

engineers

planners

surveyors

environmental scientists

> landscape architects

structural designers

ADDENDUM NO. 1

10th Avenue Roadway Improvements Project The City of Tuscaloosa, Alabama City of Tuscaloosa Project No. 2016.129.001 Neel-Schaffer Project No. NS 12329.000 Date: June 18, 2018

Please acknowledge receipt of Addendum No.1 on page 14 of the Proposal. The following shall be added to the contract documents and shall carry the same weight as though they were included in the original contract documents:

ITEM NO. 1. – Pre-Bid

a. A mandatory pre-bid meeting was held at 2:00 p.m. on Wednesday, June 13, 2018. The agenda meeting minutes and sign in sheet are attached.

ITEM NO. 2. -Revised Bid Schedule:

a. A revised bid schedule is attached and an electronic version will be provided to prospective bidders.

ITEM NO. 3. -Revised Page 6 of Contract Documents:

a. Revised page has been updated to replace \$50,000 with \$10,000.

ITEM NO. 4. -Clarification Geometric Controls:

a. Geometric Controls will be to cover any items not staked by Neel-Schaffer. Neel-Schaffer shall perform a onetime staking of items listed in the agenda attached to this addendum. Any other items the contractor requires to be staked or re-staked, due to being disturbed by construction, will be covered in this pay item. Blue topping is not covered in Neel-Schaffer's construction staking for the project.

ITEM NO. 5. - Revision Plan Sheet No. 3C

- a. Added Item No. 2723-1 Manhole Height Adjustments
 i. Ouantity 6 Each
- b. Added Item No. 15106-1 Valve Height Adjustments
 i. Quantity 13 Each
- c. Revised Item No. 2600-4 from Class 52 to Class 50

ITEM NO. 6. – Revision to Contact Document Specifications

- a. Added Specification 02723 Manhole Height Adjustment
 i. Attached to Addendum
- b. Added Specification 015106 Valve Height Adjustment
 - i. Attached to Addendum

ITEM NO. 7. -Clarification and Revision Sheet 27 Gate Valves and Detail

- a. Leave Gate Valves paid for as shown on plans: One Existing 6" Gate Valve in detail 2/27 and a REQD 16x6 Tapping Sleeve and Valve in detail 3/27.
- b. Revise sheet no. 27 detail 3/27 from "Existing 6" Water to Remain in Service" to "Existing 6" Water Abandon in Place"

ITEM NO. 8. - Clarification PVC and HDPE will not be allowed as a substitute for Ductile Iron for either water or sanitary sewer pipes.

ITEM NO. 9. - Clarification Domestic Products

a. Domestic products are required and addressed on page 11 of the specifications.

ITEM NO. 10. – Revision to Specification 02600

a. Add Section 7 to Paragraph 2.2.A:

7. Restrained joint ductile iron pipe and fitting shall be "Flex-Ring" as manufactured by American Cast Iron Pipe or "TR-Flex" as manufactured by U.S. Pipe.

ITEM NO. 11. - Revision Plan Sheet No. 3:

- a. Revised Item No. 2203-1 from Lump Sum to Cubic Yard
- b. Revised Item No. 2203-2 from Lump Sum to Cubic Yard
- c. Revised Quantity for Item No. 2240-2 from 1201 to 3593.

ITEM NO. 12. - Clarification ARTICLE VII SECTION C:

- a. As-Built drawings are waived and Neel-Schaffer will prepare "Record Drawings" for the Owner.
- b. Per the Agenda the Contractor shall coordinate any deviation from the plans with the Owner's Representative.
- ITEM NO. 13. Soil Boring Records are attached to this addendum.
- ITEM NO. 14. An electronic copy of the Cross Sections will be provided in DGN format.
- ITEM NO. 15. The Asphalt Index as described in ALDOT Standard Specifications for Highway Construction, 2018 Edition will apply to this project.
- ITEM NO. 16. Clarification Road Closure
 - a. The Contractor is expected to maintain at least one lane of traffic in each direction when flaggers are not present.
 - b. A sketch is provided showing a possible lane configuration for maintaining one lane in each direction for the bore pit located at approximate station 32+50.

Addendum No.1 Project No. 2016.129.001 ITEM NO. 17. -Revision Plan Sheet No. 2B

- Added Note 700: Alabama Football Game Day: The Contractor shall not have a lane closure during the following period unless otherwise directed by the Owner: From 10:00 PM on Thursday through to 6:00 AM the following Monday when a University of Alabama football game is scheduled in Tuscaloosa.
- ITEM NO. 18. -The Drainage Inlet Details (Sheet 2M thru 2R) are stamped by an Alabama PE for use in construction.
- ITEM NO. 19. Concrete Safety Barrier is paid for by Linear Feet of barrier and not each time it is moved.

ITEM NO. 20. - Clarification Utility Service Fee

a. Specification 3600 describe how the fee will be paid.

ITEM NO. 21. - Clarification Under Cut

- a. An Under Cut Item is already setup for the project.
- ITEM NO. 22. Clarification Reorganize Bid Schedule:
 - a. We will not reorganize the bid schedule to group like items of work.

ITEM NO. 23. - Water Meter Replacement – If a replacement water meter is need the city will provide the meter to the contractor at no additional charge. The contractor will contact the city to determine pick up of the meter.

ITEM NO. 24. - Revision to Specification 02250 Section 1.4 Payment:

a. Backfill under REQD Bituminous Asphalt shall be paid for as 2240-2

ITEM NO. 25. – Revision to Plan Sheet No. 2F

a. Revised Trench Detail to add dimension of width of 2' to trench on either side of drainage pipe.

ITEM NO. 26. – Revision to Plan Sheet No. 2I

a. Revised Trench Details from ALDOT No. 57 stone to Section 825, Type A stone.

ITEM NO. 27. - Clarification Asphalt Patching

a. Asphalt patching is paid for as shown on plans sheets 2F and 2I.

- ITEM NO. 28. Clarification Borrow Excavation a. Borrow Excavation will be paid for as described in the plans and specifications.
- ITEM NO. 29. Revision to Specification 02800 Section 1.04 Payment.

Addendum No.1 Project No. 2016.129.001 a. Revised Section 1.04 Payment to the following:

1.04 Measurement and Payment:

A. Measurement for Traffic Control shall be based on ALDOT Standard Specifications for Highway Construction Latest Edition, Section 740.

B. Payment for Traffic Control shall be at the contract unit price which shall be full compensation for Materials, installation, equipment, tools, labor and incidentals necessary to complete the work.

END OF ADDENDUM NO. 1

Amon Tumer N Wyman D. Turner, P.E. No. 30102

Addendum No.1 Project No. 2016.129.001

Pre-Bid Conference Sign-In Sheet 10th AVENUE ROADWAY IMPROVEMENTS The City of Tuscaloosa, Alabama City Hall June 13th, 2018, 2:00 p.m.

			-	(Chris Crawford	Sam Maughan	Jared Elmore	MIKEROX	Henry Hinos	RUTHOMPSON	James Paymond	Jeveny Price	Kirby Michaels	McKenzic B Dougherty	Jim Brown	JAMES GILL	Eric W. Vice	NAME
	× .				TTC/Inc.	TTL, Inc.	Edwords	AREL SCHAPPER	John Plot G. Inc.	GFC CONSTRUCTION	Alabama Power Co	Price Construction Co., Tre.	Premier Service Company	to Price Civil Service	Danella Eng (Att +-T	Gregory Constructions	Consolidated Lipe FSzyphy	REPRESENTING
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					Counter & et lusa com	Smaughan TTL USa. com	je more edwardsencineering.com	347-2100 HERK Mike.cox @ heel-schaffer Com	hhinds @ J Plott. Com	RJ@GFCCONSTRUCTION.COM	349-6744 : 1/ raymond: 500 them co. Com	intel price contraction coinc. com	Kmichaelsepsc 1201.com	mbda	0		cricuprice cps@gmail. com	E-MAIL ADDRESS

Pre-Bid Conference Sign-In Sheet 10th AVENUE ROADWAY IMPROVEMENTS The City of Tuscaloosa, Alabama City Hall June 13th, 2018, 2:00 p.m.

						L	Edmund Colgrove	Taylor David	Contract	THUP GON	JERONY JONES	Brizn When T	(Vislen Miller	NAME
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ENGINEERING & SURVEYING

2008 12TH Street P.O. Drawer 2729 Tuscaloosa, Alabama 35403 205/349-2100 Fax 205/349-2107

10TH AVENUE ROADWAY IMPROVEMENTS PROJECT

CITY OF TUSCALOOSA PROJECT NO. 2016.129.001 NEEL-SCHAFFER PROJECT NO. NS.12329.000

PRE-BID AGENDA

Wednesday, June 13th, 2018, 2:00 p.m.

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. Be sure to legibly write email address as all Addenda will be issued electronically via email.
- Name and Location of Project: 10th Avenue Roadway Improvements Tuscaloosa, AL -Roadway Improvements and City Walk along 10th Ave from 31 Street to Hargrove Road.
- Introduce Owner and Owner's Representatives

Project Summary:

- Base Bid includes overlaying 10th Ave from 29th Street to Hargrove Road, constructing an Asphalt multi-use path, storm sewer drainage, concrete sidewalks, concrete retaining wall, curb and gutter, utility duct bank, and street lighting. Also included is municipal utility work for required ductile iron water main and ductile iron sanitary sewer.
- Additive Alternate Bid No. 1 includes planning and overlay of 10th Avenue between 31st Street and 29th Street.

Receipt of Bids:

- Bids shall be received Wednesday, June 20th, 2018 at 2:00 p.m. at City Hall in the Council Chambers.
- Proposal Form and Unit Price Bid Schedule and acknowledge receipt of all addenda (submit one copy with bid)
- Bid Bond with power of Attorney
- Proposal Envelope must have Project Name, Owner Name, City Project Number, Contractor Name, Contractor State License Number shown on the outside envelope containing the bid

Contractual Requirements:

- City of Tuscaloosa Contract Documents.
- Davis-Bacon Wage Rates apply and begin on page 89 of the Contract Specifications. These wage rates apply to the General Contractor and all subcontractors.

- Contractors are encouraged to utilize minority subcontractors where applicable. The City of Tuscaloosa maintains a database which identifies eligible minority contractors and subcontractors. Information regarding the City MBE/DBE/WBE policy is included in the Contract documents beginning on page 93. The City goal for use of MBE/DBE/WBE entities is 10-20%. Database information can be obtained by calling Ms. Caramyl Drake at 205-248-5275. Contractors are required to submit certain forms associated with the City's program at various times throughout the project. These forms are located on pages 97 thru 109 of the Contract Documents. Forms 1 and 2 are due today.
- The Contractor shall be required to comply with the Alabama Immigration Law and by submission of a bid and acceptance of a contract certify compliance with this law.
- The Contractor shall be required to comply with the Affordable Health Care Act and by submission of a bid and acceptance of a contract certify compliance with this law.
- Payment and Performance Bonds will be required for this project.
- Insurance Requirements for this project are as specified beginning on page 39 of the City's Standard Contract Documents. The successful contractor shall be required to submit insurance certificates indicating insurance coverage meeting these requirements and the AGENT'S VERFICATION OF CONTRACTOR INSURANCE form shown on page 64 of the Contract Documents.
- Project Staking Controls are shown on the drawings. Neel-Schaffer will be responsible for staking proposed sidewalk, curb and gutter, retaining walls, storm sewer, sanitary sewer, light poles and conduit, water lines (no irrigation) with a 48-hour notice. Any construction stake out services desired by the contractor in addition to that shown shall be the responsibility of the contractor at no additional cost to the Owner.
- Construction Observation Services will be provided by the Owner full time and performed by Neel-Schaffer, Inc.
- Time for Completion will be 360 **consecutive calendar days**.
- Liquidated Damages will be \$1000.00 per day beyond the stated completion date.
- Record Drawings 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. As part of the addendum, an electronic copy of the bid schedule will be provided.
- Bidders should include Sales and Use Taxes in their unit prices. Materials for this project are not exempt.

Project Coordination:

- Public Pedestrian and Residence Access: Contractor must maintain access to residences at all times. This work is being performed on public streets. Any street closures required must be coordinated with Tuscaloosa Police and Fire departments.
- Public Notifications and Traffic Control (Advertisements, Door Hangers, Letters of Notification to Owners, etc.). It is important to talk with the property Owners to notify them of approximate schedule for when you will be working in their area. Notification at the beginning of work will not suffice for work performed months later. 7-days notice is recommended and should be done in writing to each home owner as noted above. A copy of the notification shall also be provided to the Owner's Representative. Traffic Control Work Zones and Details are provided in the plans but a detailed traffic control plan must be submitted by the contractor and approved by the City of Tuscaloosa prior to any work starting. This is further detailed in the traffic control notes in the plans. The traffic control plan must take into account school buses must traverse the work area during week days.

Project Conditions:

- A project sign will be required. The sign shall be paid for under the constructions sign pay item.
- Erosion Control and Clean up (During and Post Construction). Much of this work is located on City right-of—way, but in front of residences. Keep the job site clean of debris, with no open ditches left over night, unless they are properly marked and barricaded.

Miscellaneous:

- Contractor will be allowed to bid an alternative design in lieu of the cast-in-place retaining wall. The unit price shall be based on the cost per square foot of exposed face.
 - The Contractor shall be responsible for the alternative design. Drawings must be prepared under the direction of the licensed professional engineer.
 - Alternative wall designs must be constructed within the previously acquired right of way easement.
 - Retaining wall design and product sample shall be submitted to the Engineer for approval.
- Neel-Schaffer has prepared the CBMPP and the storm water permit application for the City.
- Clarification Requests **WILL NOT** be accepted after Monday, June 18, 2018 at 2:00 p.m. to allow time for addendum preparation, if required. All questions and clarification request shall be submitted in writing or by email to the Project Engineer on or before this date and 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 the 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 payment.
- Material Submittals: All submittals shall be reviewed by the contractor prior to submission and this review shall be noted on each submittal. Electronic Copies of submittals will be acceptable as long as a transmittal summarizing the submittal is included.
- Lead Time on Material Items. Coordinate with all subs regarding material lead time. Material delays will not be a valid excuse for project delays and failure to complete on time.
- Due to the residential nature of the work area, no work after 6:00 p.m. or before 7:00 a.m. will be permitted except for emergency repairs.

Proposed Addenda:

• Addendum No. 1: Pre-Bid Meeting Minutes and Sign-In Sheet Electronic copy of the Bid Schedule

Questions/Comments:

- Owner
- Bidders

N	NEEL Solutions y	CHAFFER	City of Tuscaloosa 10th Avenue City Walk and Roadway Improvements Project No. 2016.129.001 BASE BID Contract Schedule The following represents the bidder's schedule of contract unit prices for this proposal (bidder to complete below): City of TUSCA								
Item No	. Quantity	Unit	Description	Unit Cost	Amount Bid						
1026-1	1	LUMP SUM	MOBILIZATION								
1060-1	250	LINEAR FOOT	CONSTRUCTION SAFETY FENCE								
15105-1 15106-1	2 13	EACH EACH	8" GATE VALVE AND BOX VALVE HEIGHT ADJUSTMENT								
15300-1		EACH	FIRE HYDRANT ASSEMBLY								
2104-1	1,076		REMOVING CONCRETE SIDEWALK								
2104-2			REMOVING CONCRETE DRIVEWAY								
2104-3 2104-4	2,223 3,062	LINEAR FOOT	REMOVING PIPE REMOVING CURB AND GUTTER								
2104-5	1,821	LINEAR FOOT	REMOVING FENCE								
2104-6	2	EACH	REMOVING HEADWALLS								
2104-7	20	EACH	REMOVING INLETS								
2104-8 2104-9	1	EACH EACH	REMOVING JUNCTION BOXES REMOVING MANHOLES								
2104-9		EACH	REMOVING MAINHOLES REMOVING MAILBOXES (INCLUDING RESET WITH A NEW TIMBER POST)								
2104-11		EACH	REMOVING METAL POLE WITH LIGHT AND BASE (PEDESTRIAN CAUTION LIGHT)								
2110-1	1	LUMP SUM	CLEARING AND GRUBBING (MAXIMUM ALLOWABLE BID \$ 4000 PER ACRE)(APPROX 2 ACRES)								
2203-1	1,924	CUBIC YARD									
2203-2 2203-3	82	CUBIC YARD CUBIC YARD	BORROW EXCAVATION (A-4(0) OR BETTER)								
2203-3	1,450 1,450	CUBIC YARD	UNCLASSIFIED EXCAVATION (UNDERCUT MATERIAL) BORROW EXCAVATION (UNDERCUT)								
2203-4	3,266	SQUARE YARD	ROADBED PROCESSING								
2240-1	6,715	SQUARE YARD	CRUSHED AGGREGATE BASE COURSE, TYPE B, PLANT MIXED, 5" COMPACTED THICKNESS								
2240-2	3,593	TON	CRUSHED AGGREGATE,SECTION 825,TYPE A,FOR MISCELLANEOUS USE (AS DIRECTED BY THE ENGINEER)								
2260-1 2290-1	320 80	LINEAR FOOT EACH	8" SCH 40 PVC CONDUIT SAND BAGS								
2290-2	2,690	LINEAR FOOT	SIND DAGS								
2290-3	2,690	LINEAR FOOT	SILT FENCE REMOVAL								
2290-4	37	EACH	INLET PROTECTION, STAGE 3 OR 4								
2290-5	200	LINEAR FOOT									
2350-1 2350-2	9,100 4	SQUARE YARD ACRE	SOLID SODDING TEMPORARY SEEDING								
2350-3	4	ACRE	TEMPORARY MULCHING								
2400-1	1,872		PLANING EXISTING PAVEMENT (APPROXIMATELY 0.00" THRU 1.0" THICK)								
2433-1 2433-2	672 403	LINEAR FOOT	18" ROADWAY PIPE (CLASS 3 R.C.) 24" ROADWAY PIPE (CLASS 3 R.C.)								
2433-2	136	LINEAR FOOT	30" ROADWAY PIPE (CLASS 3 R.C.)								
2433-4	1,022	LINEAR FOOT	36" ROADWAY PIPE (CLASS 3 R.C.)								
2433-5	99		42" ROADWAY PIPE (CLASS 3 R.C.)								
2433-6 2433-7	150 124		48" ROADWAY PIPE (CLASS 3 R.C.) 88" SPAN, 54" RISE ROADWAY PIPE (CLASS 3 R.C.)								
2433-7	3,646		BITUMINOUS TREATMENT A								
2500-2	2,212	GALLON	TACK COAT SUPERPAVE BITUMINOUS CONCRETE WEARING SURFACE LAYER, 3/8" MAXIMUM AGGREGATE SIZE MIX,								
2500-3		TON	ESAL RANGE A/B (220 LB/SY) SUPERPAVE BITUMINOUS CONCRETE WEARING SURFACE LAYER, 1/2" MAXIMUM AGGREGATE SIZE MIX,								
2500-4	1,421	TON	ESAL RANGE C/D (135 LB/SY) SUPERPAVE BITUMINOUS CONCRETE UPPER BINDER LAYER, 3/4" MAXIMUM AGGREGATE SIZE MIX, ESAL								
2500-5	-	TON	RANGE C/D (225 LB/SY) SUPERPAVE BITUMINOUS CONCRETE UPPER BINDER LAYER, PATCHING, 3/4" MAXIMUM AGGREGATE								
2500-6 2500-7		TON	SIZE MIX, ESAL RANGE C/D_(550 LB/SY) SUPERPAVE BITUMINOUS CONCRETE UPPER BINDER LAYER, LEVELING, 1/2" MAXIMUM AGGREGATE SIZE								
			MIX, ESAL RANGE C/D (135-1190 LB/SY)								
2528-1 2528-2	634 3,180	LINEAR FOOT	CONCRETE GUTTER (VALLEY) (INCLUDES 22 LF OF 3' MODIFIED VALLEY GUTTER) COMBINATION CURB & GUTTER, TYPE C (MODIFIED)								
2529-1	355		RETAINING WALL(CAST IN PLACE)	1							
2540-1	22	CUBIC YARD	SLOPE PAVING								
2550-1	1,506	SQUARE YARD									
2550-2			CONCRETE DRIVEWAY, 6" THICK (INCLUDES WIRE MESH)								
2560-1 2560-2	1	CUBIC YARD EACH	MINOR STRUCTURE CONCRETE BUS SHELTER FOUNDATION								
2560-2	1	LUMP SUM	GEOMETRIC CONTROLS								
2580-1	1	LUMP SUM	CONSTRUCTION FUEL (MAXIMUM BID LIMITED TO \$ 162237)								
2585-1	1	MILE	BROKEN YELLOW, CLASS 2T, TYPE A TRAFFIC STRIPE (5" WIDE)								
2585-2 2585-3	1	MILE	SOLID WHITE, CLASS 2, TYPE A TRAFFIC STRIPE (5" WIDE) SOLID YELLOW, CLASS 2, TYPE A TRAFFIC STRIPE (5" WIDE)								
2585-4		MILE	BROKEN WHITE, CLASS 2, TYPE A TRAFFIC STRIPE (5 WIDE)								
2585-5		LINEAR FOOT	DOTTED, CLASS 2, TYPE A TRAFFIC STRIPE (5" WIDE)								
2585-6		MILE	SOLID TEMPORARY TRAFFIC STRIPE								
2585-7 2585-8		SQUARE FOOT	TRAFFIC CONTROL MARKINGS, CLASS 2, TYPE A TRAFFIC CONTROL LEGENDS, CLASS 2, TYPE A								
2585-9		EACH	PAVEMENT MARKERS, CLASS A-H, TYPE 1-B								
	94	EACH	PAVEMENT MARKERS, CLASS A-H, TYPE 2-D								

		CHAFFER	City of Tuscaloosa 10th Avenue City Walk and Roadway Improvements Project No. 2016.129.001 BASE BID Contract Schedule The following represents the bidder's schedule of contract unit prices for this proposal (bidder to complete below):	City of TUSCA	
Item No.	Quantity	Unit	Description	Unit Cost	Amount Bid
2585-11	27	EACH	PAVEMENT MARKERS, CLASS A-H, TYPE 2-E		
2590-1	23	SQUARE FOOT	CLASS 4, ALUMINUM FLAT SIGN PANELS 0.08" THICK OR STEEL FLAT SIGN PANELS 14 GAUGE (TYPE III OR TYPE IV BACKGROUND)		
2590-2	75	SQUARE FOOT	CLASS 8, ALUMINUM FLAT SIGN PANELS 0.08" THICK OR STEEL FLAT SIGN PANELS 14 GAUGE (TYPE IX		
2590-3 2600-1	182 130	LINEAR FOOT	ROADWAY SIGN POST (#3 U CHANNEL, GALVANIZED STEEL OR 2 ", 14 GA SQUARE TUBULAR STEEL) 6" DI, CLASS 52 WATER MAIN		
2600-2	30		8" DI, CLASS 52 WATER MAIN		
2600-3	60	LINEAR FOOT	12" DI, CLASS 52 WATER MAIN		
2600-4 2600-5	310 325	LINEAR FOOT	16" DI, CLASS 50 WATER MAIN 16" DI, CLASS 50 RESTRAINED JOINT WATER MAIN		
2602-1	2	EACH	JUNCTION BOXES, TYPE 1 OR 1P		
2602-2	1	EACH	JUNCTION BOXES, TYPE SPECIAL STRUCTURE NO. 88		
2602-3 2602-4	1	EACH EACH	JUNCTION BOXES, TYPE SPECIAL STRUCTURE NO. 105 JUNCTION BOXES, TYPE SPECIAL STRUCTURE NO. 140	1	
2602-5	1	EACH	JUNCTION BOXES, TYPE SPECIAL STRUCTURE NO. 122		
2602-6	1	EACH	JUNCTION BOXES, TYPE SPECIAL STRUCTURE NO. 123		
2602-7 2602-8	11 10	EACH EACH	INLETS, TYPE S1 OR S3 (1 WING) INLETS, TYPE S2 OR S4 (1 WING)		
2602-9	2	EACH	INLETS, TYPE S1 OR S3 (2 WING)		
2602-10 2602-11	3	EACH EACH	INLETS, TYPE S2 OR S4 (2 WING) INLETS, TYPE "SPECIAL" (YARD INLET)		
2660-1	o 5	EACH	CUT AND CAP 6" WATER MAIN		
2660-3	2	EACH	16" X 16" TAPPING VALVE AND SLEEVE		
2660-4 2660-5	112 12,100	LINEAR FOOT POUND	16" DI CLASS 52 RESTRAINED JOINT WATER MAIN W/ 36" STEEL CASING DI FITTINGS		
2660-6	53	LINEAR FOOT	2"PVC, CLASS 200 WATER MAIN		
2660-7	4	EACH	TIE TO EXISTING WATER MAIN		
2660-8 2660-9	1 2	EACH EACH	2" SERVICE TAP RELOCATE WATER METER WITH NEW METER BOX		
2660-10	1	EACH	16" X 6" TAPPING VALVE AND SLEEVE		
2700-1	200		CONCRETE MEDIAN OR SAFETY BARRIER, TYPE 6		
2705-1 2706-1	3,912 5	LINEAR FOOT EACH	DUCT BANK 48"x72"x48" VAULT		
2706-2	10	EACH	36"x48"x36" VAULT		
2722-1	2	EACH	4' DIAMETER PRE-CAST MH DOG HOUSE (12'-14' CUT) (EPOXY LINED)		
2722-2 2722-3	4 4	EACH EACH	4' DIAMETER PRE-CAST MH DOG HOUSE (10'-12' CUT) (EPOXY LINED) 4' DIAMETER PRE-CAST MH (12'-14' CUT) (EPOXY LINED)		
2722-4	181	LINEAR FOOT	18" DIAMETER DI, CL.52 EPOXY LINED SANITARY SEWER (12' - 14' CUT)		
2722-5 2722-6	243 30		12" DIAMETER DI, CL.52 EPOXY LINED SANITARY SEWER (12' - 14' CUT) 12" DIAMETER DI, CL.52 EPOXY LINED SANITARY SEWER (10' - 12' CUT)		
2722-0	134		8" DIAMETER DI, CL.52 EPOXY LINED SANITARY SEWER (10 - 12 CUT)		
2722-8	4	VERTICAL FOOT	8" DIA. MEMPHIS TEE CONNECTION RISER, DI, EPOXY LINED		
2722-9 2722-10	1 588		BYPASS PUMPING POST CONSTRUCTION CAMERA INSPECTION		
2723-1	6	EACH	MANHOLE HEIGHT ADJUSTMENT	1	
2744-1	372	LINEAR FOOT			
2744-2 2744-3	510 1	LINEAR FOOT EACH	INDUSTRIAL FENCE, 6 FEET HIGH (P.V.C. COATED) GATE, 14 FEET WIDE, COMPLETE WITH FITTINGS (WITHOUT BARBED WIRE)	}	
2744-4	1	EACH	GATE, 20 FEET WIDE, COMPLETE WITH FITTINGS (WITHOUT BARBED WIRE)		
2744-5 2744-6	1 120	EACH LINEAR FOOT	GATE, 4 FEET WIDE, COMPLETE WITH FITTINGS (WITHOUT BARBED WIRE) FENCE SET 4' ALUMINUM ORNAMENTAL	<u> </u>	
2744-6	714		PRIVACY FENCE	1	
2800-1	660	SQUARE FOOT	CONSTRUCTION SIGNS		
2800-2 2800-3	250 50	EACH EACH	CHANNELIZING DRUMS CONES (36 INCHES HIGH)		
2800-4	50 10	EACH	BARRICADES, TYPE III	<u> </u>	
2800-5	6	EACH	WARNING LIGHTS, TYPE B		
2800-6 2800-7	50 1	EACH EACH	BALLAST FOR CONE PILOT CAR	1	
2800-8	2	EACH	PORTABLE SEQUENTIAL ARROW AND CHEVRON SIGN UNIT		
2800-9	2	EACH	PORTABLE CHANGEABLE MESSAGE SIGN, TYPE 2	<u>_</u>	
2940-1 2940-3	1,050 9	CUBIC YARD EACH	TOPSOIL TREE PLANTING, CHINESE PISTACHE (30 G)	1	
2940-4	50	EACH	TREE PLANTING, CRAPE MYRTLE 'TUSCARORA' (30 G)		
2940-5	19	EACH	TREE PLANTING, ELM 'PRINCETON' (30 G)		
2940-6 2940-7	12 62	EACH EACH	TREE PLANTING, RED MAPLE 'OCTOBER GLORY' (30 G) TREE PLANTING, CRAPE MYRTLE 'SARAH'S FAVORITE' (30 G)	1	
2940-8	20	EACH	SHRUB PLANTING, LOROPETALUM (3 G)		
2940-9 2940-10	104 190	EACH EACH	SHRUB PLANTING, DRIFT ROSE 'CORAL' (3 G) SHRUB PLANTING, ABELIA 'KALEIDOSCOPE' (3 G)		
2940-10	4,210		BED PREPARATION	1	
2940-12	982	EACH	FERTILIZER FOR WOODY PLANT MATERIAL, TABLET, 21 GRAM		
2940-13	476	EACH	FERTILIZER FOR WOODY PLANT MATERIAL, TABLET, 10 GRAM		

	Solutions y	CHAFFER	City of Tuscaloosa 10th Avenue City Walk and Roadway Improvements Project No. 2016.129.001 BASE BID Contract Schedule The following represents the bidder's schedule of contract unit prices for this proposal (bidder to complete below):	City of TUSCA	
Item No.	Quantity	Unit	Description	Unit Cost	Amount Bid
2960-1	100	EACH	SPRINKLER HEAD, 1812-PRS-8		
2960-2	150	EACH	SPRINKLER HEAD, 1812-PRS-5		
2960-3	1,500	LINEAR FOOT	PIPING, 1.5" DIAMETER		
2960-4	9,450	LINEAR FOOT	PIPING, 1" DIAMETER		
2960-5	8,100	LINEAR FOOT	VALVE CONTROL WIRE		
2960-7	5	EACH	ELECTRIC CONTROL VALVE, 1"		
2960-8	3	EACH	ELECTRIC CONTROL VALVE, 1.5"		
2960-10	650	LINEAR FOOT	SLEEVES, 4" PVC		
2960-11	2	EACH	ELECTRIC CONTROLLER, 8 STATION		
2960-12	2	EACH	WEATHER SENSOR		
2960-13	2	EACH	1.5" MASTER VALVE		
3441-1	1,579	LINEAR FOOT	LOOP WIRE		
3500-1	5	EACH	PEDESTRIAN LIGHTING "P2" (LED) INSTALLATION		
3500-2	54	EACH	STREET LIGHT POLE FOUNDATION "P1"		
3500-3	11,170		6#6 & 1#12 GND - IN 2" C.		
3500-4	2	EACH	LIGHTING CONTROL FEEDER		
3500-5	2	EACH	LIGHTING CONTROL PANEL WITH CONCRETE PAD		
3500-6	200		2 - 3" C WITH PULL STRING		
3500-7	5	EACH	PEDESTRIAN LIGHTING "P2" (LED) FOUNDATION		
3500-8	54	EACH	STREET LIGHT POLE "P1" INSTALLATION		
3500-9	22	EACH	IT CABINET INSTALLATION		
3600-1	1	LUMP SUM	UTILITY SERVICE FEE ALLOWANCE (MAXIMUM BID LIMITED TO \$ 10,000.00)		
			Total Ba	se Bid Amount	

N		CHAFFER	City of Tuscaloosa 10th Avenue City Walk and Roadway Improvements Project No. 2016.129.001 ADDITIVE ALTERNATE BID NO.1 Contract Schedule The following represents the bidder's schedule of contract unit prices for this proposal (bidder to complete below):	City of TUSCA	
Item No.	Quantity	Unit	Description	Unit Cost	Amount Bid
2104-11	1	EACH	REMOVING METAL POLE WITH LIGHT AND BASE (PEDESTRIAN CAUTION LIGHT)		
2400-1	670	SQUARE YARD	PLANING EXISTING PAVEMENT (APPROXIMATELY 0.00" THRU 1.0" THICK)		
2500-4	208	TON	SUPERPAVE BITUMINOUS CONCRETE WEARING SURFACE LAYER, 1/2" MAXIMUM AGGREGATE SIZE MIX, ESAL RANGE C/D (135 LB/SY)		
2290-5	60	LINEAR FOOT	WATTLE		
2585-3	1	MILE	SOLID YELLOW, CLASS 2, TYPE A TRAFFIC STRIPE (5" WIDE)		
2585-4	1	MILE	BROKEN WHITE, CLASS 2, TYPE A TRAFFIC STRIPE (5" WIDE)		
2585-6	1	MILE	SOLID TEMPORARY TRAFFIC STRIPE		
2585-7	95	SQUARE FOOT	TRAFFIC CONTROL MARKINGS, CLASS 2, TYPE A		
2585-10	15	EACH	PAVEMENT MARKERS, CLASS A-H, TYPE 2-D		
3441-1	659	LINEAR FOOT	LOOP WIRE		
			Total Alternate Bid	No.1 Amount	

SECTION 02723 – Manhole Height Adjustment

PART 1 - GENERAL

- 1.01 Related Documents:
 - A. Drawings and general provisions of the contract, including General and Supplementary Conditions and Front End Bid Documents, apply to this section.
- 1.02 Summary:
 - A. This section shall cover the work of furnishing and installing manhole height adjustments to finished grade of asphalt pavement.
- 1.03 Materials:
 - A. Materials shall be those necessary to adjust manhole cover to be flush with finished grade of asphalt pavement.
- 1.04 Measurement and Payment
 - A. Measurement of Manhole Height Adjustment shall be each.
 - B. Payment for Manhole Height Adjustment shall be at the contract unit price which shall be full compensation for materials, installation, equipment, tools, labor, and incidentals necessary to complete the work.

END OF SECTION 02723

SECTION 015106 – Valve Height Adjustment

PART 1 - GENERAL

- 1.01 Related Documents:
 - A. Drawings and general provisions of the contract, including General and Supplementary Conditions and Front End Bid Documents, apply to this section.
- 1.02 Summary:
 - A. This section shall cover the work of furnishing and installing valve height adjustments to finished grade of asphalt pavement.
- 1.03 Materials:
 - A. Materials shall be those necessary to adjust valve to be flush with finished grade of asphalt pavement.
- 1.04 Measurement and Payment
 - A. Measurement of Valve Height Adjustment shall be each.
 - B. Payment for Valve Height Adjustment shall be at the contract unit price which shall be full compensation for materials, installation, equipment, tools, labor, and incidentals necessary to complete the work.

END OF SECTION 015106











ation)
Ca

A-1	WELL GRADED GRAVEL OR SAND; MAY INCLUDE FINES
A-1a	LARGELY GRAVEL BUT CAN INCLUDE SAND AND FINES
A-1b	GRAVELLY SAND OR GRADED SAND; MAY INCLUDE FINES
A-2	SANDS AND GRAVELS WITH FINES
A-2-4	SANDS, GRAVELS WITH ELASTIC SILT FINES LL=<40, PI=<10
A-2-5	SANDS, GRAVELS WITH ELASTIC SILT FINES LL>=41, PI=<10
A-2-6	SANDS, GRAVELS WITH CLAY FINES LL=<40, PI>=11
A-2-7	SANDS, GRAVELS WITH HIGHLY PLASTIC CLAY FINES LL>=41, PI>=11
A-3	FINE SANDS
A-4	LOW COMPRESSIBILITY SILTS
A-5	HIGH COMPRESSIBILITY SILTS, MICACEOUS SILTS
A-6	LOW-TO-MEDIUM COMPRESSIBLITY CLAYS
A-7	HIGH COMPRESSIBILITY CLAYS
A-7-5	HIGH COMPRESSIBILITY SILTY CLAYS PI= <ll-30< td=""></ll-30<>
A-7-6	HIGH COMPRESSIBILITY, HIGH VOLUME-CHANGE CLAYS PI>LL-30
A-8	PEAT, HIGHLY ORGANIC SOILS



Other Materials





Project Notes:

The subsurface investigation for this project conducted on 02/10/2015 and was 02/11/2015 by personnel from TTL, Inc.

		REFERENCE PROJECT NUMBER	FISCAL YEAR	SHEET NUMBE
	Water Level Sy	vmbols		
$\overline{\underline{\nabla}}$	WATER LEVEL AT TIME OF I	DRILLING		
<u> </u>	DELAYED WATER LEVEL			
<u>Ma</u>	CAVE—IN DEPTH			

Existing Profile _ ___

Future Grade

General Notes:

 \overline{N} = Penetration in blows per foot (AASHTO T-206) (ASTM D 1586)

RQD/REC = Rock Quality Designation (RQD) / Recovery (REC)

A horizontal solid line in the material description column of the test boring record indicates a change in the AASHTO classification of the material. A dashed line indicates a significant change in color, moisture, consistency or additional materials within the same AASHTO classification.

3019 Gransbor Areau e Turasiona Albana 3601 2013 Gransbor e Par 2013 5002	Neel Schaffer, Inc. 10th Avenue Improvements Tuscaloosa County
APPROVED: Harvey F. Upchurch, Jr., P.E.	City of Tuscaloosa Project No. A15-1211
GEOTECHNICAL ENGINEER DATE: 03/08/2016	TEST BORING RECORD SHEET LOG-01 OF 4

logged by	r:	B. W	ysock		Date Drilled:	2/10/2015		Remarks: TTL Boring No. 065–01												
Equipment	:	CME	45		Boring Depth:															
Hammer Type: Automatic			Boring Elevation	: 188.4 feet		The second second contracted we have been as a second with second s														
Drilling Method: Hollow Stem Auger w/SPT Sampling							Coora	Coordinates: N 1157288 E 1952504												
z		0	-							SA	MPLE DA	ATA								
DEPTH (ft) LEVATION	(GRAPHIC LOG	AASHTO		MATERIAL DESC	RIPTION	W.C. (%)	SAMPLE INTERVAL (fl) & NUMBER	TYPE	N	PPV (Isf)	CORE ROD % % REC	$\frac{\text{REMARKS}}{\text{Topsoil} = 0.3 \text{ ft}}$							
0 -	185 -	185 -			A-6	Very stiff, CLAY	, moist, brown	sandy lean		0-1.5		16								
				85 -	85 -	85 -	85 -	-/ -/ 85 -/		A-2	Firm, moi SAND	ist, reddish-br	own clayey		1.5-3		19			
- 18									15 -		A-6	Soft, very CLAY	moist, gray s	sandy lean		3-4.5		3		
5 -	-				, moist, gray an CLAY	and brown		4.5-6		19										

STATION 2104 29 ET LEET OF CENTEDLINE

STATION 5+15 81 FT LEFT OF CENTERLINE

Logge	d by:	B. W	ysock		Date Drilled:	2/10/2015	Remai	'ks: ring No. 065-	-02						
Equipr	nent:	CME	45		Boring Depth:	8.5 feet		•		l l'ann a	(dellice				
Hamm	er Type	: Auto	matic		Boring Elevation:	189.1 feet	Water not encountered at time of drilling.								
Drilling		w Stem	Auger	w/SPT Sampli	ng	Coordin	Coordinates: N 1157478 E 1952572								
										SA	MPLE D/	TA			
DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	AASHTO		MATERIAL DESCRIPTION			SAMPLE INTERVAL (11) & NUMBER	TYPE	N	PPV (Isf)	CORE ROD % % REC	Topsoil	emarks = 0.	
- 0 -			A-6	Firm, moi sandy le	st to very moist, an CLAY	brown		0-1.5		6					
					~			1.5-3		8					
	- 185 -			Stiff, moi lean CLA	st, gray and brow Y	wn sandy		3-4.5		10					
- 5 -								4.5-6		12					
						2		7-8.5		13					
<u> </u>				Boring ter	minated at 8.5 f	eet									



STATION 8170 28 FT LEFT OF CENTEDLINE

Logged by: B. Wysock	Date Drilled: 2/10/2015	Remar	ks: ing No. 065–	04				
Equipment: CME 45	Boring Depth: 6.0 feet		ot encountere		l lime of	drilling		
Hammer Type: Automatic	Boring Elevation: 190.1 feet	10.000	ates: N 1157			•		
Drilling Method: Hollow Stem Auger w/SPT Samp	ling	Coordin	otes: N 1137	034	E 1932	730		
					SA	MPLE DA	TA	
A ASHTO	MATERIAL DESCRIPTION	W.C. (%)	SAMPLE INTERVAL (ff) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD X X REC	REMARKS Topsoil = 0.5 ft
	se to firm, moist, brown and y, clayey SAND	10	0-1.5		4			Group Index:(0) Percent Passing #200 sieve=32 LL=17 PI=5
			1.5-3		12			
A-6 Firm, m lean Cl	oist, brown and gray sandy AY		3-4.5		6			
5 - 185 -			4.5-6		7			

				STA	ATION	8+79	28 F	T LEF	T OF	CENT	ER	LINE					
Logged	by:	B. W	ysock		Date D	rilled:	2/10/	2015	Remar	ks: ing No. 065-	05						
Equipm	nent:	CME	45		Boring	Depth:	8.5 fe	et		ing No. 000-		l lime o	(drilling				
Hamme	er Type:	Auto	matic		Boring	Elevation:	188.8	feet		ales: N 1157							
Drilling Method		Stem	Auger	w/SPT Sampli	ng				Coordin	dies. N 1157	000						
	z	c	•									SA	MPLE DA	TA			
DEPTH (ft)	ELEVATION (#)	GRAPHIC LOG	AASHTO		MATERI	AL DESCRI	PTION		w.C. (%)	SAMPLE INTERVAL (ft) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD % % REC	Topsoil	emarks = 0.3	ft
- 0 -			A-6	Firm, moi	ist, bro	wn sandy	lean C	LAY		0-1.5		7					
				Firm to s sandy le			sh-brow	'n		1.5-3		5					
	- 185 -									3-4.5		2					
- 5 -				Firm, wet CLAY	, yellov	vish-brow	'n sandy	lean		4.5-6		7					5
				Very stiff, sandy le			and gray	у У									
										7-8.5		18					

Boring terminated at 8.5 feet

Logged by: B. Wysock Equipment: CME 45 Hammer Type: Automatic Drilling Method: Hollow Stem Auger w/ DEPTH ((1) (1) (1) (1) (1) (1) (1) (1) (1) ASHTO 0 A-2 185 -A-6 5

STATION 12+82 20 FT LEFT OF CENTERLINE

nt: Type: Hollow	Stem A	15 Iatic	v/SPT Sampli	Date Drilled: Boring Depth: Boring Elevation:	2/11/2015 6.0 feet 186.1 feet	Water n	ks: ing No. 065– ot encountere		time of	drilling.		
Type: Hollow	Autom Stem A	atic	v/SPT Sampli	Boring Elevation:		Water n	•		time of	drilling.		
Hollow	Stem A		/SPT Sampli		186.1 feet		or encountere	a ai	lime of	urining.		
		Auger w	/SPT Sompli	20					F 40F0			
NOL	0			ing		Coordin	otes: N 1158	211	£ 1952	6/4		
		-							SAI	MPLE DA	TA	
(II)	GRAPHIC LOG	AASHTO		MATERIAL DESCRIP	TION	w.c. (%)	SAMPLE INTERVAL (ff) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD % % REC	REMARKS
85 -		-2-4			ilty, clayey	13	0-1.5		4			Group Index:(0) Percent Passing #200 sieve=34 LL=20 PI=7
-		A-6	Firm, wet	, gray lean CLAY	with sand		1.5-3		7			
							3-4.5		7			
-		1			wn sandy		4.5-6		8			
8	5 -/	111	5 - ///	5 - SAND wi A-6 Firm, wet	5 - SAND with gravel	5 - SAND with gravel A-6 Firm, wet, gray lean CLAY with sand Firm, moist, gray and brown sandy	5 - SAND with gravel 13 A-6 Firm, wet, gray lean CLAY with sand Firm, moist, gray and brown sandy	5 - SAND with gravel 13 0-1.5 A-6 Firm, wet, gray lean CLAY with sand 1.5-3 Firm, moist, gray and brown sandy	5 - SAND with gravel 13 0-1.5 A-6 Firm, wet, gray lean CLAY with sand 1.5-3 Firm, moist, gray and brown sandy	5 SAND with gravel 13 0-1.5 4 A-6 Firm, wet, gray lean CLAY with sand 1.5-3 7 Joint Control Joint Control 3-4.5 7 Firm, moist, gray and brown sandy Joint Control 1.5-3 1.5-3	5 SAND with gravel 13 0-1.5 4 A-6 Firm, wet, gray lean CLAY with sand 1.5-3 7 Firm, moist, gray and brown sandy 3-4.5 7	5 SAND with gravel 13 0-1.5 4 A-6 Firm, wet, gray lean CLAY with sand 1.5-3 7 Firm, moist, gray and brown sandy 3-4.5 7

Boring terminated at 6.0 feet

Logged by:	B. V	Vysock		Date Drilled:	2/10/2015	Reman	ks: ing No. 065-	.08				
Equipment:	CME	45		Boring Depth:	6.0 feet		not encounter		l lime ai	(drilling		
Hammer Typ	e: Auto	matic		Boring Elevation:	185.6 feet		ates: N 1158		E 1952		•	
Drilling Method: Holl	ow Stem	Auger	w/SPT Sampli	ing		Coordin	0162: N 1130	221	E 1932	/4/		
									SA	MPLE DA	ATA	
DEPTH (ft) (ft) (ft) ELEVATION	GRAPHIC LOG	AASHTO		MATERIAL DESCRIF	PTION	w.C. (%)	SAMPLE INTERVAL (ff)	TYPE	N	PPV (tsf)	CORE ROD % % REC	REMARKS
L 1	9	•				(~)	& NUMBER	1-		(.31)	% REC	Topsoil = 0.2 f

STATION 12+93 52 FT RIGHT OF CENTERLINE

80	ELEV	GRA	AAS		(%)	INTERVAL (ff) & NUMBER	TYP	N	(tsf)	ROD % % REC	Topsoil = 0.2 ft	8
- 0 -	- 185 -		A-2	Loose, moist, brown clayey SAND		0-1.5		10				
-			A-6	Very stiff, moist, gray lean CLAY with sand		1.5-3		17				
-				Firm to stiff, moist, brown and gray sandy lean CLAY		3-4.5		9				
- 5 -	- 180 -					4.5-6		12				

Boring terminated at 6.0 feet

				F	REFE	ERENCE	BER	FISCAL YEAR	SHEET NUMBER
STATION 5+97 36 FT LEF Date Drilled: 2/10/2015 Boring Depth: 8.5 feet Boring Elevation: 189.1 feet /SPT Sampling	Remari TTL Bori Water n		·03 ed al	time of E 1952					
MATERIAL DESCRIPTION	w.c. (%)	SAMPLE INTERVAL (11) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD X X REC	REM	ARKS	
Asphaltic CONCRETE (1") Loose, moist, red clayey SAND with gravel (fill)		0-1.5		10					
Stiff, moist, gray and brown sandy lean CLAY		1.5-3		9					
	18	3-4.5		10			Group Index Percent Pas #200 sieve= LL=26	sing	
		4.5-6		10					
		7-8.5		15					

Boring terminated at 8.5 feet

STATION 10+45 34 FT LEFT OF CENTERLINE

v/SPT San	Date Drilled: Boring Depth: Boring Elevation: npling	2/10/2015 6.0 feet 186.4 feet	Water n	ks: ing No. 065– ot encountere ates: N 11579	d a					
						SA	MPLE DA	TA		
	MATERIAL DESCRIP	TION	w.c. (%)	SAMPLE INTERVAL (11) & NUMBER	34VI	N	PPV (tsf)	CORE ROD X X REC	REMAN	ft
Loose, SAND	moist, grayish-brov	vn clayey		0-1.5		8				
Stiff, n lean (noist, yellowish-brov CLAY	wn sandy		1.5-3		10				
	firm, moist, brown Iean CLAY	n and gray		3-4.5		9				
				4.5-6		8				

Boring terminated at 6.0 feet

359 Grenslov Arevs & Turcitions, Albama 3501 2013 Simile & Pac 2013-1992	Neel Schaffer, Inc. 10th Avenue Improvements Tuscaloosa County
APPROVED: Harvey F. Upchurch, Jr., P.E.	City of Tuscaloosa Project No. A15-1211
GEOTECHNICAL ENGINEER DATE: 03/08/2016	TEST BORING RECORD SHEET LOG-02 OF 4

STATION 15+73 46 FT RIGHT OF CENTERLINE

Logged by: Equipment: Hammer Ty Drilling	ype:	CME Autor	matic	w/SPT Sampli	Date Drilled: Boring Depth: Boring Elevation	2/10/2015 6.0 feet 186.5 feet	Water i	ks: ring No. 065- not encounter ates: N 1158	ed a			•			
Method: HC		GRAPHIC LOG	AASHTO	y or i ounipr	MATERIAL DESC	RIPTION	SAMPLE DATA W.C. SAMPLE INTERVAL (II) PPV CORE NUMBER REMARKS W.S. INTERVAL (II) PV N PPV CORE NOD X REMARKS								
- 185			A-6	CLAY wit				0-1.5		7					
	-			CLAY wit	h sand	and gray lean		1.5-3		4					
				Stiff to fi sandy le		own and gray		3-4.5		11					
- 5 -					minated at 6			4.5-6		8					

Boring terminated at 6.0 feet

STATION 16+99 29 FT LEFT OF CENTERLINE Remarks: TTL Boring No. 065–10 Date Drilled: 2/10/2015 Logged by: B. Wysock Equipment: CME 45 Boring Depth: 6.0 feet later not encountered at time of drilling. Hammer Type: Automatic Boring Elevation: 186.2 feet ordinates: N 1158628 E 1952674 Drilling Method: Hollow Stem Auger w/SPT Sampling SAMPLE DATA DEPTH (ff) (ff) (fi) (fi) (f) LOG AASHTO REMARKS W.C. SAMPLE (X) INTERVAL (ft) & NUMBER MATERIAL DESCRIPTION - 0 -Asphaltic CONCRETE (4") A-2 A-6 Firm, moist, red clayey SAND with 0-1.5 12 185 gravel 1.5-3 11 Stiff, moist, gray lean CLAY with sand Stiff, moist, brown and gray sandy 3-4.5 14 lean CLAY 4.5-6 15 Boring terminated at 6.0 feet



STATION 23+02 33 FT LEFT OF CENTERLINE

				01/1		20.01			U ULINI			·		
Logged	by:	B. W	ysock		Date D	rilled:	2/11/2015		ks: ing No. 065-	13				
Equipme	ent:	CME	45	5	Boring	Depth:	6.0 feet		ot encounter		l lime of	(deillion		
Hamme	r Type:	: Auto	matic		Boring	Elevation:	182.9 feet		ates: N 1159					
Drilling Method:		v Stem	Auger	w/SPT Sampli	ing			Joorain	ules: N 1135	232	L 1932	033		
	z	~	-								SA	MPLE D	ATA	
DEPTH (ft)	ELEVATION (ft)	GRAPHIC LOG	AASHTO		MATERI	AL DESCRI	PTION	w.c. (%)	SAMPLE INTERVAL (ft) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD % % REC	REMARKS
- 0 -			A-2	Loose, m	oist, re	d clayey	SAND		0-1.5		7			
	- 180 -		A-6	Firm to v gray sar			brown and		1.5-3		5			
	-								3-4.5		13			
- 5 -	-								4.5-6		16			

Boring terminated at 6.0 feet

STATION 35+15 23 FT LEFT OF CENTERLINE

STATION DOTTO ZO TT LE							
Logged by: B. Wysock Date Drilled: 2/11/2015	Remar	ks: ing No. 065-	16				
Equipment: CME 45 Boring Depth: 6.0 feet		ng No. 065-		t time a	drilling		
Hammer Type: Automatic Boring Elevation: 178.1 feet						•	
Drilling Method: Hollow Stem Auger w/SPT Sampling	Coordin	ates: N 1160	442	L 1932	//3		
Z () -				SA	MPLE DA	ATA	
	w.c. (%)	SAMPLE INTERVAL (ff) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD % % REC	REMARKS
Asphaltic CONCRETE (4") A-2 Crushed AGGREGATE (2")		0-1.5		18			
Firm, moist, red clayey SAND with		1.5-3		13			
A-6 Soft to firm, moist, gray lean CLAY with sand		3-4.5		4			
- 5		4.5-6		7			
Boring terminated at 6.0 feet							

STATION 21+21 36 FT RIGHT OF CENTERLINE

Equipment: CME 45 Boring Depth: 6.0 feet Hammer Type: Automatic Boring Elevation: 184.5 feet Drilling Method: Hollow Stem Auger w/SPT Sampling Coordinates: N 1159047 E 1952754 E Sample Sample Data E Sample Data Remarks Matrix A-6 Firm, moist to wet, yellowish-brown sandy lean CLAY 0-1.5 6 Image: Provide Stem Auger CLAY Image: Provide Stem Auger Index:(5) Provide Stem Auger Index:(5) Provide Stem Auger Index:(5)				0171		00 11 110					-		
Equipment: CME 45 Boring Depth: 6.0 feet Hammer Type: Automatic Boring Elevation: 184.5 feet Drilling Method: Hollow Stem Auger w/SPT Sampling Coordinales: N 1159047 E 1952754 ES ES ES ES ES 0 Image: Sample and	ogged by:	8. V	lysock		Date Drilled:	2/10/2015			12				
Hammer Type: Automatic Boring Elevation: 184.5 feet Drilling Method: Hollow Stem Auger w/SPT Sampling Coordinates: N 1159047 E 1952754 E SamPLE B Material DESCRIPTION SamPLE MATERIAL (0) X REC N PPV MOD X X REC Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Material DESCRIPTION Material DESCRIPTION Material DESCRIPTION SamPLE NUMBER N PPV Material DESCRIPTION Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 1159047 E 1952754 Image: Coordinates: N 100000 Image: Coordinates: N 1000000 Image: Coordinates: N 1000000 Image: Coordinates: N 1000000 Image: Coordinates: N	Equipment:	CME	45		Boring Depth:	6.0 feet				l lime er	(drilling		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Hammer Type	: Auto	matic		Boring Elevation:	184.5 feet						•	
$ \frac{E}{B} = \begin{bmatrix} \frac{1}{2} \\ 0 \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ - \\ -$	Drilling Method: Hollo	w Stem	Auger	w/SPT Sampli	ng		Coordin	ates: N 1139	047	E 1932	/34		
A-6 Firm, moist to wet, yellowish-brown sandy lean CLAY Stiff, moist, brown and gray sandy lean CLAY - 5	z	0	-							SA	MPLE DA	ATA	
A-6 Firm, moist to wet, yellowish-brown sandy lean CLAY Stiff, moist, brown and gray sandy lean CLAY - 5	DEPTH (ff) (ff) (f)	LOG	ASHTC		MATERIAL DESCRIP	TION	W.C.	SAMPLE INTERVAL (fl)	YPE	N	PPV	CORE	REMARKS
A-6 Firm, moist to wet, yellowish-brown sandy lean CLAY 		9	-				(~)	& NUMBER	-		(131)	X REC	Topsoil = 0.5 ft
- - - - - - - - - - 17 1.5-3 5 \$ <td< td=""><td></td><td></td><td>A-6</td><td></td><td></td><td>ish-brown</td><td></td><td>0-1.5</td><td></td><td>6</td><td></td><td></td><td></td></td<>			A-6			ish-brown		0-1.5		6			
- 5							17	1.5-3		5			Percent Passing #200 sieve=64
4.5-6 13						ay sandy		3-4.5		10			
Boring terminated at 6.0 feet	127.4223							4.5-6		13			
				Boring ter	rminated at 6.0 t	feet							

STATION 26+94 32 FT LEFT OF CENTERLINE

Drilling	nent: er Type	CME : Auto	matic	w/SPT Sampli	2/11/2015 6.0 feet 179.4 feet	Water n	ks: ing No. 065- ot encountera otes: N 1159	ed a		-					
Method			-							SA	MPLE DA	TA			
DEPTH (ft)	ELEVATION (11)	GRAPHIC LOG	AASHTO		MATERIAL DESCRIP	TION	W.C. (%)	SAMPLE INTERVAL (ff) & NUMBER	TYPE	N	PPV (Isf)	CORE ROD % % REC	Topsoil	emarks = 0.2	ft
- 0 -			A-6	Firm, moi gravel	ist, gray lean CLA	AY with		0-1.5		6					
				Stiff, moi lean CLA	st, gray and bro Y	wn sandy	ч.	1.5-3		12					
	- 175 -			Soft, wet,	gray lean CLAY	with sand		3-4.5		2					
- 5 -	- 1/5 -			Stiff, moi	st, gray lean CLA	Y with sand		4.5-6		11					
				Borina ter	minated at 6.0 f	feet		4.5-6		11					

Boring terminated at 6.0 fee

				F		ERENCE		FISCAL YEAR	SHEET NUMBER
STATION 18+51 40 FT RIG	HT C)F CEN	ι ΤΕΙ	RLINE				I	
Date Drilled:2/10/2015Boring Depth:6.0 feet		ks: ing No. 065- iot encountere		l lime of	(drillion]
Boring Elevation: 186.1 feet /SPT Sampling		ates: N 1158							
MATERIAL DESCRIPTION	w.c. (%)	SAMPLE INTERVAL (11) & NUMBER	TYPE	SA N	PPV (tsf)	CORE ROD X X REC	REM	ARKS	
Soft, very moist, yellowish-brown lean CLAY with sand		0-1.5		4					
Firm, moist, brown and gray sandy lean CLAY with brick debris	16	1.5-3		6			Group Index Percent Pas #200 sieve= LL=26	sing	
Stiff to very stiff, moist, gray and brown sandy lean CLAY		3-4.5		12					
		4.5-6		16			×		

Boring terminated at 6.0 feet

STATION 24+03 42 FT RIGHT OF CENTERLINE

l by:	B. W	ysock		Date Drilled:	2/10/2015			14						
nent:	CME	45		Boring Depth:	6.0 feet				. Kana al	. datiliaa				
er Type	: Auto	matic		Boring Elevation:	182.6 feet									
: Hollow	w Stem	Auger v	w/SPT Sampli	ng		Coordine	JTES: N 1139.	529	and hereiter					
z	0								SA	MPLE DA	ATA			
EVATIO	LOG	VASHTC		MATERIAL DESCRIP	TION	W.C.	SAMPLE INTERVAL (ft)	TYPE	N	PPV (tst)	CORE ROD %		REMARKS	
	9	-				(~~)	& NUMBER	-		()	X REC	Topsoil	= 0.5	5 ft
		A-6	Stiff, moi sand	st, brown lean C	LAY with		0-1.5		13					
- 180 -							1.5-3		10					
-							3-4.5		6					
			2				4.5-6		11					
	Hollor Hollor	Hent: CME er Type: Auto Hollow Stem No((s)) Hervag	A-6	A-6 Stiff, moi sond	Inent: CME 45 Boring Depth: er Type: Automatic Boring Elevation: Hollow Stem Auger w/SPT Sampling MATERIAL DESCRIP MATERIAL DESCRIP A-6 Stiff, moist, brown lean Cl sand -180 Firm to stiff, very moist, to the stiff, very moist, to th	Nent: CME 45 Boring Depth: 6.0 feet er Type: Automatic Boring Elevation: 182.6 feet Hollow Stem Auger w/SPT Sampling MATERIAL DESCRIPTION Boring Elevation: A-6 Stiff, moist, brown lean CLAY with sand	Boring Depth: 6.0 feet arent: CME 45 Boring Depth: 6.0 feet Water n ar Type: Automatic Boring Elevation: 182.6 feet Hollow Stem Auger w/SPT Sampling Coording Boring Elevation: 182.6 feet Coording MATERIAL DESCRIPTION W.C. (x) W.C. (x) A-6 Stiff, moist, brown lean CLAY with sand -180	Image: CME 45 Boring Depth: 6.0 feet TIL Boring No. 065- er Type: Automatic Boring Elevation: 182.6 feet Water not encounter Hollow Stem Auger w/SPT Sampling MATERIAL DESCRIPTION SamPLE (x) SamPLE (x) MATERIAL DESCRIPTION M.C. MARER (x) SamPLE (x) SamPLE (x) 180 A-6 Stiff, moist, brown lean CLAY with sand 0-1.5 180 Firm to stiff, very moist, to moist, gray and brown sandy lean CLAY 3-4.5	Borng Depth: Contention 27/072013 TTL Boring No. 065-14 Ment: CME 45 Boring Depth: 6.0 feet ar Type: Automatic Boring Elevation: 182.6 feet Hollow Stem Auger w/SPT Sampling Coordinates: N 1159329 MATERIAL DESCRIPTION w.c. (x) MATERIAL DESCRIPTION MATERIAL DESCRIPTION w.c. (x) MATERIAL DESCRIPTION A-6 Stiff, moist, brown lean CLAY with sand 0-1.5 -180 - Firm to stiff, very moist, to moist, gray and brown sandy lean CLAY 3-4.5	Bornstein Dure billieur. 2/10/2013 TTL Boring No. 065-14 warn to construct the state of	Borner CME 45 Boring Depth: 6.0 feet arr type: Automatic Boring Elevation: 182.6 feet Hollow Stem Auger w/SPT Sampling MATERIAL DESCRIPTION SAMPLE DA Value A-6 Stiff, moist, brown lean CLAY with sand 0-1.5 13 -180	Borney Boring Depth: 6.0 feet arent: CME 45 Boring Depth: 6.0 feet ar Type: Automatic Boring Elevation: 182.6 feet Hollow Stem Auger w/SPT Sampling MATERIAL DESCRIPTION SamPLE Material MATERIAL DESCRIPTION W.C. SamPLE A-6 Stiff, moist, brown lean CLAY with 0-1.5 13 -180 - Firm to stiff, very moist, to moist, gray and brown sandy lean CLAY 3-4.5 6	Borney Boring Depth: 6.0 feet arent: CME 45 Boring Depth: 6.0 feet ar Type: Automatic Boring Elevation: 182.6 feet Hollow Stem Auger w/SPT Sampling MATERIAL DESCRIPTION SamPLE N Provestige Provestige N MATERIAL DESCRIPTION SamPLE A-6 Stiff, moist, brown lean CLAY with sand 0-1.5 13 -180 - Firm to stiff, very moist, to moist, gray and brown sandy lean CLAY 3-4.5 6	Theory Dure billing Dure billing arent: CME 45 Boring Depth: 6.0 feet ar Type: Automatic Boring Elevation: 182.6 feet Hollow Stem Auger w/SPT Sampling MATERIAL DESCRIPTION Coordinates: N 1159329 E 1952773

Boring terminated at 6.0 feet

3119 Greenson Augure & Tustationa, Alabama 3501 201345 SWI & File 201531982	Neel Schaffer, Inc. 10th Avenue Improvements Tuscaloosa County
APPROVED: Harvey F. Upchurch, Jr., P.E.	City of Tuscaloosa Project No. A15-1211
GEOTECHNICAL ENGINEER	TEST BORING RECORD
DATE: 03/08/2016	SHEET LOG-03 OF 4

STATION	41 + 46	23	FT	RIGHT	OF	CENTERLINE
JIANUN	41140	20		110111	U 1	VLIVLINLIN

Logged by: B. Wy	vsock	Date Drilled:	2/10/2015	Remar	ks: ing No. 065-	.17						
Equipment: CME	45	Boring Depth:	6.0 feet	Water not encountered at time of drilling.								
Hammer Type: Autom	natic	Boring Elevation:	186.3 feet		ates: N 1161				•			
Drilling Method: Hollow Stem /	Auger w/SPT Sampli	ng		Coorain	ules: N 11011	009	2 1932	0.00				
ZO							SA	MPLE DA	ATA			
CIEVATION ELEVATION (11) CRAPHIC LOG	AASHTO	MATERIAL DESCRIPT	ION	W.C. (%)	SAMPLE INTERVAL (ff) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD % % REC	REMARKS		
0	1 0	CONCRETE (4") GGREGATE (2")			0-1.5		7					
	gravel	bist, red clayey S liff, wet, to mois			1.5-3		8					
		andy lean CLAY	, grey ene		3-4.5		7					
5 -					4.5-6		10					
	Boring tor	minated at 6.0 f										

				STA	TION	42+45	48	FT	LEF	T O	F CENT	EF	RLINE			
Logged	by:	B. W	ysock		Date D	rilled:	2/11	/2015	j	Remar	ks: ing No. 065-	10				
Equipm	nent:	CME	45		Boring	Depth:	6.0 f	eet			ing No. 065-		1 P	(
Hamme	er Type:	Auto	matic		Boring	Elevation:	190.6	feet			ates: N 1161				•	
Drilling Method		Stem	Auger	w/SPT Sampli	ng					Coordin	ales: N 1101	1/3	E 1932	/93		
	z	0	-										SA	MPLE D	ATA	
(II)	ELEVATION (ft)	GRAPHIC LOG	AASHTO		MATER	AL DESCRIP	TION			w.c. (%)	SAMPLE INTERVAL (ff) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD X X REC	REMARKS
0 -	- 190 -	1//	A-2	Asphaltic	CONCR	ETE (1")			[
1				Loose, ma gravel	oist, re	ed clayey S	SAND w	vith			0-1.5		9			
4		///		Loose, mo	oist, br	rown clayey	SAND)			1.5-3		8			
				Firm, wet SAND	, brow	n and gray	y claye	ву			3-4.5		14			
- 5 -	- 185 -			Loose, mo SAND	oist, to	wet, gray	claye	y			4.5-6		9			

Boring terminated at 6.0 feet

Boring terminated at 6.0 feet



Logged by: B. Wysock

STATION 44+93 51 FT LEFT OF CENTERLINE

Logged by:	B. Wysock	Date Drilled: 2/11/2015	Remar	ks:					
Equipment:	CME 45	Boring Depth: 16.0 feet	TTL Bor	ing No. 065-	-20				
Hammer Type:	Automatic	Boring Elevation: 199.4 feet	Coordine	otes: N 1161	420	E 1952	805		
Drilling Method: Hollow	Stem Auger v	w/SPT Sampling	1						
meniou.						SA	MPLE DA	TA	
C DEPTH (ft) (ft)	GRAPHIC LOG AASHTO	MATERIAL DESCRIPTION	w.c. (%)	SAMPLE INTERVAL (ff) & NUMBER	TYPE	N	PPV (isf)	CORE ROD X X REC	REMARKS
	A-2	Asphaltic CONCRETE (2") Loose, moist, red clayey SAND with gravel		0-1.5		5			
		Dense to very dense, moist, red clayey SAND with gravel		1.5-3		34			
				3-4.5		47			
5 -				4.5-6		54			
1 1	//	Loose, moist, red clayey SAND]						
				7-8.5		10			
- 10 - -	A-3	Firm, moist to wet, brown poorly-graded SAND		9.5-11		12			
				12-13.5		12	2		
- 185 -			₽	14.5-16		17			

Boring terminated at 16.0 feet

				F	REFE	ERENCE	BER	FISCAL YEAR	SHEET NUMBER
			l						
STATION 43+75 45 FT LE	FT O	E CENT	FF						
Date Drilled: 2/11/2015	Remar	ks:							ן ר
Boring Depth: 16.0 feet	TTL Bori	ing No. 065-	19						
Boring Elevation: 197.2 feet	Coordine	otes: N 1161	302	E 1952	803				
/SPT Sampling	1								
			_	SA	MPLE DA			ARKS	1
MATERIAL DESCRIPTION	w.c. (%)	SAMPLE INTERVAL (11) & NUMBER	TYPE	N	PPV (tsf)	CORE ROD X X REC	RC M	MIK3	
Asphaltic CONCRETE (1")		0-1.5		6					1
Loose, moist, red clayey SAND with gravel		0-1.0		Ū					
		1.5-3		9			2		
		3-4.5		12		×			
Stiff, moist, brown lean CLAY with sand		4.5-6		11					
Very stiff, moist, brown and gray	1								
sandy lean CLAY									
		7-8.5		18					
		9.5-11		19					
Dense to firm, wet, brown clayey	1	12-13.5		32					
SAND with gravel				52					
	⊻								
		14.5-16		13					
		14.3-10		13					

Boring terminated at 16.0 feet

2515 Gerendersy Averse & Turcholman Addema 35401 201545 0914 & Fee 201545 092	Neel Schaffer, Inc. 10th Avenue Improvements Tuscaloosa County
APPROVED: Harvey F. Upchurch, Jr., P.E.	City of Tuscaloosa Project No. A15-1211
GEOTECHNICAL ENGINEER	TEST BORING RECORD
DATE: 03/08/2016	SHEET LOG-04 OF 4