GMC

Goodwyn Mills Cawood 2400 5th Avenue South, Suite 200 Birmingham, Alabama 35233 T 205.879.4462

TRANSMITTAL COVER SHEET

- DATE: May 1, 2025
- TO: ALL CONTRACTORS
- FROM: WHEELER CROOK, PE
- PROJECT: NORTHEAST ALABAMA REGIONAL MEGASITE CANOE CREEK ROAD INFRASTRUCTURE IMPROVEMENTS ETOWAH COUNTY COMMISSION ETOWAH COUNTY BID NO. FY 2025-12 GMC PROJECT NO. CBHM220009(2)

RE: ADDENDUM #1

PLEASE COMPLETE BELOW AND RETURN IMMEDIATELY.

Email: ashley.morris@gmcnetwork.com

I, the undersigned, hereby acknowledge receipt of this Addendum #1.

Authorized Representative of Contractor

Date

Company Name

Telephone

Contractor's License Number (if applicable)

GMC ADDENDUM NUMBER 1

NORTHEAST ALABAMA REGIONAL MEGASITE CANOE CREEK ROAD INFRASTRUCTURE IMPROVEMENTS FOR THE

ETOWAH COUNTY COMMISSION ETOWAH COUNTY BID NO. FY 2025-12 GMC PROJECT NO. CBHM220009(2)

1. <u>Revisions to Project Manual</u>

- 1.1 The following revisions are hereby added as Addendum No. 1 to the referenced Project Manual and Plans and shall be considered when preparing bids.
- 1.2 The Bid Proposal has been revised and attached. This bid proposal shall take precedence over older versions and shall be used in preparation of bids.
- 1.3 Section 01 0300 Special Project Provisions & Section 01 1500 Measurement and Payment have been revised and attached. These specifications shall take precedence over older versions and shall be used in preparation of bids.

2. <u>Contractor Questions</u>

- 2.1 Do you have an engineer's estimate on this project? \$4 \$4.4 million.
- 2.2 Is there any geotechnical information for the site to indicate the existing soil conditions? The available geotechnical information for the site can be found on the mega-site's website. https://alabamamegasite.com/due-diligence/ Just want to emphasize that this is for informational purposes and all of the information here does not directly correlate to the locations of the proposed improvements. This also does not take into consideration any changes in geological formations since report completion. Also, this does not consider any construction activities that have taken place since this report; hence, this shall only be considered for informational purposes only. Section 01 0300, Item 1.14 lists it as the contractor's responsibility for verifying subsurface conditions in areas of the project.
- 2.3 **Are any end treatments required for the new storm drain lines crossing Canoe Creek Road?** There aren't any end treatments for the storm pipes. It will just be replacement of the existing pipes.
- 2.4 Is stone backfill and bedding required for the storm drain lines crossing Canoe Creek Road? There will be a bedding and compaction requirement at least up to the spring line of the pipe, depending on depth of coverage. This detail has been provided in Addendum Number 1.

3. <u>Revisions to Drawings</u>

3.1 G-003: Schedule of Quantities

• Chart consisting of the quantities for the 16 Inch Water Transmission Main has been revised to show the updated quantities.



- A line item was added for Special Stone Aggregate Backfill for Water Utility Trench – Gradation 8910
- Chart consisting of the quantities for the Canoe Creek Road Improvements has been revised to show the updated quantities.
 - The line item for Bituminous Treatment AKG was removed.

3.2 C-903: Standard Details

- Two details were added to this page.
 - Proposed Utility Trench for Canoe Creek Road (Unpaved) Detail was added to show the stone aggregate requirement.
 - Typical Trench Detail for Storm Water Utility Pipe was added to show the bedding requirements for storm drainage pipes.

3.3 C-904: Typical Sections

- Canoe Creek Road (Unpaved) Pavement Typical Section: STA 63+36 STA 103+92 was revised.
 - The Bituminous Treatment AKG requirement was removed from this section.
 - Tapers to connect to the existing road/grade were shown.

4. <u>Acknowledgement of Receipt</u>

- 4.1 Receipt of Addendum No. 1 shall be acknowledged in two ways:
 - 4.1.1 Note on Page 5 of the Bid Form Bidder acknowledges receipt of "Addendum No. 1."

AND

4.1.2 EMAIL Goodwyn Mills Cawood, LLC immediately at <u>ashley.morris@gmcnetwork.com</u> and confirm that EMAIL has been received.

5. <u>Conclusion</u>

5.1 This is the end of Addendum No. 1, dated Thursday, May 1, 2025.

BID FORM FOR CONSTRUCTION CONTRACT – ADDENDUM NO. 1

The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

ARTICLE 1—OWNER AND BIDDER

1.01 This Bid is submitted to:

Etowah County Commission Commission Chambers, Room 108 800 Forrest Avenue Gadsden, AL 35901 Attn: Joey Statum, Commission President

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2—ATTACHMENTS TO THIS BID

- 2.01 The following documents are submitted with and made a condition of this Bid:
 - A. Required Bid security;
 - B. List of Proposed Subcontractors;
 - C. List of Proposed Suppliers;
 - D. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such authority within the time for acceptance of Bids;
 - E. Contractor's license number as evidence of Bidder's State Contractor's License; and
 - F. Accounting of Sales Tax Attachment to Proposal Form.

ARTICLE 3—BASIS OF BID

- 3.01 Unit Price Bids
 - A. Bidder will perform the following Work at the indicated unit prices:

BASE BID

16 Inch Water Transmission Main

| <u>16 Inci</u> | n water | Iransm | ISSION Main | | | | τοται |
|------------------|-----------------------|-------------------|--|----|------------|------|------------------------------|
| <u>IТЕМ</u> 1 | QTY. 12,000 | <u>UNIT</u> LF | DESCRIPTION 16 Inch CL350 Ductile Iron Water Main w/ Poly Encasement | \$ | UNIT PRICE | \$ | <u>TOTAL</u> PRICE |
| 2 | 2 | EA | 1 Inch Combination Air/Vacuum Release Valve Assembly | - | | | |
| 3 | 7 | EA | 16 Inch Beveled Gear Gate Valve | - | | | |
| 4 | 6 | EA | Fire Hydrant Assembly | - | | | |
| 5 | 4 | EA | Connect to Existing 16 Inch Water Main | - | | | |
| 6 | 5 | TON | Ductile Iron Fittings for Water | - | | | |
| 7 | 2,000 | SY | Special Stone Aggregate Backfill for Water Utility Trench - Gradation No. 8910 (Trench Depth Varies) | | | | |
| | | | Total 16 Inch Water Transmission Main: | | | \$_ | |
| <u>12 Incl</u> | h Sewer | Force N | <u>lain</u> | | | | TOTAL |
| ITEM | <u>QTY.</u> | <u>UNIT</u> | DESCRIPTION | | UNIT PRICE | | <u>TOTAL</u> <u>PRICE</u> |
| 8 | 6,000 | LF | 12 Inch SDR17 CL250 PVC Force Main | \$ | | \$ | |
| 9 | 40 | LF | 24 Inch Welded Steel Encasement (Open Cut Installation) | - | | | |
| 10 | 2 | EA | Sanitary Sewer Flushing Assembly | - | | | |
| 11 | 2 | EA | Connect to Existing 12 Inch Force Main | - | | | |
| 12 | 2 | TON | Ductile Iron Fittings for Sewer | - | | | |
| | | | | | | | |
| | | | Total 12 Inch Sewer Force Main: | | | \$ _ | |
| <u>Canoe</u> | Creek R | oad Im | provements | | | | TOTAL |
| ITEM | QTY. | <u>UNIT</u> | DESCRIPTION | | UNIT PRICE | | PRICE |
| 13 | 32 | LF | 15 Inch CPP Storm Drain Pipe | \$ | | \$ | |
| 14 | 50 | LF | 15 Inch RCP Storm Drain Pipe, Class III | - | | | |
| 15 | 106 | LF | 18 Inch RCP Storm Drain Pipe, Class III | - | | | |
| 16 | 64 | LF | 24 Inch CPP Storm Drain Pipe | - | | | |
| 17 | 32 | LF | 24 Inch Ductile Iron Storm Drain Pipe | - | | | |
| 18 | 40 | LF | 6 Inch Temporary Storm Drain Pipe | - | | | |
| 19 | 40 | LF | 8 Inch Temporary Storm Drain Pipe | - | | | |
| 20 | 40 | LF | 12 Inch Temporary Storm Drain Pipe | - | | | |

EJCDC[®] C-410, Bid Form for Construction Contract.

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| 21 | 1,340 | GAL | Tack Coat | |
|----|--------|-----|--|------|
| 22 | 5,900 | LF | Double Solid Traffic Stripe, Yellow, Class 2, Type A (5" Wide) | |
| 23 | 100 | LF | Single Solid Traffic Stripe, White, Class 2, Type A (5" Wide) | |
| 24 | 1,400 | TON | Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate Size Mix, ESAL Range A/B (220#/SY) | |
| 25 | 1,450 | TON | Superpave Bituminous Concrete Upper Binder Layer, 3/4" Maximum Aggregate Size Mix, ESAL Range A/B (225#/SY) | |
| 26 | 100 | TON | Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate Size Mix, ESAL Range C/D (200#/SY) | |
| 27 | 110 | TON | Superpave Bituminous Concrete Upper Binder Layer, 1" Maximum Aggregate Size Mix, ESAL Range C/D (250#/SY) | |
| 28 | 26,600 | SY | Crushed Aggregate Base Course, Type B, Plant Mixed, 6" Compacted Thickness (825B Crusher Run) | |
| | | | | |

\$

Total Canoe Creek Road Improvements:

General Items

ADDITIVE ALTERNATE NO. 1

| ITEM | <u>QTY.</u> | <u>UNIT</u> | DESCRIPTION | | UNIT PRICE | | <u>TOTAL</u> PRICE |
|------|-------------|-------------|---|----|------------|------------|-----------------------|
| 29 | 1 | LS | Mobilization & General Conditions (NOTE 3% of Total Bid) | \$ | LS | \$ | |
| 30 | 1 | LS | Clearing & Grubbing | _ | LS | | |
| 31 | 1 | LS | Erosion Control Measures | | LS | | |
| 32 | 1 | LS | Traffic Control Measures | | LS | . – | |
| 33 | 1 | LS | Cleanup, Grassing, Mulching, Landscaping & Site Restoration | - | LS | | |
| 34 | 1 | LS | Construction Materials Testing Allowance | _ | LS | | 15,000.00 |
| 35 | 1 | LS | Construction Survey Allowance | | LS | | 10,000.00 |
| 36 | 1 | LS | Owner's Contingency Allowance | - | LS | . <u> </u> | 50,000.00 |
| | | | Total General Items: | | | \$_ | |
| | | | <u>Total Base Bid (Line Items 1 - 36):</u> | _ | | \$ | |

Price Increase (+) / Price Decrease (-) from 16 Inch Ductile Iron to 16 Inch Fusible PVC

| <u>ITEM</u> | <u>QTY.</u> | <u>UNIT</u> | DESCRIPTION 16 Inch DR14 CL305 DIPS Fusible C-905 | | UNIT PRICE | <u>TOTAL</u> PRICE |
|-------------|-------------|-------------|--|-------|------------|------------------------------|
| A1-1 | 12,000 | LF | PVC Water Main (Open Cut Installation) [Increase (+) / Decrease (-) to Line Item 1] | \$_ | | \$ |
| | | | Total Additive Alternate No. 1: | | | \$ |
| ADDIT | IVE ALT | ERNAT | <u>E NO. 2</u> | | | |
| Price I | ncrease | (+) / Pri | ce Decrease (-) from 12 Inch PVC to 12 Inch F | usibl | e PVC | |
| <u>ITEM</u> | <u>QTY.</u> | <u>UNIT</u> | DESCRIPTION 12 Inch SDR17 CL250 Fusible PVC Force | | UNIT PRICE | <u>TOTAL</u> <u>PRICE</u> |
| A2-1 | QTY | LF | Main (Open Cut Installation) [Increase (+) / Decrease (-) to Line Item 7] | \$ | | \$ |
| | | | Total Additive Alternate No. 2: | | | \$ |
| | | | <u>Total Base Bid + Additive Alternate No.</u> <u>1:</u> | | | \$ |
| | | | Total Base Bid + Add. Alt. No. 1 & 2: | | | \$ |

- B. Bidder acknowledges that:
 - 1. each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and
 - 2. estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Work will be based on actual quantities, determined as provided in the Contract Documents.

ARTICLE 4—TIME OF COMPLETION

- 4.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 15.06 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.
- 4.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTICLE 5—BIDDER'S ACKNOWLEDGEMENTS: ACCEPTANCE PERIOD, INSTRUCTIONS, AND RECEIPT OF ADDENDA

- 5.01 Bid Acceptance Period
 - A. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

5.02 *Instructions to Bidders*

A. Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security.

5.03 Receipt of Addenda

A. Bidder hereby acknowledges receipt of the following Addenda:

| Addendum Number | Addendum Date |
|-----------------|---------------|
| | |
| | |
| | |

ARTICLE 6—BIDDER'S REPRESENTATIONS AND CERTIFICATIONS

6.01 Bidder's Representations

- A. In submitting this Bid, Bidder represents the following:
 - 1. Bidder has examined and carefully studied the Bidding Documents, including Addenda.
 - 2. Bidder has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - 3. Bidder is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
 - 4. Bidder has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, with respect to the Technical Data in such reports and drawings.
 - 5. Bidder has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, with respect to Technical Data in such reports and drawings.
 - 6. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and the Technical Data identified in the Supplementary Conditions or by definition, with respect to the effect of such information, observations, and Technical Data on (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, if selected as Contractor; and (c) Bidder's (Contractor's) safety precautions and programs.
 - 7. Based on the information and observations referred to in the preceding paragraph, Bidder agrees that no further examinations, investigations, explorations, tests, studies, or data

are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.

- 8. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- 9. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- 10. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- 11. The submission of this Bid constitutes an incontrovertible representation by Bidder that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

6.02 Bidder's Certifications

- A. The Bidder certifies the following:
 - 1. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation.
 - 2. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.
 - 3. Bidder has not solicited or induced any individual or entity to refrain from bidding.
 - 4. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 8.02.A:
 - a. Corrupt practice means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process.
 - b. Fraudulent practice means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition.
 - c. Collusive practice means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels.
 - d. Coercive practice means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

(Signature page follows)

BIDDER hereby submits this Bid as set forth above:

Bidder:

| | (typed or printed name of organization) |
|--------------------------|--|
| Ву: | (individual's signature) |
| Name: | (here a large state of) |
| Title: | (typed or printed) |
| | (typed or printed) |
| Date: | (typed or printed) |
| If Bidder is a corporati | on, a partnership, or a joint venture, attach evidence of authority to sign. |
| Attest: | |
| | (individual's signature) |
| Name: | (typed or printed) |
| Title: | |
| Date: | (typed or printed) |
| | (typed or printed) |
| Address for giving no | otices: |
| | |
| | |
| Bidder's Contact: | |
| Namo: | |
| | (typed or printed) |
| Title: | (typed or printed) |
| Phone: | |
| Email: | |
| Address: | |
| | |
| | |
| Bidder's Contractor | License No.: (if applicable) |
| | |
| | |
| | |

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SECTION 01 0300 – SPECIAL PROJECT PROVISIONS

PART 1 - GENERAL

1.1 <u>GENERAL</u>:

- A. The Contractor shall obtain the licenses and pay the building fees as required for the completion of this construction.
- B. Bidders shall refer to the Supplementary Conditions for instructions regarding all sales and use taxes for this project.
- C. In the event that bids exceed the funds available, the Owner reserves the right to exercise all or any combination of deleting sections or parts thereof to bring the construction cost within the funds available.
- D. All work shall be done in accordance with Etowah County Commission's & Utilities Board of Rainbow City's Rules and Regulations, the latest ADEM and EPA guidelines, and the latest ALDOT standard specifications and guidelines (when working within the ALDOT ROW). The amount bid for this Contract shall include all costs related to erosion control procedures, compliance with all current OSHA regulations, and building construction permits.
- E. The work covered by this contract consists of furnishing all materials, labor, equipment, tools, supplies and appurtenances necessary for the construction and testing of potable water mains and related appurtenances as shown on the plans, and as directed by the Engineer and Owner. All equipment, materials and methods of construction shall be subject to the approval of the Engineer. The Contractor shall comply with OSHA regulations on confined space entry, as published CFR on April 14, 1993.
- F. All Special Provisions as detailed herein are intended to amend and/or clarify the other Specifications as noted.
- G. All excavations, in places other than where specified in the bid proposal and contract documents, shall be bid on an unclassified basis. No extra payment will be made for required hand excavation to minimize the destruction of landscaping and vegetation that must remain or be replaced. No extra payment for removal of rock and other hard material will be made, and all costs for this type of work must be included in the amounts bid in the Proposal. No extra payment will be made for muck excavation or the removal of any wet, unstable, or unsuitable soil. Should any unsuitable soil be encountered, the Contractor is responsible for procuring suitable material for pipe trench backfill in those areas and all costs for this work must be included in the Proposal. The Contractor is required to inspect the area to his satisfaction prior to turning in a Bid Proposal.
- H. Construction Progress Meetings may be conducted via telephone.
- I. Field offices are not required for this project.
- J. The Contractor will be required to obtain an Etowah County business license. The cost is approximately \$301. This does not include other city and state licenses.

- K. During the construction of this project, the site superintendent is allowed to change.
- L. Owner/Contractor Liability (OCP) insurance is required.
- M. Third party inspections will be conducted by Goodwyn Mills Cawood, LLC.

1.2 <u>GENERAL CONTRACTOR REQUIREMENTS</u>:

- A. All Bidders shall be prepared to submit a satisfactory qualification and experience record, as outlined in this specification, at the request of the Owner.
- B. The Contractor shall have an adequate number of experienced personnel and available equipment to place on the project to successfully perform the work within the completion period.
- C. The Bidder shall have successfully completed construction of at least five (5) comparable projects similar in scope and size. Comparable projects should also include projects similar in nature.
- D. Subcontractors shall have no less than 5-years verifiable experience in their trade and no less that 5-years verifiable experience in their business enterprise contracting for work under this project. The type of work subcontracted for this project shall be the principal business of the Subcontractor.
- E. Superintendents and foremen, or other individual in the lead or supervisory position for any portion of the Work under this Contract shall have no less than 7-years verifiable experience in performing the type of work they are responsible for.
 - 1. The Contractor shall submit resumes of work and project experience for their Superintendent and foremen, as soon as possible and at least within five calendar days of receipt of the Contract to be executed for the Work, for review and acceptance by the Owner and Engineer.
- F. The Owner anticipates and desires to award the project shortly after the bid opening. Therefore, it is imperative that the Bidder be prepared to submit all required qualification information to the Engineer soon after the bid opening. The Bidder may submit this information with their bid.
- G. Applicants may not be deemed qualified if:
 - 1. The Applicant fails to submit an adequate Qualification Statement, including failing to provide all required documentation, when requested by the Engineer;
 - 2. The Applicant fails to meet the Technical and Corporate Experience Requirements;
 - 3. Reasonable grounds exist that Applicant is involved in collusion among other applicants.
 - 4. The Applicant, or any of its principals, is currently disbarred from bidding on public entity work in any State.

H. Final determination of Applicant's qualification status rests solely with the Owner.

- I. <u>QUALIFICATION STATEMENT</u>: Bidders shall be prepared to submit the following information with the bid in order for the Owner to evaluate the Bidders' qualifications during the evaluation of the bids:
 - 1. Firm name, address, number, contact.
 - 2. Legal form of business (Corp, etc.) and date started.

NORTHEAST ALABAMA REGIONAL MEGASITE

CANOE CREEK ROAD INFRASTRUCTURE IMPROVEMENTS

- 3. Name of parent company, sister company, etc.
- 4. List name and residence (City and State) of all officers, owners, partners and principals. Identify relationship of each to the firm and if active in the firm.
- 5. Current State of Alabama Contractor's License License Number, Bid Limit, Classification.
- 6. Provide a statement that Applicant has not defaulted on a project nor failed to complete a project within the past ten years. If this is not the case, explain and provide project contact information.
- 7. Provide a statement that Applicant has not filed for bankruptcy or been judged bankrupt at any time over the past nine years. If this is not the case, explain. Provide a document signed and notarized by a Company officer.
- 8. Provide a statement that Applicant has not been involved in liquidated damages in the past five years. If this is not the case, explain and provide contact information.
- 9. Provide a list of all projects under contract over the last five years, with a construction contract amount in excess of \$1,000,000.
- 10. Provide a statement that the Applicant has never abandoned a project, even temporarily, during a dispute. If this is not the case, please explain and provide contact information.
- 11. Provide a statement whether Applicant has or has not been involved in litigation as a plaintiff against an Owner, Design Firm or Construction Contract Administration Firm, or served the Owner with a claim for additional compensation prepared by an attorney or a claims consultant, excluding routine change order requests, in the past five years. If Applicant has, explain and provide contact information. List any lawsuits or administrative actions to which the Applicant is currently a party or has been a party (either as a plaintiff or defendant) during the past ten years. For each suit, list all parties and indicate whether any party was a bonding company, insurance company, an Owner or other. Identify the project giving rise to the suit or administrative action, explain the basis of the claim, and whether a settlement was reached or a judgment entered into for or against the Applicant or the Applicant's bonding company or insurance company.
- 12. Provide a statement that the Applicant, as well as all of its affiliated companies, is not involved in any dispute, formal claim, or litigation with the Owner, nor any authority or organization with which the Owner has a vested interest. If this is not the case, please explain.
- 13. List all other projects currently under contract in the United States, the current contract amounts and scheduled completion dates.
- 14. State percentage of contract amount that bidder will perform with its own forces.
- 15. List possible subcontractors that may be utilized on the project and the work each subcontractor will perform.
- 16. In reference to the Similar Projects in Paragraph 1.2.C, provide the following compete description of each project, with Owner, Engineer and Contractor's project manager/superintendent information; the date completed; bid amount and final contract amount, with change order amounts and explanation; contract completion period versus actual completion time and explanation; any claims, disputes or litigation by or against the Contractor.
- 17. List all water/sewer main projects of equal or greater size completed within the past two years with a brief project description and Owner contact information.

- 18. List all current water/sewer main projects of equal or greater size and the Owner contact information.
- 19. Provide a list of project staff including superintendents or foreman and provide a statement of the number of complete pipeline crews assigned to the Project.
- 20. Provide the following information regarding completion of past work:
 - a. Within the last five years, has your firm failed to complete any work awarded to it? (If Yes, attach a written explanation.)
 - b. Within the last five years, has applicant been involved in liquidated damages or has a claim prepared by an attorney or claims consultants, excluding routine change orders? (If Yes, attach a written explanation.)
 - c. Within the last five years, has applicant been involved in litigation against Owner or Engineering firms? (If Yes, attach a written explanation.)
 - d. Are there any judgments, claims, arbitration proceedings or suits pending or outstanding against your organization or its officers or Owners? (If Yes, attach a written explanation.)

1.3 <u>TIME FOR COMPLETION OF WORK</u>:

- A. The Contractor may proceed to award the sub-contracts, assemble materials, etc., at any time after award of Contract and Notice to Proceed with Work is given. For purposes of liquidated damages, the Contractor's official time for construction to start on work shall be the date of Notice to Proceed with Work, and completion of same shall be within the number of consecutive calendar days indicated in the Contract Documents.
- B. Acceptance of the completed Work of this Contract will be at a single date after all work is completed, and not in Phases.
- C. Nothing in the Contract Documents shall permit or be construed to permit payment to the Contractor for any extended overhead or profit due to completion of the project extending beyond the Contractual completion date. In no event shall the Owner or Engineer be liable to the Contractor for damage due to any delay to any portion of the work of this Contract.
- D. Delays due to inclement weather will not be considered on this project with the exception of a tropical event.

1.4 <u>CONTRACTOR'S USE AND LIMITATIONS OF THE SITE</u>:

- A. All work shown will be performed within the areas outlined on the plans. Should the Contractor need temporary construction easements, then the Contractor shall be responsible for securing them from the landowner(s). All Bidders are hereby advised that ALDOT standards must be adhered to during any construction within ALDOT right-of-way.
- B. The Contractor shall limit the number of vehicles on the job site by shuttling work crews. No excessive construction equipment will be allowed.
- C. The Contractor shall take the necessary precautions to ensure that no part of the existing public works (streets, storm drains and other utilities) is damaged as a result of his operations. Any damage that does occur shall be promptly repaired by the Contractor at his expense. The Owner

urges the Contractor to use rubber-tired equipment when operation on the Highway in order to prevent damage to the asphalt. The Contractor may use a layer of heavy neoprene to protect the roadway.

- D. In the event that a hurricane or tropical storm approaches the area, the Contractor shall secure all equipment, move all materials and prepare the construction site accordingly.
- E. The Contractor shall return all areas to pre-construction condition upon completion of work, at a minimum.

1.5 <u>CONSTRUCTION SCHEDULE AND INSTALLATION PLAN</u>:

- A. In addition to the construction schedule requirements stated in General and Supplemental General Conditions, the Contractor shall prepare a detailed installation plan for the work for approval by the Engineer and shall submit the plan to the Engineer for review prior to the preconstruction conference.
- B. The Contractor's Installation Plan must consider the following criteria:
 - 1. Subsurface geotechnical conditions
 - 2. Relocation of existing utilities.
 - 3. Environmental impacts of construction activities.
 - 4. Existing utilities and infrastructure and business operations.
- C. Upon award of the project, the Contractor shall work with the Owner and Engineer to have the contracts executed immediately.

1.6 ACCEPTABLE INCLEMENT WEATHER DAYS:

- A. Delays due to rain will be considered, only if the number of rain days is in excess of the average of days with precipitation of 0.01 inch or more for a city within a 100 mile radius of the project's location. This information can be found at <u>www.climate-zone.com</u>.
- B. If the radius overlaps with a nearby by city, then the city with the shortest radius from the project location shall be used.
- C. If the project location does not fall within a 100 mile radius, the following schedule shall be used as the default.

| Jan | Feb | Mar | Apr | May | Jun | July | Aug | Sept | Oct | Nov | Dec |
|-----|-----|-----|-----|-----|-----|------|-----|------|-----|-----|-----|
| 11 | 9 | 10 | 8 | 8 | 9 | 12 | 9 | 8 | 6 | 8 | 10 |

- D. If admissible rain delay days occur, inclement weather delays may also be applicable. Inclement weather may include, in addition to rain delay days, "dry-out" days at a rate no greater than 1 make-up day for each day or consecutive days of precipitation that total 1.0 inch or more.
- E. On-site records of daily rain and/or temperature readings shall be kept by the Contractor and may be accepted to verify weather and/or temperature variations which prevent earthwork, foundation

and slabs, and/or roofing materials installation. The Inspector will also be required to maintain on-site records of daily rain and/or temperature.

- F. Cold Weather concreting shall be per ACI 306. The Contractor shall have a calibrated thermometer on site which is logged by the inspector and contractor prior to any concrete pours during cold weather.
- G. Notice of inclement weather delay days must be submitted by the Contractor to the Inspector for review on the first day of every month.

1.7 MOBILIZATION, GENERAL CONDITIONS, FEES, PERMITS AND WATER COST:

- A. Included in the Proposal is a pay item to cover all costs related to mobilizing, obtaining permits, license, bonds and insurance for this project. The Contractor shall include in the amount bid for this item all costs related to providing bonds, insurance, and other security, permits and permitting costs as required under this contract. The bidder shall limit this pay item to no more than three (3) percent of the total base bid. Any additional cost related to this item shall be included in the other various bid items.
- B. The Contractor is required to obtain all city licenses, building permits, and fees from the appropriate regulatory bodies. The Contractor is responsible for all fees associated with hauling off and proper disposal of all debris and construction spoils.

1.8 <u>PROTECTION OF WORK, PROPERTY AND PERSONS</u>:

A. The Contractor shall thoroughly document the existing condition of all structures, landscaping and improvements in all areas where the construction work may result in actual damage or in damage claims. All costs associated with photographs, videotapes and other similar documentation shall be included in the bid prices. The method of providing this documentation of existing conditions shall be acceptable to the Engineer, and a complete set of the documentation shall be available to the Owner and the Engineer to help settle any disputes which may arise concerning what work is required to return property to its original condition or concerning property damage.

1.9 <u>UTILITIES BOARD OF RAINBOW CITY'S POTABLE WATER REGULATIONS</u>

A. All items listed in this section shall supersede any requirements elsewhere in the Project Plan Sheets and/or Project Manual.

B. Pipe

- 1. Water Mains
 - a. Ductile Iron Pipe shall meet the requirements of AWWA C151, pressure class 350 with mechanical joint, bell-and-spigot, or restrained joint ends.
 - b. All ductile iron pipe shall be cement lined in accordance with AWWA C104.
 - c. Glands, gaskets, and bolts for ductile iron pipe shall meet the requirements of AWWA C111 for ductile iron glands, rubber gaskets, and steel bolts.

- d. D.I. Pipe shall be manufactured by U.S. Pipe and Foundry, American Cast Iron Pipe Company, or a pre-approved by the Utility.
- e. PVC Pipe shall meet the requirements of ASTM D2241, Pressure Class 250 minimum. The use of AWWA C909 molecularly oriented PVC pipe or AWWA C900 PVC pipe is prohibited.
- f. Gaskets for PVC shall meet the requirements of AWWA C111 for rubber gaskets.
- g. PE Pipe shall meet the requirements of AWWA C906. Pressure class will be reviewed and approved on a project-by-project basis.
- 2. Water Services
 - a. Cross-linked Polyethylene ("PEX") Pipe meeting the requirements of AWWA C904.
- C. Fittings
 - 1. Compact Ductile Iron in accordance with ANSI/AWWA C153/A21.53 with Mega-Lug type retainer glands with twist-off nuts.
 - 2. Joint restraint may be provided using Lok-Ring, Flex Ring, TR- Flex, or equivalent pipe joints.
 - 3. Joint restraint may be provided using push on pipe with Fast-Grip, Field Flex-Ring, Field Lok, or equivalent restraining gaskets.
 - 4. Transition gaskets shall be used with pressure class PVC pipe to Ductile transitions.
 - 5. Fittings on PEX water service lines shall use "Q-nut" fittings. Use of push-on/gatorbite/sharkbite fittings is not allowed.
 - 6. ROMAC Alpha type restraints are acceptable for use on all fittings and valves.
- D. Valves & Accessories
 - 1. Gate valves shall be AWWA C515 resilient-sealed gate valves with ductile iron body and bonnet, bronze or ductile iron gate, bronze or 304SS non-rising stems, and 2" square operating nut.
 - 2. Gate valves shall be manufactured by M&H Valve Company, or approved equivalent.
 - 3. Butterfly valves shall be Class 150B body of ASTM A126 Grade B gray iron with ASTM A536 ductile iron and ASTM A276 type 304 stainless steel shaft; resilient seat mating to type
 - 4. 316 stainless steel body seat ring; with all stainless steel hardware.
 - 5. Butterfly valves shall be manufactured by DeZurik, Val-Matic, or pre-approved equivalent.
 - 6. Valve boxes shall comply with AWWA M44 for cast-iron valve boxes with adjustable extension and 5" diameter barrel. The use of PVC valve boxes and/or extensions is prohibited.
 - 7. Concrete locator pads shall be installed at all buried valves outside of paved areas. Locator pads shall be concrete and include a brass disc stamped with the size, distance, and direction to the valve per provided detail.
 - 8. Witness post signs shall be installed at all buried valves outside of paved areas.

- E. Miscellaneous
 - 1. Fire Hydrants shall be M & H meeting the requirements of AWWA C502 with one 5 ¹/₄" and two 2 ¹/₂" outlets, 5 ¹/₄" main valve, drain valve, 6" inlet, red in color with AWWA C550 interior coating.
 - 2. Service Saddles Copper alloy with seal and AWWA C800 threaded outlet for corporation valve. Service saddles are required on all pipe.
 - 3. Corporation Valves McDonald Fittings
 - 4. Curb Valves McDonald Fittings
 - 5. Water meter boxes shall be furnished by the Board.
 - 6. Water meters will be furnished by the Board.
 - 7. Master Meters and associated vaults for multifamily or private developments will be installed in a pre-cast concrete vault. The vault, meter and associated appurtenances (in some situations including a backflow preventer) shall be ordered, purchased, and installed by the Board. Upon completion, the developer will reimburse the Board for cost of vault and assembly. The cost of the vault and assembly shall be material cost plus a percentage for installation. These values can be obtained by contacting the Utilities Board of Rainbow City.
 - 8. Air Relief, Air/Vacuum, and Combination Air Valves shall be APCO or Val-Matic meeting the requirements of AWWA C512 with a 300-psig working pressure.
- F. Testing & Cleaning
 - 1. Piping Tests: Conduct piping tests after thrust blocks have hardened sufficiently. Fill pipeline 24 hours before testing and apply test pressure to stabilize system. Use only potable water.
 - 2. Hydrostatic Tests: Test at not less than 1-1/2 times working pressure or 150 psi for 6 hours. Provide pressure charts for the Owner's records.
 - 3. Leakage Tests: Conduct leakage tests in accordance with AWWA C600 for ductile iron or AWWA C605 for PVC.
 - 4. All taps and services must be tested.
 - 5. Preliminary Flushing: Before chlorination, fill lines to remove all air pockets and flush to remove particulates at a velocity not less than 2.5 feet per second.
 - 6. Disinfection Tests: Conduct disinfection tests in accordance with AWWA C651.
 - 7. Final Flushing; After applicable retention period, flush heavily chlorinated water. Neutralize chlorine residual in accordance with AWWA C651 if water is discharged to the environment.
 - 8. Bacteriological Tests: After Final Flushing and before new mains are connected to the Board's distribution system, perform bacteriological testing in accordance with AWWA C651.
 - 9. All tests shall be delivered to the Board a minimum of 5 working days prior to requesting approval and shall be accompanied by the as-built survey drawings.
 - 10. The Board will furnish the initial fill and flush water at no charge. Any additional water required due to leaks or failed tests shall be at the installing entity's expense.

NORTHEAST ALABAMA REGIONAL MEGASITE

CANOE CREEK ROAD INFRASTRUCTURE IMPROVEMENTS

1.10 <u>UTILITIES BOARD OF RAINBOW CITY'S SANITARY SEWER REGULATIONS</u>

- A. All items listed in this section shall supersede any requirements elsewhere in the Project Plan Sheets and/or Project Manual.
- B. Pipe
 - 1. Gravity Sewers
 - a. Ductile Iron Pipe shall meet the requirements of AWWA C151, pressure class 350 minimum, for gravity sewer pipe. Ductile Iron Pipe shall be installed when crossing under storm drains and when the depth to the top of pipe is less than 3 feet or over 12 feet.
 - b. PVC pipe shall be SDR 26 heavy wall sewer pipe meeting the requirements of ASTM D3034 for 4" to 15" gravity pipe and ASTM F679 for 18" and 21" gravity pipe. Sanitary sewer locator tape shall be buried above all PVC pipe.
 - 2. Sewer Laterals
 - a. From the main to the property line shall be the same material as the main.
 - b. From the property line to the structure may be Ductile Iron Pipe (class 350 minimum), Schedule 40 solid PVC pipe, or SDR 26 as approved by the Board.
 - c. Laterals shall be connected to the main using mechanical joint fittings. The use of couplings is not allowed.
 - 3. All gravity sewer pipe, regardless of material, shall be green in color or have a minimum 4" wide green stripe painted along the top of the pipe after installation.
 - 4. Force Main Sewers
 - a. Ductile Iron Pipe shall meet the requirements of AWWA C151, pressure class 350 minimum, for force main installations.
 - **b.** PVC pipe shall not be used for force mains. (WAIVED FOR THIS PROJECT)
 - c. HDPE Pipe shall meet all requirements and maintain a pressure class to be determined by field and pumping conditions.
 - d. All force main pipe, regardless of material, shall be green in color or have a minimum 4" wide green stripe painted along the top of the pipe after installation.
 - 5. All ductile iron pipe shall be cement lined in accordance with AWWA C104.
 - 6. Gaskets for ductile iron pipe shall meet the requirements of AWWA C111 for rubber gaskets. Gaskets for PVC pipe shall be ASTM F477 elastomeric seals.
 - 7. D.I. Pipe shall be manufactured by U.S. Pipe and Foundry, American Cast Iron Pipe Company, or a pre-approved by the Board pipe manufacturer. Pipe from other manufacturers will not be accepted.

C. Fittings

- 1. Fittings on PVC or Ductile Iron force main piping shall be restrained joints as follows:
 - a. Compact Ductile Iron in accordance with ANSI/AWWA C153/A21.53 with Mega-Lug type retainer glands with twist-off nuts.
 - b. Joint restraint may be provided using Lok-Ring or equivalent pipe joints.

- c. Transition gaskets shall be used with pressure class PVC pipe to Ductile transitions.
- d. Fittings shall not be used on gravity sewer piping. All changes in direction on gravity piping shall occur at a manhole.
- D. Valves
 - 1. All valves installed in force mains shall be AWWA C515 resilient-sealed gate valves with ductile iron body and bonnet, bronze or 304SS stems, non-rising stems, and 2" square operating nut.
 - 2. Valve boxes shall comply with AWWA M44 for cast-iron valve boxes with adjustable extension and 5" diameter barrel. The use of PVC valve boxes and/or extensions is prohibited.
- E. Manholes
 - 1. All manholes shall be normal traffic precast reinforced concrete in accordance with ASTM C478, 48" minimum diameter, with provision for ASTM C 443 rubber gasketed joints.
 - 2. All manholes shall be furnished with precast concrete inverts.
 - 3. All manholes shall be furnished with monolithic base section (6" minimum floor slab thickness), concentric cones, manhole steps, and Kor- N-Seal pipe connectors.
 - 4. All manhole frames and covers shall be East Jordan Iron Works Model V- 1480-1 or John Bouchard & Sons Model 1190 lettered "SANITARY SEWER" or approved equivalent. "SEWER" or "STORM SEWER" will not be accepted for lettering on sanitary sewer manholes.
 - 5. External Manhole Sealing Sleeve to prevent inflow and infiltration shall be as manufactured by Sealing Systems, Inc. or approved equivalent.
 - 6. Rings and covers must have plastic or rubber non-flood inserts installed on every manhole.
- F. Miscellaneous
 - 7. Memphis Tees are not allowed.
 - 8. Interior Drop Manholes can be utilized in lieu of Memphis Tee Manholes. Interior Drop Manhole will require a minimum of 60-inch diameter manhole, or as required by the Board to satisfy entry restrictions.
 - 9. Kor-N-Seal Boots are required at all new pipe to manhole connections.
 - 10. All houses shall have back water valves installed inside an access box in an appropriate manner as to protect the entire home and to allow for home owner access.
 - 11. All grout must be non-shrink hydraulic cement. Mortar or concrete will not be accepted and if found to be used will result in rejection of sewer system.
 - 12. All manhole inverts shall be poured concrete. This includes any invert difference 2-foot and below. An invert shall be poured from exit elevation for the down pipe of an interior drop manhole to the invert out of the manhole.
 - 13. Low pressure or single grinder pump systems are allowed. However, in the event one is required due to an uncontrollable situation, the Board shall only maintain the collection main. All services, connections, grinder pumps, and associated appurtenances shall be the responsibility of the home/business owner to maintain. A Grinder Pumping Station agreement

between the property owner/developer and the Board outlining these conditions must be executed prior to installation.

14. Asphalt cutting and repair must be permitted prior to construction and must be repaired to meet the governing authority's standards.

1.11 <u>TRAFFIC CONTROL</u>:

- A. It shall be the responsibility of the Contractor for all traffic control along any portion of the project. Where required, all necessary flagmen, traffic cones and drums, and traffic control plans shall be in place on both City roads and State Highways to meet the governing department's specifications.
- B. The Traffic Control Plan shall be in conformance with the Latest Edition of the Manual on Uniform Traffic Control Devices.
- C. The Contractor should consider the prices for traffic control measures when preparing bids for this project.
- D. The proposed improvements shall be constructed in a residential area. The Contractor shall make all efforts to make sure that adequate traffic control signage and flagmen are provided in advance of reaching the location of construction activities for the work day.
- E. All associated cost for Traffic Control Measures shall be considered in the price bid under the Traffic Control Measures bid item.

1.12 <u>WELL POINT DEWATERING</u>:

- A. The Contractor shall thoroughly examine the site conditions prior to bid. All costs for well point dewatering and trench dewatering, if required, shall be included in the price bid for water mains.
- B. The discharge from any trench dewatering operations (including well point dewatering) shall be conducted to natural drainage channels or other structures as approved by the Engineer in accordance with applicable permits. Ground water shall not be discharged into the sanitary sewer system.
- C. Dewatering shall be sufficient to provide a dry trench, and shall be maintained during all pipe laying operations.
- D. The Contractor shall be responsible for damage of any nature resulting from the dewatering operations.

1.13 OBSTRUCTIONS AND EXISTING UTILITIES:

- A. The Contractor is cautioned that several underground utilities exist within the existing Right-of-Way and along much of the pipeline routes. These utilities may include gas, water, sewer, power, fiber, telephone, etc.. Some utilities may not be shown on the plans. The Contractor shall be responsible for locating and protecting all existing utilities, whether shown on the plans or not.
- B. All existing utilities and structures shown on the plans are for reference only. The Contractor is

responsible for verifying all locations prior to beginning work.

- C. The site of the proposed work will be on the site of existing water infrastructure and other utilities. Any damage to any of the objects on site, both in service or out of service, shall be repaired or replaced to existing condition of better.
- D. These repairs shall be conducted at no additional expense to the owner and shall be considered a subsidiary obligation of the various bid items.
- E. This includes but not limited to the existing water mains, valves, valve markers, meters, service tubing, etc.
- F. All costs associated with locating existing utilities and working around them shall be included in the total price bid. The Contractor shall conduct a thorough and complete investigation to determine the exact location of all existing utilities before beginning work. It is imperative that the Contractor determine the horizontal and vertical location of utilities in advance in order for adjustments to be made to the existing utilities. If at any time the existing utilities come in conflict with the proposed work (i.e. proposed line intersects an existing utility), all work in that area shall stop and the Contractor and/or his agent shall notify the Engineer immediately. Neither the Contractor nor his agents shall take it upon themselves to adjust or relocate existing utilities.
- G. The Contractor is to use extreme care in protection of all utilities and drainage structures throughout the work process.
- H. It shall be the Contractor's responsibility to contact utility companies 48 hours before starting construction so maintenance personnel can locate and protect facilities, if required by the utility company.
- I. It is the responsibility of the Contractor to ensure that all utility or other poles, the stability of which may be endangered by the close proximity of excavation, are temporarily stayed in position while work proceeds in the vicinity of the pole and that the utility or other companies concerned be given reasonable advance notice of any such excavation by the Contractor.
- J. It shall be the Contractor's responsibility to remove mailboxes in the path of construction before construction takes place. The Contractor is responsible for resetting those mailboxes to their original condition or better after construction is complete.

1.14 <u>SUBSURFACE GEOTECHNICAL INVESTIGATION</u>:

A. The Contractor is responsible for verifying subsurface conditions in areas of the project as required to complete the proposed improvements. Any additional subsurface investigation required by the Contractor shall be included in the various bid prices.

1.15 <u>OWNER'S INFRASTRUCTURE AND CONNECTIONS TO EXISTING SYSTEM</u>:

- A. The Contractor shall closely coordinate all work with the Owner and the Contractor shall, under no circumstances, stop operation of any existing utility without giving notice to the Owner.
- B. The Contractor shall closely coordinate with the Owner their schedule for disrupting service to existing customers.

C. Any damage to existing water infrastructure, including the existing customer water meter, shall be replaced as a subsidiary obligation of the various bid items.

1.16 <u>OPEN CUTTING ASPHALT, STREETS, DRIVEWAYS</u>:

- A. Should any driveways or streets be needed to be open cut, the trench shall be properly backfilled and tamped as specified elsewhere. A temporary asphalt patch, if needed, may be required if the permanent asphalt patch is not placed within a few weeks. As a minimum the Contractor will temporarily backfill with material that will provide a solid surface for vehicular traffic. Loose sand will not suffice. The pavement patch installation and build-up shall be as specified in the asphalt patch detail in the Drawings.
- B. Steel plates may also be utilized as a temporary measure to cover the patch.

1.17 <u>TEMPORARY RESIDENTIAL ACCESS ROAD & STORM DRAIN PIPE</u>:

- A. The proposed utilities are going to be installed within the road along Canoe Creek Road. It is anticipated that traffic will be disrupted. Included in the quantity of the crushed aggregate provided, there is quantity considered to construct a 9' wide lane, parallel to Canoe Creek Road as a temporary access road for the existing residents along this road. There are also line items for temporary storm drain pipes. This shall be used as temporary culvert extensions, where the temporary road intersects a culvert.
- B. After the proposed improvements have been constructed, the Contractor shall be responsible for the removal and disposal of all measures associated with the temporary access road. The Contractor is responsible for securing locations for disposal of this material.
- C. All labor, materials, & equipment shall be included in the various bid items, including but not limited to: geotextile fabric material, removal and disposal of materials after construction is completed.

1.18 <u>SPECIAL STONE AGGREGATE BACKFILL FOR WATER UTILITY TRENCH –</u> <u>GRADATION NO. 8910</u>

- A. The proposed water main will be located within the road section of Canoe Creek Road (Unpaved)
 / Bynum Industrial Drive. The existing material under the road section is anticipated to be unsuitable for utility backfill.
- B. The existing in-situ material shall be removed and disposed of by the Contractor. The replacement backfill shall be full depth Gradation No. 8910 stone, compacted to 98%.
- C. This stone has been quantified, as listed in the bid proposal, based on a square yardage of anticipated trench width. The trench with per details in the Project Plan Sheets should be approximately 48 inches wide.
- D. The Contractor shall be required to obtain the amount of stone needed for a full depth backfill replacement.

- E. This line item is not included to cover any unsuitable backfill encountered along Canoe Creek Road paved, as this shall be covered in the pipe line item as detailed in Section 01 1500 – Measurement and Payment.
- F. The Contractor shall adhere as close as possible to the trench width requirements listed in these specifications with deviations being approved by the Engineer's Construction Representative, Engineer, and Owner.

1.19 <u>EROSION CONTROL MEASURES</u>:

- A. The Contractor shall include in the lump sum bid price, "Erosion Control Measures", silt fences, erosion eels, wattles, rip rap spillways, etc. in locations shown on the plans as well as areas deemed necessary in the field in order to control storm water run-off.
- B. The Contractor shall be responsible for compliance with all Federal and State regulations and statutes as relating to storm water permitting, erosion control and compliance with a BMP plan.

1.20 <u>PIPE</u>:

- A. The prices bid for the various items shall include everything necessary for a complete and workable installation.
- B. Ductile Iron Pipe shall be Pressure Class 350.
- C. PVC Force Main shall be SDR17 CL250, green in color.
- D. RCP Storm Drain Pipe shall be Class III.

1.21 <u>WARRANTIES</u>:

- A. All equipment supplied under these Specifications shall be warranted by the Contractor and the equipment manufacturers for a period of one (1) year. Warranty period shall commence on the date of Owner acceptance.
- B. The equipment shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment should fail during the warranty period, it shall be replaced in the machine(s) and the unit(s) restored to service at no expense to the Owner.
- C. The manufacturer's warranty period shall run concurrently with the Contractors warranty or guarantee period. No exception to this provision shall be allowed. The Contractor shall be responsible for obtaining equipment warranties from each of the respective suppliers or manufacturers for all the equipment specified.
- D. In the event that the manufacturer is unwilling to provide a one (1) year warranty commencing at the time of the Owner acceptance, the Contractor shall obtain from the manufacturer a two (2) year warranty starting at the time of equipment delivery to the job site. This two-year warranty shall not relieve the Contractor of the one-year warranty starting at the time of Owner acceptance of the equipment.

1.22 <u>PLANS & SPECIFICATIONS</u>:

A. The Contractor will be furnished with three (3) complete sets of Drawings and Project Manuals. Any additional sets required can be purchased for the payment fee as stipulated in the Advertisement for Bids.

1.23 <u>CONSTRUCTION MATERIAL TESTING ALLOWANCE</u>:

- A. A lump sum cash allowance is given in the Bid Proposal for required material and compaction/density testing to be performed during construction.
- B. Goodwyn Mills Cawood, LLC. will perform the required testing to ensure project requirements are met. Contact Art Williams at (205) 365-8440 for coordination of this work. Any funds remaining in this allowance will be credited to the Owner with a final summary change order during project closeout.

1.24 <u>CONSTRUCTION SURVEY ALLOWANCE</u>

- A. A lump sum cash allowance is given in the Bid Proposal to cover post construction survey/stakeout to be provided by the Engineer. This includes post installation GIS survey of all installed utilities. Any additional survey/stakeout is the responsibility of the Contractor, and will not be paid for under this allowance.
- B. The Contractor shall contact Anthony Styba at Goodwyn Mills Cawood, LLC. (205) 879-4462 for scheduling of this work. Invoices for this work shall be submitted by the Contractor with the monthly request for payment. Any funds remaining in this allowance will be credited to the Owner with a final summary change order during project closeout.

1.25 <u>OWNER'S CONTINGENCY ALLOWANCE:</u>

A. A lump sum cash allowance of \$50,000 is given in the Bid Proposal to cover additions and/or changes in the work that may arise during construction. Items included under this allowance shall first be approved by the Owner and Engineer prior to completing the work.

1.26 <u>CONCLUSION</u>:

- A. The preceding specifications, together with the plans are intended to provide the Owner with a complete and workable system for the amounts bid in the Proposal. These prices shall therefore include all minor items which are not specified in detail but which would normally be provided.
- B. The foregoing clause is intended to cover minor items. Any bidder or manufacturer of equipment who should discover a major omission in the plans and specifications is requested to so notify the Engineer before bids are received in order that a suitable addendum may be issued.

PART 2 – PRODUCTS (not used)

PART 3 – EXECUTION (not used)

END OF SECTION 01 0300

SECTION 01 1500 - MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 <u>GENERAL</u>:

- A. For the information and guidance of bidders, the following explanation of the bid form items is made. The omission or reference to any item in this description shall not, however, alter the intent of the bid form or relieve the Contractor of the necessity of furnishing such as a part of the Contract. The quantities set forth in the bid form are approximate and are given to establish a uniform basis for the comparison of bids. The Owner reserves the right to increase or decrease the quantity of any class or portion of the work during the progress of construction in accordance with the terms of the Contract. Unit prices are used as a means of computing the final figures for bid and contract purposes, for periodic payments for work performed, for determining value of additions or deletions and wherever else reasonable.
- B. Payment shall be made on the basis of work actually performed toward the completion of each item in the Contract proposal and construction cost breakdown, such work including, but not limited to, the furnishing of all necessary labor, materials, equipment, transportation, cleanup, and all other appurtenances to complete the construction and installation of the work to the configuration and extent as shown on the Drawings and described in the Specifications.
- C. The Contractor shall assume responsibility for all materials and equipment stored, protection of his product and compliance with all federal, state and local safety regulations.
- D. The Contractor will be paid only for satisfactorily installed and tested quantities. All material order quantities shall be taken from field measurements after approval from the Engineer. The Owner will not pay for excess leftover materials. All quantities derived or measurements taken from project plan sheets shall be considered estimates only.
- E. All excavation shall be bid on an "unclassified" basis. All costs for this type of work must be included in the amounts bid in the Proposal. No extra payment will be made for rock excavation or for muck excavation or the removal of any wet, unstable, or unsuitable soil. Should any unsuitable soil be encountered, the Contractor is responsible for procuring suitable material for backfill in those areas and all costs for this work must be included in the amounts bid in the proposal. The Contractor is required to inspect the area to his satisfaction prior to turning in a Bid Proposal.

1.2 <u>BID ITEMS</u>:

A. <u>CL350 Ductile Iron Water Main</u>

1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install new DI water main, along with any unpaved road patches, in the size described in the plans or directed by the owner and engineer after bidding in loca-

tions shown on the Project Plan Sheets and in accordance with the contract documents, included but not limited to: site preparation, trench excavation, shoring, pipe laying and joining, poly encasement, tracer wire, metallic warning tape, dewatering, flushing, disinfection, final grading, and other miscellaneous items required to complete the work.

- 2. Any unsuitable backfill encountered along Canoe Creek Road (Paved) shall be replaced as a subsidiary obligation of this bid item.
- 3. Linear footage of water main pipe shall be measure above ground, horizontally along the centerline of the pipe, with no deduction for the length of fittings.
- 4. Payment shall be at the unit price per linear foot (LF) of CL350 Ductile Iron Water Main installed and accepted as stated in the contract documents.
- B. <u>Combination Air Release Valve (ARV) Assembly</u>
 - 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install a new Combination ARV Assembly in locations shown on the drawings and in accordance with the contract documents, including but not limited to; tap on the main, combination air release valve, jumbo concrete meter boxes or manhole, valve marker, site preparation, excavation, backfill, conventional dewatering, cleaning, testing, final grading, and other miscellaneous items required to complete the work.
 - 2. The final installed location of each ARV assembly shall be coordinated in the file with the Inspector.
 - 3. Payment shall be made at the unit price per each (EA) Combination ARV Assembly installed and accepted as state in the contract documents.
- C. <u>Beveled Gear Gate Valve</u>
 - 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install new Gate Valves in the size as described in the plans or as directed by the owner and engineer after bidding in locations shown on the drawings and in accordance with the contract documents, including but not limited to; site preparation, excavation, backfill, dewatering, cleaning, testing, final grading, cast iron valve box, concrete valve box collar, concrete valve marker, and other miscellaneous items required to complete the work.
 - 2. All gate valves shall be installed with a concrete collar as detailed on the Project Plan Sheets.
 - 3. Payment shall be made at the unit price per each (EA) gate valve installed and accepted as stated in the contract documents
- D. Fire Hydrant Assembly
 - 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install new fire hydrant assembly in locations shown on the drawings and in accordance with the contract documents, including but not limited to; site preparation, excavation, backfill, dewatering, cleaning, testing, final grading, locking

hydrant tee, 6" gate valve, cast iron valve box, concrete valve collar, and other miscellaneous items required to complete the work.

2. Payment shall be made at the unit price per each (EA) fire hydrant assembly installed and accepted as stated in the contract documents.

E. <u>Connect to Existing Water / Force Main</u>

- 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to perform a cut-in wet connection to the existing water mains and/or force mains in the size and locations shown on the drawings and in accordance with the contract documents, including but not limited to; site preparation, excavation, backfill, dewatering, cleaning, and final grading in accordance with the drawings and contract documents.
- 2. All fittings and pipe required to make these connections shall be considered a subsidiary obligation of the corresponding wet connection bid item on the Bid Proposal.
- 3. Payment shall be made at the unit price per each (EA) connection to existing water mains and/or force mains performed and accepted as stated in the contract documents.

F. <u>Ductile Iron Fittings for Water</u>

- 1. Work performed under this item shall include furnishing all labor, materials, and equipment necessary to furnish and installed new ductile iron fittings in locations shown on the drawings and in accordance with the contract documents, included but not limited to: site preparation, excavation, mechanical joint retainer glands, thrust blocking, backfill, dewatering, and final grading in accordance with the drawings and contract documents.
- 2. Measurement for ductile iron fittings shall be based on the catalog weights (accessories not included) for mechanical joint ductile iron fittings and mechanical joint retainer glands.
- 3. Payment shall be made at the unit price per ton (TON) of ductile iron fittings installed and accepted as stated in the contract documents.

G. Special Stone Aggregate Backfill for Water Utility Trench – Gradation No. 8910

- 5. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install new stone aggregate base, Gradation No. 8910 for the proposed water mains located along Canoe Creek Road (Unpaved) / Bynum Industrial Drive in the plans or directed by the owner and engineer after bidding in locations shown on the Project Plan Sheets and in accordance with the contract documents, included but not limited to: site preparation, trench excavation, shoring, removal and disposal of existing earthen material, new Gradation No. 8910 stone, placement, compaction, dewatering, , final grading, and other miscellaneous items required to complete the work.
- 6. Square yardage of Gradation No. 8910 stone shall be measured based on the trench width needed to install the water main. Per the details, a trench of approximately 48" width shall be need for the construction of the proposed water main.
- 7. The Contractor shall be responsible for acquiring enough stone needed to do a full depth backfill replacement.

8. Payment shall be at the unit price per square yardage (SY) of Special Stone Aggregate Backfill for Water Utility Trench – Gradation No. 8910 installed and accepted as stated in the contract documents.

H. <u>PVC Force Main</u>

- 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install new PVC force main, along with any unpaved road patches, in the size described in the plans or directed by the owner and engineer after bidding in locations shown on the Project Plan Sheets and in accordance with the contract documents, included but not limited to: site preparation, trench excavation, shoring, pipe laying and joining, restrained gaskets, tracer wire, metallic warning tape, dewatering, flushing, disinfection, final grading, and other miscellaneous items required to complete the work.
- 2. Any unsuitable backfill encountered along Canoe Creek Road (Paved) shall be replaced as a subsidiary obligation of this bid item.
- 3. Linear footage of restrained joint water main pipe shall be measure above ground, horizontally along the centerline of the pipe, with no deduction for the length of fittings.
- 4. Payment shall be at the unit price per linear foot (LF) of PVC force Main installed and accepted as stated in the contract documents.

I. <u>Steel Encasement (Open Cut Installation)</u>

- 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install new Steel Encasement via open cut installation in the size as described in the plans or as directed by the owner and engineer after bidding. locations shown on the drawings and in accordance with the contract documents, including but not limited to; site preparation, excavation, joining, backfill, dewatering, cleaning, testing, and final grading in accordance with the drawings and contract documents.
- 2. In the event that any existing infrastructure is damaged as a result of the open cut operations, all cost associated with returning existing infrastructure to existing or better condition shall be considered a subsidiary obligation of this bid item.
- 3. Measurement for linear footage of steel encasement shall be above-ground, horizontally along the centerline of the casing.
- 4. Payment shall be at the unit price per linear foot (LF) of Steel Encasement installed and accepted as stated in the contract documents.

J. Sanitary Sewer Flushing Assembly

- 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install new flushing assembly in locations shown on the drawings and in accordance with the contract documents, including but not limited to; site preparation, excavation, backfill, dewatering, cleaning, testing, final grading, locking hydrant tee, gate valve, cast iron valve box, concrete valve collar, and other miscellaneous items required to complete the work.
- 2. Payment shall be made at the unit price per each (EA) flushing assembly installed and accepted as stated in the contract documents.
- K. <u>Asphalt Pavement Patch</u>

- 1. Work performed under this item shall include furnishing all labor, materials, and equipment necessary to open cut and patch the asphalt pavement in locations shown on the drawings, including but not limited to: site preparation, saw cutting the existing asphalt, excavation and removal of existing asphalt, installation and compaction of new gravel base, cleaning, and final grading in accordance with the drawings and contract documents.
- 2. Payment shall be at the unit price per square yard (SY) of asphalt paving that is open cut and patched as stated in the contract documents.

L. <u>Ductile Iron Fittings for Sewer</u>

- 1. Work performed under this item shall include furnishing all labor, materials, and equipment necessary to furnish and installed new ductile iron fittings in locations shown on the drawings and in accordance with the contract documents, included but not limited to: site preparation, excavation, mechanical joint retainer glands, ceramic epoxy lining, thrust blocking, backfill, dewatering, and final grading in accordance with the drawings and contract documents.
- 2. Measurement for ductile iron fittings shall be based on the catalog weights (accessories not included) for mechanical joint ductile iron fittings and mechanical joint retainer glands.
- 3. Payment shall be made at the unit price per ton (TON) of ductile iron fittings installed and accepted as stated in the contract documents.

NORTHEAST ALABAMA REGIONAL MEGASITE

CANOE CREEK ROAD INFRASTRUCTURE IMPROVEMENTS

M. Canoe Creek Road Improvement Items

1. All items associated with the Canoe Creek Road Improvements shall be measured and paid for according to the 2022 ALDOT Standard Specifications for Highway Construction. The following chart shall provide clarification of where the exact description of measurement and payment can be found in the ALDOT Specifications.

| BID ITEMS | MEASUREMENT & PAYMENT | APPLICABLE ALDOT SPECIFICATION |
|--|--------------------------|--------------------------------------|
| 15 Inch CPP Storm Drain Pipe | Linear Foot (LF) | Section 533 |
| 15 Inch RCP Storm Drain Pipe, Class III | Linear Foot (LF) | Section 533 |
| 18 Inch RCP Storm Drain Pipe, Class III | Linear Foot (LF) | Section 533 |
| 24 Inch CPP Storm Drain Pipe | Linear Foot (LF) | Section 533 |
| 24 Inch Ductile Iron Storm Drain Pipe | Linear Foot (LF) | Section 533 |
| 6 Inch Temporary Storm Drain Pipe | Linear Foot (LF) | Section 533 |
| 8 Inch Temporary Storm Drain Pipe | Linear Foot (LF) | Section 533 |
| 12 Inch Temporary Storm Drain Pipe | Linear Foot (LF) | Section 533 |
| Tack Coat | Gallon (Gal) | Section 405 |
| Bituminous Treatment AKG | Square Yard (SY) | Section 401 |
| Double Solid Traffic Stripe, Yellow, Class 2, Type A (5" Wide) | Linear Foot (LF) | Section 701 |
| Single Solid Traffic Stripe, White, Class 2, Type A (5" Wide) | Linear Foot (LF) | Section 701 |
| Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate Size Mix, ESAL Range A/B (220#/SY) | TON (TON) | Section 424 |
| Superpave Bituminous Concrete Upper Binder Layer, 3/4" Maximum Aggregate Size Mix, ESAL Range A/B (225#/SY) | TON (TON) | Section 424 |
| Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate Size Mix, ESAL Range C/D (200#/SY) | TON (TON) | Section 424 |
| Superpave Bituminous Concrete Upper Binder Layer, 3/4" Maximum Aggregate Size Mix, ESAL Range C/D (250#/SY) | TON (TON) | Section 424 |
| Crushed Aggregate Base Course, Type B, Plant Mixed, 6" Compacted Thickness | Square Yard (SY) | Section 301 & Section 825 |

- N. Mobilization & General Conditions
 - 1. Work performed under this item shall consist of preparatory work and operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; and

for other work, operations or costs which are of necessary incurred prior to the beginning of construction. Bond costs, license fees, lump sum insurance premiums, and other such items of expense may be included but any item that will be subsequently paid for as project work or material on hand shall be excluded.

2. Payment shall be at the Lump Sum contract price as stated in the Bid Documents. The cost of mobilization shall not exceed three percent (3%) of the total amount bid. Should an amount exceeding three percent be submitted in the bid, the amount will be revised to three percent.

O. <u>Clearing and Grubbing</u>

- 1. Work performed under this item shall include furnishing all labor, materials, and equipment necessary to perform all clearing and grubbing operations necessary for the construction of this project including but not limited to: removal of trees, vegetation, stumps, and grubbings to a minimum depth of 18 inches, and proper disposal of the debris in accordance with the drawings and contract documents.
- 2. No debris shall be pushed off the right-of-way or onto adjacent property. No burning will be allowed by the Owner unless permitted by the local and state authorities. No stumps, logs, or grubbings are to be buried on the cleared right-of-way.
- 3. Land exposure shall be minimized in terms of area and time. The Contractor shall be responsible for complying with all BMP's for erosion/sedimentation control during clearing and grubbing operations.
- 4. Payment shall be at the Lump Sum (LS) contract price as stated in the contract documents.

P. <u>Erosion Control Measures</u>

- 1. Work performed under this item shall include furnishing all labor, materials, and equipment necessary to furnish, install, maintain, and remove all erosion and sedimentation controls in accordance with the drawings and contract documents, as well as any additional measures needed to ensure proper erosion and sedimentation control and regulatory compliance.
- 2. Payment shall be at the Lump Sum (LS) contract price as stated in the contract documents. The Contractor will be responsible for paying any fines from ADEM or any other regulatory body as a result of inadequate erosion control measures.

Q. <u>Traffic Control Measures</u>

- 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install all necessary traffic control measures needed in order to complete construction activities in accordance with the contract documents, including but not limited to: site preparation, trench excavation, casing laying and joining, backfill, dewatering, final grading, and other miscellaneous items required to complete the work.
- 2. Payment shall be at the Lump Sum (LS) contract price as stated in the contract documents.
- R. Cleanup, Grassing, Mulching, Landscape, & Site Restoration
 - 1. Work performed under this item shall include furnishing all labor, materials, and equipment necessary to complete all cleanup, seeding, mulching, and site restoration, including but not limited to: cleanup of vegetation and construction debris, final topsoil, fertilizer, seeding,

mulching, sodding, watering, maintenance, mowing, landscape and site restoration, and final grading in accordance with the drawings and contract documents.

- 2. All disturbed grassed areas along the water main route must be re-established to original or better condition by seeding or solid sod. Any new sod or seed must match the pre-disturbed grass species and shall be to the satisfaction of the Owner and Engineer.
- 3. All costs associated with restoring structures and facilities (roadway signs, mailboxes, ornamental shrubbery, landscaping plants, fences, etc.) to pre-construction conditions shall be included in this bid item.
- 4. Payment shall be at the Lump Sum (LS) contract price as stated in the contract documents.
 - a. The Owner and Engineer shall be the final determination as to whether lawns are acceptable.
 - b. Acceptable seeded areas shall be deemed areas with a vigorous and uniform stand of grass with bare areas less than 5 square feet in size. All areas which fail to provide a uniform stand of turf shall be treated or replanted repeatedly until a uniform stand of grass of at least 70% coverage is attained with no bare areas greater than 5 square feet.

S. <u>Construction Materials Testing Allowance</u>

- 1. The Construction Materials Testing Allowance shall include costs for the required material and compaction/density testing, and concrete testing to be performed during construction as stated in Section 01 0300 Special Project Provisions. The Contractor shall provide a copy of any invoices for this work with the monthly request for payment.
- 2. Payment shall be at the Lump Sum (LS) contract price as stated in the contract documents.
- 3. At closeout of Contract, funds remaining in this allowance will be credited to Owner by Final Summary Change Order.

T. <u>Construction Survey Allowance</u>

- 1. This Construction Survey Allowance, in the amount of \$10,000.00, shall include costs for all initial construction stakeout and survey to be performed by the Engineer as stated in Section 01 0300 Special Project Provisions. Any additional construction stakeout or survey needed will be the responsibility of the Contractor and not paid for under this allowance. The Contractor shall provide a copy of any invoices for this work with the monthly request for payment.
- 2. Payment shall be at the Lump Sum (LS) contract price as stated in the contract documents.
- 3. At closeout of Contract, funds remaining in this allowance will be credited to Owner by Final Summary Change Order.

U. Owner's Contingency Allowance

- 1. The Owner's Contingency Allowance, in the amount of \$50,000.00, shall be a cash allowance for the Owner's use. In the event there are additions and/or changes to the work in the contract, the Owner will have the ability to use Contingency Allowance funds to pay the Contractor for these items of work. Items included under the Contingency Allowance shall first be approved by the Owner and Engineer prior to completing the work. Any work completed without approval from the Owner/Engineer is at risk of non-payment.
- 2. Payment shall be made at the Lump Sum contract price as stated in the Bid Documents.

NORTHEAST ALABAMA REGIONAL MEGASITE

CANOE CREEK ROAD INFRASTRUCTURE IMPROVEMENTS

- V. Fusible PVC Water/Force Main (Open Cut Installation)
 - 1. Work performed under this item shall include furnishing all labor, materials and equipment necessary to furnish and install new Fusible PVC water/force main via open cut installation in the size as described in the plans or as directed by the owner and engineer after bidding in locations shown on the drawings and in accordance with the contract documents, including but not limited to; site preparation, excavation, fusing, backfill, dewatering, cleaning, disinfection, testing, and final grading in accordance with the drawings and contract documents.
 - 2. Measurement for linear footage of pipe shall be above-ground, horizontally along the centerline of the pipe, from the pipe entry to the pipe exit. No additional payment will be given for extra pipe length below ground.
 - 3. Payment shall be at the unit price per linear foot (LF) of Fusible PVC water/force main installed, tested, and accepted as stated in the contract documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 1500

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| \sim | | | UANTITIES: NEAR MEGASITE CANOE CREEK R | |
|---|--|---|--|-----------|
| IEAR M | EGASITE 1 | 6 Inch W | ater Transmission Main: C-301 - C-309 | _}\ |
| ITEM | QTY | UNIT | DESCRIPTION | ∃\ |
| 1 | 12,000 | LF | 16 Inch CL350 Ductile Iron Water Main w/ Poly Encasement |] { |
| 2 | 2 | EA | 1 Inch Combination Air/Vacuum Release Valve Assembly |] { |
| 3 | 7 | EA | 16 Inch Beveled Gear Gate Valve |] { |
| 4 | 6 | EA | Fire Hydrant Assembly |]) |
| 5 | 4 | EA | Connect to Existing 16 Inch Water Main |] { |
| 6 | 5 | TON | Ductile Iron Fittings for Water |]{ |
| 7 | 2,000 | SY | Special Stone Aggregate Backfill for Water Utility Trench - Gradation No. 8910 (Trench Depth Varies) | 1 |
| \sim | \sim | | | |
| EAR M | EGASITE 1 | 2 Inch Se | wer Force Main: C-301 - C-305 | |
| ITEM | <u>QTY</u> | UNIT | DESCRIPTION | |
| 1 | 6,000 | LF | 12 Inch SDR17 CL250 PVC Force Main | |
| 2 | 40 | LF | 24 Inch Welded Steel Encasement (Open Cut Installation) | |
| 3 | 2 | EA | Sanitary Sewer Flushing Assembly | |
| 4 | 2 | EA | Connect to Existing 12 Inch Force Main | |
| 5 | 2 | TON | Ductile Iron Fittings for Sewer | |
| | | | | |
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| | | • | ements: C-401-C-404 | |
| Canoe C | QTY | | DESCRIPTION | |
| ITEM 1 | <u>QTY</u> 32 | UNIT LF | DESCRIPTION 15 Inch CPP Storm Drain Pipe | |
| 1 2 | QTY 32 50 | LF LF | DESCRIPTION 15 Inch CPP Storm Drain Pipe 15 Inch RCP Storm Drain Pipe, Class III | |
| 1 2 3 | QTY 32 50 106 | LF LF LF | DESCRIPTION 15 Inch CPP Storm Drain Pipe 15 Inch RCP Storm Drain Pipe, Class III 18 Inch RCP Storm Drain Pipe, Class III | |
| ITEM 1 2 3 4 | QTY 32 50 106 64 | LF LF LF LF LF | DESCRIPTION 15 Inch CPP Storm Drain Pipe 15 Inch RCP Storm Drain Pipe, Class III 18 Inch RCP Storm Drain Pipe, Class III 24 Inch CPP Storm Drain Pipe | |
| ITEM 1 2 3 4 5 | QTY 32 50 106 64 32 | LF LF LF LF LF LF | DESCRIPTION15 Inch CPP Storm Drain Pipe15 Inch RCP Storm Drain Pipe, Class III18 Inch RCP Storm Drain Pipe, Class III24 Inch CPP Storm Drain Pipe24 Inch Ductile Iron Storm Drain Pipe | |
| ITEM 1 2 3 4 5 6 | QTY 32 50 106 64 32 40 | UNIT LF LF LF LF LF LF LF | DESCRIPTION15 Inch CPP Storm Drain Pipe15 Inch RCP Storm Drain Pipe, Class III18 Inch RCP Storm Drain Pipe, Class III24 Inch CPP Storm Drain Pipe24 Inch Ductile Iron Storm Drain Pipe6 Inch Temporary Storm Drain Pipe | |
| ITEM 1 2 3 4 5 6 7 | QTY 32 50 106 64 32 40 40 | UNIT LF LF LF LF LF LF LF | DESCRIPTION15 Inch CPP Storm Drain Pipe15 Inch RCP Storm Drain Pipe, Class III18 Inch RCP Storm Drain Pipe, Class III24 Inch CPP Storm Drain Pipe24 Inch Ductile Iron Storm Drain Pipe6 Inch Temporary Storm Drain Pipe8 Inch Temporary Storm Drain Pipe | |
| ITEM 1 2 3 4 5 6 7 8 | QTY 32 50 106 64 32 40 40 40 40 | UNIT LF LF LF LF LF LF LF LF | DESCRIPTION15 Inch CPP Storm Drain Pipe15 Inch RCP Storm Drain Pipe, Class III18 Inch RCP Storm Drain Pipe, Class III24 Inch CPP Storm Drain Pipe24 Inch Ductile Iron Storm Drain Pipe6 Inch Temporary Storm Drain Pipe8 Inch Temporary Storm Drain Pipe12 Inch Temporary Storm Drain Pipe | |
| ITEM 1 2 3 4 5 6 7 8 9 | QTY 32 50 106 64 32 40 40 40 1,340 | UNIT LF LF LF LF LF LF LF LF GAL | DESCRIPTION15 Inch CPP Storm Drain Pipe15 Inch RCP Storm Drain Pipe, Class III18 Inch RCP Storm Drain Pipe, Class III24 Inch CPP Storm Drain Pipe24 Inch Ductile Iron Storm Drain Pipe6 Inch Temporary Storm Drain Pipe8 Inch Temporary Storm Drain Pipe12 Inch Temporary Storm Drain PipeTack Coat | |
| ITEM 1 2 3 4 5 6 7 8 9 10 | QTY 32 50 106 64 32 40 40 40 50 50 32 32 50 106 64 32 40 40 50 5,900 | UNIT LF LF LF LF LF LF LF LF GAL LF | DESCRIPTION15 Inch CPP Storm Drain Pipe15 Inch RCP Storm Drain Pipe, Class III18 Inch RCP Storm Drain Pipe, Class III24 Inch CPP Storm Drain Pipe24 Inch Ductile Iron Storm Drain Pipe6 Inch Temporary Storm Drain Pipe8 Inch Temporary Storm Drain Pipe12 Inch Temporary Storm Drain PipeTack CoatDouble Solid Traffic Stripe, Yellow, Class 2, Type A (5" Wide) | |
| ITEM 1 2 3 4 5 6 7 8 9 | QTY 32 50 106 64 32 40 40 40 1,340 | UNIT LF LF LF LF LF LF LF LF GAL | DESCRIPTION 15 Inch CPP Storm Drain Pipe 15 Inch RCP Storm Drain Pipe, Class III 18 Inch RCP Storm Drain Pipe, Class III 24 Inch CPP Storm Drain Pipe 24 Inch Ductile Iron Storm Drain Pipe 6 Inch Temporary Storm Drain Pipe 12 Inch Temporary Storm Drain Pipe 12 Inch Temporary Storm Drain Pipe Tack Coat Double Solid Traffic Stripe, Yellow, Class 2, Type A (5" Wide) Single Solid Traffic Stripe, White, Class 2, Type A (5" Wide) Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate Size | |
| ITEM 1 2 3 4 5 6 7 8 9 10 11 | QTY 32 50 106 64 32 40 40 40 5,900 100 | UNIT LF LF LF LF LF LF LF GAL LF LF | DESCRIPTION15 Inch CPP Storm Drain Pipe15 Inch RCP Storm Drain Pipe, Class III18 Inch RCP Storm Drain Pipe, Class III24 Inch CPP Storm Drain Pipe24 Inch Ductile Iron Storm Drain Pipe6 Inch Temporary Storm Drain Pipe8 Inch Temporary Storm Drain Pipe12 Inch Temporary Storm Drain PipeTack CoatDouble Solid Traffic Stripe, Yellow, Class 2, Type A (5" Wide)Single Solid Traffic Stripe, White, Class 2, Type A (5" Wide)Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate SizeMix, ESAL Range A/B (220#/SY)Superpave Bituminous Concrete Upper Binder Layer, 3/4" Maximum Aggregate Size | |
| ITEM 1 2 3 4 5 6 7 8 9 10 11 12 | QTY 32 50 106 64 32 40 40 40 5,900 100 1,400 | UNIT LF LF LF LF LF LF LF LF LF LF LF LF TON | DESCRIPTION 15 Inch CPP Storm Drain Pipe 15 Inch RCP Storm Drain Pipe, Class III 18 Inch RCP Storm Drain Pipe, Class III 24 Inch CPP Storm Drain Pipe 24 Inch Ductile Iron Storm Drain Pipe 6 Inch Temporary Storm Drain Pipe 12 Inch Temporary Storm Drain Pipe Tack Coat Double Solid Traffic Stripe, Yellow, Class 2, Type A (5" Wide) Single Solid Traffic Stripe, White, Class 2, Type A (5" Wide) Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate Size Mix, ESAL Range A/B (220#/SY) Superpave Bituminous Concrete Upper Binder Layer, 3/4" Maximum Aggregate Size Mix, ESAL Range A/B (225#/SY) Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate Size | |
| ITEM 1 2 3 4 5 6 7 8 9 10 11 12 13 | QTY 32 50 106 64 32 40 40 40 5,900 100 1,400 1,450 | UNIT LF LF LF LF LF LF LF LF LF LF TON TON | DESCRIPTION 15 Inch CPP Storm Drain Pipe 15 Inch RCP Storm Drain Pipe, Class III 18 Inch RCP Storm Drain Pipe, Class III 24 Inch CPP Storm Drain Pipe 24 Inch Ductile Iron Storm Drain Pipe 6 Inch Temporary Storm Drain Pipe 12 Inch Temporary Storm Drain Pipe 12 Inch Temporary Storm Drain Pipe Tack Coat Double Solid Traffic Stripe, Yellow, Class 2, Type A (5" Wide) Single Solid Traffic Stripe, White, Class 2, Type A (5" Wide) Superpave Bituminous Concrete Wearing Surface Layer, 1/2" Maximum Aggregate Size Mix, ESAL Range A/B (220#/SY) Superpave Bituminous Concrete Upper Binder Layer, 3/4" Maximum Aggregate Size Mix, ESAL Range A/B (225#/SY) | |

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ASTRUCTURE IMPROVEMENTS



