BID SET

2024 Pavement Repair Program

City of Willoughby

July 2024



240135



8150 Sterling Ct. | Mentor | OH | 44060 | 440.951.9000 | www.ctconsultants.com

CITY OF WILLOUGHBY OFFICIALS

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ADVERTISEMENT FOR BIDS/PUBLIC NOTICE TO BIDDERS

Sealed bids will be received at the office of the Service Director at Willoughby City Hall, 1 Public Square, Willoughby, OH 44094 until 12:00 p.m. on August 2, 2024 and will be opened and read immediately thereafter for the

2024 PAVEMENT REPAIR PROGRAM

OPINION OF PROBABLE CONSTRUCTION COSTS: \$1,060,000.00

COMPLETION DATE: OCTOBER 18, 2024

The bid specifications, drawings, plan holders list, addenda, and other bid information (**but not the bid forms**) may be viewed and/or downloaded for free via the internet at <u>https://bids.ctconsultants.com</u>. The bidder shall be responsible to check for Addenda and obtain same from the web site.

Bids must be in accordance with drawings and specifications and on forms available from CT Consultants, Inc. at a non-refundable cost of One Hundred Twenty-Five Dollars (\$125.00) for hard copies and \$45.00 for electronic files. Documents may be ordered by registering and paying online at https://bids.ctconsultants.com. Please contact planroom@ctconsultants.com or call (440) 530-2395 if you encounter any problems viewing, registering or paying for the documents.

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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 their bid prior to the opening of bids, they shall state their purpose in writing to the Owner before the time fixed for the opening, and when reached it shall be handed to them unread.
- 1.9 After the opening of bids, no Bidder may withdraw their 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 themselves with local conditions that may in any manner affect cost, progress, or performance of the work.
 - C. Familiarize themselves 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 their bid each Bidder will, at their own expense, make such additional investigations and tests as the Bidder may deem necessary to determine their 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 their 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 they have 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 their 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.
- 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.
- 4.5 Bids of corporations not chartered in the state in which the work will take place must be accompanied by proper certification that the corporation is authorized to do business in that state.

PART 5 SUBCONTRACTORS

- 5.1 The Bidder shall state on the appropriate bid form the names of all Subcontractors, Sub Consultants and other professional service providers 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 their bid without sacrificing their 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 they have 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 their 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 More than one bid for the same work from an individual or entity under the same of different names will not be considered. Reasonable grounds for believing that any bidder has an interest in more than one bid for the work may be cause for disqualification of that bidder and the rejection of all bids in which the bidder has an interest. A subcontractor or supplier is not a bidder, and may submit prices to multiple bidders.
- 6.5 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.
- 6.6 Owner may conduct further investigations as they deem necessary to assist in the evaluation of any bid and to establish the responsibility, qualifications, and financial ability of the Bidder, 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.
- 6.7 Owner reserves the right to reject the bid of any Bidder who does not pass any such evaluation to Owner's satisfaction.

6.8 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 bond in the amount of 100% of the amount bid per ORC 153.54 and 153.571. 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 Ohio and acceptable to the Owner. The bond shall be underwritten by a Surety Company authorized to transact business in the State of on the most current Department of the Treasury Circular 570, "Surety Companies Acceptable on Federal Bonds." The bond shall be a "Bid Guarantee and Contract Bond" ("rollover bond") per O.R.C. sections 153.54 and 153.571 submitted for the full amount of the bid **including all alternates**, if any.

If bid security is made by bond, the Bidder and their Surety shall sign the Supplemental Bond Acknowledgement form and submit with their 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 their 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 their 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 in the manner and timeframe stipulated in the Ohio Revised Code.

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 either:
 - A. *If submitted as Bid Security at time of bid:* "Bid Guarantee and Contract Bond" (AKA "rollover bond") per O.R.C. sections 153.54 and 153.571.
 - B. If a cashier's check or irrevocable letter of credit is submitted as Bid Security at time of bid: Contract Bond per Ohio Revised Code Sections 153.54 and 153.57, in the amount of 100% of the Contract Price. The Contractor and their 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 Ohio having an Ohio agent 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 Insurer's affording coverage shall be authorized to transact business in the State of Ohio and be listed on the most current Ohio Department of Insurance list of Ohio Licensed Companies.
- 10.4 The Contractor's Liability Insurance policy(s) shall be endorsed such that limits are on a Per Project basis.
- 10.5 The Contractor shall also provide an Owner's and Contractor's Protective Policy.
- PART 11 NON-COLLUSION AFFIDAVIT
- 11.1 Collusion between bidders will be cause for rejection of affected bids and may be cause for rejection of all bids. Multiple bids submitted by one bidder under the same name or different names, whether as an individual, firm, partnership, corporation, profit or non-profit, affiliate, or association will be cause for rejection of bids. A subcontractor is not a bidder, and may submit prices to multiple bidders.
- 11.2 All bidders shall submit an affidavit that their bid is genuine and not collusive or sham; that such bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to put in a sham bid, or that such other bidder or person shall refrain from bidding; that such bidder has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the Owner or any person or persons interested in the proposed contract; that such bidder is the only party (or parties) who has an interest with the bidder in the profits of any contract which may result from the herein contained proposal; that no individual affiliated with the Owner, including but not limited to the head of any department, any employee, or any other official or officer of the Owner, is or will be directly or indirectly interested in this bid, and/or the profits from this bid if successful; that no individual affiliated with the Owner, including but not limited to the head of any department, any employee, or any other official or officer of the Owner, has or will receive anything of value as a result of the submission of this bid or its award; that no individual affiliated with the Owner, including but not limited to the head of any department, any employee, or any other official or officer of the Owner, has been solicited to provide assistance and/or provided assistance to the bidder which might give the bidder a competitive advantage or circumvent the competitive bidding process; and that all statements contained in said proposal are true; and further, that such bidder has not, directly or indirectly submitted this bid, or the contents thereof, or divulged information or data relative thereto to any association or to any member or

agent thereof.

- 11.3 Each bid must be accompanied by a completed Noncollusion Affidavit provided within the contract documents.
- 11.4 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 <u>https://bids.ctconsultants.com</u>.

END OF SECTION 10/31/23

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 and completion 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 Reimbursement to Owner for costs of re-inspection or re-testing of any work not installed in compliance with the Contract Documents.
- 1.7 Construction staking of the improvements.
- 1.8 All erosion control measures as necessitated by the contractor's means and methods.
- 1.9 Mobilization.
- 1.10 The unit prices shall include restoration, seeding and mulching.
- 1.11 The unit price for surface courses shall include the cost to seal any cracks which may develop in the asphalt pavement during the Correction Period. The sealing shall be done just prior to the end of the Correction Period unless, due to the season and inclement weather, a time extension is granted and the Correction Period extended.
- 1.12 Asphalt binder price adjustment shall not apply to this project.
- 1.13 All asphalt mixes shall be designed for medium traffic.
- 1.14 The Unit Price shall include saw cutting, removal and disposal if the proposed item includes removal.

PART 2 - ITEMS

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

2.1 (SPC) BONDS AND INSURANCES, AS PER PLAN

Basis of Payment

A "Bonds and Insurances" item (including "Owner/Contractor Protective Policy," **and endorsements as needed to fully comply with all contract requirements**) has been included in the bid proposal.

2.2 (204) EXCAVATION OF SUBGRADE AND EMBANKMENT WITH GRANULAR MATERIAL, CCS, FABRIC, AS PER PLAN, CONTINGENCY, AS DIRECTED

The work, method of construction and materials for undercut and backfill unsuitable subgrade, as directed, shall conform to ODOT Item 204, with the following modifications:

- A. The following items of work shall be considered incidental costs to be included in the bid item:
 - 1. Excavation to depth required by the Engineer to remove unstable material.
 - 2. Backfill and compaction to a level equal to the proposed subbase with No. 304 stone under new pavement. The unit price in the Bid shall be for crushed limestone.

Method of Measurement

The quantity to be paid of cubic yards of undercut and backfill unsuitable subgrade, as directed, shall be the number of cubic yards excavated and backfilled, complete and accepted, measured and calculated by surface area of the pavement above the undercut times the depth directed to be undercut.

Basis of Payment

The unit price shall be full compensation for furnishing and placing all materials and furnishing all labor, tools and equipment necessary to complete the work as specified or a shown on the contract drawings.

2.3 (251) PARTIAL DEPTH PAVEMENT REPAIR, AS PER PLAN

Method of Measurement

The quantity to be paid shall be number of square yards installed calculated from the length measured along the center of the existing area being repaired times the width directed to be milled and patched. The width shall be variable.

Basis of Payment

The unit price shall include all work to mill the existing asphalt or concrete to a width as directed and install tack coat and asphalt concrete.

2.4 (253) PAVEMENT REPAIR, AS PER PLAN

The work, method of construction and materials for pavement repair shall be in accordance with ODOT Item 253 with the following modifications.

- A. Compacted thickness shall be as detailed on the plans.
- B. This item shall be used as directed by the Engineer.

Method of Measurement

Measurement of pavement repair of the thickness specified shall be the number of cubic yards of asphalt concrete base completed and accepted in place.

Basis of Payment

The accepted quantities of pavement repair of thickness specified will be paid for at the contract unit price per cubic yard, which price and payment shall be full compensation for furnishing and placing all materials, including furnishing all labor, tools, appliances, equipment and all other appurtenances necessary to complete the work as specified or as directed; including any necessary pavement saw cuts, existing pavement/subbase removal (regardless of material type) and subbase preparation.

2.5 (254) PAVEMENT PLANING, ASPHALT CONCRETE, AS PER PLAN

Basis of Payment

The work method of construction and materials for bituminous pavement planing shall conform to ODOT Item 254 with the following modification.

- A. Bituminous pavement planing shall include planing of any existing concrete patches and/or trench caps whether exposed or covered by an asphalt layer to the depth to match existing concrete base elevation.
- B. Pavement planing shall include immediately cleaning and removal of all debris to the satisfaction of the City.
- C. Unit price shall include the installation, maintenance, and removal of temporary apron wedges (ramps) as directed out of asphalt of asphalt millings for any apron lip greater than 3" after planing (as directed).
- D. Unit price shall include the removal of all inlet grates, wrapping with filter fabric or other approved debris protection and replacing the grates **prior** to the start of any planing. The Contractor shall maintain this protection system throughout the work and remove the fabric within 72 hours of the surface course placement.
- E. Up to 6 truckloads of grindings shall remain the property of the Owner. The Contractor, at no additional expense to the Owner, shall stockpile this material at a location to be determined by the Owner. Remaining grindings shall become property of the Contractor.

Method of Measurement

The number of square yards of bituminous pavement planing shall be the actual square yards of pavement planed to the depth specified and disposed of as measured in the field.

Basis of Payment

The unit price stipulated per square yard for pavement planing of the thickness specified shall be full compensation for furnishing and placing all materials, disposal of removed material at a City site if specified and/or removal offsite, and furnishing of all labor, tools and equipment necessary to complete the work as specified or as shown on the contract drawings.

2.6 (255) FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QCMS, AS PER PLAN

The work method of construction and materials for pavement replacement of the type specified shall be in accordance with ODOT Item 255 except as modified herein.

- A. Saw cuts shall be made to the full depth of the existing concrete pavement and be considered an incidental cost to be included with the bid item.
- B. Concrete replacement thickness shall not be less than the existing thickness.
- C. The unit price shall include hook bolt installation and the application of joint sealant.
- D. 3" subgrade, installation, preparation, and compaction are to be included for payment under this item.
- E. Furnish material conforming to ODOT Item 499 Concrete, class mix specified in plans.

Method of Measurement

The quantity to be paid of pavement replacement including subbase and curbs of the thickness and class of concrete specified, shall be the number of square yards of pavement completed and accepted in place. The width for measurements will be the width of the pavement shown on the typical cross-section of the plan, details, additional widening where called for, or as otherwise directed in writing by the Engineer. The length will be measured horizontally along the centerline of the installed utility. The plan quantities as adjusted for changes, errors and deviation in excess of allowable tolerances will be the method of measurement.

Basis of Payment

The unit price per square yard, shall be full compensation for furnishing and placing all materials, including reinforcing steel, dowels and joint materials, subbase material and compaction, concrete, concrete curb, joint saw cutting, curing compound and furnishing all labor, tools, appliances, equipment and all other appurtenances necessary to complete the work as specified or as shown.

2.7 (422) CHIP SEAL, AS PER PLAN

The work, method of construction and materials for chip seal shall be in accordance with ODOT Item 422.

Method of Measurement

Measurement will be made on a square yardage basis for the actual area of chip seal installed as measured in the field.

Basis of Payment

The unit price bid shall include all labor, material and equipment necessary to apply the bituminous material and aggregate in place, completed and accepted in accordance with the specifications or as directed by the Engineer.

2.8 (441) ASPHALT CONCRETE SURFACE COURSE, AS PER PLAN

The work, method of construction and materials for asphalt concrete surface course shall be in accordance with ODOT Item 448 with the following modifications:

- A. Compacted thickness shall be as detailed on the plans.
- B. All gutters, street castings and joints shall be sealed with an approved liquid bituminous material 4 inches in width and the cost is to be included with the bid item.
- C. Hot applied asphalt joint adhesive is to be applied to cold longitudinal construction joints and shall conform to ODOT supplemental Specification 875. This item shall be included in the cost of Asphalt Concrete Surface Course.
- D. Necessary butt or tapered edge joints and pavement saw cuts shall be considered incidental costs to be included in this bid item.

E. Reclaimed or recycled material shall not be used. Only new materials shall be used.

Method of Measurement

The measurement of asphalt concrete surface course of the thickness specified shall be the number of cubic yards of asphalt concrete surface course completed and accepted in place. The area for measurements will be as shown on the plans, or as otherwise directed in writing by the Engineer. The plan quantities as adjusted for changes, errors and deviation in excess of allowable tolerances will be the method of measurement.

Basis of Payment

The accepted quantities of asphalt concrete surface course of the thickness specified shall be full compensation for furnishing and placing all materials, including sealing materials, pavement striping, and furnishing all labor, tools, appliances, equipment and all other appurtenances necessary to complete the work as specified or as shown; including feathering at drives as necessary and butt or taped edge joints and necessary pavement saw cuts.

2.9 (441) ASPHALT CONCRETE INTERMEDIATE COURSE, AS PER PLAN

The work, method of construction and materials for asphalt concrete surface course shall be in accordance with ODOT Item 448 with the following modifications:

A. Compacted thickness shall be as detailed on the plans.

B. Maximum amount of R.A.P. shall be 25% for the intermediate course mix.

Method of Measurement

The measurement of asphalt concrete intermediate course of the thickness specified shall be the number of cubic yards of asphalt concrete intermediate course completed and accepted in place. The area for measurements will be as shown on the plans, or as otherwise directed in writing by the engineer. The plan quantities as adjusted for changes, errors and deviation in excess of allowable tolerances will be the method of measurement.

Basis of Payment

The accepted quantities of asphalt concrete intermediate course of the thickness specified shall be full compensation for furnishing and placing all materials, including furnishing all labor, tools, appliances, equipment and all other appurtenances necessary to complete the work as specified or as shown; including any necessary pavement saw cuts.

2.10 (452) 6 INCH NON-REINFORCED CONCRETE DRIVES AND APRONS, CLASS QCMS, INCLUDING FIBER REINFORCING, INCLUDING REMOVAL, AS PER PLAN

The work, method of construction and materials for concrete pavement for drives shall conform to ODOT 452, except as modified herein or as shown on the contract drawings.

- A. There will be no separate measurement or payment for removal and disposal of existing walk or concrete drives or subbase, crushed limestone base, and subgrade compaction. These items of work shall be included in the furnishing and installation of new concrete pavement for drives.
- B. Wire mesh reinforcing shall be furnished and installed if included in an existing apron. The cost of furnishing and installing the wire mesh reinforcing shall be included in the cost of this item of work.
- C. The unit price shall include Fiber Reinforcement as indicated.
- D. There will be no additional compensation for providing a thickened edge and/or integral curb, as detailed.
- E. ODOT Item 499 Concrete, Class QCMS mix shall be used in drives and drive aprons.

- F. Each and every drive slab and joint shall be edge tooled after texturing surface to match existing.
- H. ODOT 304 Aggregate Base, utilizing crushed limestone, shall be provided with these items.

Method of Measurement

The quantity to be paid of concrete for drives to the thickness and class of concrete specified shall be the actual square dimension, square feet or square yards as indicated in the Proposal of finished surface complete in place.

Basis of Payment

The unit price stipulated per square foot or square yards (as indicated in the Proposal) for concrete pavement for drives or aprons of the thickness and class of concrete specified shall be full compensation for furnishing all materials, grading, forming, finishing of the pavement including removal and disposal of existing grass, sod, topsoil, bushes, trees, walk or pavement and curbs, necessary pavement saw cutting, clearing and grubbing, excavation and/or backfill to required line and grade, subgrade compaction as required, furnishing and installing subbase or base material, integral curbing, adjustment of water/gas service valves, concrete, curing compound, and expansion joint material; wire and/or mesh reinforcing as required; furnishing of all labor, tools, materials and equipment necessary to complete the work as specified or as shown.

2.11 (609) CURB, ALL TYPES, INCLUDING REMOVAL, AS PER PLAN

The work, method of construction and materials for concrete curb as directed, of the type specified shall conform to ODOT Items 609 and 202 and as per details in the plans with the following modifications.

- A. ODOT Item 499 Concrete, Class QC MS mix shall be used for all concrete curbs.
- B. Asphalt curb shall match existing.

Method of Measurement

The length of curb of the type specified shall be the actual length of curb removed, replaced and accepted.

Basis of Payment

The unit price stipulated per lineal foot for curb as directed for the type specified shall be full compensation for excavation, removal and disposal of existing curb base, pavement, including necessary saw cuts, restoration of curb underdrains as required, backfill, lineal grading behind the curb to establish positive drainage as directed, seeding and mulching behind the curb, and installing hook-bolts, dowels, joint sealant and new curbs and furnishing and placing all materials, and furnishing all labor, tools, and equipment necessary to complete the work as specified or as shown in the Contract Drawings.

2.12 (611) CASTINGS ADJUSTED TO GRADE, AS PER PLAN

The work, method of construction and materials for various street castings adjusted to grade shall be in accordance with ODOT Item 611 with the following modifications.

- A. Metal adjusting rings or castings shall not be used. Existing risers shall be removed during the casting adjustment.
- B. Brick used shall be clay or shale brick meeting the requirements of ASTM C32 sewer brick, Grade SM.
- C. Concrete brick or masonry block shall not be used.
- D. The height limitation for additional compensation shall be revised from one (1) foot to two (2) feet.
- E. Type QC MS concrete shall be used for fill around all castings.
- F. All costs for work and material associated with incorporating a new style casting designated by the City which may include steel plates, corbelling, and/or shifting the casting to its proper location shall be included in this Item.

Method of Measurement

The quantity to be paid for of each, manholes, catch basins, water meter castings, monument boxes, gas valve boxes, water valve boxes, or service line valve boxes, adjusted to grade to be paid for shall be the actual number adjusted to grade in accordance with the contract, contract drawings and these specifications. Adjusting to grade of items proposed for new or replaced construction as part of the project will not be measured and shall be paid for in the cost of installation of that item.

Basis of Payment

The unit price stipulated, each, for manholes, catch basins, water meter castings, monument boxes, gas valve boxes, water valve boxes or service line valve boxes, adjusted to grade to be paid for under this Item shall be full compensation for furnishing and placing all material including removal, cleaning, storage and resetting of salvaged casting or new casting; pavement saw cutting, resetting of loose brick work if needed, 3/4-inch steel plates, and furnishing of all labor, tools, and necessary appurtenances to complete the work as specified or as shown on the contract drawings.

2.13 (611) STRUCTURES RECONSTRUCTED TO GRADE, AS PER PLAN

The work, method of construction and materials for catch basins or manholes reconstructed to grade shall be in accordance with ODOT Item 611 with the following modifications:

A. The Contractor and the representative of the Engineer shall field check all manholes and catch basins within the project which are to remain. Any manhole or catch basin found to exhibit substantial deterioration and requires more work than specified under adjusted to grade, shall be reconstructed to grade to a depth as directed by the Engineer.

- B. Metal adjusting rings or castings shall not be used.
- C. Brick used shall be clay or shale brick meeting the requirements of ASTM C32 sewer brick, Grade SM.
- D. Concrete brick or masonry block shall not be used.
- E. This Item shall be paid only for the vertical footage beyond the 2-foot maximum of the adjust to grade item.
- F. Type QC MS concrete shall be used for fill around all castings.
- G. All costs for work and material associated with incorporating a new style casting designated by the City which may include steel plates, corbelling, and/or shifting the casting to its proper location shall be included in this Item.

Method of Measurement

The vertical feet of manholes or catch basins reconstructed to grade to be paid for shall be the actual vertical feet reconstructed to grade measured vertically from the bottom of the casting to bottom of wall reconstructed in accordance with the contract, contract drawings and these specifications. Adjusting to grade of items proposed for new or replaced construction as part of the project will not be measured and shall be paid for in the cost of installation of that item.

Basis of Payment

The unit price stipulated, per vertical feet for catch basins, or manholes reconstructed to grade to be paid for under this Item shall be full compensation for furnishing and placing all materials including removal, cleaning, storage and resetting salvaged or new casting and furnishing of all labor, tools, and necessary appurtenances to complete the work as specified or as shown on the contract drawings.

2.14 (611) MISCELLANEOUS METALS

The work, method of construction and materials for miscellaneous metals shall be in accordance to pertinent sections of ODOT 611 with the following modifications:

- A. All sanitary and storm manhole covers within the project limits shall be replaced with custom East Jordan 1710A "City of Willoughby" covers. Sanitary cover product number "NPR20-000117-14991." Storm cover product number "NPR20-000117-14974." Existing frames shall be replaced as necessary.
- B. Existing castings may prove to be unsuitable, as determined by the Engineer, during construction of the project. It shall be the Contractor's responsibility to provide the casting of the required type, size and strength for the particular structure in question, as directed by the Engineer. All grated castings shall be bicycle safe.

- C. All castings shall conform to the requirements of ODOT Item 611.
- D. All castings removed shall remain the property of the Owner and shall be delivered to a location within the City as directed by the Owner.
- E. The Contractor is cautioned to use extreme care in the removal, storage and replacement of all castings. Any casting damaged by the negligence of the Contractor shall be replaced with the proper casting by the Contractor at no expense to the Owner.
- F. The Contractor shall not order materials until authorized by the Engineer.
- G. Castings installed for new structures (manhole/catch basins) or reconstructed to grade shall not be paid for under this item.

Method of Measurement

The quantity of miscellaneous metal to be paid for shall be actual pounds of metal supplied, supported by invoice, and accepted.

Basis of Payment

The unit price stipulated per pounds of miscellaneous metal shall be compensation for furnishing all materials, including delivery of old castings to a location within the City designated by the Owner. Placing of the various castings shall be paid for under adjusted to grade bid items.

2.15 (614) MAINTAINING TRAFFIC, AS PER PLAN

The work, method of construction and materials for maintaining traffic shall be in accordance with ODOT Item 614 and the Ohio Manual of Uniform Traffic Control Devices (OMUTCD). **The contractor shall submit a traffic control plan prior to the preconstruction meeting.**

Basis of Payment

The lump sum price stipulated for maintaining traffic shall include all costs for labor, materials, tools and appurtenances necessary to complete the work as specified. Payment shall be made progressively throughout the contract period in proportion to the percentage of work complete or as otherwise approved by the Engineer.

2.16 (638) VALVE BOX ADJUSTED TO GRADE, AS PER PLAN

Method of Measurement

The quantity to be paid shall be the number directed to be adjusted with a new riser section or sections.

Basis of Payment

The unit price shall include all labor and materials to adjust the valve box to grade with a new riser section or sections including all excavation, disposal of excess materials, stone backfill to base elevation and QCMS concrete for pavement replacement (T= match existing). The new riser section or sections, as directed, will be supplied by the Water Department. The Contractor shall coordinate with the Water Department in a timely manner to supply needed riser sections.

2.17 (642) TRAFFIC PAINT, AS PER PLAN

Basis of Payment

The lump sum price shall include recording locations of existing pavement markings and repainting of existing pavement markings. Quantities are shown on the plans.

2.18 (SPC) CONTINGENCY/DISCRETIONARY ALLOWANCE

Basis of Payment

A Contingency/Discretionary Allowance has been included in the bid proposal to be utilized as directed by the Engineer for unscheduled work items not included on the proposal forms or other changes in the work. Any portion of the allowance not utilized shall be credited to the Owner.