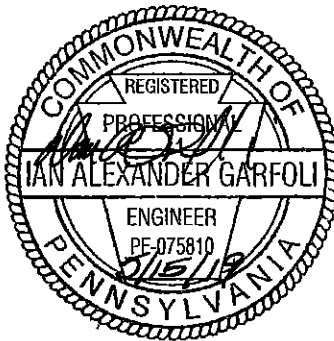


**South Darby Road Stormwater and
Roadway Improvements Project**

City of Hermitage

May 2019



181039



your trusted advisor
consultants engineers
architects
planners

3735 East State Street | Hermitage | PA | 16148 |
724.734.2306 | www.ctconsultants.com

CITY OF HERMITAGE OFFICIALS

ADMINISTRATION

Gary P. Hinkson, City Manager

Gary M. Gulla, Assistant City Manager

Donald Kizak, Engineering Manager

Donald E. Cannon, Street Department Superintendent

Marcia A. Hirschmann, Zoning, Director of Planning & Development

Jeremy P. Coxe, Assistant Director, Planning & Development

Brett Stedman, City Solicitor

Edward W. Chess, Parks and Recreation Director

Thomas W. Darby, Water Pollution & Control Superintendent

Russell Penn, Building and Inspection / Code Enforcement and Health

Sherry Iversen, Director of Finance Department

Vikki Gruitza, Finance Supervisor

Bernie Harry, Treasurer

Board of Commissioners

William J. Moder, President

Duane J. Piccirilli, Vice-President

Louis E. Squatrito, Jr., Member

William G. McConnell, Jr., Member

Michael T. Muha, Member

ADVERTISEMENT FOR BIDS/PUBLIC NOTICE TO BIDDERS

Sealed bids will be received at the office of the City Manager, Hermitage Municipal Building, 800 North Hermitage Road, Hermitage, PA 16148 until 1:30 p.m. June 6, 2019 and will be opened and read immediately thereafter for the

SOUTH DARBY ROAD STORMWATER AND ROADWAY IMPROVEMENTS PROJECT

COMPLETION DATE: 45 DAYS FROM NOTICE TO PROCEED

Bids must be in accordance with specifications and on forms available from CT Consultants, Inc., 3735 East State Street, Hermitage, PA 16148 at a non-refundable cost of One Hundred Dollars (\$100.00) picked up or One Hundred Twenty-Five Dollars (\$125.00) mailed.

The bid specifications, drawings, plan holders list, addenda, and other bid information may be obtained via the internet at www.ctconsultants.com/bidinfo/index.html . The bidder shall be responsible to check for Addenda and obtain same from the web site.

There will be a Pre-bid Conference on May 30, 2019 at 1:30 p.m. at the Hermitage Municipal Building, 800 North Hermitage Road, Hermitage, PA 16148.

Publish: *The Herald*
May 16, 2019
May 23, 2019

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SECTION 1
BID DOCUMENTS

INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

- 1.1 Sealed bids shall be received by the Owner at the location specified and until the time and date specified in the Advertisement for Bids/Public Notice to Bidders.
- 1.2 Each bid shall contain the full name and address of each person or company interested in said bid. If no other person be so interested, the Bidder shall distinctly so state the fact.
- 1.3 Bid forms must be completed in ink or by typewriter. Any corrections to the bid forms prior to submission must be initialed by the person signing the bid. Failure to submit any bid form(s) or other required document(s) may be cause for rejection of the bidder's bid at the sole discretion of the Owner.
- 1.4 Bids by Corporations must be executed in the corporate name by the President, Vice President, or other officer accompanied by evidence of authority to sign and the corporate seal must be affixed and attested by the Secretary on the Corporate Resolution form.
- 1.5 Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature.
- 1.6 All names must be typed or printed below the signature.
- 1.7 The bid shall contain an acknowledgment of receipt of all Addenda.
- 1.8 If a Bidder wishes to withdraw his bid prior to the opening of bids, he shall state his purpose in writing to the Owner before the time fixed for the opening, and when reached it shall be handed to him unread.
- 1.9 After the opening of bids, no Bidder may withdraw his bid for a period of 60 days.

PART 2 EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- 2.1 Before submitting a bid, each Bidder must
 - A. Examine the Contract Documents thoroughly.
 - B. Visit the site to familiarize himself with local conditions that may in any manner affect cost, progress, or performance of the work.
 - C. Familiarize himself with Federal, State, and local laws, ordinances, rules, and regulations that may in any manner affect cost, progress, or performance of the work.
 - D. Study and carefully correlate Bidder's observations with the Contract Documents.

- 2.2 Reference is made to the Specific Project Requirements for the identification of any reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the work which have been relied upon by the Engineer in preparing the drawings and specifications. Owner will make copies of such reports available to any Bidder requesting them if not made available with the bid documents. These reports are not guaranteed as to accuracy or completeness; nor are they part of the Contract Documents. Before submitting his bid each Bidder will, at his own expense, make such additional investigations and tests as the Bidder may deem necessary to determine his bid for performance of the work in accordance with the time, price and other terms and conditions of the Contract Documents.
- 2.3 Upon request, the Owner will provide each Bidder access to the site to conduct such reasonable investigations and tests as each Bidder deems necessary for submission for his bid.
- 2.4 The lands upon which the work is to be performed, rights-of-way for access thereto, and other lands designated for use by Bidder in performing the work are identified on the Drawings.
- 2.5 The submission of a bid will constitute an incontrovertible representation by the Bidder that he has complied with every requirement of this section and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.

PART 3 ESTIMATED QUANTITIES

- 3.1 In Unit Price Contracts, the quantities of the work itemized in the bid are approximate only and the bidders are hereby notified that the estimated quantities made by the Engineer are merely for the guidance of the Owner in comparing on a uniform basis all bids received for the work.
- 3.2 The contract quantities, where itemized, are based on plan horizontal and vertical dimensions unless otherwise specified. It is the Contractor's responsibility to verify and determine actual quantities of materials such as pipe, pavement, subgrade, etc. in his ordering materials.
- 3.3 Payments, except for lump sum contracts and except for lump sum items in unit price contracts, will be made to the Contractor only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the scheduled quantities of work to be done and materials to be furnished for items labeled as "Contingency" may be increased or diminished by any amount and the awarded quantity of all other items may be increased or diminished up to 15% without in any way invalidating the bid unit prices.
- 3.4 The successful Bidder will be required to furnish the Owner with a complete breakdown of the lump sum bid items, to the satisfaction of the Engineer/Architect, before signing the Contract documents.

PART 4 CONTRACTOR'S QUALIFICATION

- 4.1 Bidder shall provide detailed information relating to similar projects completed within the past 5 years which demonstrates the bidder's capability, responsibility, experience, skill, and financial standing to undertake this type of project and shall include a list of all projects currently under construction including status and contact person.
- 4.2 Bidder shall own, have rental or lease agreements for, or otherwise have readily available any and all equipment and tools necessary for proper execution of the work. The Owner reserves the right to request lists of equipment or tools available for the project including sources.
- 4.3 Bidder shall provide pertinent information to the Owner relative to any pending suits or outstanding liens. If no information is provided by the Bidder, the Owner shall assume that any such suits or liens do not exist.
- 4.4 The Owner may require similar information on any or all subcontractors proposed by the Bidder.

PART 5 SUBCONTRACTORS

- 5.1 The Bidder shall state on the appropriate bid form the names of all Subcontractors proposed and the items of work they are to be assigned. All work not assigned to a Subcontractor shall be assumed by the Owner to be performed by the Bidder.
- 5.2 The Owner reserves the right to approve all subcontractors proposed by the Bidder. If the Owner, after due investigation, rejects the use of a proposed subcontractor, the apparent successful Bidder may either submit an acceptable substitution without increase in bid price or decline substitution and withdraw his bid without sacrificing his bid security. Any listed subcontractor to whom the Owner does not make written objection prior to award of contract, shall be deemed acceptable to the Owner.
- 5.3 Requests for changes of Subcontractor by the Bidder after the award shall be subject to the Owner's approval and shall not change the contract bid prices.
- 5.4 No contractor shall be required to employ any Subcontractor, person or organization against whom he has reasonable objection.

PART 6 BID REVIEW BY OWNER

- 6.1 The Owner reserves the right to reject any and all bids, to waive as an informality any and all irregularities, and to disregard all nonconforming, nonresponsive or conditional bids.
- 6.2 All extensions and totals of unit prices and quantities submitted as part of the bid shall be considered informal until verified by the Owner. All bids must be made on the forms contained herein and the bid prices must be written therein, in figures only. Unit prices shall be separately written for "Unit Price Labor," "Unit Price Material," and "Total Unit Price" for each item listed. Should an error in addition and/or multiplication

be determined while checking the Contractor's math and verifying his total bid, the "Unit Price Labor" and the "Unit Price Material" figures shall govern in determining the correct "Total Unit Price" and the correct "Item Total."

- 6.3 Each bidder must bid on all Items, Alternates, Deductions, and Additions contained in the Bidding Forms. All bids not in conformity with this notice may be considered non-responsive and may be rejected.
- 6.4 In evaluating bids, the Owner may consider:
- A. The qualifications and experience of the Bidder, proposed subcontractors, and principal material suppliers as outlined in the plans and specifications.
 - B. Financial ability and soundness of the Bidder and proposed subcontractors.
 - C. Completeness of all bid forms and bid requirements.
 - D. Alternates and unit prices requested in the Bid Forms.
 - E. Unit prices or schedules of values that are or appear to be unbalanced.
 - F. Previous contractual experience with the Owner.
 - G. Whether or not the bid package complies with the prescribed requirements.
 - H. The proposed completion date, if applicable.
 - I. Any other matter allowed by law or local ordinance or resolution.
- 6.4 Owner may conduct further investigations as he deems necessary to assist in the evaluation of any bid and to establish the responsibility, qualifications, and financial ability of the Bidders, proposed Subcontractors, and other persons and organizations to do the work in accordance with the Contract Documents to Owner's satisfaction within the prescribed time.
- 6.5 Owner reserves the right to reject the bid of any Bidder who does not pass any such evaluation to Owner's satisfaction.
- 6.6 The Contract award shall be based on the lowest and best bid or lowest responsive and responsible bid (as applicable for the public contracting agency receiving bids) for the base bid and selected alternate items (if any) for this project.

PART 7 BID SECURITY

- 7.1 Each bid must be accompanied by a certified or cashier's check in the amount of 10% of the amount bid, an irrevocable letter of credit in the amount of 10% of the amount bid or an original bid bond in the amount of 10% of the amount bid. The certified or cashier's check, or irrevocable letter of credit shall be from a financial institution authorized to transact business in the State of Pennsylvania and acceptable to the Owner. The bond shall be

underwritten by a Surety Company authorized to transact business in the State of Pennsylvania and listed on the most current Department of the Treasury Circular 570, "Surety Companies Acceptable on Federal Bonds."

If bid security is made by bond, the Bidder and his Surety shall sign the Supplemental Bond Acknowledgement form and submit with his bid.

- 7.2 The certified or cashier's check, irrevocable letter of credit, or bond shall be made payable to the Owner and shall serve as a guarantee that in the event the bid is accepted and a contract is awarded to the successful Bidder, the contract will be executed by the bidder including any certifications, certificates or additional bonds required by the contract.
- 7.3 Failure on the part of the successful Bidder to execute the contract documents will cause the certified or cashier's check, irrevocable letter of credit, or bond to be forfeited to the Owner as damages.
- A. If the Owner awards the contract without rebidding, the Bidder (and the Surety on his bond if a bond was submitted) shall be liable to the Owner for a penal sum not to exceed the difference between the low bid and the next lowest bidder or 10% of the amount of the bid, whichever is less.
- B. If the Owner does not award the Contract to the next lowest Bidder, but resubmits the project for bidding; the Bidder (and the Surety on his bond if a bond was submitted) shall be liable to the Owner for a penal sum not to exceed the costs in connection with the resubmission of bids or 10% of the amount of the bid, whichever is less.
- 7.4 Checks or letters of credit for bid security of all bidders will be returned upon execution of the contract.

PART 8 CONTRACT BOND

- 8.1 As security for faithful performance and payment of all obligations under the Contract, the Owner shall require and the successful Bidder shall furnish a Contract Bond (Performance and Payment Bond) in the amount of 100% of the Contract Price. The Contractor and his Surety shall sign the Supplemental Bond Acknowledgement form and submit with the Contract forms.
- 8.2 The bond shall be underwritten by a Surety Company authorized to transact business in the State of Pennsylvania and listed on the most current Department of the Treasury Circular 570, "Surety Companies Acceptable on Federal Bonds."
- 8.3 The contract bond shall cover correction of the work for the period stated in the specifications and the correction period shall start upon Final Acceptance of the entire project and final payment by the Owner.

- 8.4 Nothing in the performance of the Engineer's service to the Owner in connection with this project shall in any way imply any undertaking for the benefit of the successful Bidder, its subcontractor(s), or the surety of any of them.

PART 9 AWARD AND EXECUTION OF CONTRACT

- 9.1 After the Owner's legislative body awards the project, the successful bidder will receive the unsigned contract documents. Within 10 days after their receipt, the successful Bidder shall sign and deliver to the Owner said contract documents including any certifications, certificates, or additional bonds required by the contract.
- 9.2 The Owner shall execute the Contract within 60 days after the day of the bid opening. When necessary and by mutual consent between the Owner and the Successful Bidder, this 60-day period may be extended.
- 9.3 The date of the Owner's signature on the Contract Agreement shall be the effective contract date.
- 9.4 The Owner shall execute and deliver to the successful Bidder one set of fully executed contract documents.

PART 10 INSURANCE

- 10.1 Verification of limits for public liability, property damage, automobile, Worker's Compensation, or any other insurance required by the provisions of this Contract must be submitted to the Owner prior to execution of the Contract.
- 10.2 All insurance shall be endorsed so that it cannot be cancelled for non-payment of premium for 10 days or cancelled or non-renewed for any other reason in less than 30 days after a written notice of such proposed action by the insurer is given to the Owner. The cancellation clause on the Certificate(s) of Insurance shall read as specified in the Supplementary Conditions and failure to submit an insurance certificate and/or policy endorsement verifying same shall be reason for the Owner to consider the Contractor non-responsive in complying with the requirements for contract execution and may be cause for forfeiture of the Bid Security to Owner.
- 10.3 The Contractor's Liability Insurance policy(s) shall be endorsed such that limits are on a Per Project basis.
- 10.4 The Contractor shall also provide an Owner's and Contractor's Protective Policy.

PART 11 NON-COLLUSION AFFIDAVIT

- 11.1 Each bid must be accompanied by a completed Noncollusion Affidavit provided within the contract documents.
- 11.2 Where there is reason to believe collusion or combination among bidders exists, the Owner reserves the right to reject the bid of those concerned.

PART 12 DELINQUENT PERSONAL PROPERTY STATEMENT

- 12.1 Included with the contract documents is a Delinquent Personal Property Statement to be filled out by the successful Bidder.
- 12.2 The statement shall be sent to both the County Auditor and the County Treasurer. A signed copy shall remain in the contract documents as well.

PART 13 ORIGINAL DOCUMENTS

- 13.1 All bid forms, contract forms, bonds and any other bid documents or contract documents requiring signatures shall be submitted with original signatures. No photo copies or faxed copies of signed documents shall be accepted.

PART 14 ADDENDA

- 14.1 The bidder shall be responsible to obtain Addenda from the web at www.ctconsultants.com/bidinfo/index.html .

END OF SECTION 1/9/19 PA

PRICES TO INCLUDE

PART 1 - GENERAL

Any work shown on the plans or required in the specifications but not paid for separately as a bid item shall be included in the cost of other bid items. The amount bid for each bid Item shall include the following:

- 1.1 All labor, materials, tools, equipment, and transportation necessary for the proper execution of the work in accordance with the Contract Documents.
- 1.2 All assistance required by the Engineer to verify compliance with the Contract Documents, including measuring for final pay quantities.
- 1.3 Project coordination and scheduling.
- 1.4 Detailed breakdown of lump sum bid items as requested by the Engineer.
- 1.5 All provisions necessary to protect workmen, the general public, and property along the work in accordance with the Contract Documents.
- 1.6 Protection and/or replacement of existing property corner monuments.
- 1.7 Protection and/or replacement of existing utilities within the project area.
- 1.8 Record drawings of the installed location of all underground electrical conduit, sewers, tees, wyes, laterals, etc.
- 1.9 Materials testing.
- 1.10 Reimbursement to Owner for costs of re-inspection or re-testing of any work not installed in compliance with the Contract Documents.
- 1.11 Construction staking of the improvements.
- 1.12 The unit price for surface courses placed on new intermediate courses shall include the cost of tack coat if directed by the Engineer.
- 1.13 The unit price for all pavement-marking items shall include making records of all existing pavement markings in the work areas and providing same to the Engineer prior to performing any work which would remove or otherwise eliminate the existing pavement markings.
- 1.14 Protection and/or removal and relocation of existing residential mailboxes affected by construction. If damaged, mailbox to be replaced in kind or better to the satisfaction of the Owner.

- 1.15 Protection and/or removal and relocation of existing landscaping features, such as boulders, timbers, railroad ties, fencing, shrubs and plantings, etc., affected by construction. If damaged, landscaping items are to be replaced in kind or better to the satisfaction of the Owner.
- 1.16 Any item of work believed to be necessary to complete work and not specifically itemized or included in an item will be incidental to the Superpave wearing course item.
- 1.17 Site restoration and cleanup, dust control measures during power sweeping with vacuum truck, furnishing and placing tar paper or plastic sheeting on manholes and valve boxes prior to tack coat or sealing, and proper disposal of all waste material.
- 1.18 Contractor must respond in writing to the Municipality and the Municipal Engineer within 48 hours of a complaint forwarded to the Contractor which was received by the Municipality. The response must include assessment of the complaint and the time frame for addressing the complaint. The Contractor must provide the name of their personnel that will handle the complaints and contact information at the pre-construction meeting.
- 1.19 Notification of all residents affected by the project one week in advance of project start date by first class mail and/or flier distributed to homes as approved by the Owner.
- 1.20 All concrete material must be tested via the methods described below.
 - 1.20.1 All concrete material must be vibrated in place per ACI Codes and Standards. All forms must be clean and free of foreign material.
 - 1.20.2 Provide proper cold weather curing per ACI Codes. All cold weather curing is incidental to the specific work item.
 - 1.20.3 Perform all field (slump, air, temperature) tests, laboratory tests and test cylinders via a third party private consultant pre-approved by the Municipality. Provide written test results for the 7- and 28-day compressive strength test. Incidental to the specific work item.
 - 1.20.4 Perform a slump test and air test (for all exposed concrete) for each 25 cubic yards of material placed per day. Provide four (4) 6-inch by 12-inch cylinders for each 50 cubic yards of material placed aggregately on the project. Incidental to the specific work item.
- 1.21 Millings for shoulder backup shall be crushed down into sizes no larger than 40 mm.

PART 2 - ITEMS

All work proposed by this contract shall be quantified and paid for in accordance with the pertinent PennDOT 408 specification except as specifically altered by other provisions of this contract.

2.1 BONDS AND INSURANCES

Basis of Payment

A "Bonds and Insurances" item (including "Owner/Contractor Protective Policy," "All Risk Builder's Risk Insurance," and/or "Installation Floater Insurance", has been included in the bid proposal.

2.2 CLEARING AND GRUBBING

Basis of Payment

The lump sum price shall be paid as per the PennDOT Pub 408 Section 201 – Clearing and Grubbing.

2.3 PAVEMENT REMOVAL, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the area in square yards and shall include the existing pavement, aggregate base and subgrade excavation to the bottom elevation of proposed crushed aggregate base course.

2.4 GEOTEXTILE FABRIC, CL IV, TYPE

Method of Measurement

The quantity to be paid shall be the area in square yards.

Basis of Payment

The square yard price shall be paid as per the PennDOT Pub 408 Section 212 – Geotextiles.

2.5 CRUSHED AGGREGATE BASE COURSE, 12" DEPTH

Method of Measurement

The quantity to be paid shall be the area in square yards.

Basis of Payment

The square yard price shall be paid as per the PennDOT Pub 408 Section 310 – Crushed Aggregate Base Course.

- 2.6 SUPERPAVE, ASPHALT MIXTURE DESIGN, HMA OR WMA WEARING COURSE, PG64-22, 0.3 TO <3 MILLION ESALS, 9.5 MM MIX, SRL-H, 1-1/2" DEPTH, AS PER PLAN

SUPERPAVE ASPHALT MIXTURE DESIGN (MAX 15% RAP), HMA OR WMA BINDER COURSE, PG 64-22, 0.3 TO <3 MILLION ESALS, 19 mm MIX, 2-1/2" DEPTH, AS PER PLAN

Basis of Payment

The unit price shall include the removal of existing pavement in the full-depth replacement sections as specified in the plans and specifications, excavation to a depth necessary to construct the full-depth pavement section as per the plans and specifications, the furnishing and placing of asphalt pavement as specified in PennDOT 409. The unit price shall also include any and all labor, equipment, and materials necessary to install the asphalt pavement as per plans and specs. In addition, this item shall include the cost and materials to perform joint and crack sealing per PennDOT 469 (including cleaning and preparation, furnishing and installing sealant, fibers, wet rolling of filled crack, and cover sand if needed), all saw cutting as specified in the plans, bituminous joint sealing with PG64-22 at all cold joints, around all structures, and along all concrete curb gutter lines; application of sand on all gutter line seal locations in front of driveways; bituminous wedge curb sealing; bituminous tack coat and power sweeping with vacuum truck; providing loose box asphalt sampling and testing for the wearing course for each roadway – testing to be conducted per PennDOT 408 requirements, minimum two loose box samples per roadway performed by independent third party testing company at the expense of the Contractor. Warm mix asphalt (WMA) is an approved alternate to HMA in both wearing and binder course.

- 2.7 DRIVEWAY REPLACEMENT, 6" DEPTH, HIGH EARLY STRENGTH, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the area in square yards of concrete driveway replacement performed per the plans and specifications measured and calculated.

Basis of Payment

The square yard price shall be paid as per the PennDOT Pub 408 Section 501 – Reinforced or Plain Cement Concrete Pavements.

- 2.8 DRIVEWAY REPLACEMENT, ASPHALT, 4" DEPTH, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the area in square yards of asphalt driveway replacement performed per the plans and specifications measured and calculated.

Basis of Payment

The unit price per square yard shall include any and all labor, equipment, and materials necessary to excavate the existing driveway, prepare and compact the new subgrade, install the new driveway that shall consist of aggregate base course, binder course, bituminous tack coat, and wearing course, and milling/excavation necessary to provide a smooth transition from the roadway to the driveway per the plans and specifications or by direction of the Engineer. The unit price shall also include the cost and materials to perform joint and crack sealing per PennDOT 469 (including cleaning and preparation, furnishing and installing sealant, fibers, wet rolling of filled crack, and cover sand if needed).

2.9 DRIVEWAY REPLACEMENT, PLAIN CEMENT CONCRETE, 5" DEPTH, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the area in square yards of concrete driveway replacement performed per the plans and specifications measured and calculated.

Basis of Payment

The unit price per square yard shall include any and all labor, equipment, and materials necessary to make neat saw cuts, excavate the existing driveway, prepare and compact the new subgrade, install the new driveway that shall consist of aggregate base course and plain cement concrete, reinforcing, tie-bars, butt joints, and finishing as necessary to provide a smooth transition from the roadway to the driveway per the plans and specifications or by direction of the Engineer.

2.10 SHOULDER BACKUP

Method of Measurement

The quantity to be paid shall be the area in square yards of shoulder backup installed per the plans and specifications measured and calculated.

Basis of Payment

The unit price per square yard shall include any and all labor, equipment, and materials necessary to place embankment off the back of the compacted shoulder and grade it to tie in smoothly with the existing terrain.

- 2.11 12" DIAMETER HDPE STORM SEWER, AS PER PLAN
18" DIAMETER HDPE STORM SEWER, AS PER PLAN
24" DIAMETER HDPE STORM SEWER, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the number of linear feet installed per the plans and specifications measured by the plan difference in horizontal distance between centerlines of manholes and/or inlets; centerline of mainline pipe for transverse sewers or laterals; ends of laterals; between ends of culvert pipe, or faces of headwalls. Any increase in installed length due to change in length of pipe or location of structures not directed by the Engineer shall not be measured for payment.

Basis of Payment

The unit price shall be irrespective of the depth of pipe and if not called out as a separate pay item shall include the removal of all existing storm sewer as shown in the plans and specifications; furnishing and laying of pipe; field location, exploratory excavation, and verification of existing utilities prior to laying conduit; earth and/or rock excavation; sheeting; shoring; disposal of undesirable and excess material; connection of any 10" or smaller pipes encountered to proposed pipes/structures; all pumping required for adequate handling of flow bypassing, underground water and/or surface water; bedding; compacted backfill material; Owner's costs related to re-inspection or re-testing of failed or re-compacted backfill material; specials; bends; tees; fittings; plugs; stoppers; cleanouts; bulkheads; jointing material; protection of existing trees or vegetation to be saved; protection and/or replacement of all existing utilities; connection to existing conduit or structures; leakage testing; internal videotaping; Owner's costs related to re-inspection or re-testing of pipe failing leakage testing or internal videotaping; removal, replacement and support of poles, posts, signs, mailboxes, paper boxes, fences, landscape timbers, guardrails, sign wiring, fixtures, or other appurtenances; surface grading above and adjacent to pipes or structures to achieve final design grade; cleaning/shaping of swales or ditches; temporary pavement; material and labor necessary to reconnect drain pipes to new storm system; temporary and permanent watertight connections to existing storm sewers and drainage pipes; temporary watertight plug of drain pipe for future connection/extension by others as indicated on the plans; and the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown. The unit price shall also include the relocation/replacement of any existing sanitary laterals, gas service lines, water service lines, or any other encountered service lines or utilities and related coordination with utility owners.

- 2.12 2' x 2' CATCH BASIN (ODOT TYPE 2-2B), AS PER PLAN
3' x 3' CATCH BASIN (ODOT TYPE 2-3), AS PER PLAN
48" STORM MANHOLE W/ SLAB TOP, AS PER PLAN
60" STORM MANHOLE W/ SLAB TOP, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the number individual catch basins installed in accordance with the plans and specifications.

Basis of Payment

The unit price shall include pavement saw cutting, removal of existing catch basins as shown in the plans and specifications, excavation, disposal of excess material, backfill of existing inlet after new inlet has been installed (select backfill), pipe stubs of matching diameter and material to tie to existing storm sewer, precast concrete structures, castings, forming of inverts, link-seal connectors, non-shrink grout of pipe connection orifice (inside and out), concrete collars for new-to-existing pipe connections, and the furnishing of all labor, materials, tools and appurtenances necessary to complete the work as specified or as shown. All new inlet structures must be field verified for depth from surface prior to ordering; any adjustments to the structures are incidental to the new inlet item including, but not limited to, cutting of the box or grade adjustment rings.

2.13 MOBILIZATION, AS PER PLAN

Basis of Payment

The lump sum price shall include all of the Contractor's setup, staging and storage, temporary facilities he may need, and erosion and sedimentation control. The total price proposed for this item shall not exceed 5% of the total base bid.

2.14 EROSION AND SEDIMENTATION CONTROL, AS PER PLAN

Basis of Payment

The lump sum price shall include any and all labor, equipment, and materials including but not limited to inlet protection, straw bales, silt fence, mulch sock, check dams, sediment traps or basins, and temporary seeding to provide erosion and sedimentation controls commensurate with the Contractor's means, methods, work schedule, and in accordance with plan details and specifications. Payment shall be made progressively throughout the contract period in proportion to the percentage of work complete or as otherwise approved by the Engineer.

2.15 MAILBOX RELOCATION

Method of Measurement

The quantity to be paid shall be for each mailbox to be relocated per the plans and specifications measured and calculated.

Basis of Payment

The unit price per each mailbox shall include any and all labor, equipment, and materials necessary to remove and relocate the existing mailbox. This includes providing a new post and a new mailbox if the existing mailbox is not in satisfactory condition to warrant reinstallation. This item is also at the direction of the Engineer.