

**Four Rivers Sanitation Authority
Rockford, Illinois**

Bidding Requirements and Contract Forms

for

Plant Roadway Replacement

Capital Project No. 2406

Four Rivers Sanitation Authority Rockford, Illinois

Bidding Requirements and Contract Forms and *General Provisions and Technical Specifications* for *Sanitary Sewer Construction*

for

Plant Roadway Replacement

Capital Project No. 2406

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Section I
Bidding Requirements

Article 1 — Notice to Bidders

The Four Rivers Sanitation Authority (FRSA) will receive signed and sealed bids for the Plant Roadway Replacement, Capital Project No. 2406, at the Steve Graceffa Administration Building (Administration Building) at 3501 Kishwaukee Street, Rockford, Illinois until 10:00 a.m. on Thursday, July 23, 2026, at which time and place responsive / responsible bids will be publicly opened and read aloud.

The Plant Roadway Replacement project consists of the abandonment of Martin Road and the reconfiguration of the FRSA wastewater treatment plant's Kishwaukee Street entrance. Work includes the removal and construction of pavement, sidewalk, curb and gutter, storm sewer, utilities, fencing, gates, lighting, signage, turf restoration, landscaping and all other appurtenances on the plans and in the specifications.

Bidder's attention is called to Article 2 – Instructions to Bidders, Section 3.7 and 3.8 Pursuant to Section 3.7, each proposal must be accompanied by fully executed copies of the Fair Employment Practices Affidavit and the Affidavit of Compliance: Responsible Bidder Ordinance. Pursuant to Section 3.8 requirements for Statement of Qualifications, Bidder must have a permanent business office within forty (40) miles of FRSA's office at 3501 Kishwaukee Street in Rockford, Illinois.

All demolition, construction, installation and associated Project work shall be completed by November 30, 2026. Liquidated damages shall be \$300.00 per calendar day.

Bid documents may be obtained at a cost of \$50.00 per set (non-refundable) by contacting the FRSA Engineering Department at 815-387-7660.

Plans and specifications may also be viewed at the offices of the Northern Illinois Building Contractors Association at 1111 S. Alpine Rd, Rockford, Illinois. For more information, visit the FRSA website at fourrivers.illinois.gov.

An optional Pre-Bid Meeting for this project will be held on Tuesday, July 14, 2026, at 10:00 a.m. in the FRSA Board Room in the Steve Graceffa Administration Building, 3501 Kishwaukee Street, Rockford, Illinois. All contractors that intend to bid on this project are encouraged to attend this pre-bid meeting.

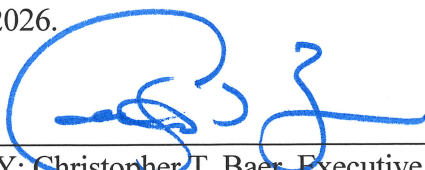
All construction shall be done in accordance with specifications on file with FRSA, including the *General Provisions and Technical Specifications for Sanitary Sewer Construction, Four Rivers Sanitation Authority* (Current Edition).

Each Proposal must be accompanied by the FRSA Bid Bond form with an acceptable Bid Security attached, in the amount of five percent (5%) of the total bid price. This amount is a guarantee that, if the Proposal is accepted, a Contract will be entered into and its performance properly secured.

The successful bidder will be required to furnish a satisfactory Performance Bond in the full amount of the Bid or Proposal. No Bid shall be withdrawn without FRSA's consent for a period of sixty (60) days after the scheduled closing time for receipt of bids.

FRSA reserves the right to reject any or all bids, or any part thereof, or to accept any bid or any part thereof, or to waive any formalities in any bids, deemed to be in the best interest of FRSA.

Dated this 29th day of June, 2026.


BY: Christopher T. Baer, Executive Director

Article 2 — Instructions to Bidders

1 General

1.1 Scope and Intent

This section of the Contract Documents provides detailed information and requirements for preparing bids to prospective bidders, bidders' responsibility, the preparation and the submission of bids, basis for awarding the Contract and other general information concerned with bidding and executing the Contract.

1.2 Contradictions

If in the case of apparent contradictions between or among the Contract Documents, the Contract Documents shall be consulted in the following order: Addenda, Agreement, Supplementary Drawings, Instructions to Bidders, Detailed Specifications, Plans, Four Rivers Sanitation Authority (FRSA) General Provisions and Technical Specifications for Sanitary Sewer Construction. The language in the first such document in which language regarding the conflict, error or discrepancy occurs shall control.

1.3 Optional Pre-Bid Meeting

An optional Pre-Bid Meeting for this project will be held on Tuesday, July 14, 2026, at 10:00 a.m. in the FRSA Board Room in the Steve Graceffa Administration Building, 3501 Kishwaukee Street, Rockford, Illinois. All Contractors intending to bid on this project are encouraged to attend the pre-bid meeting.

2 Legal Requirements

2.1 Illinois Regulations

- A. Public Act 100-1177 (820 ILCS 130/) entitled the "Prevailing Wage Act" requires the Bidder to comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on FRSA projects to submit certified payroll reports via the State's Certified Transcript of Payroll Portal currently found at: <https://labor.illinois.gov/laws-rules/conmed/certifiedtranscriptofpayroll.html>. The Bidder is responsible for verifying current information at the State's website.
- B. Public Act 83-1030 (30 ILCS 565/) entitled the "Steel Products Procurement Act" requires that steel products used or supplied in performance of this Contract or subcontract must be manufactured or produced in the United States with three exceptions.

The provisions of this Section shall not apply:

1. Where the Contract involves an expenditure of less than \$500.
2. Where the executive head of the public agency certifies in writing that
 - a) the specified products are not manufactured or produced in the United States in sufficient quantities to meet the agency's requirements, or
 - b) obtaining the specified products, manufactured or produced in the United States would increase the cost of the Contract by more than 10%.
3. When its application is not in the public interest.

- C. Public Act 96-929 (30 ILCS 570/) entitled the “Employment of Illinois Workers on Public Works Act” provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and, further, that Illinois workers are available and capable of performing the particular type work involved.
- D. Public Act 101-221 (820 ILCS 96/) entitled the “Workplace Transparency Act” requires that any party to a contract adopt and promulgate written sexual harassment policies that include, as a minimum, the following information:
1. the illegality of sexual harassment
 2. the definition of sexual harassment under Illinois State law
 3. a description of sexual harassment, utilizing examples
 4. my (our) organization's internal complaint process including penalties
 5. the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission
 6. directions on how to contact the Department and the Commission
 7. protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act
- Upon request, this information must be provided to the Illinois Department of Human Rights and the FRSA.
- E. With regard to nondiscrimination in employment, the Contractor for this project will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations.
- F. The Contractor for this project must comply with the Occupational Safety and Health Act.
- G. The Contractor for this project must comply with the Federal Drug-Free Workplace Act.
- H. Public Act 96-1416 requires the Certification of Clean Construction and Demolition Debris (CCDD) and uncontaminated soil prior to disposal at a CCDD fill site. The Contractor for this project must comply with Public Act 96-1416 and be responsible for the certifications and any fees associated with the disposal at a CCDD fill site.

1. In the event that contaminated soil is uncovered on the project, the Contractor must notify FRSA immediately. Any extra costs resulting from the presence of contaminated soil must be evaluated in accordance with FRSA General Provisions & Technical Specs for Sanitary Sewer Construction; General Conditions: Article 5 – Time Provisions and Article 8 – Changes.

2.2 Americans with Disabilities Act

The Contractor for this project will comply with all applicable requirements of the Americans with Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify Four Rivers Sanitation Authority (FRSA) and their representatives from all:

- A. suits, claims, or actions
- B. costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement

- C. damages of any kind (including but not limited to actual, punitive, and compensatory damages) relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the Contract.

3 General Instructions

3.1 Bidder's Responsibility

Bidders are cautioned not to submit proposals until having carefully examined the entire site of the proposed work and adjacent premises and the various means of approach and access to the site, and having made all necessary investigations to inform themselves thoroughly as to the facilities for delivering, placing and handling the materials at the site, and having informed themselves thoroughly as to all difficulties involved in the completion of all the work under this Contract in accordance with its requirements.

Bidders must examine the Plans, Specifications and other Contract Documents and shall exercise their own judgment as to the nature and amount of the whole of the work to be done and for the bid prices must assume all risk of variance, by whomsoever made, in any computation or statement of amount or quantities necessary to complete fully the work in strict compliance with the Contract Documents. The Bidder must satisfy himself by making borings or test pits, or by such methods as he may prefer, as to the character and location of the materials to be encountered or work to be performed. No pleas of ignorance of conditions that exist or that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work under this Contract, as a result of failure to make the necessary examinations and investigations, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill, in every detail, all of the requirements of the Contract Documents, or will be accepted as a basis for any claims whatsoever for extra compensation or for an extension of time.

The Contractor is responsible for verifying the location of all existing utilities in the project areas.

The Bidder, therefore, shall satisfy himself by such means as he may deem proper as to the location of all structures that may be encountered in construction of the work.

3.2 Addenda and Interpretations

No interpretation of the meaning of the Plans, Specifications, or other Contract Documents will be made to any bidder orally. Every request for such interpretation must be in writing addressed to Four Rivers Sanitation Authority, 3501 Kishwaukee Street, Rockford, Illinois. To be given consideration, such request must be received at least five (5) days prior to the date fixed for the opening of bids. Any and all such interpretations and any supplemental instructions will be in the form of written addenda which, if issued, will be sent by email, fax, or certified mail with acknowledgement of receipt requested, to all prospective bidders, at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such addenda or interpretation shall not relieve said bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

3.3 Laws and Regulations

The prospective bidder is warned that he must comply with all laws of the United States Government, State of Illinois, all ordinances and regulations of FRSA in the performance of the work under this

Contract. The Bidder's attention is specifically called to that provision of the General Conditions regarding the rate of wage to be paid on the work.

3.4 Quantities Estimated Only

Bidders are warned that the estimate of quantities of the various items of work and materials, as set forth in the Proposal form, is approximate only and is given solely to be used as a uniform basis for the comparison of bids. The quantities actually required to complete the Contract work may be less or more than so estimated, and if awarded a contract for the work specified, the Contractor further agrees that he will not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes of work assumed for comparison of bids and quantities of work actually performed.

3.5 Form, Preparation, and Presentation of Proposals

For particulars as to the quantity and quality of the supplies, materials and equipment to be furnished, and the nature and extent of the work or labor to be done, prospective bidders are referred to the Contract Documents, which may be examined or obtained at the office of FRSA.

Each bid will be submitted upon the prescribed Proposal form. All blank spaces for bid prices must be filled in, in ink, with the unit or total sum or both for which the Proposal is made. If the Proposal contains any omissions, erasures, alterations, additions or items not called for in the itemized Proposal, or contains irregularities of any kind, such may constitute sufficient cause for rejection of bid. In case of any discrepancy in the unit price or amount bid for any item in the Proposal, the unit price as expressed in figures will govern. In no case is the agreement form to be filled out or signed by the bidder.

Bidders may opt to contact FRSA's Engineering Department at 815.387.7660 to obtain an electronic Proposal form. If used, this form must be attached to the hard copy Proposal form and appropriately signed and executed with the bid.

The bid must be verified and be presented on the prescribed form in a sealed envelope on or before the time and at the place stated in the Advertisement for Bids, endorsed with the name of the person, firm or corporation presenting it, the date of presentation, and the title of the work for which the bid is made. If forwarded by mail, the sealed envelope containing the Proposal and marked as directed above, must be enclosed in another envelope addressed to Clerk of the Four Rivers Sanitation Authority, 3501 Kishwaukee Street, Rockford, Illinois, 61109 and be sent preferably by certified mail. FRSA will not accept facsimile generated bids.

3.6 Bid Security

Each Proposal must be accompanied by the FRSA Bid Bond form with an acceptable Bid Security attached, in the amount specified in Article One, Notice to Bidders. This sum is a guarantee that, if the Proposal is accepted, a contract will be entered into and its performance properly secured. The FRSA's Bid Bond Form included in the bid packet must be used. No other Bid Bond form may be substituted.

Within ten (10) days after the award of the bid, the deposits of all but the three lowest bidders will be returned. The deposits of the remaining two unsuccessful bidders will be returned within three (3) days after the execution of the Contract, or, if no such Contract has been executed, within sixty (60) days after the date of opening bids. The deposit of the successful bidder will be returned only after he has duly executed the Contract and furnished the required bond and insurance.

3.7 Affidavit of Compliance

Each proposal must be accompanied by fully executed original copies of the Fair Employment Practices Affidavit of Compliance and the Affidavit of Compliance: Responsible Bidder Ordinance, both of which are enclosed with the Proposal packet. Failure to submit executed original copies of both affidavits with the Proposal may constitute sufficient cause for rejection of the bid.

3.8 Statement of Qualifications

Each Proposal must be accompanied by a Statement of Qualifications certifying that the bidder is registered to do business in the State of Illinois, has a permanent business office within forty (40) miles of the FRSA office at 3501 Kishwaukee Street in Rockford, IL, and provides documentation that the bidder possesses the appropriate financial, material, equipment, facility and personnel resources and expertise necessary to meet all contractual obligations. The bidder shall document no less than three (3) contracts for roadway work within the past five (5) years having equal or greater value to the bid being submitted. FRSA reserves the right to request additional information, as needed, to evaluate bids prior to making an award.

3.9 Comparison of Proposals

Bids on item contracts will be compared on the basis of a total computed price arrived at by taking the sum of the estimated quantities of each item, multiplied by the corresponding unit prices and including any lump sum bids on individual items, in accordance with the estimate of quantities set forth in the Proposal form. Bids on lump sum contracts will be considered upon the basis of the lowest sum bid.

3.10 Acceptance of Bids and Basis of Award

The contract will be award, if at all, to the lowest responsive, responsible bidder. No bidder may withdraw his bid after the scheduled closing time for receipt of bids, for at least sixty (60) days. Four Rivers Sanitation Authority also reserves the right to reject any of all bids.

The bidder whose proposal is accepted will be notified of the Notice of Award issued by FRSA Executive Director. Within ten (10) days of issuance of a Notice of Award by the FRSA Executive Director, the successful bidder shall enter into a written contract for the performance of the Proposal work and shall furnish the required bonds and insurance certificates upon being served such Notice, personally, by mailing, or via email.

If the bidder does not comply with the Notice of Award, FRSA will issue a Deficiency Notice. If the bidder to whom the contract is awarded refuses or neglects to execute it or fails to furnish the required bond and insurance within five (5) days after receipt by him of Deficiency Notice, the amount of his deposit shall be forfeited and shall be retained by FRSA as liquidated damage and not as a penalty. It being now agreed that said sum is a fair estimate of the amount of damages that FRSA will sustain in case said bidder fails to enter into a contract and furnish the required bond and insurance. No plea of mistake in the bid shall be available to the bidder for the recovery of his deposit or as a defense to any action based upon the neglect or refusal to execute a contract.

3.10.1 Evaluation of Responsiveness

The responsiveness of bidders will be judged on the basis of the completeness of the bid submitted. To be responsive, a Bid must be submitted on the forms provided as part of the Bid Documents and comply with all the requirements of the Instruction to Bidders.

3.10.2 Evaluation of Responsibility

To be judged as responsible, the bidder shall:

- A. Have adequate financial resources for performance, the necessary experience, organization, technical qualifications, and facilities, or a firm commitment to obtain such by subcontracts;
- B. Be able to comply with the required completion schedule for the project;
- C. Have a satisfactory record of integrity, judgment, and performance, including, in particular, any prior performance on contracts from FRSA;
- D. Have an adequate financial management system and audit procedures, that provide efficient and effective accountability and control of all property, funds, and assets;
- E. Conform to the civil rights, equal employment opportunity and labor law requirements of the Bid Documents.
- F. Compliance with apprenticeship training participation as required in Four Rivers Sanitation Authority Ordinance No. 25 26 M 18
- G. Have satisfactorily completed no less than three (3) roadway contracts within the past five (5) years of equal or greater value to the bid being submitted.

3.11 The Rejection of Bids

FRSA reserves the right to reject any bid if the evidence submitted in the statement of the bidder's qualifications, or if investigation of such bidder fails to satisfy FRSA that such bidder is properly qualified to carry out the obligations and to complete the work contemplated therein. Any or all proposals will be rejected if there is reason to believe that collusion exists among the bidders. Conditional bids will not be accepted. FRSA reserves the right to reject any and all bids and to accept the bid which they deem most favorable to the interest of FRSA after all Proposals have been examined and canvassed.

3.12 Insurance and Bonding

Contractor shall provide all necessary insurance and bonds required to complete the project. No more than ten (10) calendar days subsequent to FRSA's issuance of an award letter, the Contractor shall provide documentation to prove that he has obtained all required insurance and bonds. FRSA shall be the sole judge as to the acceptability of any such proof.

Contractor shall provide and maintain all insurance and bonds as required by FRSA.

3.12.1 General

The Contractor shall ensure that:

- A. All insurance policies shall be specific to the project.
- B. The insurance certificate shall state: This certifies that the insurance coverage meets or exceeds that required for Plant Roadway Replacement, Capital Project No. 2406.
- C. FRSA shall be named as Additional Insured in all policies; this shall include the Owners' Contractors' Protective Policy option.
- D. All completed operations coverages and bonds shall remain in force for a period of two (2) years following acceptance of the Project and completed operations shall stay in force for two (2) years following completion of the Project.

3.12.2 Insurance

The Contractor shall, for the duration of the Contract and for two (2) years following project acceptance, maintain the following:

- A. General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit. The Contractor shall provide "XCU" coverage.
- B. Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage including coverages for owned, hired or non-owned vehicles, as applicable.
- C. Workers' Compensation and Employers Liability: Workers' Compensation limits as required by statute and Employers Liability limits of \$500,000 per accident and \$500,000 per disease.
- D. Builder's Risk (Course of Construction): Contractor shall purchase and maintain builder's risk insurance utilizing an "All Risk" (Special Perils) coverage form, with limits equal to one hundred percent (100%) of the completed value of the Work with no coinsurance penalty provisions. Coverage shall be adjusted for any amendments to the Contract that affect the completed value of the Work. Builder's risk insurance shall be maintained until written confirmation of Owner's procurement of property insurance coverage. The insurance company providing the builder's risk coverage shall grant permission for FRSA to partially occupy or use the premises under construction prior to Substantial Completion without removing or affecting the coverage.

The builder's risk insurance shall also cover materials to be incorporated into the Work which are stored off-site, in-transit or at the place of manufacture.

- E. Umbrella: \$2,000,000 per occurrence/aggregate for contracts valued at \$500,000 or over, or \$1,000,000 for contracts below \$500,000. \$10,000 is maximum allowable self-retained limit.
- F. Errors and Omissions: If the Contractor performs professional services, he shall maintain errors and omissions insurance with a limit no lower than \$1,000,000 for the duration of the contract.

The policies shall contain, or be endorsed to contain, the following provisions in the General Liability and Automobile Liability Coverage's:

1. Unless otherwise provided in paragraph "c" of this section, FRSA, its officers, officials, employees and volunteers shall be covered as additional insureds as respects liability arising out of activities performed by or on insured's general supervision of the Contractor, products and completed operations of the Contractor, premises owned, occupied or used by the Contractor, or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to FRSA, its officers, officials, employees, volunteers, or agents.
2. Unless otherwise provided in paragraph "c" of this section, the Contractor's insurance coverage shall be primary insurance as respects FRSA, its officers, officials, employees, volunteers, and agents. Any insurance or self-insurance maintained by FRSA, its officers, officials, employees, volunteers, or agents shall be excess of the Contractor's insurance and shall not contribute with it.
3. As an acceptable alternative to provisions "a" and "b" of this section, the Contractor may provide owner's and contractor's protective liability insurance with coverage limits, named insureds, and in conformity with all applicable specifications of this section.

4. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to FRSA, its officers, officials, employees, volunteers, or agents.
5. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
6. All Coverages — Each insurance policy required by this clause shall not be suspended, voided, canceled by either party, reduced in coverage, or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to FRSA.

3.12.3 Best's Ratings

FRSA shall be the sole judge of whether or not said insurer's ratios are satisfactory. FRSA's decision shall be final and FRSA's bidding procedures contain no appeal provision.

- A. Alphabetical Rating: For purposes of this Request for Bids, "insurer" shall mean any surety, insurance carrier, or other organization which proposes to provide an insurance policy or bond for the Contractor. No insurer or surety rated lower than "A-, Excellent" in the current *Best's Key Rating Guide* shall be acceptable to FRSA.
- B. Financial Size Rating: Provided an insurer's alphabetical rating is satisfactory, FRSA will examine said insurer's financial size rating.
 1. If Best classifies the insurer XII or larger, said insurer shall be acceptable to FRSA.
 2. If Best classifies the insurer as smaller than XII, but larger than VI, said insurer shall be submitted to FRSA's Director of Management Services and/or FRSA's insurance consultant for review.

Financial Size ratings less than VII are not acceptable and will disqualify the Contractor.

3.12.4 Performance Bond and Labor & Materials Payment Bond Form

The Contractor shall provide a Performance Bond and Labor & Materials Payment Bond form acceptable to FRSA. The performance bond shall be for either 100% of the contract price or for the Contractor's unit price times the estimated number of units, as applicable.

This Request for Bids contains a Performance Bond and a Labor & Material Bond form for the Contractor's use.

If the Contractor fails to provide acceptable bonds within the specified time, he shall be in default.

3.12.5 Correction of Contractor's Insurance or Bond Deficiencies

If FRSA determines that the Contractor's insurance or bond documentation does not conform to these specifications, FRSA shall inform said Contractor of the non-conformity. If said Contractor fails to provide conforming insurance or bond documentation within five (5) calendar days of FRSA's deficiency notice, he shall be in default.

3.12.6 Indemnification Clause

Contractor shall protect, indemnify, hold and save harmless and defend FRSA, its officers, officials, employees, volunteers, and agents against any and all claims, costs, causes, actions and expenses, including but not limited to attorney's fees incurred by reason of a lawsuit or claim for compensation arising in favor of any person, including the employees, officers, independent contractors, or subcontractors of the Contractor or FRSA, on account of personal injuries or death, or damages to property occurring, growing out of, incident to, or resulting directly or indirectly from the

performance by the Contractor or subcontractor, whether such loss, damage, injury or liability is contributed to by the negligence of FRSA or by premises themselves or any equipment thereon whether latent or patent, or from other causes whatsoever, except that the successful bidder shall have no liability for damages or the costs incident thereto caused by the sole negligence of FRSA.

The indemnification shall not be limited by a limitation on amount or type of damages payable by or for the Contractor or its subcontractor under any employee benefits act including, but not limited, to the Workers Compensation Act.

No inspection by FRSA, its employees, or agents shall be deemed a waiver by FRSA of full compliance with the requirements of the Contract. This indemnification shall not be limited by the required minimum insurance coverages in the Contract.

3.13 Tax Exemption

FRSA is exempt, by law, from paying bidder Federal Excise Tax and Illinois Retailers' Occupational Tax. Therefore, the bidder shall exclude those taxes from his bid. FRSA's tax exemption number is E9992-3696-06. The bidder shall include all other applicable taxes in his bid price.

Article 3 – Detailed Specifications

1 General

1.1 General

This article contains detailed specifications related to Proposal items. The work to be done under each item is discussed along with units for payment and measurement for payment. However, the descriptions given do not necessarily outline all the work to be done under any item. All work shall conform to current editions of the following: *Standard Specifications for Water and Sewer Main Construction in Illinois*, *Four Rivers Sanitation Authority General Provisions and Technical Specifications for Sanitary Sewer Construction*, and the *Illinois Department of Transportation's (IDOT's) Standard Specifications for Road and Bridge Construction (IDOT Standard Specifications)*.

Throughout these specifications, the term “Owner,” “Engineer,” and “FRSA” shall be synonymous.

In case of apparent contradictions between *Article 3 - Detailed Specifications*, *IDOT Standard Specifications*, and *General Provisions and Technical Specifications for Sanitary Sewer Construction*, *Article 3 - Detailed Specifications* shall govern.

Utility locations shown on the plans are based on records of varying reliability and are not guaranteed. The orientation and location (horizontal and vertical) of all existing underground utilities, such as gas mains, water mains, electric lines, field tiles, irrigation pipes, etc., shall be ascertained by the Contractor. The Contractor shall assume full responsibility all utility locations. The Contractor shall exercise extreme care when excavating near underground utilities to avoid damage; any damage done to utilities and treatment plant process facilities shall be repaired or replaced at the Contractor's sole expense. The Contractor shall be solely responsible for the protection, restraint and support of all utilities.

The general locations of the proposed work are governed by existing field conditions. Minor variations in alignment may be made to facilitate construction operations with prior FRSA approval.

Any construction not supervised by a Four Rivers Sanitation Authority (FRSA) Inspector be considered ineligible for payment.

No work shall be permitted on Sundays or FRSA Holidays without prior approval by the FRSA Director of Engineering. A 24-hour notice for work performed on Saturdays shall be provided to a FRSA Inspector.

The following holidays will be observed by FRSA during the anticipated construction duration:

- Friday, July 3, 2026 – Independence Day
- Monday, September 7, 2026 – Labor Day
- Monday, October 12, 2026 – Indigenous Peoples/Columbus Day
- Wednesday, November 11, 2026 – Veterans Day
- Thursday, November 26, 2026 – Thanksgiving Day
- Friday, November 27, 2026 – Friday after Thanksgiving Day

The FRSA will not supervise, direct, control, have authority over or be responsible for the Contractor's means, methods, techniques, sequences, procedures of construction, safety precautions and programs incident thereto, or for any failure by the Contractor to comply with all applicable laws and regulations in performance of the specified work. The FRSA shall not be responsible for the Contractor's failure to perform or furnish the work in accordance with the Contract documents.

The Contractor's proposed sequence of work shall be outlined in the Project Schedule and submitted prior to beginning any work. The Contractor is responsible for developing the means, methods, and procedures for all work and is responsible for compliance with all OSHA, EPA, and DOT regulatory requirements.

The Contractor shall be responsible for all tests of materials and final installation required by FRSA. All deficiencies noted by FRSA shall be corrected by the Contractor without additional cost to the Contract and prior to final payment.

The Contractor's workforce shall include a person competent in ensuring compliance with all pertinent OSHA regulations and requirements. This person must be present on-site at all times during construction and must be deputized to take any prompt preventative or corrective actions needed to avoid, prevent or mitigate existing and potential hazardous working conditions.

1.2 Submittals

The Contractor shall submit to the Engineer the items under 'Required Submittals' of each special provision prior to beginning any work. The Contractor shall:

1. Review each submittal.
2. Verify field dimensions.
3. Verify compliance with Contract documents.
4. Sign and stamp submittals to certify Contractor's review/approval.
5. Deliver reviewed submittals to FRSA for approval.

The Contractor shall allow one (1) week for FRSA to review submittals. FRSA reserves the right to delay review of interrelated submittals until all submittal components have been received. No Contract extension will be authorized due to the Contractor's failure to provide sufficient time for FRSA to perform a thorough review of submittals.

FRSA's approval of a submittal shall not be considered an order for additional, extra, or differing work, nor a guarantee of the accuracy of the information or the effectiveness of the products outlined in the submittal.

No work shall be fabricated by order of the Contractor, unless at the Contractor's risk, until review of submittals has been completed by FRSA.

When the Contract Documents call for work to be performed in accordance with the manufacturers' instructions, the manufacturers' instructions shall also be considered required submittals.

1.3 Required Submittals

1. Project Schedule

1.4 Basis of Payment

No payment will be made for costs associated with this item.

2 Notification, Access, and Special Considerations

2.1 Notification

The Contractor shall notify all utility companies prior to beginning any work. All underground utilities shall be located by the utility owner and special care shall be taken when excavating near underground utilities to avoid damage. Contractor shall contact JULIE at (800) 892-0123 for utility locations, seventy-two (72) hours, minimum, prior to construction. For utility locates within the plant boundaries, the Contractor shall contact Maintenance Division Manager Dean Fry at (815) 387-7616, seventy-two (72) hours, minimum, prior to construction to arrange for the location of plant infrastructure.

The Contractor shall notify the FRSA and the City of Rockford forty-eight (48) hours, minimum, prior to beginning any work. More advanced notification shall be provided if required by permits.

2.2 Access

The Contractor shall be responsible for the temporary maintenance of all roadways and drives for the duration of this project and shall maintain access to residences and businesses at all times during construction (i.e., drives, roadways, ramps, etc., must remain open or temporary access must be provided). All materials, equipment, labor, etc., necessary to ensure access is maintained shall be incidental to the Contract.

It shall be the Contractor's responsibility to secure any temporary or permanent access, storage or construction easements from property owner(s) deemed necessary to perform the work as shown on the plans or defined in the specifications.

2.3 Special Considerations

Treatment plant traffic shall be diverted at times according to the staging plan sheets. All traffic control devices and appropriate signage for diverting plant traffic shall be incidental to the contract.

The FRSA guard shack and truck weight scale are located in the center of project and shall remain open throughout construction. A temporary guard shack will be required during concrete ramp and stoop construction outside the existing guard shack. FRSA will be responsible for relocating and connecting existing guard shack equipment in the temporary guard shack. Contact FRSA Project Manager Andrew Hess at (815) 298-3110 to coordinate guard shack equipment relocation.

No work will be allowed during the FRSA fall land application period. Historically, land application lasts three (3) to five (5) days occurring in late October/early November. FRSA will provide the Contractor 72-hour notice prior to the start of land application.

The entrances and exits to the Household Hazardous Waste site located on the northwest corner of Kishwaukee Street and Martin Road shall be operational for weekend use throughout construction. All entrance and exit work shall be completed within thirty (30) calendar days of pavement removal. Contact Rob Wilhemi at (779) 348-7425 to coordinate weekday delivery schedule.

The Contractor shall provide temporary restroom facilities for the workforce for the duration of this project. All costs associated with the temporary restroom facilities shall be incidental to the contract.

2.4 Required Submittals

None.

2.5 Basis of Payment

No payment will be made for costs associated with notification, access, and special considerations.

3 Permit Requirements

3.1 General

Unless otherwise noted, the Contractor shall be responsible for securing all necessary permits and for all bonds, insurance, etc., and all fees required by any and all permits. Copies of all Contractor secured permits shall be provided to the FRSA prior to the start of construction.

The Contractor shall comply with the requirements of any and all permits obtained and required for the construction of this project. Should conflicts or contradictions arise between the plans, specifications and permits, the permits shall govern.

All work within the public Right-of-Way shall be subject to the regulations and requirements of the City of Rockford. The Contractor will be responsible for the City of Rockford Right-of-Way Permit application. Contact Jordan Masemore at (779)-348-7634 or jordan.masemore@rockfordil.gov.

City of Rockford Develop Permit DEVELOP20251013 was approved April 13, 2026.

EcoCAT clearance for IDNR Project Number 2616718 was granted June 2, 2026.

IHPA clearance for SHPO Log #003060326 was granted June 24, 2026.

The total disturbed area for this project is estimated to be 2.56 acres therefore a National Pollutant Discharge Elimination System (NPDES) permit is required which will be procured by FRSA.

3.2 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Copies of signed Contractor secured permits, as applicable.

3.3 Basis of Payment

No payment will be made for costs associated with permitting.

4 Abandon and Fill Existing Sanitary Sewer

4.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to abandon and fill existing sewers as shown on the plans.

This work shall consist of abandoning and filling existing sanitary sewers of various diameters and lengths from manhole to manhole or as shown on the plans. Prior to filling sewers, plugs and temporary piping and valves shall be installed to facilitate filling operations and air venting. All temporary piping and valves shall be considered incidental to this item. Plugs and temporary piping shall be installed at each end to contain the grout to only the sewer sections to be filled and to allow air to escape during filling.

Sanitary sewers designated to be abandoned shall be abandoned by filling the sewer with flowable bentonite grout material as full as possible. After insertion of the grout material is completed, as determined by the Inspector, the ends of the abandoned pipe shall be plugged to the satisfaction of the Engineer by using brick and mortar or another approved method.

Not only shall the mainline sewer be filled with flowable grout material but all other voids either upstream of the mainline sewer or outside of the sewer pipe shall also be filled. Voids outside of the mainline pipe caused by broken and missing pipe and the subsequent erosion of supporting pipe materials shall also be filled as much as possible.

All pavement, sidewalks, and other surfaces shall be cleaned and free of excess grout material.

4.2 Materials

1. The bentonite grout material shall have the following mix design:
 - “Mix” – 60%
 - Mason Sand or Torpedo Sand – 40%
 - Bentonite Vul-Clay Powder – 5 pounds per 25 pounds of “Mix” and Sand Water – Add as required to facilitate pumping the material.
2. The “Mix” design is detailed below. All material in the “Mix” shall be pulverized, mixed and screened with 100% passing through a #4 sieve.
 - Light Sandy Clay Mixture – 80% (100% passing #4 Sieve)
 - Limestone Powder – 15% (100% passing #4 Sieve)
 - Mason Sand – 5%
3. The Bentonite Vul-Clay Powder shall have the following properties:
 - Ph: 9-10
 - Moisture: 9%
 - Grind % - 200 Mesh 38%
4. Cellular concrete conforming to *Section 1029 of IDOT Standard Specifications for Road and Bridge Construction*, current edition will also be allowed. Minimum compressive strength shall be 50 PSI at 28 days (ASTM C495/C796).

4.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Bentonite grout mix design.
2. Cellular concrete mix design.

4.4 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Abandon and Fill Existing Sanitary Sewer.***

5 Aggregate Base Course

5.1 Description:

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 351 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to install compacted aggregate base course as shown on the plans.

This work shall consist of subgrade preparation, removal and disposal of excess materials, furnishing, placing, installing and compacting coarse aggregate, and trimming and prepping aggregate base course for subsequent pavement placement.

Aggregate base course shall be installed to the lines, grades, and depths shown on the plans.

Contractor shall compact the base course and provide an adequate number of compaction tests as determined by the FRSA. Compaction tests must be performed as work progresses. All compaction tests must meet 95% of standard Proctor density and be performed by an approved independent geotechnical company.

5.2 Materials:

1. Coarse aggregate:
 - a. Where a 12-inch course is specified, the bottom 6 inches shall be IDOT gradation CA 2, while the upper 6 inches shall be IDOT gradation CA 6.
 - b. Where a 10-inch course is specified, the bottom 5 inches shall be IDOT gradation CA 2, while the upper 5 inches shall be IDOT gradation CA 6.
 - c. Coarse aggregates shall be in accordance with Article 1004.04 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. Crushed concrete materials approved by IDOT and in accordance with Article 1004.04 may be used.

5.3 Required Submittals:

The Contractor shall submit the following items for review and approval:

1. Material gradation certificates for coarse aggregate.

5.4 Basis of Payment:

This work shall be paid for at the Contract unit price per square yard (SQ YD) for **Aggregate Base Course, Type P** of the thickness specified.

6 Aggregate Subgrade Improvement

6.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to perform subgrade improvements of various sizes and depths as shown on the plans.

This work shall consist of constructing an aggregate subgrade improvement in areas where unsuitable material has been removed. Removal and disposal of unsuitable material shall be included in the cost of **Removal & Disposal of Unsuitable Material**.

Prior to aggregate subgrade placement, the subgrade area shall be proof-rolled and witnessed by the Engineer. Proof-rolling shall consist of using a fully loaded tandem axle dump truck to identify locations of structurally unsuitable subgrade. Proof-rolling shall be scheduled and completed so as to avoid a rain event between proof-rolling and aggregate base course placement. At the direction of the FRSA, the subgrade may be required to dry out for a period of time in an attempt to identify areas of unsuitable material prior to fortifying the subgrade with additional aggregate subgrade improvement.

The maximum nominal lift thickness of aggregate gradations CA-01, CS-01, CS-02, and RR-1 shall be 24 inches. All aggregate lifts shall be compacted to the satisfaction of the FRSA. If the moisture content of the material is such that satisfactory compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the FRSA. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

6.2 Materials

1. Aggregate for subgrade improvement shall be IDOT gradation CA-01, CS-01, CS-02, or RR-1 coarse aggregate capped with 3 inches of gradation CA-06 coarse aggregate in accordance with Article 1004.04 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

6.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material gradation certificates for aggregate for subgrade improvement.

6.4 Method of Measurement

This work will be measured for payment in place in cubic yards. Removal and disposal of unsuitable material shall be measured as a separate item.

6.4 Basis of Payment

This work shall be paid for at the Contract unit price per cubic yard (CU YD) for ***Aggregate Subgrade Improvement***.

7 Barrier Gate

7.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install barrier gates as shown on the plans.

This work shall consist of furnishing and installing electric commercial barrier gates. Placement shall be as shown on the plans or as directed by the Engineer. This work shall include installation, electrical, fiber and sensor connections, programming, and testing and adjusting. The gate shall be supplied as a unit and shall function to the full capacity as described in this special provision.

Gates shall be mounted per manufacturer's instructions. Gates shall be mounted on a concrete pad that is 6 inches minimum larger than the mounting post on all sides. Gate post foundations or

mounting pads shall be per manufacturer's recommendations. The Contractor shall submit a design to the Engineer with the dimensions and location of the foundations/mounting pads for approval.

Gates shall have the following functionality:

- Gates shall open and close from a manual switch or remote located in the guard house.
- Gates shall automatically close after a set amount of time after opening.
- Gates shall be capable of opening and closing at a set time of day.
- Gates shall be compatible and capable of future RFID control by same manufacturer. (Future installation by others.)

This work shall include programming, troubleshooting, testing, and adjusting sensors and electrical equipment to obtain the full functionality as described in this special provision. All materials and labor required to furnish a complete system shall be included in this item.

7.2 Materials

1. Barrier gates shall be Liftmaster MA or approved equal. Gates shall have all functionality as described in this special provision. Gates shall have an opening speed of not less than 2.5 seconds, be battery backup capable, have aluminum LED barrier arms of 14 foot length, have a 24 VDC continuous duty, prewired motor. The motor, sensors, radio receiver, and any ancillary items shall be manufactured to operate as a complete system.

7.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Barrier gate system (motor, controls, sensors, components) specifications.
2. Foundation/mounting pad design and specifications.
3. O&M manual.

7.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for **Barrier Gate**.

8 Bollard Removal

8.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to remove bollards as shown on the plans.

This work shall consist of the complete removal and disposal of concrete filled pipe bollards and foundations. All bollard related materials shall be removed and properly disposed of.

This work shall include backfilling and compacting voids from removed bollards with appropriate trench backfill.

8.2 Required Submittals

None.

8.3 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Bollard Removal***.

9 Chain Link Fence Removal

9.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to remove and properly dispose of chain link fence as shown on the plans.

This work shall consist of the complete removal and proper disposal of chain link fence, posts, and all appurtenances.

The FRSA treatment plant perimeter shall be protected from unauthorized access at all times, and shall be closed except when work is being performed. The Contractor shall notify the FRSA when work requires the treatment plant perimeter to be breached. In order to maintain security to the FRSA treatment plant and Household Hazardous Waste site, temporary fence may be required (depending on the duration of fence removal operations) and shall be included in the cost of ***Chain Link Fence, 6', Special***.

9.2 Required Submittals

None.

9.3 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Chain Link Fence Removal***.

10 Chain Link Fence

10.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 664 of the *IDOT Standard Specifications for Road and Bridge Construction, current edition*. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install chain link fence as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Treatment Plant Perimeter Fence Detail

The FRSA treatment plant perimeter shall be protected from unauthorized access at all times, and shall be closed except when work is being performed. The Contractor shall notify the FRSA when work requires the treatment plant perimeter to be breached. In order to maintain security, temporary fence may be required (depending on the duration of fence removal operations) and shall be included in the cost of this work.

Chain link fence shall be installed to the lines shown on the plans. Chain link fence shall follow the contours of the finished grade line with a 3-inch space below the bottom of the fabric. On uneven ground, this space may vary from 1 inch to 5 inches for a maximum of an 8-foot length.

Chain link gates shall be installed as shown on the plans and will be paid for under a separate item.

Terminal (corner or end) posts shall be embedded in cast-in-place concrete cylinder foundation 14 inches in diameter by 36 inches deep. Line posts connected to a brace bar shall be embedded in cast-in-place concrete foundation cylinder 12 inches in diameter by 30 inches deep. Concrete cylinder foundations shall be finished with a 1-inch crown. All other line posts shall be driven 36 inches deep.

10.2 Materials

1. All posts, chain link fabric, hardware, barbed wire, and other appurtenances shall be aluminized steel.
2. Posts & pipe rails:
 - a. Posts and rails shall be SS40 steel pipe per ASTM F1043 group IC, Type D internal coating, Type B external coating.
 - b. Terminal posts shall be 3" nominal diameter (2.875" actual O.D.) with a pipe wall thickness of 0.16".
 - c. Line posts shall be 2 1/2" nominal diameter (2.375" actual O.D.), with a pipe wall thickness of 0.13".
 - d. Top pipe rails shall be 1 5/8" nominal diameter (1.56" actual O.D.), with a pipe wall thickness of 0.111".
3. Fabric shall be 9 gauge with 2 inch mesh, and aluminized before weave with a 0.40 ounce/square foot coating meeting ASTM A491.
4. Barbed wire arms shall be galvanized, commercial grade 45° angle arms, with slots for 3 runs of barbed wire.
5. Barbed wire shall be four-point, 12.5 gauge, with aluminized coating of 0.30 ounce/square foot per ASTM A585.
6. Fabric ties shall be 9 gauge aluminum bands or wire.
7. Tension wire shall be 7 gauge aluminum coated coil spring wire per ASTM A824.

10.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications and shop drawings for chain link fence and appurtenances.

10.4 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Chain Link Fence, 6', Special***

11 Chain Link Gates Removal

11.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to salvage and store chain link gates as shown on the plans.

This work shall consist of the salvaging and storage of chain link gates, fabric, posts, sensors, control cabinets, and all appurtenances. Electric and fiber supply wires shall be terminated as shown on the plans. Unsalvageable materials shall be disposed of at the Contractor's expense.

The Contractor shall salvage gate materials and store on site for reinstallation elsewhere on the project. The existing 30-foot, motor operated, chain link gate and motor operator located on Martin Road shall be salvaged and reinstalled northwest of the proposed parking lot as Gate A. Reinstallation shall be included in the cost of **Chain Link Gates, Motor Operated Rolling, 30' Opening**. The existing 42-foot, double swing gate located south of the Household Hazardous Waste site shall be salvaged and turned over to FRSA.

The FRSA treatment plant perimeter shall be protected from unauthorized access at all times, and shall be closed except when work is being performed. The Contractor shall notify the FRSA when work requires the treatment plant perimeter to be breached. In order to maintain security to the FRSA treatment plant and Household Hazardous Waste site, temporary fence may be required (depending on the duration of fence removal operations) and shall be included in the cost of **Chain Link Fence, 6', Special**.

11.2 Required Submittals

None.

11.3 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for **Chain Link Gates Removal**.

12 Chain Link Gates, Manual Rolling

12.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 664 of the *IDOT Standard Specifications for Road and Bridge Construction, current edition*. This work shall include all equipment, materials, labor, transportation, and workmanship to reinstall chain link gates as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Treatment Plant Perimeter Fence Rolling Gates Detail
- FRSA Treatment Plant Perimeter Fence Detail

The FRSA treatment plant perimeter shall be protected from unauthorized access at all times, and shall be closed except when work is being performed. The Contractor shall notify the FRSA when work requires the treatment plant perimeter to be breached. In order to maintain security to the FRSA treatment plant and Household Hazardous Waste site, temporary fence may be required (depending on the duration of fence removal operations) and shall be included in the cost of **Chain Link Fence, 6', Special**.

FRSA is in possession of a salvaged 30-foot, manual rolling, chain link gate which shall be reinstalled as Gate B shown on the plans. Chain link fence shall follow the contours of the finished grade line with a 3-inch space below the bottom of the fabric. On uneven ground, this space may vary from 1 inch to 5 inches for a maximum of an 8-foot length.

Terminal (corner or end) and gate posts shall be embedded in cast-in-place concrete cylinder foundation 14 inches in diameter by 36 inches deep. Concrete cylinder foundations shall be finished with a 1-inch crown.

Gates shall be equipped with proper hinges and latches, per manufacturer's instructions. Gate latches shall be able to accept a padlock.

Gate length is variable depending on the opening width and shall be designed accordingly. All gates shall be designed and manufactured per manufacturers' recommendations for strength and rigidity. All gates having an opening greater than 30-feet shall be aluminum cantilever track type. The Contractor may be required to furnish additional parts if needed.

12.2 Materials

Materials shall be from the 30 foot, manual rolling, chain link gate in the possession of FRSA. In the event replacement materials are necessary, the Contractor shall furnish, at their expense, additional materials in accordance with the following:

1. All posts, chain link fabric, hardware, barbed wire, and other appurtenances shall be aluminized steel.
2. Posts & pipe rails for gates:
 - a. Posts and rails shall be SS40 steel pipe per ASTM F1043 group IC, Type D internal coating, Type B external coating.
 - b. Gate posts shall be 4" nominal diameter (4.00" actual O.D.), with a pipe wall thickness of 0.16".
 - c. Top & bottom gate rails shall be 2 1/2" nominal diameter (1.375" actual O.D.), with a pipe wall thickness of 0.13".
 - d. Side gate rails shall be 2" nominal diameter (1.90" actual O.D.), with a pipe wall thickness of 0.12".
 - e. Gate brace pipe shall be 1 5/8" nominal diameter (1.66" actual), with a pipe wall thickness of 0.111".
3. Fabric shall be 9 gauge with 2 inch mesh, and aluminized before weave with a 0.40 ounce/square foot coating meeting ASTM A491.
4. Fabric ties shall be 9 gauge aluminum bands or wire.

12.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications and shop drawings for chain link fence and appurtenances.

12.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Chain Link Gates, Manual Rolling, 30' Opening***.

13 Chain Link Gates, Manual Swinging Double

13.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 664 of the *IDOT Standard Specifications for Road and Bridge Construction, current edition*. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install chain link gates as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Treatment Plant Perimeter Fence Swinging Gates Detail
- FRSA Treatment Plant Perimeter Fence Detail

The FRSA treatment plant perimeter shall be protected from unauthorized access at all times, and shall be closed except when work is being performed. The Contractor shall notify the FRSA when work requires the treatment plant perimeter to be breached. In order to maintain security to the FRSA treatment plant and Household Hazardous Waste site, temporary fence may be required (depending on the duration of fence removal operations) and shall be included in the cost of **Chain Link Fence, 6', Special**.

Chain link gates shall be installed to the lines shown on the plans. Chain link fence shall follow the contours of the finished grade line with a 3-inch space below the bottom of the fabric. On uneven ground, this space may vary from 1 inch to 5 inches for a maximum of an 8-foot length.

Terminal (corner or end) posts shall be embedded in cast-in-place concrete cylinder foundation 14 inches in diameter by 36 inches deep. Concrete cylinder foundations shall be finished with a 1-inch crown.

Gates shall be equipped with proper hinges and latches, per manufacturer's instructions. Gate latches shall be able to accept a padlock.

13.2 Materials

1. All posts, chain link fabric, hardware, barbed wire, and other appurtenances shall be aluminized steel.
2. Posts & pipe rails for gates:
 - a. Posts and rails shall be SS40 steel pipe per ASTM F1043 group IC, Type D internal coating, Type B external coating.
 - b. Gate posts shall be 4" nominal diameter (4.00" actual O.D.), with a pipe wall thickness of 0.16".
 - c. Pipe rails for gates shall be 1 5/8" nominal diameter (1.66" actual O.D.), with a pipe wall thickness of 0.111".
3. Fabric shall be 9 gauge with 2 inch mesh, and aluminized before weave with a 0.40 ounce/square foot coating meeting ASTM A491.
4. Fabric ties shall be 9 gauge aluminum bands or wire.

13.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications and shop drawings for chain link fence and appurtenances.

13.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Chain Link Gates, Manual Swinging Double, 10' Opening.***

14 Chain Link Gates, Motor Operated Rolling

14.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 664 of the *IDOT Standard Specifications for Road and Bridge Construction, current edition*. This work shall include all equipment, materials, labor, transportation, and workmanship to reinstall chain link gates and motor operators as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Treatment Plant Perimeter Fence Rolling Gates Detail
- FRSA Treatment Plant Perimeter Fence Rolling Gate Operator Detail

The FRSA treatment plant perimeter shall be protected from unauthorized access at all times, and shall be closed except when work is being performed. The Contractor shall notify the FRSA when work requires the treatment plant perimeter to be breached. In order to maintain security to the FRSA treatment plant and Household Hazardous Waste site, temporary fence may be required (depending on the duration of fence removal operations) and shall be included in the cost of ***Chain Link Fence, 6', Special.***

The salvaged 30-foot, motor operated, chain link gate from Martin Road shall be reinstalled as Gate A shown on the plans. Chain link fence shall follow the contours of the finished grade line with a 3-inch space below the bottom of the fabric. On uneven ground, this space may vary from 1 inch to 5 inches for a maximum of an 8-foot length.

Terminal (corner or end) and gate posts shall be embedded in cast-in-place concrete cylinder foundation 14 inches in diameter by 36 inches deep. Concrete cylinder foundations shall be finished with a 1-inch crown.

Gates shall be equipped with proper hinges and latches, per manufacturer's instructions. Gate latches shall be able to accept a padlock.

Gate length is variable depending on the opening width and shall be designed accordingly. All gates shall be designed and manufactured per manufacturers' recommendations for strength and rigidity. All gates having an opening greater than 30 feet shall be aluminum cantilever track type.

The Contractor shall be responsible for ensuring the gate operator is in a completely finished and operating condition, including all timing, sensing, and reverse adjustments. The Contractor may be required to furnish additional parts if needed. The Contractor shall connect the electrical and fiber optic cable supply as part of this project.

14.2 Materials

Materials shall be salvaged from the 30-foot, motor operated, chain link gate and motor operator from Martin Road. In the event replacement materials are necessary, the Contractor shall furnish, at their expense, additional materials in accordance with the following:

1. All posts, chain link fabric, hardware, barbed wire, and other appurtenances shall be aluminized steel.
2. Posts & pipe rails for gates:
 - a. Posts and rails shall be SS40 steel pipe per ASTM F1043 group IC, Type D internal coating, Type B external coating.
 - b. Gate posts shall be 4" nominal diameter (4.00" actual O.D.), with a pipe wall thickness of 0.16".
 - c. Top & bottom gate rails shall be 2 1/2" nominal diameter (1.375" actual O.D.), with a pipe wall thickness of 0.13".
 - d. Side gate rails shall be 2" nominal diameter (1.90" actual O.D.), with a pipe wall thickness of 0.12".
 - e. Gate brace pipe shall be 1 5/8" nominal diameter (1.66" actual), with a pipe wall thickness of 0.111".
3. Fabric shall be 9 gauge with 2 inch mesh, and aluminized before weave with a 0.40 ounce/square foot coating meeting ASTM A491.
4. Fabric ties shall be 9 gauge aluminum band or wire.
5. Gate motor operator shall be Linear HSI G slide gate motor operator.

14.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications and shop drawings for chain link fence and appurtenances.

14.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Chain Link Gates, Motor Operated Rolling, 30' Opening.***

15 Class B Patches

15.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 442 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct Class B patches as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standard 442101

This work shall consist of pavement removal, aggregate base removal, excavation and preparation, aggregate base replacement, and replacement patching.

Quality control and quality assurance testing shall be according to IDOT Check Sheet #23 *Special Provision for Quality Control/Quality Assurance of Concrete Mixtures*, revised January 1, 2022 of the *IDOT Supplemental Specifications and Recurring Special Provisions*, adopted January 1, 2025. All material testing and costs associated with conformance with this Check Sheet shall be included in this pay item and will not be paid for separately.

Aggregate base course shall be replaced in accordance with *Article 3, Section 5 Aggregate Base Course* at a depth matching the existing aggregate base course.

This work shall include furnishing, maintaining, and removing a suitable concrete wash-out container. Concrete shall not be placed until this container is available for use.

15.2 Materials

1. Materials shall be in accordance with Article 442.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

15.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC mix designs.

15.4 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Class B Patches, Type IV, 10"***.

16 Class SI Concrete Outlet

16.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 606 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct concrete gutter outlets as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT D2 18.4 Curb and Gutter Outlet, Special

Quality control and quality assurance testing shall be according to IDOT Check Sheet #23 *Special Provision for Quality Control/Quality Assurance of Concrete Mixtures*, revised January 1, 2022 of the *IDOT Supplemental Specifications and Recurring Special Provisions*, adopted January 1, 2026. All material testing and costs associated with conformance with this Check Sheet shall be included in this pay item and will not be paid for separately.

This work shall include furnishing, maintaining, and removing a suitable concrete wash-out container. Concrete shall not be placed until this container is available for use.

16.2 Materials

1. All materials shall be per Article 606.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

16.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC mix designs.

16.4 Method of Measurement

This work will be measured for payment according to the pre-defined quantities given in the respective detail(s). In the event that the work varies from the detail(s), this work will be measured for payment in place and the volume of concrete computed in Cubic Yards.

16.5 Basis of Payment

This work shall be paid for at the Contract unit price per cubic yard (CU YD) for **Class II Concrete (Outlet)**.

17 Concrete Cradle for Sanitary Sewer

17.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to construct concrete pipe support cradles for sanitary sewers as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Standard Details
- FRSA Concrete Cradle For Sanitary Sewer Detail

This work shall consist of constructing a concrete cradle support for sanitary sewers where shown on the plans. This work shall include all labor, equipment, materials, temporary construction access, dewatering, bypass pumping, bracing, shoring, creek diversion, concrete forming, excavation, trench backfill, etc. to complete the concrete support cradles as shown on the plans or as directed by the FRSA.

The lower sanitary sewer pipe shall be exposed to the spring line at the location of the pipe crossing. Concrete support cradles shall be placed on both sides of the lower pipe while maintaining 6 inches clearance from the pipe. Cradles shall be 12 inches wide and shall extend in height from the spring line of the lower pipe to 1/4 of the upper pipe.

The proposed encasement shall be either earthen or wood formed. Earthen forming will not be permitted unless the soils are cohesive enough to support a vertical face and to prevent soil/concrete migration, as determined by the Engineer. The use of earthen or bank poured concrete shall be approved by the Engineer. Wood or manufactured forms shall be provided for the full length and width of each continuous unit formed. The forms shall be braced or tied to provide the structural capacity required to produce finished concrete to the lines and grades shown on the plans.

Forms shall remain in place for a minimum of 24 hours or as directed by the Engineer. The method of form removal shall not result in damage to the concrete. If forms are removed prior to the completion of the required curing period, curing shall be resumed with an approved curing method for the remainder of the curing period.

Concrete shall be placed only on undisturbed earth. No concrete shall be placed on ice, snow, or frozen foundation material. The method and manner of placing concrete shall be such as to avoid the segregation or separation of the aggregates or the displacement of reinforcement. The external surface of all concrete shall be thoroughly worked during the operations of placing in such a manner as to work the mortar against the forms to produce a smooth finish free of honeycomb and with a minimum of water and air pockets. Open troughs and chutes shall be extended as nearly as practical to the point of deposit. Dropping the concrete a distance of more than 5 feet will not be permitted. The concrete shall be consolidated by internal vibration. The Contractor shall provide and use a sufficient number of vibrators to ensure that consolidation can be started immediately after the concrete has been deposited in the forms. Concrete shall not be exposed to the action of water before setting, or be deposited in water, except with the approval of the Engineer.

17.2 Materials

1. Concrete shall be IDOT Class DS according to Section 1020 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

17.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC mix designs.

17.4 Method of Measurement

This work will be measured for payment for each pipe crossing (one per crossing) where concrete cradles are shown on the plans. This work shall include installing concrete cradles on both sides of the crossing.

17.5 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Concrete Cradle for Sanitary Sewer***.

18 Concrete Curb & Gutter

18.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 606 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct combination concrete curb & gutter and/or low flow concrete gutter as shown on the plans.

This work within the public Right-of-Way shall be in accordance with the following standards or details:

- City of Rockford Combination Concrete Curb & Gutter, Type M6.18 Modified Detail

This work on FRSA property shall be in accordance with the following standards or details:

- FRSA Treatment Plant Combination Concrete Curb & Gutter Type M6.18, Modified & Concrete Gutter, Low Flow Detail

Curb and gutter shall include 'tip-out' and 'depressed' sections at the locations indicated in the plans and as directed by the Engineer. For payment purposes, no separate distinction will be made for standard, tip-out, or depressed curb and gutter.

Where proposed curb is to be joined to existing curb, two (2) one inch (1") diameter smooth dowels 18" inches long shall be drilled and epoxy grouted into the existing curb and gutter at mid-depth.

Quality control and quality assurance testing shall be according to IDOT Check Sheet #23 *Special Provision for Quality Control/Quality Assurance of Concrete Mixtures*, revised January 1, 2022 of the *IDOT Supplemental Specifications and Recurring Special Provisions*, adopted January 1, 2025. All material testing and costs associated with conformance with this Check Sheet shall be included in this pay item and will not be paid for separately.

This work shall include furnishing, maintaining, and removing a suitable concrete wash-out container. Concrete shall not be placed until this container is available for use.

18.2 Materials

1. All materials shall be per Article 606.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

18.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC mix designs.

18.4 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Combination Concrete Curb & Gutter, Ty. M6.18 (Modified)*** or ***Concrete Gutter, Low Flow***.

19 Construction Layout

19.1 Description

This work shall be in accordance with IDOT Check Sheet #9 *Construction Layout Stakes*, revised January 1, 2022 of the *IDOT Supplemental Specifications and Recurring Special Provisions*, adopted January 1, 2026, as included in this Contract, except as modified herein, and shall consist of the Contractor providing all layout for the construction of this project to the lines and grades as shown on the plans.

The Engineer shall perform layout checks periodically, and specifically before any PCC pavement, curb and gutter, and HMA paving is performed. The Contractor shall set sufficient stakes as are necessary for the Engineer to determine that the work is in conformance with the lines and grades shown on the plans. The Engineer may request construction layout stakes in addition to the Contractor's layout at any time.

19.2 Required Submittals

None.

19.3 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Construction Layout***

20 Curb and Gutter Removal

20.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 440 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to completely remove and properly dispose of concrete curb, concrete gutter, or combination concrete curb & gutter as shown on the plans.

Removal limits shall be sawcut full depth prior to removing curb & gutter.

20.2 Required Submittals

None.

20.3 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Curb Removal*** or ***Combination Curb & Gutter Removal***.

21 Detectable Warnings

21.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 424 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct detectable warnings as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standard 424001

Detectable warnings shall be manufactured products set in the poured sidewalk. Box outs with poured colored concrete will not be allowed.

Detectable warnings shall consist of a surface of truncated domes aligned in a square pattern (parallel alignment) or triangular pattern. Dome spacing, dome size and detectable warning location are shown in Highway Standard 424001 "Curb Ramps for Sidewalks". Detectable warning surfaces shall contrast visually with the adjacent walking surfaces by having light on dark or dark on light, and shall extend 24 inches in the direction of travel and the full width of the curb ramp, landing or sidewalk. The required texturing shall be truncated dome construction and shall consist of Federal Standard color 20109 to meet the contrast requirement.

All detectable warnings to be installed shall conform to all applicable laws and regulations including, but not limited to, most current PROWAG and ADA requirements. The Contractor shall be knowledgeable of PROWAG and ADA requirements.

21.2 Materials

1. Detectable warnings shall be made of fiberglass and carbon reinforced composite, as manufactured by ADA Solutions or approved equal. Physical characteristics shall be as follows:
 - a. Compressive Strength: 28,900 psi (ASTM D695)

- b. Flexural Strength: 29,300 psi (ASTM D790)
- c. Slip Resistance: 1.18 dry/1.05 Wet (ASTM C1028)
- d. Color: Federal Standard 20109 (ADA Solutions Brick Red 20109)

21.2 Required Submittals

The Contractor shall submit the following items for review and approval:

- 1. Detectable warning product material specifications.

21.3 Basis of Payment

This work shall be paid for at the Contract unit price per square foot (SQ FT) for **Detectable Warnings**.

22 Filter Fabric

22.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 282 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to install filter fabric as shown on the plans.

This work shall consist of preparing subgrade and installing filter fabric as shown on the plans or as directed by the Engineer.

The subgrade and filter fabric placement shall be per Section 282 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition and to the satisfaction of the Engineer. Fabric shall be covered in a timely fashion with stone riprap. Filter fabric shall be wrapped into the rip rap section where shown in the plans and details.

22.2 Materials

- 1. Filter fabric shall be according to Sections 282 and 1080 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

22.3 Required Submittals

The Contractor shall submit the following items for review and approval:

- 1. Material certificates for filter fabric.

22.4 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for **Filter Fabric**.

23 Fire Hydrant with 6" Valve and Valve Box

23.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, *City of Rockford Water Division Specifications*, and *Standard Specifications for Water and Sewer Main Construction in Illinois*, latest edition. This work shall include all equipment,

materials, labor, transportation, and workmanship to furnish and install fire hydrant assemblies as shown on the plans.

This work shall be in accordance with the following standards or details:

- City of Rockford Fire Hydrant Complete Detail

This work shall include permits, mobilization, site preparation, bypass pumping, earth excavation, trench backfill and compaction, pipe bedding, trench dewatering, power tamping, grading and dust control, and all other materials, labor, supervision, transportation, services, and all else that is necessary for the completion of the work and not included elsewhere. Utility relocation shall be included in the work covered in this item unless specifically provided for elsewhere.

This item shall include the hydrant, valve and box, blocking, trench backfill, V-Bio poly wrap, sufficient lead to make the connection, and making the connection to the tee or main, whichever is required.

Valves and valve boxes shall be furnished and installed in accordance with the City of Rockford Water Division specifications and the requirements of the Engineer. The contractor shall contact the Water Division Superintendent or her representatives for approval of grade, type and style of valves and fittings required to complete installation prior to bidding or placing. Hydrant shall have a Harrington Integral Hydrant Storz nozzle installed on hydrants during assembly and shall meet or exceed the requirements of AWWA C502 regarding material and pressure testing. The Storz nozzle shall have a brass metal face seal and hard-anodized aluminum Storz ramps and lugs. The aluminum's finish shall be hard coat anodized to Mil-A-8625f, Type 3, dark gray. The adapter shall be made of forged or extruded 6061-T6 aluminum. The blind cap shall have hard-anodized aluminum Storz ramps and lugs, made of forged or extruded 6061-T6 aluminum. The center cap shall be equipped with a suction seal. The cap shall be connected to the adapter of the hydrant with a 0.15" vinyl coated aircraft cable. Information on any anchored couplings and threaded rods to be used shall be sent to the Owner for approval. All fittings shall be furnished and installed in accordance with the City of Rockford Water Division specifications and the requirements of the Engineer.

23.2 Materials

1. Ductile Iron fittings: Ductile iron fittings shall be mechanical joint restrained ductile iron with a pressure rating of 250 psi meeting the requirements of ANSI/AWWA C153. Joints shall meet the requirements of ANSI/AWWA C111.

23.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Ductile iron fitting material specifications.
2. Fire hydrant assembly material specifications.
3. Valve material specifications.
4. Valve box material specifications.

23.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Fire Hydrant with 6" Valve and Valve Box.***

24 Fire Hydrants to Be Removed

24.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, *City of Rockford Water Division Specifications, and Standard Specifications for Water and Sewer Main Construction in Illinois*, latest edition. This work shall include all equipment, materials, labor, transportation, and workmanship to remove and dispose of fire hydrant assemblies as shown on the plans.

This work shall include permits, mobilization, site preparation, bypass pumping, earth excavation, trench backfill and compaction, pipe bedding, trench dewatering, power tamping, grading and dust control, and all other materials, labor, supervision, transportation, services, and all else that is necessary for the completion of the work and not included elsewhere. Utility relocation shall be included in the work covered in this item unless specifically provided for elsewhere.

This item shall consist of furnishing and installing all material and providing all labor necessary to remove the hydrant and auxiliary valve and cut and plug the existing water main with cement and/or remove tee in existing main and reconnect when applicable. This item will also include removal and proper disposal of all material required to complete the work. The excavated hole shall be properly backfilled and shall include trench backfill where required.

All fittings shall be furnished and installed in accordance with the City of Rockford Water Division specifications and the requirements of the Engineer.

The contractor shall remove the hydrant and deliver to the City of Rockford Water Division.

24.2 Materials

1. Ductile Iron fittings: Ductile iron fittings shall be mechanical joint restrained ductile iron with a pressure rating of 250 psi meeting the requirements of ANSI/AWWA C153. Joints shall meet the requirements of ANSI/AWWA C111.

24.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Ductile iron fitting and restrained joint material specifications.

24.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Fire Hydrant To Be Removed***.

25 Guardrail Removal

25.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 632 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to remove guardrails as shown on the plans.

This work shall consist of the complete removal and disposal of guardrail rails, posts and all other related materials and appurtenances. All guardrail related materials shall be removed and properly disposed of.

25.2 Required Submittals

None.

25.3 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Guardrail Removal***.

26 Handholes

26.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 814 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install handholes as shown on the plans.

This work shall include all modifications to the composite concrete handhole necessary to install the handhole at the locations shown on the plans. This work shall include adjusting or tipping handholes or handhole frames as necessary to match flush with final proposed grade. This work shall include coring or cutting the handhole as needed to fit conduit penetrations.

Lids shall have the following lettering, as specified by the type of manhole being installed: "ELECTRIC", "FIBER", or as otherwise directed by the Engineer.

26.2 Materials

1. All materials shall be per Article 814.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Rectangular handholes shall be composite concrete per Article 1088.05 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
3. Round handholes shall be precast concrete per Article 1042.17 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

26.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Handhole, lid, and accessory specifications.

26.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Handhole*** or ***Handhole, 2' Dia***.

27 Hot-Mix Asphalt Binder Course

27.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 406 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct hot-mix asphalt pavements as shown on the plans.

Prime coat shall be MC-30 or PEP bituminous materials applied in accordance with article 406.05 (b) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. The curing period shall not be less than 24 hours for MC-30 or 4 hours for PEP. All costs associated with placement of prime coat shall be included in this item and will not be paid for separately.

27.2 Materials

1. Hot-mix asphalt shall be mixture IL-19.0 N50 in accordance with Section 1030 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Prime coat shall be MC-30 or PEP in accordance with Section 1032 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

27.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. HMA mix designs.
2. Prime coat material certifications.

27.4 Basis of Payment

This work shall be paid for at the Contract unit price per ton (TON) for ***Hot-Mix Asphalt Binder Course, IL-19.0, N50.***

28 Hot-Mix Asphalt Surface Course

28.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 406 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct hot-mix asphalt pavements as shown on the plans.

Tack coat shall be SS-1 bituminous materials applied in accordance with article 406.05 (c) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. Tack coat shall be fully cured prior to placement of subsequent HMA courses. All costs associated with placement of tack coat shall be included in this item and will not be paid for separately.

28.2 Materials

1. Hot-mix asphalt shall be mixture IL-9.5 Mix 'D', N50 in accordance with Section 1030 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Tack coat shall be SS-1 in accordance with Section 1032 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

28.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. HMA mix designs.
2. Tack coat material certifications.

28.4 Basis of Payment

This work shall be paid for at the Contract unit price per ton (TON) for ***Hot-Mix Asphalt Surface Course, IL9.5, Mix "D", N50.***

29 Inlet and Pipe Protection

29.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 280 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship for inlet and pipe protection as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standard 280001
- Illinois Urban Manual Standard IUM-561D

This work shall include the furnishing, installation, maintenance, and removal of inlet and pipe protection. All required inlet and pipe protection shall be installed prior to any excavation taking place.

Any additional inlet and pipe protection not shown on the plans that are required due to the Contractor's actions or negligence shall be provided at no additional cost to the FRSA. The Contractor shall remove and dispose of all inlet and pipe protection within 30 days of final site stabilization and approval by the FRSA.

29.2 Materials

1. Inlet and pipe protection shall be in accordance with Article 1081.15 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition and the appropriate detail included in the plans.

29.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications for inlet and pipe protection products.

29.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Inlet and Pipe Protection.***

30 Inlets, Special

30.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 602 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct storm drainage inlets as shown on the plans.

This work shall be in accordance with the following standards or details:

- For Inlets, Special: IDOT D2 10.2, IDOT Highway Standard 602701
- For Double Inlet, Special: IDOT D2 12.2, IDOT Highway Standard 602701
- For Inlets, Special, No. 5: IDOT D2 79.4b, 79.4f, 79.4g, IDOT Highway Standard 602701

This work shall include all earth excavation, trench backfill and compaction, and saw cutting as required, in accordance with all applicable IDOT provisions and specifications.

30.2 Materials

1. All materials shall be per Article 602.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

30.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Inlet frame and grate material specifications.
2. Inlet shop drawings including a specific detail for each inlet showing the dimensions of the structure, location and spacing of steps and elevations and sizes of all pipe openings. A plan view shall be provided showing the orientation of pipe openings.
3. Material gradation certificates for trench backfill.

30.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Double Inlet, Special; Inlets, Special; and Inlets, Special, No. 5.***

31 Inlet, Manhole, and Valve Vault Construction and Adjustment

31.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 602 of the *IDOT Standard Specifications for Road and Bridge Construction, current edition*. This work shall include all equipment, materials, labor, transportation, and workmanship to adjust or construct storm drainage inlets, manholes, or valve vaults as shown on the plans

The following IDOT Highway Standards shall be used:

- For Valve Vaults to Be Adjusted with New Frame & Lid: 604001
- For Inlets Type A, Type 8 Grate: 602301, 604036
- For Manholes, Type A, 4' Dia.: 602401, 602601, 602701, 604001

This work shall include all earth excavation, trench backfill and compaction, saw cutting, pavement removal and replacement as required, in accordance with all applicable IDOT provisions and specifications.

New construction shall consist of furnishing and installing manholes, inlets, and valve vaults of various sizes, adjusting rings as required, and new frames and lids. This item shall include all materials, labor, transportation, connection to existing storm sewer or other pipes, shear resistant transition couplings and piping, as required, structure core-drills, all structures of the sizes and

types required, dewatering, frames & lids, and structure adjustments. The contractor shall verify all existing pipe sizes and materials.

Adjustment shall consist of removing existing inlet, manhole, and valve vault frames and lids, removing all brick/precast adjusting rings and all other materials, furnishing and installing new adjusting rings as required, and replacing existing frames and lids, or furnishing and installing new frames and lids as specified.

Adjustment shall include the removal of all existing adjustment rings (whether brick or concrete), and replacement with new adjusting rings. The combination of new adjusting rings shall be such that the minimum number of rings possible are used.

This work shall include adjusting manhole and valve vault frames to finish grade. The frame and lid shall be set 1/4 inch min. to 3/8 inch max. below final grade in pavement and at final grade in turf areas. Frames in the roadway shall be pitched to match the slope of pavement. All proposed rim elevations shall be obtained from the roadway reconstruction plan and profile plan sheets or from IDOT.

31.2 Materials

1. All materials shall be per Article 602.02 of the *IDOT Standard Specifications for Road and Bridge Construction, current edition*.
2. Solid lids shall have the following lettering, as specified by the type of manhole being adjusted: "ELECTRIC," "STORM," "WATER," or as otherwise directed by the Engineer.

Manhole adjustment insert riser rings are not approved for use.

31.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Manhole adjustment ring material specifications.
2. Manhole frame and lid material specifications.
3. Manhole adjustment ring sealant material specifications.
4. Catch basin, manhole, inlet, and vault shop drawings including a specific detail for each structure showing the dimensions of the structure, location and spacing of steps and elevations and sizes of all pipe openings. A plan view shall be provided showing the orientation of pipe openings.
5. Valve box material specifications.
6. Material gradation certificates for trench backfill.

31.4 Basis of Payment

For adjustment with new frames and grates or lids, this work shall be paid for at the Contract unit price per each (EACH) for ***Manholes To Be Adjusted with New Type 1 Frame, Closed Lid; Manholes To Be Adjusted with New Type 8 Grate; or Valve Vaults To Be Adjusted with New Type 1 Frame, Closed Lid.***

For new construction, this work shall be paid for at the Contract unit price per each (EACH) for ***Inlets, Type A, Type 8 Grate or Manholes, Type A, 4' Diameter, Type 1 Frame, Open Lid.***

32 Insulating Sanitary Sewers

32.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to insulate sanitary sewers as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Insulating Sanitary Sewers/Force mains Detail

This work shall consist of excavating around existing sanitary sewers and installing insulation board where directed on the plans. Excavation shall be done carefully to expose the host pipe. Insulation board shall be placed on both sides of the pipe down to the bottom of the pipe. Pipe bedding material shall be placed against the insulation board to hold it in place. The pipe shall be bedded and haunched. Insulation board shall be placed over the pipe. Insulation board joints shall be staggered and taped.

This work shall include installation of an underground buried sewer warning tape placed 1 foot above the insulation board.

Backfill shall be with compacted excavated material. Topsoil shall be replaced.

32.2 Materials

1. Insulation board shall be 2 inch thick extruded polystyrene foam board with an R value of 20.
2. Underground warning tape shall be aluminum underground sewer warning tape.

32.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Insulation board material specifications.
2. Underground warning tape material specifications.

32.4 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Insulating Sanitary Sewers***.

33 Landscape Mulch

33.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to install new mulch landscaping areas as shown on the plans.

This work shall consist of preparing subgrade, installing weed barrier fabric, landscape edging and landscape mulch as shown on the plans or as directed by the Engineer.

Topsoil shall be pulverized and shall not contain any excessively large clumps or clods, at the discretion of the Engineer. The existing ground surface shall be free of all foreign objects, stone, etc. The Contractor shall remove and dispose of such unsuitable materials.

Landscape edging shall be machine edged around all or portions of the perimeter of the landscape area as directed by the Engineer.

The prepared subgrade shall be smooth, even, and allow for positive drainage. Weed barrier fabric shall be installed on the prepared subgrade. Fabric shall overlap 6 inches at seams. Wire staples shall be used to permanently secure the fabric in place. A minimum of 1 staple per square yard is required. The top of the fabric shall be free of all soil or foreign material prior to placing landscape mulch.

Landscape mulch shall be placed to a depth of 4 inches and shall be spread uniformly so that no high, low, or bare spots occur. Care shall be taken to avoid compacting previously placed mulch.

33.2 Materials

1. Weed barrier fabric shall be an approved black, ultraviolet resistant, nonwoven geotextile fabric with a minimum weight (mass) of 1.75 oz/square yard.
2. Landscape edging shall be a polyethylene material.
3. Landscape mulch shall consist of shredded wood chips and bark, shall be fairly uniform in size, quality, and overall appearance, shall be free of foreign materials such as sawdust, grass clippings, plant parts, rocks, soil, etc. Mulch shall be dark chocolate in color, and shall match existing mulch within the Treatment Plant. A sample may be requested by the Engineer.

33.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Weed barrier fabric specifications.
2. Landscape edging specifications.
3. Landscape mulch specifications, including source & color. A sample may be required by the Engineer.

33.4 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Landscape Mulch***.

34 Landscaping

34.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and *Section 253* and *Section 254* of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish, and install woody and perennial plants as shown on the plans.

All plants shall be healthy and free of disease, insects, injuries, or defects. Plants shall have normal growth habits characteristic of their species and meet or exceed the sizes indicated on the plans.

Plants shall be laid out as indicated on the construction plans. Any variance from the layout indicated on the construction plans shall be approved by the Engineer prior to planting.

Woody plant holes shall be excavated 12-inches beyond the root mass diameter. Perennial plant holes shall be excavated to a diameter two times the width of the root mass or container. All plant holes shall be excavated no deeper than the height of the root ball. Excess material excavated from the holes may be spread in the immediate area as directed by the Engineer.

Once the plant has been properly set in the hole, prepared backfill shall be placed around the root system level with the existing grade around the hole. Woody plant backfill shall consist of 25% organic compost, 25% sand, and 50% suitable soil removed from the hole mixed with topsoil as needed to provide a sound growth environment. Perennial plant backfill shall consist of 33% organic compost and 67% suitable soil removed from the hole mixed with topsoil as needed to provide a sound growth environment. Tamping or watering shall accompany the backfilling operation to eliminate air pockets.

Woody plants shall receive water at the time of planting which shall completely saturate the backfill. Perennial plants shall receive at least 1 gallon of water per plant at the time of planting. Watering equipment shall be at the site and in operation condition prior to starting the planting operation.

Within 24 hours of planting, mulch shall be placed to a depth of 4-inches over the excavated saucer area. Care shall be taken to place the mulch in a way that does not smother the plant. Mulch placement shall be included in the cost of **Landscape Mulch**.

Additional watering on woody plants shall be performed at least once every 30 days from the time of planting through substantial completion. Additional watering on perennial plants shall be performed at least once every 7 days from the time of planting through substantial completion. The Engineer may direct the Contractor to adjust the watering frequency depending on weather conditions.

34.2 Materials

1. Amelanchier Arborea (Service Berry Bush) – 4 foot.
2. Calamagrostis x Acutiflora ‘Karl Foerster’ (Karl Foerster Grass) – 1 gallon.
3. Euonymus Alatus ‘Compacta’ (Dwarf Burning Bush) – 5 gallon.
4. Hydrangea Arborescens ‘Annabelle’ (Hydrangea Annabelle) – 5 gallon.
5. Pennisetum Alopecuroides ‘Hameln’ (Hameln Dwarf Fountain Grass) – 1 gallon.
6. Salvia Nemoralis ‘Ostfriesland’ (Salvia East Friesland) – 1 gallon.
7. Spiraea Japonica ‘Goldmound’ (Goldmound Spirea) – 5 gallon.
8. Syringa Pubescens Subsp. Patula ‘Miss Kim’ (Miss Kim Lilacs) – 5 gallon.
9. Taxus x Media ‘Tautoni’ (Taunton Japanese Yew) – 5 gallon.

34.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Plant profile/data sheet for each species to be planted.
2. Watering plan.

34.4 Warranty

The Contractor shall warrant all planted items for a period of one (1) year from the date of installation, provided the trees are properly maintained. Any plant requiring replacement, shall be furnished and replanted, at the Contractor's expense, in accordance with the original installation specifications. Any such replacements shall likewise be covered by the same warranty period from the date of subsequent installation.

34.5 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for **Landscaping**.

35 Light Pole & Fixtures

35.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to install new light poles and fixtures as shown on the plans.

This work shall consist of furnishing and installing complete light poles and fixtures on existing or new light pole foundations. This work shall include all wiring connections.

The Contractor shall verify that the light pole, light fixture, and all accessories are compatible with each other. The light pole and fixture shall be furnished and installed as a complete unit and shall include all necessary hardware and accessories.

35.2 Materials

1. Light poles shall be as follows:
 - a. Lights 'A': RAB PS4-11-251-2 25' square aluminum pole, or approved equal. Color shall be bronze.
 - b. Lights 'C': RAB PS4-11-25PT 25' square aluminum pole for 4 fixtures, or approved equal. Color shall be bronze.
2. Light fixtures shall be as follows:
 - a. Lights 'A': RAB IVAT3-100LPA750ZU or approved equal. Color shall be bronze.
 - b. Lights 'C': (4) RAB IVAT3-100LPA750ZU or approved equal. Color shall be bronze.

All materials shall match existing poles and fixtures in use at the FRSA treatment plant.

35.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Light pole and mount specifications.
2. Light fixture specifications.

35.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for **Light Pole & Fixtures**.

36 Light Pole Foundation

36.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to install new light pole foundations as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Light Pole Foundation Detail

This work shall consist of excavating for light pole foundations, installing a pre-formed concrete form, reinforcement bar, PVC conduit, and light pole anchors as shown on the plans or as directed by the Engineer.

Quality control and quality assurance testing shall be according to IDOT Check Sheet #23 *Special Provision for Quality Control/Quality Assurance of Concrete Mixtures*, revised January 1, 2022 of the *IDOT Supplemental Specifications and Recurring Special Provisions*, adopted January 1, 2025. All material testing and costs associated with conformance with this Check Sheet shall be included in this pay item and will not be paid for separately.

This work shall include furnishing, maintaining, and removing a suitable concrete wash-out container. Concrete shall not be placed until this container is available for use.

36.2 Materials

1. Concrete shall be IDOT Class DS according to Section 1020 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Conduit shall be 2-inch diameter PVC schedule 40.
3. Anchor rods shall be according to Section 1070 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

36.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC mix designs.
2. Conduit specifications.
3. Anchor rod and reinforcement bar specifications.

36.4 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Light Pole Foundation, 24" Diameter***.

37 Modify Existing Gate

37.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to modify existing gates as described herein and as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Modify Existing Gate Project Detail

This work shall consist of the following modifications to the existing Treatment Plant main front gate:

Removing the existing gate end posts (2) at the north gate closure. This shall include disconnecting tension rods and overhead beam, and removing posts and foundations. The overhead beam shall be supported as necessary.

Installing new posts (2) of like material and size in new foundations at the proposed location as shown in the plans. Reconnecting the overhead beam and tension rods. Tension rods may be cut and re-threaded or replaced. All tension rods, turnbuckles, and other appurtenances may be adjusted and re-used. Concrete foundations shall be per the project detail.

Adding square tubing to the south end of the gate. Square tubing shall be welded to the existing gate frame to extend the frame by 2 feet to accommodate the new location of the new posts. Chain link fabric shall be added to the extension in a similar manner as the fabric on the existing gate. The existing extension shall be removed and added to the proposed extension.

Furnishing and installing approximately 2 feet of additional chain to the existing chain, or replacing the chain entirely with a longer chain.

Replacing the existing 44.5 foot galvanized steel 3"x4" angle with a 46.5 foot angle of the same size and material.

Adjusting the drive chain opening and closing distances and ensuring that all adjustments to the gate and opener have been made for the gate to operate without hardship.

Cleaning the front gate in it's entirety. This shall include pressure washing and/or steel brushing (or other approved methods) all surfaces to remove all rust and surface imperfections to the satisfaction of the FRSA.

All gate modifications as described herein shall be complete and functional, including pulling and connecting wiring, testing, and equipment start-up.

37.2 Materials

1. New posts shall be SS40 aluminized steel pipe per ASTM F1043 group IC, Type D internal coating, Type B external coating, 4" nominal diameter (4.00" actual O.D.), with a pipe wall thickness of 0.16".
2. Concrete for post foundations shall be IDOT Class DS according to Section 1020 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
3. Aluminum square tubing shall be 2 inches by 3 inches and be of like material as the existing gate.
4. Fabric shall be 9 gauge with 2 inch mesh, and aluminized before weave with a 0.40 ounce/square foot coating meeting ASTM A491. Fabric ties shall be 9 gauge aluminum bands or wire.

37.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications and shop drawings for posts.

2. PCC mix designs for gate post foundations.
3. Material specifications for square tubing.
4. Material specifications for chain link fabric and appurtenances.
5. Gate cleaning methods and procedures.

37.4 Basis of Payment

This work shall be paid for at the Contract unit price per Lump Sum (L SUM) for ***Modify Existing Gate***.

38 Mulch

38.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 251 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to apply mulch as shown on the plans.

Mulch method 2 shall utilize Procedure 2 for stabilization.

38.2 Materials

Mulch material shall be in accordance with Article 251.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

38.3 Required Submittals

None.

38.4 Method of Measurement

This work will be measured in place in Square Yards.

38.5 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Mulch, Method 2***.

39 Pavement Removal

39.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 440 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work includes the complete removal and disposal of existing pavement sections of various depths and materials, including concrete and asphalt, where indicated on the plans.

Maximum pay limits for pavement removal are shown on the plans and will be used to determine quantities for payment. Any damage to pavements beyond the removal limits shall be replaced full depth at no additional cost to the FRSA.

The pavement limits shall be sawcut full depth prior to removal. The remaining pavement edges shall be protected from damage. All costs associated with sawcutting and pavement protection shall be included in this item.

39.2 Required Submittals

None.

39.3 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Pavement Removal***

40 Perimeter Erosion Barrier

40.1 General

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 280 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to install perimeter erosion barrier as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standard 280001

This work shall include the furnishing, installation, maintenance, and removal of perimeter erosion barrier. All required perimeter erosion barrier shall be installed prior to any excavation taking place.

Any additional perimeter erosion barrier than what is shown on the plans and that is required due to the Contractor's actions or negligence shall be provided at no additional cost to the FRSA. The Contractor shall remove and dispose of all perimeter erosion barrier within 30 days of final site stabilization and approval by the FRSA.

40.2 Materials

1. Perimeter erosion barrier shall be of the silt filter fence type, and shall be in accordance with Article 1080.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition and the appropriate detail included in the plans.

40.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications for silt filter fence.

40.4 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Perimeter Erosion Barrier***.

41 Pipe Culvert Removal

41.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 501 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to remove pipe culverts as shown on the plans.

This work shall include all earth excavation, removal and disposal of existing pipe culverts and all attached headwalls, wingwalls, aprons, and end sections. This item shall also include furnishing all trench backfill in place of removed pipe culverts to the lines and grades shown on the plans.

This item shall include removal of all sizes and types of pipe culverts and appurtenances.

Trench Backfill:

Trench backfill and compaction, whether with furnished or excavated material, shall be included in this item. The Contractor shall backfill the entire width of all trenches as soon as conditions permit. The trench shall be backfilled to the existing subsoil or proposed subgrade elevation as rapidly as conditions permit. The Contractor shall exercise care not to disturb any existing utilities during backfilling and compaction operations.

Backfill material and compaction shall be as follows:

1. In unpaved areas, such as agricultural fields, yards, parkways, ditches, unimproved/recreational land, etc., and not within 2 feet of pavements or structures, backfill shall consist of suitable excavated material. Suitable excavated material shall be free of brush, roots, debris, un-natural materials, and excessively large rocks, boulders, or compacted or frozen clay or soil masses. Suitable excavated material shall not be in a fluid, sloppy state or have excessive moisture. Excavated material containing excessive moisture, as determined by the FRSA, shall be allowed to dry as needed prior to being deemed suitable. Suitable excavated material shall be placed in uniform loose lifts not exceeding 24 inches, and shall be mechanically compacted to the satisfaction of the FRSA.
2. In trenches within 2 feet of all pavements, curb, gutters, curb and gutter, shoulders, sidewalks, driveways, parking lots, etc., backfill shall consist of approved select trench backfill to backfill trenches to subgrade elevation. Select trench backfill shall be IDOT gradation FA-6, or excavated material approved as such, mechanically compacted in 12 inch maximum loose lifts to subgrade elevation. Select trench backfill shall be in accordance with Section 208 and Article 100.04 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. Select trench backfill shall be placed and mechanically compacted with a vibratory plate, vibratory roller, or other approved equipment-mounted compaction equipment. Water jetting, ponding or flooding will not be permitted as a means of trench compaction.

Select trench backfill shall be compacted to ninety-five percent (95%) of Standard Proctor density. All compaction tests shall be performed at the Contractor's expense by an approved, independent geotechnical-testing firm. Compaction testing shall occur on the first full day of backfilling operations. The independent testing firm shall work with the Contractor to establish appropriate and adequate compaction methods and patterns. Select trench backfill moisture content shall be modified if necessary and as operations progress. If the tests do not meet the compaction requirements specified above, the area shall be both re-compacted and re-tested at the Contractor's expense until the test requirements are met. If initial tests indicate

compaction requirements are being met, no further lift testing will be required unless the method, equipment, or material (including moisture content) changes.

41.2 Materials

1. Trench backfill shall be per Article 208.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

41.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material gradation certificates for trench backfill.

41.4 Method of Measurement

This work shall be measured for payment according to Article 501.06 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, except that trench backfill shall be included in the cost of this item, and will not be paid for separately.

41.5 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT), for **Pipe Culvert Removal**.

42 Pipe Handrail

42.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 509 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition and the *CDB 2018 Illinois Accessibility Code*. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install pipe handrails and/or guardrails as shown on the plans.

This work shall be in accordance with the following standards or details, as applicable:

- FRSA Treatment Plant Pipe Handrail for Accessibility Ramp Detail

This work shall include verifying the dimensions and slopes of the surfaces accepting pipe handrails or guardrails prior to fabrication. No additional compensation will be made due to the Contractor's variations or changes in dimensions or elevations of sidewalks, steps, or ramps. The rails shall follow an alignment as shown on the plans for both straight and curved sections.

The Contractor shall verify the directions of all end returns for all travel ways and sidewalk or stair directions. No additional compensation will be made for changes in directions of end returns.

All pipe handrails and guardrails to be installed shall conform to all applicable laws and regulations including, but not limited to, most current PROWAG and ADA requirements. The Contractor shall be knowledgeable of PROWAG and ADA requirements and shall provide assistance to the Engineer in the placement of pipe handrails and guardrails at no additional cost to the FRSA.

42.2 Materials

1. Pipe rail shall be 1.5 inch diameter galvanized steel per Article 1006.34 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

2. Pipe rails shall be primed with Amercoat 68 HS Epoxy Primer, and shall be finished with dark bronze paint to match SW 7675 Sealskin. Rails shall match existing rails on-site in material, color, and dimensions.

42.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Pipe rail material specifications and pre-fabrication shop drawings.
2. Primer and finish paint material specifications, including color samples.

42.4 Method of Measurement

This work shall be measured for payment according to Article 509.09 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, except that measurement will be made along the top of the gripping rail from one end to the other, following all turns and bends.

42.5 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Pipe Handrail, Special.***

43 Portland Cement Concrete Pavement Sleeper Slab

43.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 420 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct concrete pavement sleeper slabs as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Treatment Plant Separation Joint with Sleeper Slab Detail

This work shall consist of constructing an 8 inch thick load bearing formed slab with welded wire reinforcement. The slab shall extend from back of curb to back of curb. The slab shall be constructed on a compacted aggregate base. The placed concrete for the sleeper slab shall be finished to the grade and slope of the subsequent PCC pavement bottom. The sleeper slab shall have a smooth finish. Concrete curing shall be in accordance with Section 1022 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

When staging is required, the welded wire reinforcement shall be overlapped by 24 inches and tied before pouring the next stage.

A bond breaker consisting of a single layer of felt paper, or 2 layers of polyethylene sheeting 6 mm or greater in thickness, shall be placed between the sleeper slab and the subsequent PCC pavement. When the subsequent PCC pavement is placed, a 2 inch preformed fiber expansion joint shall be constructed along the center of the sleeper slab according to the jointing plan. The top of the 2 inch joint shall be filled with hot poured joint sealer.

A PCC Quality Control Plan, prepared by the Contractor, shall be submitted to the Engineer for review and approval prior to any PCC pavement work beginning. Quality control and quality assurance testing shall be according to IDOT Check Sheet #23 *Special Provision for Quality*

Control/Quality Assurance of Concrete Mixtures, revised January 1, 2022 of the IDOT Supplemental Specifications and Recurring Special Provisions, adopted January 1, 2026. All material testing and costs associated with conformance with this Check Sheet shall be included in this pay item and will not be paid for separately.

This work shall include furnishing, maintaining, and removing a suitable concrete wash-out container. Concrete shall not be placed until this container is available for use.

43.2 Materials

All references that follow are contained in the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

1. Portland Cement Concrete shall be Class PV in accordance with Section 1020.
2. Welded wire reinforcement shall be in accordance with Article 1006.10. Dowel bars and dowel bar assemblies shall be in accordance with Article 1006.11.
3. Poured joint sealer shall be in accordance with Article 1050.02.
4. Preformed expansion joint fillers shall be in accordance with Article 1051.09.
5. Membrane curing compounds shall be in accordance with Section 1022.

43.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC Mix Designs.
2. Reinforcement & dowel bar material certifications.
3. Poured Joint Sealer material certifications.
4. Expansion joint filler material certification.
5. Membrane curing compound material certification.
6. PCC Quality Control Plan.

43.4 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Portland Cement Concrete Pavement, Sloper Slab, 8"***.

44 Portland Cement Concrete Pavement (Jointed)

44.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 420 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct concrete pavement as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standards 420001, 420101, 420701

Concrete may be placed via formed or slip form method. Laser/GPS screeding will not be allowed as a concrete placement option on slopes 3.00% or greater.

Irregular pavement panels that are within intersections and/or curves shall also contain welded wire reinforcement.

Final finish shall be Type B according to Article 420.09(e)(2) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

Concrete curing shall be in accordance with Section 1022 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

Upon completion pavement joints shall be sealed with hot-poured joint sealer in accordance with Article 420.12 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

A PCC Quality Control Plan, prepared by the Contractor, shall be submitted to the Engineer for review and approval prior to any PCC pavement work beginning. Quality control and quality assurance testing shall be according to IDOT Check Sheet #23 *Special Provision for Quality Control/Quality Assurance of Concrete Mixtures*, revised January 1, 2022 of the *IDOT Supplemental Specifications and Recurring Special Provisions*, adopted January 1, 2026. All material testing and costs associated with conformance with this Check Sheet shall be included in this pay item and will not be paid for separately.

Any concrete panels that exhibit defects within the warranty period shall be removed and replaced at the Contractor's expense.

This work shall include furnishing, maintaining, and removing a suitable concrete wash-out container. Concrete shall not be placed until this container is available for use.

44.2 Materials

All references that follow are contained in the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

1. Portland Cement Concrete shall be Class PV in accordance with Section 1020.
2. Welded wire reinforcement and tie bars shall be in accordance with Article 1006.10. Dowel bars and dowel bar assemblies shall be in accordance with Article 1006.11.
3. Poured joint sealer shall be in accordance with Article 1050.02.
4. Preformed expansion joint fillers shall be in accordance with Article 1051.09.
5. Membrane curing compounds shall be in accordance with Section 1022.

44.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC Mix Designs.
2. Reinforcement & dowel bar material certifications.
3. Poured Joint Sealer material certifications.
4. Expansion joint filler material certification.
5. Membrane curing compound material certification.
6. PCC Quality Control Plan.

44.4 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Portland Cement Concrete Pavement, 08" (Jointed)***.

45 Portland Cement Concrete Sidewalk

45.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 424 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to construct concrete sidewalk as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standards 424001, 424016, 424026
- FRSA Treatment Plant PCC Sidewalks Detail

This work shall consist of preparing subgrade and installing and compacting a 6 inch aggregate base course, which shall be included in this item.

All sidewalks to be installed shall conform to all applicable laws and regulations including, but not limited to, most current PROWAG and ADA requirements. The Contractor shall be knowledgeable of PROWAG and ADA requirements and shall provide assistance to the Engineer in the design of all sidewalk installations at no additional cost to the FRSA. Assistance may include, but is not limited to, field assistance in measuring sidewalk grades, staking and layout of curb ramps, verification of PROWAG and ADA compliance and final grade checks of formwork prior to the placement of concrete material.

Sidewalk shall be thickened to 8" (with 6" aggregate base) through alleyway/commercial/industrial driveway approaches and shall be thickened to 6" (with 6" aggregate base) through residential driveway approaches, and shall be reinforced with welded wire fabric reinforcing steel equal or greater to 6"x6" D8.0/D8.0. The additional labor and materials required when placing sidewalk through driveways and alleys shall be considered incidental to this item.

Thickened edges shall be installed per plan locations and detail dimensions and shall be included in this item.

Quality control and quality assurance testing shall be according to IDOT Check Sheet #23 *Special Provision for Quality Control/Quality Assurance of Concrete Mixtures*, revised January 1, 2022 of the *IDOT Supplemental Specifications and Recurring Special Provisions*, adopted January 1, 2020. All material testing and costs associated with conformance with this Check Sheet shall be included in this pay item and will not be paid for separately.

This work shall include furnishing, maintaining, and removing a suitable concrete wash-out container. Concrete shall not be placed until this container is available for use.

45.2 Materials

1. All materials shall be per Article 424.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

2. Aggregate base course for sidewalks shall be IDOT gradation CA-06.

45.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC mix designs.
2. Material gradation certificates for aggregate.

45.4 Method of Measurement

This work will be measured for payment according to Article 424.12 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. Sidewalks through driveway approaches will be measured as sidewalks.

45.5 Basis of Payment

This work shall be paid for at the Contract unit price per square foot (SQ FT) for **Portland Cement Concrete Sidewalk, 4"**.

46 Portland Cement Concrete Sidewalk Accessibility Ramp and Stoop

46.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all labor, equipment, excavation, materials, and accessories required to construct the concrete sidewalk accessibility ramp and stoop as shown in the construction plan set.

This work shall be in accordance with the following standards or details:

- FRSA Accessibility Ramp Stoop Foundation

All components of the ramp and stoop as shown in the Plan Sheets including, and not limited to, footings, foundation walls, expansion joints, and steel reinforcement shall be included in this pay item. The handrail shall be paid separately under **Pipe Handrail, Special**.

Quality control and quality assurance testing shall be according to IDOT Check Sheet #23 *Special Provision for Quality Control/Quality Assurance of Concrete Mixtures*, revised January 1, 2022 of the *IDOT Supplemental Specifications and Recurring Special Provisions*, adopted January 1, 2026. All material testing and costs associated with conformance with this Check Sheet shall be included in this pay item and will not be paid for separately.

46.2 Materials

1. Concrete ramp, stoop, footing, and foundation wall shall use Class SI concrete per Article 1020.04 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Aggregate base course for ramp shall be IDOT gradation CA-06.

46.3 Required Submittals

1. Shop drawings for all structural design elements.
2. Material certifications for steel reinforcement.
3. Concrete mix designs.

46.4 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Portland Cement Concrete Sidewalk Accessibility Ramp and Stoop***”.

47 Precast Reinforced Concrete Flared End Section

47.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 542 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install precast reinforced concrete flared end sections as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standard 542301

This work shall consist of furnishing and installing precast reinforced concrete flared end sections, with toe blocks, of various sizes. This item shall include all materials, labor, transportation, and connection to existing or new pipe culverts or storm sewer. The contractor shall verify all existing pipe sizes and materials.

This work shall include all earth excavation, trench backfill and compaction, and saw cutting as required, in accordance with all applicable IDOT provisions and specifications.

This work shall also include any incidental grading work in the vicinity of the end sections to achieve positive drainage.

47.2 Materials

1. Precast reinforced concrete end sections shall be according to Article 542.07(b) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, and IDOT highway standard 542301.

47.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications and shop drawings for metal end sections.

47.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Precast Reinforced Concrete Flared End Section, 12”*** or ***Precast Reinforced Concrete Flared End Section, 15”***.

48 Pulling Electric and Fiber Optic

48.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to pull and connect electrical and fiber optic cables in existing underground conduits as shown on the plans.

This work shall consist of furnishing, installing, and connecting electrical and fiber optic cables by means of existing underground conduits as shown on the plans. This work shall include all labor, equipment, materials, dewatering, etc. to install and connect electrical and fiber optic cables as shown on the plans or as directed by the FRSA.

This work shall include pulling and connecting the specified electrical or fiber optic cables to the designated junctions or terminals. An appropriate length of slack cable shall be left at each junction or terminal location.

This work shall include removing all existing wiring and conductors from conduits to be used for new electric and fiber optic cables.

The Contractor shall notify Project Manager Andrew Hess (815 298-3110 seventy-two hours in advance of work to coordinate down times.

48.2 Materials

1. Electrical conductors shall be suitable for underground conduit applications and shall be in conformance with all applicable electrical codes. Electrical conductors shall be #10 AWG copper supply conductors unless otherwise noted by the manufacturer of the equipment served.
2. Fiber optic cable:
 - a. Shall be single-mode or multi-mode fiber optic cable as required.
 - b. Shall be manufactured by Belden. No other manufacturer or substitutes shall be acceptable.
 - c. Shall be new, unused and of current design and manufacture.
 - d. All fibers in the cable must be usable.
 - e. Optical fibers shall be sufficiently free of surface imperfections and inclusions to meet the optical, mechanical and environmental requirements.
 - f. Breakout kits shall be installed where required.
 - g. Fiber runs are to be continuous with no splices.
 - h. Fiber connectors shall be Belden Optimax LC non-metallic connectors with a ceramic ferrule. No other manufacturer or substitutes shall be acceptable.
 - i. Fiber connectors shall be installed in accordance with the manufacturer's installation procedures & guidelines. Any connectors damaged or improperly installed by the successful respondent shall be replaced at the Contractor's expense.

48.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Electrical conductor cable specifications.
2. Fiber optic cable specifications.
3. Fiber connector specifications.

48.4 Method of Measurement

This work will be measured for payment in place in feet, along the horizontal alignment of the conduit run. When multiple runs are specified, measurement will be made for each run.

48.5 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Pulling Electric & Fiber Optic***.

49 PVC Conduit with Conductors

49.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to construct underground PVC conduits as shown on the plans.

This work shall consist of furnishing materials and installing PVC conduits where shown on the plans. This work shall include all labor, equipment, materials, dewatering, bracing, shoring, excavation, trench backfill, etc. to install PVC conduits as shown on the plans or as directed by the FRSA.

Conduits shall be installed a minimum of 24 inches below the finished grade. Joints shall be solvent weld. Link seal fittings shall be used at all conduit/structure junctions. This work shall include all bends, fittings, etc. that are required to install conduit as shown on the plans. This work shall include connections to buildings, structures, light pole bases, etc. as shown on the plans.

This work shall include pulling and connecting the specified electrical or fiber optic cables to the designated junctions or terminals. An appropriate length of slack cable shall be left at each junction or terminal location.

The PVC conduit shall be installed from the light pole foundations to a handhole or manhole, shown on the plans, where it will meet the existing lighting system conduit. The Contractor shall install conducting wire in the conduit, from the light pole (including connecting light fixture) to the existing electrical panel inside of the guard shack building.

49.2 Materials

1. Conduits:
 - a. Conduits shall be rigid PVC Schedule 80 in accordance with UL 651 and NEMA TC-2.
 - b. Fittings shall be matching fittings by the same manufacturer as the conduit, complying with NEMA TC-9.
2. Link seal fittings shall be a modular sealing system that creates a permanent hydrostatic seal. Hardware shall be 316 SS.
3. Electrical conductors shall be suitable for underground conduit applications and shall be in conformance with all applicable electrical codes. Electrical conductors shall be #10 AWG copper supply conductors unless otherwise noted by the manufacturer of the equipment served.

49.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Conduit, fitting, and bend specifications.
2. Link Seal fitting specifications.
3. Electrical conductor cable specifications.

49.4 Method of Measurement

This work will be measured for payment in place in feet, along the horizontal alignment of the conduit run. When multiple conduits are specified for a run and are installed in the same excavation, measurement will be made for each conduit. Measurement will be made from the

point of connection to existing conduit, or from the outside of a building, handhole, manhole, light pole foundation, structure, etc.

49.5 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for *PVC Conduit (With Conductors), 1"*.

50 PVC Conduit

50.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to construct underground PVC conduits as shown on the plans.

This work shall consist of furnishing materials and installing PVC conduits where shown on the plans. This work shall include all labor, equipment, materials, dewatering, bracing, shoring, excavation, trench backfill, etc. to install PVC conduits as shown on the plans or as directed by the FRSA.

Conduits shall be installed a minimum of 24 inches below the finished grade. Joints shall be solvent weld. Link seal fittings shall be used at all conduit/structure junctions. This work shall include all bends, fittings, etc. that are required to install conduit as shown on the plans. This work shall include connections to buildings, structures, light pole bases, etc. as shown on the plans. Pull wire shall be installed in all conduits.

Conduit running from weigh scale to guard shack shall connect to building with a link seal fitting. The PVC conduit shall connect to a junction box inside of the building next to the wall penetration, to be furnished and installed by the Contractor.

50.2 Materials

1. Conduits:
 - a. Conduits shall be rigid PVC Schedule 80 in accordance with UL 651 and NEMA TC-2.
 - b. Fittings shall be matching fittings by the same manufacturer as the conduit, complying with NEMA TC-2.
2. Link seal fittings shall be a modular sealing system that creates a permanent hydrostatic seal. Hardware shall be 316 SS.

50.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Conduit, fitting, and bend specifications.
2. Link Seal fitting specifications.
3. Junction box specifications.

50.4 Method of Measurement

This work will be measured for payment in place in feet, along the horizontal alignment of the conduit run. When multiple conduits are specified for a run and are installed in the same excavation, measurement will be made for each conduit. Measurement will be made from the

point of connection to existing conduit, or from the outside of a building, handhole, manhole, light pole foundation, structure, etc.

50.5 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for *PVC Conduit, 1"*; *PVC Conduit, 2"*; or *PVC Conduit, 4"*.

51 Reinforced Concrete Ductbank Removal

51.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to remove and dispose of reinforced concrete ductbanks as shown on the plans.

This item shall consist of completely removing and properly disposing of existing concrete ductbanks of various sizes and at various depths. All ductbanks to be removed as shown on the plans shall be removed flush with the associated connected structures. Saw-cutting may be required to leave a clean-cut flush removal.

The Contractor shall verify with the FRSA that the ductbanks to be removed are not carrying any live electrical or communications utilities. Removal and disposal of the internal electrical or communications wiring shall also be included in this item.

51.2 Required Submittals

None.

51.3 Method of Measurement

This work shall be measured in place, in feet horizontally along the center of the ductbank from the outside face of the connected structure(s).

51.4 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for *Reinforced Concrete Ductbank Removal*.

52 Reinforced Concrete Ductbank

52.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to construct reinforced concrete ductbanks as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Treatment Plant Concrete Ductbank Detail

This work shall consist of constructing reinforced concrete ductbanks where shown on the plans. This work shall include all labor, equipment, materials, dewatering, bracing, shoring, concrete forming, excavation, trench backfill, etc. to complete the reinforced concrete ductbanks as shown on the plans or as directed by the FRSA.

Ductbanks shall be installed a minimum of 24 inches below the finished grade. Whenever possible, ducts shall be sloped toward the end structure(s), so as to avoid creating a sag condition.

This work shall include furnishing, maintaining, and removing a suitable concrete wash-out container. Concrete shall not be placed until this container is available for use.

Cast-in-Place Concrete:

Earthen concrete forming will not be permitted unless approved by the FRSA. Wood or manufactured forms shall be provided for the full length and width of the ductbank. The forms shall be braced and tied to provide the structural capacity required to produce finished concrete to the lines and grades shown on the plans.

Prior to reinforcement bar placement, forms shall be coated with form oil. When the concrete surfaces are not exposed to view, wood forms may be saturated with water immediately prior to the placement of concrete in lieu of form oil.

Reinforcement bars shall be arranged and installed so as not to form conductive or magnetic groups around ducts or duct groups. This will require alternating upper and lower reinforcement around the circumference of the ductbank.

No concrete shall be placed on ice, snow, or frozen foundation material. The method and manner of placing concrete shall be such as to avoid the segregation or separation of the aggregates or the displacement of reinforcement. The external surface of all concrete shall be thoroughly worked during the operations of placing in such a manner as to work the mortar against the forms to produce a smooth finish free of honeycomb and with a minimum of water and air pockets. Open troughs and chutes shall be extended as nearly as practical to the point of deposit. Dropping the concrete a distance of more than 5 feet will not be permitted. The concrete shall be consolidated by internal vibration. The Contractor shall provide and use a sufficient number of vibrators to ensure that consolidation can be started immediately after the concrete has been deposited in the forms. Concrete shall not be exposed to the action of water before setting, or be deposited in water, except with the approval of the Engineer.

Forms shall remain in place for a minimum of 24 hours or as directed by the Engineer. The method of form removal shall not result in damage to the concrete. If forms are removed prior to the completion of the required curing period, curing shall be resumed with an approved curing method for the remainder of the curing period. Backfilling shall not commence without approval from the Engineer, and without the new ductbank having been surveyed with GPS equipment by the FRSA.

Ancillary Items:

Concrete shall have red dye broomed into the top of the uncured finished concrete.

Underground electrical excavation warning tape shall be provided and installed per the plan details. One warning tape shall be provided for ductbanks up to 24 inches wide. Two warning tapes shall be provided for ductbanks greater than 24 inches wide.

Tracer wire shall be provided and installed.

Conduits:

Joints shall be solvent weld in ducts, fittings, and bends. Link seal fittings shall be used at all conduit/structure junctions. Connections to existing ductbank conduits shall be made by removing concrete around existing conduits and connecting new conduits to existing conduits. Pulling cord equaling 100 lb test nylon shall be installed in all ducts, including spares. Conduit

separator/hangers shall be installed close enough to prevent sagging or misplacement of the conduits, and not less than 4 per 20 feet. Conduit shall be secured to separators/hangers to prevent floating during pouring of concrete. Entire assembly shall be tied together using non-metallic straps. A test mandrel of 80% inside diameter shall be pulled through ducts to test joints integrity and test for out-of-round conduits. If obstructions are found, they shall be corrected and re-tested. A leather washer type duct cleaner shall be pulled through the full length of conduits, followed by a rubber conduit swab for final cleaning and to assist in spreading lubrication throughout the conduits.

52.2 Materials

1. Concrete shall be IDOT Class DS according to Section 1020 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Reinforcement shall be #4 size and shall conform to Sections 508 and 1006.10 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
3. Duct separators/hangers shall be factory fabricated PVC interlocking spacers sized for the type and sizes of ducts per the plans.
4. Tracer wire & Access points:
 - a. Tracer wire shall be copper clad steel high strength 12 AWG as MFG by Copperhead Industries, or approved equal, and shall be color coded per APWA uniform color code.
 - b. Access points in non-paved areas shall be Snakepit Lite Duty Adjustable Single Terminal Access Points, as MFG by Copperhead Industries. Access points in paved areas shall be Snakepit Roadway Single Terminal Cast Iron Lid access points as MFG by Copperhead Industries.
5. Underground electrical excavation warning tape shall be permanent, continuous printed, aluminum backed tape.
6. Conduits encased in concrete:
 - a. Conduits shall be rigid PVC Schedule 40 in accordance with UL 651 and NEMA TC-2.
 - b. Fittings (other than bends) shall be matching fittings by the same manufacturer as the conduits encased in concrete, complying with NEMA TC-9.
 - c. Bends shall be either galvanized & PVC coated rigid steel conduit long sweep bends per UL 6 & ANSI C80.1, or fiberglass long sweep elbows per UL 2420 and Article 355 of the NEC, both with a minimum radius of 48 inches.
7. Conduits extending outside of concrete:
 - a. Conduits shall be rigid PVC Schedule 80 in accordance with UL 651 and NEMA TC-2.
 - b. Fittings (other than bends) shall be matching fittings by the same manufacturer as the conduits extending outside of concrete, complying with NEMA TC-9.
8. Link seal fittings shall be a modular sealing system that creates a permanent hydrostatic seal. Hardware shall be 316 SS.

52.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. PCC mix designs.

2. Duct separator/hanger specifications.
3. Tracer wire, access point, and appurtenances specifications.
4. Underground electrical excavation warning tape specification.
5. Conduit, fitting, and bend specifications.
6. Link Seal fitting specifications.

52.4 Method of Measurement

This work will be measured for payment in place in feet, along the horizontal alignment of the ductbank.

52.5 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Reinforced Concrete Ductbank, 2-2", 1x2.***

53 Removal and Disposal of Unsuitable Material

53.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 202 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to remove and dispose of unsuitable material as shown on the plans.

Unsuitable material that is encountered during construction shall be excavated, removed, and disposed of. Locations and extents of this work shall be at the direction of the Engineer. This item is intended to be used for the removal of unsuitable subgrade material. Replacement subgrade material shall be per the special provision 'Aggregate Subgrade Improvement'.

53.2 Required Submittals

None.

53.3 Method of Measurement

This work will be measured for payment in its original position and the volume computed in cubic yards.

53.4 Basis of Payment

This work shall be paid for at the Contract unit price per cubic yards (CU YD) for ***Removal & Disposal of Unsuitable Material.***

54 Remove and Relocate Landscape Boulders

54.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and

workmanship to remove the existing landscape boulders and relocate to the location shown on the plans.

This work shall include, but is not limited to, subgrade preparation, filter fabric installation, installation and compaction of a 6-inch aggregate base course, landscape boulder placement, and backfill placement. Any existing boulders unable to be salvaged shall be removed and disposed of.

The face of the relocated landscape boulders shall be positioned 5-feet behind the back-of-curb. Slopes between the back-of-curb and face of boulders shall not exceed 10%. The exposed height of the landscape boulders shall not exceed 4-feet with the bottom boulder course buried a minimum of 6-inches below the finished grade. The slope of the relocated landscape boulders shall not exceed 3H:1V.

The relocated landscape boulders shall be constructed on a compacted 6-inch aggregate base course. The aggregate base course may be used to level out boulders as necessary. The largest existing boulders shall be utilized as the bottom boulder course, with boulders decreasing in size on subsequent courses. Vertical joints of the boulders shall be staggered with stones selected to minimize voids. Landscape boulders shall be backfilled with free draining aggregate as necessary with filter fabric placed between native soil and backfilled stone.

54.2 Materials

1. Aggregate base course shall be IDOT gradation CA-06.
2. Backfill shall be IDOT gradation CA-07.
3. Filter fabric shall be according to Sections 282 and 1080 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

54.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material gradation certificates for aggregate.
2. Material certificates for filter fabric.

54.4 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Remove and Relocate Landscape Boulders***.

55 Remove Abandoned Sampling Tank

55.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to remove the abandoned wastewater sampling tank as shown on the plans.

This work shall consist of the complete removal and proper disposal of the concrete structure, and all other related materials and appurtenances regardless of type or size of material. There are no record drawings of this structure. The approximate outside dimensions of the concrete structure are 7 feet wide, 19 feet long, 7 feet deep. The top of the structure is at existing grade. This work shall include removal and disposal of the 10 inch ductile iron valve, 10 inch PVC piping and

fittings, 2 wastewater mixers, and all other appurtenances. This work shall include plugging the 10 inch PVC pipe in manhole 169-004 as well as at the location of severance at the structure to be removed.

This work shall include terminating the electrical power that fed the structure at the light pole approximately 25 feet south of the structure.

This work shall include backfilling and compacting excavations caused by the removal of structures with appropriate trench backfill material. Backfill shall be incidental to this pay item.

55.2 Required Submittals

None.

55.3 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Remove Abandoned Sampling Tank.***

56 Remove Electric Meter and Wooden Screen.

56.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to remove the existing electrical meter and wooden screen as shown on the plans.

This work shall consist of the complete removal and proper disposal of the electrical meter and wooden screen located in the center of the western pavement loop to be removed. Electrical wiring shall be terminated at the foundation or as shown on the plans.

This work shall include backfilling any excavations caused by electrical meter and wooden screen removal with appropriate backfill material.

ComEd has disconnected the electrical meter from the electrical system.

56.2 Required Submittals

None.

56.3 Method of Measurement

This work will be measured for payment in its original position and the volume computed in cubic yards.

56.4 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Remove Electric Meter and Wooden Screen.***

57 Remove Light Pole and Foundation

57.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to remove existing light poles and foundations as shown on the plans.

This work shall consist of the complete removal and proper disposal of the light poles, posts, fixtures, foundations, and all other related materials and appurtenances regardless of type or size of material. Electrical wiring shall be terminated at the foundation or as shown on the plans.

The Contractor shall salvage any flood lights present on the light poles and turn over to FRSA.

This work shall include the backfilling and compaction of excavations caused by light pole foundation removal with appropriate trench backfill material.

57.2 Required Submittals

None.

57.3 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Remove Light Pole Foundation***.

58 Remove Sign Assembly

58.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to remove the existing sign assembly as shown on the plans.

This work shall consist of the salvaging of the existing cedar sign and the removal and disposal of the existing concrete sign foundations.

The Contractor shall saw the two existing wooden sign posts immediately above the concrete foundations, to be salvaged and turned over to FRSA.

This work shall include the backfilling and compaction of excavations caused by sign foundation removals with appropriate trench backfill material.

58.2 Required Submittals

None.

58.3 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Remove Existing Sign Assembly***.

59 Removing Manholes and Catch Basins

59.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 605 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to remove manholes and catch basins as shown on the plans.

This work shall consist of the complete removal and disposal of manholes, catch basins, and all other related materials and appurtenances regardless of type of material (precast, brick, block, masonry, etc.) or size of structure.

This work shall include backfilling and compacting excavations caused by structure removal with appropriate trench backfill material.

59.2 Required Submittals

None.

59.3 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Removing Catch Basins*** or ***Removing Manholes***.

60 Sanitary Manholes To Be Adjusted

60.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 602 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to adjust sanitary manholes as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Sanitary Manhole Adjustment Detail

This work shall consist of the removal and disposal of existing manhole frames and lids, removal and disposal of all brick adjustment, precast adjusting rings, and all other adjustment materials, furnishing and installing new adjusting rings as required, furnishing and installing new frames and lids and exterior manhole adjustment seals.

This work shall include all earth excavation, trench backfill and compaction, saw cutting, pavement removal and replacement as required, in accordance with all applicable IDOT provisions and specifications.

This work shall include adjusting manhole frames to finish grade. The frame and lid shall be set 1/4 inch min. to 3/8 inch max. below final grade in pavement and at final grade in turf areas. All proposed rim elevations shall be obtained from the roadway reconstruction plan and profile plan sheets or from the Resident Engineer.

This work shall include the removal of all existing adjustment (whether brick or concrete), and replacement with new adjusting rings. The combination of new adjusting rings shall be such that the minimum number of rings possible are used.

Allowable types of adjusting rings include precast concrete and expanded polypropylene (EPP). These can be used in conjunction with each other, except that a precast concrete ring shall not be placed over an EPP ring.

For precast concrete adjusting rings:

All adjusting ring joints, as well as the joint between the frame and adjustment ring, shall be sealed watertight by means of an all-weather rubber butyl sealant designed for the purpose of sealing concrete structures water-tight. The adjusting ring surface shall be dry and free of foreign material. The surface shall be dried and heated with a weed burner when outside temperatures are less than optimum for adhesion of the sealant to the concrete.

Frames in the roadway shall be pitched to match the slope of pavement. EPP taper rings are required when frames are pitched.

For expanded polypropylene (EPP) adjusting rings:

The use of EPP adjustment rings shall be according to Sections 602 and 1043 of the *IDOT Standard Specifications, and Supplemental Specifications & Recurring Special Provisions*, most recent editions. The EPP adjustment rings shall be installed according to the manufacturer's instructions. If the top surface of the manhole is not level, even, or is irregular, a non-shrink grout shall be placed to create a level surface and the first EPP ring shall be bedded and leveled in the non-shrink grout. The joints between the manhole, all adjustment rings, and the frame shall be sealed with the manufacturer's recommended/specified adhesive. The top ring shall be a 'finish ring' when pitching the frame is not necessary.

Frames in the roadway shall be pitched to match the slope of pavement. The top ring shall be a tapered 'adjustment' ring when pitching the frame is required. Shimming is not an acceptable method of pitching when using EPP rings. The upper most ring shall have grooves on the lower surface and a flat upper surface.

External adjustment seals are required regardless of the type of adjustment rings used. Heat shrinkable adjustment seals shall not be used with EPP rings.

The maximum height of adjustment shall be 12 inches. The distance between the top of the frame to the first manhole step shall be no more than 30 inches. A maximum of one (1) 2 inch adjusting ring will be allowed.

The Contractor shall install an FRSA approved exterior adjustment seal on all manholes as shown on the FRSA Standard Detail sheet.

60.2 Materials

Materials shall be in accordance with *Article 3: Detailed Specifications, 59 Sanitary Manholes To Be Reconstructed, 59.2 Materials, Items 1-4*.

Manhole adjustment insert riser rings are not approved for use.

60.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Manhole adjustment ring material specifications.
2. Manhole adjustment ring sealant material specifications.
3. Manhole exterior adjustment seal (chimney seal) material specifications.

4. Manhole frame and lid material specifications.

60.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Sanitary Manholes To Be Adjusted With New Type 1 Frame, Closed Lid.***

61 Sanitary Manholes to Be Reconstructed

61.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 602 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to reconstruct sanitary manholes as shown on the plans.

This work shall be in accordance with the following standards or details:

- FRSA Sanitary Manhole Adjustment Detail
- FRSA Manhole Reconstruct Detail

This work shall consist of the removal and disposal of existing manhole frames and lids, removal and disposal of all brick adjustment, precast adjusting rings, and all other adjustment materials, removal and disposal of manhole cone and/or barrel sections of various sizes and materials, furnishing and installing new precast cone and/or barrel sections of various sizes, furnishing and installing new adjusting rings as required, furnishing and installing new frames and lids and exterior manhole adjustment seals.

This work shall include all earth/rock excavation, trench backfill and compaction, saw cutting, pavement removal and replacement as required, in accordance with all applicable IDOT provisions and specifications.

This item shall include installation of a new precast cone or barrel sections of various diameters and adjustment of sanitary manholes.

Manhole reconstruction shall include the removal and disposal of the existing frame & lid, adjusting rings, brick or precast cone sections, and block or precast barrel sections to an elevation below the taper or to sound structure, whichever is lowest. The removal shall stop at a course of bricks or blocks which is a minimum of 90% intact, and which obtains the full inside diameter of the manhole. A leveling bed of non-shrink cement shall be applied to the top of the remaining top course. The bottom of the new precast cone or barrel section to be placed on the existing structure shall not have a ship-lap. It shall be full thickness and set on 2 beads of 1" mastic. A one foot (1') high by six-inch (6") thick concrete collar shall be poured around the entire outside of the manhole, centered vertically on the joint.

This work may include rotating the cone section to a specific direction and removing and installing new steps, as directed by the Engineer.

Manhole Adjustment:

Manhole adjustment shall consist of removing existing manhole frames and lids, removing all brick/precast adjusting rings and all other materials, furnishing and installing new adjusting rings as required, furnishing and installing new frames and lids, and furnishing and installing exterior manhole adjustment seals.

This work shall include adjusting manhole frames to finish grade. The frame and lid shall be set 1/4 inch min. to 3/8 inch max. below final grade in pavement and at final grade in turf areas. All proposed rim elevations shall be obtained from the roadway reconstruction plan and profile plan sheets or from the Resident Engineer.

This work shall include the removal of all existing adjustment (whether brick or concrete), and replacement with new adjusting rings. The combination of new adjusting rings shall be such that the minimum number of rings possible are used.

Allowable types of adjusting rings include precast concrete and expanded polypropylene (EPP). These can be used in conjunction with each other, except that a precast concrete ring shall not be placed over an EPP ring.

For precast concrete adjusting rings:

All adjusting ring joints, as well as the joint between the frame and adjustment ring, shall be sealed watertight by means of an all-weather rubber butyl sealant designed for the purpose of sealing concrete structures water-tight. The adjusting ring surface shall be dry and free of foreign material. The surface shall be dried and heated with a weed burner when outside temperatures are less than optimum for adhesion of the sealant to the concrete.

Frames in the roadway shall be pitched to match the slope of pavement. EPP taper rings are required when frames are pitched.

For expanded polypropylene (EPP) adjusting rings:

The use of EPP adjustment rings shall be according to Sections 602 and 1043 of the *IDOT Standard Specifications, and Supplemental Specifications & Recurring Special Provisions*, most recent editions. The EPP adjustment rings shall be installed according to the manufacturer's instructions. If the top surface of the manhole is not level, even, or is irregular, a non-shrink grout shall be placed to create a level surface and the first EPP ring shall be bedded and leveled in the non-shrink grout. The joints between the manhole, all adjustment rings, and the frame shall be sealed with the manufacturer's recommended specified adhesive. The top ring shall be a 'finish ring' when pitching the frame is not necessary.

Frames in the roadway shall be pitched to match the slope of pavement. The top ring shall be a tapered 'adjustment' ring when pitching the frame is required. Shimming is not an acceptable method of pitching when using EPP rings. The upper most ring shall have grooves on the lower surface and a flat upper surface.

External adjustment seals are required, regardless of the type of adjustment rings used. Heat shrinkable adjustment seals shall not be used with EPP rings.

The maximum height of adjustment shall be 12 inches. The distance between the top of the frame to the first manhole step shall be no more than 30 inches. A maximum of one (1) 2 inch adjusting ring will be allowed.

The Contractor shall install an FRSA approved exterior adjustment seal on all manholes as shown on the FRSA Standard Detail sheet.

61.2 Materials

1. Adjusting rings:
 - a. Precast concrete adjusting rings shall be standard reinforced concrete pipe pattern and shall conform to ASTM C478 and ASTM C139. There shall be no spalled edges or cracks. Precast concrete adjusting rings shall be size 4 inch height or greater.
 - b. Expanded polypropylene (EPP) rings shall be in accordance with Section 1043 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Adjusting ring sealant:
 - a. Precast concrete adjusting ring sealant shall be a flexible rubber butyl pre-formed sealant designed for the purpose of making concrete structure joints water-tight. Material shall conform to ASTM C990.
 - b. EPP ring sealant used for watertight installation of the EPP rings shall meet ASTM C 920, Type S, Grade NS, Class 25, uses NT, T, M, G, A, and O.
3. Manhole exterior adjustment seals (chimney seals) shall be of a rubber compound in accordance with ASTM C-923 (Sealing Systems Inc. Gator Wrap or approved equal).
4. Manhole frames & lids:
 - a. Manhole frames and lids shall be per the approved frames and lids in the table below:

Approved Frames & Lids				
	Neenah Frame	Neenah Lid	East Jordan Frame	East Jordan Lid
Regular	1670-2004	R-1670-0358	00111711	00111732
Low Profile	1670-2008	R-1670-0358	---	---
Bolt Down *	1915J-F08		---	---

* For manholes connected to mains 18" diameter or larger, or for manholes located in flood prone areas, frames & lids shall be the bolt down type.

5. Precast concrete barrel and cone sections shall conform to ASTM C478 and shall be free of spalling or cracks.
6. Precast concrete barrel and cone joint sealant shall be a flexible rubber butyl pre-formed sealant designed for the purpose of making concrete structure joints water-tight. Material shall conform to ASTM C990.
7. Precast concrete barrel and cone external joint seals shall be a single, full circumference compression band in accordance with ASTM c-877 (Type II); MarMac MacWrap or approved equal.
8. Manhole steps shall be 10 inches long & 12 inches wide in accordance with ASTM C-478; Neenah R-1982-F, M.A. Industries PS-1, or approved equal.

Manhole adjustment insert riser rings are not approved for use.

61.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Manhole adjustment ring material specifications.

2. Manhole adjustment ring sealant material specifications.
3. Manhole exterior adjustment seal (chimney seal) material specifications.
4. Precast concrete barrel and cone section specifications.
5. Manhole frame and lid material specifications.
6. Manhole barrel and cone joint sealant material specifications.
7. Manhole barrel and cone external joint seal material specifications.
8. Manhole step material specifications.

61.4 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Sanitary Manholes To Be Reconstructed With New Type 1 Frame, Closed Lid.***

62 Sanitary Manholes to Be Removed

62.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 602 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to remove and dispose of sanitary manholes as shown on the plans.

This work shall consist of completely removing existing sanitary sewer manholes of various diameter or size, including outside drop manholes as required to construct this project. Any existing sanitary sewers to be abandoned as part of the manhole removal shall be bulkheaded with a watertight plug. This work shall conform to Section 605.03 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

This work shall include all earth excavation, trench backfill and compaction, and saw cutting, in accordance with all applicable IDOT provisions and specifications.

62.2 Required Submittals

None.

62.3 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for ***Sanitary Manholes To Be Removed.***

63 Seeding and Fertilizing

63.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 250 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to seed and fertilize as shown on the plans.

Any additional seeding and fertilizing than what is shown on the plans and that is required due to the Contractor's actions or negligence shall be provided at no additional cost to the FRSA.

The areas to be seeded shall be free of all foreign objects, debris, or excessively large clumps or clods, at the discretion of the Engineer. Seedbed preparation shall be per Article 250.05 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. The seedbed shall be prepared to the satisfaction of the Engineer.

All seeded areas shall be maintained for a period of 30 days after application, which shall include supplemental watering and mowing as directed by the Engineer.

Fertilizer shall be applied in accordance with Article 250.04 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

63.2 Materials

1. Seed mixtures shall be according to the type specified on the plans, and according to Article 250.07 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. Seed shall be in accordance with Article 1081.04 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Fertilizer shall be in accordance with Article 1081.08 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

63.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Seed mixtures.
2. Fertilizer specifications and certifications.

63.4 Method of Measurement

This work will be measured in place in square yards.

63.5 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Seeding, Class 1 and Fertilizing***.

64 Sidewalk Removal

64.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 440 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to completely remove and properly dispose of sidewalk as shown on the plans.

Removal limits shall be sawcut full depth prior to removing sidewalk. This item shall include the removal of steps, stoops, etc.

64.2 Required Submittals

None.

64.3 Basis of Payment

This work shall be paid for at the Contract unit price per square foot (SQ FT) for ***Sidewalk Removal***.

65 Sign Panel

65.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 720 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, and the current MUTCD. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install sign panels as shown on the plans.

The following IDOT highway standards shall be used:

- IDOT Highway Standard 720001

This work shall consist of the installation of sign panels and mounting hardware, regardless of type of material or size of sign and/or mounting method. Sign panels shall be according to Section 720 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. Signs shall be installed at the correct height and location to comply with all applicable federal, state, and local codes, and ADA requirements.

Sign faces shall be according to the current MUTCD as follows:

- R7-8 Reserved Parking
- R7-8A Van Accessible

Custom sign faces shown on the plans shall receive FRSA approval prior to manufacturing.

65.2 Materials

1. Sign panels and faces shall be according to Sections 1090 and 1091 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

65.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Sign panel material and face specifications.

65.4 Basis of Payment

This work shall be paid for at the Contract unit price per square foot (SQ FT) for ***Sign Panel – Type 1*** or ***Sign Panel – Type 3***.

66 Stabilized Construction Entrance

66.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to install stabilized construction entrance(s) as shown on the plans.

This work shall be in accordance with the Illinois Urban Manual IL-630 detail.

This work shall include the furnishing, installation, maintenance, and removal of all materials required for stabilized construction entrance(s). All required stabilized construction entrances shall be installed prior to any excavation taking place.

Any additional areas of stabilized construction entrance than what is shown on the plans and that is required due to the Contractor's actions or negligence shall be provided at no additional cost to the FRSA. The Contractor shall remove and dispose of all stabilized construction entrance materials within 30 days of final site stabilization and approval by the FRSA.

The coarse aggregate shall be a thickness of 6 inches or more. The length and width shall be as shown on the plans. The aggregate shall not be placed until the location has been inspected and approved by the Engineer.

The coarse aggregate shall be dumped and spread into place in horizontal layers not more than 3 feet in thickness. It shall be placed in a manner to produce a reasonable homogenous stable fill that contains no segregated pockets, fragments, or unfilled space. No compaction will be required beyond that resulting from placing and spreading operations.

All surface water flowing or diverted toward the construction entrance shall be piped through the entrance. Any pipe(s) used for this shall be included in the cost of this item. The stabilized construction entrance shall have positive drainage away from roadways.

The entrance shall remain in place and be maintained until the disturbed area is stabilized. Any sediment migrated onto public right-of-way shall be removed immediately. The aggregate and/or filter fabric shall be removed and replaced as needed or directed by the Engineer to effectively contain sediment and other material from leaving the construction site.

66.2 Materials

1. Aggregate shall be IDOT gradation CA-1 or CA-3 per Section 1004 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Filter fabric shall be in accordance with Article 1080.03 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

66.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications coarse aggregate.
2. Material certifications for filter fabric.

66.4 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Stabilized Construction Entrance***.

67 Stone Riprap

67.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 281 of the *IDOT Standard Specifications for Road and Bridge*

Construction, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install stone riprap as erosion control or protection as shown on the plans.

This work shall consist of earth excavation, removal and disposal of excavated material, preparing subgrade, installing filter fabric, installing bedding material, and installing stone riprap as shown on the plans or as directed by the Engineer.

The subgrade and riprap placement shall be per Section 281 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition and to the satisfaction of the Engineer.

Filter fabric shall be measured for payment as a separate item.

67.2 Materials

1. Stone riprap shall be according to Sections 281 and 1005 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.
2. Bedding material shall be gradation RR 1 or RR 2 according to Article 1005.01 (c) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

67.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material gradation certificates for stone riprap.
2. Material gradation certificates for bedding material.

67.4 Basis of Payment

This work shall be paid for at the Contract unit price per square yards (SQ YD) for ***Stone Riprap, Class A3***.

68 Storm Sewers

68.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 550 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install storm sewers as shown on the plans.

This work shall include all earth excavation, pipe, gaskets, trench backfill and compaction, and all other materials required to install storm sewers to the lines and grades shown on the plans. All joints shall be sealed with rubber gaskets.

This work shall include connections to existing or proposed storm manholes, inlets, or structures of varying materials.

Pipe Bedding:

Crushed stone pipe bedding for flexible pipe shall be IDOT CA-16 gradation (3/8" crushed stone bedding chips) conforming to Class IA per ASTM Standard D2321. Bedding material for flexible pipe shall be placed from six inches (6") minimum below the bottom of the pipe to the spring line of the pipe and shall be haunched in place along the side of the pipe, ensuring that all voids are

eliminated. Bedding material shall be placed from the spring line of the pipe to twelve inches (12") minimum above the top of the pipe.

Bedding shall be graded such that it precludes the migration of trench wall material into the bedding.

Trench Backfill:

Trench backfill and compaction, whether with furnished or excavated material, shall be included in this item. The Contractor shall backfill the entire width of all trenches as soon as conditions permit. The trench shall be backfilled to the existing subsoil or proposed subgrade elevation as rapidly as conditions permit. The Contractor shall exercise care not to disturb any existing utilities during backfilling and compaction operations. The Contractor shall use reasonable care while backfilling over the sewer. No materials such as rocks, boulders, compacted or frozen clay or soil masses greater than 1 cubic foot, shall be allowed to be dropped directly on the sewer pipe. If these materials are present in the backfill, the Contractor shall bring bedding material to a point 24 inches above the crown of the pipe. The cost of this additional bedding material shall be considered incidental to this item.

Backfill material and compaction shall be as follows:

1. In unpaved areas, such as agricultural fields, yards, parkways, ditches, unimproved/recreational land, etc., and not within 2 feet of pavements or structures, backfill shall consist of suitable excavated material. Suitable excavated material shall be free of brush, roots, debris, un-natural materials, and excessively large rocks, boulders, or compacted or frozen clay or soil masses. Suitable excavated material shall not be in a fluid, sloppy state or have excessive moisture. Excavated material containing excessive moisture, as determined by the FRSA, shall be allowed to dry as needed prior to being deemed suitable. Suitable excavated material shall be placed in uniform loose lifts not exceeding 24 inches, and shall be mechanically compacted to the satisfaction of the FRSA.
2. In trenches within 2 feet of all pavements, curb, gutters, curb and gutter, shoulders, sidewalks, driveways, parking lots, etc., backfill shall consist of approved select trench backfill to backfill trenches to subgrade elevation. Select trench backfill shall be IDOT gradation FA-6, or excavated material approved as such, mechanically compacted in 12 inch maximum loose lifts to subgrade elevation. Select trench backfill shall be in accordance with Section 208 and Article 1003.04 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. Select trench backfill shall be placed and mechanically compacted with a vibratory plate, vibratory roller, or other approved equipment-mounted compaction equipment. Water jetting, ponding or flooding will not be permitted as a means of trench compaction.

Select trench backfill shall be compacted to ninety-five percent (95%) of Standard Proctor density. All compaction tests shall be performed at the Contractor's expense by an approved, independent geotechnical-testing firm. Compaction testing shall occur on the first full day of backfilling operations. The independent testing firm shall work with the Contractor to establish appropriate and adequate compaction methods and patterns. Select trench backfill moisture content shall be modified if necessary and as operations progress. If the tests do not meet the compaction requirements specified above, the area shall be both re-compacted and re-tested at the Contractor's expense until the test requirements are met. If initial tests indicate compaction requirements are being met, no further lift testing will be required unless the method, equipment, or material (including moisture content) changes.

68.2 Materials

1. Rigid storm sewer pipe shall be RCCP per Section 1042 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, ASTM C-76, and AASHTO M-170.
2. Flexible storm sewer pipe shall be:
 - a. PVC SDR 35 with a pipe stiffness of 46 psi meeting the requirements of ASTM D2934. Joints shall meet the requirements of ASTM D3212.
 - b. PVC SDR 26 with a pipe stiffness of 115 psi meeting the requirements of ASTM D3034. Joints shall meet the requirements of ASTM D3212.
3. Storm sewer replacement pipe for removal/replacement at utility/sewer crossings shall be the same size and material as the existing pipe.
4. Rubber gaskets for storm sewer pipe shall be per Section 1056 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, and ASTM C-443.
5. Crushed stone pipe bedding shall be IDOT CA-16 gradation conforming to per ASTM Standard D2321 Class 1A.
6. Trench backfill shall be per Article 208.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

68.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Pipe material certifications.
2. Material gradation certificates for pipe bedding material.
3. Material gradation certificates for trench backfill.

68.4 Method of Measurement

This work shall be measured for payment according to Article 550.09 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, except that trench backfill shall be included in the cost of this item, and will not be paid for separately.

68.5 Basis of Payment:

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Storm Sewers, Class A, Type 1 12"***; ***Storm Sewers, Class A, Type 1 15"***; or ***Storm Sewers, PVC*** of the diameter specified.

69 Telescoping Steel Sign Support

69.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 728 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, and the current MUTCD. This work shall include all equipment,

materials, labor, transportation, and workmanship to furnish and install telescoping steel sign supports as shown on the plans.

The following IDOT highway standards shall be used:

- IDOT Highway Standard 728001

This work shall consist of the installation of telescoping steel sign supports. Sign panels and mounting hardware shall be included in the cost of ***Sign Panel – Type 1***.

69.2 Materials

1. Telescoping steel sign support shall be according to Sections 728.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

69.3 Required Submittals

1. None.

69.4 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Telescoping Steel Sign Support***.

70 Temporary Ditch Checks

70.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 280 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to install, maintain, and remove temporary ditch checks as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standard 280001-07
- Illinois Urban Manual Standard IUM-514

This work shall be performed according to Article 280.04 (a) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

70.2 Materials

1. Temporary ditch checks shall be in accordance with Article 280.02 (h) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

70.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Temporary ditch check material specifications.

70.4 Method of Measurement

This work will be measured for payment along the long axis of the device in place in feet.

70.5 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Temporary Ditch Checks***.

71 Temporary Erosion Control Seeding

71.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 280 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to seed for temporary erosion control as shown on the plans.

Any additional seeding than what is shown on the plans and that is required due to the Contractor's actions or negligence shall be provided at no additional cost to the FRSA.

This work shall be performed according to Article 280.04 (f) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

71.2 Materials

1. Seed shall be in accordance with Article 280.02 (i) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

71.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Seed mixtures.

71.4 Method of Measurement

This work will be measured for payment in pounds of seed applied.

71.5 Basis of Payment

This work shall be paid for at the Contract unit price per pound (POUND) for ***Temporary Erosion Control Seeding***.

72 Temporary Guard Shack

72.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to provide and maintain a temporary guard shack for FRSA use as shown on the plans.

During concrete ramp and stoop construction outside the existing guard shack, the Contractor shall provide and maintain an office trailer which shall serve as a temporary guard shack. The office trailer shall be positioned as shown on the plans and not interfere with construction operations, site access, or safety.

This work shall include providing a temporary electrical service to the temporary guard shack for the duration of its use. The Contractor shall coordinate with ComEd to obtain the temporary

electrical service and shall be responsible for obtaining all permits, inspections, and approvals associated with the temporary electrical service. The Contractor shall provide and install all conductors, conduit, meter sockets, disconnects, grounding, panels, pedestals, transformers, and other necessary equipment required to deliver temporary electrical service to the temporary guard shack. The Contractor shall be responsible for all utility connection charges, service fees, electrical costs, and maintenance of the temporary electrical service. When the temporary guard shack is no longer required, the Contractor shall remove all temporary electrical facilities and restore any disturbed areas to their original condition.

This work shall include providing and routing two (2) CAT6 ethernet cables from the existing guard shack to the office trailer.

FRSA will be responsible for relocating and connecting guard shack equipment. Contact Project Manager Andrew Hess at (815) 298-3110 to coordinate guard shack equipment relocation.

72.2 Materials

1. Office trailer:
 - a. Size: 8' x 16' minimum.
 - b. Exterior: Office trailer shall have weather resistant metal siding with insulated walls, floor, and roof. A minimum of two (2) operable windows shall be provided. Exterior doors shall be lockable and have access stairs with handrails.
 - c. Furnishings: Provide an office desk, chair, and waste receptacle.
 - d. HVAC: Provide heating and cooling abilities capable of maintaining 68°F minimum heating and 75°F maximum cooling.
 - e. Electrical: Provide complete 120/240 volt, single-phase, 100-amp minimum electrical service including interior LED lighting, duplex outlets spaced per code, exterior entry lighting, and an electrical panel compliant with NEC requirements.
 - f. Restrooms: Provide and maintain an adjacent portable restroom reserved for guard shack use only.
 - g. Safety equipment: Provide a fire extinguisher, smoke detectors, and a first aid kit.
2. CAT6 ethernet cable shall be Belden brand, or FRSA approved equal, rated for exterior use and not exceed 300-feet in length.

72.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Office trailer specifications.
2. Office trailer layout.
3. CAT6 cable data sheet.

72.4 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Temporary Guard Shack***.

73 Thermoplastic Pavement Marking

73.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 780 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and apply thermoplastic pavement markings as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standard 780001

Prior to placement of thermoplastic pavement markings, the Contractor shall layout all markings with temporary construction paint for review and approval by the FRSA.

73.2 Materials

1. Materials shall be according to Article 780.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

73.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material specifications.

73.4 Method of Measurement

This work will be measured for payment according to Article 780.14 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

73.5 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for ***Thermoplastic Pavement Marking – Line, 04”*** or ***Thermoplastic Pavement Marking – Line 24”*** or the Contract unit price per square foot (SQ FT) for ***Thermoplastic Pavement Marking – Letters & Symbols***.

74 Topsoil Furnish and Place

74.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 211 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to install topsoil as shown on the plans.

Any additional topsoil than what is shown on the plans and that is required due to the Contractor's actions or negligence shall be provided at no additional cost to the FRSA.

This work shall include preparing areas to be seeded, furnishing and placing topsoil, and removal and disposal of unsuitable materials. Topsoil shall be pulverized and shall not contain any excessively large clumps or clods, at the discretion of the Engineer. The existing ground surface shall be free of all foreign objects, stone, etc. The Contractor shall remove and dispose of such unsuitable materials.

Topsoil placed adjacent to pavement edges, curbs, sidewalk, etc. shall be placed such that the topsoil is flush with the hard surface in its final state, after any settling has occurred. Topsoil that settles next to hard surfaces shall be corrected by the Contractor at no additional cost to the FRSA.

74.2 Materials

1. Topsoil utilized from off-site sources shall be in accordance with Article 1081.05(a) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

74.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Material certifications for topsoil (if being imported from off-site).

74.4 Method of Measurement

This work will be measured in place in square yards.

74.5 Basis of Payment

This work shall be paid for at the Contract unit price per square yard (SQ YD) for ***Topsoil Furnish and Place, 4"***.

75 Traffic Control and Protection

75.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Section 701 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish, install, maintain, relocate, and remove work zone traffic control and protection as shown on the plans.

This work shall be in accordance with the following standards or details:

- IDOT Highway Standards 701.502

This work shall consist of the furnishing, installation, maintenance, and removal of work zone traffic control and protection. All required traffic control devices shall be installed prior to any work taking place within the designated work zone.

75.2 Equipment

1. All traffic control devices and equipment shall be in accordance with Article 701.03 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

75.3 Required Submittals

The Contractor shall submit the following items for review and approval:

1. Name and contact information for the person directly employed by the Contractor who is to be responsible for the installation and maintenance of the traffic control, per Article 701.04 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

75.4 Basis of Payment

This work shall be paid for at the Contract unit price per lump sum (L SUM) for ***Traffic Control and Protection***.

76 Tree Removal

76.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 201 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition. This work shall include all equipment, materials, labor, transportation, and workmanship to remove trees as shown on the plans.

This work shall consist of cutting, grubbing, removal, and disposal of trees and stumps. The removal and disposal of trees, saplings, bushes, and other brush and debris less than 6 inches in diameter at a height of 4.5 feet above ground level will be considered incidental and will not be measured for payment, per Articles 201.02 and 201.08 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

Tree trimming and pruning necessary to complete the work shown on the plans shall be per Article 201.03(b) of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, and shall only be done with the approval of the Engineer. Tree trimming shall be accomplished by saw cutting limbs flush with the attached limb or trunk. Tree trimming and pruning will be considered incidental and will not be measured for payment.

Only those trees specifically marked for removal by the Engineer shall be removed. Only those trees approved to be trimmed by the Engineer shall be trimmed. All other trees shall be protected from damage during construction.

76.2 Required Submittals

None.

76.3 Method of Measurement

This work will be measured for payment per Article 201.10 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

76.4 Basis of Payment

This work shall be paid for at the Contract unit price per unit diameter (UNIT) for **Tree Removal (Over 15 Units Diameter)**.

77 Wood Sign Support

77.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions, and Sections 730 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition, and the current MUTCD. This work shall include all equipment, materials, labor, transportation, and workmanship to furnish and install wood sign supports as shown on the plans.

This work shall consist of the installation of wood sign supports. Sign panels and mounting hardware shall be included in the cost of **Sign Panel – Type 3**.

77.2 Materials

1. Wood sign support shall be according to Sections 730.02 of the *IDOT Standard Specifications for Road and Bridge Construction*, current edition.

77.3 Required Submittals

None.

77.4 Basis of Payment

This work shall be paid for at the Contract unit price per foot (FOOT) for *Wood Sign Support*.

78 Yard Hydrant to Be Removed

78.1 Description

This work shall conform to Four Rivers Sanitation Authority (FRSA) requirements, details, and provisions. This work shall include all equipment, materials, labor, transportation, and workmanship to remove yard hydrants as shown on the plans.

This work shall consist of the complete removal and disposal of various sizes and types of yard hydrants. All yard hydrant related materials shall be removed and properly disposed of. This work shall include properly capping various types and sizes of water lines.

78.2 Required Submittals

None.

78.3 Basis of Payment

This work shall be paid for at the Contract unit price per each (EACH) for *Yard Hydrant To Be Removed*.

Section II
Contract Forms

Proposal

Project: Plant Roadway Replacement, Capital Project No. 2406

Location: Four Rivers Sanitation Authority Waste Water Treatment Plant, 3333 Kishwaukee Street, Rockford, IL 61109

Completion Date: November 30, 2026

Liquidated Damages: \$300/calendar day per each completion date deadline

To: Board of Trustees
Four Rivers Sanitation Authority
3501 Kishwaukee Street
Rockford, IL 61109

From: _____

(Individual, Partnership or Corporation, as case may be)

(Address of Individual, Partnership or Corporation)

I (We), the undersigned, hereby propose to furnish all materials, equipment, tools, services, labor, and whatever else may be required to construct and place in service the above subject Sanitary Sewer for the Four Rivers Sanitation Authority all in accordance with the plans and specifications, provided by Four Rivers Sanitation Authority. The undersigned also affirms and declares:

1. That I (we), have, examined and am (are) familiar with all the related contract documents and found that they are accurate and complete and are approved by the undersigned.
2. That I (we), have carefully examined the site of the work, and that, from my (our) investigation, has satisfied myself (ourselves) as to the nature and location of the work, the character, quality, and quantity of materials and the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions and all difficulties to be encountered, and all other items which may, in any way, effect the work or its performance.
3. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same purposes, and is in all respects fair and without collusion or fraud; and that I (we) are not barred from bidding as a result of a bid-rigging or bid-rotating conviction.
4. That accompanying the Proposal is a Bidder's Bond in the amount specified in Article 1, Notice to Bidders, payable to the Board of Trustees of the Four Rivers Sanitation Authority, which it is agreed, shall be retained as liquidated damages by said Four Rivers Sanitation

Authority if the undersigned fails to execute the Contract in conformity with the contract documents incorporated in the contract documents and furnish bond as specified, within ten (10) days after notification of the award of the contract to the undersigned.

5. The Bidder is of lawful age and that no other person, firm or corporation has any interest in this Proposal or in the Contract proposed to be entered into.
6. The Bidder is not in arrears to the Four Rivers Sanitation Authority, upon debt or contract and is not a defaulter, as surety or otherwise, upon any obligation to the Four Rivers Sanitation Authority.
7. No officer or employee or person whose salary is payable in whole or in part by the Four Rivers Sanitation Authority is, shall be or become interested, directly or indirectly as a contracting party, partner, stockholder, surety or otherwise, in this Proposal, or in the performance of the Contract, or in the work to which it is relates, or in any portion of the profits thereof.
8. The Bidder which I represent complies with all applicable requirements of the Americans with Disabilities Act (ADA) and the Occupational Safety and Health Act (OSHA) and that if said bidder is awarded a contract, it will complete all OSHA required or ADA-required employee and customer training, will make available all required information, and will hold harmless and indemnify the Four Rivers Sanitation Authority and the Four Rivers Sanitation Authority's representatives.

In regard to participation in an approved Apprenticeship program, upon request, Contractor will be required to provide written proof of participation.

9. The undersigned, as Bidder, declares that he has adopted and promulgated written sexual harassment policies in accordance with Public Act 101-0221 and will make this information available upon request.
10. The undersigned, as Bidder, declares he will comply with prevailing wages in accordance with the Illinois Department of Labor Standards. The State of Illinois requires contractors and subcontractors on public works projects (including Four Rivers Sanitation Authority) to submit certified payroll reports via the State's Certified Transcript of Payroll Portal found at <https://labor.illinois.gov/laws-rules/conmed/certifiedtranscriptofpayroll.html>.
11. The undersigned, as Bidder, declares he will comply with the Federal Drug Free Workplace Act.
12. The undersigned, as Bidder, declares he will comply with Public Act 83-1030 entitled "Steel Products Procurement Act."
13. The undersigned, as Bidder, declares he will comply with Public Act 96-929 (30 ILCS 570) regarding Illinois residents' employment.
14. The undersigned, as Bidder, declares he will comply with non-discrimination in employment in accordance with the Illinois Fair Employment Practices Commissions Rules & Regulations.
15. The undersigned, as Bidder, declares that he currently participates in an apprenticeship or training program that is registered with the United States Department of Labor's Bureau of Apprenticeship and Training or other acceptable State of Illinois Department of Labor monitored program.

In submitting this bid, it is understood that the right is reserved by the Four Rivers Sanitation Authority to reject any and all bids. It is agreed that this bid may not be withdrawn for a period of sixty (60) days from the opening thereof.

The undersigned further declares that he (they) has (have) carefully examined the following items of work and that the cost of all the work to complete this project is given in this Proposal.

Not to be used for bidding purposes

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
1	1	L SUM	Abandon and Fill Existing Sanitary Sewer			
2	3,065	SQ YD	Aggregate Base Course, Type B 10"			
3	954	SQ YD	Aggregate Base Course, Type B 12"			
4	345	CU YD	Aggregate Subgrade Improvement			
5	2	EACH	Barrier Gate			
6	4	EACH	Bollard Removal			
7	652	FOOT	Chain Link Fence Removal			
8	690	FOOT	Chain Link Fence, 6', Special			
9	2	EACH	Chain Link Gates Removal			
10	1	EACH	Chain Link Gates, Manual Rolling, 30' Opening			
11	1	EACH	Chain Link Gates, Manual Swinging Double, 10' Opening			
12	1	EACH	Chain Link Gates, Motor Operated Rolling, 30' Opening			
13	240	SQ YD	Class B Patches, Type IV, 10"			
14	2	CU YD	Class S Concrete (Outlet)			
15	1	EACH	Concrete Cradle for Sanitary Sewer			
16	2,643	FOOT	Combination Concrete Curb & Gutter, Ty. M6.18 (Modified)			

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
17	217	FOOT	Concrete Gutter, Low Flow			
18	1	L SUM	Construction Layout			
19	1,020	FOOT	Combination Curb & Gutter Removal			
20	40	FOOT	Curb Removal			
21	34	SQ FT	Detectable Warnings			
22	1	EACH	Double Inlet, Special			
23	84	SQ YD	Filter Fabric			
24	1	EACH	Fire Hydrant with 6" Valve and Valve Box			
25	1	EACH	Fire Hydrants To Be Removed			
26	42	FOOT	Guardrail Removal			
27	4	EACH	Handhole			
28	1	EACH	Handhole, 2' Dia.			
29	215	TON	Hot-Mix Asphalt Binder Course, IL-19.0, N50			
30	107	TON	Hot-Mix Asphalt Surface Course, IL-9.5, Mix "D" N50			
31	14	EACH	Inlet and Pipe Protection			
32	3	EACH	Inlets, Special			
33	2	EACH	Inlets, Special, No. 5			

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
34	3	EACH	Inlets, Type A, Type 8 Grate			
35	67	FOOT	Insulating Sanitary Sewers/Forcemains			
36	779	SQ YD	Landscape Mulch			
37	1	L SUM	Landscaping			
38	8	EACH	Light Pole & Fixtures			
39	52	FOOT	Light Pole Foundation, 24" Diameter			
40	2	EACH	Manholes To Be Adjusted with New Type 1 Frame, Closed Lid			
41	1	EACH	Manholes To Be Adjusted with New Type 8 Grate			
42	2	EACH	Manholes, Type A, 4' Diameter, Type 1 Frame, Open Lid			
43	1	L SUM	Modify Existing Gate			
44	8,072	SQ YD	Mulch, Method 2			
45	4,421	SQ YD	Pavement Removal			
46	1,292	FOOT	Perimeter Erosion Barrier			
47	97	FOOT	Pipe Culvert Removal			
48	68	FOOT	Pipe Handrail, Special			
49	99	SQ YD	Portland Cement Concrete Pavement Sleeper Slab, 8"			
50	3,065	SQ YD	Portland Cement Concrete Pavement, 08" (Jointed)			

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
51	1	L SUM	Portland Cement Concrete Sidewalk Accessibility Ramp and Stoop			
52	1,119	SQ FT	Portland Cement Concrete Sidewalk, 4"			
53	1	EACH	Precast Reinforced Concrete Flared End Sections, 12"			
54	2	EACH	Precast Reinforced Concrete Flared End Sections, 15"			
55	635	FOOT	Pulling Electric & Fiber Optic			
56	1,123	FOOT	PVC Conduit (With Conductors), 1"			
57	124	FOOT	PVC Conduit, 1"			
58	278	FOOT	PVC Conduit, 2"			
59	72	FOOT	PVC Conduit, 4"			
60	30	FOOT	Reinforced Concrete Ductbank Removal			
61	30	FOOT	Reinforced Concrete Ductbank, 2-2", 1x2			
62	345	CU YD	Removal and Disposal of Unsuitable Material			
63	1	L SUM	Remove and Relocate Landscape Boulders			
64	1	L SUM	Remove Abandoned Sampling Tank			
65	1	L SUM	Remove Electric Meter and Wooden Screen			
66	7	EACH	Remove Light Pole and Foundation			
67	1	L SUM	Remove Sign Assembly			

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
68	3	EACH	Removing Catch Basins			
69	1	EACH	Removing Manholes			
70	1	EACH	Sanitary Manholes To Be Adjusted with New Type 1 Frame, Closed Lid			
71	2	EACH	Sanitary Manholes To Be Reconstructed with New Type 1 Frame, Closed Lid			
72	1	EACH	Sanitary Manholes To Be Removed			
73	8,072	SQ YD	Seeding, Class 1 and Fertilizing			
74	464	SQ FT	Sidewalk Removal			
75	5	SQ FT	Sign Panel - Type 1			
76	40	SQ FT	Sign Panel – Type 3			
77	187	SQ YD	Stabilized Construction Entrance			
78	84	SQ YD	Stone Riprap, Class A3			
79	147	FOOT	Storm Sewers, Class A, Type 1 12"			
80	314	FOOT	Storm Sewers, Class A, Type 1 15"			
81	45	FOOT	Storm Sewers, PVC, 06"			
82	6	FOOT	Storm Sewers, PVC, 08"			
83	10	FOOT	Storm Sewers, PVC, 10"			
84	45	FOOT	Storm Sewers, PVC, 12"			

Item No.	Quantity	Unit	Description	Unit Price (In Writing)	Unit Price (In Figures)	Total Price (In Figures)
85	15	FOOT	Telescoping Steel Sign Support			
86	20	FOOT	Temporary Ditch Checks			
87	168	POUND	Temporary Erosion Control Seeding			
88	1	L SUM	Temporary Guard Shack			
89	69	SQ FT	Thermoplastic Pavement Marking - Letters & Symbols			
90	1,686	FOOT	Thermoplastic Pavement Marking - Line, 04"			
91	24	FOOT	Thermoplastic Pavement Marking - Line, 24"			
92	8,851	SQ YD	Topsoil Furnish and Place, 4"			
93	1	L SUM	Traffic Control and Protection			
94	108	UNIT	Tree Removal (over 15 Units Diameter)			
95	1	EACH	Valve Vaults To Be Adjusted with New Type 1 Frame, Closed Lid			
96	28	FOOT	Wood Sign Support			
97	2	EACH	Yard Hydrant To Be Removed			
TOTAL BID PRICE:						
				(In Writing)	(In Figures)	

The undersigned acknowledges receiving Addendum numbers _____, _____, _____, and realizes that all Addenda are considered part of the Contract.

By: _____

Name: _____ Title: _____ Date: _____

Not to be used for bidding purposes

Fair Employment Practices Affidavit of Compliance

Project: Plant Roadway Replacement, Capital Project No. 2406

NOTE: THE BIDDER MUST EXECUTE THIS AFFIDAVIT AND SUBMIT IT WITH ITS SIGNED BID. THE FOUR RIVERS SANITATION AUTHORITY CANNOT ACCEPT ANY BID WHICH DOES NOT CONTAIN THIS AFFIDAVIT

_____, being first duly sworn, deposes and says that:
(Name of person making affidavit)

They are: _____ of _____
(Officer's Title) (Company Name)

that said company is and "Equal Opportunity Employer" as defined by Section 2000(e) of Chapter 21, Title 42 of the United States Code annotated and Federal Executive Orders #11375 which are incorporated herein by reference;

and that said company will comply with any and all requirements of Title 44 Admin. Code 750. APPENDIX A – Equal Opportunity Clause, Rules and Regulations, Illinois Department of Human Rights, which read as follows:

"In the event of the contractor's non-compliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation. During the performance to this contract, the contractor agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizen status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
2. That, if he or she hires additional employees in order to perform this contract or any portion of this contract, he or she will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the areas from which he or she may reasonably recruit and he or she will hire for each job classification for which employees are hired in a way that minorities and women are not underutilized.
3. That, in all solicitations or advertisements for employees placed by him or her or on his or her behalf, he or she will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, national origin or ancestry, citizenship status, age, physical or mental handicap unrelated to ability, sexual orientation, military status or an unfavorable discharge from military service.
4. That he or she will send to each labor organization or representative of workers with which he or she has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the contractor in his or her efforts to comply with such Act and Rules and Regulations, the contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations under the contract.
5. That he or she will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Departments Rules and Regulations.
6. That he or she will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
7. That he or she will incorporate verbatim or by reference the provisions of this clause in every subcontract awarded under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the contractor will be liable for compliance with applicable provisions of this clause by such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any subcontractor fails or refuses to comply with the provisions. In addition, the contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

(Source: Amended at 32 Ill. Reg. 16484, effective September 23, 2008)"

IL Dept of Human Rights Registration No.: _____ Expiration Date: _____

Signature

Subscribed and sworn to before me this _____ day of _____, 20____.

Notary Public

STATE OF ILLINOIS)
) SS.
COUNTY OF _____)

AFFIDAVIT OF COMPLIANCE: RESPONSIBLE BIDDER ORDINANCE

I, _____ [Name of Affiant], being first duly sworn upon oath, state as follows:

1. **Position:** I am the _____ [Title] of _____ [Name of Bidding Entity] (the "**Bidder**"), and I am authorized to make this Affidavit on its behalf.
2. **Project:** This Affidavit is submitted in connection with the bid for Plant Roadway Improvements, Capital Project No. 2406 (the "**Project**") for the **Four Rivers Sanitation Authority ("FRSA")**.
3. **Responsible Bidder Status:** I certify that the Bidder meets the definition of a "**Responsible Bidder**" as set forth in the FRSA Responsible Bidder Ordinance for projects estimated to cost over \$40,000.
4. **Apprenticeship Program Participation:** The Bidder, and all subcontractors at any tier, participate in active apprenticeship and training programs approved and registered with the U.S. Department of Labor's Office of Apprenticeship and Training (or its successor) for each of the trades of work contemplated under the awarded contract.
5. **Evidence of Participation:** Attached to the bid (or to be provided as required) are copies of the applicable apprenticeship standards and apprenticeship agreement(s) for any contractor(s) who will perform work on the project site.
6. **Subcontractor Compliance:** The Bidder shall require all subcontractors for this FRSA Project to comply with the requirements of this Ordinance.
7. **Verification:** I understand that FRSA may request additional documentation to verify that the apprenticeship program is active and registered.
8. **Acknowledgment of Penalties:** I acknowledge that failure to provide this Affidavit or proof of participation shall render the bid non-responsive and subject to disqualification. Further, I understand that failure to comply with these requirements during the performance of the contract may result in being deemed in default, withholding of payments, and contract termination.
9. **Exemptions:** I certify that the work for which this bid is submitted is not exclusively dedicated to the transportation of materials and equipment nor does it consist solely of the maintenance, repair, or installation of lining of sanitary sewer lines, unless a specific waiver has been granted by FRSA.

FURTHER AFFIANT SAYETH NOT.

[Signature of Affiant]

SUBSCRIBED AND SWORN to
before me this ____ day of _____, 20__.

NOTARY PUBLIC

Bid Bond

KNOW ALL MEN BY THESE PRESENTS, that we:

_____ (hereinafter called the Principal) and

_____ (hereinafter called the Surety)

a Corporation chartered and existing under the laws of the State of _____ with its principal offices in the City of _____ and authorized to do business in the State of Illinois are held and firmly bound onto the Four Rivers Sanitation Authority (FRSA) of Winnebago County, Illinois, in the full and just sum of: **FIVE PERCENT (5%) OF THE TOTAL BID PRICE** good lawful money of the United States of America, to be paid upon demand of the FRSA, to which payment will and truly to be made we bind ourselves, our heirs, executors, administrators, and assigns, jointly and severally and firmly by these presents.

WHEREAS, the Principal is about to submit, or has submitted to FRSA, a proposal for the Plant Roadway Replacement project consisting of the abandonment of Martin Road and the reconfiguration of the FRSA wastewater treatment plant's Kishwaukee Street entrance. Work includes the removal and construction of pavement, sidewalk, curb and gutter, utilities, fencing, gates, lighting, signage, turf restoration, landscaping, and all other appurtenances on the plans and in the specifications.

WHEREAS, the Principal desires to file this bond, in accordance with law, to accompany this Proposal.

NOW THEREFORE, The conditions of this obligation are such that if the Proposal be accepted, the Principal shall, within ten days after the date of receipt of a written notice of award of Contract, execute a Contract in accordance with the Proposal and upon the terms, conditions, and prices set forth therein, in the form and manner required by FRSA, and execute a sufficient and satisfactory Contract Performance Bond payable to said FRSA in an amount of one hundred percent (100%) of the Contract price (including alternates) in form and with security satisfactory to said FRSA, then this obligation to be void, otherwise to be and remain in full force and virtue in law; and the Surety shall, upon failure of the Principal to comply with any or all of the foregoing requirements within the time specified above, immediately pay to the aforesaid FRSA, upon demand, the amount hereof in good and lawful money of the United States of America, not as a penalty, but as liquidated damages.

IN TESTIMONY THEREOF, the Principal and Surety have caused these presents to be duly signed
and sealed this _____ day of _____, 20_____.

Principal

(Seal)

By _____

Name: _____

Title: _____

Date: _____

Attest:

Secretary

Surety

(Seal)

By _____

Name: _____

Title: _____

Date: _____

Agreement

1. General

THIS AGREEMENT, made and concluded this _____ day of _____, 2026, between the Four Rivers Sanitation Authority (FRSA), Rockford, Illinois, acting by and through the Board of Trustees, and _____, his/their executors, administrators, successors or assigns:

2. Scope of Work

WITNESSETH: That for and in consideration of the payments and agreements made in the Proposal attached hereto, to be made and performed by FRSA and according to the terms expressed in the Bond referring to these presents, the Contractor agrees with FRSA at his/their own proper cost and expense to do all the work, furnish all equipment, materials and all labor necessary to complete the work in accordance with the plans and specifications hereinafter described, and in full compliance with all of the terms of this agreement and the requirements of FRSA and its representative.

And it is also understood and agreed that the Bidding Requirements, Detailed Specifications, Contract Forms, General Conditions, General Requirements, Technical Specifications, Plans, Addenda, and provisions required by law are all essential documents of the contract, and are a part hereof, as if herein set out verbatim or as if attached, except for titles, subtitles, headings, table of contents and portions specifically excluded.

3. Contract Price

FRSA shall pay to the Contractor, and the Contractor shall accept, in full payment for the performance of this Contract, subject to any additions or deductions provided for hereby, in current funds, the Total Contract Price of _____ and 00/100 (\$ _____).

Payments are to be made to the Contractor in accordance with and subject to the provisions of Section 7 of this Agreement, which is a part of this Contract.

4. Bond

The Contractor has entered into and herewith tenders a bond of even date herewith, in the penal sum of _____ and 00/100 (\$ _____) to insure the faithful performance of this Contract, which said bond is hereby made a part of this Contract by reference.

5. Maintenance and Guarantee

The Contractor shall promptly repair, replace, restore or rebuild any imperfections that may arise and shall maintain satisfactory to FRSA all work for a period three years from the date of final acceptance of the Contract for trench settlement and for a period of two years all other work, except where periods of maintenance and guarantee are provided for. The Contractor shall, for this period, indemnify and save harmless the FRSA, its officers and agents from any injury done to property or persons as a direct or alleged result of imperfections in the Contractors' work, and shall immediately assume and take charge of the defense of such action or suits in like manner and to all intents and purposes as if said actions and suits had been brought directly against the Contractor.

If the Contractor shall fail to repair, replace, rebuild or restore such defective or damaged work promptly after receiving notice given by FRSA, the FRSA shall have the right to have the work done by others and to call on the Contractor and his bondsman to pay the costs thereof.

6. Contract Execution

IT IS EXPRESSLY UNDERSTOOD AND AGREED that the entire improvement shall be done in a thorough and workmanlike manner, under the direction and to the satisfaction of FRSA and in full compliance with all the requirements of its representative under them. All loss or damage arising out of the nature of the work to be done, or from any detention of unforeseen obstruction or difficulty which may be encountered in the prosecution of the work, or from the action of the elements, shall be sustained by the Contractor.

The Contractor will be held responsible for all accidents, and hereby agrees to indemnify and protect FRSA from all suits, claims, and actions brought against it, and all cost, and damages which FRSA may be put to by reason of an injury or alleged injury, to the person or property of another in the execution of this contract, or the performance of the work, or in guarding the same, or for any material used in its prosecution or in its construction.

Any person employed on the work who shall refuse or neglect to obey the directions of FRSA or its representative, or who shall be deemed by FRSA to be incompetent, or who shall be guilty of any disorderly conduct, or who shall commit any trespass on any public or private property in the vicinity of the work, shall at once be removed from the work by the Contractor when so requested by FRSA.

Any request to extend the contract completion date must be considered by the Board at the Board meeting prior to the then-existing contract termination date. Any deviation from this action will result in the liquidated damage clause in the contract to be exercised.

7. Payments to Contractor

FRSA hereby covenants and agrees, in consideration of the covenants and agreements in this Contract, specified to be kept and performed by the Contractor and subject to the conditions herein contained, and if FRSA receives an acceptable invoice prior to the tenth day of the month and receives approval of the work by the FRSA's Director of Engineering, FRSA shall issue payment before the fifth day of the succeeding month. If FRSA receives an acceptable invoice on or after the tenth day of the month, FRSA shall issue payment before the fifth day of the second succeeding month.

FRSA reserves the right at all times to refuse to issue payment in case the Contractor has neglected or failed to pay any subcontractors, workmen or employee on the work.

8. Subcontracts

No part of the work herein provided for shall be sublet or subcontracted without the express consent of FRSA, to be entered in the records, and in no case shall consent relieve the Contractor from the obligation herein entered into, or change the terms of this Agreement.

9. Contractor's Responsibility

This Contract shall extend to and be binding upon the successors and assigns, and upon the heirs, administrators, executors, and legal representatives of the Contractor.

In consideration of and to induce the award of this Contract to him, the Contractor represents and warrants: that he is not in arrears to FRSA upon debt of the Contract and that he is not a defaulter, as surety, contractor or otherwise; that he is financially solvent and sufficiently experienced and competent to perform the work; that the work can be performed as called for by the Contract; that the facts stated in his proposal and the information given by him is true and correct in all respects, and that he is fully informed regarding all the conditions affecting the work to be done and labor and materials to be furnished for the completion of this Contract and that his information was secured by personal investigation and research.

The Contractor shall pay not less than the prevailing wage rate as determined by the Department of Labor, to all laborers, workmen and mechanics performing work under this Contract. Contractor shall comply with current revisions of the wage standards; as required by law. The Contractor shall be responsible for verifying the prevailing wages each month and notifying all subcontractors of the appropriate monthly rates. The State of Illinois requires contractors and subcontractors on FRSA projects to submit certified payroll reports via the State's Certified Transcript of Payroll Portal currently found at: <https://labor.illinois.gov/laws-rules/conmed/certifiedtranscriptofpayroll.html>. The Contractor is responsible for verifying current website.

In regard to nondiscrimination in employment, Contractor will be required to comply with the Illinois Fair Employment Practices Commission's Rules and Regulations as provided herein.

The Contractor shall comply with the American Disabilities Act of 1990 (ADA). The Contractor will hold harmless and indemnify FRSA and their representatives from all:

- (a) suits, claims, or actions;
- (b) costs, either for defense (including but not limited to reasonable attorney's fees and expert witness fees) or for settlement, and;
- (c) damages of any kind (including but not limited to actual, punitive, and compensatory damages)

relating in any way to or arising out of the ADA, to which said firm is exposed or which it incurs in the execution of the contract.

Contractor shall also comply with Public Act 101-0221, which requires any party to a contract to adopt and enforce a written policy regarding sexual harassment that includes, as a minimum, the following information:

- (a) the illegality of sexual harassment
- (b) the definition of sexual harassment under Illinois State law;
- (c) a description of sexual harassment, utilizing examples;
- (d) my (our) organization's internal complaint process including penalties;
- (e) through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
- (f) directions on how to contact the Department and the Commission; and
- (g) protection against retaliation as provided by Section 6-101 of the Illinois Human Rights Act.

Upon request this information will be provided to the Illinois Department of Human Rights. Upon FRSA award of a contract, FRSA will be provided this information described no more than ten working days after FRSA issues its award notification.

The Contractor shall comply with Public Act 96-929 (30 ILCS 570) which provides that Illinois residents be employed on Illinois public works projects, provided there has been a period of excessive unemployment (5%) in the State of Illinois as defined in the Act; and further, that Illinois workers are available and capable of performing the particular type work involved.

The Contractor shall comply with all rules and regulations of OSHA during the execution of this Contract.

The Contractor shall comply with the Federal Drug Free Workplace Act.

The Steel Products Procurement Act, Illinois Public Act 83-1030, requires that steel products used or supplied in performance of this Contract or subcontract shall be manufactured or produced in the United States with three exceptions, as explained in the Instructions to Bidders.

The Contractor shall comply with Public Act 96-1416 regarding the disposal of CCDD and uncontaminated soil at CCDD fill sites as explained in the Instructions to Bidders.

10. Time

Work under this Agreement shall be commenced upon written Notice to Proceed. The completion date for this project shall be November 30, 2026.

11. Liquidated Damages

The amount of liquidated damages shall be \$300.00 per calendar day.

12. Counterparts

This Agreement may be executed and recorded in counterparts, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same instrument. The Parties hereby acknowledge and agree that facsimile signatures or signatures transmitted by electronic mail in so-called "pdf" format shall be legal and binding and shall have the same full force and effect as if an original of this Agreement had been delivered. Each of the parties (a) intend to be bound by the signatures on any document sent by facsimile or electronic mail, (b) are aware that the other party will rely on such signatures, and (c) hereby waive any defenses to the enforcement of the terms of this Agreement based on the foregoing forms of signature.

13. Seals

IN WITNESS WHEREOF, the parties have hereunto set their hands and seals, and such of them as are corporations have caused these presents to be signed by their duly authorized officers.

Four Rivers Sanitation Authority
Winnebago County, Illinois

(Seal)

By _____
President, Board of Trustees

ATTEST: _____
Clerk of the Board

Contractor

(Corporate Seal)

By _____
Contractor's Officer

Name: _____
Title: _____
Date: _____

ATTEST: _____

Not to be used for bidding purposes

Labor & Material Payment Bond

TO: _____ Contractor Name

Contractor City, State _____

KNOW ALL MEN BY THESE PRESENTS

That _____ (Contractor)

as Principal, and _____

a corporation of the State of _____ as Surety, are held and firmly bound unto the Four Rivers Sanitation Authority, as Obligee, for the use and benefit of claimants as hereinafter defined in the amount of _____

_____ Dollars (\$ _____), for the payment
where of Principal and Surety bind themselves, their heirs, executors, administrators, successors and
assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has by written agreement dated _____ 20__ Entered into a Contract with Obligees for _____ in accordance with contract documents prepared by the Four Rivers Sanitation Authority which Contract is by reference made a part hereof, and is hereinafter referred to as “the Contract”.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if Principal shall promptly pay for all laborers, workers and mechanics engaged in the work under the Contract, and not less than the general prevailing rate of hourly wages of a similar character in the locality in which the work is performed, as determined by the State of Illinois Department of Labor pursuant to the Illinois Compiled Statutes 280 ILCS 130 / 1-12 et.seq. and for all material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect.

1. A claimant is deemed as any person, firm, or corporation having contracts with the Principal or with any of Principal's subcontractors for labor or materials furnished in the performance of the Contract on account of which this Bond is given.
2. Nothing in this Bond contained shall be taken to make the Obligee liable to any subcontractor, material man or laborer, or to any other person to any greater extent than it would have been liable prior to the enactment of The Public Construction Bond Act, approved June 20, 1931, as amended; provided further, that any person having a claim for labor and materials furnished in the performance of the Contract shall have no right of action unless he shall have filed a verified notice of such claim with the Obligee within 180 days after the date of the last item of work or the furnishing of the last item of materials, which claim shall have been verified and shall contain the name and address of the claimant, the business address of the claimant within the State of Illinois, if any, or if the claimant be a foreign corporation having no place of business within the State the principal place of business of the corporation, and in all cases of partnership the names and residences of each of the partners, the name of the Contractor

for the Obligee, the name of the person, firm or corporation by whom the claimant was employed or to whom such claimant furnished materials, the amount of the claim and a brief description of the public improvement for the construction or installation of which the contract is to be performed. No defect in the notice herein provided for shall deprive the claimant of its right of action under the terms and provisions of this Bond unless it shall affirmatively appear that such defect has prejudiced the rights of an interested party asserting the same.

3. No action shall be brought on this Bond until the expiration of 120 days after the date of the last item of work or of the furnishing of the last item of material except in cases where the final settlement between Obligee and the Contractor shall have been made prior to the expiration of the 120 day period, in which case action may be taken immediately following such final settlement; nor shall any action of any kind be brought later than 6 months after the acceptance by the Obligee of the work. Such suit shall be brought only in the circuit court of this State in the judicial district in which the Contract is to be performed.
4. Surety hereby waives notice of any changes in the Contract, including extensions of time for the performance thereof.
5. The amount of this Bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder.
6. The Principal and Surety shall be liable for any attorneys' fees, engineering costs, or court costs incurred by the Obligee relative to claims made against this Bond.

Signed and Sealed this _____ day of _____, 20____.

CONTRACTOR

SURETY

Contractor Firm Name

By: _____
Signature

Printed Name

Title

By: _____
Attorney-in-Fact Signature

Printed Name

Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

Performance Bond

KNOW ALL MEN BY THESE PRESENTS, that WHEREAS, the Four Rivers Sanitation Authority has awarded to: _____ hereinafter designated as the “Principal”, a contract, dated, _____, for the Four Rivers Sanitation Authority.

WHEREAS, said Principal is required under the terms of said Contract to furnish a bond for the faithful performance of said Contract (the “Bond”);

NOW, THEREFORE, we the Principal and _____ as Surety, are firmly bound unto the Four Rivers Sanitation Authority in the penal sum of _____ Dollars (\$ _____) lawful money of the United States for the payment of which sum well

and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally firmly by these presents for a performance bond. The conditions of this obligation is such that if the said Principal does well and faithfully performs all the conditions and covenants of said Contract, according to the true intent and meaning thereof, upon its part to be kept and performed, then the above obligation is to be null and void, otherwise to remain in full force and effect.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if the above bounden Principal, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the said Contract, including the provisions for liquidated damages in the said Contract, any changes, additions or alterations thereof made as therein provided, on its part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless the Four Rivers Sanitation Authority, its officers and agents, as therein stipulated, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect. And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder or the specifications accompanying the same and no inadvertent overpayment of progress payments shall in any way affect its obligations on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work or to the specifications or of any inadvertent overpayment of progress payments. The Four Rivers Sanitation Authority shall be named as beneficiary on this Performance Bond.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their seal this _____ day of _____, 20_____, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

CONTRACTOR

SURETY

Contractor Firm Name

By: _____
Signature

Printed Name

Title

By: _____
Attorney-in-Fact Signature

Printed Name

Resident Agent

ATTEST:

Corporate Secretary (Corporations only)

Section III
Attachments



Check Sheet for Recurring Special Provisions

Local Public Agency

County

Section Number

	Winnebago	
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☐ Check this box for lettings prior to 01/01/2026

The Following Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Recurring Special Provisions

Check Sheet #			Page No.
1	☐	Additional State Requirements for Federal-Aid Construction Contracts	90
2	☐	Subletting of Contracts (Federal-Aid Contracts)	90
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4	☐	Specific EEO Responsibilities Non Federal-Aid Contracts	101
5	☐	Required Provisions - State Contracts	106
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7	☐	Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	113
8	☐	Temporary Stream Crossings and In-Stream Work Pads	114
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10	☐	Use of Geotextile Fabric for Railroad Crossing	118
11	☐	Subsealing of Concrete Pavements	120
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14	☐	Patching with Hot-Mix Asphalt Overlay Removal	127
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Local Public Agency

County

Section Number

Winnebago

The Following Local Roads And Streets Recurring Special Provisions Indicated By An "X" Are Applicable To This Contract And Are Included By Reference:

Local Roads And Streets Recurring Special Provisions

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LRS 4	☐ Flaggers in Work Zones	184
LRS 5	☐ Contract Claims	185
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LRS 7	☐ Bidding Requirements and Conditions for Material Proposals	192
LRS 8	Reserved	198
LRS 9	☐ Bituminous Surface Treatments	199
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LRS 11	☐ Employment Practices	204
LRS 12	☐ Wages of Employees on Public Works	206
LRS 13	☐ Selection of Labor	208
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LRS 15	☐ Partial Payments	212
LRS 16	☐ Protests on Local Lettings	213
LRS 17	☐ Substance Abuse Prevention Program	214
LRS 18	☐ Multigrade Cold Mix Asphalt	215
LRS 19	☐ Reflective Crack Control Treatment	216

Instructions for BLR 11300 - Page 1 of 1

Note: Instructions are not to be submitted with the form.

This form shall be used and included in proposal/contract documents. Items checked on the check sheet are included by reference and do not need to also be attached.

For more information see Chapter 11 of the Bureau of Local Roads and Street Manual (BLRS Manual).

Local Public Agency	Insert the name of the Local Public Agency (LPA) the proposal is for.
County	From the drop down, select the name of the County in which the LPA is located.
Section Number	Insert the section number without dashes that the proposal/contract is for.
Check Box for Letting Date	Check this box if the letting is to be held prior to January 1, 2026. For lettings held on or after January 1, 2026 leave the box blank. This choice allows the correct version of the form to display for the desired letting.
Special Provisions	Check the boxes for the Recurring Special Provisions and the Local Roads and Streets Recurring Special Provisions which are to be included in this proposal/contract package by reference.

This form is to be submitted in the proposal packet for material proposal/deliver and install proposals and contract proposals.

Section IV

General Provisions and Technical Specifications for Sanitary Sewer Construction

(separate document incorporated by reference)