

CONTRACT AND SPECIFICATIONS  
FOR THE  
CONSTRUCTION OF THE  
**EMILY VESTAL DRAIN**

Located in Sections 2,3,10,11,15,  
Township 18 North, Range 4 East

**NOBLESVILLE TOWNSHIP, HAMILTON COUNTY INDIANA**

HAMILTON COUNTY DRAINAGE BOARD

## BIDDER'S CHECK LIST

BID FORM and SUPPLEMENTAL BID FORM completely filled out and signed by Contractor.

Contract filled out and signed by Contractor

Bid Bond or Certified Check -5% of Bid Amount

Form 96 completely filled out

Plan of Action

Equipment Questionnaire

Experience Questionnaire

Employment Eligibility Certification

Financial Statement

Acknowledge of Receipt of Addendum, if applicable

Certificate of Liability Insurance

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NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN THAT SEALED BIDS FOR THE RECONSTRUCTION OF THE EMILY VESTAL DRAIN 14,234 FEET, MORE OR LESS IN LENGTH IN SECTIONS 2,3,10,11,15 TOWNSHIP 18 NORTH, RANGE 4 EAST, NOBLESVILLE TOWNSHIP WILL BE OPENED AND READ ON THE 22ND DAY OF JULY 2024 AT 9:00 A.M. BY THE HAMILTON COUNTY DRAINAGE BOARD IN THE HAMILTON COUNTY COMMISSIONERS COURT IN THE HAMILTON COUNTY JUDICIAL BUILDING, ONE HAMILTON COUNTY SQUARE, NOBLESVILLE, INDIANA 46060-2230.

All bids must be on proposal forms furnished by the Hamilton County Surveyor and accompanied by a bid bond or certified check in an amount equal to five percent (5%) of the bid amount. The bidder shall also execute a FORM 96 as required by the State Board of Accounts and include a notarized non-collusion affidavit with the bid documents.

Plans and specifications for the project are on file in the office of the Hamilton County Drainage Board / Surveyor's Office at One Hamilton County Square, Suite 188, Noblesville, Indiana 46060.

A non-refundable fee for plans and specifications of Seventy Five dollars (\$75.00) is required. Check payable to the Hamilton County Treasurer.

**ALL BIDS WILL BE SUBMITTED TO THE DRAINAGE BOARD SECRETARY BY 9:00 A.M. JULY 22 2024.**

Attest: Lynette Mosbaugh  
Executive Secretary

## INSTRUCTIONS TO BIDDERS

### **BASIS ON WHICH BIDS ARE SOLICITED:**

Bids are solicited on the basis of a Base Bid and Supplementary Bids clearly set forth in the Bid Form and the Plans and Specifications.

Base Bid items must be stated in figures and the grand total of bids for all items proposed computed and stated in figures. All bids for the supplementary items must be stated in figures.

Bidders shall make proposals on the complete project and bids will not be accepted which are partial and bids will not be accepted where the bidder bids on only one item.

### **SCHEDULE OF QUANTITIES SHOWN IN PROPOSAL FORM:**

The schedule of quantities as shown in the Base Bid, although stated with as much accuracy as is possible in advance, is approximated only, and is assumed solely for the purpose of comparing bids. The quantities on which payments will be made to the Contractor from the Supplementary Bids will be determined from the actual amount of the materials used and work done. The Contractor shall furnish such additional work or materials deemed necessary by the Surveyor to complete the project, and any extra compensation to the Contractor shall be at the Base Bid price. If the Base Bid does not include the particular work item, machine cost or material, then the cost shall be determined by the Supplementary Bid. If a discrepancy occurs between like work items, machine cost or material cost in the Base Bid and Supplemental Bid, the lower of the two costs will be used for determining the cost for additional work or materials. Likewise the Contractor shall not receive payment for any quantity deemed unnecessary by the Surveyor provided that notice is given by the Surveyor in sufficient time to protect the Contractor against any commitments he may have made to suppliers of labor or materials.

The Contractor shall be bound to comply with the prevailing scale of minimum wages as provided by law.

Materials shall be of a quality equal or superior to the requirements of the Plans and Specifications. The burden of proof of quality of any substitution shall be the Contractors. Any dispute arising as the material or workmanship shall be settled by the Surveyor on behalf of the Board and his decisions shall be final.

The Bids for all material and work shall include installation and completion at the site of work. The Board shall not be liable for payment of any sales tax or other tax whatsoever that may be levied by the Federal Government, State Government, or other private, public or political agency. All materials and equipment must be transported to the site of the work by the Contractor and no additional compensation will be allowed for such transportation.

**BIDS:**

Bidders shall submit bids on the form provided herein, all parts of which shall be filled in. Each bid shall be submitted in a sealed ten (10") inch by thirteen (13") (10"x13") inch envelope addressed to the Hamilton County Drainage Board, One Hamilton County Square, Suite 188, Noblesville, Indiana-46060. There shall be one bid per envelope. The envelope shall also bear the NAME and Address of the person or firm submitting the bid and the Name of the Project for which the bid is submitted.

The Hamilton County Drainage Board reserves the right to correct any apparent error resulting from erroneous mathematical calculation before awarding a contract. The legal status of the bidder must be stated on Form Number 96.

A partnership bidder must give the full names and addresses of all partners and must be signed by at least one (1) person who shall designate himself as a partner authorized to sign on behalf of all partners.

When persons doing business under an assumed name submit a bid, all such persons must sign the bid and Form Number 96. A corporate bidder must name the state in which it is incorporated. The bid must be signed in the name of and under the seal of the corporation, by a duly authorized officer or agent of the corporation and his address given. Such officer or agent must be present legal evidence that he has lawful authority to sign said bid and the signature

is binding upon the corporation and that the corporation has a legal existence. In the event that any corporation organized and doing business under laws of any foreign state, is a successful bidder, such a corporation shall present evidence before a contract for said work is executed, that is authorized to do business in the State of Indiana.

**BID DEADLINE:**

All bids shall be submitted no later than 9:00 A.M. on date of opening.

**BIDDER'S OBLIGATION OF EXAMINATIONS:**

Bidders are required to examine the Instructions to Bidders, Plans, Specifications, Contract, Bid Form, the site of the proposed work, and other data which may be on file in the office of the Surveyor. No pleas of ignorance of conditions that exist or of conditions or difficulties that may be encountered in the execution of the work under this contract, as a result of a failure to make the necessary examination and investigations, will be accepted as an excuse for any failure or omissions on the part of the Contractor to fulfill in every detail all requirements of the Contract, Plan and Specifications, or will be accepted as a basis for any claims whatsoever for extra compensation. Upon request, all available information in the possession of the Surveyor will be shown to the bidder, but correctness of such information is not guaranteed.

**BIDDERS NON-COLLUSION AFFIDAVIT:**

No bid will be considered unless accompanied by a Bidder's Non-Collusion Affidavit Form, properly executed and notarized. The Contractor shall furnish a list of all equipment he has.

**FINANCIAL STATEMENT:**

All Bidders shall submit as a part of the bid General Form Number 96, as prescribed by the State Board of Accounts, and entitled, "Standard Questionnaire and Financial Statement for Bidders."

**BOND:**

Bidder shall submit with his proposal a Bid Bond or Certified Check in an amount equal to five (5%) percent of the total amount of the Bid. Certified checks and or Bid Bonds shall be made payable to the Hamilton County Drainage Board and shall be retained by the Board as liquidated

damages if the successful bidder fails to execute a contract within five (5) days after award of contract has been made.

Unsuccessful bidders may have their certified check or Bid Bond returned to them any time after an acceptable contract performance bond has been executed and a contract signed.

**WITHDRAWAL OF BIDS:**

Bidders may withdraw bids at any time prior to the scheduled bid deadline. Bidders will not be permitted to withdraw Bids at or after Bid Deadline.

**REJECTION OF BIDS:**

The Board reserves the right to reject any bid for any reason, including those containing any omission, additions, extensions, erasures, alterations, or irregularities of any kind. The judgment of the Board shall be final in determining the capability, experience and ability of the Bidder to successfully and properly prosecute the contract.

**EXPERIENCE QUESTIONNAIRE:**

All bidders shall submit as part of the bid, the Experience Questionnaire on the form provided.

**EQUIPMENT QUESTIONNAIRE:**

All bidders shall submit as part of the bid, the Equipment Questionnaire on the form provided.

**PLAN OF ACTION:**

All bidders shall submit as part of the bid, the plan of action on the form provided.

**ADDENDUM:**

Any addendum issued during the time of bidding, or forming a part of the contract documents given to the bidder for preparation of his proposal, shall be covered in the proposal and shall be acknowledge and attached to the proposal.

**EMPLOYMENT ELIGIBILITY CERTIFICATION:**

All bidders shall submit as part of the bid the Employment Eligibility Certification on the form provided.



## GENERAL PROVISIONS

### **DEFINITION OF TERMS:**

Drainage Board: Whenever the word "Drainage Board" or "Board" appears in these specifications and contract it shall be understood as referring to the Hamilton County Drainage Board, or any Joint Board, as established by Chapter 305 of the Acts of the Indiana General Assembly.

Surveyor: Whenever the "Surveyor" appears in these specifications and contract it shall be understood as referring to the Surveyor of Hamilton County, Indiana, or his duly authorized employee, agent, or other representative.

Contractor: Whenever the word "Contractor" appears on these specifications and contracts it shall be understood as referring to the person, partnership, firm, or corporations who shall enter into an agreement with the Drainage Board to perform the work herein described.

### **BOND:**

The Contractor to whom the contract is awarded shall provide a performance bond acceptable to the Board in the amount of at least 120% of the contract price which shall be forfeited, in whole or in part, should he fail to perform the work as provided by these specifications. The Bond shall be submitted within five (5) days of the acceptance of the contractor bid and shall continue in force for one (1) year from the date of acceptance of the completed project by the Board and shall contain a maintenance clause to cover all guarantees against defective material and workmanship.

### **INSURANCE:**

The Contractor shall adhere to the insurance requirements as set out in the attachment entitled "AMENDED HAMILTON COUNTY POLICY ESTABLISHING INSURANCE REQUIREMENTS FOR VENDORS" dated December 21, 2020.

### **ENGINEERING SUPERVISION:**

All work performed under this contract shall be under the supervision and direction of the Surveyor who will survey and set stakes if necessary; also furnish plans, technical advice and/or assistance for each project which may be ordered by the Drainage Board and all work shall be performed as directed by the Surveyor or his

representative.

The Contractor shall set an appointment to meet with the Surveyor within five (5) days of the acceptance of the Contractor's bid. At this time the Contractor and Surveyor shall review all aspects of the project. The Contractor shall not start work until this conference is held.

The Contractor shall, at all times during his absence from the work, have upon the job a competent supervisor to whom orders and instructions may be addressed or delivered. "The Contractor or his foreman shall have in his possession a complete set of plans and specifications whenever work is in progress on the job site". The Contractor or his representatives shall contact the Surveyor's Office each day work is performed. The Contractor shall have on the job site a cellular telephone at all times while work is in process.

**WORKMAN'S COMPENSATION:**

The Contractor shall be required to comply with regulations set out by the Indiana State Industrial Board in reference to the provision of the Indiana Workman's Compensation Act, and any amendments thereto.

**NON-DISCRIMINATION PROVISION:**

The Contractor on this project agrees that in the hiring of employees for the performance of work under this contract or any sub-contract hereunder, no Contractor, Sub-Contractor, or any person acting on behalf of such Contractor or Sub-Contractor shall discriminate against any employee or applicant for employment, with respect to his hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of his race, color, religion, national origin, or ancestry.

**COMPLETION DATE:** The bidder is cautioned that the completion date for this project is MAY 12, 2025 and that failure to complete the project in accordance with plans, specifications and special provisions of this contract by this date, shall result in a deduction of any monies due the Contractor, not as a penalty, but as liquidated damages.

Said deductions will be computed at the rate of \$100.00 per day times the number of calendar days past completion date.

**EASEMENT:**

The Contractor shall use the easement provided by law for the Board or its duly authorized representative. This easement is as shown on plans. The Contractor will however, respect the limitation of the easement in cases where the Board has entered into a non-enforcement agreement. The Contractor shall use due care to avoid damage to crops, livestock, fences, buildings and other structures outside of the easement, and to crops and approved structures as mentioned above inside the easement insofar as possible. The Contractor shall be held liable for any un-necessary damage to crops, livestock, fences, buildings, existing drainage structures, highway, railroad or private bridges or culverts or any property whatsoever. Repair or replacement of any such damage to any public or private property, due to the negligence or carelessness of the Contractor, shall be at the expense of the Contractor.

**SAFETY PRECAUTIONS:**

The Contractor shall erect and maintain throughout the course of the project all necessary barricades, warning signs or lights to protect the safety of the public. The Contractor shall use all due and proper precaution to prevent injury to any property, person or persons and shall omit no reasonable precautions which provide for the security of all persons and property. The Contractor will be held responsible for any damages that any party may sustain in consequence of neglecting the necessary precaution in prosecuting the work. For safety reasons the operation side of the project shall be the side opposite a County or State Road if the project parallel such a road. All applicable Federal, State and Local Safety Codes and Regulations shall be adhered to during all phases of construction on this project.

**PERMITS, STATE AND LOCAL ORDINANCES:**

The Contractor shall obtain and pay at his expense all permits and licenses, give all notices, pay charges and fees necessary and incident to the prosecution of the work. The Contractor shall comply with all Federal, State and Local laws, Ordinances, Rules and Regulations bearing on the conduct of the work.

**ADDENDUM AND CHANGE ORDERS:**

Any addendum issued before the opening of bids shall become a part of this contract and be added to the bid. Any change order issued after the award of the contract shall also become a part of the contract. Any increase or decrease in the contract price as a result of a change order shall be determined as stated in the Instruction to Bidders. Addendum or change orders shall be made in writing with a copy to the Contractor and another placed in the contract.

**LIABILITY OF CONTRACTOR:**

The Contractor shall indemnify and save harmless the Board, Surveyor and their agents, representatives and employees from all damages, suites, judgments, actions, expenses or claims or any character brought on account of any injury or damages sustained by any person, or property from acts of such Contractor, in consequence of any neglect in safeguarding the work, arrangement or operation of any tools, machinery, appliances, devices or materials which may be used or furnished by the Contractor, or through the use of improper materials in constructing the work, or because of any action, omission, neglect or misconduct of said Contractor, or because of any claims or amount arising or recovered under the Workman's Compensation Act, or any other law, bylaw, amendment, ordinance, order or decree. The Board may retain for its use so much of the money due said Contractor under his contract as shall be considered necessary by the Board until aforesaid shall have been settled and suitable evidence to that effect is furnished the Board. In case no money is due the Contractor, his surety shall not be released until such suits, or claims for injuries of damages as aforesaid shall have been settled and suitable evidence to that effect furnished the person or persons herein receiving bids.

**ASSIGNMENT OF CONTRACT:**

The Contractor shall not subcontract or assign this contract, or any part thereof, without the written consent of the Board, which consent may be withheld only for good cause.

Requests for permission to subcontract or assign any portion of the contract shall be in writing and accompanied by a letter showing that the organization which is to perform the work is particularly experienced and equipped for such work. The Board may require the subcontractor to

submit questionnaires to establish his experience and financial ability. Provisions of the contract shall apply to the subcontractor the same as is applies to the Contractor. Consent from the Board to subcontract or assign any portion of the contract shall not relieve the Contractor of any responsibility to fulfill the contract.

**COOPERATION WITH PUBLIC UTILITIES:**

Prior to the start of construction the Contractor will notify by certified mail all public utilities who may own poles, lines, transformers, wire, cables, pipes, conduit, etc. on or adjacent to the site of the proposed work. The Contractor shall be held responsible to notify any public utilities and arrange for the relocation of any of its properties which may interfere with safe prosecution of the work. In no case will the Board be held responsible for any cost involved in the relocation or rerouting of any poles, lines, transformers, wires, cables, pipes, conduit, etc. on or adjacent to the site of the proposed work and the Contractor agrees to save the Board harmless from any such claims. Due precaution and cooperation shall be exercised by the Contractor to prevent damage to such property, hazards to traffic or other liability.

**MATERIAL:**

ALL MATERIAL USED IN THE PROSECUTION OF THE WORK SHALL COMPLY WITH THE CURRENT INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, current version, and if a request is made, any material shall be made available to the Surveyor for inspection and/or testing. Any material rejected shall be removed from the site of the project at the expense of the Contractor.

**EQUIPMENT:**

The Contractor shall furnish the equipment necessary for the completion of the work. All equipment used in the prosecution of the work shall be adequate for the work to be performed, and in good working order.

**REJECTION OF WORK DONE:**

If in the opinion of the Surveyor any portion of the work completed by the Contractor does not meet the specifications by being incomplete or unsatisfactory the Contractor shall do whatever necessary to complete the work to the Surveyors satisfaction at no extra cost to the Board.

**BRIDGES:**

Clean out under or through any County, State, Railroad or Private bridge or culvert as specified in the contract or as directed by the County Surveyor, shall be at the expense of the Contractor and no extra compensation will be allowed for such work. Removal, lowering or replacement of any County, State Railroad or Private Bridge or culvert as specified in the contract shall be a separate bid item on the bid form.

**INTERPRETATION OF CONTRACT DOCUMENTS:**

The contract documents are complementary and what is called for by one shall be as binding as if called for by all. The intent of the contract documents is to include in the contract prices, the cost of all labor, materials, water, fuel, tools, plant, equipment, light, transportation, and all the other expense as may be necessary for the proper execution of the work, complete and ready for continuous service.

In case of discrepancy in the drawings and in the specifications, the matter shall be immediately called to the attention of the Surveyor, who shall make a decision as the true meaning intended. Any attempt by the Contractor to remedy or adjust such discrepancy, without the decision of the Surveyor, will be entirely at the Contractor's risk. The Surveyors decision shall be in the form of a written addendum, a copy of which shall be sent to all prospective bidders.

The work is to be done complete and to the satisfaction of the Surveyor, notwithstanding any minor omissions in the specifications or drawings. Plans are drawn to scale as shown, but written dimensions shall take preference over scaled dimensions.

It is understood by all concerned that the apparent silence of the specifications as to any detail or the apparent omission of a detailed description concerning any point shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the first quality is to be used. All interpretations of these specifications shall be made upon this basis.

**SURVEYOR'S DECISIONS:**

To prevent disputes and litigation, it is further agreed by and between the Board and Contractor, that the Surveyor shall determine all questions in relation to the construction of the work and the Surveyor shall, in all cases, decide all questions which may arise in regard to the work under this contract, and this decision shall be a condition precedent to the right of the Contractor to receive any money or compensation for anything done or furnished under this contract.

**REJECTION AND ACCEPTANCE OF WORK:**

In case the Contractor neglects or refuses, after written notice, to remove or replace any rejected work, the same may be removed and replaced by the Board at the expense of the Contractor or the Contractor's Surety.

None of the work done or materials and appurtenances furnished shall be finally accepted until the entire contract is completed, inspected and ready for acceptance.

Until final acceptance of the work by the Surveyor, it shall be under the charge and care of the Contractor, and he shall take every necessary precaution against injury or damage to the work by traffic, by the action of elements, or from any other cause, whatsoever. No equipment shall be removed from the project area until the project is approved by the Surveyor.

**PARTIAL PAYMENT:**

The Surveyor may authorize partial or progress payments for work performed in the amounts not in excess of eighty-five (85%) percent of the contract price of the work then completed.

The value of the work performed may be estimated by the Surveyor at the end of each calendar month. ("Work Performed" as herein used, is interpreted to include materials for the project which are incorporated into the work as part of the complete construction.)

Fifteen (15%) percent of the contract price will be withheld by the Board for a period of sixty (60) days after the final acceptance of the work by the Surveyor for the purpose of securing payments of material, men laborers and sub-contractors.

The Contractor shall meet with the Inspector/Surveyor at any time a claim for payment is submitted so as to review the claim.

**FINAL PAYMENT:**

After the final approval and acceptance by the Surveyor of all the work contracted for, the Contractor shall furnish the Board a sworn statement stating that all expenses incurred for labor and materials have been paid in full. A form for this statement is provided after DRC-2.

**TERMINATION OF CONTRACT:**

If the Contractor fails or refuses to perform the work in an acceptable manner, the Board may give notice in writing to the Contractor and his surety of such failure or refusal, specifying the same and directing what action shall be taken.

Any one or more of the following will be considered sufficient justification for such notice:

1. Failure to begin the work under the contract within the time specified
2. Failure to perform the work with sufficient supervision, workman, equipment and materials to insure the prompt completion of said work
3. Unsuitable performance of the work;
4. Neglecting or refusal to remove defective materials or failure to perform anew such work as may have been rejected:
5. Discontinuing the prosecution of the work or any part of it
6. Inability to finance the work adequately;
7. If for any reason, the Contractor fails to carry on the work in an acceptable manner.

If the Contractor, or his surety, within a period of ten (10) days after such notice does not proceed in compliance therewith, then the Board shall have full power and authority, without violating the contract, to remove the prosecution of the work out of the hands of said Contractor, to appropriate or use any and all materials and



equipment on the ground as may be suitable and acceptable and may, at his option, turn the work over to the surety, or enter into an agreement with another Contractor for the completion of the Contract according to terms and provisions therefore, or he may use such other methods as, in his opinion, shall be required for the completion of said contract in an acceptable manner.

All costs of completing the work under the contract shall be deducted from any monies due or which may become due said Contractor. In case the expense so incurred by the Board may be less than the sum which would have been payable under the contract if it had been completed by said Contractor, then said Contractor shall be entitled to receive the difference, but in case such expense shall exceed the sum which would have been payable under the contract, then the Contractor and his surety shall be liable and shall pay to the Board the amount of said excess.

## SPECIFICATIONS

### **CLEARING:**

Location and amount of clearing to be done by the Contractor shall be set out in the SPECIAL INSTRUCTIONS. All stumps that interfere or that are likely to interfere with the flow of ditch shall be removed and disposed of by the Contractor, all others to be cut off flush with the ground and will be treated with approved brush killer having a dye additive such as DOW TORDON 101R. In area adjacent to the ditch banks, stumps, brush, logs, wire, rocks, or other debris more than 1/3 cubic foot in volume shall be buried with at least three (3') feet of cover or disposed of by the Contractor by removing debris from site or by burning if the proper permits are obtained. Copies of the permits are to be filed with the County Surveyor before burning commences. Debris which remains after burning shall be buried. In no case shall the burying or covering of any material which will interfere with normal farming operations be tolerated.

Areas of burying shall be chosen by the Contractor with approval of the landowners and the County Surveyor. The cost of clearing shall include the disposal of debris.

The right is reserved for landowners, with the approval of the County Surveyor, to mark any trees to be saved. **Landowner may request clearing items to be stacked or piled rather than disposed of per above. In these instances the landowner must provide written request to the County Surveyor for approval. Areas on landowner's property for such storage shall be outside of the regulated drain easement and shall be the responsibility of the landowner for disposal.** The Contractor shall not remove trees from a landowner's property unless written consent is received from the landowner and a copy of which is given to the County Surveyor.

Any exceptions to these clearing specifications must have the approval of the County Surveyor, and if the County Surveyor demands written consent of the landowner. The Contractor shall submit a copy of Commercial Applicator License to the Hamilton County Surveyor's Office prior to commencement of clearing operations.

**EXCAVATING:**

The excavation shall be done according to the grade, bottom width, side slope and depth as shown in the plans and specifications. The bank shall be left as nearly smooth and even as possible to secure the same in a good and workmanlike manner. To accomplish this, the Contractor shall use a Hydraulic Excavator with a smooth edged ditch bucket or dragline. All washes shall be filled and all open laterals entering the main ditch shall be cleared and cleaned a minimum of fifty (50') feet on uniform grade to meet the natural grade of the lateral and no extra compensation shall be allowed for such work. The Contractor is expected to make all feasible alignments of the ditch bottom necessary to accomplish the best possible finished channel under the existing circumstance. Extra compensation will not be allowed the Contractor for excavation made in addition to the amount shown in the specifications unless so ordered by the County Surveyor. Any cutoff, widening or change in channel not specified in the specifications will be paid for at the unit price bid or at a price per unit as agreed upon by the Contractor and the County Surveyor.

No open ditch shall be undercut more than eight (8") inches from grade shown on profile. Bottom width shall be measured at the elevation of the designed bottom.

The right is reserved, without impairing the contract, to order the performance of such work, or class of work not contemplated in the proposal, as may be considered necessary to complete fully and satisfactorily the work included in the contract. Such extra work shall be done by the Contractor and he shall be compensated at a price per unit as agreed upon by the Contractor and the County Surveyor.

**EXCAVATED MATERIAL:**

Excavated material shall be spread so that a minimum of ten (10') foot berm shall be left between the top of the ditch bank and the spread spoil. The slope of the spoil from the berm's edge to the maximum height shall be 5:1. From the maximum height the spoil will have an 8:1 back slope to field level. The maximum height of the spoil from the original ground elevation shall be eighteen (18") inches. All spoils shall be placed on the side of the ditch designated by the County Surveyor in the SPECIAL INSTRUCTIONS. The finished spoil shall be left in a smooth

manner, so that any average crop farm tractor can be driven over all parts of it with a reasonable degree of safety and economy. All spoil banks shall be leveled to the satisfaction of the County Surveyor and all compensation for leveling spoil banks shall be included in the bid price for excavation.

Landowners concerned may authorize bucket spread or spoil piles, but the Contractor is warned that written consent from the landowner shall be obtained to eliminate liability for un-spread spoil, brush or stumps.

In a case where the special specifications or provisions include the spreading of spoil heretofore left un-spread by a former clean out or dredging process, the same clearing and spreading specifications herein set out shall apply both to the former un-spread spoil and the spoil made available by the work herein proposed.

**RIP RAP:**

Riprap shall be seven (7") inches or nine (9") inches graded size or as indicated in the SPECIAL INSTRUCTIONS.

**PAVEMENT REPLACEMENT:**

Pavement replacement of State Highway shall be done as provided for in the "INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, current version. Pavement replacement of Hamilton County Roads shall be done as provided in the "Hamilton County Standard for Construction of Road Improvements" current version. County Roads shall be backfilled with flowable fill even with the existing road surface as directed by the County Highway Engineer. Contractor shall notify County or State Highway Departments before construction in Right-Of-Ways begins. Pavement replacement for city or town streets shall be done per the specifications of the city or town owning the right-of-way.

**INLETS, CATCH BASINS, BREATHERS, MANHOLES, JUNCTION BOXES:**

The construction and location of inlets, catch basins, breathers, manholes and junction boxes shall be set out in the SPECIAL INSTRUCTIONS and shall be an individual bid item.

**CONCRETE:**

Concrete shall be of a classification as specified in the Special Specifications plans. The unit price of concrete in place as shown in the plans shall include the forms and

reinforcing steel of size, quantity, and designation as shown on the plans and all concrete shall be of a quality and shall be placed in a manner as provided by the "INDIANA DEPARTMENT OF TRANSPORTATION (INDOT) STANDARD SPECIFICATIONS", current edition.

**CORRUGATED METAL PIPE:**

Corrugated metal pipe, helcor or equal shall be of gauge and quality that will meet the provision of Section 908-Metal Pipe as set forth in the "Indiana Department of Transportation (INDOT) Standard Specifications, current edition" unless stated otherwise in the SPECIAL INSTRUCTIONS or approved by the County Surveyor. The unit price shall include all materials, pipe, bands, bolts, labor and machinery to place the pipe on grade and to backfill as directed. Standard coupling bands with a minimum length of twelve (12") inches shall be used.

**TILE DRAIN EXTENSION:**

A twenty (20') foot section of corrugated metal pipe will be installed for drains outletting into the ditch at locations as shown on the plans, and at other locations where tile outlets are encountered during construction. The pipe should slip around the existing tile, by using a pipe one size larger diameter than the diameter of the existing tile. Pipe shall extend out from the ditch bank to such a position that the outlet is one (1') foot back of the bottoms edge and no more than three (3') feet above the ditch bottom as profile. Payment for these items will be made based on the actual number and sizes installed at the various locations at the various bid prices per lineal foot. All outlets shall be fitted with an approved animal guard.

**DRAIN TILE:**

Materials for use shall be equal or superior to the quality provided in Section 907 of the "Indiana Department of Transportation Standard Specifications, current version" or as specified in the SPECIAL INSTRUCTIONS.

**TILE EXCAVATING AND BACKFILL:**

All work related to this section shall conform to the applicable sections of the "Indiana Department of Transportation Standard Specifications, current version", or as specified in the SPECIAL INSTRUCTIONS. Cost of the excavating and backfilling shall be included in the bid price of the tile.

**SEEDING AND FERTILIZING:**

1. Channel side slopes will be seeded twice. The first seeding will occur at the end of each day's construction, while the ground is still moist. Fertilizer will be applied. Apply the second seeding just prior to final inspection. Only those areas where the grass has not germinated will be seeded the second time. The seed and fertilizer will be applied with a broadcast type seeder.

QUANTITIES:

Tall Fescue (low or endophyte free)	35 lbs/acre
Annual Rye Grass	20 lbs/acre
12-12-12 Fertilizer	1000 lbs/acre

SUBSTITUTE THE FOLLOWING FOR RYE GRASS

- Oats-----March 15 through May 1
- Wheat-----October 1 through November 1

2. Disturbed areas that are not in crop production will be seeded and fertilized upon final grading. Apply fertilizer and work into the soil to a depth of two (2") inches or three (3") inches with a harrow or disc. Prepare a firm seed bed with a cultipacker or cultipacker type seeder. Work the seed into the soil 1/4 to 1/2 inch deep. Straw mulch will be used around erosion control structures and other critical areas as determined by the project inspector.

QUANTITIES:

General purpose farm mix	20 lbs/acre
12-12-12 Fertilizer	1000 lbs/acre
Straw Mulch (where required)	3000 lbs/acre

GENERAL PURPOSE MIX:

- 20% Perennial Rye Grass
- 20% Timothy
- 13% Orchard Grass
- 12% Red Star Clover
- 12% Tall Fescue
- 12% Vernal Alfalfa
- 11% Alsike Clover

3. All erosion structures, waterways or other areas indicated in the SPECIAL INSTRUCTIONS shall be mulched. Mulch shall consist of 1 1/2 tons of dry material per acre. Material shall consist of straw or hay or other, if approved by the Surveyor. Mulch shall be applied at a rate of fifty-five (55) bales per acre after seeding-fertilizing the area.

**CLEAN UP:**

The Contractor shall, at all times, keep the premises free from accumulations of waste material or rubbish caused by his employees or work. At the completion of the work, he shall remove all rubbish, tools, equipment and surplus material from the premises and shall leave his work area in a neat and presentable condition.

**OCCUPATIONAL SAFETY AND HEALTH ADMIN., LABOR:**

SUBPART P-EXCAVATING, TRENCHING AND SHORING Authority:

Sec 107, Contract Work Hours and Safety Standards Act (Construction Safety Act) (40 U.S.C. 33): Sections 4,6,8 Occupation Safety and Health Act of 1970 (29 U.S.C. 653 ,655 657); Secretary of Labor's Order No 12-71 (36 FR 8754),8-76 (41 FR 25059, or 9-83 (48 FR 35736),as applicable. 1926.650 General Protection Requirements

(a) Walkways, runways, and sidewalks shall be kept clear of excavated material or other obstruction and no sidewalks shall be undermined unless shored to carry a minimum live load of one hundred and twenty-five (125) pounds per square foot.

(b) If planks are used for raised walkways, runways, or sidewalks, they shall be laid parallel to the length of the walk and fastened together against displacement.

(c) Planks shall be uniform in thickness and all exposed ends shall be provided with beveled cleats to revert tripping.

(d) Raised walkways, runways and sidewalks shall be provided with plank steps on strong stringers. Ramps, used in lieu of steps, shall be provided with cleats to insure a safe walking surface.

(e) All employees shall be protected with personal protective equipment of the protection of the head, eyes, respiratory organs, hands, feet and other parts of the body as set forth in Subpart E of this part.

(f) Employees exposed to vehicular traffic shall be provided with and shall be instructed or wear warning vests marked with or made of reflecting or high visibility material.

(g) Employees subject to hazardous dusts, gases, fumes, mists, or atmospheres deficient in oxygen, shall be protected with approved respiratory protection as set forth in Subpart D of this part.

(h) No person shall be permitted under loads handled by power shovels, derrick, or hoists. To avoid spillage, employees shall be required to stand away from any vehicle being loaded.

(i) Daily inspections of excavations shall be made by a competent person. If evidence of possible cave-ins or slides is apparent, all work in the excavation shall cease until the necessary precautions have been taken to safeguard the employees. 1926-651

SPECIFIC EXCAVATION REQUIREMENTS:

(a) Prior to opening an excavation, effort shall be made to determine whether underground installations; i.e., sewer, telephone, water, fuel, electric lines, etc. will be encountered, and if so, where such underground installations are located.

When the excavation approaches the estimated location of such an installation, the exact location shall be determined and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation.

(b) Trees, boulders, and other surface encumbrances, located so as to create a hazard to employees involved in excavation work in the vicinity thereof at any time during operations, shall be removed or made safe before excavating is begun.



(c) The walls and faces of all excavations in which employees are exposed to danger from moving ground shall be guarded by a shoring system, sloping of the grounds or some other equivalent means.

(d) Excavations shall be inspected by a competent person after every rainstorm or other hazard-increasing occurrence, and the protection against slides and cave-in shall be increased if necessary.

(e) The determination of the angle of repose and design of the supporting system shall be based on careful evaluation of pertinent factors such as: Depth of cut; possible variation in anticipated changes in materials from exposure to air, sun, water, or freezing; loading imposed by structures, equipment, overlying material, or stored material; and vibration from equipment, blasting, in traffic, or other sources.

(f) Supporting systems; i.e.; piling, cribbing, shoring' etc., shall be designed by a qualified person and meet accepted engineering requirements. When tie rods are used to restrain the top of sheeting or other retaining systems, the rods shall be securely anchored well back of the angle of repose. When tight sheeting or sheet piling is used, full loading due to ground water table shall be assumed, unless prevented by weep holes or drains or other means. Additional stringers, ties and bracing shall be provided to allow for any necessary temporary removal of individual supports.

(g) All slopes shall be excavated to at least the angle of repose except for areas where solid rock allows for line drilling or pre-splitting.

(h) The angle of repose shall be flattened when an excavation has water conditions, silty materials, loose boulders, and areas where erosion, deep frost action, and slide planes appear.

(i) (1.) In excavations which employees may be required to enter, excavated or other material shall be effectively stored and retained at least two (2') feet or more from the edge of the excavation.

(2.) As an alternative to the clearance prescribed in paragraph (i)(1.) of this section, the employer may use effective retaining devices in lieu thereof in order to revert excavated or other materials from falling into excavation.

(j) Sides, slopes and faces of all excavations shall meet accepted engineering requirements by scaling, benching, barricading, rock bolting, wire meshing, or other equally effective means. Special attention shall be given to slopes which may be adversely affected by weather or moisture content.

(k) Support systems shall be planned and designed by a qualified person when excavation is in excess of twenty (20') feet in depth, adjacent to structures or improvements, or subject to vibration or ground water.

(l) Materials used for sheeting, sheet piling, cribbing, bracing, shoring, and underpinning shall be in good serviceable condition, and timbers shall be sound, free from large or loose knots, and of proper dimensions.

(m) Special precaution shall be taken in sloping or shoring the sides of excavations adjacent to a previously backfilled excavation or a fill, particularly when the separation is less than the depth of the excavation. Particular attention also shall be paid to joints and seams of material comprising a face and the slope of such seams and joints.

(n) Except in hard rocks, excavating below the level of the base of footing of any foundation or retaining wall shall not be permitted, unless the wall is underpinned and all other precautions taken to insure the stability of the adjacent walls for the protection of employees involved in excavation work or in the vicinity thereof.

(o) If the stability of adjoining buildings or walls is endangered by excavations, shoring, bracing, or underpinning shall be provided as necessary to insure their safety. Such shoring, bracing or underpinning shall be inspected daily or more often as conditions warrant, by a competent person and the protection effectively maintained.

(p) Diversion ditches, dikes or other suitable means shall be used to prevent surface water from entering an excavation and to provide adequate drainage of the area adjacent to the excavations.

(q) If it is necessary to place or operate power shovels, derricks, trucks, materials or other heavy objection a level above and near an excavation, the side of the excavation shall be sheet-piled, shored and braced as necessary to resist the extra pressure due to such superimposed loads.

(r) Blasting and the use of explosives shall be performed in accordance with Subpart U of this part.

(s) When mobile equipment is utilized or allowed adjacent to excavations, substantial stop logs or barricades shall be installed. If possible, the grade should be away from the excavation.

(t) Adequate barrier physical protection shall be provided at all remotely located excavations. All well, pits, shafts, etc. shall be barricaded or covered. Upon completion of exploration and similar operations, temporary wells, pits, shafts, etc., shall be backfilled.

(u) If possible, dust conditions shall be kept to a minimum by the use of water, salt, calcium chloride, oil or other means.

(v) In locations where oxygen deficiency or gaseous conditions are possible, air in the excavations shall be tested. Contracts, as set forth in Subpart D and E of this part, shall be established to assure acceptable atmospheric conditions. When flammable gases are present, adequate ventilation shall be provided or sources of ignition shall be eliminated. Attended harness and line, basket stretcher, etc., shall be readily available where adverse atmospheric conditions may exist or develop in an excavation.

(w) Where employees or equipment are required or permitted to cross over excavations, walkways or bridges with standard guardrails shall be provided.

(x) Where ramps are used for employees or equipment, they shall be designed and constructed by qualified person in accordance with accepted engineering requirements.

(y) All ladders used on excavations operations shall be in accordance with the requirements of Subpart L of this part. '1926.652

SPECIFIC TRENCHING REQUIREMENTS:

(a) Banks more than five (5') feet high shall be shored, laid back to a stable slope or some other equivalent means or protection shall be provided where employees may be exposed to moving ground or cave-ins. Refer to Table P-1 as a guide in sloping of banks. Trenching less than five (5') feet in depth shall also be effectively protected when examination of the ground indicates hazardous ground movement may be expected.

(b) Sides and trenches in unstable or soft materials, five (5') feet in depth, shall be shored, sheeted, braced, sloped or otherwise supported by means of sufficient strength to protect the employees working within them. See Tables P-q, P2 (following paragraph (g) of this section.

(c) Sides of trenches in hard or compact soil, including embankments, shall be shored or otherwise supported when the trench is more than five (5') feet in depth and eight (8') feet or more in length. In lieu of shoring, the sides of the trench above the five (5') foot level may be sloped to preclude collapse, but shall not be steeper than a one (1') foot rise to each 1/2 foot horizontal. When the outside diameter of a pipe is greater than a six (6') feet, a bench of four (4') feet minimum shall be provided at the toe of the sloped portion.

(d) Materials used for sheeting and sheet piling, bracing shoring and underpinning, shall be in good serviceable condition, and timbers used shall be sound and free from large or loose knots, and shall be designed and installed so as to be effective to the bottom of the excavation.

(e) Additional precautions by way of shoring and bracing shall be taken to prevent slides or cave-ins when excavations or trenches are made in locations adjacent to backfilled excavations, or where excavations are subject to vibrations from railroad or highway traffic, the operation of machinery or other source.

(f) Employees entering bell-bottom pier holes shall be protected by the installation of a removable-type casting of sufficient strength to resist shifting of the surrounding earth. Such temporary protection shall be provided for the full depth of that part of each pier holes which is above the bell. A lifeline, suitable for instant rescue and securely fastened to a shoulder harness, shall be worn by each employee entering the shafts. This lifeline shall be individually manned and separate from any line used to remove materials excavated from the bell footing.

- (g) (1) Minimum requirements for trench timbering shall be in accordance with Table P-2.  
(2) Braces and diagonal shores in a wood shoring system shall not be subjected to compressive stress in excess of values given by the following formula:

$$S=1300-20 L/D$$

Maximum Ratio  $L/D=50$

Where:

L = length, unsupported, in inches

D = Least side of the timber in inches

S = Allowable stress in pounds per square inch of cross-section

**CONFINED SPACE REQUIREMENTS:**

CONTRACTORS SHALL COMPLY WITH ALL RULES AND REGULATIONS AS SET OUT FOR CONFINED SPACE ENTRY. ALL PROCEDURES SHALL COMPLY WITH 29CFR PARTS 1910.

AMENDED HAMILTON COUNTY POLICY  
ESTABLISHING INSURANCE REQUIREMENTS FOR VENDORS

Vendors, who enter into a contract with Hamilton County, the Hamilton County Airport Authority, the Hamilton County Drainage Board, the Hamilton County Health Department, the Hamilton County Parks and Recreation Department, and the Hamilton County Solid Waste Board (hereinafter collectively “the County”), shall be required to provide a Certificate of Insurance to the County as part of the contract. A copy of this Policy shall be included in any requests for bids, quotations, rental agreements or other proposals.

- A. Each contract with the County shall require a Certificate of Insurance. Those contracts, whether the result of bids, quotes, or negotiation, shall include but not limited to, the following:
1. Services provided to any office or department of the County.
  2. Renters, tenants, instructors/teachers, and recreational users of any property owned or operated by the County, if the rental payment exceeds \$500 per day or event, if the proposed event could potentially include over fifty (50) individuals, if property being used includes the historic courthouse square, or if the rented facility is planned to be used to provide alcohol.
  3. All construction contracts.
  4. All contracts for maintenance and repair services, which includes “on call” agents.
  5. Design services including buildings, roads, bridges, and other infrastructure.
  6. Contracts for design and/or installation of software and hardware systems in any County building or facility.

7. Vendors who regularly provide deliveries of supplies and/or services to various offices of the County, including repair services, maintenance services, and delivery of water, office supplies, and similar products.

8. Riverview Hospital.

B. All Certificates of Insurance shall include the following coverages and meet the following requirements:

1. Commercial General Liability Insurance

a. The CONSULTANT/CONTRACTOR/VENDOR (hereinafter collectively “VENDOR”) must obtain and carry Commercial General liability insurance at limits not less than \$1,000,000 per occurrence basis, \$2,000,000 general aggregate. Coverage shall be on an occurrence form and include contractual liability. The policy shall be amended to include the following extensions of coverage:

- i. Exclusions relating to the use of explosives, collapse, and underground damage to property shall be removed.
- ii. The policy shall provide thirty (30) days notice of cancellation to County.
- iii. Exclusions for independent contractors and/or exclusions for type of work being performed shall be removed unless the independent contractors has their own insurance policy that is subject to the terms stated herein this Policy. The independent contractor’s insurance policy must include, at a minimum, all of the requirements stated herein.
- iv. The VENDOR shall name the County as an additional insured on a primary and non-contributory basis and shall provide for a waiver of subrogation for the additional insureds.

- v. The VENDOR shall expressly waive any and all claims of subrogation against the County that arises from existence or performance of the agreement between the VENDOR and the County.

2. Automobile Liability

- a. The VENDOR shall obtain automobile liability insurance covering all owned, leased, borrowed, rented, or non-owned autos used by employees or others on behalf of the VENDOR for the conduct of the VENDOR's business, for an amount not less than \$1,000,000 combined single limit for bodily injury and property damage. The term "automobile" shall include private passenger autos, trucks, and similar type vehicles licensed for use on public highways. The policy shall be amended to include the following extensions of coverage:
  - i. If applicable, as determined by the County's Legal Counsel, Contractual Liability coverage shall be included.
  - ii. The policy shall provide thirty (30) days notice of cancellation to the County.
  - iii. The VENDOR shall name the County as an additional insured on a primary and non-contributory basis and shall provide for a waiver of subrogation for the additional insureds.

3. Workers Compensation and Employers Liability

- a. The VENDOR, who comes on County premises, must obtain and carry workers' compensation and employers' liability insurance with policy limits not less than \$500,000 each accident, \$500,000 each employee, and \$500,000 policy limit.
  - i. In lieu of obtaining and carrying workers' compensation and employers' liability insurance independent contractors can fill out and file with the State of Indiana a WCE-1 Application for Workers' Compensation Clearance Certificate (hereinafter "WCE-1 Form"). Once the WCE-1 Form has been approved by the State of Indiana the independent contractor shall upload the certificate of approval to the County's Compliance Vendor prior to entering into any agreement with the County.
- b. The policy shall not exclude any owners, partners, or proprietors.



- c. Workers' compensation shall include a waiver of subrogation in favor of County and provide thirty (30) days notice of cancellation to the County.
- d. A VENDOR that does not come on County property is exempt from the workers' compensation requirements of this policy.

4. Umbrella/Excess Liability

- a. The VENDOR must obtain and carry an umbrella/excess liability policy with a combined single limit of \$1,000,000 and provide thirty (30) days notice of cancellation to the County.
- b. The umbrella/excess policy may be used to meet the required limits and coverage for the general liability and auto liability policies provided such umbrella/excess liability policy result in the same or greater coverage.

C. The following coverages shall be applicable based upon the services being provided:

1. Professional Liability Insurance

- a. The VENDOR must obtain and carry professional liability insurance in an amount of \$1,000,000 per claim and \$2,000,000 aggregate for all claims for negligent performance. When a VENDOR is building or designing a bridge, a building, or any other significant structure the VENDOR must carry professional liability insurance in the amount of \$5,000,000 per claim and \$5,000,000, aggregate for all claims for negligent performance or one additional reasonable amount included in the contract as agreed to by the parties. The VENDOR shall maintain the coverage for a period ending two (2) years after substantial completion of construction or the termination of this contract, whichever is longer. Waiver of subrogation in favor of County shall apply if automatically included in the professional liability policy.

2. Watercraft Liability

- a. When necessary to use watercraft for the performance of the VENDOR's Services under the terms of this Contract, either by the VENDOR, or any SUB-VENDOR, the VENDOR or SUB-VENDOR operating the watercraft shall carry watercraft liability insurance in the amount of \$1,000,000 combined single limit for bodily injury and property damage, including protection & indemnity where applicable. Coverage shall apply to owned, non-owned, and hired watercraft.

- b. If the maritime laws apply to any work to be performed by the VENDOR under the terms of the agreement, the following coverage shall be provided:
    - i. United States Longshoremen & Harbor workers
    - ii. Maritime Coverage - Jones Act
  - c. The policy shall provide thirty (30) days notice of cancellation to the County.
  - d. The VENDOR or SUB-VENDOR shall name the County as an additional insured.
3. Aircraft / Unmanned Aircraft Systems Liability
- a. When necessary to use an aircraft for the performance of the VENDOR's services under the terms of this Contract, either by the VENDOR or SUB-VENDOR, the VENDOR or SUB-VENDOR operating the aircraft shall carry aircraft liability insurance in the amount of \$1,000,000 for un-manned aircraft systems and \$5,000,000 for manned aircraft systems combined single limit for bodily injury and property damage, including passenger liability except for unmanned aircraft, and including personal injury coverage.
  - b. Coverage shall apply to owned, non-owned, and hired aircraft.
  - c. The policy shall provide thirty (30) days notice of cancellation to the County.
  - d. The VENDOR or SUB-VENDOR shall name the County as an additional insured.
4. Builder's Risk
- a. Should the VENDOR'S services include renovation or new construction, a builder's risk policy insuring the full amount on a replacement cost basis, including soft costs, of the renovation or new construction is required and a Certificate of Insurance evidencing the full limit shall be provided to the County.
  - b. The builders' risk shall include the County as an additional insured.
5. Installation Floater
- a. Should the VENDOR'S services include installation of equipment into real property, VENDOR shall purchase full replacement cost coverage in the form of an installation floater to cover said property until installed.
6. Pollution Liability

- a. VENDORS shall generally not be required to carry pollution liability coverage insurance.
- b. The County reserves the right to require a VENDOR to carry adequate pollution liability coverage insurance.
  - i. This determination will be assessed on a project-by-project or VENDOR-by-VENDOR basis.
  - ii. Either the Board of Commissioners or department head can make this determination.

7. Cyber Liability

- a. Should any of the VENDOR's services involve any one or more of the following services, VENDOR shall carry cyber liability in an amount not less than \$2,000,000 each claim, \$2,000,000 annual aggregate:
  - i. Payroll services;
  - ii. Employee benefits including retirement plans, health insurance and/or consulting, human resource services, third party administrators;
  - iii. Hardware, software, or other IT services;
  - iv. Legal services that include the handling, storing, or transmitting of personal identifiable information; and
  - v. Medical providers

8. Flow-Down Clause.

- a. VENDOR shall use commercially reasonable efforts to include in its SUB-VENDOR's provisions, which impose obligations on SUB-VENDORS, that are consistent with all of the obligations imposed on the VENDOR in the agreement between the County and the VENDOR. In the event that a conflict exists between the terms of the agreement between the SUB-VENDOR and VENDOR and the terms of the VENDOR and/or County agreement, the terms of agreement between the VENDOR and County shall govern and control.

D. Procedures

1. Penalty for Non-Compliance

- a. Any VENDOR who is determined to be "non-compliant in-progress" by the County's Compliance Vendor shall be given notice of their non-compliance status. The VENDOR shall have thirty (30) days, from the date of notice, to

become compliant with all applicable insurance provisions mentioned in this exhibit. In the event that the VENDOR does not become compliant within the permitted thirty (30) days, the relationship between the VENDOR and the County may be terminated.

2. Appeal Process

- a. Should any VENDOR be determined to be “non-compliant” by the County’s Compliance Vendor the VENDOR and/or department head may initiate an appeal of that determination on a form provided by a representative from the Auditor’s office. The VENDOR’s appeal will be brought before an Advisory Committee to the Board of Commissioners (hereinafter “the BOC”) to determine whether an exemption should be made on behalf of the VENDOR. The Advisory Committee shall provide a recommendation to the BOC and the BOC shall approve or deny the Advisory Committee’s recommendation. The Advisory Committee shall consist of the County’s insurance consultant, the Safety and Risk Manager for the County, the appropriate department head or representative from the appropriate department, a representative from the Auditor’s office, and a representative of the County’s legal counsel.
- b. Should a department head and/or an elected official identify a VENDOR to be an appropriate candidate to submit an appeal, prior to being determined to be “non-compliant finalized” by the County’s Compliance Vendor, they may do so immediately upon identifying the particular VENDOR. This appeal will be brought before the Advisory Committee established above in section D(2)(a). The Advisory Committee will send their recommendation to the BOC and the BOC shall approve or deny the Advisory Committee’s recommendation.

3. All contracts shall provide the Certificates of Insurance to the County’s Compliance Vendor. The department head or elected official shall provide the Certificate of Insurance contact information form to the Hamilton County Auditor’s Office at [insurance.coi@hamiltoncounty.in.gov](mailto:insurance.coi@hamiltoncounty.in.gov) upon approval of the contract/agreement between the VENDOR and the County. The Certificates shall also name the following boards and committees as additional insureds if the contract applies to the property or activities of the following:

- a. The Hamilton County Sheriff;

- b. The Hamilton County Parks and Recreation;
  - c. The Hamilton County Health Department;
  - d. The Hamilton County Airport Authority;
  - e. The Hamilton County Solid Waste Board;
  - f. The Hamilton County Public Building Corporation (if applicable);
  - g. The Hamilton County 4-H Department; and/or
  - h. Hamilton County Drainage Board.
4. The Hamilton County Auditor's Office shall enter the VENDOR information into the County's insurance compliance system ("the Compliance System"). The Compliance System shall be constructed, operated, and maintained by the County's Compliance Vendor. Upon entering the VENDOR's information into the Compliance System, the Compliance Vendor shall do the following:
- a. Confirm with the agent and/or insurance company shown on the Certificate of Insurance, that the insurance set out in said Certificate is in full force and effect and includes the minimum coverages set out herein.
5. In the event the Certificate of Insurance does not reflect insurance, which are presently in force, the Compliance Vendor shall immediately notify the Hamilton County Auditor, who shall notify the department head and/or elected official. All purchases and/or services from the vendor shall be suspended until the Certificate of Insurance is brought into compliance pursuant to Section B (13) Penalty for Non-Compliance mentioned above. See rhetorical paragraph "Section B (13) Penalty for Non-Compliance."
6. In the event a VENDOR's information becomes invalid, expires, or does not meet the requirements of this Policy, the Compliance Vendor shall immediately notify, by email, the Hamilton County Auditor at [insurance.coi@hamiltoncounty.in.gov](mailto:insurance.coi@hamiltoncounty.in.gov). The

Compliance Vendor shall inform the VENDOR that the Certificate does not comply with County requirements and needs to be remedied within ten (10) business days of this notice. In the event, the Certificate is not provided in compliance with this Policy, after three (3) notifications, pursuant to Section B(13) the VENDOR will be deemed as “non-compliant finalized” and the contract with the VENDOR may be terminated after ten (10) business days and the County may prohibit subsequent contracts or agreements with the vendor. See rhetorical paragraph “Section B (13) Penalty for Non-Compliance.” If the contract between the County and the VENDOR is to be terminated by the BOC, the Auditor’s office shall provide a written notice to the appropriate department head five (5) business days prior to the contract being terminated.

7. In the event the Certificate of Insurance is not authentic or is not enforceable, a ten (10) days notice will be sent to the appropriate department head who shall suspend all activities and payments to the VENDOR until the Certificate of Insurance is authentic or enforceable.

E. Training

1. The terms of this policy shall be included in the Hamilton County Employee Handbook.
2. The Human Resource Department shall include training for all Department Heads and Elected Officials.
3. Mandatory Training shall be scheduled and conducted for all Hamilton County Employees who administer contracts described in this policy.
4. Any Department Head, Elected Official, or other employee who is responsible for any acts listed herein may be subject to disciplinary action as determined by the Commissioners.

This Amended Policy shall be effective retroactive to 1<sup>st</sup> day of December, 2020.

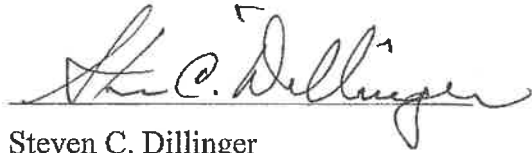
Approved this 21st day of December, 2020.

BOARD OF COMMISSIONERS  
OF HAMILTON COUNTY

\_\_\_\_\_  
Mark E. Hejrbrandt

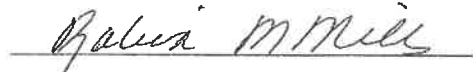


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Christine Altman



\_\_\_\_\_  
Steven C. Dillinger

ATTEST:



\_\_\_\_\_  
Robin Mills, Auditor

### **SPECIAL INSTRUCTIONS**

Although the Special Instructions that follow are listed separately from the body of the contract, they are to be considered as instruction given "in addition to" those found in the Specifications portion of the contract. The intent of these Special Instructions, together with the Standard Specifications and Construction Drawings, is to provide for the complete construction of the project. Therefore, the bidder is advised to read and thoroughly understand the requirements found in this section and the Specifications section. Any further unanswered questions or discrepancies should be addressed to the Hamilton County Surveyor's Office for a determination.

### **IOSHA REGULATIONS**

IOSHA Regulations 29 C.F.R. 1926, Safety and Health Regulations for Construction, are hereby incorporated with the contract documents.

### **STANDARD SPECIFICATIONS**

The following standard specifications shall not apply to this project:

1. Clearing on Page 15
2. Inlets, Catch Basins, Breathers, Manholes, Junction Boxes on Page 17
3. Concrete, pages 17 and 18

### **PROJECT DESCRIPTION**

The reconstruction project includes dredging accumulated sediment from a portion of the Emily Vestal Regulated Drain from approximately 450-feet south of Midland Lane to the northern end of the drain; the entirety of the Willow Lake Relocation Arm of the Emily Vestal Drain which ends at 171<sup>st</sup> Street; and a portion of the Arm 1 Arm of the Emily Vestal Regulated Drain from the main ditch approximately 1,518-feet upstream of the main ditch. The project includes clearing, bank shaping where needed, tile drain extensions for existing tile drains, surface water drains as needed, spreading of the dredged material, rip-rap of certain areas, four rip-rap rock chutes, seeding of the open ditch, seeding of a filter strip on the operational side, and general seeding of other disturbed areas.

### **AS BUILT DRAWINGS**

As-built drawings (record drawings) for this project shall be prepared by the Hamilton County Surveyor's Office. The contractor shall call Mr. Jerry Liston at the Surveyor's Office at 317-776-8495 when the project is ready for the as-built



survey. Grade checks will be performed by Hamilton County Surveyor's Office as needed to ensure work is on grade per the Construction Drawings.

**BENCHMARKS**

Benchmarks shall be provided to the contractor by the Hamilton County Surveyor's Office at the time of construction staking. Please contact Mr. Jerry Liston at 317-776-8495 for benchmark information.

**BID AWARD**

THE HAMILTON COUNTY DRAINAGE BOARD RESERVES THE RIGHT TO HOLD THE BIDS FOR THIS PROJECT FOR UP TO ONE HUNDRED TWENTY (120) DAYS AFTER THE BIDS ARE OPENED.

**BID FORM**

1. All items listed on the Bid Form shall be bid as Furnished and Installed.
2. Contractor must submit the Bid Forms included with the Bid Packet with his Bid. Alternate Bid Forms will not be accepted.

**BRIDGE CLEAN OUT**

1. The contractor is to remove the buildup of sedimentation under Midland Lane and Kipford Street per Keynote B of the Construction Drawings.
2. This Work will be conducted in the presence of the Inspector.
3. NOTE: NO MECHANIZED EQUIPMENT SHALL BE STAGED, STORED OR OPERATED IN FLOWLINE OF DITCH.
  - a. As such, it is expected that the Work will be completed using a hydro-excavation process. However, the Contractor may use other appropriate methods.
  - b. Contractor shall use measures at the downstream limit of the work to limit sediment disturbed by the hydro-excavation method from moving downstream,
4. The cost for this work shall be included in Line Item B-11.

**CLEAN UP**

The contractor shall, at all times, keep the premises free from accumulations of waste material or rubbish caused by his employees or work. At the completion of the work, Contractor shall remove all excess material from the site including, but not limited to, stone, silt fence, construction materials, rubbish, tools, equipment and surplus material from the project limits and shall leave the work area in a neat and presentable condition.

## CLEARING

### 1. GENERAL

- a. In the area adjacent to the ditch bank on the operational side, stumps, brush, logs, wire, rocks, or other debris more than 1/3 cubic foot in volume shall be removed from the limit of work and legally disposed of off-site.
- b. All items scheduled for demolition, items to be removed, demolished structures, asphalt materials, and concrete materials shall be removed from the limit of the work and legally disposed of offsite by the Contractor.
- c. Contractor shall endeavor to protect from damage the existing trees within the project limits that are not directly affected by the Work.
- d. Contractor shall coordinate any branch/limb trimming with the HCSO Inspector before performing any branch/limb trimming.
- e. Clearing of trees and vegetation with trunk thickness greater than 3-inches for the project was completed under a separate contract.
  - i. The trunks were cut 3-feet above grade and left in-place.
  - ii. These trunks shall be removed with this project per Section 5(d) below.
- f. Any further/additional clearing of trees or woody vegetation, other than stumps, deemed by the Contractor to be necessary for the Work shall be reviewed and approved by the Inspector.
- g. Any additional tree clearing shall comply with Section 2 below.
- h. All drive and farm crossing removal shall be coordinated with the property owner with notice of the removal provided a minimum of 48-hour hours before the removal. Removal shall be done as work progresses such that the drive or crossing remains in place for as long as possible. Reconstruction of the drive or crossing shall occur as soon as possible after the Work in the vicinity of the drive or crossing is complete.
- i. Pavement removal shall occur as the work progresses such that the pavement remains in place for as long as possible.
- j. Contractor is to take every precaution to protect the mailboxes within the construction area. If a mailbox is damaged or removed it will be at the contractor's

expense to replace it with the same type and quality as the original. Mail delivery must be maintained to the residences affected through the duration of the project. Mailboxes affected by the work shall be temporarily relocated until such time as they can be reinstalled. They shall be securely mounted in a temporary manner. Mailboxes affected by the work shall be reset to the original locations at the completion of the work. All mailbox assemblies that are to be removed and reset shall be carefully handled. Any such materials damaged by the Contractor or allowed to be damaged while in storage shall be repaired or replaced by the Contractor at no additional cost. Coordinate with the local postmaster for installation requirements.

- k. Existing Traffic Control Signage affected by the project shall be temporarily relocated but mounted in conformance with the MUTCD such that the signage is still effective for the public.
- l. Contractor may chip the woody clearing debris and spread the chipped material such that the chipped material is beneath spoil material as it is spread. The maximum depth of chipped material shall be 1-inch Contractor shall denote which method will be used on the bid form.
- m. There are several existing improvements within the limits of the Work that need to be removed. These improvements include, but are not limited to, the items listed below. These items are to be removed and not replaced. The Contractor shall confirm with the property owner if the items are to be salvaged and provided to the property owners for their use. If items are identified to be salvaged to the property owner, all care shall be taken to limit the damage to the material as it is removed. Items to be removed shall be removed from the limit of work and legally disposed.
  - i. Fencing within the existing regulated drain easement at Midland Lane.
    - 1. The cost for this work shall be included in Line Item B-3.
  - ii. Fencing within the existing regulated drain easement at Kippford Street.
    - 1. The cost for this work shall be included in Line Item B-3.
  - iii. Existing rip-rap that cannot be salvaged and re-used.

- 1. The cost for this disposal shall be included in Line Item B-1.
  - iv. Stumps remaining from previous clearing work.
    - 1. The cost for this disposal shall be included in Line Item B-1.
  - v. Trees not cleared during previous clearing work that are deemed by the Contractor to be necessary for the work and approved by the Inspector for removal.
    - 1. The cost for this disposal shall be included in Line Item B-1.
- n. There are several existing improvements within the limits of the Work that need to be removed and replaced/reconnected or salvaged and re-used if possible. These improvements include, but are not limited to, the following:
  - i. 24" RCP End Section at Line "A" Station 38+33 referenced by Keynote M on Sheet 4 of the Construction Drawings.
  - ii. 15" RCP End Section at Line "A" Station 41+66 referenced by Keynote N on Sheet 4 of the Construction Drawings.
  - iii. Existing Farm Crossings at the following locations
    - 1. Line "A" Station 52+51.11
    - 2. Line "A" Station 55+70.32
    - 3. Line "Arm 1" Station 150+92.33
    - 4. Line "Arm 1" Station 142+92.76
    - 5. Line "Arm 1" Station 153+98.00
    - 6. Line "Arm 1" Station 146+91.76
  - iv. Gabion Baskets on off-bank between Line "A" Stations 41+50 and 41+85.
  - v. Rip-Rap at various locations referenced by Keynote A.
  - vi. Asphalt drive at Line "Arm 1" Station 146+91.76

2. TREE REMOVAL

- a. The right is reserved for landowners, with the approval of the County Surveyor, to mark any trees to be saved.
- b. The contractor shall meet with each property owner prior to starting any clearing activity. During that meeting, the contractor shall discuss marketable timber and the salvage of any timber material for other uses such as firewood. The property owner has first rights to any marketable trees within the

project limits. The property owner must relinquish those rights to the contractor in writing before the contractor could sell any marketable timber.

- c. In the event that the property owner identifies a tree that is to be saved as allowed in the General Conditions, the Contractor shall make all reasonable efforts to protect and preserve the tree from damage.
- d. In the event that the property owner identifies a tree or trees that are marketable and that such a tree or trees need to be removed by a timber harvesting company, the contractor shall provide notice to the property owner that such work must be completed before the deadlines associated with this project or such marketable tree(s) will be removed by this contract.
- e. Any tree clearing for this project shall be reviewed by and approved by the HCSO Inspector before performing any clearing operations.
- f. Landowner may request clearing items to be stacked or piled rather than disposed of per above. Landowners that request such cleared material for firewood or other uses shall submit a written request to the County Surveyor for approval. Landowner shall then sign a waiver form and submit the form to the Contractor. Contractor shall then submit the waiver form to the Inspector. Such material requested by the property owner shall not be processed (to include, but not be limited to: cutting limbs and branches to certain lengths, splitting, moving material beyond the limit of the easement) beyond that required for the project. The Contractor shall deliver such material to just outside the limits of the easement as Work progresses.
- g. If trees are to be cleared before October 1, 2024, prior to any felling or pruning, all trees that are 3" in diameter and greater shall be confirmed to not be actively used as a bat roost.
  - i. Such confirmation may require a field visit by a qualified individual that shall be coordinated by the Surveyor.
  - ii. Trees identified by the qualified individual to remain shall not be removed or affected by the project.

### 3. BURNING

- a. Burning is not allowed on this project.

#### 4. BURYING

- a. Burying of trash (items that would otherwise be considered trash such as soda cans or bottles; packaging materials; waste construction items; paint cans; empty containers of oil grease or other fluid material, etc.), removed asphalt pavement materials, metallic items or materials (including, but not limited to, old CMP piping or breathers) or plastic items or materials is not allowed under any circumstances within the project limits.
- b. Such materials must be removed and hauled offsite. The cost for this disposal shall be included in the Line Item B-1.

#### 5. TREE AND STUMP REMOVAL

- a. Trees identified for removal and trunks remaining from previous clearing operations that are not within the limits of the proposed top-of-bank:
  - i. Shall be cut at grade and the stump completely ground to a depth that severs the roots from the main root mass or to a depth of 10-inches, whichever is greater.
  - ii. Stumps shall then be treated with approved brush killer having a dye additive such as Dow Tordon 101r.
  - iii. All holes resulting from the stump grinding work shall be backfilled with clean, pulverized topsoil to the level of the adjoining grade.
  - iv. No such holes will be allowed to remain outside of the working hours of the day the stump is removed (the hole shall be backfilled the same day the stump is removed).
- b. Trees identified for removal and trunks remaining from previous clearing operations that are within the limits of the proposed top-of-bank:
  - i. Shall be removed in their entirety.
  - ii. The stump shall be removed in its entirety and the hole resulting from the removal shall be backfilled with clean, pulverized topsoil to the level of the adjoining grade and compacted to limit settlement.
  - iii. No such holes will be allowed to remain outside of the working hours of the day the stump is removed (the hole shall be backfilled the same day the stump is removed).

## 6. FENCING REMOVAL

- a. Fencing identified for removal by Keynote G on the Construction Drawings shall be removed from within the limits of the existing easement and not replaced.
- b. The lengths noted in the bid forms are approximate.
- c. Removal of fencing required for the work shall be coordinated with the property owner with notice of the removal provided a minimum of 48-hour hours before the removal.
- d. The Contractor shall confirm with the property owner if the items are to be salvaged and provided to the property owners for their use.
- e. If items are identified to be salvaged to the property owner, all care shall be taken to limit the damage to the material as it is removed.
- f. Contractor shall only remove full sections of fence.
- g. Removal shall be done as work progresses such that the fence remains in place for as long as possible.

## CONSTRUCTION ENTRANCE

1. Each main point of access to the Work areas from the public right-of-way selected by the Contractor requires the installation of a stable construction entrance.
2. The Construction Entrance indicated in the Construction Drawings is approximate.
  - a. The final location of the construction entrance shall be proposed by the Contractor with acceptance by the Inspector.
3. Entrances shall conform to 1 on Sheet 16 of the Construction Drawings.
4. Contractor shall obtain any necessary permits for construction entrances.
5. Removal
  - a. The access drive and any culverts shall be completely removed after final acceptance of the project by the Hamilton County Surveyor's Office.
  - b. The area shall be restored to grade that existed prior to the installation of the construction entrance.
  - c. The area shall be seeded.
6. The cost for this work shall be included in Line Item B-2.

**CONSTRUCTION INSPECTION**

Mr. Jerry Liston of the Hamilton County Surveyor's Office shall do the construction inspection. He can be reached at 317-776-8495.

**CONSTRUCTION STAKING**

- 1. Construction staking will be performed by the Hamilton County Surveyor's Office. Please contact Mr. Brian Rayl at 317-776-8495 to coordinate this work.
- 2. Electronic Files
  - a. CAD or other electronic design files are not available for this project.

**CONTRACTORS CLAIM DATES**

The claims will be submitted by 8:30 AM to the Hamilton County Surveyor's Office Administrative Assistant on or before the following dates.

June 28, 2024	August 30, 2024	October 25, 2024
July 12, 2024	September 13, 2024	November 8, 2024
July 26, 2024	September 27, 2024	November 17, 2024
August 9, 2024	October 11, 2024	December 19, 2024

**COORDINATION WITH PROPERTY OWNERS**

- 1. Contractor shall provide a minimum of 48-hours to each property Owner prior to work starting within the regulated drain easement on their property.
- 2. All drive removal shall be coordinated with the property owner with notice of the removal provided a minimum of 48-hour hours before the removal.
- 3. All open ditch crossing removal for replacement or restriction of access shall be coordinated with the property owner. Notice of such closure or restriction shall be provided to the affected property owners 24 hours in advance of the closure or access restriction.
- 4. If the Contractor makes arrangements with property owners to store and/or stage material and equipment outside the limits of the Regulated Drain Easement, the Contractor shall obtain formal approval from the property owner for such use of the property prior to mobilization. Contractor shall inspect and document the condition of the property with the property owner prior to mobilization. Contractor shall be responsible to restore the portion of the property



used for construction equipment access, staging and storage to those conditions that existed at the time of inspection with the property owner.

#### **DEWATERING**

1. The Contractor shall provide and maintain adequate dewatering equipment to remove and dispose of all surface and ground water entering excavations, trenches, or other parts of the work. Each excavation shall be kept dry during subgrade preparation and continually thereafter until the structure to be built, or tile to be installed therein is completed to the extent that no damage from hydrostatic pressure, flotation, or other cause will result.
2. Surface water shall be diverted or otherwise prevented from entering excavated areas or trenches to the greatest extent practicable without causing damage to adjacent property.
3. The Contractor will be held responsible for the condition of any tile or conduit which he may use for drainage purposes, and all such tiles or conduits shall be left clean and free of sediment.
4. All necessary dewatering methods for site excavations shall be considered incidental to construction and the cost thereof shall be included in other costs of the project.

#### **DRAINAGE EASEMENTS**

All work shall be performed within the existing public road right of way or existing easements. The statutory easement is 75-feet in width measured from each top of bank.

#### **EARTHWORK**

1. General Notes
  - a. The "Excavating" Specification on Page 16 and the "Excavated Material" specification on Pages 16 and 17 of this Project Manual apply to this project. The information outlined below reinforces and supplements the information presented in those Specifications.
  - b. The work shall consist of all earthwork operations, including but not limited to channel dredging/excavation of the existing open ditch, tile drain extension installation, surface water pipe installation, regulated drain outlet installation, rip-rap installation, and placement of soil material generated from all such installations and construction as required by the Construction Drawings
  - c. The excavation shall be at the gradient shown and to the depth shown on the Construction Drawings as

provided by the Surveyor and shall be made on a regular uniform grade as shown on the Construction Drawings or as directed by the Surveyor.

- d. All excavated soil material shall be placed as shown on the construction drawings and such that water does not pond or pool and such that the existing flow of water is not blocked or impeded.
- e. Excavations shall comply with OSHA Construction Industry Standards (29CFR Part 1926) Subpart P; Excavations, Trenching and Shoring. All excavation shall be completed and maintained in a safe and stable condition throughout.
- f. IOSHA Regulations 29 C.F.R. 1926, Subpart B are hereby incorporated with the contract documents. The Contractor shall incorporate the trench safety requirements as set out in the above-mentioned regulations and such material, equipment, etc. required, shall be included in the cost of culvert and tile installation.
- g. Landowners may authorize bucket spread or spoil piles of excavated material. Contractor shall obtain written consent from the landowner for such work and provide such written consent to the Inspector.
- h. In instances where the Construction Drawings require spreading of spoil that was stockpiled or left unspread by previous work, the spoil shall be spread the same as if it were generated from the earthwork associated with this project

## 2. Intent

- a. The intent of this project is to place all excavated soil material within the project limits and in accordance with HCSO Detail OD-6.
- b. Therefore, it may be necessary to move soil material from one area of the project to another area.
- c. There shall be no individual payment for such movement of soil material. The cost for moving material in this manner shall be included in the cost of other items.

## 3. Preparation/Topsoil Salvage And Preservation

- a. All earthwork operations shall endeavor to preserve the existing soil layer configuration to the greatest extent possible.
- b. As work progresses, the earthwork operations shall be phased such that the existing topsoil within areas where dredged material will be placed shall first be removed from the entire area and stockpiled separately

from general excavation material and at a location where it will not be affected other earthwork.

- c. Under no circumstances shall the topsoil be intermixed with general excavation material.
- d. There shall be no individual payment for this work. The cost thereof shall be included in the costs of the other items of the contract.

#### 4. Open Ditch

##### a. General

- i. The excavation shall be at the gradient shown and to the depth shown on the Construction Drawings as provided by the Surveyor and shall be made on a regular uniform grade as shown on the Construction Drawings or as directed by the Surveyor.
- ii. All cuts must be at or below grade, not to exceed three tenths of a foot (0.3) below grade.
- iii. NO MECHANIZED EQUIPMENT SHALL BE STAGED, STORED OR OPERATED IN FLOWLINE OF DITCH.

##### b. Ditch Dredging

- i. The existing open ditch shall be dredged in accordance with the following details on the noted sheets of the Construction Drawings.

1. Detail 1 on Sheet 18 between Line "A" Stations 22+75 and 52+13, Line "A" Stations 52+89 and 55+27, and Line "A" Stations 140+72 and 149+89.

a. Excavation shall start at the off-bank toe-of-slope.

2. Detail 2 on Sheet 18 between Line "A" Stations 56+70 and 91+78, Line "A" Stations 96+44 and 126+50, Line "Arm 1" Stations 141+33 and 156+50, and Line "Arm 1" rock chutes.

a. Excavation shall start at the off-bank toe-of-slope.

b. Sand is present starting at Line "A" Station 62+85.

c. When sand material is encountered, notify the Inspector immediately and

- refer to Detail 8 on Sheet 17 of the Construction Drawings.
3. Detail 3 on Sheet 18 between Line "B" Stations 56+14 and 56+50.
  4. Detail 4 on Sheet 18 between Line "C" Stations 91+78 and 93+44, Line "C" Stations 94+06 and 96+44, Albert Brock Arm rock chute, and Cherry Tree Farms Arm rock chute.
    - a. Sand is present between Line "C" Stations 91+78 and 96+44.
    - b. When sand material is encountered, notify the Inspector immediately and refer to Detail 8 on Sheet 17 of the Construction Drawings
  5. Detail 7 on Sheet 18 between Line "A" Stations 126+50 and 136+96.
    - a. Sand is present between the stations noted.
    - b. When sand material is encountered, notify the Inspector immediately and refer to Detail 8 on Sheet 17 of the Construction Drawings.
    - c. Contractor shall note that excavation starts at a point that is offset two-feet from the off-bank toe-of-slope.
    - d. In this section, the side slopes of the top surface of the open ditch shall be 1.5:1.
    - e. Dress bank as directed by the Inspector if daylight is below the existing top-of-bank.
  6. Detail 8 on Sheet 18 between Line "A" Stations 136+96 and 140+38.
    - a. Sand is present between the stations noted.
    - b. When sand material is encountered, notify the Inspector immediately and refer to Detail 8 on Sheet 17 of the Construction Drawings.
    - c. Contractor shall note that excavation starts at a point that is offset two-feet from the off-bank toe-of-slope.

- d. Below the limits of the sand, the side slopes of the top surface of the open ditch shall be 1.5:1.
- e. On the operational side, a "shelf" of in-situ soil material shall be created that is 1-foot thick above the top of the sand.
- f. Above the shelf, the side slope of the open ditch will be 2:1 to daylight with bank shaping if needed.

7. Detail 9 on Sheet 18 between Line "A" Stations 140+38 and 140+52.

- a. Excavation shall start at the off-bank toe-of-slope.
  - ii. In the event that the proposed flowline elevation may be achieved with the bottom width and side slopes specified within the existing toes-of-slope or below the existing tops-of-bank, the existing bank of the operational side shall still be shaped to be a smooth 2:1 slope.
  - iii. Soil shall be removed using a "one-step" process.
  - iv. The bank shall be left as nearly smooth and even as possible to secure the same in a good and workmanlike manner. To accomplish this, the Contractor shall use a smooth-edged ditch bucket.
  - v. Contractor shall fill/repair any existing bank erosion or existing washes. Rip-rap may be used if approved by the Inspector.
  - vi. The cost for this work shall be included in Line Items B-12, B-13, B-14, B-15, B-16, B-17, and B-18, respectively.

5. Culverts, Tile Drain Extension, Surface Water Pipe, End Sections.

- a. The width of the trench or excavation shall be no wider than that specified in the appropriate details on the Construction Drawings unless soil conditions warrant a wider trench or excavation for stability. Contractor should note the depth of the tile or culvert as per profile.
- b. An excavator or backhoe of sufficient size and power must be used for trenching.

- c. The job shall be done under safe working conditions. If conditions exist that necessitate the use of suitable sheeting, planking, or bracing on the sides of excavations or trenches, it shall be required. The Contractor shall receive no extra compensation for the lumber sheeting, or materials, or labor used for the supporting of the sides of any excavation or trenches unless the same is left in the trench by order of the Surveyor.
- d. Work shall endeavor to minimize the amount of open trench at any time.
- e. The cost for this work shall be included in Line Items B-6, B-7, B-19, B-20, B-21, B-22, B-23, B-24, B-26, B-27, B-28, and B-29.

#### 6. 161<sup>st</sup> Street Culvert

- a. Per Keynote I on the Construction Drawings, the existing flowline transitions upstream and downstream shall be removed as the open ditch is dredged.
  - i. Any existing rip-rap may be salvaged and re-used elsewhere on the project.
- b. Per Keynote K on the Construction Drawings, a 1-foot sump shall be maintained through the existing structure. The constructed flowline approaching the structure shall be 1-foot above the existing flowline within the limits of the structure.
- c. Per Keynote P on the Construction Drawings, the existing wildlife shelf on each side of, and within, the existing structure shall be maintained. The proposed top-of-bank shall be constructed to the inside edge of the existing wildlife shelf; not to the inside face of the existing structure. Refer to Detail 3 on Sheet 20 of the Construction Drawings.
- d. The work noted in this section shall be considered incidental to construction and the cost thereof shall be included in other costs of the project.

#### 7. Rip-Rap, Construction Entrance, Farm Crossing Installation

- a. The width of the area to install and key in the material shall be no wider than that specified in the details on the Construction Drawings.
  - vii. Dredging operation shall consider the over excavation necessary for installation of rip-rap.

- b. The cost for this work shall be included in Line Items B-2, B-25, B-30, B-31, and B-32.

#### 8. Placement of Excavated Material

##### a. Mounded

- i. All excavated soil material shall be placed as shown on Sheet 26 of Construction Drawings or at a location acceptable to the Hamilton County inspector in accordance with the General Provisions and HCSO Detail OD-6 (Detail 4 on Sheet 16 of the Construction Drawings).
- ii. The general excavation material shall be placed to a depth that allows the topsoil to be redistributed over the stockpile area such that the overall depth of the final stockpile does not exceed 18-inches (in accordance with Hamilton County Surveyor Office Standard Detail OD-6) or other depth as shown on the Construction Drawings
- iii. General excavation material, that material excavated that is not considered topsoil, shall be spread generally in accordance with Hamilton County Surveyor Office Standard Detail OD-6, the proposed cross sections, or at the locations shown on the Construction Drawings.
- iv. Sheet 26 of the Construction Drawings, "Spoil Placement Plan", outlines the location where spoil material shall be placed.
- v. There are two areas where spoil may be placed within the limits of the regulated drain easement on the off-bank. The areas are between the following stations:
  - 1. Line "A" Stations 22+50 [Start Project] and 27+00 [Midland Lane]
  - 2. Line "A" Stations 53+16.37 and 56+75.
- vi. The cost for this work shall be included in Line Items B-12; B-13; B-14; B-15; B-16; B-17; B-18

##### b. Prohibited Areas

- i. As shown on Sheet 26, Spoil Placement Plan, of the Construction Drawings, there are areas within the project limits where spoil material may not be placed.
- ii. Soil material excavated from the existing open ditch between these stations shall be hauled to other parts of the project and spread in accordance with HCSO Detail OD-6.

- iii. There shall be no individual payment for this work. The cost thereof shall be included in the costs of the other items of the contract.
- iv. Under no circumstances shall any soil or other material be placed within the regulated drain easement on the operational side between the following stations:
  - 1. Line "A" Station 22+50 [Start Project] and 27+00 [Midland Lane].
  - 2. Line "A" Station 31+75 and 39+10.
  - 3. Line "A" Station 41+87 and 50+75.
  - 4. Line "A" Station 56+50 and 67+00.
  - 5. Line "A" Station 72+75 and 74+25.
  - 6. Line "A" Station 82+50 and 88+75.
  - 7. Line "A" Station 91+51.26 and 126+75.
- v. Under no circumstances shall any soil or other material be placed beyond the limits of the regulated drain easement on the operational side between the following stations:
  - 1. Line "A" Station 22+50 [Start Project] and Station 39+80 [Kippford Street]
  - 2. Line "A" Station 42+23.04 and 52+75.
  - 3. Line "A" Station 56+50 and 67+00.
  - 4. Line "A" Station 72+75 and 75+25.
  - 5. Line "A" Station 81+40 and 149+92.66 [End Project]
- vi. Under no circumstances shall any soil or other material be placed within the limits of the regulated drain easement or beyond the limits of the regulated drain easement on the off-bank unless approved by the Inspector.
- c. Soil Spreading Beyond Limit of Statutory Easement
  - i. As allowed by IC 36-9-27-33, excavated soil resulting from the construction, reconstruction, or maintenance of an open drain may extend beyond the limits of the statutory easement.
  - ii. The areas specifically identified for such spoil placement are shown on Sheet 26 of the Construction Drawings and between the following stations:
    - 1. Line "A" Stations 40+11 and 42+23.04 on the operational side.
    - 2. Line "A" Stations 52+75 and 62+00 on the operational side.
    - 3. Line "A" Stations 67+00 and 72+75 on the operational side.



4. Line "A" Stations 75+25 and 81+40 on the operational side.
- iii. For the specific areas identified on Sheet 26 of the Construction Drawings, and where such placement is deemed necessary as the work progresses, confirmation for the following shall be obtained in writing from the Inspector before the material is placed:
  1. The County Surveyor has established that that the extension is necessary.
  2. The extension has been provided for in the Engineer's Report on the construction, reconstruction, or maintenance.
  3. The county surveyor has provided oral or written notice of the entry on the land to the property owner of record, and in the case of a municipality, to the executive of that municipality.
    - a. Said notice shall state the purpose for the entry.
- iv. When spreading soil beyond the limit of the statutory easement, Contractor shall, to the greatest extent possible, use due care to avoid damage to crops, fences, buildings, and other structures outside of the limit of the easement, and to crops and approved structures inside the right-of-way.

#### 9. Topsoil Restoration

- a. Upon the completion of General Excavation, Mass Earthwork and Tile Installation, the stockpiled topsoil shall be evenly redistributed over the entire area disturbed by the Phase 2 work to achieve the grades outlined on the Construction Drawings.
- b. Topsoil shall be redistributed over the disturbed areas after General Excavation/Mass Earthwork has been completed.
- c. After the placement of general excavation material, the topsoil shall be re-spread over the disturbed area as close to the existing thickness as possible.
- d. Topsoil spreading shall not be conducted when the ground or the topsoil is frozen, excessively wet or otherwise in a condition that is detrimental to uniform spreading operations.
- e. Surfaces that are to receive topsoil shall be lightly scarified prior to the topsoil spreading operation.

10. Finish Grading

- a. Finish Grading shall conform to the "Final Grading" Special Instruction.
- b. There shall be no individual payment for this work. The cost thereof shall be included in the costs of the other items of the contract.

**EXISTING CONDITIONS**

1. The CONTRACTOR shall verify the elevations and measurements of all points where new construction is to match existing conditions prior to the commencement of any construction activities.
2. No direct payment shall be made for this work but the cost thereof shall be included in the costs of the other items of the contract.

**EXISTING MONUMENTS**

1. Contractor shall protect any lot corner monumentation evident within the project limits.
2. In the event that a lot corner monument will be affected by the work, contractor shall notify inspector immediately. Contractor shall not remove or otherwise affect the monument until the Hamilton County Surveyor's Office surveys/locates the monument so that it may be reset after the work is completed.
3. After the monument has been located, work in the area may continue. The monuments will be reset by the Hamilton County Surveyor's Office after the work is complete. The work will be performed by Brian Rayl at 317-776-8495.

**EXISTING REGULATED DRAIN**

1. The existing outlets of the Cherry Tree Farms Arm, the Albert Brock Noblesville Relocation Arm, and the Arm 1 Arm will be reconstructed as rock chutes as shown on Details 1, 2, and 3 (respectively) on Sheet 19 of the Construction Drawings.
2. The cross section of the Arm 1 rock chute shall be in accordance with Detail 2 on Sheet 18 of the Construction Drawings.
3. Rip-Rap shall be placed in accordance with Detail 1 on Sheet 17 of the Construction Drawings for the Arm 1 Arm rock chute.
4. The cross sections of the Cherry Tree Farms Arm and Albert Brock Arm rock chutes shall be in accordance with Detail 4 on Sheet 18 of the Construction Drawings.

5. Rip-Rap shall be placed in accordance with Detail 4 on Sheet 17 of the Construction Drawings for the Cherry Tree Farms Arm and Albert Brock Arm rock chutes.
6. The cost for this work shall be included in Line Item B-30.

#### **FARM CROSSING**

##### 1. General

- a. The Inspector shall work with the property owner for a final location which will be field staked by the Hamilton County Surveyor's Office.
  - b. Each crossing shall conform to HCSO Detail C-2 (Detail 6 on Sheet 16 of the Construction Drawings).
  - c. Each crossing pipe shall be properly bedded per manufacturers recommendations.
  - d. Final backfill shall be compacted granular backfill. Refer to "Tile, Culverts, Fittings Installation And Backfill" Special Instruction.
2. The following farm crossings shall be installed as part of this project:

- a. Station 153+98 of Line "Arm 1" per Detail 6 on Sheet 21 of the Construction Drawings.
  - i. Culvert: 40-LF of 54" CMP with Granular Backfill
    1. The cost for this work shall be included in Line Item B-19.
  - ii. Crossing: 16-foot wide driving surface consisting of 12-inch depth #2 Stone per Detail 3 on Sheet 25 of the Construction Drawings at the length indicated on Detail 6 on Sheet 21 of the Construction Drawings.
    1. The cost for this work shall be included in Line Item B-25.
- b. Station 150+92 of Line "Arm 1" per Detail 5 on Sheet 21 of the Construction Drawings.
  - i. Culvert: 40-LF of 54" CMP with Granular Backfill
    1. The cost for this work shall be included in Line Item B-20.
  - ii. Crossing: 16-foot wide driving surface consisting of 12-inch depth #2 Stone per Detail 3 on Sheet 25 of the Construction Drawings at the length indicated on Detail 5 on Sheet 21 of the Construction Drawings.
    1. The cost for this work shall be included in Line Item B-25.
- c. Station 146+92 of Line "Arm 1" per Detail 4 on Sheet 21 of the Construction Drawings.
  - i. Culvert: 40-LF of 60" CMP with Granular Backfill

1. The cost for this work shall be included in Line Item B-21.
- ii. Crossing: The driving surface of this crossing is an existing asphalt drive.
  1. The asphalt drive shall be removed and repaired as needed to install the proposed culvert in accordance with HCSO Detail M-1 (Detail 2 on Sheet 25 of the Construction Drawings).
  2. The asphalt repair is generally shown on Detail 4 on Sheet 21 of the Construction Drawings.
  3. The crossing includes earth shoulders on each side of the drive patch per Detail 3 on Sheet 25 of the Construction Drawings
  4. The cost for this work shall be included in Line Item B-9.
- d. Station 142+93 of Line "Arm 1" per Detail 3 on Sheet 21 of the Construction Drawings.
  - i. Culvert: 40-LF of 60" CMP with Granular Backfill
    1. The cost for this work shall be included in Line Item B-22.
  - ii. Crossing: 16-foot wide driving surface consisting of 12-inch depth #2 Stone per Detail 3 on Sheet 25 of the Construction Drawings at the length indicated on Detail 3 on Sheet 21 of the Construction Drawings.
    1. The cost for this work shall be included in Line Item B-25.
- e. Station 55+70 of Line "A" per Detail 2 on Sheet 20 of the Construction Drawings.
  - i. Culvert: 80-LF of 72" CMP with Granular Backfill
    1. The cost for this work shall be included in Line Item B-23.
  - ii. Crossing: 30-foot wide driving surface consisting of 12-inch depth #2 Stone at the length indicated on Detail 2 on Sheet 20 of the Construction Drawings.
    1. The cost for this work shall be included in Line Item B-25.
- f. Station 52+51 of Line "A" per Detail 1 on Sheet 20 of the Construction Drawings.
  - i. Culvert: 80-LF of 72" CMP with Granular Backfill
    1. The cost for this work shall be included in Line Item B-24.
  - ii. Crossing: 30-foot wide driving surface consisting of 12-inch depth #2 Stone at the length indicated

on Detail 1 on Sheet 20 of the Construction Drawings.

1. The cost for this work shall be included in Line Item B-25.

#### **FILTER STRIP**

1. Twenty (20') foot filter strips shall be installed as indicated on the Construction Drawings.
  - a. The filter strip shall be installed on the operational side of the open ditch in all instances.
2. The filter strip shall conform to the Detail for Filter Strip, OD-9 (Detail 5 on Sheet 16 of the Construction Drawings).
3. Mulched seeding of the filter strip shall be as outlined in the Seeding and Fertilizing section of the Specifications.
4. Contractor shall not be responsible for supplying or installing carsonite markers. These shall be installed by the inspector from the Hamilton County Surveyor's Office.
5. The cost for this work shall be included in Line Item B-33.

#### **FINAL GRADING**

1. Disturbed areas shall be smoothly graded.
2. All disturbed areas shall be left in a smooth manner, without ruts or surface irregularities that could contribute to concentrated surface flow or ponding water and such that maintenance equipment used to maintain the area, maintain the regulated drain, install and maintain a filter strip, and any average crop farm tractor or other farm equipment can be driven over all points of it with a reasonable degree of safety and economy.
3. No rocks, pieces of concrete, clay tiles or any other debris will be allowed to remain on the surface of the disturbed areas.
4. Use of rock screen or rake may be necessary to remove all rocks and debris prior to seed and straw placement.
5. All areas shall be restored to those elevations that existed prior to the Work and such that there is no ponding of water within the disturbed area.
6. In agricultural areas, the finished area shall be left in a smooth, tillable manner without debris including, but not limited to, brush, logs, excavated stumps or rocks 1/3 of a cubic foot or larger, that will interfere with mowing equipment, agricultural equipment or other maintenance vehicles.

7. Where the work affects an existing roadside, rear yard swale, or side yard swale, the swale shall be restored to the slopes indicated on the Construction Drawings or to the existing slopes and such that positive drainage is provided in all cases. Side slopes shall be no steeper than 4:1.
8. All spoil banks, piles, and areas shall be leveled to the satisfaction of the Inspector and the County Surveyor.
9. There shall be no individual payment for this work. The cost thereof shall be included in the costs of the other items of the contract.

#### **GEOTECHNICAL REPORT**

1. A geotechnical investigation was conducted for this project.
2. The geotechnical report is included in the Project Manual.
3. Boring logs from the Geotechnical Report are shown on Sheet 22 of the Construction Drawings.
4. The geotechnical report is provided for the benefit of the Contractor to consider the prevailing soil conditions identified in the geotechnical report as the Contractor develops their bid.
5. Contractor shall make note of the soil conditions outlined in the soil borings.
  - a. Soil conditions can vary significantly between boring locations.

#### **MAINTENANCE OF TRAFFIC**

1. General
  - a. No long-term maintenance of traffic is expected for this project. In the event that short term traffic control is required, such traffic control shall conform to this specification.
  - b. Maintenance of traffic shall be the sole responsibility of the CONTRACTOR. Contractor shall provide all necessary signage, barricades, barrels, beacons, cones, markings, changeable message boards, and personnel (including flagmen) for maintenance of traffic. Access and traffic to all businesses, residences, for all postal deliveries and all emergency traffic such as police, fire, medical, etc. within the project limits, shall be maintained at all times. A minimum of one lane of travel shall be open at all times during working hours and traffic maintained with the use of flaggers. Two-way traffic shall be maintained during non-working hours.

- c. Unless otherwise directed, or permitted, the work specified shall be arranged and prosecuted in accordance with all applicable provisions of Sections 104.04, 107, 801 of the INDOT Standard Specifications and as outlined in the INDOT Work Zone Traffic Control Guidelines.
- d. The names and telephone numbers of the CONTRACTOR'S superintendent and one other responsible employee shall be furnished at the pre-construction conference. These employees shall be on call and available at nights, weekends, or during other non-working periods to repair or replace all traffic control devices, which may become damaged or inoperative.
- e. The number, size, location and wording for all signage, barricades, cones, barrels and markings associated with Maintenance of Traffic shall conform to the requirements of the INDOT Work Zone Traffic Control Guidelines, latest edition. A written maintenance of traffic plan shall be submitted to the Inspector for review by the Engineer prior to starting construction.
- f. All maintenance of traffic measures shall be in place before work commences.
- g. There shall be no individual payment for this item. The cost for Maintenance of Traffic shall be included in the cost of other items.

2. Flaggers

- a. Should the Contractor elect to maintain traffic during the Work, a minimum of one lane of travel shall be open at all times during working hours and traffic maintained with the use of flaggers. Two-way traffic shall be maintained during non-working hours.

**MOBILIZATION/DEMobilIZATION**

There is no individual payment for this item. The cost for this item shall be included in the cost of other items.

**OPERATIONAL AREA**

- 1. The Operational Area/Operational Side is the side of the open ditch from which dredging operations shall be conducted. The Operational Side is noted on the Construction Drawings but is also summarized below.

Side (Looking Upstream)	From	To

Right	22+75 [Project Start]	56+50 [Old Rail Bed]
Left	56+50 [Old Rail Bed]	126+50 [Near Cherry Tree Meadows]
Right	126+50 [Near Cherry Tree Meadows]	149+89.37 [Project End]

**PAVEMENT, CURB, AND SIDEWALK RESTORATION**

1. General

- a. Contractor is to replace all concrete curb, concrete sidewalk, asphalt path, and driveways affected by or damaged by the work.
- b. All asphalt surfaces affected by the work and requiring replacement shall be saw cut and removed to straight lines perpendicular to the roadway, path, or driveway centerline at the limits of the replacement area prior to starting tile or culvert installation.
- c. Concrete pavement, sidewalk, and curbs with existing joints shall be sawcut at the nearest joint past the removal limits such that only full sections of these items are removed and replaced.
- d. Driveways shall be repaired to match the existing material "in kind" (i.e. asphalt drives shall be restored with asphalt).
- e. All work shall match the appearance of the existing improvements as nearly as possible.

2. Asphalt Drive Repair

- a. Asphalt driveway repair shall be per HCSO Detail M-1 (Detail 2 on Sheet 25 of the Construction Drawings).
- b. Asphalt drives shall be saw cut and removed to straight lines parallel to the trench prior to starting tile or culvert installation
- c. The cost for this work shall be included in Line Item B-9.

3. Asphalt Path

- a. Damaged asphalt path shall be repaired in accordance with the City of Noblesville standards.
- b. The cost for this work shall be included in Line Item B-4.
- c. In the event that repair/restoration of asphalt path is not required, Contractor shall not invoice the HCSO for any portion of that line item and the Contract



Price shall be reduced by 100% of the value of that line item through a Change Order.

4. Curb Repair

- a. Damaged concrete curb shall be repaired per the City of Noblesville standards.
- b. The cost for this work shall be included in Line Item B-5.
- c. In the event that repair/restoration of concrete curb is not required, Contractor shall not invoice the HCSO for any portion of that line item and the Contract Price shall be reduced by 100% of the value of that line item through a Change Order

5. Sidewalk Repair

- a. Damaged concrete sidewalk shall be repaired per the City of Noblesville standards.
- b. The cost for this work shall be included in Line Item B-8.
- c. In the event that repair/restoration of concrete sidewalk is not required, Contractor shall not invoice the HCSO for any portion of that line item and the Contract Price shall be reduced by 100% of the value of that line item through a Change Order

**PERMITS**

1. Contractor shall be responsible for obtaining all local permits necessary for this project.

**PRE-CONSTRUCTION MEETING**

1. This meeting shall take place at least seven (7) days prior to the commencement of the construction activities and no later than two (2) weeks after award of contract.
2. The scheduling and notification of such meeting shall be the responsibility of the County Surveyor's Office.
3. Those invited shall be: County Surveyor or his representative, Contractor, Project Inspector, County Highway, representative of Utilities in project area and other interested parties.

**PROJECT START DATE**

Construction may begin after the pre-construction conference.

**PROTECTION OF EXISTING FACILITIES**

On this project there are existing utility lines, structures and assemblies that are to remain in place. The CONTRACTOR shall take care that these structures are not damaged. If any of

these structures are damaged, the CONTRACTOR shall be required to repair them at his own expense.

#### 1. General

- a. The Contractor shall take the necessary steps and actions to determine the exact location of underground utilities and facilities, and shall exercise sufficient care during construction to prevent damage to said utilities and facilities.
- b. Indiana Underground Plant Protection must be contacted for underground utility locations. You must call Indiana Underground Plant Project at 811. You must call at least "two (2) full working days" in advance of working and have a representative of the utility present during the excavation over and adjacent to its facility.
- c. There shall be no individual payment for this work. The cost thereof shall be included in the costs of the other items of the contract

#### 2. Private Installations

- a. Contractor shall coordinate the location of any private installations within the easement with the property owner.
- b. Such installations include, but are not limited to: irrigation lines, invisible dog fences and underground power for lighting systems on the lot.
- c. Remove any sprinkler/irrigation systems or invisible fence in the area of construction and replace/reconnect at the completion of construction.
- d. The Contractor shall be responsible to restore the service to such installations to a proper and working order at the completion of the Work if such installations conflict with the Work.
- e. Contractor shall minimize the duration of service loss.
- f. Sprinklers shall be temporarily capped until the system can be re-installed.

#### 3. Utility Services

- a. If, during construction, it becomes necessary to disconnect a water, sanitary sewer, gas, telecomm, power or other utility lateral/service for the Work,

the Contractor shall notify the HCSO and affected property owner immediately.

- b. Contractor shall minimize the duration of service loss and shall be responsible to coordinate the restoration of service after work at the crossing is complete with the Utility Company if it is the responsibility of the Utility to restore the service.
- c. The Contractor shall be responsible to restore the service in the event that restoration of such service is not the responsibility of the Utility.
- d. Damage to any existing utility service during the project caused by the CONTRACTOR'S operations or equipment, shall be repaired by the CONTRACTOR at no expense to the Contract.

#### 4. Public Utilities

- a. If, during the course of construction, it becomes necessary to relocate any existing sewer main, water main, gas main, telephone cable or conduit, cable television, or electric line, it shall be the responsibility of the utility company involved to make the necessary relocation. However, the Contractor shall assume all risk and liability for any inconvenience, delay, or damage sustained by him due to any interference from the said underground utility or the operations of moving them. The CONTRACTOR shall coordinate with the utility in order to expedite said work.
- b. Damage to any of the existing public utility facilities during the project caused by the CONTRACTOR'S operations or equipment, shall be repaired by the CONTRACTOR at no expense to the Contract. This includes sewer, water, gas, electric, telephone, cable, etc. and includes facilities within proposed storm sewer trenches.
- c. Citizens Energy Group (CEG) Underground Facility
  - i. For all work near a CEG underground facility referenced by Keynote Q on the Construction Drawings:
    - 1. Contractor shall provide 72-hours notice to CEG prior to any work near the facilities noted.
    - 2. No work shall occur within vicinity of the facilities noted without a CEG representative present.

3. Prior to any work near the facilities noted, Contractor shall pothole the existing facility to confirm the depth and location.
4. Within an area 10-feet upstream and downstream of the facilities noted, dredging and earthwork operations shall be completed using a hydro excavation method only.
5. Contractor shall use measures at the downstream limit of the work to limit sediment disturbed by the hydro-excavation method from moving downstream.

5. Existing Tile, Drain or Other Connection

- a. Any existing field tile or other drainage piping (private drains, yard drains, roof drains, sump pump discharges) connected to the existing drain, crossed by the new drain, or discharging to the existing open ditch that are encountered or affected by the scope of work specified within the Contract Documents shall be given a positive outlet in accordance with HCSO Detail O-1 or connected to the new piping system in accordance with HCSO Detail O-3. The Contractor shall be paid for such connections of outlets at the unit price bid for such items or at a price established using the supplemental bid prices. In no case will the failure to place a suitable protective plug at the top (upstream) end of any good existing tile intercepted, or the failure to tap into the new tile, or not connect properly to a good existing tile, be tolerated for any tile intercepted or encountered during construction, reconstruction, or repair.
- b. Any such connections shall be documented to include the station, diameter, pipe material and invert and provided to the Inspector.
- c. Core drilling or cutting with concrete saw is required for making openings in RCP for lateral connections. All connections will be grouted and inspected prior to backfilling. Breaking an opening in RCP with a hammer will not be allowed.
- d. Contractor shall notify engineer immediately if an existing tile is uncovered that is lower than the proposed drain.
- e. Any existing field tile or other drainage piping damaged by the Contractor's operations shall be replaced by the Contractor at his own expense. Any such connections shall be documented to include the

station, diameter, pipe material and invert and provided to the Inspector.

6. Pavement, Curb, Sidewalk, Driveway, Path

- a. The Contractor shall take all necessary precautionary measures, and perform the work in such a manner as to adequately protect and safeguard the existing pavement, curbing, sidewalk, driveway, pavement surface, walk surface, path surface, and drive surface to remain in place from any damage due to such operations. The Contractor's attention is also directed to the fact that the operation of crawler type construction equipment on those portions of the surface to remain in place will not be permitted and the operation of overweight or oversize equipment in those areas shall be governed by State and Local Laws and Regulations. Any damage portion in surface, or pavement and surface removed in excess of that required for the construction as set out in the Construction Drawings, shall be satisfactorily replaced or repaired by the Contractor at his own expense. The Contractor's attention is specifically directed to all applicable Articles of Section 107 in regard to his own responsibility under this contract.
- b. Contractor shall reference Keynotes E and F on the Construction Drawings.

7. Easement Area

- a. Contractor shall protect all lawn and landscaping areas within the easement and right of way and at the completion of the project, restore such areas to the condition that existed prior to starting the work, or better.

8. Existing Trees

- a. There are several trees identified by Keynote H on the Construction Drawings that are to remain. Generally, these trees are near Midland Lane and Kippford Street.
- b. These trees shall be flagged by the Hamilton County Surveyor's Office.
- c. To the greatest extent possible, the Contractor shall protect these trees from damage during construction and work around them.
- d. If the Contractor is of the opinion that a tree needs to be removed for the Work, the Contractor shall notify the Inspector immediately.

- e. Under no circumstances shall one of these trees be removed without approval from the Inspector. It may be necessary to inspect such a tree for endangered animals prior to the removal of the tree.

9. Existing Gabion Baskets

- a. The existing gabion baskets between Line A" Stations 41+50 and 41+85 on the off-bank shall remain and be protected during construction.

10. Existing Tile Outlets

a. Keynote "O"

- i. There are several existing tile outlets identified by Keynote O on the Construction Drawings. These tile outlets shall be protected during the work. Generally, the tiles are at the following Line "A" Stations:

- 1. 25+95.19
- 2. 51+42.80
- 3. 88+56.82
- 4. 91+16.70
- 5. 92+29.46

- ii. Ditch dredging near these tile outlets shall start from the existing toe of slope below tile outlet.
- iii. Revetment Rip-Rap shall be added below the tile outlet from the operational side if possible and as directed by the Inspector.
- iv. The cost for the work to place any rip-rap in these instances shall be included in Line Item B-31.

b. Keynote "J"

- i. There are several existing tile outlets identified by Keynote J on the Construction Drawings. These tile outlets shall be protected during the work. Generally, the tiles are at the following Line "A" Stations:

- 1. 133+91.07
- 2. 141+84.35
- 3. 144+13.79
- 4. 144+97.97
- 5. 147+48.84

## QUESTIONS

This project is a Hamilton County Surveyor's Office project. All RFI's, clarifications, and technical questions shall be directed to Mr. Gary Duncan or Mr. Jerry Liston of the Hamilton County Surveyors Office. They may be reached at 317-776-8495.

## REQUIRED DEADLINES

All trees 3-inch diameter and larger MUST be felled by or before March 25, 2016.

## REMOVE AND RESET RCP END SECTION

1. Two existing end sections are scheduled for removal and re-setting because of the dredging operation and bank work.
2. These end sections must be removed and reset to match the side slope of the proposed open ditch.
3. The existing end sections shall be reset such that the slope of the existing tile is maintained through the flared end section and such that the most downstream edge of the end section is flush with the surface of the side slope of the proposed side slope.
4. Some amount of the existing tile may need to be removed to reset the end section. Contractor shall excavate as needed to remove full segments of the existing tile.
5. Trenching for this removal shall conform to the "Earthwork" Special Instruction.
6. The trench shall be backfilled to match the elevation of the surface of the side slope of the proposed open ditch.
7. The existing end section shall be reinstalled/reset in accordance with Section 2 of the "Tile, Culverts, and Fittings Installation and Backfill" Special Instruction
8. These end sections are referenced by Keynote M at Line "A" Station 38+33 and Keynote N at Line "A" Station 41+66 on the Construction Drawings.
  - a. The existing end section referenced by Keynote M at Line "A" Station 38+33 is a 24" RCP end section.
    - i. Contractor shall refer to Detail 6 on Sheet 17 for placement of rip-rap.
    - ii. The cost for re-setting the end section shall be included in Line item B-6.
    - iii. The cost for placing rip-rap at this end section shall be included in Line Item B-31.
  - b. The existing end section referenced by Keynote N at Line "A" Station 41+66 is a 15" RCP end section.
    - i. Contractor shall refer to Detail 7 on Sheet 17 for placement of rip-rap.
    - ii. The cost for re-setting the end section shall be included in Line item B-7.

## RIP RAP

### 1. General

- a. Filter Fabric shall be installed under all rip-rap placed with this project.
- b. The cost for this work is included in the line items noted in the individual sections.

### 2. Reset/Reuse Existing Rip-Rap

- a. There are several areas within the project limits that are referenced by Keynote A and Keynote I.
- b. In each instance of Keynote A, Contractor shall evaluate the condition of the existing gabion baskets, rip-rap, and rock chute and leave in place if possible.
  - i. If not able to be left in place, Contractor shall make all reasonable efforts to salvage and re-use the existing rip-rap on other areas of the project.
  - ii. If not able to be left in place, Contractor shall make all reasonable efforts to salvage and re-install the existing gabion baskets at the current location.
  - iii. In each instance of Keynote I, the rip-rap will be removed as the open ditch is dredged. Contractor shall make all reasonable efforts to salvage and re-use this existing rip-rap on other areas of the project.
- c. Keynote A references existing gabion baskets on the operational side between Line "A" Stations 41+50 and 41+85, existing rip-rap near Line "A" Station 50+00, existing rip-rap near Line "A" Station 51+30, and existing rock chute between Line "Arm 1" Stations 141+20 and 141+81.
- d. Keynote I references rip-rap upstream and downstream of the existing structure at 161<sup>st</sup> Street.
- e. The cost for this work shall be included in Line Item B-10.

### 3. General Rip-Rap

- a. Rip-Rap is required to be placed at the following locations:
  - i. Culverts/Farm Crossings
    1. Line "A" 52+51.11 shown on Detail 1 on Sheet 20 of the Construction Drawings and per Detail 6 on Sheet 16 of the Construction Drawings.



2. Line "A" 55+70.32 shown on Detail 1 on Sheet 20 of the Construction Drawings and per Detail 6 on Sheet 16 of the Construction Drawings.
  3. Line "Arm 1" 142+92.76 shown on Detail 3 on Sheet 21 of the Construction Drawings and per Detail 6 on Sheet 16 of the Construction Drawings.
  4. Line "Arm 1" 146+91.76 shown on Detail 4 on Sheet 21 of the Construction Drawings and per Detail 6 on Sheet 16 of the Construction Drawings.
  5. Line "Arm 1" 150+92.33 shown on Detail 5 on Sheet 21 of the Construction Drawings and per Detail 6 on Sheet 16 of the Construction Drawings.
  6. Line "Arm 1" 153.98 shown on Detail 6 on Sheet 21 of the Construction Drawings and per Detail 6 on Sheet 16 of the Construction Drawings.
  7. The cost for this work shall be included in Line Item B-30.
- ii. Cherry Tree Farms Arm
1. Rip-rap shall be placed as shown on Detail 1 on Sheet 19 of the Construction Drawings.
  2. The rip-rap placed at this location includes the proposed rock chute for the Cherry Tree Farms Arm per Detail 1 on Sheet 19 and Detail 4 On Sheet 17 of the Construction Drawings.
  3. The rip-rap at this location also includes rip-rap placed in accordance with Detail 5 on Sheet 17 of the Construction Drawings.
  4. The cost for this work shall be included in Line Item B-30.
- iii. Albert Brock Noblesville Relocation Arm
1. Rip-rap shall be placed as shown on Detail 2 on Sheet 19 of the Construction Drawings.
  2. The rip-rap placed at this location includes the proposed rock chute for the Albert Brock Noblesville Relocation Arm per Detail 2 on

Sheet 19 and Detail 4 On Sheet 17 of the Construction Drawings.

3. The rip-rap at this location also includes rip-rap placed in accordance with Detail 2 on Sheet 17 of the Construction Drawings
4. The cost for this work shall be included in Line Item B-30.

iv. Arm 1 Arm Outlet

1. Rip-rap shall be placed as shown on Detail 3 on Sheet 19 of the Construction Drawings.
2. The rip-rap placed at this location includes the proposed rock chute for the Arm 1 Arm outlet per Detail 3 on Sheet 19 and Detail 1 On Sheet 17 of the Construction Drawings.
3. The rip-rap at this location also includes rip-rap placed in accordance with Detail 2 on Sheet 17 of the Construction Drawings
4. The cost for this work shall be included in Line Item B-30.

v. Arm 1 Arm Rock Chute

1. Rip-rap shall be placed as shown on Detail 1 on Sheet 25 of the Construction Drawings.
2. The rip-rap placed at this location includes the proposed rock chute per Detail 1 on Sheet 25 and Detail 1 On Sheet 17 of the Construction Drawings.
3. The cost for this work shall be included in Line Item B-30.

vi. Open Ditch Bottom Width Transition

1. Rip-rap shall be placed as shown on Detail 1 on Sheet 21 of the Construction Drawings between Line "A" Stations 140+40 and 140+84.
2. Rip-Rap shall conform to Detail 3 on Sheet 17 of the Construction Drawings.
3. The cost for this work shall be included in Line Item B-30.

vii. Tile Outlet Near Kippford Street

1. Rip-rap shall be placed as shown on Detail 2 on Sheet 21 of the Construction Drawings between Line "A" Stations 41+50 and 41+85.

2. Rip-Rap shall conform to Detail 7 on Sheet 17 of the Construction Drawings.
3. This work includes rip-rap to be placed at the outlet of the existing tile outlet to be reset per Keynote "N" at Line "A" Station 41+66.52.
4. The existing gabion baskets on the off-bank between these stations are to remain in place.
5. The cost for this work shall be included in Line Item B-30.

#### 4. Undistributed Tile Outlet Rip-Rap

- a. The bid forms include a line item for "Undistributed Tile Outlet Rip Rap".
- b. Such rip rap shall be installed as required by the Construction Drawings or as approved by the Inspector.
- c. The location of this undistributed rip-rap is referenced by Keynotes L, M, and O on the Construction Drawings and at the following locations:
  - i. Keynote L
    1. Line "A" Station 26+43.15
    2. Line "A" Station 26+64.67
  - ii. Keynote M
    1. Line "A" Station 38+32.99
    2. This rip-rap is associated with the removal and reset of a 24-inch end section.
    3. Rip-rap shall be placed per Detail 6 on Sheet 17 of the Construction Drawings.
  - iii. Keynote O
    1. Revetment Rip-Rap shall be added below the tile outlet from the operational side if possible and as directed by the Inspector.
    2. Line "A" Station 25+95.19
    3. Line "A" Station 51+42.80
    4. Line "A" Station 88+56.82
    5. Line "A" Station 91+16.70
    6. Line "A" Station 92+29.46
- d. The cost for the work shall be included in Line Item B-31.

## 5. Undistributed Channel Rip-Rap

- a. The bid forms include a line item for "Undistributed Channel Rip Rap".
- b. This rip-rap is expected to need to be installed where sand is encountered.
- c. Rip-Rap in sand areas shall be installed based on presence of sand and only by approval of Inspector.
- d. The geotechnical investigation identified sand to various depths through certain segments of the project. Based on these varied depths, different details have been developed. These details are Details 8, 8A, 8B, 8C, 8D, and 8E on Sheet 17 of the Construction Drawings.
- e. Between Line "A" Stations 62+85 and 86+50 and between Line "A" Stations 96+44 and 122+79, rip-rap is not required even if sand is encountered. See Detail 8A on Sheet 17 of the Construction Drawings.
- f. Between Line "A" Stations 91+78 and 96+44, rip-rap is required to be installed on both side of the channel to the excavation daylight point, vertical limit of sand, or top-of-bank; whichever is lowest as shown on Detail 8B on Sheet 17 of the Construction Drawings.
- g. Between Line "A" Stations 86+50 and 91+78 and between Line "A" Stations 122+79 and 126+50, rip-rap is required to be installed from the off-bank toe-of-slope to the excavation daylight point, vertical limit of sand, or top-of-bank; whichever is lowest on the operational side per Detail 8C on Sheet 17 of the Construction Drawings.
- h. Between Line "A" Stations 126+50 and 136+96, rip-rap is required to be installed from a point that is 2-foot laterally from the off-bank toe-of-slope to the excavation daylight point, vertical limit of sand, or top-of-bank; whichever is lowest on the operational side per Detail 8D on Sheet 17 of the Construction Drawings. The side slopes of the open ditch between these stations is 1.5(H) to 1.0(V).
- i. Between Line "A" Stations 136+96 and 140+38, rip-rap is required to be installed from a point that is 2-foot laterally from the off-bank toe-of-slope to the vertical limit of sand on the operational side per Detail 8E on Sheet 17 of the Construction Drawings. The side slopes of the open ditch between these stations is 1.5(H) to 1.0(V) and a horizontal shelf is required out side where rip-rap is required.

- j. Payment shall be made based on final rip rap installed.
- k. The cost for this work is included in Line Item B-32.

6. Material

- a. Unless otherwise specified, Rip Rap shall be Revetment Rip-Rap per the INDOT Standard Specifications Section 904.04 (f). The rip rap shall be at least D50 = 6" inches in size.

7. Installation

a. General

- i. Rip Rap shall be placed at the locations indicated on Construction Drawings and installed in accordance with various details on Sheets 16, 17, 18, 19, 20, 21, and 25 of the Construction Drawings.
- ii. The rip rap shall be placed at least 18" inches in depth (or as shown on the Construction Drawings) and keyed into place so the top of the rip rap is flush with the bottom and sides of the ditch/adjacent grade.
- iii. For the rip-rap placed per Detail 8E on Sheet 17 of the Construction Drawings, rip-rap shall be installed to a depth 18-inches below the proposed flowline with the side walls of the excavation for the rip-rap to be as near vertical as possible.

**ROCK CHUTE**

- 1. Several rock chutes are included in the project.
- 2. The rock chutes will consist of revetment rip-rap placed loose on geotextile fabric to a depth of at least 18" inches (or as shown on the Construction Drawings) and keyed into place so the top of the rip rap is flush with the bottom and sides of the ditch/adjacent grade.
- 3. The rock chutes shall be installed in accordance with Detail 1 on Sheet 17, Detail 4 on Sheet 17, Detail 1 on Sheet 19, Detail 2 on Sheet 19, Detail 3 on Sheet 19, and Detail 2 on Sheet 25 of the Construction Drawings.
- 4. The cost for this work shall be included in Line Item B-30.

**SALES TAX**

- 1. Owner is exempt from payment of sales and compensating use taxes of the State of Indiana and of cities and counties thereof on all materials to be incorporated into the work.

2. Owner will furnish the required certificates of tax exemption to Contractor for use in the purchase of supplies and materials to be incorporated into the work.
3. Owner's exemption does not apply to construction tools, machinery, equipment, or other property purchased by or leased by Contractor, or to supplies or materials not incorporated into the work.

#### **SAW CUTTING**

1. In all areas where proposed construction matches existing conditions or pavement is to be removed and replaced, full depth saw cutting shall be required at the limits of removal or at the nearest, existing joint past the limits of removal for the trench.
2. No direct payment will be made for saw cutting. The cost thereof shall be included in the costs of the other items.

#### **SEEDING AND FERTILIZING**

##### 1. General

a. The Seeding and Fertilizing section of the General Provision (page 19 and 20) apply to this project. The information outlined below reinforces and supplements the information presented in the General Provisions.

##### b. Seeding Operation

i. All areas to be seeded shall be seeded twice.

##### ii. First Seed Application

1. Channel slopes shall be seeded at the end of each days construction while the soil is still moist.
2. Filter strips shall be seeded upon final grading.
3. General seeding areas shall be seeded upon final grading.

##### iii. Second Seed Application

1. The second seeding shall be applied prior to the final inspection and shall be only for those areas where the grass from the first seeding has not germinated and established into an abundant and uniform stand of grass

##### 2. Ditch Seeding

a. The areas for Ditch seeding are referenced by Keynote D on the Construction Drawings.

b. Fertilizer shall be applied during the first seeding application.

c. Seed Mix

Type	Quantities
Tall Fescue (low or endophyte free)	35-lbs/acre
Annual Rye Grass	20-lbs/acre
12-12-12 Fertilizer	1000-lbs/acre
SUBSTITUTE THE FOLLOWING FOR RYE GRASS	
Oats	March 15 through May 1
Wheat	October 1 through November 1

d. The cost for this work shall be included in Line Item B-34.

### 3. Filter Strip

a. In accordance with General Provisions on Page 19 and 20, filter strip areas shall be seeded, mulched, and fertilized upon final grading.

i. Apply fertilizer and work into the soil to a depth of two (2") inches or three (3") inches with a harrow or disc.

ii. Prepare a firm seed bed with a cultipacker or cultipacker type seeder. Work the seed into the soil 1/4 to 1/2 inch deep.

iii. Straw mulch shall be applied to all seeded areas and to other critical areas as determined by the project inspector.

b. Contractor shall refer to detail 5 on Sheet 16 of the Construction Drawings.

c. Seed Mix

Type	Quantities
General Purpose Farm Mix	20-lbs/acre
12-12-12 Fertilizer	1000-lbs/acre

Straw Mulch	3000-lbs/acre
General Purpose Mix	
Perennial Rye Grass	20%
Timothy	20%
Orchard Grass	13%
Red Star Clover	12%
Tall Fescue	12%
Vernal Alfafa	12%
Alsike Clover	11%

d. The cost for this work shall be included in Line Item B-33.

## 2. General Seeding

a. All other areas above the tops-of-bank of the open ditch, not part of the filter strip, and not in active agricultural areas shall be seeded, mulched, and fertilized upon final grading.

b. There are areas for General Seeding that are referenced by Keynote C on the Construction Drawings. The cost for this work shall be included in Line Item B-35.

c. There are areas for General Seeding that are referenced by Keynote R on Sheet 27 of the Construction Drawings.

i. This seeding is in non-agricultural areas where the extent of land disturbance and spoil placement will be established as the work progresses.

ii. The cost for this work shall be included in Line Item B-36, "Undistributed General Seeding with Straw Mulch" and shall be paid based on the quantity of seed, fertilizer, and straw mulch actually placed.

d. After final grading is complete:



- i. Apply fertilizer and work into the soil to a depth of two (2") inches or three (3") inches with a harrow or disc.
- ii. Prepare a firm seed bed with a cultipacker or cultipacker type seeder. Work the seed into the soil 1/4 to 1/2 inch deep.
- iii. Straw mulch shall be applied to all seeded areas and to other critical areas as determined by the project inspector.

e. Seed Mix

Type	Quantities
General Purpose Farm Mix	20-lbs/acre
12-12-12 Fertilizer	1000-lbs/acre
Straw Mulch	3000-lbs/acre
General Purpose Mix	
Perennial Rye Grass	20%
Timothy	20%
Orchard Grass	13%
Red Star Clover	12%
Tall Fescue	12%
Vernal Alfafa	12%
Alsike Clover	11%

4. Watering

- a. As referenced by Keynote S on Sheet 27 of the Construction Drawings, all seeded areas outside the limits of the open ditch shall be adequately watered by the Contractor for the duration of the project and until an acceptable stand of grass is established.
- b. The cost for this work shall be included in Line Items B-37.
- c. Climatic conditions will warrant the amount of water and frequency of application.
- d. For the basis of this Bid, watering shall consist of 1" of water applied to the seeded area per week for a period of 4 weeks (4 applications)

## 5. Guarantee

- a. The Contractor shall guarantee a stand of grass; and if through the actions of the elements, seasons, animals or man the seed does not grow, the Contractor shall reseed, re-fertilize and do that which is required to establish an abundant and uniform stand of grass in the areas indicated for seeding on the Construction Drawings.
- b. Final acceptance of the project shall not be made until the requirements of this special instruction have been satisfied.

## STORM WATER POLLUTION PREVENTION DURING CONSTRUCTION

### 1. General

- a. This work shall consist of placing permanent and temporary erosion control features in accordance with the Construction Drawings.
- b. The cost for this work shall be included in Line Item B-2, B-30, B-31, B-32, B-33, B-34, B-35, and B-36.
- c. Adequate erosion protection measures shall be provided during construction and strictly adhere to all applicable laws, rules and regulations regarding erosion control.
- d. Temporary erosion control features shall be in accordance with Section 108 and shall be maintained until permanent erosion control features are placed.
- e. Measures shall be placed at the earliest possible stage of the construction operation in and removed when no longer required.
- f. All temporary soil/topsoil stockpiles that will remain on-site for more than that days operation/work shall be protected with silt fence at the toe of the stockpile around the full perimeter of the stockpile.
- g. Each main point of access to the Work areas from the public right-of-way selected by the Contractor requires the installation of a stable construction entrance.

### 2. Erosion Control Measures

- a. The Contractor shall provide adequate erosion and sediment control measures during construction such as, but not limited to:
  - i. Seeding
  - ii. Straw Mulch
  - iii. Rip-Rap

- iv. Stabilized Construction Entrances
- v. \*Additional erosion control measures may be required by the Inspector to protect the downstream waters from receiving sediment originating from the site.

### 3. Inspection

- a. All erosion and sediment control measures as specified in the Construction Drawings shall be inspected by the Contractor.
- b. An inspection of erosion control measures in place shall be made at least once every seven (7) days and after each rain event of one-half inch (½-inch) or greater. The inspection shall include:
  - i. The identification of areas contributing to storm water discharges associated with construction activity.
  - ii. Confirmation that all erosion control devices are installed as specified and that they are operating properly.
  - iii. The Contractor's vehicles and work area shall be inspected to ensure that solid and liquid wastes are being properly disposed of and not allowed to be discharged into storm water runoff.
- c. A report shall be completed summarizing the results of each inspection. The inspection report provided by the Inspector at the preconstruction meeting shall be used to record information obtained from field investigations of the erosion control measures. Copies of the reports shall be submitted to the Inspector with each invoice. The Contractor is responsible for keeping the inspection sheets in a log book for review by IDEM, IDNR or ACOE.

### 4. Maintenance During Construction

- a. All erosion control measures shall be maintained throughout the project and until such time as the disturbed areas have been completely stabilized or other provisions have altered the need for these measures.

### 5. Removal

- a. All temporary erosion and sediment control practices shall be removed and disposed of within thirty (30) days after the final site stabilization is achieved or after temporary practices are no longer needed.

6. All construction entrances/access drives shall be removed after final acceptance of the project by the Hamilton County Surveyor's Office

#### **STREET CLEANING/DUST CONTROL**

1. The CONTRACTOR shall provide effective dust control throughout the project.
2. Perimeter roadways shall be kept clean from soil material deposited on the roadway as a result of the work associated with this project.
3. Loader-mounted pick-up, power sweepers, or other types of pull type models shall be used for street cleaning.
4. Street cleaning shall also be performed prior to the pre-final meeting as directed by the Surveyor.
5. Naturally occurring conditions, out of the control of the owner, that cause more dust control than normal shall not be a valid reason for request of payment for dust control.
6. There shall be no individual payment for this work. The cost thereof shall be included in the costs of the other items of the contract regardless of the amount of times this operation is reasonably requested.

#### **SURFACE WATER PIPE**

1. Surface Water Drain pipe shall be installed in all instances where the excess soil spread in accordance with HCSO Detail OD-6 (Detail 4 on Sheet 16 of the Construction Drawings) will block the surface runoff from areas upstream of the excess soil spreading area.
2. Such surface water drain pipe shall be installed even if not specifically indicated on the Construction Drawings.
3. The exact number and location of the surface water pipes shall be determined in the field by the Hamilton County Surveyor's Office Inspector.
4. The Contractor shall not order pipes in advance.
5. Surface water pipe installation shall conform to HCSO Detail OD-8 (Detail 5 on Sheet 18 of the Construction Drawings).
6. On each surface water pipe, an anti-seep collar shall be installed at locations indicated on HCSO Detail OD-8.
7. An animal guard shall be installed on each Surface Water Pipe per HCSO Detail O-2 (Detail 3 on Sheet 16 of the Construction Drawings).
8. A certain number of tile drain extensions are included on the Bid Form.

- a. The quantity listed on the Bid Form is not indicative of the total number that may be required.
  - i. Contractor shall be paid for each surface water pipe installed.
  - ii. The final quantity will be adjusted (add or deduct) as necessary by Change Order.

9. The cost for this work shall be included in Line Item B-29.

#### **TEMPORARY FACILITIES**

1. There are no field office requirements for this project.
2. Toilet facilities shall be provided at the discretion of the Contractor.
  - a. The cost for any toilet facilities shall be included in the cost of other items.

#### **TILE AND FITTINGS**

1. General
  - a. All tile and fittings shall be as indicated on the Construction Drawings.
  - b. Tile and fittings shall be of the dimensions shown on the Construction Drawings, of standard thickness, free from flaws, cracks, creases, or blisters, circular in form, square at both ends, and true to their lengths.
  - c. Fittings shall be compatible with size pipes being joined and shall be supplied by the manufacturer of the pipe selected by the Contractor for this project such that the fittings are compatible with the piping selected for this project.
2. Materials
  - a. Materials for use shall be equal or superior to the quality provided in Section 907 of the "Indiana Department of Transportation Standard Specifications, current version".
  - b. Fittings shall meet or exceed the material, quality, fabrication, testing and performance standards of the pipe to which the fittings are connected.
  - c. Corrugated Metal Pipe (CMP)
    - i. All CMP pipe shall be galvanized, ½" or 1" deep corrugations, 12-gauge.
    - ii. Metal end section shall conform to Section 908.06 of the INDOT Specifications, Latest Edition. A toe plate anchor constructed of 0.138-IN thick galvanized steel shall be provided with each end section. The tow plate anchor shall be match

punched to fit holes in the skirt lip and shall be provided loose and complete with 3/8-inch diameter galvanized bolts, galvanized washers, and galvanized nuts.

d. Reinforced Concrete Pipe (RCP)

- i. All RCP pipe shall be Class III RCP as per ASTM 443 specifications unless otherwise specified.
- ii. All RCP is to be of the dimensions shown on the Construction Drawings of standard thickness, free from flaws, cracks, or blisters, circular in form and true in their lengths.

e. Precast Concrete End Sections

i. Hook Bolts

1. Four hook bolts, four washers, and four nuts shall be provided for each end section.
2. The hook bolts, washers, and nuts shall be galvanized and provided loose.
3. Hook bolts shall be ½" minimum diameter steel all thread 12-inches long.
4. Hook bolts shall be set in the toe anchor such that the exposed length of the bolt, after being set into the toe anchor, is sufficient to extend through the bottom slab of the precast end section and allow the precast end section to be secured to the hook bolt using a washer and a nut.

3. Acceptance

- a. All tile and fittings shall be inspected by the Contractor and Surveyor. All those not meeting the requirements shall be rejected.

**TILE DRAIN EXTENSION**

1. All existing tiles, drains and/or laterals draining to the existing ditch require the installation of twenty foot (20') long corrugated metal pipe (CMP) per Detail O-1 (Detail 2 on Sheet 16 of the Construction Drawings) with Animal Guard per Detail O-2 (Detail 3 on Sheet 16 of the Construction Drawings).
2. Such tile drain extensions shall be installed even if not specifically indicated on the Construction Drawings.
3. Note: If the existing tile outlet is in good condition, it may not need an extension. Such determination shall be made by the Inspector.

4. Pipe shall extend out from the ditch bank to the position indicated on Details O-1 and O-2.
5. Contractor shall refer to Tile Drain Extension Specification on Page 18 of the Project Manual.
6. The third sentence of the Specification on Page 18, which reads: "Payment for these items will be made based on the actual number and sizes installed at the various locations at the various bid prices per lineal foot" shall be revised to read as follows: "A certain number of tile drain extensions are included on the Bid Form. The quantity listed on the Bid Form is not indicative of the total number that may be required. Contractor shall be paid for each tile drain extension installed. The final quantity will be adjusted (add or deduct) as necessary by Change Order.
7. Except for the five (5) tiles listed below, the Contractor shall not order pipes in advance.
  - a. Tile Drain Outlet Line "A" Station 130+31.42 (12-15)
  - b. Tile Drain Outlet Line "A" Station 132+69.65 (12-15)
  - c. Tile Drain Outlet Line "A" Station 127+30.08 (12-15)
  - d. Tile Drain Outlet Line "A" Station 126+93.86 (18-21)
  - e. Tile Drain Outlet Line "A" Station 31+94.38 (15-18)
8. The cost for this work shall be included in Line Items B-26, B-27, B-28.

#### **TILE, CULVERTS, AND FITTINGS INSTALLATION AND BACKFILL**

1. General
  - a. All tile and culvert construction shall be per HCSO details and specifications.
  - b. All tile and culverts shall be bedded per manufacturer's recommendations.
  - c. For each construction day, the tile installed will be properly bedded, but not backfilled until 3:00 pm thus allowing the tile to be inspected. However, backfilling shall be completed by the end of the day.
  - d. No rocks over six inches (6") in diameter or other non-compacting materials shall be buried in the trench.
  - e. Dips/sags on newly installed storm systems, private or public, will not be allowed. Also, infiltration from cracks, missing pieces, and joints shall not be allowed. Variations from these standards must be

justified and received written acceptance from the County Surveyor.

- f. Excess earth to the amount required to replace settlement shall be neatly rounded over the trench and the remainder hauled off the work site.
- g. Trenches shall be backfilled to existing grade or grades as indicated on the drawings.
- h. Any settlement of the backfill below the finish ground surfaces shall be remedied by the Contractor for a period of one (1) year after final completion and acceptance upon receipt of written notice from the Owner.
- i. In areas of unsuitable ground conditions, and deep cuts, the Contractor shall make plans to bed the tile or pipe in such manner as to keep them on grade and in alignment, and he shall take due consideration of such suspected or known areas in his bid.
- j. Due precautions shall be taken by the Contractor to insure a backfill under all laterals or existing tile crossing the trench of sufficient compaction and stability to prevent settlement in the tile that would cause breakage or improper grade. The Surveyor may order metal pipe of sufficient length or strength to span the trench in cases where suitable backfill and compaction is not obtained.
- k. Fittings shall be secured to the pipes following the manufacturer's recommendations.

## 2. Precast Concrete End Sections

- a. End sections shall be set and leveled on a 6 in. thick bed of coarse aggregate.
- b. Before setting the precast pipe end section in place, a concrete toe anchor shall be poured using class A concrete.
  - i. The hook bolts shall be set into the toe anchor prior to the toe anchor concrete setting.
- c. Prior to being lowered into the trench, end sections shall be examined closely and so fitted that they will form a true line of pipe when in place. Sections which do not fit together properly shall not be used.
- d. If precast units are used and the adjoining pipe is to be field connected directly to the precast unit, the connection shall be made using a class A concrete



collar of 6 in. minimum longitudinal and radial thickness.

- e. Each end section shall be field bolted to the toe anchor using the galvanized washers and galvanized nuts.
- f. Refer to Hamilton County Surveyor's Office Standard Plan O-5 and the INDOT Standard Drawing E-715-PCES-01.

### 3. Backfill

- a. Special backfill such as pit run gravel, b-borrow, pea gravel, or limestone shall be placed as specified on the Construction Drawings or as directed by the Surveyor.
  - i. All limestone shall be washed.
  - ii. Inspector shall inspect and approve all Special Backfill material prior to installation.
  - iii. The cost for this special backfill shall be included in the cost of the culverts and tiles.
- b. When backfilling the trench, the general excavated material shall be placed back into the trench first and to a sufficient depth to account for the settlement of the material itself as well as the topsoil placed above it. The topsoil shall then be placed as the final backfill material to a depth that matches the existing condition to the greatest extent possible. Such topsoil is expected to extend slightly above the adjacent existing ground until the trench backfill consolidates and settles. The topsoil shall be neatly rounded over the trench.

### UTILITY LOCATION AND NOTIFICATION

- 1. All utility locations and notifications are the responsibility of the Contractor.
- 2. The Drawings indicate information on underground and surface utilities or facilities in the project area. This information may not be complete and/or may not accurately reflect the actual size, location or depth of the utilities or facilities. The Surveyor or Drainage Board shall therefore not be held responsible for utilities whose size, location, or depth differs from the information on the Drawings.
- 3. Consequently, the Contractor shall contact the owners of the various utilities or facilities in the project area prior to the start of construction for the location of the various utilities or facilities.

## **WORKING HOURS**

1. Permissible working hours for this project are Monday through Friday from 7:00 a.m. to 6:00 p.m., excluding legal holidays.
  - a. Construction operations outside of these working hours will not be permitted without the written consent of the Owner or Inspector.
2. No night work requiring the presence of an Engineer or Inspector will be permitted, except in case of great emergency, and then only to such extent as is absolutely necessary, and with written approval of the inspector, provided that this clause shall not operate in case of a crew organized for regular and continuous night work, and on such work which, in the opinion of the Engineer, can only be performed satisfactorily at night.
3. Weekend work will be only with the written consent of the Owner and Inspector and to such extent as he may judge to be necessary.
4. Any work necessary to be performed after regular working hours, or on weekends and legal holidays, shall be performed without additional expense to the Owner.

## **WORKING UNDER POWER LINES**

For all work under power lines:

1. The Contractor shall be aware of the power lines and use caution while working under them.
2. Be aware of the potential for electrostatic discharge.
3. Contractor shall limit time working under the power lines to that time necessary for the work.
4. Contractor is advised to ground all equipment.
5. Contractor shall not park or store equipment or materials under the power lines.

EXPERIENCE QUESTIONNAIRE

The signatory of this questionnaire guarantees the truth and accuracy of all statements and of all answers to interrogatories hereinafter made.

- 1. How many years has your organization been in business as a General Contractor under your present business name? \_\_\_\_\_
- 2. How many years experience in \_\_\_\_\_ construction work has your organization had:
  - (a) As a General Contractor? \_\_\_\_\_
  - (b) As a sub-contractor? \_\_\_\_\_
- 3. For what cities have you performed work and to whom do you refer? \_\_\_\_\_  
\_\_\_\_\_
- 4. For what counties have you performed work and to whom do you refer? \_\_\_\_\_  
\_\_\_\_\_
- 5. For what State bureaus or departments have you performed work and to whom do you refer? \_\_\_\_\_  
\_\_\_\_\_
- 6. Have you ever performed any work for the U.S. Government? \_\_\_\_\_  
If so, when and to whom do you refer? \_\_\_\_\_  
\_\_\_\_\_

7. What is the construction experience of the principal individuals of your organization?

Individual's Name	Present Position	Years of Const. Exp.	Magnitude And Type	In What Capacity
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

\_\_\_\_\_  
Signed

EQUIPMENT QUESTIONNAIRE

The signatory of this questionnaire guarantees the truth and accuracy of all statements and of all answers to interrogatories hereinafter made.

Contractor shall include all equipment listed on Bid Form in Questions #1 and #2 below.

1. What equipment do you own that is available for the proposed work?

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2. What equipment do you intend to lease or rent for use on the proposed work, should the contract be awarded to you?

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Signed

TO: HAMILTON COUNTY DRAINAGE BOARD

The following is for the Emily Vestal Drain Reconstruction

Base Bid					
Line Item	Item Description	Unit	Quantity	Unit Cost	Total Cost
B-1	General Clearing and Disposal	LS	1		
B-2	Construction Entrance	EA	7		
B-3	Fence Removal	LF	116		
B-4	Asphalt Path Repair/Replace	SYS	90		
B-5	Curb Repair/Replace	LF	83		
B-6	Remove; salvage, and Reset 24" RCP end section	EA	1		
B-7	Remove; salvage, and Reset 15" RCP end section	EA	1		
B-8	Sidewalk Repair	SYS	90		
B-9	Asphalt Drive Removal and Repair	SYS	24		
B-10	Reuse/Reset Existing Rip-Rap	EA	2		
B-11	Hydro Excavate Existing Crossing	EA	2		
B-12	Channel Excavation With Soil Spreading [Per Detail 1/18]	LF	4093		
B-13	Channel Excavation With Soil Spreading [Per Detail 2/18]	LF	8031		
B-14	Channel Excavation With Soil Spreading [Per Detail 3/18]	LF	36		
B-15	Channel Excavation With Soil Spreading [Per Detail 4/18]	LF	506		
B-16	Channel Excavation With Soil Spreading [Per Detail 7/18]	LF	1046		

Line Item	Item Description	Unit	Quantity	Unit Cost	Total Cost
B-17	Channel Excavation With Shelf with Soil Spreading [Per Detail 8/18]	LF	342		
B-18	Channel Excavation With Soil Spreading [Per Detail 9/18]	LF	14		
B-19	54" CMP with Granular Backfill at Line "Arm 1" Station 153+98	LF	40		
B-20	54" CMP with Granular Backfill at Line "Arm 1" Station 150+92	LF	40		
B-21	60" CMP with Granular Backfill at Line "Arm 1" Station 146+92	LF	40		
B-22	60" CMP with Granular Backfill at Line "Arm 1" Station 142+93	LF	40		
B-23	72" CMP with Granular Backfill at Line "A" Station 55+70	LF	80		
B-24	72" CMP with Granular Backfill at Line "A" Station 52+51	LF	80		
B-25	#2 Stone [12" Deep at Crossings]	TON	483		
B-26	Tile Drain Outlet 15" CMP	EA	3		
B-27	Tile Drain Outlet 18" CMP	EA	1		
B-28	Tile Drain Outlet 21" CMP	EA	1		
B-29	Surface Water Pipe	EA	14		
B-30	Revetment Rip-Rap on Geotextile Fabric	TON	1231		
B-31	Undistributed Tile Outlet Rip Rap	TON	50		
B-32	Undistributed Channel Rip Rap	TON	5500		
B-33	Filter Strip with Straw Mulch	Acre	6.5		
B-34	Ditch Seeding	Acre	7		

Line Item	Item Description	Unit	Quantity	Unit Cost	Total Cost
B-35	General Seeding with Straw Mulch	Acre	0.25		
B-36	Undistributed General Seeding with Straw Mulch	Acre	13.5		
B-37	Watering	LS	1		
Total Base Bid					

Supplemental Bid

Item Description	Unit	Unit cost
<b>RCP</b>	<b>(Installed)</b>	
12 "	LF	
15 "	LF	
18 "	LF	
21 "	LF	
24 "	LF	
27 "	LF	
30 "	LF	
33 "	LF	
36 "	LF	
<b>CMP 12 GA</b>	<b>(Installed)</b>	
6 "	LF	
8 "	LF	
10 "	LF	
12 "	LF	
18 "	LF	
21 "	LF	
24 "	LF	
30 "	LF	
36 "	LF	
<b>Animal Guard</b>		
6 "	EACH	
8 "	EACH	
10 "	EACH	
12 "	EACH	
15 "	EACH	
18 "	EACH	
21 "	EACH	
<b>HDPE, Dual Wall perforated (Installed)</b>		
6 "	LF	
8 "	LF	
10 "	LF	
12 "	LF	
15 "	LF	
18 "	LF	
<b>HDPE, Dual Wall non-perf. (Installed)</b>		
6 "	LF	
8 "	LF	
10 "	LF	
12 "	LF	
15 "	LF	
18 "	LF	

Item Description	Unit	Unit cost
<b>HDPE, Dual Wall Tees</b>		
6 "	EACH	
8 "	EACH	
10 "	EACH	
12 "	EACH	
15 "	EACH	
18 "	EACH	
<b>HDPE, Dual Wall Internal Coupler</b>		
6 "	EACH	
<b>HDPE, Dual Wall External Coupler</b>		
8 "	EACH	
10 "	EACH	
12 "	EACH	
15 "	EACH	
18 "	EACH	
<b>SDR 35 PVC (Installed)</b>		
6 "	LF	
8 "	LF	
10 "	LF	
12 "	LF	
15 "	LF	
18 "	LF	
<b>SDR 35 PVC TEES</b>		
6 "	EACH	
8 "	EACH	
10 "	EACH	
12 "	EACH	
15 "	EACH	
18 "	EACH	
<b>TILE CONNECTIONS (Installed)</b>		
4 "	EACH	
6 "	EACH	
8 "	EACH	
10 "	EACH	
12 "	EACH	



Supplemental Bid Cont...

Item Description	Unit	Unit cost
<b>Machine Prices per hour</b>		
Hydraulic Excavator		
5/8 Cu. Yd	HOUR	
36" Bucket	HOUR	
3/4 Cu. Yd Dredge Bucket	HOUR	
Bulldozer under 100 hp	HOUR	
Bulldozer over 100 hp	HOUR	
Backhoe w/loader	HOUR	
Grader	HOUR	
Tractor	HOUR	
Pumps	DAY	
Compactor	DAY	
Mini-Excavator	HOUR	
Bobcat	HOUR	
Bulldozer	HOUR	
<b>Trucks</b>		
Pickup to 1 ton	HOUR	
1 ton	HOUR	
Single Axle	HOUR	
Tandem or Tri-Axle	HOUR	
<b>Material (Installed)</b>		
Concrete - 3000 PSI	CYS	
Concrete - 4000 PSI	CYS	
Flowable Fill	CYS	
Graded Rip Rap(7"-9")	CYS	
Fill Sand	TON	
Washed #8 Stone	TON	
Unwashed #8 Stone	TON	
#2 Stone	TON	
#4 Stone	TON	
Tordon for Stump Treatment	GAL	
<b>Labor per hour</b>		
Supervisor	HOUR	
Machine operator	HOUR	
Labor	HOUR	

Item Description	Unit	Unit Cost
<b>Erosion Control Materials (Installed)</b>		
Indiana Seed Co. or Equiv.		
#18 Lawn Mix	LBS	
#6 Rough Mix	LBS	
Wheat	LBS	
Annual Rye	LBS	
12-12-12 Fertilizer	LBS	
Hydro-Seed	SQ. FT.	
Straw Bales	EACH	
7' Steel Fence Posts	EACH	
Silt Fence	LF	
Dirt Fill	CYS	
Erosion Control Blanket SC-150	SYS	
Erosion Control Blanket SC-250	SYS	
Erosion Control Blanket P-300	SYS	
Erosion Control Blanket C-125	SYS	

Employment Eligibility Verification Certification

This Certification is submitted by the undersigned, \_\_\_\_\_, as part of the contract with Hamilton County for the project known as \_\_\_\_\_ entered into on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_. The undersigned affirms under the penalties of perjury that the Contractor does not knowingly employ an unauthorized alien.

The Contractor shall enroll in and verify the work eligibility status of all newly hired employees through the E-Verify program as defined in IC 22-5-1.7-3. The Contractor is not required to participate if the Contractor is self-employed and does not employ any employees.

The Contractor shall not knowingly employ or contract with an unauthorized alien. The Contractor shall not retain an employee or contract with a person that the Contractor subsequently learns is an unauthorized alien.

The Contractor shall require all subcontractors who perform work under its contract, to certify to the Contractor that:

1. The subcontractor does not knowingly employ or contract with an unauthorized alien;
2. The subcontractor has enrolled and is participating in the E-Verify program. The Contractor agrees to maintain this certification at least two years after the term of a contract with a subcontractor.

The County may terminate the contract if the Contractor fails to cure a breach of this provision no later than thirty (30) days after being notified by the County.

The terms of this Certification shall be incorporated within the contract between the Contractor and the County.

Witness this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Contractor: \_\_\_\_\_

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

Signature: \_\_\_\_\_, \_\_\_\_\_  
Printed: \_\_\_\_\_ Title



DRAIN RECONSTRUCTION CONTRACT

THIS AGREEMENT by and between the HAMILTON COUNTY DRAINAGE BOARD, hereinafter referred to as "BOARD" and \_\_\_\_\_, hereinafter referred to as "CONTRACTOR".

WITNESSETH:

THAT WHEREAS, Contractor is the successful bidder for the reconstruction of the Emily Vestal Drain as ordered by the Board, it is now agreed by and between the Parties as follows:

1. The Contractor agrees to perform the work under the supervision of the Surveyor or his representative, in accordance with the plans, Instructions to Bidder, General Provisions, Special Instructions, profile and cross sections made by the Board, which are incorporated herein by reference as fully as if the same were set out.

2. The Board agrees to pay Contractor the agreed sum of \$\_\_\_\_\_ payment to be made according to law.

3. The Contractor agrees that all work under this contract shall be completed on or before the completion date set out in the General Provisions.

4. It is understood and agreed that fifteen Percent (15%) of the contract price herein shall be withheld by the Board for a period of sixty (60) days after the completion of the work for the purpose of securing payment of suppliers, laborers and sub-contractors.

5. The Contractor agrees and binds itself to pay all bills for labor, materials and all services whatsoever that shall be used in this reconstruction or otherwise incorporated in this work and to save the Board and the landowners affected harmless from all such bills.

6. This contract also incorporates by reference a certain contractor's bid dated July 22, 2024 as fully as if the same were set out completely herein.

7. It is understood that the Board contracts in its official capacity and that the members thereof shall not in any event be personally liable under this agreement.

IN WITNESS WHEREOF THE PARTIES HAVE SET THEIR HANDS THIS  
\_\_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_.

HAMILTON COUNTY DRAINAGE BOARD

\_\_\_\_\_  
PRESIDENT

\_\_\_\_\_  
MEMBER

\_\_\_\_\_  
MEMBER

BY \_\_\_\_\_  
CONTRACTOR

TO: HAMILTON COUNTY DRAINAGE BOARD

RE:

As Contractor on the contract awarded on \_\_\_\_\_  
for the \_\_\_\_\_ Drain, I hereby notify  
the Hamilton County Drainage Board that all expenses incurred  
for labor and materials have been paid in full.

The foregoing is true under the penalties of perjury.

BY: \_\_\_\_\_  
Contractor-Print

\_\_\_\_\_  
Contractor-Signature

STATE OF INDIANA, HAMILTON COUNTY, ss:

Subscribed and sworn to before me, the undersigned, a Notary  
Public in and for said County this \_\_\_\_\_ day  
of \_\_\_\_\_ 20\_\_\_\_\_.

Witness my hand and official seal.

My Commission expires \_\_\_\_\_ Notary Public  
\_\_\_\_\_ County of Residence

PARTIAL PAY REQUEST

Page \_\_\_ of \_\_\_

Contractor:

Date of Estimate: \_\_\_\_\_ Pay Request Number: \_\_\_\_\_

Is this the Final Pay Request? \_\_\_\_\_

Item No.	Description	CHANGE ORDERS		COMPLETED THIS ESTIMATE		COMPLETED TO DATE	
		Amount/Unit	Unit Price	Amount	Total \$	Amount	Total \$
Total						Total	
Minus 15% Withheld							
Amount Paid							

This estimate was reviewed by: \_\_\_\_\_, of the County Surveyors Office.

June 13, 2023

Mr. Gary Duncan, Jr.  
Hamilton County Surveyor's Office  
One Hamilton County Square, Suite 188  
Noblesville, Indiana 46060

Re: Geotechnical Data Report  
**Emily Vestal Drain**  
**Hazel Dell Parkway**  
**Noblesville, Indiana**  
Patriot Project No.: 23-0528-01G

Dear Gary:

Submitted herewith is the data report presenting the requested exploration for the Emily Vestal Drain located near Hazel Dell Parkway in Noblesville, Indiana. This exploration was completed in general accordance with our Proposal No. P23-0499-01G dated March 20, 2023. This report includes detailed and graphic logs of seven (7) soil borings drilled at the proposed project site. Also included in the report are the results of laboratory tests performed on the samples obtained from the site.

The purpose of this exploration is to determine the general near surface and subsurface conditions within the project area. This was achieved by drilling soil borings, and by conducting laboratory tests on samples taken from the borings. This report contains the results of our findings.

**Project Information:**

The proposed project includes the reconstruction of the Emily Vestal Drain near Hazel Dell Parkway, between East 146<sup>th</sup> Street and East 171<sup>st</sup> Street in Noblesville, Indiana. The project site is presently the Emily Vestal Drain alignment. The project includes the alignment from the intersection of Midland Lane and Cherry Tree Road and travels north to the intersection of East 171<sup>st</sup> Street and Willowview Road.

**General Subsurface Conditions:**

Our interpretation of the subsurface conditions is based upon seven (7) soil borings drilled at the approximate locations shown on the Boring Location Map (Figure No. 2) in Appendix "A". All depths discussed below refer to depths below the existing ground surface. Based on the results of the soil borings completed at the site, the following subsurface profile is presented. A description of each general soil unit has been identified and is described below:

Topsoil, a surficial layer of material that is a blend of silts, sands, and clays, with varying amounts of organic matter, was encountered at the ground surface at the seven (7) boring locations. The topsoil layer was about 3 to 4 ½ inches thick in the borings.



The surficial layer is generally underlain by very soft to very stiff, **SILTY or SANDY CLAY**. The silty or sandy clay layers typically extend to depths of 3 ½ to 13 ½ feet below the existing ground surface. The natural moisture content of this material ranges from 11 to 38 percent (%). The silty or sandy clay layers have unconfined compressive strengths, as determined by a hand penetrometer, of 0.5 to 3.7 tons per square foot (tsf). Standard Penetration Test N-values (blow counts) in this material varied from 2 to more than 50 blows per foot (bpf).

Below the silty or sandy clay layers, very loose to very dense, **SAND (SP-SM) or SILTY SAND (SM)** was encountered to predetermined boring termination depths of 15 feet below the existing ground surface. Standard Penetration Test N-Values (blow counts) in this material varied from 4 to more than 50 bpf.

The soil conditions described above are general, and some variations in the descriptions should be expected; for more specific information, please refer to the boring logs presented in Appendix "A". It should be noted that the dashed stratification lines shown on the soil boring logs indicate approximate transitions between soil types. In-situ stratification changes could occur gradually at different depths.

***As previously mentioned, unsuitable very soft to soft clays and very loose sands were encountered in three (3) of the seven (7) borings, at depths up to 13 ½ feet below the existing ground surface.*** The following table presents the extent of the unsuitable soils encountered in the borings:

**Table No. 1: Summary of Unsuitable Soils Encountered in Borings**

<b>Boring Number</b>	<b>Soil Classification</b>	<b>Approximate Depth of Unsuitable Soils (feet)<sup>(1)</sup></b>
B-1	Soft to Very Soft Sandy Clay (CL)	3 ½ to 13 ½
B-3	Very Loose Sand (SP-SM)	3 ½ to 6
B-7	Very Soft Silty Clay (CL)	3 ½ to 6

<sup>(1)</sup> Represents depth below existing ground surface.

**Groundwater Conditions:**

The term groundwater pertains to any water that percolates through the soil found on site. This includes any overland flow that permeates through a given depth of soil, perched water that occurs below the "water table", a zone that remains saturated and water-bearing year-round.

Groundwater was observed during drilling in four (4) of the seven (7) borings performed at the site at depths between 6 ½ and 13 ½ feet below the existing ground surface. Groundwater was not observed in the remaining borings during drilling. Immediately after the borings were completed and the augers were removed from the boreholes,

groundwater was observed at a depth of 4 feet below the existing ground surface at Boring B-7. The remaining borings were dry at the cave-in depths shown on the boring logs.

It should be recognized that fluctuations in the groundwater level should be expected over time due to variations in rainfall and other environmental or physical factors. The true static groundwater level can only be determined through observations made in cased holes over a long period of time, the installation of which was beyond the scope of this exploration.

**Conclusion:**

Please contact us if you have any questions regarding this data report.

Respectfully submitted,  
**Patriot Engineering and Environmental, Inc.**



**Logan Young, E.I.**  
Geotechnical Engineer



**William D. Dubois, P.E.**  
Senior Principal Engineer



- Appendix:
- Site Vicinity Map (Figure No. 1)
  - Boring Location Map (Figure No. 2)
  - Hand Auger Boring Logs
  - Boring Log Key
  - Unified Soil Classification System (USCS)

**APPENDIX**

SITE VICINITY MAP (FIGURE NO. 1)

BORING LOCATION MAP (FIGURE NO. 2)

BORING LOGS

BORING LOG KEY

UNIFIED SOIL CLASSIFICATION SYSTEM (USCS)

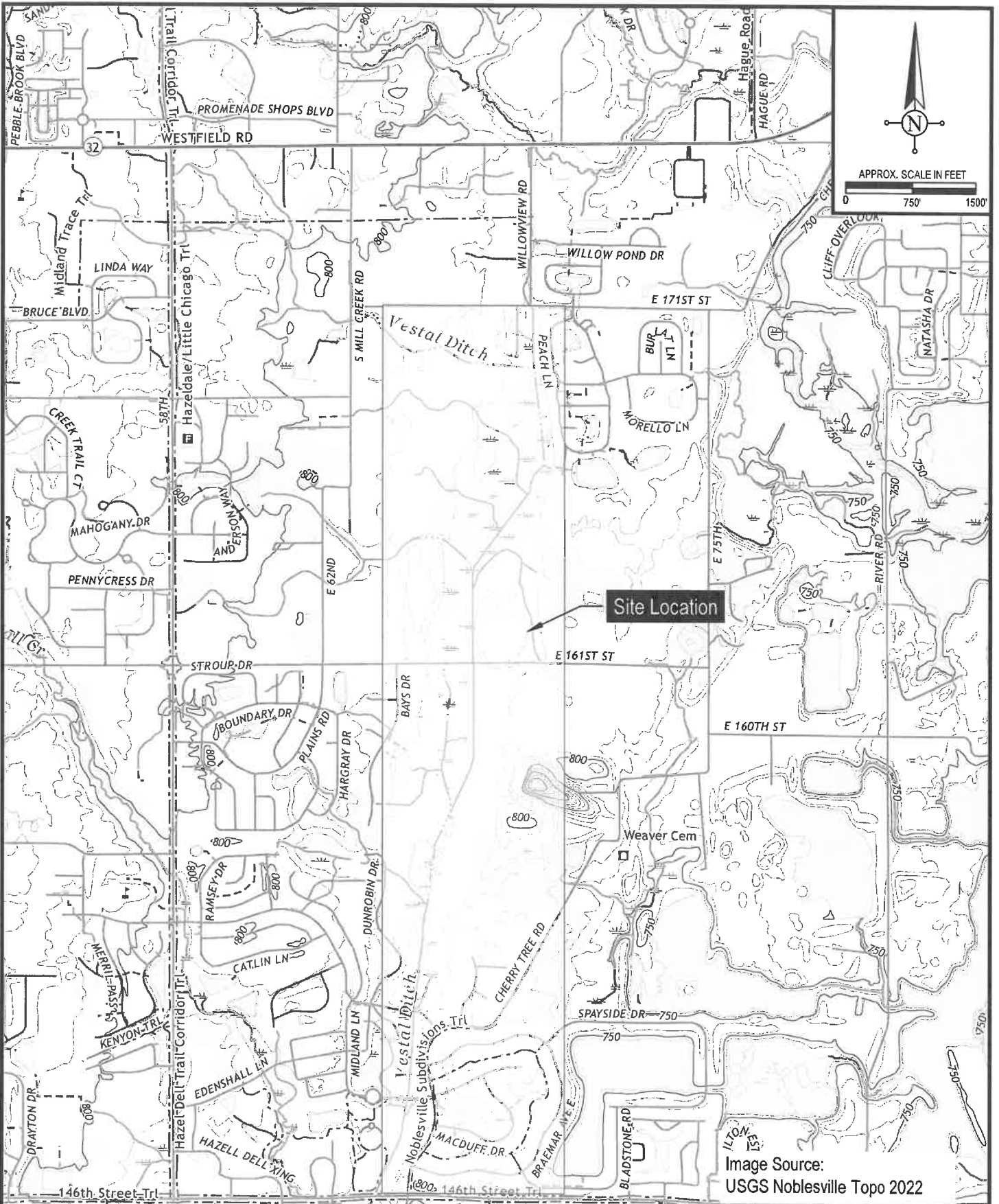


Image Source:  
USGS Noblesville Topo 2022



**Patriot Engineering &  
Environmental, Inc.**

Project: Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Project Number: 23-0528-01G	Drawn By: L. Lidy
Date: 5/15/23	Approved: L. Young
	DWG: 23-0528-01G_geo

**Figure 1**

**Site Vicinity Map**



**LEGEND**

- ⊕ PATRIOT Soil Boring
- B-1 Soil Boring ID



**Patriot Engineering & Environmental, Inc.**

**NOTES:**

1. Boring locations were staked by PATRIOT. All locations are shown as approximate.
2. All locations were determined in the field with references to existing landmarks.
3. Image Source: Google Earth
4. Scale as shown.

**Project:** Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Project Number: 23-0528-01G	Drawn By: L. Lidy
Date: 5/15/23	Approved: L. Young
	DWG: 23-0528-01G_geo



**PATRIOT ENGINEERING  
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**LOG OF BORING B-1**

(Page 1 of 1)

Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Client Name : Hamilton County Surveyor  
Project Number : 23-0528-01G  
Logged By : J. Rogers  
Start Date : 05/15/2023  
Drilling Method : HSA

Driller : G. McDougle  
Sampling : Splitspoon  
Approx. Elevation : +/- 780 feet  
Latitude : 40° 2'11.87"N  
Longitude : 86° 3'5.40"W

Depth in Feet	Elevation (Feet) 780	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
Water Levels ▼ During Drilling - 13.5 feet ▽ After Completion - 9.0 feet ◆ After 24 Hours - N/A											
0					TOPSOIL (4") Gray and brown, slightly moist to moist, medium stiff to soft, SANDY CLAY with trace gravel	1	67	3/3/3		12	
5	775		CL			2	89	2/1/2	0.9	13	
						3	83	1/WOH/2	1.0	23	WOH - Weight of Hammer
10	770	▽	CL		Gray and brown, moist, very soft, SANDY CLAY with trace gravel and interbedded sand seams	4	67	WOH/1/1	0.5	23	Boring caved to 10 feet upon auger removal.
15	765	▼	SM		Gray, saturated, loose, SILTY SAND	5	89	3/3/4			
Boring terminated at 15 feet.											
20	760										



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**LOG OF BORING B-2**

(Page 1 of 1)

Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Client Name : Hamilton County Surveyor  
Project Number : 23-0528-01G  
Logged By : J. Rogers  
Start Date : 05/15/2023  
Drilling Method : HSA

Driller : G. McDougle  
Sampling : Splitspoon  
Approx. Elevation : +/- 779 feet  
Latitude : 40° 1'57.73"N  
Longitude : 86° 3'4.05"W

Depth in Feet	Elevation (Feet) 779	Water Level	USCS	GRAPHIC	Water Levels					REMARKS	
					▼ During Drilling - 10.0 feet	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results
DESCRIPTION											
0					TOPSOIL (3.5") Dark gray and brown, moist, medium stiff, SILTY CLAY with trace to little sand	1	33	2/2/3	1.9	24	Boring caved to 8 feet upon auger removal.
775			CL		Gray and brown, moist, medium stiff, SILTY CLAY with little sand and trace gravel	2	72	1/2/3	1.3	16	
5			CL		Brown, slightly moist, medium dense, fine to medium grained, SAND with trace silt and trace gravel	3	100	7/9/11			
770			SP-SM		Gray, saturated, medium dense, fine to medium grained, SAND with trace silt and trace gravel	4	89	8/11/11			
10		▼	SP-SM			5	94	5/7/9			
765											
15					Boring terminated at 15 feet.						
760											
20											



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**LOG OF BORING B-3**

(Page 1 of 1)

Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Client Name : Hamilton County Surveyor  
Project Number : 23-0528-01G  
Logged By : J. Rogers  
Start Date : 05/15/2023  
Drilling Method : HSA

Driller : G. McDougle  
Sampling : Splitspoon  
Approx. Elevation : +/- 777 feet  
Latitude : 40° 1'40.46"N  
Longitude : 86° 3'10.97"W

Depth in Feet	Elevation (Feet) 777	Water Level	USCS	GRAPHIC	Water Levels					REMARKS		
					▼ During Drilling - Dry	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results	qp tsf
DESCRIPTION												
0					TOPSOIL (4")							
			CL		Dark gray, very moist, medium stiff, SILTY CLAY with trace sand	1	33	2/3/5	2.9	26		
775												
			SP-SM		Gray, slightly moist, very loose, fine to medium grained, SAND with trace silt and some gravel	2	67	2/2/2				
5												
			SP-SM		Brown, slightly moist, dense, fine to medium grained, SAND with trace silt and some gravel	3	72	5/15/22				
770												
			SP-SM		Gray, slightly moist, medium dense, fine to medium grained, SAND with trace silt and some gravel	4	56	25/16/11				
10												
			SP-SM		Brown, slightly moist, dense, fine to medium grained, SAND with trace silt and trace gravel	5	83	10/15/17				
765												
15			Boring terminated at 15 feet.									Groundwater was not encountered during drilling, nor upon completion.
760												
20												

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**LOG OF BORING B-4**

(Page 1 of 1)

Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Client Name : Hamilton County Surveyor  
Project Number : 23-0528-01G  
Logged By : J. Rogers  
Start Date : 05/15/2023  
Drilling Method : HSA

Driller : G. McDougle  
Sampling : Splitspoon  
Approx. Elevation : +/- 777 feet  
Latitude : 40° 1'20.59"N  
Longitude : 86° 3'17.13"W

Depth in Feet	Elevation (Feet) 777	Water Level	USCS	GRAPHIC	Water Levels					REMARKS	
					▼ During Drilling - Dry	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results
DESCRIPTION											
0					TOPSOIL (3")						
			CL		Gray and brown, moist, medium stiff, SILTY CLAY with little sand and trace gravel	1	67	3/3/3	2.3	22	
775											
					Brown, slightly moist, dense, fine to medium grained, SAND with trace silt and gravel	2	56	5/9/23			
5											
			SP-SM			3	83	13/20/18			
770											
						4	72	15/23/21			
10											
			SP-SM		Brown, slightly moist, medium dense, fine to medium grained, SAND with trace silt and little gravel	5	78	10/10/13			
765											Boring caved to 11 feet upon auger removal.
15					Boring terminated at 15 feet.						Groundwater was not encountered during drilling, nor upon completion.
760											
20											



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Louisville, KY Dayton, Cincinnati, OH

**LOG OF BORING B-5**

(Page 1 of 1)

Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Client Name : Hamilton County Surveyor  
Project Number : 23-0528-01G  
Logged By : J. Rogers  
Start Date : 05/15/2023  
Drilling Method : HSA

Driller : G. McDougle  
Sampling : Splitspoon  
Approx. Elevation : +/- 773 feet  
Latitude : 40° 1'4.43"N  
Longitude : 86° 3'17.65"W

Depth in Feet	Elevation (Feet) 773	Water Level	USCS	GRAPHIC	DESCRIPTION	Samples	Rec %	SPT Results	qp tsf	w %	REMARKS
0					TOPSOIL (4.5")						
			CL		Dark gray, moist, medium stiff, SILTY CLAY with trace sand	1	44	2/2/5	2.0	22	
770			CL		Dark gray, very moist, very stiff, SILTY CLAY with trace sand	2	33	5/8/20	2.5	32	
5			SP-SM		Brown, slightly moist, dense, fine to medium grained, SAND with trace silt and little	3	72	15/22/20			
765			SP-SM		Brown, slightly moist, very dense, fine to medium grained, SAND with trace silt and gravel	4	67	10/27/30			
10			SP-SM		Brown, slightly moist, medium dense, fine to medium grained, SAND with trace silt and trace to little gravel with interbedded clay seams	5	11	5/6/8			
760											
15					Boring terminated at 15 feet.						Groundwater was not encountered during drilling, nor upon completion.
755											
20											

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**LOG OF BORING B-6**

(Page 1 of 1)

Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Client Name : Hamilton County Surveyor  
Project Number : 23-0528-01G  
Logged By : J. Rogers  
Start Date : 06/05/2023  
Drilling Method : HSA

Driller : G. McDougale  
Sampling : Splitspoon  
Approx. Elevation : +/- 768 feet  
Latitude : 40° 0'16.44"N  
Longitude : 86° 3'28.79"W

Depth in Feet	Elevation (Feet) 768	Water Level	USCS	GRAPHIC	Water Levels					REMARKS	
					▼ During Drilling - 7.5 feet	▽ After Completion - Dry	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results
DESCRIPTION											
0					TOPSOIL (7")						
			CL		Gray and brown, hard, SILTY CLAY with trace sand	1	100	6/12/24	1.8	25	Boring caved to 2.5 feet upon auger removal.  Sample No. 3: Two attempts were made to obtain a splitspoon sample. Classification is based on field observations.
765			CL		Black, hard, SILTY CLAY with trace sand transitioning to brown and gray, hard, SANDY CLAY with trace gravel and interbedded sand seams	2	56	50/50-3"	3.4	19	
5			CL			3	0	26/50-2"			
760			SM		Gray, saturated, medium dense, SILTY SAND	4	78	5/8/10			
10			CL		Gray, slightly moist, stiff, SANDY CLAY with trace gravel	5	94	5/6/8	3.7	11	
15			Boring terminated at 15 feet.								
755											
750											
20											



**PATRIOT ENGINEERING  
and Environmental Inc.**

Indianapolis, Terre Haute, Evansville,  
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Louisville, KY Dayton, Cincinnati, OH

**LOG OF BORING B-7**

(Page 1 of 1)

Emily Vestal Drain  
Hazel Dell Parkway  
Noblesville, Indiana

Client Name : Hamilton County Surveyor  
Project Number : 23-0528-01G  
Logged By : J. Rogers  
Start Date : 06/05/2023  
Drilling Method : HSA

Driller : G. McDougale  
Sampling : Splitspoon  
Approx. Elevation : +/- 767 feet  
Latitude : 40° 0'11.38"N  
Longitude : 86° 3'30.24"W

Depth in Feet	Elevation (Feet) 767	Water Level	USCS	GRAPHIC	Water Levels					REMARKS	
					▼ During Drilling - 6.5 feet	▽ After Completion - 4.0 feet	◆ After 24 Hours - N/A	Samples	Rec %		SPT Results
DESCRIPTION											
0					TOPSOIL (7")						
765			CL		Black, medium stiff, SILTY CLAY with trace sand	1	72	2/3/3		38	Boring caved to 7 feet upon auger removal.
5			CL		Gray and brown, very soft, SILTY CLAY with trace sand and trace marl	2	72	2/1/1	0.7	25	
760			SP-SM		Gray, saturated, medium dense, fine to medium grained, SAND with trace silt and trace gravel	3	100	5/7/13			
10			CL		Gray, slightly moist, stiff, SANDY CLAY with trace gravel	4	94	4/5/7	2.4	13	
755			CL		Gray, slightly moist, hard, SANDY CLAY with trace gravel	5	78	10/13/25	1.7	12	
15			Boring terminated at 15 feet.								
750											
20											

## BORING LOG KEY

### UNIFIED SOIL CLASSIFICATION SYSTEM FIELD CLASSIFICATION SYSTEM FOR SOIL EXPLORATION

#### NON COHESIVE SOILS (Silt, Sand, Gravel and Combinations)

Density		Grain Size Terminology		
		Soil Fraction	Particle Size	US Standard Sieve Size
Very Loose	-4 blows/ft. or less	Boulders	Larger than 12"	Larger than 12"
Loose	-5 to 10 blows/ft.	Cobbles	3" to 12"	3" to 12"
Medium Dense	-11 to 30 blows/ft.	Gravel: Coarse	¾" to 3"	¾" to 3"
Dense	-31 to 50 blows/ft.	Small	4.76mm to ¾"	#4 to ¾"
Very Dense	-51 blows/ft. or more	Sand: Coarse	2.00mm to 4.76mm	#10 to #4
		Medium	0.42mm to 2.00mm	#40 to #10
		Fine	0.074mm to 0.42mm	#200 to #40
		Silt	0.005mm to 0.074 mm	Smaller than #200
		Clay	Smaller than 0.005mm	Smaller than #200

#### RELATIVE PROPORTIONS FOR SOILS

Descriptive Term	Percent
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

#### COHESIVE SOILS (Clay, Silt and Combinations)

Consistency	Unconfined Compressive Strength (tons/sq. ft.)	Field Identification (Approx.) SPT Blows/ft.
Very Soft	Less than 0.25	0 - 2
Soft	0.25 - < 0.5	3 - 4
Medium Stiff	0.5 - < 1.0	5 - 8
Stiff	1.0 - < 2.0	9 - 15
Very Stiff	2.0 - < 4.0	16 - 30
Hard	Over 4.0	> 30

**Classification** on logs are made by visual inspection.

**Standard Penetration Test** - Driving a 2.0" O.D., 1<sup>3/8</sup>" I.D., sampler a distance of 1.0 foot into undisturbed soil with a 140 pound hammer free falling a distance of 30.0 inches. It is customary for **Patriot** to drive the spoon 6.0 inches to seat into undisturbed soil, then perform the test. The number of hammer blows for seating the spoon and making the tests are recorded for each 6.0 inches of penetration on the drill log (Example - 6/8/9). The standard penetration test results can be obtained by adding the last two figures (i.e. 8 + 9 = 17 blows/ft.).

**Strata Changes** - In the column "Soil Descriptions" on the drill log the horizontal lines represent strata changes. A solid line (————) represents an actually observed change, a dashed line (- - - - -) represents an estimated change.

**Groundwater** observations were made at the times indicated. Porosity of soil strata, weather conditions, site topography, etc., may cause changes in the water levels indicated on the logs.

**Groundwater symbols:** ▼-observed groundwater elevation, encountered during drilling; ▽-observed groundwater elevation upon completion of boring.

# Unified Soil Classification System

Major Divisions		Group Symbol	Typical Names	Classification Criteria for Coarse-Grained Soils			
Coarse-grained soils (more than half of material is larger than No. 200)	Gravels (more than half of coarse fraction is larger than No. 4 sieve size)	Clean gravels (little or no fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines	$C_u \geq 4$ $1 \leq C_c \leq 3$	$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{D_{30}^2}{D_{10} D_{60}}$
		Poorly graded gravels, gravel-sand mixtures, little or no fines	GP	Not meeting all gradation requirements for GW ( $C_u < 4$ or $1 > C_c > 3$ )			
		Gravels with fines (appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures	Atterberg limits below A line or $P_L < 4$		Above A line with $4 < P_L < 7$ are borderline cases requiring use of dual symbols
			GC		Atterberg limits above A line or $P_L > 7$		
	Sands (more than half of coarse fraction is smaller than No. 4 sieve size)	Clean sands (little or no fines)	SW	Well-graded sands, gravelly sands, little or no fines	$C_u \geq 6$ $1 \leq C_c \leq 3$	$C_u = \frac{D_{60}}{D_{10}}$	$C_c = \frac{(D_{30})^2}{D_{10} D_{60}}$
			SP	Poorly graded sands, gravelly sands, little or no fines	Not meeting all gradation requirements for SW ( $C_u < 6$ or $1 > C_c > 3$ )		
		Sands with fines (appreciable amount of fines)	SM	Silty sands, sand-silt mixtures	Atterberg limits below A line or $P_L < 4$		Limits plotting in hatched zone with $4 \leq P_L \leq 7$ are borderline cases requiring use of dual symbols
			SC		Atterberg limits above A line with $P_L > 7$		
Fine-grained soils (more than half of material is smaller than No. 200)	Silt and clays (liquid limit <50)	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands, or clayey silts with slight plasticity	<ol style="list-style-type: none"> <li>Determine percentages of sand and gravel from grain size curve.</li> <li>Depending on percentages of fines (fraction smaller than 200 sieve size), coarse-grained soils are classified as follows: Less than 5% - GW, GP, SW, SP More than 12% - GM, GC, SM, SC 5-12% - Borderline cases requiring dual symbols</li> </ol>			
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays				
		OL	Organic silts and organic silty clays of low plasticity				
	Silt and clays (liquid limit >50)	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts				
		CH	Inorganic clays or high plasticity, fat clays				
		OH	Organic clays of medium to high plasticity, organic silts				
	Highly organic soils	PT	Peat and other highly organic soils				

