



Highway Department
1313 Holland Road, Appleton, WI 54911-8947
Phone: (920) 832-5673 Fax: (920) 832-2032
Visit our website at www.outagamie.org

PROJECT MANUAL FOR

**Project 320010 – 039 – 202
Endeavour Drive Sanitary Sewer
Appleton International Airport
Non-Highway
Outagamie County
2022**

PREPARED BY:

OUTAGAMIE COUNTY HIGHWAY DEPARTMENT
1313 HOLLAND ROAD
APPLETON, WI 54911-8947
(920) 832-5673

**Project 320010 – 039 – 202
Endeavour Drive Sanitary Sewer
Appleton International Airport
Non-Highway**

**Contract Documents
July 29, 2022**

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I. Advertisement for Bids

**OFFICIAL NOTICE
ADVERTISEMENT FOR BIDS**

Notice is hereby given by Outagamie County, Wisconsin, that it will receive sealed bids for Project 320010 – 039 – 202, Endeavour Drive Sanitary Sewer, until 3:00 P.M., Local Time on the 11th day of August, 2022, in the office of the Outagamie County Highway Department located at 1313 Holland Road, Appleton, WI 54911. Bids will be publicly opened and read at that time and date.

The project includes sanitary sewer construction and all incidental items necessary to complete the work shown on the plans. Contract documents, plans, and bid specifications can be downloaded from the Outagamie County website (www.outagamie.org) located in the “*RFP Postings*” under the *Financial Services* department or by contacting Michael Morman, Assistant Highway Engineer, by email (michael.morman@outagamie.org) or by phone (920) 832-5673.

The owner reserves the right to reject any or all bids. All responsive bidders shall be pre-qualified by the Wisconsin Department of Transportation to perform the work in the bid or request prequalification a minimum of five (5) days prior to the bid being submitted.

Name: Michael Morman
Title: Outagamie County Assistant Highway Engineer
Date: July 29, 2022

II. Bid Form

BID FORM

PROJECT IDENTIFICATION: **Project 320010 – 039 – 202**
Endeavour Drive Sanitary Sewer
Appleton International Airport
Non-Highway
Outagamie County

THIS BID IS SUBMITTED TO: **Outagamie County Highway Department**
Michael Morman, Assistant Highway Engineer
1313 Holland Road
Appleton, WI 54911

1. The undersigned BIDDER proposes and agrees, if this Bid is accepted, to enter into an agreement with OWNER in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Bid Price and within the Bid Times indicated in this Bid and in accordance with the other terms and conditions of the Contract Documents.
2. BIDDER accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 90 days after the date of bid opening. BIDDER will sign and deliver the required number of counterparts of the Agreement with the Bonds and other documents required by the Bidding Requirements within ten (10) days after the date of OWNER's Notice of Award.
3. In submitting this Bid, BIDDER represents, as more fully set forth in the Agreement, that:

(a) BIDDER has examined copies of all the bidding documents and of the following Addenda, receipt of all which is hereby acknowledged:

Addendum Number

Date of Addendum

(b) BIDDER has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance and furnishing of the Work;

(c) BIDDER is familiar with and is satisfied as to all federal, state and local laws and regulations that may affect cost, progress, performance and furnishing of the Work.

(d) BIDDER is aware of the general nature of Work to be performed by OWNER and others at the site that relates to Work for which this Bid is submitted as indicated in the Contract Documents.

(e) BIDDER has correlated the information known to BIDDER, information and observations obtained from visits to the site, reports and drawings identified in the bidding documents and all additional examinations, investigations, explorations, tests, studies and data with the bidding documents.

- (f) BIDDER has given OWNER written notice of all conflicts, errors or discrepancies that BIDDER has discovered in the bidding documents and the written resolution thereof by OWNER is acceptable to BIDDER, and the bidding documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
- (g) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; BIDDER has not directly or indirectly induced or solicited any other BIDDER to submit a false or sham Bid; BIDDER has not solicited or induced any person, firm or corporation to refrain from bidding; and BIDDER has not sought by collusion to obtain for itself any advantage over any other BIDDER or over OWNER.

4. BIDDER will complete the Work in accordance with the bidding documents for the prices shown on the attached schedules of unit prices. The OWNER reserves the right to accept either bid alternate in its entirety. BIDDER is not required to submit both bid alternates, but must complete at least one of either bid alternates in its entirety to be considered a complete bid but must complete bid. OWNER reserves the right to reject any bid alternates that are incomplete.

BIDDER acknowledges that unit quantities contained in some parts of the proposal are not guaranteed and final payment will be based on actual quantities determined as provided in the contract documents and installed in the field.

5. BIDDER agrees that the Work will be substantially complete and completed and ready for final payment in accordance with the Special Provisions on or before the dates or within the number of calendar days indicated in the Agreement. BIDDER accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the times specified in the contract documents.

6. The following documents are either attached hereto or previously submitted and made a condition of this Bid:

- (a) Required Bid Security in the form of (Bond) (Certified Check) attached hereto in the amount of at least ten percent (10%) of the maximum bid price.
- (b) A tabulation of Subcontractors, Suppliers and other persons and organizations required to be identified in this Bid.

7. Communications concerning this Bid shall be addressed to the address of BIDDER indicated below.

8. Terms used in this Bid which are defined in the General Conditions or Instructions will have the meanings indicated in the General Conditions or Instructions.

BID FORM

Project 320010 – 039 – 202 Endeavour Drive Sanitary Sewer Appleton International Airport Outagamie County			Quantity	Unit Price	Extended Price
Item	Unit	Item Description			
S001	LF	Sanitary Sewer PVC Pipe, 10-inch Installed	620		
S002	VF	Sanitary Sewer Manhole, 4-FT diameter	18		
S003	EACH	Tap Sanitary Manhole	1		
S005	LF	Sanitary Sewer Insulated Trench, 10-inch PVC	25		
BID TOTAL				\$	

If BIDDER is:

An Individual

By _____ (SEAL)
(Individual's Name)

doing business as _____

Business address _____

Phone No. _____

A Partnership

By _____ (SEAL)
(Firm Name)

_____ (General Partner)

Business Address _____

Phone No. _____

A Corporation

By _____
(Corporation)

(State of Incorporation)

By _____
(Name of Person Authorized to Sign)

(Title)

(Corporate Seal)

Attest _____
(Secretary)

Business Address _____

Phone No. _____

A Joint Venture

By _____
(Name)

(Address)

By _____
(Name)

(Address)

(Each joint venturer must sign. The manner of signing for each individual, partnership and corporation that is a party to the joint venture should be in the manner indicated above.)

SUBCONTRACTOR LIST

Contractor shall list all subcontractors including the name, address, phone number, contact person, description of work and estimated dollar value of work.

Subcontractor

Name: _____

Address: _____

Contact: _____ Phone: (_____) _____

Description: _____ Amount: \$_____

Subcontractor

Name: _____

Address: _____

Contact: _____ Phone: (_____) _____

Description: _____ Amount: \$_____

Subcontractor

Name: _____

Address: _____

Contact: _____ Phone: (_____) _____

Description: _____ Amount: \$_____

Subcontractor

Name: _____

Address: _____

Contact: _____ Phone: (_____) _____

Description: _____ Amount: \$_____

The OWNER reserves the right to accept or reject any subcontractor.

III. Insurance Requirements

Highway Department – 2022 Construction Materials & Services
Article III – Insurance Requirements for Independent Contractors & Vendors

Section 1 - Indemnification and Hold Harmless Clause:

_____ (*Contractor / Vendor Name*) agrees at all times during the term of the agreement to indemnify, hold harmless and defend the County, its Boards, Committees, Officers, Employees, Authorized Representatives and Volunteers against any and all liabilities, losses, damages costs or expenses (including, without limitation, actual attorney's and consultant's fees) which the County, its Boards, Committees, Officers, Employees and Representatives may sustain, incur or be required to pay by reason of or in any way related to bodily injury, personal injury or property damage of whatsoever nature or in connection with or in any way related to the performance of the work by _____ (*Contractor/Vendor Name*), its employees, agents and anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable, provided, however, that the provisions of this section shall not apply to liabilities, losses, charges, costs or expenses caused solely by or resulting from the gross negligent acts or omissions of the County, its Agencies, Boards, Committees, Officers, Employees, Authorized Representatives or Volunteers. It is agreed that Contractor/Vendor will be responsible for primary loss investigation, defense and judgment costs where this indemnification is applicable. Contractor's/Vendor's indemnity obligations shall not be limited by any worker's compensation statute, disability benefit or other employee benefit or similar law or by any other insurance maintained by or required of Contractor/Vendor.

Section 2 - Compliance with Laws, Regulations, Permits, Etc. Clause:

The _____ (*Contractor/Vendor Name*) shall comply with all Federal, State and local codes, laws, regulations, standards, and ordinances, including, without limitation, those of the Occupational Safety and Health Administration (OSHA), the Wisconsin Department of Safety and Professional Services and all County rules and orders governing the performance of the work performed by the Contractor/Vendor, its employees, agents and subcontractors or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable. In addition, any material, equipment or supplies provided to the County must comply with all safety requirements as set forth by the Wisconsin Administrative Code, Rules of the Industrial Commission on Safety and all applicable OSHA Standards. Effective May 1, 2007 employers performing work on qualified public works construction projects in Wisconsin for municipal government and state building projects will be required to have a written substance abuse testing program in place. The provisions of this requirement are contained in Wisconsin Statute § 103.503.

Section 3 - Subcontractors Clause:

The _____ (*Contractor/Vendor Name*) shall require each of their Subcontractors to take out and maintain, during the life of their subcontract the same insurance coverages as required under section 6, below, including without limitation naming the County, its Boards, Committees, Officers, Employees, Authorized Representatives and Volunteers as additional insureds with respect to all commercial general liability insurance policies. Each Subcontractor shall furnish to the _____ (*Contractor/Vendor Name*) two (2) copies of all certificates of insurance in a form acceptable to the County. The _____ (*Contractor/Vendor Name*) shall furnish one copy of each of the certificates of insurance, and any other evidence of insurance requested by the County, to the County prior to the commencement of any work to be performed by Contractor/Vendor or its Subcontractors. The County reserves the right to immediately terminate the contract with no liability or obligation to Contractor/Vendor or its Subcontractors, if the Subcontractor is not in compliance with these insurance requirements.

Section 4 - Proof of Insurance:

Policies shall be issued by a company or companies authorized to do business in the State of Wisconsin and licensed by the Wisconsin Insurance Department and having an "AM Best" rating of A- or better. Acceptance of Contractor's insurance by County shall not relieve or decrease the liability of the Contractor hereunder. Any deductible or self-insured retention amount or other similar obligation under the policies shall be the sole responsibility of the Contractor. Coverage afforded shall apply as primary and non-contributory, with the County, its Boards, Committees, Officers, Employees, Authorized Representatives and Volunteers named as **additionally insureds (with respects to any and all insurance policies identified in Section 6, as allowed by law)**. All liability insurance policies (except professional liability policies) to be maintained hereunder by Contractor/Vendor shall be occurrence based and not claims made policies. The County shall be given thirty (30) days advance notice of cancellation or nonrenewal of any and all required insurance coverages during the term of this agreement. Prior to the execution of this agreement, the _____ (*Contractor/Vendor name*) shall furnish the County with certificates of insurance (Acord Form 25-S or equivalent) signed by the insurer's representative and, upon request, certified copies of the required insurance policies and any other insurance related information, evidencing the insurance coverage requirements referenced below. **Certificates of insurance shall be provided with RFP response or sealed bid or mailed to the following address: Outagamie County Highway Department, Attention: Risk Administrator, 1313 Holland Road, Appleton, WI 54911.** The County reserves the right to immediately terminate the contract with no liability or obligation to Contractor/Vendor or any of its Subcontractors, if the _____ (*Contractor/Vendor Name*) is not in compliance with these insurance requirements.

Section 5 – Applicable Law:

Any lawsuits related to or arising out of disputes under this agreement shall be commenced and tried in the Circuit Court of Outagamie County, Wisconsin and the County and _____ (*Contractor/Vendor Name*) shall submit exclusively and specifically to the jurisdiction of the Outagamie County Circuit Court for such lawsuits. This agreement will be governed and construed according to the laws of the State of Wisconsin.

Section 6 – Insurance Coverage Requirements:

The insurance requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. **Outagamie County in no way warrants that the minimum limits contained herein are sufficient to protect the Contractor/Vendor from liabilities that might arise out of the performance of work under this contract by the Contractor, its agents, representatives, employees or subcontractors, and Contractor is free to purchase additional insurance.** _____ (*Contractor/Vendor Name*) agrees that in order to protect itself and the County, its Boards, Committees, Employees, Authorized Representatives and Volunteers under the indemnity provisions of Section 1, it will at all times during the term of the agreement provide and maintain at its own expense, the following minimum limits of insurance covering its operations:

Minimum Insurance Coverages and Limits

1) Worker's Compensation & Employer's Liability

- a) Applicable State – Statutory Limits as Required by the State of Wisconsin
- b) Applicable Federal (e.g. U.S. Longshoremen's and Harbor Worker's Act, Admiralty (Jones) Act, and Federal Employer's Liability Act) – Statutory Limit
- c) Employer's Liability - \$100,000 each occurrence / \$100,000 each person (disease) / \$500,000 total limit (disease)

Except as may be otherwise set forth herein, the County shall not be liable to _____ (*Contractor/Vendor Name*), its employees, or subcontractors, or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable, for any injuries to any of them arising out of or in any way related to the performance of the work under this agreement.

_____ (*Contractor/Vendor Name*) agrees that the indemnification and hold harmless provisions within this agreement extend to any claims brought by or on behalf of any such employees, subcontractors or anyone employed directly or indirectly by any of them or by anyone for whose acts any of them may be liable.

2) Automobile Liability – Owned, Non-Owned, Hired

- a) Bodily Injury and Property Damage Combined - \$1,000,000 for bodily injury and property damage per occurrence limit covering all vehicles to be used in connection with the performance of Contractor's/Vendor's obligations under this Agreement.
- b) Coverage for commercial automobile liability insurance shall be at least as broad as Insurance Services Office (ISO) Business Auto Coverage (Form CA 0001), covering Symbol 1 (any vehicle).

If Contractor/Vendor/Subcontractor or Contractor's/ Vendor's/Subcontractor's employees use personal vehicles to perform any services or work to be performed by Contractor/Vendor or Subcontractor under this Agreement, the Contractor/Vendor/Subcontractor must provide, to the County, a copy of the Certificate of Insurance (and any other documentation requested by the County) for Personal Automobile Liability coverage for each employee of Contractor/Vendor/Subcontractor who will be using their personal vehicle to perform such services or work as evidence of satisfactory compliance.

3) Comprehensive General Liability (Including Broad Liability Endorsement)

- a) Bodily Injury and Property Damage Combined - \$1,000,000, Each Occurrence
- b) Personal Injury - \$1,000,000
- c) X,C,U – \$1,000,000 / Each Occurrence
- d) Coverage for commercial general liability insurance shall be at least as broad as Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 0001)

4) Umbrella or Excess Liability

- a) \$1,000,000 following form excess of the primary General Liability, Automobile Liability and Employers Liability Coverages.

5) Completed Operations / Product Liability

- a) \$1,000,000 / Each Accident

Coverage shall be maintained for a period of two (2) years after the final payment to Contractor/Vendor.

IV. Special Provisions

SPECIAL PROVISIONS

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SPECIAL PROVISIONS

1. General

Perform the work under this construction contract as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2022 Edition; Village of Greenville Standard Specifications for Sewer and Water Construction, latest edition; Wisconsin Department of Transportation Standard Specifications for Airport Construction, 2021 Edition; as published by the department; and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.

The County of Outagamie, as issuer of this bid proposal, shall hereinafter be referred to as "the Department". The term "Engineer" shall mean an employee or authorized representative of the Outagamie County Highway Department or Outagamie County Appleton International Airport (ATW) who is tasked with having direct supervision or administration of the contract work.

2. Scope of Work

The work under this contract shall consist of the extension of the Endeavour Drive sanitary sewer system. Construction work under this contract will include sanitary sewer construction and all incidental items necessary to complete the work as shown on the plans and included in the proposal and is further described below.

Construction work being completed by Outagamie County Highway crews will include asphalt pavement patching, base aggregate, and other items as shown on the plans, including overall project management. Coordinate all contract work with Outagamie County crews and maintain communication regarding progress of contract work.

3. Project Plans, Project Manual and Addenda

Contract documents can be downloaded from the Outagamie County website (www.outagamie.org) located in the RFP postings section under "Financial Services". Project addenda, if required, will be posted at the same location. It is the contractor's responsibility to check the website for addenda prior to submitting bid.

4. Bid Bond and Performance Bond

Each proposal must be accompanied by a certified check payable to Outagamie County, or by a bid bond, in the amount of 10 percent (10%) of the maximum bid as a guarantee for the amount specified in the bid. The certified check is returnable to the bidder immediately after the signing of the contract.

Successful bidders shall furnish the Department with a performance bond equal to 100% of the contracted amount.

5. Insurance

The contractor shall furnish and deliver to the Department a certificate of insurance meeting the minimum requirements of Section 107.26 of the Standard Specifications and Part III of the Project Manual.

6. Prosecution and Progress

Completion of the contract work shall be in the 2022 construction season. Assure that the timeframe is consistent with the contract completion time of five (5) working days. Upon approval, the engineer will issue the notice to proceed within ten calendar days before the beginning of the approved timeframe.

All contract work shall be completed prior to January 1, 2023. The contractor awarded the work must coordinate with both County crews and the Hangar Development Principal Contractor for all construction operations.

When the contractor is installing the sanitary sewer under the existing Access Drive pavement, the contractor will have twelve (12) hours to install sanitary sewer under the existing pavement. The contractor shall notify Justin Schumacher, Grade Foreman (920-209-9810) 24 hours in advance of installing the sanitary sewer through the Access Drive pavement. The trench must be backfilled immediately and replaced with gravel ramps to allow access to the existing driveway and gate. The contractor shall sawcut and remove pavement prior to installing sanitary sewer but must maintain a gravel ramp across sawcut area. Sawcutting and pavement removal shall be considered incidental to the sanitary sewer installation.

7. Liquidated Damages

ATW will assess daily liquidated damages of \$500 for each calendar day beyond what is allowed in the Prosecution and Progress section.

8. Work by Others.

The Outagamie County Highway Department will perform the following work:

- Grading
- Base aggregate
- Asphalt pavement patching
- Landscaping & erosion control

Outagamie County will coordinate overall project management and maintain communication with ATW personnel. Primary contact for the Department is Justin Schumacher, Grade Foreman (920-209-9810). Backup contact is Michael Morman, Assistant Highway Engineer (920-850-3269). Backup phone number for both parties is 920-832-5673.

9. Traffic

Access to and from the Endeavour Drive expansion area shall be from STH 96 using Endeavour Drive. Construction vehicles are not allowed to drive on any airside area (within airport fence). Access to existing tenant buildings on Endeavor Drive must be maintained at all times, except for the 8-hour exception noted above.

10. Utilities

This contract does not come under the provisions of Administrative Rule Trans 220.

Appleton International Airport (ATW)

ATW has the following utilities on the project:

- Watermain along the east edge of the Endeavour Drive extension, installed in spring of 2022.
- Fiber Optic communication line will cross under the Endeavor Drive extension but will be relocated with the Hangar Development Project (by others).

No conflicts are anticipated.

Village of Greenville – Sanitary Sewer

The Village of Greenville has sanitary sewer facilities stubbed at the north end of the project area and will be extended with the project.

No conflicts anticipated.

Village of Greenville – Water

No conflicts anticipated.

WE Energies – Gas

WE Energies has a gas line around the north edge of the existing Endeavour Drive cul-de-sac running to existing building.

No conflicts anticipated.

WE Energies – Electric

WE Energies has an electric line around the north edge of the existing Endeavour Drive cul-de-sac running to existing building.

No conflicts anticipated.

Charter Communications – Communications

Charter has existing telephone and fiber optic lines around the north edge of the existing Endeavour Drive cul-de-sac running to existing building.

No conflicts anticipated.

11. Other Contracts

This project will require coordination with a private hangar project currently being constructed by Boldt Construction. Both projects will have activities happening in close proximity of each other throughout the life of this contract. Coordination with Boldt Construction is required.

ATW plans to construct project ATW1010 / SAP-94 for the expansion of the terminal apron. This project was let in June, with construction anticipated to start in August 2022. The contract has not been awarded yet.

ATW also plans to construct project ATW1008 / SAP-95 for the reconstruction of the East Side Service Road. This project was let in March with construction anticipated to start after August 2, 2022. The construction contract has been awarded to MCC, Inc. Primary contact is Sam Woelfel, (920) 749-3360 ext. 3046, sam.woelfel@murphyinc.org.

ATW also plans to construct improvements to the valet parking area. The project was let in March with construction anticipated to start in the 2022 construction season. The construction contract has been awarded to MCC, Inc. Primary contact is Sam Woelfel, (920) 749-3360 ext. 3046, sam.woelfel@murphyinc.org.

12. Permits

The airport has obtained the following permits:

- Wisconsin Department of Natural Resources Notice of Intent (NOI)
- Village of Greenville Stormwater Permit
- Village of Greenville Erosion Control Permit

Comply with the requirements of the above permits in addition to requirements of these special provisions. Copies of each permit is available from Westwood by contacting Aaron Stewart at (920) 830-6177.

13. Construction Staking

Westwood will provide one set of construction stakes for the sanitary sewer including manholes and pipe. Contact Aaron Stewart at (920) 830-6177 to arrange for construction staking.

14. S001 Sanitary Sewer PVC Pipe, 10-inch Installed

A Description

This special provision describes furnishing and installing new 10-inch PVC Sanitary Sewer Pipe. The work under this item shall be completed as shown on the plans or as approved by the engineer, and shall conform to Section 31 23 33, Section 33 05 31, Section 33 05 97.26, and Section 33 31 00 of the Village of Greenville Standard Specifications, latest edition, and to the Standard Specifications for Sewer & Water Construction in Wisconsin, 6th Edition.

B Materials

B.1 Sanitary Main Pipe Materials

- Provide 10-inch Polyvinyl Chloride (PVC) gravity sewer pipe and fittings manufactured and tested in accordance with ASTM D3034, PSM SDR-35 PVC. Do not use more than one material brand and manufacturer.
- Elastomeric Gaskets: Conform to ASTM F477
- Elastomeric Joints: Conform to ASTM D3212
- Solvent Weld Joints: Not permitted.
- Repair Couplings
- Repair couplings for PVC SDR-35 pipe to PVC SDR-35 pipe shall comply with ASTM 3034, PSM SDR-35 PVC and gasketed joints complying with ASTM F1336 with stops.
- Repair couplings for transition between ABS composite pipe and PVC shall be Fernco eccentric couplings with stainless steel shear rings, bands, nuts and housings.

B.2 Trace Wire Materials

- Provide #12 AWG copper clad steel, high strength with minimum 450 lb. break load, with minimum 30 mil HDPE or high molecular weight polyethylene insulation thickness designed for direct bury.
- Insulation color shall be green for non-metallic sanitary sewer and services.
- Connectors shall be Copperhead Industries Mainline to Service Connectors or approved equal.

B.3 Bedding Material

- Provide $\frac{3}{4}$ -inch crushed rock bedding material of Soil Class A-7 in accordance with the appropriate Specification Section.

B.4 Native Backfill Material

- Unless otherwise specified, use excavated material as backfill material. Use excavated material consisting of materials that, in the judgement of the Engineer, are suitable for backfilling. All backfill for trenches within roadways and within 2-ft of back of curb shall be select granular backfill. Backfill outside of the above limits shall be native backfill unless material is unacceptable to Director of Public Works or Municipal Engineer. Notify Director of Public Works or Municipal Engineer to make determination.
- Topsoil, peat, organic soils, and materials containing slag, cinders, foundry sand, debris, and rubble, or soil with less than required bearing capacity as determined by Engineer are unsuitable materials.
- Backfill material shall be free of vegetation or other organic material, concrete or concrete fragments, stones larger than three (3) inches, frozen material, and blasted rock

B.5 Granular Backfill Materials

- Provide granular backfill material in accordance with Crushed Aggregate Base Course Gradation #2. All backfill for trenches within roadways and within 2-ft of back of curb shall be select granular backfill.

C Construction

C.1 Preparation

- Clean pipe interior and joints prior to installation. Keep pipe clean during construction.

- Install watertight plug to prevent water from entering the existing sewer system.
- Provide bypass pumping of existing connecting sewer in accordance with the appropriate Specification Section.

C.2 Separations from Water Mains

- Horizontal separation: 8 feet, measured center to center.
- Water Main below a Sewer: 18 inches clear. (Both pipes shall be constructed of water main quality pipe and joints for 10 feet either side of the crossing).
- Water Main above a Sewer: 6 inches clear.

C.3 General Pipe Installation

Install PVC pipe in accordance with requirements of ASTM D 2321. Begin pipe installation at the lowest point in the line proceeding upstream with the bell end of the pipe pointing upstream.

Utilize full length pipe except at manholes or service branches. Minimum pipe length entering and exiting manholes shall be 10 feet.

Use a saw to cut ends of pipe flush with inside wall of manholes and structures.

Provide cap, plug, or bulkhead at exposed ends of pipe upon completion of construction or whenever pipe installation is not in progress.

Vertical and Horizontal Alignment:

- Install sewer pipe to maintain vertical and horizontal alignment as shown on the engineered plans.
- Use laser equipment mounted in a manner to permit beam to shine through pipe.
- Use a target to check each pipe installed.
- Check laser beam alignment and grade a minimum of every 100 feet.
- Use a fan to control air temperature variations in pipe and reduce bending of laser beam.

Commence pipe installation only after dewatering the trench below the trench bottom and necessary sheathing is in place.

Once the sanitary sewer is complete the Contractor shall schedule a walk through with the Sanitary District, the Municipal Engineer, and the Developer's Engineer. The Contractor shall correct all deficiencies prior to proceeding with roadway construction.

C.4 Trenched Installation

Excavate trench and provide pipe bedding and backfill material in accordance to the appropriate Specification Section.

Prepare trench bottom to design line and grade so that only minor movement of the pipe is necessary after installation.

Lay pipe to design line and grade with set field grades to invert of pipe.

- Do not allow horizontal and vertical alignment to vary from design line and grade at any structure by more than 1% of the inside diameter of the pipe or $\frac{1}{4}$ -inch, whichever is larger.
- Do not allow the horizontal alignment of the pipe to vary from design line at any point along the pipe by more than 1% of the inside diameter of the pipe.
- Low spots holding water exceeding the following depths for each pipe size are unacceptable and shall be removed and reinstalled to proper grade. For 10-inch pipe, the maximum low spot depth is $\frac{1}{2}$ -inch.

Provide uniform bearing for full pipe barrel length. Excavate bell holes as necessary for uniform support of pipe barrel on bedding material.

Do not lay pipe in water or on saturated soil or bedding, or allow water to rise in trench around pipe prior to placing backfill material.

Do not disturb installed pipe and bedding when using movable trench boxes and shields. Block or anchor pipe as necessary to prevent joint displacement.

Install wye or tee service fitting at each location shown on the engineered plans. A Tee fitting may be used for lateral connections on existing sanitary sewer.

Assemble pipe joints in accordance with manufacturer's recommendations.

Push "home" the spigot end of the pipe joint in the socket before proceeding to install the next pipe.

When connecting to an existing sewer not terminating in a manhole, uncover the end of the existing sewer prior to laying sewer to allow horizontal and vertical adjustments.

Install pipe such that pipe joints are located far enough from the manhole outside wall to permit future pipe repair without damaging the manhole and the joints do not fall within manhole walls.

Provide pipe embedment as shown on the engineered plans.

C.5 Bedding Installation & Compaction

Deposit all bedding material uniformly and simultaneously on each side of pipe to prevent lateral displacement. Provide bedding as shown on engineering plans. Uniformly compact material under and around pipe and shape bottom to fit contour of pipe.

C.6 Backfill Installation & Compaction

Backfill in trenches supporting aggregate or paved roads shall be in accordance with WisDOT Standard Specification 608.2.2.3.

Native backfill in trenches not supporting aggregate or paved roads shall be compacted to a minimum percentage of the maximum laboratory dry density as determined by ASTM D698 Standard Proctor test as listed below. Compaction acceptance tests shall be taken every 300 LF of trench, and for every 12-inch lift of backfill. Compaction acceptance tests will not be required in delineated wetland areas.

All utility trenches shall be compacted to the following minimums:

- Cohesive Materials: 90% deeper than 36 inches below finished grade; 95% top 36 inches below finished grade
- Non-Cohesive Materials: 90% deeper than 36 inches below finished grade; 95% top 36 inches below finished grade

C.7 Trace Wire Installation

Provide mainline trace wire with all service lateral trace wires properly connected to the mainline trace wire, to ensure full tracing/locating capabilities from a single connection point. Provide trace wire at the 3 o'clock position of the pipe, taping or tying at 10-foot intervals. Terminate trace wire on all sanitary laterals at an approved trace wire access box color coded green and located directly above the service lateral at the road right of way. Follow grounding specifications and connections.

D Measurement

The Department will measure Sanitary Sewer PVC Pipe, 10-inch Installed by the linear foot (LF), measured along the centerline of pipe installation acceptably completed.

E Payment

The owner will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
S001	Sanitary Sewer PVC Pipe, 10-Inch Installed	LF

Payment is full compensation for the complete installation of the sanitary main including the furnishing, delivery, storage, handling and installation of the PVC pipe, fittings, trace wire, bedding, and backfill, and for all labor and equipment necessary for excavation and installation of the materials, and for all other incidentals necessary for the full sanitary main installation.

15. S002 Sanitary Sewer Manhole, 4-FT Diameter

A Description

This special provision describes the furnishing and installation of new sanitary manholes. The work under this item shall be completed as shown on the plans or as approved by the engineer, and shall conform to Section 33 05 62 and Section 33 31 00 of the Village of Greenville Standard Specifications, latest edition, and to the Standard Specifications for Sewer & Water Construction in Wisconsin, 6th Edition.

B Materials

B.1 4-ft Diameter Precast Reinforced Concrete Manhole

Circular manhole components including base sections, risers sections, grade rings (adjusting rings), eccentric cone, flat slab top and manhole reducing bench shall meet ASTM C478.

Provide precast concrete sections and related components conforming to ASTM C478, Type II with acid-resistant cement.

Provide base section with base riser section and integral monolithic bottom extending minimum of 6 inches beyond riser section.

Provide riser sections with dimensions and orientation of pipe cut-outs as shown on the engineered plans.

Joint design shall be in accordance with ASTM C990.

Provide lifting inserts with base and riser sections. No through wall lifting holes will be accepted.

Mark date of manufacture and name or trademark of manufacturer on inside of barrel.

B.2 Manhole Precast Concrete Base

Base section(s) shall include base riser section with integral monolithic bottom extending a minimum of 6 inches beyond riser section

Provide cast in-place concrete base where shown on the engineered plans.

- Provide Class AA Portland cement concrete mix design in accordance with the appropriate Specification Section.
- Provide reinforcement in accordance with ASTM A775. Provide bolsters, chairs, spacers and other devices for spacing, supporting and fastening reinforcing bars and welded wire fabric in place.

B.3 Manhole Top

Provide eccentric cone section for manholes unless flat slab top section is shown on the engineered plans.

Provide flat slab top where shown on engineered plans.

Provide eccentric cone section on sanitary sewer and storm sewer unless otherwise shown on the engineered plans.

Manhole and structure top shall be capable of supporting HS-25 loading.

Provide top opening of cone section or flat slab top of diameter shown on the engineered plans.

B.4 Grade Adjusting Rings

Grade rings shall be circular for manhole castings. The grade adjusting rings shall be designed to allow final adjustment of the frame and cover or grate to the grade established on the engineered plans or as established by the Engineer.

Grade adjusting rings shall be capable of supporting the minimum requirements of AASHTO M-306, H-25 and HS-25.

Provide precast reinforced concrete adjusting rings complying with ASTM C478.

- Adjusting rings shall be free from cracks, voids, and other defects.
- Provide a minimum of two precast concrete rings with a maximum height of 10 inches total.

Provide Cretex PRO-RING grade adjustment rings.

- The grade adjustment rings shall be manufactured from ARPRO® Expanded Polypropylene (EPP), black. 5000 series meeting ASTM D3575 and ASTM D4819-1. The rings shall be manufactured using a high compression molding process to produce a finished density of 120 g/l ((7.5pcf)).
- Rings contain either an upper and lower keyway (tongue and groove) for vertical alignment and/or an adhesive trench on the underside with a flat top.
- Provide a maximum height of 6 inches.

Provide grade adjustment rings that are injection molded-recycled HDPE as manufactured by LADTECH, Inc. or approved equal. Adjustment rings shall be manufactured from polyethylene plastic in accordance with ASTM D-4976.

When in a traffic area, provide top 4 inches of adjusting rings height with rubber ring manufactured by Infra-Riser.

- Provide tapered rubber adjusting ring in sloped pavement.
- Provide manufacturer recommended polyurethane sealant between rubber rings.

B.5 Joint Sealants

Joint sealant gaskets shall be rubber gasket joint meeting requirements of C-443.

Outside edges of all joints shall have 1-1/4" thick butyl rubber material meeting requirements of AASHTO M-198 Type B flexible plastic gasket and ASTM C990 butyl rubber sealant. Shall be CS-102.

B.6 Pipe Connection

Provide resilient flexible connector meeting the requirements of ASTM C923.

Seal the flexible connector and the manhole by casting the connector integrally with the manhole wall.

The seal between the connector and the pipe shall be by compression of the resilient material against the outside of the pipe.

Factory-made manholes shall use A-Lok or Z-Lok pipe connections.

Where an existing manhole is core drilled in the field or the entering pipe is not perpendicular to the concrete riser section, provide one of the following flexible connectors: XPC Inc. Kor-N-Seal or Press-Seal Gasket Corporation PSX:Positive Seal.

B.7 Manhole Steps

Provide machined frames and covers.

- Steel reinforced coated with copolymer polypropylene meeting ASTM C478.
- Copolymer polypropylene shall meet ASTM D4101.
- Steel reinforcement shall be ASTM A615, Grade 60, $\frac{1}{2}$ " minimum steel reinforcing rod.
- Step shall be 11"-12" wide center to center of anchors and project from the wall between 5" and 7".
- Minimum design live load shall be a single concentrated load of 300 lbs. when in place.
- Uniformly space steps at 12 inches to 16 inches.
- Align steps with vertical side of eccentric top section.
- Place first step no more than 36 inches from top of casting.
- Do not place steps in lift station wet wells.

B.8 Manhole Castings

Provide machined frames and covers.

- Castings shall be ASTM A48, Class 35B, gray iron.
- Covers shall be self-sealing with concealed pick hole.
- Shall be of uniform quality free from blowholes, shrinkage, discoloration, and other defects.
- Shall be heavy duty designed for HS-20 loadings.
- Provide frame and covers of type shown on engineered plans.
- Provide size and configuration as shown on engineered plans.

B.9 Chimney Seals

Furnish internal flexible rubber frame seal and where necessary, an interlocking extension or extensions, sealing the entire chimney of sanitary manholes. The seal and extension or extensions shall extend from the casting down to the top of the manhole cone.

Design the manhole frame seal to prevent leakage of water through the manhole chimney throughout a 50-year design life.

The seal shall be designed so that it can be installed in manholes where the frame and chimney diameters differ by up to 20%.

The frame seal shall be capable of repeated vertical movement of not less than 2 inches and/or repeated horizontal movement of not less than $\frac{1}{2}$ inch after installation throughout the design life.

The frame and chimney seals and bands shall be sized for the casting diameter and the chimney diameter shown on the Engineered Plans.

B.10 Granular Foundation

Structure bedding material below the concrete structure base shall be $\frac{3}{4}$ -inch crushed rock chips gradation, Soil Class A-7, in accordance with appropriate specification.

C Construction

C.1 General Manhole Installation

Install new manholes at the locations and elevations shown on the engineering plans.

- New sanitary manholes shall be installed in accordance with Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition.

- Install precast concrete structures plumb and to line and grade shown on the engineered plans to within a tolerance of 1/8-inch in 4 feet.
- Place the precast manhole section as indicated and install according to ASTM C891.
- Pipe connections shall enter the barrel through a flexible, watertight gasket or connector.

C.2 Provisions for Future Sewer Connections

- Provide pipe stubs as shown on the engineered plans.
- Extend pipe stubs a maximum of 12 inches from outer wall of structure unless otherwise shown on engineered plans.
- Cap or bulkhead pipe stub to watertight condition.

C.3 Frame and Chimney Seal Installation

- Inspect sealing surfaces to determine if reasonably smooth, clean and free from offsets.
- Use a high strength, non-shrink grout to fill areas smooth in the sealing area of the precast manhole section.
- Furnish rubber sleeve and the least number of extensions necessary to seal the area from the manhole frame to the cone section or flat top section of the precast manhole. Owner to install chimney seal.
- Install frame in accordance with the manufacturer's recommendations.

D Measurement

The department will measure Sanitary Sewer Manhole, 4-ft Diameter by each manhole installation acceptably completed including excavation, backfilling, and restoration.

E Payment

The owner will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
S002	Sanitary Sewer Manhole, 4-FT Diameter	VF

Payment is full compensation for the full installation of manhole including all materials, labor, and equipment for excavation, complete installation of new manhole including joints, casting, cover, seals, casting, and all other parts, bedding, granular backfill, associated restoration, and all other incidentals necessary for the manhole complete construction.

16. S003 Tap Existing Sanitary Manhole

A Description

This special provision describes tapping new sanitary sewer into an existing sanitary manhole. The work under this item shall be completed as shown on the plans or as approved by the engineer, and shall conform to 33 31 00 of the Village of Greenville Standard Specifications, latest edition, and to the Standard Specifications for Sewer & Water Construction in Wisconsin, 6th Edition.

B (Vacant)

C Construction

Connecting to Existing Sanitary Sewer Structure

Excavate to verify location and depth of existing structure. Notify Engineer immediately if location and/or depth conflict with the engineered plans.

Core drill a hole in the structure large enough to accommodate the pipe and a watertight flexible pipe gasket to manhole connection seal.

Provide a watertight flexible pipe gasket to manhole connection seal and commence pipe installation.

D Measurement

The department will measure Tap Existing Sanitary Manhole by each manhole acceptably completed including excavation, backfilling, and all incidental materials.

E Payment

The owner will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
S003	Tap Sanitary Manhole	EACH

Payment is full compensation for the work described under this item including the labor and equipment for excavating, tapping the existing manhole, and all incidental materials necessary to acceptably complete the watertight pipe connection in accordance with this section and all applicable standard specifications.

17. S005 Sanitary Sewer Insulation**A Description**

This special provision describes furnishing and installing insulation for the sanitary main where shown on the plans. The work under this item shall be completed as shown on the plans or as approved by the engineer, and shall conform to 33 31 00 of the Village of Greenville Standard Specifications, latest edition, and to the Standard Specifications for Sewer & Water Construction in Wisconsin, 6th Edition.

B Materials

Extruded polystyrene conforming to ASTM C578, Type VI.

- Compressive strength of at least 40 PSI.
- Minimum R-value of 5.
- Maximum water absorption of 0.17% by volume.
- Each board shall be 2 inches thick x 4 feet wide x 8 feet long.

C Construction

Provide where shown on the engineered plans.

- Install insulation board in an inverted "U" around the pipe.
- Install insulation board with the top insulation board the same width as the trench centered over the pipe.
- Install the sides of the U-shape 2-feet high with the bottom of the legs at least to the springline of the pipe.
- Install the insulation board in layers to provide a minimum thickness of 4" or the thickness stated on the engineered plans.
- Install such that there are no voids under the insulation.

D Measurement

The department will measure Sanitary Sewer Insulation by the linear foot (LF) along the center line of pipe insulation acceptably installed.

E Payment

The owner will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
S005	Sanitary Sewer Insulation	LF

Payment is full compensation for the furnishing, delivery, storage, and handling of new pipe insulation materials, and for all labor, equipment, survey work and other incidentals necessary for acceptably installing the pipe insulation.

V. Agreement

AGREEMENT

THIS AGREEMENT, made this _____ day of _____, 2022, by and between Outagamie County, hereinafter called "OWNER" and _____,
(*Name of Contractor*)

doing business as an individual or a partnership or a corporation hereinafter called "CONTRACTOR".

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete the construction of Project 320010 – 039 – 202, Endeavour Drive Sanitary Sewer, Appleton International Airport, Non-Highway, Outagamie County.
2. The CONTRACTOR will furnish all of the materials, supplies, tools, equipment, labor and other services necessary for the construction and completion of the PROJECTS described herein.
3. The CONTRACTOR will complete the work required by the CONTRACT DOCUMENTS within five (5) working days unless extended otherwise by the OWNER and ENGINEER.
4. The CONTRACTOR agrees to perform all of the WORK described in the CONTRACT DOCUMENTS and comply with the terms therein for the sum of \$ _____, or as shown in the BID FORM.
5. The term "CONTRACT DOCUMENTS" means and includes the following:
 - (A) Advertisement for Bids
 - (B) Special Provisions
 - (C) Bid Form
 - (D) Agreement
 - (E) Notice of Award
 - (F) Notice to Proceed
 - (G) Bid Bond
 - (H) Performance Bond
 - (I) Certificate of Insurance
6. The OWNER will pay the CONTRACTOR as work progresses in the manner and at such times as set forth in the CONTRACT DOCUMENTS. The OWNER will retain 5% of the contract cost until final project acceptance.
7. This AGREEMENT shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.

IN WITNESS WHEREOF, the parties hereto executed, or caused to be executed by their duly authorized officials, this AGREEMENT in triplicate each of which shall be deemed as original on the date first above written.

OWNER:

BY _____

Name _____

(Please Type)

Title _____

(SEAL)

ATTEST:

Name _____

(Please Type)

Title _____

CONTRACTOR:

BY _____

Name _____

(Please Type)

Address _____

(SEAL)

ATTEST:

Name _____

(Please Type)

Title _____

VI. Notice of Award

NOTICE OF AWARD

To: _____



PROJECT DESCRIPTION: Project 320010 – 039 – 202
Endeavour Drive Sanitary Sewer

The Outagamie County Highway Department has considered the BID submitted by you for the above-described WORK in response to its Advertisement for Bids dated July 29, 2022, and Information for Bidders.

You are hereby notified that your BID has been accepted for items in the amount of

\$.

You are required by the Information for Bidders to execute the Agreement and furnish the required CONTRACTOR'S Performance BOND and Certificates of Insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to execute said Agreement and to furnish said BONDS within ten (10) days from the date of this Notice, said OWNER will be entitled to consider all your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID BOND. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 20_____.
.

Owner

Bv

Title

ACCEPTANCE OF NOTICE

Receipt of the above NOTICE OF AWARD is hereby acknowledged
by

this the **day of** **2022**

Title _____

VII. Notice to Proceed

NOTICE TO PROCEED

**Project 320010 – 039 – 202
Endeavour Drive Sanitary Sewer
Appleton International Airport
Non-Highway
Outagamie County**

Date: _____, 2022

To: _____

Owner's Project No. 320010 – 039 – 202

Contract For: Endeavour Drive Sanitary Sewer
Appleton International Airport
Outagamie County, WI

You are hereby notified that the contract time under the above contract will commence to run on _____, 2022. By that date, you are to start performing the work and your other obligations under the contract documents at the location of the project described above. All work shall be completed within **five (5) working days** at Endeavour Drive, Appleton International Airport unless otherwise extended by the Owner in writing.

Before you may start any work at the site, you must deliver to the Owner a Certificate of Insurance which you are required to purchase and maintain in accordance with the contract documents.

Work at the site must be started by _____, 2022.

Outagamie County
Owner

Authorized Signature

Name & Title



VIII. Change Order Form

CHANGE ORDER REQUEST

Order No. _____

Date: _____

Agreement Date: _____

NAME OF PROJECT: _____

OWNER: _____

CONTRACTOR: _____

The following changes are hereby made to the CONTRACT DOCUMENTS:

Justification:

Change to CONTRACT PRICE: \$ _____

Original CONTRACT PRICE: \$ _____

Current CONTRACT PRICE adjusted by previous CHANGE ORDER \$ _____

The CONTRACT PRICE due to this CHANGE ORDER will be (increased) (decreased)
by: \$ _____

The new CONTRACT PRICE including this CHANGE ORDER will be \$ _____

Change to CONTRACT TIME:

The date for completion of all work will be _____ (Date).

Approvals Required:

Requested by: _____

Recommended by: _____

Ordered by: _____

Accepted by: _____