



## **CONTRACT DOCUMENTS AND SPECIFICATIONS**

**FOR**

# **FOREST PARK 2025 STREET PROGRAM**

**Prepared for:**

**CITY OF FOREST PARK  
3814 HARRISON AVENUE  
CHEVIOT, OHIO 45211**

**Prepared by:**

**Verdantas LLC  
4420 Cooper Road, #200  
Cincinnati, Ohio 45242**

**Verdantas Project No: 250070**

**March 2025**

**SPECIFICATIONS  
AND  
CONTRACT DOCUMENTS**

**FOREST PARK 2025 STREET PROGRAM**

**CITY OF FOREST PARK, OHIO**

**VERDANTAS LLC  
4420 COOPER ROAD, SUITE 200  
CINCINNATI, OHIO 45242  
[www.verdantas.com](http://www.verdantas.com)**

## **PROJECT INFORMATION**

**PROJECT:** **FOREST PARK 2025 STREET PROGRAM**

**OWNER:** **CITY OF FOREST PARK  
1201 WEST KEMPER ROAD  
FOREST PARK, OHIO 45240**

**ENGINEER:** **VERDANTAS, LLC  
4420 COOPER ROAD, SUITE 200  
CINCINNATI, OHIO 45242**

**CONTACT: ERIC MORRIS  
TELEPHONE: (513) 792-8413  
E-MAIL: emorris@verdantas.com**

**CT CONSULTANTS, INC.  
PROJECT:** **#250070**

**BID OPENING DATE:** **APRIL 9, 2025**

**ADVERTISING DATE:** **CINCINNATI ENQUIRER -  
  
MARCH 26, 2025  
APRIL 2, 2025**

# CITY OF FOREST PARK, OHIO

## **MAYOR**

Aharon Brown

## **1ST VICE MAYOR**

Denise Holt

## **2ND VICE MAYOR**

Rosalind Moore

## **CITY MANAGER**

Donnie Jones

## **CITY COUNCIL**

Travina Adams

Chelsea Clark

Terrence Harrison

Reginald Sylvester

**CITY OF FOREST PARK, OHIO  
HAMILTON COUNTY**

**INVITATION TO BID**

Sealed proposals will be received at the office of the City Clerk, Municipal Building, City of Forest Park, Hamilton County, 1201 W. Kemper Road, 45240, until **11:00 AM** local time on **APRIL 9, 2025**, for furnishing all labor, materials, and equipment necessary to complete project known as the **FOREST PARK 2025 STREET PROGRAM**, and, at said time and place, publicly opened and read aloud.

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 Dollars (\$100.00) for mailed hard copies and \$45.00 for electronic files. Documents may be ordered by registering and paying for the documents online at <https://bids.verdantas.com>. Please contact [planroom@verdantas.com](mailto:planroom@verdantas.com) or call 440-530-2351 if you encounter any problems registering or paying for the documents

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 <https://bids.veredantas.com>. The bidder shall be responsible to check for Addenda and obtain same from the web site.

Each bidder is required to furnish with his proposal, a Bid Guaranty and Contract Bond in accordance with Section 153.54 of the Ohio Revised Code. Bid security furnished in Bond form shall be issued by a Surety Company or Corporation licensed in the State of Ohio to provide said surety.

Proposals must contain the full name of the party or parties submitting the same and all persons interested therein. It is the intent and requirements of the Owner that this project be completed no later than **OCTOBER 15, 2025**.

When the total overall project exceeds \$29,653, all bidders must comply with the prevailing wage rates on Public Improvements in Hamilton County and the City of Forest Park, Ohio, as ascertained and determined by the Administrator of the Ohio Bureau of Employment Services (OBES) as provided in Section 4115.05 through 4115.034 of the Revised Code of the State of Ohio. It is anticipated that the Prevailing Wage Law will apply to this project.

The Council of the City of Forest Park, Ohio, reserves the right to waive irregularities and to reject any or all bids.

---

Donnie R. Jones, City Manager

Publishing Date: **CINCINNATI ENQUIRER**  
**MARCH 26, 2025**  
**APRIL 2, 2025**

## TABLE OF CONTENTS

|  | <u>Page</u> |
|--|-------------|
| <b>Project Information</b>   |             |
| <b>Legal Notice / Invitation to Bid</b>                            |             |
| <b>City of Forest Park Officials</b>                               |             |
| <br><b><u>INSTRUCTIONS TO BIDDERS</u></b>                          |             |
| General  | 1           |
| Definitions of Terms   | 1-2         |
| ODOT Construction and Material Specifications                      | 2           |
| Examination of Plans, Specifications, General Provisions, and Site | 2-3         |
| Interpretation of Quantities in Proposal                           | 3           |
| “Or Approved Equal” Items  | 3           |
| Addenda  | 3           |
| Alternate Bid  | 3           |
| General Conditions   | 4           |
| Bidders Qualifications   | 4           |
| Subcontracts   | 4-5         |
| Bid Guaranty   | 5-6         |
| Preparation of Proposal  | 6-7         |
| Date for Completion  | 7           |
| Delivery of Proposals  | 7           |
| Withdrawal or Modification of Proposals                            | 8           |
| Public Opening of Proposals  | 8           |
| Disqualification of Bids   | 8           |
| Non-Responsive Proposals   | 8           |
| Rights Reserved by the Owner                                       | 8-9         |
| Material Guaranty  | 9           |
| Notice of Award  | 9           |
| Documents Required Prior to Signing of Contract                    | 9           |
| Contract Guaranty  | 10          |
| <br><b><u>GENERAL PROVISIONS</u></b>                               |             |
| Quantities   | 11          |
| Preference for Ohio Products, Services, and Labor                  | 11          |
| Subcontractors   | 11          |
| Wage Rates   | 11-12       |
| Insurance  | 12-13       |
| Antidiscrimination Clause  | 14          |
| Preconstruction Conference and Partnering                          | 14          |

| <b><u>GENERAL PROVISIONS (Continued)</u></b>                  | <b><u>Page</u></b> |
|---|--------------------|
| Haul Roads  | 14-15              |
| Permits   | 15                 |
| Operations/Progress Schedule Coordination                     | 15                 |
| Coordination of Specifications, Plans, and General Provisions | 15-16              |
| Plans   | 16                 |
| Notice to Proceed   | 16                 |
| Construction Layout Stakes                                    | 16                 |
| Safety Standard and Accident Prevention                       | 17                 |
| Cooperation by Contractor                                     | 17                 |
| Cooperation between Contractors                               | 17                 |
| Warranty  | 18                 |
| Control of Material   | 18                 |
| Storage of Materials  | 18                 |
| Testing   | 19                 |
| Testing Requirements  | 20-21              |
| Sanitary Measures   | 21                 |
| Public Convenience and Safety                                 | 21                 |
| Maintenance of Traffic  | 21                 |
| Protection and Restoration of Property                        | 22                 |
| Clean-up During Construction                                  | 22                 |
| Final Clean-up  | 22                 |
| Final Inspection  | 23                 |
| Utilities   | 23                 |
| Sewage, Surface, and Flood Flows                              | 23                 |
| Use of Existing Facilities                                    | 23                 |
| Underground Utility Facilities/Cooperation with Utilities     | 23-24              |
| Maintenance During Construction                               | 25                 |
| Failure to Maintain Roadway or Structure                      | 25                 |
| Protection of Existing Structures                             | 25-26              |
| Monuments and Landmarks                                       | 26                 |
| Base Lines and Benchmarks                                     | 26                 |
| Restoration of Disturbed Areas                                | 26                 |
| Supervision of the Work                                       | 26-27              |
| Defective or Unacceptable Work                                | 27-28              |
| Intent of Contract  | 28                 |
| Measurement of Quantities                                     | 28                 |
| Plans and Estimated Quantities                                | 28                 |
| Prices  | 29                 |
| Alteration of Plans or Character of Work                      | 29                 |
| Extra Work  | 30                 |
| Modification of Contract or Change Orders                     | 30                 |
| Disputes and Contractor Claims                                | 30-31              |
| Times of Completion and Damages for Delays                    | 31-32              |
| Failure to Complete on Time                                   | 32-33              |
| Unsatisfactory Progress and Termination of the Contract       | 33                 |
| Payments  | 34                 |

|   | <b><u>Page</u></b> |
|---|--------------------|
| <b><u>GENERAL PROVISIONS (Continued)</u></b>                      |                    |
| Waiver of Mechanic's Lien   | 34                 |
| Acceptance of Final Payment                                       | 35-36              |
| Termination of the Owner's Liability                              | 36                 |
| Termination for Cause   | 36                 |
| Termination for Convenience                                       | 36-37              |
| Contractor's Right to Terminate Contract                          | 37                 |
| Guarantee of Work   | 37-38              |
| Notice  | 38                 |
| No Estoppel   | 38                 |
| Assignment  | 38                 |
| Independent Contractor Status                                     | 38                 |
| Other Contracts   | 38-39              |
| Patents   | 39                 |
| Laws, Ordinances, and Regulations                                 | 39-40              |
| Environmental Protection  | 40                 |
| Taxes   | 40                 |
| Utility Ownership   | 41                 |
| <b><u>PREVAILING WAGE</u></b>                                     |                    |
| Wage Rates  | 42-43              |
| Prevailing Wage Affidavit   | 43                 |
| <b><u>SPECIFICATIONS FOR CONSTRUCTION</u></b>                     | 44-77              |
| <b><u>BID PROPOSAL AND LEGAL FORMS</u></b>                        |                    |
| Bidder Information Sheet  | <b>A</b>           |
| Bid Proposal  | <b>B</b>           |
| Bid Guaranty and Contract Bond                                    | <b>C-D</b>         |
| Certificate as to Interest  | <b>E</b>           |
| Subcontractors List   | <b>F</b>           |
| Unresolved Findings for Recovery Affidavit                        | <b>G</b>           |
| Certification/Affidavit in Compliance with O.R.C. Section 3517.13 | <b>H-J</b>         |
| Contract  | <b>K-L</b>         |
| Personal Property Tax Affidavit                                   | <b>M</b>           |
| Affidavit of Contractor or Sub-Contractor                         | <b>N</b>           |
| Guarantee   | <b>O</b>           |
| Final Release of Lien   | <b>P</b>           |
| Certification of Solicitor and Finance Director/Treasurer         | <b>Q</b>           |



# INSTRUCTIONS TO BIDDERS

## GENERAL

In accordance with the Notice to Bidders, sealed bids will be received until **11:00 AM** on **April 9, 2025**, at the office of the City Clerk, Municipal Building, City of Forest Park, Hamilton County, 1201 W. Kemper Road, 45240, for the furnishing of labor and materials required for the **FOREST PARK 2025 STREET PROGRAM**, all in accordance with these instructions, conditions, specifications, and on the enclosed forms. All shall be submitted in a sealed envelope addressed to the City Clerk, City of Forest Park, Ohio, and shall be plainly marked on the outside of the envelope **FOREST PARK 2025 STREET PROGRAM**. No bid may be withdrawn, once the bid has been deposited with the Owner, except in accordance with Ohio Revised Code, Section 9.31. Proposals received after the time for the opening of bids will be returned to the Bidder unopened.

## DEFINITIONS OF TERMS

Whenever the term “Bidder” occurs, it shall mean any person, firm or corporation as a Prime Contractor who submits a proposal/bid for the Project, either acting directly or through a duly authorized representative.

Whenever the term “Bid Packet” occurs, it shall mean all the documents contained herein and any addenda thereto.

Whenever the term “City” or “Owner” occurs, it shall mean the City of Forest Park, Ohio. The Director of Public Works, or his designee, shall be the representative for the Owner.

Whenever the term “Contract” occurs, it shall mean the written agreement between the Owner and the Contractor covering the performance of the Work on the Project and the furnishing of labor and/or materials in the construction of the Work on the Project, including the Contract Documents.

“Contract Documents” shall mean these Instructions to Bidders and General Conditions, the Specifications, any Drawings and/or Plans, the Contract Bond and all other forms or certificates required by these Instructions, all forms included with the Contractor’s Bid, all the material contained in this Bid Packet, any Change Orders, and all addenda to any of the aforementioned items. The Contract Documents shall be a part of the Contract as if fully rewritten therein.

Whenever the term “Contractor” occurs, it shall mean a person, firm or corporation contracting with the Owner as a Prime Contractor to supply labor, materials, or equipment or all for the Project.

Whenever the term “Construction Manager” or “Engineer” occurs, it shall mean CT Consultants, Inc., or agent so designated by the Owner to act as the Owner’s agent.

Whenever the term “Director” occurs, it shall mean the Owner, or the Owner’s agent.



Whenever the term “Project” occurs, it shall mean the entire public improvement proposed by the Owner to be constructed in part or in whole pursuant to the Contract.

Whenever the term “Proposal or “Bid” occurs, it shall mean the offer of the Bidder to perform the Work on the Project, when said offer is made out and submitted on the prescribed forms, properly signed and guaranteed, and in the prescribed manner.

Whenever the term “Subcontractor” occurs, it shall mean a person, firm, or corporation other than the Prime Contractor supplying labor and materials for the Work to the Contractor and under the control of the Contractor.

Whenever the term “the Work” occurs, it shall mean the Work to be performed in constructing and completing the Project, including all labor, materials and equipment.

### **ODOT CONSTRUCTION AND MATERIAL SPECIFICATIONS**

The most current State of Ohio, Department of Transportation (ODOT), Construction and Material Specifications (CMS) and Supplemental Specifications are adopted and made part of these Contract Documents, unless specifically excluded herein.

All references to the Director, the Director of Highways, the First Assistant Director, and Chief Engineer, the Deputy Director of Design and Construction, the Deputy Director of Operations, the Engineer of Construction, the Engineer of Maintenance, the Engineer of Bridges, the Engineer of Tests, shall be considered to read the Engineer.

All references to the State, the State of Ohio, the Department, the Department of Highways, or the Highway Department shall be considered to read the Owner.

### **EXAMINATION OF PLANS, SPECIFICATIONS, GENERAL PROVISIONS AND SITE**

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

Subject to public safety and convenience, prospective Bidders will be permitted to explore the site of the Work by boring or test pits, permits for which will be issued by the Director. Explorations shall be at the sole risk and expense to the Bidder and under conditions of safety, maintaining traffic, and restoring all areas disturbed by any and all explorations to conditions equal to, or better than, the condition prior to exploration.

The Owner does not make any representation of soil or foundation conditions or materials, nor does it represent that drawings may not be modified to meet changes in soil conditions encountered as the Work progresses. The Contractor must inspect the site of the proposed Work and must assume all risk as to the nature and behavior of the material which may be encountered in excavation, whether apparent on the surface or disclosed only in the course of the Work.

### **INTERPRETATION OF QUANTITIES IN PROPOSAL**

The quantities appearing in the proposal are approximate only and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of Work performed and accepted or materials furnished and accepted in accordance with the Contract except for lump sum contracts and except for lump sum items in unit price contracts. The scheduled quantities of Work to be done and materials to be furnished may be increased, decreased, or omitted as hereinafter provided.

### **"OR APPROVED EQUAL" ITEMS**

In the preparation of these documents and plans, several proprietary products may have been specified. In all such cases, it is to be understood that the Contractor may offer a substitute for the specified product, as indicated by "Or Approved Equal". However, the Contractor must be aware that, before commencement of construction, he must provide information to the Engineer concerning the substituted product, and that the Engineer must approve in writing the offered product as being equal to the specified product before use or incorporation in the Work.

Unless otherwise modified by the Engineer, proprietary products are to be installed and/or constructed in strict compliance with the pertinent manufacturer's specifications.

### **ADDENDA**

Notify the Engineer promptly of any discrepancies in, or omissions from the Contract Documents. The Engineer will issue a clarifying addendum to each person on record as having received a set of Contract Documents. The Owner will not be responsible for oral instruction or information. Questions received less than five (5) days prior to bid date cannot be answered. Any Addenda issued during the bidding period are to be included in the Proposal and shall become a part thereof.

### **ALTERNATE BID**

It is the Owner's intent for the Contractor to bid on both the base and alternate bid items. Upon award of the Contract, the Owner will inform the Contractor, in writing, if the standard bid or alternate bid items will be included with the Project.

**THE OWNER RESERVES THE RIGHT TO AWARD OR DELETE ANY OR ALL COMBINATIONS.**



## **GENERAL CONDITIONS**

The successful Bidder/Contractor shall be responsible for all site operations related to the Work as shown and described in the Specifications, Plans and related General Provisions, and shall meet all requirements of these Instructions, General Provisions, and Specifications. All Work shall be completed in compliance with these Instructions, the General Provisions, Specifications, Plans and other Contract Documents.

## **BIDDERS QUALIFICATIONS**

The Owner requires that the Bidder furnish satisfactory evidence that he has the necessary resources to fulfill the conditions of the Contract and the Specifications. Each Bidder shall submit on the form included in the Bid Packet, a statement of the Bidder's qualifications. Each Bidder must furnish satisfactory evidence that it is operating a business of a type that can meet the Specifications for the Work and that it has operated such business for at least the last two (2) years. Only Bidders who have sufficient experience; ample equipment and personnel; adequate financial resources or the ability to obtain such resources as required during the performance of the Contract; who are able to comply with the required performance schedule for the Work; who have a satisfactory record of integrity; who have a satisfactory record of performance (Bidders who are delinquent in current contract performance, when the number and the extent of the delinquencies of each are considered, shall be presumed to be unable to fulfill this requirement, in the absence of evidence to the contrary or circumstances properly explained); and who are otherwise qualified and eligible to receive an award under applicable Ohio laws and regulations, shall be considered.

The Owner shall have the right to take such steps as it deems necessary to determine the ability of the Bidder to perform his obligations under the Contract, and the Bidder shall furnish to the Owner all such information and data for this purpose as it may request. The right is reserved to reject any bid where an investigation of the available evidence or information does not satisfy the Owner that the Bidder is qualified to carry out properly the terms of the Contract.

The Owner requires that the Bidder furnish a list of references of all persons, corporations, political subdivisions or firms for whom the Bidder has done the type of Work required for this Project within the last two (2) years.

## **SUBCONTRACTS**

The Bidder shall submit, with his bid, a complete list of the names and addresses of any subcontractors he contemplates for use on the Project. In addition, the Owner requires that the Bidder furnish a list of subcontractor references of all persons, corporations, political subdivisions or firms for whom the proposed subcontractor has done the type of Work proposed under contract between the Contractor and the subcontractor within the last two (2) years.

The subcontractor must be acceptable to the Owner and approved by the Owner, in writing, prior to the execution of the Contract. Although such approval shall not be arbitrarily withheld, subcontractors that have proven unsatisfactory in the past or do not have adequate manpower or resources to perform the Work will not be accepted. Only subcontractors who have sufficient experience; ample equipment and personnel; adequate financial resources or the ability to obtain such resources; who are able to comply with the required performance schedule for the Work; who have a satisfactory record of integrity; who have a satisfactory record or performance (Bidders who are delinquent in current contract performance, when the number and the extent of the delinquencies of each are considered, shall presumed to be unable to fulfill this requirement, in the absence of evidence to the contrary or circumstances properly explained); and who are otherwise qualified and eligible to receive an award under applicable Ohio laws and regulations, shall be considered.

The subcontractor must submit a non-collusion affidavit prior to the execution of the Contract.

Approval of the proposed subcontractor(s) will not be given by the Owner unless and until the above requirements are met. Although the Bidder is not required to submit the required Subcontractor forms, filled out by any proposed subcontractors, with its bid, the Bidder is hereby advised of these requirements so that appropriate action can be taken to prevent subsequent delays in subcontract awards and/or the execution of the Contract.

After the Subcontractors have been approved and the Contract signed, no changes in the subcontractors shall be made without the prior written approval of the Owner.

### **BID GUARANTY**

In accordance with Ohio Revised Code Section 153.54, and in order to assure that if the Bidder's bid is accepted that it will enter into the Contract with the Owner, each bid must be accompanied by a Bid Guaranty in the form of either:

1. A Bond for the full amount of the bid, in the form of a Bid Guaranty Bond, acknowledged by the Bidder, as principal, and by a surety company qualified to do business in the State of Ohio, and satisfactory to the Owner as surety; or
2. A cashier's check or certified check issued by a responsible bank or trust company, and made payable to the order of the Owner, in the sum of at least ten percent (10%) of the Bid; or
3. A letter of credit pursuant to Ohio Revised Code Chapter 1305, which shall be revocable only at the option of the Owner.

The Bid Guaranty shall be enclosed in the sealed envelope containing the Bid.

If the bidder chooses to submit a Bid Guaranty Bond, the bond shall be in form prescribed by Ohio Revised Code Section 153.571. The Bond must be signed by an authorized agent of an acceptable surety bonding company and by the Bidder. The bond must be countersigned by a resident agent

of the bonding company and its corporate seals must be affixed to all copies. ***The name and address of both the surety and surety's agent must appear on the bond.*** Bid Guaranty must be supported by credentials showing the Power of Attorney of the surety's agent.

Bid guaranties (cashier's check or certified check) will be returned to unsuccessful Bidders within fifteen (15) days of the execution of the Contract with the successful Bidder.

Once the bid is awarded pursuant to the Notice of Award, the Contractor will be required to execute the Contract with the Owner within ten (10) days of its receipt of said Notice. Execution of the Contract shall require the submittal of a Performance Bond (unless the Bidder has already submitted a Bid Guaranty Bond), proof of insurance, and other documents, as outlined below. Executed copies of the bond and insurance certificates are required for each set of Contract Documents. If the Contractor fails to execute the Contract within the required time, the Contractor's Bid Guaranty may be forfeited to the Owner, not as a penalty, but as liquidated damages, in accordance with the terms of the Bid Guaranty. The Project may then be rebid or awarded to the next lowest and best bidder, as the Owner determines at its own discretion.

### **PREPARATION OF PROPOSAL**

The Bidder shall submit its Proposal upon the forms furnished by the Owner. All blank spaces for bid prices must be filled in, in words or figures, and shall be written in ink or typewritten. The Bidder shall initialize any corrections or changes in the Proposal.

The Bidder's Proposal must be signed in ink by the individual, by one or more members of the partnership, or by one or more officers of a corporation, or by an agent of the Bidder legally qualified and acceptable to the Owner. If the Proposal is made by an individual, his name and business address must be shown; by a partnership, the name and business address of each partnership member must be shown; by a corporation, the name of the state under the laws of which the corporation is chartered and the name and title of the officer or officers having authority under the bylaws to sign contracts, the name of the corporation and the business address of its corporate officials must be shown.

A foreign corporation submitting a Proposal must comply with the laws of doing business in the State of Ohio, if its Proposal or any part thereof is accepted.

To be considered responsive, each bid shall consist of the following, fully executed:

1. Bidder Information Sheet
2. Bid Proposal
3. Acknowledgement of Addenda, if applicable
4. Days for Completion
5. Bid Guaranty and Contract Bond
6. Certificate as to Interest
7. Unresolved Findings for Recovery Affidavit
8. Certification/Affidavit in Compliance with O.R.C. Section 3517.13
9. Statement of Bidder's Qualifications and References, if applicable



#### 10. List of Subcontractors Names and Addresses, if applicable

The Bidder's attention is directed to all applicable Federal, State, and local laws, and the rules and regulations of all authorities and agencies having jurisdiction over the Work. All such laws, rules, and regulations shall apply to the Contract and every aspect of the Work and shall be deemed included as a part of the Contract as if the same were fully written therein.

The attention of Bidders is especially directed to the following:

1. Federal and Civil Rights Law regulating Equal Opportunity Employment
2. Bid Guaranty and Contract Bond requirements
3. Statutory requirements of the State of Ohio relative to licensing of corporations organized under the laws of any other state
4. Federal or State of Ohio Prevailing Wage Law

The price or prices shown on the proposal shall include all costs associated with the Work (including labor), shall be the actual price(s) to be paid by the Owner, and shall include all discounts, allowances, etc. Each Bidder shall bid on each item listed in the Proposal

Where a discrepancy appears between the sum shown in the "Total" column and the correct product of the sums appearing in the "Estimated Quantity" and "Unit Price" columns, the correct product of the sums appearing in the "Estimated Quantity" and "Unit Price" columns shall control.

Federal, State, and Local taxes shall not be included in any Bid.

#### **DATE FOR COMPLETION**

The Bidder shall state in his Proposal, in the space provided, the number of calendar days which he will require, after signing the Contract to complete all items of the construction as specified herein. In no instance shall the amount of time be longer than the maximum set by the Owner herein. The agreed time of completion shall be written into the Contract when it is executed.

It is the intent and requirements of the owner that the proposed Work shall be installed and operational no later than **OCTOBER 15, 2025**.

#### **DELIVERY OF PROPOSALS**

The total Contract Documents and Specifications book shall be placed, together with the required completed forms, in a sealed envelope addressed to the City of Forest Park, Ohio. Proposals will be received until the hour and date set for the opening thereof and must be in the hands of the Owner's appointed representative by such time. Proposals received after the time indicated for the opening of bids will be returned to the Bidder unopened.



**WITHDRAWAL OR MODIFICATION OF PROPOSALS**

No bid may be withdrawn, once the bid has been deposited with the Owner, except in accordance with Ohio Revised Code Section 9.31. Likewise, modifications to a bid, once submitted, shall not be accepted.

**PUBLIC OPENING OF PROPOSALS**

Proposals will be opened and read loud publicly at the time and place designated in the Legal Notice to Bidders. Bidders, their authorized agents, and other interested parties are invited to be present.

**DISQUALIFICATION OF BIDS**

Any bid submitted unsealed or unsigned, or any bid deemed unresponsive will be disqualified and returned to the Bidder. Bids submitted without a Bid Guaranty or an invalid Guaranty will be disqualified and will be returned to the Bidder.

**NON-RESPONSIVE PROPOSALS**

Proposals may be considered non-responsive and may be rejected for the following reasons:

1. If the Proposal is on a form other than that furnished by the Owner or if the form is altered or any part thereof is detached.
2. If there are unauthorized additions, conditional or alternate bids, conditions, or irregularities of any kind which may tend to make the Proposal incomplete, indefinite or ambiguous as to its meaning.
3. If the Bidder adds any provisions reserving the right to accept or reject the Award or to enter into the Contract pursuant to the Award. This does not exclude a bid limiting the maximum gross amount of awards acceptable to any one Bidder at any one bid letting, provided that any selection of awards will be made by the Owner.

**RIGHTS RESERVED BY THE OWNER**

The Owner reserves the right to review and evaluate all bids for a period of sixty (60) days.

The Owner reserves the right to reject any and all bids, to waive any discrepancies or irregularities in the bidding, and to determine, in its own discretion, which Proposal is the best bid. Lowest bid, while a major consideration, will not exclusively govern the Bid Award. The Bid Award shall be made from all considerations, including costs and the responsibility of the Bidder.

The Owner reserves the right to reject the bid of any Bidder who has previously failed to perform properly or complete on time contracts of similar nature; who is not in a position to perform the



Contract; or who has habitually, and without just cause, neglected the payment of bills or otherwise disregarded his obligations to subcontractors, materialmen or employees.

In addition to the above-mentioned items, the Owner will also consider the following in determining the best bid: that the Bidder maintains a permanent place of business; has adequate equipment to do the Work properly and expeditiously; has suitable financial status to meet the obligations incidental to the Work; and has the necessary experience.

The Owner reserves the right to award or delete any or all items or combination of items.

### **MATERIAL GUARANTY**

Before the Contract is awarded, the Bidder may be required to furnish a complete statement of the origin, composition and manufacturer of any or all materials to be used in the construction of the Work together with samples, of which said samples may be subjected to any tests the Owner, in its sole discretion, deems appropriate to determine their quality and fitness for the Work.

### **NOTICE OF AWARD**

The award of the Contract, if it be awarded, will be made to the best overall Bidder whose Proposal complies with all the requirements prescribed. In no case will an award be made until all necessary investigations are made as to the responsibility of the Bidder to whom it is proposed to award the Contract. The successful Bidder will be notified by letter, mailed to the address shown on his Proposal that his bid has been accepted and that he has been awarded the Contract.

### **DOCUMENTS REQUIRED PRIOR TO SIGNING OF CONTRACT**

Immediately upon the award of the bid and prior to the signing of the Contract, the Contractor shall furnish to the Owner:

1. Ohio Workers' Compensation Certificate from the Industrial Commission of Ohio;
2. Credentials showing the Power of Attorney of the Agent of the Surety;
3. A Certificate of Compliance issued by the Division of Insurance showing the right of the bonding company to do business in the State of Ohio;
4. A Certificate from the Secretary of State showing the right of the Contractor to do business in the State of Ohio, if said Contractor should be a Corporation not incorporated under the laws of the State of Ohio;
5. A Certificate of Insurance with coverage as specified in these Instructions, covering the period of time the Work will be in progress;
6. Listing of selected subcontractor(s) for Owner approval, in accordance with the second paragraph under "Subcontracts" of these Instructions; and/or
7. Any specific forms required by the Owner.

**CONTRACT GUARANTY**

If the Contractor submitted a Bid Guaranty Bond in the form prescribed by Ohio Revised Code Section 153.571 for the full amount of its bid, the same shall be retained by the Owner as the Contractor's Performance Bond.

If the Contractor submitted a cashier's check, certified check or letter of credit, the Contractor, at the time the Contract is entered into, shall furnish a Performance Bond, in the form prescribed by Ohio Revised Code Section 153.57, payable to the Owner, for the total amount of the Contract. Said Bond shall be duly executed by the Contractor, as principal, and by a surety company qualified to do business under the laws of the State of Ohio and satisfactory to the Owner, as surety, for the faithful performance of the Contract and payment for labor and materials. The Bond must be signed by an Authorized Agent of an acceptable surety bonding company and by the Contractor. The Performance Bond must be countersigned by a resident agent of the bonding company and its corporate seals must be affixed to all copies. The name and address of both the surety and surety's agent must appear on Bond, and it must be supported by credentials showing the Power of Attorney of the surety's agent.

The premiums of such Bonds shall be paid by the Contractor.

If the Contractor fails to perform under the Contract, the Performance Bond may be forfeited by the Contractor to the Owner, in accordance with the termination provisions contained herein.

## **GENERAL PROVISIONS**

### **QUANTITIES**

The Owner reserves the right to delete quantities of either labor or materials or both, from the Contract, as deemed necessary by the Owner, to meet any funding restrictions for the Work.

### **PREFERENCE FOR OHIO PRODUCTS, SERVICES, AND LABOR**

All Contractors and subcontractors involved with the Project will, to the extent practicable, use Ohio products, materials, services and labor. Domestic steel use requirements, as specified in Section 153.011 of the Ohio Revised Code, apply if State Capital funds are used for this Project. Copies of Section 153.011 can be obtained from any of the office of the Ohio Department of Administrative Services.

### **SUBCONTRACTORS**

The Contractor may utilize subcontractors, subject to the following:

1. The Contractor shall not assign, transfer, convey, sublet, or otherwise dispose of the Contract or his rights, title or interest in or to the same or any part thereof, without the written consent of the Owner. Such consent shall not release or relieve the Contractor or his Surety from any obligation or liability under the Contract. In no case will the Contractor be permitted to sublet more than fifty percent (50%) of the total Contract cost.
2. The Contractor shall not award subcontracts to any subcontractor without prior written approval of the Owner.
3. The Contractor shall be fully responsible for the acts or omissions of any of its subcontractors. Nothing contained in the Contract or the Contract Documents shall create any contractual relationship between the Owner and any subcontractors.
4. The Contractor shall cause appropriate provisions to be inserted in all subcontracts that bind the subcontractor to the Contractor under the same terms of any provisions of the Contract Documents that are applicable to the Work of the subcontractor, and that give the Contractor the right to terminate the subcontractor for any violation of those provisions by the subcontractor.

### **WAGE RATES**

The prevailing wage laws of the State of Ohio contained in Ohio Revised Code Chapter 4115.02 et. seq., must be complied with on this Project. The Contractor and all its subcontractors are required to pay wages which shall not be less than the prevailing wages for the class of Work done.



The current prevailing wage rates are a part of this Bid Packet and shall be a part of the Contract Documents.

The Contractor shall be responsible for submitting to the Owner its required payroll reports. In addition, the Contractor must, prior to its request for final payment, file a notarized Final Affidavit of Compliance with Prevailing Wage Law, certifying that prevailing wages were paid on this Project.

The Contractor shall be responsible for assuring that all its subcontractors comply with prevailing wage requirements and that all subcontractors provide the Owner with the required payroll reports. The Contractor shall also be responsible for assuring that all its subcontractors file a notarized "Final Affidavit of Compliance with Prevailing Wage Law, certifying that prevailing wages were paid on this Project.

The Contractor hereby acknowledges that it is responsible for the compliance itself and of any and all subcontractors with Ohio's Prevailing Wage Law, and that lack of compliance with any requirements of Prevailing Wage Law by it or any Subcontractor shall give the Owner the right to withhold payments under this Contract until such requirements are met.

## **INSURANCE**

The Contractor shall not commence Work under the Contract until it has obtained all insurance required under this paragraph. The policies shall also protect the Owner, its officers, agents, and employees as additional insured, and shall be in a form approved by the Owner. Certified copies of the insurance policies, fully executed by officers of the insurance company, shall be submitted with the executed Contract and must be submitted before the Notice to Proceed will be sent. Coverage will be provided through insurance companies licensed to do business in the State of Ohio and with a Best Rating of A- or better.

During the term of the Contract, the Contractor will agree to provide evidence of insurance in the amounts stated below. The Contractor may also be required to submit the original insurance policies for inspection and approval of the Owner before Work is commenced. Said policies shall provide that they cannot be cancelled, permitted to expire, or be changed without fifteen (15) days advanced written notice to the Owner. The Contractor shall provide all insurance required by this Contract.

**Required Insurance:** The Contractor shall take out, and maintain during the life of the Contract, Comprehensive General Liability Insurance, Automobile Liability Insurance and an Excess Liability Umbrella Form. Such policies shall protect the Contractor and the Owner from any and all claims or damages for bodily injury, including accidental death, as well as any and all claims for property damage, during the performance of any and all Work under the Contract, whether such performance be by the Contractor, any subcontractor, or by anyone directly or indirectly employed by either of them or in any such manner as would impose liability on the Owner. The **minimum** required limits for each type of policy are as follows:



- A. Comprehensive General Liability:
- |     |                              |   |
|-----|------------------------------|---|
| (1) | General Aggregate            | \$1,000,000   |
| (2) | Bodily Injury/Wrongful Death | \$1,000,000 per person<br>\$1,000,000 per occurrence<br>\$2,000,000 aggregate liability |
| (3) | Property Damage*             | \$1,000,000 per occurrence<br>\$2,000,000 aggregate liability                           |
- B. Comprehensive Automobile Liability:
- |     |                              |   |
|-----|------------------------------|---|
| (1) | Bodily Injury/Wrongful Death | \$1,000,000 per occurrence<br>\$1,000,000 aggregate liability |
| (2) | Property Damage*             | \$1,000,000 per occurrence<br>\$1,000,000 aggregate liability |
- \*Including any damage caused by blasting or underground excavation.
- C. Excess Liability Umbrella Form:
- |     |                   |             |
|-----|-------------------|-------------|
| (1) | General Aggregate | \$3,000,000 |
| (2) | Each Occurrence   | \$1,000,000 |

Owner's Protective Liability Insurance: The Contractor shall take out, and maintain during the life of the Contract, an Owner's Protective Liability Insurance policy in the name of the Owner. The primary insurance policy shall not be less than a minimum combined single limit of \$1,000,000. In addition, a \$1,000,000 excess policy will be required. The policy shall protect the Owner from any claims or damages that may arise out of or result from the performance of any Work or from any operations, either directly or indirectly, by the Contractor or its subcontractors under the Contract.

Subcontractor's Insurance: The Contractor shall require subcontractors not protected under the Contractor's insurance policies to take out and maintain insurance of the same nature and kind and in the same amounts as required of the Contractor.

Workers' Compensation Insurance: Before any Work is commenced, the Contractor shall take out, and maintain during the life of the Contract, Workers' Compensation Insurance for all of its employees, in accordance with the laws of the State of Ohio. In case any Work is subcontracted, the Contractor shall require the subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees, unless such employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in Work under this Contract is not protected under the Workers' Compensation statute, the Contractor shall provide Employee Liability Insurance for any such employees, and shall provide or cause each subcontractor to provide the same.

**ANTIDISCRIMINATION CLAUSE**

The Contractor hereby agrees to the following:

1. That in the hiring of employees for the performance of the Work under this Contract or any subcontract, neither the Contractor nor any subcontractor, nor any persons acting on behalf of the same, will discriminate against any citizen in the employment of or laborers or workers who are qualified and available to perform the Work, for reasons of race, creed, color, national origin, religion, age, sex, handicap, or familial status; and
2. That neither the Contractor nor any subcontractors, nor any persons acting on behalf of the same, shall in any manner discriminate or intimidate any employee hired for the performance of the Work on account of race, creed, color, national origin, religion, age, sex, handicap, or familial status.

**PRECONSTRUCTION CONFERENCE AND PARTNERING**

A preconstruction conference with the Owner will be required of the successful Bidder/Contractor. Said conference will be held for the purpose of reviewing the Specifications, Plans, and execution of the Work. The Engineer will arrange the meeting between the Contractor, the Owner, and representatives of the utility companies, and all parties shall be notified of the time, date, and location of the conference by the Engineer. The Agenda for the conference shall include, as a minimum, the following items:

1. Status of Contract and Notice to Proceed
2. Utility company requirements, OUPS notification
3. Designation of emergency 24-hour Contractor contacts
4. Discussion of critical items
5. Required permits
6. Notice to property owners
7. Maintenance of Traffic
8. Review of testing requirements and inspection procedures
9. Operations schedule and completion date
10. Listing of haul roads
11. Confirmation of subcontractors and suppliers
12. Review of the Change Order process
13. Payment Request submittal procedures
14. Payroll submittal procedure

**HAUL ROADS**

The Contractor shall also provide at the preconstruction conference, a list of the local roads to be used for the purpose of hauling equipment and/or material to or from the Project site. Only the local roads in the vicinity of the Project have to be listed; state and/or Federal roads do not have to



be included. Where necessary, the list shall include the extent of the roads to be affected and any special restrictions, such as height or weight restrictions, which may be applicable. Construction shall not commence until the Owner has reviewed the haul roads list and approved the same. The submission of the list and approval of the same do not relieve the Contractor the responsibility for conforming to and obeying all applicable height and weight restriction on the haul roads, nor from responsibility for any damages done to, on or along said haul roads. The Contractor is referred to ODOT Item 105.12 concerning restrictions.

### **PERMITS**

The Contractor will be required to obtain all permits necessary in connection with the Work. All permits shall be subject to the inspection of the Owner.

### **OPERATIONS/PROGRESS SCHEDULE AND COORDINATION**

At the preconstruction meeting, the Contractor shall submit to the Engineer a schedule showing the method and manner which the Contractor proposes to pursue so as to complete the proposed Work in such a manner that it will be ready for final acceptance within the time stated in the Proposal. Said schedule will show location, sequence, equipment, manpower, and estimated calendar days to complete each segment of Work required. Upon approval by the Engineer of the starting point of the various phases of the construction, the method and manner of performing the Work and the sequence of operations shall not be altered except with the approval of the Owner. Changes to said schedule are to be issued in writing and approved by the Engineer and Owner before operations are changed or rescheduled.

The Contractor shall use all practical means to make the progress of the Work conform to that shown on the progress schedule which is in effect. No payment will be made to the Contractor while he is delinquent in the submission of a progress schedule. Should the prosecution of the Work, for any reason, be discontinued, the Contractor shall notify the Owner at least twenty-four (24) hours in advance of resuming operations.

### **COORDINATION OF SPECIFICATIONS, PLANS, AND GENERAL PROVISIONS**

The specifications, the supplemental specifications, the plans, general provisions, and all supplementary documents are essential parts of the Contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary to each other and to describe and provide for a complete project. In case of discrepancy, calculated dimensions will govern over scaled dimensions, plans will govern over specifications, proposals and special provisions will govern over both specifications and plans.

The Contractor shall take no advantage of any apparent error or omission in the plans or specifications. In the event the Contractor discovers such an error or omission, he shall

immediately notify the Engineer. The Engineer will then make such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications. See "Extra Work" and "Modification of Contract or Change Orders".

All items salvaged as part of this Contract shall be removed by the Contractor without damage as excavation and work progresses, and placed within the right-of-way where they may be conveniently picked up by the Owner's forces. Old materials not reserved by the Owner and not being used in the work will become property of and must be disposed of by the Contractor.

## **PLANS**

If applicable, the plans illustrate the general character and scope of the work covered by the Specifications and Contract Documents. Additional detailed drawings and other information deemed necessary by the Engineer will be furnished to the Contractor when and as required by the work. Figured dimensions on drawings shall take precedence over general drawings and shall be considered as explanatory and not as indicating extra work.

**The Contractor is advised that, before ordering material, the Contractor is responsible for making his own field measurements and for field verifying all information required for the Project.**

## **NOTICE TO PROCEED**

Once the Contract has been entered into and the preconstruction conference held, the Owner will provide the Contractor a Notice to Proceed. Said Notice shall state the beginning date the Contractor shall commence the work and the date by which the work is to be completed.

## **CONSTRUCTION LAYOUT STAKES**

Construction stake out shall be provided by the Contractor as required to construct the project in accordance with the lines and grades established in the plans. The cost of this item shall be incidental to the Contract.

## **SAFETY STANDARD AND ACCIDENT PREVENTION**

With respect to all work performed under the Contract, the Contractor shall comply with all safety standard provisions of (1) all applicable building and construction codes; (2) the *Manual of Accident Prevention in Construction*, published by the Associated General Contractors of America; (3) the requirements of the Occupational Safety & Health Act, and the requirements of Title 29 of the Code of Federal Regulations, Chapter 15.



The Contractor shall maintain at the job site all medical items and equipment necessary for administering first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or doctor's care of all persons injured on the job site. In no case shall the Contractor permit any employee to work at the job site before it has made arrangements for the immediate removal of injured persons to a hospital or doctor's care.

The Contractor shall at all times exercise every precaution for the protection of persons, including its employees, and property, and shall guard against creating any unnecessarily hazardous conditions. This protection shall include, but is not limited to, sheeting and shoring, barricades, and warning lights as needed.

The Contractor shall be responsible for all accidents arising out of or connected with its performance under the Contract and Contract Documents, and shall indemnify and hold harmless the Owner and the Engineer from all liability, costs, suits, claims or actions brought against it for any injury or alleged injury to any person or property. All loss or damage to the work arising from fire, floods, storms or other natural causes, or from any detention, obstruction or difficulties which may be encountered in the prosecution of the work shall be borne by the Contractor.

No blasting of any kind will be permitted on this Project.

### **COOPERATION BY CONTRACTOR**

The Contractor will be supplied with three (3) copies of the specifications and three (3) sets of approved plans and contract assemblies including special provisions, one (1) set of which the Contractor shall keep available on the work site at all times.

The Contractor shall give the work the constant attention necessary to facilitate the progress thereof. He shall cooperate with the Engineer, his inspectors, and all other Contractors of any agency in every way possible.

### **COOPERATION BETWEEN CONTRACTORS**

The Contractor shall coordinate his work with other Contractors within or adjacent to the Project area. All completed work shall meet the line and grade of other work in an acceptable manner.

### **WARRANTY**

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations, to the Work not executed by the Contractor,



improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Engineer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

### **CONTROL OF MATERIAL**

The materials used on the Work shall meet all requirements of the Contract. In order to expedite the inspection and testing of materials, the Contractor shall notify the Engineer of his proposed sources prior to delivery. **All materials supplied shall meet ODOT requirements or as otherwise specified in these Contract Documents.**

Unless otherwise specified, all materials shall be new, and both workmanship and material shall be of proper quality and sufficient for the purpose contemplated. The Contractor shall furnish, if requested by the Owner or Engineer, satisfactory evidence as to type and quality of materials and workmanship.

All items of equipment and/or material proposed by the Contractor for substitutions must be pre-approved by the Engineer, in writing, and shall be equal or superior to the items specified in the Contract Documents. If substitutions proposed by the Contractor for a specified item requires engineering revisions, the total expense of said revisions shall be paid by the Contractor.

Any items of labor or materials required, but not shown as a separate pay item in the Proposal, shall be furnished and installed as incidental to the Contract, except as noted in the plans and specifications.

### **STORAGE OF MATERIALS**

The Contractor shall obtain prior written approval from the Owner for any locations proposed for use for the temporary storage of construction materials, tools and/or equipment. All such materials shall be neatly and compactly maintained in a manner as to cause the least inconvenience to adjacent property owners and to traffic. Under no circumstances shall existing drainage courses be blocked or water hydrants, valves, or meter pits covered in storing materials. All materials stored upon public thoroughfares must be provided with warning lights and reflective striping at nighttime and on weekends in a manner to alert traffic of such obstructions.

Private property shall not be used for storage purposed without written permission of the owner or lessee, and if requested by the Engineer, copies of such written permission shall be furnished him.

Any additional space required must be provided by the Contractor at their expense.

### **TESTING**

In addition to material testing by the supplier, on-site material and soil testing will be required to insure the work meets the specifications established as part of this project. The Contractor shall bear the cost of and provide all required materials, labor, apparatus, services and facilities in connection therewith.



Seven (7) days prior to commencement of construction, the Contractor shall submit to the Engineer a list of two (2) or three (3) proposed, accredited testing firms. The Engineer shall then select from the submitted list the name of the firm which is to be responsible for all of the required testing.

The Contractor is responsible for notifying the testing agency 24 hours prior to starting work requiring material testing. If the Contractor fails to provide testing as per any of the requirements, he will be required to stop work until proper arrangements have been made with the testing agency.

The testing agency and its representatives are not authorized to revoke, alter, relax, enlarge or release any requirement of the contract documents, nor to approve or accept any portion of the work.

The Contractor shall include the cost of all required tests in the unit price bid for the pertinent item and no separate compensation is to be made for said testing.

All testing shall be done in the presence of the Owner or Engineer by an approved testing laboratory and one copy of the test shall be sent directly to him.

When questions arise as to whether the requirements of the Contract have been fulfilled, the Owner shall engage an independent testing laboratory to perform any tests necessary to establish the acceptability of the work.

Should such additional tests show in the judgment of the Owner the work or materials to be defective or otherwise not meeting the requirements of the Contract, the Contractor shall, immediately upon notification by the Owner, remove, replace or reconstruct same, as the case may require and shall if directed by the Owner, make such further tests as may be necessary to determine fulfillment of the Contract requirements. The cost of all re-tests shall be deducted from the Contractor's fee for said work.

All tests shall be made under the supervision and direction of the Owner or Engineer except those required by a public authority shall be under the supervision and direction of such authority.

## **TESTING REQUIREMENTS**

Minimum testing requirements shall be as follows:

Soil Testing: Excavation and embankment construction shall be constructed in accordance with ODOT CMS Item 203. The testing agency shall test all embankments per ODOT CMS Item 203.07.

Subgrade shall be prepared in accordance with ODOT CMS Item 204. The testing agency shall test all subgrade per ODOT CMS Item 204.03

**Flexible Pavement:** The Testing agency shall provide quality control testing of asphalt mixes per ODOT CMS Item 403.05. Field density testing will be required for asphalt courses. The Contractor shall submit a job mix formula (JMF) prior to paving operations.

**Portland Cement Concrete:** All portland cement concrete work shall be tested by an independent testing laboratory. The independent testing laboratory shall secure a random sample from each 25 cubic yards of concrete delivered to the job site. A minimum of one sample shall be made each day that concrete work is performed. One sample consists of a minimum of four (4) cylinders. The cylinders shall be molded by the testing laboratory and cured from each sample, in accordance with ASTM C 172. Cylinders shall then be tested in accordance with ASTM C39. Two (2) cylinders shall be tested at 28 days to constitute a compressive-strength test.

A compressive-strength test shall be the average compressive strength from a set of two (2) specimens obtained from same composite sample and tested at age indicated. Two (2) cylinders shall be tested at 56 days only if the 28-day test results do not meet specifications. If the Contractor elects to test one cylinder at seven (7) days, it will be for information only. Two (2) cylinders need to be tested to constitute a compressive-strength test. Additional cylinders must be made for 7-day tests. Strength of each concrete mixture will be satisfactory if every average of any three (3) consecutive compressive-strength tests equal or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi (3.4 MPa). If less than three (3) compressive-strength tests are made, then the average of the actual number of tests will be used to determine acceptance.

Using ASTM C 143, the testing agency shall determine the slump of the concrete for each sample, and also whenever the consistency of the concrete appears to vary. The agency shall also determine the air content of the concrete for each sample, in accordance with either ASTM C 231, ASTM C 173, or ASTM C 138.

The agency shall report all test and inspection results to the Engineer, Contractor, and concrete supplier in writing one working day after the work is performed. All test reports shall include the exact location in the work at which the batch represented by a sample was deposited. Reports of strength tests shall include detailed information on storage and curing of specimens prior to testing.

All concrete work not meeting the specifications as listed in Item 499 and as noted herein shall be removed immediately and replaced in an acceptable manner with no additional compensation to the Contractor, unless provisions for an extended guarantee are provided herein.

**Concrete testing will be enforced.**

## **SANITARY MEASURES**

The Contractor shall construct and maintain sanitary conveniences for use by its employees at the site of the Work. Such conveniences shall be of sufficient number and shall be placed in locations approved by the Engineer. The Contractor shall require all employees and persons connected with the Work to use said conveniences, and any employee or person who violates this rule shall not again be employed at the site of the Work by the Contractor. Such conveniences shall be in

compliance with all State and local health department regulations, and the Contractor shall promptly and fully comply with all health department orders and regulations regarding said conveniences.

### **PUBLIC CONVENIENCE AND SAFETY**

The Contractor shall at all times so conduct his work as to assure the least possible obstruction to traffic. The safety and convenience of the general public and the residents along the highway and the protection of persons and property shall be provided for by the Contractor as specified under subsection Maintenance of Traffic.

The Contractor shall provide and maintain safeguards, safety devices and protective equipment and take any other needed actions as may be necessary to protect the public and property in connection with the work. The Contractor shall notify the Chiefs of the Police Department and Fire Department of the temporary blocking of any street.

The presence of barricades, lights or other traffic control devices provided and maintained by any party other than the Contractor, shall not relieve the Contractor of this responsibility.

### **MAINTENANCE OF TRAFFIC**

When construction interferes with the normal use of the highway, temporary traffic facilities shall be provided. For local traffic, vehicular ingress and egress shall be provided at all times for the property adjacent to the work. For through traffic, the traffic will be maintained through all portions of the project unless the Owner authorizes the closure of portions of the highway.

Temporary traffic control devices and facilities shall be furnished, erected, maintained and paid for in accordance with the provisions of Section 614 - Maintaining Traffic of the ODOT - "Construction and Material Specifications". All traffic control plans, signs, and devices shall conform to the requirements of the Ohio Manual of Uniform Traffic Control Devices. The provisions of these items and this section shall not in any way relieve the Contractor of any of his legal responsibilities or liabilities for the safety of the public. Additional maintenance of traffic may be required, as specified on the plans. Cost considered to be part of 614 – Maintaining Traffic

### **PROTECTION AND RESTORATION OF PROPERTY**

The Contractor shall be responsible for the preservation of all public and private property. The Contractor shall be responsible for all damage or injury to property of any character, during the prosecution of the work, resulting from any act, omission, neglect or misconduct in his manner or method of executing the work, or at any time due to defective work or materials, and said responsibility will not be released until the project shall have been completed and accepted.

**Dust nuisance originating from any work shall be controlled by the Contractor at the sole expense of the Contractor.**

When and where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the nonexecution thereof by the Contractor, he shall restore, at his own expense, such property to a condition equal or better to that existing before such damage or injury was done, by repairing, rebuilding or otherwise restoring as may be directed, or he shall make good such damage or injury in an acceptable manner.

When mailboxes, road or street name signs and supports interfere with construction, the Contractor shall remove and erect them in a temporary location during construction in a manner satisfactory to and as directed by the Engineer. After completion of the construction and before final acceptance of the project, the Contractor shall erect the mailboxes, road or street name signs and supports in a permanent location in accordance with the plans unless otherwise directed by the Engineer. This shall be considered a subsidiary obligation of the Contractor under the affected items. The Contractor shall cooperate with the Engineer in protecting and preserving cornerstones and monuments that are within the work area. Monuments, cornerstones and land markers unexpectedly encountered shall be protected, referenced and preserved in the same manner.

### **CLEAN-UP DURING CONSTRUCTION**

The Contractor shall at all times maintain the job site and working areas in an orderly condition, reasonably clean and free of accumulations of dirt and debris. If the Contractor fails to maintain the job site and working area in a satisfactory condition, the Owner shall have the right to employ others to do so at the Contractor's expense, commencing 24 hours after the Contractor has been notified that the job site and/or working areas require clean-up.

### **FINAL CLEAN-UP**

As soon as portions of the work are ready for use, they shall be thoroughly cleaned by the Contractor of all dirt and rubbish, and cleared of all materials, forms, falsework, temporary structures and equipment.

The Contractor shall also clean out all sewer drains, inlets, manholes, and other underground lines and structures affected by his work and restore all disturbed areas to their original or better condition.

### **FINAL INSPECTION**

When the work has been entirely completed and final cleanup has been performed, the Engineer will inspect the improvement. If items remain which must be completed or remedied by the Contractor, he shall perform the work immediately upon being notified by the Engineer. When such items have been corrected by the Contractor, final inspection will be made. The work must pass final inspection before it will be accepted by the Owner.



**UTILITIES**

Any utility, such as telephone, electricity or water, required by the Contractor for the performance of the Work shall be the responsibility of the Contractor, who shall be responsible for the cost of the same.

**SEWAGE, SURFACE, AND FLOOD FLOWS**

The Contractor shall furnish all the necessary equipment, shall take all necessary precautions, and shall assume the entire cost of handling and properly disposing of any sewage, seepage, storm, surface, flood or underground flows which may be encountered at any time during the performance of the Work. The manner of providing for these flows shall meet with the approval of the Engineer, and the entire cost of same shall be included in the unit prices stipulated for the various items of the Work. As applicable, all work must comply with the municipality or County storm water regulations.

**USE OF EXISTING FACILITIES**

The Owner, upon written notice to and with the approval of the Contractor, shall have the right to connect any sewers, conduit, or pipeline with any existing similar facilities or appurtenances, or to grant permits to make connections therewith at any time before the Work is completed. The Contractor shall not interfere with any such connections and no extra compensation shall be made to the Contractor on account thereof. The performance of the Work shall be planned in such a manner as to allow the use of all existing facilities during the construction period.

**UNDERGROUND UTILITY FACILITIES/COOPERATION WITH UTILITIES**

The Owner will notify all utility companies, all pipeline owners, or other parties affected and endeavor to have all necessary adjustments of the public or private utility fixtures, pipelines, and other appurtenances within or adjacent to the limits of construction made as soon as practicable.

Within ten (10) days of the award of the Contract, the Owner shall notify all utilities of the name, address, and phone number of the Contractor. The Contractor shall notify the Ohio Underground Utility Protection Service (OUPS) and nonmember owners of the starting date at least two (2) working days prior to starting the Work. The utility shall mark, stake, or otherwise designate the location of the underground facilities within 48 hours of receiving the Contractor's notice of the starting date. The marking or locating shall be coordinated to stay approximately two (2) days ahead of the planned construction.

The identification of underground facilities, any necessary relocation thereof, and the protection of the same shall be undertaken in conformance with Section 153.64 of the Ohio Revised Code. At least two (2) working days prior to commencing Work in an area that may involve underground utility facilities, as shown on the plans, the Contractor shall notify the Engineer, the registered



utility protection service, and the owners of the underground utility facility who are not members of the registered utility service.

The existing underground utilities are shown as accurately as possible on the plans, based on the information available. The Owner and/or Engineer do not assume any liability for location of underground service lines. Any utility services damaged that were previously marked in the field shall be replaced at the Contractor's expense.

Where the plans provide for conduit to be connected to, or to cross either over or under, or close to an existing underground structure, it shall be the responsibility of the Contractor to locate the existing structure, both as to line and grade, before starting to lay the proposed conduit, in order to assure compatibility with line and grade of the conduit. Payment for all such operations shall be included in the unit price bid for the pertinent conduit item.

The Contractor shall make arrangements with the utility company if adjustments to proposed grade of existing facilities (e.g. manholes, catch basins, valves, boxes, etc.) are to be made prior to the commencement of any paving operations. This shall include utility facilities not shown on the plans but that are located within the pavement area. Work performed on utility facilities shall be in strict accordance with the specifications of the applicable utility company and shall be performed under the direction, supervision and inspection of said company.

At points where the Contractor's operations are adjacent to properties of telephone and power companies, or are adjacent to other property, damage to which might result in considerable expense, loss, or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

The Contractor shall cooperate with the owner of any underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication of rearrangement work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted.

In the event of interruption to underground or overhead utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall immediately alert the occupants of nearby premises as to any emergency that the Contractor may create or discover at or near such premises. The Contractor shall then notify the Engineer and the owner or operator of the utility facility of the disruption and shall cooperate with said utility owner or operator in the restoration of service. If water service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until the local fire authority has approved provisions for continued service.

## **MAINTENANCE DURING CONSTRUCTION**

The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces to the end that the roadway or structures are kept in satisfactory condition at all times.



In the case of a contract for the placing of a course upon other courses or a subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

### **FAILURE TO MAINTAIN ROADWAY OR STRUCTURE**

If the Contractor, at any time, fails to comply with the provisions of the above-reference section, the Engineer will immediately notify the Contractor of such non-compliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may immediately proceed to maintain the Project and the entire cost of this maintenance will be deducted from monies due or to become due to the Contractor on his Contract.

### **PROTECTION OF EXISTING STRUCTURES**

It shall be the responsibility of the Contractor to perform the Work in such a manner as not to damage or destroy any existing feature which is not marked for replacement or removal. The Contractor shall, at its own expense, protect and maintain any bridges, curbs, gutters, sidewalks, roadways, or any other private or public structures that may be endangered in the prosecution of the Work. The Contractor shall also exercise due care during the Work so as not to destroy any trees, plants, shrubs, or structures not specifically marked for removal or relocation within the area of the Project site. The Contractor hereby agrees to repair and make good any damages caused to any such property by reason of its prosecution of the Work.

In some instances, the Contractor will be required to excavate under and around existing utilities. The Contractor shall exercise extreme care so as not to damage the utility during the Work.

The Contractor shall schedule his operations so that the improved areas have had sufficient time to cure, set and/or harden before the area is opened to traffic or other use. The Contractor shall be responsible for the immediate repair of all improved areas if damage is done by traffic or other use. The Contractor shall also be responsible for the immediate rectification of problems created in areas outside of the improved areas, which are attributable to the failure of the improved area, such as, but not limited to, the tracking of materials into unimproved areas.

The Contractor shall be responsible for the protection of areas outside of the limits of the designated Project site, but which are adjacent to those limits. This will include those areas used by construction traffic for access to and from the Project site. Where the Engineer and/or the Owner determine that the Contractor's operations have been responsible for damage to areas outside of the Project site limits, the Contractor shall be responsible for the repair of the area, subject to the approval of the Engineer. No additional compensation will be due the Contractor for any such repairs.

**MONUMENTS AND LANDMARKS**

The Contractor shall not remove, relocate or in any way damage any monuments, survey pins or landmarks without the approval of the Engineer. Any monument, survey pin or landmark so removed without approval of the Engineer may be replaced by the Owner and the expense of the survey and replacement charged to the Contractor.

**BASE LINES AND BENCHMARKS**

The Contractor shall carefully preserve all base lines and benchmarks which have been set by the Owner or its agent. The Contractor shall be charged with the expense of resetting any base lines or benchmarks caused by the loss or disturbance of such by the Contractor.

**RESTORATION OF DISTURBED AREAS**

In all cases where the Work requires the restoration of areas with topsoil, seeding and mulching, the Contractor shall not seed and mulch until directed to do so by the Engineer. The Engineer shall not so direct the Contractor until he has assured that the site is properly graded and topsoiled.

Upon completion of the seeding and mulching, the Contractor shall immediately notify the Engineer of the same. Upon receipt of notice from the Engineer that the restoration is complete, the Owner shall notify the property owners of their maintenance duties.

In cases where the Engineer determines the seeding and mulching should not be performed until after the designated completion date for the Work, the Engineer shall notify the Contractor of the same, in writing. Suspension of the seeding and mulching at the direction of the Engineer shall not count against the Contractor as a delay.

**SUPERVISION OF THE WORK**

The Engineer or upon the authorization of the Engineer, the Owner's Public Works Director, shall in all cases, determine the amount, quality acceptability and fitness of the kinds of labor and material, which are to be paid for under the Contract. The Owner or the Owner's agent shall determine all questions related to the Work and the performance thereof, and decide every question which may arise relative to the fulfillment of the Contract on the part of the Contractor.

The Engineer will evaluate the materials furnished and the labor to be performed under the Contract, and is authorized by the Owner to reject all labor or materials, or any part thereof, that does not comply in kind, quality, quantity, time, place or manner with the Contract or Contract Documents. The approval or acceptance or any part of the Work, or any payment on account thereof, shall not prevent the rejection of said labor or materials at any time thereafter during the

term of the Contract, if said labor or materials are found to not be in accordance with the requirements of the Contract or the Contract Documents.

### **DEFECTIVE OR UNACCEPTABLE WORK**

All materials and each part or detail of the Work shall be subject to evaluation by the Engineer. The Engineer shall be allowed access to all parts of the Work and shall be furnished with such information and assistance by the Contractor, as is required to make a complete and detailed review.

Any work done or materials used without direct observation by an authorized representative may be ordered removed and replaced at the Contractor's expense.

All work, which does not conform to the requirements of the Contract, will be considered unacceptable unless otherwise determined acceptable in accordance with Section 105.03 of the ODOT Construction and Materials Specifications.

Should defective or unacceptable labor or materials be suspected, and the Engineer so require, the Contractor shall uncover, take down or make openings in the finished work for the purpose of examination at such points as the Engineer designates.

If the Work so exposed or examined is satisfactory, the cost of uncovering, taking down or making openings shall be paid by the Owner to the Contractor as a change in Work; however, should the Work thus exposed or examined be unsatisfactory, the cost of uncovering, taking down or making openings shall be borne by the Contractor.

If the exposed or examined labor or materials are found to be unacceptable or defective by the Engineer, he shall serve on the Contractor written notice of his rejection of the unsatisfactory labor or materials, his instructions for remedying the same, and a time within which the defective material or labor is to be remedied. If the Contractor neglects or refuses to remove and/or replace the defective labor or materials within the time limit given, the Owner may remedy the situation and charge the expense thereof to the Contractor. The expense so charges shall be deducted out of the monies due to the Contractor under the Contract. If the amounts still due the Contractor under the Contract are insufficient to meet the expense, the additional monies shall be paid by the Contractor, and if the Contractor refuses or neglects to pay, the monies shall be paid by his Surety or shall be deducted from its Performance/Contract Bond.

If, in the opinion of the Owner, an emergency arises that jeopardizes the continuity of water service and/or the public health, safety or welfare of the residents of the Owner, the Owner shall give notice of the emergency to the Contractor by telephone or in person. If the Contractor is unable to remedy the situation at the time it exists, the Owner reserves the right to immediately take steps to have the situation remedied. If, in the opinion of the Owner, the emergency was created through the carelessness or recklessness of the Contractor, then the Contractor and its Surety shall be liable to the Owner for all expenses incurred by the Owner in correcting the situation.

## **INTENT OF CONTRACT**

The intent of the Contract is to provide for the construction and completion in every detail of the Work described. The Contractor shall perform all items of work covered and stipulated in the proposal and perform altered and extra work, furnish all labor, materials, equipment, tools, transportation and supplies required to complete the work in accordance with the plans, specifications and terms of the Contract. Should any misunderstanding arise as to the intent or meaning of the plans, specifications, special provisions or proposal, or any discrepancy appear, the decision of the Engineer shall be final and conclusive.

## **MEASUREMENT OF QUANTITIES**

For all contracts, except lump sum contracts, after an item of the Work is completed and before final payment is made, the Engineer will determine the quantities of various items of work performed, as the basis for final settlement. The Contractor, in case of unit price items, will be paid for the actual amount of work performed in accordance with these specifications as provided under the various items.

## **PLANS AND ESTIMATED QUANTITIES**

The Plans and Bid Proposal quantities prepared by the Owner are intended to outline the Work to be done by the Contractor. The estimated quantities shall be used in determining the total amount of the bid and for the purpose of determining the lowest and best bid. It is understood and agreed, however, that the Plan is subject to minor changes from time to time during the progress of the Work, that the estimated quantities listed in the Proposal are approximate only, that the Contractor has no claim for damage and is not entitled to extra pay above and beyond the agreed unit prices on account of increasing or decreasing the quantities, and that in measuring the work for payment to the Contractor, the Owner shall consider only the number, length, area and solid contents of the various items of Work incorporated in the improvement in accordance with the Plans or as ordered placed by the Owner.

## **PRICES**

The Owner will pay to the Contractor the prices herein stipulated as full compensation for everything furnished and work completed by the Contractor under the Contract, including all incidental work required but not specifically mentioned, and for any work arising from any unforeseen obstruction or difficulty encountered in the prosecution of the work, and for all risks of every description connected with the work, and for all expenses incurred by or in consequence of the suspension or discontinuance of the work, as herein specified and for well and faithfully completing the work, together with remedying all defects developing during the guarantee period.

**ALTERATION OF PLANS OR CHARACTER OF WORK**

The Owner reserves the right to make, at any time during the progress of the Work, such increases or decreases in quantities and such alterations in details of construction as may be found to be necessary or desirable. Such increases or decreases and alterations shall not invalidate the Contract nor release the Surety, and the Contractor agrees to perform the Work as altered, the as if it had been a part of the original Contract.

Unless such alterations and increases or decreases materially change the character of the work to be performed or the cost thereof, the altered work shall be paid for at the same unit prices as other parts of the Work. No claim shall be made by the Contractor for any loss of anticipated quantities and the quantities of work as done. Payments shall be in accordance with Section 109.04 of the ODOT Construction and Materials Specifications. If, however, the character of the Work of the unit costs thereof are materially changed, an allowance shall be made on such basis as may have been agreed to in advance of the performance of the Work, or in case no such basis has been previously agreed upon, then an allowance shall be made, either for or against the Contractor, in such amount as the Owner may determine to be fair and equitable.

Should the Contractor encounter or discover during the progress of Work, subsurface or latent physical conditions at the site differing materially from those indicated in this Contract, or unknown physical conditions at the site of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract, the Engineer shall be promptly notified in writing of such conditions before they are disturbed. The Engineer will thereupon promptly cause the investigation of said conditions, and if they are found to so materially differ and cause an increase or decrease in the cost of, or the time required for performance of the Contract, an equitable adjustment will be made.

Any adjustment in compensation because of a change or changes resulting from one or more of the conditions described in the previous paragraph will be made in accordance with the provisions of Extra Work. Any adjustments in Contract time because of changes will be made in accordance with the provisions in 108.06 of the ODOT Construction and Material Specifications.

**EXTRA WORK**

Items of work with unit prices included in the estimate of the original Contract, in an amount less than \$10,000 may be authorized as Extra Work by the Engineer.

**MODIFICATION OF CONTRACT OR CHANGE ORDERS**

Items of Work not included in the estimate of the original Contract and additional units of items included in the estimate of the original Contract in an amount in excess of \$10,000, may be authorized as a Modification of the Contract or Change Order. Payment shall be in accordance with Sections 109.05(A)(B) of the ODOT CMS.



The Owner may, when necessary, by ordinance, authorize alterations or modifications in the Specifications and Plans for the Work, or omit from the Work covered by this Contract any portion thereof. Before any such alteration or modification shall be effective, the price to be paid for the Work or the material, or both, under the altered or modified Contract, shall have been agreed upon in writing and signed by the Contractor and by the Contractual Agent or Agents of the Owner. It is expressly agreed that such changes shall not, in any way, violate or annul the Contract, and the Contractor hereby agrees not to claim or bring suit for any damages, whether for loss of profits or otherwise, on account of these changes. Whenever, during the progress of the Work, any change or modification of the Work is agreed upon, such change shall be considered and treated as though originally contracted for, and shall be subject to all provisions of the original Contract.

The Contractor's Sureties will not be notified of changes in the work or cost thereof, except when by reason of any Change Orders, the total Contract price increases by more than twenty (20%) percent of the original price.

### **DISPUTES AND CONTRACTOR CLAIMS**

In cases where there arises a dispute (whether over payment, claims, or quality of Work) between the Contractor and the Owner, the Contractor shall not cease Work on the Project because of said dispute, unless told to cease work by the Owner. The Contractor shall continue Work on the Project and agrees that such a dispute shall not relieve him from the requirements under "Time of Completion and Damages for Delays".

In all cases, the Contractor shall submit to the Owner any claims for disputed amounts, in writing, within seven (7) calendar days of learning of said dispute. In submitting such claim, the Contractor shall include his actual original calculations and raw cost data, along with his job cost reports and field diaries.

If the Owner makes to the Contractor an offer on a claim which the Contractor refuses, and if the Contractor then gets an amount equal to or less than the Owner's last offer in court, the Contractor shall pay all legal costs, including attorney's fees and expert witness fees, that the Owner incurs from the date of the Owner's last offer until the day the Contractor is awarded judgment.

Any claims or disputes shall be limited by the requirements of "Modification of Contract or Change Order."

### **TIME OF COMPLETION AND DAMAGES FOR DELAYS**

The Project construction time shall commence upon the date indicated in the Notice to Proceed, which shall be sent to the Contractor by the Owner. The Contractor shall agree to commence the Work on the date specified in the written Notice to Proceed, weather permitting, and to fully complete the Work by **OCTOBER 15, 2025**, unless such time for completion is extended, in writing, by the Owner. However, neither the Contractor nor any subcontractors shall commence

any part of the work under the Contract until it has obtained all insurance required, as listed in the General Conditions, and such insurance has been approved by the Owner.

The Contractor agrees that time is of the essence, and therefore, if the Contractor neglects, fails, or refuses to complete the Work within the allotted time, or fails to secure an extension of time for delays, the Contractor does hereby agree to pay to the Owner, as liquidated damages and not as a penalty the amount as stated in the Contract for each calendar day beyond the completion date stated in the Notice to Proceed, unless the time for completion has been extended in writing by the Owner. Such damages shall be deducted from any monies due and owing to the Contractor under the Contract. If the amounts still due the Contractor under the Contract are insufficient to meet the expense, the additional monies shall be paid by the Contractor, and if the Contractor refuses or neglects to pay, the monies shall be paid by his Surety or shall be deducted from its Performance/Contract Bond.

If the Contract is revised in any material respect and it is determined that said revision will cause delay in the completion of the work, the Engineer will postpone the completion date by the number of calendar days he determines to be equitable.

If the Contractor finds it impossible for reasons beyond his control to complete the work by the date as specified or as extended in accordance with the provisions of this subsection, he may make a written request to the Engineer for an extension of time setting forth therein the reasons which he believes will justify the granting of his request. Requests for extensions of time shall be filed in writing by the Contractor to the Engineer not later than thirty (30) days following the termination of the delay. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the work was delayed because of conditions beyond the control and without the fault of the Contractor, he may extend the time for completion in such amount as the conditions justify.

Delays caused by weather or seasonal conditions should be anticipated and will be considered as the basis for an extension of time only when the actual work days lost exceed the number of working days lost each month due to the inclement weather as determined in Section 108.06 of the ODOT Construction and Materials Specifications.

The extended time for completion shall then be in full force and affect the same as though it were the original time for completion.

If the Owner should suspend the Work in whole or in part, the date for completion shall be extended by the number of days that the suspension directly or indirectly delays the completion of the Work.

If the Work is delayed for unforeseeable causes beyond the control and without the fault of negligence of the Contractor, such as severe or unusual climatic conditions, acts of God, acts of the Owner or interference by other contractors, extensions of time may be granted by the Owner, upon the Contractor's written request for an extension. The Contractor shall, within five (5) days from the beginning of such delay, notify the Owner in writing of the causes of the delay and request an extension. In no case shall such an extension of time exceed the time actually lost to the Contractor by reason of such delay or interference.



The Owner, reserves the right to suspend the whole or any part of the Work, when in the best interest of the Owner, in its sole discretion. Without any additional compensation to the Contractor for such suspension; however, the Contractor shall be granted an extension of time for completing the Work in the same amount of time that it was delayed by such suspension, unless said suspension was necessitated by the actions or inactions of the Contractor.

### **FAILURE TO COMPLETE ON TIME**

If the Contractor fails to complete the Work within the time or times allowed by the Contract, the Owner, if satisfied that he Contractor is carrying the Work forward with reasonable progress and deems it to be in the best interest of the Public, may allow him to continue in control of the Work. It shall be necessary for the Contractor to make written application to the Owner in order to warrant such continuance. Payments to the Contractor for work performed and materials furnished will be made.

When the work is not completed within the time or times allowed by the Contract, and the Contractor is permitted to remain in control, the Work shall be prosecuted at as many different places, at such times, and with such forces as the Owner may request.

For each calendar day that any work shall remain uncompleted after the Contract completion date or dates, the sum specified in the Contract will be deducted from any money due the Contractor, not as a penalty but as liquidated damages provided, however, that due account shall be taken of any adjustment of the completion date or dates granted under the provision of "Time of Completion and Damages for Delays". In the event one or more interim completion dates are specified without specific separate liquidated damages, the amount set forth in the Schedule in Section 108.07 of the ODOT Construction and Materials Specifications will separately apply to each interim date. In the event a period of liquidated damages for an interim completion date overlaps a subsequent completion date, the liquidated damages will be cumulative.

Permitting the Contractor to continue and finish the Work or any part of it after the date or dates fixed for its completion, or after the date or dates to which completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its right under the Contract. The Owner may waive such portions of the liquidated damages as may accrue after the work is in condition for safe and convenient use by the public.

### **UNSATISFACTORY PROGRESS AND TERMINATION OF THE CONTRACT**

In case the Contractor or any Subcontractor fails to furnish materials or to execute the Work in accordance with the Plans and Specifications, or if the provisions of the Contract are otherwise violated, then in any such case, upon ten days written notice to the Contractor and his Surety, the Owner shall have the right to declare the Contractor in default on the Contract. Said notice shall contain the reason for the Owner's intention to declare the Contractor in default on the Contract and, unless within ten days after service of said notice the violation shall cease or satisfactory arrangements shall have been made for its correction, the Contractor, upon the expiration of said



ten days, shall be in default on the Contract and his right to proceed under the Contract shall be terminated.

In the event the Contract is thus declared to be defaulted, the Owner will immediately notify the Contractor and his Surety of such action, and will at once cause the work already done to be measured and computed. The action of the Owner in the declaration of the default of the Contract shall be final and conclusive, and the Contractor shall not be entitled to claim or receive any damages for not being allowed to continue. After the default of the Contract, the Surety shall have the right to take over and complete the Work, provided, however, that the Surety shall notify the Owner in writing of its intent to do so within twenty (20) days after the notice of the default of the Contract. Such completion of the Work by the Surety shall be done in strict accordance with all the provisions of the original Contract. However, if the Surety does not take over the Contract as stated above, then the Owner shall cause the Work to be completed under a second contract. If the cost of the Work done under the second contract exceeds what it would have cost under the original Contract, the increased cost shall be paid from any money due the Contractor under the Contract, and if that is not sufficient, then the increased cost shall be paid by the Contractor and/or his Surety.

The Contractor and/or his Surety shall also pay all cost and expense of reletting the Work and all damages resulting from noncompletion of the Work within the Contract time. If, when the Work is completed, it is found that there is any money due the Contractor, it will be paid to him; but no money shall be paid to the Contractor under the Contract after it has been declared in default, until the Work has been completed and accepted and all claims and suits resulting therefrom shall have been settled.

## **PAYMENTS**

The Owner shall pay to the Contractor the price stipulated in the Contract, by making progress payments to the Contractor during the performance of the Work, on the basis of the value of work performed.

The Contractor shall submit an invoice to the Engineer of the quantity of work performed for approval. Requests for payment shall not be made more frequently than every thirty (30) days. The Engineer shall forward the invoice to the City of Forest Park for approval, and upon approval of the invoice by the Engineer and the Owner, the Owner shall pay the Contractor within thirty (30) days.

Partial payment may be reduced or withheld entirely if, in the opinion of the Owner, construction is not proceeding according to the Contract, or if for any other violation, or for failure of the Contractor to comply with the orders of the Owner, or pending settlement of claims of liens filed against the Contractor.

The Owner shall make partial payments to the Contractor for work performed and materials delivered to the site at 92% of the value of work until the project is 50% complete. All work

performed and material delivered to the site after the work is 50% complete shall be paid at 100% of the value.

The Contractor shall submit three (3) signed and notarized original copies of each Application for Payment to the Engineer. One copy shall include waivers of lien and similar attachments if required.

### **WAIVER OF MECHANIC'S LIEN**

Upon reaching 70% completion and again prior to Final Application for Payment, the Contractor shall submit waivers of mechanic's liens from subcontractors, materialmen, and suppliers for all construction to date.

1. Submit partial waivers on each item for amount requested, before deduction for retainage, on each item.
2. When an application shows completion of an item, final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
4. Submit final Application for Payment with or preceded by final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
5. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.

### **ACCEPTANCE OF FINAL PAYMENT**

After the final inspection has been made and the Owner has accepted the Work, the Final Statement of Cost will be prepared. If any items were erroneously overestimated in any partial estimate, such errors will be corrected in any subsequent partial estimate or in the final estimate, and the Contractor shall have no right to any such excess and shall not be entitled to any damage on account of such corrections in the final estimate.

The following paperwork is necessary from the Contractor to close-out the Project:

1. Final invoice for payment.
2. Final affidavit listing all subcontractors/suppliers used on the Project and indicating the amount paid in full.
3. Final Release of Liens from all subcontractors indicating the amount paid in full.
4. Prevailing Wage Affidavit, if applicable.
5. Guarantee.
6. Final Release of Lien.



7. Concrete Test Reports, if applicable.
8. Asphalt field density testing reports, if applicable.
9. Any additional testing reports as required by the Contract.

After the final estimate and Final Statement of Cost have been prepared and after the Contractor has fulfilled all of his obligations under the Contract, the Owner will pay the entire sum found to be due the Contractor after deducting all previous payments and any liquidated damages, if applicable.

The date of acceptance of the Work by the Owner shall be the date of approval of the Final Statement of Cost.

If, after physical completion of the work and acceptance of the Owner's final measurements by the Contractor, the Owner finds that the Final Statement of Cost or final estimate or both may be unavoidably delayed, he may allow a payment on one-hundred percent (100%) of the final measurements, less such estimated amount of money as the Owner may deem necessary to withhold to take care of any contingencies which may arise.

Should the Contractor have any claim against the Owner because of a variance with the Owner's final measurement, the Owner may allow payment based on the Owner's measurement pending adjustments of the disputed item or items. Acceptance of payment on such basis shall not stop the Contractor's claim nor prevent its satisfactory adjustment.

Retainage shall be paid to the Contractor within thirty (30) days from the date of the Owner's final acceptance of the Work and the completion of the Contract. Upon the Contractor's acceptance of this final payment, the Owner and the Engineer shall be released from any and all claims and any liability to the Contractor for anything further under or relating to the Contract or the Contract Documents, including any act or omission by the Owner or any of its employees or agents, including the Engineer; however, no payments, final or otherwise, shall operate as a release on the Contractor or its Sureties from any obligations under the Contract or the Contract Documents.

#### **TERMINATION OF THE OWNER'S LIABILITY**

No person, partnership, firm, or company other than the Contractor shall have any interest in the Contract and no claims shall be made or held valid and neither the Owner nor its agents shall be held liable for, nor shall be held to pay any money except as herein provided. The acceptance by the Contractor of the final payment made as aforesaid shall operate as, and shall constitute, a release to the Owner and its agents from any claim or liability to the Contractor for anything done or furnished for, or relating to the Work or for any act or neglect of the Owner or any person related to or connected with the Work.

**TERMINATION FOR CAUSE**

- A. In the event that any of the provisions of the Contract are violated by the Contractor, or by any of its subcontractors, the Owner may serve written notice upon the Contractor and its surety of its intention to terminate the Contract. Such notice shall list the act or omission causing the breach, upon the service of such notice, the Contractor shall have ten (10) business days to correct the breach or to make arrangements for correction that is satisfactory to the Owner.
- B. If no such correction or arrangements are made within the allotted time, the Owner may, in its sole discretion, terminate the Contract on a date solely determined by the Owner. In the event of such termination, the Owner shall immediately serve notice thereof to the Contractor and its surety. The surety shall then have the right to take over and perform the Contract provided, however, if the surety does not elect to continue performance, the Performance Bond will be forfeited and the Owner shall cause the Contract to be completed.
- C. Upon termination for cause, the payment to the Contractor of compensation earned for Work performed to the date of such termination shall be in full satisfaction of all claims against the owner under this Contract, however the Owner shall have the right to deduct from any amounts due and owing to the Contractor, including retainage, any costs, both direct and incidental, incurred by the Owner in completing the Project. The Contractor and/or surety shall be liable for any excess costs the Owner may so incur, and the Owner shall have the right to pursue any legal remedies necessary to affect the same.

**TERMINATION FOR CONVENIENCE**

- A. The Contractor hereby acknowledges that as the Owner is a public entity, due to unforeseen circumstances, funding restraints, or changes in the nature of the Work, it may become necessary for the Owner to terminate the Contract for convenience.
- B. In the event the owner finds it necessary to terminate the Contract for convenience, the Owner shall serve notice upon the Contractor and its surety of its intention to terminate the Contract ten (10) business days prior to the termination date.
- C. Upon termination for convenience, the Owner shall pay to the Contractor all compensation due for Work performed to the date of termination, including all costs for materials that were to be incorporated into the Project that cannot be returned; all restocking fees for materials that were to be incorporated into the Project that can be returned only upon the payment of a restocking fee. The Contractor shall submit to the Owner detailed invoices and proof of restocking fees, if any, within ten (10) business days of his receipt of notice of termination from the Owner. In addition, the Owner will negotiate compensation with the Contractor for actual costs incurred as a result of the termination.

**CONTRACTOR'S RIGHT TO TERMINATE CONTRACT**

The Contractor may terminate the Contract, upon ten (10) days written notice to the Owner if any public authority should stop the work for three (3) months, or if the Owner should fail to issue a Certificate of Payment, or if the Owner should fail to pay in accordance with this agreement.

**GUARANTEE OF WORK**

The Contractor hereby guarantees all work performed for a period of one (1) year from the date of completion, and two (2) years for all asphalt paving work, against all defects resulting from the use of inferior materials or equipment (unless said materials or equipment were provided by the Owner) or inferior workmanship. The Contractor hereby agrees that during the guarantee period, it shall make all repairs, corrections, replacements or changes that, in the opinion of the Engineer, are necessary due to the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the Contract or Contract Documents. The Contractor shall, promptly upon receipt of written notice from the Owner, remove and replace all unsatisfactory work with suitable materials, equipment or workmanship, without additional expense to the Owner.

If the Contractor fails to proceed with these terms of the guarantee in a timely manner, the Owner shall have the right to have the defects corrected, and the Contractor and its sureties shall be liable to the Owner for all expenses incurred by the corrections.

Any or all special guarantees applicable to any definite parts of the Work, including the materials or equipment, shall also be subject to the terms of this section during the first year of the life of such special guarantees.

Customary manufacturer's guarantees in excess of one year shall be turned over to the Owner. If the terms and conditions as set forth are met to the satisfaction of the Owner and Contractor, the Owner may reduce the Performance Bond to ten percent (10%) of the total amount paid the Contractor in the performance of this Contract as a Guarantee bond.

**NOTICE**

Any written notice required to be served under the Contract or the Contract Documents shall be served by certified mail, or by personal service at the parties' places of business.

**NO ESTOPPEL**

At no time shall the Owner be precluded or estopped by any provisions of the Contract, from demanding and recovering from the Contractor any damages sustained because of the Contractor's failure to comply with the Contract or the Contract Documents. The final inspection of the Work shall not be binding or conclusive upon the owner if it subsequently appears that the Contractor willfully, fraudulently, or through collusion with an agent of the Owner, supplied inferior materials

or workmanship, or departed from the terms of the Contract or Contract Documents, notwithstanding the acceptance of the Work and payment for the same by the Owner.

### **ASSIGNMENT**

Neither the Contract or any part thereof, nor any funds to be received there under, by the Contractor shall be assigned, except upon the prior written permission of the Owner, upon any conditions that may be imposed by the Owner, and upon the prior written permission of any sureties who executed the Performance Contract Bond on behalf on the Contractor.

### **INDEPENDENT CONTRACTOR STATUS**

At all times during the term of the Contract, the Contractor shall be and remain as an Independent Contractor with respect to all services performed under the Contract, The Contractor agrees that all income reporting requirements to the U.S. government, the State of Ohio, and any local governments are its responsibility and not that of the Owner. The Contractor shall be responsible for the payment of all taxes including, but not limited to, Federal, state, and local taxes, Social Security taxes, unemployment insurance taxes, and other taxes or license fees required by law, for its officers, agents, and employees. The Contractor agrees that neither it, nor any of its officers, agents, nor employees is entitled to receive workers' compensation, unemployment compensation, vacation leave, sick leave, or any other fringe benefits provided to the employees of the Owner or any other Owner agency, under this Contract. Contractor acknowledges that under this Contract, the Owner is not required to contribute to the Ohio Public Employees Retirement System on behalf of the Contractor, its officers, agents, or employees, nor is the Contractor eligible to contribute to or receive benefits from said system.

### **OTHER CONTRACTS**

The Owner reserves the right to allow other work or to enter into other contracts for work or materials to be constructed or placed in or about the Work to be performed under this Contract, and to order the starting and progress of such other contracts at any time prior to the completion of this Contract. The Contractor hereby agrees to allow the construction or progress of other such work, under such arrangements for the joint occupation for the site of the Work as the Engineer may establish. The Contractor hereby waives any claim for damages or extra compensation by reason of any real or supposed interference with his performance of the Work; however, if in the judgment of the Engineer, the joint occupation of the site has unreasonably impeded the progress of the Contractor's work under the Contract, then the time for completion of the Work may be extended by the Owner.

## **PATENTS**

The Contractor shall indemnify and hold harmless the Owner, its officers, employees, and agents from all liabilities, judgments, costs, damages, or claims arising from the infringement of any patent, patent rights or royalty rights by reason of the use of any patented materials, machinery, devices, and equipment furnished or used in the performance of the Work, or by reason of the use of patented designs furnished and incorporated into the Work by the Contractor and accepted by the Owner, excepting any materials or equipment furnished by the Owner. In the event that any claim, suit, or action in law or equity of any kind whatsoever is made or brought against the Owner involving any such patents, then the Owner shall have the right to retain, from the money due and owing to the Contractor, an amount the Owner deems sufficient to protect the Owner against loss until such claim, suit, or action has been settled and evidence of such settlement has been satisfactorily presented to the Owner's Law Director.

## **LAWS, ORDINANCES, AND REGULATIONS**

The intent of the Contract and the Contract Documents is to include each and every provision and clause required by law to be inserted herein, and they shall be read and enforced as though there were included herein.

The Contractor shall keep itself fully informed of, and shall strictly observe and comply with, all applicable Federal State, County, and local laws, rules, regulations, and ordinances; building code requirements; permit requirements; licensing requirements; inspection requirements; all laws, rules, and regulations regarding the employment of and payment of all laborers, the legal rights of all laborers employed under the Contract; all orders or decrees that exist or that may be enacted by anybody or tribunal having jurisdiction or authority over any aspect of the Work. The Contractor shall also insure that its subcontractors are also informed of and strictly comply with and observe all applicable laws, rules, regulations, and ordinances.

The Contract shall be required to give all notices and pay all fees for any required permits, licenses, or inspection, unless the Owner assumes the responsibility for giving such notices or paying such fees. The Engineer will discuss any special permits that may be required for the Project at the preconstruction conference.

The Contractor shall indemnify and hold harmless the Owner, the Owner's officers, employees and agents, including the Engineer, against any claim or liability arising from or based upon any violation of any such law, rule, regulations, ordinance, order, decree or requirement, whether by the Contractor itself, its employees or agents, or any of its subcontractors.

Should the Contractor at any time find that any requirement of the Contract of the Contract Documents is at variance with any applicable law, rule, regulation, requirement, order or decree, it shall promptly notify the Engineer.

**ENVIRONMENTAL PROTECTION**

The Contractor shall observe and comply with all Federal, State, and local laws and regulations controlling pollution of the environment and shall comply with provisions of Section 107.19 of the ODOT Construction and Material Specifications.

**TAXES**

The Contractor will be required to pay, without additional expense to the Owner, all Federal, State, local and other taxes which may be applicable to the Work, excepting any taxes and assessments on the real property comprising the site of the Work. The Owner will provide a State Sales Tax Exemption Certificate to the Contractor for materials incorporated into the Work.

The Contractor hereby agrees to withhold all City of Forest Park income taxes due or payable under the provisions of the Codified Ordinances of the City of Forest Park for wages, salaries, and commission paid to its employees who will work within the City for more than 12 workdays, and further agrees that any of its subcontractors shall be required to withhold any such City income taxes due to under said Code for services performed under this Contract. The Contractor is advised to get full information from the Tax Office prior to bidding.



**UTILITY OWNERSHIP**

The following utilities and owners are located within the work limits of this project:

|                       |   |
|-----------------------|---|
| <b>Gas</b>            | Duke Energy<br>139 E. Fourth Street<br>Room 460-A<br>Cincinnati, Ohio 45201<br>(513) 287-2762                             |
| <b>Electric</b>       | Duke Energy<br>139 E. Fourth Street<br>Room 467, Annex<br>Cincinnati, Ohio 45202<br>(513) 458-3852                        |
| <b>Water</b>          | Greater Cincinnati Water Works<br>4747 Spring Grove Avenue<br>Cincinnati, Ohio 45232<br>(513) 591-5007                    |
| <b>Telephone</b>      | Cincinnati Bell Telephone Company<br>221 East Fourth Street, Building 121-900<br>Cincinnati, Ohio 45201<br>(513) 565-7043 |
| <b>Sanitary Sewer</b> | Metropolitan Sewer District of Greater Cincinnati<br>1600 Gest Street<br>Cincinnati, Ohio 45204<br>(513) 557-7167         |
| <b>Cable TV</b>       | Charter Communications, Inc.<br>11254 Cornell Park Drive, Suite 430B<br>Cincinnati, Ohio 45242<br>(513) 386-5907          |
| <b>Storm Sewer:</b>   | City of Forest Park<br>1201 West Kemper Road<br>Forest Park, Ohio 45240<br>(513) 595-5258                                 |



## PREVAILING WAGE

Under 4115.071, Paragraph "C" of the Ohio Revised Code, any Contractor or Subcontractor contracting with a Public Authority must submit certain personnel and payroll information to that Public Authority's prevailing Wage Coordinator during the life of the Contract.

Any Contractor or Subcontractor participating in a public works project must:

1. Supply to Prevailing Wage Coordinator of the contracting public authority a schedule of the dates during the life of his contract with the authority on which he is required to pay wages to employees.
2. Deliver to the Prevailing Wage Coordinator a certified copy of his payroll, within two weeks after the initial pay date, and supplement report for each month thereafter. If the construction period is to be less than one month, the payroll reports must be made on a weekly basis. Payroll reports must contain the following information:
  - a. Wages
  - b. Name
  - c. Current address
  - d. Social Security number
  - e. Number of hours worked during each day of the pay periods covered and the total for each week.
  - f. Hourly rate of pay
  - g. Job classification
  - h. Fringe payments
  - i. Deductions from his wages.

### **WAGE RATES**

When the total overall project exceeds \$29,653, all bidders must comply with the prevailing wage rates on Public Improvements in Hamilton County and, as ascertained and determined by the Administrator of the Ohio Bureau of Employment Services (OBES) as provided in Section



4115.05 through 4115.034 of the Revised Code of the State of Ohio. It is anticipated that the Prevailing Wage Law will apply to this project.

The Contractor must submit, with the "Bid Proposal, the "Affidavit of Contractor, Prevailing Wages-Bid Proposal" certifying that the most current prevailing wage rates are used for determining prices for the Bid Proposal and that prevailing wages shall be paid throughout the duration of the project.

### **PREVAILING WAGE AFFIDAVIT**

An "Affidavit of Contractor or Subcontractor, Prevailing Wage", must be executed and returned to the Owner upon completion of the project. Final payment will be retained until the document is received. Please note that the affidavit encompasses the work done by all Subcontractors as well as the Contractor's work force

# SPECIFICATIONS FOR CONSTRUCTION

In general, unless specifically set forth herein, the work, materials, and methods of measurement and payment shall conform to the applicable divisions and paragraphs (as noted on the Bid Proposal or in the plans) of the most current edition of the:

**State of Ohio  
Department of Transportation**

1. Construction and Material Specifications
2. Construction and Material Supplemental Specifications
3. Standard Construction Drawings

**City of Cincinnati  
Department of Water Works**

1. Construction and Material Specifications
2. Standard Drawings

## SCOPE OF WORK

1. **CEDARCREEK DRIVE, MANDARIN COURT, NETHERLAND COURT, INDRA COURT AND GALLITIN COURT**

Partial curb repair on Cedarcreek Dr, Mandarin Ct, Netherland Ct, Indra Ct and Gallitin Ct, catch basin repair as needed, adjust all manholes to grade, downspout repair and replacement as needed, full depth spot pavement removal and repair as needed, 2-1/2" depth pavement planning, multi-seal surfacing interlayer (SAMI), 1" asphalt leveling course, 1-1/2" asphalt surface course, and apply asphalt rejuvenating agent to new asphalt pavement.

*Engineer's Estimated Opinion of Construction Cost is \$625,000*

## **SPECIAL PROVISIONS**

### **ITEM 207 - TEMPORARY SEDIMENT AND EROSION CONTROLS**

The Contractor shall take extreme care to prevent unnecessary erosion, water pollution and siltation at all points of the project. Temporary seeding and mulching, straw bales, slope drains, etc., shall be used as necessary or as directed by the Engineer. The cost of all temporary erosion control measures shall be incidental to the Contract.

### **FULL-DEPTH PAVEMENT SAWING**

All existing pavement to be widened and/or removed shall be sawed full depth at the limits of removal, using a diamond saw blade to provide a uniform edge and prevent damage to pavement that is to remain in place. The cost of the sawing shall be incidental to the applicable pavement removal item.

### **ITEMS 251 / 252 / 253 - PAVEMENT REPAIR**

The final areas to be repaired under "Item 251, Partial Depth Pavement Repair", "Item 252, Full Depth Rigid Pavement Removal and Flexible Replacement," "Item 253, Pavement Repair," will be designated in the field by the Engineer and the quantity of work to be covered under these items will be based upon the measurement of those designated areas.

The unit price bid for Item 251, Partial Depth Pavement Repair, shall include all the costs incurred in the removal of the existing concrete pavement to a depth specified by the Engineer, and the placing of the asphalt pavement as per plan.

The unit price bid for Item 253, Pavement Repair, shall include all the costs incurred in the removal of the existing asphalt pavement, the compaction of the subgrade as required, and the construction of the pavement courses as per plan.

**The Contractor shall plane off the existing pavement as shown on the typical details. The Engineer will then mark the location, size and type of repair to be made. Weather permitting, the Contractor shall complete the pavement repairs within five (5) working days from when the planing operations have been completed.**

**All curb repairs, asphalt repairs and utility adjustments are to be completed before the asphalt surface work begins.**

**ITEM 254 - PAVEMENT PLANING**

The work of this item consists of removing the existing asphalt wearing surface to the depths and limits specified or as directed by the Engineer, the intent of which is to restore adequate curb height and/or to remove deteriorated portions or irregularities in the existing wearing surface. Removal shall be by the method of cold surface planing, as described in Item 254.

The Contractor shall be responsible for notifying all residents of parking restrictions 24 hours in advance of any and all planing operations. Care shall be exercised during planing operations so as not to damage manhole covers, grates, chambers, valves, valve boxes, etc. Any utility castings damaged by the Contractor's operations shall be replaced by the Contractor at his expense.

After removing the wearing course, the Contractor shall immediately clean and tack coat an area at least four feet (4') in radius around all utility castings within the removal area and place an asphalt concrete wedge, thoroughly compacted in accordance with Item 401, around the castings in the four-foot (4') radius area. As an alternate method, the Contractor may choose at the time the wearing course is removed to leave a four-foot radius wedge of existing surface course around the utility casting to protect traffic, but will not be allowed to remove these wedges until the day previous to placing asphalt concrete surfacing on the street. Where manholes or valve chambers within an area where wearing course is removed have previously been adjusted with adjusting rings, the Contractor shall also have the option of removing the adjustment ring.

If the Contractor chooses to remove the adjustment rings, he shall re-install the rings immediately prior to resurfacing the street. No additional compensation will be paid for the placing of asphalt wedges, the removal and re-installation of adjustment rings, or the separate removal of existing wearing course left around the castings. These costs shall be included in the cost of removing the wearing course. All material removed shall be the property of the Contractor.

The Contractor shall note that the maintenance of proper drainage patterns will be of special concern, especially where proposed work is to meet existing pavement. The Contractor may be required to survey areas in question, using an automatic level or other appropriate equipment to assure proper grade and cross-slope. The cost of all operations required to assure and to demonstrate that proper drainage patterns have been maintained shall be included in the unit price bid for the pertinent pavement removal item.

**The Contractor shall place the SAMI, Type 1 within 24 hours of the completion of the pavement repairs. The asphalt concrete surface course shall be placed within 48 hours of the completion of the placing of the SAMI, Type 1.**

**During the pavement planing process, should circumstances arise where more existing pavement is being removed than specified, the Contractor SHALL notify the owner immediately and stop work until the owner arrives on-site and the issue is discussed and resolved. Due to past experiences, including, but not limited to, air temperature, pavement temperature and/or failure of bonding agent, a substantial increase in the pavement planing has occurred without the City's approval or insight into existing conditions. Should overages to the Contract occur that are associated with pavement planing not completed per the**

**drawings and specifications AND the continued pavement planing by the Contractor without notifying the Owner and stopping work, then the Contractor shall be responsible for all additional work associated with the pavement planing not being completed per the drawings and specification, including but not limited to the additional work or quantities needed to complete the paving specification.**

#### **ITEM 401 - SEALING EDGES**

All edges of the asphalt concrete surface course constructed under this Contract shall be sealed with asphalt cement as directed by the Engineer, the cost of same to be included in the unit price bid for Item 448, Asphalt Concrete. After completion of the surface course, gutters shall be sealed with **hot applied rubberized joint sealer** as directed by the Engineer. The material shall be applied at a uniform width of approximately 4 inches and at a rate just sufficient to fill surface voids. Sealing edges at building walls, foundations, or other visible surfaces shall be done neatly and without more than one-half (1/2) inch of the sealant being visible on the surface. Any extra sealant applied to visible surfaces shall be carefully and thoroughly removed by the Contractor at no additional cost to the Owner.

#### **ITEM 401 - ASPHALT CONCRETE PAVEMENTS**

401.16      Compaction: Add: Achieve an in-place density of the compacted material ranging between 92.0% and 96.9% as determined by the material testing consultant.

#### **ITEM SPECIAL – TACK COAT, TRACKLESS TACK**

##### **ITEM SPECIAL - TACK COAT, TRACKLESS TACK**

**DESCRIPTION:** This work consists of preparing and treating a paved surface with a trackless tack asphalt emulsion.

Furnish materials according to the ODOT's approved list.

Meet all requirements of Item 407 Tack Coat in the Construction and Materials Specifications required by the contract, except as noted below.

**MATERIAL:** Meet all properties of the approved manufacturer's trackless tack specification requirements on file with the laboratory at time of placement.

**ACCEPTANCE AND SAMPLING OF MATERIALS:** Supply certified test data to the Engineer and to the district laboratory demonstrating the trackless tack supplied was tested for and meets all material properties shown on the department's approved list.

During construction, the Contractor will prepare a sample from the distributor and supply to an approved test lab for testing to confirm the material requirements. Based on the quantities for this



project, one quart of trackless tack will be sampled and shall utilize a proper plastic quart sampling container. Clearly mark on the sample with the manufacturer's name, project number, and the words "Trackless Tack".

**EQUIPMENT:** Follow manufacturer's recommendations for correct distributor settings. Thoroughly clean all equipment if previously used material charge is different than the proposed material.

**APPLICATION OF ASPHALT MATERIAL:** Uniformly apply the trackless tack with a distributor according to the manufacturer's instructions. If trackless tack is stored for an extended period of time, prior to application, agitate or gently circulate the material.

Ensure all nozzles and spray patterns are identical to one another along the distributor spray bar. Place the angle of the nozzle at a 15 to 30-degree angle to the spray bar axis to maximize overlap or as recommended by the nozzle manufacturer. Contact the manufacturer's representative for required spray nozzle size and distributor and nozzle settings.

Apply at a rate of 0.04 to 0.1 gallons per square yard. Do not dilute trackless tack. Recommended application temperature is 160° F to 180° F. Do not exceed 180° F. The Engineer will approve the quantity, rate of application, temperature, distributor settings, and areas to be treated before application of the trackless tack coat. The Engineer will determine the actual application in gallons per square yard by a check on the project.

**PERFORMANCE OF TRACKLESS TACK:** Determine the time to set for the material to become trackless. The Engineer will report any issues with excessive time to set, or after set issues with stickiness, or pickup of the tack to the Contractor.

If the certified test data fails to meet the lab testing criteria, or field samples fail to meet the lab test criteria, or the trackless tack fails to perform satisfactorily in the field, as noted above, the Contractor will be required to replace and supply another approved trackless tack product for the remainder of the project at no additional cost to the department.

#### **ITEM 446 / 448 - MEETING EXISTING PAVEMENT**

Where an asphalt concrete resurfacing project begins or ends, the surface course shall meet the existing on a neat, straight line. Unless otherwise directed by the plans, the Contractor shall construct a ten- foot (10') long butt joint (see detail). This is to be incidental to Item 448, Asphalt Concrete.

**ITEM 441 - ASPHALT CONCRETE**

448.03 Reports and 448.04 Acceptance: Acceptance requirements have been modified in these Special Provisions to adjust for smaller quantity projects and assure each day of paving meets the design criteria of the Job Mix Formulas (JMF). Except as modified in this provision, all other requirements of the ODOT 441 Specification still apply.

Acceptance of all 448 asphalt will be based on the results of extraction and gradation tests performed by the material testing consultant. The testing consultant will obtain four (4) samples for each day of paving in accordance with ODOT Supplement 1035. The consultant will do extraction and gradation tests, in accordance with ODOT Supplements 1038 and 1039, for two (2) of the samples, the other two (2) will be hold samples. A Lot as used in 403.08 will be defined by the total cubic yards of asphalt placed for each specific pay item for each JMF. Acceptance of a Lot will be based on the average of a minimum of four (4) tests. In addition to each Lot, each day of paving will be subject to the tolerance criteria shown in Tables 403.08-1 and 403.08-2.

The Contractor is still required to perform all tests and submit reports per ODOT 441.

**ITEM 441 - BROOMING AND CLEANING**

The existing surface shall be cleaned and prepared in accordance with Item 401.12. The cost for such work is to be included in the unit price bid for Item 448, Asphalt Concrete.

**ITEM 499 - CONCRETE - GENERAL**

If the averages of all sets of three consecutive strength test results meet the following strengths, an extended guarantee will be required on all concrete work.

- a) 3500 psi to 3799 psi - 3 year guarantee
- b) 3800 psi to 3999 psi - 2 year guarantee

**ITEM 503 - SHEETING AND SHORING**

The Contractor shall furnish, put in place, and maintain such piling, sheeting, bracing, etc., as is required by the Industrial Commission and the Department of Industrial Relations, State of Ohio, in their Bulletin No. 1C-3, "Specific Safety Requirements Relating to Building and Construction Work," as revised. The Contractor shall furnish, put in place, and maintain and remove such sheeting, shoring, planking and bracing as may be required to support the sides of the excavations and to prevent any movement which could in any way injure the work, human life, or adjacent structures and property, obstruct surface drainage channels or waterways, or otherwise injure or delay the work. If required at any time by the Engineer, the Contractor shall furnish and install such additional sheeting, shoring and bracing as may be necessary to protect the work, but compliance with such orders or failure on the part of the Engineer to give such orders shall in no case release

the Contractor from liability for any damages or injuries caused by weak or insufficient sheeting, shoring and bracing, nor from his responsibility to protect the work or adjacent property.

Except when ordered left in place, all wood sheeting above the top of the pipe, steel sheet piling, braces, shorer, walers or stringers, shall not be withdrawn until the backfill is practically complete. As the backfill progresses to the elevation of a set of walers and braces, such bracing shall be removed. All sheeting and bracing specified, shown on the plans, or directed by the Engineer to be left in place shall not be removed. All sheeting left in place shall be cut off at least two (2) feet below final finish grade. During the removal of sheeting, care must be taken to prevent movement of the sides of the excavation. All voids left by the withdrawal of sheeting shall immediately be carefully refilled by ramming with tools adapted to the purpose, pneumatic or other approved type, or by flushing sand into the voids.

Whenever the Engineer, in writing, orders any type sheeting, shoring, bracing or foundation material left in place, or when so shown on the plans or specified, the Contractor will be paid for the actual amount so left in place at prices stipulated for the applicable items. Sheeting, shoring and bracing left in place by the Contractor for his own convenience will not be paid for under any item.

#### **ITEM 603 - REVIEW OF DRAINAGE FACILITIES**

Before any work is started on the project and again before final acceptance by the Owner, the Contractor, with the Engineer, shall make an inspection of the existing sewers within the work limits, which are to remain in service and which may be affected by the work. The condition of the existing conduits and their appurtenances shall be determined from field observations. Written records of the inspection and/or photographic documentation shall be kept by the Engineer.

All existing sewers inspected initially by the above-mentioned parties shall be maintained and left in a condition reasonably comparable to that determined by the original inspection. Any change in the condition resulting from the Contractor's operations shall be corrected by the Contractor to the satisfaction of the Engineer. All existing and/or new conduits, inlets, catch basins, and manholes constructed and/or cleaned as a part of the project shall be free of all foreign matter and in a clean condition before the project will be accepted by the Owner. Payment for all operations described above shall be included in the unit prices bid for the pertinent item.

#### **ITEM 611 - RESTORATION OF AREAS DISTURBED BY DRAINAGE FACILITIES**

Soil areas disturbed by construction of underdrains, trench drains, conduits, catch basins or other drainage facilities shall be regraded to drain properly and then restored with top soil, seeding and mulching. The cost of restoration of these soil areas is to be included in the unit price bid for the pertinent drainage item.

Pavement areas (including walks, drives, curbs, etc.) disturbed by the construction of the drainage facilities will be restored as per the applicable asphalt pavement repair detail or the concrete pavement detail. Payment for the restoration of these areas will be at the unit price bid for the pertinent pavement item.

**ITEM 611 - STORM MANHOLES, CATCH BASINS AND INLETS**

All castings for manholes, catch basins and inlets shall conform to those specified in the standard construction drawings. Grated inlet tops shall be placed as specified on the plans. Tops of casting elevations are subject to final adjustments as approved by the Engineer. All castings used shall be subject to the final approval of the Engineer.

**ITEM SPL - SANITARY MANHOLE ADJUSTED TO GRADE**

The unit price for Item SPL, "Manhole Adjusted to Grade," shall include the cost of picking up said rings at the Metropolitan Sewer District Storage Yard at 225 West Galbraith Road, hauling said rings to the site and installing said rings at the required locations. The Contractor shall contact the Division of Sewer Maintenance, Metropolitan Sewer District, to arrange for the furnishing of the required rings.

This includes sanitary sewer manhole adjusted to grade with precast concrete ring, labor and materials and sanitary sewer manhole adjusted to grade with shim ring, labor, and materials.

This work consists of adjusting manholes to grade with using precast concrete shim rings, brick and mortar, or mortar only adjustments. If necessary, these items also include minor repairs to the top sections of the manhole. The repairs are limited to the top 6 inches of the dome as measured below the casting.

For sanitary, storm and combined sewer manholes, in lieu of concrete shim rings, the use of the following products is permitted.

1. Injection molded high density polyethylene (HDPE) adjustment rings as manufactured by Ladtech, Inc. The HDPE adjustment rings must be manufactured from polyethylene plastic as identified ASTM Designation D-1248 (Standard Specification for Polyethylene Plastic Molding and Extrusion materials.) The adjustment rings must be tested to assure compliance with the impact and loading requirements per the ASSHTO Standard Specifications for Highway Bridges. The maximum height adjustment with the HDPE rings is 6 inches.

Install per the manufacturers recommendations and per the following:

For the HDPE adjusting ring installation, all concrete and metal surfaces must be clean of sand grit and loose rust. Between all HDPE plastic rings, concrete and metal surfaces, spread a 3/8-inch continuous seal of Sikaflex 11FC or approved equal to each surface in contact with the rings. The contractor must ensure the seal between the cone, rings and metal casting have a continuous bead of sealant to ensure a complete and waterproof seal. Utilize a molded and indexed slope ring for all adjustments for matching sloped or crowned road grade.

ALL HDPE adjusting rings must be covered by a manufacturer's five-year warranty.

1. Infra-Riser ® rubber composite riser rings as manufactured by East Jordan Iron Works. These rings must be installed per all manufacturers' recommendations including the use of a joint sealer. Place the ring just below the casting. Do not stack more than two rings high. The rings must not exceed a total height of 3 inches.

For adjustment of sewer manholes, refer to Manhole Adjustment Detailed Drawing.

Casting Adjustment Requirements:

1. Perform utility casting adjustments after the placement of the intermediate (leveling) course of asphalt pavement or after planning the surface course if no intermediate course is stipulated.
2. Saw cut a square area of pavement full depth around the casting a minimum of two feet beyond the edge of the casting to accommodate suitable mechanical compaction equipment.
3. Adjust castings to the proper height using precast concrete shims. Brick and mortar adjustments only possible with permission of the engineer.
4. After the casting has been adjusted to grade, restore the entire void in the pavement by tacking around the perimeter of the casting and saw cut edges and filling the opening around the casting with compacted Item 301 Asphalt Concrete base. The maximum compacted depth of any one layer of the 301 material for these adjustments is 4 inches. Compact the final lift of 301 base flush with the surface of the intermediate course or the planed surface if no intermediate course is used. The minimum depth of 301 material is **12 inches**.
5. The use of dry mix concrete to fill the void around the casting is not permitted.
6. Upon completion of the adjustment work, immediately place a compacted 448 Type 1 hot-mix asphalt wedge around the raised casting. **For castings exposed up to one inch, place a wedge with a minimum diameter of four feet around the casting. For castings greater than one inch, place a wedge with a minimum diameter of six feet around the casting. Asphalt wedges must extend up to and be flush with the top of the casting.** Install wedges by the end of the workday in which the casting is raised. Remove wedges immediately prior to the machine paving. The cost of wedging castings is considered incidental to the Contract.

### **ITEM 611 - CATCH BASIN RECONSTRUCTION**

The Contractor shall remove and clean the existing castings, remove the existing concrete slab tops, and remove the existing walls down to any point of cracking or wall failure, as directed by the Engineer. The Contractor will then rebuild the walls using brick and mortar, set castings, and/or concrete slab tops at the proper final grade. Castings and concrete slab tops will be inspected by the Engineer to determine their suitability for re-use. As directed by the Engineer, broken or

deteriorated castings and/or concrete slab tops shall be replaced during the catch basin reconstruction work.

All catch basins designated as CB-3 or CB-3A are similar but not necessarily exactly equal to current ODOT Standards. Contractor to verify prior to ordering any parts.

Existing frames, grates and hoods are to be reused on the rebuilt catch basins unless noted otherwise, or as directed by the Engineer.

Any conduit necessary for the relocation and construction of catch basins shall be incidental to the pertinent item.

Payment for "Item 611, Catch Basin Rebuild Top 18" Using Precast Top," shall include all labor, equipment and materials necessary to remove catch basin tops, rebuild walls, and reset castings and/or concrete slab tops on a per-unit basis to grade.

Payment for providing new castings shall be on a per-unit basis under "Item 611, Furnish New Curb Plate" and "Item 611, Furnish New Grate".

**NOTE: Contractor shall deliver the existing catch basin grates to the Public Works facility located at 1970 Waycross Road. Cost considered included to project.**

#### **ITEM 611 - CATCH BASIN ADJUSTMENT**

Payment for "Item 611, Catch Basin Adjusted to Grade," shall include all labor, equipment and materials necessary to raise catch basin frame and grate with brick and mortar to proper elevation when roadway is resurfaced.

#### **ITEM 608 - WALKS, CURB RAMPS, AND STEPS**

The unit price bid for Item 608 shall include all labor, material, and equipment necessary for the removal and disposal of the existing concrete walk, the replacement of the concrete walk, and the restoration of the grass areas adjacent to the walk with topsoil and seed. **All restoration work is to be completed within one (1) week of the completion of the construction of the new concrete walk.** The walk shall be five (5) inches in thickness, except in walk areas through the driveway aprons, and at curb ramps where the thickness shall be increased to six (6) inches.

The Owner shall mark in the field the walk to be replaced under this item. The minimum width to be replaced will be two (2) feet. Replacement walk shall match the line and grade of the existing walk. Item 705.03, preformed one-piece expansion joint material, 1/2-inch thick, shall be placed adjacent to all existing remaining walk or structures. Where integral lug curb is a part of the walk to be repaired, the cost of replacement of the curb shall be included in the price bid for the walk.

The estimate quantity for the replacement of the existing concrete walk is approximate only and could increase or decrease from time to time during the progress of the work.



**Any replacement concrete walk not constructed as per detail will be removed and replaced. Field marking of walk prior to removal with City Inspector. Measurements for sidewalk will be per list given to Contractor. Any additional walk replacement must be approved by the City Inspector before removal/replacement.**

Curb ramp construction shall conform to Item 608.07. Curb ramp standard dimensions will be adjusted as required by the Owner in the field to provide adequate access for handicapped persons in the vicinity of poles or other fixed objects behind the curb. Curb ramps in both new and existing concrete walks will be measured by square footage complete. Payment shall include the cost for saw cutting, excavation, disposal of material, backfill, base course material, reinforcing steel, expansion joint material, grading, forming, all materials, finishing of the curb and walk of the ramp, restoration, and incidentals necessary to complete the specified items. The furnishing and installation of truncated domes is to be completed under a separate pay item and will be measured by square footage installed.

It is the Contractor's responsibility to protect the new surface until it cures.

#### **ITEMS 608 / 452 - SIDEWALK AND/OR DRIVE APRON FINISH**

The finish applied to the Portland Cement concrete surface used as a sidewalk or driveway apron shall be a broom finish. All joints and outside edges of the pavement shall be tooled with an edger or joint tool after brooming the final finish. **Apply clear curing compound to all new sidewalk and drive aprons.** Final finish, joints, and edges shall be subject to the approval of the Engineer.

**It is the Contractor's responsibility to protect the new surface until it cures.**

#### **ITEM 609 - CURBING, CONCRETE MEDIANS, AND TRAFFIC ISLANDS**

The unit price bid for Item 609 shall include all labor, equipment, and material necessary to saw cut, remove and dispose of existing curb, construct the replacement curb, and restore the adjacent grass areas with topsoil, seeding, and mulching, and **apply white pigmented curing compound to all new curb and gutter**, or as directed by the Owner. **The restoration work is to be completed within one (1) week of the completion of the construction of the new curb.** The replacement curb shall, in general, match the existing curb as to line and grade, except where there are existing drainage problems. The Contractor shall grade the new curb to drain in conformance with the drainage patterns of the street.

**When the new curb is proposed to be constructed on both sides of the street, the construction of the replacement curb including downspout connections and grouting in place, and the restoration work is to be completed on one side of the street before construction of the replacement curb begins on the other side of the street.**

It is the Contractor's responsibility to protect the new surface until it cures.

Existing contraction joint pattern in the curb shall be maintained, but the maximum spacing between contraction joints shall be ten (10) feet. Expansion joints shall be constructed on a maximum



spacing of forty (40) feet. Where replacement curb begins or ends at an existing expansion joint, the Contractor shall install new expansion joint material, the cost of which is to be included in the unit price bid for the curb replacement. Finish of the replacement curb shall be a light brush finish.

Unless otherwise directed by the Engineer, where curb is to be replaced at driveway locations the Contractor shall construct the curb so as to facilitate ingress and egress of vehicles and to match the grade of the existing drive. If required, the Contractor shall construct the portion of the curb through the drive entrance as a drop curb with transition areas on each side of the driveway approach. The Contractor shall note that the concrete curb details, as shown on the plans, may be modified by the Engineer in the field in order to properly match the various dimensions of the existing curb, which is to be removed.

Existing downspout leaders outletting at the curb shall be replaced as per the detail, "Downspout Extension detail". The cost for the labor and material necessary to replace the downspout leader shall be incidental to the pertinent curb replacement item for each downspout replaced three (3) feet in length. Topsoil and seeding shall be incidental costs. If more than three (3) feet of downspout needs to be replaced to obtain positive slope, the additional work shall be paid on a per foot basis in bid item 611, 3" PVC pipe SCH 40. However, all new downspout pipe shall be installed with as few joints as possible, regardless of how payment is made. Any necessary vertical or horizontal bends shall be included and paid for on the above basis.

#### **ITEM 614 - MAINTAINING TRAFFIC**

The Contractor shall maintain traffic through the project at all times in conformance with Item 614.

During the removal of the asphalt wearing course, the repair of the base pavement and/or the construction of the asphalt courses for the roadway, the Contractor will be permitted to close one lane of pavement while maintaining traffic in the other lane on an alternating flow basis. The Contractor will be held strictly to the flagging requirements listed under Item 614.03d. The closing of the lane to traffic will be permitted during the above operations and for the periods of time consistent with the requirements of the specifications for the protection of the completed asphalt concrete courses.

If, at the completion of the normal working day, any trench for pavement construction and/or construction of proposed sewer has not been completely backfilled and restored, a temporary cover, such as a metal plate or another approved device, shall be placed over that portion of the trench remaining open.

**All** driveways shall be accessible to the residents between the hours of 6:30 - 8:30 AM and 4:30 - 6:30 PM. The **only** exception shall be during curb and apron replacement construction at the drive entrances. Should work that may block the driveway be necessary, the Contractor must notify the residents or businesses at least two (2) working days prior to closing driveways. If the residents and businesses have not been notified two (2) working days in advance of the anticipated drive closures, the Contractor will be prohibited from making these closures until such time as the proper advance notification is made.

In addition to driveway blockage notification provided and distributed by the Contractor, the City shall prepare and the Contractor shall immediately distribute (hand deliver) up to four (4) public



notices to each resident or business during the job in order to keep the residents informed throughout the project.

The maximum time period for driveway closure shall be 96 hours. The Contractor shall place new curbs within 48 hours of removal. The Contractor shall keep driveways closed for a 48-hour period after concrete placement to permit the curing of concrete curbs, driveway aprons, or sidewalk across driveways.

The Contractor shall note that any interim material used for providing driveway ingress and egress will not be a separate pay item, and the cost of said interim material shall be included in the lump-sum price bid for Item 614.

In those areas where existing pavement is to be resurfaced or removed and replaced, the Contractor shall conduct his operations so as to maintain driveway traffic through the construction area. If two approved access points serve the same parking area, the Contractor will be permitted to close one access at a time. The Contractor will be permitted to close paved areas to traffic for a minimum period of time, consistent with the requirements of the specifications for the protection of completed asphalt concrete courses. If business property is involved, an alternate access must be provided if blockage exceeds one (1) hour. Repeated blocking must allow at least a 15-minute interval of traffic access every hour. Time period of residential driveway closures shall be kept to a minimum, but no more than the maximum time period stated in the above paragraphs.

#### **ITEM 659 - SEEDING AND MULCHING**

A Class1 – lawn mixture shall be used for the areas that need to be restored with seed and mulch.

#### **ITEM 659 - COMMERCIAL FERTILIZING**

All areas to be seeded and mulched under Item 659 shall have commercial fertilizer (12-12-12) applied to the rate of 20 pounds per 1000 square feet, the cost of which shall be incidental to the Contract.

# ITEM SPECIAL– STRESS-ABSORBING MEMBRANE INTERLAYER (SAMI SYSTEM)

## 1.0 DESCRIPTION

The work covered under this provision consists of furnishing all materials, equipment, labor, and preparation necessary for the application of a Stress-Absorbing Membrane Interlayer (SAMI). The applied materials shall completely seal the entire pavement surface and provide a uniform textured surface, suitable for the placement of hot mixed asphalt overlays, micro-surfacing or slurry surfacing overlays.

## 2.0 MATERIALS

### POLYMER MODIFIED BITUMINOUS EMULSION BINDER

| <b>EMULSION PROPERTY<br/>METHOD</b> | <b><u>MINIMUM</u></b> | <b><u>MAXIMUM</u></b> | <b><u>TEST</u></b> |
|-------------------------------------|-----------------------|-----------------------|--------------------|
| SF VISCOSITY, 50 C (sec)            | 50                    | 400                   | ASTM D 244         |
| PERCENT SOLIDS (%)*                 | 70                    |                       | ASTM D 244         |
| STORAGE STABILITY, 24 hrs (%)       |                       | 1.0                   | ASTM D 244         |
| SIEVE TEST, #20 mesh (%)            |                       | 0.1                   | ASTM D 244         |

| <b>RESIDUE PROPERTY<br/>METHOD</b>   | <b><u>MINIMUM</u></b> | <b><u>MAXIMUM</u></b> | <b><u>TEST</u></b>      |
|--------------------------------------|-----------------------|-----------------------|-------------------------|
| PENETRATION, 100g, 5 sec, 25 C (dmm) | 70                    | 100                   | ASTM D 5                |
| SOFTENING POINT, RING & BALL (C)     | 65                    |                       | ASTM D 36               |
| ELASTIC RECOVERY, 4C, 10CM (%)**     | 70                    | 1.0                   | ASTM D 6084             |
| FORCE DUCTILITY, 4C, 40cm***         |                       | 0.1                   | ASTM D 113 <sup>1</sup> |

<sup>1</sup>Modified

\*\* The specimen is extended 10 cm. The extended area is severed immediately in the middle using a pair of shears. After one hour at the test temperature, the severed ends are returned to contact and the ductilometer reading is made again. The sample must recover at least 70 percent of the original 10 cm distance.

\*\*\* ASTM D 113 as modified by the addition of a load cell to the standard ductility test apparatus. The load cell is calibrated in pounds per square centimeter. Reading is measured at 40 cm. Reading is multiplied by 6.45 to yield pounds per square inch force required to extend the test specimen.

The asphalt modifier shall be a thermoplastic elastomer type polymer. The modifier shall be added to the asphalt cement prior to the emulsification process.

**ITEM SPECIAL - STRESS-ABSORBING MEMBRANE INTERLAYER (SAMI SYSTEM)**

Page 2 of 8

**AGGREGATE**

The surface cover aggregate shall be 100% crushed material from quarried stone, natural gravel, or other high quality aggregate and meet the following requirements.

**PHYSICAL REQUIREMENTS**

| <u>TEST</u>             | <u>DESCRIPTION SPECIFICATION</u>       |         |
|-------------------------|--|---------|
| AASHTO T96 (ASTM C 131) | L.A. Abrasion Test                     | 40% max |
| ASTM C 142              | Deleterious Materials                  | 1.0 max |
| ASTM D 5821             | Crushed pieces                         | 100%    |
| AASHTO T104 (ASTM C 88) | Sodium sulfate soundness test, 5 cycle | 15      |

**GRADING REQUIREMENTS**

ASTM C 117

| <u>SIEVE SIZE</u>  | <u>TYPE I</u> | <u>TYPE II</u> |
|--------------------|---------------|----------------|
| 1 inch (25 mm)     | 100           | 100            |
| 3/4 inch (19 mm)   | 100           | 90-100         |
| 1/2 inch (12.5 mm) | 95-100        | 20-50          |
| No. 4 (4.75 mm)    | 5-25          | 0-10           |
| No. 8 (2.36 mm)    | 0-10          | 0-5            |
| No. 200 (75 um)    | 2             | 2              |

**STORAGE OF MATERIALS**

Materials shall be so stored as to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work.

**STOCKPILES**

Stockpiling and loading methods shall be such as to permit ready identification of the aggregate materials and to minimize segregation. Sites for stockpiles shall be clean prior to storing materials. Material shall not be removed from stockpiles within one foot of the ground until final clean-up of the worksite. Materials shall be handled in a manner such that moisture content shall be reasonable minimized and uniform for each day's run.

**ITEM SPECIAL - STRESS-ABSORBING MEMBRANE INTERLAYER (SAMI SYSTEM)**

Page 3 of 8

**3.0 EQUIPMENT**

Equipment shall be safe, environmentally acceptable, and capable of producing a consistent quality product.

**PRESSURIZED DISTRIBUTOR APPLICATOR**

The pressurized distributor shall have a computerized rate control that automatically adjusts the distributor's pump to the ground speed. The distributor shall be capable of heating and re-circulating the bituminous binder to the specified temperature. A number of nozzles shall be spaced longitudinally along the variable width spray bar for uniformly applying the bituminous material and shall include a means of controlling the operation of the nozzles.

Interchangeable nozzles and sizes shall be used for the material and rate specified and shall be properly positioned and bar height adjusted so as to provide an overlapping pattern and a uniform rate of application across the desired pavement coverage width without ridges or streaking.

The unit shall include:

- A digital speed/application readout that operates continuously and is located in the operator's view.
- A bitumen application system capable of maintaining the specified application rate with +/- 0.02 gal/sq. yd.

**AGGREGATE SPREADER**

The Aggregate material spreader shall be a variable width, self-propelled unit equipped so as to deliver a uniform distribution of aggregate particles across the desired pavement surface without ridges or laps at the specified rate. The aggregate spreader unit shall include:

- A ground speed control device interconnected with the aggregate applicator so as to provide a computerized application rate control of the aggregate that adjusts to the travel speed.
- A variable width application box which is adjustable to maintain a uniform application rate of aggregate to cover exposed emulsion without ridges or laps.
- Capability to apply aggregate at an application rate range of 10 to 50 lbs/sq. yd.

**COMPACTING EQUIPMENT**

Self-propelled pneumatic-tired roller(s), etc. shall be provided. All equipment used on the roadway shall be equipped with at least one approved flashing, rotating or oscillating amber light visible from all sides. All material storage tanks and material handling units shall be capable of heating and storing materials such as to not cause damage to the emulsion.



**ITEM SPECIAL - STRESS-ABSORBING MEMBRANE INTERLAYER (SAMI SYSTEM)**

Page 4 of 8

**MISCELLANEOUS**

All equipment including hand tools, thermometers, etc., shall be provided. All equipment used on the roadway shall be equipped with at least one approved flashing, rotating or oscillating amber light visible from all sides. All material storage tanks and material handling units shall be capable of heating and storing materials such as to not cause damage to the emulsion.

**4.0 CONTRACTOR QUALIFICATION AND SUBMITTAL REQUIREMENTS**

To be considered for an award on this item of work, the Contractor shall submit to the Engineer, within ten (10) calendar days of the bid opening, evidence that demonstrates the ability to comply with all specifications and meet the experience requirements as stated.

Contractor is pre-qualified within the state, has operated under the same company for a minimum of two (2) years and has experience in performing the specified work in compliance with these specifications.

Contractor has performed with acceptable results a minimum of three (3) projects of equal or greater size and of similar complexity. Mix designs, quality control test reports, customer contacts, and project scope of work shall be submitted for each project.

Certification signed by the Contractor stating that all equipment used in the performance of the item of work is owned and maintained by the contractor and meets specifications for operation and safety. Included shall be a listing of all equipment proposed for the specified work.

Contractor shall provide a list of all key personnel employed by the Contractor that will have management authority, duties or responsibilities for this item of work.

Contractor shall provide a list of all proposed material sources and corresponding test reports that demonstrate compliance with the specifications.

Contractor shall provide a Safety Plan acceptable to the Engineer.

Engineer shall provide a Quality Control Plan acceptable to the Engineer.

**5.0 PRE-PAVING ON SITE MEETING**

A meeting between the Contractor and Engineer will be held at the project site prior to beginning work. The agenda for this meeting will include:



**ITEM SPECIAL - STRESS-ABSORBING MEMBRANE INTERLAYER (SAMI SYSTEM)**

Page 5 of 8

- Review of Contractor's detailed work schedule
- Review of Traffic Control Plan.
- Inspection of equipment
- Calibration and adjustments to equipment

**6.0 WEATHER LIMITATION**

The stress absorbing membrane may be placed when the pavement and atmosphere temperature is 10° C (50° F) or above. Placement is not permitted if it is raining, the chance of rain is imminent or when the pavement surface condition is wet or when impending weather conditions are such that proper curing may not be obtained.

**7.0 CONSTRUCTION**

The Contractor shall follow the construction methods as described.

1. The Contractor shall establish stations, at 1000 feet intervals on the entire project, prior to placing the stress absorbing membrane. The stations shall be maintained until project completion.
2. The surface shall be thoroughly cleaned by the Contractor and shall be dry when the bituminous binder is applied. Material cleaned from the surface shall be removed and disposed of as directed by the Engineer. Removal of mud, clay, and other fine silts shall be accomplished by high pressure water.
3. Bituminous emulsion shall be heated to a temperature within the specified range and applied using an approved pressurized distributor and at a uniform and consistent rate as approved for the design of the project surface to be treated.
4. The specified aggregate shall be spread uniformly onto the bituminous binder within 120 seconds of the bituminous spray.
5. Projects greater than 12,000 Square yards in area require a minimum of two rollers to be used. Rollers shall proceed at a maximum speed of 5 MPH. The entire surface shall receive a minimum of two roller passes. The first roller pass shall be performed within one minute of aggregate spread.

**8. APPLICATION OF MATERIALS****BITUMINOUS BINDER**

The bituminous binder shall be heater to the specified temperature and uniformly placed to prevent ridges or streaks in the surface.



**ITEM SPECIAL - STRESS-ABSORBING MEMBRANE INTERLAYER (SAMI SYSTEM)**

Page 6 of 8

The bituminous binder shall be applied at a temperature of 150° F - 190° f, and at the rate specified +/- 0.02 gal/sq. yd. The supplier of the polymer modified asphalt emulsion binder is to design the application rate of the cover material and binder in relation to the surface condition to be treated. This rate shall be approved by the Engineer prior to use.

**MATERIAL APPLICATION RATES**

**BINDER APPLICATION RATE**  
Gallon Per Square Yard

| <u>APPLICATION<br/>TYPE</u>  | <u>TYPE I</u> | <u>TYPE II</u> | <u>TOLERANCE</u> |
|------------------------------|---------------|----------------|------------------|
| Prior to Micro-Surfacing     | 0.45-0.50     | NA             | +/- 0.2          |
| Prior to 1-inch min. Overlay | 0.50-0.55     | 0.65-0.70      | +/- 0.2          |

AGGREGATE APPLICATION RATE – shall be as determined by the supplier of polymer modified asphalt emulsion binder and project design and shall produce a completed surface with no exposed binder.

The supplier of SAMI emulsion shall determine any variances needed in the application rate for emulsion and aggregate, based on the pavement condition, aggregate type, and aggregate size. This information shall be reported to the Engineer prior to beginning work and shall include an aggregate gradation on the job specific materials.

**9.0 QUALITY CONTROL**

The Contractor to measure compliance shall use the methods described in this section.

- Aggregate Gradation
- Aggregate Moisture Content
- Yield check on Bituminous Binder
- Temperature Check on Bituminous Binder

If the Contractor's test results exceed any of the identified quality control tolerances, the Engineer shall be immediately notified. The Engineer will review explanation and the corrective action taken by the Contractor. Another test will be taken and if the test results still exceed the quality control tolerance, placement shall STOP. The Contractor shall immediately notify the Engineer, and identify the cause of the excessive deviation and detail corrective action necessary to bring the deficiency into compliance. The Engineer will give approval prior to resumption of work.

**ITEM SPECIAL - STRESS-ABSORBING MEMBRANE INTERLAYER (SAMI SYSTEM)**

Page 7 of 8

**10.0 DOCUMENTATION**

The Contractor shall provide the Engineer a daily report with the following information:

- Control Section/Project number/County/Route
- Date/Air Temperature/Pavement Temperature
- Bituminous Binder Temperature (3 per day)
- Station Location per Test
- Beginning and Ending Stations
- Yield Check on Bituminous Binder (3 per day)
- Aggregate Gradation and Moisture (3 per day)
- Length/Width/Total Area

Other required documentation shall include:

- To be provided as requested or at project completion
- Bill of Lading on aggregate and bituminous binder

**11.0 ACCEPTANCE**

The Contractor shall inspect the completed Stress Absorbing Membrane during the application process for any deficiencies. The deficiencies will be limited to surface flushing, surface patterns, and loss of stone retention.

Workmanship shall be inspected for the following:

- Untreated areas (missed)
- No overlap on longitudinal joints
- No overlap on construction joints

All corrective work shall be accomplished prior to resurfacing with bituminous materials, or within 24 hours. The Contractor shall furnish materials, equipment, and labor to make corrections at no additional cost to the contract. The Engineer shall give final approval on inspection and corrective work.



**ITEM SPECIAL - STRESS-ABSORBING MEMBRANE INTERLAYER (SAMI SYSTEM)**

Page 8 of 8

**12.0 MEASUREMENT AND PAYMENT**

The completed work as measured will be paid for at the contract unit price for the following contract items:

| <u>PAY ITEM</u>                   | <u>PAY UNIT</u> |
|-----------------------------------|-----------------|
| Stress Absorbing Membrane Type I  | Square Yard     |
| Stress Absorbing Membrane Type II | Square Yard     |

Payment for Stress Absorbing Membrane includes all materials, equipment, labor, and preparation, final clean-up, and related incidentals.

**CATCH BASIN**

All catch basins will be rebuilt accordingly to the details below. All catch basin hoods shall be stamped with a logo “Dump no Waste” and “”Drains to Waterways” along with a fish logo. Catch basin grates are to be replaced with the bicycle safety type “L” grate.

**CB3 (Double Grate Inlet)**

ID No. from Neenah Foundry

Complete Set R-3288-E2

Curb Plate R-3288-7001

Bicycle Safe Grate Type “L” (Two Grates Required)

**CB3-A (Single Grate Inlet)**

ID No. from Neenah Foundry

Complete Set R-3289-C2

Curb Plate R-3289-7006

Bicycle Safe Grate Type “L” (One Grate Required)

Neenah Foundry (614) 876-2671



## **ITEM SPECIAL - ASPHALT REJUVENATING AGENT**

### **ASPHALT REJUVENATING AGENT**

#### **I. Scope**

This work shall consist of furnishing all labor, material, and equipment necessary to perform all operations for the application of an asphalt rejuvenating agent to asphaltic concrete surface courses. The rejuvenation of surface courses shall be spray application of a cationic rejuvenating agent composed of petroleum oils and resins emulsified with water. All work shall be in accordance with the specifications, the applicable drawings, and subject to the terms and conditions of this Contract.

#### **II. Material Specifications**

The asphalt rejuvenating agent shall be an emulsion composed of a petroleum resin oil base uniformly emulsified with water. Each bidder must submit a certified statement from the asphalt rejuvenator manufacturer showing that the asphalt rejuvenating emulsion conforms to the required physical and chemical requirements.

## ITEM SPECIAL - ASPHALT REJUVENATING AGENT

Page 2 of 6

**SPECIFICATIONS**

| <b><u>TESTS</u></b>                        | <b><u>TEST METHOD</u></b> |                      | <b><u>REQUIREMENTS</u></b> |                    |
|--|---------------------------|----------------------|----------------------------|--------------------|
|  | <b><u>ASTM</u></b>        | <b><u>AASHTO</u></b> | <b><u>MIN.</u></b>         | <b><u>MAX.</u></b> |
| <b>Tests on Emulsions:</b>                 |                           |                      |                            |                    |
| Viscosity @ 25°C, SFS                      | D-244                     | T-59                 | 15                         | 40                 |
| Residue, %W <sup>1</sup>                   | D-244 (Mod.)              | T-59 (Mod.)          | 60                         | 65                 |
| Miscibility Test <sup>2</sup>              | D-244 (Mod.)              | T-59 (Mod.)          | No Coagulation             |                    |
| Sieve Test, %W <sup>3</sup>                | D-244 (Mod.)              | T-59 (Mod.)          | –                          | 0.1                |
| Particle Charge Test                       | D-244                     | T-59                 | Positive                   |                    |
| Percent Light Transmittance <sup>4</sup>   | GB                        | GB                   | –                          | 30                 |
| <b>Tests on Residue from Distillation:</b> |                           |                      |                            |                    |
| Flash Point, COC, °C                       | D-92                      | T-48                 | 196                        | –                  |
| Viscosity @ 60°C, cSt                      | D-445                     | –                    | 100                        | 200                |
| Asphaltenes, %w                            | D-2006-70                 | –                    | –                          | 1.00               |
| Maltene Dist. Ratio                        | D-2006-70                 | –                    | 0.3                        | 0.6                |
| $\frac{PC + A_1^5}{S + A_2}$               |                           |                      |                            |                    |
| PC/S Ratio <sup>5</sup>                    | D-2006-70                 | –                    | 0.5                        | –                  |
| Saturated Hydrocarbons, S <sup>5</sup>     | D-2006-70                 | –                    | 21                         | 28                 |

1 ASTM D-244 Modified Evaporation Test for Percent of Residue is made by heating 50 gram sample to 149° C (300° F) until foaming ceases, then cool immediately and calculate results.

1 ASTM D-244 Modified Evaporation Test for Percent of Residue is made by heating 50 gram sample to 149° C (300° F) until foaming ceases, then cool immediately and calculate results.

1 ASTM D-244 Modified Evaporation Test for Percent of Residue is made by heating 50 gram sample to 149° C (300° F) until foaming ceases, then cool immediately and calculate results.

1 ASTM D-244 Modified Evaporation Test for Percent of Residue is made by heating 50 gram sample to 149° C (300° F) until foaming ceases, then cool immediately and calculate results.

1 ASTM D-244 Modified Evaporation Test for Percent of Residue is made by heating 50 gram sample to 149° C (300° F) until foaming ceases, then cool immediately and calculate results.

PC = Polar Compounds

A<sub>1</sub> = First Acidaffins

A<sub>2</sub> = Second Acidaffins

S = Saturated Hydrocarbons

For information on Reclamite, contact Mr. David Helm at 1-800-333-6309.



## ITEM SPECIAL - ASPHALT REJUVENATING AGENT

Page 3 of 6

**III. Application Temperature / Weather Limitations**

The temperature of the asphalt rejuvenating emulsion at the time of application shall be as recommended by the manufacturer. The asphalt rejuvenating agent shall be applied only when the existing surface to be treated is thoroughly dry and when it is not threatening to rain. The asphalt rejuvenating agent shall not be applied when the ambient temperature is below 40° F.

**IV. Handling of Asphalt Rejuvenating Agent**

Contents in tank cars or storage tanks shall be circulated at least forty-five minutes before withdrawing any material for application. When loading the distributor, the asphalt rejuvenating agent concentrate shall be loaded first and then the required amount of water shall be added. The water shall be added into the distributor with enough force to cause agitation and thorough mixing of the two materials. To prevent foaming, the discharge end of the water hose or pipe shall be kept below the surface of the material in the distributor which shall be used as a spreader. The distributor truck will be cleaned of all of its asphalt materials and washed out to the extent that no discoloration of the emulsion may be perceptible. Cleanliness of the spreading equipment shall be subject to the approval and satisfaction of the Engineer.

**V. Applicating Equipment**

The distributor for spreading the emulsion shall be self-propelled and shall have pneumatic tires. The distributor shall be designed and equipped to distribute the asphalt rejuvenating agent uniformly on variable widths of surface at readily determined and controlled rates from 0.05 to 0.5 gallons per square yard of surface and with an allowable variation from any specified rate not to exceed five (5) percent of the specified rate.

Distributor equipment shall include full circulation spray bars, pump tachometer, volume measuring device and a hand hose attachment suitable for application of the emulsion manually to cover areas inaccessible to the distributor. The distributor shall be equipped to circulate and agitate the emulsion within the tank.

A check of distributor equipment, as well as application rate accuracy and uniformity of distribution, shall be made when directed by the Engineer.

The truck used for sanding shall be equipped with a spreader that allows the sand to be uniformly distributed onto the pavement. The spreader shall be able to apply 1/2 pound to three (3) pounds of sand per square yard in a single pass. The spreader shall be adjustable so as not to broadcast sand onto driveways or treelawns.

The sand to be used shall be free flowing, without any leaves, dirt, stones, etc. Any wet sand shall be rejected from the job site.

Any equipment which is not maintained in full working order, or is proven inadequate to obtain the results prescribed, shall be repaired or replaced at the direction of the Engineer.



## ITEM SPECIAL - ASPHALT REJUVENATING AGENT

Page 4 of 6

**VI. Resident Notification**

The Contractor shall distribute by hand, a typed notice to all residences and businesses on the street to be treated. The notice will be delivered no more than 24 hours prior to the treatment of the road. The notice will have a local phone number that residents may call to ask questions. The notice shall be of the door hanger type which secures to the door handle of each dwelling. Unsecured notices will not be allowed. The Contractor shall also place the notice on the windshield of any parked cars on the street. Hand distribution of this notice will be considered incidental to the contract.

**VII. Application of Rejuvenating Agent**

The asphalt rejuvenating agent shall be applied **after the first 48 hours but within two (2) weeks of asphalt overlay placement** by a distributor truck at the temperature recommended by the manufacturer and at the pressure required for the proper distribution. The emulsion shall be so applied that uniform distribution is obtained at all points of the areas to be treated. Distribution shall be commenced with a running start to insure full rate of spread over the entire area to be treated. Areas inadvertently missed shall receive additional treatment as may be required by hand sprayer application.

Application of asphalt rejuvenating agent shall be on one-half width of the pavement at a time. When the second half of the surface is treated, the distributor nozzle nearest the center of the road shall overlap the previous application by at least one-half the width of the nozzle spray. In any event, the centerline construction joint of the pavement shall be treated in both application passes of the distributor truck.

Before spreading, the asphalt rejuvenating agent shall be blended with water at the rate of two (2) parts rejuvenating agent to one (1) part water, by volume or as specified by the manufacturer. The combined mixture of asphalt rejuvenating agent and water shall be spread at the rate of 0.05 to 0.10 gallons per square yard, or as approved by the Engineer following field testing.

The Contractor, in the presence of the Engineer or his authorized representative, shall mark off two areas of pavement surface on the street equal to one square yard each. The rejuvenating agent shall be applied accurately to said test areas at the rate of 0.04 and 0.08 gallons per square yard respectively. The method of application shall be approved by the Engineer. The results of these tests shall determine the rate of application required on each street. The results of the tests shall be reported to the Engineer prior to application.

Where more than one application is to be made, succeeding applications shall be made as soon as penetration of the preceding application has been completed and approval is granted for additional applications by the Engineer.

Grades or super elevations of surfaces that may cause excessive runoff, in the opinion of the Engineer, shall have the required amounts applied in two or more applications as directed.

**ITEM SPECIAL - ASPHALT REJUVENATING AGENT**

Page 5 of 6

After the street has been treated, the area within one foot of the curb line on both sides of the road shall receive an additional treatment of the asphalt rejuvenating emulsion uniformly applied at 1/2 the established rate, using a hand spray hose.

After the rejuvenating emulsion has penetrated, a coating of dry sand shall be applied to the surface in sufficient amount to protect the traveling public, as required by the Engineer.

The Contractor shall furnish a quality inspection report, showing the source, manufacturer, and the date shipped, for each load of asphalt rejuvenating agent. When directed by the Engineer, the Contractor shall take representative samples of material for testing.

**VIII. Street Sweeping**

The Contractor shall be responsible for sweeping and cleaning of the streets prior to and after treatment.

Prior to treatment, the street will be cleaned of all standing water, dirt, leaves, and foreign materials by using a power broom.

All sand used during the treatment must be removed no later than 48 hours after treatment of the street. This shall be accomplished by a combination of hand and mechanical sweeping. All turnouts, cul-de-sacs, etc., must be cleaned of any material to the satisfaction of the Engineer. Street sweeping will be included in the price bid per square yard for asphalt rejuvenating agent.

If, after sand is swept and in the opinion of the Engineer a hazardous condition exists on the roadway, the Contractor must apply additional sand and sweep same no later than 24 hours following reapplication. No additional compensation will be allowed for reapplications and removal of sand.

**IX. Traffic Control**

The Contractor shall schedule his operations and carry out the work in a manner to cause the least disturbance and/or interference with the normal flow of traffic over the areas to be treated. Treated portions of the pavement surfaces shall be kept closed and free from traffic until penetration, in the opinion of the Engineer, has become complete and the area is suitable for traffic.

When, in the opinion of the Engineer, traffic must be maintained at all times on a particular street, then the Contractor shall apply asphalt rejuvenating agent to one lane at a time. Traffic shall be maintained in the untreated lane until the traffic may be switched to the completed lane.

The Contractor shall be responsible for all traffic control and signing required to permit safe travel. The Contractor shall notify the police and fire departments as to the streets that are to be treated each day.

ITEM SPECIAL - ASPHALT REJUVENATING AGENT

Page 6 of 6

If, in the opinion of the Engineer, proper signing is not being used, the Contractor shall stop all operations until safe signing and barricading is achieved.

**X. Basis for Payment**

The accepted quantities, measured as provided for above, will be paid for at the contract unit price for asphalt rejuvenating agent.

Asphalt rejuvenating agent shall be paid for PER SQUARE YARD, which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified and required.



# ELECTRIC UTILITY NOTES

## DUKE ENERGY

1. **DANGER** - Contractor shall contact the company prior to excavation in vicinity of electric underground facilities (approximate plan location shown) or when working near overhead electric facilities.
  - (A) For Field Inspector to locate underground electric line, in Ohio call "Ohio Utilities Protection Service" at 1-800-362-2764, and in Kentucky call "Kentucky Underground Protection Service (KUPS)" at 1-800-752-6007 (at least 48 hours in advance), excluding hours Sat., Sun., and State Legal Holidays.
  - (B) For notification of construction activity near energized electric facilities, call Mr. Bob Schroeder, 513-287-3426.
  - (C) For additional underground electric record information, call 513-287-2454.
  - (D) For electric engineering notification, agreements and correspondence, address to Mr. Tom Birkenhauer, Duke Energy Corporation, Distribution Design Engineering, Room 467A, 139 East Fourth Street, P.O. Box 960, Cincinnati, Ohio 45202-0960.
2. Contractor shall be responsible for all damages to electric facilities during construction.
3. Electric facilities to be kept in service at all times.
4. Contractor shall be responsible for supporting existing electric facilities affected by the proposed construction.
  - A. Where high pressure oil filled pipe type cable installations are exposed or otherwise interfered with by the Contractor, protection by the Contractor will be required against damage to the coating or surrounding thermal sand envelope.
  - B. Where concrete encased conduit systems or direct buried cable systems are exposed or otherwise interfered with, the Contractor shall protect the system as necessary against damage. As soon as feasible, the Contractor shall take additional appropriate steps to provide permanent measures to restore support. The methods used shall be based on conditions to be determined by the utility.
  - C. Where poles or anchors that support overhead electric facilities are exposed or otherwise interfered with, the Contractor shall protect them from damage and provide temporary support to insure the integrity of the system. As soon as feasible, the Contractor shall take additional appropriate steps to provide permanent measures to restore support. The methods used shall be based on conditions to be determined by the utility.
  - D. Where the depth of excavation for the proposed work is greater than five (5) feet, the Contractor shall sheet and shore the trench to continuously maintain the support of electric facilities at locations where the electric facilities are within the zone of influence adjacent to the excavation as determined by the natural angle of repose of the soil.
  - E. All damage to electric facilities and services requiring adjustments, relocations and/or repairs will be made at the Contractor's cost.
5. Contractor shall not backfill exposed electric facilities until the company has inspected its facility or performed any adjustments and/or maintenance that may be required.

**NOTE:** Should Contractor damage electric facilities, Contractor shall immediately notify the Electric Service Desk through the Company Operator (513-421-9500). Contractor shall keep everyone clear of damaged electric facilities until company personnel arrive at the work site.



# **GAS FACILITY NOTES**

## **DUKE ENERGY**

### **Gas Facility Notes**

- I. For Gas Engineering Notification, agreements, and official correspondence, address to:

Duke Energy  
Gas Distribution Engineering  
P.O. Box 960, Room 460-A  
Cincinnati, Ohio 45273-9598

- II. The gas main information provided shows the approximate locations and depths of cover and is provided to comply with statutory regulations. This information should be used only for planning, not construction.
- III. All gas main depths of cover noted are approximate depths of cover recorded at the time of installation. Any resulting grade changes since the time of the main installation will cause the existing depth of cover to be different. Extreme care must be taken to ensure safe excavation when approaching known or suspected gas facilities.
- IV. All gas services were installed at a minimum of 1'-6" of cover. See Item III above.
- V. For additional gas facility record information, call (513) 287-3636.
- VI. To comply with federal and state regulations concerning damage prevention programs, the utility companies must be contacted at least 48 hours (two working days) prior to excavation by calling the Ohio Utilities Protection Service (OUPS), toll free, at 1-800-362-2764.

### **Construction Notes**

- I. Gas facilities are to be kept in service at all times.
- II. The Contractor shall be responsible for all damages to gas facilities during or as a result of the Contractor's construction. All damage to gas facilities requiring adjustments, relocations and/or repairs will be made at the Contractor's cost.
- III. The Contractor shall sheet and shore all excavations as required to continuously support gas facilities within the zone of influence (as determined by the natural angle of repose of the soil).



- IV. Crossing buried gas facilities with heavy construction equipment may cause damage to the gas facilities. Contact the Gas Engineering Department for details on how to protect the gas facilities from damage.
- V. The Contractor shall not backfill exposed gas facilities until the utility has inspected its facilities and performed any maintenance and/or adjustments that may be required.
- VI. The Contractor is responsible for preventing any damage to our gas facilities. This includes protection of coatings and wrappings on steel gas mains. It also includes any damage with may have occurred to plastic gas mains, such as crimps or gouges.
- VII. When cast iron or similar gas facilities are exposed or interfered with by the Contractor, replacement or reinforcement by Duke Energy may be required at the Contractor's expense. Backfill with control low strength material will be required.
- VIII. Blasting or other construction procedures which may transmit loads or vibrations in the vicinity of gas facilities must be approved by Duke Energy's Gas Engineering Department. A blasting plan, identifying all pertinent information, must be submitted in writing by a blasting expert prior to any work.

**Proposed Developments at Gas R/W & Easements (If Applicable)**

- I. Proposed development plans around and near gas facilities within private easements must be submitted to Duke Energy's Gas Engineering Dept. for review. These plans must be approved before any work may begin within our easements.
- II. Specified easement widths must be maintained in order for Duke Energy to protect its facilities.
- III. No permanent structures may be built within the easements.
- IV. Cuts and fills are generally not permitted within the easements. Some fills may be allowed, and will be reviewed on an individual basis. Any permitted fills will be limited to an amount which will allow Duke Energy to properly maintain its facilities.
- V. Perpendicular utility crossings of gas easements are acceptable, provided proper clearances are maintained. Parallel installations are normally not allowed.

# WATER WORKS NOTES

All work pertaining to water works items shall be done in strict accordance with the specifications of the City of Cincinnati Water Works and under the direction, supervision and inspection of the Water Works. Water main items are to be constructed in accordance with the provisions of the State of Ohio, Department of Transportation, Construction and Material Specifications, current edition, and modified by the latest edition of the City of Cincinnati Supplement to said State of Ohio Specifications, and any supplements or changes thereto. Copies of all pertinent specifications may be obtained from the City of Cincinnati Water Works, 4747 Spring Grove Avenue.

A cushion of 12" shall be maintained between the proposed water mains and the existing sewers, inlet connections, and drains. If a greater clearance is desired, it will be so designated. Building sewer laterals are not to be disturbed or trapped. Existing drains, sewers and culverts are not to be disturbed. If the water main is to be under culverts or pipe sewers, they shall be tunneled and backfilled with Class "T" concrete.

It shall be the Contractor's responsibility to arrange for removal and replacement of any poles and guys necessary for the installation of the proposed water mains, and any cost connected thereto shall be his expense.

All backfill to be Method "A" except where otherwise noted.

No part of any fire hydrant setting shall be installed closer than five feet to any driveway, inlet, utility pole, or guy wire anchor.

All pipe and specials shall be in accordance with City of Cincinnati Specification 40-110-76.

All valves to be purchased from the Cincinnati Water Works.

No extra payment will be made for lead joints.

# SANITARY SEWER NOTES

Sanitary sewer and/or combination sewer items are to be constructed in accordance with the provisions of the State of Ohio, Department of Transportation, Construction and Material Specifications, current edition, and modified by the latest edition of the City of Cincinnati Supplement to said State of Ohio Specifications, and any supplements or changes thereto.

The Contractor shall supply separate bid items for raising manholes using manhole adjustment rings and for using brick and mortar. If only one bid item is received, the Contractor shall raise all manholes with manhole adjustment rings. Sewer manhole adjustment prior to machine paving shall be done in accordance with M.S.D. Standard Acc. No. 49058 and 49058-A.

In the event that manhole adjustment rings cannot be used on sanitary and/or combination sewer manholes, the Contractor shall be required to use brick masonry and to adjust manholes to grade. Substandard or damaged manhole castings shall be replaced with standard casting (Acc. No. 49005). Standard manhole casting (in exchange) shall be provided by the Metropolitan Sewer District at no cost to the Contractor. However, the Contractor shall load and haul manhole casting to and from the Sewer Maintenance Division facility located at 225 West Galbraith Road, Cincinnati, OH 45215.

The Contractor shall notify Mr. Dave Muenzenmayer of the Sewer Maintenance Division of the Metropolitan Sewer District (telephone number 513-352-4968) two (2) days prior to the start of construction.

*Revised July 2012*



# **BID FORMS**

The bid forms are not available online. The bid forms are available only by purchasing a set of plans and specifications at the location indicated in the Invitation to Bid.