

Columbia Township, Hamilton County, Ohio 5686 Kenwood Road, Cincinnati 45227 (513) 561-6046

REQUEST FOR BIDS ELM STREET SANITARY SEWER EXTENSION 2024

Bid Opening 11:00 am Thursday, August 15, 2024

INVITATION

Columbia Township, Ohio, is soliciting competitive sealed Bids for the construction of a sanitary sewer extension on Elm Street in Columbia Township ("Project") subject to the conditions detailed in this Bid Invitation.

Information pertaining to any item in this Bid Invitation can be obtained by contacting:

David Lorei Abercrombie & Associates DLorei@abercrombie-associates.com (513) 385-5757 Ext. 118

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FORMS

Bid Form Contract Notice to Proceed Guarantee Engineer

ADVERTISEMENT FOR BIDS

Columbia Township Elm Street Sanitary Sewer Extension

Bids for the Elm Street Sanitary Sewer Extension ("Project") will be received by Columbia Township at the Columbia Administration Building, 5686 Kenwood Rd., Cincinnati, 45227, until Thursday, August 15, 2024 at 11:00 a.m. local time. At that time the Bids received will be publicly opened and read.

Project requires extending sanitary sewer from an existing manhole on Elm Street east along Elm Street and north on Beech Street as shown on attached Abercrombie & Associates' plans. Project is Phase 2 of a sanitary sewer extension program; in Phase 1, sanitary sewer was extended from Pear Lane north through a utility easement to a manhole on Elm Street.

Information and Bidding Documents for the Project can be found and downloaded at the following website:

www.ColumbiaTwp.org

All official notifications, addenda, and other Bidding Documents will be offered through the designated website. Neither Owner nor Engineer will be responsible for Bidding Documents, including addenda, if any, obtained from sources other than the Owner.

For all further requirements regarding bid submittal, qualifications, procedures, and contract award, refer to the Instructions to Bidders that are included in the Bidding Documents.

Owner:Columbia TownshipBy:Columbia Board of Trustees by Mel Taylor, AdministratorDate:July 23, 2024

PROJECT OVERVIEW

Project includes extending sanitary sewer from an existing manhole on Elm Street east along Elm Street and north on Beech Street as shown on attached Abercrombie & Associates' plans. Project is Phase 2 of a sanitary sewer extension program; in Phase 1, sanitary sewer was extended from Pear Lane north through a utility easement to a manhole on Elm Street.

The Project also requires that, upon completion of construction, the Metropolitan Sewer District of Greater Cincinnati (MSDGC) will inspect and should accept the Elm Street Sanitary Sewer into its inventory. Columbia Township is the Project Owner for construction.

Review the entirety of these specifications for general rules, deadlines, and qualification requirements. All Bids must be entirely completed for consideration. A project schedule must be included that specifies the timeline for completion of the project.

There is no engineer's estimate for the Project.

Any records submitted to the Township, or that are used by the Township, may be public records. The Township will disclose public records upon request unless a statute exempts them from disclosure. Respondents should also be aware that if even a portion of a record is exempt from disclosure, generally, the rest of the record must be disclosed.

TIMELINE

- Bid Posted: Tuesday, July 23 open for three weeks
- Bid Opening: 11:00 am (local time) Thursday, August 15
- Township Approval: Tuesday, August 20
- Contract Signed: Tuesday, August 20
- Pre-Con Meeting: 11:00am (local time) Thursday, August 22
- Project Completion Friday, October 18, 2024

Construction must be completed, and final invoice received by Columbia Township, no later than December 1, 2024.

ATTACHMENTS

Elm Street Sanitary Sewer Extension Plan Pear Lane Sanitary Sewer As-Builts Ohio EPA Permit To Install - Approved

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Section 1: Bid

DEFINITIONS AND TERMS

Columbia Township, when used, shall mean the party of the first part or its properly authorized agents acting severally within the scope of the duties and responsibilities entrusted to them and hereinafter referred to as "OWNER."

Columbia Township representative, when used, shall mean Dustin Frazier, Public Works Superintendent, or any other person duly authorized by the Owner to act on its behalf on the Project.

BID SUBMISSION

Bids must be delivered, in person by company representative or by contract courier, to Columbia Township Administration, 5686 Kenwood Road, Cincinnati, Ohio, 45227, on or **before 11:00 am Thursday, August 15, 2024.** Late Bids will not be accepted. Faxed or emailed responses will not be accepted or considered. All Bids must be submitted in a sealed envelope and marked with the Bidder's name, the Bidder's address, and COLUMBIA TOWNSHIP ELM ST. SEWER EXTENSION PROJECT. Each Bid must contain the full name of the party or parties submitting the same and all persons interested therein. Envelopes which are not sealed will not be accepted.

BID OPENING

11:00 am Thursday, August 15, 2024

Columbia Township Administration, 5686 Kenwood Rd., Cincinnati 45227

Bidder attendance at the Bid Opening is welcomed but not mandatory.

PERFORM SERVICE BY

Construction must be completed by Friday, October 18, 2024, and final invoice received by Columbia Township, no later than December 1, 2024.

<u>AWARD</u>

The Bid will be awarded within 10 days after Bid closing. No Bid may be withdrawn in that time. Columbia Township reserves the right to reject any and all Bids and waive irregularities in the Bids.

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NOTICE TO PROCEED AND CONTRACT

Owner and the successful Bidder will enter into a Project Contract for the work to be performed under the terms of these Contract Documents for the Bid Sum in the Bidder's proposal, and Owner will issue a Notice to Proceed.

TAX STATUS

Owner is Tax Exempt and will provide required documentation to the successful Bidder.

CONTRACT PAYMENT TERMS

The Bid price for the Project shall include the cost of labor, tools, equipment, materials and all else necessary therefore and incidental thereto. Ten percent (10%) of each invoice is withheld until Contractor's work and/or damages are completed to the satisfaction of Columbia Township and may be made at the end of the warranty period. Approved invoices received by the twenty-fifth day of the month will be paid the following month. No interest is applicable.

PREVAILING WAGE

Prevailing Wage rates DO APPLY. All Bidders must comply with the prevailing wage rates on Public Improvements in Hamilton County and Columbia Township as determined by the Ohio Department of Wage & Hour Administration.

GENERAL BID CONDITIONS

Bids are to include any charges for delivery, packing, freight, lodging, etc.

ODOT Safety Standards: The most recent edition of the "Manual of Traffic Control for Construction and Maintenance Operations" as published by the Ohio Department of Transportation. By this reference, this standard is made an official part of these Contract Documents.

INTERPRETATIONS AND ADDENDA

Notify the Owner's Representative **in writing** promptly of any discrepancies in, or omissions from the Contract Documents. Bidder must submit all questions about the

Columbia Township (Hamilton County) Elm Street Sewer Extension Project Bidder's Initials: _____ Page **6** of **26** meaning or intent of the Bidding Documents to Engineer in writing. Contact information and submittal procedures for such questions are as follows:

Project Engineer:

David Lorei Abercrombie & Associates DLorei@abercrombie-associates.com

If no response within 24 hours call:

Dustin Frazier Owner's Representative 513-678-7070

Interpretations or clarifications considered necessary by Owner's representative will be issued by Addenda to clarify, correct, supplement, or change the Bidding Documents and be distributed to each person on record as having received a set of Contract Documents. Any Addenda issued during the Bidding period are to be included in the Bid and shall become a part thereof.

Questions received less than seven (7) days prior to the date for opening of Bids may not be answered.

The Owner will not be responsible for oral instruction or information; only responses set forth in an Addendum will be binding. Responses to questions are not part of the Contract Documents unless set forth in an Addendum that expressly modifies or supplements the Contract Documents.

If an Addendum is issued within 72 hours prior to the published time for the bid opening, excluding Saturdays, Sundays, and legal holidays, the bid opening will be extended with no further advertising required. Clarifications that do not change the specifications for the work may be issued within the 72-hour period without extending the bid opening date and time.

PERFORMANCE BOND

The successful Bidder shall furnish a Performance Bond before commencing the work. The Performance Bond shall be in an amount equal to 100% of the full amount of the Bid Sum as security for the faithful performance of the obligation of the Contract Documents.

EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS & SITE OF WORK

The Bidder is expected to carefully examine the site of the proposed work, the plans, specifications, special provisions, general conditions, and addenda before submitting a Bid. The submission of a Bid shall be considered evidence that the Bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the plans, specifications, special provisions, general conditions, and addenda.

COMPETENCY OF BIDDERS

The Owner requires that the Bidder shall furnish satisfactory evidence as detailed in this document that he has the necessary resources to fulfill the conditions of the Contract Documents.

In order that the Owner may award the project to the "lowest responsive and responsible Bidder", the Bidder is advised that the Owner may conduct such investigations (written or oral, confidential or nonconfidential) as it may at its sole option to undertake, which investigation will help establish the responsibility, including qualifications, experience on similar projects, financial condition, conduct and performance on previous contracts, proposed subcontractors, suppliers and/or other party proposed to perform or furnish work or materials in accordance with the Contract Documents, facilities and equipment, management skills, and ability to execute the contract properly.

The Owner may make such investigations as deemed necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such information and date for this purpose as the Owner may request.

The Owner reserves the right to reject any Bid if the evidence submitted by, or investigations of such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the Work contemplated herein.

INTERPRETATION OF QUANTITIES

Bidders must satisfy themselves of the accuracy of the estimated quantities in the Bid Form by examination of the site and a review of the drawings and specifications including Addenda. After Bids have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the nature of the work to be done. Upon discovering errors, inconsistencies or ambiguities in the construction documents, Bidders shall report this at once to the Columbia Township representative.

WITHDRAWAL OF BID

Bidder may withdraw its Bid, in person only, at any time prior to the scheduled time for closing the receipt of Bids. Withdrawals after the scheduled time for closing the receipt of Bids will not be permitted for a period of sixty (60) days.

Any Bidder may change or modify the Bid in the same manner in which it was originally submitted, but no Bidder may withdraw its Bid after the specified time of the opening of Bids.

Bids received after the specified time of the Bid opening will be returned to the Bidder unopened.

CONSIDERATION OF BIDS

Owner has the right to ask for additional information after Bids are received.

Owner reserves the right to expand or reduce the work subject to negotiating with the successful contract.

Owner reserves the right to reject any or all Bids, to award contracts in whole or in part, or to waive any informalities or irregularities in the submitted Bids. The response to this Bid Invitation is entirely voluntary. The Bid Invitation does not commit Owner to award a contract, to pay any costs incurred in the preparation of a Bid to this request, or to procure or contract for services or supplies.

Owner may reject responses that do not meet the requirements of the Bid in any respect. Bids which contain false or misleading statements, or which provide references that do not support an attribute or condition contended by the Vendor, may be rejected. If, in the opinion of the Owner, information is intended to mislead the Township in its evaluation of the Bid and the attribute, condition, or capability, the Bid will be rejected.

Any Bid may be withdrawn prior to the above scheduled time for the opening of Bids or authorized postponement thereof. Any Bid received after the time and date specified shall not be considered. The Owner shall declare a Bid non-responsive as indicated in Section 102.14.

In the event that a Bidder's Bid is substantially lower than the other Bids for the same work and the Bidder wishes to withdraw his Bid, and the Bid was submitted in good faith, and the reason for the Bid amount being substantially lower was a clerical error as opposed to a judgment error & was actually due to an unintentional and substantial arithmetic error or an unintentional omission of a substantial quantity of work, labor or materials made directly in the compilation of the Bid, the Bidder shall have in the Owner's hands, within two business days (48 business day hours) after the time of Bid opening stated in the Bidding documents, a written request for consideration of withdrawal of his Bid. After due consideration of the Bidding error, the Owner may, at his discretion, permit withdrawal of the Bid.

If any person contemplating the submission of a Bid for the proposed work is in doubt as to the true meaning of any part of the Drawings, Specifications, or other Contract Documents, he shall submit a written request for an interpretation thereof to the Columbia Township representative. The person making the request will be responsible for its prompt delivery.

Any interpretation of the Contract Documents will be made only by Addendum duly issued to each person receiving a set of such Documents. Neither the Owner nor his authorized representative will be responsible for explanation or interpretations of proposed Documents except as issued in accordance herewith. Should there be any reason why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the Owner and the Bidder.

ACCEPTANCE OF BID (AWARD)

Award shall go to "Lowest responsive and responsible Bidder." Prior to acceptance of the Bid and prior to performing work, the Contractor shall furnish proof of the below required documents:

- 1. Certificate of Insurance, including Columbia Township named as Additional Insured.
- 2. Ohio Bureau of Workers' Compensation (BWC) Certificate of Coverage.
- 3. 100% satisfactory performance and payment bond
- 4. New Vendor Form (if applicable, for Finance department purposes).
- 5. Emergency contacts.
- 6. Signed and completed Request for Bid
- 7. Initial all pages in the area provided on the footer of each page.

FORFEITURE OF CONTRACT

If the party to whom the "Notice of Award" has been mailed has not executed the "Contract Form", the "Contract Bonds" and provided Proof of Insurance within ten (10) days as

Columbia Township (Hamilton County) Elm Street Sewer Extension Project Bidder's Initials: _____ Page **10** of **26** specified in the section entitled "Final Award", it shall be considered in default thereof. The Owner may then re-Bid or let to another Bidder.

PREPARATION AND SUBMISSION OF BID

Each Bid must be submitted, in person by company representative or by contract courier, in a sealed envelope addressed to the Owner. Each sealed envelope containing a Bid must be plainly marked on the outside with the name of the Bidder, address, and the name of the Project for which the Bid is submitted. One copy of the Bid Form is required. All blank spaces for Bid Prices must be filled in ink or typewritten.

The Bid must be submitted on the original Bid Form furnished by the Owner. They shall be signed in ink by an authorized representative of the Bidder. Interlineations, alterations, or changes in a Bid must be explained or noted over the signature of the Bidder. Bids containing any conditions, omissions, unexplained erasures, alteration of forms, or irregularities of any kind may be rejected by the Owner, however, the Owner reserves the right to accept or to reject any or all Bids and to waive defects or technicalities as he may deem best for his interest.

Whenever in any of the Contract Documents, an article, material, or equipment is defined by describing a proprietary product or by using the name of a manufacturer, it is done for the express purpose of establishing a basis for the type of function, quality, durability, and efficiency and not for the purpose of limiting competition.

COMPLETION DATE

The Contract must be completed Friday, October 18, 2024.

The Owner needs to minimize disturbance to its residents. The Contractor will proceed with the work at such rate of progress to ensure full completion within the contract time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract time for completion of work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the loyalty of the work.

If the Contractor fails to complete the work within the Contract time, then the Contractor will pay to the Owner, the amount for liquidated damages as specified herein for such calendar days that the Contractor shall be in default after the time stipulated in the Contract Documents.

The Contractor shall not be charged with liquidated damages or any excess when the delays in completion of the work is due to the following, and the Contractor has promptly given written notice of such delay to the Columbia Township representative.

- A. To any preference, priority or allocation order duly issued by the Owner.
- B. To unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, or of the public enemy, acts of the Owner, fires, floods epidemic, quarantine, restrictions, strike, freight embargoes, and abnormal and unforeseeable weather.

LIQUIDATED DAMAGES

Failure to complete the project within the agreed timeframe shall subject the Contractor to liquated damages. Said damages shall be assessed against the prime Contractor in accordance with Section 108.06 and 108.07 of the State of Ohio Department of Transportation Construction & Material Specifications. No exceptions will be made.

INSURANCE

<u>Insurance Requirements</u> – Contractors shall procure and maintain for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, their agents, representatives, employees, or subcontractors.

Minimum Scope of Insurance - Coverage types shall include and be at least as broad as:

- 1. **Commercial General Liability (CGL):** Insurance Services Office (ISO) Form CG 00 01 covering \$1,000,000 per occurrence for bodily injury, property damage, personal & advertising injury. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit: \$2,000,000.
- 2. **Automobile Liability:** Insurance Services Form Number CA 0001 covering Code 1 (any auto), with limits no less than \$2,000,000 per accident for bodily injury and property damage.

- 3. **Workers' Compensation** insurance as required by the State of Ohio, and Employer's Liability insurance with a limit of no less than \$1,000,000 per accident for bodily injury or disease. If coverage is through The Ohio Bureau of Workers' Compensation, Employer's Liability coverage must be endorsed on the Commercial General Liability policy.
 - a. Such coverage shall **name Columbia Township as Additional Insured and Loss Payee** as its interests may appear.

If the Contractor maintains higher limits than the minimum shown above, the Columbia Township requires and shall be entitled to coverage for the higher limits maintained by the Contractor. Any available proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the Columbia Township.

<u>Deductibles and Self-Insured Retentions</u> – Any deductibles or self-insured retentions must be declared to and approved by the Columbia Township. At the Columbia Township's option, either: The Contractor shall cause the insurer to reduce or eliminate such deductibles or self-insured retention as respects the Columbia Township, its officials, agents, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

<u>Other Insurance Provisions</u> – The policies are to contain or be endorsed to contain the following provisions:

- 1. Additional Insured: "Columbia Township", its officials, agents, employees and volunteers" shall be named as Additional Insureds on the Commercial General Liability and Automobile Liability policies as respects liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor.
 - a. To provide appropriate Additional Insured coverage for general liability, including liability arising out of the products-completed operations hazard, Contractor agrees to use the following endorsement(s), or similar endorsements providing equal or broader Additional Insured coverage:
 - i. ISO Form <u>CG 20 10 11 85</u>, OR if later revisions are used;
 - ii. ISO Form CG 20 10 10 01 AND ISO Form CG 20 37 10 01

Columbia Township (Hamilton County) Elm Street Sewer Extension Project Bidder's Initials: _____ Page **13** of **26** 2. **Primary Coverage:** For claims related to this project, the Contractor's insurance coverage shall be primary as respects Columbia Township, its officials, agents, employees, and volunteers. Any insurance or self-insurance maintained by the Columbia Township, its officials, agents, employees and volunteers shall be in excess of Contractor's insurance and shall not contribute with it.

<u>Umbrella or Excess Liability</u> – Contractor may satisfy the minimum liability limits required above for Commercial General Liability or Business Auto Liability under an Umbrella or Excess Liability policy. Contractor agrees to endorse Columbia Township as an Additional Insured on the Umbrella or Excess policy unless the Certificate of Insurance states the Umbrella or Excess policy provides coverage on a "Follow Form" basis.

<u>Acceptability of Insurers</u> – Insurance is to be placed with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to Columbia Township.

<u>Verification of Coverage</u> – The Contractor shall furnish the Columbia Township with Certificates of Insurance and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required herein. All certificates and endorsements shall be received by the Columbia Township before work commences. However, failure to obtain the required documents prior to the beginning of work shall not waive the Contractor's obligation to provide them. The Columbia Township reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time.

<u>Certificate of Insurance</u> – The certificate of insurance shall contain the following language: "Columbia Township", its officials, agents, employees, and volunteers are Additional Insureds. Coverage shall be primary to the Additional Insureds and not contributing with any other insurance or similar protection available to the Additional Insureds whether other available coverage be primary, contributing, or excess."

<u>Non-renewal, Cancellation, or Material Change of Coverage</u> – Each insurance policy required above shall state that coverage shall not be cancelled, except with notice to the Township. If the Contractor receives a non-renewal or cancellation notice from an insurance carrier providing coverage required herein, or receives notice that coverage no longer complies with the requirements herein, Contractor agrees to notify Columbia Township by fax or email within five (5) business days with a copy of the non-renewal or cancellation notice, or written explanation of how coverage is no longer in compliance. The Contractor shall cease operations on the occurrence of any such non-renewal, cancellation, or material change and shall not resume operations until insurance is in force that complies with these requirements.

Columbia Township (Hamilton County) Elm Street Sewer Extension Project Bidder's Initials: Page **14** of **26** <u>Contractor's and Subcontractor's Insurance</u> – The Contractor shall not commence work under this Contract until they have obtained the insurance required herein, nor shall the Contract permit and Subcontractor to commence work on their subcontract until the insurance required of the Subcontractor has been so obtained. Contractors shall require and verify that all subcontractors or anyone performing work for the Columbia Township maintain insurance meeting all of the requirements stated herein including the requirement to name the Columbia Township, its officials, agents, employees and volunteers as Additional Insureds on Commercial General Liability coverage for both ongoing operations and completed operations beyond project completion date.

Section 2: Project

GENERAL INFORMATION AND PROJECT SCOPE

- 1. The project location is within a residential neighborhood and requires extending sanitary sewer from a manhole on Elm Street to serve properties on the north side of Elm Street. Contractors must visit the site to evaluate site conditions in advance in advance of submitting a Proposal.
- 2. Columbia Township secured an Ohio EPA Permit To Install (Form A & B); the selected contractor will be expected to secure all other necessary permits to perform the work.
- 3. The Contractor is required to provide a post-construction "as-built" survey to meet the requirements of the Metropolitan Sewer District of Greater Cincinnati. This survey is required to be provided within 60 days of the Project Completion Date of October 18, 2024.
- 4. The Contractor shall adhere to all applicable OSHA standards. The Contractor is responsible for ensuring that no unauthorized person enters the Work Zone and must have a staff member dedicated to this responsibility. All work must be performed in a manner as to not endanger the health or safety of any workers, residents, Township employees, or cause damage to any properties.
- 5. Before work begins, the Contractors shall submit to the Authorized Columbia Township representative the names and telephone numbers of persons who can be contacted 24 hours a day by the Township and all police agencies. These

persons shall be responsible for placing or replacing necessary traffic control devices to maintain traffic safely.

- 6. Traffic control is the sole responsibility of the Contractor and shall comply with requirements for maintaining traffic as indicated in the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways, current edition, the proposal, specifications, and the plans. The Contractor shall perform the required work with the least inconvenience to, and the maximum safety of Township staff, guests, and the Contractor.
- 7. Police and Fire access shall be always maintained.
- 8. Access to abutting properties shall be always maintained unless approved by an authorized Township employee and property owner has been properly notified.
- 9. Under no circumstances shall the Contractor leave a hazardous work site or situation unattended, un-barricaded or unresolved before ceasing work for the day.
- 10. All work processes must occur during daylight hours. The Contractor is required to coordinate work schedules with an authorized employee of the Township.
- 11.No work shall be permitted on Saturday, Sunday, or Holidays without written approval from the Township Project Manager. The holidays are New Year's Day, Martin Luther King Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

PROJECT EXECUTION

<u>Contractor Standards</u>: Anything not specifically mentioned, but is usually performed in work of this character, must be done, and performed by the Contractor the same as if it were written herein.

The successful Bidder shall be the sole Contractor to perform this work unless an authorized Columbia Township Representative consents in writing to the subcontracting of specific aspects of the work covered by this contract.

The Contractor shall perform all work in such a fashion as to not damage sidewalks, utilities, curbs, structures, paths, trails, waterways, roadways, vehicles, people, or property. In all instances where any damage occurs, the repair of such damage shall be

the responsibility of the Contractor. The Bidder should thoroughly examine and familiarize themselves with all documents and specifications. It is the responsibility of each Bidder to acquaint themselves with the existing field conditions related to performance and labor, the facilities involved, and the difficulties and restrictions attending the performance of these specifications.

The Contractor shall adhere to all applicable OSHA standards. All work must be performed in a manner as to not endanger the health or safety of any person or cause damage to property.

The Contractor is responsible for contacting all abutting property owners adjacent to where work will be performed if any aspect of the Project involves the Contractor being present on the abutting property. Additionally, if any aspect of the Project involves debris temporarily being placed on the abutting property, he Contractor must contact the property owners.

Safety / Traffic Control: All work shall conform to ODOT safety standards and must comply with the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Paragraph 1518, as published in the "Federal Register" Vol. 36. N.75 Saturday, April 17, 1971 and as amended from time to time. Traffic control is the total responsibility of the contractor and must meet requirements for maintaining traffic as indicated in the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways, current edition, the Bid, specifications, and the plans.

Underground Utilities: The contractor must contact OHIO811 prior to any planting or excavation work to have underground utilities located and marked. It is the Contractor's responsibility to ensure that all underground utilities (gas, electric, water, sewer, telephone, cable television, telecommunications and any other like systems or obstructions) are noted prior to installation and any conflicts between planting site and utility location reported to the Columbia Township Representative prior to any planting or excavation work. It is the contractor's responsibility to avoid damage to underground utilities.

Finishing Procedures: Clean site, removing any excesses of material, debris, etc. Seed and straw any turf areas that were disturbed turf by the Project. Seed to be Lesco Tall Fescue Select Blend (or equivalent) applied at 9 pounds per 1,000 square feet.

Supervision: Contractor consults with Columbia Township or its agent concerning details and scheduling of all work. Contractor shall maintain on site a field supervisor in charge of work at all times, who can communicate in English and to whom Columbia Township or its agent may issue directions and who is authorized to accept and act upon such directives. This supervisor shall have field experience with sanitary sewer projects similar in scope that demonstrates the supervisor's abilities to manage the project to meet specifications. The sanitary sewer construction crew shall have field experience with projects similar in scope that demonstrates their ability to perform work on the project to meet specifications.

CORRECTION OF WORK

The contractor, at its own cost, shall re-execute any work that fails to conform to the contract requirements and shall remedy defects due to faulty materials or workmanship upon written notice from the Columbia Township Representative, at the soonest time that can be coordinated with other work and seasonal weather demands. Columbia Township will not issue a letter of initial acceptance until these defects are corrected.

PROVISIONS

- 1. A pre-construction meeting with the Columbia Township Representative must occur at least seven days before commencement of the Project.
- 2. The Contractor agrees to properly use and dispose of all petroleum and hazardous products, including but not limited to oil, oil filters, grease cartridges, hydraulic oil, and diesel fuel. Any on-site spillage must be reported and properly removed and cleaned up by the Contractor in accordance with applicable statutes and rules of the State of Ohio.
- 3. The execution of the entire Project is expected no later than Friday, October 18, 2024 barring unusual weather conditions. Work delays caused by conditions related to weather will be discussed and approved by a Columbia Township Representative on a case-by-case basis.
- 4. All work processes must occur during daylight hours. The Contractor is required to coordinate work schedules with the Columbia Township Representative. The Contractor shall schedule work to minimize or avoid conflicts with any Columbia Township special events. No work shall be permitted on Saturday, Sunday, or Holidays without written approval from the Columbia Township Representative. The holidays are New Year's Day, Martin Luther King Day, Presidents Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

- 5. Under no circumstances shall the Contractor leave a hazardous work site or situation unattended, un-barricaded or unresolved before ceasing work for the day.
- 6. It is the Contractor's responsibility to ensure that no unauthorized person enters the Work Zone Area while work is underway, or while any debris remains in that area.

SAFETY OF PERSONS AND PROPERTY

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of this work.

With respect to all Work performed, the Contractor shall:

- Comply with the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of Title 29 of the Code of Federal Regulations, Paragraph 1518, as published in the "Federal Register" Vol. 36. N.75 Saturday, April 17, 1971 and as mended from time to time.
- 2. Always exercise every precaution for the prevention of accidents and the protection of persons (including employees) and property.
- 3. All workers shall wear required safety equipment and apparel appropriate for the tasks being undertaken.
- 4. Maintain at its office and in delivery vehicles all articles necessary for giving first aid to the injured and shall make standing arrangements for the immediate removal to a hospital or doctor's care of persons (including employees) who may be injured at the delivery site.
- 5. Comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury, or loss.
- 6. Promptly remedy damage and loss (other than damage or loss insured under property insurance required by the contract) to property caused in whole or in part by the Contractor or anyone directly or indirectly employed by the Contractor, or by anyone for whose acts they may be liable and for which the Contractor is, except damage or loss attributable to acts or omissions of Columbia Township or anyone directly or indirectly employed by them, or anyone for whose acts may be liable,

and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations for Indemnification.

7. Designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's supervisor unless otherwise designated by the Contractor in writing to Columbia Township.

TRAFFIC CONTROL

- 1. The Contractor shall perform the required work with the least inconvenience to, and the maximum safety of, the Contractor and the public. The requirements for maintaining traffic shall be as indicated in the Ohio Manual of Uniform Traffic Control Devices for Streets and Highways, current edition, the Bid, specifications, and the plans. Any variance from these requirements shall be approved by the Columbia Township Representative in writing.
- Before work begins, the Contractors shall submit to the Columbia Township Representative the names and telephone numbers of persons who can be contacted 24 hours a day by Columbia Township and all interested police agencies. These persons shall be responsible for placing or replacing necessary traffic control devices to maintain traffic safely.
- 3. Police and Fire access shall be always maintained.
- 4. Access to abutting properties shall be always maintained.

CLEAN-UP

The responsibility for disposal of all debris generated by this Project falls to the Contractor. The Contractor is responsible for removing any debris generated by the Project including containers, bottles, paper debris, etc. All roads, parking areas, turf areas and any other areas where Project work is being performed are to be cleaned of all dirt, mud, and debris associated with this project. It is the Contractor's responsibility to provide this clean-up.

INDEMNIFICATION

To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless, Columbia Township, Columbia Township's consultants, agents, vendors and employees of any of them from and against claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Supplier, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this section.

In claims against any person or entity indemnified under this section by an employee of the Supplier, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this section shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Supplier or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.

The Bid will be awarded within 10 days after Bid closing.

No Bid may be withdrawn in that time.

BID FORM

DATE, 20	
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PROJECT Columbia Township – Elm Street Sanitary Sewer Extension, Columbia Township, Ohio, 45227

PROPOSAL OF hereinafter called "Bidder", a (corporation) (partnership) (sole proprietorship) (Bidder strike out inapplicable terms)

TO Columbia Township, (hereinafter called "Owner")

The undersigned, in compliance with your Bid Advertisement, submits the following Bid.

1.1 REPRESENTATIONS

- A. Bidder will accept the provisions of the Bidding Documents.
- B. Bidder will enter into and execute a contract with the Owner within 10 days after notification of the acceptance of this Bid.
- C. Bidder will accomplish the Work in accordance with the Bidding Documents prepared by Columbia Township and Abercrombie & Associates.
- D. See specification 00 43 00 Bid Form Supplements for additional information to include with Bid Form.

1.2 TIME OF COMPLETION

A. Bidder will achieve Substantial Completion on or before Friday, Oct.18, 2024.

1.3 BID AMOUNTS

A. Base Bid Amount: Bidder proposes to construct this project for the stipulated sum of:

Dollars (\$_____)

Columbia Township (Hamilton County) Elm Street Sewer Extension Project Bidder's Initials: Page **22** of **26** The above base bid amount includes the following allowances:

Owner Contingency:			
Dollars (\$)	<u>)</u>	

1.4 ADDENDA

Bidder acknowledges receipt of the following Addenda: Α.

No.	Dated	, 2024
No.	Dated	, 2024

No. _____ Dated _____, 2024

Respectfully Submitted,

Firm Name	Ву
Street Address	– Signature
City, State and Zip Code	– Title
Telephone	_

Corporations: Affix Corporate Seal

State in which incorporated

END OF BID FORM DOCUMENT

Columbia Township (Hamilton County) Elm Street Sewer Extension Project Bidder's Initials: Page 23 of 26

CONTRACT

This Contract, made this _____ day of _____, 2024, by and between **Columbia Township**, hereinafter called **"Owner"** and _____, hereinafter called **"Contractor"**.

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

ELM STREET SANITARY SEWER EXTENSION PROJECT

hereinafter called "Work" for the sum stated in the Proposal, and for all extra work in connection therewith, under the terms as stated in the General Conditions of the Contract Documents, and at his (its or their) own proper cost and expense to furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor, insurance and other accessories and services necessary to complete the said work in accordance with the conditions and prices stated in the Proposal, Information and Instructions to Contractor, the General Conditions, Construction Specifications, Plans, Drawings, Prints and Addendum therefore approved by the Owner, and all of which are a part hereof and collectively evidence and constitute the Contract.

Contractor hereby agrees to commence work under this Contract as outlined in the Notice to Proceed and to have substantially **completed the project by** ______, **2024**. Contractor further agrees to pay liquidated damages for each consecutive calendar day thereafter as provided in the General Conditions.

The Contract Sum shall be______. Owner agrees to pay the Contractor in current funds for the performance of the Contract, subject to additions and deductions, and to make payments on account thereof, as provided in the General Conditions.

IN WITNESS WHEREOF, the parties to these presents have executed this Contract in the year and day first above mentioned.

WITNESS:

OWNER:

By____

Columbia Township Board of Trustees by Melissa Taylor, Administrator

WITNESS:

CONTRACTOR:

Ву_____

Columbia Township (Hamilton County) Elm Street Sewer Extension Project Bidder's Initials: Page **24** of **26**

NOTICE OF COMMENCEMENT PUBLIC IMPROVEMENT SECTION 1311.252 ORC

The undersigned, Melissa Taylor, Administrator for Columbia Township, on behalf of the Columbia Township Board of Trustees, gives the following information with respect to the indicated public improvement:

1. The name of the public improvement is:	Elm Street Sanitary Sewer Extension
---	-------------------------------------

2. The public improvements are located on:

Elm Street, Columbia Twp., Hamilton County, OH

3. The name and address of this public authority is as follows:

Columbia Township, 5686 Kenwood Road, Cincinnati, Ohio 45227

4. The name and address of all principal Contractors working on the public improvement, the trade of each Principal Contractor, and the name and address of the surety for each Principal Contractor are as follows:

Surety:

5. Date of Notice of Commencement:

6. The name and address of the representative of the public authority for the purposes of serving the lien affidavit are as follows:

Melissa Taylor, Administrator Columbia Township 5686 Kenwood Road Cincinnati, Ohio 45227

Melissa Taylor

Sworn to before me, a Notary Public this _____ day of _____, 2024, by Melissa Taylor, Administrator for Columbia Township, on behalf of the public authority.

Notary Public

Columbia Township (Hamilton County) Elm Street Sewer Extension Project Bidder's Initials: _____ Page **25** of **26**

GUARANTEE

The undersigned	, having heretofore entered into a
Contract with Columbia Township dated	for the Improvement, Repair
and Construction of:	

Elm Street Sanitary Sewer Extension Project

and in accordance with the terms of said Contract, do hereby guarantee that all labor and material furnished and work performed by us under said Contract is in conformity with such plans and specifications and authorized alterations thereto and that such Improvement, Repair and Construction installed pursuant to said Contract is free from imperfect workmanship and materials and we agree the repair at our own cost and expense, all the work covered under said Contract and change orders which may prove to be defective for a period of one year from the date hereof. Furthermore, we agree to repair, at our sole cost, any work that may affect or disturb in making the repairs herein contemplated.

Ву:

Title:

Guarantee Period Begins:



Mike DeWine, Governor Jon Husted, Lt. Governor Laurie A. Stevenson, Director

December 30, 2022

MSD of Greater Cincinnati Attn: Ryan Welsh

1600 Gest Street Cincinnati, OH 45204 RE: MSD of Greater Cincinnati Permit-Long Term Approval Surface Water Permit to Install Hamilton DSWPTI1544954

Subject: Elm Street Sanitary Sewer Extension SS#7207 - Installation of sanitary sewer to serve 2 existing single-family homes and one existing 1 story church, Columbia Twp Plans Received on December 23, 2022 From: Abercrombie & Associates

Ladies and Gentlemen:

Enclosed is an approved Ohio EPA Permit to Install. This permit contains several conditions and restrictions; I urge you to read it carefully. A general condition of your permit states that issuance of the permit does not relieve you of the duty of complying with all applicable federal, state, and local laws, ordinances, and regulations. You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Treasurer State of Ohio", which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address: Environmental Review Appeals Commission, 30 East Broad Street, 4th Floor, Columbus, OH 43215. If you have any questions, please contact the Ohio EPA District Office.

Ohio EPA has developed a customer service survey to get feedback from regulated entities that have contacted Ohio EPA for regulatory assistance, or worked with the Agency to obtain a permit, license or other authorization. Ohio EPA's goal is to provide our customers with the best possible customer service, and your feedback is important to us in meeting this goal. Please take a few minutes to complete this survey and share your experience with us at http://www.surveymonkey.com/s/ohioepacustomersurvey. If you have any questions, please contact the Ohio EPA district office to which you submitted your application.

Sincerely,

Kenf. Th

Kevin J. Fowler, Supervisor Permit Processing Unit, Division of Surface Water

KJF/bd

Enclosure

cc: Southwest District Office Abercrombie & Associates Hamilton County Board of Commissioners Hamilton County General Health Columbia Township Ohio EPA 12/30/2022

Entered Director's Journal

I certify this to be a true and accurate copy of the official documents as filed in the records of the Ohio Environmental Protection Agency.

Date: 12/30/2022

Ohio Environmental Protection Agency

Bv:

Permit to Install

Application No: 1544954

Applicant Name: MSD of Greater Cincinnati Address: 1600 Gest Street City: Cincinnati State Zip: OH 45204

Person to Contact: Ryan Welsh Telephone: 513-244-5519

Description of Proposed Source: Elm Street Sanitary Sewer Extension SS#7207 - Installation of sanitary sewer to serve 2 existing single-family homes and one existing 1 story church, Columbia Twp, Hamilton

Issuance Date: December 30, 2022 Effective Date: December 30, 2022

The above named entity is hereby granted a permit to install for the above described source pursuant to Chapter 3745-42 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source of environmental pollutants will operate in compliance with applicable state and federal laws and regulations. Issuance of this permit does not constitute expressed or implied assurance that, if constructed or modified in accordance with those plans and specifications, the above described source of pollutants will be granted the necessary operating permits. This permit is granted subject to the following conditions attached hereto.

Ohio Environmental Protection Agency

annie & Stevenson

Laurie A. Stevenson Director P.O. Box 1049 50 West Town Street, Suite 700 Columbus, OH 43216-1049 MSD of Greater Cincinnati Page 2 of 4 December 30, 2022

This permit shall expire if construction has not been initiated by the applicant within eighteen months of the effective date of this permit. By accepting this permit, the applicant acknowledges that this eighteen month period shall not be considered or construed as extending or having any effect whatsoever on any compliance schedule or deadline set forth in any administrative or court order issued to or binding upon the permit applicant, and the applicant shall abide by such compliance schedules or deadlines to avoid the initiation of additional legal action by the Ohio EPA.

The director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, examining records, or reports pertaining to the construction, modification, or installation of the above described source of environmental pollutants.

Issuance of this permit does not relieve you of the duty of complying with all applicable federal, state, and local laws, ordinances, and regulations.

Any well, well point, pit or other device installed for the purpose of lowering the ground water level to facilitate construction of this project shall be properly abandoned in accordance with the provisions of Section 3745-9-10 of the Ohio Administrative Code or in accordance with the provisions of this plan or as directed by the Director or his representative. For more information please contact: Division of Drinking and Ground Water - Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, Ohio 43215 (614) 644-2752.

Any person installing any well, well point, pit or other device used for the purpose of removing ground water from an aquifer shall complete and file a Well Log and Drilling Report form with the Ohio Department of Natural Resources, Division of Water, within 30 days of the well completion in accordance with the Ohio Revised code Section 1521.01 and 1521.05. In addition, any such facility that has a capacity to withdraw waters of the state in an amount greater than 100,000 gallons per day from all sources shall be registered by the owner with the chief of the Division of Water, Ohio Department of Natural Resources, within three months after the facility is completed in accordance with Section 1521.16 of the Ohio Revised Code. For copies of the necessary well log, drilling report, or registration forms, please contact:

Ohio Department of Natural Resources 2045 Morse Road Bldg. E Columbus, OH 43229-6693 (614) 265-6717

1. The proposed wastewater disposal system shall be constructed in strict accordance with the plans and application approved by the director of the Ohio Environmental Protection Agency. There shall be no deviation from these plans without the prior express, written approval of the agency. Any deviations from these plans or the above conditions may lead to such sanctions and penalties as provided for under Ohio law. Approval of these plans and issuance of this permit does not constitute an assurance by the Ohio Environmental Protection Agency that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

2. If the construction area for this project is one acre or more, or is part of a larger development that is one acre or more, the applicant must submit a Notice of Intent (NOI) for coverage under the general construction stormwater permit to Ohio EPA at least 21 days prior to the start of construction of this project.

3. For projects involving construction or placement of fill in a stream or wetland, the applicant shall contact the appropriate district of the U.S. Army Corps of Engineers for a determination regarding potential impacts to water of the state as well as the requirements for obtaining, if necessary, certification. The applicant shall acquire a Section 404 permit and 401 water quality certification, if needed, before impacting any waters of the state as part of this project.

4. The Metropolitan Sewer District of Greater Cincinnati shall be responsible for proper operation and maintenance of the sewerage system.

5. For parallel installation, a minimum horizontal separation of 10 feet between gravity sanitary sewers and any existing or proposed potable water mains shall be maintained. The distance shall be measured edge to edge.

6. Where gravity sewer lines cross existing or proposed water mains, the gravity sewer lines shall be laid below the water mains to provide a separation of at least 18 inches between the invert of the water main and the crown of the gravity sewer. The lines shall be laid so that the gravity sewer line joints are as far as possible from the water main joints.

7. For parallel installation where a minimum horizontal separation of 10 feet between gravity sanitary sewers and any existing or proposed potable water mains cannot be maintained, the water main and gravity sewer line should be laid in separate trenches and the bottom of the water main should be at least 18 inches above the crown of the gravity sewer. If the vertical separation distance cannot be maintained, both the water main and gravity sewer line must be constructed of slip-on or mechanical joint pipe complying with public water supply design standards of the agency and be pressure tested to 150 psi (1034 kPa) to assure water-tightness. The pipe material shall remain the same from manhole to manhole where the separation distance cannot be maintained. If the gravity sewers and water main must be placed in the same trench, the water main shall be placed on a shelf of undisturbed earth with the invert of the water main at least 18 inches above the crown of the gravity sewer. Additionally, there shall be a minimum of 5 feet of horizontal separation measured edge to edge between the water main and the gravity sewer. The gravity sewer shall be constructed of slip-on or mechanical joint pipe complying with public water supply design standards of the agency from sewerage manhole to sewerage manhole at the locations where the separation distance cannot be maintained and be pressure tested to 150 psi (1034 kPa) to assure water-tightness.

8. The operation of the sewerage system shall be under the responsible charge of a certified operator having the proper certificate issued under Chapter 3745-7-05 of the Ohio Administrative Code.

9. This permit to install applies only to the wastewater disposal system listed above. The installation of drinking water supplies, air contaminant sources, or solid waste disposal facilities will require the submittal of a separate application to the director.

10. Provisions shall be made for proper operation of the wastewater pumping facilities.

11. Roof drains, foundation drains, and other clean water connections to the sanitary sewer shall be prohibited by enforcement of legally adopted rules by the authority regulating the use of sanitary sewers.

12. Sewer and manhole construction joints shall conform to standards of the Ohio Environmental Protection Agency.

13. When flexible pipe (PVC, ABS, HDPE, etc.) is used it must be tested for maximum deflection of 5 percent after the final backfill has been in place no less than 30 days to permit stabilization of the soil-pipe system. Pipe with a stiffness of 200 p.s.i. or greater need not be tested for deflection if all pipe between manholes is less than 12 feet below final grade.

MSD of Greater Cincinnati Page 4 of 4 December 30, 2022

The rigid ball or mandrel used for the deflection test shall have a diameter not less than 95 percent of the base inside diameter or average inside diameter of the pipe depending on which is specified in the ASTM specification, including the appendix, to which the pipe is manufactured. The test shall be performed without mechanical pulling devices.

All pipe, flexible and rigid, shall be subject to a leakage test. The leakage exfiltration/infiltration test shall be a hydrostatic or air test. The hydrostatic leakage test shall not exceed 100 gallons per inch of pipe diameter per mile per day for any section of the system. If an air test is used, the test shall conform to the test procedure outlined in the ASTM standards for the material of pipe used.

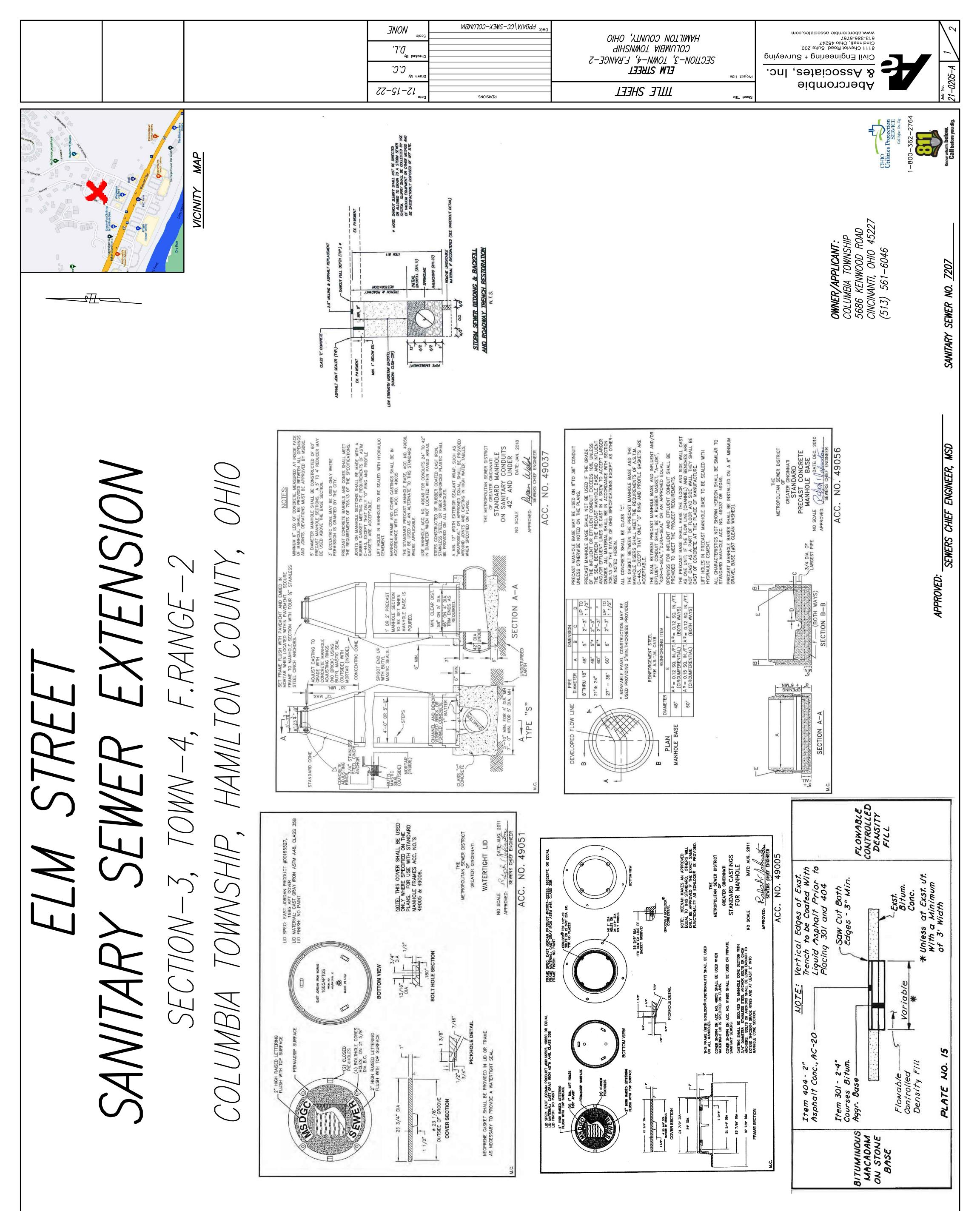
The leakage and deflection test shall be conducted under the supervision of a professional engineer. A representative of the professional engineer may supervise the deflection and leakage tests, but the professional engineer must sign off on the results of the deflection and leakage tests. Results of the deflection and leakage tests shall be kept on file at least 180 days by the entity responsible for the sewerage system, and shall be available upon request by the Ohio Environmental Protection Agency. Any lines which fail the deflection or leakage test must be repaired and retested until they meet the requirements which have been set forth within this condition.

14. All gravity sanitary sewers which are located in well field areas shall comply with and be tested as specified in Ohio Environmental Protection Agency Guideline, Gravity Sewers in Well Field Areas, February 1983.

15. The permit to install is not an authorization to discharge pollutants to waters of the state. Pursuant to Chapter 6111 of the Ohio Revised Code, the applicant shall apply for a permit to discharge (NPDES) 180 days prior to any discharge of pollutants to waters of the state.

16. Project Description: This project is proposing the extension of about 181 lineal feet of 8-inch PVC gravity sewers and associated manholes to serve two residences and an existing commercial structure.

17. Fugitive dust generated by this sewer construction project shall be controlled as specified in OAC 3745-17-08 (B).



Sanitary sewer notes

1. ALL PLANS AND CONSTRUCTION WITHIN HAMILTON COUNTY SHALL COMPLY WITH THE LATEST EDITION OF THE "RULES AND REGULATIONS" MANUAL GOVERNING THE DESIGN, CONSTRUCTION, MAINTENANCE, OPERATION , AND USE OF SANITARY AND COMBINED SEWERS IN THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI, HAMILTON COUNTY, OHIO, EFFECTIVE MARCH 1, 2001. COPIES MAY BE OBTAINED FROM THE DIVISION OF WASTEWATER ENGINEERING MSD, 1600 GEST STREET, CINCINNATI, OHIO 45204.

chereaning mod, 1000 gest start, cincinnati, und 40204. 2. All Sanitary Sewers Shall be constructed under the Inspection of the Sewers Chief Engineer, MSD. 3. THE OWNERS OF ALL PROPERTIES SHOWN ON THIS IMPROVEMENT PLAN SHALL BE SUBJECT TO ALL APPLICABLE SEWER SERVICE CHARGES, ASSESSMENTS, TAP-IN CHARGES OR FEES WHICH HAVE BEEN OR MAY BE ESTABLISHED BY THE BOARD OF COUNTY COMMISSIONERS.

4. APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO BREAKING GROUND FOR THE PURPOSE OF VERIFYING BY FIELD INSPECTION THE EXACT LOCATION OF UNDERGROUND UTILITIES. 5. ALL SANITARY SEWER PIPE SHALL BE PVC, SDR35, ASTM D-3034 IN ACCORDANCE WITH MSD RULES AND REGULATIONS, EXCEPT WHERE NOTED. 6. ALL MANHOLES ON SANITARY SEWERS SHALL BE TYPE "S" MSD ACCESSION NO. 49037.
7. SANITARY MANHOLES SHALL BE TEMPORARILY CONSTRUCTED TO AN ELEVATION OF TWO FEET ABOVE THE SURROUNDING GRADE BY MEANS OF AN ADDITIONAL MANHOLE SECTION OR BRICK MASONRY ON TOP OF THE CONE.

8. SANITARY BUILDING SEWERS FOR PUBLIC AND PRIVATE SEWERS SHALL NOT BE EXTENDED MORE THAN TEN (10) FEET BEYOND THE PROPOSED RIGHT-OF-WAY LINE, EASEMENT LINE OR, IN CASES OF PRIVATE SEWERS, NO MORE THAN TEN (10) FEET BEYOND THE MAIN LINE SEWER PRIOR TO ISSUANCE OF TAP PERMITS.

9. TWO-WAY CLEANOUTS SHALL BE INSTALLED AT THE RIGHT-OF-WAY LINE OR SANITARY SEWER EASEMENT, WHERE APPLICABLE, IN ACCORDANCE TO MSD ACCESSION NO. 61979.

10. All lowest finished floor elevations shall be at least 36 inches above the crown of the sewer at the point of tap connection to said sewer, whether public or private, and/or in accordance with city of cincinnati supplement cc-51-49. Any building to be served by means other than gravity must be so noted on the plans.

11. ALL MANHOLES ON PUBLIC SANITARY SEWERS SHALL HAVE STANDARD LIDS AND FRAMES, ACC. NO 49005, EXCEPT WHERE NOTED. THE FRAME SHALL BE SECURELY FASTENED TO THE TOP MANHOLE SECTION BY FOUR 3/4-INCH STAINLESS STEEL CINCH ANCHORS.

12. Contractor's license — All work done on Sanitary and/or combined sewers within the Jurisdiction of the metropolitan sewer district must be done by a contractor who is an approved sewer tapper properly licensed by the department and bonded. 13. Sanitary Building Sewers Shall be connected to the main line with wyes. Tee Fittings are to be used only where shown on the Approved Plan.

14. A TAP PERMIT IS REQUIRED FOR EACH BUILDING. BOND OR FINAL APPROVAL OF THE MAIN LINE IS REQUIRED PRIOR TO ISSUANCE OF A TAP PERMIT.

15. SANITARY SEWER CONSTRUCTION MUST COMMENCE WITHIN 12 MONTHS AND BE COMPLETED WITHIN 36 MONTHS OF THE DATE OF APPROVAL SHOWN HEREON OR THESE PLANS BECOME VOID. 16. FOR SANITARY SEWER MANHOLES CONSTRUCTED IN PARKING LOTS, THE RIM ELEVATION SHALL BE 1" HIGHER THAN THE SURROUNDING GRADE AND THE PAVEMENT SHALL BE FEATHERED AWAY FROM THE MANHOLE RIM AT A GRADUAL SLOPE.

17. FOR SANITARY MANHOLES CONSTRUCTED IN GRASS AREAS, THE RIM ELEVATION SHALL BE 3" HIGHER THAN THE SURROUNDING GRADE, AND THE FILL SHALL BE FEATHERED AWAY FROM THE MANHOLE RIM AT A GRADUAL SLOPE.

18. ROOF DRAINS; FOUNDATION DRAINS, COOLING WATER, SWIMMING POOL WATER OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

19. TO ASSURE THAT STORMWATER DOES NOT ENTER THE SANITARY SEWER SYSTEM, A SCHEMATIC PLAN OF THE FOOTING AND FOUNDATION DRAINAGE SYSTEM, INCLUDING THE POINT OF DISCHARGE, IS NECESSARY.

20. THE CONTRACTOR SHALL TEST ALL MANHOLES LEAKAGE BY MEANS OF VACUUM TESTING. THE VACUUM TESTING CANNOT BE DONE UNTIL AFTER THE MANHOLES ARE SET TO FINAL GRADE AND THE MANHOLE CASTINGS ARE BOLTED DOWN. ALL LIFT HOLES SHALL BE PLUGGED. ANY OTHER OPENINGS, SUCH AS FOR PRESSURE RELIEF VALVES, SHALL BE PLUGGED. ANY OTHER OPENINGS, SUCH AS FOR PRESSURE RELIEF VALVES, SHALL BE PLUGGED AND CARE SHALL BE TAKEN TO SECURELY BRACE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE. THE VACUUM TEST. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED AND CARE SHALL BE TAKEN TO SECURELY BRACE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE. THE VACUUM TEST HEAD SHALL BE PLUGSE FROM BEING DRAWN INTO THE MANHOLE. THE VACUUM TESTING SHALL BE IN ACCORDANCE WITH ANUFACTURER'S RECOMMENDATIONS. VACUUM TESTING SHALL BE IN ACCORDANCE WITH ASTM C1244. A VACUUM OF 10 INCHES MERCURY (10" HG) SHALL BE IN ACCORDANCE WITH ASTM C1244. A VACUUM OF 10 INCHES MERCURY (10" HG) SHALL BE NACORDANCE WITH ASTM C1244. A VACUUM OF 10 INCHES MERCURY (10" HG) SHALL BE NACORDANCE WITH ASTM C1244. DIALUMAN DIALI THE VALVES CLOSED, THE TIME SHALL BE MEASURED FOR THE VACUUM PUMP SHUT OFF. WITH THE VALVES CLOSED, THE TIME SAS CALCULATED FROM ASTIN C1244, OR AS APPROVED BY THE ENGINEER ALL MANHOLE REPAIR AND RETESTING REQUIRED BECAUSE OF THE FAILURE TO MEET THE TSTING REQUIREMENTS SHALL BE BORNE BY THE CONTRACTOR AT HS COST.

21. INSTALLATION OF A PRIVATE FORCE MAIN REQUIRES A PERMIT FROM THE HAMILTON COUNTY BOARD OF HEALTH. CONTACT THE BOARD OF HEALTH AT 946-7852 REGARDING PERMIT AND INSPECTION.

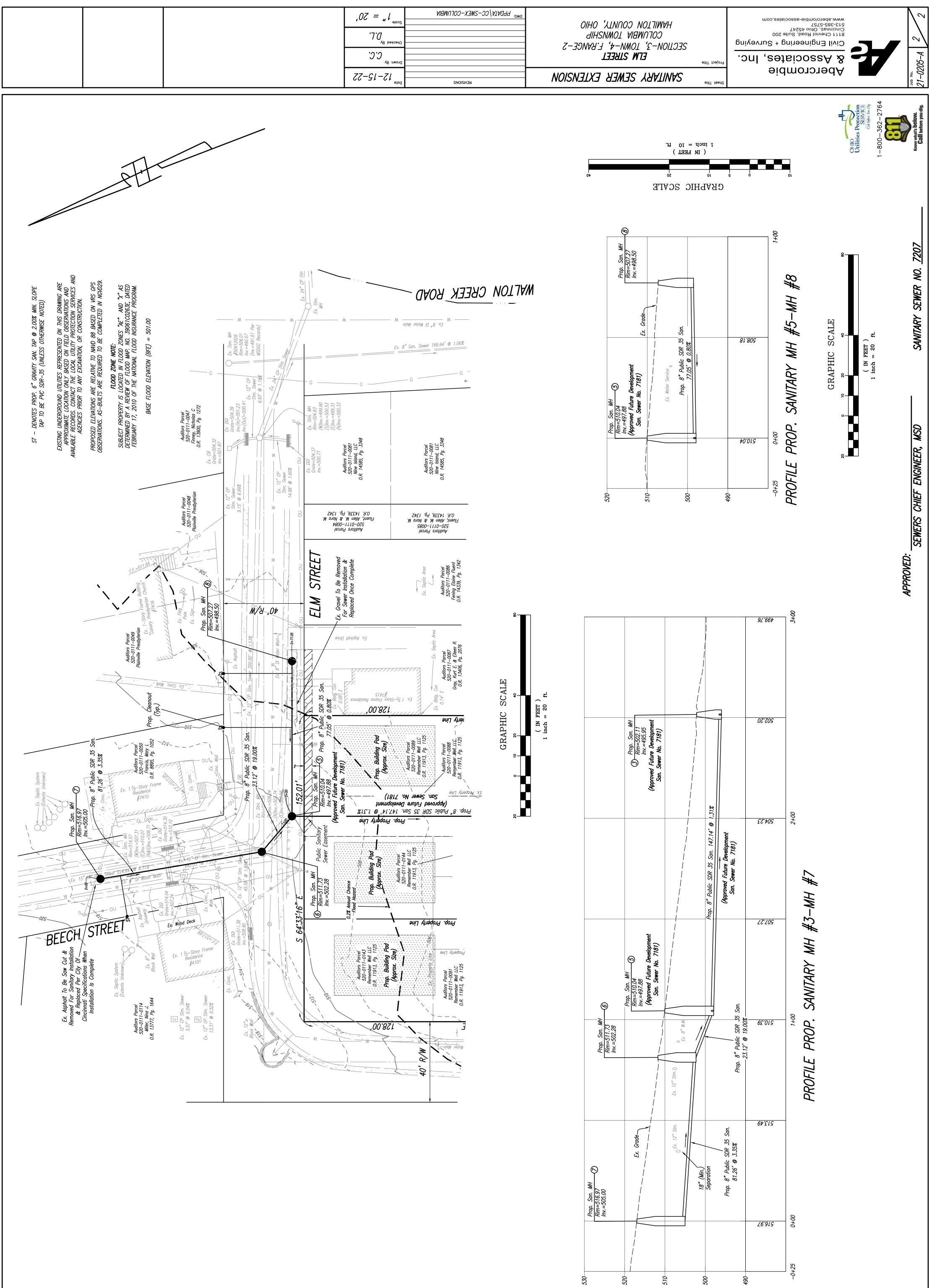
SEWERS SHALL BE LAID AT LEAST 10 FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A 10 FOOT SEPARATION, THE APPROPRIATE REVIEWING AGENCY MAY ALLOW DEVIATION ON A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVIATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEVATION SO THE BOTTOM OF THE WATER MAIN IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE, BOTH THE WATER MAIN AND SEWER MUST BE CONSTRUCTION OF SLIP-ON OR MECHANICAL JOINT PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS OF THE AGENCY AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATERTIGHTNESS BEFORE BACKFILLING.

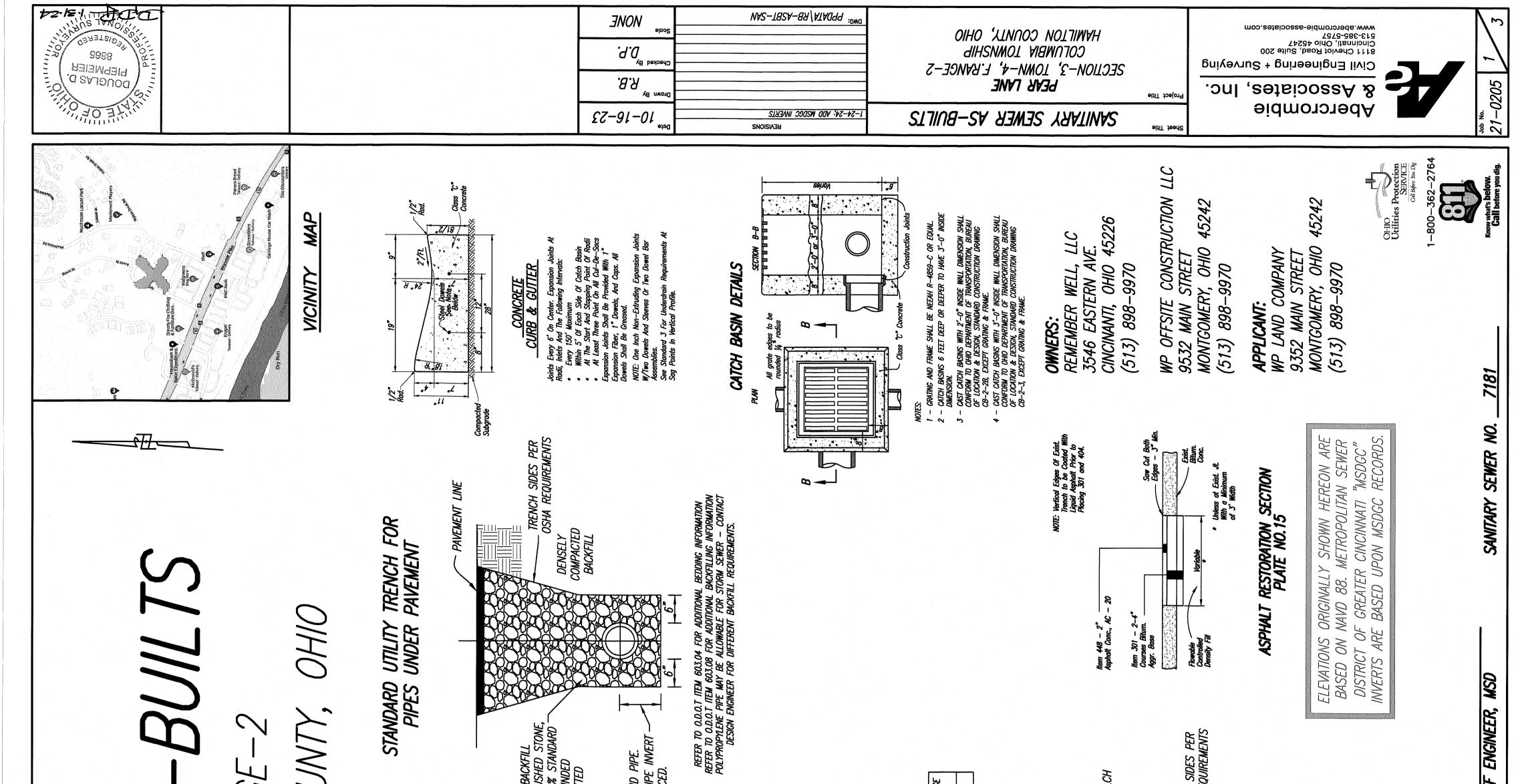
BENCHMARK

COLUMBIA TOWNSHIP BENCHMARK No. 2235 WOOSTER PIKE, 0.20 MILE EAST OF INDIANVIEW AVENUE. MARK IS 7.7 FT. NORTH OF THE NORTH EDGE OF THE PAVEMENT, 18.0 FT. EAST OF POLE NO. V1134E, AND 7.0 FT EAST OF THE PRODUCED EAST EDGE OF A 1-1/2 STORY BRICK HOUSE NO. 7109. ELEV=590.06*

This drawing and the design concepts represented, as instruments of service, are the sole property of Abercrombie & Associates Inc., and may not be used, reproduced, or copied for any purpose without prior written authorization of Abercrombie & Associates, Inc.



e used, prior ign concep re the sole s Inc., and r any purpo This drawing and the design instruments of service, are t Abercrambie & Associates In reproduced, or copied for an written authorization of Aber



	PEAR LANE
SAMITARY	PY SEWER AS-
SEC	TION-3, TOWN-4, F.RANGE
COLUMBIA	TOWNSHIP, HAMILTON COUN
ANY STRUCTURE CONSTRUCTION ON SAID PROPERTY IN WHICH SAID PERMANENT SEWER EASEMENT EXISTS SHALL BE KEPT NOT LESS THAN THREE (3) FEET OUTSIDE THE PERMANENT SEWER EASEMENT LINE NEAREST THE SITE OF THE PROPOSED STRUCTURE, EXCEPT THAT THIS RESTRICTION IS NOT APPLICARIE TO ALL STORM SEWER EASEMENTS	COUNTY ENGINEER NOTES
ANY DEVATION FROM THE AFORESAUD RESTRICTIONS SHALL BE PETITIONED BY WRITTEN REQUEST TO THE GRANTEES OR THEIR ASSIGNS. EACH SUCH REQUEST SHALL BE CONSIDERED ON AN INDIMDUAL BASIS WITH APPROVAL NOT TO BE UNREASONABLY WITHHELD.	ALL PLANS AND CONSTRUCTION WITHIN HAMILTON COUNTY SHALL COMPLY WITH THE "RULES AND REGULATIONS" OF THE HAMILTON COUNTY ENGINEER GOVERNING THE SURFACE PHYSICAL IMPROVEMENTS FOR PRIVATE DEVELOPMENTS WITHIN THE UNINCORPORATED AREAS OF HAMILTON COUNTY
20. PRIVATE STORM SEWER EASEMENTS SHOWN ON THESE PLANS ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY, AND THE COUNTY OF HAMILTON IS NOT OBLIGATED TO MAINTAIN, REPAIR OR OPERATE ANY PRIVATE STORM SEWER LINE. OPERATION AND MAINTENANCE OF ALL PRIVATE STORM SEWER LINES SHOWN ON THESE PLANS IS THE OBLIGATION OF THE OWNERS OF THE LOTS USING THE STORM SEWER LINES	EFFECTIVE FEBRUARY 27, 2013. NO PART OF ANY DRIVEWAY APRON WITHIN THE ROAD RIGHT-OF-WAY SHALL BE INSTALLED WITHIN FIVE (5) FEET OF ANY INLET, FIRE HYDRANT, UTILITY POLE OR GUY WIRE ANCHOR. MULBOX INSTALLATIONS: MAILBOX INSTALLATIONS: COMPACTED TO 98% STI
21. PRIVATE INDIVIDUAL DISPOSAL LINE EASEMENT SHOWN ON THESE PLANS ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY, AND THE COUNTY OF HAMILTON IS NOT OBLIGATED TO MAINTAIN, REPAIR OR OPERATE ANY PRIVATE DISPOSAL LINES. OPERATION AND MAINTENANCE OF ALL PRIVATE DISPOSAL LINES SHOWN ON THESE PLANS IS THE OBLIGATION OF THE OWNERS OF THE LOTS USING THE DISPOSAL LINES.	ALL SUPPORTS FOR MALBOXES SHALL BE OF THE "BREAKAWAY" TYPE. SATTSFACTORY SUPPORTS SHALL BE AS FOLLOWS: A. MAXIMUM 4 "X4" TIMBER. A. MAXIMUM 4 "X4" TIMBER. A. MAXIMUM 2 ½" DIAMETER STANDARD WALL PIPE. B. MAXIMUM 2 ½" DIAMETER STANDARD WALL PIPE. C. ANY MATERIAL WITH EQUAL BREAKAWAY CHARACTERISTICS OF ABOVE. MIDDLE 1/3 RENEATH DIDE IN
22. PRIVATE DRAINAGE EASEMENTS SHOWN ON THESE PLANS ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY, AND THE COUNTY OF HAMILTON IS NOT OBLIGATED TO MAINTAIN OR REPAIR ANY WATERCOURSES, DRAINAGE CHANNELS OR INSTALLATIONS IN SAID EASEMENTS.	D SPRINKLER SYSTEMS SHALL NOT BE PERMITTED WITHIN THE SHALL BE LOOSELY PLACEL OF-WAY. SUBDIVISION PLAN APPROVED BY H.C.R.P.C. ON 3-4-2021.
THE EASEMENT AREA OF EACH LOT AND ALL IMPROVEMENTS IN IT SHALL BE MAINTAINED CONTINUOUSLY BY THE OWNER OF THE LOT. WITHIN THESE EASEMENTS, NO STRUCTURES, PLANTING OR OTHER MATERIAL SHALL BE PLACED OR PERMITTED TO REMAIN WHICH MAY OBSTRUCT, RETARD OR CHANGE THE DIRECTION OF THE FLOW OF WATER THROUGH THE WATERCOURSES OR DRAINAGE CHANNELS IN THE EASEMENT.	TOWNSHIP NOTE: ALL DOWNSPOUT CONNECTION OUTLET PIPES SHOULD BE INSTALLED IN ACCORDANCE WITH RULES AND RECULATIONS OF THE OFFICE OF THE HAMILTON COUNTY ENGINEER FOR PRIVATE IMPROVEMENTS, SPECIFICALLY ARTICLE II, SECTION 206 AND ACCOMPANIED BY STANDARD DRAWING #4 AND #8 OF SAME MANUAL.
23. The Following Note, or a similar note, must be shown on The Building Permit Plan (Plot Plan) for the Following Lots if The Lowest Floor Elevation (including Basements) is below the Elevations stated below.	BENCHMARK COLUMBIA TOWNSHIP BENCHMARK No. 2235 WOOSTER PIKE, 0.20 MILE EAST OF INDIANNEW AVENUE, MARK IS 7.7 FT. NORTH OF THE NORTH EDGE OF THE PAVEMENT, 18.0 FT. EAST OF POLE
"NO GRAVITY FLOW STORM DRAINS FROM ANY DRIVEWAY, WINDOW WELL, STARWELL, FOUNDATION, BASEMENT, PATIO OR OTHER SOURCE WILL BE PERMITTED TO BE DIRECTLY CONNECTED TO THE PROPOSED STORM SEWER SYSTEM AND/OR EXISTING OR PROPOSED WATERCOURSE BELOW THE FOLLOWING ELEVATIONS:	AND 7.0 FI EASI OF THE PRODUCED EASI EUGE OF HOUSE NO. 7109. STORM WATER DETENTION FACIL
see minimum opening elevations (moe) on plans If the basement floor is below the above stated elevation, the basement shall be provided with a sump pump well and sump	DESIGNATIONHIGHWATER ELEVATIONPRE-DEVPOST-DEVREQUIREDSTORAGEPROVIDEDSTORAGEDESIGNATION(FT. ABOVE M.S.L.)Q10(CFS)Q100(CFS)VOLUME(C.F.)VOLUMEDETENTION501.500.090.642,4062,511
PUMP. THE PUMP SHALL BE DISCHARGED ON THE LOT AT OR ABOVE THE ELEVATION STATED ABOVE. A GRAVITY FLOW STORM SYSTEM MAY BE DISCHARGED ON THE LOT AT A POINT WHERE THE OUTLET IS NOT AFFECTED BY FLOODING FROM THE PROPOSED STORM SEWER SYSTEM AND/OR EXISTING OR PROPOSED WATERCOURSE."	STANDARD UTILITY TRENCH FOR PIPES NOT UNDER PAVEMENT
24. THE BOARD OF COUNTY COMMISSIONERS HAS ADOPTED FLOOD DAMAGE PREVENTION REGULATIONS. THESE REGULATIONS REQUIRE THAT AN APPLICATION FOR A DEVELOPMENT PERMIT FOR WORK WITHIN THE FLOOD PLAIN LIMITS SHALL BE MADE TO THE PUBLIC WORKS/SANITARY ENGINEER'S DEPARTMENT OF HAMILTON COUNTY, OHIO. AN APPROVAL OF SAID DEVELOPMENT PERMIT SHALL BE OBTAINED PRIOR TO PERFORMING ANY WORK WITHIN THESE LIMITS.	$\frac{1}{2} = \frac{1}{2} = \frac{1}$
PRIVATE DRAINAGE AND/OR STORM SEWER EASEMENT FOR STORM WATER Detention/retention facility.	
PRIVATE STORM DRAINAGE/SEWER LIMITS FOR STORM WATER DETENTION SHOWN ON THIS PLAN ARE NOT ACCEPTED BY THE BOARD OF COUNTY SHOWN ON THIS PLAN ARE NOT ACCEPTED BY THE BOARD OF COUNTY COMMISSIONERS OF HAMILTON COUNTY AND THE COUNTY OF HAMILTON IS NOT OBLICATED TO MANTAIN OR REPAIR ANY CHANNELS OR INSTALLATIONS IN SAID LIMITS. THE SAID LIMIT AREA AND ALL IMPROVEMENTS IN IT SHALL BE MAINTAINED CONTINUOUSLY BY THE LEGAL OWNER(S) FOR NONRESIDENTIAL DEVELOPMENTS. THEY SAID LIMIT AREA AND ALL IMPROVEMENTS IN IT SHALL BE MAINTAINED CONTINUOUSLY BY THE HOME OWNERS'S ASSOCIATION (HOA) OR THE PROPORTIONAL DISTRIBUTION OF THE PROPERTY OWNERS WITHIN THE DEVELOPMENT OF THE HOM IS DISSOLVED OR NOT FORMED FOR RESIDENTIAL DEVELOPMENTS NO STRUCTURES, PLANTING OR OTHER MATERIAL, SHALL BE PLACED OR PERMITTED TO REMAIN WHICH MAY OBSIRUCT, RETARD OR CHANGE THE DIRECTION OF THE FLOW OF MATER THROUGH THE DRAINAGE CHANNEL IN	WITH ANGULAR CRUSHED STONE, COMPACTED TO 95% STANDARD DENSITY. NO ROUNDED AGGREGATE PERMITTED AGGREGATE PERMITTED 6" MIN. BEDDING AROUND PIPE. MIDDLE 1/3 BENEATH PIPE INVERT MIDDLE 1/3 BENEATH PIPE INVERT SHALL BE LOOSELY PLACED.
THE SAID LIMITS. THE LOCATION OF THE PRIVATE STORM DRAINAGE/SEWER LIMITS MUST BE PREPARED BY THE DEVELOPER OF HIS ENGINEER ON AN EASEMENT AND/OR RECORD PLAT BY THE METES AND BOUNDS DESCRIPTION. THE PLAT IS TO BE SUBMITTED TO THE HAMILTON COUNTY DEPARTMENT OF PLANNING AND DEVELOPMENT FOR REVIEW AND APPROVAL PRIOR TO THE DEVELOPER OR HIS ENGINEER HAVING THE PLAT RECORDED. THE DEVELOPER OR HIS ENGINEER IS TO SUBMIT A PRINT OF THE RECORDED PLAT TO THE HAMILTON COUNTY DEPARTMENT OF PLANNING AND DEVELOPMENT FOR THER FILE AND RECORDS PRIOR TO APPROVAL OF THE FINAL DEVELOPMENT PLANS OR CERTIFICATE OF OCCUPANCY.	REFER TO OD.O.T. TIEN 603:08 FOR ADDITIONAL BACKFILLING INFORMATION REFER TO PIPE MANUFACTURER SPECIFICATIONS FOR DETENTION PIPING REFER TO PIPE MANUFACTURER SPECIFICATIONS FOR DETENTION PIPING SEVER SPECIFICATIONS FOR DETENTION PIPING

SANITARY SENER NOTES

1. ALL PLANS AND CONSTRUCTION WITHIN HAMILTON COUNTY SHALL COMPLY WITH THE LATEST EDITION OF THE "RULES AND REGULATIONS" MANUAL GOVERNING THE DESIGN, CONSTRUCTION, MAINTENANCE, OPERATION , AND USE OF SANITARY AND COMBINED SEWERS IN THE METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI, HAMILTON COUNTY, OHIO, EFFECTIVE MARCH 1, 2001. COPIES MAY BE OBTAINED FROM THE DIVISION OF WASTEMATER ENGINEERING MSD, 1600 GEST STREET, CINCINNATI, OHIO 45204.

2. All sanitary sewers shall be constructed under the inspection of the sewers chief engineer, MSD.

3. THE OWNERS OF ALL PROPERTIES SHOWN ON THIS IMPROVEMENT PLAN SHALL BE SUBJECT TO ALL APPLICABLE SEWER SERVICE CHARGES, ASSESSMENTS, TAP-IN CHARGES OR FEES WHICH HAVE BEEN OR MAY BE ESTABLISHED BY THE BOARD OF COUNTY COMMISSIONERS.

4. APPROPRIATE UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO BREAKING GROUND FOR THE PURPOSE OF VERIFYING BY FIELD INSPECTION THE EXACT LOCATION OF UNDERGROUND UTILITIES.

5. ALL SANTARY SEWER PIPE SHALL BE PVC, SDR35, ASTM D-3034 IN ACCORDANCE WITH MSD RULES AND REGULATIONS, EXCEPT WHERE NOTED.

6. ALL MANHOLES ON SANITARY SEWERS SHALL BE TYPE "S" MSD ACCESSION NO. 49037.

7. Sanitary manholes shall be temporarily constructed to an elevation of two feet above the surrounding grade by means of an additional manhole section or brick masonry on top of the cone.

8. Sanitary Building Sewers for Public and Private Sewers Shall not be extended more than ten (10) feet beyond the proposed Right-of-Way line, easement line or, in cases of Private Sewers, no more than ten (10) feet beyond the main line Sewer prior to issuance of tap Permits.

9. All lowest finished floor elevations shall be at least 36 inches above the crown of the sever at the point of tap connection to said sever, whether public or private, and/or in accordance with city of cincinnati supplement cc-51-49. Any building to be served by means other than gravity must be so noted on the plans.

10. All manholes on Public Santary Sewers Shall have Standard Lids and Frames, Acc. No 49005, Except Where Noted. The Frame Shall be securely fastened to The Top manhole section by Four 3/4-inch Stainless Steel Cinch Anchors.

11. Contractor's license — All work done on Santary and/or combined severs within The Jurisdiction of the metropolitan sever district must be done by a contractor Who is an Approved sever tapper properly licensed by the department and bonded.

12. Sanitary Building Sewers Shall be connected to the main line with wyes. Tee Fittings are to be used only where shown on the Approved Plan.

13. ROOF DRAINS; FOUNDATION DRAINS, COOLING WATER, SWIMMING POOL WATER OR OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.

14. A TAP PERMIT IS REQUIRED FOR EACH BUILDING. BOND OR FINAL APPROVAL OF THE MAIN LINE IS REQUIRED PRIOR TO ISSUANCE OF A TAP PERMIT.

15. SANITARY SEWER CONSTRUCTION MUST COMMENCE WITHIN 12 MONTHS AND BE COMPLETED WITHIN 36 MONTHS OF THE DATE OF APPROVAL SHOWN HEREON OR THESE PLANS BECOME VOID.

16.

16. FOR SANITARY SEWER MANHOLES CONSTRUCTED IN PARKING LOTS, THE RIM ELEVATION SHALL BE 1* HIGHER THAN THE SURROUNDING GRADE AND THE PAVEMENT SHALL BE FEATHERED AWAY FROM THE MANHOLE RIM AT A GRADUAL SLOPE.

17. For Sanitary Manholes Constructed in Grass areas, the rim elevation shall be 3" Higher than the Surrounding Grade, and the Fill shall be feathered away from the Manhole Rim at a Gradual Slope.

18. To assure that stormwater does not enter the santary sever system, a schematic plan of the footing and foundation drainage system, including the point of discharge, is necessary.

19. THE CONTRACTOR SHALL TEST ALL MANHOLES LEAKAGE BY MEANS OF VACUUM TESTING. THE VACUUM TESTING CANNOT BE DONE UNTL AFTER THE MANHOLES ARE SET TO FINAL GRADE AND THE MANHOLE CASTINGS ARE BOLTED DOWN. ALL LIFT HOLES SHALL BE PLUGGED. ANY OTHER OPENINGS, SUCH AS FOR PRESSURE RELIEF VALVES, SHALL BE TEMPORARLY PLUGGED TO ALLOW THE VACUUM TEST. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED TO ALLOW THE VACUUM TEST. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED TO ALLOW THE VACUUM TEST. ALL PIPES ENTERING THE MANHOLE SHALL BE PLUGGED TO ALLOW THE VACUUM TEST. HEAD SHALL BE PLUCS FROM BEING DRAWN INTO THE MANHOLE. THE SHALL BE TAKEN TO SECURELY BRACE THE PLUGS FROM BEING DRAWN INTO THE MANHOLE. THE VACUUM EQUIPMENT TEST HEAD SHALL BE PLACED IN THE OPENING OF THE CASTING ONLY, AND THE SEAL INFLATED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. VACUUM FIGS SHALL BE IN ACCORDANCE WITH ASTIN C1244. A VACUUM OF TO INCHES MERCURY (10° HG) SHALL BE MEASURED FOR THE VACUUM POINT OFF. WITH THE VALVES CLOSED, THE THE SHALL BE MEASURED FOR THE VACUUM TO DROP TO NINE INCHES MERCURY (10° HG) SHALL BE MEASURED FOR THE VACUUM TO DROP TO NINE INCHES MERCURY (10° HG) SHALL BE MEASURED FOR THE VACUUM TO DROP TO NINE INCHES MERCURY (10° HG) SHALL BE MEASURED FOR THE VACUUM TO DROP TO NINE INCHES MERCURY (10° HG) SHALL BE MEASURED FOR THE VACUUM TO DROP TO NINE INCHES MERCURY (10° HG) MANHOLE SHALL PASS IF THE TIME MEETS OR EXCEEDS THE ALLOWAHOLE REPAIR AND RETESTING REQUIRED BECAUSE OF THE FALURE TO MEET THE TESTING REQUIREMENTS SHALL BE BORNE BY THE CONTRACTOR AT HIS COST.

20. INSTALLATION OF A PRIVATE FORCE MAIN REQUIRES A PERMIT FROM THE HAMILTON COUNTY BOARD OF HEALTH. CONTACT THE BOARD OF HEALTH AT 946-7852 REGARDING PERMIT AND INSPECTION.

SEWERS SHALL BE LAID AT LEAST TO FEET HORIZONTALLY FROM ANY EXISTING OR PROPOSED WATER MAIN. THE DISTANCE SHALL BE MEASURED EDGE TO EDGE. IN CASES WHERE IT IS NOT PRACTICAL TO MAINTAIN A TO FOOT SEPARATION, THE APPROPRIATE REVIEWING AGENCY MAY ALLOW DEVATION ON A CASE-BY-CASE BASIS, IF SUPPORTED BY DATA FROM THE DESIGN ENGINEER. SUCH DEVATION MAY ALLOW INSTALLATION OF THE SEWER CLOSER TO A WATER MAIN, PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH PROVIDED THAT THE WATER MAIN IS IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER AND AT AN ELEMEN SO THE BOTTOM OF THE WATER MAIN IS AT LEAST TB INCHES ABOVE THE TOP OF THE SEWER. 22. IF IT IS IMPOSSIBLE TO OBTAIN PROPER HORIZONTAL AND VERTICAL SEPARATION AS DESCRIBED ABOVE, BOTH THE WATER MAIN AND SEWER MUST BE CONSTRUCTION OF SLIP-ON OR MECHANICAL JOINT PIPE COMPLYING WITH PUBLIC WATER SUPPLY DESIGN STANDARDS OF THE AGENCY AND BE PRESSURE TESTED TO 150 PSI TO ASSURE WATERTICHTNESS BEFORE BACKFILLING.

21. TWO-WAY CLEANOUTS SHALL BE INSTALLED AT THE RIGHT-OF-WAY LINE OR SANITARY SEWER EASEMENT, WHERE APPLICABLE, IN ACCORDANCE TO <u>MSD ACCESSION NO. 61979</u>.

STORN DOWNEE MOTE STORN DOWNEE MOTE STORN DOWNEE MALE AND SCHOLMAND FRAMMER IN CHART RALE AND SCHOLMAND FRAMMER IN CHART RALES AND SCHOLMAND FRAMMER IN CHART RALES AND SCHOLMAND FRAMMER IN CHART RALES AND SCHOLMAND FRAMMER IN CONTRIP SAUL SCHORT TRUES AND SCHOLATOROW FRAMMER IN CONTRIPORTING REGULATION STORM STORM CONTRIPORTING REGULATION STORM STORM CONTRIPORTING REGULATIONS CONFIGURATION STORM CONTRIPORTING REGULATIONS CONFIGURATION STORM CONTRIPORTING REGULATIONS OF HAMILTON SCHORT ADMISTRATION PRILIDAR STATE OF 900 STEEL CHARMER, AND MATERIA STATE CONSTRUCTION AND MATERIAL SCHORT SCHORT STORM STEPRIC SCHORT SCHORT SCHORT STORM STEPRIC SCHORT SCHORT

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