liabilities) compared to 1. The greater, the better.
- ii. The Bidder's average coefficient of Debt ratio (Total Debt/Total Assets) compared to 1. The lesser, the better.

3. Experience

- a. Whether the Bidder has experience under contracts in the role required by this Contract for at least the last five years before the Bid submission deadline, and with activity in at least nine months each year.
 - b. Whether the Bidder has participated as in the role required by this Contract in at least two contracts within the last five years, each with a value of at least 85% of the stated estimate for this Project, that have been successfully and substantially completed and that are similar to the proposed Works. Similarity shall be based on the physical size, complexity, methods, technology or other characteristics as described in the Contract Documents.
 - c. For the above or other contracts executed during the period stipulated in above, whether the Bidder has experience in the following key activities: **ODOT Pre-Qualification for horizontal work listed in scope of project including** asphalt paving; concrete ramps; stone walls and pre-fabricated pedestrian bridge.
 - d. Whether the Bidder has a record of consistent customer satisfaction and of consistent completion of projects, including projects that are comparable to or larger and more complex than the Project, on time and in accordance with the applicable Contract Documents.
 - e. The Bidder's prior experience on other projects with the CITY OF DUBLIN and with other public owners, including the Bidder's demonstrated ability to complete its work on these projects in accordance with the Contract Documents and on time, and will also consider its ability to work with the City as a willing, cooperative, and successful team member.
4. Whether the Bidder possesses or can obtain sufficient equipment and facilities to complete the Project.
 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, rules, and regulations, including but not limited to the Occupational Safety and Health Act, Prevailing Wage laws, and Ethics laws.
 7. The Bidder's participation in a drug-free workplace program acceptable to the City, and the Bidder's record for both resolved and unresolved findings of the Auditor of State for recovery as defined in Section 9.24 of the O.R.C..
 8. The City's prior experience with the Bidder's surety.
 9. The Bidder's interest in the Project as evidenced by its attendance at any pre-Bid meetings or conferences for Bidders.
 10. Depending upon the type of the work, other essential factors, as the City may determine and as are included in the Specifications.
 11. The foregoing information with respect to each of the Subcontractors and Suppliers that the Bidder intends to use on the Project.
- e. With its Bid, the Bidder will complete and submit to the City a completed Contractor's Qualification Statement (using the form included in the Contract Documents), and thereafter will provide the City with such additional information as the City may request regarding the Bidder's qualifications.
 - f. The failure to submit requested information on a timely basis may result in the determination that the Bidder is not the lowest and best Bidder.
 - g. With its Bid, the Bidder shall submit a list of proposed subcontractors using the form included with the Contract Documents. Subcontract work shall not total more than **49%** of the Contractor's Contract with the City.
 - h. The City reserves the right to reject proposed Subcontractors before the Contract is awarded. The Bidder shall replace rejected subcontractors with subcontractors acceptable to the City with no change in the amount of the Bid submitted by the Bidder to City. After approval by the City 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 City. The City reserves the right to reject Subcontractors after the Contract is awarded. In that instance, the City shall only be liable to the Contractor for the difference in Contract Price between the rejected subcontractor and the replacement subcontractor. The Contractor's markup on the replacement subcontractor shall be equal to or less than the markup on the rejected subcontractor contract.
 - i. With its Bid, the Bidder shall submit a list of supervisory personnel with which it intends to staff the Project indicating their respective roles on the Project. The City reserves the right to reject proposed personnel both before and after the Contract is awarded with no additional cost to the City. Once the personnel list is approved by the City, it shall not be changed without the written consent of the City.

- j. No Bidder may withdraw its Bid within sixty (60) days after the date Bids are opened. The City reserves the right to waive any formalities or irregularities or to reject any or all Bids.
- k. The City 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.
- l. By submitting its Bid, the Bidder agrees that the City's determination of which Bidder is the lowest and best Bidder shall be final and conclusive, and that if the Bidder or any person on its behalf challenges such determination in any legal proceeding, the Bidder will indemnify and hold the City and its employees and agents harmless from any claims included or related to such legal proceeding, whether or not proven, and from legal fees and expenses incurred by the City, its employees, or agents that arise out of or are related to such challenge.
- m. Award of Contract. The award and execution of the Contract, when required, will only be made pursuant to the legal process applicable to the City for awarding contracts of this nature.

END OF INSTRUCTIONS TO BIDDERS

C. REQUEST FOR INFORMATION (PRE-BID)

**CITY OF DUBLIN
DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD**

The person, firm, or corporation submitting a request for information shall be responsible for its prompt delivery and do so in a manner that will allow a sufficient period of time for the issuance and delivery of an Addendum before receipt of bids. The CITY OF DUBLIN will not be responsible for any other explanations of the Contract Documents made before the receipt of bids.

Please submit all pre-bid questions in writing by facsimile or electronic mail (Email) to: **Mike Sweder P.E. and Ken Richardson P.E.,P.S. , 614-410-4699**

Company:	Contact Name:
Email:	Phone:
Requested Information:	

D. BID COVERSHEET

BIDDERS SHALL ATTACH THIS FORM AS THE COVERSHEET TO THE BID. USE THE BOXES BELOW TO CHECK YOUR WORK. COMPLETING THIS FORM DOES NOT GUARANTEE THAT YOUR BID WILL BE RESPONSIVE OR SELECTED; BUT, SHOULD HELP TO OVERCOME THE MOST COMMON BIDDER MISTAKES. THE CITY OF DUBLIN, OHIO RESERVES THE RIGHT TO REJECT ANY AND ALL PROPOSALS AND TO WAIVE ANY INFORMALITIES OR IRREGULARITIES IN THE PROPOSALS.

- 1. Bidder's Company Name: _____
- 2. Total Bid (From Bid Form): \$ _____

BID PACKAGE

- Reviewed in detail?

PROPOSAL

- Acknowledged any addenda?
- Total bid amount completed in words and figures?
- Signed by a person with authority to bind your company?
- No changes made to form or conditions added?

BID SCHEDULE

- Completely filled in?

COMBINED BID/PERFORMANCE/PAYMENT BOND

- Your company name in the Principal blank?
- Surety name in the Surety blank?
- Dollar amount should be blank
- Signed as indicated?

COMBINED DELINQUENT PERSONAL PROPERTY TAX & NONCOLLUSION AFFIDAVIT

- Filled in?
- Signed?
- Notarized?

AFFIDAVIT OF AUTHORITY

- Needs completed if you are anything other than a sole proprietor
- Filled in?
- Signed?
- Notarized?

POWER OF ATTORNEY (OUT OF STATE CORPORATION)

- Must have if you are an out of state corporation

LIST OF SUBCONTRACTORS

- Completed?

LIST OF SUPERVISORY PERSONNEL

Completed?

CONTRACTOR QUALIFICATION STATEMENT

Completed?

INSURANCE CERTIFICATE

Submitted?

WORKERS COMPENSATION COVERAGE

Submitted?

W-9 FORM

Submitted?

E. PREVAILING WAGE RATES DISK

II. BIDDING FORMS

A. PROPOSAL

CITY OF DUBLIN

DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD PROJECT

_____ (the "Bidder") submits this Proposal having read and examined the contract documents, including but not limited to the Invitation to Bid.

Addenda Number

Date of Receipt

The Bidder proposes to perform all work for the Agreement for Construction in accordance with the contract documents for the following sum:

Total Bid (in figures): \$ _____

Total Bid (in words): _____

In the event of a discrepancy between the amount of the total bid as written in figures and in words, the amount written in words shall govern.

Unless otherwise specified in the Bid Document the amount of the total bid is based on the unit prices or lump sum set forth in the Bid Schedule attached hereto and incorporated herein.

The Bidder understands and agrees that all work to be performed under the Agreement for Construction shall be completed by the date or time required by the Contract Documents unless an extension of time is granted by the CITY OF DUBLIN.

Upon failure to have the work completed within the project time, the CITY OF DUBLIN, Ohio shall be entitled to retain or recover from the Bidder, as liquidated damages, and not as a penalty, the amounts set forth in the following table for each and every calendar day until completion. The right of the CITY OF DUBLIN, Ohio to recover liquidated damages shall not substitute for any recovery for additional costs in the event the Bidder fails to complete the Agreement for Construction according to the Contract Documents.

Liquidated Damages:

<u>Contract Amount</u>	<u>Dollars per Day</u>
\$0-25,000	100.00
25,001-50,000	150.00

50,001-100,000	200.00
100,001-500,000	300.00
500,001-1,000,000	500.00
1,000,001-2,000,000	750.00
2,000,001-5,000,000	1,000.00
5,000,001-10,000,000	1,500.00
Over \$10,000,001	2,000.00

REPRESENTATIONS OF THE BIDDER

The Bidder represents the following:

1. The Bidder has read and understands the Contract Documents and understands that it must 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 that might indicate a contrary intention.
2. The Bid is based upon the items specified by the Contract Documents.
3. The Bidder has visited the 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 of the Contract Documents.
4. Within ten (10) business days from the date of receipt the Notice of Intent to Award, the Bidder understands that it must enter into and execute an agreement for CITY OF DUBLIN, DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD PROJECT if awarded based on this proposal. If the Bidder does not execute an agreement for the Project for any reason, the Bidder and the Bidder's surety shall be liable to the CITY OF DUBLIN, Ohio as provided in O.R.C. Section 153.54.
5. Within ten (10) business days of the date of receipt of the Notice of Intent to Award, the Bidder understands that it must submit the following:
 - a. Performance Bond. (If combined bid/performance/payment not submitted already).
 - b. Copy of Additional Insured Endorsement.
6. The Bidder understands that it must furnish any other information requested by the CITY OF DUBLIN.

The Bidder hereby signs this Proposal on the ____ day of _____, 2013.

If Bidder is an individual, complete the following:

Signature: _____

Print Name: _____

Name of Business: _____

(if different from above)

Federal Identification Number: _____

Address: _____

Telephone: () _____

Fax: () _____

If Bidder is a partnership, complete the following:

Name of Partnership: _____

By: _____

(Signature)

Print Name: _____

Federal Identification Number: _____

Address: _____

Telephone: () _____

Fax: () _____

Names and Addresses of all general partners:

If Bidder is a joint venture, complete the following:

Name of Joint Venture: _____

By: _____

(Signature)

Print Name: _____

Address: _____

Telephone: () _____

Fax: () _____

Complete the following for each firm represented by the joint venture:

1. Name: _____

Federal Identification Number: _____

Address: _____

Telephone: () _____

Fax: () _____

2. Name: _____

Federal Identification Number: _____

Address: _____

Telephone: () _____

Fax: () _____

If Bidder is a corporation, complete the following:

Name of Corporation: _____

By: _____

(Signature)

Print Name: _____

Title: _____

Federal Identification Number: _____

Address: _____

Telephone: () _____

Fax: () _____

State of Incorporation: _____

Names and addresses of Corporate Officers:

BID SCHEDULE

BIDDER agrees to perform all work described in the CONTRACT DOCUMENTS for the following unit prices:

**Dublin Road South Multi-Use Path
Hertford Lane to Rings Road**

CITY OF DUBLIN

REF NO.	(1) ITEM	(2) DESCRIPTION	(3) QUANT.	(4) UNIT	(5) LABOR (\$)	(6) MATERIAL (\$)	(7) (5)+(6) TOTAL (\$)	(8) (3) x (7) TOTAL EXTENDED INFORMAL PRICE (\$)
GENERAL								
1	614	MAINTAINING TRAFFIC	1	LUMP				
2	623	CONSTRUCTION LAYOUT STAKES	1	LUMP				
3	624	MOBILIZATION	1	LUMP				
4	SPEC	PROOF SURVEY	1	LUMP				
							GENERAL SUBTOTAL =	
ROADWAY								
5	201	CLEARING & GRUBBING	1	LUMP				
6	201	TREES OR STUMPS REMOVED, 15" SIZE	20	EA				
7	202	CURB & GUTTER REMOVED & DISPOSED OF	118	LF				
8	202	PIPE REMOVED & DISPOSED OF	33	LF				
9	202	PAVEMENT REMOVED & DISPOSED OF	1	SY				
10	202	FENCE REMOVED FOR REUSE	120	LF				
11	203	EXCAVATION	761	CY				
12	203	ROCK CUT EXCAVATION	60	CY				
13	203	EMBANKMENT	176	CY				
14	203	SELECT GRANULAR EMBANKMENT, #2 STONE	40	CY				
15	204	SUBGRADE COMPACTION	1,482	SY				
16	204	PROOF ROLLING	1	HR				
17	607	FENCE REBUILT	120	LF				
18	653	TOPSOIL FURNISHED & PLACED, A.P.P.	138	CY				
19	SPEC	STONE WALL REMOVED AND SALVAGED	82	LF				
20	SPEC	RELOCATED STONE WALL, UP TO 18"	27	LF				
21	SPEC	RELOCATED STONE WALL, OVER 18" TO 36"	32	LF				
22	SPEC	SUPPLEMENTAL STONE	1	TON				
23	SPEC	GRASS PAVERS, AS PER PLAN	1,600	SF				
							ROADWAY SUBTOTAL =	

BID SCHEDULE

BIDDER agrees to perform all work described in the CONTRACT DOCUMENTS for the following unit prices:

**Dublin Road South Multi-Use Path
Hertford Lane to Rings Road**

CITY OF DUBLIN

REF NO.	(1) ITEM	(2) DESCRIPTION	(3) QUANT.	(4) UNIT	(5) LABOR (\$)	(6) MATERIAL (\$)	(7) (5)+(6) TOTAL (\$)	(8) (3) x (7) TOTAL EXTENDED INFORMAL PRICE (\$)
EROSION CONTROL								
24	207	FILTER FABRIC FENCE	2,000	LF				
25	659	SEEDING & MULCHING, A.P.P.	1,648	SY				
26	SPEC	TREE PROTECTION FENCE	300	LF				
<i>EROSION CONTROL SUBTOTAL =</i>								
STORM DRAINAGE								
27	901	4" PIPE, WITH TYPE 1 BEDDING, 720.12	50	LF				
28	901	18" PIPE, WITH TYPE 1 BEDDING, 706.02	8	LF				
29	SPEC	ADS FLARED END SECTION WITH DISSIMILAR COUPLER	1	50				
<i>STORM DRAINAGE SUBTOTAL =</i>								
SANITARY								
30	604	MANHOLE ADJUSTED TO GRADE (SANITARY)	1	EA				
<i>SANITARY SUBTOTAL =</i>								
PAVEMENT								
31	254	PAVEMENT PLANING	172	SY				
32	301	ASPHALT CONCRETE BASE (DRIVES)	82	TON				
33	304	AGGREGATE BASE (MULTI-USE PATH)	169	CY				
34	304	AGGREGATE BASE (DRIVES)	79	CY				
35	407	NTSS-1HM TRACKLESS TACK COAT	7	GAL				
36	448 *	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, MEDIUM TRAFFIC (MULTI-USE PATH)	137	TON				
37	448 *	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, MEDIUM TRAFFIC (DRIVES)	27	TON				

BID SCHEDULE

BIDDER agrees to perform all work described in the CONTRACT DOCUMENTS for the following unit prices:

**Dublin Road South Multi-Use Path
Hertford Lane to Rings Road**

CITY OF DUBLIN

REF NO.	(1) ITEM	(2) DESCRIPTION	(3) QUANT.	(4) UNIT	(5) LABOR (\$)	(6) MATERIAL (\$)	(7) (5)+(6) TOTAL (\$)	(8) (3) x (7) TOTAL EXTENDED INFORMAL PRICE (\$)	
38	448 *	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG64-22, MEDIUM TRAFFIC (ROADWAY)	16	TON					
39	452	8" NON-REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT	18	SY					
40	608	4" CONCRETE WALK, WITH #57 STONE, A.P.P.	68	SF					
41	608	CURB RAMP	1	EA					
42	609	COMBINATION CURB & GUTTER, A.P.P.	166	LF					
43	1551	DETECTABLE WARNING, A.P.P.	2	EA					
44	SPEC	BRICK WALK, A.P.P.	38	SF					
45	SPEC	BRICK STEPS, A.P.P.	15	LF					
		<i>PAVEMENT SUBTOTAL =</i>							
		WATER							
46	807	SERVICE BOXES ADJUSTED TO GRADE	6	EA					
47	807	VALVE BOXES ADJUSTED TO GRADE	3	EA					
48	807	COLUMBUS STANDARD HEAVY DUTY VALVE BOX	3	EA					
49	SPEC	SURVEY COORDINATES	1	LUMP					
		<i>WATER SUBTOTAL =</i>							
		TRAFFIC CONTROL							
50	630	REMOVAL OF GROUND MOUNTED SIGN & DISPOSAL	1	EA					
51	630	REMOVAL OF GROUND MOUNTED POST SUPPORT & DISPOSAL	1	EA					
52	630	GROUND MOUNTED SUPPORT POST, NO. 3 POST, TYPE S, A.P.P.	14	LF					
53	630	2-1/4" SQUARE ANCHOR POST, A.P.P.	1	EA					
54	630	SIGN, FLAT SHEET	7	SF					
		DO NOT BID							

BID SCHEDULE

BIDDER agrees to perform all work described in the CONTRACT DOCUMENTS for the following unit prices:

**Dublin Road South Multi-Use Path
Hertford Lane to Rings Road**

CITY OF DUBLIN

REF NO.	(1) ITEM	(2) DESCRIPTION	(3) QUANT.	(4) UNIT	(5) LABOR (\$)	(6) MATERIAL (\$)	(7) (5)+(6) TOTAL (\$)	(8) (3) x (7) TOTAL EXTENDED INFORMAL PRICE (\$)
55	644	CENTER LINE, 4"	19	LF				
56	644	STOP LINE, 24"	19	LF				
57	644	CROSSWALK LINE, 12"	106	LF				
<i>TRAFFIC CONTROL SUBTOTAL =</i>								
STRUCTURES								
58	503	COFFERDAMS AND EXCAVATION BRACING	1	LUMP				
59	503	UNCLASSIFIED EXCAVATION	1	LUMP				
60	511	CLASS C CONCRETE, ABUTMENT INCLUDING FOOTING, A.P.P.	34	CY				
61	518	POROUS BACKFILL WITH FILTER FABRIC	3	CY				
62	564	SEALING OF CONCRETE SURFACES	10	SY				
63	SPEC	RAILING (42" HIGH METAL RAILING)	14	LF				
64	SPEC	STRUCTURE, MISC.: 72' PRE-ENGINEERED TRUSS PEDESTRIAN BRIDGE	1	LUMP				
<i>STRUCTURES SUBTOTAL =</i>								
MAINTENANCE OF TRAFFIC								
65	614	LAW ENFORCEMENT OFFICER, WITH PATROL CAR, A.P.P.	20	HR				
66	616	WATER	5	M GAL				
<i>MAINTENANCE OF TRAFFIC SUBTOTAL =</i>								

* DENOTES ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS (2010 EDITION). ALL OTHER ITEMS REFERENCE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL

GRAND TOTAL =

BID SCHEDULE

BIDDER agrees to perform all work described in the CONTRACT DOCUMENTS for the following unit prices:

**Dublin Road South Multi-Use Path
Hertford Lane to Rings Road**

CITY OF DUBLIN

REF NO.	(1) ITEM	(2) DESCRIPTION	(3) QUANT.	(4) UNIT	(5) LABOR (\$)	(6) MATERIAL (\$)	(7) (5)+(6) TOTAL (\$)	(8) (3) x (7) TOTAL EXTENDED INFORMAL PRICE (\$)
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<p>TOTAL BID FOR PROJECT: SUBMITTED BY: (COMPANY)</p>	<hr style="border: none; border-top: 1px solid black;"/> <hr style="border: none; border-top: 1px solid black;"/>
--	---

If Bidder is an entity other than those described above, complete the following:

Name of Bidder:

By: _____

(Signature)

Print Name: _____

Title: _____

Federal Identification Number: _____

Address: _____

Telephone: () _____

Fax: () _____

Type of Business Entity: _____

Names and addresses of all Principals:

C. COMBINED BID/PERFORMANCE/PAYMENT BOND

CITY OF DUBLIN DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned _____ (the "Principal") and _____ (the "Surety"), are hereby held and firmly bound unto the CITY OF DUBLIN, Ohio as obligee in the penal sum of the dollar amount of the bid submitted by the Principal to the CITY OF DUBLIN on _____, 2013 to undertake the project known as the **CITY OF DUBLIN, DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD PROJECT.**

The penal sum referred to herein shall be the dollar amount of the Principal's bid to CITY OF DUBLIN, incorporating any additive or deductive alternate proposals made by the Principal on the date referred to above to the CITY OF DUBLIN, which are accepted by the CITY OF DUBLIN. 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 full amount of the Principal's bid, including alternates. Alternatively, if the blank is filled in, the amount stated must not be less than the full amount of the bid including alternates, in dollars and cents. A percentage is not acceptable.)

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

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above-named Principal has submitted a bid for the CITY OF DUBLIN, DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD PROJECT.

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

NOW ALSO, if the Principal shall well and faithfully do and perform the things agreed by Principal to be done and performed according to the terms of said contract; and shall pay all lawful claims of subcontractors, material men, 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 material man or laborer having a just claim, as well as for the CITY OF DUBLIN herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

The Surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of said contract or in or to the plans or specifications therefore shall in any wise affect the obligations of the Surety on the Surety's bond, and the Surety does hereby waive notice of any such modifications, omissions or additions to the terms of the contract or to the plans or specifications.

Signed this _____ day of _____, 2013.

PRINCIPAL:

By: _____

(Signature)

Print Name: _____

Title: _____

Address:

Telephone: () _____

SURETY:

By: _____

(Signature)

Print Name: _____

Title: _____

Address:

Telephone: () _____

SURETY AGENT:

By: _____

(Signature)

Print Name: _____

Title: _____

Address:

Telephone: () _____

D. ALTERNATE BID SECURITY FORM

Bidder Name: _____

Project Name: DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

The undersigned Bidder hereby submits with its bid the following bid security equaling 10% of the total amount of the bid as required by Ohio Revised Code Section 153.54:

A Certified Check

A Cashier's Check

A Letter of Credit pursuant to Chapter 1305 of the Ohio Revised Code

A bid guaranty filed under this form shall be conditioned to provide that if the bid is accepted, the bidder, after the awarding or the recommendation for the award of the contract, whichever the CITY OF DUBLIN designates, will enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material. All bid guaranties filed hereunder shall be payable to the CITY OF DUBLIN, be for the benefit of the CITY OF DUBLIN, and be deposited with, and held by, the CITY OF DUBLIN.

Bidder Signature: _____

Print Name: _____

E. PERFORMANCE AND PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned _____ as principal and _____ as sureties, are hereby held and firmly bound unto CITY OF DUBLIN ("Obligee") in the penal sum of \$ _____, for the payment of which well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed this _____ day of _____, _____.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above named principal did on _____ enter into a contract with CITY OF DUBLIN, which said contract is made a part of this bond the same as though set forth herein;

Now, if the said principal shall well and faithfully do and perform the things agreed by it to be done and performed according to the terms of said contract; and shall pay all lawful claims of subcontractors, material suppliers, 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 material supplier or laborer having a just claim, as well as for the Obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

The said surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of the said contract or in or to the plans or specifications therefor shall in any wise affect the obligations of said surety on its bond.

Signed this _____ day of _____, 2013.

PRINCIPAL:

By: _____

(Signature)

Print Name: _____

Title: _____

Address:

Telephone: () _____

SURETY:

By: _____

(Signature)

Print Name: _____

Title: _____

Address:

Telephone: () _____

SURETY AGENT:

By: _____

(Signature)

Print Name: _____

Title: _____

Address:

Telephone: () _____

F. AFFIDAVIT OF AUTHORITY

CITY OF DUBLIN

DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

(To be completed and executed if the Contractor is anything other than a sole proprietorship.)

State of _____ (State Where Completing this Form)

County of _____ (County Where Completing this Form) SS:

_____ (Your Name), being duly sworn, deposes and says that he or she is the _____ (Position) of _____ (Business Name), a _____ (Type of Entity) organized and existing under and by virtue of the laws of the State of _____ (State), and having its principal office at: _____ (Address), _____ (City), _____ (County), _____ (State).

Affiant further says that he is familiar with the records, minute books and by-laws of _____ (Business Name).

Affiant further says that _____ (Name of Person Signing Contract) _____ (Title of Person Signing Contract) of _____ (Business Name)

is duly authorized to sign the Contract for the CITY OF DUBLIN DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD Project on behalf of _____ (Business Name) by virtue of _____.

(Describe how the person signing the Contract has Authority to sign for example: "a provision of the by-laws" or "a resolution of the Board of Directors"—if by resolution, give date of adoption.)

_____, _____.
(Your Signature) (Your Position)

The foregoing instrument was acknowledged before me this _____ (date) by _____ (name of person acknowledged). Signature and Seal of person taking acknowledgement:

G. COMBINED DELINQUENT PERSONAL PROPERTY TAX & NONCOLLUSION AFFIDAVIT

State of _____ (State Where Completing this Form)

County of _____ (County Where Completing this Form) ss:

_____ (Your Name), Affiant, being first duly sworn, deposes and says:

1. I am the _____ (Your Title) of _____ (Business Name), the Bidder that has submitted the attached Bid;

2. I am fully informed respecting the preparation and contents of the attached Bid and all pertinent circumstances respecting such Bid, and that such Bid is genuine and is not a collusive or sham Bid;

4. Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed directly or indirectly with any other Bidder, firm, or person to submit a collusive or sham Bid in connection with the contract for which the attached Bid has been submitted, or to refrain from Bidding in connection with such contract, or has in any manner directly or indirectly sought by agreement, collusion, communication, or conference with any other Bidder, firm, or person to fix the price or prices in the attached Bid or of any other Bidder, or to fix any overhead, profit, or cost element of Bid price or the Bid price of any other Bidder, or to secure through any collusion, conspiracy, connivance, or unlawful agreement any advantage against the **CITY OF DUBLIN**, Ohio, or any person interested in the proposed contract; and

5. The price or prices quoted in the attached Bid are fair, proper, and not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agent's representatives, owners, employees, or parties in interest, including this affiant.

6. Effective this _____ day of _____, **2013**, the Bidder:

is charged with delinquent personal property taxes on the general list of personal property as set forth below:

County	Amount (include total amount, with penalties and interest thereon)
_____ County	\$ _____

is not charged with delinquent personal property taxes on the general list of personal property in any Ohio county.

Choose One

Signed: _____

Title: _____

The foregoing instrument was acknowledged before me this _____ (date)

by _____ (name of person acknowledged).

Signature and Seal of person taking acknowledgement:

H. W-9 FORM

Form W-9 (Rev. December 2011) Department of the Treasury Internal Revenue Service	Request for Taxpayer Identification Number and Certification	Give Form to the requester. Do not send to the IRS.				
Print or type See Specific Instructions on page 2.	Name (as shown on your income tax return)					
	Business name/disregarded entity name, if different from above					
	Check appropriate box for federal tax classification: <input type="checkbox"/> Individual/sole proprietor <input type="checkbox"/> C Corporation <input type="checkbox"/> S Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Trust/estate <input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶					
	<input type="checkbox"/> Other (see instructions) ▶					
	Address (number, street, and apt. or suite no.)	Requestor's name and address (optional)				
City, state, and ZIP code						
List account number(s) here (optional)						
Part I Taxpayer Identification Number (TIN) Enter your TIN in the appropriate box. The TIN provided must match the name given on the "Name" line to avoid backup withholding. For individuals, this is your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I Instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> on page 3. Note. If the account is in more than one name, see the chart on page 4 for guidelines on whose number to enter.						
		Social security number <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%; height: 20px;"> </td> </tr> </table>				
		Employer identification number <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:25%; height: 20px;"> </td> </tr> </table>				
Part II Certification Under penalties of perjury, I certify that:						
1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and 3. I am a U.S. citizen or other U.S. person (defined below).						
Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 4.						
Sign Here	Signature of U.S. person ▶	Date ▶				
General Instructions Section references are to the Internal Revenue Code unless otherwise noted.						
Purpose of Form 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 • 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.						

I. LIST OF SUBCONTRACTORS

CITY OF DUBLIN

DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

NOTE: The bidder must perform at least 51% of the total contract cost with its own forces.

1. Name of Subcontractor (Include names of any parent company) : _____

Federal Identification Number: _____

Address: _____

Type of Work:

Subcontractor to Provide: _____

Approximate Percentage of the Contract Cost to be Performed by Subcontractor: _____

Experience Record: _____

2. Name of Subcontractor (Include names of any parent company) : _____

Federal Identification Number: _____

Address: _____

Type of Work:

Subcontractor to Provide: _____

Approximate Percentage of the Contract Cost to be Performed by Subcontractor: _____

Experience Record: _____

3. Name of Subcontractor (Include names of any parent company)

: _____ Federal Identification Number: _____

Address: _____

Type of Work:

Subcontractor to Provide: _____

Approximate Percentage of the Contract Cost to be Performed by Subcontractor: _____

Experience Record: _____

4. Name of Subcontractor (Include names of any parent company) : _____

Federal Identification Number: _____

Address: _____

Type of Work:

Subcontractor to Provide: _____

Approximate Percentage of the Contract Cost to be Performed by Subcontractor: _____

Experience Record: _____

5. Name of Subcontractor (Include names of any parent company) : _____

Federal Identification Number: _____

Address: _____

Type of Work:

Subcontractor to Provide: _____

Approximate Percentage of the Contract Cost to be Performed by Subcontractor: _____

Experience Record: _____

Add additional sheets if necessary.

J. CONTRACTOR QUALIFICATION STATEMENT

Contractor: _____

Date: _____

Project: DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

The foregoing Contractor submits this Statement of Qualifications to the CITY OF DUBLIN, Ohio as part of its bid for the above named Project and represents that the information contained herein is complete and accurate to the best of the Contractor’s knowledge. The CITY OF DUBLIN reserves the right to reject any, part of any, or all bids and to waive any informalities and irregularities. The Contractor expressly acknowledges this right of the CITY OF DUBLIN to reject any or all bids or to reject any incomplete or irregular bid. Contractor must furnish all information requested on this Statement of Qualifications. Failure to do so may result in disqualification of the bid. The CITY OF DUBLIN may consider the information submitted on this form in determining the lowest and best Contractor for the Project giving such weight to each item as the CITY OF DUBLIN deems appropriate. The CITY OF DUBLIN may conduct such investigations as are deemed necessary to establish the qualifications and financial ability of the Contractor and its subcontractors and suppliers.

The Contractor authorizes the CITY OF DUBLIN and its representatives to contact the owners, design professionals, and others having knowledge (collectively “Contacts”) on projects on which the Contractor has worked—whether listed on this form or not—and authorizes and requests such Contacts to provide the CITY OF DUBLIN with a candid evaluation of the Contractor’s performance. By submitting its bid, the Contractor agrees that if it or any person, directly or indirectly, on its behalf or for its benefit brings an action against any of such Contacts or the employees of any of them as a result of or related to such candid evaluation, the Contractor will indemnify and hold harmless such Contacts and the employees of any of them from any claims whether or not proven that are part of or are related to such action and from all legal fees and expenses incurred by any of them arising out of or related to such legal action. This obligation is expressly intended for the benefit of such Contacts and the employees of each of them. By submitting this form, Contractor agrees that the CITY OF DUBLIN’s determination of which Contractor is the lowest and best Contractor shall be final and conclusive, and that if the Contractor or any person on its behalf challenges such determination in any legal proceeding, the Contractor will indemnify and hold the CITY OF DUBLIN and its employees and agents harmless from any claims included or related to such legal proceeding, whether or not proven, and from legal fees and expenses incurred by the City, its employees, or agents that arise out of or are related to such challenge.

NAME OF PROJECT: DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

1. ORGANIZATION

- 1.1 How many years has your organization been in business as a Contractor?
- 1.2 How many years has your organization been in business under its present business name?
 - 1.2.1 Under what other or former names has your organization operated?
- 1.3 If your organization is a corporation, answer the following:
 - 1.3.1 Date of incorporation:
 - 1.3.2 State of incorporation:
 - 1.3.3 President's name:
 - 1.3.4 Vice President's name(s):
 - 1.3.5 Secretary's name:
 - 1.3.6 Treasurer's name:
- 1.4 If your organization is a partnership, answer the following:
 - 1.4.1 Date of organization:
 - 1.4.2 Type of partnership (if applicable):
 - 1.4.3 Name(s) of general partner(s):
- 1.5 If your organization is individually owned, answer the following:
 - 1.5.1 Date of organization:
 - 1.5.2 Name of owner:

1.6 If the form of your organization is other than those listed above, describe it and name the principals:

2. LICENSING

2.1 List jurisdictions and trade categories in which your organization is legally qualified to do business, and indicate registration or license numbers, if applicable.

2.2 List jurisdictions in which your organization's partnership or trade name is filed.

3. EXPERIENCE

3.1 List the categories of work that your organization normally performs with its own forces.

3.2 Claims and Lawsuits (If the answer to any of the questions below is yes, please attach details.)

3.2.1 Has your organization ever failed to complete any work?

3.2.2 Within the last five (5) years has your organization or any of its officers initiated any Claims, had any Claims initiated against it or them, or been involved in or is currently involved in any mediation or arbitration proceedings or lawsuits suits related to any construction project, or has any judgments or awards outstanding against it or them? If the answer is yes, please attach the details for each Claim, including the names and telephone numbers of the persons who are parties, the amount of the Claim, the type of Claim and basis for the Claim, and the outcome.

Note: As used in this document "Claim" means a Claim initiated under the Contract Documents for a project.

3.3 Within the last five years, has any officer or principal of your organization ever been an officer or principal of another organization when it failed to complete a construction contract? If the answer is yes, please attach details for each instance, including the names and telephone numbers of the persons who are parties to the contract, and the reason(s) the contract was not completed.

3.4 On a separate sheet, list construction projects your organization has in progress with an original Contract Sum of more than \$ 272,000.00, giving the name of project, owner and its telephone number, design professional and its telephone number, contract amount, percent complete and scheduled completion date.

3.4.1 State total amount of work in progress and under contract:

3.5.1 Provide the following information for each project your organization has had during the last five (5) years, which your organization believes is of comparable or greater size and complexity than the Owner's project. If there are more than five (5) of these projects, only provide information on the most recent five (5) projects, including current projects.

Project And Work	Contract Sum	Owner's Representative & Telephone Number	Engineer's Or Architect's Representative Name & Telephone Number

3.5.2 State average annual amount of construction work your organization has performed during the last five years.

3.5.3 If any of the following members of your organization's management--president, chairman of the board, or any director--operates or has operated another construction company during the last five (5) years, identify the member of management and the name of the construction company.

3.5.4 If your organization is operating under a trade name registration with the Secretary of State for the State of Ohio, identify the entity for which the trade name is registered. If none, state "none."

3.5.5. If your organization is a division or wholly-owned subsidiary of another entity or has another relationship with another entity, identify the entity of which it is a division or wholly-owned subsidiary or with which it has another relationship and also identify the nature of the relationship. If none, state "not applicable."

3.6 On a separate sheet, list the construction education, training and construction experience for each person who will fill a management role on the Project, including without limitation the Project Executive, Project Engineer, Project Manager, and Project Superintendent. For each person listed, include with the

other information the last three projects on which the person worked and the name and telephone number of the Design Professional and the Owner.

4. REFERENCES

4.1 Trade References:

4.2 Bank References:

4.3 Surety:

4.3.1 Name of bonding company:

4.3.2 Name and address of agent:

5. FINANCING

5.1 Financial Statement

5.1.1 Attach a financial statement, preferably audited, including your organization's latest balance sheet and income statement showing the following items:

Current Assets (e.g., cash, joint venture accounts, accounts receivable, notes receivable, accrued income, deposits, materials inventory and prepaid expenses);

Net Fixed Assets;

Other Assets;

Current Liabilities (e.g., accounts payable, notes payable, accrued expenses, provision for income taxes, advances, accrued salaries and accrued payroll taxes); and

Other Liabilities (e.g., capital, capital stock, authorized and outstanding shares par values, earned surplus and retained earnings).

5.1.2 Name and address of firm preparing attached financial statement, and date thereof.

5.1.3 Is the attached financial statement for the identical organization named on page one?

5.1.4 If not, explain the relationship and financial responsibility of the organization whose financial statement is provided (e.g., parent-subsidiary).

5.2 Will the organization whose financial statement is attached act as guarantor of the contract for construction?

Certification. The undersigned certifies for the reliance of the Owner that after diligent investigation, to the best of the undersigned's belief, the information provided with this Contractor's Qualification Statement is true, accurate and not misleading.

SIGNATURE

Dated at this ____ day of _____, 2013.

Name of Organization: _____

By: _____ (Print Name)

Signature: _____

Title: _____

_____, being duly sworn, deposes and says that the information provided herein is true and sufficiently complete so as not to be misleading.

Subscribed and sworn before me this ____ day of _____, 2013.

Notary Public

My Commission Expires: _____

SEAL

CONTRACTOR'S ORGANIZATION

General Information

Address: _____

Telephone and Facsimile: _____

E-mail address: _____

Web site: _____

If address given above is a branch office address, provide principal home office address:

Type of Organization

The Contractor's Organization is a:

Corporation

Date and State of Incorporation: _____

Executive Officers: (Names and Addresses) _____

Partnership

Date and State of Organization: _____

Type of Partnership: General Limited Limited Liability Other:

Current General Partners: (Names and Addresses) _____

Joint Venture

Date and State of Organization: _____

Joint Venturers: (For each indicate the name, address and form and state of organization, as well as the managing or controlling Joint Venturer if applicable.) _____

Limited Liability Company

Date and State of Organization: _____

Members: (Names and Addresses) _____

Sole Proprietorship

Date and State of Organization: _____

City or Cities: (Names and Addresses) _____

Other

Type of Organization: _____

State of Organization: _____

Cities and/or Principals: (Names and Addresses) _____

In addition to the above categories of business entities, indicate whether Contractor's organization is certified as a:

Disadvantaged Business Enterprise Certified by:

Minority Business Enterprise Certified by:

Women's Business Enterprise Certified by:

Historically Underutilized Business Zone Small Business Concern Certified by: _____

LICENSING AND REGISTRATION

Jurisdictions in which Contractor is legally qualified to practice: (Indicate license or registration numbers for each jurisdiction, if applicable, and type of license or registration. Attach separate sheet as necessary.)

In the past five years, has Contractor had any business or professional license suspended or revoked? Yes No

If yes, describe circumstances on separate attachment, including jurisdiction and bases for suspension or revocation.

CONTRACTOR'S PERSONNEL AND APPROACH

Key Construction Personnel. Create and attach Schedule A, listing the Contractor's: 1) Key Construction Personnel who will work on the Project; 2) their construction experience; and, 3) the percentage of time that each is anticipated to devote to the Project.

List types of work generally performed by Contractor's own work force:

Subcontractors

Indicate criteria used in the selection of subcontractors (Indicate if Not Applicable).

- Price
- Financial strength
- Bonding capacity
- Previous experience with Contractor
- Previous experience in industry
- Subcontractor's reputation in industry
- Availability of sufficient personnel
- Safety record
- Other: _____

State Contractor's policy on the bonding of its subcontractors: _____

Describe Contractor's proposed technical and management approach to the Project, including approaches to quality, time and cost control: (Attach additional sheets as necessary.)

CONTRACTOR'S RELEVANT EXPERIENCE

Past Projects List. In the chart below, list at least five construction projects Contractor has worked on in the past five (5) years with project delivery systems similar in size and scope to the one to be employed for this Project. (For Joint Ventures, list each joint venturer's projects separately).

City Name	Project Type	Contract Amount	Completion Date	Contact Name and Number

Current Projects List. In the chart below, list all current projects of the Contractor, including projects not yet underway, approximate dollar value of each and the percentage of completion of each project. (For Joint Ventures, list each joint venturer's projects separately).

City Name	Project Type	Contract Amount	Percentage Complete	Contact Name and Number

Annual Construction Volume. Indicate the annual volume of work completed for the past three years:

Year _____

Year _____

Year _____

In the past five years, has Contractor defaulted, been terminated for cause or failed to complete a construction contract awarded to it? ___ Yes ___ No

If yes, describe circumstances on separate attachment, including dates and owner, and if applicable, Contractor's surety.

In the past five years, has any officer, partner, joint venturer or proprietor of the Contractor ever failed to complete a construction contract awarded to that person or entity in their name or on behalf of another organization? Yes No

If yes, describe circumstances on separate attachment, including dates and City, and if applicable, surety.

Describe all litigation arising from Contractor's active projects or projects worked on within the last five years. (Attach additional sheets as necessary.)

CONTRACTOR'S SAFETY PROGRAM

If Contractor has a written safety program, attach a copy.

Does the Contractor's safety program include instructions on the following:

Safety work practices Yes No

Safety supervision Yes No

Toolbox safety meetings Yes No

Emergency procedures Yes No

First aid procedures Yes No

Accident investigation Yes No

Fire protection Yes No

New workers' orientation Yes No

Do you have a safety officer/department in your company? Yes No

If yes,

Name: _____

Title: _____

Phone: _____

Do you conduct project safety inspections? Yes No

If yes, how often? _____

Who conducts this inspection?

Name: _____

Title: _____

Do you hold project safety meetings for field supervisors? Yes No

If yes, how often? Weekly Bi-weekly Monthly Less often as needed

Do you have in place an instruction program on safety for newly hired or promoted supervisors? Yes No

If yes, please attach a copy of program format.

If craft "toolbox" safety meetings are held, what is their frequency? Weekly Bi-weekly Monthly Less often as needed

Do you have a drug and alcohol testing policy? Yes No

If Yes, attach a copy of the policy.

Provide Contractor's OSHA No. 300 Log and Summary of Occupational Injuries and Illnesses for the past five years.

List all OSHA Citations and Notifications of Penalty, monetary or other, received within the last five years: (Indicate final disposition as applicable. Attach additional sheets as necessary.)

List all safety citations of violations under state law received within the last five years: (Indicate final disposition as applicable. Attach additional sheets as necessary.)

SURETY AND INSURANCE

Surety Company: (Name and Address)

Agent: (Name, Address and Telephone Number)

Total bonding capacity: \$ _____

Limit per project: \$ _____

Available bonding capacity as of this date: \$ _____

CONTRACTOR FINANCIAL INFORMATION

List principal banks used, the approximate value of outstanding loans and general repayment history, as well as the Name, Address and Telephone Number of a contact person:

Attach audited financial statements for the past three (3) years, including latest balance sheet.

State whether Contractor, or any of the individuals identified in Article 1, has/have been the subject of any bankruptcy proceeding within the last five (5) years.

Yes No

If yes, describe circumstances on separate attachment.

STATEMENT OF POTENTIAL CONFLICTS OF INTEREST

Provide information about any business associations, financial interests or other circumstances that may create a conflict of interest with the City or any other Party known to be involved in the Project.

OTHER INFORMATION

Within the past five years, has Contractor, or any of the individuals identified in Article 1 and/or Schedule A been the subject of any criminal indictment or judgment of conviction for any business-related conduct constituting a crime under state or federal law? __ Yes __ No

If yes, describe circumstances on separate attachment.

Within the past five years, has Contractor or any of the individuals identified in Article 1 and/or Schedule A been the subject of any federal or state suspension or disbarment? __ Yes __ No

If yes, describe circumstances on separate attachment.

Within the past five years, has Contractor, or any of the individuals identified in Article 1 and/or Schedule A been the subject of any formal proceeding or consent order with a state or federal environmental agency involving a violation of state or federal environmental laws? __ Yes __ No

If yes, describe circumstances. (Attach additional sheets as necessary.)

REFERENCES

Provide one additional reference for each of the following categories.

1. City

Name: _____

Address: _____

Telephone No.: _____

Contact Person: _____

2. Architect/Engineer

Name: _____

Address: _____

Telephone No.: _____

Contact Person: _____

3. Subcontractor

Name: _____

Address: _____

Telephone No.: _____

Contact Person: _____

The Undersigned, on behalf of the Contractor, certifies under that the information provided here, or attached to this form, is true and sufficiently complete to the best of the Contractor's knowledge.

CONTRACTOR

Signature _____

Printed Name: _____

Title: _____

Date: _____

III. ADDITIONAL CONTRACT DOCUMENTS

A. CITY OF DUBLIN/CONTRACTOR AGREEMENT

STANDARD AGREEMENT

CITY OF DUBLIN, OHIO

I. INTRODUCTION

This Agreement is entered into on _____, by and between the CITY OF DUBLIN, Ohio (“Owner”), located at 5200 Emerald Parkway, Dublin, Ohio 43017, and _____ (“Contractor”), located at _____ for the CITY OF DUBLIN DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD PROJECT (“Project”).

THIS DOCUMENT HAS IMPORTANT LEGAL CONSEQUENCES. CONSULTATION WITH AN ATTORNEY IS ENCOURAGED WITH RESPECT TO ITS EXECUTION, COMPLETION AND MODIFICATION.

The Owner, a political subdivision of the State of Ohio, and the Contractor have entered into this Owner-Contractor Agreement (“Agreement”) as of the date set forth above. The Owner and the Contractor agree as follows:

1 WORK.

1.1 The Contractor shall furnish all the labor, services, materials, plant, equipment, tools, scaffolds, appliances, transportation, and all other things (collectively called the “Work”) necessary for the timely and proper completion of the Work described in the Contract Documents for the Project. The Contractor shall provide the Performance and Payment Bonds on the forms and in the manner described in the Contract Documents.

1.2 CLEANUP. Contractor shall cleanup, repair, restore and otherwise return any site or location provided by Owner to the condition in which it was delivered to Contractor. Contractor shall repair, at its sole expense, any property it damages, whether part of the work or not, to a condition acceptable to Owner.

1.3 COMPLETION. The Project shall be finally completed by: August 16, 2013. The Contractor shall at all times furnish sufficient skilled workers, materials, and equipment to perform the Work in strict conformance with the Contract Documents and to the entire satisfaction of the Owner, so as to complete the Project by the Date for Final Completion. All materials and equipment provided shall be new, free from all defects, fit for the purpose for which intended, and merchantable.

1.4 SUPERVISION. The Contractor shall assign a competent Project Supervisor who shall be present on site. At the Owner’s request and without additional charge to Owner, the Contractor shall replace the Project Supervisor. The Owner’s Representative shall not be responsible for the acts or omissions of the Project Supervisor or his assistants. At a minimum, the Project Supervisor shall be present on site whenever any Contractor or Subcontractor personnel are present on site.

1.5 TAXES AND FEES. Contractor is subject to and responsible for paying fees to obtain all applicable licenses, permits, and other permissions necessary to perform its obligations under this Contract. Contractor is responsible for paying federal, state, and local taxes. Contractor agrees to withhold all income taxes due or payable under the provisions of Income Tax Ordinances of the Owner, for qualifying wages, salaries, and commissions paid to its employees and further agrees that any of its sub-contractors shall be required to agree to withhold any such income taxes due for services performed under this Contract.

2 CONTRACT DOCUMENTS.

2.1 The Contract Documents consist exclusively of:

- This Agreement
- Invitation to Bid
- Instructions to Bidders
- Prevailing Wage Rates (if Applicable)
- Proposal
- Bid Schedule
- Performance and Payment Bonds
- Delinquent Personal Property Tax & Noncollusion Affidavit
- Affidavit of Authority (If applicable)
- List of Subcontractors
- Contractor Qualification Statement
- CITY OF DUBLIN General Conditions Division 100
- Supplemental General Conditions
- The current version of the CMS, excluding 's Division 100
- Specifications
- Supplemental Specifications
- Notice of Award to Bidder
- Notice to Proceed
- Final Affidavit of Compliance with Prevailing Wages
- Plans and Drawings

If there is a conflict between any of the Contract Documents, the document listed first above shall control.

3 OWNER'S REPRESENTATIVE.

3.1 The City Engineer and/or his designee is the Owner's Representative with respect to all matters involving the Owner.

3.2 Except as specifically stated to the contrary elsewhere in this Agreement, the Contractor shall direct all communications to the Owner through the Owner's Representative, although the City Manager and Fiscal Officer of the Owner are also authorized to send written communications to the Contractor.

3.3 The Owner's Representative will monitor the progress of the Contractor's Work and will conduct regular inspections of the progress of the Work as provided in the Contract Documents.

Such inspections shall not relieve the Contractor of any of its obligations under the Contract Documents.

3.4 The Contractor shall at all times provide the Owner's Representative access to the Work.

4 TIME FOR COMPLETION AND PROJECT COORDINATION.

4.1 Project Time Schedule. The Owner anticipates that Work on the Project will begin upon its issuance of a Notice to Proceed and be completed by August 16, 2013, unless the Owner and Contractor agree to different commencement and completion dates.

4.2 Contractor is responsible for scheduling its subcontractors and for any delay resulting from their performance.

4.3 TIME IS OF THE ESSENCE. THE DATES IN THE PROJECT TIME SCHEDULE ARE OF THE ESSENCE OF THIS AGREEMENT. THE CONTRACTOR SHALL PROSECUTE ITS WORK IN ACCORDANCE WITH THE PROJECT TIME SCHEDULE, INCLUDING ANY AMENDMENTS THERETO.

5 DELAYS AND ACCELERATIONS.

5.1 NOTICE OF DELAYS. The Contractor shall give the Owner written notice of any delay affecting its Work within 24 hours of the commencement of the delay. The notice shall state in all capital letters at least 12 point font "NOTICE OF DELAY." The failure to give the required notice or include the required "NOTICE OF DELAY" language shall constitute an irrevocable waiver of the Contractor's right to seek an extension of time and/or additional compensation/damages for the delay. The Owner, in its sole and reasonable discretion, shall determine whether a delay shall entitle the Contractor to an extension of time, additional payment, or both. Any of the foregoing shall only be granted pursuant to the procedures for Change Orders set forth in this Agreement.

5.2 ACCELERATION OF THE WORK. If the Contractor fails to perform as required by the Contract schedule, the Owner may require the Contractor to accelerate its Work by adding workers or working additional shifts, extended shifts or overtime, so that the Work is in final form before the Date for Final Completion. If the Owner requires the Contractor to accelerate its Work, the Contractor shall take the required action within two days of the Notice. If the acceleration is not due to fault of the Contractor, Owner shall issue a Change Order increasing the Contract Sum to pay the Contractor for the Contractor's additional costs of accelerating its Work so that the Work is in final form before the Date for Final Completion. If there is a dispute as to whether the Contractor is entitled to a Change Order for accelerating its Work, the Contractor shall proceed to accelerate its Work without waiting for a Change Order or payment of any additional compensation, but may reserve its right to make a claim against the Owner for its additional costs incurred in accelerating its Work. The Contractor's additional costs for accelerating its Work shall be determined in accordance with Paragraph 5.2.2.

5.2.1 OWNER'S OBLIGATION TO PAY. The Owner shall pay the Contractor, as provided in this Paragraph, for the Contractor accelerating its Work so that its Work is in final form before the Date for Final Completion so long as the acceleration is not required as a result of the Contractor's failure to stay on schedule. The Owner shall not be required to

compensate the Contractor for accelerating its Work based on the Contractor's own decision so that the Work is in final form by the Date for Final Completion.

5.2.2 COMPENSATION FOR ACCELERATION OF THE WORK. To the extent that the Owner requires the Contractor to accelerate its Work and is obligated to pay under Section 5.2.1, the Owner shall pay the Contractor for the Contractor's additional costs of accelerating its Work, as determined in accordance with this Paragraph. The additional costs of accelerating the Work shall be (a) any premium for overtime, additional shift work, or extended shift work, (b) the cost of any additional supervision required by the acceleration, (c) out of pocket cost of any additional equipment required for the acceleration, and (d) overhead, including home office overhead, and profit equal to ten percent (10%) of the total amount of items (a) and (b) for which additional compensation is permitted under this Paragraph. The foregoing shall be the only additional compensation and/or damages the Contractor shall be entitled to receive for accelerating its Work so that it is complete before the Date for Final Completion. As a condition precedent to its recovery of additional compensation, the Contractor shall provide the Owner with full information about the costs of accelerating its Work in the form and format requested by the Owner.

6 CORRECTIVE ACTION.

6.1 If the Owner determines that the Contractor is not cooperating or coordinating its work properly with its subcontractors, not supplying sufficient skilled workers, not cleaning up the Project, not furnishing the necessary materials, equipment, or any temporary services or facilities to perform the Work in strict conformance with the Contract Documents, or the Contractor is not on schedule, or is not otherwise performing its obligations under the Contract Documents, THE CONTRACTOR SHALL IMMEDIATELY, AND IN NOT LESS THAN FORTY-EIGHT (48) HOURS AFTER NOTICE OF SUCH DETERMINATION, OR SUCH LESSER TIME AS MAY BE PROVIDED IN THE CONTRACT DOCUMENTS, (1) COMMENCE SUCH ACTION AS IS NECESSARY TO CORRECT THE DEFICIENCIES NOTED BY THE OWNER, (2) PROCEED TO USE ITS BEST EFFORTS TO CORRECT SUCH DEFICIENCIES WITHIN THIRTY (30) DAYS OF SUCH NOTICE OR BY THE DEADLINE FOR COMPLETION OF THE PROJECT SET FORTH IN THIS AGREEMENT WHICHEVER IS SOONER AND/OR, (3) IF THE OWNER INSTRUCTS THE CONTRACTOR TO TAKE SPECIFIED CORRECTIVE ACTION, SHALL IMMEDIATELY TAKE SUCH CORRECTIVE ACTION, including but not limited to increasing the number of skilled workers, providing temporary services or facilities, and cleaning up the Project. Such corrective action shall be taken and continued uninterruptedly without waiting to initiate any dispute under Paragraph 11 of this Agreement or the resolution of any dispute initiated under such paragraph.

7 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 Project and all of the duties, obligations and responsibilities of the Contractor under this Agreement and the other Contract Documents will be \$. 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 because of the Work or the materials incorporated into the Work. The Contractor shall pay any such taxes.

8 LIQUIDATED DAMAGES.

8.1 The Contractor shall have its work substantially completed by the date stated in Paragraph 1.3; the timeline may be varied following award of the contract based upon the Contractor's ability to perform the work on a different timeline acceptable to the Owner. By entering into this Agreement, the Contractor agrees that the period for performing the Work is reasonable and that the Contractor's Work can be substantially complete by the date stated in this Agreement.

8.2 If the Contractor does not have its Work on the Project substantially complete by the date stated in Paragraph 1.3 or as otherwise agreed by the parties, the Contractor will pay the Owner (and the Owner may set off from sums coming due the Contractor) liquidated damages in accordance with the Contract Documents.

8.3 The Contractor acknowledges by signing this Agreement with the Owner that the amount of liquidated damages represents a reasonable estimate of the actual damages the Owner would incur if the work is not substantially complete by the foregoing date and that the damages that may result from the failure to substantially complete the work by the foregoing date are uncertain and difficult to ascertain. These liquidated damages are damages for loss of use of the Project, and the Contractor 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. In addition to such Liquidated Damages, the Contractor shall indemnify, defend and hold the Owner and its employees and agents harmless from any and all claims, whether or not such claims are proven, and from all costs and expenses incurred, as a result of or related to such claims, including but not limited to attorneys' and consultants' fees and expenses, provided that such claims arise out of or are related to the Contractor's failure to Substantially Complete its Work by its Date for Substantial Completion. These Liquidated Damages are in addition to any other remedies available to the Owner under the Contract Documents.

9 LIMITATION AND LIABILITY.

9.1 The Owner's total liability under this Agreement shall be limited to the amount set forth in the Finance Director's certificate accompanying this Agreement. Under no circumstances shall the elected officials, officers, employees, council members, or agents of the Owner be personally liable for any obligations or claims arising out of or related to this Agreement.

10 PAYMENT

10.1 APPLICATIONS FOR PAYMENT. Payment applications shall be submitted on a monthly basis and shall reflect the amount of work completed as of the date the application for payment is submitted. On or before Completion, the Contractor shall submit to the Owner, an itemized payment application for such period in the following format and with one copy of the following documentation: 1) Invoice for work performed and materials and equipment provided for the previous pay period; 2) Current list of the Contractor's Subcontractors and suppliers showing their respective contract sums, amount paid, and amount due; 3) Contractor's Affidavit of Release of Liens with and lien releases in the format provided by the Owner for all the Contractor's

Subcontractors and suppliers current through the date of the Contractor's previous Application for Payment; 4) Such other supplemental information as the Owner may require. Such other information may include a schedule of all materials and equipment stored on site.

10.2 The Owner may withhold payment in whole or in part, and may demand that the Contractor refund amounts previously paid, to protect the Owner from loss because of: 1) The Contractor's default or failure to perform any of its obligations under the Contract Documents, including but not limited to: failure to provide sufficient skilled workers; Work, including equipment or materials, which is defective or otherwise does not conform to the Contract Documents; failure to conform to the Project Time Schedule; and failure to follow the directions of or instructions from the Owner; 2) The Contractor's default or failure to perform any of its obligations under another contract that it has with the Owner; 3) The filing of third party claims, or reasonable evidence that third party claims have been or will be filed; 4) The Work has not proceeded to the extent set forth in the application for payment; 5) Any representations made by the Contractor are untrue; 6) The failure of the Contractor to make payments to its Subcontractors; 7) Damage to the Owner's property or the property of another person or laborer; 8) The determination that there is a substantial possibility that the Work cannot be completed for the unpaid balance of the Contract Sum; and/or 9) Liens filed or reasonable evidence indicating the probable filing of such liens.

10.3 The Owner will pay the Contractor within 30 days after receipt of the Contractor's payment application, provided that the payment application has been properly submitted on a timely basis and is accompanied by all of the required documentation. The Owner may establish a cut-off date for the submission of the payment application.

11 RETAINAGE.

11.1 AMOUNT OF PAYMENTS. Subject to Paragraph 8.1, the amount of the payments to the Contractor shall be determined in accordance with the following paragraphs:

11.2 PAYMENTS. Payments under the contract shall be made at the rate of 95% of the amount set forth in the Contractor's payment application and approved by the Owner until the Work is 50% complete. When more than fifty percent (50%) of the Work has been completed, the amount retained may be reduced at the City's sole discretion. The Engineer may also, at any time, increase retainage by any amount needed to protect the City's interests with respect to any incomplete, defective or unsatisfactory Work; costs or damages incurred by the City that are subject to the Contractor's indemnification obligations; or back charges that the City may assess against the Contractor.

11.3 DOCUMENTATION. Upon request, the Contractor immediately shall supply the Owner with such information as may be requested so as to verify the amounts due to the Contractor, including but not limited to original invoices for materials and equipment and documents showing that the Contractor has paid for such materials and equipment, and so as to verify that amounts due laborers, subcontractors, and materialmen have been paid to them.

11.4 FINAL PAYMENT.

11.4.1 The final application for payment shall be itemized, and the Contractor shall ensure that the final application for payment shall contain one (1) copy of each of the following documents, if not previously delivered to the Owner: 1) All items from Paragraph

10.1; 2) Consent of the Contractor's Surety to Payment; 3) An assignment to the Owner of all warranties obtained or obtainable by the Contractor from manufacturers and suppliers of equipment and materials incorporated into the Work by written instrument of assignment in a form acceptable to the Owner; and 4) Such other documentation as required by the Contract Documents, the Owner, or applicable law.

11.4.2 The making of Final Payment by the Owner shall not constitute a waiver of Claims by the Owner for the following: 1) Liens, Claims, security interests, or encumbrances arising out of the Contract Documents that are unsettled; 2) Failure of the Work to comply with the requirements of the Contract Documents; 3) Terms of special warranties required by the Contract Documents; 4) Claims for Indemnification; 5) Claims about which the Owner has given the Contractor written notice; or 6) Claims arising after Final Payment.

11.5 ESCROW ACCOUNT. The Owner and the Contractor agree that no escrow account shall be required in connection with this Agreement and that retained funds will not earn interest.

12 CHANGE ORDERS.

12.1 A Change Order is a written instrument signed by the Owner and the Contractor stating their agreement upon a change in the Work, the amount of the adjustment or the method for computing the amount of the adjustment of the Contract Sum, if any, and the extent of the adjustment in the Project Time Schedule, if any.

13 CLAIMS AND DISPUTES.

13.1 A Claim is a demand or assertion by one of the parties seeking, as a matter of right, adjustment, or interpretation of the terms of the Contract Documents, payment of money, extension of time, or other relief with respect to the terms of the Contract Documents, provided that the Owner's decision to adjust or withhold payment under Paragraph 10.2 shall not be considered a Claim. The responsibility to substantiate claims shall rest with the party making the Claim. The Contractor shall not knowingly present or cause to be presented a false or fraudulent Claim. As a condition precedent to making a claim, the Contractor shall submit an affidavit sworn to before a notary public or other person authorized to administer oaths in the State of Ohio and executed by an authorized representative of the Contractor, which states that:

13.1.1 The Claim which is submitted herewith complies with Paragraph 13.1 of the Owner-Contractor Agreement, which provides that the "Contractor shall not knowingly present or cause to be presented a false or fraudulent Claim."

13.1.2 Claims must be made by written notice in an acceptable written medium. Claims may not be submitted via email.

13.1.3 If the Contractor wishes to make a Claim for an increase in the Contract Sum, written Notice as provided herein shall be given before proceeding to execute the Work.

13.1.4 If the Contractor wishes to make a Claim for additional time, the Contractor shall include an estimate of cost and probable effect of delay on progress of the Work. In the event of continuing delay, only one Claim is necessary. If adverse weather conditions are the basis for a Claim for additional time, such claim shall be documented by data

substantiating that weather conditions were abnormal for the period of time and could not have been reasonably anticipated, and that weather conditions had an adverse effect on the scheduled construction.

13.1.5 If conditions are encountered at the site which are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents AND (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then the observing party shall give written notice to the other party promptly before conditions are disturbed. If the conditions meet the requirements of (1) AND (2) and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, the Owner will issue an appropriate Change Order.

13.1.6 The Contractor shall make all claims in writing within seven (7) calendar days after the occurrence of the event giving rise to the Claim. Failure to do so shall be an irrevocable waiver of the Claim.

13.1.7 Within ten (10) days of its receipt of a written request, the Contractor shall make available to the Owner or its representative any books, records, or other documents in its possession or to which it has access relating to any Claim and shall require its Subcontractors, regardless of tier, and materialmen to do likewise.

13.1.8 If a Claim has not been resolved within fourteen (14) days after submission to the other party, the City shall have the right, at its sole discretion, to elect to pursue resolution of the Claim through mediation or arbitration. Should the City elect to pursue either mediation or arbitration, said alternative dispute resolution shall be conducted in general conformity with the applicable rules of the American Arbitration Association. Should the City elect not to pursue resolution of a claim through the foregoing process, the Claimant's exclusive remedy is to file suit in the Common Pleas Court of Franklin County, Ohio.

14 DEFAULT OF THE CONTRACTOR.

14.1 EVENTS OF DEFAULT. Each of the following constitutes an event of default of the Contractor:

14.1.1 The Contractor's failure to perform any of its obligations under the Contract Documents and to proceed to commence to correct such failure within forty-eight (48) hours after written notice thereof from the Owner or such lesser time as is provided in the Contract Documents, or

14.1.2 The Contractor's failure thereafter to use its best efforts to correct such failure, or

14.1.3 Except when an extension of time is granted in writing by the Owner, to correct such failure within thirty (30) days after receipt of written notice thereof.

14.1.4 The Contractor's failure to pay its obligations as they become due or the Contractor's insolvency.

14.2 OWNER'S REMEDIES. Upon the occurrence of an event of default the Owner shall have the following remedies, which shall be cumulative:

14.2.1 Order the Contractor to stop the Work, which the Contractor shall do immediately;

14.2.2 To perform through others all or any part of the Work remaining to be done and to deduct the cost thereof from the unpaid balance of the Contract Sum or, if the unpaid balance of the Contract Sum is inadequate, to demand reimbursement of amounts previously paid to the Contractor;

14.2.3 To terminate this Agreement and take possession of, for the purpose of completing the Work or any part of it, all materials, equipment, scaffolds, tools, appliances, and other items belonging to or possessed by the Contractor, all of which the Contractor hereby transfers and assigns to the Owner for such purpose, and to employ any person or persons to complete the Work, including the Contractor's employees, and the Contractor shall not be entitled to receive any further payment until the Work is completed; and/or,

14.2.4 All other remedies which the Owner may have at law or in equity or otherwise under the Contract Documents.

14.3 TERMINATION OF AGREEMENT. The termination of this Agreement shall be without prejudice to the Owner's rights and remedies, including without limitation the Owner's right to be indemnified by the Contractor.

14.4 PAYMENTS DUE CONTRACTOR. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Project, including any costs, expenses or damages incurred by the Owner as a result of the event of default, including attorneys' and consultants' fees and the administrative expense of the Owner's staff, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The obligations under this Paragraph shall survive the termination of this Agreement.

15 DEFAULT OF THE OWNER.

15.1 EVENTS OF DEFAULT. The following constitutes the exclusive events of default of the Owner:

15.1.1 The failure of the Owner to perform any of its obligations under the Contract Documents and to correct such failure within thirty (30) days after receipt of written notice thereof from the Contractor specifying the default and the necessary corrective action.

15.2 CONTRACTOR'S REMEDY.

15.2.1 The Contractor's sole and exclusive remedy for the default of the Owner, other than the failure of the Owner to pay the Contractor, will be to bring a suit for damages in the Common Pleas Court of Franklin County, Ohio. The Contractor's right to exercise that remedy shall be subject to its giving the Owner the required notices and following any other procedures required by the Contract Documents.

15.2.2 If the Owner fails to pay the Contractor as payment becomes due, the Contractor may, upon fifteen (15) days written Notice, stop the Work until payment of the amount owing has been received. An adjustment to the Contract Sum will be made as if the

Work had been suspended for the convenience of the Owner under Section 16 of this Agreement.

16 SUSPENSION OR TERMINATION FOR THE CONVENIENCE OF THE OWNER.

16.1 SUSPENSION FOR THE CONVENIENCE OF THE OWNER.

16.1.1 The Owner may, without cause, order the Contractor to suspend, delay, or interrupt the Work in whole or in part for such period of time as the Owner may determine.

16.1.2 An adjustment shall be made for increases in the cost of performance of the Work, including profit and overhead on the increased cost of performance, caused by the suspension, delay or interruption, provided that the total cost of profit and overhead shall not exceed 10% of the amount of the increased cost not attributable to profit or overhead. No adjustment shall be made to the extent that: performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible; or an equitable adjustment is made or denied under another provision of this Agreement.

16.2 TERMINATION FOR THE CONVENIENCE OF THE OWNER.

16.2.1 The Owner may, in its discretion and without cause, by written notice to the Contractor terminate this Agreement for the Owner's convenience.

16.2.2 Upon receipt of a written notice from the Owner terminating this Agreement without cause and for the Owner's convenience, the Contractor shall (i) immediately cease performing the Work, unless otherwise directed by the Owner, in which case the Contractor shall take the action directed by the Owner, (ii) take all reasonable and necessary action to protect and preserve the Work, and (iii) unless otherwise directed by the Owner, terminate all agreements with Subcontractors and suppliers.

16.2.3 If this Agreement is terminated without cause and for the Owner's convenience and there exists no event of the Contractor's default, as defined in this Agreement, the Owner will pay the Contractor (i) for Work performed under this Agreement up to the date the notice of termination is received by the Contractor at the rates for Work performed under this Agreement, including overhead and profit of 10% on the Work performed up to the date of termination.

16.2.4 If this Agreement is terminated without cause for the Owner's convenience and there exists an event of the Contractor's default, as defined in this Agreement, the Contractor shall be entitled to receive only such sums as it would be entitled to receive following the occurrence of an event of default under this Agreement.

16.2.5 The termination of this Agreement shall be without prejudice to any rights or remedies that exist at the time of termination.

17 INSURANCE AND INDEMNIFICATION.

17.1 The Contractor shall maintain:

- Comprehensive general liability insurance in the amount of \$1,000,000.00;

- Automobile liability insurance in the amount of \$1,000,000.00;
- Workers compensation coverage as required by Ohio Law;
- Umbrella/Excess liability coverage in the amount of \$2,000,000.00; and
- Installation floater for the Work in the amount of \$N/A;
- Additionally, said policies of insurance shall name the Owner, its elected officials, officers, employees, agents and volunteers as additional insureds for incidents arising out of the Contract.

17.2 Insurance furnished by the Owner, if any, is not intended to and shall not cover equipment and materials before they are physically incorporated into the Work or tools. The Contractor shall bear the entire risk of loss with respect to tools, equipment, and materials.

17.3 To the maximum extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Owner's consultants, agents, and employees from and against all claims, damages, losses, and expenses, including but not limited to attorneys' and consultants' fees—whether made by Owner or a third-party—arising out of or related to the Contractor's performance of the Work including but not limited to the failure of the Contractor to perform its obligations under the Contract Documents, any claims for bodily injury, sickness, disease, or death or to injury to or destruction of or loss of use of real or personal property, claims for additional storage and handling charges, liens against funds, claims related to the alleged failure of the Contractor to perform in accordance with the Contract Documents, and/or claims related to the removal, handling, or use of any hazardous materials. The Owner may set off amounts equal to any sums for which it is entitled to be indemnified from the amounts otherwise due the Contractor under the Contract Documents. It is agreed that the cost of the Owner's staff in calculating any expenses under this Paragraph shall be at the rate of \$35.00 per hour.

18 WARRANTIES.

18.1 In addition to any other warranties, guarantees, or obligations set forth in the Contract Documents or applicable as a matter of law and not in limitation of the terms of the Contract Documents, the Contractor warrants and guarantees that:

- The Owner will have good title to the Work and all materials and equipment incorporated into the work will be new;
- The Work and all materials and equipment incorporated into the Work will be free from all defects, including any defects in workmanship or materials;
- The Work and all equipment incorporated into the Work will be fit for the purpose for which intended;
- The Work and all materials and equipment incorporated into the Work will be merchantable; and,
- The Work and all materials and equipment incorporated into the Work will conform in all respects to the Contract Documents.

18.2 Upon notice of the breach of any of the foregoing warranties or guarantees or any other warranties or guarantees under the Contract Documents, the Contractor, in addition to any other requirements in the Contract Documents, shall commence to correct such breach and all

damage resulting therefrom within forty-eight (48) hours after written notice thereof, thereafter shall use its best efforts to correct such breach and damage to the satisfaction of the Owner and, except when an extension of time is granted in writing by the Owner, correct such breach and damage to the satisfaction of the Owner within thirty (30) days of such notice; provided that if such notice is given after final payment hereunder, such 48-hour period shall be extended to seven (7) calendar days. If the Contractor fails to commence to correct such breach and damage, or to correct such breach and damage as provided above, the Owner, upon written notice to the Contractor and without prejudice to any of its other rights or remedies, may correct the deficiencies. The Contractor upon written notice from the Owner shall pay the Owner, within ten (10) days after the date of such notice, all of the Owner's costs and expenses incurred in connection with or related to such correction and/or breach, including without limitation the Owner's administrative, legal, and consulting expenses. The foregoing warranties and obligations of the Contractor shall survive the final payment and/or termination of this Agreement. If the Contractor fails to pay the Owner any amounts due under this Paragraph, the Contractor shall pay the Owner, in addition to the amounts due, a late payment fee of one and one-half percent (1.5%) per month for each month or part thereof that the payments are not paid when due.

19 GENERAL.

19.1 MODIFICATION. No modification or waiver of any of the terms of this Agreement or of any other Contract Documents shall 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 shall require the signature of the Owner's Representative acting under the authority of a specific resolution of the Owner. Under no circumstances shall 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.

19.2 ASSIGNMENT. The Contractor may not assign this Agreement without the written consent of the Owner, which the Owner may withhold in its sole discretion.

19.3 THIRD PARTIES. Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the Owner or the Contractor.

19.4 LAW AND JURISDICTION. All questions regarding the validity, intention, or meaning of this Agreement or any modifications of it relating to the rights and obligations of the parties shall 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 Common Pleas Court of Franklin County, Ohio, and each party hereby expressly consents to the jurisdiction of such court.

19.5 STATUTE OF LIMITATIONS. Regardless of any provision to the contrary, the statute of limitations with respect to any defective or non-conforming Work that is not discovered by the Owner shall not commence until the discovery of such defective or non-conforming Work by the Owner.

19.6 NOTICES. Notices, requests, or demands by either party shall be in writing, unless otherwise expressly authorized, and shall be personally served, forwarded by expedited messenger service, sent by facsimile transmission, or be given by registered or certified mail, return receipt requested, postage prepaid, and, in the case of the Owner, addressed to the address/FAX number set forth at the beginning of this Agreement marked "Urgent, deliver to Owner's Representative/Designee," and, in the case of the Contractor, addressed to its address/FAX number set forth at the beginning of this Agreement. Any party may change its address/FAX number by giving notice hereunder. All notices, requests, and demands shall be deemed received upon receipt in the case of personal delivery or delivery by expedited messenger service, including leaving the notice at the address provided herein during normal business hours; upon the expiration of forty-eight (48) hours from the time of deposit in the United States mail; or, in the case of a notice given by facsimile transmission, upon the expiration of twenty-four (24) hours after the transmission is sent.

19.7 CONSTRUCTION. The parties acknowledge that each party has reviewed this Agreement and the other Contract Documents and has voluntarily entered into this Agreement. Accordingly, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement, the other Contract Documents, or any amendments or exhibits to it or them.

19.8 APPROVALS. Except as expressly provided herein, the approvals and determinations of the Owner shall be subject to the sole discretion of the Owner and will be valid and binding on the Contractor, provided only that they be made in good faith, i.e., honestly. If the Contractor challenges any such approval or determination, the Contractor shall have the burden of proving by clear and convincing evidence that it was not made in good faith.

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

19.10 COMPLIANCE WITH LAWS AND REGULATIONS. The Contractor, at its expense, shall comply with all applicable federal, state, and local laws, rules, and regulations applicable to the Work. Including, but not limited to Ohio's Prevailing Wage law if applicable.

19.11 PROJECT SAFETY. The Contractor shall follow all applicable safety and health regulations during the progress of the Project and shall monitor all of its employees and its subcontractors for compliance with such safety and health regulations. In undertaking the responsibilities set forth in this Paragraph, the Contractor does not assume any duty or responsibility to the employees of any Subcontractor or supplier, regardless of tier. The Owner assumes no responsibility for the development, review, or implementation of any project safety plan or for Project safety and has no authority to direct the means and methods of the Contractor.

19.12 EQUAL OPPORTUNITY. Contractor agrees that, 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. Contractor further agrees that neither it, its subcontractors, or any person on the 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. That there shall be deducted from the amount payable to the Contractor by the Owner under this Agreement a forfeiture of twenty-five dollars (\$25.00) as required by O.R.C. Section 153.60 for each person who is discriminated against or intimidated in violation of this Agreement. That this Agreement may be canceled or terminated by the Owner and all money to become due hereunder may be forfeited for a second or subsequent violation of the terms of this section of this Agreement.

19.13 USE OF OWNER'S FACILITIES. The Contractor shall ensure that neither its employees, nor its Subcontractor's or material supplier's employees, regardless of tier, do any of the following without the express prior written consent of the Owner: use the Owner's cafeteria, rest rooms, or phones; use or bring any alcoholic beverages, controlled substances, or firearms on any property owned by the Owner. The Owner will not tolerate any such actions and any such action observed or made known to the Owner shall be dealt with severely.

19.14 ETHICS. By signing and entering into this agreement with the Owner, the Contractor represents that it is familiar with all applicable ethics law requirements, including without limitation Sections 102.04 and 3517.13 of the O.R.C., and certifies that it is in compliance with such requirements. The Contractor understands that failure to comply with the ethics laws is, in itself, grounds for termination of this contract and may result in the loss of other contracts with the Owner.

19.15 PROPERTY TAX AFFIDAVIT. The Contractor's affidavit given under ORC Section 5719.024 is incorporated herein.

19.16 ENTIRE AGREEMENT. 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.

CITY OF DUBLIN, OHIO

By: _____
Its: _____
Date: _____

By: _____
Its: _____
Date: _____

APPROVED AS TO FORM:

Stephen J. Smith, Esq., Law Director

Date: _____

CERTIFICATE OF AVAILABILITY OF FUNDS

I Angel Mumma, hereby certify that I am the fiscal officer for the CITY OF DUBLIN, OHIO and that the amount of money to wit \$ required to meet the cost of the attached Contract between the City and has been or will be, before the ordering of any materials, lawfully appropriated for the purpose of said Contract and the money so appropriated is on deposit or in process of collection to the credit of the appropriate fund free from any previous encumbrances. Moneys due in excess of the Contract Sum and any Contingency amount assigned thereto shall require an additional and separate Fiscal Officer's Statement of Availability which shall not be given unless the Contract adjustment is directly attributable to one of the express methods for increasing the Contract Sum under the Contract Documents; and, such process is completed in the manner required by the Contract Documents.

Date

Angel Mumma, Finance Director

B. CITY OF DUBLIN GENERAL CONDITIONS DIVISION 100

City of Dublin Division of Engineering General Condition Division 100 can always be found at:

<http://dublinohiousa.gov/dev/dev/wp-content/uploads/2013/02/City-of-Dublin-General-Conditions-Section-100.pdf>

If you purchase a hard copy of the project documents the General Condition Division 100 will be on the CD included in the Bid Document. The General Condition Division 100 will also be posted with the project on the City of Dublin's website where the project documents are available for download.

C. SUPPLEMENTAL GENERAL CONDITIONS

THERE ARE NO SUPPLEMENTAL GENERAL CONDITIONS FOR THE CITY OF DUBLIN, DUBLIN ROAD SOUTH MULTI-USE PATH HETRFORD LANE TO RINGS ROAD PROJECT

D. SUPPLEMENTAL SPECIFICATIONS

CONTRACT SPECIFICATIONS

All contract specifications in this section are to be considered a part thereof.

MAINTENANCE OF TRAFFIC

Dublin Road shall be closed to traffic between Hertford Lane and Rings Road from Thursday, June 6, 2013 to Friday, August 16, 2013. Property owners, U.S. Mail, and if required, emergency vehicles, shall have continued access to properties every day along Dublin Road in the closed area.

WORKING HOURS

The Contractor is permitted to work between 7:00 A.M. and 7:00 P.M., Monday through Saturday. Permission to work on Sunday and holidays must be requested in writing and approved by the City Engineer.

STAGING AREA

The Contractor shall be responsible for making arrangements for a staging area.

GEOTECHNICAL INFORMATION

The subsurface exploration report has been included for the project area.

TEST HOLES

The Contractor is encouraged to dig test holes at the project site prior to making their bid to familiarize themselves with site subsurface conditions. The bidder shall take into account any difficulty they perceive in constructing the project due to rock, ground water, weak soils, topsoil, etc.

INSPECTION

All inspections shall be provided by the City.

PROPOSAL

No extra compensation will be paid to the Contractor by reason of compliance with any of the requirements indicated in the Specifications. Payment shall be deemed to be included among the several items, as bid upon, unless otherwise specifically provided.

SCHEDULE

The Contractor shall submit a work schedule to the City Engineer at the time of the pre-construction meeting. This schedule will detail the timing of the work activities for the various sections of the project. Revised project schedules are to be submitted every four (4) weeks throughout the project.

CONSTRUCTION LAYOUT

All construction layout stakes for this project shall be provided by the Contractor. All work shall be performed by and under the guidance of an Ohio Professional Surveyor.

COORDINATING WITH UTILITIES

It is the Contractor's responsibility to coordinate their work with the private utilities as required. The utility owner may be required to brace, temporarily support, or relocate their respective utilities so that the proposed improvements can be constructed.

STORAGE OF EQUIPMENT AND MATERIALS

No materials, including pipe, shall be stored within twenty (20) feet of any intersecting street or driveway. During non-working hours, storage of equipment shall comply with these same requirements and shall not in any way relieve the Contractor of their legal responsibilities or liabilities for the safety of the public.

CONSTRUCTION MATERIALS

No alternates or deviations shall be permitted from those construction materials shown on the plans. Bidders shall not submit alternates with their bid.

DEWATERING

The cost of any dewatering operations required for the construction of the storm sewers, culverts, underground ducts and/or conduits shall be included in the price bid for the various items.

CONDUIT END TREATMENT

Immediately after placement of any conduits, the Contractor shall construct the end treatments required by the plans at both the outlet and inlet ends. This shall include headwalls, flared-end sections, rip-rap, rock channel protection, seeding, etc.

ITEM 901 – STORM SEWER WITH TYPE 1 BEDDING (706.02)

All storm sewer conduits from 12" to 42" shall meet the requirements of ASTM C-76, Class III or stronger.

MANHOLES, CATCH BASINS AND INLETS

The contractor will make all final grade adjustments of manhole, catch basin and inlet covers and frame assemblies using injection molded high density polyethylene (HDPE) adjustment rings where practical. These adjustment rings shall be manufactured from polyethylene plastic as identified in ASTM Designation D-1248 (Standard Specification for Polyethylene Plastic Molding and Extrusion Materials). Installation shall be per manufacture's recommendations only. The annular space between the rings and cone basin, the rings, and the rings and cover frame shall be sealed utilizing an approved butyl sealant.

SURVEY MONUMENTATION

The contractor shall carefully preserve bench marks, property corners, reference points, stakes and other survey reference monuments or markers. In cases of willful or careless destruction, the contractor shall be responsible. Resetting of markers shall be performed by an Ohio Professional Surveyor as approved by the City Engineer at the contractor's expense.

CONSTRUCTION NOISE

Any devise shall not be operated at any time in such a manner that the noise created substantially exceeds the noise customarily and necessarily attendant to the reasonable and efficient performance of such equipment.

ITEM SPECIAL – GRASS PAVERS, AS PER PLAN

Grass pavers shall be GEOBLOCK 5150 Porous Pavement System - Heavy Fire Truck Access & H2O loading as manufactured by Presto Geosystems. Contractor shall follow GEOBLOCK 5150 specifications, design and construction requirements.

ITEM SPECIAL - STRUCTURE MISC.: 72' PRE-ENGINEERED HALF THROUGH TRUSS PEDESTRIAN BRIDGE WITH UNDERHUNG FLOOR BEAM

1.0 General

1.1. The AASHTO LRFD Guide Specification for the Design of Pedestrian Bridges, December 2009 shall apply except as noted.

1.2. Design loads

1.2.1. Live Loads

1.2.1.1. Pedestrian Live Load

Main Members: Main-supporting members, including girders and trusses, shall be designed for a pedestrian live load of 85 pounds per square foot (psf) of bridge walkway area. The pedestrian live load shall be applied to those areas of the walkway so as to produce maximum stress in the member being designed.

Secondary Members: bridge decks and supporting floor systems, including secondary stringers, floor beams, and their connections to main supporting members, shall be designed for a live load of 85 psf, with no reduction allowed.

1.2.1.2. Vehicle Load

Pedestrian/bicycle bridge shall be designed for an occasional single maintenance vehicle load. This shall be an 8,000 pound vehicle load. The axle spacing shall be 9'- 0" and the wheel spacing 5'- 0" with 3,200 pounds on the front axle and 4,800 pounds on the back axle.

The maintenance vehicle live load shall not be placed in combination with the pedestrian live load.

A vehicle impact allowance is not required.

1.2.2. Wind Loads

A wind load of the following intensity shall be applied horizontally at right angles to the longitudinal axis of the structure. The wind load shall be applied to the projected vertical area of all superstructure elements, including exposed truss members on the leeward truss.

For Trusses: 75 pounds per square foot

For open truss bridges, where wind can readily pass through the trusses, bridges may be designed for a minimum horizontal load of 35 pounds per square foot on the full vertical projected area of the bridge, as if enclosed.

1.3. Design details

1.3.1. Deflection

Members should be designed so that the deflection due to the service pedestrian live loads does not exceed 1/400 of the length of the span.

The horizontal deflection due to lateral wind load shall not exceed 1/500 of the length of the span.

1.3.2. Vibrations

The fundamental frequency of the pedestrian bridge without live load should be greater than 3.0 hertz (Hz) to avoid the first harmonic. If the fundamental frequency cannot satisfy this limitation, or if the second harmonic is a concern, a dynamic performance evaluation should be made.

In lieu of such evaluation the bridge may be proportioned so that the fundamental frequency shall be greater than

$$F \geq 2.86 \ln (180/W)$$

where \ln is the natural log and W is the weight (kips) of the supported structure, including dead load and an allowance for actual pedestrian live load. Alternatively, the minimum supported structure weight (W) shall be greater than

$$W \geq 180 e^{(-0.35f)}$$

Where f is the fundamental frequency (Hz)

1.3.3. Allowable Fatigue Stress

Allowable fatigue stress ranges for steel members shall be determined from Article 6.6 of the AASHTO LRFD Bridge Design Specifications, except that the allowable fatigue stress ranges for Redundant Load

Path structures may be used, regardless of the actual degree of member redundancy. Fatigue provisions need not apply to pedestrian live load stresses for cases where heavy pedestrian loads are infrequent, but shall be considered for wind loads.

1.3.4. Minimum Thickness of metal

The provisions of Article 6 of the Standard Specifications for Highway Bridges shall apply, except that the minimum thickness of closed structural tubular members shall be $\frac{1}{4}$ inch.

1.3.5. Welded Tubular Connections

Welded tubular connections shall be designed in accordance with the Structural Welding Code-Steel ANSI/AWS D1.1.

2.0 GENERAL FEATURES OF DESIGN

2.1. Width

Bridge width shall be 8' and shall be as measured from the face/face of truss.

2.2. Member Components

All members of the vertical trusses (top and bottom chords, verticals, and diagonals) shall be fabricated from square and/or rectangular structural steel tubing. Other structural members and bracing shall be fabricated from structural steel shapes or square and rectangular structural steel tubing. To provide lateral support for the top flange of open shape stringers (w-shapes or channels), a minimum of one stiffener shall be provided in each stringer at every floor beam location.

2.3. Camber

The bridge shall have a vertical camber dimension at midspan equal to 100% of the full dead load.

2.4. Finish

All Blast Cleaning shall be done in a dedicated OSHA approved indoor facility owned and operated by the bridge fabricator. Blast operations shall use Best Management Practices and exercise environmentally friendly blast media recovery systems.

To aid in providing a uniformly “weathered” appearance, all exposed surfaces of steel shall be blast cleaned in accordance with Steel Structures Painting Council Surface Preparation Specifications No. 7 Brush-Off Blast Cleaning, SSPC SP7 latest edition.

Exposed surfaces of steel shall be defined as those surfaces seen from the deck and from outside of the structure. Stringers, floor beams, lower brace diagonals and the inside face of the truss below deck and bottom face of the bottom chord shall not be blasted.

3.0 Qualified Suppliers

Each bidder is required to identify their intended bridge supplier as part of the bid submittal. Qualified suppliers must have at least 5 years experience fabricating these type structures.

Pre-approved Manufacturers:
Continental Bridge
9025 Centre Pointe Drive, Suite 400
West Chester, Ohio 45069

Steadfast Bridges Co.
9025 Centre Pointe Drive, Suite 400
West Chester, Ohio 45069

Suppliers other than those listed above may be used provided the engineer or owner’s agent evaluates.

The proposed supplier and approves the supplier 5 days prior to bid opening. The contractor must provide the following documentation, for any proposed supplier who is not pre-approved, at least 10 days prior to bid.

- Product Literature
- All documentation to insure the proposed substitution will be in compliance with these specifications.

This shall include:

- Representative design calculations
- Representative drawings
- Splicing and erection procedures
- Warranty information
- Inspection and Maintenance procedures
- AISC Shop Certification
- Welder Qualifications

- Proposed suppliers must have at least five (5) years experience designing and fabricating these type structures and a minimum of five (5) successful bridge projects, of similar construction, each of which has been in service at least three (3) years. List the location, bridge size, owner, and a contact for reference for each project.

The engineer will evaluate and verify the accuracy of the submittal prior to bid. If the engineer determines that the qualifying criteria have not been met, the contractor's proposed supplier shall be rejected. The engineer's ruling shall be final.

4.0 Welded Tubular Connections

American National Standards Institute / American Welding Society (ANSI/AWS. All welded tubular connections shall be checked, when within applicable limits, for the limiting failure modes outlined in the ANSI/AWS D1.1 Structural Welding Code.

All tubular joints shall be plain unstiffened joints (made without the use of reinforcing plates) except as follows:

- Where chords, end floor beams and in high profiles the top end struts weld to the end verticals, the end verticals (or connections) may require stiffening to transfer the forces from these members into the end vertical.
- Truss vertical to chord connections.

NOTE: The effects of fabrication tolerances shall be accounted for in the design of the structure.

Special attention shall be given to the actual fit-up gap at welded truss joints.

5.0 MATERIALS

5.1. Steel – Bridge members are fabricated from high strength, low alloy, enhanced atmospheric corrosion resistant ASTM A847 cold-formed welded square and rectangular tubing, and ASTM A588, ASTM A606, or ASTM A242 plate and structural shapes ($F_y = 50,000\text{psi}$). The minimum corrosion index of atmospheric corrosion resistant steel, as determined in accordance with ASTM G101, shall be 6.0.

5.2. Decking –

5.2.1. Ironwood IPE Planks

6.0 WELDING

6.1. Welding

Welding and weld procedure qualification tests shall conform to the provisions of ANSI/AWS D1.1 "Structural Welding Code", latest edition. Filler metal shall be in accordance with the applicable AWS Filler Metal Specification (i.e. AWS A 5.28 for the GMAW Process). For exposed, bare, unpainted applications of corrosion resistant steels (i.e. ASTM A588 and A847), the filler metal shall be in accordance with AWS D1.1, Section 3.7.3.

6.2. Welders

Welders shall be properly accredited operators, each of whom shall submit certification of satisfactorily passing AWS standard qualification tests for all positions with unlimited thickness of base metal, have a minimum of 6 months experience in welding tubular structures and have demonstrated the ability to make uniform sound welds of the type required.

7.0 SUBMITTALS

7.1. Submittal Drawings

Schematic drawings and diagrams shall be submitted to the City of Dublin for their review after receipt of order. Submittal drawings shall be unique drawings, prepared to illustrate the specific portion of the work to be done. All relative design information such as member sizes, bridge reactions, and general notes shall be clearly specified on the drawings. Drawings shall have cross referenced details and sheet numbers. All drawings shall be signed and sealed by a Professional Engineer who is licensed in the state of Ohio..

7.2. Structural Calculations

Structural calculations for the bridge superstructure shall be submitted by the bridge manufacturer and Reviewed by the approving engineer. All calculations shall be signed and sealed by a Professional Engineer who is licensed in the state of Ohio. The calculations shall include all design information necessary to determine the structural adequacy of the bridge. The calculations shall include the following:

- All AISC allowable stress checks for axial, bending and shear forces in the critical member of each truss member type (i.e. top chord, bottom chord, floor beam, vertical, etc.).
- Checks for the critical connection failure modes for each truss member type (i.e. vertical, diagonal, floor beam, etc.). Special attention shall be given to all welded tube on tube connections

- All bolted splice connections.
- Main truss deflection checks.
- Deck design.

NOTE: The analysis and design of triangulated truss bridges shall account for moments induced in members due to joint fixity where applicable. Moments due to both truss deflection and joint eccentricity must be considered.

7.3. Welder certifications in compliance with AWS standard qualification tests.

8.0 FABRICATION

8.1. General Requirements

8.1.1. Drain Holes

Provide 1" diameter drain holes at all low points.

8.1.2. Welds

Special attention shall be given to developing sufficient weld throats on tubular members. Fillet weld details shall be in accordance with AWS D1.1, Section 3.9 (See AWS Figure 3.2). Unless determined otherwise by testing, the loss factor "Z" for heel welds shall be in accordance with AWS Table 2.8. Fillet welds which run onto the radius of a tube shall be built up to obtain the fullthroat thickness (See Figure 7.1). The maximum root openings of fillet welds shall not exceed 3/16" in conformance with AWS D1.1, Section 5.22. Weld size or effective throat dimensions shall be increased in accordance with this same section when applicable (i.e. fit-up gaps > 1/16").

The fabricator shall have verified that the throat thickness of partial joint penetration groove welds (primarily matched edge welds or the flare-bevel-groove welds on underhung floor beams) shall be obtainable with their fit-up and weld procedures. Matched edge welds shall be "flushed" out when required to obtain the full throat or branch member wall thickness.

For full penetration butt welds of tubular members, the backing material shall be fabricated prior to installation in the tube so as to be continuous around the full tube perimeter, including corners.

Backing may be of four types:

- A "box" welded up from four (4) plates.

- Two “channel” sections, bent to fit the inside radius of the tube, welded together with full penetration welds.
- A smaller tube section which slides inside the spliced tube.
- A solid plate cut to fit the inside radius of the tube.

Corners of the “box” backing, made from four plates, shall be welded and ground to match the inside corner radii of the chords. The solid plate option shall require a weep hole either in the chord wall above the “high side” of the plate or in the plate itself. In all types of backing, the minimum fit-up tolerances for backing must be maintained at the corners of the tubes as well as across the “flats”.

8.2. Quality Certification

Bridge(s) shall be fabricated by a fabricator who is currently certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for the category “Simple Steel Bridges” as set forth in the AISC Certification Program. Quality control shall be in accordance with procedures outlined for AISC certification.

9.0 DELIVERY AND ERECTION

Delivery is made to a location nearest the site which is easily accessible to normal over-the-road tractor/trailer equipment. All trucks delivering bridge materials will need to be unloaded at the time of arrival. The manufacturer will provide detailed, written instruction in the proper lifting procedures and splicing procedures (if required). The method and sequence of erection shall be the responsibility of others. The bridge manufacturer shall provide written inspection and maintenance procedures to be followed by the bridge owner.

10.0 BEARINGS

10.1. Bearing Devices

Bridge bearings shall consist of a steel setting or slide plate placed on the abutment or grout pad. The bridge bearing plate which is welded to the bridge structure shall bear on this setting plate. One end of the bridge will be fixed by fully tightening the nuts on the anchor bolts at that end. The opposite end will have finger tight only nuts to allow movement under thermal expansion or contraction. The bridge bearings shall sit in a recessed pocket on the concrete abutment. Minimum 28-day strength for the abutment concrete shall be 4,000 PSI. The bearing seat shall be a minimum of 16” wide. The step height (from bottom of bearing to top-of-deck) shall be determined by the bridge manufacturer.

11.0 FOUNDATIONS

The bridge manufacturer shall determine the number, diameter, minimum grade and finish of all anchor bolts. The anchor bolts shall be designed to resist all horizontal and uplift forces to be transferred by the superstructure to the supporting foundations. Engineering design of the bridge supporting foundations (abutment, pier, bracket and/or footings), including design of anchor bolt embodiments, shall be the responsibility of the foundation engineer. The contractor shall provide all materials for (including anchor bolts) and construction of the bridge supporting foundations. The contractor shall install the anchor bolts in accordance with the manufacturer’s anchor bolt spacing dimensions. Information as to bridge support reactions and anchor bolt locations will be furnished by the bridge manufacturer after receipt of order and after the bridge design is complete.

12.0 WARRANTY

The bridge manufacturer shall warrant their steel truss structure(s) to be free of design, material and workmanship defects for a period of fifteen years from the date of delivery. This warranty does not include decking, railing attachments, on any other items not part of the steel truss structure. This warranty shall not cover defects in the bridge caused by abuse, misuse, overloading, accident, improper maintenance, alteration or any other cause not the result of defective materials or workmanship. This warranty shall be void unless owner’s records, which will indicate compliance with the minimum guidelines specified in the Inspection and Maintenance Procedures, can be supplied. Repair or replacements shall be the exclusive remedy for defects under this warranty. The bridge manufacturer shall not be liable for any consequential or incidental damages for breach of any express or implied warranty on their structures.

13.0 APPROVAL CHECKLIST

The following checklist will be used in the evaluation of all submittals to assure compliance with the Special Specifications for Prefabricated Bridge. This checklist is considered the minimum acceptable requirements for compliance with these specifications. Any deviations from this checklist shall be considered grounds for rejection of the submittal. Any costs associated with delays caused by the rejection of the submittal, due to non-compliance with this checklist, shall be fully borne by the contractor and bridge supplier.

SUBMITTAL DRAWINGS

Data required to be shown:

- _____ Bridge Elevation
- _____ Bridge Cross Section
- _____ All Member Sizes
- _____ All Vertical Truss Members are Square or Rectangular Tubing
- _____ Bridge Reactions
- _____ General Notes Indicating
- _____ AISC Stress Conformance
- _____ Material Specifications to be Followed
- _____ Design Live Load
- _____ Design Vehicle Load (If Applicable)
- _____ Design Wind Load
- _____ Other Specified Design Loads
- _____ Welding Process
- _____ Blast Cleaning
- _____ Paint System to be Used (If Applicable)
- _____ Paint Color Chart (If Applicable)
- _____ Detailed Bolted Splices (If Applicable)
- _____ Bolted Splice Location (If applicable)
- _____ Signature and Seal of Professional Engineer, licensed in Accordance with Section 3.0

DESIGN CALCULATIONS

Data required to be shown:

- _____ Joint Coordinates & Member Incidences
- _____ Joint and Member Loads
- _____ Member Properties
- _____ Load Combinations
- _____ AISC Member Stress Checks for Each Member Type
- _____ Critical Connection Failure Mode Checks For Each Member Type
- _____ Chord Face Plastification Checks
- _____ Punching Shear Checks
- _____ Material Failure Checks (Truss Webs)
- _____ Weld Failure Checks (Effective Length)
- _____ Weld Failure Checks (Ultimate)
- _____ Local Buckling of the Main Member Face Checks
- _____ Main Member Yielding Failure Checks
- _____ Main Member Crippling Failure Checks
- _____ Main Member Buckling Failure Checks
- _____ Main Member Shear Failure Checks
- _____ All Bolted Splice Checks (if applicable)
- _____ Main Truss Deflection Checks

Decking Material Checks

Consideration of Individual Member Moments Due to Truss Deflection, Joint Fixity and Joint Eccentricity

FABRICATION SUBMITTALS

Data required to be shown:

Written Installation Instructions **

Written Splicing Instructions **

Written Maintenance & Inspection Instructions **

Welder Certifications **

Welding Procedures **

Material Certifications (if applicable)

Structural Steel (if applicable)

Decking (if applicable)

Structural Bolts (if applicable)

Quality Control Section of AISC Certification Manual (if applicable) **

Painter Certifications (if applicable) **

Weld Testing Reports (if applicable)

** NOTE: These items are required to be submitted along with Submittal Drawings and Design Calculations.

Those Fabrication Submittal Items not marked are to be submitted prior to shipment of the bridge.

E. GEOTECHNICAL SPECIFICATIONS



Stantec

Stantec Consulting Services Inc.
1500 Lake Shore Drive Suite 100
Columbus OH 43204
Tel: (614) 486-4383
Fax: (614) 486-4387

June 7, 2012
File: 173608736

City of Dublin, Ohio
c/o
Mr. Brian Hagerty, PE
Stantec Consulting Services Inc.
1500 Lake Shore Drive
Suite 100
Columbus, Ohio 43204

**Reference: Geotechnical Exploration
 Dublin Road Multi-Use Path
 Dublin, Ohio**

Stantec Consulting Services Inc. (Stantec) is pleased to submit the geotechnical exploration report for the referenced project. This report includes findings and recommendations based on the evaluation performed for improvements to the multi-use path.

Stantec appreciates the opportunity to provide these geotechnical engineering services. If you have any questions or if we can be of further assistance, please contact our office.

Respectfully,

STANTEC CONSULTING SERVICES INC.

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Richard L. Williams, PHD, PE
Principal
Tel: (614) 844-4004
Fax: (614) 486-1351
Rich.Williams@Stantec.com

Attachments: Report of Geotechnical Exploration

Submitted: 1 PDF copy via email (Brian.Hagerty@Stantec.com)



Geotechnical Exploration
Dublin Road Multi-Use Path
Dublin, Ohio

Prepared for:
City of Dublin, Ohio

Prepared by:
Stantec Consulting Services Inc.
1500 Lake Shore Drive
Suite 100
Columbus, Ohio

June 7, 2012

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1.0 Introduction

The City of Dublin, Ohio is planning on upgrading and expanding their multi-use path along Dublin Road in Dublin, Ohio. The proposed path is located just south of downtown Dublin between Tuttle Road and Waterford Drive. The general location of the project area is shown on the Vicinity Map provided as Figure 1. Stantec Consulting Services Inc. (Stantec) was contracted to provide geotechnical engineering services primarily focused on evaluation of the subsurface conditions at two of the proposed bridge locations, one of the culvert extensions and along a portion of the proposed path.

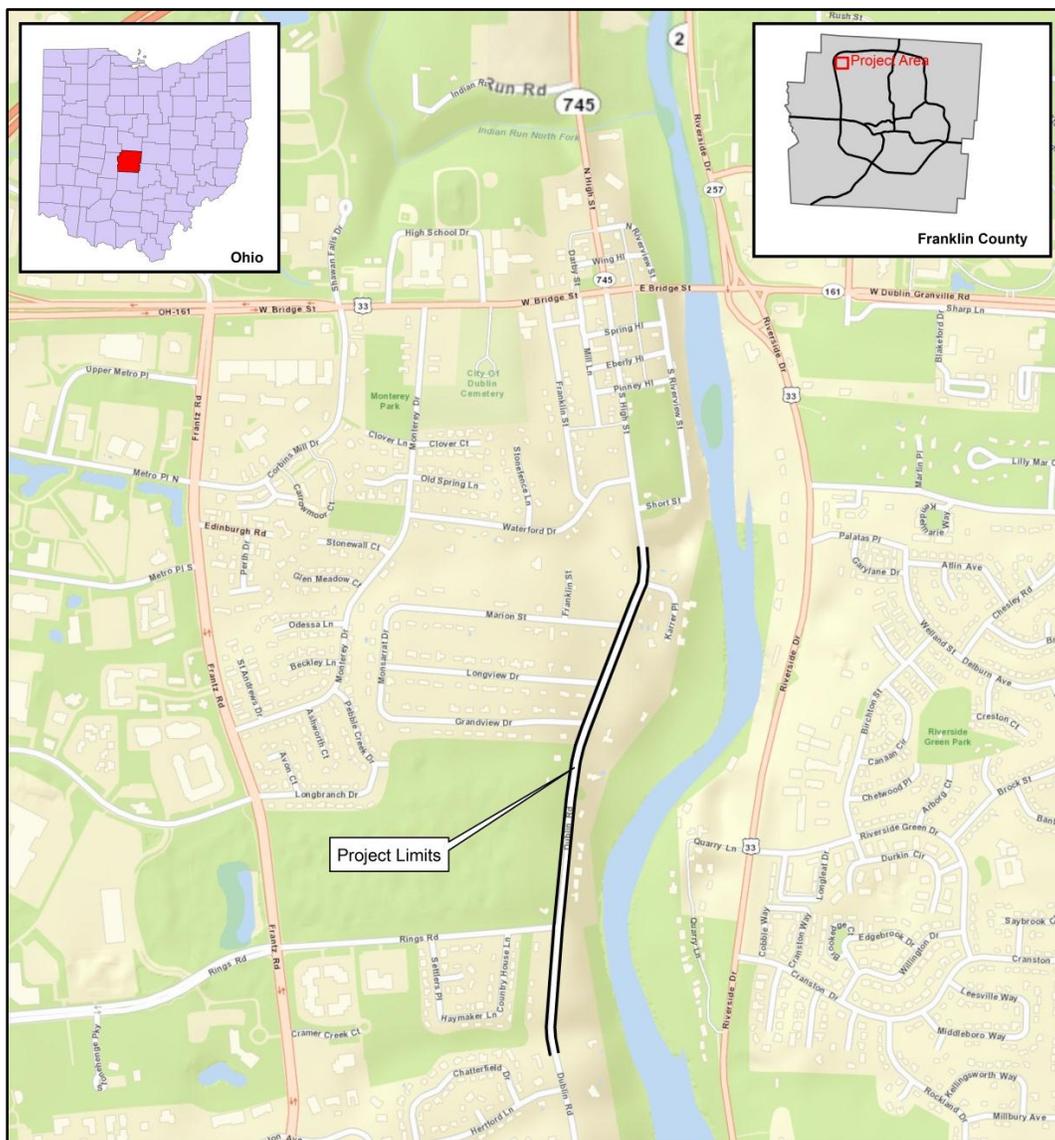


Figure 1 – Vicinity Map

2.0 Generalized Site Geology

2.1 GENERAL

The *Physiographic Regions of Ohio Map* (Ohio Department of Natural Resources (ODNR), 1998) indicates that the project site is located in the Columbus Lowland Till Plain. This region is described as lowland surrounded in all directions by relative uplands, having a broad regional slope toward the Scioto Valley with many larger streams. The ground surface Elevation in the vicinity of the project ranges from 800 to 830 feet above Mean Sea Level.

2.2 SOIL GEOLOGY

The soil survey *Web Soil Survey of Franklin County* (United States Department of Agriculture website at <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>, 2010) indicates that the soils within the site are primarily silt loams of the Milton and Ritchey Associations. These soils are described as well drained with no frequency flooding or ponding. The typical AASHTO soil classification of this soil type is A-4. Udorthents soils are in areas of cut and fill and therefore do not have a specific drainage class or AASHTO soil classification but tend to consist of varying amounts of neighboring soils.

The project site is underlain by ground moraine according to the *Quaternary Geology of Ohio, Marion Quadrangle* map (ODNR, 1994). The moraine is described as flat to gently undulating.

2.3 BEDROCK GEOLOGY

The *Reconnaissance Bedrock Geology Map of the Northwest, Ohio Quadrangle* (ODNR, 1997) indicates that the overburden soils are underlain by limestone bedrock (Delaware and Columbus formations) primarily of the Devonian geologic period.

Bedrock topography mapping *Shaded Bedrock Topography Map of Ohio* (ODNR, 2004) indicates that the bedrock surface in the project vicinity ranges from Elevation 701 to 800. Drift thickness mapping *Shaded Drift-Thickness Map of Ohio* (ODNR, 1985) indicates that drift (glacially deposited soil above bedrock) ranges from 21 to 50 feet thick in the project vicinity.

The *Known and Probable Karst In Ohio* (ODNR, 2002) map indicates no known or probable karst areas in the project vicinity. However, it is within the carbonate-dominant lithology meaning it has a potential for karst formations, and it is known that the path site traverses zones of soil-filled fractures or fissures within the underlying limestone.

3.0 Exploration

3.1 HISTORIC GEOTECHNICAL DATA

Historical subsurface information was available from the City of Dublin and included multiple investigations completed in 1987 for the Upper Scioto West Sewer Interceptor by Jenny Engineering Corporation (Springfield, New Jersey) and Resource International (Columbus, Ohio). Additional subsurface information was obtained from the Ohio Department of Transportation (ODOT) for the bridge structure at Cramer Creek (WAS-10-10.04). Numerous borings from these investigations were utilized for planning and analysis purposes. A total of 11 Borings (TB-9, TB-10, TB-11, TB-60, TB-62 through TB-65 and B-1 through B-3) were previously performed within the limits of the current evaluation. The borings were performed to depths ranging from 17.0 feet to 74.7 feet below the ground surface and included significant sampling and laboratory testing. Locations of the historical borings are shown on the Geotechnical Site Plans provided in Appendix A. The historical boring logs are provided in Appendix E.

3.2 PROJECT EXPLORATION PROGRAM

During March 26 and 27, 2012, three borings and six testpits were performed along Dublin Road. Geotechnical Site Plans provided as Exhibits 1 through 3 in Appendix A of this report show the locations of the borings and testpits. The laboratory-corrected subsurface and testpit logs are provided in Appendix B.

The borings were advanced using continuous-flight augers from a truck-mounted drill rig. Standard Penetration Test (SPT, ASTM D1586) samples were generally performed at 2.5-foot intervals to termination depth. Upon encountering bedrock in Boring B-201 and B-203, NQ-sized coring equipment was used to obtain 5 feet of bedrock core sample. Runs and units of bedrock core were measured for core recovery and loss percentages, as well as Rock Quality Designation (RQD). The materials encountered and samples retrieved were logged by a professional geologist, with particular attention given to soil type, consistency and moisture content. The borings were monitored for the presence of groundwater during the drilling process, and at the completion of drilling, the depth of water was recorded on the boring log. At the conclusion of drilling operations, the boreholes were backfilled with auger soil cuttings, and grass seed with straw was applied.

The testpits were performed using a mini utility backhoe (CAT 302.5), equipped with a 2-foot-wide excavating bucket. The testpits were excavated to a depth encountering the top of bedrock surface. At that depth, elevations of the bedrock surface were surveyed at one or two locations depending upon the variance in bedrock elevation. The materials encountered in the sides and bottom of the excavation were logged by the professional geologist. No samples were obtained from the testpits. At completion of the testpit, the excavation was backfilled with the removed soil, and grass seed with straw was applied.

Geotechnical Exploration

Dublin Road Multi-Use Path

Dublin, Ohio

All of the samples obtained were transported to Stantec's materials laboratory where they were visually classified (ASTM D2488) and a moisture content determination (ASTM D2216) was performed on each sample. Engineering classification testing was performed on samples representing the predominant soil horizons encountered in the borings. The testing consisted of sieve and hydrometer analysis (particle size distribution, ASTM D422) and Atterberg Limits (ASTM D4318). The testing results were used to classify the soils according to the Unified Soil Classification System (ASTM D2487). Unconfined compressive (UC) strength tests were performed on selected undisturbed samples when a suitable sample was obtained. Summaries of the lab testing are provided in Appendix C.

4.0 Findings

4.1 GENERAL

The boring and testpit locations are shown on the Geotechnical Site Plans presented in Appendix A. Laboratory-corrected subsurface logs are shown in Appendix B with laboratory test results presented in Appendix C.

Table 1 summarizes the borings and testpits performed for this evaluation. The boring locations are symbolized using “B” and the testpits are symbolized using “TP”.

Table 1. Geotechnical Exploration Summary

Exploration ID	Description of Location	Ground Surface Elevation (feet)	Exploration Depth (feet)
B-201	North of the Cramer Ditch Structure	829.5	10.5
B-202	North of the Cosgray Creek Structure	802.9	25.0
B-203	South of the Monterey Creek Structure	806.5	16.0
TP-301	175 feet North of Rings Road	828.4	3.2
TP-302	500 feet North of Rings Road	826.4	1.8
TP-303	275 feet South of Grandview Drive	811.6	2.0
TP-304	50 feet South of Grandview Drive	808.6	2.8
TP-305	50 feet North of Grandview Drive	806.1	5.0
TP-306	275 feet North of Marion Street	805.0	3.5

4.2 GENERAL SUBSURFACE CONDITIONS

4.2.1 Cramer Ditch Bridge

Boring B-201 was drilled north of the existing Dublin Road bridge structure and encountered overburden soils to a depth of 5.5 feet below the existing ground surface (El. 824.0). The soils included 6-inches of topsoil over 5.0 feet of Silty Clay with Sand and Gravel. The consistency of this soil was Stiff with hand penetrometer measurements ranging from 3.0 to 4.0 tons per square foot (tsf). Bedrock was encountered at a depth of 5.5 feet (El. 824.0) and consisted of moderately hard Limestone. No groundwater was encountered during drilling.

4.2.2 Cosgray Creek Bridge

Boring B-202 was drilled within the pavement limits of Dublin Road, north of the existing bridge structure over Cosgray Creek and encountered overburden soils to the boring termination depth at 25.0 feet below the existing ground surface (El. 777.9). The asphalt and subbase material has an overall thickness of 12-inches. From 12-inches to a depth of 5.0 feet, medium dense to dense Sand and Gravel was encountered. From 5.0 feet to 10.0 feet, medium dense to very dense Silt Clay with Sand and Gravel was encountered. From 10.0 feet to 25.0 feet, loose to

dense Sand and Gravel was encountered. No Bedrock was encountered within Boring B-202. No groundwater was encountered during drilling.

4.2.3 Monterey Creek Culvert

Boring B-203 was drilled within a residential driveway just south of the existing Dublin Road bridge structure over Monterey Creek. The boring encountered overburden soils to a depth of 11.0 feet below the existing ground surface (El. 795.5). The asphalt and subbase material has an overall thickness of 12-inches. From 12-inches to a depth of 3.5 feet, Fill consisting of loose Silty Clay with Sand and Gravel was encountered. Below the Fill, from 3.5 feet to 11.0 feet, loose to medium dense Silty Gravel with Sand was encountered. Bedrock was encountered at a depth of 11.0 feet (El. 795.5) and consisted of moderately hard Limestone. No groundwater was encountered during drilling.

4.2.4 Along the Path Alignment

Testpits TP-301 through TP-306 were performed along the proposed alignment primarily to establish the depth to bedrock. The overburden soil encountered within the testpits ranged from 1.8 feet to 5.0 feet below the existing ground surface. Detailed information is provided on the Testpit Logs which are provided in Appendix B.

5.0 Analysis and Recommendations

5.1 GENERAL

Stantec understands the City of Dublin is planning on upgrading and expanding their multi-use path along the west side of Dublin Road in Dublin, Ohio. This report focuses on the portion of the path located just south of downtown Dublin between Tuttle Road and Waterford Drive. It includes two of the proposed bridge locations, one culvert extension and approximately 6000 feet of proposed path.

The proposed bridge at Cramer Ditch is a new structure that will have a span of 60 feet with a width of 8 feet. The proposed bridge at Cosgray Creek will be a new structure that is an extension of the existing bridge. It will have a span of 19 feet and a width of 17 feet. The proposed structure at Monterey Creek will be a culvert extension with a span of 20 feet and a width of 8 feet.

The irregular and frequently shallow bedrock poses difficulties for construction of a path such as the one currently being designed. Portions of the path will require excavation to meet the desired grade and elevation with bedrock excavation likely at some locations. The bridge structures are planned to be supported on the bedrock. This report provides information to assist the design process.

5.2 SITE PREPARATION

Prior to commencing earthwork operations, it is recommended that all existing topsoil, existing trees including their entire root mass, vegetation, and other miscellaneous materials be completely removed from the entire footprint of the proposed path pavement. Following the removal of these materials, it is recommended the entire exposed subgrade be examined by a geotechnical engineer to identify any weak, wet, organic or otherwise unsuitable soils that were not encountered during the geotechnical exploration. The exposed subgrade for the path should be evaluated by performing a proofroll using a heavily loaded, tandem-axle construction vehicle. If unsuitable conditions are encountered, the materials should be scarified, dried and thoroughly recompacted in place. In some instances, the material may require overexcavation and replacement with structural fill.

5.3 STRUCTURAL FILL PLACEMENT

All construction operations involving earthwork, should be performed in the presence of a qualified soils technician who is experienced in monitoring and testing earthwork construction. The technician should exercise their duties under the direct supervision of a professional engineer experienced in geotechnical engineering.

All soil to be used as structural fill should have an organic content of less than 5 percent and should not include materials detrimental to the functioning of the fill. Bedrock and other hard, durable fragments should be limited to particles displaying a maximum dimension of 2 inches, should not exceed 10 percent of the total volume and should be uniformly distributed throughout the fill material. Larger materials and deposits of significant quantity may require disposal in non-structural areas.

Fill should be placed in uniform lifts with a maximum thickness of 8-inches prior to compaction. All fill should be compacted to a unit dry weight equal to or greater than 98 percent of the maximum unit dry weight as determined in the laboratory by the Standard Methods of Test for Moisture-Density Relations of Soils (Standard Proctor Test – ASTM D698). Moisture content of the structural fill should be maintained within -2 and +2 percent of the optimum moisture content.

5.4 BEDROCK EXCAVATION

Along the alignment of the path, bedrock varies significantly as discussed in this report. This variation includes the top of bedrock elevation, amount of weathering and spacing of the joints/fractures. Depending upon these factors and the final design grades, portions of this bedrock may require excavation with a track hoe or possibly a hydraulic/pneumatic hammer attached to a track hoe. Along the path where limited excavation is planned, the upper portion of the weathered bedrock may be able to be excavated using a large bull dozer.

It is likely that locations with relatively small footprints (less than 4-foot bucket width) may require excavation using a hydraulic/pneumatic hammer. This is primarily due to the confinement and the tightly jointed nature of the limestone bedrock.

5.5 TOP OF BEDROCK EVALUATION

Bedrock was encountered in eight of the nine explorations (B-201, B-203 and TP-301 through TP-306). Bedrock was not encountered before the boring was terminated at a depth of 25.0 feet in Boring B-202. Bedrock core samples were obtained in Borings B-201 and B-203. Table 2 provides a summary of the bedrock data obtained for this evaluation.

Table 2. Bedrock Summary for 2012 Evaluation

Exploration ID	Ground Surface Elevation (feet)	Average Depth to Bedrock (feet)	Surveyed Bedrock Elevation (feet)	
B-201	829.5	5.5	824.0	--
TP-301	828.4	3.1	825.3 (north)	825.2 (south)
TP-302	826.4	1.4	825.0 (north)	825.0 (south)
TP-303	811.6	0.7	810.9 (middle)	--
TP-304	808.6	2.2	806.7 (west)	806.1 (east)
TP-305	806.1	3.4	802.9 (west)	802.7 (east)
B-202	802.9	n/e	n/e	--
TP-306	805.0	3.5	801.4 (north)	801.8 (south)
B-203	806.5	11.0	795.5	--

Note: n/e – Not encountered.

Table 3 provides a summary of the bedrock data gathered from historical documentation.

Table 3. Bedrock Summary from Historical Documentation

Exploration ID	Ground Surface Elevation (feet)	Average Depth to Bedrock (feet)	Surveyed Bedrock Elevation (feet)
B-3	827.8	8.0	819.8
B-2	827.1	9.0	818.1
B-1	826.3	7.0	819.3
TB-9	829.0	5.0	824.0
TB-60	828.3	3.0	825.3
TB-10	825.0	0.5	824.5
TB-62	822.0	2.0	820.0
TB-63	805.0	5.8	799.2
TB-64	806.5	12.5	794.0
TB-65	805.5	10.8	794.7
TB-11	801.0	5.4	795.6

Based on the data in Tables 2 and 3, construction of the path between Boring TB-10 (at Rings Road) and Testpit TP-304 (at Grandview Drive) encountered bedrock less than 3.0 feet below the ground surface. Depending upon the final grades and the design pavement section, these areas may require bedrock excavation in order to attain design path grades. It may be advantageous to modify the design to avoid this type of excavation since excavation of bedrock can significantly increase project costs.

5.6 FOUNDATION RECOMMENDATIONS

It is understood that all three structures are planned to be supported by shallow foundations. Two of the proposed locations, the bridge structure at Cramer Creek and the Culvert Extension at Monterey Creek, will be supported on competent bedrock. The other proposed bridge location, at Cosgray Creek, will be supported on glacial till since bedrock was not encountered within 25 feet of the existing ground surface. A bearing capacity evaluation was performed at each of the three structure locations.

5.6.1 Cramer Creek Bridge

Based on the structure type and subsurface conditions evaluated, it is recommended that foundations be supported using spread foundations at a bearing Elevation of 819.0. At this elevation, limestone bedrock was encountered. An unconfined compressive strength (UC) test was performed on a sample obtained in Boring B-201. The results of the test include a compressive strength of 465 tons per square foot (tsf) for the intact portion of the bedrock sample. Detailed results of the test are provided in Appendix C.

Based on results of the laboratory tests and the bedrock quality observed, we recommend a Bearing Resistance, at the service limit state, of 20 ksf for design of the bridge foundations. This corresponds to Table C10.6.2.6.1-1 in the AASHTO LRFD Bridge Design Specifications (2010). It is estimated that total settlement of the spread footings bearing on competent bedrock will be negligible. It is recommended that a minimum width of 24-inches be used for the foundations at this location.

5.6.2 Cosgray Creek Bridge

It is understood that foundations are proposed with a bearing depth of approximately 14 feet below the existing ground surface (El. 789). At this depth, medium dense to dense Sand and Gravel was encountered in Boring B-202. Foundations constructed as recommended in this report may be designed for a Bearing Resistance, at the service limit state, of 3.8 kips per square foot (ksf). It is recommended that a minimum width of 36-inches be used for the foundations at this location.

It is estimated that settlement in the granular materials will primarily occur during construction and long-term settlement will be less than one-inch with differential settlement of less than one-half inch.

5.6.3 Monterey Creek Culvert

Based on the structure type and subsurface conditions evaluated, it is recommended that foundations be supported using spread foundations at a bearing Elevation of 794.0. At this elevation, limestone bedrock was encountered. An unconfined compressive strength (UC) test was performed on a sample obtained in Boring B-203. The results of the test include a compressive strength of 1,173 tons per square foot (tsf) for the intact portion of the bedrock sample. Detailed results of the test are provided in Appendix C.

Based on results of the laboratory tests and the bedrock quality observed, we recommend a Bearing Resistance, at the service limit state, of 20 ksf for design of the bridge foundations. This corresponds to Table C10.6.2.6.1-1 in the AASHTO LRFD Bridge Design Specifications (2010). It is estimated that total settlement of the spread footings bearing on competent bedrock will be negligible. It is recommended that a minimum width of 24-inches be used for the foundations at this location.

5.6.4 General Recommendations

The foundation bearing depth for all structures is recommended to be a minimum of 36 inches below the final grade for frost protection or in accordance with the local codes, whichever is lower. All foundations are to be embedded a minimum of 12-inches into competent bedrock for sliding and lateral stability. Additional embedment may be required to resist the design loads. Foundation surfaces should be nearly level and should be cleaned of all loose soil, debris and water.

5.7 EXCAVATION CONSIDERATIONS

It should be noted that the presence of granular material in the walls of some of the excavations could result in caving or sloughing. Bracing and/or sloping of the excavations may be necessary. The excavation will be especially susceptible when encountering saturated granular materials. It is recommended that all excavations be safely performed in accordance with the most recent edition of the Occupational Safety and Health Administration (OSHA) regulations.

5.8 LATERAL EARTH PRESSURES

Wing walls and other below grade retaining structures must be designed to withstand lateral earth pressures and hydrostatic pressures that could develop. The magnitude varies on the basis of soil type, permissible wall movement and configuration of backfill.

Table 4 provides the equivalent fluid unit weights and selected parameters for backfill typically used for these types of structures.

Table 4 - Lateral Earth Pressure Parameters

	Backfill Type	
	Coarse Aggregate Backfill	Bank Run Sand and gravel
Effective Friction Angle (degrees)	36	34
Unit Weight (pcf)		
Moist	110	115
Buoyant	48	53
Equivalent Fluid Unit Weights (pcf)		
<u>Drained Conditions</u>		
Active Case ¹	25	29
Passive Case	424	407
At-Rest Case	45	51
<u>Undrained Conditions</u>		
Active Case ¹	73	76
Passive Case	246	248
At-Rest Case	82	86
Earth Pressure Coefficient		
Active Case (K_A) ¹	0.23	0.25
Passive Case (K_P)	3.85	3.54
At-Rest Case (K_O)	0.41	0.44

¹Based on Coulomb Theory in accordance with AASHTO LRFD Bridge Design Specifications, Fifth Edition (2010).

To reduce lateral earth pressures, free-drainage should be provided in accordance with ODOT Item 518. Placement of the granular backfill should be in accordance with ODOT Item 518.05 “Porous Backfill”. Positive drainage out of the granular backfill using weepholes or pipe drains is necessary to minimize the hydrostatic pressures against the structures. Providing positive drainage out of the backfill will allow the use of the “drained” condition. The equivalent fluid unit weights in Table 3 assume that granular backfill is placed in a wedge formed by projecting a surface from the base of the wall at a 60-degree angle up from horizontal.

Cohesive soils and granular soils with significant clay content can cause high magnitudes of lateral loads because of creep and swelling pressures. It is recommended that these materials not be used as backfill and that a free-draining granular material such as ODOT’s Select Granular material containing a maximum of 15 percent passing the No. 200 sieve, or coarse

angular gravel such as ODOT Item 703.01 (crushed No. 57 Aggregate), be used as backfill against the wall.

Backfill should be compacted in accordance with ODOT Item 203.07 "Compaction and Moisture Content". Over compaction in areas directly behind structures should be avoided as this can cause damage to the wall. Appropriate equipment should be used to obtain the required compaction without causing damage.

5.9 GROUNDWATER CONDITIONS

At completion of drilling, all borings were "dry", meaning no water had accumulated at the bottom of the borehole. Based on this information, groundwater is not likely to have an impact on construction activities performed outside of the waterway. However, construction activities that breach the sides of the waterways will be significantly impacted. It is likely that activities near the waterways and locations that encounter granular soils will require diversion of the water or some other method to provide acceptable working conditions. Due to the proximity of the structures to the waterways, it is likely that groundwater levels will fluctuate with the water level in the waterway, especially at locations that encounter granular materials.

During construction, surface runoff and precipitation should not be permitted to collect and stand in excavations. Foundation materials weakened or disturbed by water should be removed prior to placement of the structure.

6.0 Closure and Limitations of Study

This study was performed to provide a general summary of the geotechnical characteristics within the project site and provide preliminary recommendations for design and site development. The information contained in this report should be viewed in the general nature in which it was intended.

The subsurface logs and related information presented in this report depict approximate subsurface conditions only at the specific boring locations noted and at the time of drilling. Conditions at other locations may differ from those occurring at the boring locations. Also the passage of time may result in a change in the subsurface conditions at the boring locations.

Appendix A
Geotechnical Site Plans



06/2012
173608736



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LEGEND

-  **B-201** Boring Location and Identification (Current Evaluation)
-  **TB-50** Boring Location and Identification (Previous Evaluations)

-  **TP-301** Testpit Location and Identification (Current Evaluation)

Client/Project

**City of Dublin, Ohio
 Dublin Road Multi-Use Path
 Dublin, Ohio**

Figure No.

1

Title

**Geotechnical Site Plan
 Sheet 1 of 3**

Scale **1" = 100'**



06/2012
173608736

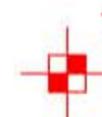


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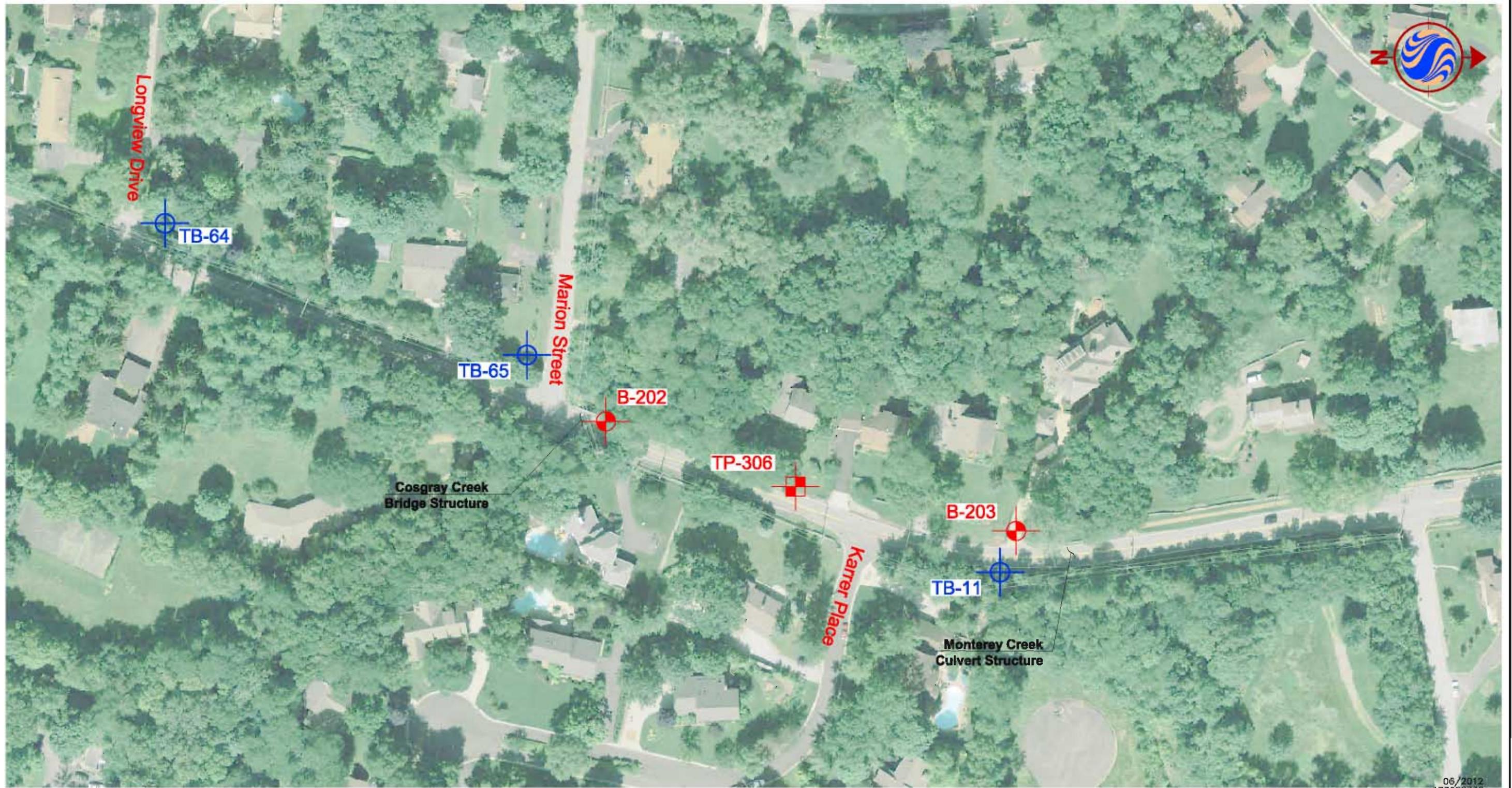
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LEGEND

-  **B-201** Boring Location and Identification (Current Evaluation)
-  **TB-50** Boring Location and Identification (Previous Evaluations)

-  **TP-301** Testpit Location and Identification (Current Evaluation)

Client/Project
City of Dublin, Ohio
Dublin Road Multi-Use Path
Dublin, Ohio
 Figure No.
2
 Title
Geotechnical Site Plan
Sheet 2 of 3
 Scale **1" = 100'**



06/2012
173608736



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LEGEND

-  **B-201** Boring Location and Identification (Current Evaluation)
-  **TB-50** Boring Location and Identification (Previous Evaluations)

-  **TP-301** Testpit Location and Identification (Current Evaluation)

Client/Project

**City of Dublin, Ohio
 Dublin Road Multi-Use Path
 Dublin, Ohio**

Figure No.

3

Title

**Geotechnical Site Plan
 Sheet 3 of 3**

Scale **1" = 100'**

Appendix B

Subsurface and Testpit Logs

Project Number	173608736	Location	See Geotechnical Site Plan		
Project Name	Dublin Road Multi Use Path	Boring No.	B-201	Total Depth	10.5 ft
County	Franklin	Surface Elevation	829.5 ft		
Project Type	Geotechnical Exploration	Date Started	3/27/12	Completed	3/27/12
Supervisor	Rob Kirkbride	Driller	CTL	Depth to Water	Dry
Logged By	C.W. Krumm	Depth to Water	N/A	Date/Time	3/27/12
		Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
829.5	0.0	Top of Hole							
829.0	0.5	Topsoil and gravel							
		Brown silty clay with sand and gravel, stiff, moist. Fill		SPT-1	1.0 - 2.5	1.0	7-10-6	19	PP = 3.5-4.0 tsf
			SPT-2	3.5 - 5.0	1.0	4-5-4	17	PP = 3.0 - 4.0 tsf	
824.0	5.5	Limestone, light gray, moderately hard, fractured and slightly weathered.							Began Core
819.0	10.5		43	5.0	4.7	94	10.5	Compressive strength: 465 tsf	

Bottom of Hole

Top of Rock = 5.5
Elevation (824.0)

Project Number	173608736	Location	See Geotechnical Site Plan		
Project Name	Dublin Road Multi Use Path	Boring No.	B-202	Total Depth	25.0 ft
County	Franklin	Surface Elevation	802.9 ft		
Project Type	Geotechnical Exploration	Date Started	3/27/12	Completed	3/27/12
Supervisor	Rob Kirkbride Driller CTL	Depth to Water	Dry	Date/Time	3/27/12
Logged By	C.W. Krumm	Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core	RQD	Run	Rec. Ft.	Rec. %	Run Depth	
802.9	0.0	Top of Hole							
801.9	1.0	Asphalt and base							
		Brown sand and gravel, trace silt, medium dense to dense, moist. Fill		SPT-1	1.0 - 2.5	1.0	1-17-15	7	PP = 2.0 tsf
797.9	5.0			SPT-2	3.5 - 5.0	1.3	20-4-16	5	PP = 2.0 - 2.5 tsf
		Brown to light brown silty clay with sand and gravel, medium dense to very dense, moist. limestone fragments presence.		SPT-3	6.0 - 7.5	0.2	12-12-12	21	
792.9	10.0			SPT-4	8.5 - 10.0	1.2	15-23-28	21	
		Brown sand and gravel, some silt, medium dense to dense, moist. From 17.0 to 18.0 Loose		SPT-5	11.0 - 12.5	1.3	22-19-14	7	
				SPT-6	13.5 - 15.0	1.0	18-14-8	15	
				SPT-7	16.0 - 17.5	1.0	15-4-5	20	
				SPT-8	18.5 - 20.0	1.3	5-8-19	18	
777.9	25.0			SPT-9	23.5 - 25.0	1.0	10-7-9	14	

No Refusal /
Bottom of Hole

STANTECFMISM_LEGACY_173608736_BORING LOGS.GPJ_FMISM-GRAPHIC LOG.GDT_5/2/12

Project Number	173608736	Location	See Geotechnical Site Plan		
Project Name	Dublin Road Multi Use Path	Boring No.	B-203	Total Depth	16.0 ft
County	Franklin	Surface Elevation	806.5 ft		
Project Type	Geotechnical Exploration	Date Started	3/27/12	Completed	3/27/12
Supervisor	Rob Kirkbride	Driller	CTL	Depth to Water	Dry
Logged By	C.W. Krumm	Depth to Water	N/A	Date/Time	3/27/12
		Depth to Water	N/A	Date/Time	N/A

Lithology		Description	Overburden	Sample #	Depth	Rec. Ft.	Blows	Mois.Cont. %	Remarks
Elevation	Depth		Rock Core						
806.5	0.0	Top of Hole							
805.5	1.0	Asphalt and base							
803.0	3.5	Brown silty clay, with sand and gravel, loose, moist. Fill		SPT-1	1.0 - 2.5	0.5	6-3-3	9	
				SPT-2	3.5 - 5.0	0.5	2-3-7	8	
				SPT-3	6.0 - 7.5	0.5	8-9-13	6	
				SPT-4	8.5 - 10.0	0.4	50+/6"	4	
795.5	11.0							Began Core	
790.5	16.0	Limestone, light gray, moderately hard, fossiliferous. Fractured from 14.2' to 15.0'. Fractured at 16'.							Compressive strength: 1173 tsf
				7	5.0	5.0	100	16.0	

Bottom of Hole
Top of Rock = 11.0
Elevation (795.5)

TESTPIT LOG

Stantec Consulting Services Inc.

Project Name: Dublin road Multi-Use Path Location: 175 feet North of Rings Road Project No.: 173608736.400	Testpit ID: TP-301 Page 1 of 1
Logged by: C. W. Krumm Equipment Operator: CTL Engineering Equipment Type: CAT 302.5 Backhoe	Date: 3/26/2012
Surface Elevation (feet): 828.4 Coordinates: (N) 760,595 (E) 1,796,428	Surface Conditions/Weather: 50° Sunny Testpit Dimensions: 2 ft by 5 ft
Comments: Excavation traverse to hillside	S = Bag Sample ST = Shelby Tube [] – Indicates laboratory test results

Depth (feet)	Sample ID	Geologic Description	Remarks	Classification
1		Topsoil, brown, with tree roots to 8", silty clay.		CL
2		Red brown silt or clay trace sub-rounded gravel.		ML
3		Cobble zone 2 inch to 1 foot sub-rounded Slabs of tan fissile is 2-3 inches thick.		GC
4		End of Test Pit	End of pit	
5		Surveyed Bedrock Elevations: 825.33 (north) 825.18 (south)		

TESTPIT LOG

Stantec Consulting Services Inc.

Project Name: Dublin road Multi-Use Path Location: 500 feet North of Rings Road Project No.: 173608736.400	Testpit ID: TP-302 Page 1 of 1
Logged by: C. W. Krumm Equipment Operator: CTL Engineering Equipment Type: CAT 302.5 Backhoe	Date: 3/26/2012
Surface Elevation (feet): 826.4 Coordinates: (N) 760,915 (E) 1,796,463	Surface Conditions/Weather: 50° Sunny Testpit Dimensions: 2 ft by 5 ft
Comments:	S = Bag Sample ST = Shelby Tube [] – Indicates laboratory test results

Depth (feet)	Sample ID	Geologic Description	Remarks	Classification
1		Topsoil, black, brown silt-clay with fine gravel.		CL
2		Black brown silt or clay with sub-rounded 2" to 1ft cobbles.		GC
3		Bedrock slabs of limestone.	End of pit	
4				
5				
		Surveyed Bedrock Elevations: 824.97 (north) 825.01 (south)		

TESTPIT LOG

Stantec Consulting Services Inc.

Project Name: Dublin road Multi-Use Path Location: 275 feet South of Grandview Drive Project No.: 173608736.400	Testpit ID: TP-303 Page 1 of 1
Logged by: C. W. Krumm Equipment Operator: CTL Engineering Equipment Type: CAT 302.5 Backhoe	Date: 3/26/2012
Surface Elevation (feet): 811.6 Coordinates: (N) 761,710 (E) 1,796,545	Surface Conditions/Weather: 50° Sunny Testpit Dimensions: 2 ft by 3 ft
Comments: By stone wall.	S = Bag Sample ST = Shelby Tube [] – Indicates laboratory test results

Depth (feet)	Sample ID	Geologic Description	Remarks	Classification
1		Brown silty clay with sub-angular cobbles, topsoil.		GC
2		Limestone cobbles and limestone bedrock.		GC
3		End of Pit	End of Pit	
4				
5		Surveyed Bedrock Elevations: 810.86 (middle)		

TESTPIT LOG

Stantec Consulting Services Inc.

Project Name: Dublin road Multi-Use Path Location: 50 feet South of Grandview Drive Project No.: 173608736.400	Testpit ID: TP-304 Page 1 of 1
Logged by: C. W. Krumm Equipment Operator: CTL Engineering Equipment Type: CAT 302.5 Backhoe	Date: 3/26/2012
Surface Elevation (feet): 808.6 Coordinates: (N) 761,920 (E) 1,796,593	Surface Conditions/Weather: 50° Sunny Testpit Dimensions: 2 ft by 5 ft
Comments:	S = Bag Sample ST = Shelby Tube [] – Indicates laboratory test results

Depth (feet)	Sample ID	Geologic Description	Remarks	Classification
1		Red brown topsoil, silty clay with grass.		CL
		Sub-angular sand and gravel with silt.		GC
2		Silt and sand.		SM
		Cobble zone : Cobbles 2-10" and sub-rounded.		GC
3		Bedrock limestone.		
4				
5		Surveyed Bedrock Elevations: 806.65 (west) 806.12 (east)		

TESTPIT LOG

Stantec Consulting Services Inc.

Project Name: Dublin road Multi-Use Path Location: 50 feet North of Grandview Drive Project No.: 173608736.400	Testpit ID: TP-305 Page 1 of 1
Logged by: C. W. Krumm Equipment Operator: CTL Engineering Equipment Type: CAT 302.5 Backhoe	Date: 3/26/2012
Surface Elevation (feet): 806.1 Coordinates: (N) 762,035 (E) 1,796,640	Surface Conditions/Weather: 50° Sunny Testpit Dimensions: 6 ft long by 2 ft wide
Comments: Dug down to 5 feet at 2 nd location. 1 st location had gravel fill indicating utility.	S = Bag Sample ST = Shelby Tube [] – Indicates laboratory test results

Depth (feet)	Sample ID	Geologic Description	Remarks	Classification
1		Topsoil Red brown silty clay with trace gravel & vegetation.		CL
2		Red brown silty clay, firm, little gravel.		ML
3				
4		Changed to light tan sand with cobbles and coarse gravel, sub-rounded.		GC
5		Surveyed Bedrock Elevations: 802.86 (west) 802.67 (east)	End of Pit	

TESTPIT LOG

Stantec Consulting Services Inc.

Project Name: Dublin road Multi-Use Path Location: 275 feet North of Marion Street Project No.: 173608736.400	Testpit ID: TP-306 Page 1 of 1
Logged by: C. W. Krumm Equipment Operator: CTL Engineering Equipment Type: CAT 302.5 Backhoe	Date: 3/26/2012
Surface Elevation (feet): 805.0 Coordinates: (N) 762,983 (E) 1,797,011	Surface Conditions/Weather: 50° Sunny Testpit Dimensions: 2 ft by 4 ft
Comments: Ductile sewer line 5 to 6 feet down. Gas line 3 feet down.	S = Bag Sample ST = Shelby Tube [] – Indicates laboratory test results

Depth (feet)	Sample ID	Geologic Description	Remarks	Classification
1		Topsoil. Brown soil with roots.		CL
2		Red brown soil with gravel and cobbles sub-rounded 2 inches to 1 foot.		ML
3				
4		Hard limestone rock or cobbles.	End of pit.	
5		Surveyed Bedrock Elevations: 801.37 (north) 801.76 (south)		

Appendix C

Lab Testing Results



Summary of Soil Tests

Project Name Dublin Road Multi-Use Path Project Number 173608736
 Source B-202 / S-4, 8.5'-10.0' Lab ID 6
 County Franklin Date Received 4-26-12
 Sample Type SPT Date Reported 4-26-12

Test Results

Natural Moisture Content

Test Not Performed
 Moisture Content (%): 21.0

Atterberg Limits

Test Method: ASTM D 4318 Method A
 Prepared: Dry
 Liquid Limit: N/A
 Plastic Limit: N/A
 Plasticity Index: N/A
 Activity Index:

Particle Size Analysis

Preparation Method: ASTM D 421
 Gradation Method: ASTM D 422
 Hydrometer Method: ASTM D 422

Particle Size		% Passing
Sieve Size	(mm)	
	N/A	
3/4"	19	100.0
3/8"	9.5	95.3
No. 4	4.75	91.2
No. 10	2	88.7
No. 40	0.425	77.4
No. 200	0.075	68.0
	0.02	55.1
	0.005	37.7
	0.002	31.0
estimated	0.001	26.4

Moisture-Density Relationship

Test Not Performed
 Maximum Dry Density (lb/ft³): N/A
 Maximum Dry Density (kg/m³): N/A
 Optimum Moisture Content (%): N/A
 Over Size Correction %: N/A

California Bearing Ratio

Test Not Performed
 Bearing Ratio (%): N/A
 Compacted Dry Density (lb/ft³): N/A
 Compacted Moisture Content (%): N/A

Specific Gravity

Estimated
 Particle Size: No. 10
 Specific Gravity at 20° Celsius: 2.70

Plus 3 in. material, not included: 0 (%)

Range	ASTM (%)	AASHTO (%)
Gravel	8.8	11.3
Coarse Sand	2.6	11.3
Medium Sand	11.3	--
Fine Sand	9.4	9.4
Silt	30.3	37.0
Clay	37.7	31.0

Classification

Unified Group Symbol:
 Group Name:
 AASHTO Classification:

Comments:
 Reviewed by:



Summary of Soil Tests

Project Name Dublin Road Multi-Use Path Project Number 173608736
 Source B-202 / S-5, 11.0'-12.5' Lab ID 7
 County Franklin Date Received 4-26-12
 Sample Type SPT Date Reported 4-26-12

Test Results

Natural Moisture Content
 Test Not Performed
 Moisture Content (%): 7.3

Atterberg Limits
 Test Method: ASTM D 4318 Method A
 Prepared: Dry
 Liquid Limit: N/A
 Plastic Limit: N/A
 Plasticity Index: N/A
 Activity Index:

Particle Size Analysis
 Preparation Method: ASTM D 421
 Gradation Method: ASTM D 422
 Hydrometer Method: ASTM D 422

Moisture-Density Relationship
 Test Not Performed
 Maximum Dry Density (lb/ft³): N/A
 Maximum Dry Density (kg/m³): N/A
 Optimum Moisture Content (%): N/A
 Over Size Correction %: N/A

Particle Size		% Passing
Sieve Size	(mm)	
	N/A	
3/4"	19	100.0
3/8"	9.5	90.8
No. 4	4.75	80.6
No. 10	2	71.3
No. 40	0.425	48.6
No. 200	0.075	37.0
	0.02	19.3
	0.005	6.5
	0.002	3.6
estimated	0.001	2.0

California Bearing Ratio
 Test Not Performed
 Bearing Ratio (%): N/A
 Compacted Dry Density (lb/ft³): N/A
 Compacted Moisture Content (%): N/A

Plus 3 in. material, not included: 0 (%)

Specific Gravity
 Estimated
 Particle Size: No. 10
 Specific Gravity at 20° Celsius: 2.70

Range	ASTM (%)	AASHTO (%)
Gravel	19.4	28.7
Coarse Sand	9.3	22.7
Medium Sand	22.7	---
Fine Sand	11.6	11.6
Silt	30.5	33.4
Clay	6.5	3.6

Classification
 Unified Group Symbol:
 Group Name:
 AASHTO Classification:

Comments: _____

 Reviewed by: _____



Summary of Soil Tests

Project Name Dublin Road Multi-Use Path Project Number 173608736
 Source B-203 / S-3, 6.0'-7.5' Lab ID 14
 County Franklin Date Received 4-26-12
 Sample Type SPT Date Reported 4-26-12

Test Results

Natural Moisture Content

Test Not Performed
 Moisture Content (%): 5.6

Atterberg Limits

Test Method: ASTM D 4318 Method A
 Prepared: Dry
 Liquid Limit: N/A
 Plastic Limit: N/A
 Plasticity Index: N/A
 Activity Index:

Particle Size Analysis

Preparation Method: ASTM D 421
 Gradation Method: ASTM D 422
 Hydrometer Method: ASTM D 422

Particle Size		%
Sieve Size	(mm)	Passing
	N/A	
3/4"	19	100.0
3/8"	9.5	63.6
No. 4	4.75	46.3
No. 10	2	38.0
No. 40	0.425	21.9
No. 200	0.075	14.2
	0.02	6.9
	0.005	2.0
	0.002	1.2
estimated	0.001	0.8

Moisture-Density Relationship

Test Not Performed
 Maximum Dry Density (lb/ft³): N/A
 Maximum Dry Density (kg/m³): N/A
 Optimum Moisture Content (%): N/A
 Over Size Correction %: N/A

California Bearing Ratio

Test Not Performed
 Bearing Ratio (%): N/A
 Compacted Dry Density (lb/ft³): N/A
 Compacted Moisture Content (%): N/A

Specific Gravity

Estimated
 Particle Size: No. 10
 Specific Gravity at 20° Celsius: 2.70

Plus 3 in. material, not included: 0 (%)

Range	ASTM (%)	AASHTO (%)
Gravel	53.7	62.0
Coarse Sand	8.3	16.1
Medium Sand	16.1	---
Fine Sand	7.7	7.7
Silt	12.2	13.0
Clay	2.0	1.2

Classification

Unified Group Symbol:
 Group Name:
 AASHTO Classification:

Comments: _____

 Reviewed by: _____

Project Name Dublin Road Multi-Use Path
 Lithology Limestone, light gray, moderately hard
 Hole Number B-201 Depth (ft) 9.5'-9.9'

Project Number 173608736
 Lab ID UCR-16
 Date Received 04-05-2012

Temperature (°C) 22.2 Moisture Condition As received, moist

Date Tested 04-27-2012

Side Planeness Fail
 Perpendicularity Pass
 End Planeness Pass
 Parallelism Pass

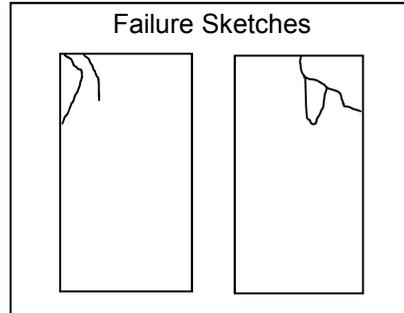
Height (in) 4.678
 Diameter (in) 1.976
 Area (in²) 3.067

Wet Unit Weight (pcf) 166.1
 Dry Unit Weight (pcf) N/A
 Moisture Content (%) N/A

Loading Rate (lbf/sec) 100
 Peak Load (lbf) 19792

Failure Type Undetermined

Compressive Strength (psi) 6450
 Compressive Strength (psf) 928800
 Compressive Strength (tsf) 465

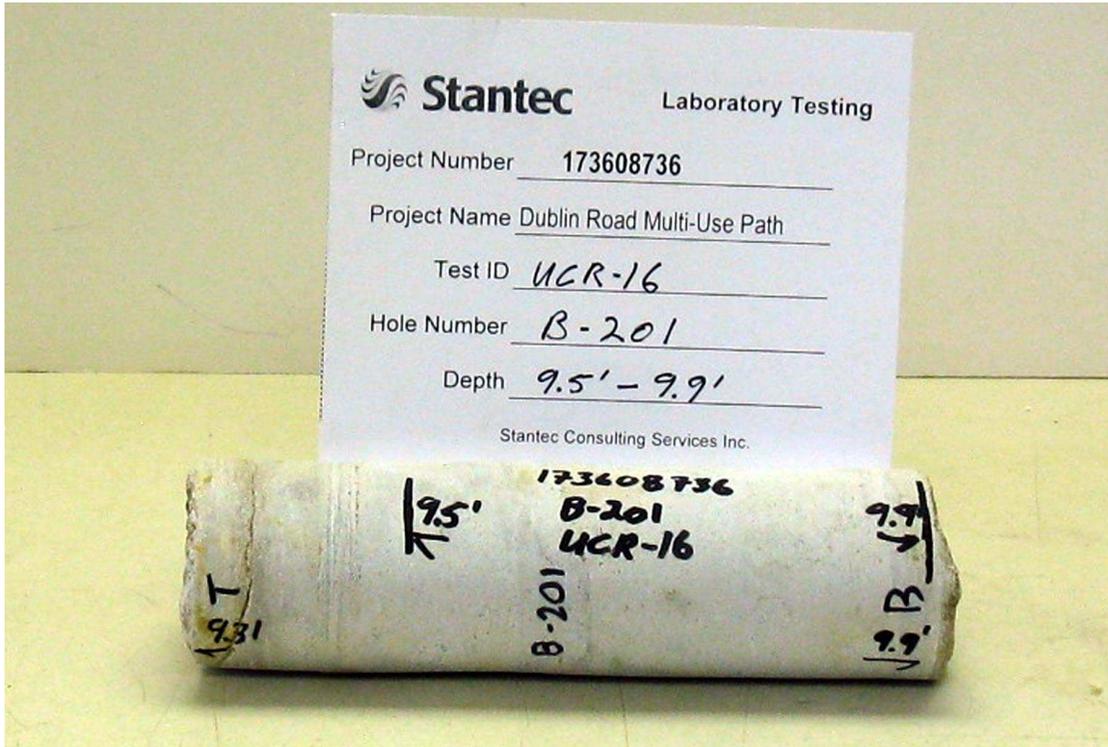


Comments _____

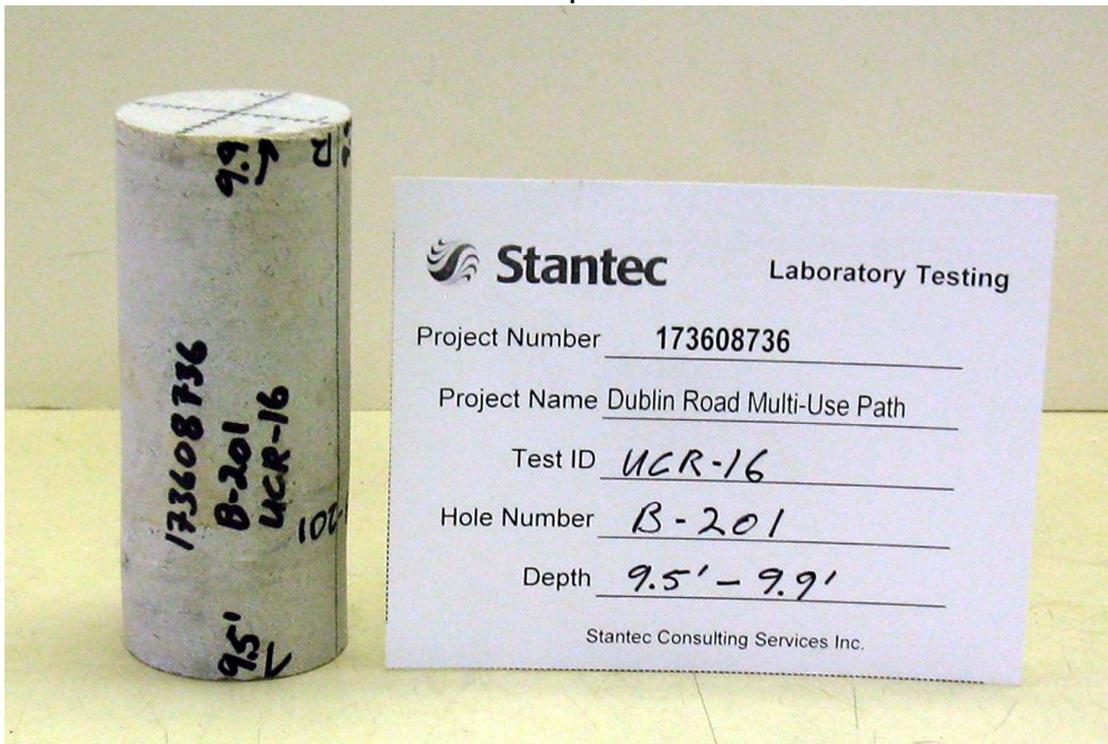
Project Name Dublin Road Multi-Use Path
 Lithology Limestone, light gray, moderately hard
 Hole Number B-201 Depth (ft) 9.5'-9.9'
 Test Type Unconfined compressive strength

Project Number 173608736
 Lab ID UCR-16

As Received

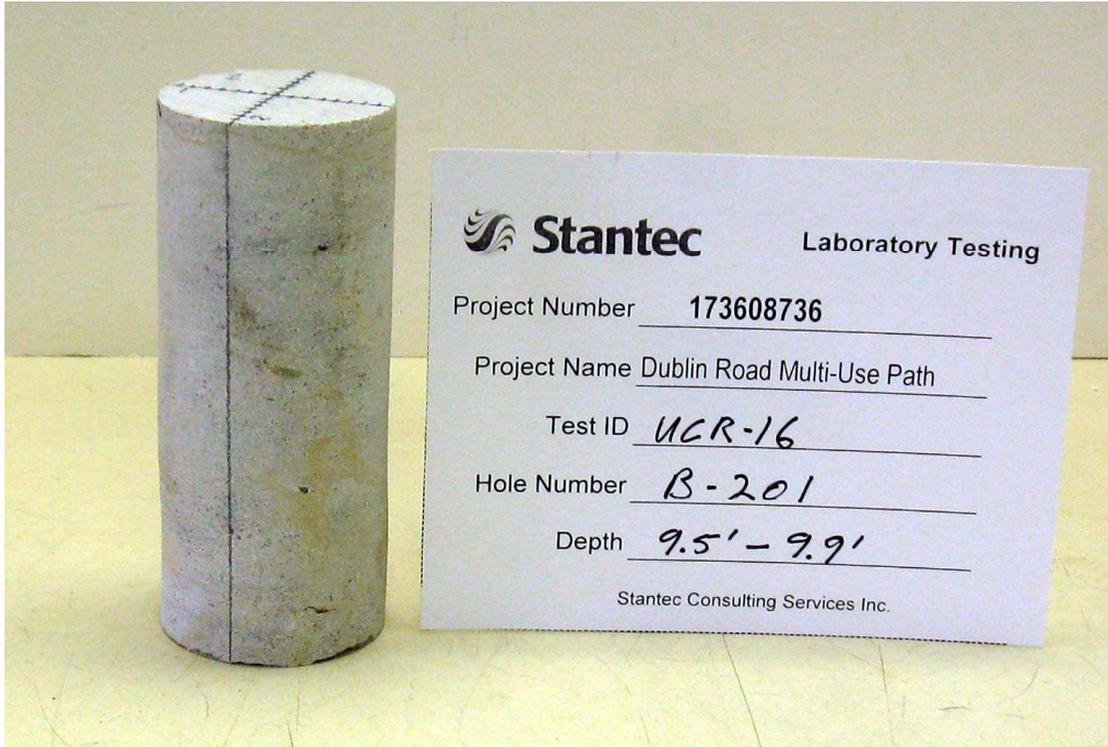
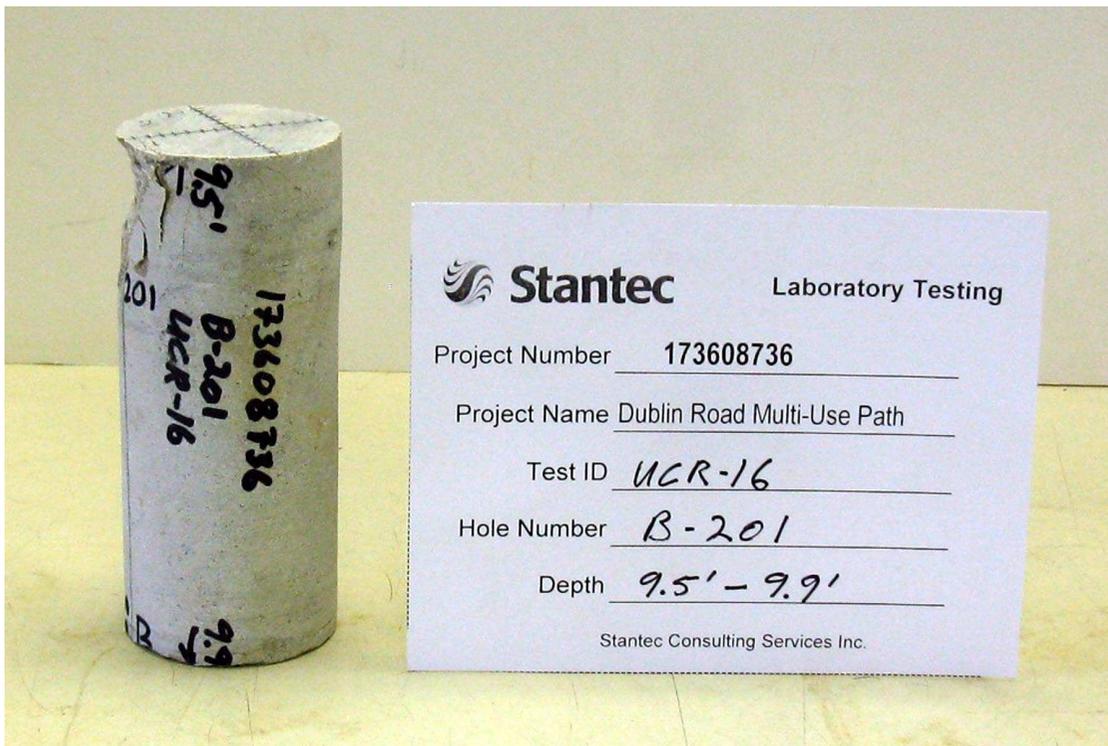


Core Preparation



Project Name Dublin Road Multi-Use Path
Lithology Limestone, light gray, moderately hard
Hole Number B-201 Depth (ft) 9.5'-9.9'
Test Type Unconfined compressive strength

Project Number 173608736
Lab ID UCR-16

Core Preparation**Post Test**

Project Name Dublin Road Multi-Use Path
Lithology Limestone, light gray, moderately hard
Hole Number B-201 Depth (ft) 9.5'-9.9'
Test Type Unconfined compressive strength

Project Number 173608736
Lab ID UCR-16

Post Test

Project Name Dublin Road Multi-Use Path
 Lithology Limestone, light gray, moderately hard
 Hole Number B-203 Depth (ft) 14.8'-15.2'

Project Number 173608736
 Lab ID UCR-17
 Date Received 04-05-2012

Temperature (°C) 22.2 Moisture Condition As received, moist

Date Tested 04-27-2012

Side Planeness Pass
 Perpendicularity Pass
 End Planeness Pass
 Parallelism Pass

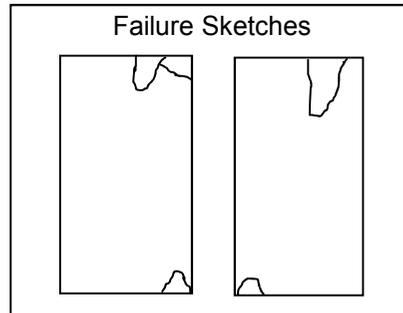
Height (in) 3.957
 Diameter (in) 1.978
 Area (in²) 3.073

Wet Unit Weight (pcf) 164.5
 Dry Unit Weight (pcf) N/A
 Moisture Content (%) N/A

Loading Rate (lbf/sec) 100
 Peak Load (lbf) 50052

Failure Type Undetermined

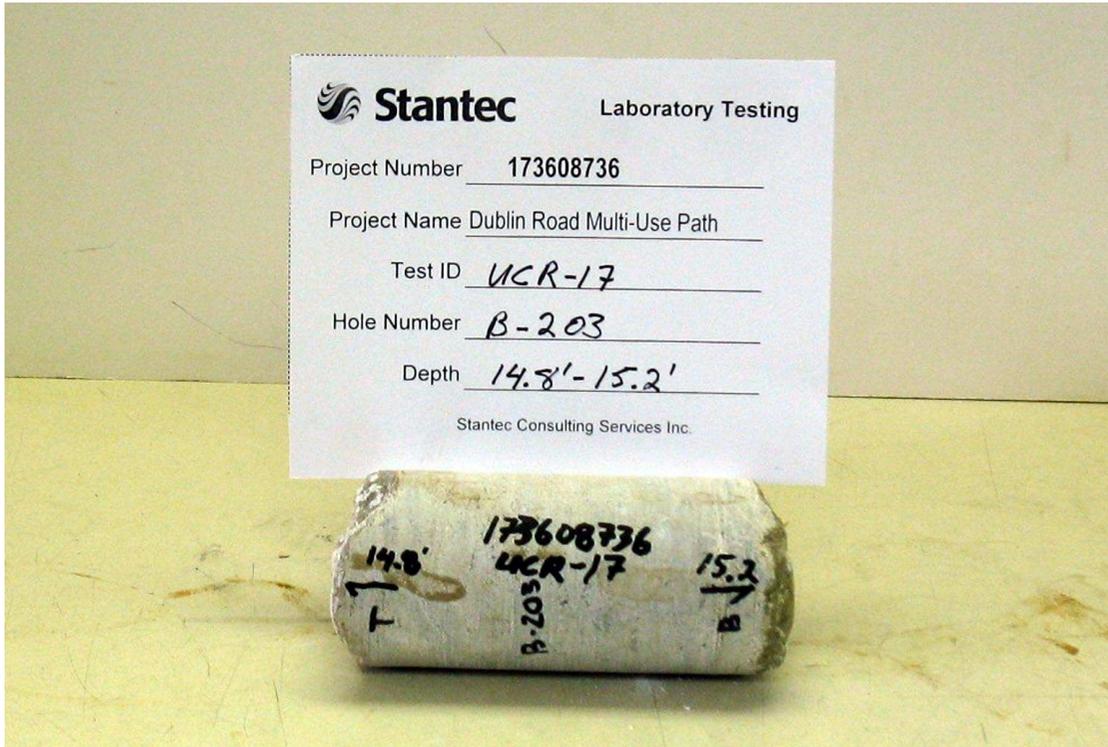
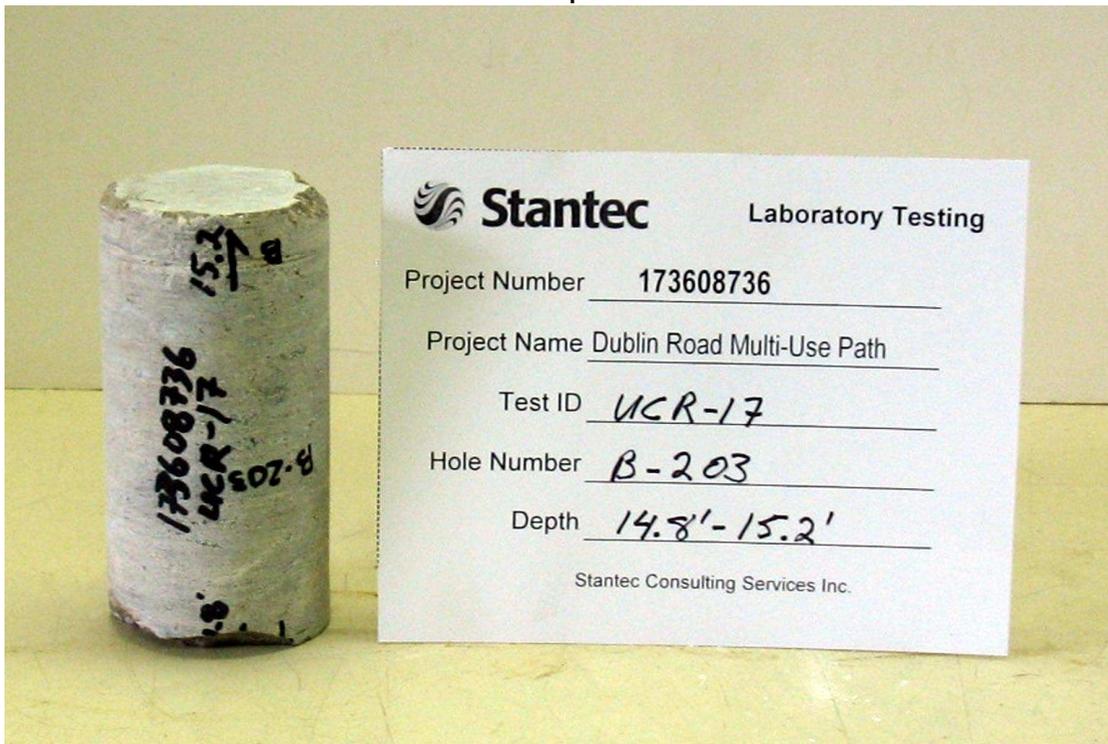
Compressive Strength (psi) 16290
 Compressive Strength (psf) 2345760
 Compressive Strength (tsf) 1173



Comments Fragile nature of specimen ends inhibited preparation. Capped ends with Hydro-Stone.

Project Name Dublin Road Multi-Use Path
Lithology Limestone, light gray, moderately hard
Hole Number B-203 Depth (ft) 14.8'-15.2'
Test Type Unconfined compressive strength

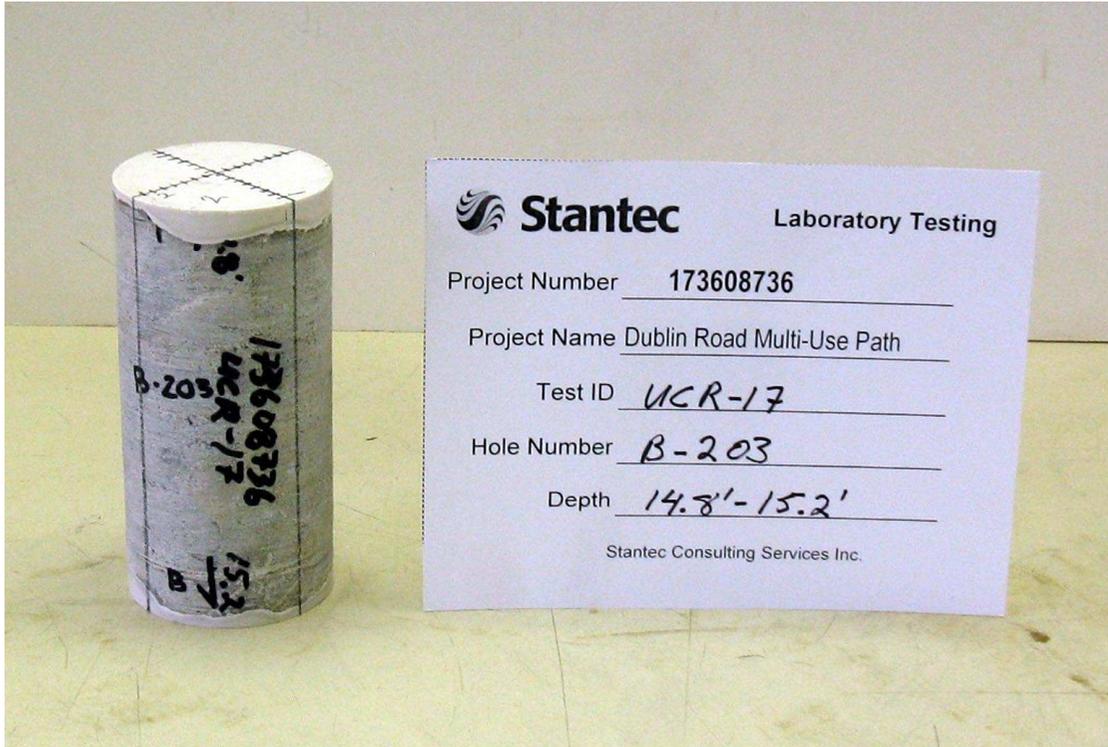
Project Number 173608736
Lab ID UCR-17

As Received**Core Preparation**

Project Name Dublin Road Multi-Use Path
 Lithology Limestone, light gray, moderately hard
 Hole Number B-203 Depth (ft) 14.8'-15.2'
 Test Type Unconfined compressive strength

Project Number 173608736
 Lab ID UCR-17

Core Preparation



Post Test



Project Name Dublin Road Multi-Use Path
Lithology Limestone, light gray, moderately hard
Hole Number B-203 Depth (ft) 14.8'-15.2'
Test Type Unconfined compressive strength

Project Number 173608736
Lab ID UCR-17

Post Test

Appendix D

Calculations

BEARING CAPACITY ANALYSIS (Terzaghi Method)

Project Name: Dublin Road Multi-Use Path

Structure: Cosgray Creek Bridge

Project Number: 173608736

cohesion =	0	psf	(estimate c = 1/2 Su for cohesive)
phi angle =	24	deg	(use phi = 0 for cohesive)
unit weight =	120.0	pcf	
embedment depth =	8.00	feet	
footing width =	3.0	feet	
Factor of Safety =	3.0		

N_c = 23.4

N_q = 11.4

N_γ = 7.9

Ultimate Bearing Capacity = 11.406 ksf

Allowable Bearing Capacity = 3.802 ksf

ALLOWABLE BEARING CAPACITY TABLE (KSF)

Footing Width	Embedment Depth			
	8.0	10.0	12.0	15.0
3.0	3.802	4.634	5.466	6.714
4.0	3.960	4.792	5.624	6.872
5.0	4.118	4.950	5.782	7.030
6.0	4.276	5.108	5.940	7.188
8.0	4.592	5.424	6.256	7.504

Note: Increasing the footing width may also increase the settlement, therefore a review of the calculation may be necessary.

Appendix E

Historical Boring Logs

Jenny Engineering Corporation Geotechnical Consultants		TEST BORING LOG			BORING NO. TB-9	
PROJECT Upper Scioto West Interceptor Sewer				JOB NO.: 870005		
CLIENT John David Jones and Associates, Inc.				LOCATION:		
BORING CONTRACTOR Resource International, Inc.				ELEVATION: 829.0'		
GROUND WATER				CASING	SAMPLER	CORE TUBE
DATE	TIME	DEPTH	CASING	TYPE	SS	NX
3/4/87		17.0'		DIA.	2" O.D.	2 1/8"
				WT.	140 lbs.	
				FALL	30 in.	
				DATUM: USGS		
				DATE START: 2/27/87		
				DATE FINISHED: 2/28/87		
				DRILLER: M.G. & J.C.		
				INSPECTOR:		

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL				ROCK				LABORATORY TEST RESULTS				REMARKS			
			SYMBOL	LOG. SAMPLE NO.	PEN RESIST. BLOWS/6IN	RUN No.	%RECOVERY	ROD %	FRACTURE SPACING			WATER % CONTENT	DRY UNIT WEIGHT PCF	UNCONFINED COMPRESSIVE STRENGTH KSF				
									GRAPHIC	MAXIMUM	MINIMUM					AVERAGE		
1	0.5	Brown Clayey SILT, and fine to coarse Gravel Limestone BOULDERS	ML	S-1	4 12 17													
2	2.5																	
3	2.8	Br. Clayey SILT, and fine to coarse Gravel	ML		3													
4		Brown fine to coarse GRAVEL, and limestone Boulders	GW	S-2	3 21													
5	5.0	LIMESTONE, light gray-tan, laminated, fine to medium grained, argillaceous, fossiliferous, hard scattered sparry layers (Delaware)																
6																		
7							R-1	89	41		6.5	1	3.5			vertical weathered joints		
8		slightly broken															40% water loss @ 7.0'	
9																		
10																		
11																		
12																		
13		few stylolites																
14							R-2	100	25		10	0.75	5.0				vertical weathered closed joint	
15		broken to very broken																100% water loss @ 14.0'
16																		series of 45-60° slightly weathered closed joints w/ rust stain
17																		▼ 17.0'
18		slightly broken																
19																		
20																		
21		massive					R-3	100	81		15	1	8					
22																		
23																		

See Sheet No. 2 of 3

45-60° weathered closed joints some residual clay filling

Jenny Engineering Corporation Geotechnical Consultants				TEST BORING LOG				BORING NO. TB-10							
PROJECT Upper Scioto West Interceptor Sewer								JOB NO.: 870005							
CLIENT John David Jones & Associates, Inc.								LOCATION:							
BORING CONTRACTOR Resource International, Inc.								ELEVATION: 825.0'							
GROUND WATER				CASING	SAMPLER	CORE	TUBE	DATUM: USGS							
DATE	TIME	DEPTH	CASING	TYPE	SS	NX		DATE START: 2/24/87							
3/4/87		50.0'		DIA.	2" O.D.	2 1/8"		DATE FINISHED: 2/26/87							
				WT.	140 lbs.			DRILLER: M.G. & J.C.							
				FALL	30 in.			INSPECTOR:							
ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL			ROCK				LABORATORY TEST RESULTS				REMARKS	
			SYMBOL	SAMPLE LOC. NO.	PEN RESIST. BLOWS/6IN	RUN No.	% RECOVERY	RQD %	FRACTURE SPACING			WATER % CONTENT	DRY UNIT WEIGHT PCF		UNCONFINED COMPRESSIVE STRENGTH KSF
		Brown Clayey SILT, highly organic LIMESTONE, weathered	S-1	3 12 50/4											some asphalt conc.
1	1.4														
2		LIMESTONE, light brown-gray, laminated, fine to medium grained, fossiliferous, broken (Delaware)				R-1	63	0		3	1	2			moderately weathered joints along bed- ding planes
3															
4															
5															
6															45° mod. weathered joint
7		stylolitic slightly broken to broken				R-2	95	50		5	1.5	3			
8															
9															
10						R-3	100	36		6	1	3.5			90° slightly wea- thered closed joint
11															
12															
13															
14															
15		stylolitic very fossiliferous iron stained along bedding planes				R-4	100	65		7	1.5	4			90% water loss @ 14.0'
16															
17															
18															
19															
20						R-5	75	28		6	1.5	3			90° slightly wea- thered joint
21															
22															
23		See Sheet 2 of 3				R-6	92	31		8	1.5	4.5			

Jenny Engineering Corporation Geotechnical Consultants		TEST BORING LOG						BORING NO. TB-10							
ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL			ROCK				LABORATORY TEST RESULTS			REMARKS		
			SYMBOL	SAMPLE LOG. SAMPLE NO.	PEN RESIST. BLOWS/6IN	RUN No.	%RECOVERY	ROD %	FRACTURE SPACING			WATER % CONTENT		P DRY UNIT WEIGHT CF	UNCONFINED COMPRESSIVE STRENGTH KSF
							GRAPHIC	MAXIMUM	MINIMUM	AVERAGE					
		Same													
	24					R-6	92	31		8	1.5	4.5			90° weathered joint
	25														
	26	massive													
	27	broken				R-7	95	63		12	1	6.5			solution channel
	28														
	29														45° weathered joint
	30	massive				R-8	78	49		7	1.5	4			
	31														
	32	broken													
	33														
	34														series of 45° slightly weathered closed parallel joints
	35	massive				R-9	78	35		13.5	2	7.5			
	36														
	37														
	38	broken to very broken				R-10		0		0					80° slightly weathered joint
	39					R-11		0		0					45-90° joints
	40														
	41														
	42	massive				R-12	100	80		34	1	17.5			25° slightly weathered joint
	43														
	44	slightly broken to broken													
	45														
	46														
	47	massive				R-13	100	70		22	1	11			90° slightly weathered joint
	48														
	49														
	50	massive													Mod. weathered joint
	51					R-14	98	96		31	1	16			50.0'

See Sheet 3 of 3

Jenny Engineering Corporation Geotechnical Consultants		TEST BORING LOG							BORING NO. TB-10					
ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL		ROCK				LABORATORY TEST RESULTS			REMARKS		
			SYMBOL	SAMPLE NO. PEN RESIST. BLOWS/6IN	RUN No.	%RECOVERY	ROD *	FRACTURE SPACING			WATER % CONTENT		DRY UNIT PC WEIGHT	UNCONFINED COMPRESSIVE STRENGTH KSF
							GRAPHIC	MAXIMUM	MINIMUM	AVERAGE				
52		LIMESTONE, medium gray-brown, fine grained, argillaceous to silty, hard to very hard, massive, chert nodules (Delaware)												
53														
54														
55		CHERT, medium to dark gray-brown, silty, calcareous, very hard, massive to broken (Delaware)												
56					R-15	100	73	7.5	1	4	0	148	1189	30° weathered joint
57														
58														
59		LIMESTONE, light gray-brown massive to medium bedded, fine grained, argillaceous to silty, coralline, bituminous coatings along bedding/fracture planes (Columbus)												
60														
61					R-16	100	54	13	2	7.5	0	162	1290	
62														
63														2" clay layer at the bottom (rug or fracture filling).
64														
65														
66		less coralline shaly			R-17	100	51	10	1.5	5.5	0	155	1195	45° weathered, slightly open joint
67														
68		brown												
69		Bottom of boring @ 68.5 ft.												

Jenny Engineering Corporation Geotechnical Consultants				TEST BORING LOG				BORING NO. TB-11							
PROJECT Upper Scioto West Interceptor Sewer								JOB NO.: 870005							
CLIENT John David Jones and Associates, Inc.								LOCATION:							
BORING CONTRACTOR Resource International, Inc.								ELEVATION: 801.0							
GROUND WATER								DATUM: USGS							
DATE		TIME		DEPTH		CASING		TYPE		SS		NX		DATE START: 3/6/87	
3/6/87				20.7'				DIA.		2" O.D.		2-1/8"		DATE FINISHED: 3/6/87	
								WT.		140 lbs.				DRILLER: S.G. & R.G.	
								FALL		30 in.				INSPECTOR:	

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL				ROCK				LABORATORY TEST RESULTS			REMARKS	
			SYMBOL	SAMPLE LOC. NO.	PEN RESIST. BLOWS/6IN	RUN No.	% RECOVERY	RQD %	FRACTURE SPACING			WATER % CONTENT	DRY UNIT WEIGHT PCF		UNCONFINED COMPRESSIVE STRENGTH KSF
									GRAPHIC	MAXIMUM	MINIMUM				
		Gravel Base 0.8													
1		Light brown to dark gray Clayey SILT, some fine to coarse Gravel, trace fine to coarse Sand, Limestone and Shale fragments, very stiff to hard	S-1	9	50/3										
2															
3					14										
4				S-2	15										
5				13											
6		LIMESTONE, very light tan-gray, fine to medium grained, fossiliferous, hard, very broken (Delaware) 5.4	S03	50/4											
7															
8															jointed along bedding planes
9															100% water loss @ 8.5'
10						R-1	100	14		5	1	3			90° slightly weathered joints
11		slightly broken to broken													
12															
13															
14		clay filled joints				R-2	90	37		7.5	1	4			45° slightly weathered joint
15															
16		clay filled joints				R-3	100	25		4	1	2.5			45° weathered joint
17															
18						R-4	90	30		6	1.5	3.5			
19						R-5	94	41		7	2	4.5	0	153	472
20		massive													
21															20.7'
22						R-6	99	71		28	2	?			
23															
		See Sheet 2 of 2													

Jenny Engineering Corporation Geotechnical Consultants		TEST BORING LOG										BORING NO. TB-11			
ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL			ROCK				LABORATORY TEST RESULTS			REMARKS		
			SYMBOL	SAMPLE LOG. NO.	PEN RESIST. BLOWS/6IN	RUN NO.	%RECOVERY	RQD %	FRACTURE SPACING			WATER % CONTENT		DRY UNIT WEIGHT PCF	UNCONFINED COMPRESSIVE STRENGTH KSF
								GRAPHIC	MAXIMUM	MINIMUM	AVERAGE				
-24															
-25		broken				R-6	99	71		28	2				
-26															
-27		massive to broken clay-filled joints											0	156	1544
-28															
-29															
-30															
-31		LIMESTONE, med. gray-tan, laminated, argillaceous, hard to very hard, mas- sive to broken, chert nodules (Delaware)				R-7	95	70		13	2	7.5			
-32															10% water loss @ 31.0'
-33															
-34															45° weathered joints
-35													0	160	2114
-36		Bottom of boring @ 35.7'													



RESOURCE INTERNATIONAL
281 ENTERPRISE DRIVE
COLUMBUS, OHIO 43081

TEST BORING LOG

BORING NO. **TB - 60**

PROJECT: UPPER SCIOTO WEST BRANCH INTERCEPTOR

JOB NO.: 87 - 0068

CLIENT: JOHN DAVID JONES & ASSOCIATES, INC.

ELEVATION: 828.3 feet

GROUND WATER

CASING SAMPLER CORE TUBE

DATE STARTED: 9-3-87

DATE TIME DEPTH CASING TYPE

SS NX

DATE FINISHED: 9-10-87

9-9-87 2:00p.m 49.5 ft 3.0 ft DIA 4" 2"

DRILLER: S.G., R.W & W.M.

9-10-87 8:30a.m 52.3 ft 3.0 ft WT 140 lb

INSPECTOR: K.K.

10-1-87 2:17p.m 50.0 ft well FALL 30"

LAB TEST RESULTS

STA. 252+60
OFF. 15 Ft. Lt

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL			ROCK				% WATER CONTENT	P DRY UNIT WEIGHT	K UNCON COMP. STRENGTH	REMARKS		
			SYMBOL	SAMPLE NO	PEN RESIT BLOWS/8"	RUN NO.	% RECOVERY	% RQD	FRACTURE SPACING						
									GRAPHIC					MAXIMUM	MINIMUM
825.3		Topsoil and dark brown clayey silt, trace of fine gravel and sand. Medium stiff. (Visual ML) 3-0		1	1										
	50				2										
	100	Limestone, light gray, fine to medium crystalline, porous fossiliferous, trace of hydrocarbons, fractured, weathered in fractures, few stylolites.			3	1	75	19		5	5	3			
	150	Less fractured.				2	118	86		10	1	5.5			
	200					3	88	59		20	1.5	4			
	250					4	96	70		15	5	8			
	300					5	92	60		13	-	6.5			
	350	More porous.				6	86	34		6.5	5	3.5			
	400	Fewer fossils.													
	450														

Triconed to 9.5' because of equipment limitations.

100% water loss at 18.0'.

Partial recovery from previous run.



RESOURCE INTERNATIONAL
281 ENTERPRISE DRIVE
COLUMBUS, OHIO 43081

TEST BORING LOG

BORING NO. TB-60

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL		ROCK				LAB TEST RESULTS			REMARKS			
			SYMBOL	SAMPLE NO.	PEN. RESIST BLOWS/6"	RUN NO.	% RECOVERY	% RQD	FRACTURE SPACING				% WATER CONTENT	DRY UNIT WEIGHT	UNCON. COMP. STRENGTH
									GRAPHIC	MAXIMUM	MINIMUM				
773.3	55.0	Limestone as above.													
	55.0	Cherty limestone, gray to dark brown, coarse to fine crystalline, hard, brittle, very few fossils.			7	100	90	18	1	9		166	8.6		
770.1	58.2	Chert, light gray to dark brown, mottled, nodular, fractured. hard brittle, interbedded limestone. Very few fossils.										157	11.4		
766.1	62.2	Limestone, light to dark gray brownish, abundant fossils (mostly coral) near the bottom. Moderately fractured, hard.		8	95	69	18	-	9						
758.3	70.0	Bottom of boring at 70.0 feet.													
	75.0														
	80.0														
	85.0														
	90.0														
	95.0														

OBSERVATIONS: Water monitoring well installed.



RESOURCE INTERNATIONAL
281 ENTERPRISE DRIVE
COLUMBUS, OHIO 43081

TEST BORING LOG

BORING NO. **TB-62**

PROJECT: UPPER SCIOTO WEST BRANCH INTERCEPTOR

JOB NO.: 87-0068

CLIENT: JOHN DAVID JONES & ASSOCIATES, INC.

ELEVATION: 822.0 feet

GROUND WATER

CASING SAMPLER CORE TUBE

DATE STARTED: 9-9-87

DATE TIME DEPTH CASING TYPE

SS NX

DATE FINISHED: 9-10-87

9-9-87 5:00p.m. 39.9 ft 2.0 ft DIA 4" 2"

DRILLER: M.G. & J.H.

9-10-87 8:10a.m. 43.3 ft 2.0 ft WT 140 lb

INSPECTOR: K.K.

10-1-87 2:05p.m. 44.0 ft none FALL 30"

LAB TEST RESULTS

STA. 266+80

OFF. 40 Ft. Lc.

REMARKS

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL			ROCK				LAB TEST RESULTS				REMARKS				
			SYMBOL	SAMPLE NO.	PEN RESIT BLOWS/6"	RUN NO.	% RECOVERY	% RQD	FRACTURE SPACING			% WATER CONTENT	PC		DRY UNIT WEIGHT	UNCOR CORP. STRENGTH		
									GRAPHIC	MAXIMUM	MINIMUM						AVERAGE	
820.0		Topsoil and brown clayey silt little fine to coarse gravel (limestone fragments). Very stiff. (Vis. ML) 2.0	1	6	9													
50		Limestone, light gray to brownish fine to medium crystalline, fossiliferous, trace of hydrocarbons, few stylolites, porous, highly fractured, weathered in fractures.				1	82	0		3.5	-	2						Triconed to 5.0'.
100						2	100	0		3.5	1	2						100% water loss at 7.5'.
150						3	100	17		6	-	3						
200		Fossils, few stylolites, highly fractured, weathered in fractures.																
250						4	100	79		23	-	1.5						
300		Less fractured.																
350		Fewer fossils.				5	100	79		15	-	9						
400						6	100	76		15	15	8						
450		Limestone, light to dark gray mottled, crystalline, fossiliferous, stylolites, weathering in fractures, trace of hydrocarbons, few chert nodules.											165	13.7				



RESOURCE INTERNATIONAL
281 ENTERPRISE DRIVE
COLUMBUS, OHIO 43081

TEST BORING LOG

BORING NO. TB - 62

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL			ROCK				LAB TEST RESULTS			REMARKS		
			SYMBOL	SAMPLE NO.	PEN. RESIST BLOWS/6"	RUN NO.	% RECOVERY	% RQD	FRACTURE SPACING			% WATER CONTENT		DRY UNIT WEIGHT	UNCON. COMP. STRENGTH
									GRAPHIC	MAXIMUM	MINIMUM				
771.0		Same as above. 51.0										164	14.3		
766.0	56.0	Limestone as above. Chert nodules becoming more abundant at depth (cherty limestone) few fractures. Hard.			7	100	95		24	1	12				
	600	Bottom of boring at 56.0 feet.													
	650														
	700														
	750														
	800														
	850														
	900														
	950														

OBSERVATIONS: _____



RESOURCE INTERNATIONAL
281 ENTERPRISE DRIVE
COLUMBUS, OHIO 43081

TEST BORING LOG

BORING NO. **TB-63**

PROJECT: UPPER SCIOTO WEST BRANCH INTERCEPTOR

JOB NO.: 87-0068

CLIENT: JOHN DAVID JONES & ASSOCIATES, INC.

ELEVATION: 805.0 feet

GROUND WATER

CASING SAMPLER CORE TUBE

DATE STARTED: 9-10-87

DATE TIME DEPTH CASING TYPE

SS NX

DATE FINISHED: 9-11-87

9-10-87 3:30p.m. 23.4 ft 5.5 ft DIA

4" 2"

DRILLER: M.G. & J.H.

9-11-87 10:00p.m. 23.4 ft 5.5 ft WT

140 lb

INSPECTOR: K.K.

10-1-87 2:00p.m. 25.0 ft Well FALL

30"

LAB TEST RESULTS

STA. 271+60

OFF. 40 Ft. Rt.

REMARKS

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL		ROCK				LAB TEST RESULTS			REMARKS		
			SYMBOL	SAMPLE NO	RUN NO.	% RECOVERY	% RQD	GRAPHIC	MAXIMUM FRACTURE SPACING	MINIMUM	AVERAGE		% WATER CONTENT	PCF DRY UNIT WEIGHT
800.0		Dark brown clayey silt, some fine to coarse gravel, trace fine to coarse sand, few weathered rock fragments, trace of organics. Damp. Stiff.		1	4									
799.5	5.0	(Visual ML) 5.0		22	7									
		Light gray fine to coarse gravel and fine to coarse sand, little clayey silt. very dense. (Vis. GW) 5-8		2	8	1	93	35	1.5	6				Highly fractured to 7.5'.
		Limestone, light gray to brown mottled, fine to medium crystalline, fossiliferous, few stylolites, weathered in fractures.				2	100	0	2.5	1.5				100% water loss at 10.5'.
		Highly fractured.				3	100	65	17	8.5				
		Less fractured, porous.										148	6.8	
		Few chert nodules				4	100	84	18	9				
772.5	32.5	Cherty limestone, gray brown, mottled, modular, very few fossils, hard, brittle				5	100	56	10.5	5.5		161	14.8	
767.5	37.5	Limestone, light gray to brown abundant fossils, (coral and bivalves), few stylolites, few fractures. Hard. Massive.										147	7.2	
759.5	45.0	Bottom of boring at 45.5 feet. Water monitoring well installed.				6	99	74	39	1 20				



RESOURCE INTERNATIONAL
281 ENTERPRISE DRIVE
COLUMBUS, OHIO 43081

TEST BORING LOG

BORING NO. **TB-65**

PROJECT: UPPER SCIOTO WEST BRANCH INTERCEPTOR

JOB NO.: 87-0068

CLIENT: JOHN DAVID JONES & ASSOCIATES, INC.

ELEVATION: 805.5 feet

GROUND WATER

CASING SAMPLER CORE TUBE

DATE STARTED: 9-14-87

DATE TIME DEPTH CASING TYPE

SS NX

DATE FINISHED: 9-15-87

9-15-87 11:30a.m. 25.0 ft 43.0 ft DIA 4" 2"

DRILLER: M.G. & W.M.

10-1-87 1:51p.m. 27.5 ft none WT 140 1b

INSPECTOR: K.K.

FALL

30"

LAB TEST RESULTS

STA. 280+15
OFF. 35 Ft.Lt.

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL			ROCK				LAB TEST RESULTS				REMARKS
			SYMBOL	SAMPLE NO	PEN RESIST BLOWS/6"	RUN NO.	% RECOVERY	% ROD	FRACTURE SPACING			% WATER CONTENT	DRY UNIT WEIGHT	
								GRAPHIC	MAXIMUM	MINIMUM	AVERAGE	PCF	KSI	
805.3		Topsoil 0.2		1	3									
		Brown clayey silt, mottled, little fine to coarse gravel, trace of organics. Stiff. (Visual ML)			6									
800.5	50	Light brown clayey silt, trace fine to coarse sand, fine to coarse gravel (limestone and chert fragments). Hard. (Visual ML)		2	11									
					17									
					30									
794.7	100	Limestone, light gray to brown medium crystalline, highly fractured, fossiliferous, highly weathered on fractures. (Visual ML)		3	22	1	32	0	3.5	-	2			Very low core recovery.
					50									
					3									
790.5	150	Light brown clayey gravel, some fine to coarse sand and rock fragments, brown silt. Dense. (Visual GC-GW)		4	9									
					18									
					14									
					13									
					25									
					20									
780.2	200	Limestone, light to dark brown fine to medium crystalline, highly fossiliferous, highly fractured, weathered. Ferruginous stains on fracture faces, argillaceous. (Visual ML)		6	50	2	32	0	3.5	-	2			Very low core recovery.
					3									
					9									
774.5	250	Dark gray clayey silt, some fine to coarse gravel, trace fine to coarse sand (till). Hard. (Visual ML)		7	15									9.0 Hand Penetrometer
					23									
					10									
769.0	300	Dark gray fine to coarse gravel and fine to coarse sand trace clayey silt. Very dense. (Visual GW)		8	29									
					24									
					29									
					27									
					34									
758.5	350	Limestone, light gray to dark brown, mottled, coarse to fine crystalline, highly fossiliferous, mostly coral. (Visual ML)		9	50	3	97	19	6	-	3	153	9.1	



RESOURCE INTERNATIONAL
281 ENTERPRISE DRIVE
COLUMBUS, OHIO 43081

TEST BORING LOG

BORING NO. TB - 65

ELEVATION	DEPTH	DESCRIPTION OF MATERIALS	SOIL		ROCK				LAB. TEST RESULTS				REMARKS		
			SYMBOL	SAMPLE NO.	PEN. RESIST BLOWS/6"	RUN NO.	% RECOVERY	% RQD	FRACTURE SPACING			% WATER CONTENT		DRY UNIT WEIGHT	UNCON. COMP. STRENGTH
									GRAPHIC	MAXIMUM	MINIMUM				
754.5		Limestone as above.				3	97	19	6	-	3				
		Bottom of boring at 51.0 feet.													
	550														
	600														
	650														
	700														
	750														
	800														
	850														
	900														
	950														

OBSERVATIONS: Installed water monitoring well.

LOG OF BORING

Date Started 02/12/97 Date Completed 02/12/97 Sampler's Type HSA/CORE Dia. 3 1/4" I.D./ 3" O.D.
 Boring No. B-2 Station & Offset 12+58 9.0 ft RT Surface Elev. 827.1 ft Water Elev. 807.0

Elev. (ft)	Depth (ft)	Std. Pen./ RQD	Rec. (ft)	Loss (ft)	Description	Sample No.	Physical Characteristics											
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L	P.I.	W.C.	ODOT Class			
827.1	0				ASPHALT													
	2.0	NO SAMPLING			BROWN, SANDY SILT with GRAVEL, BOULDERS, COBBLES (FILL)												VISUAL	
	4.0																	
	6.0																	
	8.0																	
819.1	8.0						CONCRETE SLAB											
818.1	10.0	26	4.8	0.2	LIMESTONE, Lt. GRAY CRYSTALLINE, FOSSILIFEROUS 0° to 10° BEDDING DIP, CLOSE JOINTING, VERY SLIGHT to SLIGHT WEATHERING, HARD. MOST JOINTS CLAY FILLED. AVERAGE POINT LOAD UNCONFINED COMPRESSIVE STRENGTH = 14,237 psi													
	12.0																	
	14.0																	
813.1	16.0	52	5.0	0.0														
	18.0																	
808.1	19.0																	

TOP of ROCK

BOTTOM of BORING

LOG OF BORING

Date Started 02/13/97 Date Completed 02/13/97 Sampler's Type HSA/ROCK CORE Dia. 3 1/4" I.D./ 3" O.D.
 Boring No. B-3 Station & Offset 12+16 9.0 ft RT Surface Elev. 827.8 ft Water Elev. DRY

Elev. (ft)	Depth (ft)	Std. Pen./ RQD	Rec. (ft)	Loss (ft)	Description	Sample No.	Physical Characteristics												
							% Agg.	% C.S.	% F.S.	% Silt	% Clay	L.L	P.I.	W.C.	ODOT Class				
827.8	0																		
826.6	2.0				ASPHALT over BASE COARSE														
	4.0	N S A M P L I N G			BROWN SANDY CLAYEY SILT with COBBLES, BOULDERS. (FILL)														
821.8	6.0																		
	8.0					WEATHERED LIMESTONE													
819.8	10.0																		
	12.0	20	4.2	0.8	LIMESTONE, Lt. GRAY FINELY CRYSTALLINE, FOSSILIFEROUS 0° to 10° BEDDING DIP, CLOSE JOINTING , VERY SLIGHT to SLIGHT WEATHERING, HARD. MANY JOINTS CLAY OR SANDY CLAY FILLED. AVERAGE POINT LOAD UNCONFINED COMPRESSIVE STRENGTH = 19,165 psi														
814.8	14.0																		
	16.0	28	4.5	0.5															
809.8	18.0																		

VISUAL

TOP of ROCK

BOTTOM of BORING

F. STANDARD DRAWINGS

GENERAL NOTES, SIDEWALK CURB RAMPS

1. CURB RAMP COMPONENTS ASSEMBLY – THE CURB RAMP INCLUDES THE RAMPS, FLARED SIDES, LANDINGS AND ROLLED EDGES.
2. CURB RAMP TYPE – CURB RAMPS SHALL BE SPECIFIED BY THE APPROPRIATE TYPE AND SHALL BE PERPENDICULAR TO THE CURB EXCEPT TYPES E & F
TYPE A – DIAGONAL RAMP WITH FLARES IN TREE LAWN
TYPE B – DIAGONAL RAMP WITH FLARES
TYPE C – PERPENDICULAR RAMP IN TREE LAWN
TYPE D – PERPENDICULAR RAMP OBSTRUCTED ON ONE SIDE
(WITH PRIOR WRITTEN CITY APPROVAL ONLY)
TYPE E – RAMP WITH RECESSED LOWER LANDING FOR ALLEYS AND DRIVEWAYS
(WITH TREE LAWN)
TYPE F – RAMP WITH RECESSED LOWER LANDING FOR ALLEYS AND DRIVEWAYS
(NO TREE LAWN)
TYPE G – PARALLEL (OFF-STREET LANDING) WITH 2 TRANSITION RAMPS (WITH PRIOR WRITTEN CITY APPROVAL ONLY)
TYPE H – MEDIAN RAMP WITH CENTER LANDING
TYPE I – COMBINED PERPENDICULAR AND PARALLEL RAMP ONE DIRECTION
3. RAMP RUNNING SLOPE – THE RAMP RUNNING SLOPE SHALL BE 1:20 (5%) TO 1:13 (7.7%).
4. RAMP CROSS SLOPE – THE MAXIMUM CROSS SLOPE SHALL BE 1:64 (1.56%, 3/16 INCH PER FOOT).
5. PERPENDICULAR RAMP WIDTH – THE MINIMUM WIDTH OF A SIDEWALK RAMP SHALL BE 4-FEET AND OF A BIKE PATH RAMP SHALL BE 8-FEET. THE WIDTH MAY BE REDUCED TO A MINIMUM OF 3-FEET WITH PRIOR WRITTEN CITY APPROVAL IF CLEARANCE RESTRICTIONS EXIST.
6. PARALLEL RAMP WIDTH – TYPE H RAMP SHALL BE A MINIMUM OF 4-FEET BY 5-FEET & 5-FEET BY 5-FEET RESPECTIVELY, PER STANDARD DRAWINGS.
7. ALL JOINTS BETWEEN NEW AND EXISTING MATERIALS SHALL BE FLUSH.
8. FLARES – THE LENGTH OF THE FLARE AT THE FACE OF CURB SHALL BE A MAXIMUM OF 10% OR 10 TIMES THE CURB HEIGHT, WHICHEVER IS LESS.
9. LANDINGS – LANDINGS SHALL BE A MINIMUM OF 4-FEET BY 4-FEET WITH A 1:64 (1.56%) CROSS SLOPE FOR ALL CURB RAMP TYPES EXCEPT PARALLEL CURB RAMPS. OFF STREET LANDINGS FOR PARALLEL CURB RAMPS SHALL BE A MINIMUM OF 4-FEET BY 5-FEET AS INDICATED IN THE STANDARD DRAWINGS. LANDINGS ARE REQUIRED AS FOLLOWS:
 - A. TOP LANDING – CURB RAMP TYPES A, B, C AND G SHALL HAVE LANDINGS AT THE TOP OF THE RAMP.
 - B. LOWER RECESSED LANDING – CURB RAMP TYPE E AND F SHALL HAVE A RECESSED LANDING AT THE BOTTOM OF THE RAMP WHERE IT INTERSECTS THE CURB LINE.

Date: 03/15/2011



CITY OF DUBLIN™
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STANDARD DRAWING

CURB RAMP
GENERAL NOTES

SHEET 1 OF 2

DWG. NO. **PD-02**

C. LANDING AT INTERSECTING SIDEWALKS – WHEREVER SIDEWALKS INTERSECT THERE SHALL BE A LANDING MEETING THE ABOVE REQUIREMENTS. (GENERAL NOTES CONTINUED ON SHEET 2)

10. STREET COUNTER SLOPE – THE COUNTER SLOPE AT THE BASE OF THE RAMP SHALL BE A MAXIMUM OF 1:20 OR 5% FOR A MINIMUM OF 2–FEET.
11. MAXIMUM DIFFERENTIAL BETWEEN RAMP RUNNING SLOPE AND GUTTER PAN SHALL BE 13%, THE PREFERRED DIFFERENTIAL IS 11%.
12. SURFACES – RAMP AND FLARE SURFACES MUST BE STABLE AND SLIP RESISTANT. RAMPS SHALL BE MEDIUM BROOMED TRANSVERSE TO THE DIRECTION OF TRAVEL. GRATINGS, VALVE BOXES, AND UTILITY BOXES SHALL NOT BE LOCATED IN THE RAMP, LANDING, OR TRANSITION AREAS.
13. DETECTABLE WARNINGS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF DUBLIN STANDARD DRAWING PD–03. DETCTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A PUBLIC VEHICULAR WAY.
14. THE PEDESTRIAN WALKWAY WITHIN THE STREET PAVEMENT, AT LEAST 7–FEET WIDE, BETWEEN OPPOSING RAMPS SHALL HAVE A CROSS–SLOPE (THE LONGITUDINAL STREET SLOPE) OF NO GREATER THAN 2%. VERTICAL STREET CURVES SHALL BE INSTALLED AS NEEDED.
15. GRAVEL BEDDING SHALL HAVE A MINIMUM DEPTH OF 4 INCHES AND SHOULD NOT EXCEED A DEPTH OF 6 INCHES.

Date: 03/15/2011



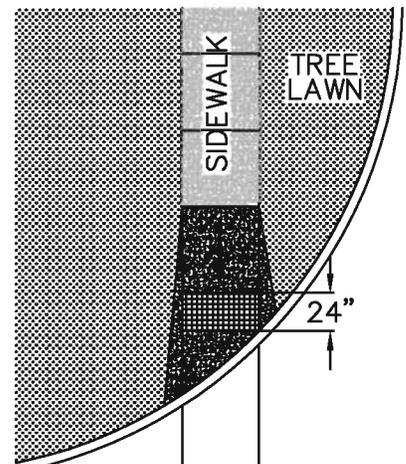
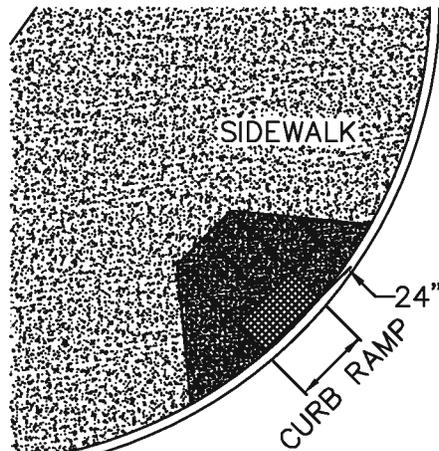
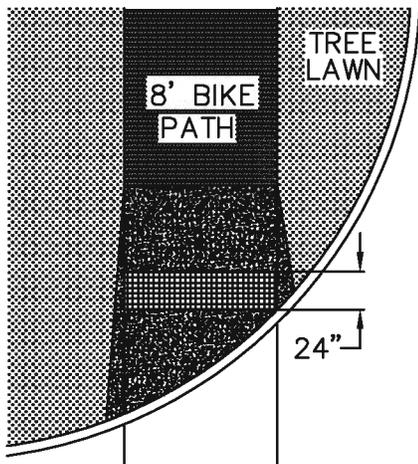
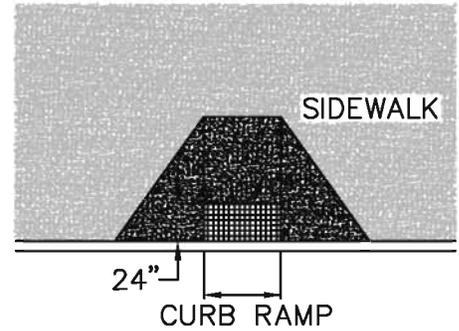
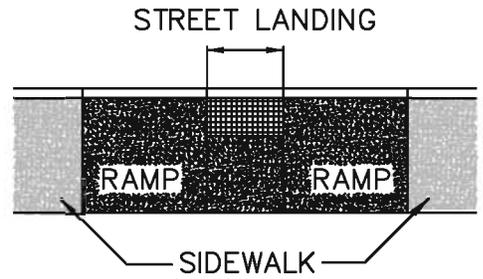
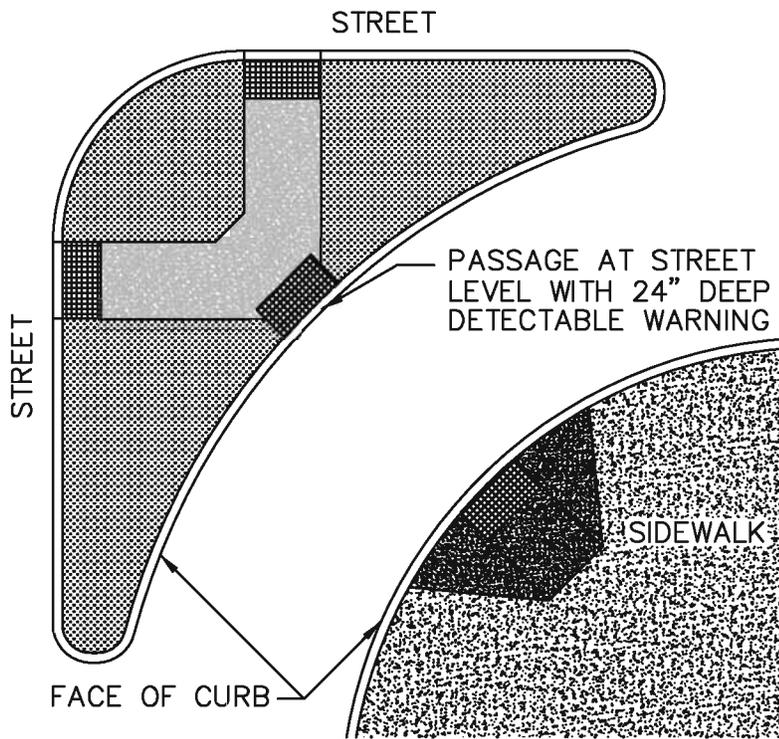
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STANDARD DRAWING

CURB RAMP
GENERAL NOTES

SHEET 1 OF 2

DWG. NO. ***PD-02***



NOTES:

1. DETECTABLE WARNINGS SHALL BE PROVIDED WHEREVER A CURB RAMP CROSSES A VEHICULAR WAY, EXCLUDING UNSIGNALIZED DRIVEWAY CROSSINGS.
2. DETECTABLE WARNINGS SHALL BE PROVIDED 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE. THE DETECTABLE WARNING SHALL BE LOCATED ADJACENT TO THE CURB LINE.
3. DETECTABLE WARNINGS SHALL BE PLACED 2" TO 4" BEHIND FACE OF CURB.

Date: 09/18/2006



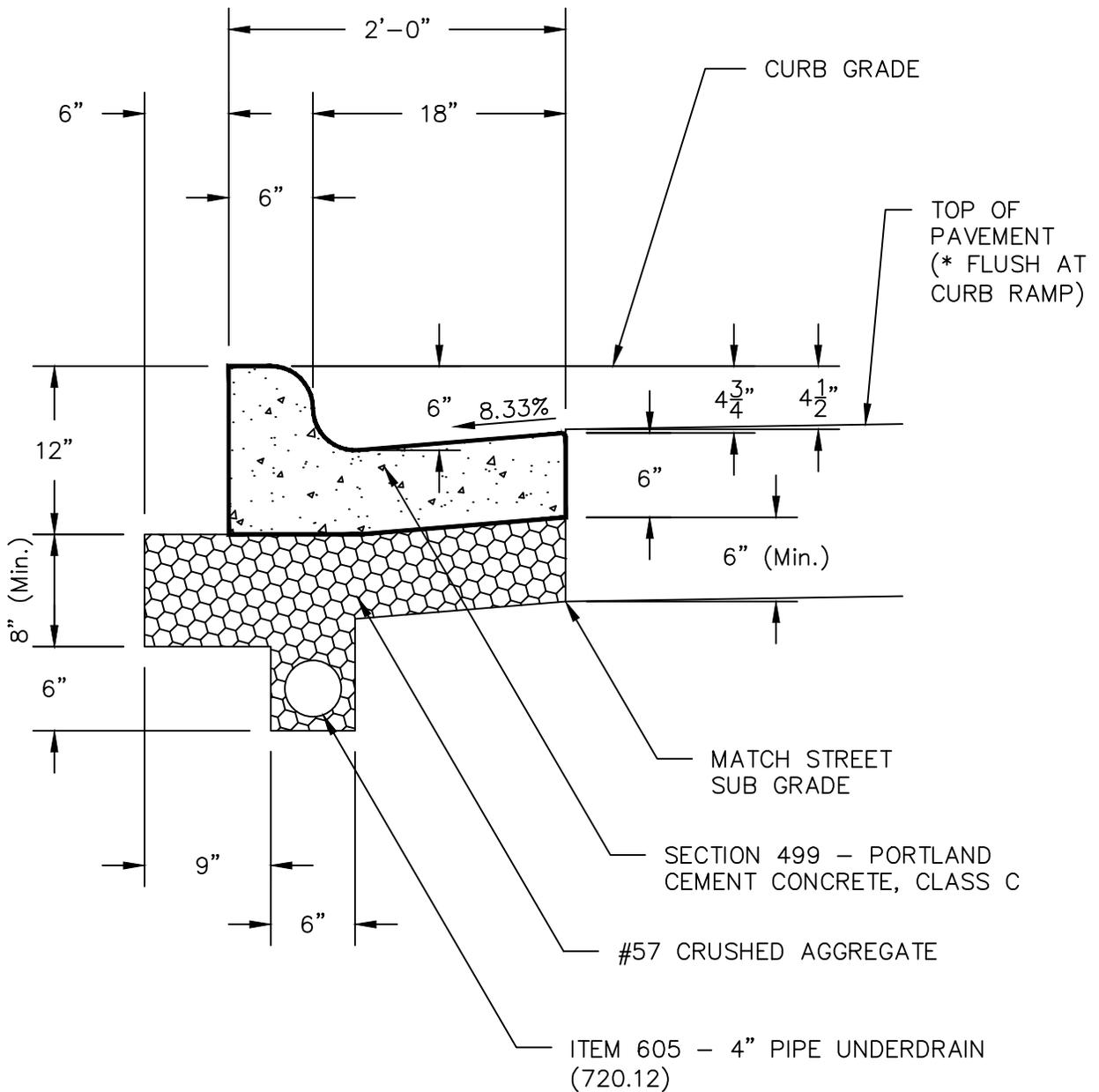
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STANDARD DRAWING

DETECTABLE WARNINGS

SHEET 1 OF 1

DWG. NO. **PD-03**



* SEE DRAWING RD-03 FOR GUTTER TRANSITION AT CURB RAMP.

Date: 07/13/2011



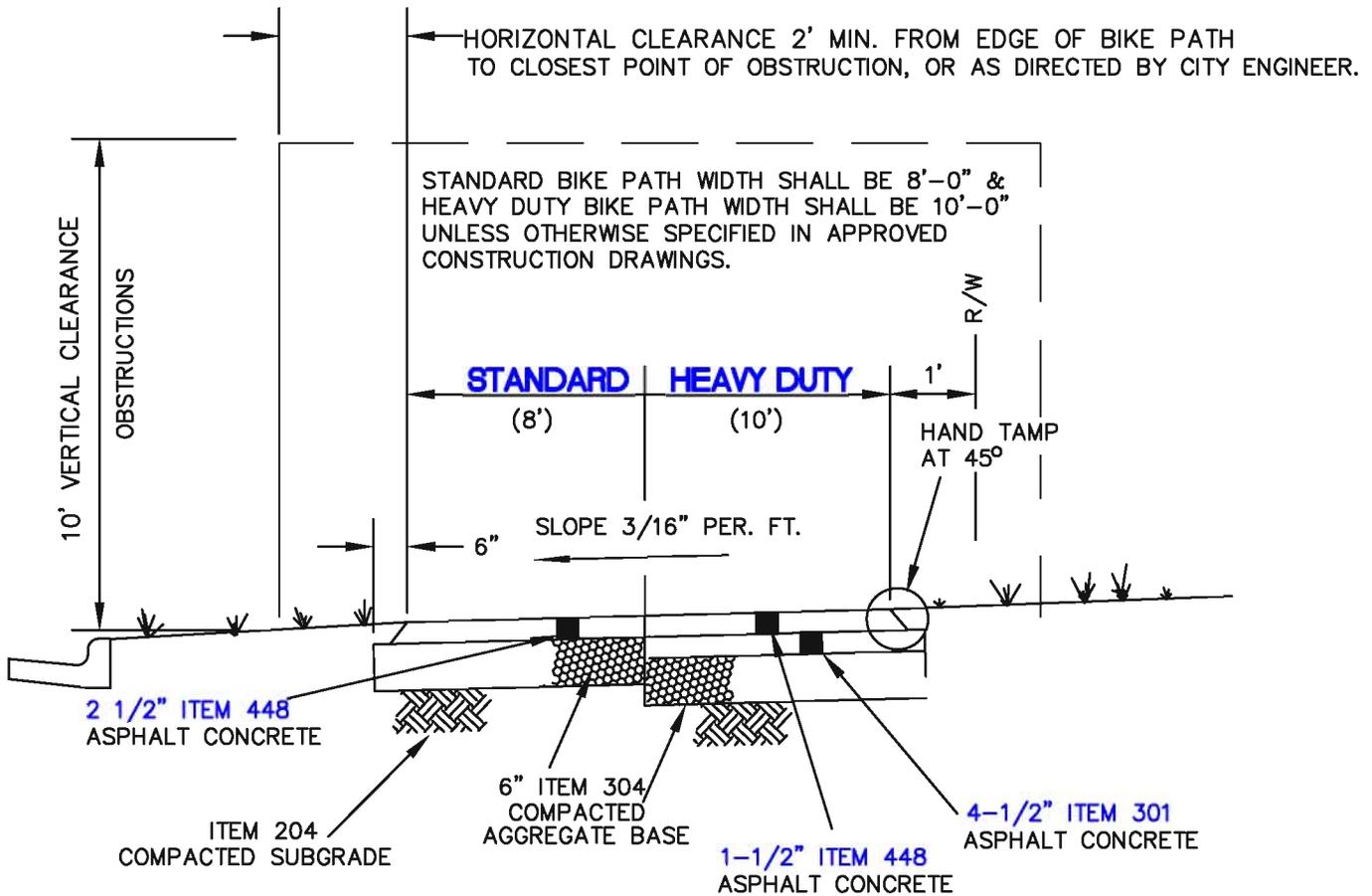
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STANDARD DRAWING

**COMBINATION CONCRETE
CURB & GUTTER**

SHEET 1 OF 1

DWG. NO. **RD-02**



1. ALL TOPSOIL SHALL BE REMOVED FROM SUB GRADE AREAS. ITEM 204 SHALL BE COMPACTED TO NO LESS THAN 98% OF MAX. DRY DENSITY. EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.
2. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED. SEED MIXTURE REQUIRES THE APPROVAL OF THE CITY ENGINEER.
3. PAVEMENT MARKINGS AND SIGNING SHALL CONFORM TO OHIO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. BIKE PATHS CROSSING CONCRETE RESIDENTIAL DRIVEWAY APPROACHES SHALL BE 6" PC CONCRETE ACROSS THE WIDTH OF THE DRIVEWAY APPROACH, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER. BIKE PATHS CROSSING NONRESIDENTIAL DRIVEWAY APPROACHES SHALL MATCH THE THICKNESS AND CROSS-SECTION OF THE DRIVEWAY APPROACH OR 8" PC CONCRETE, WHICHEVER IS GREATER, AS APPROVED BY THE CITY ENGINEER.
5. FOR GEOMETRIC STANDARDS FOR CURB RAMP REFER TO DUBLIN STD. DWG. PD-01.

Date: 03/15/2011



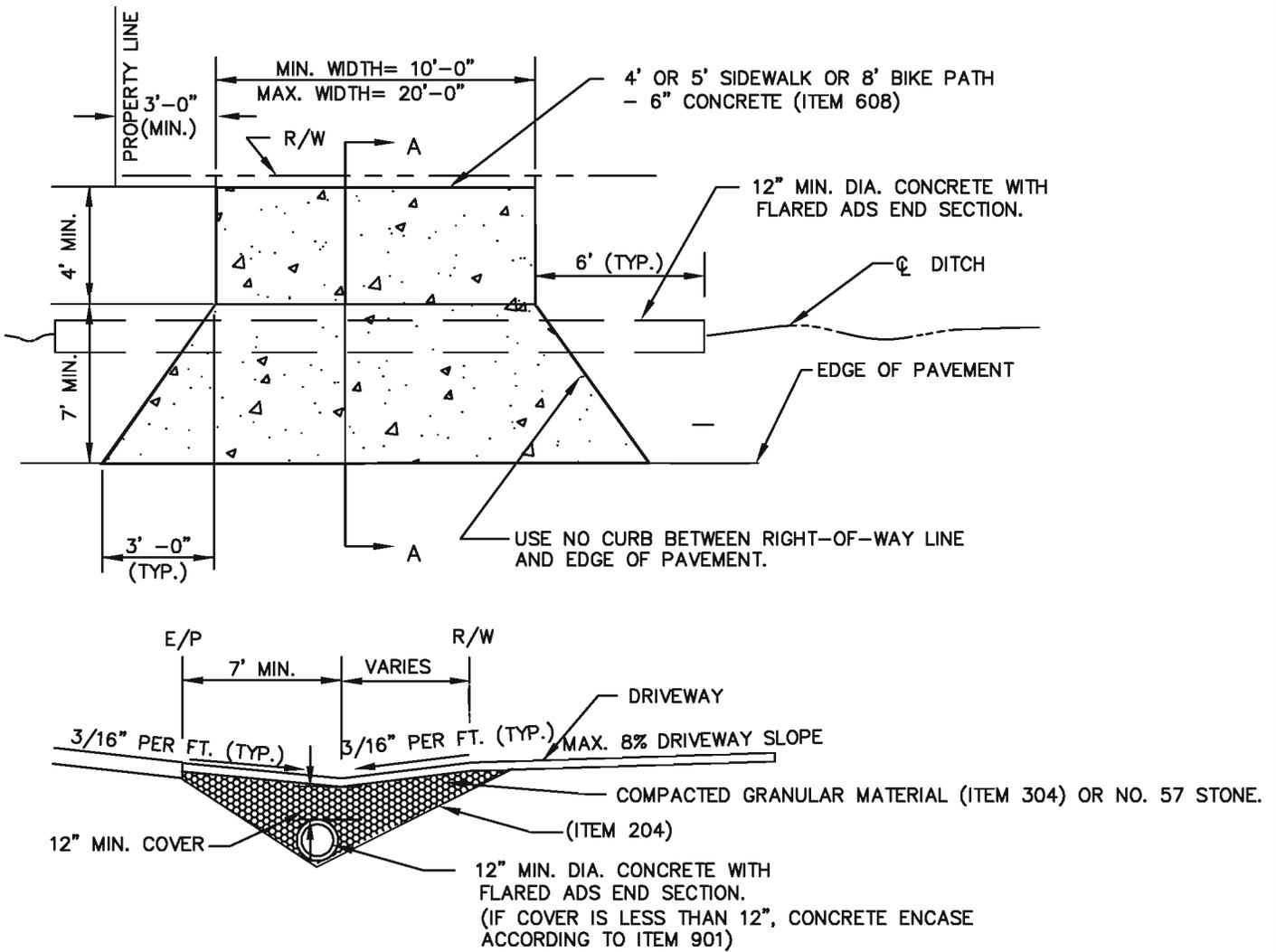
CITY OF DUBLIN™
ENGINEERING

STANDARD DRAWING

BIKE PATH
(STANDARD & HEAVY DUTY)

SHEET 1 OF 1

DWG. NO. **RD-06**



SECTION A-A

NOTE:

1. THE CITY ENGINEER MAY REQUIRE LARGER PIPE TO BE INSTALLED. MINIMUM SLOPE OF PIPE SHALL BE 1 % UNLESS OTHERWISE APPROVED.
2. DRIVE APPROACH SHALL BE 6" CONCRETE OR ALTERNATE ASPHALT AS REQUIRED.
 6" AGGREGATE BASE ITEM 304
 1 1/2" ASPHALT ITEM 402
 1 1/2" ASPHALT ITEM 404

Date: 09/18/2006



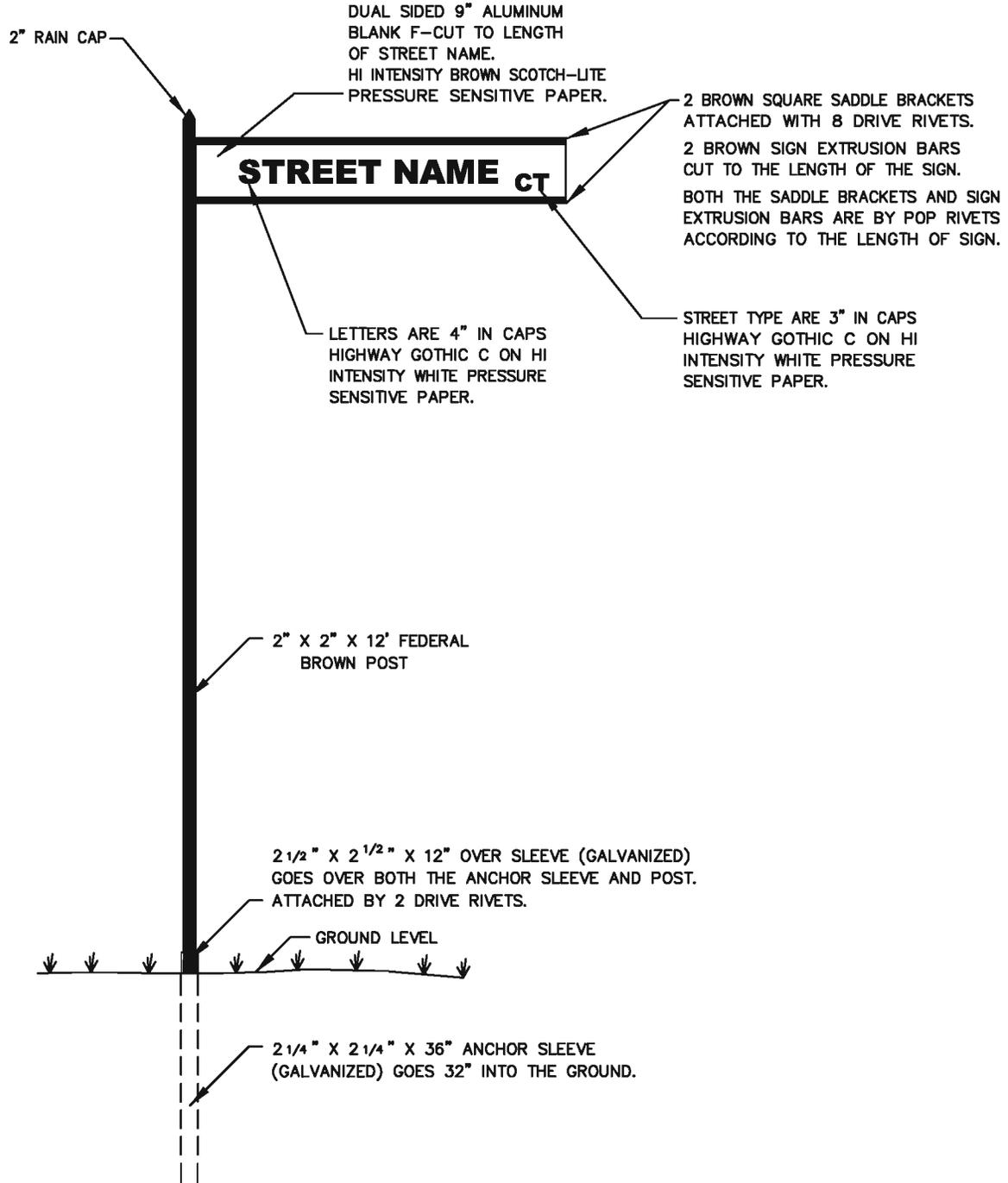
CITY OF DUBLIN™
ENGINEERING

STANDARD DRAWING

**RESIDENTIAL DRIVEWAY APPROACH FOR
STREETS WITHOUT CURB & GUTTER**

SHEET 2 OF 9

DWG. NO. **RD-07**



Date: 09/18/2006



CITY OF DUBLIN™
ENGINEERING

STANDARD DRAWING

**TYPICAL STREET
NAME SIGN**

SHEET 1 OF 1

DWG. NO. **RD-10**

G. SCOPE OF WORK

Horizontal construction of approximately 1,230 ft of 8-ft wide asphalt multi-use path; concrete ramps; stone walls and pre-fabricated pedestrian bridge.

IV. OWNER COMPLETED FORMS

A. OWNER EXECUTION CHECKLIST

The following list highlights and serves as a reminder of actions required to execute the Contract with the selected bidder.

Notice of Award

- Complete the form once bidder selected
- Mail form to bidder
- Collect acceptance from bidder

Notice of Award to Surety and Surety's Agent

- Complete the form once bidder selected
- Send the bond to legal counsel for double-check of validity
- Send notice form to Surety and Agent at the addresses listed on the Bond form

Bid Tabulation Sheet

- If Prevailing Wage applies, ensure that the Bid Tabulation Sheet is completed and in your Project file

Prevailing Wage

- Check the date of the Determination Letter included with the Contract Documents. If it has expired, issue new prevailing wage rates to the Contractor.

Owner/Contractor Agreement

- Have the Contractor sign the Agreement
- Have the Law Director review and sign the Agreement
- Have the Fiscal officer sign the Agreement
- Have the CITY OF DUBLIN representative sign the Agreement

Notice of Commencement

- Complete the Notice of Commencement form and put it in the Project file
- Must produce it if requested but no filing requirement

Notice to Proceed

- Issue the Notice to Proceed

Bidder's and Subcontractors' Certificate(s) of Licensure

- If applicable, Collect from Bidder if not submitted with Bid

B. NOTICE OF AWARD TO BIDDER

Date: _____

PROJECT: DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

The CITY OF DUBLIN (Owner) has considered the Bid submitted by you for the above-described work in response to the Legal Notice dated Tuesday, March 12, 2013.

You are hereby notified that your Bid has been accepted for items in the amount of \$.

You are required by the Instructions to Bidders to execute the Contract and furnish the required documents within ten (10) calendar days from the date of this notice to you.

If you fail to execute said Contract within ten (10) days from the date of this notice, Owner may—at its discretion—exercise its rights with respect to your Bid guaranty and be entitled to such other rights as may be granted by Law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

Dated this _____ day of _____, 2013.

Sincerely,

Paul A. Hammersmith P.E.
Director of Engineering / City Engineer

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged.

Bidder _____

This _____ day of _____, 2013

By: _____

Title: _____

C. NOTICE OF AWARD TO SURETY AND SURETY'S AGENT

(Surety)

(Address)

(City/State/Zip)

(Surety's Agent)

(Address)

(City/State/Zip)

Date: _____

SENT BY REGULAR U.S. MAIL

RE: NOTICE OF AWARD OF CONTRACT

To Whom It May Concern:

You are notified that your principal, _____, has been awarded a contract for the CITY OF DUBLIN, DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD project, in the amount of \$_____ by the CITY OF DUBLIN, Ohio .

Sincerely,

Paul A. Hammersmith P.E.
Director of Engineering / City Engineer

D. NOTICE TO PROCEED

To:

Date: _____

Project: **DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD**

Owner: CITY OF DUBLIN, OHIO
5200 Emerald Parkway, Dublin, Ohio 43017

You are hereby notified to commence Work in accordance with the City/Contractor Agreement dated _____, and you are to complete the Work in the time required by the Contract Documents. Within ten (10) days from this Notice to Proceed date, you will begin physical, on-site improvements. You are required to return an acknowledged copy of this Notice to Proceed, to the Owner, indicating Acceptance of this Notice to Proceed.

Paul A. Hammersmith P.E.
Director of Engineering / City Engineer

ACCEPTANCE OF NOTICE TO PROCEED

Receipt of the above NOTICE TO PROCEED is hereby acknowledged by _____,
this the day of _____, 2013.

By: _____

Title: _____

E. NOTICE OF COMMENCEMENT OF PUBLIC IMPROVEMENT (O.R.C. §1311.252)

NOTICE IS HEREBY GIVEN OF THE COMMENCEMENT OF A PUBLIC IMPROVEMENT AS FOLLOWS:

1. The public improvement is identified as the CITY OF DUBLIN, DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD project located at Dublin Road starting at Hertford Lane going north to Rings Road.
2. The public authority and Owner responsible for the public improvement is the CITY OF DUBLIN, Ohio, 5200 Emerald Parkway, Dublin, Ohio 43017 .
3. The principal contractor(s) for the public improvement are as follows:
 , .
4. The date the CITY OF DUBLIN first executed a contract with a principal contractor for this public improvement is .
5. The name and address of the representative for the CITY OF DUBLIN upon whom service may be made for the purposes of serving an affidavit pursuant to Section 1311.26 of the Ohio Revised Code is Paul A. Hammersmith P.E., Director of Engineering / City Engineer for the CITY OF DUBLIN, Ohio, 5800 Shier-Rings Road, Dublin, Ohio 43016.

The foregoing instrument was acknowledged before me this _____, day of _____, 20____ by Paul A. Hammersmith P.E., Director of Engineering / City Engineer for the CITY OF DUBLIN, Ohio.

Signature and Seal of person taking acknowledgement:

V. ADDITIONAL PROJECT FORMS

A. PAYROLL INFORMATION

PROJECT: DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

I, _____ (Name),
_____ (Title) of _____
(Company Name), state the following:

1. That I pay or supervise the payment of the persons employed by _____ (Company Name) on the above-referenced project.
2. That during the payroll period commencing on the _____ day of _____, 2013, and ending on the _____ day of _____, 2013, all persons employed on said project have been paid the full weekly wages earned; that no rebates have been or will be made either directly or indirectly to or on behalf of said _____ (Contractor/Subcontractor) from the full weekly wages earned by such persons; and that no deductions have been made either directly or indirectly from the full wages earned by such persons, other than permissible deductions as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. 276c), and described below:

3. That any payrolls otherwise under this Agreement for Construction (the "Agreement") required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in the specifications as supplied by the Department of Industrial Relations or any wage determination incorporated into the Agreement; and that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

4. That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with the Ohio Apprenticeship Council.

5. That (check applicable box):

- a. WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS:

In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above-referenced payroll, payments of fringe benefits listed in the Agreement have been or will be made to appropriate programs for the benefit of such employees, except as noted in Section 4 below.

- b. WHERE FRINGE BENEFITS ARE PAID IN CASH:

Each laborer or mechanic listed in the above-referenced payroll has been paid as indicated on the payroll, and amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the Agreement, except as noted in Section 4 below.

c. Exceptions:

Exception (Craft):

Explanation:

_____	_____
_____	_____
_____	_____
_____	_____

Remarks:

(Signature)

(Print Name and Title)

The willful falsification of any of the above statements may subject the Contractor or Subcontractor to fines as described in Section 4115.99 of the O.R.C.

B. FINAL AFFIDAVIT OF COMPLIANCE WITH PREVAILING WAGES

PROJECT: DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD

STATE OF _____

COUNTY OF _____, SS:

I, _____, (Name of person signing the affidavit)
_____ (Title) do hereby certify that the wages paid to all employees of
_____ (Company Name) for all hours
worked on project the CITY OF DUBLIN DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD
LANE TO RINGS ROAD Project located at Dublin Road starting at Hertford Lane going north
to Rings Road during the period from _____ to _____ are in
compliance with the Prevailing Wage requirements of Chapter 4115 of the Ohio Revised
Code. I further certify that no rebates or deductions have been or will be made, directly or
indirectly, from any wages paid in connection with this project, other than those provided
by law.

(Signature of Affiant)

(Print Name)

Sworn to and subscribed in my presence this ____ day of _____, 2013.

Notary Public

The above affidavit must be executed and sworn to by the officer or agent or the Contractor/Subcontractor who supervised the payment of employees, before the CITY OF DUBLIN, Ohio will release the surety and/or make final payment due under the terms of the Agreement.

C. CONTRACTOR'S LIEN WAIVER AND RELEASE AGREEMENT

Project: **DUBLIN ROAD SOUTH MULTI-USE PATH - HERTFORD LANE TO RINGS ROAD**

The undersigned hereby acknowledges receipt of payment from the City for all Work on the Project through the date of its prior Application for Payment. The undersigned acknowledges and agrees that the terms in this Agreement shall have the same meaning as in the Contract Documents for the Project.

In return for said payment, and/or pursuant to certain contractual obligations of the undersigned, the undersigned hereby waives and releases any rights it has or may have through the date of its last Application for Payment to any and all Claims and liens related to the Project, including without limitation: Claims of payment, mechanic's liens, liens against funds, surety bond Claims, and Claims for breach of contract or unjust enrichment. The sole exception to this waiver and release is for any Claims the undersigned has made by properly and timely submitting a Claim as required by the Contract Documents. The undersigned acknowledges and agrees that this wavier and release is intended to be a comprehensive release of all Claims and liens related to the Project, including without limitation all Claims against the City, and the employees, board members, agents and representatives of any of the foregoing persons. The undersigned further certifies that this Agreement covers Claims and liens by all persons with which it did business related to the Project, including without limitation subcontractors and suppliers, through the date of its last Application for Payment. The undersigned represents that all such persons have signed an agreement in the form of this Agreement releasing any and all Claims and liens related to the Project, except for any Claims made by properly and timely submitting a Claim as required by the Contract Documents, a copy of which has been delivered to the City. The undersigned hereby represents and warrants that it has paid any and all welfare, pension, vacation, or other contributions required to be paid on account of the employment by the undersigned of any laborers on the Project.

This Agreement is for the benefit of, and may be relied upon by the City. The undersigned hereby agrees to indemnify, defend and hold harmless each of the foregoing, the Project, work or improvement, and real property from any and all Claims, or liens that are or should have been released in accordance with this Agreement.

Contractor Name: _____

Authorized Signature: _____

Title: _____

The foregoing instrument was acknowledged before me this _____, day of _____, 20____ by _____.

Signature and Seal of person taking acknowledgement:

VI. PLANS/DRAWINGS

Plans and Drawing are available at <http://dublinohiousa.gov/bids-and-requests-for-proposals> when downloading the project documents on line. If you purchase a hard copy of the project documents the plans and drawings will be on the CD included in the Bid Document and 11 X 17 printed copy as well.