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## ADDENDUM NO. 1

Date: September 5, 2014

Project Name: Alberta Revitalization Infrastructure Project Phase 1A  
for the City of Tuscaloosa

City Project Number: A12-1324  
WA Project Number: 13-100

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This addendum to drawings and specifications dated August 8, 2014 and any previous addenda for the above referenced project supersedes all contrary and conflicting information contained in said drawings, specifications and addenda. Said drawings, specifications and addenda are hereby amended in the following particulars that are in full force as part of this contract.

Bidders shall acknowledge receipt of this addendum on their bid.

### **ITEM NO. 1 – PRE-BID MEETING:**

A mandatory pre-bid meeting was held at 10:00 a.m. on Thursday, September 4, 2014. The agenda meeting minutes (including electronic document release form) and sign in sheet are attached.

### **ITEM NO. 2 – CLARIFICATION ON SALES & USE TAX SAVINGS:**

Contractor shall disregard the Sales & Use Tax information provided in the prebid meeting agenda, and remove/replace the following noted article of the contract agreement and original bid proposal form with the below and attached information.

1. Article II., Paragraph J. of the Contract Agreement shall be removed in its entirety and replaced with the following: Sales and Use Taxes shall not be included in the bid. The project will be bid and administered in compliance with the State of Alabama Act 2013-205, Certificate of Exemption from Sales and Use Tax for Governmental Entities, regarding sales and use taxes. The Contractor shall be responsible for obtaining a certificate of exemption from the Alabama Department of Revenue for purchases of materials and other tangible property made part of the project. Any subcontractors purchasing materials or other tangible personal property as part of the project shall also be responsible for obtaining a certificate of exemption.
2. As per the State of Alabama Act 2013-205, the estimate sales and use tax saving must be accounted for on the bid proposal. Failure to provide the estimated sales and use tax savings may render the bid as non-responsive. Other than determining responsiveness of the bid, sales and use tax accounting shall not affect the bid pricing nor shall be considered in the determination of the lowest responsible and responsive bidder.
3. See the attached revised Bid Proposal sheet to be used in the bid submittal which includes provisions for sales and use tax savings accounting on the bid proposal.

**ITEM NO. 3 – BID SCHEDULE:**

Replace the original Bid Schedule found in the contract documents in its entirety with the attached revised Bid Schedule dated 09/05/14. Additional or revised line items are reflected by being italicized and bolded.

**ITEM NO. 4 – CIVIL CONSTRUCTION PLAN SHEETS:**

The following plans sheets have been revised as noted and shall replace the original plan sheets found in the contract documents in their entirety with the attached revised plan sheets dated 09/05/14.

Sheet C6.2

1. Added sanitary manhole "E6" and deleted concrete collar at this location.
2. Deleted memphis tee at sanitary manhole "E3".

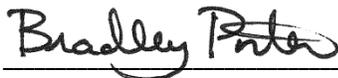
Sheet C6.3

1. Deleted memphis tee at sanitary manhole "E3"

**ITEM NO. 5 – CONTRACTOR QUESTIONS:**

1. Detail 3 for Storm Drain Backfill (C11.7) calls for bedding material to be #57 stone. Spec 02250 Trenching, Backfill, & Compaction calls for #8910 bedding material. Which material should be used? *Backfill shall be as shown on the trench details shown on sheet C11.7. See attached revised spec section 02250.*
2. Will night work be allowed for the grading and/or paving? *Working at night will be permissible but Contractor shall maintain access for all emergency vehicles. Prior to performance of night work, Contractor shall coordinate with Owner's Representative and City on proposed dates of night work. No night work can occur without prior approval.*

**END OF ADDENDUM NO. 1**



**Michael Bradley Porter, P.E.  
Alabama Registration No. 30442**



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**ALBERTA REVITALIZATION INFRASTRUCTURE PROJECT PHASE 1A**  
**TUSCALOOSA CITY HALL**  
**NARASHINO ROOM**

**CITY OF TUSCALOOSA PROJECT NO. A12-1324**  
**WALKER ASSOCIATES PROJECT NO. 12-100**

**PRE-BID AGENDA**  
(Meeting Minutes in Red)

**Thursday, September 4, 2014, 10:00 a.m. CST**

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**General:**

- Welcome (Please Silence all Radios and Phones)
- Pre-Bid Conference is **MANDATORY** for all Bidders; Sign-In Sheet (Complete for Record) will be included with Addendum No. 1. Be Sure to legibly write email address as all Addenda will be issued electronically via email.
- Name and Location of Project: Alberta Revitalization Infrastructure Project Phase 1A – 26<sup>th</sup> Avenue East from 6<sup>h</sup> Street East to 8<sup>th</sup> Street East, and 7<sup>th</sup> Street East from 25<sup>th</sup> Avenue East to 26<sup>th</sup> Avenue East
- Introduce Owner and Owner’s Representatives (City of Tuscaloosa, Walker Associates)
- Introduce Utility Companies (Alabama Power Company, Alagasco, AT&T)

**Project Summary:**

- Overall Summary of the Project: Project includes municipal utility work including removal/replacement of storm drain, sanitary sewer, water distribution. Private utility improvements to install conduits below ground. Contractor to install conduits as part of this phase for immediate and future use. Where required for immediate use, the respective utility companies will install wiring through the conduits, energize the utility, and abandon the overhead utility. Contractor responsible for scheduling and coordination with private utility companies. Streetscape work will include asphalt paving, curb and gutter, and sidewalk.
- Existing Residential Structure Removal. **Located along south side of 7<sup>th</sup> Street. City owns the property, but some residents still occupy property. Owner’s Representative will assist in coordination between City and Contractor on scheduling removal. In the event the residents are not relocated in sufficient time to allow for structure removal as part of this project, then no demolition will occur on that specific property. Upon removal of structure, any holes left from footings, slabs, etc. shall be graded/backfilled to prevent ponding water.**
- Contract Documents (City of Tuscaloosa Contract Documents with Federal Supplemental Documents Housing and Urban Development (HUD). Review Federal Supplementals in the Contract Documents for any and all additional requirements.
- Davis-Bacon Wage Rates apply as per the Federal Supplemental Documents
- Contractors are encouraged to utilize minority subcontractors where applicable. The City of Tuscaloosa maintains a database which identifies eligible minority contractors and subcontractors.
- The contractor shall pay special attention to Exhibit A – City of Tuscaloosa MBE/DBE/WBE Policy for Public Works Projects over \$50,000. Forms 1 & 2 included as part of Exhibit A must be completed and submitted to the Engineer by close of business (5:00pm CST on September 4, 2014). These forms are attached to this agenda and could be completed and returned before leaving this meeting. Forms 3 & 4 must be completed and included with the Contractor’s sealed bids. Omission of these forms could result in the bid being rejected if the bid is determined to not be responsive.

- The Contractor shall be required to comply with the Alabama Immigration Law and provide certification of the same by completing the sworn affidavit provided in the contract documents. This form is also required for all Subcontractors.
- Contract Documents: Drawings and Specifications are available for pickup at Walker Associates, Inc.
- Sales and Use Tax Savings:
  - ~~Bidders (Contractors, Subcontractors, and vendors) are hereby given notice of the Owner's intent to implement a tax savings arrangement.~~
  - ~~Sales and use taxes are to be included in the bid prices and, thus, the contract amount, but the contract amount will be reduced by the amount of taxes saved based upon actual purchases.~~
  - ~~The Contractor retains the responsibility for the materials purchased, except that the Owner will pay vendors directly for materials purchased by the Contractor as agent for the Owner.~~
  - ~~The Owner's payment for materials directly to vendors also constitutes payment against the construction contract amount.~~
  - ~~The Contractor's costs for administering the arrangement are to be included in the various bid prices and the final contract amount. There shall be no separate payment for administering the arrangement.~~
  - ~~Sales and use tax savings will be applied to the contract amount as a deductive change order and at an amount of 9%. Please note that this is not a blanket 9% on the entire contract.~~
  - ~~Contractor must submit a Material Invoice Transmittal to the Owner through the Engineer monthly and may elect to submit the same every fourteen (14) days.~~
  - **Disregard Sales and Use Tax Savings info provided above. See Addendum No. 1 form and attachments for direction regarding Sale and Use Tax Savings.**

#### Receipt of Bids:

- Bids shall be received Thursday, September 11, 2014 at 2:00 p.m. CST at the Tuscaloosa City Hall in the Narashino Room.
- Proposal Form and Unit Price Bid Schedule and receipt of all addenda (submit one copy with bid)
- Bid Bond with Power of Attorney
- Exhibit A - MBE/DBE/WBE Policy Forms 3 & 4
- Proposal Envelope must have Project Name, Owner Name, City of Tuscaloosa Project Number (A12-1324), Contractor Name, and Contractor State License Number on outside of envelope.

#### Contractual Requirements:

- Payment and Performance Bonds will be required for this project.
- Required Permits (ADEM-NPDES, City of Tuscaloosa, etc.) and all Licenses (City, State, Federal, etc.) for all Contractors involved on the project. Copies will be provided to Owner's Representative.
- Insurance Requirements: Contractor shall follow all insurance requirements set forth in the contract documents. **Contractor shall be required to also carry Builder's Risk All Risk Insurance as part of this project.**
- NPDES Permit – Permit shall be in the Contractor's name. The Contractor is responsible for preparation, submittal, and obtaining of the permit and all associated fees. This is further detailed in the contract documents.
- **Construction Materials Testing (CMT)** will be provided by the Owner and performed by TTL, Inc. The initial tests will be paid for by the Owner; however, subsequent tests will be the Contractor's responsibility. The General Contractor is responsible for making sure that all subcontractors are aware and familiar with compaction requirements for the project. **Frank Summers noted that in areas where compaction is already complete but then disturbed again, that area and any associated trenches must be recompacted to meet project requirements.**
- **Construction Staking Services** will be provided by the Owner and performed by Walker Associates, Inc. The items to be staked are noted as follows and shall be paid for by the Owner: horizontal and vertical location of the following – storm and sanitary sewer junctions and water mains with offsets, curb and gutter, horizontal light pole locations, street centerlines, street subgrade, base grade, and horizontal utility bank locations. The Owner shall provide staking one (1) time only. Negligence with Owner provided stakes will result in subsequent staking of the item(s) to be the Contractor's responsibility.
- **Construction Observation Services** will be provided by the Owner full time and performed by Walker Associates, Inc.
- Time for Completion will be **120 consecutive calendar days.**

- Liquidated Damages Amount: **\$500.00 per day beyond the stated completion date.**
- Record Drawings are required and will be prepared by the Owner's Representative. The Contractor shall coordinate any deviation from the plans with the Owner's Representative.
- Unit Price Contract: Bid Schedule can be found in the Contract Documents. Upon request by the Contractor, an electronic copy of the bid schedule can be provided. The Contractor shall be required to sign & submit an electronic release form. This form is attached to the prebid agenda & will also be included with Addendum 1

#### **Project Coordination:**

- Alabama Power Company, AT&T, Alagasco, Comcast Cable, TDOT Fiber Optic – Conduit and Equipment Installation (Very Important to Coordinate Material Pick-Up, Scheduling, etc. with Utility Companies as they are an integral part of the project). While the utility companies will be pulling the utilities in the conduits as required for this phase of the project, it is the Contractor's responsibility to schedule this work and coordinate with the respective utilities so new underground utilities can be energized and existing above ground utilities can be removed and/or temporary relocation to maintain the project schedule.
- Private Utility Companies to assist with temporary relocations of existing overhead facilities and underground gas mains where required.
- Scheduling and Traffic Control for Private Utility Companies: Contractor responsible for traffic control for private utility companies.
- Scheduling with Tuscaloosa Department of Transportation (Contractor to submit to Owner's Representative a detailed traffic control plan for any lane closures in advance of proposed work requiring closure. TCP will then be submitted to OCE and TDOT for approval prior to implementation of TCP and start of associated work.)
- Public/Private Residence and Vehicle Access: Contractor must maintain access to all existing business or residences. Any work which will affect access for these people shall be coordinate so alternate access is provided as needed. A minimum of 7-days notice is recommended and should be done in writing to those affected. A copy of the notification shall be provided to the Owner's Representative. No additional payment will be made for temporary stone required to maintain access to business or residences when sidewalk or driveway removal is required.
- Coordination with existing projects will be required. Ongoing construction is occurring at the Alberta School for Performing Arts and Fire Station No. 4. Work by Alabama Power Company will also be ongoing at the adjacent substation as work is performed to expand the substation northwardly as shown in the plans. It will be the Contractor's responsibility to coordinate with these adjacent Contractor's and their projects to coordinate access to their site from this projects work. Any necessary road closures will need to be coordinate with these projects and the City of Tuscaloosa.
- Progress and Coordination Meetings: Progress and Coordination meetings will be required for the project. Time and frequency of these meeting will be determined prior to construction and as the project progresses.

#### **Project Conditions:**

- Construction Project Area – Defined by limits of work shown in plans.
- Security at Site – No on-site security provided, recommend contractor secure equipment at end of work day. (The Contractor may use temporary construction fencing as necessary to protect their equipment and materials.)
- Job Site Offices and Safety for the project are the Contractor's responsibility.
- Erosion Control and Clean up (During and Post Construction)

#### **Miscellaneous:**

- Clarification Requests **WILL NOT** be accepted after Tuesday, September 9<sup>th</sup> at 10:00 a.m. All questions and clarification request shall be submitted in writing to the Project Engineer on or before this date and time.
- Material Submittals: If hard copies are provided, they shall be 3 ring bound – No Exceptions. Electronic copies of material submittals will be accepted and are preferred. Electronic submittals shall include transmittal summarizing items covered with respective material submittal.
- Lead Time on Material Items: Coordinate with all subs regarding material lead time. Material delays will not be a valid excuse for project delays or failure to complete on time.

- Pay Applications (Review and Submittal): Upon submittal of pay request, the Owner's Representative has 10 days to review pay application. Preferred method of pay application submittal process would be to meet on a predetermined quantity cut-off date to review and agree upon the quantities for that month's pay application. The Contractor will then prepare the pay application and all required supporting documentation (certified payroll, stored materials, etc.) and submit to Owner's Representative. If all required items are not submitted then the pay application will be returned for corrections. Upon receipt of a completed, approved pay application, it will then be forwarded to the City for final approval and processing.
- Any Temporary Piping for storm drainage shall be the Contractor's responsibility and shall be incidental to the project.
- Temporary Sanitary Sewer Bypass Pumping: In the event the Contractor elects to temporarily bypass pump sanitary sewer during manhole tie-ins, etc., the Contractor shall closely monitor the pump to ensure no backup or discharge of sewer outside of the manhole. Any bypass pumping or associated work shall be incidental to the project.

**Proposed Addenda:**

- Pre-Bid Agenda Meeting Minutes & Sign-In Sheet
- Revised Sheet ~~C6.1 & C6.2~~ C6.2 & C6.3
- Revised Bid Schedule
- Revised Sales & Use Tax Savings

**Questions/Comments:**

- Owner
  - Grant Wilson emphasized the bid requirements. The Bidder shall make sure all items are submitted as required or the bid would be rejected.
- Utility Companies
- Bidders

**Contractor's Questions:**

1. *Request clarification of existing asphalt removal.* Pavement removal will not be paid for twice. (i.e. if you saw-cut/remove pavement for utility installation and temporarily patch to provide access, you do not get payment for this same area of pavement removal again when you remove the pavement the final time in preparation of the roadbed.)
2. *Can you remove all roadway asphalt pavement at one time?* Access for public and private properties must be maintained at all times. Anywhere pavement is removed and access is required, the Contractor will have to provide temporary, all-weather roadways as necessary to maintain access.
3. *Can roadway be closed completely?* Roadway must be kept accessible to maintain access for the public, and construction traffic for adjacent projects. As noted previously, temporary, all-weather roadways are required if the existing road is closed. The entire right-of-way width can be used for this. The Contractor may install crossings at night to avoid daytime traffic. Access shall still be required for emergency vehicles.
4. *Will allowance for asbestos removal be provided?* Yes, it will be noted on the revised bid schedule as part of Addendum No. 1.
5. *Clarification regarding depths of private utility conduit crossing related to public utilities?* All minimum depths for private utility duct banks must be maintained. The Contractor shall coordinate any duct bank crossing with municipal utilities to ensure minimal depths are maintained and that any duct bank change in elevation transitions satisfies the private utility companies for their use in wiring installation.
6. *Clarification on adjacent ongoing projects completion dates?*  
 Fire Station No. 4: Approximate Completion Date – January 2015  
 Alberta School for the Performing Arts: Approximate Completion Date – December 2014

## Electronic Document Release

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To: Bidders  
Project: City of Tuscaloosa  
Alberta Revitalization Infrastructure Project Phase 1A  
City of Tuscaloosa Project No.: A12-1324  
Date: 8/18/2014  
Document: Design Files

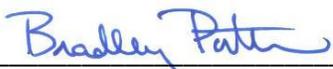
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The delivery of this electronic data is a component of Walker Associates' instruments of service and is for the benefit of the client for whom the service has been performed. This delivery constitutes a non-exclusive, limited license for the recipient to use this electronic data for the specific purpose of responding to the clients requirements on this project.

It is our professional opinion that this electronic data provides design, and or survey information current as of the date of its initial release. Any use of this electronic data is at the sole risk and liability of the user who retains the responsibly of meeting project requirements.

Because data stored in electronic format can be modified inadvertently or otherwise without the authorization of the data's creator, the information contained in Walker Associates' signed and sealed documents shall be deemed to be correct and superior to this electronic data. Walker Associates, Inc. makes no representation as to long term compatibility, usability, or readability of this electronic data.

Re-use of this electronic data without Walker Associates' professional involvement will be at the recipient's sole risk and without liability to Walker Associates, Inc. By signature below, the recipient shall indemnify and hold harmless Walker Associates, Inc., our consultants and agents, and employees of any of them from and against claims, damages, losses and expenses, including, but not limited to, attorney's fees, arising out of the unauthorized use of this electronic data.

From:   
Bradley Porter, P.E.

Company: \_\_\_\_\_

Recipient: \_\_\_\_\_

Date: \_\_\_\_\_

**PRE-BID SIGN-IN SHEET**  
**ALBERTA REVITALIZATION INFRASTRUCTURE PROJECT PHASE 1A**  
**CITY OF TUSCALOOSA PROJECT NO. A12-1324**  
**WALKER ASSOCIATES PROJECT NO. 12-100**  
**TUSCALOOSA CITY HALL, NARASHINO ROOM, TUSCALOOSA, ALABAMA**  
**SEPTEMBER 4, 10:00 A.M.**

NAME	REPRESENTING	PHONE	FAX	E-MAIL ADDRESS
BRADLEY PORTER	WALKER ASSOCIATES, INC.	205-561-3778	205-561-3779	bporter@walkercivil.com
FRANK SUMMERS	WALKER ASSOCIATES, INC.	(205)561-3778	(205)561-3779	FSUMMERS@WALKERCIVIL.COM
Jimmy Vaughn	Russo Corp.	205-923-4434		jvaughn@russocorp.com
EDDIE YESSICK	REV CONST. INC	205-349-1860	205-349-1862	eyessick@me.com
PAUL BURKHALTER	GFC Construction, Inc	758-1948	758-3303	Paul@GFCConstruction.com
DON MURPHY	DRM UTILITIES	752-7700	391-4900	Don@DRMUTILITIES.COM
Tommy Smith	RUSSO CORP	205-948-5015	205-925-0665	tsmith@russocorp.com
Richard Murphree	DRM UTILITIES	752-7700	391-4900	richard@drmutilities.com
Michael Hoban	B.W. Hoban Const Co.	339-7724	339-7731	office@bwhobanconstruction.com
Jeremy Price	Price Construction	553-4520	553-4627	info@priceconstructioninc.com
CHRIS LATHAM	CAMAR Construction	345-0729		chrise.lathamengllc.com





CITY OF TUSCALOOSA PUBLIC WORKS  
SECTION THREE  
PROPOSAL (BID)  
(2014)

**NOTE TO BIDDER:** Use BLACK ink for completing this Proposal form.

To: \_\_\_\_\_ THE CITY OF TUSCALOOSA, ALABAMA \_\_\_\_\_  
Address: \_\_\_\_\_ P.O. BOX 2089 \_\_\_\_\_  
\_\_\_\_\_ TUSCALOOSA, AL 35403 \_\_\_\_\_  
Project Title: \_\_\_\_\_ ALBERTA REVITALIZATION INFRASTRUCTURE PROJECT PHASE 1A \_\_\_\_\_  
Project No.: \_\_\_\_\_ A12-1324 \_\_\_\_\_  
Trade: \_\_\_\_\_ The trade portion of the work for which this Proposal is submitted is: \_\_\_\_\_  
\_\_\_\_\_ (if applicable) \_\_\_\_\_  
Trade Package No.: \_\_\_\_\_

**BIDDER:** The name of the Bidder submitting this Proposal is \_\_\_\_\_ doing business  
at \_\_\_\_\_  
\_\_\_\_\_ Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

which is the address to which all communications concerned with this Proposal and with the Contract shall be sent.

Licensed, Class \_\_\_\_\_, Alabama General Contractor No.: \_\_\_\_\_ (Attach Copy)

Alabama General Contractor Specialty \_\_\_\_\_

Alabama General Contractor License Major Categories:

(1) \_\_\_\_\_ (2) \_\_\_\_\_

Bidder's contact person for additional information on this Proposal:

Name: \_\_\_\_\_ Telephone: \_\_\_\_\_

**ADDENDA:** The Bidder hereby acknowledges that he has received Addenda No's. \_\_\_\_\_,  
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ (Bidder shall Insert No. of each Addendum received) and agrees that all addenda  
issued are hereby made part of the Contract Documents, and the Bidder further agrees that his Proposal(s) includes  
all impacts resulting from said addenda.

**LUMP SUM:** The Bidder agrees to accept as full payment of the work proposed under this Project, as services  
are rendered, as herein specified and as shown on the Contract Documents, upon the undersigned's own estimate of  
quantities and costs, the following lump sum of: \_\_\_\_\_ Dollars  
and \_\_\_\_\_ cents (\$ \_\_\_\_\_). *(Amount written in words has precedence)*

**ALTERNATES:** Attach additional sheets for additive or deductive alternates, if in contract documents.

**UNIT PRICES: SEE FOLLOWING PAGES**

Where the Project is bid in unit prices then Bidder agrees to perform the work in the stated quantities of the materials at the unit prices so bid, the cumulative total of which constitutes the base bid set forth below, and to accept as final payment for the work performed under this Project as herein specified the extension of each such unit price for the quantities actually installed in accordance with the following or attached unit price schedule.

An unbalanced bid, as herein defined, may be considered non-responsive. A bid resulting in a substantial advance payment on an item that is for a single lump sum payment may be considered non responsive.

Prices for mobilization and demobilization combined shall not exceed 5% of the total base bid unless a reasonable explanation is provided in writing with the bid and accepted by the Owner. Lump sum payments and unit price bids for a single or lump sum payment may be spread over the course of the period of work until the line item is complete at owner's option.

The Bidder's unit price for materials listed is as including the payment of taxes (See Page 3) where applicable: (Attach additional sheets if required)

**SALES & USE TAX SAVINGS ACCOUNTING:** Pursuant to State of Alabama Act 2013-205, Section 1(g) the Contractor accounts for the sales tax NOT included in the bid proposal form as follows:

**ESTIMATED SALES & USE TAX**

Base Bid: \$ \_\_\_\_\_

Alternate: \$ \_\_\_\_\_

Failure to provide an accounting of sales tax may render the bid non-responsive. Other than determining responsiveness, sales tax accounting shall not affect the bid pricing nor be considered in the determination of the lowest responsible responsive bidder.

**AS BUILT DRAWINGS:** The Bidder's Proposal contains \$ \_\_\_\_\_ for "as built drawings."

**BIDDER'S DECLARATION AND UNDERSTANDING:** The undersigned, hereinafter called the Bidder, declares that the only persons or parties interested in this Proposal are those named herein, that this Proposal is, in all respects, fair and without fraud, that it is made without collusion with any official of the City, and that the Proposal is made without any connection or collusion with any person submitting another Proposal on this Contract.

The Bidder further agrees that he has checked and verified the completeness of the Contract Documents and that he has exercised his own judgment regarding the interpretation of subsurface information utilizing all pertinent data in arriving at his conclusions. The Bidder shall be fully responsible for any damages or liability arising out of his or his subcontractors prebid investigations.

The Bidder understands and agrees that if a Contract is awarded, the City may elect to award all schedules under one Contract, lump sum, separately, or in any combination that best serves the interests of the City.

The Bidder further declares that he has carefully examined the Contract documents for the construction of the Project and has checked and verified the completeness of the Contract Documents, that he has personally inspected the site, that he has satisfied himself as to the quantities involved, including materials and equipment, and conditions of work involved. Bidder further declares that he is fully aware of the fact that the description of the work, quantities of work and materials, as included herein, is brief and is intended only to indicate the general nature of the work and to identify the said quantities with the detailed requirements of the Contract Documents. Bidder also declares that this Proposal is made according to the provisions and under the terms of the Contract Documents, which Documents are hereby made a part of this Proposal.

The Bidder declares that he understands and agrees that the quantities shown in the Advertisement for Bids and in the Proposal are approximate only and are subject to either increase or decrease; and that should quantities be decreased, he also understands and agrees that payment will be made on actual quantities installed at the unit bid prices, and will make no claim for anticipated profits for any decreases in the quantities. Actual quantities will be determined upon completion of the work.

**START OF CONSTRUCTION AND CONTRACT COMPLETION TIME:** The Bidder further agrees to begin work on the date stated in the Notice to Proceed and to fully complete the work, in all respects, within the time specified in the contract documents for completion.

**EXPERIENCE OF BIDDER:** Unless advised by the awarding authority in the Advertisement for Bids that the same is not required, the Bidder submits the following list of at least three clients for whom projects involving construction of similar projects have been performed within the past 5 years.

1.

Name of Client		Telephone Number
Street		City
Facility	Size	Date
Name of Engineer/Architect /Engineering Firm		Telephone Number

2.

Name of Client		Telephone Number
Street		City
Facility	Size	Date
Name of Engineer/Architect /Engineering Firm		Telephone Number

3.

Name of Client		Telephone Number
Street		City
Facility	Size	Date
Name of Engineer/Architect/Engineering Firm		Telephone Number

**PERFORMANCE OF WORK BY CONTRACTOR:** The Bidder shall perform at least 50 percent of the work with his own forces (refer to the INSTRUCTIONS TO BIDDERS).

**SUBCONTRACTORS:** Unless the same information has been provided in the prequalification statement, the Bidder further certifies that if his bid is accepted, the following subcontracting firms or businesses will be awarded subcontracts for the following portions of the work:

Description of Work \_\_\_\_\_

\_\_\_\_\_  
Name

\_\_\_\_\_' \_\_\_\_\_' \_\_\_\_\_'  
Street City State Zip

\_\_\_\_\_  
Description of Work

\_\_\_\_\_  
Name

\_\_\_\_\_' \_\_\_\_\_' \_\_\_\_\_'  
Street City State Zip

\_\_\_\_\_  
Description of Work

\_\_\_\_\_  
Name

\_\_\_\_\_' \_\_\_\_\_' \_\_\_\_\_'  
Street City State Zip

\_\_\_\_\_  
Description of Work

\_\_\_\_\_  
Name

\_\_\_\_\_' \_\_\_\_\_' \_\_\_\_\_'  
Street City State Zip

**SURETY:** If the Bidder is awarded a construction contract on this Proposal, the Surety who provides the Performance Bond and Payment Bond will be:

\_\_\_\_\_ whose address is

\_\_\_\_\_' \_\_\_\_\_' \_\_\_\_\_'  
Street City State Zip

Single Job Bond Limit \_\_\_\_\_ Aggregate Job Bond Limit \_\_\_\_\_

**If Sole Proprietor or Partnership:**

IN WITNESS hereto the undersigned has set his (its) hand this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Signature of Bidder

\_\_\_\_\_  
Title

**If Corporation:**

IN WITNESS WHEREOF the undersigned corporation has caused this instrument to be executed and its seal affixed by its duly authorized officers, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Name of Corporation

By \_\_\_\_\_

(seal)

\_\_\_\_\_  
Title

Attest \_\_\_\_\_  
Secretary

\*\*\*\*\*

The Bidder declares that he understands and agrees that the quantities shown in the Advertisement for Bids and in the Proposal are approximate only and are subject to either increase or decrease; and that should quantities be decreased, he also understands and agrees that payment will be made on actual quantities installed at the unit bid prices, and will make no claim for anticipated profits for any decreases in the quantities. Actual quantities will be determined upon completion of the work.

Attached hereto is a (Bid Bond) or (Check) for the sum of \_\_\_\_\_ according to the conditions under "Instructions to Bidders" and provisions therein.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

BY: \_\_\_\_\_

\_\_\_\_\_  
Title

**(NOTE)** If the Bidder is a corporation, the Proposal shall be signed by an officer of the corporation; if a partnership it shall be signed by a partner. If signed by others, authority for signature shall be attached.

**[ END OF BID PROPOSAL—OFFICE OF THE CITY ATTORNEY ]**



**City of Tuscaloosa**  
**Alberta Revitalization Infrastructure Project**



**Phase 1A**  
**Bid Schedule**  
 9/5/2014 (Revised Addendum No. 1)

Item No.	Quantity	Unit	Description	Unit Cost	Total Cost
<b>PROJECT BASE BID COST</b>					
<b>General, Demolition, Clearing, Grubbing, and Earthwork</b>					
1	1	l.s.	Payment and Performance Bonds		
2	1	l.s.	Mobilization and Demobilization		
3	1	l.s.	Demolition, Clearing, and Grubbing (Approximately 1.1 acres)		
4	1137	l.f.	Removal/Stone Backfill of Existing Pipe (4" & larger, all material)		
5	12	each	Remove Existing Sanitary Manhole/Storm Structure & Backfill		
6	10	c.y.	Slurry Fill of Abandoned Pipes		
<b>7</b>	<b>2508</b>	<b>s.y.</b>	<b>Remove Existing Pavements (Concrete and Asphalt)</b>		
8	1	each	Remove Existing Fire Hydrant		
9	1	l.s.	Demo/Remove Existing Residence No. 1 (2303 7th Street East)		
10	1	l.s.	Demo/Remove Existing Residence No. 2 (2305 7th Street East)		
11	1	l.s.	Demo/Remove Existing Residence No. 3 (2311 7th Street East)		
12	1	l.s.	Demo/Remove Existing Residence No. 4 (2313 7th Street East)		
13	1	l.s.	Demo/Remove Existing Residence No. 5 (2315 7th Street East)		
14	1	l.s.	Demo/Remove Existing Residence No. 6 (702 24th Avenue East)		
15	1	l.s.	Demo/Remove Existing Residence No. 7 (2401 7th Street East)		
16	1	l.s.	Demo/Remove Existing Concrete Slab No. 1 (2415 7th Street East)		
17	1	l.s.	Demo/Remove Existing Concrete Slab No. 2 (2417 7th Street East)		
18	1	l.s.	Demo/Remove Existing Concrete Slab No. 3 (2419 7th Street East)		
19	1	l.s.	Earthwork		
20	1	l.s.	Topsoil (Req'd 4" thick in all disturbed areas)		
21	2000	c.y.i.p.	Removal/Disposal/Replacement of Unsuitable Material		
<b>Base, Pave and Curb &amp; Gutter Improvements</b>					
22	50	s.y.	Milling/Planing Existing Pavement (Thickness Varies) (26th Avenue)		
23	2718	s.y.	Roadbed Stabilizing Material (Includes ALDOT #57 Stone and Roadbed Processing)		
24	2718	s.y.	Bituminous Treatment A (ALDOT 401)		
25	480	gal	Tack Coat (ALDOT 405A)		
26	2500	s.y.	Bituminous Concrete Wearing Surface Layer, 1/2" Max Aggregate Mix (ALDOT 424A) (1.50" Compacted Thickness)		
27	2270	s.y.	Bituminous Concrete Upper Binder Layer, 3/4" Max Aggregate Mix (ALDOT 424B) (1.50" Compacted Thickness)		
28	2270	s.y.	Bituminous Concrete Lower Binder Layer, 1" Max Aggregate Mix (ALDOT 424B) (2.25" Compacted Thickness)		
<b>29</b>	<b>37</b>	<b>s.y.</b>	<b>Asphalt Patching</b>		
30	21	s.y.	Concrete Driveway - Residential (6" Thick)		
31	28	s.y.	Concrete Sidewalk		
32	1090	l.f.	Combination Curb and Gutter		
33	100	l.f.	2' Band Curb		
34	53	l.f.	4' Valley Gutter (Residential Driveways)		
35	87	l.f.	4' Valley Gutter with Reinforcement (Fire Station No. 4 Driveway)		
36	54	l.f.	4' Valley Gutter with Reinforcement (APCO Driveway)		
37	84	l.f.	6' Valley Gutter		

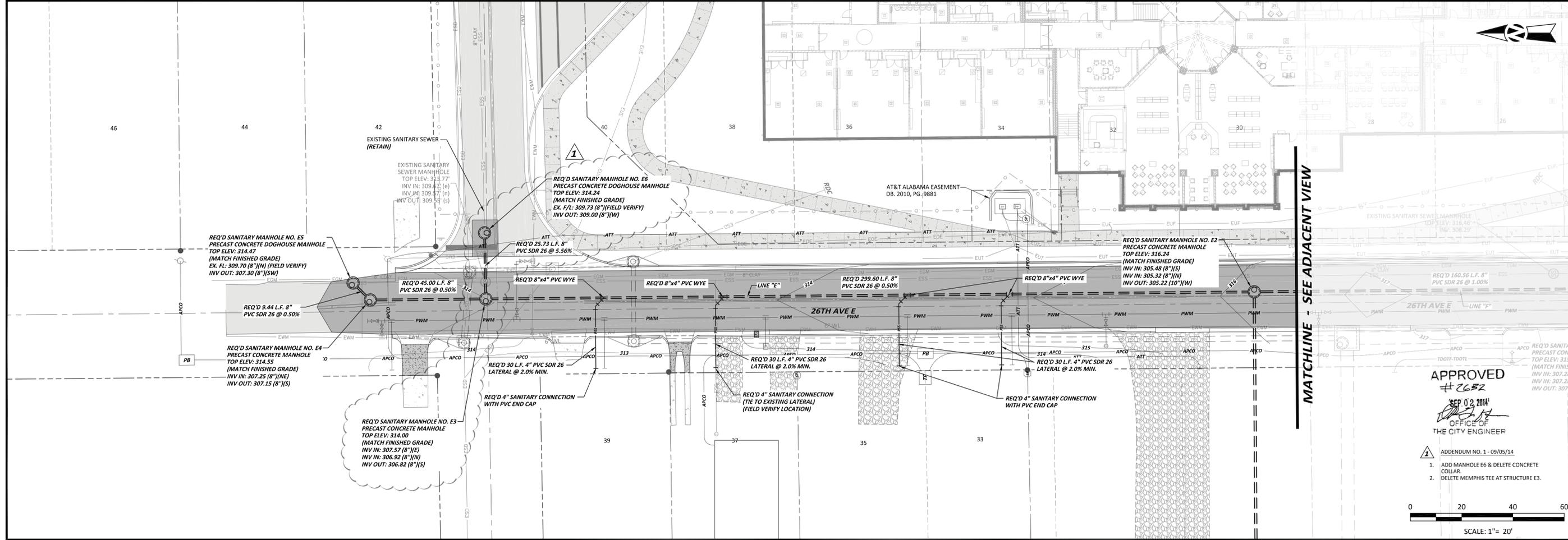
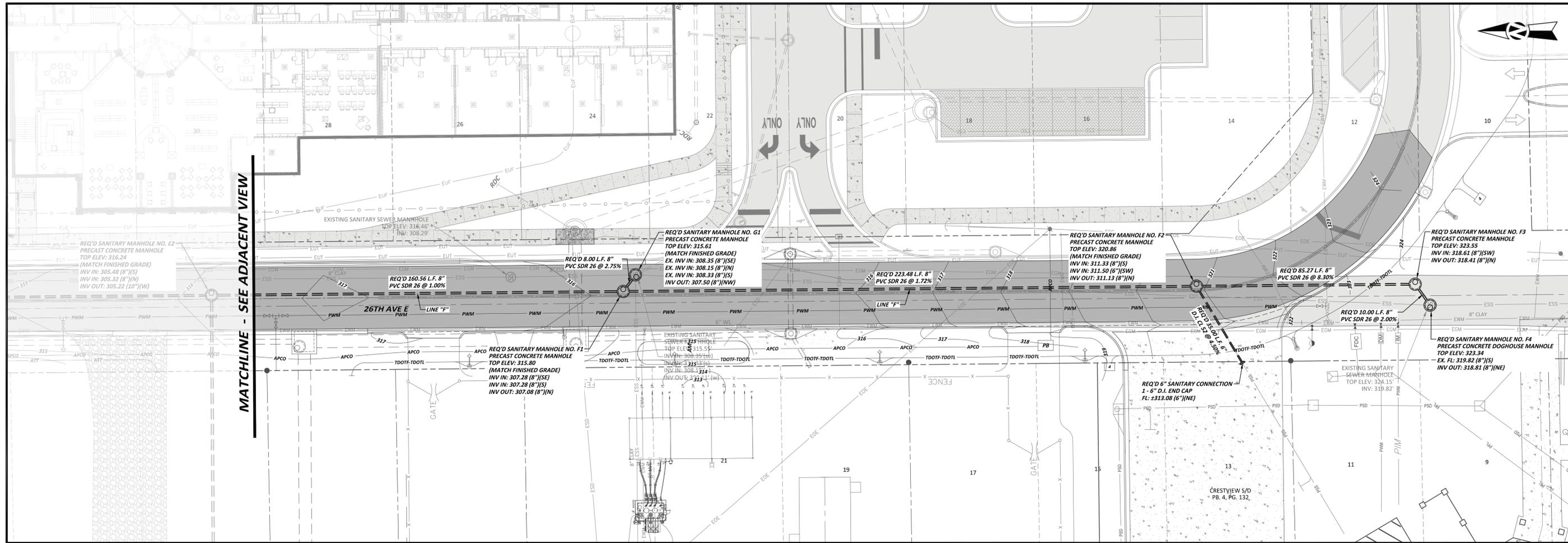
<b>Storm Sewer System Improvements</b>				
38	15	l.f.	15" R.C. Pipe, Class 3	
39	31	l.f.	18" R.C. Pipe, Class 3	
40	362	l.f.	24" R.C. Pipe, Class 3	
41	31	l.f.	22" x 13 1/2" R.C. Arch Pipe, Class 3	
42	28	l.f.	28 1/2" x 18" R.C. Arch Pipe, Class 3	
43	441	l.f.	58 1/2" x 36" R.C. Arch Pipe, Class 3	
44	1	each	Type "S" Inlet (1 Wing)(Depths Vary)	
45	2	each	Type "S" Inlet (2 Wing)(Depths Vary)	
46	2	each	Type "S" Inlet (2 Wing) with BMP Snout (Model 30R) & 5' Sump	
47	1	each	Concrete Junction Box (Depths Vary)	
48	1	l.s.	Storm Structure 1-1 (Junction Box, Special)	
49	1	l.s.	Storm Structure 1-2 (Junction Box, Special)	
50	1	l.s.	Storm Structure 1-3 (Junction Box, Special)	
51	1	l.s.	Storm Structure 1-4 (Junction Box, Special)	
52	1	l.s.	Storm Structure 1-5 (Junction Box, Special)	
53	1	each	Tie to Existing Storm Structure	
54	2	each	Concrete Plug Existing Storm Structure Invert or Pipe	
<b>Sanitary Sewer System Improvements</b>				
55	120	l.f.	6" PVC SDR 26 Sanitary Sewer Lateral (includes any req'd end caps)	
<b>56</b>	<b>868</b>	<b>l.f.</b>	<b>8" PVC SDR 26 Sanitary Sewer Main</b>	
57	333	l.f.	10" PVC SDR 26 Sanitary Sewer Main	
58	35	l.f.	6" DI CL 52 Sanitary Sewer Stub Out and Cap at Fire Station #4	
59	7	each	Standard Precast Manhole	
<b>60</b>	<b>4</b>	<b>each</b>	<b>Standard Precast Doghouse Manhole</b>	
61	1	each	Tie to Existing Sewer Lateral	
<b>62</b>	<b>0</b>	<b>each</b>	<b>Tie to Existing Sewer Main (Includes Concrete Collar)</b>	
63	2	each	Concrete Plug Existing Sanitary Manhole Invert or Pipe	
64	1195	l.f.	Post Construction Camera Inspection	
<b>Water Distribution and Fire Protection System Improvements</b>				
65	89	l.f.	3/4" Type "K" Copper Water Service Line (includes cap where req'd)	
66	10	l.f.	6" Class 350 Compression Joint D.I. Water Main	
67	828	l.f.	8" Class 350 Compression Joint D.I. Water Main	
68	2	each	6" x 6" Tapping Sleeve and Valve and Valve Box	
69	1	each	8" x 8" Tapping Sleeve and Valve and Valve Box	
70	5	each	8" Gate Valve and Valve Box	
71	2	each	8" DIMJ Water Main Plug	
72	4	each	Cut/Cap Existing Water Main	
73	4	each	Direct Tap to Water Main	
74	1	each	Fire Hydrant Assembly	
75	1	l.s.	Pressure Testing and Disinfection (For Entire System)	
<b>Electrical, Fiber Optic, Irrigation Utility Improvements</b>				
76	1	l.s.	2" Sch 40 PVC Conduit (APCO) (+/- 710 l.f.)	
77	1	l.s.	3" Sch 40 PVC Conduit (APCO) (+/- 230 l.f.)	
78	1	l.s.	5" Sch 40 PVC Conduit (APCO) (+/- 5,000 l.f.)	
79	1	l.s.	4" Sch 40 PVC Conduit (AT&T) (+/- 410 l.f.)	
80	1	l.s.	1 1/2" Sch 40 PVC Conduit (TDOTL) (+/- 720 l.f.)	
81	1	l.s.	1 1/4" Sch 40 PVC Conduit (TDOTF) (+/- 170 l.f.)	
82	1	l.s.	4" Sch 40 PVC Conduit w\3 1 1/4" Innerducts (TDOTF)(+/- 3,800 l.f.)	
83	1	l.s.	6" Sch 40 PVC Conduit (Irrigation) (+/- 100 l.f.)	
84	3	each	4'x6'x4' Pull Box (APCO) (Installation Only)	
85	1	each	6'x15'x7' Manhole (APCO) (Installation Only)	
86	1	each	Pad Mount Transformer (APCO) (Installation Only)	
87	3	each	Secondary Pedestal (APCO) (Installation Only)	
88	2	each	3'x4'x3' TDV Vault	
89	1	each	4'x6'x4' TDV Vault	
90	1	l.s.	Tie to Existing AT&T Cabinets	
91	1	l.s.	Tie to Existing Residential Power Panel (Service Conversion)	

<b>Erosion Control</b>					
92	1	l.s.	Erosion Control Management and Maintenance		
<b>Traffic Control</b>					
93	1	l.s.	Traffic Control		
94	1	l.s.	Construction Signs		
<b>Permanent Signing and Striping</b>					
95	1376	l.f.	Solid Yellow, Class 1, Type A Traffic Stripe (4" Wide)		
<b>Miscellaneous Items</b>					
96	100	tons	ALDOT No. 24 Stone (Miscellaneous Use As Directed by the Owner's Representative)		
97	100	tons	ALDOT No. 57 Stone (Miscellaneous Use As Directed by the Owner's Representative)		
98	100	tons	ALDOT No. 8910 Stone (Miscellaneous Use As Directed by the Owner's Representative)		
99	150	c.y.	Utility Trench Foundation Material (As Directed by Owner's Representative)		
100	750	s.y.	Geotextile Stabilization Mat (Mirafi HP570) Only As Directed by the Owner's Representative)		
101	500	l.f.	6" Underdrain (As Directed by the Owner's Representative)		
102	1	each	Remove\Reset Mailbox		
<b>103</b>	<b>1</b>	<b>allowance</b>	<b>Asbestos Abatement of Existing Residences to be Demolished</b>	<b>\$30,000.00</b>	<b>\$30,000.00</b>
				<b>Total Base Bid Cost</b>	

**ALTERNATE NO. 1**

*Install Ductile Iron Sanitary Sewer Pipe In Lieu of PVC Sewer Pipe (unit cost shall be listed as additive or deductive difference to respective unit cost in base bid above)*

A1	120	l.f.	6" D.I. CL 52 Sanitary Sewer Lateral (includes any req'd end caps)		
<b>A2</b>	<b>868</b>	<b>l.f.</b>	<b>8" D.I. CL 52 Sanitary Sewer Main</b>		
A3	333	l.f.	10" D.I. CL 52 Sanitary Sewer Main		
				<b>Subtotal Alternate No. 1 Cost</b>	
				<b>Total Base Bid Cost + Alternate No. 1</b>	



MATCHLINE - SEE ADJACENT VIEW

MATCHLINE - SEE ADJACENT VIEW

**APPROVED**  
 #2652  
 SEP 02 2014  
 OFFICE OF THE CITY ENGINEER

1. ADD MANHOLE E6 & DELETE CONCRETE COLLAR.  
 2. DELETE MEMPHIS TEE AT STRUCTURE E3.

ADDENDUM NO. 1 - 09/05/14

0 20 40 60  
 SCALE: 1" = 20'

**WALKER ASSOCIATES, INC.**  
 ENGINEERING, PLANNING, GIS & SURVEYING

917 22nd Avenue - Suite B  
 Tuscaloosa, AL 35401  
 P (205) 561-3778 | F (205) 561-3779  
 www.walkercivil.com

ALABAMA  
 LICENSED PROFESSIONAL ENGINEER  
 No. 30444  
 09/05/14  
 MICHAEL BRADLEY POWERS

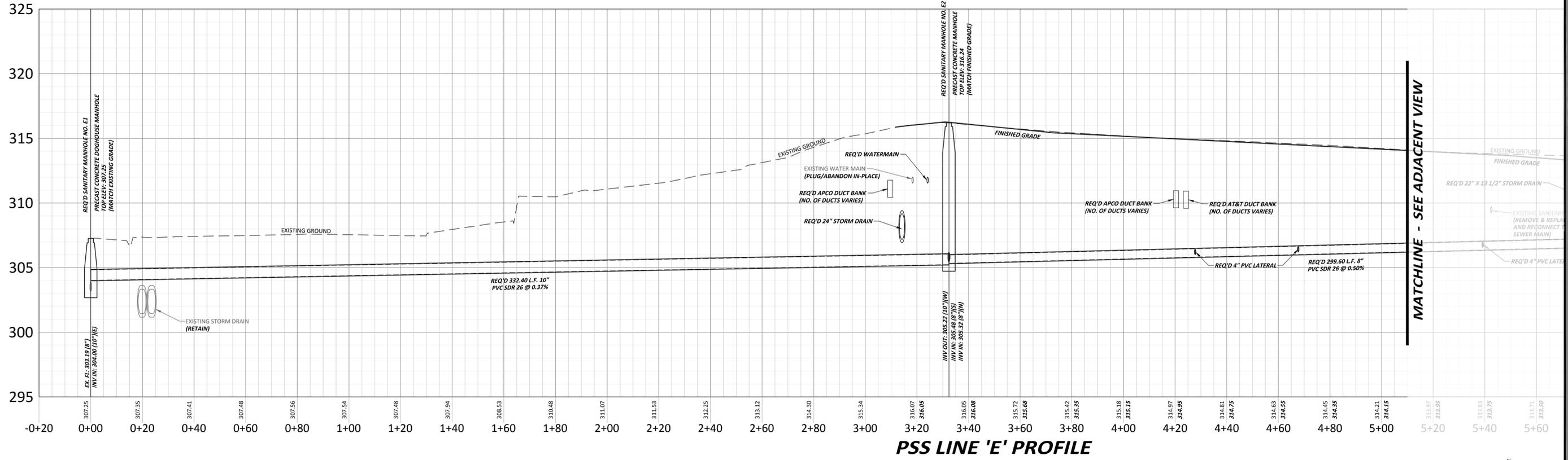
**SANITARY SEWER PLAN**  
 CITY OF TUSCALOOSA  
 ALBERTA REVITALIZATION INFRASTRUCTURE PROJECT  
 PHASE 1A - 25TH AVENUE EAST TO 26TH AVENUE EAST  
 TUSCALOOSA, ALABAMA  
 CITY OF TUSCALOOSA PROJECT: A12-1324

No.	Date	Description
1	09/05/14	Addendum No. 1

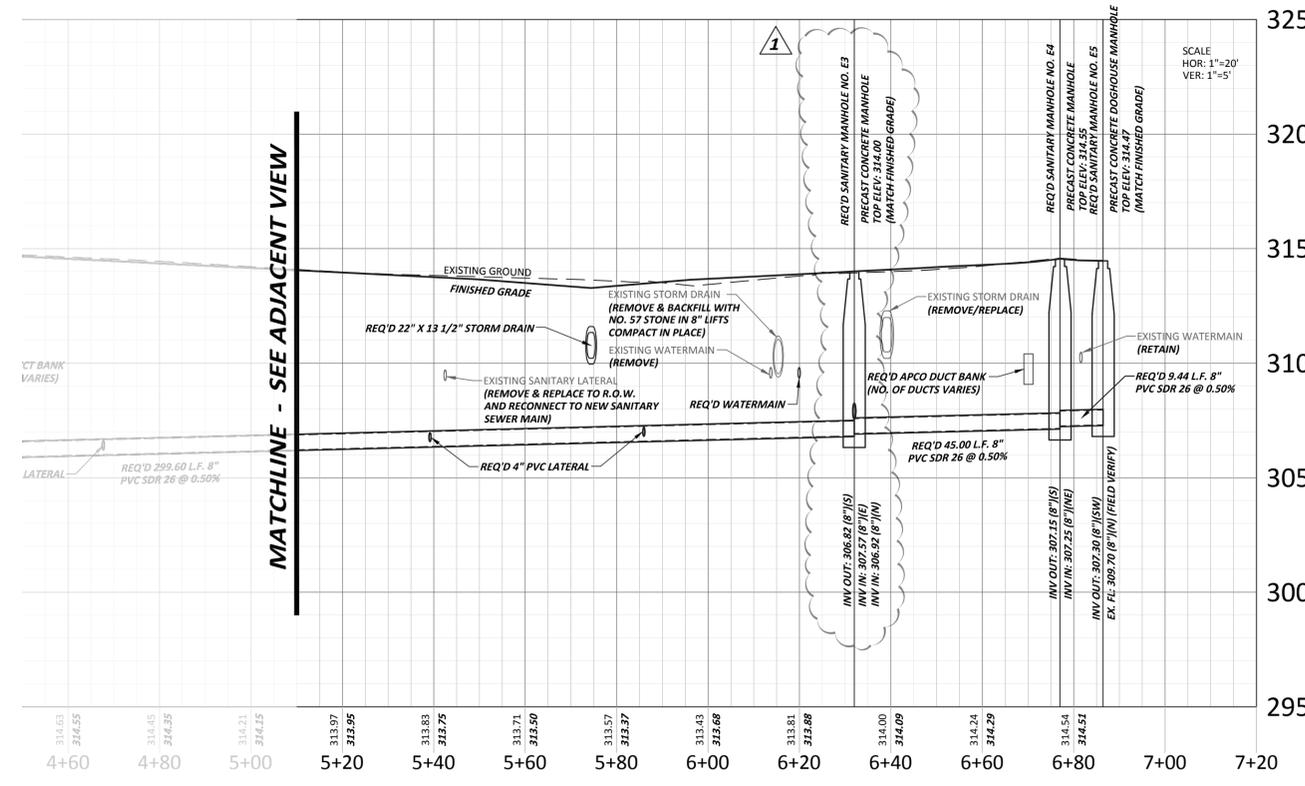
Drawn By: DJT  
 Date: 8/8/14  
 Job No.: 12-100  
 File Name: 12100-Ph1A\_Sheet\_C6\_01-04\_Sanitary.dwg

Checked By: M B P  
 Job No.: 12-100  
 Date: 8/8/14

Sheet No.  
**C6.2**



**PSS LINE 'E' PROFILE**



**MATCHLINE - SEE ADJACENT VIEW**

APPROVED  
 #2652  
 SEP 02 2014  
 OFFICE OF  
 THE CITY ENGINEER



**SANITARY SEWER PROFILES**  
 CITY OF TUSCALOOSA  
 ALBERTA REVITALIZATION INFRASTRUCTURE PROJECT  
 PHASE 1A - 25TH AVENUE EAST TO 26TH AVENUE EAST  
 TUSCALOOSA, ALABAMA  
 CITY OF TUSCALOOSA PROJECT: A12-1324

No.	Description
1	ADDENDUM NO. 1
Date	09/05/14
Drawn By	DJT
Checked By	M B P
Date	8/8/14
Job No.	12-100
File Name	12100-PT1A-Sheet.C6 01-04_Sanitary.dwg

1. DELETE MEMPHIS TEE AT STRUCTURE E3.

## **SECTION 02250 - TRENCHING, BACKFILL AND COMPACTION**

### **PART 1 - GENERAL**

#### **1.1 Summary:**

- A. This Section of Specifications deals with the requirements for Trenching, Backfill, and Compaction for utility lines placed in roadways, lawns or unimproved property or any other area.

#### **1.2 Products Installed but not Furnished Under This Section:**

- A. Ductile Iron Pipe and Fittings
- B. PVC Pipe
- C. Gate Valves
- D. Valve Boxes and Vaults
- E. Water Service Connections
- F. Manholes and Covers
- G. Fire Hydrants

#### **1.3 Related Sections:**

- A. Section 02660 – Water System
- B. Section 02722 – Sanitary Sewer System
- C. Section 02920 – Seeding and Mulching
- D. Section 02600 – Ductile Iron Pipe and Fittings
- E. Section 02433 – Storm Sewers

#### **1.4 Payment:**

- A. Payment for trenching, bedding, backfill, and compaction shall be considered incidental to the cost of the pipe, and no separate payment shall be made.
- B. No separate payment shall be made for sloping back of trench walls, shoring, blasting, fence removal and replacement, or the protection and/or replacement of plants, trees, structures, etc. In general, the condition after construction shall be as good, or better, than before construction. No payment will be made unless specifically itemized in the Bid Schedule.

#### **1.5 References:**

- A. U.S. Department of Labor, Occupational Safety and Health Administration.
- B. State of Alabama Department of Transportation Standard Specifications for Highway Construction.

#### **1.6 Project Conditions:**

- A. Environmental Requirements:
  - 1. The Contractor shall maintain all drainage ways, gutters, etc., at all times. The Contractor at his own expense shall remove any eroded or washed material that enters pipes, ditches, or streams.
  - 2. The Contractor shall provide erosion control as required to protect from damage surrounding areas.
  - 3. All areas damaged as a result of erosion shall be repaired to a condition equal or better than the condition prior to construction, as determined by the Engineer.

## **PART 2 - PRODUCTS**

### **2.1 Materials:**

- A. Select Backfill:
  - 1. Unless otherwise shown on the Construction Plans, **Initial Select Backfill** to be installed around the pipe shall be No. 8910 crushed limestone meeting or exceeding the requirements of the Alabama Department of Transportation Standard Specifications for Highway Construction, Latest Edition.
  - 2. Unless otherwise shown on the Construction Plans and not including the initial select backfill around the pipe, **Select Backfill** where specified or required shall be No. 57 crushed limestone. Crushed stone shall meet or exceed the requirements of the Alabama Department of Transportation Standard Specifications for Highway Construction, Latest Edition, Section 801.
- B. Standard Backfill:
  - 1. Standard backfill shall consist of native soils free of large rocks, boulders and other deleterious substances.
- C. Bedding:
  - 1. Class "1" Bedding shall be Alabama Department of Transportation Standard Specifications for Highway Construction, Section 801, No. 8910 crushed limestone.
  - 2. Class "2" Bedding shall be reinforced concrete 3000 psi design mix.
  - 3. Unless specified on the drawings or required by the Engineer, pipe shall be bedded in native soil (Class "3").
- D. Trench Foundation
  - 1. Trench foundation material shall be Alabama Department of Transportation Standard Specifications for Highway Construction, Section 801, No. 2 crushed limestone. This material shall only be used when approved in advance by the Engineer.

### **2.2 Source Quality Control:**

- A. The Contractor shall supply gradation analysis for each type of crushed stone used.

## **PART 3 - EXECUTION**

### **3.1 Examination of Conditions:**

- A. The Contractor shall examine the area to be trenched and verify his requirements for trenching.

### **3.2 Protection and Removals:**

- A. Fences:
  - 1. All fences in conflict with the proposed construction shall be removed in a neat and workmanlike manner and then replaced immediately following construction operations. Where materials removed are not suitable for reuse, they shall be replaced with new material of equal or better quality and construction. All fences shall be rebuilt to line, with posts well set, wires fastened with new staples or ties and well stretched. All corner and end posts shall be well braced and set a minimum of 30 inches in the ground.

- B. Utility Poles, Guy Wires, Miscellaneous Poles, Etc.:
1. All utility poles, guy wires, sign posts and similar private obstructions which are indicated on the plans or existing on the ground shall be removed and replaced by the Contractor at his own expense. In the event street signposts or signs are damaged or destroyed by the Contractor's operations, they may be replaced by the Owner at the Contractor's expense.
  2. When it is necessary to remove or adjust any utilities, representatives of the utilities involved shall be notified to decide the method and nature of work to be done. The Contractor shall make satisfactory arrangements with other utilities for the required removal or adjustments at the Contractor's expense, unless otherwise specified.
  3. The Contractor shall be held liable for damage, including negligent or willful damage to any other utility and shall pay for the cost of all necessary repairs and any damages resulting to public or private property resulting therefrom.
  4. The Contractor shall take whatever means necessary to support sewer mains to their true line and grade when they are encountered during excavation. The pipe shall be supported so that no leakage will occur and under no circumstances will the Contractor be allowed to bypass raw sewage or allow raw sewage to leak into the trench. If a repair becomes necessary the contractor shall use materials of the same type and class of pipe. At a minimum, PVC pipe and fittings shall conform to ASTM D3034, SDR 26. All couplings to existing pipe shall be manufactured couplings and all metal parts shall be stainless steel.
- C. Ornamental Shrubs and Trees:
1. Ornamental shrubs and trees shall not be removed unless directed by the Engineer. When ornamental shrubs and/or trees are to be removed and replaced, the following steps shall be followed:
    - a. Remove all trees, shrubs or plants, which interfere with construction intact with root system and protect from drying during construction period.
    - b. Replace plant to original location as soon as possible, taking care to insure that hole is large enough, and no damage is done to root system.
    - c. Fill hole with good topsoil and tamp lightly and firmly into place and water plant.
  2. Contractor shall replace with like kind and size if any plant, tree, or shrub which is disturbed by construction and dies within 1 year, at no cost to the Owner.
- D. Adjacent Property:
1. The Contractor shall confine his operations to the rights-of-ways and/or easements designated. The Contractor at no additional cost to the Owner shall repair any damage to adjacent property.
- E. Private Drives and Sidewalks:
1. The Contractor shall keep all private drives and sidewalks open and accessible at all times.
  2. All streets and public roads shall be kept open and accessible to emergency vehicles at all times.
- F. Existing Underground Utilities:
1. The Contractor shall protect all existing utilities during the trenching operation. The Contractor shall cooperate fully with the utility's requests for temporary and permanent supports during the trenching operation and shall furnish and install supports at no additional cost to the Owner.
  2. Storm sewers in conflict with the proposed trench may be carefully dislodged and stockpiled. The pipes shall be cleaned and replaced immediately after new construction is clear. Storm sewers damaged by the Contractor shall be replaced with new pipe at no additional cost to the

Owner. All storm sewers removed shall be re-laid to proper grade on a firm bedding so that settlement will not occur.

### **3.3 Trench Preparation:**

#### **A. Clearing and Grubbing:**

1. Where clearing or partial clearing of the right-of-way or easements is necessary, such work shall be completed prior to trench excavation. Projecting materials such as trees, logs, brush, hedges, etc., shall be cut as near to the surface of the ground as possible, and all stumps and roots shall be grubbed out unless specifically stated otherwise. All materials so cleared and grubbed shall be removed from the site. In no case shall excavated materials be allowed to cover brush or trees prior to disposal. Clearing and grubbing costs shall be included in the unit price bid for the related pipe unless a specific line item for clearing and grubbing is included in the bid schedule.
2. The Contractor shall bear all costs of disposing of all cleared and grubbed materials. Unless otherwise specified, all merchantable timber cut from the area designated to be cleared shall become the property of the Contractor.
3. Burning will be permitted, provided the Contractor obtains permits and meets the requirements of the proper fire authorities and any other state, county or local ordinances. Burning on private property will not be permitted without written permission of the Owner of the property. The authority to burn shall in no way relieve the Contractor from damages, which may result from his operations.
4. In no case shall any materials from clearing and grubbing operations be left on the project, or be pushed onto abutting private properties, or be buried in embankments or trenches on the project.
5. On public property, existing trees or limbs over 2 inches in diameter shall not be cut unless they are within 7 feet of pipe centerline or specific permission is received from the Engineer. On private easements or in lawns, no trees or brush shall be cleared or cut without prior approval of the Engineer or Inspector. The Contractor shall be required to remove trees, shrubs or plants on private property intact, and to ball the roots, keep watered as required, and replant in their original location upon completion of pipe laying operations, unless written permission is obtained from the Engineer, or unless otherwise specified. The Contractor shall replace, at his own expense, any trees, shrubs, or plants which shall be damaged as a result of his operations, or which shall die within 1 year of the time it was disturbed or damaged.

#### **B. Saw Cutting:**

1. Prior to beginning the trenching operation in paved areas such as roads, drives, and parking lots, all paving shall be saw cut to a minimum depth of 2 inches. All paving materials shall be removed and disposed of prior to the trenching operation.
2. Prior to beginning the saw cutting, all traffic control devices, barricades, cones and permits required shall be obtained and in place.

#### **C. Verification of Existing Utilities:**

1. Prior to the excavation but after the saw cutting in paved areas, the Contractor shall unearth all known utilities and confirm the location and depth of such utility sufficiently far enough in advance to adjust the vertical or horizontal alignment of the pipeline if necessary.

### **3.4 Trench Construction:**

#### **A. General:**

1. Trenching or excavation for pipe lines shall consist of the excavation necessary for the installation of sanitary or storm sewers, water lines, gas lines, and other utilities and all appurtenant facilities, including manholes, junction boxes, inlets, outlets, thrust blocks, and pipe protection as called for on the Drawings.

2. Trench excavation shall be made in an open cut unless tunneling or other construction methods are specifically authorized, and shall be true to the lines and grades shown on the plans or established by the Engineer.
  3. When vertical banks for trench excavation are not practical to construct or create dangerous conditions to workmen, the banks may be sloped provided that such excavation does not damage adjacent structures. However, when trench banks are sloped, such banks shall be cut to vertical planes as specified above for that part of the ditch below the level of one (1) foot above the top of the pipeline.
  4. All streets, sidewalks, crossings, fire hydrants, water valves, fire alarm boxes and other similar public utilities are to be kept open or accessible for their intended use.
  5. Every drain, gutter, culvert, or sewer for surface drainage encountered is to be kept open for both temporary and permanent flow, or if necessarily closed, other adequate provision for drainage is to be made.
  6. In all cases where materials are deposited along open trenches, they shall be placed so that in the event of rain, no damage will result to the work and/or to adjacent property.
  7. Pipe trenches shall not be excavated more than 300 feet in advance of pipe laying and temporary bridges or cross walks shall be constructed where required to maintain vehicular or pedestrian traffic.
  8. Trench widths shall be confined to dedicated rights-of-way or construction easements, unless special written agreements have been made with the affected property owner. Place all excavated materials within easements or rights-of-way, and do not obstruct any public or private roadways or streets.
  9. Where select backfill is specified or required, all excavated materials shall be promptly removed and disposed of by the Contractor.
- B. Rock Excavation:
1. Rock encountered in trench excavation for pipe lines shall be removed for the over-all width of trench and to a depth of 6-inches below the bottom of the barrel of pipe 24-inches in diameter and smaller, and 8-inches below the bottom of pipe 24 to 36 inches in diameter, and 12-inches below pipe larger than 36-inches in diameter, if rock extends to such depths.
  2. Where pipelines are constructed on concrete cradles, rock shall be excavated to the bottom of the cradle as shown on the plans. When necessary to provide sufficient working space, rock shall be excavated to additional depth for bell holes.
  3. After the Engineer has inspected the completed excavation, the space below the ultimate pipe or structure grade shall be filled with an approved foundation material and compacted to the proper grade.
  4. Drilling and blasting methods used in rock excavation shall be optional with the Contractor but shall be conducted with due regard to the safety of persons and property in the vicinity of the work and in strict conformity with all laws, ordinances, or regulations governing blasting and the use of explosives. The Contractor shall be licensed for this type of blasting and shall follow the insurance requirements of the general conditions. The Contractor shall also notify the fire department at least 48 hours in advance of any blasting.
  5. Rock excavation near existing structures of all types shall be conducted with the utmost care, and every precaution shall be taken to prevent damage to such structures. Any damage or injury of whatever nature to persons or property caused directly or indirectly by blasting operations shall be promptly repaired, replaced, or compensated for by the Contractor at his own expense and to the satisfaction of the persons injured or the owners of the property damaged.
- C. Sheeting, Shoring and Bracing:

1. The sides of all trenching excavations shall be sufficiently sheeted, shored, and braced whenever necessary to prevent slides, cave-ins, settlements or movement of the banks and to maintain the excavation clear of obstructions that will, in any way, hinder or delay the progress of the work.
  2. Wood or steel sheet piling of ample design and type shall be used when necessary.
  3. All sheeting, shoring, and bracing shall have sufficient strength and rigidity to withstand the pressures exerted and to maintain the walls of the excavation properly in place and protect all persons and property from injury or damage.
  4. Where excavations are made adjacent to existing buildings or other structures, or in paved streets or alleys, the Contractor shall take particular care to sheet, shore and brace the sides of the excavation adequately so as to prevent any undermining of or settlement beneath such structures or pavement. Underpinning of adjacent structures shall be done when necessary. The Contractor will be liable for any damage to any structure that results from his operations.
  5. Sheeting, shoring or bracing materials shall not be left in place unless so shown by the plans or ordered by the Engineer. Such materials shall be removed in such manner as will not endanger or damage the new structure or any existing structures or property, either public or private, in the vicinity, and so as to avoid cave-ins or slides. No trench sheeting and bracing shall be removed until the trench has been backfilled one foot above the top of the pipe.
- D. Trenching Through Dikes or Fill Sections:
1. Trenching through existing dikes or fill sections shall be accomplished in accordance with general trenching requirements as specified elsewhere.
  2. Trenching for pipe lines or other utilities through dikes or fill sections under construction shall not begin until the new dike or fill section has been constructed, enlarged, or otherwise improved to an elevation 3 feet above the top of the pipe or other utility being installed.
  3. Where existing dikes or fill sections are being used for the storage of liquids such as a lagoon, reservoir, pond, lake, canal, or other structure, the Contractor shall take whatever means necessary to preserve the integrity of the structure. No leakage of the stored liquid out of the structure will be allowed without the written approval of the owners of said structure.
- E. Minimum Trench Widths:
1. All excavations shall be made to the lines and grades as established by the drawings, and shall be open cut through whatever material encountered. The Engineer may, if requested, make changes in the trench alignment to avoid major obstructions, if such changes can be made within the easement right-of-way without adversely affecting the intended function of the facility. In areas where soil conditions permit normal excavation of the trench, the sides shall be cut as nearly vertical as possible from the bottom of the trench to a point at least 12 inches above the top of the pipe. The trench width shall conform to Table 2 of the AWWA C600 Specification.

### **3.5 Dewatering:**

- A. The Contractor shall at all times provide and maintain the necessary equipment and means for removal of all water from excavated areas. All excavated areas shall be kept free of water while any work is in progress. Particular precautions shall be taken to prevent the displacement of structures or pipelines as a result of accumulated water.
- B. Bedding material or pipe shall not be placed in wet or unstable trenches. Soil that cannot be properly dewatered shall be excavated and dry material tamped in place to such a depth as may be required to provide a firm trench bottom.
- C. All water removed or diverted from excavations shall be disposed of in a manner that will prevent damage to adjacent property or any flooding of streets or property. Disposal of trench water through the pipeline under construction shall not be allowed.

- D. Water shall be removed and disposed of so as to not damage adjacent property or existing drainage ways.

**3.6 Trench Foundation Material:**

- A. Where unsuitable materials for supporting pipe cushion are encountered, these materials shall be removed and replaced with trench foundation material, as directed by the Engineer.
- B. Trench foundation material shall be placed at the specified trench width from the bottom of the excess excavation to the bottom grade line of the pipe cushion.
- C. Trench foundation material so placed shall be as shown on the trench detail drawings or specified herein. If not shown on the drawings, trench foundation material shall consist of Alabama Department of Transportation Standard Specifications for Highway Construction, Section 801, No. 2 crushed limestone.
- D. Payment for trench foundation material will be limited to situations approved in advance by the Engineer.

**3.7 Bedding and Backfill:**

- A. General:
  - 1. All areas where bedding is not specifically called for or required by the Engineer, the pipe shall be bedded in native soils. Bell holes shall be excavated so that the entire pipe length rests on firm soil.
  - 2. Areas undercut by the Contractor through negligence, or his convenience, shall be backfilled and tamped with approved materials at the expense of the Contractor. In paved areas, the backfill material shall be select backfill.
  - 3. Bedding shall meet the requirements of Paragraph 2.01 of these specifications.
  - 4. Backfilling shall not begin before the Engineer or Inspector has inspected the grade and alignment of the pipe.
  - 5. If select backfill is not specified, backfilling to a point 12-inches above the top of the pipe, defined as the pipe zone, shall be done with good earth, sand or gravel and shall be free from large rocks or hard lumpy materials. Large rocks shall be defined as any larger than 2-inches in diameter. No materials of perishable, spongy or otherwise unsuitable nature shall be used in backfilling. It is essential that the completed backfill be done in such a manner as to minimize voids in the backfill.
  - 6. Place trench backfill material at approximately the same rate along both sides of the pipe and compact by tamping in layers not to exceed 8 inches of loose fill up to the horizontal centerline of the pipe. The intent is to cradle the pipe so that the full length is uniformly supported on firm bedding and the weight of the pipe and backfill is borne uniformly by the lower half of the pipe barrel. Special attention should be given to the backfilling and tamping procedures to insure that no voids or un-compacted areas occur beneath the pipe. The use of granular material for backfill in the pipe zone shall constitute a pay item only when so directed by the Engineer. After this, fill and compact the trench as specified below, depending upon the location of the work and danger from subsequent settlement.
  - 7. All backfilling shall be done in such a manner that will not disturb or injure the pipe or structure over or against which it is being placed. Any pipe or structure injured, damaged, or moved from its proper line or grade during backfilling operations, shall be replaced or repaired and then re-backfilled as herein specified, at the expense of the Contractor.
- B. Trench Backfill and Pipe Bedding:
  - 1. Pipe bedding and trench backfill shall be constructed as shown on the drawings for trench details. If no trench details are shown on the drawings, then the Contractor shall install the

utilities as described in Paragraphs 3.07 B.3 and 3.07 B.4.

2. Where pipes are installed in unpaved areas, unless specifically shown on the drawings or called out in the Bid Schedule to be unimproved, the areas shall be considered to be **Improved** areas and shall be constructed accordingly.

3. \*Pipe Bedding and Trench Backfill – **Gravity Pipe:**

- a. Under Pavement (Asphalt or Concrete and/or Gravel Drives):

Pipe Material – Ductile Iron

Bedding – 6" ALDOT No. 57 crushed limestone  
Initial Backfill – Select Backfill ALDOT No. 57 from bottom of pipe to springline in maximum 8" loose layers mechanically consolidated in-place (no exceptions).  
Final Backfill – Select backfill ALDOT No. 57 to top of trench in maximum 8" loose layers mechanically consolidated in-place (no exceptions).

Pipe Material – PVC

Bedding – 6" ALDOT No. 57 crushed limestone.  
Initial Backfill – Select Backfill ALDOT No. 57 from bottom of pipe to top of pipe in maximum 8" loose layers mechanically consolidated in-place (no exceptions).  
Final Backfill – Select backfill ALDOT No. 57 to top of trench in maximum 8" loose layers mechanically consolidated in-place (no exceptions).

- b. Improved Areas:

Pipe Material – Ductile Iron and Concrete

Bedding – 6" ALDOT No. 57 crushed limestone.  
Initial Backfill – Select Backfill ALDOT No. 57 from bottom of pipe to springline of pipe in maximum 8" loose layers mechanically consolidated in-place (no exceptions).  
Final Backfill – Standard backfill to top of trench in maximum 8" loose layers compacted to 98% SPD.

Pipe Material – PVC

Bedding – 6" ALDOT No. 8910 crushed limestone.  
Initial Backfill – Select Backfill ALDOT No. 57 from bottom of pipe to 6" above top of pipe in maximum 8" loose layers mechanically consolidated in-place (no exceptions).  
Final Backfill – Standard backfill to top of trench in maximum 8" loose layers compacted to 98% SPD.

- c. Unimproved Areas: **See trench details included in the construction plans.**

**\*See trench details included in the construction plans.**

4. \*Pipe Bedding and Trench Backfill – **Pressure Pipe:**

- a. Under Pavement (Asphalt or Concrete and/or Gravel Drives):

Pipe Material – Ductile Iron

Bedding - Class 3 Native Material \*\*  
Initial Backfill – Select Backfill ALDOT No. 57 from bottom of pipe to top of pipe in maximum 8" loose layers mechanically consolidated in-place (no exceptions).  
Final Backfill – Select backfill ALDOT No. 57 to top of trench in maximum 8" loose layers mechanically consolidated in-place (no exceptions).

Pipe Material – PVC

- Bedding - Class 3 Native Material \*\*  
Initial Backfill – Select Backfill ALDOT No. 8910 from bottom of pipe to 12" above top of pipe in maximum 8" loose layers mechanically consolidated in-place (no exceptions).  
Final Backfill – Select backfill ALDOT No. 57 to top of trench in maximum 8" loose layers mechanically consolidated in-place (no exceptions).

b. Improved Areas:

Pipe Material – Ductile Iron and/or PVC

- Bedding – Class 3 Native Material \*\*  
Initial Backfill – Standard backfill from bottom of pipe to springline in maximum 8" loose layers compacted to 98% SPD.  
Final Backfill – Standard backfill to top of trench in maximum 8" loose layers compacted to 98% SPD.

c. Unimproved Areas: **See trench details included in the construction plans.**

**\*See trench details included in the construction plans.**

**\*\* Where trench bottom is rock provide 6" layer of trench foundation material as approved by the Engineer.**

5. \*Pipe Bedding and Trench Backfill – Utility Duct Banks (If not concrete encased):

a. Under Pavement (Asphalt or Concrete and/or Gravel Drives):

- Pipe Material – PVC  
Bedding – 6" ALDOT No. 8910 crushed limestone.  
Initial Backfill – Select Backfill ALDOT No. 8910 from bottom of pipe to 12" above top of shallowest pipe in duct bank in maximum 8" loose layers mechanically consolidated in-place (no exceptions).  
Final Backfill – Select backfill ALDOT No. 57 to top of trench in maximum 8" loose layers mechanically consolidated in-place (no exceptions).

b. Improved/Unimproved Areas:

- Pipe Material – PVC  
Bedding – 6" ALDOT No. 8910 crushed limestone.  
Initial Backfill – Select Backfill ALDOT No. 8910 from bottom of pipe to 12" above top of shallowest pipe in duct bank in maximum 8" loose layers mechanically consolidated in-place (no exceptions).  
Final Backfill – Standard backfill to top of trench in maximum 8" loose layers compacted to 98% SPD.

**3.8 Cleaning:**

- A. The Contractor shall thoroughly clean all areas damaged during construction of excess fill, construction debris, etc.  
B. All gutters and adjacent curbing shall be swept clean of debris and materials that may hinder storm water flow.

**3.9 Protection:**

- A. The Contractor shall protect the newly constructed pipeline from damage until final acceptance of the work.

**END OF SECTION 02250**