

CITY OF FAIRHOPE

**Bid No. 002-21 Drainage Improvements for Oak St and Section St
at Bid Mouth Gully**

**Project No PW006-20 Drainage Improvements at Oak St and
Section St**

for

Public Works Department

MAYOR

Sherry Sullivan

FAIRHOPE CITY COUNCIL

JACK BURRELL, COUNCIL PRESIDENT

Posted _____

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**CITY OF FAIRHOPE
PUBLIC WORKS CONTRACT DOCUMENT**

**SECTION ONE
ADVERTISEMENT and NOTICE FOR BIDS**

Sealed bids will be received by the City of Fairhope, Alabama, a Municipal Corporation, at the offices located at 555 S. Section Street, on **December 15, 2020 until 9:00 a.m.**, local time, and then publicly opened and read for the furnishing of all labor and material (where required) and equipment for performing a public works project according to the plans, details, specifications and Contract Documents.

Award of the Contract will be made within **Ninety (90) calendar days from the date of the Notice to Proceed.**

1.0 The Bid

1.0.1 Bid No 002-21 Drainage Improvements for Oak St and Section St at Big Mouth Gully and the general character of said public works project shall consist of the following: **Project Number PW006-20 Drainage Improvements at Oak St and Section St project consisting of drainage improvements along Section St in front of Civic Center to Bayou Drive.**

1.1 Plans and Specifications

1.1.1 Plans and specifications and all related Contract Documents are open for public inspection at the office of Purchasing Manager located at 555 S Section St, Fairhope, Alabama, and plans, specifications and other elements of the contract documents may be obtained from the office of the **Engineer of Record, Lieb Engineering Company, LLC** located at **1290 Main Street Daphne, AL 36526.**

1.1.2 Plans, specifications and Contract Documents may be obtained at the above location upon the deposit of Twenty-Five Dollars (\$25.00), which amount does not exceed twice the cost of printing, production, handling and distribution of each set of such documents. Deposits by prime Contractor bidders are refundable in full upon return of all documents in reusable condition within ten (10) days of bid opening. Additional sets of bid documents for prime Contractor bidders, subcontractors, vendors or dealers may be obtained upon payment of the same deposit. Such deposits will be refunded, less the cost of printing, reproduction, handling and distribution, if all the documents are returned in reusable condition within ten (10) days of bid opening.

1.1.3 All eligible refunds of deposits for plans and specifications will be made by the City within twenty (20) days of bid opening.

1.2 Qualification of Bidders

1.2.1 All bidders must be responsible, meeting the criteria and requirements set forth in the Instructions to Bidders and bid proposal.

1.2.2 Prequalification of Bidders IS NOT required over and above requirements of the General Contractors License.

1.2.2.1 If prequalification of bidders is indicated to be required by the preceding sentence, then written prequalification information is available for review at the same office where plans, specifications and Contract Documents are available.

1.2.3 The attention of all bidders is called to the provisions of State law governing "General Contractors," as set forth in Ala. Code §34-8-1, et seq. (1975), and rules and regulations promulgated pursuant thereto.

1.2.4 If a construction manager is being utilized and this contract is one of a multiple of trade contracts, then the bidder shall be fully licensed for the trade, as determined by applicable law.

1.2.5 The City may not enter into a contract with a non-resident corporation or entity which is not qualified under State law to do business in the State of Alabama, <http://sos.alabama.gov/business-entities>.

- 1.2.6 All bidders shall possess all other licenses and/or permits required by applicable law, rule or regulation for the performance of the work.
- 1.2.7 All bidders must submit with their proposal, State of Alabama Contractor's license number and a copy of the license. State law, Ala. Code §34-8-8(b), requires all bids to be rejected which do not contain the General Contractor's current license number.
- 1.2.8 The City reserves the right to reject all bids and/or reject and rebid the Project should it determine the same is in the best interest of the City.
- 1.3 Construction Manager**
- 1.3.1 _____ If the preceding blank is marked with an affirmative indication, it means that this contract involves the use of a construction manager and this contract is one of several multiple trade and/or multiple prime contracts for work on the Project. Bidders attention is called to the supplemental conditions attached to the General Conditions of the Contract Documents regarding this topic.
- 1.4 Bid Bonds:** Each bidder must submit with its bid a cashier's check drawn on an Alabama bank or a fully executed bid bond on the form that is contained in the Contract Documents executed by a surety company duly authorized and qualified to make bond in the State of Alabama. All bonds, sureties and/or cashier checks will be made payable to the City for an amount not less than 5 percent (5%) of the City's or its engineers or architects estimated cost of the Project or of the total bid in the proposal, but in no event more than \$10,000.00.
- 1.5 Sales and Use Tax Savings:** Alabama Department of Revenue Rule 810-6-3.69.02(2010) exempts certain payment of state, county, and municipal sales and use taxes by the contractor or subcontractor on tangible personal property to be incorporated into the realty pursuant to a contract with a municipal corporation such as the City of Fairhope. All bidders shall bid the work on the project in accordance with said law by not including the payment of such taxes where applicable. All successful contractors and subcontractors of bidders shall enter into a Purchasing Agent Appointment Agreement, if required. All tax-exempt purchases shall be in accordance with the laws of this state and the Alabama Department of Revenue and **attached are the documents to make Application for Tax Exemption**. It is the sole responsibility of the successful contractor to make the necessary inquiries and determinations as to what materials or items of tangible personal property to be incorporated into the project qualify as tax exempt in the opinion of the Alabama Department of Revenue.
- 1.5.1 In the event the City elects to utilize a Purchasing Agent Appointment agreement in conjunction with this contract, the Contractor will be required to execute such an agreement and perform in accordance therewith.
- 1.6 Pre-Bid Conference:** A Non-Mandatory **Pre-Bid Conference** is required for this Project. The pre-bid conference will be held on **Dec 3, 2020 at 9:00 a.m.** at City Services and Utilities Building located at 555 S. Section Street, Fairhope, Alabama 36532.
- 1.7 NOTE:** All bidders are advised to carefully read the Instructions to Bidders contained in the Contract Documents, which provisions and requirements are adopted herein by reference.

[END ADVERTISEMENT FOR BID]

CITY OF FAIRHOPE PUBLIC WORKS

SECTION TWO INSTRUCTIONS TO BIDDERS

NOTE: THIS DOCUMENT CONTAINS IMPORTANT BIDDING AND CONTRACTING INFORMATION. ALL POTENTIAL BIDDERS SHOULD READ IT THOROUGHLY

- 2.0 Intention:** The Advertisement for Bids, Instruction to Bidders, Contract Agreement, any modifications or supplemental conditions to the Contract Agreement, Bid Proposal, and the Plans and Specifications are interrelated and apply to the complete work to which they relate.
- 2.1 Definitions:** Where the following words, or the pronouns used in their stead, occur herein, they shall have the following meaning:
- 2.1.1 "Awarding Authority" shall mean the City of Fairhope, Alabama.
- 2.1.2 "Bidder" shall mean any person, firm or corporation, that is responsible, submitting a responsive bid for the Project contemplated by the contract documents, who meets the requirements set forth in the contract documents, maintains a permanent place of business, has adequate forces and equipment to perform the work on the Project properly and within the time limit that is established, has sufficient experience in the type work provided for in the contract documents and has adequate financial status and resources to meet its obligations contingent to the work.
- 2.1.3 "City" or "Owner" shall mean the City of Fairhope, Alabama, as the awarding authority or its authorized and legal representatives.
- 2.1.4 "Construction Manager" shall mean that person or entity employed by the City to provide Construction Manager services on the work or Project, who shall be the City's representative on the Project.
- 2.1.5 "Contractor" shall mean initially the successful or probable low bidder and then the party of the first part to the construction agreement or the legally authorized representatives of such party, including a trade contractor.
- 2.1.6 "Engineer/Architect" shall mean an Engineer or Architect responsible for design and related services on the Project, and if no Construction Manager is employed, then the Engineer is the representative of the City of Fairhope, Alabama, on the Project. References to the "Engineer" shall mean the Construction Manager, if the City has employed such services, to the extent such services are applicable to construction management activity as set forth in the agreement between the City and the Construction Manager, and the context herein indicates that it would relate to services traditionally and customarily performed by a Construction Manager; otherwise, "Engineer" shall refer to the Engineer or Architect.
- 2.1.7 "Force Account Work" work paid for by reimbursing for the actual cost for labor, materials and equipment usage incurred in the performance of the work, as directed, including a percentage for overhead and profit where appropriate.
- 2.1.8 "Gender": a word importing one gender shall if appropriate extend to and be applied to the other gender. The masculine shall include the feminine and vice versa, unless the context clearly indicates otherwise.
- 2.1.9 "Inspector" shall mean a representative of the Engineer/Architect, Construction Manager or the City, as the case may be.
- 2.1.10 "Non-Resident Contractor" shall mean a contractor which is neither (a) organized and existing under the laws of the State of Alabama nor (b) maintains its principal place of business in the State of Alabama. A non-resident contractor which has maintained a permanent branch office within the State of Alabama for at least five (5) continuous years shall not thereafter be deemed to be a non-resident contractor so long as the contractor continues to maintain a branch office within Alabama.
- 2.1.11 "Project" shall mean the Public Work to which these Contract Documents relate, including the labor, materials and all work to be done by Contractor that is the subject of the bid, plans, specifications and contract documents.

- 2.1.12 "Public Property" Real property which the awarding authority owns or has contractual right to own or purchase, including easements, rights-of-way, or otherwise.
- 2.1.13 "Public Work(s)" shall mean a Project consisting of the construction, repair, renovation, or maintenance of public buildings, structures, sewers, water works, roads, bridges, docks, underpasses and viaducts, as well as any other improvement to be constructed, repaired or renovated or maintained on public property to be paid, in whole or in part, with public funds or with financing to be retired with public funds in the form of lease payments or otherwise.
- 2.1.14 "Responsible Bidder" shall mean a bidder who, among other qualities determined necessary for performance, is competent, experienced and financially able to perform the contract.
- 2.1.15 "Responsive Bidder" shall mean a bidder who submits a bid that complies with the terms and conditions of the invitation for bids, including plans, drawings, specifications and other provisions of the contract documents.
- 2.1.16 "Retainage" shall mean that money belonging to the Contractor which has been retained by the awarding authority conditioned upon final completion and acceptance of all work in connection with the Project.
- 2.1.17 "Singular/Plural" the singular shall include the plural and vice versa, unless the context clearly indicates otherwise.
- 2.1.18 "Trade Contracts" "Trade contracts" or "multiple prime contracts" are multiple but separate contracts with the City on the same Project that represent significant construction activities performed concurrently with and closely coordinated with construction activities performed on the Project under other trade contracts.
- 2.1.19 "Unbalanced Bid" Unbalanced bids may be considered non-responsive and may be subject to rejection. An unbalanced bid includes but is not limited to one which results in a substantial advance payment to the contractor.
- 2.2 Work to be Performed:** The City contemplates the construction of a public works project as generally described in the Advertisement for Bid and as more particularly described, shown and depicted on the plans, specifications, drawings and in the contract documents.

2.3 Bidding

- 2.3.1 All bids must be made upon the bid proposal forms contained in the Contract documents, shall state the amount bid for each item as shown therein and all blanks shall be properly filled in and bid proposal executed as required.
- 2.3.2 Any bidder may withdraw his or its bid, either personally or by telegraphic or written request (not by facsimile), at any time prior to the scheduled opening time for receipt of bids. Except as provided in Ala. Code §39-2-11(b)(c)(d), no bid may be withdrawn after opening of bids prior to the time of returning bid bonds as provided for herein.
- 2.3.3 Any unauthorized conditions, limitations or provisos attached to the bid proposal, except as otherwise provided herein, will render a bid proposal informal and may cause its rejection. Unbalanced bids may be subject to rejection. **Bids without the General Contractor's license number and a copy of the license will be rejected.**
- 2.3.4 All bids will be opened in public at the time and date specified in the Notice of Advertisement for bids, unless otherwise altered by addendum. All bidders are invited to be present at the opening of bids. No bids will be received after the time established for the opening of bids.
- 2.3.5 All bids are to be enclosed in a sealed envelope addressed to the City of Fairhope, P. O. Drawer 429, Fairhope, Alabama 36533 and/or hand delivered to the Purchasing Manager, 555 S. Section Street, Fairhope, Alabama. All bids are to be marked to indicate clearly the Project to which it applies and include the following language: "Bid Enclosed" and "Attention Purchasing Manager."

2.3.5.1 NOTE: Bidders current General Contractor's license number must be displayed on the bid and the sealed envelope, as well as the bid name and number.

2.4 Responsible, responsive bidders: The City reserves the right to reject any bid that is submitted by a bidder that is determined by the City to not be a responsible bidder or whose bid proposal is not responsive.

2.4.1 In determining whether a bidder or bid is responsible and/or responsive, the City reserves the right to also request and consider the following factors:

2.4.1.1 Types or kinds of materials or items best suited to the City's needs for the Project.

2.4.1.2 A current financial statement of the bidder and/ or bonding capability or limits

2.4.1.3 An accurate inventory of equipment to be used on the Project for a list of key personnel to be used on the Project and detailed histories of their experience.

2.4.1.4 A list of similar work performed by any person, firm, or corporation with the same name as the name or any of the names in the bidder's proposal within the last five (5) years.

2.4.1.5 A list of five (5) references familiar with the bidder's competence, experience, capabilities, skill and integrity.

2.4.1.6 A statement of bidder pertaining to bankruptcies, judgments, liens or litigation within the last five (5) years. Such statement shall also apply to each company, officer and the key personnel on the Project.

2.4.1.7 The General Contractor's State license number and class.

2.4.1.8 Bidder's performance and prosecution of past projects for the City.

2.4.1.9 An unbalanced bid.

2.4.1.10 Other information supplied in the bid proposal.

2.4.1.11 The City may make such investigations as it deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the City all such information and data for this purpose as the City may request. The City reserves the right to reject any Proposal if the evidence submitted by, or investigation of, such Bidder fails to satisfy the City that such Bidder is properly qualified to carry out the obligations of the Contract and complete the work contemplated therein.

2.5 Bid Bonds: Each bidder must submit with its bid, a cashier's check drawn on an Alabama bank, made payable to the City of Fairhope or a fully executed bid bond on the form that is contained in the contract documents, executed by a surety company duly authorized and qualified to make bond in the State of Alabama. All bonds and/or cashier's check will be made payable to the City of Fairhope for an amount not less than five (5%) percent of the City's or its engineers or architects estimated cost of the Project or of the total bid in the proposal, but in no event more than \$10,000.00. The purpose of said bid bond is to insure that the successful bidder will enter into a written contract with the City for the Project on the form included in the contract documents and furnish a performance bond and payment bond executed by a surety company duly authorized and qualified to make such bond in the State of Alabama, in the amount required and provide evidence of insurance as required by the bid documents within time specified or if no time is specified, within thirty (30) days after the forms have been presented to the successful bidder for signature. Provided; however, if extenuating circumstances prevail, the City may grant an extension of time not exceeding five (5) days for the return of the contract bonds and evidence of insurance. The price or cost of all items bid shall remain in effect for a period of fifty (50) days after Notice of Award.

2.6 Return of Bid Bonds: All bid bonds, except those of the three lowest bona fide bidders, will be returned immediately after bids have been checked, tabulated and the relation of the bids established. The bid bonds of the three lowest bidders may be retained and if so will be returned as soon as the contract bonds and the contract documents of the successful bidder have been approved and properly executed.

- 2.6.1 In the event it is necessary to defer a contract award for longer than fifteen (15) days, after opening of bids, then all bid bonds, except that of the potential successful bidders will be returned.
- 2.6.2 Award of the contract will be made within the time specified after the opening of bids. In the event no award is made within such time, all bids may be rejected and all bonds returned.
- 2.6.3 Provided; however, the potentially successful bidder may enter into a written agreement with the City for an extension of time for consideration of its bid, in which case, the bidder's bond shall remain in full force and effect or the City may permit said bidder to substitute a satisfactory surety for the cashier's check if submitted as a guaranty to the bid bond.
- 2.7 **Forfeiture of Bid Bonds:** Should the successful bidder or bidders to whom a contract is awarded fail to execute a contract(s) and furnish acceptable contract securities and evidence of insurance, as required, within thirty (30) days after the prescribed forms have been presented to him/her, the City may retain from the proposal guaranty, if it is a cashier's check or recovered from the principal or the sureties, if the guaranty is a bid bond, the difference between the amount of the contract as awarded, and the amount of the proposals of the new lowest bidder. If no other bids are received, the full amount of the proposal guaranty may be so retained and recovered as liquidated damages for such default. Any sum so retained or recovered shall be the property of the awarding authority.
- 2.8. **Consideration of Bid Proposals:**
 - 2.8.1 Generally: The contract will be awarded to the lowest responsible and responsive bidder, unless the City determines that all the bids are unreasonable or that it is not in the best interest of the City to accept any of the bids.
 - 2.8.1.1 Award of the contract will be made on the basis of the lowest actual bid amount for the contract, which is defined as the total of the bid and/or extended total amounts for unit price items, plus requested and accepted additive or deductive alternates, pursuant to the provisions hereof.
 - 2.8.1.2 The City reserves the right to reject all bids and/or reject and rebid the Project should it determine the same is in the best interest of the City.
 - 2.8.2 Minor irregularities as determined by the City or its representatives, will not cause a bid to be non-responsive and may be waived by the City.
 - 2.8.3 Bidder must possess all licenses and permits required by applicable law, rule or regulation for the performance of the work prior to bidding.
 - 2.8.4 Where the City elects to prequalify contractors prior to bidding, it shall be understood that such requalification may be general in nature and shall not limit the City's right to revoke such prequalification pursuant to Ala. Code §39-2-4(d) (1975).
 - 2.8.5 Joint ventures shall not generally be considered acceptable bids without special waiver from the City, which must be requested in writing at least thirty (30) days prior to bid opening.
 - 2.8.6 Additive and/or Deductive Alternates: If the City has elected to request bids for additive and/or deductive alternates, then the following procedure shall be the basis for calculating such bids:
 - 2.8.6.1 Deductive Alternates: Any deductive alternate from the base bid shall constitute cumulative deductions from the base bid; and in determining the lowest bidder, if the City elects to consider any deductive alternates, the City will proceed to consider the bids upon the basis of the base bids of all qualified bidders minus the respective deduction stated for the first alternate. If the City determines that it wishes to proceed to consider additional deductive alternates, it may do so sequentially and in like manner throughout the deductive alternates the City elects, so that the base bids of all qualified Bidders shall be calculated minus the respective number of deductive alternates in sequence the City has elected to consider. The lowest responsible responsive bid will be the lowest actual base bid of a qualified bidder less the selected sequential deductive alternates.
 - 2.8.6.2 Additive Alternates: To determine additive alternates, any additive alternate shall constitute cumulative additions to the base bid; and in determining the lowest bidder if the City elects to consider any additive

alternates, the City will proceed to consider the bids upon the basis of the base bid of all bidders plus the respective addition stated for the first alternate. If the City determines that it wishes to proceed to consider additional additive alternates it may do so sequentially, and in like manner, throughout the additive alternates, the City elects, so that the base bids of all qualified bidders shall be calculated plus the respective number of additive alternates in sequence the City has elected to consider. The lowest responsible responsive bid will be the lowest actual base bid of a qualified bidder plus the selected sequential additive alternates.

- 2.8.7 Once the City has determined the lowest responsible responsive bidder as set forth herein, then it may award the contract on the basis of accepting and/or rejecting any additive and/or deductive alternates of that bid as it determines is in the best interest of the City.
- 2.8.8 No Bids or Only One Bid: In the event no bid proposals or only one bid proposal is received in response to the City's Advertisement for Bids at the time stated for the opening of bids, the City may elect at its discretion, any of the following options:
 - 2.8.8.1 Advertise for and seek other competitive bids.
 - 2.8.8.2 Direct that the work shall be done by force account under its direction and control.
 - 2.8.8.3 Negotiate for the work through the receipt of informal bids. Provided; however, where only one responsible and responsive bid has been received, any negotiation for the work shall be for a price lower than that bid.
- 2.8.9 An unbalanced bid.
- 2.9 **Materials and Work:** All materials, which the engineering plans specify or are required, will be installed as they are shown on the drawings, plans and/or specs.
 - 2.9.1 Brand names, catalog numbers, weights, etc., are used to indicate levels of quality only and are not intended to restrict the bidding. If bidding on an item of another brand or manufacturer than that specified, bidder's proposal should be accompanied by brochures or other pertinent literature giving detailed specifications of the item(s) on which the proposal is being made. Bids or proposals received without sufficient literature to determine equal quality may not be considered. Final determination as to equal quality will be made by the City.
 - 2.9.2 Quantities: The quantities shown in the proposal shall be considered by the contractor as the quantities required to complete the work for the purpose of bidding. Should the amount equal to the difference of quantities at the unit prices bid for the items will be added to or deducted from the contract total.
 - 2.9.3 Adjustment Items: During the course of work, the prices bid for adjustment items may be used by the City to increase or decrease the total cost for the work if the quantity of work exceeds or is less than the amount shown on plans.
 - 2.9.4 The attention of all bidders is called to the fact that all or a portion of this Project may be federally funded and if so, the special conditions of a federally funded contract including federal labor standard provisions, the minimum wage rates included in the contract documents, plans and specifications must be followed.
 - 2.9.5 Construction Crews: The Contractor will be required to furnish at least one separate construction crew during the work as set forth in the contract. Unless waived by the City, the Contractor shall perform on the sites and with his own organization and equipment, at least fifty percent of the total amount of the work to be performed under this Contract. The Contractor may only subcontract a maximum of fifty (50%) percent of the work without City consent. If, during the progress of the work hereunder, the Contractor requests a reduction of such percentage, and the City representative determines that it would be to the City's advantage, the percentage of the labor required to be performed by the Contractor's own organization may be reduced; PROVIDED prior written approval of such reduction is obtained by the Contractor from the City.

NOTE: Bidders are advised to carefully review all other elements of the Project.

- 2.9.6 In the event the City elects to utilize a Purchasing Agent Appointment agreement in conjunction with this contract, the Contractor will be required to execute such an agreement and perform in accordance therewith.
- 2.10 **Execution of Contract, Notice to Proceed:** Award of the Contract will be made within the time specified after the opening of bids.
- 2.10.1 The bidder to whom award is made shall enter into a written contract for the Project with the City on the forms provided in the contract documents, furnish the required performance and labor and bonds with proper surety and furnish the evidence of insurance as required, all within thirty (30) days of presentation of the prescribed forms to the bidder. If extenuating circumstances prevail, the City may grant an extension of time not exceeding five (5) days or the return of the contract, required bonds and evidence of insurance.
- 2.10.2 Within twenty (20) days after presentation by the bidder to the City, the City shall review the bonds, surety and evidence of insurance to ascertain whether they meet the requirements of the contract documents, and if such requirements have been met the City shall complete the execution of the contract.
- 2.10.3 A **Notice to Proceed** order will be issued by the City or its representatives within fifteen (15) days after final execution of the Contract by the City. **The Contractor shall begin work on the date specified in the Notice to Proceed.**
- 2.11 **Labor, Material and Performance Bonds:** Within thirty (30) days after the prescribed forms have been presented, the successful bidder shall execute a Performance Bond with good and sufficient surety from a company duly authorized and qualified to make such bond in the State of Alabama, a Performance Bond made payable to the City of Fairhope, with a penalty equal to 100 percent of the amount of the contract price and in addition thereto, another bond with good and sufficient surety by a surety company duly authorized and qualified to make such bond in the State of Alabama, payable to the City of Fairhope, in an amount equal to 100 percent of the contract price with an obligation that such contractor shall promptly make payments to all persons supplying it or them with labor, materials or supplies for or in prosecution of the Project provided for in such contract and for the payment of reasonable attorney's fees incurred by any successful claimants or plaintiffs in civil actions on said bond, pursuant to the provisions of Ala. Code §39-1-1 (1975).
- 2.12 **Surety and Insurer Qualifications:** All Certificates of Insurance and Bonds (furnished in connection with the work to be performed under this contract) shall be countersigned by a licensed agent residing and engaged in doing business in the State of Alabama. The surety and insurer shall be licensed and authorized to do business in the State of Alabama. The Surety companies on bonds shall be rated A- or better by A. M. BEST and listed on the United States Treasury Department 570 list.
- 2.13 **Power-of-Authority:** The attorney-in-fact (resident agent) who executes the performance bond and/or payment bond on behalf of the surety must attach a notarized copy of his or her power-of-attorney as evidence of his authority to bind the surety of the date of execution of the bonds. Certification by a resident agent authorized to do business in Alabama is required.
- 2.14 **Insurance:** The successful contractor shall file with the City, **at the time of delivery of the signed Contract**, satisfactory evidence of insurance, the requirements as set forth in the Contract agreement. Satisfactory evidence of insurance shall include at a minimum, the insurer's standard "Certificate of Insurance" (modified pursuant to insurance requirements of the contract agreement) and the agents verification of insurance as required by **Article Five of CONTRACT**. If the City deems that additional evidence or clarification, etc., of insurance is appropriate, the bidder shall promptly furnish the same to the City upon request.
- 2.15 **Examination of Contract Documents and of the Site of the Project:** Before submitting a Bid Proposal for the Project, each bidder shall carefully examine the Contract Documents, including but not limited to plans, drawings, specifications, contract, etc. visit the site, and satisfy itself as to the nature and location of the Project, and the general and local conditions, including weather, the general character of the site or building, the character and extent of existing work within or adjacent to the site, any other work being performed or proposed thereon at the time of submission of their bids. It shall

obtain full knowledge as to transportation, disposal, handling, and storage of materials, availability of water, electric power, and all other facilities in the area which will have a bearing on the performance of the Project for which they submit their proposals. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and visit and has judged for and satisfied himself as to conditions to be encountered regarding the character, difficulties, quality, and quantities of work to be performed and the material and equipment to be furnished, and as to the contract requirements and contingencies involved. It shall be the Bidder's obligation to verify for himself and to his complete satisfaction, all information concerning site and surface conditions.

- 2.16 **Subsurface Reports:** Prior to Bid opening, the City will make available to prospective Bidders, upon request, any information that it may have as to subsurface conditions and surface topography at the work site. Investigations of subsurface conditions were made for the purpose of study and design, and neither the City nor its consultants that performed such testing assume any responsibility whatsoever in respect to the sufficiency or accuracy of borings, or of the logs of test borings, or of other investigations that have been made, or of the interpretations made thereof, and there is no warranty or guarantee, either expressed or implied, that the conditions indicated by such investigations are representative of those existing throughout such area, or any part thereof, or that unforeseen developments may not occur.
- 2.16.1 Logs of test borings, geotechnical reports, or topographic maps showing a record of the data obtained by the investigations of surface and subsurface conditions that are made available shall not be considered a part of the Contract Documents, and are available only for the convenience of the Bidders. Such logs and reports represent only the opinion of the Engineer/Architect or Consultant as to the character of the materials encountered by him in his investigations of the test borings.
- 2.16.2 Information derived from inspection of logs of test borings, or pits, geotechnical reports, topographic maps, or from Drawings showing location of utilities and structures will not in any way relieve the Contractor from any risk, or from properly examining the site and making such additional investigations as he may elect, or from properly fulfilling all the terms of the Contract Documents.
- 2.16.3 The City shall not be responsible for any interpretations or conclusions drawn from any subsurface exploration reports or borings. Each bidder is to base his bid upon his determination of the subsurface conditions and of the types and quantities of material to be encountered or needed. Additional tests or other exploratory operations may be made at no cost to the City.
- 2.17 **Interpretation of Plans and Specifications:** If any bidder contemplating submitting a bid for the proposed contract is in doubt as to the true meaning of any part of plans, specifications, or other proposed contract documents, **he may submit to the Engineer/Architect or Construction Manager, as the case maybe, a written request for an interpretation thereof at least ten (10) days prior to bid opening.** The bidder submitting the request will be responsible for its prompt delivery. Any interpretation of the proposed documents will be made only by written addendum duly issued and a copy of such addendum will be mailed or delivered to each person receiving a set of such documents. The City, Construction Manager or Engineer/Architect will not be responsible for any other explanations or interpretations of the proposed documents.
- 2.18 **General Contractor's Permit or License:** The attention of all bidders is called to the provisions of the State law governing general contractors as set forth in Ala. Code §34-8-1 et seq. (1975), particularly in regard to the need for and evidence of a State general contractor's license. The provisions of said statute are adopted herein by reference and form a part of the Contract with the selected bidder should this Project be awarded.
- 2.18.1 Bidders are reminded that they will be governed by said statutes insofar as they are applicable. To summarize, the above quoted statutes, Ala. Code §34-8-1, et seq. (1975) provides that no one is entitled to bid and no contract may be awarded to anyone who does not possess a valid general contractor's permit or license, including specialty classifications for the work, as provided by the foregoing sections of the State Code, and rules and regulations promulgated pursuant thereto and that said bid may not be considered without evidence being produced that he is so qualified. Trade contractors must be duly licensed in accordance with applicable law. The City may not enter into a contract with a nonresident corporation that is not qualified under the State law to do business in Alabama.

- 2.18.2 Bidder MUST include with his proposal a **State of Alabama Contractor's current license number** and **a copy of the license**. State law, Ala. Code §34-8-8(b) (1975) requires all bids to be rejected which do not contain general contractor's license number
- 2.19 **U. S. Products Preference:** The successful bidder (contractor) shall comply with Ala. Code §39-3-1 (1975), shall agree to utilize in the execution of the Project, materials, supplies and products manufactured, mined, processed or otherwise produced in the United States or its territories, if the same are available at reasonable and competitive prices and not contrary to any sole source specifications. It is further stipulated that a breach of the foregoing provision of this agreement by the contractor in failing to utilize domestic products shall result in a downward adjustment in the contract price equal to any realized savings or benefit to the Contractor.
- 2.20 **Use of Domestic Steel:** The attention of all bidders and that of the successful bidder (contractor) is drawn to Ala. Code §39-3-4 (1975), requiring the use of steel produced within the United States for municipal construction projects when specifications in the construction contract require the use of steel and do not limit its supply to a sole source. This provision is subject to waiver if the procurement of domestic steel products becomes impractical as a result of national emergency, national strike or other causes. Violations of the use of domestic steel requirements shall result in a downward adjustment in the contract price to equal any savings or benefit to the Contractor.
- 2.21 **In State Bidder Preference:** Pursuant to Ala. Code §39-3-5 (1975), in the letting of public contracts in which municipal funds are utilized, except those contracts funded in whole or in part with funds received from a federal agency, preference shall be given to resident contractors, and a nonresident bidder domiciled in a state having laws granting preference to local contractors shall be awarded Alabama public contracts only on the same basis as the nonresident bidders' state awards contracts to Alabama contractors bidding under similar circumstances; and resident contractors in Alabama, as defined in Ala. Code §39-2-12 (1975), be they corporate, individuals or partnerships, are to be granted preference over non-residents in awarding of contracts in the same manner and to the same extent as provided by the laws of the state of the domicile of the nonresident.
- 2.21.1 Nonresident bidders must accompany any written bid documents with a written opinion of an attorney-at-law licensed to practice law in such nonresident bidder's state of domicile, as to the preferences, if any or none, granted by the law of that state to its own business entities whose principal places of business are in that state in the letting of a public contract.
- 2.22 **Applicable Laws:** Each Bidder shall inform himself of, and the Bidder awarded a contract shall comply with federal, state, and local laws, statutes, and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning minimum wage rates, the use of domestic products, U.S. steel and resident labor, non-discrimination in the employment of labor, protection of public and employee safety and health, environmental protection, the protection of natural resources, fire protection, burning and non-burning requirements, permits, fees and similar subjects. Certain statutory requirements are summarized immediately hereinafter. The attention of all bidders is called to the fact that the work will be subject to compliance with all applicable City building and technical codes and will be subject, in addition to all other inspections, to inspection by a representative of the City of Fairhope Building Inspections Department.
- 2.23 **SRF/DWSRF Special Requirements.** If all or any portion of the Project to which this contract applies is funded in whole or in part by the proceeds of a loan or loans from the Alabama Department of Environmental Management (ADEM) through either a **State Revolving Fund for Wastewater or Water (SRF or DWSRF, respectively)**, additional requirements for the Contractor exist (Requirements). These Requirements relate to Project objectives for utilization of Minority Business Enterprises/Women Business Enterprises (MBE/WBE). The Contractor must document efforts made to utilize MBE/WBE firms and submit to ADEM, with a copy to the City within ten (10) days after contract execution, evidence of the positive steps in accordance with the requirements to utilize small minority and women businesses in the procurement of subcontracts. **Not applicable**
- 2.23.1 Other Requirements relate to Federal Labor Standards, Title VI of the Civil Rights Act of 1964, Equal Employment Opportunity, Affirmative Action Equal Opportunity Clause, Goals and Timetables, compliance with Occupational Safety and Health Act of 1970 and Section 107 of Contract Work Hours and Safety Standards Act (PL91-54) which are adopted herein by reference to the extent applicable.

- 2.23.2** For DWSRF and SRF funded projects, special requirements are also set forth in **Supplemental General Conditions**. If not attached to the contract documents, Contractors should contact the City representative and/or the City's Consulting Engineer for a copy of all special requirements and conditions. **Not Applicable**
- 2.24** **Special Conditions for Federally Funded Contracts.** If all or any portion of the Project to which this contract applies is funded in whole or in part by the proceeds of a grant from an agency of the United States Government, additional requirements for the Contractor exist. A summary of these requirements entitled, "Special Conditions for Federally funded Contracts," is attached hereto and made a part hereof. Bidder should contact the Engineer or City Representative to confirm the applicability of these requirements to the Project. **Not Applicable**
- 2.25** **Agent's Verification of Insurance.** A letter equivalent from the Insurance Agent should be submitted with each Contractor's Bid, or in the alternative, Contractor may provide a copy of the insurance policy or policies reflecting the coverages required herein.
- 2.26** **Utilizing Minority Contractors.** Contractors are encouraged to utilize the minority contractor data base to identify eligible minority contractors and subcontractors. Bidders should document its efforts to utilize minority contractors for the project and identify the minority subcontractors that the bidder intends to engage on the project. Bidders attention is called to the requested information related to the use of disadvantaged businesses.
- 2.27** **Compliance with Immigration Law.** By signing this contract, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment or continue to employ an unauthorized alien within the State of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom, to the extent allowed by Federal law.

[END INSTRUCTION TO BIDDER]

City of Fairhope
SCOPE OF WORK AND SPECIFICATIONS

Bid No. 002-21 Drainage Improvements for Oak St and Section St at Big Mouth Gully
Project PW006-20 Drainage Improvements at Oak St and Section St

LOCATION OF WORK:

The proposed project is located along Section Street just south of Oak street and south of Bayou Drive. All the work is within the city limits of the City of Fairhope, Baldwin County, Alabama.

PROJECT PURPOSE:

This purpose of the project is to Improve the drainage flow and erosion. The project will install improvements to increase underground drainage and reduce the erosion of the landscape and hardscape in the area.

PROPOSED WORK:

Drainage Improvements: The City of Fairhope proposes to provide multiple improvements within the City of Fairhope's Central Business District, including but not limited to installation of new drainage inlets on Section Street and replacing the drainage flume with concrete.

GENERAL CONDITIONS, SPECIAL PROVISIONS and SUPPLEMENTAL SPECIFICATIONS

1. **SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION:** The Contractor shall comply with the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (PL-596) and under Section 107 of the Contract Work Hours and Safety Standards Act (PL-91-54).

The contractor alone shall be responsible for the safety, efficiency, and adequacy of his plant, appliances, and methods, and for any damage which may result from their failure or their improper construction, maintenance, or operations.

2. **DEPARTMENT OF TRANSPORTATION SPECIFICATIONS:** It is the intent of the Public Works Director to construct the within described improvements in accordance with the State of Alabama Highway Department Standard Specifications for Highway Construction, most current edition. Said specifications shall be hereafter referred to as the Highway Department Specifications.

All provisions enumerated in the Highway Department Specifications shall be complied with, except as otherwise revised herein. Where certain modifications in said specifications appear in these specifications, only the modifications apply; otherwise, the standard specifications apply.

In said specifications where the words State of Alabama, Governor, State Highway Department, Director, etc., appear, substitute the Owner. Where the word Engineer appears, it shall mean Public Works Director. Where the words Testing Laboratory and/or Laboratory appear, it shall mean the particular Testing Laboratory retained by the Owner for this work.

3. **DEPARTMENT OF TRANSPORTATION DRAWINGS:** Where State of Alabama Department of Transportation Alabama Standard Drawings are applicable for the work required, they shall be considered as part of the plans, and copies of required drawings will be afforded the Contractor for construction purposes.
4. **PROJECT SITE:** The Contractor shall keep the project site clean at all times. No loose dirt, or stockpiles shall be left in areas other than those areas approved by the Public Works Director. The Public Works Director may require the Contractor to clean up any portion of the Project as he deems necessary. Construction & Demolition (C&D) must be cleaned up daily.

5. **MATERIALS:** The Contractor agrees to comply with, and to require the compliance of all subcontractors with the provisions of Act #876 of the Legislature of Alabama, adopted on September 8, 1961, requiring purchase of materials and supplies and products for the project which are manufactured, mined, processed, or otherwise produced in the United States or its territories if the same are available at reasonable prices; and the Contractor further agrees and stipulates to pay to the Owner a sum to be determined and fixed by the Owner in an amount not less than five hundred (\$500.00) dollars nor more than twenty (20%) percent of the gross amount of the Contract in the event he or any subcontractor breach this agreement to use domestic products.
6. **PUBLIC CONVENIENCE:** No attempt is made to restrict work hours of the Contractor's operations, but he is reminded that it will be necessary to arrange his work schedule to provide the least inconvenience to the public and individual residents. The Contractor shall take extra precaution to ensure that traffic is protected by the use of, but not limited to, flashing signs and barrels. No direct payment will be made for any of the work described in this section.
7. **EROSION CONTROL:** Immediately prior to any clearing and grubbing or any excavation which could disturb the soils, the Contractor shall install the erosion control items in locations as required by the nature of the work performed. The provide Erosion Control Plan shall be considered the minimum requirement for the project.

The Contractor will be responsible for identifying and installing erosion control in areas where erosion may be encountered during construction of the project. The Contractor shall take all necessary precautions to ensure that the construction of the project and the erosion/sediment from the project are adequately controlled and do not damage streams or adjacent property.

The erosion control items installed shall be maintained by the Contractor throughout the course of the project. The City of Fairhope's Environmental Programs Manager shall be the final authority for corrective action, remediation, requirement of additional BMP's and all other directives required for erosion/sediment control.

8. **UNDERGROUND UTILITIES AND SERVICES:** Existing utilities, mailboxes, signs, piers, bulkheads and minor obstructions may or may not be shown on the plans. Their presence, and the required removal and the resetting thereof shall be considered incidental to the overall project and the cost for the work noted above shall be included in the overall "unit" prices for the project (no separate payment).
9. The Contractor is solely responsible for the locating all existing Utilities and Services. Failure of the Contractor to locate any utility does not justify additional payment to the Contractor if said utility is damaged. The Contractor must notify the utility companies involved prior to starting construction and shall make every effort not to damage any utilities. If utilities are damaged by the Contractor, the Contractor must pay all expenses incurred in the repair at no cost to the Owner or his representatives.
10. **PROVISIONS REQUIRED BY LAW DEEMED INSERTED:** Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein and the contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the contract shall forthwith be physically amended to make such insertion or correction.
11. **PROTECTION OF LIVES AND HEALTH:** "The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all damages to persons or property, either on or off the site, which occur as a result of his prosecution of the work. The safety provisions of applicable laws and building and construction codes, in addition to specific safety and health regulations described by Chapter XIII, Bureau of Labor Standards, Department of Labor, Part 1518, Safety and Health Regulations for Construction, as outlined in the Federal Register, Volume 36, No. 75, Saturday, April 17, 1971. Title 29 - LABOR, shall be observed and the Contractor shall take or cause to be taken, such additional safety and health measures as the Contracting Authority may determine to be reasonably necessary."
12. **PUBLIC WORKS DIRECTOR'S AUTHORITY:** The Public Works Director shall give all orders and directions contemplated under this contract and specifications, relative to the execution of the work. The Public Works Director shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid for under this contract and shall decide all

questions which may arise in relation to said work and the construction thereof. The Public Works Director's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Public Works Director's shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

The Public Works Director shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute. Any differences or conflicts in regard to their work which may arise between the Contractor under this contract and other Contractors performing work for the Owner shall be adjusted and determined by the Public Works Director.

13. USE OF PREMISES AND REMOVAL OF DEBRIS: The Contractor expressly undertakes at his own expense:

- a. to take every precaution against injuries to persons or damage to property;
- b. to store his apparatus, materials, supplies and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;
- c. to place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work; materials, and debris caused by his operations, to the end that at all times the site of the work shall present a neat, orderly and workmanlike appearance;
- d. before final payment to remove all surplus material, false-work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, and to put the site in a neat, orderly condition;
- e. to affect all cutting, fitting or patching of his work required to make the same to conform to the plans and specifications and, except with the consent of the Public Works Director, not to cut or otherwise alter the work of any other Contractor.
- f. The removal and proper disposal of all construction and demolition (C&D) debris is the contractor's responsibility. The cost of such removal and disposal shall be a subsidiary obligation of the related works unit costs.

14. INSURANCE: The Contractor shall not commence work under this Contract until he has obtained all the insurance required (**see Article Five**) under this specification and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on his subcontract until the insurance required of the subcontractor has been so obtained and approved. In addition to the minimum required Insurance the contractor must provide the following:

- a. Longshoreman endorsement

15. STATE OF ALABAMA GENERAL CONTRACTOR LICENSE: Any proposed bidder for this project must possess and maintain a valid Alabama General Contractor (GC) License to qualify to submit bids in the state of Alabama (Code of Alabama; Section 34- 8-8). The license must be maintained and valid throughout the contract period. The prime contractor may receive bids from unlicensed subcontractors; however, the subcontractor must be licensed before beginning work (Code of Alabama; Section 34-8- 7). A copy of all GC Licenses must be provided by the Pre-Construction Conference.

16. CITY OF FAIRHOPE BUSINESS LICENSE: The Contractor shall not commence work under this contract until he has obtained a City of Fairhope Business License. The license must be maintained and valid throughout the contract period. A copy of the Business License must be provided by the Pre-Construction Conference.

17. MATERIALS, SERVICES AND FACILITIES:

- a. It is understood that except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, supervision, temporary construction of every nature, and all other services and facilities of every nature whatsoever necessary to execute, complete and deliver the work within the specified time.
- b. Any work necessary to be performed after regular working hours, on Sundays or Legal Holidays, shall be performed without additional expense to the Owner.

18. **CONTRACTOR'S TITLE TO MATERIALS:** No materials or supplies for the work shall be purchased by the Contractor or by any Subcontractor subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies used by him in the work, free from all liens, claims or encumbrances.

INSPECTION AND TESTING OF MATERIALS:

- a. All materials and equipment used in the construction of the project shall be subject to adequate inspection and testing in accordance with accepted standards. The laboratory or inspection agency shall be selected by the Owner. The Owner will pay for all laboratory inspection service direct, and not as a part of the Contract.
- b. Materials of construction, particularly those upon which the strength and durability of the structure may depend, shall be subject to inspection and testing to establish conformance with specification and suitability for uses intended.

19. **QUANTITIES AND PAYMENTS:** Quantities provided are best estimates and may vary with field conditions. Contractor should field verify prior to bidding. Payment will be made on actual measured quantities of work/materials preformed. No mobilization/demobilization shall be quantified or separately paid. Mobilization/demobilization shall be a subsidiary obligation of the quoted unit prices in the aggregate. Only two pay requests will be entertained: payment at substantial completion and release of retainage at final acceptance. A 10% retainage will be applied to the project – retainage will be paid at completion of project close out.

20. **CONTRACT TIME:** Contract time for this project shall be from the **Ninety (90) Calendar days** from **Notice to Proceed date**.

21. **MATERIAL SPECIFICATIONS:**

- a. 024119 LF - SELECTIVE DEMOLITION
- b. 033053 FL - MISCELLANEOUS CAST-IN-PLACE CONCRETE
- c. 221413 FL – FACILITY STORM DRAINAGE PIPING
- d. 311000 FL - SITE CLEARING
- e. 312000 FL - EARTH MOVING
- f. 321216 FL - ASPHALT PAVING
- g. 321313 FL - CONCRETE PAVING
- h. 321373 FL - CONCRETE PAVING JOINT SEALANTS
- i. 321400 FL - UNIT PAVING
- j. 321723 FL - PAVEMENT MARKINGS
- k. 321726 FL - TACTILE WARNING SURFACING

SECTION 024119 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Demolition and removal of selected site elements.
2. Salvage of existing items to be reused or recycled.

- B. Related Requirements:

1. Section 311000 "Site Clearing" for site clearing and removal of above- and below-grade improvements not part of selective demolition.

1.3 DEFINITIONS

- A. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- B. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.

1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

1.5 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.
 1. Inspect and discuss condition of construction to be selectively demolished.
 2. Review areas where existing construction is to remain and requires protection.

1.6 FIELD CONDITIONS

- A. Notify Engineer of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- B. Hazardous Materials: It is not expected that hazardous materials will be encountered in the Work.
 - 1. If suspected hazardous materials are encountered, do not disturb; immediately notify Engineer and Owner. Hazardous materials will be removed by Owner under a separate contract.
- C. Storage or sale of removed items or materials on-site is not permitted.
- D. Utility Service: Maintain existing utilities indicated to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.7 WARRANTY

- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during selective demolition, by methods and with materials and using approved contractors so as not to void existing warranties. Notify warrantor before proceeding. Existing warranties include the following:
- B. Notify warrantor on completion of selective demolition, and obtain documentation verifying that existing system has been inspected and warranty remains in effect. Submit documentation at Project closeout.

1.8 COORDINATION

- A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs or video.
 - 1. Inventory and record the condition of items to be removed and salvaged. Provide photographs or video of conditions that might be misconstrued as damage caused by salvage operations.

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.

3.3 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
- B. Temporary Shoring: Design, provide, and maintain shoring, bracing, and structural supports as required to preserve stability and prevent movement, settlement, or collapse of construction and finishes to remain, and to prevent unexpected or uncontrolled movement or collapse of construction being demolished.
 - 1. Strengthen or add new supports when required during progress of selective demolition.
- C. Remove temporary barricades and protections where hazards no longer exist.

3.4 SELECTIVE DEMOLITION, GENERAL

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
- B. Removed and Reinstalled Items:

1. Clean and repair items to functional condition adequate for intended reuse.
 2. Pack or crate items after cleaning and repairing. Identify contents of containers.
 3. Protect items from damage during transport and storage.
 4. Reinstall items in locations indicated. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- C. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Engineer, items may be removed to a suitable, protected storage location during selective demolition and cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.5 SELECTIVE DEMOLITION PROCEDURES FOR SPECIFIC MATERIALS

- A. Concrete: Demolish in small sections. Using power-driven saw, cut concrete to a depth of at least 3/4 inch at junctures with construction to remain. Dislodge concrete from reinforcement at perimeter of areas being demolished, cut reinforcement, and then remove remainder of concrete. Neatly trim openings to dimensions indicated.
- B. Concrete: Demolish in sections. Cut concrete full depth at junctures with construction to remain and at regular intervals using power-driven saw, and then remove concrete between saw cuts.
- C. Masonry: Demolish in small sections. Cut masonry at junctures with construction to remain, using power-driven saw, and then remove masonry between saw cuts.
- D. Concrete Slabs-on-Grade: Saw-cut perimeter of area to be demolished, and then break up and remove.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
1. Do not allow demolished materials to accumulate on-site.
 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn demolished materials.

3.7 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.

END OF SECTION 024119

SECTION 033053 - MISCELLANEOUS CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes cast-in-place concrete, including reinforcement, concrete materials, mixture design, placement procedures, and finishes.
- B. Related Requirements:
 - 1. Section 312000 "Earth Moving" for drainage fill under slabs-on-grade.
 - 2. Section 321313 "Concrete Paving" for concrete pavement and walks.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete mixture.

1.4 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94 requirements for production facilities and equipment.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. Comply with the following sections of ACI 301 unless modified by requirements in the Contract Documents:
 - 1. "General Requirements."
 - 2. "Formwork and Formwork Accessories."
 - 3. "Reinforcement and Reinforcement Supports."
 - 4. "Concrete Mixtures."
 - 5. "Handling, Placing, and Constructing."
 - 6. "Lightweight Concrete."

- B. Comply with ACI 117.

2.2 STEEL REINFORCEMENT

- A. Reinforcing Bars: ASTM A 615, Grade 60, deformed.
- B. Plain-Steel Wire: ASTM A 1064, as drawn.
- C. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064, plain, fabricated from as-drawn steel wire into flat sheets.
- D. Deformed-Steel Welded-Wire Reinforcement: ASTM A 1064, flat sheet.

2.3 CONCRETE MATERIALS

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- B. Cementitious Materials:
 - 1. Portland Cement: ASTM C 150, Type II.
 - 2. Fly Ash: ASTM C 618, Class C or F.
 - 3. Slag Cement: ASTM C 989, Grade 100 or 120.
- C. Normal-Weight Aggregate: ASTM C 33, 1-1/2-inch nominal maximum aggregate size.
- D. Lightweight Aggregate: ASTM C 330, 1-inch nominal maximum aggregate size.
- E. Air-Entraining Admixture: ASTM C 260.
- F. Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and that do not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
 - 1. Water-Reducing Admixture: ASTM C 494, Type A.
 - 2. Retarding Admixture: ASTM C 494, Type B.
 - 3. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
 - 4. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
 - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494, Type G.
 - 6. Plasticizing and Retarding Admixture: ASTM C 1017, Type II.
- G. Water: ASTM C 94.

2.4 RELATED MATERIALS

- A. Vapor Retarder: Plastic sheet, ASTM E 1745, Class A or B.

- B. Vapor Retarder: Polyethylene sheet, ASTM D 4397, not less than 10 mils thick; or plastic sheet, ASTM E 1745, Class C.
- C. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.

2.5 CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.
- B. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth or cotton mats.
- C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- D. Water: Potable.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
- F. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.

2.6 CONCRETE MIXTURES

- A. Comply with ACI 301.
- B. Normal-Weight Concrete:
 - 1. Minimum Compressive Strength: 3000 psi at 28 days.
 - 2. Maximum W/C Ratio: 0.45.
 - 3. Cementitious Materials: Use fly ash, pozzolan, slag cement, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.
 - 4. Slump Limit: 4 inches for concrete with verified slump of 2 to 4 inches before adding high-range water-reducing admixture or plasticizing admixture, plus or minus 1 inch.
 - 5. Air Content: Maintain within range permitted by ACI 301.

2.7 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94 and furnish batch ticket information.
 - 1. When air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94. Mix concrete materials in appropriate drum-type batch machine mixer.
 - 1. For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.

2. For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mix type, mix time, quantity, and amount of water added. Record approximate location of final deposit in structure.

PART 3 - EXECUTION

3.1 FORMWORK INSTALLATION

- A. Design, construct, erect, brace, and maintain formwork according to ACI 301.

3.2 EMBEDDED ITEM INSTALLATION

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

3.3 VAPOR-RETARDER INSTALLATION

- A. Install, protect, and repair vapor retarders according to ASTM E 1643; place sheets in position with longest dimension parallel with direction of pour.
 1. Lap joints 6 inches and seal with manufacturer's recommended adhesive or joint tape.

3.4 STEEL REINFORCEMENT INSTALLATION

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

3.5 JOINTS

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Engineer.
- C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness, as follows:

1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover marks on concrete surfaces.
 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch-wide joints into concrete when cutting action does not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.
- D. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface unless otherwise indicated.

3.6 CONCRETE PLACEMENT

- A. Comply with ACI 301 for placing concrete.
- B. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.
- C. Do not add water to concrete during delivery, at Project site, or during placement.
- D. Consolidate concrete with mechanical vibrating equipment according to ACI 301.

3.7 FINISHING FORMED SURFACES

- A. Rubbed Finish: Apply the following rubbed finish, defined in ACI 301, to smooth-formed-finished as-cast concrete where indicated:
 1. Smooth-rubbed finish.
 2. Grout-cleaned finish.
 3. Cork-floated finish.
- B. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.8 FINISHING UNFORMED SURFACES

- A. General: Comply with ACI 302.1R for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Screed surfaces with a straightedge and strike off. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane before excess moisture or bleedwater appears on surface.

1. Do not further disturb surfaces before starting finishing operations.
- C. Scratch Finish: Apply scratch finish to surfaces indicated and surfaces to receive concrete floor topping or mortar setting beds for ceramic or quarry tile, portland cement terrazzo, and other bonded cementitious floor finishes unless otherwise indicated.
- D. Float Finish: Apply float finish to surfaces indicated, to surfaces to receive trowel finish, and to floor and slab surfaces to be covered with fluid-applied or sheet waterproofing, fluid-applied or direct-to-deck-applied membrane roofing, or sand-bed terrazzo.
- E. Trowel Finish: Apply a hard trowel finish to surfaces indicated and to floor and slab surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin film-finish coating system.
- F. Trowel and Fine-Broom Finish: Apply a partial trowel finish, stopping after second troweling, to surfaces indicated and to surfaces where ceramic or quarry tile is to be installed by either thickset or thinset methods. Immediately after second troweling, and when concrete is still plastic, slightly scarify surface with a fine broom.
- G. Slip-Resistive Broom Finish: Apply a slip-resistive finish to surfaces indicated and to exterior concrete platforms, steps, and ramps. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiber-bristle broom perpendicular to main traffic route.

3.9 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with ACI 301 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- D. Curing Methods: Cure formed and unformed concrete for at least seven days by one or a combination of the following methods:
 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at

least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period, using cover material and waterproof tape.

3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.10 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Tests: Perform according to ACI 301.
 1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
 2. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.

END OF SECTION 033053

SECTION 221413 - FACILITY STORM DRAINAGE PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Pipe, tube, and fittings.
 - 2. Specialty pipe fittings.
 - 3. Encasement for underground metal piping.

1.3 PERFORMANCE REQUIREMENTS

- A. Components and installation shall be capable of withstanding the following minimum working pressure unless otherwise indicated:
 - 1. Storm Drainage Piping: 10-foot head of water.

1.4 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Piping materials shall bear label, stamp, or other markings of specified testing agency.
- B. Comply with NSF/ANSI 14, "Plastics Piping System Components and Related Materials," for plastic piping components. Include marking with "NSF-drain" for plastic drain piping and "NSF-sewer" for plastic sewer piping.

1.6 PROJECT CONDITIONS

- A. Interruption of Existing Storm-Drainage Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary service according to requirements indicated:
 - 1. Notify Owner no fewer than two days in advance of proposed interruption of storm-drainage service.

2. Do not proceed with interruption of storm-drainage service without Owner's written permission.

PART 2 - PRODUCTS

2.1 PIPING MATERIALS

- A. Comply with requirements in "Piping Schedule" Article for applications of pipe, tube, fitting materials, and joining methods for specific services, service locations, and pipe sizes.

PART 3 - EXECUTION

3.1 EARTH MOVING

- A. Comply with requirements for excavating, trenching, and backfilling specified in Section 312000 "Earth Moving."

3.2 PIPING INSTALLATION

- A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations from layout are approved on coordination drawings.
- B. Install piping at indicated slopes.
- C. Install piping free of sags and bends.
- D. Install fittings for changes in direction and branch connections.
- E. Lay buried building storm drainage piping beginning at low point of each system. Install true to grades and alignment indicated, with unbroken continuity of invert. Place hub ends of piping upstream. Install required gaskets according to manufacturer's written instructions for use of lubricants, cements, and other installation requirements. Maintain swab in piping and pull past each joint as completed.
- F. Do not enclose, cover, or put piping into operation until it is inspected and approved by authorities having jurisdiction.

3.3 JOINT CONSTRUCTION

- A. Grooved Joints: Cut groove ends of pipe according to AWWA C606. Lubricate and install gasket over ends of pipes or pipe and fittings. Install coupling housing sections, over gasket, with keys seated in piping grooves.

3.4 FIELD QUALITY CONTROL

- A. During installation, notify authorities having jurisdiction at least 24 hours before inspection must be made. Perform tests specified below in presence of authorities having jurisdiction.
 - 1. Roughing-in Inspection: Arrange for inspection of piping before concealing or closing-in after roughing-in.
 - 2. Final Inspection: Arrange for final inspection by authorities having jurisdiction to observe tests specified below and to ensure compliance with requirements.
- B. Reinspection: If authorities having jurisdiction find that piping will not pass test or inspection, make required corrections and arrange for reinspection.
- C. Reports: Prepare inspection reports and have them signed by authorities having jurisdiction.

3.5 CLEANING

- A. Clean interior of piping. Remove dirt and debris as work progresses.
- B. Protect drains during remainder of construction period to avoid clogging with dirt and debris and to prevent damage from traffic and construction work.
- C. Place plugs in ends of uncompleted piping at end of day and when work stops.

END OF SECTION 221413

SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Protecting existing vegetation to remain.
 - 2. Removing existing vegetation.
 - 3. Clearing and grubbing.
 - 4. Stripping and stockpiling topsoil.
 - 5. Stripping and stockpiling rock.
 - 6. Removing above- and below-grade site improvements.
 - 7. Temporary erosion and sedimentation control.

1.3 DEFINITIONS

- A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction and indicated on Drawings.
- D. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated on Drawings.
- E. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

SECTION 221413 - FACILITY STORM DRAINAGE PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Pipe, tube, and fittings.
 - 2. Specialty pipe fittings.
 - 3. Encasement for underground metal piping.

1.3 PERFORMANCE REQUIREMENTS

- A. Components and installation shall be capable of withstanding the following minimum working pressure unless otherwise indicated:
 - 1. Storm Drainage Piping: 10-foot head of water.

1.4 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Piping materials shall bear label, stamp, or other markings of specified testing agency.
- B. Comply with NSF/ANSI 14, "Plastics Piping System Components and Related Materials," for plastic piping components. Include marking with "NSF-drain" for plastic drain piping and "NSF-sewer" for plastic sewer piping.

1.6 PROJECT CONDITIONS

- A. Interruption of Existing Storm-Drainage Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary service according to requirements indicated:
 - 1. Notify Owner no fewer than two days in advance of proposed interruption of storm-drainage service.

2. Do not proceed with interruption of storm-drainage service without Owner's written permission.

PART 2 - PRODUCTS

2.1 PIPING MATERIALS

- A. Comply with requirements in "Piping Schedule" Article for applications of pipe, tube, fitting materials, and joining methods for specific services, service locations, and pipe sizes.

PART 3 - EXECUTION

3.1 EARTH MOVING

- A. Comply with requirements for excavating, trenching, and backfilling specified in Section 312000 "Earth Moving."

3.2 PIPING INSTALLATION

- A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicated locations and arrangements were used to size pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations from layout are approved on coordination drawings.
- B. Install piping at indicated slopes.
- C. Install piping free of sags and bends.
- D. Install fittings for changes in direction and branch connections.
- E. Lay buried building storm drainage piping beginning at low point of each system. Install true to grades and alignment indicated, with unbroken continuity of invert. Place hub ends of piping upstream. Install required gaskets according to manufacturer's written instructions for use of lubricants, cements, and other installation requirements. Maintain swab in piping and pull past each joint as completed.
- F. Do not enclose, cover, or put piping into operation until it is inspected and approved by authorities having jurisdiction.

3.3 JOINT CONSTRUCTION

- A. Grooved Joints: Cut groove ends of pipe according to AWWA C606. Lubricate and install gasket over ends of pipes or pipe and fittings. Install coupling housing sections, over gasket, with keys seated in piping grooves.

3.4 FIELD QUALITY CONTROL

- A. During installation, notify authorities having jurisdiction at least 24 hours before inspection must be made. Perform tests specified below in presence of authorities having jurisdiction.
 - 1. Roughing-in Inspection: Arrange for inspection of piping before concealing or closing-in after roughing-in.
 - 2. Final Inspection: Arrange for final inspection by authorities having jurisdiction to observe tests specified below and to ensure compliance with requirements.
- B. Reinspection: If authorities having jurisdiction find that piping will not pass test or inspection, make required corrections and arrange for reinspection.
- C. Reports: Prepare inspection reports and have them signed by authorities having jurisdiction.

3.5 CLEANING

- A. Clean interior of piping. Remove dirt and debris as work progresses.
- B. Protect drains during remainder of construction period to avoid clogging with dirt and debris and to prevent damage from traffic and construction work.
- C. Place plugs in ends of uncompleted piping at end of day and when work stops.

END OF SECTION 221413

1.5 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.6 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Use sufficiently detailed photographs or video recordings.
 - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plant designated to remain.
- B. Burning: Burning will not be permitted.

1.7 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing site clearing indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
 - 1. Do not proceed with work on adjoining property until directed by Engineer.
- C. Utility Locator Service: Notify One Call for area where Project is located before site clearing.
- D. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.
- E. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 312000 "Earth Moving."
 - 1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Verify that trees, shrubs, and other vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- C. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.

3.3 EXISTING UTILITIES

- A. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others, unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Engineer not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Engineer's written permission.

3.4 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.

1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.
2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

3.5 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials, and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION 311000

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Excavating and filling for rough grading the Site.
 - 2. Preparing subgrades for slabs-on-grade walks pavements turf and grasses and plants.
 - 3. Subbase course for concrete walks pavements.
 - 4. Subbase course and base course for asphalt paving.

1.3 DEFINITIONS

- A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.
- C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
- D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
- E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.
- F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
 - 1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices changes in the Work.
 - 2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Engineer. Unauthorized excavation, as well as remedial work directed by Engineer, shall be without additional compensation.

- G. Fill: Soil materials used to raise existing grades.
- H. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.
- I. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- J. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct preexcavation conference at Project site.
 - 1. Review methods and procedures related to earthmoving, including, but not limited to, the following:
 - a. Personnel and equipment needed to make progress and avoid delays.
 - b. Coordination of Work with utility locator service.
 - c. Coordination of Work and equipment movement with the locations of tree- and plant-protection zones.
 - d. Extent of trenching by hand or with air spade.
 - e. Field quality control.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of the following manufactured products required:
 - 1. Geotextiles.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified testing agency.
- B. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill as follows:
 - 1. Classification according to ASTM D 2487.
 - 2. Laboratory compaction curve according to ASTM D 698.
- C. Preexcavation Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces that might be misconstrued as damage caused by earth-moving operations. Submit before earth moving begins.

1.7 QUALITY ASSURANCE

- A. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.

1.8 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth-moving operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Improvements on Adjoining Property: Authority for performing earth moving indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
 - 1. Do not proceed with work on adjoining property until directed by Engineer.
- C. Utility Locator Service: Notify "One Call" for area where Project is located before beginning earth-moving operations.
- D. Do not commence earth-moving operations until temporary site fencing and erosion- and sedimentation-control measures specified in are in place.
- E. Do not commence earth-moving operations until plant-protection measures specified in Section 015639 "Temporary Tree and Plant Protection" are in place.
- F. The following practices are prohibited within protection zones:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Foot traffic.
 - 4. Erection of sheds or structures.
 - 5. Impoundment of water.
 - 6. Excavation or other digging unless otherwise indicated.
 - 7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
- G. Do not direct vehicle or equipment exhaust towards protection zones.
- H. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
 - 1. Liquid Limit: 20 maximum.
 - 2. Plasticity Index: 10 maximum.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.
 - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 294; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Drainage Course: Narrowly graded mixture of washed crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.
- I. Filter Material: Narrowly graded mixture of natural or crushed gravel, or crushed stone and natural sand; ASTM D 448; coarse-aggregate grading Size 67; with 100 percent passing a 1-inch sieve and zero to 5 percent passing a No. 4 sieve.
- J. Sand: ASTM C 33; fine aggregate.

2.2 GEOTEXTILES

- A. Subsurface Drainage Geotextile: Nonwoven needle-punched geotextile, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater

than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:

1. Survivability: Class 2; AASHTO M 288.
2. Survivability: As follows:
 - a. Grab Tensile Strength: 157 lbf; ASTM D 4632.
 - b. Sewn Seam Strength: 142 lbf; ASTM D 4632.
 - c. Tear Strength: 56 lbf; ASTM D 4533.
 - d. Puncture Strength: 56 lbf; ASTM D 4833.
3. Apparent Opening Size: No. 40 sieve, maximum; ASTM D 4751.
4. Permittivity: 0.5 per second, minimum; ASTM D 4491.
5. UV Stability: 50 percent after 500 hours' exposure; ASTM D 4355.

B. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:

1. Survivability: Class 2; AASHTO M 288.
2. Survivability: As follows:
 - a. Grab Tensile Strength: 247 lbf; ASTM D 4632.
 - b. Sewn Seam Strength: 222 lbf; ASTM D 4632.
 - c. Tear Strength: 90 lbf ; ASTM D 4533.
 - d. Puncture Strength: 90 lbf; ASTM D 4833.
3. Apparent Opening Size: No. 60 sieve, maximum; ASTM D 4751.
4. Permittivity: 0.02 per second, minimum; ASTM D 4491.
5. UV Stability: 50 percent after 500 hours' exposure; ASTM D 4355.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

3.3 EXPLOSIVES

- A. Explosives: Do not use explosives.

3.4 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.
- B. Classified Excavation: Excavate to subgrade elevations. Material to be excavated will be classified as earth.
 - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; and soil, boulders, and other materials not classified as rock or unauthorized excavation.
- C. Excavations at Edges of Tree- and Plant-Protection Zones:
 - 1. Excavate by hand or with an air spade to indicated lines, cross sections, elevations, and subgrades. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.

3.5 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.6 SUBGRADE INSPECTION

- A. Notify Engineer when excavations have reached required subgrade.
- B. If Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.

- C. Proof-roll subgrade and pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
 - 2. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Engineer, and replace with compacted backfill or fill as directed.
- D. Authorized additional excavation and replacement material will be paid for according to Contract provisions for unit prices.
- E. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Engineer, without additional compensation.

3.7 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
 - 1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
 - 2. Surveying locations of underground utilities for Record Documents.
 - 3. Testing and inspecting underground utilities.
 - 4. Removing concrete formwork.
 - 5. Removing trash and debris.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

3.8 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 - 1. Under grass and planted areas, use satisfactory soil material.
 - 2. Under walks and pavements, use engineered fill.
 - 3. Under steps and ramps, use engineered fill.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

3.9 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.

2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.10 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
 1. Under pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 98 percent.
 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 98 percent.
 3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.
 4. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

3.11 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 1. Provide a smooth transition between adjacent existing grades and new grades.
 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
 1. Turf or Unpaved Areas: Plus or minus 1 inch.
 2. Walks: Plus or minus 1 inch.
 3. Pavements: Plus or minus 1/2 inch.

3.12 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

- A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:

1. Install separation geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
 2. Place base course material over subbase course under hot-mix asphalt pavement.
 3. Shape subbase course and base course to required crown elevations and cross-slope grades.
 4. Place subbase course and base course 6 inches or less in compacted thickness in a single layer.
 5. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 6. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.
- C. Pavement Shoulders: Place shoulders along edges of subbase course and base course to prevent lateral movement. Construct shoulders, at least 12 inches wide, of satisfactory soil materials and compact simultaneously with each subbase and base layer to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.13 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE

- A. Place drainage course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:
1. Install subdrainage geotextile on prepared subgrade according to manufacturer's written instructions, overlapping sides and ends.
 2. Place drainage course 6 inches or less in compacted thickness in a single layer.
 3. Place drainage course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 4. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.14 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
1. Determine prior to placement of fill that site has been prepared in compliance with requirements.
 2. Determine that fill material classification and maximum lift thickness comply with requirements.
 3. Determine, during placement and compaction, that in-place density of compacted fill complies with requirements.
- B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2937, and ASTM D 6938, as applicable. Tests will be performed at the following locations and frequencies:
 - 1. Paved Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 2000 sq. ft. or less of paved area or building slab but in no case fewer than three tests.
- E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.15 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
 - 1. Scarify or remove and replace soil material to depth as directed by Engineer; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.16 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.
- B. Transport surplus satisfactory soil to designated storage areas on Owner's property. Stockpile or spread soil as directed by Engineer.
 - 1. Remove waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 312000

SECTION 321216 - ASPHALT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

- 1. Cold milling of existing asphalt pavement.
 - 2. Hot-mix asphalt patching.
 - 3. Hot-mix asphalt paving.
 - 4. Hot-mix asphalt overlay.
 - 5. Asphalt surface treatments.

- B. Related Requirements:

- 1. Section 312000 "Earth Moving" for subgrade preparation, fill material, unbound-aggregate subbase and base courses, and aggregate pavement shoulders.
 - 2. Section 321373 "Concrete Paving Joint Sealants" for joint sealants and fillers at pavement terminations.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

- 1. Review methods and procedures related to hot-mix asphalt paving including, but not limited to, the following:
 - a. Review proposed sources of paving materials, including capabilities and location of plant that will manufacture hot-mix asphalt.
 - b. Review requirements for protecting paving work, including restriction of traffic during installation period and for remainder of construction period.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- 1. Include technical data and tested physical and performance properties.
 - 2. Job-Mix Designs: Certification, by authorities having jurisdiction, of approval of each job mix proposed for the Work.
 - 3. Job-Mix Designs: For each job mix proposed for the Work.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer and testing agency.
- B. Material Certificates: For each paving material. Include statement that mixes containing recycled materials will perform equal to mixes produced from all new materials.
- C. Material Test Reports: For each paving material, by a qualified testing agency.
- D. Field quality-control reports.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by ALDOT.
- B. Testing Agency Qualifications: Qualified according to ASTM D 3666 for testing indicated.
- C. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of ALDOT for asphalt paving work.
 - 1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

1.7 FIELD CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
 - 1. Prime Coat: Minimum surface temperature of 60 deg F.
 - 2. Tack Coat: Minimum surface temperature of 60 deg F.
 - 3. Slurry Coat: Comply with weather limitations in ASTM D 3910.
 - 4. Asphalt Base Course: Minimum surface temperature of 40 deg F and rising at time of placement.
 - 5. Asphalt Surface Course: Minimum surface temperature of 60 deg F at time of placement.

PART 2 - PRODUCTS

2.1 AGGREGATES

- A. General: Use materials and gradations that have performed satisfactorily in previous installations.
- B. Coarse Aggregate: ASTM D 692, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.

- C. Fine Aggregate: ASTM D 1073, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.
 - 1. For hot-mix asphalt, limit natural sand to a maximum of 20 percent by weight of the total aggregate mass.
- D. Mineral Filler: ASTM D 242, rock or slag dust, hydraulic cement, or other inert material.

2.2 ASPHALT MATERIALS

- A. Asphalt Binder: AASHTO M 320, PG 64-22.
- B. Asphalt Cement: ASTM D 3381 for viscosity-graded material ASTM D 946 for penetration-graded material.
- C. Cutback Prime Coat: ASTM D 2027, medium-curing cutback asphalt, MC-30.
- D. Emulsified Asphalt Prime Coat: ASTM D 977 emulsified asphalt, or cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.
- E. Tack Coat: ASTM D 977 emulsified asphalt, or ASTM D 2397 cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.
- F. Fog Seal: ASTM D 977 emulsified asphalt, or ASTM D 2397 cationic emulsified asphalt, slow setting, factory diluted in water, of suitable grade and consistency for application.
- G. Water: Potable.
- H. Undersealing Asphalt: ASTM D 3141; pumping consistency.

2.3 AUXILIARY MATERIALS

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that subgrade is dry and in suitable condition to begin paving.
- B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
 - 2. Proof roll with a loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons.
 - 3. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Engineer, and replace with compacted backfill or fill as directed.

- C. Proceed with paving only after unsatisfactory conditions have been corrected.

3.2 PATCHING

- A. Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompress existing unbound-aggregate base course to form new subgrade.
- B. Portland Cement Concrete Pavement: Break cracked slabs and roll as required to reseat concrete pieces firmly.
 - 1. Pump hot undersealing asphalt under rocking slab until slab is stabilized or, if necessary, crack slab into pieces and roll to reseat pieces firmly.
 - 2. Remove disintegrated or badly cracked pavement. Excavate rectangular or trapezoidal patches, extending into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Recompress existing unbound-aggregate base course to form new subgrade.
- C. Tack Coat: Before placing patch material, apply tack coat uniformly to vertical asphalt surfaces abutting the patch. Apply at a rate of 0.05 to 0.15 gal./sq. yd.
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- D. Placing Patch Material: Fill excavated pavement areas with hot-mix asphalt base mix for full thickness of patch and, while still hot, compact flush with adjacent surface.
- E. Placing Patch Material: Partially fill excavated pavements with hot-mix asphalt base mix and, while still hot, compact. Cover asphalt base course with compacted, hot-mix surface layer finished flush with adjacent surfaces.

3.3 REPAIRS

- A. Leveling Course: Install and compact leveling course consisting of hot-mix asphalt surface course to level sags and fill depressions deeper than 1 inch in existing pavements.
 - 1. Install leveling wedges in compacted lifts not exceeding 3 inches thick.
- B. Crack and Joint Filling: Remove existing joint filler material from cracks or joints to a depth of 1/4 inch.
 - 1. Clean cracks and joints in existing hot-mix asphalt pavement.
 - 2. Use emulsified-asphalt slurry to seal cracks and joints less than 1/4 inch wide. Fill flush with surface of existing pavement and remove excess.
 - 3. Use hot-applied joint sealant to seal cracks and joints more than 1/4 inch wide. Fill flush with surface of existing pavement and remove excess.

3.4 SURFACE PREPARATION

- A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.
- B. Herbicide Treatment: Apply herbicide according to manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted-aggregate base before applying paving materials.
 - 1. Mix herbicide with prime coat if formulated by manufacturer for that purpose.
- C. Cutback Prime Coat: Apply uniformly over surface of compacted unbound-aggregate base course at a rate of 0.15 to 0.50 gal./sq. yd. Apply enough material to penetrate and seal, but not flood, surface. Allow prime coat to cure.
 - 1. If prime coat is not entirely absorbed within 24 hours after application, spread sand over surface to blot excess asphalt. Use enough sand to prevent pickup under traffic. Remove loose sand by sweeping before pavement is placed and after volatiles have evaporated.
 - 2. Protect primed substrate from damage until ready to receive paving.
- D. Emulsified Asphalt Prime Coat: Apply uniformly over surface of compacted unbound-aggregate base course at a rate of 0.10 to 0.30 gal./sq. yd. per inch depth. Apply enough material to penetrate and seal, but not flood, surface. Allow prime coat to cure.
 - 1. If prime coat is not entirely absorbed within 24 hours after application, spread sand over surface to blot excess asphalt. Use enough sand to prevent pickup under traffic. Remove loose sand by sweeping before pavement is placed and after volatiles have evaporated.
 - 2. Protect primed substrate from damage until ready to receive paving.
- E. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd.
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.5 PLACING HOT-MIX ASPHALT

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
 - 1. Place hot-mix asphalt base course in number of lifts and thicknesses indicated.
 - 2. Place hot-mix asphalt surface course in single lift.
 - 3. Spread mix at a minimum temperature of 250 deg F.
 - 4. Begin applying mix along centerline of crown for crowned sections and on high side of one-way slopes unless otherwise indicated.
 - 5. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

- B. Place paving in consecutive strips not less than 10 feet wide unless infill edge strips of a lesser width are required.
 - 1. After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Overlap mix placement about 1 to 1-1/2 inches from strip to strip to ensure proper compaction of mix along longitudinal joints.
 - 2. Complete a section of asphalt base course before placing asphalt surface course.
- C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

3.6 COMPACTION

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.
 - 1. Complete compaction before mix temperature cools to 185 deg F.
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
 - 1. Average Density: 96 percent of reference laboratory density according to ASTM D 6927, but not less than 94 percent or greater than 100 percent.
 - 2. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent or greater than 96 percent.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Repairs: Remove paved areas that are defective or contaminated with foreign materials and replace with fresh, hot-mix asphalt. Compact by rolling to specified density and surface smoothness.
- G. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- H. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.7 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:
 - 1. Base Course: Plus or minus 1/2 inch.
 - 2. Surface Course: Plus 1/4 inch, no minus.
- B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
 - 1. Base Course: 1/4 inch.
 - 2. Surface Course: 1/8 inch.
 - 3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

3.8 SURFACE TREATMENTS

- A. Fog Seals: Apply fog seal at a rate of 0.10 to 0.15 gal./sq. yd. to existing asphalt pavement and allow to cure. With fine sand, lightly dust areas receiving excess fog seal.
- B. Slurry Seals: Apply slurry coat in a uniform thickness according to ASTM D 3910 and allow to cure.
 - 1. Roll slurry seal to remove ridges and provide a uniform, smooth surface.

3.9 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Thickness: In-place compacted thickness of hot-mix asphalt courses will be determined according to ASTM D 3549.
- C. Surface Smoothness: Finished surface of each hot-mix asphalt course will be tested for compliance with smoothness tolerances.
- D. Asphalt Traffic-Calming Devices: Finished height of traffic-calming devices above pavement will be measured for compliance with tolerances.
- E. In-Place Density: Testing agency will take samples of uncompacted paving mixtures and compacted pavement according to ASTM D 979.
 - 1. Reference maximum theoretical density will be determined by averaging results from four samples of hot-mix asphalt-paving mixture delivered daily to site, prepared according to ASTM D 2041, and compacted according to job-mix specifications.
 - 2. In-place density of compacted pavement will be determined by testing core samples according to ASTM D 1188 or ASTM D 2726.

- a. One core sample will be taken for every 1000 sq. yd. or less of installed pavement, with no fewer than three cores taken.
 - b. Field density of in-place compacted pavement may also be determined by nuclear method according to ASTM D 2950 and correlated with ASTM D 1188 or ASTM D 2726.
- F. Replace and compact hot-mix asphalt where core tests were taken.
- G. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

END OF SECTION 321216

SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes Concrete Paving Including the Following:
 - 1. Curbs and gutters.
 - 2. Walks.
- B. Related Requirements:
 - 1. Section 033053 "Miscellaneous Cast-in-Place Concrete" for general building applications of concrete.
 - 2. Section 321373 "Concrete Paving Joint Sealants" for joint sealants in expansion and contraction joints within concrete paving and in joints between concrete paving and asphalt paving or adjacent construction.
 - 3. Section 321723 "Pavement Markings."
 - 4. Section 321726 "Tactile Warning Surfacing" for detectable warning mats.

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash, slag cement, and other pozzolans.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to concrete paving, including but not limited to, the following:
 - a. Concrete mixture design.
 - b. Quality control of concrete materials and concrete paving construction practices.
 - 2. Require representatives of each entity directly concerned with concrete paving to attend, including the following:

- a. Contractor's superintendent.
- b. Independent testing agency responsible for concrete design mixtures.
- c. Ready-mix concrete manufacturer.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified Installer of stamped detectable warnings ready-mix concrete manufacturer and testing agency.
- B. Material Certificates: For the following, from manufacturer:
 - 1. Cementitious materials.
 - 2. Steel reinforcement and reinforcement accessories.
 - 3. Fiber reinforcement.
 - 4. Admixtures.
 - 5. Curing compounds.
 - 6. Applied finish materials.
 - 7. Bonding agent or epoxy adhesive.
 - 8. Joint fillers.
- C. Material Test Reports: For each of the following:
 - 1. Aggregates: Include service-record data indicating absence of deleterious expansion of concrete due to alkali-aggregate reactivity.
- D. Field quality-control reports.

1.7 QUALITY ASSURANCE

- A. Stamped Detectable Warning Installer Qualifications: An employer of workers trained and approved by manufacturer of stamped concrete paving systems.
- B. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
 - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").

- C. Testing Agency Qualifications: Qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
 - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.

1.8 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified independent testing agency to perform preconstruction testing on concrete paving mixtures.

1.9 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Cold-Weather Concrete Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:
 - 1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 - 2. Do not use frozen materials or materials containing ice or snow.
 - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.
- C. Hot-Weather Concrete Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
 - 1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Cover steel reinforcement with water-soaked burlap, so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 - 3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS

2.1 CONCRETE, GENERAL

- A. ACI Publications: Comply with ACI 301 unless otherwise indicated.

2.2 FORMS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
- B. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

2.3 STEEL REINFORCEMENT

- A. Deformed-Steel Welded-Wire Reinforcement: ASTM A 1064, flat sheet.
- B. Epoxy-Coated Welded-Wire Reinforcement: ASTM A 884, Class A, plain steel.
- C. Reinforcing Bars: ASTM A 615, Grade 60; deformed.
- D. Epoxy-Coated Reinforcing Bars: ASTM A 775 or ASTM A 934; with ASTM A 615, Grade 60 deformed bars.
- E. Steel Bar Mats: ASTM A 184; with ASTM A 615, Grade 60 deformed bars; assembled with clips.
- F. Plain-Steel Wire: ASTM A 1064, as drawn.
- G. Deformed-Steel Wire: ASTM A 1064.
- H. Joint Dowel Bars: ASTM A 615, Grade 60 plain-steel bars; zinc coated (galvanized) after fabrication according to ASTM A 767, Class I coating. Cut bars true to length with ends square and free of burrs.
- I. Epoxy-Coated, Joint Dowel Bars: ASTM A 775; with ASTM A 615, Grade 60 plain-steel bars.
- J. Tie Bars: ASTM A 615, Grade 60; deformed.
- K. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded-wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified, and as follows:
 - 1. Equip wire bar supports with sand plates or horizontal runners where base material will not support chair legs.
 - 2. For epoxy-coated reinforcement, use epoxy-coated or other dielectric-polymer-coated wire bar supports.
- L. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating, compatible with epoxy coating on reinforcement.
- M. Zinc Repair Material: ASTM A 780.

2.4 CONCRETE MATERIALS

- A. Cementitious Materials: Use the following cementitious materials, of same type, brand, and source throughout Project:
 - 1. Portland Cement: ASTM C 150, portland cement Type II.
 - 2. Fly Ash: ASTM C 618, Class C.
 - 3. Slag Cement: ASTM C 989, Grade 100 or 120.
- B. Normal-Weight Aggregates: ASTM C 33, uniformly graded. Provide aggregates from a single source with documented service-record data of at least 10 years' satisfactory service in similar paving applications and service conditions using similar aggregates and cementitious materials.
 - 1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
 - 2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
- C. Air-Entraining Admixture: ASTM C 260.
- D. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.
 - 1. Water-Reducing Admixture: ASTM C 494, Type A.
 - 2. Retarding Admixture: ASTM C 494, Type B.
 - 3. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
 - 4. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
 - 5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494, Type G.
 - 6. Plasticizing and Retarding Admixture: ASTM C 1017, Type II.
- E. Water: Potable and complying with ASTM C 94.

2.5 CURING MATERIALS

- A. Absorptive Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry.
- B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- C. Water: Potable.
- D. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete.
- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
- F. White, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B, dissipating.

2.6 RELATED MATERIALS

- A. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber in preformed strips.
- B. Slip-Resistive Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of fused aluminum-oxide granules or crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials.
- C. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.
- D. Epoxy-Bonding Adhesive: ASTM C 881, two-component epoxy resin capable of humid curing and bonding to damp surfaces; of class suitable for application temperature, of grade complying with requirements, and of the following types:
 - 1. Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete.
- E. Chemical Surface Retarder: Water-soluble, liquid, set retarder with color dye, for horizontal concrete surface application, capable of temporarily delaying final hardening of concrete to a depth of 1/8 to 1/4 inch.

2.7 STAMPED DETECTABLE WARNING MATERIALS

- A. Detectable Warning Stamp: Semirigid polyurethane mats with formed underside capable of imprinting detectable warning pattern on plastic concrete; perforated with a vent hole at each dome.
 - 1. Size of Stamp: One piece, matching detectable warning area shown on Drawings.
- B. Liquid Release Agent: Manufacturer's standard, clear, evaporating formulation designed to facilitate release of stamp mats.

2.8 CONCRETE MIXTURES

- A. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience.
 - 1. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method.
 - 2. When automatic machine placement is used, determine design mixtures and obtain laboratory test results that comply with or exceed requirements.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement in concrete as follows:
 - 1. Fly Ash or Pozzolan: 25 percent.
 - 2. Slag Cement: 50 percent.

3. Combined Fly Ash or Pozzolan, and Slag Cement: 50 percent, with fly ash or pozzolan not exceeding 25 percent.
- C. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows:
 1. Air Content: 5 percent plus or minus 1-1/2 percent for 3/4-inch nominal maximum aggregate size.
- D. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.
- E. Chemical Admixtures: Use admixtures according to manufacturer's written instructions.
 1. Use high-range, water-reducing admixture in concrete as required for placement and workability.
 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
- F. Concrete Mixtures: Normal-weight concrete.
 1. Compressive Strength (28 Days): 3000 psi.
 2. Maximum W/C Ratio at Point of Placement: 0.45.
 3. Slump Limit: 4 inches, plus or minus 1 inch.

2.9 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94 and ASTM C 1116. Furnish batch certificates for each batch discharged and used in the Work.
 1. When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.
 1. For concrete batches of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
 2. For concrete batches larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
 3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixing time, quantity, and amount of water added.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine exposed subgrades and subbase surfaces for compliance with requirements for dimensional, grading, and elevation tolerances.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT INSTALLATION

- A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials.
- C. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. Maintain minimum cover to reinforcement.
- D. Install welded-wire reinforcement in lengths as long as practicable. Lap adjoining pieces at least one full mesh, and lace splices with wire. Offset laps of adjoining widths to prevent continuous laps in either direction.
- E. Zinc-Coated Reinforcement: Use galvanized-steel wire ties to fasten zinc-coated reinforcement. Repair cut and damaged zinc coatings with zinc repair material.
- F. Epoxy-Coated Reinforcement: Use epoxy-coated steel wire ties to fasten epoxy-coated reinforcement. Repair cut and damaged epoxy coatings with epoxy repair coating according to ASTM D 3963.
- G. Install fabricated bar mats in lengths as long as practicable. Handle units to keep them flat and free of distortions. Straighten bends, kinks, and other irregularities, or replace units as required before placement. Set mats for a minimum 2-inch overlap of adjacent mats.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
 - 1. When joining existing paving, place transverse joints to align with previously placed joints unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
 - 1. Continue steel reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of paving strips unless otherwise indicated.
 - 2. Provide tie bars at sides of paving strips where indicated.
 - 3. Butt Joints: Use bonding agent at joint locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
 - 4. Keyed Joints: Provide preformed keyway-section forms or bulkhead forms with keys unless otherwise indicated. Embed keys at least 1-1/2 inches into concrete.
 - 5. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
 - 1. Locate expansion joints at intervals of 50 feet unless otherwise indicated.
 - 2. Extend joint fillers full width and depth of joint.
 - 3. Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated.
 - 4. Place top of joint filler flush with finished concrete surface if joint sealant is not indicated.
 - 5. Furnish joint fillers in one-piece lengths. Where more than one length is required, lace or clip joint-filler sections together.
 - 6. During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. Remove protective cap after concrete has been placed on both sides of joint.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness, as follows, to match jointing of existing adjacent concrete paving:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. Repeat grooving of contraction joints after applying surface finishes.
 - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before developing random contraction cracks.

3. Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or coat with asphalt one-half of dowel length to prevent concrete bonding to one side of joint.
- E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 1/4-inch radius. Repeat tooling of edges after applying surface finishes.

3.6 CONCRETE PLACEMENT

- A. Before placing concrete, inspect and complete formwork installation, steel reinforcement and items to be embedded or cast-in.
- B. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. Do not place concrete on frozen surfaces.
- C. Moisten subbase to provide a uniform dampened condition at time concrete is placed. Do not place concrete around manholes or other structures until they are at required finish elevation and alignment.
- D. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.
- E. Do not add water to concrete during delivery or at Project site. Do not add water to fresh concrete after testing.
- F. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.
- G. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping.
 1. Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. Keep vibrator away from joint assemblies, reinforcement, or side forms. Use only square-faced shovels for hand spreading and consolidation. Consolidate with care to prevent dislocating reinforcement.
- H. Screed paving surface with a straightedge and strike off.
- I. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleedwater appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.
- J. Curbs and Gutters: Use design mixture for automatic machine placement. Produce curbs and gutters to required cross section, lines, grades, finish, and jointing.
- K. Slip-Form Paving: Use design mixture for automatic machine placement. Produce paving to required thickness, lines, grades, finish, and jointing.
 1. Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations.

3.7 FLOAT FINISHING

- A. General: Do not add water to concrete surfaces during finishing operations.
- B. Float Finish: Begin the second floating operation when bleedwater sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.
 - 1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
 - 2. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface, perpendicular to line of traffic, to provide a uniform, fine-line texture.
 - 3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

3.8 DETECTABLE WARNING INSTALLATION

- A. Blockouts: Form blockouts in concrete for installation of detectable paving units specified in Section 321726 "Tactile Warning Surfacing."
 - 1. Tolerance for Opening Size: Plus 1/4 inch, no minus.
- B. Cast-in-Place Detectable Warning Tiles: Form blockouts in concrete for installation of tiles specified in Section 321726 "Tactile Warning Surfacing." Screed surface of concrete where tiles are to be installed to elevation, so that edges of installed tiles will be flush with surrounding concrete paving. Embed tiles in fresh concrete to comply with Section 321726 "Tactile Warning Surfacing" immediately after screeding concrete surface.

3.9 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with ACI 306.1 for cold-weather protection.
- C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete but before float finishing.
- D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
- E. Curing Methods: Cure concrete by moisture curing moisture-retaining-cover curing curing compound or a combination of these as follows:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Water.
 - b. Continuous water-fog spray.
 - c. Absorptive cover, water saturated and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Immediately repair any holes or tears occurring during installation or curing period, using cover material and waterproof tape.
3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating, and repair damage during curing period.

3.10 PAVING TOLERANCES

A. Comply with tolerances in ACI 117 and as follows:

1. Elevation: 3/4 inch.
2. Thickness: Plus 3/8 inch, minus 1/4 inch.
3. Surface: Gap below 10-feet-long; unleveled straightedge not to exceed 1/2 inch.
4. Alignment of Tie-Bar End Relative to Line Perpendicular to Paving Edge: 1/2 inch per 12 inches of tie bar.
5. Lateral Alignment and Spacing of Dowels: 1 inch.
6. Vertical Alignment of Dowels: 1/4 inch.
7. Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel.
8. Joint Spacing: 3 inches.
9. Contraction Joint Depth: Plus 1/4 inch, no minus.
10. Joint Width: Plus 1/8 inch, no minus.

3.11 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- B. Testing Services: Testing and inspecting of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
1. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.

2. Slump: ASTM C 143; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
 3. Air Content: ASTM C 231, pressure method; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
 4. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 deg F and below and when it is 80 deg F and above, and one test for each composite sample.
 5. Compression Test Specimens: ASTM C 31; cast and laboratory cure one set of three standard cylinder specimens for each composite sample.
 6. Compressive-Strength Tests: ASTM C 39; test one specimen at seven days and two specimens at 28 days.
 - a. A compressive-strength test shall be the average compressive strength from two specimens obtained from same composite sample and tested at 28 days.
- C. Strength of each concrete mixture will be satisfactory if average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
- D. Test results shall be reported in writing to Engineer, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
- E. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Engineer but will not be used as sole basis for approval or rejection of concrete.
- F. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Engineer.
- G. Concrete paving will be considered defective if it does not pass tests and inspections.
- H. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
- I. Prepare test and inspection reports.

3.12 REPAIR AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Engineer.
- B. Drill test cores, where directed by Engineer, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.

- C. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- D. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 321313

SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Cold-applied joint sealants.
2. Hot-applied joint sealants.
3. Cold-applied, fuel-resistant joint sealants.
4. Hot-applied, fuel-resistant joint sealants.
5. Joint-sealant backer materials.
6. Primers.

- B. Related Requirements:

1. Section 079200 "Joint Sealants" for sealing nontraffic and traffic joints in locations not specified in this Section.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Verification: For each kind and color of joint sealant required, provide Samples with joint sealants in 1/2-inch-wide joints formed between two 6-inch-long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.
- C. Paving-Joint-Sealant Schedule: Include the following information:
 1. Joint-sealant application, joint location, and designation.
 2. Joint-sealant manufacturer and product name.
 3. Joint-sealant formulation.
 4. Joint-sealant color.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Product Certificates: For each type of joint sealant and accessory.

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.
- B. Product Testing: Test joint sealants using a qualified testing agency.

1.7 FIELD CONDITIONS

- A. Do not proceed with installation of joint sealants under the following conditions:
 - 1. When ambient and substrate temperature conditions are outside limits permitted by joint-sealant manufacturer or are below 40 deg F.
 - 2. When joint substrates are wet.
 - 3. Where joint widths are less than those allowed by joint-sealant manufacturer for applications indicated.
 - 4. Where contaminants capable of interfering with adhesion have not yet been removed from joint substrates.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Compatibility: Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer, based on testing and field experience.

2.2 COLD-APPLIED JOINT SEALANTS

- A. Single-Component, Nonsag, Silicone Joint Sealant: ASTM D 5893, Type NS.
- B. Single-Component, Self-Leveling, Silicone Joint Sealant: ASTM D 5893, Type SL.
- C. Multicomponent, Nonsag, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type M, Grade NS, Class 25, for Use T.
- D. Single Component, Pourable, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type S, Grade P, Class 25, for Use T.

- E. Multicomponent, Pourable, Urethane, Elastomeric Joint Sealant: ASTM C 920, Type M, Grade P, Class 25, for Use T.

2.3 HOT-APPLIED JOINT SEALANTS

- A. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I.
- B. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I or Type II.
- C. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type I, II, or III.
- D. Hot-Applied, Single-Component Joint Sealant: ASTM D 6690, Type IV.

2.4 COLD-APPLIED, FUEL-RESISTANT JOINT SEALANTS

- A. Fuel-Resistant, Single-Component, Pourable, Modified-Urethane, Elastomeric Joint Sealant: ASTM C 920, Type S, Grade P, Class 25, for Use T.
- B. Fuel-Resistant, Multicomponent, Pourable, Modified-Urethane, Elastomeric Joint Sealant: ASTM C 920, Type M, Grade P, Class 12-1/2 or 25, for Use T.

2.5 HOT-APPLIED, FUEL-RESISTANT JOINT SEALANTS

- A. Hot-Applied, Fuel-Resistant, Single-Component Joint Sealants: ASTM D 7116, Type I or Type II.
- B. Hot-Applied, Fuel-Resistant, Single-Component Joint Sealants: ASTM D 7116, Type III.

2.6 JOINT-SEALANT BACKER MATERIALS

- A. Joint-Sealant Backer Materials: Nonstaining; compatible with joint substrates, sealants, primers, and other joint fillers; and approved for applications indicated by joint-sealant manufacturer, based on field experience and laboratory testing.
- B. Round Backer Rods for Cold- and Hot-Applied Joint Sealants: ASTM D 5249, Type 1, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.
- C. Round Backer Rods for Cold-Applied Joint Sealants: ASTM D 5249, Type 3, of diameter and density required to control joint-sealant depth and prevent bottom-side adhesion of sealant.
- D. Backer Strips for Cold- and Hot-Applied Joint Sealants: ASTM D 5249; Type 2; of thickness and width required to control joint-sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

2.7 PRIMERS

- A. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine joints to receive joint sealants, with Installer present, for compliance with requirements for joint configuration, installation tolerances, and other conditions affecting joint-sealant performance.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Surface Cleaning of Joints: Before installing joint sealants, clean out joints immediately to comply with joint-sealant manufacturer's written instructions.
 - 1. Remove all foreign material from joint substrates that could interfere with adhesion of joint sealant, including dust, old joint sealants, oil, grease, waterproofing, water repellents, water, surface dirt, and frost.
- B. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

3.3 INSTALLATION OF JOINT SEALANTS

- A. Comply with joint-sealant manufacturer's written installation instructions for products and applications indicated unless more stringent requirements apply.
- B. Joint-Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions.
- C. Install joint-sealant backings to support joint sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.
 - 1. Do not leave gaps between ends of joint-sealant backings.
 - 2. Do not stretch, twist, puncture, or tear joint-sealant backings.
 - 3. Remove absorbent joint-sealant backings that have become wet before sealant application and replace them with dry materials.

- D. Install joint sealants immediately following backing installation, using proven techniques that comply with the following:
 - 1. Place joint sealants so they fully contact joint substrates.
 - 2. Completely fill recesses in each joint configuration.
 - 3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.
- E. Tooling of Nonsag Joint Sealants: Immediately after joint-sealant application and before skinning or curing begins, tool sealants according to the following requirements to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint:
 - 1. Remove excess joint sealant from surfaces adjacent to joints.
 - 2. Use tooling agents that are approved in writing by joint-sealant manufacturer and that do not discolor sealants or adjacent surfaces.
- F. Provide joint configuration to comply with joint-sealant manufacturer's written instructions unless otherwise indicated.

3.4 CLEANING AND PROTECTION

- A. Clean off excess joint sealant as the Work progresses, by methods and with cleaning materials approved in writing by joint-sealant manufacturers.
- B. Protect joint sealants, during and after curing period, from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately and replace with joint sealant so installations in repaired areas are indistinguishable from the original work.

3.5 PAVING-JOINT-SEALANT SCHEDULE

- A. Joint-Sealant Application: Joints within concrete paving.
 - 1. Joint Location:
 - a. Expansion and isolation joints in concrete paving.
 - b. Contraction joints in concrete paving.
 - c. Other joints as indicated.
 - 2. Joint Sealant: Single-component, self-leveling, silicone joint sealant.
- B. Joint-Sealant Application: Joints within concrete paving and between concrete and asphalt paving.
 - 1. Joint Location:
 - a. Joints between concrete and asphalt paving.

- b. Joints between concrete curbs and asphalt paving.
 - c. Other joints as indicated.
 - 2. Joint Sealant: Hot-applied, single-component joint sealant.
 - 3. Joint-Sealant Color: Manufacturer's standard
- C. Joint-Sealant Application: Fuel-resistant joints within concrete paving.
 - 1. Joint Location:
 - a. Expansion and isolation joints in concrete paving.
 - b. Contraction joints in concrete paving.
 - c. Other joints as indicated.
 - 2. Joint Sealant: Fuel-resistant, single-component, pourable, modified-urethane, elastomeric joint sealant.
 - 3. Joint-Sealant Color: Manufacturer's standard.

END OF SECTION 321373

SECTION 321400 - UNIT PAVING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Brick pavers set in aggregate setting beds.
2. Concrete pavers set in aggregate setting beds.
3. Asphalt-block pavers set in bituminous setting beds.
4. Stone pavers set in aggregate setting beds.
5. Cast-in-place concrete edge restraints.
6. Precast concrete curbs.

- B. Related Requirements:

1. Section 321313 "Concrete Paving" for concrete base under unit pavers and for cast-in-place concrete curbs and gutters serving as edge restraints for unit pavers.
2. Section 321443 "Porous Unit Paving" for unit paving using grid pavers or pavers with openings between them.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For materials other than water and aggregates.
- B. Product Data: For the following:
 1. Pavers.
 2. Mortar and grout materials.
 3. Edge restraints.
 4. Precast concrete curbs.
- C. Sieve Analyses: For aggregate setting-bed materials, according to ASTM C 136.
- D. Samples for Initial Selection: For each type of unit paver indicated.

1.5 INFORMATIONAL SUBMITTALS

- A. Adhesion and Compatibility Test Reports: From latex-additive manufacturer for mortar and grout containing latex additives.
- B. Material Certificates: For unit pavers. Include statements of material properties indicating compliance with requirements, including compliance with standards. Provide for each type and size of unit.
- C. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for unit pavers, indicating compliance with requirements.
 - 1. For solid interlocking paving units, include test data for freezing and thawing according to ASTM C 67.

1.6 QUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 - 1. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Adhesion and Compatibility Testing: Submit to latex-additive manufacturer, for testing as indicated below, Samples of flooring materials that will contact or affect mortar and grout that contain latex additives.
 - 1. Use manufacturer's standard test methods to determine whether mortar and grout materials will obtain optimal adhesion with, and will be nonstaining to, installed brick and other materials constituting brick flooring installation.

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Store pavers on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied.
- B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.
- C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.
- D. Store liquids in tightly closed containers protected from freezing.
- E. Store asphalt cement and other bituminous materials in tightly closed containers.

1.9 FIELD CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.
- B. Weather Limitations for Bituminous Setting Bed:
 - 1. Install bituminous setting bed only when ambient temperature is above 40 deg F and when base is dry.
 - 2. Apply asphalt adhesive only when ambient temperature is above 50 deg F and when temperature has not been below 35 deg F for 12 hours immediately before application. Do not apply when setting bed is wet or contains excess moisture.
- C. Weather Limitations for Mortar and Grout:
 - 1. Cold-Weather Requirements: Comply with cold-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.
 - 2. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6. Provide artificial shade and windbreaks and use cooled materials as required. Do not apply mortar to substrates with temperatures of 100 deg F and higher.
 - a. When ambient temperature exceeds 100 deg F, or when wind velocity exceeds 8 mph and ambient temperature exceeds 90 deg F, set pavers within 1 minute of spreading setting-bed mortar.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Source Limitations: Obtain each type of unit paver, joint material, and setting material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

2.2 BRICK PAVERS

- A. Brick Pavers: Light-traffic paving brick; ASTM C 902, Class SX, Application. Provide brick without frogs or cores in surfaces exposed to view in the completed Work.
 - 1. Thickness: As indicated.
 - 2. Face Size: As indicated.
 - 3. Color: Fairhope Red.
- B. Brick Pavers: Heavy vehicular paving brick; ASTM C 1272. Provide brick without frogs or cores in surfaces exposed to view in the completed Work.
 - 1. Thickness: As indicated.
 - 2. Face Size: As indicated.
 - 3. Color: Fairhope Red.

- C. Efflorescence: Brick shall be rated "not effloresced" when tested according to ASTM C 67.
- D. Temporary Protective Coating: Precoat exposed surfaces of brick pavers with a continuous film of a temporary protective coating that is compatible with brick, mortar, and grout products and can be removed without damaging grout or brick. Do not coat unexposed brick surfaces; handle brick to prevent coated surfaces from contacting backs or edges of other units. If, despite these precautions, coating does contact bonding surfaces of brick, remove coating from bonding surfaces before setting brick.

2.3 CONCRETE PAVERS

- A. Concrete Pavers: Solid paving units made from normal-weight concrete with a compressive strength not less than 5000 psi, water absorption not more than 5 percent according to ASTM C 140, and no breakage and not more than 1 percent mass loss when tested for freeze-thaw resistance according to ASTM C 67.
 - 1. Thickness: As Indicated.
 - 2. Face Size and Shape: As Indicated.
 - 3. Color: As Indicated.

2.4 STONE PAVERS

- A. Granite Pavers: Rectangular paving slabs made from granite complying with ASTM C 615/C 615M.
 - 1. Color and Grain: Light gray with fine grain.
 - 2. Finish: As indicated.
 - 3. Match Engineer's samples for color, finish, and other stone characteristics relating to aesthetic effects.
 - 4. Thickness: Not less than 80 mm unless otherwise indicated.
 - 5. Face Size: As indicated.

2.5 CURBS AND EDGE RESTRAINTS

- A. Job-Built Concrete Edge Restraints: Comply with requirements in Section 033000 "Cast-in-Place Concrete" for normal-weight, air-entrained, ready-mixed concrete with minimum 28-day compressive strength of 3000 psi.

2.6 ACCESSORIES

- A. Cork Joint Filler: Preformed strips complying with ASTM D 1752, Type II.
- B. Compressible Foam Filler: Preformed strips complying with ASTM D 1056, Grade 2A1.

2.7 AGGREGATE SETTING-BED MATERIALS

- A. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C 33 for fine aggregate.

- B. Stone Screenings for Leveling Course: Sound stone screenings complying with ASTM D 448 for Size No. 10.
- C. Sand for Joints: Fine, sharp, washed, natural sand or crushed stone with 100 percent passing No. 16 sieve and no more than 10 percent passing No. 200 sieve.
 - 1. Provide sand of color needed to produce required joint color.
- D. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications; made from polyolefins or polyesters, with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 - 1. Survivability: Class 2, AASHTO M 288.
 - 2. Apparent Opening Size: No. 60 sieve, maximum; ASTM D 4751.
 - 3. Permittivity: 0.02 per second, minimum; ASTM D 4491.
 - 4. UV Stability: 50 percent after 500 hours' exposure, ASTM D 4355.
- E. Drainage Geotextile: Nonwoven needle-punched geotextile fabric, manufactured for subsurface drainage applications, made from polyolefins or polyesters; with elongation greater than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
 - 1. Survivability: Class 2, AASHTO M 288.
 - 2. Apparent Opening Size: No. 40 sieve, maximum; ASTM D 4751.
 - 3. Permittivity: 0.5 per second, minimum; ASTM D 4491.
 - 4. UV Stability: 50 percent after 500 hours' exposure, ASTM D 4355.
- F. Herbicide: Commercial chemical for weed control, registered with the EPA. Provide in granular, liquid, or wettable powder form.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Where unit paving is to be installed over waterproofing, examine waterproofing installation, with waterproofing Installer present, for protection from paving operations, including areas where waterproofing system is turned up or flashed against vertical surfaces.
- C. Proceed with installation only after unsatisfactory conditions have been corrected and waterproofing protection is in place.

3.2 PREPARATION

- A. Remove substances from concrete substrates that could impair mortar bond, including curing and sealing compounds, form oil, and laitance.

- B. Sweep concrete substrates to remove dirt, dust, debris, and loose particles.
- C. Proof-roll prepared subgrade according to requirements in Section 312000 "Earth Moving" to identify soft pockets and areas of excess yielding. Proceed with unit paver installation only after deficient subgrades have been corrected and are ready to receive subbase course for unit pavers.

3.3 INSTALLATION, GENERAL

- A. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.
- B. Mix pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
- C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.
 - 1. For concrete pavers, a block splitter may be used.
- D. Handle protective-coated brick pavers to prevent coated surfaces from contacting backs or edges of other units. If, despite these precautions, coating does contact bonding surfaces of brick, remove coating from bonding surfaces before setting brick.
- E. Joint Pattern: As indicated.
- F. Pavers over Waterproofing: Exercise care in placing pavers and setting materials over waterproofing so protection materials are not displaced and waterproofing is not punctured or otherwise damaged. Carefully replace protection materials that become displaced and arrange for repair of damaged waterproofing before covering with paving.
 - 1. Provide joint filler at waterproofing that is turned up on vertical surfaces unless otherwise indicated; where unfilled joints are indicated, provide temporary filler or protection until paver installation is complete.
- G. Tolerances: Do not exceed 1/32-inch unit-to-unit offset from flush (lippage) or 1/8 inch in 10 feet from level, or indicated slope, for finished surface of paving.
- H. Tolerances: Do not exceed 1/16-inch unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches and 1/4 inch in 10 feet from level, or indicated slope, for finished surface of paving.
- I. Expansion and Control Joints: Provide for sealant-filled joints at locations and of widths indicated. Provide compressible foam filler as backing for sealant-filled joints unless otherwise indicated; where unfilled joints are indicated, provide temporary filler until paver installation is complete. Install joint filler before setting pavers. Sealant materials and installation are specified in Section 079200 "Joint Sealants."
- J. Expansion and Control Joints: Provide cork joint filler at locations and of widths indicated. Install joint filler before setting pavers. Make top of joint filler flush with top of pavers.
- K. Provide edge restraints as indicated. Install edge restraints before placing unit pavers.

1. Install edge restraints to comply with manufacturer's written instructions. Install stakes at intervals required to hold edge restraints in place during and after unit paver installation.
 2. For metal edge restraints with top edge exposed, drive stakes at least 1 inch below top edge.
 3. Install job-built concrete edge restraints to comply with requirements in Section 033000 "Cast-in-Place Concrete."
 4. Where pavers set in mortar bed are indicated as edge restraints for pavers set in aggregate setting bed, install pavers set in mortar and allow mortar to cure before placing aggregate setting bed and remainder of pavers. Cut off mortar bed at a steep angle so it will not interfere with aggregate setting bed.
 5. Where pavers embedded in concrete are indicated as edge restraints for pavers set in aggregate setting bed, install pavers embedded in concrete and allow concrete to cure before placing aggregate setting bed and remainder of pavers. Hold top of concrete below aggregate setting bed.
- L. Provide steps made of pavers as indicated. Install paver steps before installing adjacent pavers.
1. Where pavers set in mortar bed are indicated for steps constructed adjacent to pavers set in aggregate setting bed, install steps and allow mortar to cure before placing aggregate setting bed and remainder of pavers. Cut off mortar bed at a steep angle so it will not interfere with aggregate setting bed.

3.4 AGGREGATE SETTING-BED APPLICATIONS

- A. Compact soil subgrade uniformly to at least 95 percent of ASTM D 698 laboratory density.
- B. Proof-roll prepared subgrade to identify soft pockets and areas of excess yielding. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Engineer, and replace with compacted backfill or fill as directed.
- C. Place separation geotextile over prepared subgrade, overlapping ends and edges at least 12 inches.
- D. Place aggregate subbase and base, compact by tamping with plate vibrator, and screed to depth indicated.
- E. Place aggregate subbase and base, compact to 100 percent of ASTM D 1557 maximum laboratory density, and screed to depth indicated.
- F. Place drainage geotextile over compacted base course, overlapping ends and edges at least 12 inches.
- G. Place leveling course and screed to a thickness of 1 to 1-1/2 inches, taking care that moisture content remains constant and density is loose and uniform until pavers are set and compacted.
- H. Treat leveling course with herbicide to inhibit growth of grass and weeds.
- I. Set pavers with a minimum joint width of 1/16 inch and a maximum of 1/8 inch, being careful not to disturb leveling base. If pavers have spacer bars, place pavers hand tight against spacer

bars. Use string lines to keep straight lines. Fill gaps between units that exceed 3/8 inch with pieces cut to fit from full-size unit pavers.

1. When installation is performed with mechanical equipment, use only unit pavers with spacer bars on sides of each unit.
- J. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000-lbf compaction force at 80 to 90 Hz. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.
1. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches of uncompacted pavers adjacent to temporary edges.
 2. Before ending each day's work, compact installed concrete pavers except for 36-inch width of uncompacted pavers adjacent to temporary edges (laying faces).
 3. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches of laying face.
 4. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with nonstaining plastic sheets to protect them from rain.
- K. Spread dry sand and fill joints immediately after vibrating pavers into leveling course. Vibrate pavers and add sand until joints are completely filled, then remove excess sand. Leave a slight surplus of sand on the surface for joint filling.
- L. Do not allow traffic on installed pavers until sand has been vibrated into joints.
- M. Repeat joint-filling process 30 days later.

3.5 BITUMINOUS SETTING-BED APPLICATIONS

- A. Apply primer to concrete slab or binder course immediately before placing setting bed.
- B. Prepare for setting-bed placement by locating 3/4-inch-deep control bars approximately 11 feet apart and parallel to one another, to serve as guides for striking board. Adjust bars to subgrades required for accurate setting of paving units to finished grades indicated.
- C. Place bituminous setting bed where indicated, in panels, by spreading bituminous material between control bars. Spread mix at a minimum temperature of 250 deg F. Strike setting bed smooth, firm, even, and not less than 3/4 inch thick. Add fresh bituminous material to low, porous spots after each pass of striking board. After each panel is completed, advance first control bar to next position in readiness for striking adjacent panels. Carefully fill depressions that remain after removing depth-control bars.
 1. Roll setting bed with power roller to a nominal depth of 3/4 inch. Adjust thickness as necessary to allow accurate setting of unit pavers to finished grades indicated. Complete rolling before mix temperature cools to 185 deg F.

- D. Apply neoprene-modified asphalt adhesive to cold setting bed by squeegeeing or troweling to a uniform thickness of 1/16 inch. Proceed with setting of paving units only after adhesive is tacky and surface is dry to touch.
- E. Place pavers carefully by hand in straight courses, maintaining accurate alignment and uniform top surface. Protect newly laid pavers with plywood panels on which workers can stand. Advance protective panels as work progresses, but maintain protection in areas subject to continued movement of materials and equipment to avoid creating depressions or disrupting alignment of pavers. If additional leveling of paving is required, and before treating joints, roll paving with power roller after sufficient heat has built up in the surface from several days of hot weather.
- F. Joint Treatment: Place unit pavers with hand-tight joints. Fill joints by sweeping sand over paved surface until joints are filled. Remove excess sand after joints are filled.

3.6 MORTAR SETTING-BED APPLICATIONS

- A. Saturate concrete subbase with clean water several hours before placing setting bed. Remove surface water about one hour before placing setting bed.
- B. Apply mortar-bed bond coat over surface of concrete subbase about 15 minutes before placing mortar bed. Do not exceed 1/16-inch thickness for bond coat. Limit area of bond coat to avoid its drying out before placing setting bed.
- C. Apply mortar bed over bond coat; spread and screed mortar bed to uniform thickness at subgrade elevations required for accurate setting of pavers to finished grades indicated.
- D. Place reinforcing wire over concrete subbase, lapped at joints by at least one full mesh and supported so mesh becomes embedded in the middle of mortar bed. Hold edges back from vertical surfaces approximately 1/2 inch.
- E. Place mortar bed with reinforcing wire fully embedded in middle of mortar bed. Spread and screed mortar bed to uniform thickness at subgrade elevations required for accurate setting of pavers to finished grades indicated.
- F. Mix and place only that amount of mortar bed that can be covered with pavers before initial set. Before placing pavers, cut back, bevel edge, and remove and discard setting-bed material that has reached initial set.
- G. Wet brick pavers before laying if the initial rate of absorption exceeds 30 g/30 sq. in. per minute when tested according to ASTM C 67. Allow units to absorb water so they are damp but not wet at time of laying.
- H. Place pavers before initial set of cement occurs. Immediately before placing pavers on mortar bed, apply uniform 1/16-inch-thick bond coat to mortar bed or to back of each paver with a flat trowel.
- I. Tamp or beat pavers with a wooden block or rubber mallet to obtain full contact with setting bed and to bring finished surfaces within indicated tolerances. Set each paver in a single

operation before initial set of mortar; do not return to areas already set or disturb pavers for purposes of realigning finished surfaces or adjusting joints.

- J. Spaced Joint Widths: Provide 3/8-inch nominal joint width with variations not exceeding plus or minus 1/8 inch.
- K. Grouted Joints: Grout paver joints complying with ANSI A108.10.
- L. Grout joints as soon as possible after initial set of setting bed.
 - 1. Force grout into joints, taking care not to smear grout on adjoining surfaces.
 - 2. Clean pavers as grouting progresses by dry brushing or rubbing with dry burlap to remove smears before tooling joints.
 - 3. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
 - 4. If tooling squeezes grout from joints, remove excess grout and smears by dry brushing or rubbing with dry burlap and tool joints again to produce a uniform appearance.
- M. Cure grout by maintaining in a damp condition for seven days unless otherwise recommended by grout or liquid-latex manufacturer.

3.7 REPAIRING, POINTING, AND CLEANING

- A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.
- B. Pointing: During tooling of joints, enlarge voids or holes and completely fill with grout. Point joints at sealant joints to provide a neat, uniform appearance, properly prepared for sealant application.
- C. Cleaning: Remove excess grout from exposed paver surfaces; wash and scrub clean.
 - 1. Remove temporary protective coating as recommended by coating manufacturer and as acceptable to paver and grout manufacturers.
 - 2. Do not allow protective coating to enter floor drains. Trap, collect, and remove coating material.

END OF SECTION 321400

SECTION 321723 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes painted markings applied to asphalt and concrete pavement.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - 1. Review methods and procedures related to marking pavement including, but not limited to, the following:
 - a. Pavement aging period before application of pavement markings.
 - b. Review requirements for protecting pavement markings, including restriction of traffic during installation period.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include technical data and tested physical and performance properties.
- B. Shop Drawings: For pavement markings.
 - 1. Indicate pavement markings, colors, lane separations, defined parking spaces, and dimensions to adjacent work.
 - 2. Indicate, with international symbol of accessibility, spaces allocated for people with disabilities.

1.5 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of ALDOT for pavement-marking work.
 - 1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

1.6 FIELD CONDITIONS

- A. Environmental Limitations: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 deg F for alkyd materials 55 deg F for water-based materials, and not exceeding 95 deg F.

PART 2 - PRODUCTS

2.1 PAVEMENT-MARKING PAINT

- A. Pavement-Marking Paint: Alkyd-resin type, lead and chromate free, ready mixed, complying with AASHTO M 248, Type N; colors complying with FS TT-P-1952.
 - 1. Color: As indicated.
- B. Pavement-Marking Paint: MPI #97, latex traffic-marking paint.
 - 1. Color: As indicated.
- C. Glass Beads: AASHTO M 247, Type 1.
 - 1. Roundness: Minimum 80 percent true spheres by weight.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that pavement is dry and in suitable condition to begin pavement marking according to manufacturer's written instructions.
- B. Proceed with pavement marking only after unsatisfactory conditions have been corrected.

3.2 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Engineer.
- B. Allow paving to age for a minimum of 30 days before starting pavement marking.
- C. Sweep and clean surface to eliminate loose material and dust.
- D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

1. Apply graphic symbols and lettering with paint-resistant, die-cut stencils, firmly secured to pavement. Mask an extended area beyond edges of each stencil to prevent paint application beyond the stencil. Apply paint so that it cannot run beneath the stencil.
2. Broadcast glass beads uniformly into wet markings at a rate of 6 lb/gal.

3.3 PROTECTING AND CLEANING

- A. Protect pavement markings from damage and wear during remainder of construction period.
- B. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION 321723

SECTION 321726 - TACTILE WARNING SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:

1. Cast-in-place detectable warning tiles.
2. Surface-applied detectable warning tiles.
3. Detectable warning mats.
4. Detectable warning unit pavers.

- B. Related Requirements:

1. Section 321313 "Concrete Paving" for concrete walkways serving as substrates for tactile warning surfacing.
2. Section 321400 "Unit Paving" for unit paving installations incorporating detectable warning unit pavers specified in this Section.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.4 CLOSEOUT SUBMITTALS

- A. Maintenance Data: For tactile warning surfacing, to include in maintenance manuals.

1.5 QUALITY ASSURANCE

- A. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.
 1. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.6 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.7 PROJECT CONDITIONS

- A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.
- B. Weather Limitations for Adhesive Application:
 - 1. Apply adhesive only when ambient temperature is above 50 deg F and when temperature has not been below 35 deg F for 12 hours immediately before application. Do not apply when substrate is wet or contains excess moisture.
- C. Weather Limitations for Mortar and Grout:
 - 1. Cold-Weather Requirements: Comply with cold-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602.
 - 2. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in ACI 530.1/ASCE 6/TMS 602. Provide artificial shade and windbreaks, and use cooled materials as required. Do not apply mortar to substrates with temperatures of 100 deg F and higher.
 - a. When ambient temperature exceeds 100 deg F, or when wind velocity exceeds 8 mph and ambient temperature exceeds 90 deg F, set unit pavers within 1 minute of spreading setting-bed mortar.

1.8 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of tactile warning surfaces that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Deterioration of finishes beyond normal weathering and wear.
 - b. Separation or delamination of materials and components.
 - 2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 TACTILE WARNING SURFACING, GENERAL

- A. Accessibility Requirements: Comply with applicable provisions in the U.S. Architectural & Transportation Barriers Compliance Board's ADA-ABA Accessibility Guidelines for Buildings and Facilities for tactile warning surfaces.
 - 1. For tactile warning surfaces composed of multiple units, provide units that when installed provide consistent side-to-side and end-to-end dome spacing that complies with requirements.

- B. Source Limitations: Obtain each type of tactile warning surfacing, joint material, setting material, anchor, and fastener from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

2.2 DETECTABLE WARNING MATS

- A. Surface-Applied Detectable Warning Mats: Accessible truncated-dome detectable warning resilient mats, UV resistant, manufactured for adhering to existing concrete walkway surfaces, with slip-resistant surface treatment on domes, field of mat, and beveled outside edges.
 - 1. Material: Modified rubber compound, UV resistant.
 - 2. Color: as indicated.
 - 3. Shapes and Sizes:
 - a. Rectangular panel, as indicated.
 - 4. Dome Spacing and Configuration: as indicated.
 - 5. Mounting: Adhered to pavement surface with adhesive and fastened with fasteners.

2.3 ACCESSORIES

- A. Fasteners and Anchors: Manufacturer's standard as required for secure anchorage of tactile warning surfaces, noncorrosive and compatible with each material joined, and complying with the following:
 - 1. Furnish Type 304 stainless-steel fasteners for exterior use.
 - 2. Fastener Heads: For nonstructural connections, use flathead or oval countersunk screws and bolts with tamper-resistant heads, colored to match tile.
- B. Adhesive: As recommended by manufacturer for adhering tactile warning surfacing unit to pavement.
- C. Sealant: As recommended by manufacturer for sealing perimeter of tactile warning surfacing unit.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that pavement is in suitable condition to begin installation according to manufacturer's written instructions. Verify that installation of tactile warning surfacing will comply with accessibility requirements upon completion.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION OF TACTILE WARNING SURFACING

- A. General: Prepare substrate and install tactile warning surfacing according to manufacturer's written instructions unless otherwise indicated.
- B. Place tactile warning surfacing units in dimensions and orientation indicated. Comply with location requirements of AASHTO MP 12.

3.3 INSTALLATION OF DETECTABLE WARNING TILES

A. Cast-in-Place Detectable Warning Tiles:

1. Concrete Paving Installation: Comply with installation requirements in Section 321313 "Concrete Paving." Mix, place, and finish concrete to conditions complying with detectable warning tile manufacturer's written requirements for satisfactory embedment of tile.
2. Set each detectable warning tile accurately and firmly in place and completely seat tile back and embedments in wet concrete by tamping or vibrating. If necessary, temporarily apply weight to tiles to ensure full contact with concrete.
3. Set surface of tile flush with surrounding concrete and adjacent tiles, with variations between tiles and between concrete and tiles not exceeding plus or minus 1/8 inch from flush.
4. Protect exposed surfaces of installed tiles from contact with wet concrete. Complete finishing of concrete paving surrounding tiles. Remove concrete from tile surfaces.
5. Clean tiles using methods recommended in writing by manufacturer.

B. Removable Cast-in-Place Detectable Warning Tiles:

1. Concrete Paving Installation: Comply with installation requirements in Section 321313 "Concrete Paving." Mix, place, and finish concrete to conditions complying with detectable warning tile manufacturer's written requirements for satisfactory embedment of removable tile.
2. Set each detectable warning tile accurately and firmly in place with embedding anchors and fasteners attached, and firmly seat tile back in wet concrete by tamping or vibrating. If necessary, temporarily apply weight to tiles to ensure full contact with concrete.
3. Set surface of tile flush with surrounding concrete and adjacent tiles, with variations between tiles and between concrete and tiles not exceeding plus or minus 1/8 inch from flush.
4. Protect exposed surfaces of installed tiles from contact with wet concrete. Complete finishing of concrete paving surrounding tiles. Remove concrete from tile surfaces.
5. Clean tiles using methods recommended in writing by manufacturer.

C. Surface-Applied Detectable Warning Tiles:

1. Lay out detectable warning tiles as indicated and mark concrete pavement.
2. Prepare existing paving surface by grinding and cleaning as recommended by manufacturer.
 - a. Cut perimeter kerf in existing concrete pavement to receive metal tile flange.

3. Apply adhesive to back of tiles in amounts and pattern recommended by manufacturer, and set tiles in place. Firmly seat tiles in adhesive bed, eliminating air pockets and establishing full adhesion to pavement. If necessary, temporarily apply weight to tiles to ensure full contact with concrete.
4. Install anchor devices through face of tiles and into pavement using anchors located as recommended by manufacturer. Set heads of anchors flush with top surface of mat.
5. Mask perimeter of tiles and adjacent concrete, and apply sealant in continuous bead around perimeter of tile installation.
6. Remove masking, adhesive, excess sealant, and soil from exposed surfaces of detectable warning tiles and surrounding concrete pavement using cleaning agents recommended in writing by manufacturer.
7. Protect installed tiles from traffic until adhesive has set.

3.4 INSTALLATION OF DETECTABLE WARNING MATS

- A. Lay out detectable warning mats as indicated and mark concrete pavement at edges of mats.
- B. Prepare existing paving surface by grinding and cleaning as recommended by manufacturer.
- C. Apply adhesive to back of mat in amounts and pattern recommended by manufacturer, and set mat in place. Firmly seat mat in adhesive bed, eliminating air pockets and establishing full adhesion to pavement. If necessary, temporarily apply weight to mat to ensure full contact with adhesive.
- D. Install anchor devices through face of mat and into pavement using anchors located as recommended by manufacturer. Set heads of anchors flush with mat surface.
- E. Mask mat perimeter and adjacent concrete, and apply sealant in continuous bead around perimeter of mat.
- F. Remove masking, adhesive, excess sealant, and soil from exposed surfaces of detectable warning mat and surrounding concrete pavement using cleaning agents recommended in writing by manufacturer.
- G. Protect installed mat from traffic until adhesive has set.

3.5 INSTALLATION OF DETECTABLE WARNING UNIT PAVERS

- A. Unit Paver Installation, General:
 1. Setting-Bed and Unit Paver Installation: Comply with installation requirements in Section 321400 "Unit Paving."
 2. Mix unit pavers from several pallets or cubes, as they are placed, to produce uniform blend of colors and textures.
 3. Cut unit pavers with motor-driven masonry saw equipment to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible.
 4. Tolerances: Do not exceed 1/4 inch in 10 feet from level, or indicated slope, for finished surface of paving.

B. Aggregate Setting-Bed Applications:

1. Place aggregate base, compact by tamping with plate vibrator, and screed to depth indicated.
2. Place leveling course and screed to a thickness of 1 to 1-1/2 inches, taking care that moisture content remains constant and density is loose and uniform until unit pavers are set and compacted.
3. Treat leveling course with herbicide to inhibit growth of grass and weeds.
4. Set unit pavers with a minimum joint width of 1/16 inch and a maximum of 1/8 inch (3 mm), being careful not to disturb leveling base. If pavers have spacer bars, place pavers hand tight against spacer bars. Use string lines to keep straight lines.
5. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000-lbf compaction force at 80 to 90 Hz.
6. Spread dry sand and fill joints immediately after vibrating pavers into leveling course. Vibrate pavers and add sand until joints are completely filled, then remove excess sand. Leave a slight surplus of sand on the surface for joint filling.

C. Mortar Setting-Bed Applications:

1. Saturate concrete subbase with clean water several hours before placing setting bed. Remove surface water about one hour before placing setting bed.
2. Apply mortar-bed bond coat over surface of concrete subbase about 15 minutes before placing mortar bed. Limit area of bond coat to avoid its drying out before placing setting bed. Do not exceed 1/16-inch thickness for bond coat.
3. Apply mortar bed over bond coat; spread and screed mortar bed to uniform thickness at subgrade elevations required for accurate setting of pavers to finished grades indicated.
4. Mix and place only that amount of mortar bed that can be covered with pavers before initial set. Before placing pavers, cut back, bevel edge, and remove and discard setting-bed material that has reached initial set.
5. Place pavers before initial set of cement occurs. Immediately before placing pavers on mortar bed, apply uniform 1/16-inch-thick bond coat to mortar bed or to back of each paver with a flat trowel.
6. Tamp or beat pavers with a wooden block or rubber mallet to obtain full contact with setting bed and to bring finished surfaces within indicated tolerances. Set each paver in a single operation before initial set of mortar; do not return to areas already set or disturb pavers for purposes of realigning finished surfaces or adjusting joints.
7. Spaced Joint Widths: Provide 3/8-inch nominal joint width with variations not exceeding plus or minus 1/8 inch.
8. Grouted Joints: Grout paver joints complying with ANSI A108.10. Grout joints as soon as possible after initial set of setting bed.
 - a. Force grout into joints, taking care not to smear grout on adjoining surfaces.
 - b. Tool exposed joints slightly concave when thumbprint hard.
 - c. Cure grout by maintaining in a damp condition for seven days unless otherwise recommended by grout or liquid-latex manufacturer.
9. Remove excess grout from exposed paver surfaces; wash and scrub clean.
10. Protect installation from traffic until grout has set.

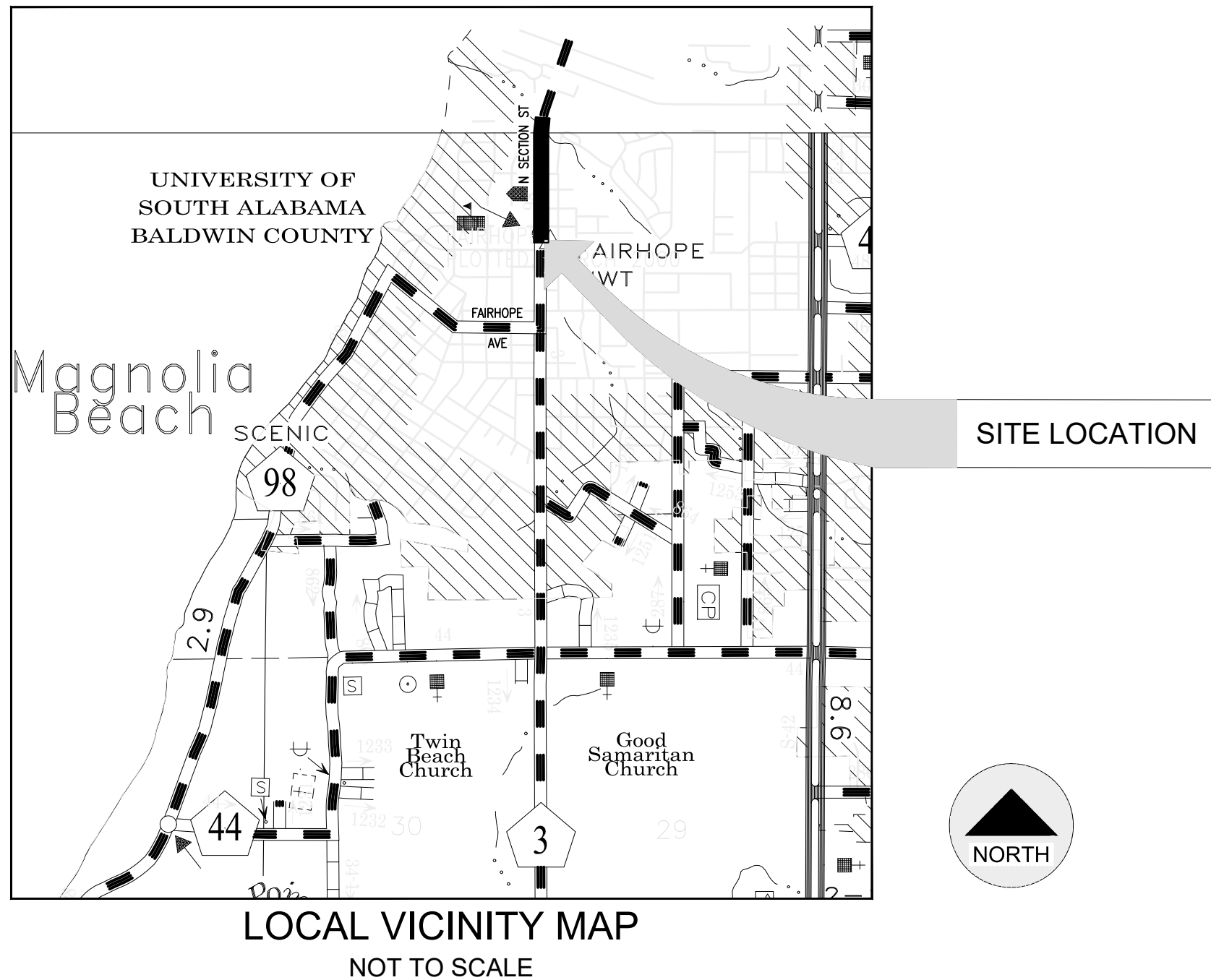
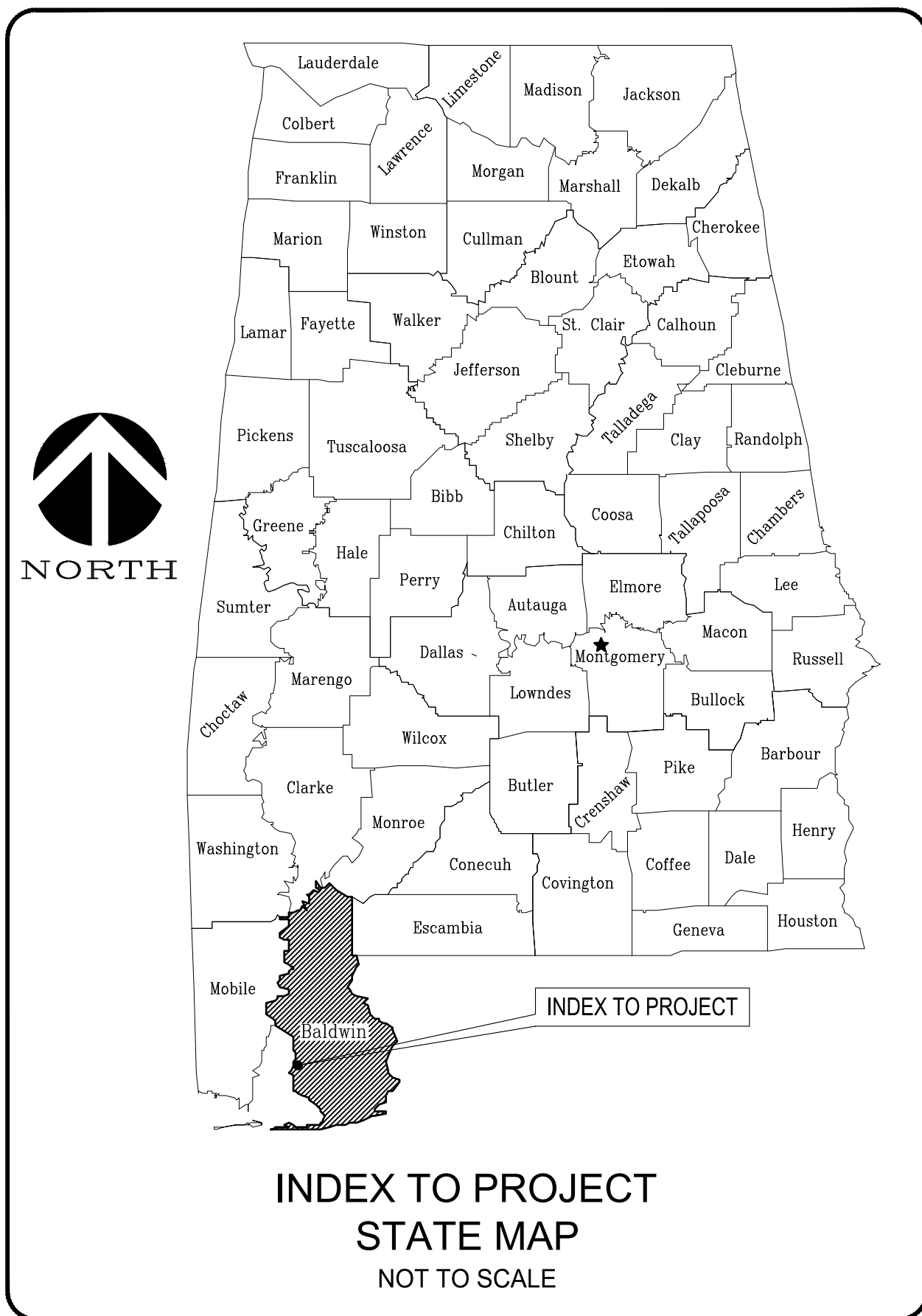
3.6 CLEANING AND PROTECTION

- A. Remove and replace tactile warning surfacing that is broken or damaged or does not comply with requirements in this Section. Remove in complete sections from joint to joint unless otherwise approved by Engineer. Replace using tactile warning surfacing installation methods acceptable to Engineer.
- B. Protect tactile warning surfacing from damage and maintain free of stains, discoloration, dirt, and other foreign material.

END OF SECTION 321726

IMPROVEMENTS

OAK AVENUE TO BAYOU DRIVE
FAIRHOPE, AL 36532



INDEX TO SHEETS:				
SEQUENCE	SHEET NO.	SHEET NAME	ISSUE DATE	REVISION DATE
1	C1.0	COVER SHEET	7/17/2020	
2	C2.0	CIVIL GENERAL NOTES	7/17/2020	
3-6	C3.0 - C6.0	EXISTING CONDITIONS AND DEMOLITION PLAN	7/17/2020	
7-10	C7.0 - C10.0	GRADING AND DRAINAGE PLAN	7/17/2020	
11	C11.0	PROFILE VIEW	7/17/2020	
12	C12.0	CIVIL DETAILS	7/17/2020	

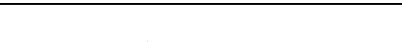
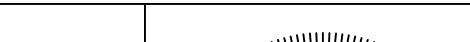
PROJECT CONTACT INFORMATION:

OWNER:
THE CITY OF FAIRHOPE
161 NORTH SECTION ST.
FAIRHOPE, AL 36532
(251) 928-8003
CONTACT: RICHARD JOHNSON, PE

ENGINEER:
LIEB ENGINEERING COMPANY, LLC
PO BOX 2266
FAIRHOPE, AL 36533
(251) 978-9779
CONTACT: CHRIS LIEB, PE

SURVEYOR:
THE WOODLANDS GROUP, LLC
PO BOX 213
MONTROSE, AL 36559
(601) 479-3408
CONTACT: JUSTIN PALMER

ISSUED
FOR
BID

REVISIONS				<div><p>LIEB ENGINEERING COMPANY</p></div> <div>LIEB ENGINEERING COMPANY PO BOX 2266 FAIRHOPE, AL 36533 PH: (251) 978-9779</div>	NOT VALID WITHOUT THE DATED SIGNATURE AND SEAL OF AN ALABAMA LICENSED ENGINEER. ALABAMA LICENSED ENGINEER: CHRISTOPHER JAY LIEB, P.E. LICENSE NUMBER 31204 ALABAMA CERTIFICATE OF AUTHORIZATION NUMBER: 4938				SECTION STREET DRAINAGE IMPROVEMENTS				<div><p>7/17/20</p></div>
A		ISSUED FOR BID	7/17/2020						COVER SHEET				
									FAIRHOPE, AL				
									OWNER: CITY OF FAIRHOPE				
									SHEET NUMBER		C1.0	A	
									1 OF 12				
									JOB NUMBER		DRAWN BY: <u>JLG</u> DATE: <u>05/11/2020</u> SCALE: <u>N/A</u>		
									2019-069		CHECKED BY: <u>CJL</u> APPROVED BY: <u>CJL</u> ENGR: <u>CJL</u>		

GENERAL NOTES:

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY PERMITS REQUIRED TO CONSTRUCT THIS PROJECT AND PAY ALL PERMIT FEES. ALL PERMITS MUST BE IN-HAND PRIOR TO CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL METHODS, PROCEDURES, AND SEQUENCES OF CONSTRUCTION.
3. CONSTRUCTION SITE SAFETY, INCLUDING ALL ADEQUATE TEMPORARY BRACING AND SHORING, IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. THE LOCATION OF EXISTING UTILITIES SHOWN ON DRAWINGS ARE APPROXIMATE. THE CONTRACTOR SHALL MAKE EVERY REASONABLE EFFORT TO FIELD LOCATE ANY AND ALL UTILITIES PRIOR TO ORDERING MATERIALS AND/OR BEGINNING CONSTRUCTION. ANY AND ALL DISCREPANCIES SHALL BE REPORTED TO LIEB ENGINEERING IMMEDIATELY. THE CONTRACTOR SHALL EXERCISE DUE CARE TO PROTECT THEM FROM DAMAGE DURING EXCAVATION AND CONSTRUCTION.
5. THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES TO PROTECT ADJACENT PROPERTIES AND IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS ON OR OFF SITE DUE TO THE CONSTRUCTION OF THIS PROJECT. ANY DAMAGE WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
6. ALL EXCAVATIONS SHALL ADHERE TO THE PROVISIONS OF THE MOST CURRENT OSHA STANDARDS AND SPECIFICATIONS.
7. THIS PROPERTY IS IN ZONE "X" AS PER THE MAP BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FEDERAL INSURANCE ADMINISTRATION COMMUNITY PANEL NUMBER 644 OF 1100 FOR BALDWIN COUNTY AND MAP NUMBER 01003C0644M AS PER REVISED MAP DATED APRIL 19, 2019.
8. BOUNDARY AND TOPOGRAPHIC DATA WAS COMPILED FROM A SURVEY PROVIDED BY THE WOODLANDS GROUP, LLC.
9. CONTRACTOR IS RESPONSIBLE FOR ALL PUBLIC UTILITY CONNECTIONS (ELECTRIC, WATER, GAS, COMMUNICATIONS, SEWER) AS WELL AS PROVIDING ALL INFRASTRUCTURES REQUIRED BY UTILITY COMPANY.

SITE DEMOLITION NOTES:

1. ALL EXISTING IMPROVEMENTS SHALL REMAIN WITHIN THE LIMITS OF CONSTRUCTION UNLESS SPECIFICALLY NOTED, "TO BE REMOVED".
2. CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING ITEMS TO BE SALVAGED, REMOVED AND REUSED, ETC. CONTRACTOR TO USE CAUTION NOT TO DAMAGE THESE ITEMS DURING REMOVAL AND/OR REUSE. ANY DAMAGED ITEMS SHALL BE REPAIRED/REPLACED AT CONTRACTOR'S EXPENSE.
3. ANY AND ALL UTILITIES IN CONFLICT WITH PROPOSED IMPROVEMENTS SHALL BE REMOVED OR RELOCATED. COORDINATE WITH UTILITY PROVIDER PRIOR TO REMOVAL/RELOCATION.
4. CONTRACTOR TO DISPOSE OF ALL DEMOLITION AND CONSTRUCTION DEBRIS AT LEAST WEEKLY IN AN APPROVED MANNER.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL, RELOCATION OR PROTECTION OF ALL ABOVE AND BELOW GROUND EXISTING IMPROVEMENTS THAT ARE IN CONFLICT WITH THE PROPOSED IMPROVEMENTS UNLESS NOTED.

LAYOUT NOTES:

1. TOPOGRAPHY AND SITE BOUNDARIES SHALL BE FIELD VERIFIED BY CONTRACTOR PRIOR TO ORDERING MATERIALS AND/OR BEGINNING CONSTRUCTION. IMMEDIATELY NOTIFY LIEB ENGINEERING OF ANY DISCREPANCIES.
2. ALL DIMENSIONS AND COORDINATES SHOWN ARE TO THE OUTSIDE FACE OF BUILDING, TO THE BACK OF CURB, OR TO THE EDGE OF SURFACING UNLESS OTHERWISE NOTED.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL BENCHMARKS AND PROPERTY CORNERS. ANY REPLACEMENT WILL BE AT THE CONTRACTOR'S EXPENSE.
4. VERIFY ALL DIMENSIONS AND CONDITIONS RELATED TO EXISTING CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF LIEB ENGINEERING. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE. SCALE IS FOR GUIDELINE PURPOSES ONLY. IF DIMENSIONS ARE UNCLEAR, DO NOT SCALE. REQUEST CLARIFICATION FROM THE ENGINEER.
5. CONTRACTOR SHALL FOLLOW STATE REQUIREMENTS FOR SURVEY PRACTICES FOR CONSTRUCTION LAYOUT WORK.

GRADING NOTES:

1. THE LIMITS OF CLEARING SHALL BE AT THE EDGE OF PROPOSED GRADING OR THE PROPERTY LINE, WHICHEVER IS LESS.
2. THE OWNER SHALL BE RESPONSIBLE FOR PROVIDING COMPACTION TESTING.
3. ALL TOP SOIL WITHIN LIMITS OF CONSTRUCTION (5' BEYOND THE BUILDING FOOTPRINT AND 3' BEYOND PAVEMENTS AND WITHIN THE LIMITS OF GRADING) SHALL BE STRIPPED AND STOCKPILED ON SITE IN AN APPROVED MANNER. TOPSOIL SHALL BE SPREAD 6" DEEP ON ALL NON IMPROVED AREAS TO BRING TO FINISHED GRADE. ANY EXCESS TOPSOIL SHALL BE DISPOSED OF OFF SITE IN AN APPROVED MANNER.
4. IN CUT AREAS, SUBGRADE SHALL BE SCARIFIED A MINIMUM OF 1' AND RECOMPACTED BEFORE PLACING FILL OR ANY OTHER IMPROVEMENTS. RECOMPACTION SHALL MEET THE SPECIFIED DENSITY AND MOISTURE CONTENT IN GRADING NOTE #6 AND #7.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE SUBGRADE AFTER IT HAS BEEN INITIALLY PREPARED DUE TO INCLEMENT WEATHER AND CONSTRUCTION TRAFFIC.
6. ALL STRUCTURAL FILL MATERIAL SHALL BE A SANDY MATERIAL FREE OF ORGANICS, DEBRIS, AND OTHERWISE DELETERIOUS MATERIALS AND CONTAINING A MAXIMUM 12 PERCENT PASSING THE NO. 200 SIEVE AND 95 PERCENT OR LESS PASSING THE NO. 40 SIEVE, BY WEIGHT, A MAXIMUM LIQUID LIMIT OF 20. MATERIAL SHALL BE PLACED IN 8" LOOSE LIFTS AND EACH LIFT COMPACTED TO 98 PERCENT STANDARD PROCTOR DENSITY AS PER ASTM-D698, AT A FIELD MOISTURE WITHIN ±3 PERCENT OF OPTIMUM. ON SITE SOILS FREE OF ORGANICS AND DELETERIOUS MATERIALS AND SATISFYING THE SPECIFICATIONS PROVIDED ABOVE MAY BE STOCKPILED AND USED AS STRUCTURAL FILL.
7. PIPE BEDDING SHALL BE "SELECT SAND." THE MATERIAL SHALL CONTAIN LESS THAN 10% PASSING THE #200 SIEVE AND 90% OR LESS PASSING THE #40 SIEVE, BY WEIGHT. MATERIAL SHALL BE PLACED IN 8" LOOSE LIFTS AND EACH LIFT COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY AS PER ASTM-D698, AT A FIELD MOISTURE WITHIN ±3 PERCENT OF OPTIMUM. ON SITE SOILS FREE OF ORGANICS AND DELETERIOUS MATERIALS AND SATISFYING THE SPECIFICATIONS PROVIDED ABOVE MAY BE STOCKPILED AND USED AS PIPE BEDDING.
8. SUBGRADE SHALL BE PROOF ROLLED WITH A HEAVILY LOADED DUMP TRUCK AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL FOUNDATIONS, PAVING, ETC.. ANY AREAS SHOWING SIGNS OF PUMPING, RUTTING, OR ANY UNSUITABLE (ORGANIC, SOFT, WET, LOOSE) MATERIAL FOUND IN PLACE SHALL BE UNDERCUT AND REPLACED, OR MOISTURE CONDITIONED AND COMPACTED TO THE SPECIFIED DENSITY AND MOISTURE CONTENT SPECIFIED.
9. FINISHED GRADES ARE SHOWN ON THIS PLAN. CONTRACTOR SHALL MAKE THE APPROPRIATE HOLDDOWNS FOR SUBGRADE ELEVATIONS.
10. STORM DRAINAGE INLETS SHALL BE LOCATED AT THE LOWPOINTS. NOTIFY LIEB ENGINEERING OF ANY DISCREPANCIES.
11. CONTRACTOR SHALL PROVIDE FOR PERSONNEL AND VEHICULAR PROTECTION AT ANY OPEN EXCAVATIONS IN ACCORDANCE WITH 29 CFR PART 1926 AS WELL AS ANY REQUIREMENTS FOR EXCAVATIONS GREATER THAN FOUR (4) FEET IN DEPTH.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR SHORING ADJACENT TO EXISTING STRUCTURES AND UNDERGROUND UTILITIES DURING ALL EXCAVATION OPERATIONS. TYPE OF SHORING AND PROCEDURE TO BE FOLLOWED MAY BE SUBJECT TO THE ENGINEER'S REVIEW BUT THE STRUCTURAL ADEQUACY OF THESE SYSTEMS, AS WELL AS DAMAGES TO THE EXISTING FACILITIES, ARE THE RESPONSIBILITY OF THE CONTRACTOR.
13. COMPACTION TESTS SHALL BE TAKEN AT THE RECOMMENDATION OF THE ON-SITE GEOTECHNICAL ENGINEER, BUT AT A MINIMUM 5 IN THE PAVEMENT AREAS AND 6 IN THE BUILDINGS AREAS PER 8" LIFT.
14. COMPACTION WITHIN LIMITED SPACES (I.E. MANHOLES, INLETS, UTILITY TRENCHES) SHOULD BE BACKFILLED AND COMPACTED SYSTEMATICALLY, AT THE DIRECTION OF THE ON-SITE GEOTECHNICAL ENGINEER. SAND BACKFILL SHALL BE INSTALLED IN 12" LOOSE LIFTS AND COMPACTED WITH 6-8 PASSES OF A VIBRATORY COMPACTOR.
15. DEWATERING SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. PREVENT SURFACE WATER AND GROUND WATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION. REROUTE SURFACE WATER RUNOFF AWAY FROM EXCAVATED AREAS. DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES. INSTALL A DEWATERING SYSTEM TO KEEP SUBGRADES DRY AND CONVEY GROUND WATER AWAY FROM EXCAVATIONS. MAINTAIN UNTIL DEWATERING IS NO LONGER REQUIRED.
16. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IS MAINTAINED THROUGHOUT CONSTRUCTION. PONDING AND STANDING WATER SHALL BE KEPT TO A MINIMUM.

UTILITY NOTES:

1. THE LOCATION OF THE UTILITIES SHOWN IN THESE PLANS ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL UTILITIES PRIOR TO CONSTRUCTION IN THEIR VICINITY.
2. THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. NOTIFICATION SHOULD BE GIVEN AT LEAST 24 HOURS PRIOR TO APPROACHING THE AFFECTED UTILITY.
3. ALL WATER MAINS SHALL BE OF A PIPE CLASS APPROVED BY THE UTILITY OWNER.
4. WATER MAIN VALVES AND WATER SERVICE TAPS SHALL NOT BE LOCATED UNDER THE PROPOSED PAVEMENT.
5. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY BEFORE ATTEMPTING TO TAP THE LINE.
6. UTILITY COMPANIES
 - POWER – CITY OF FAIRHOPE
 - WATER – CITY OF FAIRHOPE
 - SEWER – CITY OF FAIRHOPE
 - TELEPHONE – AT&T / BELLSOUTH
 - GAS – CITY OF FAIRHOPE
7. A MINIMUM OF 2'-4" PVC UTILITY SLEEVES SHALL BE INSTALLED ACROSS ALL STREETS TO SERVE ISLANDS WITH IRRIGATION.
8. ALL PVC PIPE SHALL BE MARKED USING A 12 GAUGE COATED COPPER WIRE BURIED BETWEEN 3 AND 6 INCHES ABOVE THE TOP OF THE PIPE.
9. ALL UTILITIES SHALL BE LOCATED UNDERGROUND.

CONCRETE NOTES:

1. ALL NORMAL WEIGHT CONCRETE SHALL OBTAIN A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI UNLESS NOTED OTHERWISE.
2. CALCIUM CHLORIDE AND/OR ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL NOT BE USED IN THE CONCRETE.
3. TEST CYLINDERS SHALL BE MADE AND TESTED AS OUTLINED IN THE ACI 301 SPECIFICATION, AND PER PROJECT SPECIFICATIONS.
4. REINFORCING BARS SHALL BE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM A-615, GRADE 60 AND PLACED IN ACCORDANCE WITH ACI-315, LATEST EDITION UNLESS SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS.
5. FABRICATION OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" ACI 315.
6. UNLESS OTHERWISE NOTED, CONCRETE COVER FOR REINFORCING BARS SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF ACI 318.
7. TYPE II PORTLAND CEMENT SHALL BE USED IN THE MANUFACTURE OF ALL CONCRETE UNLESS OTHERWISE NOTED. PORTLAND CEMENT SHALL CONFORM TO C150. ONLY ONE BRAND OF CEMENT SHALL BE USED FOR ALL CONCRETE FOR EXPOSED SURFACES OF ADJACENT STRUCTURES.
8. AGGREGATE, BOTH COARSE AND FINE, USED IN THE MANUFACTURE OF CONCRETE SHALL CONFORM TO ASTM C33 UNLESS OTHERWISE NOTED.
9. CONTRACTOR MAY SUBSTITUTE CONSTRUCTION JOINTS IN LIEU OF CONTROL JOINTS AS NEEDED.
10. EXPANSION JOINT MATERIAL SHALL BE BITUMINOUS TYPE PER ASTM D994.
11. SEALANT SHALL BE BASF SONOLASTIC SL2, OR OTHER ELASTOMERIC JOINT SEALANT AS APPROVED. ALL SEALANT MATERIAL SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDED INSTALLATION INSTRUCTIONS.
12. PAVEMENT SURFACE SHALL HAVE BROOM FINISH.

TRAFFIC CONTROL NOTES:

1. THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE LATEST EDITION AND REVISION OF PART VI OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE APPROVED TRAFFIC CONTROL PLAN FOR ALL CONSTRUCTION WITHIN WORK AREAS SHOWN AND DESCRIBED IN PART VI OF THE MUTCD.
2. PERMANENT ROADWAY SIGNS OR TEMPORARY CONSTRUCTION SIGNS WHICH ARE NOT APPLICABLE OR INAPPROPRIATE FOR THE CURRENT CONDITIONS SHALL BE COVERED OR REMOVED.
3. THE DIMENSIONS SHOWN OR DESCRIBED FOR LOCATING CONSTRUCTION SIGNS ARE NOMINAL. THE ACTUAL DIMENSIONS SHALL BE ADJUSTED TO BEST FIT LOCAL CONDITIONS AND PROVIDE MAXIMUM VISIBILITY.
4. IF TRAFFIC CONTROL DEVICES ARE NECESSARY FOR PROPER WARNING AND TRAFFIC CONTROL AFTER SUNSET, THEN AS A MINIMUM, TYPE "B" WARNING LIGHTS SHALL BE PLACED ON THE FIRST WARNING SIGN AND CHANNELIZING DRUM AND TYPE "A" REFLECTIVE SHEETING SHALL BE REQUIRED ON ALL SIGNS.
5. HAZARDOUS CONDITIONS ON OPEN ROADWAYS SUCH AS PAVEMENT DROP-OFFS IN EXCESS OF 2'; CONSTRUCTION MATERIALS, VEHICLES, OR EQUIPMENT STORED OR PLACED WITHIN THE ROADWAY RIGHT-OF-WAY; AND OPEN TRENCHES ACROSS OR NEAR THE ROADWAY SHALL NOT BE ALLOWED UNLESS THE CONTRACTOR IS ON SITE AND WORKING, AND PROPER TRAFFIC CONTROL MEASURES ARE BEING TAKEN.
6. THE CONTRACTOR SHALL KEEP OPEN ROADWAYS CLEAN AND FREE OF CONSTRUCTION DEBRIS, DIRT, LOOSE GRAVEL OR OTHER MATERIAL THAT MAY CAUSE HAZARDOUS DRIVING CONDITIONS.
7. TRAFFIC CONTROL DEVICES SHALL MEET THE STANDARD MATERIAL AND INSTALLATION REQUIREMENTS SPECIFIED IN THE CURRENT EDITION OF THE ALDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION.
8. ROADWAYS AND DRIVEWAYS SHALL REMAIN OPEN DURING CONSTRUCTION.
9. CHANNELIZING DEVICES SHALL BE PLACED AT 10' ON CENTER ALONG MINIMUM 20' RADII TO CHANNELIZE TRAFFIC INTO AND OUT OF INTERSECTING ROAD AND DRIVES WITHIN AREAS WHERE CHANNELIZING DEVICES ARE REQUIRED. TEMPORARY REGULATORY SIGNS SUCH AS STOP SIGNS AND YIELD SIGNS SHALL BE PLACED AS NECESSARY FOR PROPER TRAFFIC CONTROL IN ACCORDANCE WITH THE MUTCD.

EROSION CONTROL NOTES:

1. SITE EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES, AND REGULATIONS.
2. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING THE CONSTRUCTION PROCESS AND UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. ALL EROSION CONTROL INSTALLATION AND MAINTENANCE SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AT NO ADDITIONAL COST TO THE OWNER.
3. EROSION CONTROL DEVICES SHOWN ON THESE PLANS ARE A MINIMUM. ADDITIONAL DEVICES SHALL BE INSTALLED AS REQUIRED TO PREVENT SILTATION, EROSION AND OTHER DEGRADATION OR POLLUTION TO THE SITE OR ADJACENT PROPERTIES, STREAMS, DITCHES, AND PUBLIC ROADWAYS.
4. EROSION CONTROL DEVICES SHALL INCLUDE, BUT NOT LIMITED, TO THE FOLLOWING DEVICES: SILT FENCING, BRUSH BERMS, SEDIMENT BASINS, DETENTION PONDS, STRAW WATTLES, CHECK DAMS, FILTER BERMS, JUTE MATTING, VEGETATIVE FILTER STRIPS, TURF REINFORCEMENT MAT, DIVERSION BERMS, ETC.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL DEVICES IN GOOD OPERATING CONDITION DURING ALL LAND DISTURBING ACTIVITIES. THIS RESPONSIBILITY SHALL INCLUDE THE CLEANUP AND/OR REPAIRS TO THE DEVICES AT NO ADDITIONAL COST TO THE OWNER.
6. EROSION CONTROL DEVICES SHALL BE MONITORED AND MAINTAINED UNTIL THE SITE HAS BEEN PERMANENTLY STABILIZED AND AFTER EACH RAINFALL GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD, ANY WIND GUSTS GREATER THAN 25 MPH, AND ANY SUSTAINED WINDS GREATER THAN 20 MPH IN A 24 HOUR PERIOD.
7. AFTER ALL LAND DISTURBANCE ACTIVITIES HAVE CEASED AND AFTER ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED, THE EROSION CONTROL DEVICES SHALL BE REMOVED BY THE CONTRACTOR AND THE AREA CLEANED AND DRESSED.
8. DEWATERING OPERATIONS MAY NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE OR POLLUTION TO ADJACENT PROPERTIES, STREAMS, DITCHES, OR PUBLIC ROADWAYS.
9. A GRAVELED ACCESS DRIVE OF SUFFICIENT SIZE SHALL BE AT EACH SITE ENTRANCE/EXIT TO PREVENT TRACKING OF DIRT AND SEDIMENT ONTO PUBLIC OR PRIVATE ROADWAYS. IF SEDIMENT REACHES THE ROADWAY, THEN IT MUST BE CLEANED AT THE END OF EACH WORKDAY.
10. ALL LAND DISTURBANCE ACTIVITIES SHALL BE CONDUCTED IN A LOGICAL SEQUENCE TO MINIMIZE THE EXPOSURE OF BARE AREAS AT ANY ONE TIME.
11. ALL DISTURBED AREAS LEFT INACTIVE FOR MORE THAN 10 DAYS SHALL BE SEEDED AND MULCHED.
12. PRIOR TO SITE CLEARING, ALL PERIMETER SILT FENCING, BRUSH BERMS, ETC. AND GRAVELED ACCESS DRIVES SHALL BE INSTALLED.
13. ALL EXISTING STREAMS, DITCHES, ETC. SHALL BE PROTECTED FROM SEDIMENTS AND SILTS BY SILT FENCING, WATTLES, BRUSH BERMS, ETC.
14. WATTLES OR SILT FENCING SHALL BE INSTALLED AT ALL INLETS UPON THE COMPLETION OF EACH INLET AS INSTALLED.
15. RIP RAP SHALL BE PLACED AT EACH HEADWALL IMMEDIATELY FOLLOWING CONSTRUCTION OF EACH HEADWALL.
16. GEOTEXTILE SHALL BE PLACED ON ALL 2:1 SIDE SLOPES. GEOTEXTILE SHALL BE NORTH AMERICAN GREEN SC150 OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL GEOTEXTILES SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
17. GEOTEXTILE SHALL BE PLACED ON ALL 3:1 SIDE SLOPES. GEOTEXTILE SHALL BE NORTH AMERICAN GREEN S150 OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL GEOTEXTILES SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
18. GEOTEXTILE SHALL BE PLACED ON ALL DITCH BOTTOMS & 1' UP EACH SIDE. GEOTEXTILE SHALL BE NORTH AMERICAN GREEN SC250 OR APPROVED EQUAL UNLESS OTHERWISE NOTED ON PLANS. ALL GEOTEXTILES SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
19. GOOD HOUSEKEEPING PRACTICES AND PREVENTATIVE MAINTENANCE SHALL BE PERFORMED ON SITE DAILY TO PREVENT POLLUTION SOURCES FROM CONTACTING STORMWATER AND GROUND WATER. THIS INCLUDES, BUT IS NOT LIMITED TO: EQUIPMENT INSPECTION FOR LEAKS OF HAZARDOUS MATERIALS, PICKUP AND PROPER DISPOSAL OF WASTE MATERIALS TO APPROVED DISPOSAL SITES, STORING CONTAINERS AND BAGS AWAY FROM TRAFFIC ROUTES, PUBLICIZING POLLUTION PREVENTION CONCEPTS THROUGH POSTERS, WASHING EQUIPMENT AND VEHICLES AT APPROVED WASHING LOCATIONS, AND USING ONLY WATER (NO DETERGENTS) FOR WASHING ACTIVITIES.
20. AT A MINIMUM, THE EROSION CONTROL DEVICES SHOWN ON THESE PLANS SHALL BE INSTALLED. ADDITIONAL MEASURES MAY BE REQUIRED AND SHALL BE IMMEDIATELY INSTALLED UPON ANY ADDITIONAL SILTATION, EROSION, AND OTHER DEGRADATION OR POLLUTION TO THE SITE OR ADJACENT PROPERTIES, STREAMS, DITCHES, AND PUBLIC ROADWAYS NOT MITIGATED OR UNFORESEEN BY THIS SET OF PLANS.
21. THE CONTRACTOR SHALL SIZE, INSTALL, AND MAINTAIN ADEQUATE CONTROLS FOR THE SITE. REFER TO THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS, LATEST EDITION.

STORM DRAINAGE NOTES:

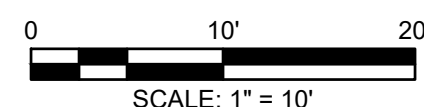
1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL STORM PIPE MATERIALS TO LIEB ENGINEERING PRIOR TO INSTALLATION AND/OR FABRICATION.
2. ALL PROPOSED STORM INLETS (GRATES, CURB, YARD, AREA DRAINS) ARE TO BE LOCATED AT THE LOWPOINTS. GRADING SHALL BE TO DIRECT RUNOFF TO THESE INLETS. NOTIFY LIEB ENGINEERING OF ANY DISCREPANCIES.
3. STORM DRAINAGE SYSTEMS SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. VERIFY ALL PIPE SLOPES, INVERTS, AND POINTS OF CONNECTION PRIOR TO CONSTRUCTION. NOTIFY LIEB ENGINEERING OF ANY DISCREPANCIES.
4. THE CONTRACTOR SHALL VERIFY ALL EXISTING AND PROPOSED STORM PIPE GRADES AND POINTS OF CONNECTION PRIOR TO INSTALLATION. LIEB ENGINEERING SHALL BE NOTIFIED OF ANY DEVIATIONS PRIOR TO CONSTRUCTION.
5. PROPOSED STORM PIPES SHALL BE BEDDED IN 6" OF SAND.
6. ALL RIP RAP SHALL BE CLASS 2 PER THE ALABAMA DEPT. OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED.
7. ALL STORM PIPES 15" AND LESS SHALL BE SMOOTH LINED HIGH DENSITY POLYETHYLENE (HDPE) OR SCHEDULE 40 POLYVINYL CHLORIDE (PVC) WITH WATER-TIGHT JOINTS UNLESS OTHERWISE NOTED, INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
8. ALL STORM PIPES 18" AND GREATER SHALL BE CLASS 3 REINFORCED CONCRETE PIPE (RCP) BELL AND SPIGOT INSTALLED WITH WATERTIGHT JOINTS UNLESS OTHERWISE NOTED.
9. ALL STORM MANHOLES SHALL BE HANSON CONCRETE OR APPROVED EQUAL PRECAST CONE, RISER, AND BASE SECTIONS WITH GASKETED JOINTS MEETING ALDOT SPECIAL DRAWING # MH-621-2.
10. ALL SLOPE PAVED HEADWALLS SHALL BE PER ALDOT SPECIAL DRAWING #HW-614-SP.
11. ALL IMPACT DISSIPATING HEADWALLS SHALL BE PER ALDOT SPECIAL DRAWING #ID-621.
12. ALL SINGLE AND DOUBLE WING CURB INLETS SHALL BE PER ALDOT SPECIAL DRAWING # I-621-S, TYPE S3 FOR 15" TO 30" STORM PIPES AND TYPE S4 FOR 36" TO 54" STORM PIPES.
13. ALL YARD INLETS SHALL BE HANSON CONCRETE OR APPROVED EQUAL PRECAST INLET BOXES 3'-1" x 3'-1" OR 4'-2" x 4'-2" DEPENDING ON MAXIMUM PIPE DEFLECTIONS. YARD INLET TOP TO BE PRECAST WITH A RING AND COVER ACCESS PROVIDED THROUGH THE TOP.
14. ALL ROADSIDE DITCH INLETS SHALL BE PER ALDOT SPECIAL DRAWING # I-621-C.
15. ALL CONCRETE COLLARS SHALL BE PER ALDOT SPECIAL DRAWING # CC-530.



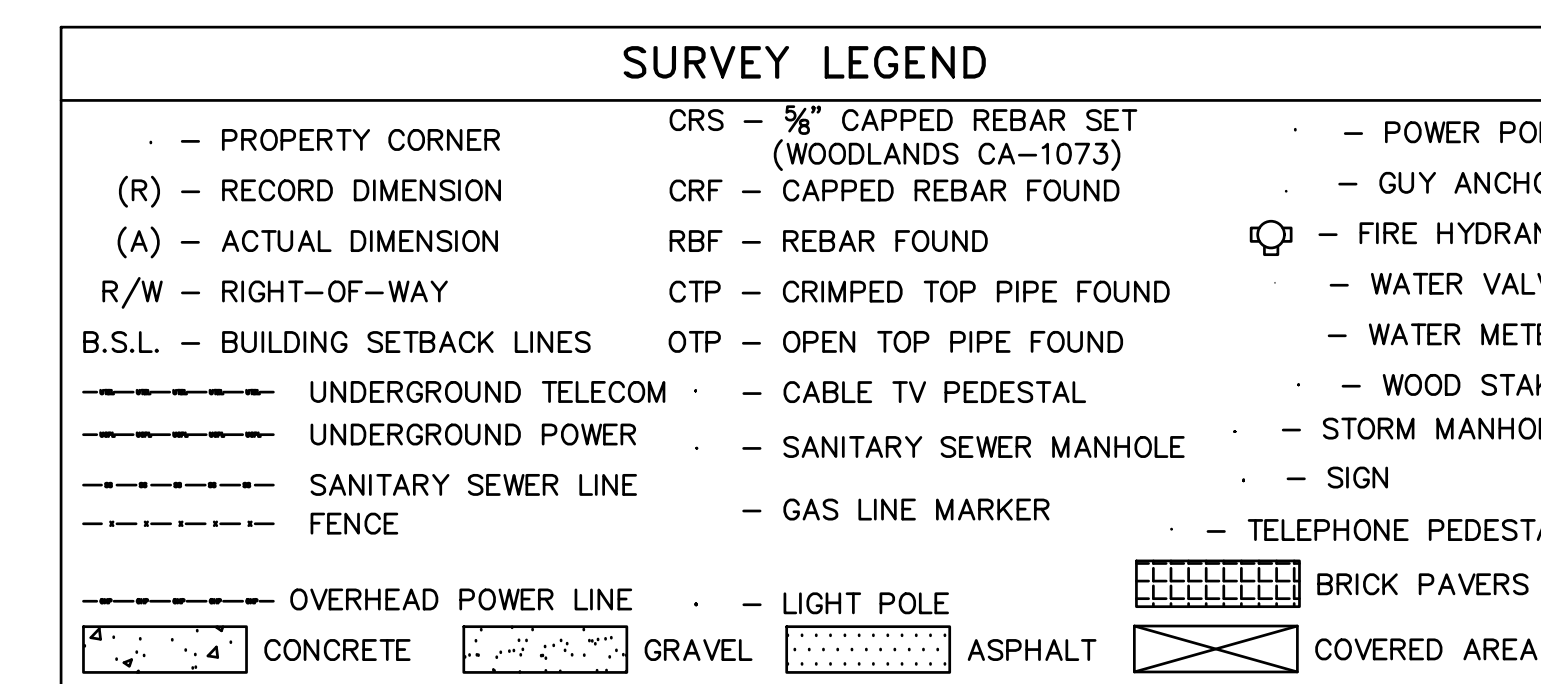
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A	ISSUED FOR BID	7/17/2020			CIVIL GENERAL NOTES					
					FAIRHOPE, AL					
					OWNER: CITY OF FAIRHOPE					
					SHEET NUMBER					
				JOB NUMBER	DRAWN BY: <u>JLG</u>	DATE: <u>05/11/2020</u>	SCALE: <u>N/A</u>	C2.0	A	
				2019-069	CHECKED BY: <u>CJL</u>	APPROVED BY: <u>CJL</u>	ENGR: <u>CJL</u>			
							2 OF 12		7/17/20	



1. SEE SHEET C2.0 FOR ALL GENERAL NOTES.

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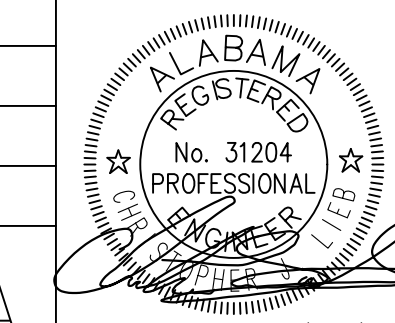
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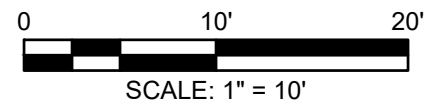
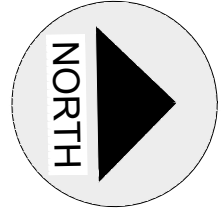
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ALABAMA LICENSED ENGINEER: CHRISTOPHER JAY LIEB, P.E. LICENSE NUMBER 31204
ALABAMA CERTIFICATE OF AUTHORIZATION NUMBER: 4938

9	JOB NUMBER	DRAWN BY: <u>JLG</u> DATE: <u>05/11/2020</u> SCALE: <u>1"=10'</u>		
	2019-069	CHECKED BY: <u>CJL</u>	APPROVED BY: <u>CJL</u>	ENGR: <u>CJL</u>

SECTION STREET DRAINAGE IMPROVEMENTS
EXISTING CONDITIONS AND DEMOLITION PLAN
FAIRHOPE, AL
OWNER: CITY OF FAIRHOPE


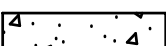
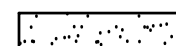
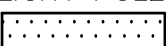
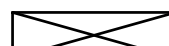
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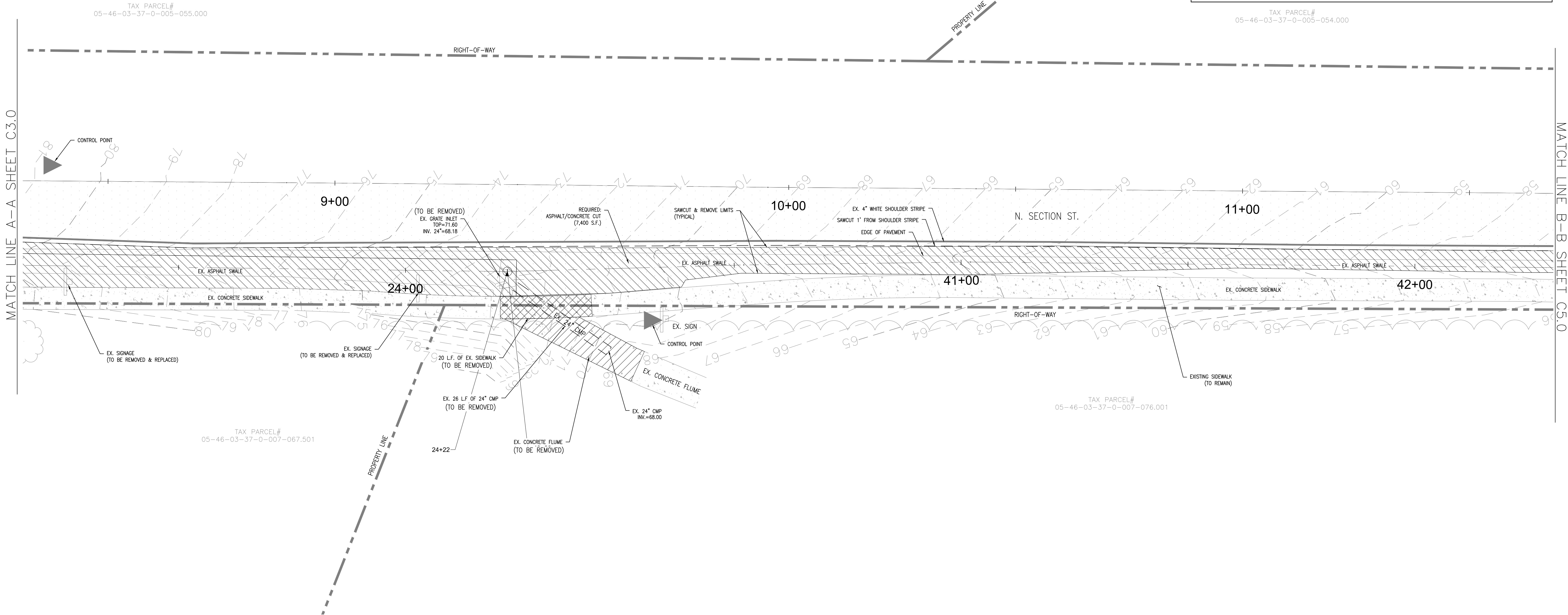




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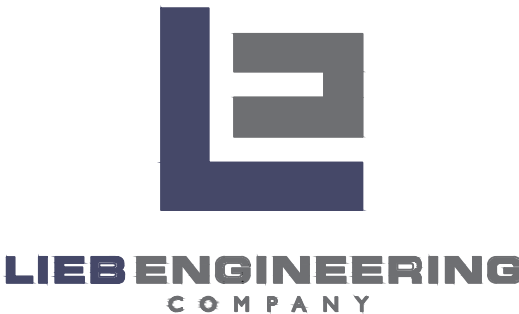
1. SEE SHEET C2.0 FOR ALL GENERAL NOTES.

SURVEY LEGEND			
· - PROPERTY CORNER	CRS - 5/8" CAPPED REBAR SET (WOODLANDS CA-1073)	· - POWER POLE	
(R) - RECORD DIMENSION	CRF - CAPPED REBAR FOUND	· - GUY ANCHOR	
(A) - ACTUAL DIMENSION	RBF - REBAR FOUND	⊙ - FIRE HYDRANT	
R/W - RIGHT-OF-WAY	CTP - CRIMPED TOP PIPE FOUND	· - WATER VALVE	
B.S.L. - BUILDING SETBACK LINES	OTP - OPEN TOP PIPE FOUND	· - WATER METER	
===== UNDERGROUND TELECOM	· - CABLE TV PEDESTAL	· - WOOD STAKE	
===== UNDERGROUND POWER	· - SANITARY SEWER MANHOLE	· - STORM MANHOLE	
===== SANITARY SEWER LINE	· - SIGN		
===== FENCE	- GAS LINE MARKER	· - TELEPHONE PEDESTAL	
===== OVERHEAD POWER LINE	· - LIGHT POLE	 BRICK PAVERS	
 CONCRETE	 GRAVEL	 ASPHALT	
		 COVERED AREA	



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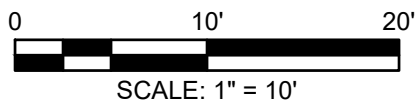
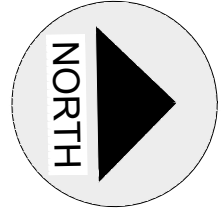
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2019-069	CHECKED BY: CJL	APPROVED BY: CJL	ENGR: CJL

SECTION STREET DRAINAGE IMPROVEMENTS	
EXISTING CONDITIONS AND DEMOLITION PLAN	
FAIRHOPE, AL	
OWNER: CITY OF FAIRHOPE	
SHEET NUMBER	C4.0
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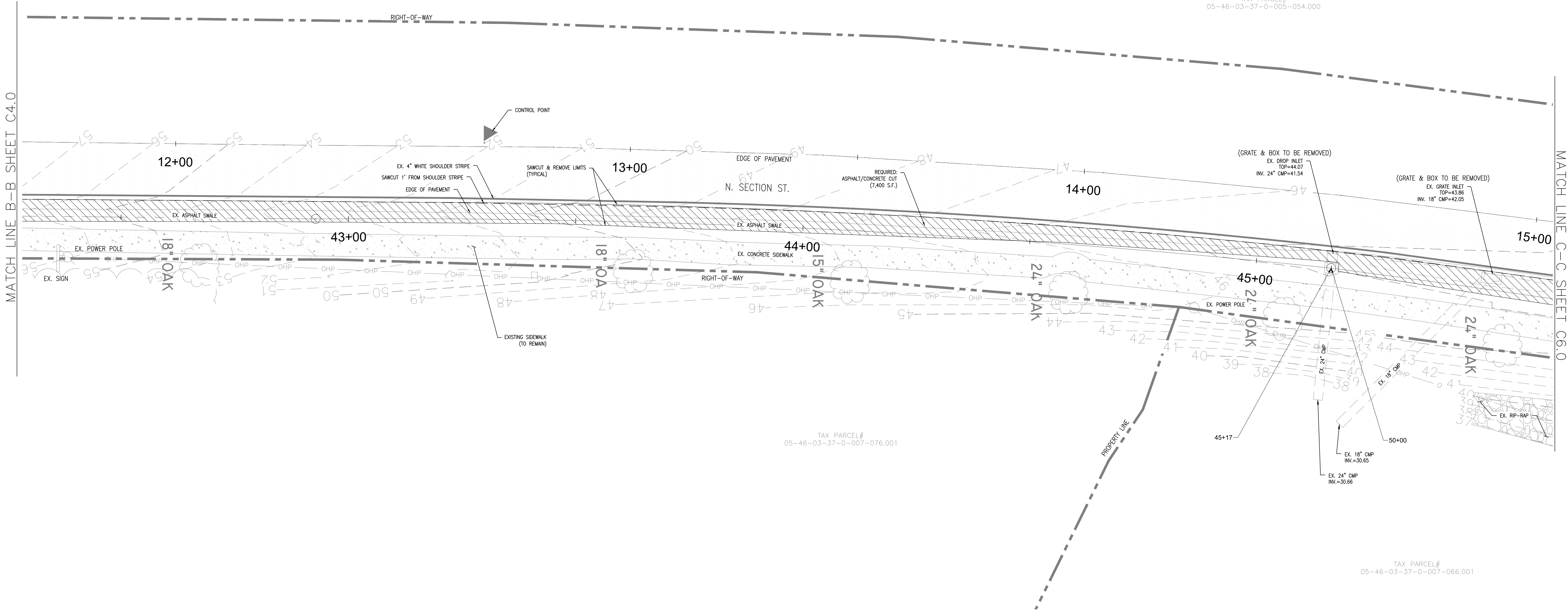




NOTES:
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SURVEY LEGEND		
· - PROPERTY CORNER	CRS - 5/8" CAPPED REBAR SET (WOODLANDS CA-1073)	· - POWER POLE
(R) - RECORD DIMENSION	CRF - CAPPED REBAR FOUND	· - GUY ANCHOR
(A) - ACTUAL DIMENSION	RBF - REBAR FOUND	⊕ - FIRE HYDRANT
R/W - RIGHT-OF-WAY	CTP - CRIMPED TOP PIPE FOUND	· - WATER VALVE
B.S.L. - BUILDING SETBACK LINES	OTP - OPEN TOP PIPE FOUND	· - WATER METER
----- UNDERGROUND TELECOM	· - CABLE TV PEDESTAL	· - WOOD STAKE
----- UNDERGROUND POWER	· - SANITARY SEWER MANHOLE	· - STORM MANHOLE
----- SANITARY SEWER LINE	· - GAS LINE MARKER	· - SIGN
----- FENCE	· - TELEPHONE PEDESTAL	
----- OVERHEAD POWER LINE	· - LIGHT POLE	
[Pattern] CONCRETE	[Pattern] GRAVEL	[Pattern] ASPHALT
		[Pattern] BRICK PAVERS
		[Pattern] COVERED AREA

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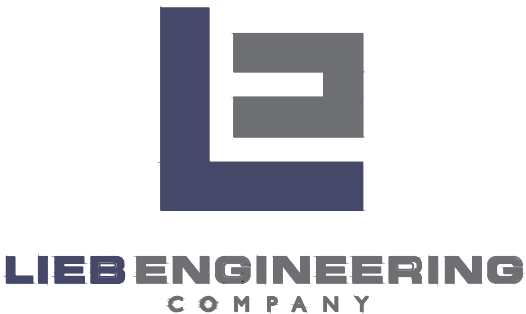


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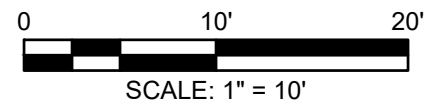
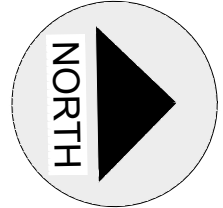
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JOB NUMBER	DRAWN BY: JLG	DATE: 05/11/2020	SCALE: 1"=10'
2019-069	CHECKED BY: CJL	APPROVED BY: CJL	ENGR: CJL

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EXISTING CONDITIONS AND DEMOLITION PLAN	
FAIRHOPE, AL	
OWNER: CITY OF FAIRHOPE	


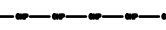


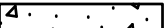
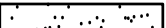
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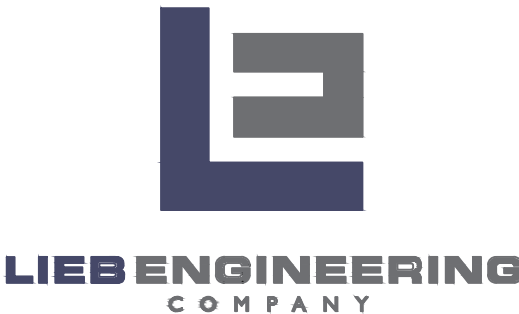


NOTES:
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SURVEY LEGEND					
- - - - -	PROPERTY CORNER	CRS - 3/8" CAPPED REBAR SET (WOODLANDS CA-1073)	- - - - -	POWER POLE	
(R) -	RECORD DIMENSION	CRF - CAPPED REBAR FOUND	- - - - -	GUY ANCHOR	
(A) -	ACTUAL DIMENSION	RBF - REBAR FOUND		FIRE HYDRANT	
R/W -	RIGHT-OF-WAY	CTP - CRIMPED TOP PIPE FOUND	- - - - -	WATER VALVE	
B.S.L. -	BUILDING SETBACK LINES	OTP - OPEN TOP PIPE FOUND	- - - - -	WATER METER	
- - - - -	UNDERGROUND TELECOM	- - - - -	- - - - -	WOOD STAKE	
- - - - -	UNDERGROUND POWER	- - - - -	- - - - -	STORM MANHOLE	
- - - - -	SANITARY SEWER LINE	- - - - -	- - - - -	SIGN	
- - - - -	FENCE	- - - - -	- - - - -	TELEPHONE PEDESTAL	
- - - - -	OVERHEAD POWER LINE	- - - - -	- - - - -	BRICK PAVERS	
	CONCRETE		GRAVEL		ASPHALT
	LIGHT POLE		COVERED AREA		

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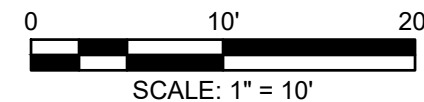
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2019-069	CHECKED BY: CJL	APPROVED BY: CJL	ENGR: CJL


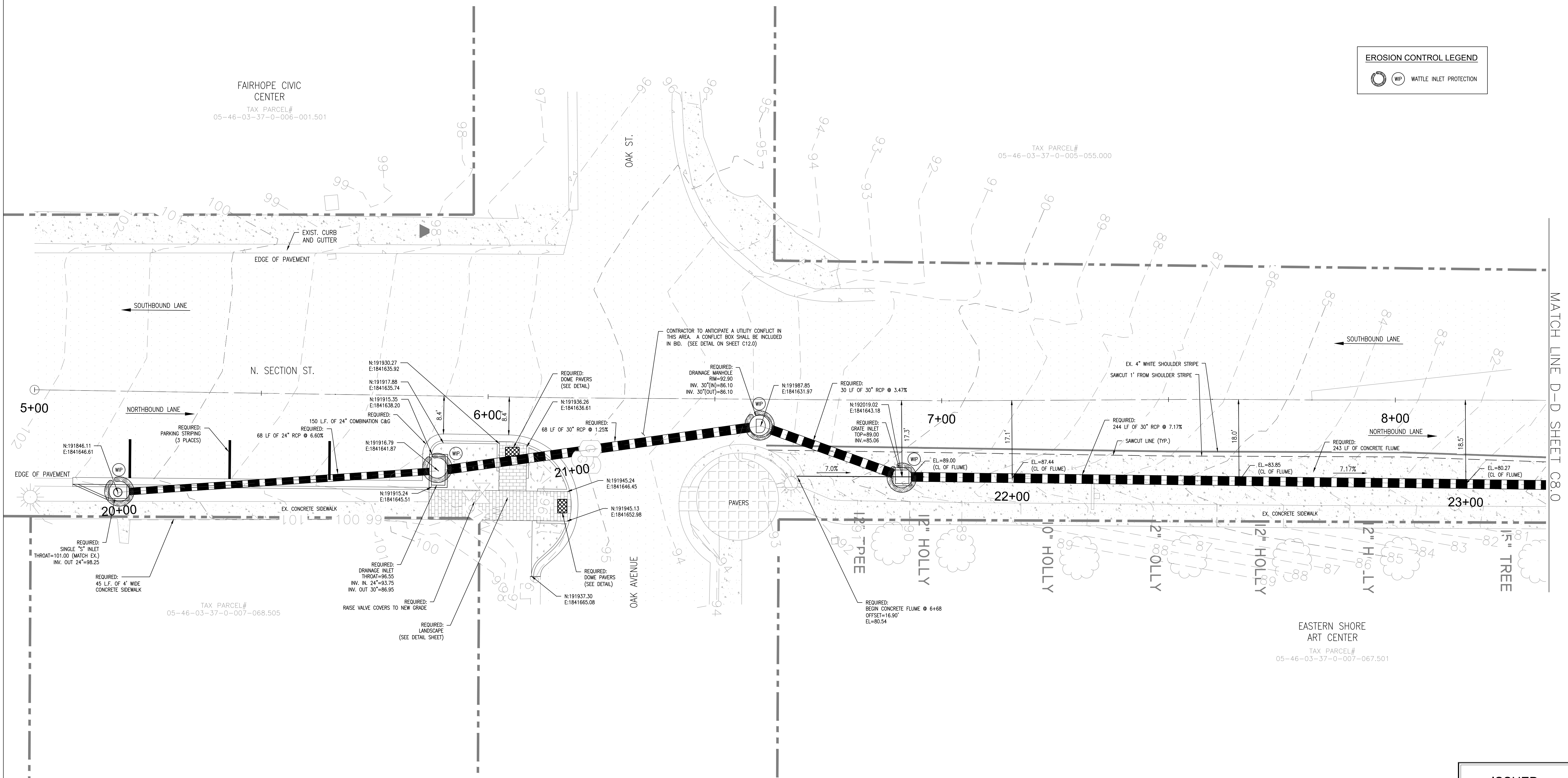
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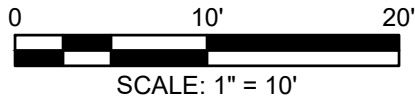
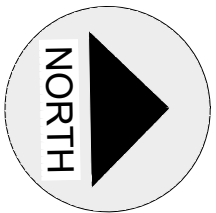
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ALABAMA LICENSED ENGINEER: CHRISTOPHER JAY LIEB, P.E. LICENSE NUMBER 31204
ALABAMA CERTIFICATE OF AUTHORIZATION NUMBER: 4938

JOB NUMBER	DRAWN BY: <u>JLG</u>	DATE: <u>05/11/2020</u>	SCALE: <u>1"=10'</u>
2019-069	CHECKED BY: <u>CJL</u>	APPROVED BY: <u>CJL</u>	ENGR: <u>CJL</u>

SECTION STREET DRAINAGE IMPROVEMENTS		
GRADING AND DRAINAGE PLAN		
FAIRHOPE, AL		
OWNER: CITY OF FAIRHOPE		
SHEET NUMBER		
7 OF 12	C7.0	A



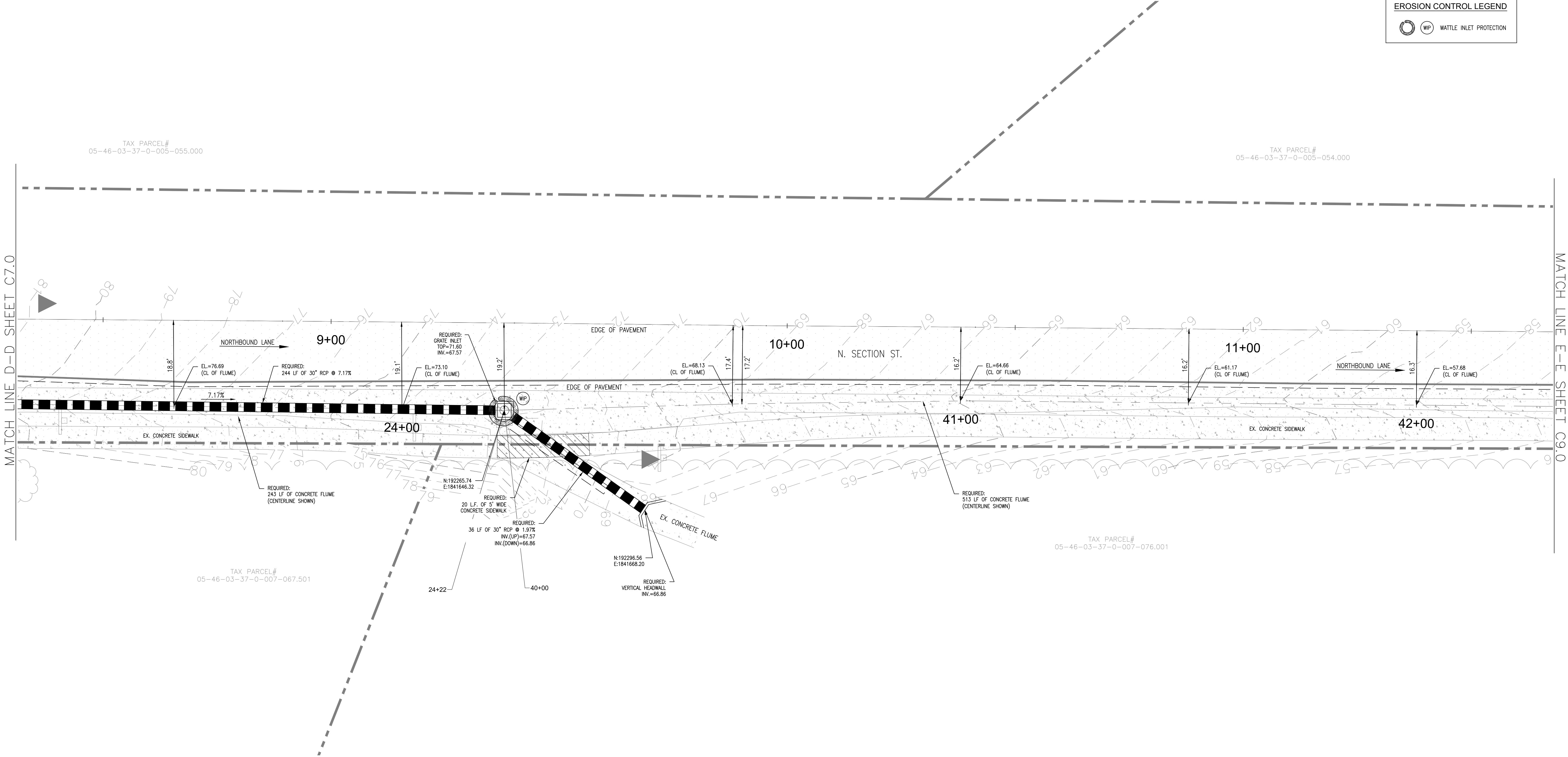
- NOTES:
- SEE SHEET C2.0 FOR ALL GENERAL NOTES.

EROSION CONTROL LEGEND



MATCH LINE D-D SHEET C7.0

MATCH LINE E-E SHEET C9.0



ISSUED
FOR
BID

REVISIONS			
A	ISSUED FOR BID	7/17/2020	



LIEB ENGINEERING COMPANY
PO BOX 2266
FAIRHOPE, AL 36533
PH: (251) 978-9779

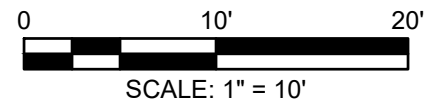
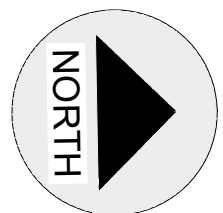
NOT VALID WITHOUT THE DATED SIGNATURE AND SEAL OF AN ALABAMA LICENSED ENGINEER.
ALABAMA LICENSED ENGINEER: CHRISTOPHER JAY LIEB, P.E. LICENSE NUMBER 31204
ALABAMA CERTIFICATE OF AUTHORIZATION NUMBER: 4938

JOB NUMBER	DRAWN BY: JLG	DATE: 05/11/2020	SCALE: 1"=10'
2019-069	CHECKED BY: CJL	APPROVED BY: CJL	ENGR: CJL

SECTION STREET DRAINAGE IMPROVEMENTS	
GRADING AND DRAINAGE PLAN	
FAIRHOPE, AL	
OWNER: CITY OF FAIRHOPE	
SHEET NUMBER	8 OF 12
C8.0	
A	



7/17/20



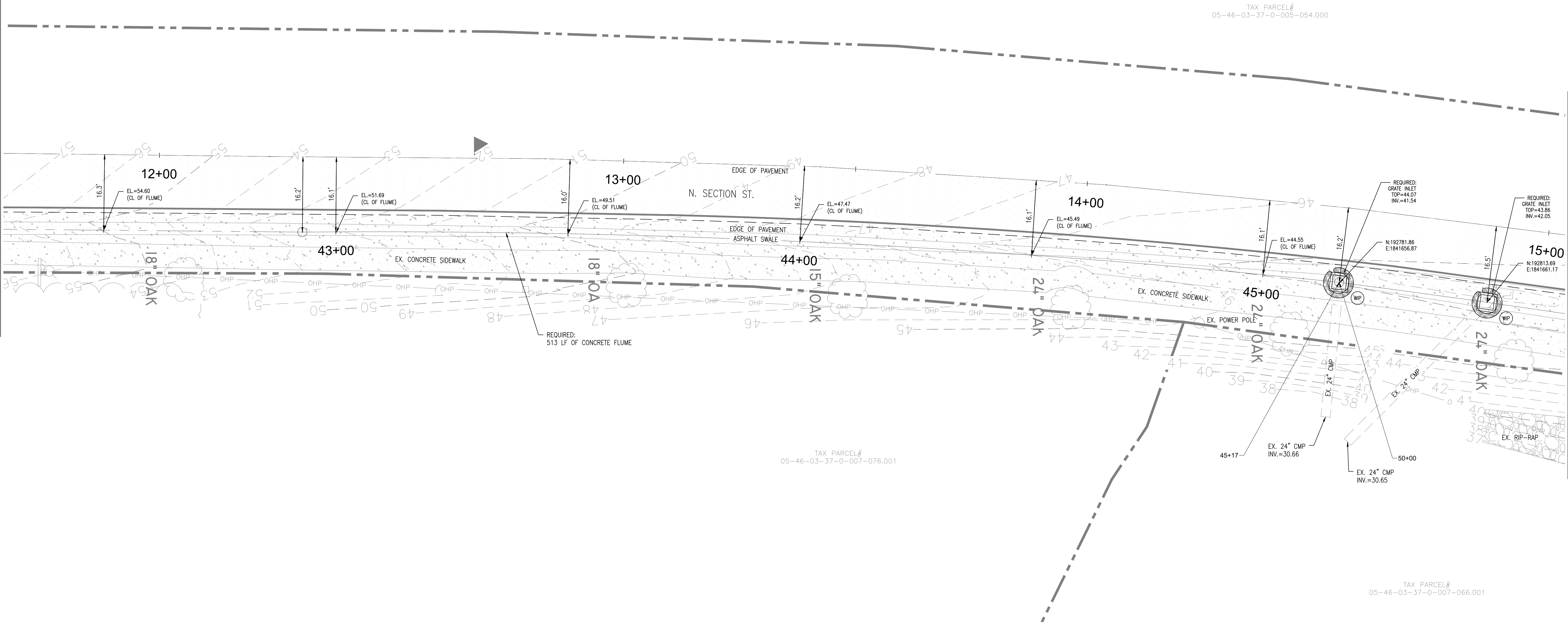
NOTES:

1. SEE SHEET C2.0 FOR ALL GENERAL NOTES.

EROSION CONTROL LEGEND



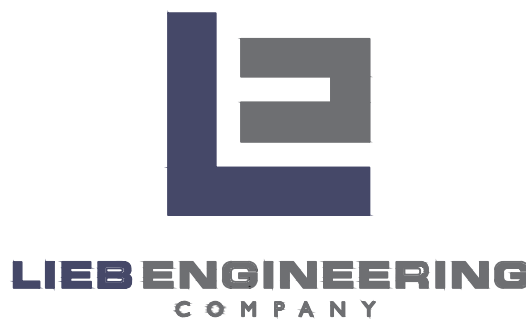
MATCH LINE E-E SHEET C8.0



MATCH LINE F-F SHEET C10.0

ISSUED
FOR
BID

REVISIONS			
A	ISSUED FOR BID	7/17/2020	



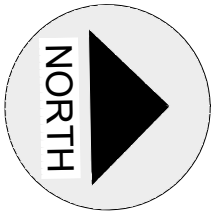
LIEB ENGINEERING COMPANY
PO BOX 2266
FAIRHOPE, AL 36533
PH: (251) 978-9779

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ALABAMA LICENSED ENGINEER: CHRISTOPHER JAY LIEB, P.E. LICENSE NUMBER 31204
ALABAMA CERTIFICATE OF AUTHORIZATION NUMBER: 4938

JOB NUMBER	DRAWN BY: JLG	DATE: 05/11/2020	SCALE: 1"=10'
2019-069	CHECKED BY: CJL	APPROVED BY: CJL	ENGR: CJL

SECTION STREET DRAINAGE IMPROVEMENTS	
GRADING AND DRAINAGE PLAN	
FAIRHOPE, AL	
OWNER: CITY OF FAIRHOPE	
SHEET NUMBER	C9.0
9 OF 12	A





0 10' 20'
SCALE: 1" = 10'

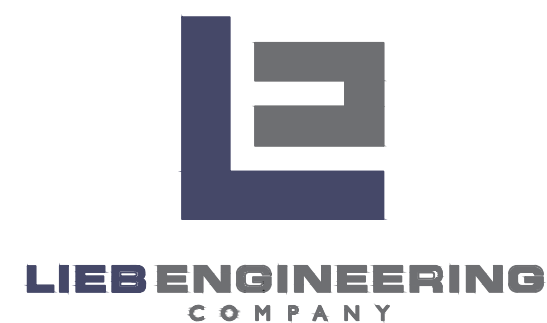
NOTES:

1. SEE SHEET C2.0 FOR ALL GENERAL NOTES.



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REVISIONS			
A	ISSUED FOR BID	7/17/2020	



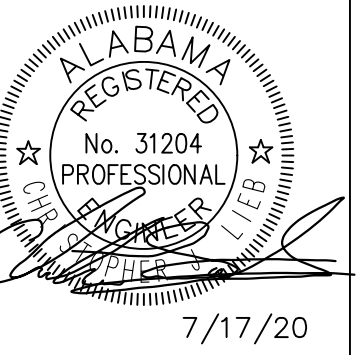
LIEB ENGINEERING COMPANY
PO BOX 2266
FAIRHOPE, AL 36533
PH: (251) 978-9779

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ALABAMA LICENSED ENGINEER: CHRISTOPHER JAY LIEB, P.E. LICENSE NUMBER 31204
ALABAMA CERTIFICATE OF AUTHORIZATION NUMBER: 4938

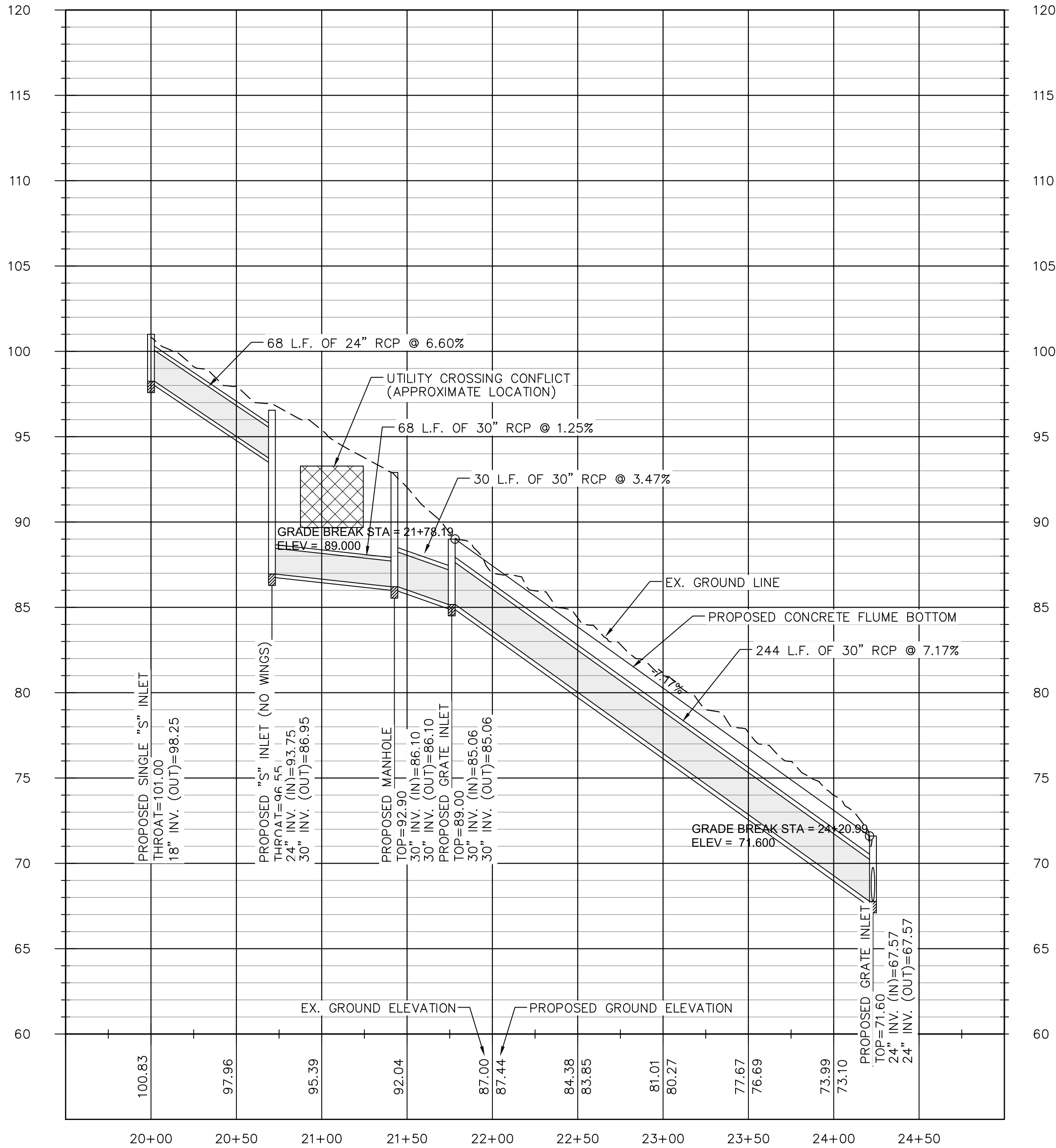
JOB NUMBER	DRAWN BY: <u>JLG</u>	DATE: <u>05/11/2020</u>	SCALE: <u>1"=10'</u>
2019-069	CHECKED BY: <u>CJL</u>	APPROVED BY: <u>CJL</u>	ENGR: <u>CJL</u>

SECTION STREET DRAINAGE IMPROVEMENTS	
GRADING AND DRAINAGE PLAN	
FAIRHOPE, AL	
OWNER: CITY OF FAIRHOPE	
SHEET NUMBER	
10 OF 12	

C10.0 A



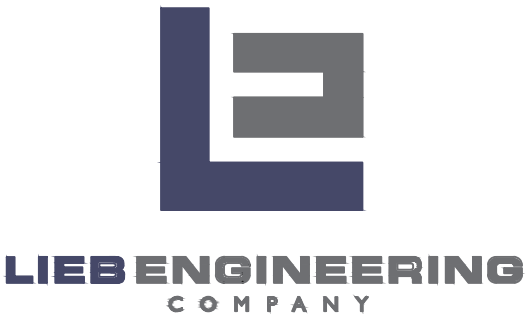
NOTES:
1. SEE SHEET C2.0 FOR ALL GENERAL NOTES.



PROFILE SCALE:
HORIZONTAL=1"=50'
VERTICAL=1"=5'

ISSUED
FOR
BID

REVISIONS			
A	ISSUED FOR BID	7/17/2020	



LIEB ENGINEERING COMPANY
PO BOX 2266
FAIRHOPE, AL 36533
PH: (251) 978-9779

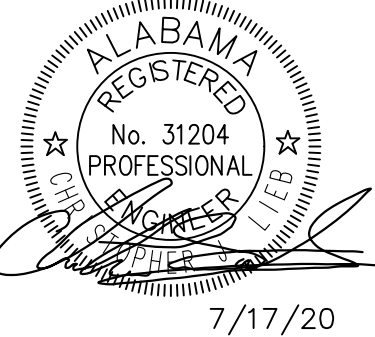
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ALABAMA CERTIFICATE OF AUTHORIZATION NUMBER: 4938

JOB NUMBER	DRAWN BY: JLG	DATE: 05/11/2020	SCALE: AS SHOWN
2019-069	CHECKED BY: CJL	APPROVED BY: CJL	ENGR: CJL

SECTION STREET DRAINAGE IMPROVEMENTS	
PROFILE VIEW	
FAIRHOPE, AL	
OWNER: CITY OF FAIRHOPE	

SHEET NUMBER	
11 OF 12	

C11.0 A



3.0 BIDDER'S DECLARATION AND UNDERSTANDING

- ### 3.1 START OF CONSTRUCTION AND CONTRACT COMPLETION TIME

3.2 ADDENDA:

3.3 BID AMOUNTS

The OWNER agrees to provide the following materials: NONE

Bid will include all labor, materials, equipment, shipping, overhead, profit, bonds, insurance and all other costs necessary to provide the complete services outlined within this contract and scope of work: 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 turnkey bid of:

All work is proposed to be conducted in accordance with the attached plans and drawings for

CITY DRAINAGE IMPROVEMENTS	QUANTITY	UNIT PRICE	UNITS	SUBTOTAL
<i>Pavement Demolition</i>	980	\$	SY	\$
<i>Striping Removal</i>	10	\$	SF	\$
<i>Curbing Demolition</i>	150	\$	LF	\$
<i>Conc/brick Ped Ramps Removal</i>	240	\$	SF	\$
<i>Conc/Flume</i>	23	\$	SY	\$
Removal of Grate Inlets	2	\$	EA	\$
Bituminous Treatment A	90	\$	SY	\$
Superpave Bituminous Concrete Wearing Surface Layer (1")	5	\$	TONS	\$
Superpave Bituminous Concrete Upper Binder Surface Layer (2")	10	\$	TONS	\$
Soil Excavation & Haul (Paving)	1,630	\$	CY	\$
New P.I.P. Concrete Curb and Gutter	150	\$	LF	\$
New ADA Pedestrian Dome mats	2	\$	EA	\$
New Paver Walk	270	\$	SF	\$
Traffic Striping	30	\$	LF	\$
Soil Mitigation - Imported Planting Soil	5	\$	CY	\$
Traffic Control	1	\$	LS	\$
Erosion Control	1	\$	LS	\$
30" RCP	390	\$	LF	\$
24" RCP	71	\$	LF	\$
Drainage Manhole	1	\$	EA	\$
Grate Inlet	4	\$	EA	\$
"S" Inlet	2	\$	EA	\$
Concrete Flume	825	\$	SY	\$
Vertical Headwall	1	\$	EA	\$
Concrete Sidewalk	28	\$	SY	\$
Conflict Box	1	\$	EA	\$
TOTAL ESTIMATE OF COST				\$

Project PW006-20 Drainage Improvements at Oak St and Section St.

3.2 LUMP SUM:

TOTAL BASE BID:

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 (\$_____)

(Amount written in words has precedence)

3.3 UNIT PRICES:

3.3.1 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.

- 3.3.2 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.
- 3.3.3 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.
- 3.3.4 The Bidder's unit price for materials listed is as including the payment of taxes (See **Section One, Advertisement and Notice for Bid: 1.5 Sales and Use Tax Savings**) where applicable: (Attach additional sheets if required)

3.4 AS BUILT DRAWINGS:

As Built Drawings are a subsidiary obligation of the project and will be a requirement at the end of the project. The Bidder's Proposal contains _____ DOLLARS (\$ _____) for "as Built drawings".

3.5 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	Telephone Number
	Name of Engineering Firm	
2.	Name of Client	Telephone Number
	Street	City
	Facility	Size
		Date
	Name of Engineer/Architect	Telephone Number
	Name of Engineering Firm	
3.	Name of Client	Telephone Number
	Street	City
	Facility	Size
		Date
	Name of Engineer/Architect	Telephone Number
	Name of Engineering Firm	

3.7 **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).

3.18 **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

Each bid must give the full business address of the Bidder and must be signed by him with his usual signature. Bids by partnerships must furnish the full names of all partners and must be signed with the partnership name by one of the members of the partnership, or by an authorized representative, followed by the signature and designation of the person signing. Bids by Corporations must be signed with the legal name of the corporation followed by the name of the State of Incorporation and by the signature and designation of the President, secretary, or other person authorized to bind it in the matter. The name of each person shall also be typed or printed below the signature. A bid by a person who affixes to this signature the word "president", "secretary", "agent" or other designation without disclosing his principal, may be held to be the bid of the individual signing. When requested by the City of Fairhope, Baldwin County, Alabama, satisfactory evidence of the authority of the officer signing in behalf of the corporation shall be furnished.

The undersigned agrees to furnish the goods/services as requested by you for the City of Fairhope, Baldwin County, Alabama in your Invitation to Bid, and certifies that they will meet or exceed the Specifications called for. The undersigned has read all information pertaining to this bid and has resolved all questions. It is also understood and agreed that all prices quoted are F.O.B. as described in the bid documents and specifications. The undersigned also affirms he/she has not been in any agreement or collusion among Bidders or prospective Bidders in restraint of freedom of competition, by agreement to bid at a fixed price or to refrain from bidding or otherwise.

WITNESS our hands this _____ day of _____, 2020.

IF CORPORATION, PARTNERSHIP, OR JOINT VENTURE

Name of Corporation, Partnership or Joint Venture

BY:

(SIGNATURE of Officer authorized for sign Bids and Contracts for the firm)

(Position or Title)

(PRINT NAME(S) OF OTHERS IF IN PARTNERSHIP)

Business Mailing

Address

Phone

City, State, Zip Code

E-Mail

Alabama General Contractor License No. _____ AI Foreign Corp Entity ID _____
(Attach Copy) (Required of Out of State vendors)

Alabama General Contractor License Major

Categories:

Alabama General Contractor Specialties

NOTARY FOR CORPORATION, PARTNERSHIP OR JOINT VENTURE

STATE OF _____ }

COUNTY OF _____ }

I the undersigned authority in and for the said State and County, hereby certify that _____

_____ and _____, as _____
Print name of Bid signer Print name of Bid signer Title

of _____
Print Company Name

whose name(s) is signed to the foregoing document and who is known to me, acknowledged before me on this day, that, being informed of the contents of the document they executed the same voluntarily on the day the same bears date.

Given under my hand and Notary Seal on this _____ day of _____, 2020.

Notary Public _____

My Commission Expires _____

[END OF BID PROPOSAL]

CITY OF FAIRHOPE
PUBLIC WORKS CONTRACT DOCUMENTS

**SECTION FOUR
BID BOND**

The PRINCIPAL (Bidder's name and address)

The OWNER
City of Fairhope
P.O. Drawer 429
Fairhope, AL 36533

The PROJECT for which the Principal's Bid is submitted: (Project name as it appears in the Bid Documents)

PROJECT NO.	PW006-20
PROJECT NAME:	DRAINAGE IMPROVEMENTS AT OAK STREET AND SECTION STREET

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned Principal and Surety, jointly and severally, hereby bind ourselves, our heirs, executors, administrators, successors, and assigns to the OWNER in the PENAL SUM of five percent (5%) of the amount of the Principal's bid, but in no event more than TEN THOUSAND DOLLARS (\$10,000.00).

THE CONDITION OF THIS OBLIGATION is that the Principal has submitted to the OWNER the attached bid, which is incorporated herein by reference, for the Project identified above.

NOW, THEREFORE, if, within the terms of the Bid Document, the OWNER accepts the Principal's bid and the Principal thereafter either:

- (a) executes and delivers a Construction Contract with the required Performance and Payment Bonds (each in the for contained in the Bid Documents and properly completed in accordance with the bid) and delivers evidence of insurance as prescribed in the Bid Documents, or fails to execute and deliver such Construction Contract with such Bonds and evidence of insurance, but pays the OWNER the difference, not to exceed the Penal Sum of this Bond, between the amount of the Principal's Bid and the larger amount for which the OWNER may award a Construction Contract for the same Work to another Bidder, then, this obligation shall be null and void, otherwise it shall remain in full force and effect.

The Surety, for value received, hereby stipulates and agrees that the obligation of the Surety under this Bond shall not in any manner be impaired or affected by any extension of the time within which the OWNER may accept the Principal's bid, and the Surety does hereby waive notice of any such extension.

SIGNED AND SEALED this ____ day of _____, 2020.

ATTEST

(Principal (Company))

By _____

Print Name and Title

**SURETY
ATTEST**

Surety Company

By _____

Print Name and Title

CORPORATION

Name of Corporation, Partnership, or Joint Venture

Business Mailing Address: _____

email _____ phone _____

BY: _____
(Signature of Officer Authorized to sign Bids
and Contracts for the Firm)

(Position or Title)

(General Contractor's License Number)

Foreign Corporation Entity Id (Required of out-of-state-vendors)

Attest:

(Secretary)

(Name of State under the laws of which incorporated)

(Name of Surety)

BY: _____
(Attorney in Fact)

SECTION FIVE INSURANCE REQUIREMENTS

5.0 INSURANCE REQUIREMENTS

Awarded Contractor, at its sole expense, shall obtain and maintain in full force the following insurance to protect the Contractor and the City of Fairhope at limits and coverages specified herein. The City of Fairhope will be listed as an additional insured under the Contractor's General Liability insurance and automobile liability insurance policies, and all other applicable policies and certificates of insurance. These limits and coverages specified are the minimum to be maintained and are not intended to represent the correct insurance needed to fully and adequately protect the awarded Bidder.

5.01 All insurance will be provided by insurers by admitted carriers in the State of Alabama, shall have a minimum A.M. Best rating of A-VII and must be acceptable to the CITY. Self-insured plans and/or group funds not having an A.M. Best rating must be submitted to the CITY for prior approval.

5.02 **NO WORK IS TO BE PERFORMED UNTIL PROOF OF COMPLIANCE WITH THE INSURANCE REQUIREMENTS HAS BEEN RECEIVED BY THE CITY.**

5.03 **Worker's Compensation and Employer's Liability**

Part One: Statutory Benefits as required by the State of Alabama		
Part Two: Employer's Liability	\$1,000,000	each accident
	\$1,000,000	each employee
	\$1,000,000	Policy Limit

5.04 **U.S. Longshoreman & Harbor Workers Act (USL&H)**

Required if contract involves work near a navigable waterway that may be subject to the USL&H law.

5.05 **Maritime Endorsement (Jones Act)**

Endorsement required if contract involves the use of a Vessel. Or include coverage for "Master or Member or Crew" under "Protection and Indemnity" coverage (P&I) unless crew is covered under Workers Compensation.

Bodily injury by accident	\$1,000,000	each accident
Bodily injury by disease	\$1,000,000	aggregate

5.06 **Commercial General Liability**

Coverage on an Occurrence from with a combined single limit of (Bodily Injury and Property Damage combined as follows:

Each occurrence	\$1,000,000
Personal and Advertising Injury	\$1,000,000
Products/Completed Operation Aggregate	\$2,000,000
General Aggregate	\$2,000,000

Coverage to include:

- Premises and operations
- Personal injury and Advertising Injury
- Products/completed operations
- Independent Contractors
- Blanket Contractual Liability
 - Explosion, Collapse and Underground hazards
- Broad Form Property Damage
- Railroad Protective Liability Insurance if work involves construction, demolition, or maintenance operations on or within 50 feet of a railroad.

5.07 **Automobile Liability**

Covering all owned, non-owned and hired vehicles with a limit of no less than \$1,000,000 combined single limit of Bodily injury and property damage per occurrence.

5.08 Certificates of Insurance

A Certificate of Insurance evidencing the above minimum requirements must be provided to and accepted by the CITY PRIOR to commencement of any work on the contract. Each policy shall be endorsed to provide ten (10) days written notice of cancellation to the CITY.

- 5.08.1** The Contractor shall require certificates of insurance from sub-Contractors. Sub-Contractors will carry limits of insurance equal to or greater than those carried by the Contractor. These certificates shall evidence waivers of subrogation in favor of the Contractor and the CITY, and shall be made available to the CITY upon request.

SECTION SIX
Standard Terms and Conditions
City of Fairhope, AL

65. ACCEPTANCE OF AGREEMENT

This Agreement contains all terms and conditions agreed upon by the Owner and Winning bidder. No other agreement, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind either party hereto. The Winning Bidder shall not employ Subcontractors without the express written permission of the Owner. No waiver, alteration, consent or modification of any of the provisions of the Agreement shall be binding unless in writing and signed by the Owner and Contractor. This Agreement shall not be construed against the party or parties preparing it. It shall be construed as if all the parties and each of them jointly prepared this Agreement, and any uncertainty or ambiguity shall not be interpreted against one or more parties.

2. ACCEPTANCE OF WORK

The City of Fairhope will be deemed to have accepted the Work after the City of Fairhope agrees the Work is completed by signature on delivery or service tickets. In the event Work furnished under the Contract / Agreement / Purchase Order is found to be defective or does not conform to the intent of the Contract / Agreement / Purchase Order, the awarded vendor shall, after receipt of notice from the City of Fairhope, correct the deficiencies. Failure on the part of the awarded vendor to properly correct the deficiencies within the time period allowed will constitute the City of Fairhope's right to cancel the Contract / Agreement / Purchase Order immediately, upon written notice to the awarded vendor.

3. ADDENDA

All Addenda are part of the Contract Documents. Include resultant costs in the Bid. Addenda will be issued by email to all Bidders on record, and posted to the City of Fairhope website www.fairhopeal.gov. It is the responsibility of the bidder to verify that all addenda have been received, and to include all signed addenda in the bid submission

4. ADDITIONAL ORDERS

Unless it is specifically stated to the contrary in the bid response, the City of Fairhope reserves the option to place additional orders against a contract awarded as a result of this solicitation at the same terms and conditions; to extend the renewal date until a new bid is in place, if it is mutually agreeable.

5. APPLICABLE LAW

This Agreement is deemed to be under and shall be governed by and construed according to the laws of the State of Alabama. Any litigation arising out of the Agreement shall be heard in the Courts of Baldwin County, Alabama.

6. ASSIGNMENT

The awarded vendor shall not assign the Contract / Agreement / Purchase Order or sublet it as a whole without the express written permission of the City of Fairhope. The awarded vendor shall not assign any payment due them hereunder, without the express written permission of City of Fairhope. The City of Fairhope may assign the Contract / Agreement / Purchase Order, or sublet it as a whole, without the consent of the awarded vendor.

7. ASSURANCE OF NON-CONVICTION OF BRIBERY

The bidder hereby declares and affirms that, to its best knowledge, none of its officers, directors, or partners and none of its employees directly involved in obtaining contracts has been convicted of bribery, attempted bribery or conspiracy to bribe under the laws of any state or Federal government.

8. AWARD CONSIDERATION

The following factors will be considered in determining the lowest **responsible** bidder: Overall quality, Conformity with specifications both general and specific, Purposes for which materials or services are required, Delivery dates and time required for delivery, Unit acquisition cost, financial ability to meet the contract, previous performance, facilities and equipment, availability of repair parts, experience, delivery promise, terms of payments, compatibility as required, other costs, and other objective and accountable factors which are reasonable.

9. AWARD OR REJECTION OF BIDS

The Bid will be awarded to the lowest responsible bidder complying with conditions of the invitation for bids, provided his bid is reasonable and it is in the interest of the City of Fairhope to accept it. The bidder to whom the award is made will be notified at the earliest possible date. The City of Fairhope, however, reserves the right to reject any and all bids and to waive any informality in bids received whenever such rejection or waiver is in the interest to the City of Fairhope.

10. BACK ORDERS

If it is necessary to back order any items, the vendor must notify the Purchasing Department and advise as to the expected shipping or delivery date. If this date is not acceptable, the City of Fairhope may seek remedies for default.

11. BID AND PERFORMANCE SECURITY

If bid security is required, a bid bond or cashier's check in the amount indicated on the bid cover must accompany the bid and be made payable to The City of Fairhope of Baldwin County, AL. Corporate or certified checks are not acceptable. Bonds must be in a form satisfactory to the City and underwritten by a company licensed to issue bonds in the State of Alabama. If bid security fails to accompany the bid, it shall be deemed unresponsive, unless the Purchasing Manager deems the failure to be non-substantial. All checks will be returned to the bidders after the contract has been approved. If a performance bond is required, the successful bidder will be notified after the awarding of the contract.

12. BRAND NAMES

Reference to brand names and numbers is descriptive, but not restrictive, unless otherwise specified. Bids on equivalent items meeting the standards of quality thereby indicated will be considered, providing the bid clearly describes the article offered and indicates how it differs from the referenced brands. Descriptive literature or manufacturers specifications plus any supplemental information necessary for comparison purposes should be submitted with the bid or the bid on that item may be rejected. Reference to literature submitted with a previous bid or

on file with the Division of Purchasing will not satisfy this requirement. The burden is on the bidder to demonstrate that the item bid is equivalent to the item specified in the ITB. Bids without sufficient documentation to fully support equality, may be considered non-responsive. Reference by the City of Fairhope in the ITB to available existing specifications shall be sufficient to make the terms of such specifications binding on the bidder. Unless the bidder specifies otherwise in its bid, it is understood the bidder is offering a referenced brand item as specified in the ITB or is bidding as specified when no brand is referenced. Failure to examine drawings, specifications and instructions will be at the bidder's risk.

13. BUSINESS LICENSE

The vendor selected to enter into a Contract / Agreement with the City of Fairhope must be licensed to do business in the City of Fairhope prior to commencement of any work under the contract. Delivery of goods or services to the City of Fairhope by Purchase Order have detailed and varied Business License requirements. In all instances that require a business license. Awarded vendor will provide proof of possessing a current City of Fairhope Business License. Prospective bidders will not be required to possess a City of Fairhope Business License prior to award.

14. CANCELLATION OF / CONTRACT / AGREEMENT / PURCHASE ORDER / LEASE

A purchase order can be canceled in whole or in part when awarded vendor fails to deliver or perform as specified. Cancellation of a purchase order can only be made by a written purchase order change (POC) from the City of Fairhope. A term contract, lease or agreement can be canceled by the City of Fairhope, for justifiable cause, or convenience, by written notice.

15. CERTIFICATION PURSUANT TO ACT NO. 2006-557

Alabama law (section 41-4-116, code of Alabama 1975) provides that every bid submitted and contract executed shall contain a certification that the vendor, contractor, and all of its affiliates that make sales for delivery into Alabama or leases for use in Alabama are registered, collecting, and remitting Alabama state and local sales, use, and/or lease tax on all taxable sales and leases into Alabama. By submitting this bid, the bidder is hereby certifying that they are in full compliance with act no. 2006-557, they are not barred from bidding or entering into a contract pursuant to 41-4-116, and acknowledges that the awarding authority may declare the contract void if the certification is false. All corporations must register to do business in Alabama with the Office of the Secretary of State. Their address is:

Office of the Secretary of State

P.O. Box 5616

Montgomery, AL 36103

(334) 242-5324

Fax: (334) 240-3138

<http://www.sos.state.al.us/index.aspx>

The Foreign Corporation form is online at

<http://sos.alabama.gov/business-entities>.

16. COST OF REMEDYING DEFECTS

All defects, indirect and consequential costs of correcting, removing or replacing any or all of the defective materials or equipment will be charged against the awarded vendor.

17. DELIVERY OF BID

Bids must be received in the Purchasing Office by the date and time specified on the bid cover. All bids will be accepted until the time and date stated on the bid cover. No bids will be accepted that extend past the time and date on the bid cover. The time of receipt shall be determined by the time clock stamp in the Purchasing Department. Bids submitted by U.S. Mail must be received by the City of Fairhope of Baldwin County, Alabama, in the City of Fairhope offices, 555 South Section St., Fairhope, AL, unless otherwise specified.

18. DELIVERY

The number of calendar days required for delivery after receipt of a purchase order shall be stated in the RFQ / ITB / RFP and /or Purchase Orders. When no time is stated in the document, the time shall be fourteen (14) calendar days after receipt of order. If a shipment is not made within the time period specified, the Purchase Order may be canceled.

19. ENVIRONMENTAL REQUIREMENTS

All products will be clearly labeled for their intended use. Each delivery of product or materials will include a Material Safety Data Sheet (MSDS) for all materials that require an MSDS. All manufacturers/distributors of hazardous substances, including any of the items listed on this bid/quote/ contract and subsequent award must include completed material safety data sheet (MSDS) for each hazardous material. Additionally, each container of hazardous materials must be appropriately labeled with:

- a) The identity of the hazardous material,
- b) Appropriate hazard warnings, and manufacturer, importer, or other responsible party.

20. EQUIPMENT DEMONSTRATION

The City of Fairhope may require equipment/ product materials or service techniques to be demonstrated at a time, date and location to be specified by the City of Fairhope.

21. EQUIPMENT ELECTRICAL CERTIFICATION

All electrical equipment purchased shall conform to, and be identified in, the applicable standard(s), or otherwise be certified as applicable, as of the bid opening date and time, by Underwriters Laboratories, Inc. or other recognized laboratory facility. Bidder must provide satisfactory documentation with returned bid that all such equipment meets the applicable product standard or has otherwise been certified as outlined above. Unless indicated in the bid document, the above certification shall apply to the equipment itself, not the individual components of that equipment.

65. ERRORS IN BID

Bidders are assumed to be informed regarding conditions, requirements and specifications prior to submitting bids. Failure to do so will be at the bidder's risk. Bids already submitted may be withdrawn without penalty prior to bid opening. Errors discovered after the bid opening may not be corrected.

65. FORCE MAJEURE

Neither the City nor the awarded vendor shall be deemed in breach of any contract / Purchase Order or Agreement which may result from this proposal submission if it is prevented from performing any of the obligations hereunder by reason of Acts of God, acts of the public enemy, acts of superior governmental authority, strikes or labor disputes, floods, riots, rebellion, sabotage, or any similar other unforeseeable causes beyond its

control and not due to its fault or negligence. Each party shall notify the other immediately in writing of the cause of such after the beginning period thereof. The awarded vendor may request cancellation and the City of Fairhope may grant the request if performance is prevented by any of the above referenced causes, or other unavoidable circumstances not attributable to the fault or negligence of the vendor. The burden of proof for such relief rests with the vendor. All correspondence pertaining to cancellation of a purchase order or term contract must be addressed to the City of Fairhope Purchasing Manager.

65. HAZARDOUS AND TOXIC SUBSTANCES

Bidder must comply with all applicable Federal, State, County and City laws, ordinances and regulations relating to hazardous and toxic substances, including such laws, ordinances and regulations pertaining to information hazardous and toxic substances, and as amended from time to time. Bidder shall provide the City of Fairhope with a "Material Safety Data Sheet" for all goods that carry one.

25. INDEMNITY

Indemnity: The awarded vendor hereby agrees to indemnify and save harmless the City of Fairhope, its officers, agent, and employees, from and against any and all liabilities, claims, demands, damages, fines, fees, expenses, penalties, suits, proceedings, actions and cost of actions, including reasonable attorneys fees for trial and on appeal, of any kind and nature, arising or growing out of, or in any way connected with the performance of this Contract / Agreement / Purchase Order, to the extent caused by a negligent act or omission of the awarded vendor, their agents, servants, employees, Subcontractors, or others associated with the awarded vendor. The awarded vendor shall be responsible for damage to any equipment excluded from this agreement, or damage or injury caused by any equipment excluded from this agreement, only to the extent that the damage or injury is caused by a negligent act or omission of the awarded vendor, or caused by failure of the awarded vendor's supplied product to perform as specified.

26. INSPECTION

All materials, workmanship, equipment, and supplies are subject to inspection and test at any source or time. Final inspection, acceptance or rejection will be made at delivery destination. Goods that do not meet specifications will be rejected unless substitutions have been approved by the City of Fairhope. Failure to inspect or to reject upon receipt, however, does not relieve the awarded vendor of liability. When subsequent tests, after receipt, are conducted and when such tests reveal a failure to meet specifications, the City of Fairhope will reject the goods and the awarded vendor shall immediately supply goods meeting specifications or the City of Fairhope may seek damages including but not limited to the testing expense, regardless of whether a part of or all of the goods have been consumed through the testing process. Rejected goods shall be removed by the awarded vendor promptly after rejection, at his expense. If not removed in fourteen (14) calendar days, they may be disposed of at the discretion of the City of Fairhope. Disposal costs will be the awarded vendor's responsibility.

27. INSPECTION OF PREMISES

At reasonable times, the City may inspect those areas of the awarded vendor's place of business that are related to the performance of a Contract / Agreement / Purchase Order. If the

City makes such an inspection, the awarded vendor must provide reasonable assistance. The City of Fairhope reserves the right on demand and without notice all the vendor's files associated with a subsequent Contract / Agreement / Purchase Order where payments are based on the awarded vendor's record of time, salaries, materials, or actual expenses. This same clause will apply to any subcontractors assigned to the Contract / Agreement / Purchase Order.

28. INSURANCE

If a Contract / Agreement / Purchase Order results from this RFQ /ITB /RFP, or other form of solicitation, the awarded vendor shall maintain such insurance as will indemnify and hold harmless the City of Fairhope from Workmen's Compensation and Public Liability claims from property damage and personal injury, including death, which may arise from the awarded vendor's operations under this Contract / Agreement / Purchase Order, or by anyone directly or indirectly employed by him/her.

29. INVITATION TO BID

Any provisions made in the RFQ / ITB / RFP, or other form of solicitation, supersedes any provisions outlined here in the General Terms and Conditions.

30. INVOICING, DELIVERY, PACKAGING

Invoices shall be prepared only after ordered materials have been delivered. All invoices must show the purchase order number. Unless otherwise specified in writing, vendors shall not ship any material without an authorized Purchase Order from the City of Fairhope Purchasing Department. All packages delivered must show the purchase order number. The awarded vendor will be required to furnish all materials, equipment and/or service called for at the bid price quoted. In the event the awarded vendor fails to deliver within a reasonable period of time, as determined by the City of Fairhope, the right is reserved to cancel the award and subsequent purchase order and purchase from the next lowest responsible bidder the items needed. The original awarded vendor will be back charged the difference between the original contract price and the price the City of Fairhope has to pay as a result of the failure to perform by the original awarded vendor. All bids will remain firm for acceptance for 60 days from the date of bid opening. Prices shall be net F.O.B., Prepaid and Allow, City of Fairhope chosen site, Baldwin County, Al. The title and risk of loss of the goods will not pass to the City of Fairhope until receipt and acceptance takes place at the F.O.B. point.

31. LABELING

Individual shipping cartons shall be labeled with the name "City of Fairhope", Purchase Order Number, and where applicable, Contract Number, date of manufacture, batch number, storage requirements, conditions, and recommended shelf life. Bidders are encouraged to offer product packaging with recycled content.

32. LOSS OR DAMAGE IN TRANSIT

Delivery by a vendor to a common carrier does not constitute delivery to the City of Fairhope. Any claim for loss or damage incurred during delivery shall be between the vendor and the carrier. The City of Fairhope accepts title only after satisfactory receipt at the delivery point. The City of Fairhope shall note all visible damages on the freight bill and may refuse the damaged goods. The vendor shall make immediate replacement of the damaged merchandise or be subject to damages for breach of contract. If damage is to a small portion of a total shipment and the

City of Fairhope will not be inconvenienced because of the shortage, the vendor may be permitted by the Purchasing Manager to deduct the amount of damage or loss from its invoice, in lieu of replacement. Risk of loss during delivery is borne by the vendor until the goods have been accepted by the City of Fairhope, unless otherwise specified in the RFQ / ITB / RFP or other form of solicitation.

33. MANDATORY SITE VISIT

If the RFQ / ITB /RFP or other form of solicitation requires a mandatory site visit, bidders must inspect the site where installation or service is to take place to obtain a full understanding of scope of work outlined therein. Date of site visit will be determined by the City of Fairhope.

34 MONITORING OF SERVICES

Performance of services will be monitored by the requisitioning department and/or the Purchasing Department, and evaluation reports may be filed with the Purchasing Department. Performance not meeting specifications will result in cancellation of Contract / Agreement / Purchase Order and may result in vendor being removed from the vendor list.

35. NONCONFORMING MERCHANDISE

When merchandise received from the lowest responsible bidder is not in accordance with the purchase order, it will be returned to the bidder, at bidder's expense.

36. NON-DISCRIMINATION

The City of Fairhope is an Equal Opportunity Employer and requires that all contractors comply with the Equal Employment Opportunity laws and the provisions of the Contract / Agreement / Purchase Order documents in this regard. The City also encourages and supports the utilization of Minority Business Enterprises on this and all public bids.

37. NON -EXCLUSIVE

Unless otherwise specified, this Contract / Agreement / Purchase Order is considered a non-exclusive Contract /Agreement / Purchase Order between the parties.

38. NOTIFICATION AND ACCIDENT REPORTS

In the event of accidents of any kind, in the performance of a Contract / Agreement / Purchase Order, the awarded vendor shall notify the City of Fairhope immediately and furnish, without delay, copies of all such accident reports to the City of Fairhope. If in the performance of their Work, the awarded vendor fails to immediately report an accident to the City of Fairhope, of which the awarded vendor has knowledge of and which results in a fine levied against the City of Fairhope then the awarded vendor shall be responsible for all fines levied against the City of Fairhope.

39. PACKAGING

All goods must be packaged in new packing containers. Packing that meets the requirements of common carriers is acceptable, unless otherwise required. A packing slip or invoice must accompany all shipments and must reference the purchase order number. Unless otherwise specified, goods are to be packaged in cartons meeting federal specifications and shipped on non-returnable pallets.

40. PATENTS

Awarded Vendor guarantees that the sale and / or use of goods

will not infringe upon any U.S. or foreign patent. Awarded vendor will at his / her own expense, indemnify, protect and save harmless the City of Fairhope, on any patent claims arising from the purchase of goods or services.

41. PAYMENT

Invoices – Upon completion of service and delivery of materials specified in the applicable purchase order, awarded vendor will submit an invoice and signed delivery ticket to:

City of Fairhope
Accounts Payable Department
P.O. Box 429
Fairhope, Al. 36533
ap@fairhopeal.gov

All invoices must reference appropriate Purchase Order Numbers
Payment of Invoice: All invoices received by the City of Fairhope are payable within thirty (30) days from the date of receipt by the City of Fairhope, provided they are approved by the City of Fairhope.

42. PAYMENT WITHHELD

Payment may be withheld until all items have been delivered and all requirements of the Contract / Agreement / Purchase Order have been fulfilled

43. PRODUCT TESTING

Vendor shall incur all cost involved in obtaining an Independent Laboratory Test if the City deems necessary during the term of the Contract / Agreement / Purchase Order. The City of Fairhope reserves the right to request a demonstration of any and all items bid before making the award

44. PERMITS LICENSES AND CERTIFICATES

The awarded vendor is to procure all permits, licenses, and certificates, or any approvals of plans or specifications as may be required by Federal, State, Local Laws, ordinances, rules, and regulations, for the proper execution and completion of Work covered under the Contract / Agreement / Purchase Order.

45. PREPARATION OF BID

All bids / proposals shall be typewritten or in ink on the form(s) prepared by the City of Fairhope. Bids / proposals prepared in pencil will not be accepted. All bids / proposals must be signed by officials of the corporation or company duly authorized to sign bids / proposals. Any bid / proposal submitted without being signed will automatically be rejected. All corrections or erasures shall be initialed and dated by the person authorized to sign quotations /bids / proposals. If there are discrepancies between unit prices quoted and extensions, the unit price will prevail.

46. QUESTIONS / CONTACT

. Commencing with the issuance of the RFQ / ITB / RFP, or other form of solicitation, no vendor or anyone acting on a vendor's behalf, shall make direct or indirect contact with City personnel or undertake any activities or take any action to otherwise promote its quotation / bid / proposal to the City or its personnel. All communications shall be made to the contact identified in the quotation / bid / proposal documents. Violation of this requirement may, at the City's sole and absolute discretion, be grounds for disqualifying a vendor from further consideration.

47. RECEIPT BY CITY OF FAIRHOPE

If not otherwise stated in the order, the City of Fairhope will be said to have received goods when they have been delivered, unloaded and placed on the agency's dock or if there is no dock, inside an accessible building, and signed for by an authorized City employee. Shipments will be checked against the receiving copy of the Purchase Order. If the purchase order requires grading certificates, USDA Stamps, or any proof of quality, such proof must accompany the shipment.

48. REJECTION OF BIDS

The City of Fairhope reserves the right to accept or reject any or all bids in whole or in part for any reason, to waive technicalities or informalities, or to advertise for new proposals, if, in the judgment of the awarding authority, the best interest of the City of Fairhope will be promoted thereby. Bidders may be disqualified and rejection of proposals may be recommended for any of (but not limited to) the following causes: Failure to use the bid forms furnished by the City of Fairhope, Lack of signature by an authorized representative on the bid form, Failure to properly complete the bid form and vendor compliance, Evidence of collusion among bidders, Unauthorized alteration of the bid form.

50. RIGHT TO AUDIT

The awarded vendor shall maintain documentation of all work performed. The awarded vendor shall make any and all documentation available to the City of Fairhope at all reasonable times, for inspections and audit by the City of Purchase Order and for a period of Three (3) years after expiration of the Contract / Agreement / Purchase Order.

51. SAMPLES

Bidders will not be required to furnish samples at the time of bid opening, unless specifically called for. The City of Fairhope reserves the right to request samples after bid opening to assist in the evaluation of proposals submitted.

52. SAFETY MEASURES

The awarded vendor shall take all necessary precautions for the safety of the City of Fairhope's and awarded vendor's employees at the Work site, and shall erect and properly maintain at all times, all necessary safeguards for the protection of the workmen and the public. The awarded vendor shall post signs warning against hazards in and around the Work site.

53. SET-UP AND INSTALLATION

Unless otherwise specified, bid / quotation to include cost of all uncrating, disposal of shipping materials, set-up, testing and initial instruction to agency personnel.

54. SPILL CLEAN UP

The awarded vendor shall be responsible for spillage caused by their negligence, which occurs during transit or unloading operations. The awarded vendor shall immediately report and clean up any spillage. Upon failure to do so, the awarded vendor shall remain responsible for all actual related costs

55. SUBSTITUTIONS

Substitutions on a purchase order shall require the approval of the Originating Buyer. The City of Fairhope reserves the right to reject at destination and hold at the vendor's risk and expense any goods supplied by the vendor which do not conform to the specification or description embodied in the order or are inferior in any respect to the good specified. Any good bought by sample which is inferior

in quality to the sample submitted by vendor will be rejected. Any goods delivered that do not meet specifications may be returned to the vendor at its expense. When a good is returned, the vendor must make immediate replacement with acceptable merchandise or the City of Fairhope may seek remedies for default.

56. TABULATION

Bid results are posted on The City of Fairhope's web site: www.fairhopeal.gov. The awarded vendor will be sent a written notification via mail.

57. TAXES

Prices quoted shall be delivered prices, exclusive of all federal or state excise, sales, and manufacturer's taxes. The City will assume no transportation or handling charges other than specified in the RFQ, ITB, RFP or other form of solicitation. The City is tax exempt by law – Code of Alabama 1975.

58. TERMINATION FOR CONVENIENCE

Any Contract / Agreement / Purchase Order may be terminated for convenience by the City of Fairhope, in whole or in part, by written notification to the awarded vendor.

59. TERMINATION FOR DEFAULT

Performance of Work under the Contract / Agreement / Purchase Order Agreement may be terminated by the City of Fairhope, in whole or in part, in writing, whenever the City of Fairhope determines that the awarded vendor has failed to meet the requirements of the Contract / Agreement / Purchase Order.

60. TERMINATION FOR NON-APPROPRIATION

Termination for Non-appropriation – The continuation of any financial obligation beyond the current fiscal year is subject to and contingent upon sufficient funds being appropriated, budgeted, and otherwise made available by the local source, State Legislature and/or federal sources. The City of Fairhope may terminate any financial obligation, and awarded vendor waives any and all claim(s) for damages, effective immediately upon receipt of written notice (or any date specified therein) if for any reason the City of Fairhope's funding from local, State and/or federal sources is not appropriated, withdrawn or limited.

61. TIME IS OF THE ESSENCE

The City of Fairhope and awarded vendor agree that time is of the essence in the performance of work called for under this Contract / Agreement / Purchase Order. The awarded vendor agrees that all work will be accomplished regularly, diligently and uninterrupted at such a rate of progress as will ensure full completion thereof within reasonable time periods.

62. TITLE

All titles, fees, as well as other charges, are to be paid by awarded vendor. Awarded vendor is to furnish prepaid certificate of title in the name of the City of Fairhope, Title shall change upon acceptance of delivery at the City of Fairhope approved delivery location.

63. VENDOR LIST

A vendor may be removed from the City of Fairhope's Bidders List if a vendor fails to respond to three (3) consecutive ITB's. A properly submitted "No Bid" is considered as a response and the vendor will receive credit for the response.

64. WARRANTY

The awarded vendor expressly warrants that all articles, materials, and work offered shall conform to each and every specification, drawing, sample, or other description which is furnished to or adopted by the City of Fairhope, and that it will be fit and sufficient for the purpose intended, merchantable, of good material and workmanship, and free from defects. The awarded vendor further warrants all items for a period of one year, unless otherwise stated, from the date of acceptance of the items delivered and installed or work completed. All repairs, replacements, or adjustments during the warranty period will be at the awarded vendor's sole expense. Awarded vendor will provide written warranty for all parts and labor for a period of (1) one year commencing from date of written acceptance of delivery by City of Fairhope. Awarded vendor will provide written copies of all other applicable warranties, such as,

Manufacturer's warranty. Those warranties, if any, will be in addition to the awarded vendor's warranty, and the terms of which will not be altered by the awarded vendor's warranty.

65. IMMIGRATION LAW

The Contractor agrees that it shall comply with all of the requirements of the **Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No 2011-535**, Alabama Code (1975) Section 31-13-1, et. Seq., (also known as the Alabama Immigration Act) see Section 31-13-9, and the provisions of said Act, including all penalties for violation thereof, are incorporated herein.

sample

Contract Documents

Bid No. 002-21 Drainage Improvements for Oak St and Section St

at Big Mouth Gully

Project No PW006-20 Drainage Improvements at Oak St and Section St

for

Public Works Department

City of Fairhope, Alabama

SHERRY SULLIVAN, MAYOR

FAIRHOPE CITY COUNCIL

JACK BURRELL, COUNCIL PRESIDENT

SET _____

CITY OF FAIRHOPE
SECTION SEVEN

SAMPLE CONTRACT

**Bid No. 002-21 Drainage Improvements for
Oak St and Section St at Big Mouth Gully**

**Project No PW006-20 Drainage Improvements at Oak St and Section St
for
Public Works Department**

THIS AGREEMENT made and entered into this ____ day of _____, 20____, by and between _____, hereinafter sometimes called the CONTRACTOR, as party of the first part, and the CITY OF FAIRHOPE, Alabama, a Municipal Corporation, hereinafter sometimes called the CITY or OWNER, as party of the second part,

W-I-T-N-E-S-S-E-T-H:

In consideration of the amounts herein named and of the mutual agreements and provisions herein contained, the Contractor and the City agree in regard to a public works project (hereinafter either the "work" or the "Project") as described in the Advertisement for Bids.

The Contractor will perform the work and/or construct the Project as well as furnish at his own cost and expense all labor, tools, equipment and transportation as are herein and in the Contract documents required to be furnished by the Contractor, and shall perform all the work in a manner and form required to construct the Project described in and shown on the contract documents as the same are hereinafter more specifically described and as provided by the plans, specifications and documents which are attached hereto and made a part hereof, as if fully set out herein and addenda together with all plans and drawings on file in the office specified below.

**ARTICLE I
GENERAL CONDITIONS**

1.0 Contract Documents: As used throughout the documents constituting the contract, the term "Contract Documents" shall mean and include the following: Advertisement for Bids, Addenda (if issued), the Instructions to Bidders, the Bid Proposal, the General Specifications, the Detail Specifications, Supplemental and Special Conditions (if attached), together with this Contract Agreement and any modifications, including change orders, if made, and the drawings, plans and profiles that are now on file in the office referred to in the advertisement, the Performance Bond and the Labor and Material Bond, executed by the Contractor in connection with this Contract and insurance requirements and certificates.

1.0.1 All such documents hereinabove enumerated are adopted herein by reference and constitute the Contract between the parties to the same extent as if each were set out in full in this agreement.

1.2 Independent Contractor: The Contractor enters into this Contract with the City as an independent contractor and, as such, agrees that neither the City nor its officers, agents, employees or inspectors shall be responsible for the acts or omissions of the Contractor, or any subcontractor, or any of the Contractor's or subcontractor's agents or employees, or any other persons performing any of the work pursuant to this Contract. The Contractor shall be solely responsible for controlling construction manner, means and techniques consistent with the contract documents, plans and specifications.

1.3 Order of Precedence: Should there be a direct conflict between the various elements of the contract documents to the extent that the same cannot be reconciled to be read *in para materia*, then precedence shall be given the same in the following order:

- 1.3.1 Subsequent modifications (change orders or amendments) to contract agreement after execution
- 1.3.2 Addenda (if issued)
- 1.3.3 Supplemental general conditions and special conditions (if included)
- 1.3.4 The Contract Agreement
- 1.3.5 General and technical specifications
- 1.3.6 Large Scale Drawings (if included)
- 1.3.7 Enlarged Plans (if included)
- 1.3.8 Plans (if included)
- 1.3.9 Instructions to bidders
- 1.3.10 Advertisement for bids
- 1.3.11 Proposal (Bid)
- 1.3.12 Purchasing Agent Appointment Agreement (if utilized)
- 1.3.13 Where more than one document relates to the same matter if both can be given reasonable effect both are to be retained. Written specifications will take precedence over drawings.

1.4 Integration: Contract Terms and Construction:

- 1.4.1 Integration: This Agreement, together with all documents which constitute the "Contract Documents," constitute the entire agreement of the parties, as a complete and final integration thereof with respect to its subject matter. All understandings and agreements heretofore had between and among the parties are merged into this Agreement, which alone fully and completely expresses their understandings. No representation, warranty, or covenant made by any party which is not contained in this Agreement or expressly referred to herein has been relied on by any party in entering into this Agreement.
- 1.4.2 Amendment in Writing: This Agreement may not be amended, modified, altered, changed, terminated, or waived in any respect whatsoever, except by a further agreement or change order, in writing, properly executed by all of the parties.
- 1.4.3 Binding Effect: This Agreement shall bind the parties and their respective personal representatives, heirs, next of kin, legatees, distributees, successors, and assigns.
- 1.4.4 Captions: The captions of this Agreement are for convenience and reference only, are not a part of this Agreement, and in no way define, describe, extend, or limit the scope or intent of this Agreement.
- 1.4.5 Construction: This Agreement shall be construed in its entirety according to its plain meaning and shall not be construed against the party who provided or drafted it.
- 1.4.6 Mandatory and Permissive: "Shall," "will," and "agrees" are mandatory; "may" is permissive.
- 1.4.7 Governing Laws: The laws of the State of Alabama shall govern the validity of this Agreement, the construction of its terms, the interpretation of the rights, the duties of the parties, the enforcement of its terms, and all other matters relating to this Agreement.
- 1.4.8 Ownership of Contract Documents: The Contract Documents, and copies of parts thereof, are furnished and owned either by the City or the design professional. All portions of the Contract Documents, and copies of parts thereof, are the instruments of service for this Project. They are not to be used on other work and are to be returned to the City on request at the completion of the Project. Any reuse of these materials without specific written verification

or adaptation by the City will be at the risk of the user and without liability or legal expense to the City or Engineer/Architect. Such user shall hold the City and Engineer/Architect harmless from any and all damages, including reasonable attorneys' fees, from any and all claims arising from any such reuse. Any such verification and adoption shall entitle the City to further compensation at rates to be agreed upon by the user and the City.

1.5 Rules of Construction: For the purposes of this contract, except as otherwise provided or unless the context otherwise requires:

- 1.5.1 Words of masculine, feminine or neuter gender include the correlative words of other genders. Singular terms include the plural as well as the singular, and vice versa.
- 1.5.2. All references herein to designated "articles," "sections," and other subdivisions or to lettered exhibits are to the designated articles, sections and subdivisions hereof and the exhibits annexed hereto unless expressly otherwise designated in context. All article, section, other subdivision and exhibit captions herein are used for reference only and do not limit or describe the scope or intent of, or in any way affect this agreement.
- 1.5.3 The terms "include," "including," and similar terms shall be construed as if followed by the phrase, "without being limited to".
- 1.5.4 The terms "herein," "hereof," and "hereunder," and other words of similar import refer to this agreement as a whole and not to any particular article, section, other subdivision or exhibit.
- 1.5.5 All recitals set forth in, and all exhibits to, this agreement are hereby incorporated in this agreement by reference.
- 1.5.6 No inference in favor of or against any party shall be drawn from the fact that such party or such party's counsel has drafted any portion hereof.
- 1.5.7 All references in this agreement to a separate instrument are to such separate instrument as the same may be amended or supplemented from time to time pursuant to the applicable provisions thereof.

1.6 Construction Manager - Multiple Trade Contracts: If indicated in the Advertisement for Bids, the City has elected to engage the services of a Construction Manager for the work on this Project. If so, the same will be indicated in the bid packages and special supplemental conditions will be attached in regard to trade contracts. Contractor, as one of the multiple trade contractors on the Project shall adhere to all terms and conditions of the contract documents, particularly the supplemental conditions regarding multiple trade or multiple prime contractors. Any provision of the general conditions in direct conflict with the supplemental conditions is superseded to the extent of the conflict. If using a Construction Manager format, then this shall be a multiple trade or multiple prime contract agreement subject to the supervision and direction of a Construction Manager, in accordance with the terms and provisions of the Construction Manager's agreement with the City, which agreement is adopted herein by reference.

1.7 Coordination of Plans, Specifications, etc.: The specifications, the plans, drawings and all supplementary documents are essential parts of the Contract, and requirements occurring in one are as binding as though occurring in all. They are intended to be comprehensive to describe and provide a complete work. In case of discrepancy, figured dimensions shall govern.

1.8 Corrections of Plans, etc.: Should any portions of the plans, specifications or drawings be obscure or in dispute, they shall be referred to the Engineer/Architect and he shall decide as to the true meaning and intent. The Engineer/Architect shall also have the right to correct any errors or omissions at any time when such corrections are necessary for the proper fulfillment of said plans and specifications.

1.9 Taxes and Charges: Except to the extent the City and the Contractor are utilizing a "Purchasing Agent Appointment Agreement," or the Contractor has opted to file for Tax Exemption with the City to the State Revenue Dept, Contractor shall withhold and pay all sales and use taxes and all withholding taxes, whether local, state or federal and pay

all Social Security taxes and also all State Unemployment Compensation taxes, and pay or cause to be withheld, as the case may be, any and all taxes, charges, or fees or sums whatsoever, which are now or may hereafter be required to be paid or withheld under any laws. Pursuant to Ala. Code §39-1-3 (1975), Contractor shall be reimbursed for any additional severance, sales or uses taxes incurred as a result of an increase in such taxes during performance of the contract.

1.10 Shop Drawings and Submittals. The Contractor shall submit shop drawings, samples and submittals depicting or representing the construction of portions of the Project in accordance with the plans and specifications to the Engineer/Architect and if there is no Engineer or Architect on the Project, to the City representative. The Contractor shall pay for or the cost may be withheld from payments to the Contractor for more than two (2) reviews of the shop drawings, samples or submittals or similar element of work by the Engineer, Architect or City representative.

1.11 Alabama Immigration Law. By signing this contract, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment or continue to employ an unauthorized alien within the State of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom, to the extent allowed by Federal law.

ARTICLE II PAYMENTS, CLAIMS AND CHARGES, ETC.

2.0 Contract Price: The City will pay and the Contractor will accept in full consideration for the performance of the work/Project, subject to additions and deductions (including but not limited to liquidated damages) as provided in the contract documents and herein, the sum of _____ (\$ _____) and/or in unit prices as shown in Bidder's schedule for the base bid amount of _____ (\$ _____) being the amount of the Contractor's bid as awarded by the City.

2.1 Estimated Quantities and Unit Prices: If award was made in whole or in part based upon unit prices, the Contractor agrees that the prices given in the Proposal are unit prices. The estimated quantities as stated in the Advertisement for Bids and in the Proposal and as indicated on the plans or in other places are approximate only, are subject either to increase or decrease and are only for the purpose of comparing on uniform basis the bids offered for the Project under this contract. The Contractor further agrees that should the quantities of any of the items of the work be increased, he will do the additional work at the unit prices set out in the Proposal and should the quantities be decreased, payment will be made on actual quantities at the unit prices and he will make no claim for anticipated profits for any decrease in the quantities. Actual quantities will be determined upon completion of the Project.

2.2 Overtime Work by Contractor: If the Contractor for his convenience and at his own expense should desire to carry on his work at night or outside regular hours, he shall submit written notice to the Engineer/Architect and he shall allow ample time for satisfactory arrangements to be made for inspecting the work in progress. At no time shall the notice be given less than 24 hours before such overtime work is started. The Contractor must obtain, through the Engineer/Architect, the City's approval for work at night, on Saturdays, Sundays or legal holidays. The Contractor shall light the different parts of the Project as required to comply with all applicable federal and state regulations and with all applicable requirements of the City.

2.2.1 Overtime hours shall be considered any hours worked by the Contractor on Saturday, Sunday and legal holidays, which in the Engineer/Architect's opinion requires the Engineer/Architect's resident observer's presence to observe such overtime work. Overtime hours requiring the presence of City inspectors shall be considered any hours worked by the Contractor in excess of eight (8) hours during any working day and/or in excess of forty (40) hours from Monday through Friday and/or any time on Saturday, Sunday or legal holiday. In general, it should be expected that the Engineer / Architect's resident observer or City's inspector will be present at all times that the Contractor is working.

- 2.2.2 If the Contractor elects to schedule and perform overtime work, the Contractor shall pay the City for the City's resident inspector's salary plus costs for each hour of overtime work. Overtime shall be rounded up to the nearest whole hour. This amount shall include the inspector's salary at overtime rate, labor additive, which includes insurance, social security, workmen's compensation, sick pay, paid holidays, vacation pay and his vehicle and equipment. Payment to the City shall be made by a deduction from the Contractor's monthly payment invoice for any overtime worked.
- 2.3 Payments on Account/Payments Withheld/Retainage:** Upon presentation of a verified application for payment, which shall include a "Contractor's Affidavit of Payment of Debts and Claims," AIA Form G706 or equivalent, then usually by the fifteenth (15th) day of each calendar month or as soon thereafter as is practical, as the Project progresses, the City shall make partial payments to the Contractor of the billable work performed less payments already made and less deductions for any incomplete, unaccepted or defective work. In making partial payments to the Contractor, there shall be retained five (5%) percent of the estimated amount of work done and value of materials stored on the site or suitably stored and insured off-site. Provided; however, after fifty (50%) percent of the Project has been satisfactorily completed, no further retainage will be withheld. **All pay requests are to be sent to Accounts Payable, City of Fairhope, P.O. Drawer 429, Fairhope, AL 36533 and/or AP@fairhopeal.gov**
- 2.3.1 Retainage shall be held until final completion and acceptance of all work covered by the Contract Documents unless escrow or deposit arrangements are agreed to by the City. When maintenance periods are included in the Contract Documents covering highways, bridges or similar structures, such period shall be considered a component part of the contract and retainage will be held until the expiration of such periods.
- 2.3.2 On completion and acceptance of each separate building, public work or other separately identifiable and complete division of the Project in regard to which a separate price has been stated in the Contract Documents or can be separately ascertained, payment may be made in full including retainage but less deductions. Provided; however, the City will not consider making such payment on any such item of work if it is an integral part of a complete project.
- 2.3.3 All materials and work covered by partial payments as provided for herein shall become the sole property of the City; provided, however, the Contractor shall not be relieved from the sole responsibility for the care and protection of materials and work upon which payments have been made and for the restoration of any damaged work.
- 2.3.4 The City may also withhold from time to time from payment to the Contractor such an amount or amounts as may be necessary to pay and fully satisfy all claims and demands for labor and services rendered in and about the Project, including any such amount or amounts due to be paid to or by any subcontractor or supplier, amounts for City's or Engineer/Architect's observers or inspectors for contractors' overtime as herein provided, or for engineering or design services associated with Contractor initiated change orders or submittals in excess of that permitted herein. The Contractor hereby authorizes the City as its agent, to apply such amounts so withheld to the payment of any amount so due to be paid and all other just and lawful claims other than claims for damages for tort. In case of disagreement with reference to any such claim or claims, the City may keep such amounts so withheld on account of such claim or claims until such disagreement is finally settled and determined.
- 2.3.5 In addition, the City may also withhold payment of the whole or any part of a verified or approved application for payment from the Contractor to such an extent as may be necessary to protect itself from loss on account of any of the following causes discovered subsequent to its verification or approvals:

- 2.3.5.1 Defective work.
 - 2.3.5.2 Evidence indicating probable filing of claims by other parties against the Contractor.
 - 2.3.5.3 Failure of the Contractor or subcontractor to promptly make payments to subcontractors or for materials, labor, food stuffs and supplies.
 - 2.3.5.4 Damage to another contractor under separate contract with the City.
 - 2.3.5.5 Assessment of liquidated damages.
- 2.5.6 When the above grounds are removed, applications for payment will then be verified and/or approved for amounts not previously verified and approved because of them.
- 2.3.7 The Contractor shall not attempt to withdraw at any time during the term of this contract or any extensions thereof, without the expressed written consent of the City, the whole or any part of the amounts so retained by the City from payments due the Contractor by the establishment of an escrow account or by depositing securities in lieu thereof, pursuant to Ala. Code §39-2-12(e) or (f), or any amendments thereto or any equivalent law, ordinance or regulation. It is expressly agreed between the parties hereto that should the City elect not to consent to the same, then the Contractor shall not elect to, attempt to or in any manner endeavor to withdraw such retained amounts.
- 2.4 Claims for Extra Cost:** If the Contractor claims that any instructions by drawings or otherwise involve extra cost or any extension of time, he shall notify the City in writing within ten (10) days after the receipt of such instructions and in any event before proceeding to execute the Project. Thereafter, the procedure shall be the same as that for change orders. No such claim shall be valid unless made in accordance with the terms of this section. There shall be no damages for delay.
- 2.4.1 Except as otherwise herein provided, no charge for any extra work will be allowed unless the same has been duly authorized in writing by the City and the price stated in such order.
- 2.5 Differing Site Conditions:** If, in the performance of the Contract, subsurface or latent conditions are found to be materially different from those indicated by the plans and specifications, or unknown conditions of an unusual nature are disclosed differing materially from conditions usually inherent in work of the character shown and specified, the Contractor shall immediately notify the Engineer/Architect in writing regarding such conditions but in no event later than forty-eight (48) hours after discovery of such conditions by the Contractor.
- 2.5.1 The written notice shall describe the conditions, and other pertinent information, in no event shall such notice be later than forty-eight (48) hours before such conditions are disturbed. Upon such notice, or upon such observation of conditions, the Engineer/Architect will promptly make such changes in the plans and/or Specifications as he finds necessary (if any are necessary) to conform to the different conditions, and any increase or decrease in the cost of the Project resulting from such changes may be adjusted as provided under Change Orders or Claims for Extra Cost as set forth in the Contract documents.
- 2.6 Change Orders:** Change orders shall be allowed only under the following conditions:
- 2.6.1 Minor changes for a total monetary amount less than that required for competitive bidding; or
 - 2.6.2 Changes for matters incidental to the original contract necessitated by unforeseeable circumstances arising in the course of work under the contract; or
 - 2.6.3 Changes due to emergencies; or,
 - 2.6.4 Changes provided for in the original bidding and original Contract Documents as alternates;

- 2.6.5 Changes of relatively minor items not contemplated when the plans and specifications were prepared and the Project was bid and which are in the public interest and generally do not exceed 10 percent of the Contract Price, subject to Alabama Bid Law exceptions.
- 2.6.6 The Contractor or successful bidder is expected to complete the Project as bid and specified within the financial parameters stated therein. However, if it shall be determined that a change order condition possibly exists in any given case during the performance of the contract, the Contractor shall promptly notify in writing the representative of the City and shall not implement such change until having notified the representative of the City. If the change is minor in the opinion of the representative of the City and does not involve,
- 2.6.6.1 an adjustment in the contract sum or construction bid price, or
 - 2.6.6.2 result in extension of the contract time, or
 - 2.6.6.3 a material change in the contract scope of services, then the City representative may authorize the change in writing to the Contractor. The Contractor shall not perform such change until receipt of such written change order.
- 2.6.7 In the event the change order requested by the Contractor involves,
- 2.6.7.1 an increase in the contract sum or construction bid price,
 - 2.6.7.2 extend the contract time, or
 - 2.6.7.3 materially change the Contractor's scope of work or services, then the Contractor shall request a change order in writing and present the same to the City representative.
- 2.6.8 The representative of the City shall determine whether this is a change order which can be allowed and, if so, what exception it would fall under. The representative of the City shall then document the same, attach the same to the Contractor's request for a change order and submit the same with his recommendation to the City Council at its next or any subsequent regularly scheduled Council meeting for approval.
- 2.6.9 The City reserves the right to institute change orders as the Owner pursuant to the aforesaid terms and conditions.
- 2.6.10 In no event is a change order to be executed by the Contractor prior to approval thereof by the City, except for emergencies.
- 2.7 Determination of Adjustment of the Contract Sum:** The adjustment of the Contract Sum resulting from a change in the Work shall be determined by one of the following methods as determined by Owner:
- 2.7.1. By mutual agreement to a lump sum based on or negotiated from an itemized cost proposal from the Contractor.
 - 2.7.2. Additions to the Contract Sum shall include the Contractor's direct costs plus a maximum 15% markup for overhead and profit. Where subcontract work is involved, the total mark-up for the Contractor and a subcontractor shall not exceed 25%. No allowance for overhead and profit shall be figured on a change which involves a net credit to the Owner. For the purposes of this method of determining an adjustment of the Contract Sum, "overhead" shall cover the Contractor's indirect costs of the change, such as the cost of bonds, superintendent and other job office personnel, watchman, job office, job office supplies and expenses, temporary facilities and utilities, and home office expenses.

- 2.8 Construction Schedule and Periodical Estimates:** Immediately after execution and delivery of the Contract and before the first partial payment is made, the Contractor shall deliver to the City and Engineer/Architect and Construction Manager, a construction schedule in a form satisfactory to the City or Construction Manager, which may include CPM for all major trades, showing the proposed dates of commencement and completion of each of the various activities, of work required under the Contract documents, the interrelationship of each activity, sequences, resources for each and the anticipated amount of each monthly payment that will become due the Contractor in accordance with the progress schedule. The Contractor shall also furnish (1) a detailed estimate giving a complete breakdown on the contract price and (2) periodical itemized estimates of the work done for the purpose of making partial payments, however the same will not be considered as fixing a basis for additions to or deductions from the contract price. Scheduling is particularly critical if Contractor is a trade contractor and adherence to the Construction Manager progress schedule is required.

NOTE: Depending upon the complexity of the work the City may require CPM or equivalent meeting all criteria above.

- 2.9 Sales and Use Tax Savings:** In the event the parties have executed a Purchasing Agent Appointment Agreement (Alabama Department of Revenue Form ST: PAA1) materials and supplies will be ordered and/or paid for in accordance therewith if requested. If the Contractor wishes to file for tax exemption they will also notify the City purchasing manager to assist in the process. Forms for Sales Tax and Use exemption are an attachment to this document.

ARTICLE III TIME

- 3.0 Time for Completion/Delays:** The Contractor hereby agrees to commence work under this Contract on the date to be specified in a written "**Notice to Proceed**" of the Engineer/Architect or thirty (30) days from the date of contract execution if no notice is issued, and to fully complete the Project within **NINETY (90)** consecutive calendar days thereafter. If this is a trade contract, then the Contractor shall perform within the time periods and at the times as established by the Construction Manager's approved construction schedule for the project. The Contractor further agrees to pay to the City, liquidated damages for each consecutive calendar day thereafter as hereinafter provided. Time is of the essence and a material element to this agreement.
- 3.0.1 NOTE:** When maintenance periods are included in the contract for highways, bridges or similar structures, such periods shall be considered component parts of the contract. To the extent the construction schedule contains "float," the parties agree that the same belongs to the Project and may be utilized by either party.
- 3.1 Delay:** If the Contractor is delayed at any time in the progress of work by any of the following causes, the Contractor may be entitled to a reasonable extension of time as determined by the City in which to complete the Project. Provided, however, no such delay nor the extension of time if granted shall be grounds for a claim by the Contractor for damages or for additional cost, expenses, overhead or profit or other compensation:
- 3.1.1** Fires, abnormal floods, tornadoes or other cataclysmic phenomenon of nature.
 - 3.1.2** Strikes, embargoes, lockouts, war, acts of public enemy.
 - 3.1.3** Change orders.
 - 3.1.4** Acts of performance or delays in performance by other contractors employed by the City or their subcontractors.

3.1.5 Causes beyond the control of the Contractor.

- 3.1.6 Provided further, that the Contractor shall immediately give notice in writing to the City and follow extension of time procedures as provided for herein. The City expressly disclaims any liability to Contractor for any cost, expense or damage caused by other contractors, subcontractors or suppliers, including those engaged by the City. The City shall not be liable for damages or cost to the Contractor sustained due to any interference from utilities or appurtenances or from the operations of relocating the same.

3.2 Extensions of Time: All written requests for extensions of time must be submitted to Engineer/Architect within ten (10) days after the occurrence of the cause for delay. The Engineer/Architect shall ascertain the facts and the extent of the delay and shall recommend to the City Council whether it should extend the time for completing the Project. Any extension of time shall be in writing and processed as a change order.

- 3.2.1 For change orders requesting extensions of time due to rain, wind, flood or other natural phenomenon, the Contractor's written request must be accompanied, at the City's request, by a detailed report of weather at this site for the last ten (10) years with averages showing means and statistical deviations from mean averages to support request for extension.

- 3.2.2 No extension shall be made for delays due to rain, wind, flood or other natural phenomenon of normal intensity for the locality.

- 3.2.3 In the event any material changes, alterations, or additions are made as herein specified, which in the opinion of the Engineer/Architect will require additional time for execution of any work under the contract, then in that case, the time of the completion of the Project may be extended through change order. No extensions of time shall be given for any minor changes, alterations or additions. The Contractor shall not be entitled to any reparation or compensation on account of such additional time or extensions of time. To the extent that the construction schedule contains "float," the parties agree that the same belongs to the Project and may be utilized by either party.

3.3 Right of the City to Terminate Contract: If the Contractor should be adjudged as bankrupt, or if it should make a general assignment for the benefit of its creditors, or if a receiver should be appointed for the Contractor or any of its property, or if it should persistently or repeatedly refuse or fail to supply enough properly skilled workmen or if it should refuse or fail to make prompt payment to persons supplying labor for the Project under the Contract, or persistently disregard instructions of the Engineer/Architect or fail to observe or perform any provision of the Contract documents, or fail or neglect to promptly prosecute or perform the Project in accordance with the Contract documents or otherwise be guilty of a substantial violation of any provision of the Contract documents, then the City may, on giving at least thirty (30) days' written notice to the Contractor, without prejudice to any other rights or remedies of the City in the premises, terminate the Contractor's right to proceed with the Project. In such event, the City may take over the Project and prosecute the same to completion, by contract or otherwise, and the Contractor and its sureties shall be liable to the City for any and all excess cost occasioned to the City thereby, including attorney's fees; and in any such case, the City may take possession of and utilize in completing the Project such appliances and plant of the Contractor or its subcontractors as may be on the site work and necessary or useful thereof. In the event of termination, the same shall not relieve the Contractor nor any of its sureties of their obligation pursuant to this agreement. In the event it becomes necessary for the City to maintain any legal action against the contractor, to enforce its rights herein, the Contractor shall pay the City all expenses associated therewith including a reasonable attorney's fee.

- 3.3.1 Owner may at any time and for any reason terminate Contractor's services and work at Owner's convenience. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement. Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work

completed in conformity with this Agreement; plus, (2) such other costs actually incurred by Contractor as are permitted by the prime contract and approved by Owner; (3) plus ten percent (10%) of the cost of the work referred to in subparagraph (1) above for overhead and profit.

3.4 Liquidated Damages: Should the work under this contract not be completed within the time specified, scheduled or as extended, it is understood and agreed that there may be deducted by the City or Engineer/Architect from the partial and/or final payments to the Contractor or otherwise charged to the Contractor, a sum computed at the rate of Two Hundred Fifty Dollars (\$250.00) per day beginning from the stated or extended date of completion and continuing for so long as the Project remains incomplete. It is understood and agreed that the above deduction is not a penalty, but money due to reimburse the City/Owner for inconvenience and damage to the general public, due to the delay in the completion of the Project and is reasonable. The collection of liquidated damages by the City shall not constitute an election or waiver by the City of recovery of additional delay or non-delay related damages from the Contractor, and the City expressly reserves the right to recover actual damages for other harms resulting from delay. The provisions of the liquidated damage clause shall apply and continue to apply even if the Contractor terminates or abandons the Project prior to the scheduled completion dates.

3.4.1 The amounts of such liquidated damages and actual damages incurred by reason of failure to complete the work stipulated in the Contract are hereby agreed upon as reasonable estimates of the costs which may be accrued by the City. It is expressly understood and agreed that these amounts are not to be considered in the nature of penalties, but as damages which have accrued against the Contractor. The City shall have the right to deduct such damages from any amount due, or that may become due the Contractor, or the amount of such damages shall be due and collectible from the Contractor or Surety.

ARTICLE IV WORK AND MATERIALS

4.0 Cooperation of Contractor: The Contractor shall have available on the job site, at all times, at least one (1) copy of the plans and specifications, if prepared, for the Project.

4.0.1 He shall give the Project the constant attention necessary to facilitate the progress thereof and shall cooperate with the City, Engineer/Architect and with other Contractors in every way possible. The Contractor shall at all times have a Superintendent, capable of acting as his agent on the Project, who shall receive communications from the Engineer/Architect or his authorized representatives or the City's authorized representative. The Superintendent shall have full authority to give and execute orders relating to the Project without delay and to promptly supply such tools, plant equipment, materials and labor as may be required.

4.0.2 The City reserves the right to utilize its own forces on the site or those of another contractor and to communicate through its representative directly with the Contractor.

4.1 Coordination - Trade Contractors: If the supplemental conditions are attached to these general conditions indicating that this Project involves the use of multiple trade or multiple prime contractors under the supervision and direction of a Construction Manager employed by the City, then each such trade contractor shall cooperate and coordinate its construction activities and operations with those of other trade contractors and other entities involved in the Project and included under different sections of the specifications that are dependent upon each other in any manner for proper and correct installation, connection and operation, to assure efficient, prompt, orderly and proper installation of each part of the Project.

4.1.1 When utilizing trade contractors and/or multiple prime contractors under the supervision of Construction Manager cooperation and coordination of activities is extremely important. Refer to the provisions of the supplemental conditions for detailed requirements.

- 4.2 Superintendence:** The Contractor shall assign to and keep at the Project site competent Supervisory personnel. The Contractor shall designate, in writing, before starting work, an authorized representative who shall be an employee of the Contractor and shall have complete authority to represent, to receive notice for, and to act for the Contractor. The Contractor shall not permit or allow any work to be conducted upon the Project site without the presence of supervisory personnel. The Engineer/Architect shall be notified in writing prior to any change in superintendent assignment. Using his best skill and attention, the Contractor shall give efficient supervision to the Project. The Contractor shall be solely responsible for all construction means, methods, techniques, and procedures, for providing adequate safety precautions, and for coordinating all portions of the Project under the Contract. It is specifically understood and agreed that neither the Engineer/Architect nor the City shall not have control or charge of and shall not be responsible for the construction means, methods, techniques, or procedures, or for providing adequate safety precautions in connection with the Project under the Contract.
- 4.3 Contractor's Tools and Equipment:** The Contractor's tools and equipment used on the Project shall be furnished in sufficient quantity and of a capacity and type that will adequately and safely perform the work specified, and shall be maintained and used in a manner that will not create a hazard to persons or property, or cause a delay in the progress of the Project.
- 4.4 Furnishing Labor and Equipment:** The Contractor shall furnish and pay for all equipment, labor and supervision, and all such materials as required to be furnished in the Notice to Bidders and as may other-wise be necessary to the completion of the Project and the operation of each construction crew required.
- 4.5 Employees:** The Contractor shall employ only competent, skillful workers on the Project, and whenever any person shall appear to be incompetent or to act in a disorderly, unsafe improper manner, such person shall promptly be removed from the Project by the Contractor.
- 4.6 Materials and Appliances:** Unless otherwise stipulated, the Contractor shall provide and pay for all other materials, water, heating, lighting, fuel, power, transportation, machinery, appliances, telephone, sanitary facilities, temporary facilities and other facilities and incidentals necessary for the execution and completion of the Project.
- 4.6.1** The Contractor warrants to the City and the Engineer/Architect that, unless otherwise specified, all materials and equipment furnished under this contract shall be new, and both workmanship and materials shall be of good quality, free of faults and defects, and in conformance with the Contract Documents. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials. In selecting and/or approving equipment for installation in the Project, neither the City nor Engineer/Architect assume responsibility for injury or claims resulting from failure of the equipment to comply with applicable federal, state, and local safety codes or requirements, or the safety requirements of a recognized agency, or failure due to faulty design concepts, or defective workmanship and materials. Material and/or equipment damaged by flooding or other causes during the construction period shall be subject to rejection by the Engineer/Architect; reconditioning and/or repairing material and/or equipment is not acceptable.
- 4.7 Asbestos and Hazardous Materials:** Unless specifically authorized and instructed to the contrary by the City, the Contractor shall not permit, allow, place, install or incorporate into the Project or upon the work site, any hazardous material(s), including, but not limited to, any products or materials that contain asbestos in any quantity. It shall be the responsibility of the Contractor to inspect all materials and products delivered for incorporation or installation in the Project to ensure that they contain no hazardous materials or asbestos. Where the Contractor or any subcontractor has or should have a reasonable suspicion that any product or material contains asbestos or other hazardous material, the Contractor shall immediately inspect the material or product, obtain a product or material data sheet, and notify the City's representative prior to installation or incorporation of the same into the Project. Any product or material determined to contain asbestos or other hazardous material shall be removed from the Project

immediately and properly disposed of as required by law. Products or material to which the contractor should pay particular attention to avoid the presence of asbestos incorporated therein include, but are not limited to the following: concrete, batt insulation, roof insulation, building felts, mastics, water proofing products, adhesives, resilient flooring products, ceiling tiles, interior coatings, exterior coatings, roofing, pipe installation, duct installation and pre-assembled items of equipment.

4.7.1 At the completion of the Project, the Contractor shall submit a duly executed Asbestos Affidavit in the form as attached hereto prior to final payment.

4.7.2 The Contractor is responsible for insuring that all of its employees and subcontractors are adequately trained to handle hazardous materials in accordance with 49 CFR §172(g).

4.8 Protection of Work and Property: The Contractor shall furnish and install all necessary temporary works for the protection of the Project. The Contractor shall at all times adequately maintain, guard and protect his own work from damage, and safely guard and protect private, commercial, industrial, the City's and others' property from injury or loss arising in connection with this Contract. He shall make good any such damage, injury or loss, except such as may be directly due to errors in the plans or specifications or caused by agents or employees of the City.

4.8.1 The Contractor shall protect all existing vegetation such as trees, shrubs, and grass on or adjacent to the site which are not required to be removed or do not unreasonably interfere with construction, as may be determined by the Engineer/Architect, and be responsible for all cutting or damaging of trees and shrubs or grassed areas, including damage due to careless operation of equipment, stockpiling of materials or equipment.

4.8.2 Care shall be taken by the Contractor in felling trees that are to be removed to avoid any unnecessary damage to vegetation or other trees that are to remain in place. Any limbs or branches unavoidably broken during such operations shall be trimmed with a clean cut and painted with an approved tree priming compound. The Contractor may be required to replace or restore at his own expense all vegetation not protected and preserved, as above required, that may be destroyed or damaged.

4.8.3 The Contractor shall provide and maintain all passageways, guard fences, lights, and other facilities required for protection by federal, state or municipal laws and regulations or local conditions.

4.8.4 The Contractor shall comply with local and state regulations governing the operation of premises which are occupied and shall perform the contract in such a manner as not to interrupt or interfere with the operation of other facilities.

4.8.5 The Contractor shall store his apparatus, materials, supplies, and equipment in such orderly fashion at the site of the Project as will not unduly interfere with the progress of his work or the work of any other contractor.

4.8.6 Necessary crossings of curbs, sidewalks, roadways or parkways shall be protected against damage and any damage shall be repaired by or at the expense of the Contractor.

4.8.7 The Contractor shall not place upon the Project or any part thereof, loads inconsistent with the design or safety of that portion of the Project.

4.8.8 The Contractor shall provide and maintain access to all public and private properties at all times and be responsible for any damage caused by his operation to existing driveways, yards, streets, parking lots, utilities, railroads, etc., and such damage shall be corrected at the Contractor's expense. Roadways authorized closed by State or Local authorities shall be maintained to provide access to all fire, police, and other emergency vehicles and all individuals

having private property in the closed area. The Contractor shall notify at least 24 hours in advance the Fire, Police, and Transportation Departments having local jurisdiction, the Owner and any other individuals, businesses, or agencies that may be affected.

4.9 Protection of Existing Utilities. Contractor shall be responsible for any damage to existing structures or the interruption of any utility services which shall be repaired or restored promptly by and at the expense of the Contractor.

4.9.1 To that extent, the Contractor shall provide whatever measures are necessary to properly protect and maintain all existing utilities encountered in the course of the work. The Contractor shall be exclusively responsible to the utility owner for any and all damages to the various utilities caused by the Contractor's actions or lack of actions to adequately protect the same.

4.9.2 The Contractor shall determine the exact location of all existing utilities before commencing work and agrees hereby to be fully responsible and liable for any and all damages which might occur by his failure to exactly locate and/or preserve the location of any and all underground or overhead utilities. The Contractor shall be solely and directly responsible to the utility owner for any and all damages to the various utilities, caused by the Contractor's actions or lack of actions to adequately protect such utilities. If any utilities are to be affected during the course of construction, the Contractor shall so notify the owners thereof at least seventy-two (72) hours prior to any such construction activity. The Contractor shall fully cooperate and coordinate with all utility owners in the event of an interruption to any utility service. The cost for locating, uncovering and protecting underground and/or overhead utilities is included within the Contractor's bid price for various other items of work.

4.9.3 The Contractor shall maintain all storm sewers, drains and/or ditches so that flow is not disturbed or impeded. The Contractor shall protect storm drains, inlets and/or ditches, lawns, landscaping and other facilities, from damage during the testing, and flushing.

4.10 Limiting Exposures: The Contractor shall prosecute the work on the Project to insure that no part of the construction, complete or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period. Where applicable, such exposures include, but are not limited to the following:

Excessive static or dynamic	Chemicals	Improper lubrication
loading	Light	Unusual wear or other misuse
Excessive internal or external pressures	Puncture	Contact between incompatible materials
Excessively high or low temperatures	Abrasions	Destructive testing
Thermal shock	Heavy traffic	Misalignment
Excessively high or low humidity	Soiling, staining & corrosion	Excessive weathering
Air contamination or pollution	Bacteria	Unprotected storage
Water or ice	Rodent and insect infestation	Improper shipping or handling
Solvents	Combustion	Theft
	Electrical current	Vandalism
	High speed operation	

4.10.1 The Contractor shall minimize dust and air pollution through the use of water or other devices, require the use of properly operating combustion emission control devices and by encouraging the shutdown of construction vehicles when not in use.

4.11 Safety: The completed Project shall include all necessary permanent safety devices, such as machinery guards and similar ordinary safety items as may be appropriate or required by law. Further, any feature of the Project (including City-furnished or City-selected equipment) subject to such safety regulations shall be fabricated, furnished, and installed in compliance with these

requirements. Contractors and manufacturers of equipment shall be held responsible for compliance with the requirements included herein. Contractors shall notify all equipment suppliers and subcontractors of the provisions of this Article.

- 4.11.1 In selecting and/or accepting equipment for installation in the Project, neither the City nor Engineer/Architect assume responsibility for any personal injury, property damage, or any other damages or claims resulting from failure of the equipment to comply with applicable safety codes or requirements, or the safety requirements of a recognized agency, or failure due to manufacturer's faulty design concepts, or defective workmanship and materials. The Contractor shall indemnify and hold the City, Program Coordinator, and Engineer/Architect harmless against any and all liability, claims, suits, damages, costs, or expenses without limitation arising out of the installation or use of such equipment.
- 4.11.2 The Contractor shall take all necessary precautions for the safety of employees on the Project and shall comply with all applicable provisions of federal, state, and municipal safety laws and building codes to prevent accidents or injury to persons on or about or adjacent to the premises where the Project is being performed. He shall erect and properly maintain at all times, as required by conditions, and progress of the Project, all necessary safeguards for the protection of workmen and the public, and shall post danger signs warning against the hazards created by features of construction and the site.
- 4.11.3 Machinery, equipment and all hazards shall be guarded or eliminated in accordance with the State Accident Prevention in Construction provisions to the extent that such provisions are not in contravention with applicable laws.
- 4.11.4 The Contractor shall do whatever work is necessary for safety and be solely and completely responsible for conditions of the jobsite, including safety of all persons (including but by no means limited to the public, site personnel, visitors, or employees) and property during the Contract period. The contract period shall include any subsequent warranty or other period associated with Project deficiency or repair and all hours including, and in addition to, normal working hours.
- 4.11.5 Safety provisions shall conform to the Federal and State Departments of Labor and the Occupational Safety and Health Act (OSHA), and all other applicable federal, state, county, and local laws, ordinances, codes, the requirements set forth herein, and any regulations that may be specified in other parts of these Contract Documents. Where any of these are in conflict, the more stringent requirement shall be followed. The Contractor's failure to thoroughly familiarize himself with the aforementioned safety provisions shall not relieve him from compliance with the obligations and penalties set forth therein.
- 4.11.6 The Contractor shall at all times provide proper facilities for safe access to the work by authorized government officials (federal, state, county and local) and representatives of the Owner.
- 4.12 Traffic Control:** The Contractor shall be responsible for traffic control, including plan and devices to the extent the same is required due to work in, upon or in proximity to public right-of way, streets, roads or vehicular traffic. The traffic control plan and all traffic control devices shall conform at a minimum to the Manual on Uniform Traffic Control Devices for Streets and Highways, Latest Edition, Federal Highway Administration. A copy of which is on file in the office of the City of Fairhope Director of the Department of Transportation for examination. Copies may be obtained from the Alabama Department of Transportation. Should the appropriate public authority determine a greater degree of traffic control is required, then the Contractor shall promptly provide same. The Contractor shall submit a plan to the City Engineer for approval before commencing construction.
- 4.12.1 Reasonable means of ingress and egress by vehicular and/or pedestrian traffic to property adjacent to the Project shall be maintained at all times. The Contractor shall indemnify and

hold the City harmless for any claims or causes of action including but not limited to those for inverse condemnation and/or lost profits arising out of or in any manner associated with access to or the restriction or prevention thereof to adjoining property. Traffic control and erosion control is of paramount importance during the construction of this Project and the terms and conditions in the contract documents in regard to these matters must be strictly adhered to.

- 4.13 Responsibility to Act in Emergency:** In case of an emergency which threatens loss or damage to property, and/or safety, the Contractor shall act, without previous instructions from the City or Engineer/Architect, as the situation may warrant. The Contractor shall notify the Engineer / Architect thereof immediately thereafter. Any claim for compensation by the Contractor, together with substantiating documents in regard to expense, shall be submitted to the City through the Engineer/Architect. The claim will be handled in accordance with the provisions for extra work. However, if the emergency is created or aggravated by the Contractor, he shall be liable for the resulting damages. If the Contractor fails to take necessary action as required by such an emergency, the City may assign another Contractor or use his own forces to perform the emergency work. Costs or damages arising from the failure of the Contractor to act in an emergency may be deducted from the Contractor's request for payment.
- 4.14 Sanitary Regulations:** The Contractor shall provide and maintain such sanitary accommodations for the use of his employees and those of his subcontractors as may be necessary to comply with the requirements and regulations of the local and State Department of Health. At a minimum, necessary sanitary conveniences for the use of the laborers on the work shall be erected and maintained by the Contractor, in such a manner and at such points as shall be approved by the Engineer/Architect. Their use shall be strictly enforced. In the Construction Manager format, the City may provide sanitary accommodations through the Construction Manager.
- 4.15 Cutting, Patching, etc.:** Unless otherwise stated in the contract documents, the Contractor shall do all necessary cutting, fitting and patching of the Project that may be required to properly receive the work, to make its several parts join together properly, receive and provide for the work of various trades, and be received by the work of other contractors, or as required by drawings and specifications to complete the Project. After such cutting, he shall replace or restore or repair and make good all defective or patched work as required by the Engineer/Architect. He shall not cut, excavate or otherwise alter any work in any manner or by a method or methods that will endanger the Project, adjacent property, workmen, the public or the work of any other contractor. The Contractor shall check the location of all sleeves, openings, slots, etc., for the piping, ducts, breeching, conduits, louvers, grills, fans, etc., as they are laid out on the job.
- 4.15.1 Provisions for openings, holes and clearances through walls, beams, floors, ceilings and partitions shall be made and checked by the Contractor and/or his subcontractor in advance of constructing such parts of the Project and unnecessary, superfluous or dangerous cutting shall be avoided.
- 4.15.2 Pipes passing through concrete or masonry walls shall be protected by pipe sleeves two sizes larger than the pipe, plus its installation to provide free movement.
- 4.15.3 Under no condition shall structural, framing or other parts or members subjected to computed stress be cut or disturbed without the approval of the Engineer/Architect. Any plates, studs or joists, and/or rafters that are approved to be cut to execute necessary work shall be securely strapped and braced to restore their strength by approved methods.
- 4.15.4 Unless otherwise indicated in Supplemental Conditions, all road crossings and/or driveways cut by the Contractor during the performance of the Project shall be returned to service as soon as possible and replaced or repaired within seven (7) calendar days.

4.15.5 All major thoroughfares must be repaired the same day as cut. The Contractor shall be responsible for the safety and welfare of the traveling public while construction work is being done and until the City accepts the Project.

4.15.6 The Contractor will replace at his own expense, all pipe and accessories that may be broken, damaged, stolen or lost and all materials that may become damaged, lost, stolen or misused.

4.15.7 The Engineer/Architect's approval shall be obtained before cutting or drilling holes in concrete or masonry that tend to damage or weaken the load capacity.

4.16 Trailers: With the approval of the City or Engineer/Architect, the Contractor may park trailers or other structures for housing men, tools, machinery and supplies, but they will be permitted only at approved places and their surroundings shall be maintained at all times in a sanitary and satisfactory manner by the Contractor. On or before the completion of the Project, all such trailers or structures shall be removed, unless the City authorizes their abandonment without removal, together with all rubbish and trash, at the expense of the Contractor.

4.17 Construction Staking: If necessary, the Engineer or the City will furnish initial lines and grades to establish the initial horizontal and vertical control points and define the beginning and ending points of the Project. The Contractor is responsible for engaging the services of a qualified Engineer or land surveyor to replace and/or re-establish in accordance with the Construction plans and/or specs, all construction stakes that are disturbed, displaced or destroyed during construction.

4.17.1 If the Contractor finds any errors or discrepancies with the construction staking or the criteria upon which it is based, he/she shall promptly notify the Owner's representative.

4.18 Periodic Cleanup: The Contractor shall periodically, at least weekly, or as requested during the progress of the Project, clean up and remove from the premises, all refuse, rubbish, scrap materials and debris caused by its employees or its subcontractors resulting from its work, to the end that all times the premises are sanitary, safe, reasonably clean, orderly and workmanlike. Trash and combustible materials shall not be allowed to accumulate inside buildings or elsewhere on the premises. At no time shall any rubbish be thrown from window openings, except during renovations with adequate precautions and into proper receptacles. The Contractor shall comply with all municipal litter and construction site ordinances

4.18.1 Before the Project is considered as complete, all rubbish created by or in connection with the construction must be removed by the Contractor and the premises left in a condition by the Contractor satisfactory to the City. Street, curbs, crosswalks, pavements, sidewalks, fences and other public and private property disturbed shall be restored to their former condition or better, and final payment will be withheld until such work is finished by the Contractor.

4.18.2 Contractor shall conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws. No burning or burying of rubbish or waste materials is permitted on the Project site. The Contractor shall dispose of any hazardous material in a safe manner, off site, in accordance with applicable laws and regulations and shall not dispose of volatile or hazardous waste in storm or sanitary sewer drainage ditches, streams or waterways.

4.18.3 Contractor shall periodically wet down dry materials and rubbish to lay dust and prevent blowing dust; and shall provide adequate and approved containers for collection and disposal of waste material, debris and rubbish, removing grease, dust, dirt, stains, labels, fingerprints and other foreign materials from exposed and semi-exposed surfaces.

4.19 Termite Control. If the Project involves construction of a building or if otherwise specifically required by the City, then the Contractor shall provide soil treatment for termite control under all

interior slabs on grade and foundation walls, and as herein specified. Contractor shall also comply with manufacturer's instructions and recommendations for work, including preparation of substrate and application and shall engage a professional pest control operator, licensed in accordance with regulations of governing authorities for application of soil treatment solution and doing business in the state where the Project is located for a minimum of five (5) years.

- 4.19.1 Contractor shall not apply soil treatment solution until excavating, filling and grading operations are completed, except as otherwise required in construction operations. To insure penetration, the soil treatment will not be applied to frozen or excessively wet soils or during inclement weather. Contractor shall comply with all handling and application instructions of the soil toxicant manufacturer. The type of materials to be used for soil poisoning shall first be submitted to the City for approval.
- 4.19.2 The soil treatment solution shall be an emulsible concentrate insecticide for dilution with water, specially formulated to prevent infestation by termites. Fuel oil will not be permitted as a dilutant.
- 4.19.3 Contractor shall strictly comply with the Environmental Protection Agency's (EPA) rules and regulations governing chemicals and their use. Only soil treatment solutions which are not injurious to planting shall be used. Other solutions may be used as recommended by Applicator when acceptable to the EPA, local governing authorities, and the Engineer/Architect.
- 4.19.4 Contractor shall comply with the following requirements when applying the soil treatment solution:
 - 4.19.4.1 Surface Preparation: Remove foreign matter which could decrease effectiveness of treatment on areas to be treated. Loosen, rake, and level soil to be treated, except previously compacted areas under slabs and foundations. Toxicants may be applied before placement of compacted fill under slabs if recommended by toxicant manufacturer.
 - 4.19.4.2. Under slab-on-grade structures, treat soil before concrete slabs are placed using either power sprayer or tank type garden sprayer.
 - 4.190.4.2.1 Apply 4-gallons of chemical solution per 10 linear feet to soil in critical areas under slab, including entire inside perimeter inside of foundation walls, along both sides at interior partition walls, around plumbing pipes and electric conduit penetrating slab, and around interior column footings.
 - 4.19.4.2.2 Apply one gallon of chemical solution per 10 sq. ft. as an overall treatment under slab and attached slab areas where fill is soil or unwashed gravel. Apply 1-1/2 gallons of chemical solution to areas where fill is washed gravel or other coarse absorbent material.
 - 4.19.4.2.3 Apply 4 gallons of chemical solution per 10 linear feet of trench for each foot of depth from grade to footing, along outside edge of building. Dig a trench 6" to 8" wide along outside of foundation to a depth of not less than 12". Punch holes to top of footing at not more than 12" o.c. and apply chemical solution. Mix chemical solution with the soil as it is being replaced in trench.
 - 4.19.4.3. Post signs in areas of application warning workers that soil poisoning has been applied. Remove signs when areas are covered by other construction.
 - 4.19.4.4 Reapply soil treatment solution to areas disturbed by subsequent excavation or other construction activities following application.

4.20 Erosion Control

- 4.20.1. To the extent there has been issued by the City Engineer a land development permit in accordance with applicable ordinances, the Contractor shall conform to and abide by all terms and conditions of such permit.
- 4.20.2. Erosion control measures shall be performed on all disturbed areas in accordance with the BMPP included in the Notice of Intent and with Section 665, Alabama Highway Department Specifications. The CONTRACTOR will perform all erosion control measures necessary to prevent silt and soil from leaving construction area and entering private property or the "Waters of the State." Erosion control measures shall be in strict accordance with Alabama Non-Point Source Management Program Document and EPA Storm Water Pollution Prevention for Construction Activities.
- 4.20.3. In accordance with Section 665 of Alabama Highway Department Specifications, temporary erosion control work shall involve the construction of temporary berms, dikes, drains, fences, dams, etc. with the use of temporary seeding, mulching, erosion control netting, hay bales, sandbags, check dams, etc., as necessary in order to prevent silt and soil from leaving rights-of-way and entering private property or from washing into drainage structures located on State or County rights-of-way. CONTRACTOR shall mow grassed areas as required during the construction phase of the contract.
- 4.20.4 Erosion control measures shall be maintained by the CONTRACTOR through the warranty period of the Contract. If additional measures are required to correct problems which might occur, these shall be performed by the CONTRACTOR at no additional cost to the OWNER.
- 4.20.5 Materials used for erosion control measures shall be in accordance with Section 665.02 of Alabama Highway Department Specifications and shall include hay bales, sandbags, silt fencing rip rap, crushed stone, mulch or other materials necessary in order to accomplish erosion control.

4.21 Wastewater Containment and Management Plan. In accordance with ADEM Consent Order, NPDES permit NO. AL0022713, Fairhope WWTP, Baldwin County (125) dated September 8, 2009 and the "City of Fairhope, Water and Sewer Department Engineering Report and Compliance Plan", December 2009; to the extent that construction activity by the Contractor involves any wastewater infrastructure or construction activities in close proximity to any wastewater infrastructure and/or to any City sanitary sewer assets the Contractor shall submit to the City Engineer, prior to commencing construction, a wastewater containment and management plan (the "Plan"). The Plan shall adequately address the means, methods and techniques to be employed by the Contractor for containing and transporting wastewater in a sanitary manner without, at any time, permitting the discharge of wastewater into the environment or creating the necessity of a State required sanitary sewer overflow report. The Plan shall be submitted by the Contractor to the Office of City Engineer for review and approval before commencing any construction activity. The City Engineer may waive the requirement of submitting a Plan if he/she determines that the construction activity to which the Plan would relate does not involve any potential for the discharge of wastewater into the environment or creating the potential for the necessity of a State required sanitary sewer overflow report.

4.22 Environmental Clause/Covenant. Contractor shall not allow any toxic, hazardous or contaminated substances or gases (including, but not limited to, asbestos and raw materials which include hazardous constituents or any other similar substances or materials which are included under or regulated by any local, state, or federal law, rule or regulation pertaining to environmental regulations, contamination, clean-up or disclosure such as, without limitation, the Comprehensive Environmental Response Compensation and Liability Act of 1980 ("CERCLA");

the Clean Air Act (42 U.S.C. Sec. 7401 et seq.); the Clean Water Act (33 U.S.C. §1251 et seq.); the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.); and the Toxic Substances Control Act (42 U.S.C. §2601 et seq.) or state environmental clean-up or disclosure acts and statutes as all such acts and statutes exist now or are hereafter amended (such acts and statutes referred to herein as "Environmental Laws")(such substances or gases referred to herein as 'Hazardous Substances') to be stored, located, or discharged on the premises without specific prior written consent of the City. Contractor shall comply with all Environmental Laws affecting the premises. Contractor covenants to hold the City, its officers, agents and employees harmless from and against any loss, costs, damage or expenses (including attorney's fees and expenses) arising out of the presence of Hazardous Substances (as hereinbefore described) on or about the premises or the violation of any Environmental Laws with respect thereto, the occurrence of which Hazardous Substances on the premises or the violation of any Environmental Laws shall have arisen solely from the acts or omissions of Contractor, its subcontractors, agents, invitees and employees. This indemnity shall survive the termination of this Contract and shall inure to the benefit of the City of Fairhope, its successors and assigns.

ARTICLE V INSURANCE, LIABILITY, ETC.

5.0 Contractor's Insurance:

5.0.1 Insurance Required. The Contractor shall not commence work under this contract until it has obtained all insurance required by the Contract documents and such insurance has been accepted by the City. The Contractor shall maintain the required insurance during the term of the Contract including any extensions of the term. These limits and coverages specified are the minimum to be maintained and are not intended to represent the correct insurance needed to fully and adequately protect the awarded Bidder.

5.0.1.1 Insurance shall be written in comprehensive form by insurance companies rated A- or better by A. M. BEST and shall protect the Contractor and the City against claims for injuries to members of the public (including City employees) or damages to property of others (including City property) arising out of any act of the Contractor or any of its agents, employees or subcontractors and shall cover both on-site and off-site operations under this contract and insurance coverage shall extend to any motor vehicles or other related equipment, irrespective of whether the same is owned, non-owned or hired.

5.0.1.2 The obtaining and maintaining by Contractor and subcontractors of the insurance required herein does not relieve the Contractor of any responsibilities, obligations or duties to the City pursuant to this contract.

5.0.2 Additional Insurance. The Contractor shall have an insurance professional review the Contractor's activities in regard to the performance of this contract and the Contractor shall obtain any further or additional insurance or greater limits as recommended by the insurance professional.

5.0.3 Insurance Limits. Neither the setting of insurance limits or requirements nor the acceptance or approval of the same by the City imply or represent that the limits or the insurance carrier is sufficient or that such insurance actually has been obtained, that being the responsibility of the Contractor.

5.0.4 Subcontractors. The Contractor shall require all subcontractors to take out and maintain the type of insurance required herein to the extent of their involvement in the Project so as to be adequate to protect against liability. In the event any work under this Contract is performed by a subcontractor(s), the Contractor shall remain responsible for any liability directly or indirectly

arising out of the work performed under this Contract, regardless of whether or not such work is covered by the subcontractor's insurance. The Contractor shall not allow any subcontractor to commence work on the project until all similar insurance required of the subcontractor has been obtained. All subcontractors shall maintain required insurance during the term of the contract including any extensions of the term.

5.0.5 City's Right to Review Coverage. The City shall have the right to inspect and approve Contractor's insurance coverage herein required. Should the City deem it advisable to modify the coverage in any way, it shall so request of the Contractor in writing and should the Contractor fail to modify the coverage, then the City may pay the cost of any increased coverage or take credit for any decreases as may be appropriate. Review or acceptance of insurance by the City or representatives of the City shall not relieve or decrease the responsibility of the Contractor hereunder.

5.0.6. Waiver of Subrogation. To the extent that the Contractor is required to maintain insurance coverage for loss or damage to property or bodily injury, including Builders Risk All Risk insurance, the insurance must waive and the Contractor hereby waives subrogation of claims against the City, its officers, agents and employees.

5.0.7 City as Additional Insured. The City shall be named as additional insured, for ongoing and completed operations for up to two (2) years, on the Contractor's and any subcontractor's policies for any claims arising out of work performed under this Contract. The Contractor shall provide the City with a Certificate of Insurance naming the City as an additional insured using ISO for CG 2010 1185 (or substitute form providing equivalent coverage) or on the combination of ISO forms CG 20 10 07 04 or CG 20 33 07 04 and CG 20 37 07 04 (or a substitute or ISO form providing equivalent coverage) naming the **City as an additional insured**, giving all parties a 30 notice of cancellation or intent not to renew the insurance, a waiver of subrogation and list any and all exclusions. The coverage available to the City as an additional insured shall not be less than:

\$1,000,000	Each Occurrence,
\$2,000,000	General Aggregate (subject to a per project general aggregate applicable to the project),
\$2,000,000	Products/completed Operations Aggregate
\$1,000,000	Personal and Advertising injury limits.

Additional insured coverage shall apply as primary, non-contributory, insurance with any other insurance afforded to the City and the Contractor.

5.0.8. Elevators, Hoist and Cranes. If the Contractor or a subcontractor will utilize in connection with the performance of the work pursuant to this contract an elevator, material hoist, crane or other equipment, or conveyor, then the Contractor shall take out and maintain or require the subcontractor to take out and maintain insurance that shall protect the Contractor and the City against claims for injuries to members of the public (including City employees) or damages to property of others (including City property) arising out of any act of the Contractor or any of its agents, employees or subcontractors resulting from the operation of such elevator, material hoist, crane or other equipment, or conveyor.

5.1 Insurance:

5.1.1 Workmen's Compensation Insurance:

The Contractor shall take out and maintain during the term or any extensions of this contract Workmen's Compensation Insurance as required by Alabama law for all of its employees employed at the site of the Project or off-sites related to the Project and, in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor.

Worker's Compensation and Employer's Liability

Part One: Statutory Benefits as required by the State of Alabama

Part Two: Employer's Liability	\$1,000,000	each accident
	\$1,000,000	each employee
	\$1,000,000	Policy Limit

5.1.1.1 In case any class of employees engaged in any work under this contract at the site of the Project is not protected under the Workmen's Compensation statute, the Contractor shall provide, and shall cause each subcontractor to provide, adequate accident insurance for the protection of its employees not otherwise protected.

5.1.1.2 **Water or Navigational Exposure:** Where work under this contract may trigger the requirement for Federal Longshoreman's and Harbor worker's Act and Federal Jones Act or insurance required by other applicable law or regulations, the Contractor shall obtain the same if required.

5.1.2. **Comprehensive Automobile and Vehicle Liability Insurance:**

The Contractor shall maintain during the term or any extensions of this contract, comprehensive automobile and vehicle liability insurance. The limits of liability shall not be less than **\$1,000,000 combined single limit or equivalent.**

5.1.3. **Commercial General Liability Insurance:**

The Contractor shall maintain during the term or any extensions of this contract, Commercial General Liability Insurance, including officers, agents and employees.

5.1.3.1 The limits of liability shall not be less than

\$1,000,000	Each Occurrence
\$2,000,000	General Aggregate (subject to a per project general aggregate applicable to the project),
\$2,000,000	Products/Completed Operations Aggregate
\$1,000,000	Personal and Advertising Injury Limits Combined Single Limit or equivalent.

5.1.4 **Owner's Protective Insurance:**

For projects with a contract amount of \$500,000.00 or greater, an Owner's Protective Policy is required in the minimum amount of **\$1,000,000 each occurrence.** Provided, however, the City may require such insurance on projects of lesser amount if an insurance limit amount is stated herein.

5.1.5 **Umbrella Excess Liability Over Primary Insurance:**

The Contractor shall take out and maintain during the term of this contract, and any extensions thereof, Umbrella Excess Liability Insurance. The minimum limits of coverage shall be as follows:

Each Occurrence	\$ _____
Aggregate	\$ _____

5.1.5.1 The coverage shall be over the required general liability insurance and automobile liability insurance as a minimum. There shall be no gaps or sublimit deductibles, etc.

5.1.6 **Miscellaneous Insurance:**

The Contractor shall provide whatever insurance may be required of the City or the Contractor by permits or agreements, etc., with the railroad, highways, or other utilities. The Contractor shall familiarize himself with all insurance requirements contained in easements, permits, and

agreements associated with this Project. The Contractor shall provide any Railroad Protective Liability and other General Liability Insurance in the amounts contained in the agreements, permits or easements or in greater amounts if higher limits are appropriate or required elsewhere. The Contractor shall bear the cost of all required insurance and shall include in his bid a sufficient amount to cover the cost of all required insurance. To the extent the City obtains permits or licenses for railroad or highway bores, crossings or other work involved in the Project, the Contractor shall obtain adequate insurance to protect itself and the City.

5.1.7 Builders Risk All Risk Insurance:

To the extent applicable to the Project, the Contractor shall secure and maintain during the life of this Contract, Builder Risk All Risk Insurance coverage for 100 percent of the Contract Price. This insurance shall not exclude coverage for earthquake, landslide, tornado, flood, collapse or loss due to the result of faulty workmanship. Such insurance shall also provide for any damages caused by injury to, or destruction of, tangible property, including loss of use resulting therefrom, and shall pay all losses to the Contractor and the City as their interest may appear.

5.1.7.1 If this is a trade contract under a construction manager format, the provisions of this subsection shall not apply.

5.1.8. Proof of Carriage of Insurance:

The Contractor shall furnish the City with satisfactory proof of carriage of the insurance required herein, in the form of an insurance certificate or if the City elects in the form of a policy. Insurance shall be in a form satisfactory to the City.

5.1.8.1 The Contractor's and any subcontractor's general liability and automobile liability insurance shall endorse the Owner (City of Fairhope), its officers, agents and employees, as additional insured's for any claims arising out of work performed under this contract.

5.1.8.2 The Contractor's insurance endorsing the Owner and others as additional insured's shall be "primary" and non-contributory as to such endorsed insured's.

5.1.8.3 Cancellation: The certificate and policy, as the case may be, shall state that the City shall be given thirty (30) days' written notice of cancellation or any change in the insurance coverage.

5.1.8.4 There shall be a statement that the Contractor and any subcontractors waive subrogation as to the City, its officers, agents, employees and Program Coordinator.

5.1.8.5 There shall be a statement that full aggregate limits apply per job or contract.

5.1.8.6 Agents verification of Contractor's insurance on form provided by the City or equivalent.

5.1.8.7 Insurance shall contain no exclusions for x, c or u.

5.1.8.8 Full aggregate limits must apply per job or contract.

5.2 No Personal Liability of Public Officials

In carrying out any of the provisions hereof in exercising any authority granted by the Contract, there will be no personal liability upon any public official

5.3 Indemnity

To the maximum extent permitted by law, the Contractor shall save harmless, indemnify and defend the City, its officers, agents and employees from and against any and all claims and losses, cost, expense or liability including attorney's fees and litigation costs caused by, arising out of, resulting from, or occurring in connection with the performance of the work by the Contractor or any subcontractor, regardless of the fault, breach of contract, or negligence of the City, its officers, agents or employees excepting only such claims or losses that have been adjudicated to have been caused solely by the negligence of the City and regardless of whether or not the Contractor is or can be named a party in a litigation.

- 5.3.1 Contractor agrees to indemnify and/or reimburse the City for any fines, violations, charges, suits, or sums of money imposed by the Alabama Department of Environmental Management (ADEM), Environmental Protection Agency (EPA), or any administrative agency on the City of Fairhope for any sewage or contaminate discharged or Wetlands regulations violation as a result of or arising out of the work by the Contractor pursuant to this agreement.

5.4 Errors and Omissions

The Contractor does agree to release and hold harmless the City of Fairhope or any of its officers, agents and employees and its Program Coordinator from any damages claimed by the Contractor or subcontractors resulting from or attributable in whole or in part to, errors in or omissions of the plans and specifications, including final drawings of the Engineer/Architect or other design professionals. As to plans, specifications or designs prepared by independent design professionals, the parties agree that any City review or approval thereof was only for overall suitability, maintenance and usability and there are no express or implied warranties by the City as to the adequacy, accuracy, correctness, or code compliance thereof.

5.5 Exclusion of Contractor Claims

In performing its obligations, the Engineer/Architect and its consultants may cause expense for the Contractor or its subcontractors and equipment or material suppliers. However, those parties and their sureties shall maintain no direct action against the City or its officers, employees, agents and program coordinator for any claim arising out of, in connection with, or resulting from the Engineering services performed or required to be performed where such services are performed in good faith to protect the City or the Public.

5.6 Inadequate Surety/Insurance

It is further mutually agreed between the parties hereto that if, at any time after the execution of this agreement, any of the surety bonds of the Contractor or subcontractors relating to the Project for its faithful performance shall be deemed by the City to be unsatisfactory, or if for any reason such bond(s) ceases to be adequate to cover the performance of the work or the surety ceases to do business by agent in Baldwin County, Alabama, the Contractor shall, at its expense, within five (5) days after the receipt of notice from the City so to do, furnish an additional bond or bonds in such form and amount and with such surety or sureties as shall be satisfactory to the City. In such event, no further payment to the Contractor shall be deemed to be due under this agreement until such new or additional security for the faithful performance of the work shall be furnished in manner and form satisfactory to the City.

5.7 Changes

When changes in the scope of work by written order or change orders aggregate in amount equal to 10 percent of the total contract, including the change order or change orders, the insurance coverage included under this heading shall be increased accordingly by the Contractor. Proof of coverage shall be established by endorsement to the original policy or by re-issue of the original policy to include the added coverage, or in accordance with any other acceptable policy with the insuring company for increasing the coverage.

**ARTICLE VI
OBSERVATION OF THE PROJECT**

- 6.0** The Contractor shall furnish the Engineer/Architect and/or the City's observer with every reasonable facility for ascertaining whether or not the work performed is in accordance with the requirements and intent of the Specifications and Contract Documents. No work shall be done without suitable inspection by the Engineer/Architect's Inspector or the City's observer. Payment for work or failure to reject any defective work shall not in any way prevent later

rejection when such defect is discovered, nor obligate the City to final acceptance. All work done when not in accordance with the Plans, specifications and contract will be rejected and, without cost to the City, shall immediately be removed and other work done in accordance therewith by the Contractor. If the Contractor fails to remove the work as above ordered, then the Engineer / Architect shall have the right and authority to stop the Contractor and his work at once and the City may correct the work as herein provided at the cost and expense of the Contractor.

6.0.1 Inspection is not acceptance and shall not constitute acceptance by the City.

6.0.2 The work shall also be subject to inspection by representatives of the City of Fairhope Building Inspection Department.

6.1 Observation of the Project: The Engineer/Architect, the City and its observers, agents, any agency having jurisdiction, and their representatives shall have access at all times to the Project for inspection whenever it is in preparation or progress, and the Contractor shall provide proper facilities for such access and inspection. The City or the Engineer/Architect may appoint or assign observers, with designated duties and restricted authority, to inspect the Project as may be directed, or to make special observations requested in advance by the Contractor, and to report progress of the Project, and manner of procedure, quality of the material and workmanship, and compliance with the Contract Documents. Inspection or observation is not acceptance and shall not constitute acceptance by the City.

6.1.1 All materials, workmanship, equipment, processes of manufacture, and methods of construction, shall be subject to inspection, examination, and test by such persons at any and all places where such manufacture and/or construction are being carried on. The Engineer/Architect shall have the right to reject material, workmanship and/or equipment that are defective or otherwise not in accordance with the drawings and Specifications and require its correction by the Contractor. Rejected workmanship shall be satisfactorily corrected, and rejected material shall be satisfactorily replaced with proper material by the Contractor without charge therefor, and the Contractor shall promptly segregate and remove the rejected material from the premises. Provided; however, neither the presence or absence of such observers nor the giving or failure to give such advice, direction or instruction shall in any manner relieve the Contractor from any contract requirement.

6.1.2 Upon rejection of material and/or workmanship by the Engineer/Architect or the City, there may be occasion where such deficiencies may be corrected more economically antime through modification of the design versus removal and replacement. In such instances, the Engineer/Architect shall provide design services on behalf of the City necessary for analysis and correction of the rejected work. Costs associated with hourly fees for these professional services shall be paid by the City and deducted from payment to the Contractor based on the actual costs incurred. Prior to beginning any analysis and accrual of associated professional service fees, the Engineer/Architect shall provide the Contractor and City notice in writing of the intent to begin, summary of the scope of work, estimated time to complete, and estimated total fees. Any costs associated with corrective work performed by the Contractor to remedy such deficiencies shall be the sole responsibility of the Contractor.

6.1.3 Neither the City observers nor the Engineer/Architect, will be authorized to revoke, alter, relax, or waive any requirements of the Contract Documents; to issue instructions contrary to the drawings and Specifications; nor shall they supervise and direct work for the Contractor, nor unreasonably interfere with the Contractor's operations beyond the extent necessary to make certain that the Project is being carried out according to the contract requirements.

6.1.4 Any advice which they may give the Contractor shall not be construed as binding the City in any way, nor as releasing the Contractor from any of the contract requirements.

- 6.1.5 If the Contractor considers any work demanded of it to be outside the contract requirements, or any ruling of the Engineer/Architect or an inspector to be unfair, it may immediately, upon such work being demanded or ruling made, request written instructions from the Engineer / Architect, or inspector, or within ten days file an appeal to the Engineer/Architect or the City, stating clearly and in detail the basis of its objections. However, pending the decision on such appeal no work shall be done in disregard of the rulings of the Engineer / Architect or inspector or his instructions on items of work affected by such appeal.
- 6.1.6 The Contractor shall furnish promptly, without extra compensation, all reasonable facilities, labor, and material necessary for safe and convenient access, inspection, and tests that may be required by the Engineer/Architect.
- 6.2 Authority and Duties of Observers:** If City or consultant inspectors, whether for the Engineer/Architect or Construction Manager, are being utilized, they shall be authorized and permitted to inspect all work done. The Inspector shall not be authorized to alter or waive any requirements of the Specifications. He shall have authority to call the attention of the Contractor to failure of the work to conform to the specifications and Contract. He may suspend the Project until any questions at issue can be referred to and decided by the Engineer/Architect or the City.
- 6.2.1 Neither the Engineer / Architect, Inspector, the City or other representatives for the City shall be responsible in any way for construction means, methods or techniques, nor for the safety of the construction work, progress, or employees of the Contractor or any subcontractors, except as set forth in the Construction Manager contract, if applicable.
- 6.2.2 The presence of the Inspector shall not in any manner lessen the responsibility of the Contractor pursuant to this agreement.
- 6.3 Defective Work/Correction of Work by the City:** The inspection of the work shall not relieve the Contractor of any of its obligations to fulfill its contract and defective work shall be made good, notwithstanding that such work has been previously inspected by the Engineer / Architect and accepted or estimated for payment. The failure of the Engineer/Architect or inspector to condemn improper workmanship shall not be considered as a waiver of any defect, whether known at the time or discovered later, or as preventing the City at any time subsequently from recovering damages for work actually defective. All work shall be guaranteed by the Contractor against defects in workmanship for a period of one year from date of final payment.
- 6.3.1 Upon failure and/or neglect by the Contractor to promptly prosecute or perform the work in accordance with the contract documents, including any requirements with respect to the construction schedule, plans or specifications, the City may, without prejudice to any other remedy it may have, correct such deficiencies and may deduct the actual cost thereof from payment, then or thereafter due to the Contractor.
- 6.4 Disagreement:** Should any disagreement or difference arise as to the estimated quantities or classifications or as to the meaning of the drawings or specifications, or any point concerning the character, or acceptability or nature of the several kinds of work, or construction thereof, the decision of the Engineer/Architect shall be final and conclusive and binding on the Contractor.
- 6.5 Stop Work Orders:** During unseasonable weather all work must stop when the Engineer /Architect so directs and all work must be suitably protected by Contractor at all times. However, the Engineer/Architect shall be under no obligation to stop work on the Project. If the Project is stopped, the Contractor shall not be entitled to extra compensation for delays or problems associated with the stoppage.
- 6.6 Progress Meetings:** The Contractor shall conduct regular progress meetings during the course of the Project at least once a month or more often if requested by the City or Engineer / Architect. The meetings shall be held at a site convenient to all parties and if a site cannot be agreed upon, the City will designate a site.

- 6.6.1 The Contractor or designated representative, the Contractor's Superintendent, all subcontractors, engineers, inspectors, and the City's representative shall attend.
- 6.6.2 The Contractor shall keep accurate written minutes of the meetings and forward copies thereof to the Engineer/Architect and the City's representative before the next scheduled meeting.
- 6.6.3 If a trade contract, progress meetings will be conducted by the Construction Manager, who will keep minutes. All trade contractors shall attend unless excused by the Construction Manager.

ARTICLE VII

PROJECT COMPLETION

- 7.0 **Substantial Completion:** "Substantial completion" shall be that degree of completion of the Project or a defined portion of the Project, as evidenced by the Engineer / Architect's written Notice of Substantial Completion, sufficient to provide the City, at its discretion, the full-time use of the Project or defined portion of the work for the purposes for which it was intended. "Substantial Completion" of an operating facility or operating component of the Project shall be that degree of completion that has provided a minimum of seven (7) continuous days of successful, trouble-free operation in a "fully automatic" manner acceptable to the City and Engineer/Architect and with all redundant systems fully operational. All equipment contained in the Project, plus all other components necessary to enable the owner to operate the facility in the manner that was intended, shall be complete on the substantial completion date.
 - 7.0.1 When the Contractor considers that the Project, or where acceptable to the City, a designated portion thereof is substantially complete, the Contractor shall prepare and submit to the Engineer / Architect a list of items to be completed or corrected and request an inspection for Substantial Completion. The failure by the Contractor to include any items on such list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents. After inspection and/or if an operating facility, after a minimum of seven (7) continuous days of successful, trouble free operation has been achieved during startup, the Engineer/Architect may, at his sole discretion, issue a written notice of substantial completion for the purpose of establishing the starting date for specific equipment guarantees or warranties, and to establish the date that the City will assume the responsibility for the cost of operating such equipment.
 - 7.0.2 Said notice shall not be considered as final acceptance of any portion of the Project or relieve the Contractor from completing the remaining work, including any remaining performance or acceptance testing, within the specified time and in full compliance with the Contract Documents. Specifically, the issuance of a written notice of Substantial Completion shall not relieve the Contractor of his obligation to promptly remedy any omissions and latent or unnoticed defects in the Project covered by the written Notice of Substantial Completion.
- 7.1 **Final Inspection:** Upon notice from the Contractor that its work is complete, the Engineer/Architect and/or other representatives of the City shall make a final inspection of the work or Project and conduct test or tests if applicable. The Engineer/Architect shall notify the Contractor of all apparent and/or visible instances where the Project fails to comply with the plans and specifications and contract documents, as well as any defects he may discover (punch list). The Contractor shall immediately make such alterations as are necessary to make the Project comply with the plans and specifications and to the satisfaction of the Engineer/Architect.
 - 7.1.1 Upon completion of all such repairs in a satisfactory manner, and when the Engineer/Architect has determined that the work or Project is acceptable under the contract, including this provision and after publication of final completion and all other requirements of final payment as provided for in this agreement, then he shall issue a final certificate of payment to the City stating that the balance is due the Contractor, less such amounts as may have been withheld by the City

from time to time as provided in the contract documents. In recommending to the City that it make such final payment to the Contractor, the Engineer/Architect shall also issue a certificate of final acceptance wherein he shall recommend to the City that it accept the Project and/or work as final and complete pursuant to the contract documents.

- 7.1.2 Verification, approval, inspection, final inspection, issuance of final acceptance, issuance of final certificate of payment, action or approval by the City upon the final certificate of payment or final acceptance shall not in any way relieve the Contractor of responsibility for faulty materials or workmanship
- 7.1.3 All warranty or guarantee periods shall commence and start to run from the date of substantial completion.
- 7.2 **"As Built" Drawings:** Unless waived by the City representative, the Contractor must provide to the City a set of "as built" drawings acceptable to the City as a component part of the Project prior to final payment.
- 7.3 **Final Cleanup:** Before final completion and final acceptance, the Contractor shall remove from the City's property or rights-of-ways and from all public and private property, all tools, scaffolding, false work, temporary structures and/or utilities, including the foundations thereof (except such as the City permits in writing to remain); rubbish and waste materials resulting from its operation or caused by its employees; and shall remove all surplus materials, leaving the site clean and true to line and grade, and the Project in a safe and clean condition ready for use and operation. In addition to the above, the Contractor shall be responsible for the following special cleaning for all trades as the Project shall have been completed:
 - 7.3.1 Cleaning of all painted, enameled, stained or baked enamel work: removal of all marks, stains, fingerprints and splatters from such surfaces.
 - 7.3.2 Cleaning of all glass: cleaning and removing of all stickers, labels, stains and paint from all glass and the washing and polishing of the same on interior and exterior.
 - 7.3.3 Cleaning or polishing of all hardware.
 - 7.3.4 Cleaning all tile, floor finishing of all kinds; removal of all splatters, stains, paint, dirt, and dust, the washing and polishing of all floors as recommended by the manufacturer or required by the Engineer/Architect.
 - 7.3.5 Cleaning of all manufactured articles, materials, fixtures, appliances and equipment; removal of all stickers, rust stains, labels (except instructional and/or safety labels) and temporary covers and cleaning and conditioning of all manufactured articles, materials, fixtures, appliances, electrical, heating and air conditioning equipment as recommended or directed by the manufacturers, unless otherwise required by the Engineer/Architect; blowing out or flushing out of all foreign matter from all dust pockets, piping, tanks, pumps, fans, motors, devices, switches, panels, fixtures, boilers, similar features; and freeing identification plates on all equipment or excess paint and the polishing thereof.
 - 7.3.6 In the case of failure to comply with the above requirements for any part of the Project within the time specified by the Engineer/Architect, he may cause the work to be done and deduct the cost thereof from the contract price on the next or succeeding application or payment, or in the event that the cost exceeds the balance due the Contractor, bill the Contractor for the excess.
- 7.4 **Notice of Completion:** The Contractor shall, immediately after the completion of the Project and acceptance by the Owner as provided for herein, give notice as required by Ala. Code §39-1-

1(f) by an advertisement in some newspaper of general circulation published within the City or county wherein the Project has been done for a period of **four (4) successive weeks**. The advertisement shall advise interested parties to contact both the Contractor and the specific City representative. The City's representative shall be named along with his proper mailing address. In no instance shall a final payment be made upon the contract until the expiration of thirty (30) days after the completion of the notice. Proof of publication of said notice shall be made by the Contractor to the City of Fairhope by affidavit of the Publisher and a printed copy of the notice published.

7.4.1 Provided, however, that the requirements hereinabove stated for notice and advertisement shall not apply to contractors performing contracts of less than Fifty Thousand Dollars (\$50,000.00) in amount and the governing body of the City of Fairhope so as to expedite final payment, shall cause notice of final completion of such contract to be published one time in Baldwin County and shall post notice of final completion on the City of Fairhope's bulletin board for one (1) week and shall require the Contractor to certify under oath that all bills have been paid in full. Final settlement with such Contractor may be made at any time after the notice shall have been posted for one (1) entire week.

7.4.2 **NOTE: when maintenance periods are included in the contract for highways, bridges or similar structures, such periods shall be considered component parts of the contract.**

7.5 Final Payment:

Upon completion of the Project by the Contractor and acceptance by the City's representatives of all work required of the Contractor for the Project, but not until **thirty (30) days after Completion of the Notice**, the amount due the Contractor pursuant to the Contract Documents shall be paid upon the presentation by the Contractor to the City's representative of the following:

7.5.1 A properly executed and duly certified voucher for payment, verified by architect, engineer or other City representative, including therewith evidence that all payrolls and all amounts due for labor and materials, other than claims for damages due to tort, have been fully paid and satisfied and there are no outstanding claims or demands associated with the work on the Project.

7.5.2 A release of all claims and claims of lien against the City from the Contractor and all major subcontractors (the City may waive the requirement for subcontractor releases) arising under and by virtue of the contract, on the form attached, duly executed by the Contractor and with the consent of the surety. The Contractor may specifically except claims of the Contractor from the operation of the release if specifically excepted therefrom in stated amounts and the reason therefor. The Contractor may with the consent of the City representative, if any subcontractor refuses to furnish such a release, furnish a bond with surety satisfactory to the City representative to indemnify against such claims.

7.5.3 **Proof of Publication of Notice of Completion** including affidavit of publisher and a printed copy of the notice so published, as provided by law.

7.5.4 In accordance with Ala. Code §39-2-12(c), a non-resident contractor shall satisfy the City that he or she has paid all taxes due and payable to the State, the City and all applicable political subdivisions.

7.6 Acceptance of Final Payment Constitutes Release: The acceptance by the Contractor of the final payment shall release the City, the Engineer/Architect, as representatives of the City, and their officers, employees, agents, and sub-consultants from all claims and all liability to the Contractor for all things done or furnished in connection with the Project, and every act of the City and others relating to or arising out of the work except claims previously made in writing and still unsettled. No payment, however, final or otherwise, shall operate to release the Contractor or his Sureties from obligations under this Contract and the Performance Bond, Payment Bond, and other bonds, warranties and guarantees as herein provided.

ARTICLE VIII WARRANTY AND GUARANTEES

8.0 Warranty and Guarantee:

- 8.1. Warranty: The Contractor warrants to the City and the Engineer/Architect that all materials and equipment furnished under this Contract will be new unless otherwise specified and that all work, materials and equipment will be of good quality, free from fault and defects and in conformance with the contract documents. The work must be safe, substantial and durable construction in all respects. All work, materials and equipment not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. Warranties shall commence to run from the date of substantial completion.
- 8.1.1 The work furnished must be of first quality and the workmanship must be the best obtainable in the various trades. The Contractor hereby guarantees the Project and the work on the Project against defective materials or faulty workmanship for a minimum of one (1) year after final payment by the City and shall replace or repair any defective materials or equipment or faulty workmanship during the period of guarantee at no cost to the City.
- 8.2 Guarantee: If, within the designated warranty period or if not designated, within one (1) year from the date of substantial completion, any of the work, materials or equipment is found to be defective or not in accordance with the contract documents, the Contractor shall correct it promptly after receipt of written notice from the City to do so, unless the City has previously specifically given the Contractor a written acceptance of such specific condition. This obligation shall survive termination of the Contract. The City shall give such notice promptly after discovery of the condition.
- 8.3 Roofing Guarantee: If the Project involves a roof on a building or other structure, then the Contractor shall execute and provide the Roofing Guarantee in the form attached hereto. The guarantee shall be delivered to the City and Engineer/Architect prior to final payment.
- 8.4 Termite Warranty: If the Project involves termite treatment as required in Article IV, then the Contractor shall furnish to the City a written warranty certifying that the applied soil poisoning treatment will prevent the infestation of subterranean termites and that if subterranean termite activity is discovered during the warranty period, Contractor shall re-treat the soil and repair or replace any damage caused by termite infestation. The warranty shall be for a period of five (5) years from the date of treatment signed by Applicator and Contractor.
- 8.5 **Correction of Defective Work During Warranty/Guarantee Period**: The Contractor hereby agrees to make, at his own expense and no cost to the City, all repairs or replacements necessitated by defects in materials or workmanship, provided under the terms of this Contract, and pay for any damage to other works resulting from such defects, which become evident within 1 year after the date of substantial completion unless substantial completion is established by the Engineer/Architect only for specified items of equipment, or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents unless the City has previously given the Contractor a written acceptance of such defects. The Contractor shall promptly correct such defects upon receipt of a written notice from the City to do so. This obligation shall survive the termination of the Contract.
- 8.5.1 Unremedied defects identified for correction during the warranty period described herein before, but remaining after its expiration, shall be considered as part of the obligations of the warranty. Defects in material, workmanship, or equipment which are remedied as a result of obligations of the warranty shall subject the remedied portion of the Project to an extended warranty period of 1 year after the defect has been remedied.

- 8.5.2 Repetitive malfunction of equipment shall be cause for equipment replacement and an extension of the guarantee period for the equipment to a date 1 year following acceptable replacement.
- 8.5.3 The Contractor further assumes responsibility for a similar guarantee for all work and materials provided by subcontractors or manufacturers of packaged equipment components. The Contractor also agrees to hold the City and the Engineer/Architect and employees harmless from liability or damages, including the Engineer/Architect's and attorneys' fees, and cost and expenses of litigation of any kind arising from damage due to said defects. The Contractor shall make all repairs and replacements promptly upon receipt of written order for same from the City. If the Contractor fails to make the repairs and replacements promptly, or in an emergency where delay would cause serious risk, or loss, or damage, the City may have the defective work corrected or the rejected work removed and replaced, and the Contractor and his Surety shall be liable for the cost thereof. The Contractor during the warranty period shall repair/replace as rapidly as possible any and all equipment, materials, etc., which are found to be defective. Should any items not be repaired/replaced within thirty (30) days from the time it is reported to the Contractor by the City, then the warranty period shall be extended on that item for a period equal to the time that the item has remained defective, incomplete, or inoperable as determined by the City. The Contractor must certify that the item has been corrected.
- 8.5.4 The City's rights under this Article shall be in addition to, and not a limitation of, any other rights and remedies available by law.

ARTICLE IX LAWS, PERMITS, ETC.

- 9.0 **Laws and Regulations/Royalties, Patents, Copyrights and Permits and Rights-of-Way:** The Contractor shall comply with and keep itself fully informed of all laws, ordinances and regulations of federal, state, City and county in any manner effecting those engaged or employed in the Project, or the materials used in the Project, or in any way affecting the conduct of the Project, and of all orders and decrees of bodies or tribunals having any jurisdiction or authority over same. The Contractor shall possess all permits and licenses required by applicable law, rule or regulation for the performance of the Project. If any discrepancy or inconsistency should be discovered in this contract, or in the drawings or specifications herein referred to, in relation to any law, ordinance, regulation, order or decree, it shall forthwith report the same in writing to the Engineer/Architect. It shall at all times, itself, observe and comply with all such existing and future laws, ordinances and regulations.
- 9.0.1 The Contractor shall protect and indemnify the City, Engineer/Architect, and their respective employees, officers, sub-consultants, and agents against any claim or liability arising from or based on the violation of any such laws, ordinances, or regulations. All permits, licenses, and inspection fees necessary for prosecution and completion of the Project shall be secured and paid for by the Contractor, unless otherwise specified.
- 9.0.1.1 The Contractor shall obtain and pay for all licenses and permits and shall pay all fees and charges for connection to outside service and the use of property required for the execution and completion of the Project.
- 9.0.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and code requirements applicable in or bearing on the conduct of the Project unless in conflict with contract requirements. If the Contractor ascertains at any time that any requirements of the Contract is at variance with applicable laws, ordinances, regulations, or building code requirements, it shall promptly notify the Engineer/Architect and any necessary adjustment of the Contract will be made as herein specified under change in orders.

- 9.0.3 The Contractor shall pay all applicable federal, state and local taxes and assessments on the Project. Wherever the law of the place of building requires a special tax, use, occupation, or other tax, the Contractor shall pay such tax.
- 9.0.4 The Contractor shall pay all royalties and license fees. The Contractor shall hold and save the City and its agents and employees harmless from liability of any nature or kind, including costs and expenses, for or on account of any patented or unpatented invention, process, article or appliance manufactured or used in the performance of the contract, including its use by the City.
- 9.0.5 To the extent that the Project has not been permitted or registered by the Engineer or City, Contractor shall register or obtain any and all necessary National Pollutant Discharge Elimination System (NPDES) Permits required by USEPA or the Alabama Department of Environmental Management (ADEM) as well as any applicable storm water permits or registration for the construction of the improvements specified in the Contract Documents. The Contractor shall abide by all regulations and conditions relative to the permit or registration and attachments to the permit or registration, including but not limited to sampling and monitoring. The Contractor shall fulfill for the City all the requirements made upon the City by the permit(s) or registration.
- 9.0.6 The Contractor shall be fully responsible for all aspects of erosion and sediment control. The Contractor shall utilize whatever measures are necessary to prevent pollution or siltation due to his activities. As a minimum, the Contractor shall strictly comply with the erosion control methods referenced in the Alabama Soil and Water Conservation Committee "Alabama Handbook for Erosion Control, Sediment Control, and Storm water Management on Construction Sites and Urban Areas," latest edition (referred to as the Alabama Handbook").
- 9.0.7 If the Contractor has information that any process, article or item specified or delineated by the Engineer/Architect is an infringement of a patent or a copyright, it shall promptly give such information to the Engineer/Architect.
- 9.1 Alabama Department of Transportation Rights-of-Way:** If any portion of the Project involves work upon State right-of-way, the Contractor agrees to provide the Alabama Department of Transportation with a bond or certified check in the amount required, made payable to the Alabama Department of Transportation, to guarantee the faithful performance of the provisions of a permit and to guarantee that the Contractor shall maintain the work in a manner suitable to the Alabama Department of Transportation for a period of one (1) year. The Alabama Department of Transportation Bond Form must be used. At the end of one (1) year from the completion of this work, the Department of Transportation will return the certified check or bond to the applicant provided all provisions of this permit have been complied with. Otherwise, the Department of Transportation shall apply the certified check or bond to the cost of repairing the rights-of-way with State forces.
- 9.2. Baldwin County Right-of-Way:** If any portion of the Project involves work upon County right-of-way, the Contractor agrees to execute an application and file with Baldwin County a bond or certified check in the amount required, made payable to Baldwin County to guarantee the faithful performance of this provision of this work suitable to the County for a period of one (1) year. At the end of one year from the completion of this work, the County will return the certified check or bond to the applicant provided all provisions of this permit have been complied with. Otherwise, the County shall apply the certified check or bond on the cost of repairing the right-of-way with the County forces.
- 9.3 Storm Water Permit and Monitoring:**
- 9.3.1.** To the extent that the Project has not been permitted or registered by the Engineer or the City, and the Project is defined as an NPDES Construction Site per ADEM Admin. Code

Chapter 335-6-12 (the Rule), the Contractor shall submit to the Alabama Department of Environmental Management (ADEM) a Notice of Registration (NOR) under the Rule for Storm Water Discharges during construction activities.

- 9.3.1.1 The Contractor shall strictly adhere to all requirements of the NOR and the rule regardless of which party has obtained coverage.
- 9.3.2 Compliance with all provisions of ADEM Admin. Code Chapter 335-6-12 and this registration is required, including but not limited to, the preparation and implementation of a Construction Best Management Practices Plan (CBMPP) and any other plans as may be required, the regular maintenance of the Best Management Practices (BMPs) to the maximum extent practicable and the submittal of required reports. As required by the Rule, the Contractor shall retain a Qualified Credentialed Professional (QCP) to prepare the CBMPP and to certify that it was prepared in accordance with the requirements of the "Alabama Handbook" and the Rule.
- 9.3.3. This registration neither precludes nor negates an operator's responsibility or liability to apply for, obtain, or comply with other ADEM, federal, state, or local government permits, certifications, licenses, or other approvals.
- 9.3.4. The Contractor, unless application for registration has already been made, will be furnished a Storm Water NOR application package when the contract is awarded. The Storm Water NOR application package will include the following:
 - 9.3.4.1 Typical transmittal letter to ADEM.
 - 9.3.4.2 NOR applications filled out with Project information.
 - 9.3.4.3 Project area map.
 - 9.3.4.4 Other data as required by the NOR for Tier 1 waters if applicable.
- 9.3.5 The Contractor will complete or furnish the following items and submit to ADEM within five working days of the receipt of the NOR application provided by the Owner.
 - 9.3.5.1 Information as outlined in the typical letter of transmittal, to the address indicated on the letter of transmittal, by registered mail or hand deliver.
 - 9.3.5.2. The "Alabama Department of Environmental Management (ADEM), Field Operations Division Storm Water Program" Notice of Registration (NOR); NOR shall be signed by a responsible official who is the operator, owner, the sole proprietor of a sole proprietorship, a general/controller member or partner, or an executive officer of at least the level of vice-president for a corporation. Additionally, the QCP is required to sign the CBMPP certification part of the NOR.
 - 9.3.5.3 Determine applicable fee per ADEM Fee Schedule and make check payable to: Alabama Department of Environmental Management for the NOR and submit to the Alabama Department of Environmental Management with the NOR application.
- 9.3.6 Application for the Storm Water Permit shall be made by the Contractor no later than five working days after receipt of application provided by Owner. The Contractor shall not commence any construction activities until ADEM has issued the authorization number for the Project.
- 9.3.7 Payment
 - 9.3.7.1 Payment will be made to the Contractor for obtaining the stormwater NOR as specified herein for the lump sum amount as shown in the bid schedule. If there is no line item for registration, obtaining the NOR shall be considered a subsidiary obligation of mobilization.

- 9.3.7.2 Individual erosion and sediment control items shall be paid for at the unit prices as shown in the bid schedule. Routine inspections will be performed by the Owner's representative or Engineer to verify compliance with the CBMPP and the Rule shall be the Contractor's responsibility and shall be incidental to the storm water registration.
- 9.3.7.3 If no individual erosion and sediment control items are included in the bid schedule the cost of these items shall be incidental to the lump sum amount as shown in the bid schedule for Storm Water Monitoring and Temporary Erosion and Sediment Control and payment shall be made pro rata as the Project progresses.
- 9.3.8 The Contractor shall perform all work in compliance with and as required by any State, Federal or Local registration, permit or license, the terms and conditions of which are adopted herein by reference. The Contractor agrees to indemnify and hold harmless the City, Engineer, and their respective officers, agents and employees from any fines, penalties, damages, claims, liability or judgment arising out of or in any manner associated with the Contractor's failure to perform work on the Project in strict accordance with all storm water registration, permit or license requirements.

ARTICLE X. MISCELLANEOUS CLAUSES

10.0 **Notice and Service Thereof:**

- 10.01 All notices, demands, requests, change orders, instructions, approvals and claims shall be in writing. Unless expressly otherwise provided in this agreement, any election, notice or other communication required or permitted to be given under this agreement shall be in writing and deemed to have been duly given if provided in accordance with the provisions hereof.
- 10.02 Any notice to or demand upon the Contractor shall be in writing and shall be sufficiently given if addressed to the Contractor at the address stated herein and deposited in the United States mail in a sealed envelope with sufficient postage prepaid or delivered with charges prepaid to any telegraph company for transmission to the Contractor at such address. It shall also be sufficient if such notice or demand be served upon the Contractor personally or its local representative in charge of the Project or delivered at his local office. The Contractor shall, from time to time, designate to the City in writing any change of address to which such notice or demand shall be sent.
- 10.03 Any notice to or demand upon the City shall be in writing and shall be sufficiently given if delivered to the office of the City's representative or if addressed to the City representative and deposited in the United States mail in a sealed envelope with sufficient postage prepaid or delivered with charges prepaid to any telegraph company for transmission to such representative of the City.
- 10.1 City Representative: The City's representative, and **Engineer of Record** is **Chris Lieb**, on this Project. All references to Engineer or Architect shall be to the City representative if no Engineer or Architect is involved in the Project.

- 10.2 **Contractor Representative:** The Contractor's representative on this Project is hereby designated as _____ and whose address is _____
_____ and email _____.

10.3 **Capacity:** Each party to this agreement represents and warrants to the other as follows:

10.3.1 That it is an individual of the age of majority or otherwise a legal entity duly organized and in good standing pursuant to all applicable laws, rules and regulations.

10.3.2 That each has full power and capacity to enter into this agreement, to perform and to conclude the same including the capacity, to the extent applicable, to grant, convey and/or transfer; areas, assets, facilities, properties, (both real and personal), permits, consents and authorizations and/or the full power and right to acquire and accept the same.

10.3.3 That to the extent required, each party has obtained the necessary approval of its governing body or board and a resolution or other binding act has been duly and properly enacted by such governing body or board authorizing this agreement and said approval has been reduced to writing and certified or attested by the appropriate official of the party.

10.3.4 That each party has duly authorized and empowered a representative to execute this agreement on their respective behalf and the execution of this agreement by such representative fully and completely binds the party to the terms and conditions hereof.

10.3.5 That absent fraud, the execution of this agreement by a representative of the party shall constitute a certification that all such authorizations for execution exist and have been performed and the other party shall be entitled to rely upon the same. To the extent a party is a partnership, limited liability company or joint venture, the execution of this agreement by any member thereof shall bind the party and to the extent that the execution of agreement is limited to a manager, managing partner or specific member then the person so executing this agreement is duly authorized to act in such capacity for the party.

10.3.6 That each party represents and warrants to the other that there is no litigation, claim or administrative action threatened or pending or other proceedings to its knowledge against it which would have an adverse impact upon this transaction or upon either's ability to conclude the transaction or perform pursuant to the terms and conditions of this agreement.

10.3.7 That each party has obtained any and all required permits, approvals and/or authorizations from third parties to enable it to fully perform pursuant to this agreement.

10.4 **Ownership of Contract Documents:** The Contract documents, and copies of parts thereof, are furnished and owned either by the City or the Engineer/Architect. All portions of the Contract Documents, and copies of parts thereof, are the instruments of service for this Project. They are not to be used on other work and are to be returned to the City on request at the completion of the Project. Any reuse of these materials without specific written verification or adaptation by the City will be at the risk of the user and without liability or legal expense to the City or Engineer/Architect. Such user shall hold the City, its officers, agents and employees harmless from any and all damages, including reasonable attorneys' fees, from any and all claims arising from any such reuse. Any such verification and adoption shall entitle the City to further compensation at rates to be agreed upon by the user and the City.

10.5 **No Waiver of Rights:** Neither the inspection by the City or the Engineer/Architect or any of their officers, employees, agents, or sub-consultants, nor any order by the City for payment of money, nor any payment for, or acceptance of, the whole or any part of the Project by the City or Engineer/Architect, nor any extension of time or change order, nor any possession taken by the City or its employees, or non-enforcement of any provision of this agreement by either party shall operate as a waiver of any provision of this agreement, or any power herein reserved to the City, or any right to damages, nor shall any waiver of any breach in this agreement be held to be a waiver of any other or

subsequent breach. Acceptance or final payment shall not be final and conclusive with regards to latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the City's rights under any warranty.

10.6. Subletting or Assigning of Contract:

10.6.1 Limitations: Limitations: The Contractor shall not sublet, assign, transfer, convey, sell or otherwise dispose of any portion of the agreement, his obligations, right, or interest therein, or its power to execute such agreement, to any person, firm or corporation without written consent of the City and such written consent shall not be construed to relieve the Contractor of any duty or responsibility for the fulfillment of the agreement. A sale, conveyance or transfer of 50% or more of the stock or ownership of the Contractor shall be considered an assignment. Provided; however, in no event shall any portion of this agreement be assigned to an unsuccessful bidder whose bid was rejected because he or she was not a responsible or responsive bidder. Use of subcontracts up to a combined (total) value of 50 percent of the value of all work will not be construed as an assignment. Unless otherwise stipulated in the proposal or general conditions, the Contractor shall perform, with its own organization, work with the value not less than fifty (50) percent of the value of all work embraced in the contract.

10.6.2 Sub-Contractor's Status: A subcontractor shall be recognized only in the capacity of an employee or agent of the Contractor

10.7 Third Party Beneficiaries: It is the intent of the parties hereto that there shall be no third party beneficiaries to this agreement.

10.7.1. Final Integration: This Agreement constitutes the entire agreement of the parties, as a complete and final integration thereof with respect to its subject matter. All written or oral understandings and agreements heretofore had between and among the parties are merged into this Agreement, which alone fully and completely expresses their understandings. No representation, warranty, or covenant made by any party which is not contained in this Agreement or expressly referred to herein has been relied on by any party in entering into this Agreement.

10.7.2 Force Majeure: Neither party to this Agreement shall hold the other party responsible for damages or delay in performance caused by acts of God, strikes, lockouts or other circumstances beyond the reasonable control of the other or the other party's employees, agents or contractors.

10.7.3 Amendment in Writing: This Agreement may not be amended, modified, altered, changed, terminated, or waived in any respect whatsoever, except by a further agreement in writing, properly executed by all of the parties.

10.7.4 Binding Effect: This agreement shall bind the parties and their respective personal representatives, heirs, next of kin, legatees, distributees, successors, and assigns.

10.7.5 Captions: The captions of this Agreement are for convenience and reference only, are not a part of this Agreement, and in no way define, describe, extend, or limit the scope or intent of this Agreement.

10.7.6 Construction: This Agreement shall be construed in its entirety according to its plain meaning and shall not be construed against the party who provided or drafted it.

10.7.7 Mandatory and Permissive: "Shall", "will", and "agrees" are mandatory; "may" is permissive.

- 10.7.8 **Governing Laws:** The laws of the State of Alabama shall govern the validity of this Agreement, the construction of its terms, the interpretation of the rights, the duties of the parties, the enforcement of its terms, and all other matters relating to this Agreement.
- 10.7.9 **Liability of the City or City Officials.** Notwithstanding any provision hereof to the contrary, the parties agree and acknowledge that the liability and obligations of the City, City officials or City employees as set forth herein are subject to the limitations imposed on municipalities by the Constitution and laws of the State of Alabama. No present or future official, officer or employee of the City shall ever be personally liable for the performance of any obligations hereunder.
- 10.7.10 **Non-Discrimination:** The Contractor agrees that in performing the work and services as required herein under this agreement, not to discriminate against any person on the basis of race color, religion, sex, age or disability. (The Contractor shall fully comply with the Americans with Disabilities Act), the Fair Labor Standards Act and all other applicable laws and regulations).
- 10.7.11 **Fines and Penalties:** The Contractor shall be solely liable for any and all fines or penalties which may be levied by any governmental authority against the Owner and/or Contractor which are related to the Contractor's operations. The Owner shall deduct the amount of the levied fine or penalty from the Contract amount.
- 10.7.12 **Agreement Date/Counterparts:** The date of this Agreement is intended as and for a date for the convenient identification of this Agreement and is not intended to indicate that this Agreement was necessarily executed and delivered on said date. This instrument may be executed in any number of counterparts, each of which so executed shall be deemed an original, but all such counterparts shall together constitute but one and the same instrument.
- 10.7.13 **Use of Words and Phrases.** The following words and phrases, where used in this document, shall be given the following and respective interpretations: "Herein," "hereby," "hereunder," "hereof," and other equivalent words refer to this document as an entirety and not solely to the particular portion hereof in which any such word is used.
- 10.7.13.1 The definitions set forth in any portion of this Agreement unless the text or context indicates differently shall be deemed applicable whether the words defined are herein used in the singular or the plural. Wherever used herein any pronoun or pronouns shall be deemed to include both singular and plural and to cover all genders.
- 10.7.14 **Severability.** Each provision of this agreement shall be considered to be severable and, if for any reason, any such provision or any part thereof, is determined to be invalid and contrary to any existing or future applicable law, such invalidity shall not impair the operation of or affect those portions of this agreement that are valid, but this agreement shall be construed and enforced in all respects as if the invalid or unenforceable provision or part hereof had been omitted.

Section 41-16-5, Code of Alabama 1975, requires that public contracts over \$15,000 include the following language:

**By signing this Contract, _____ represents
COMPANY NAME**

and agrees that it is not currently engaged in, nor will it engage in, any boycott of a person or entity based in or doing business with a jurisdiction with which the State of Alabama can enjoy open trade

THE CITY OF FAIRHOPE, ALABAMA

ATTEST:

Sherry Sullivan, Mayor

Lisa A. Hanks, MMC, City Clerk

NOTARY FOR THE CITY

STATE OF ALABAMA}

COUNTY OF BALDWIN}

I, the undersigned authority in and for said State and County, hereby certify that **SHERRY SULLIVAN** as **Mayor** of the City of Fairhope, whose name is signed to the foregoing document and who is known to me, acknowledged before me on this day, that, being informed of the contents of the document she executed the same voluntarily on the date the same bears date.

Given under my hand and Notary Seal on this ____ day of _____, 20__

Notary Public_____

My Commission Expires ____/____/____

[END OF CONTRACT AGREEMENT]

CITY OF FAIRHOPE
CONTRACT DOCUMENTS
PERFORMANCE BONDS

STATE OF ALABAMA}
BALDWIN COUNTY}

KNOWN ALL MEN BY THESE PRESENTS, that we _____
as principal and _____ (hereinafter called the "Surety"), as Surety, do
hereby acknowledge ourselves indebted and firmly bound and held unto the City of Fairhope,
Alabama, (hereinafter called the "**City**") a municipal corporation existing under and by virtue of
the laws of the State of Alabama, for the use and benefit of those entitled thereto, in the penal
sum of _____ (\$_____) for the payment
of which will and truly be made in lawful money of the United States, we do hereby bind
ourselves, our successors and assigns and personal representatives, jointly and severally,
firmly by the presents.

BUT THE CONDITION OF THE FOREGOING OBLIGATION OR BOND IS THIS:
WHEREAS, the **City** has entered into a certain written Contract with said Contractor for **Project**
No. PW006-20 Drainage Improvements at Oak St and Section St in accordance with Contract
documents therefore on file in the Office of Purchasing for the **City of Fairhope** at the
price of, to-wit:

_____ Dollars (\$_____) as more fully appears in said

written contract bearing the date of _____, 20____, which contract is hereby
referred to and made a part hereof to the same extent as if set out herein in full.

NOW, THEREFORE, if the Contractor shall fully and faithfully perform all the
undertakings and obligations under the said agreement or contract herein before referred to and
shall fully indemnify and save harmless the said **City** from all costs and damages whatsoever
which it may suffer by reason of any failure on the part of said Contractor so to do, and shall
fully reimburse and repay the said **City** any and all outlay and expense which it may incur in
making good any such default, and shall guarantee all workmanship against defects for a period of
one year, this obligation or bond shall be null and void, otherwise it shall remain in full force and
effect.

And, for value received it is hereby stipulated and agreed that no change, extension of time,
alteration or addition to the terms of said agreement or contract or in the work to be performed
thereunder or the specifications accompanying the same shall in any wise affect the obligations of
the principal or of the surety under this bond, and notice is hereby waived of any such change,
extension of time, alternative of or addition to the terms of the agreement or contract or to the work
or to the specifications.

IN WITNESS WHEREOF, the said Contractor has hereunder affixed its signature and
said Surety has hereunto caused to be affixed its corporate signature and seal, by its duly
authorized officers on the ____ day of _____, 20____.

Principal

By _____
Title

Surety

ATTEST:

By _____

Title

CITY OF FAIRHOPE
PUBLIC WORKS CONTRACT DOCUMENTS
SECTION NINE
LABOR AND MATERIAL BOND

KNOWN ALL MEN BY THESE PRESENTS, that we, _____
(hereinafter called the "Contractor") of _____
as principal and _____ (hereinafter called the "Surety"),
as Surety, do hereby acknowledge ourselves indebted and firmly bound and held unto the City
of Fairhope, Alabama, (hereinafter called the "**City**"), a municipal corporation, existing under and
by virtue of the Laws of the State of Alabama, for the use and benefit of those entitled
thereto, in the penal sum of _____ (\$_____) for
the payment of which well and truly to be made in lawful money of the United States, we do
hereby bind ourselves, or successors, assigns and personal representatives, jointly and
severally, firmly by these presents.

BUT THE CONDITION OF THE FOREGOING OBLIGATION OR BOND IS THIS:

WHEREAS: the **City** has entered into a certain written contract with said Contractor for
Project No. PW006-20 Drainage Improvements at Oak St and Section St in accordance with
contract documents heretofore on file in the Office of the **City of Fairhope** at the price of, to-wit: _
(\$_____) as more fully appears in said written Contract bearing date of _____
_____, 20____ which Contract is hereby referred to and made a part hereof to the same extent as if
set out herein in full.

NOW, THEREFORE, if said Principal and all subcontractors to whom any portion of the
work provided for in said contract is sublet and all assignees of said Principal and of such
subcontractors shall promptly make payment to all persons supplying him or them with labor,
foodstuffs, or supplies for or in the prosecution of the work provided for in such contract, or in
any amendment or extension of or addition to said contract, and for the payment of reasonable
attorney's fees, incurred by the claimant or claimants in suits on said bond, then the above
obligation shall be void; otherwise, it shall remain in full force and effect.

PROVIDED, however, that this bond is subject to the following conditions and limitations:

(a) (a) Any person, firm or corporation that has furnished labor, foodstuffs, or supplies
for or in the prosecution of the work provided for in said contract, payment for which has not
been made, shall have a direct right of action in his or their name or names against the principal
and surety on this bond, which right of action shall be asserted in a proceeding, instituted in the
county in which the work provided for in said contract is to be performed and in any county in
which said Principal or Surety does business. Such right of action shall be asserted in a
proceeding instituted in the name of the claimant or claimants for his or their use and benefit
against said Principal and Surety or either of them (but not later than one year after the final
settlement of said Contract) in which action such claim or claims shall be adjudicated and
judgment rendered thereon.

(b) In addition to any other legal mode of service, service of summons and other
process in suits on this bond brought in Baldwin County may be had on the Principal or the Surety
in accordance with Title 27, Chapter 3, Section 24 of the Ala. Code (1975) by serving a copy of
the summons and complaint or other pleading or process, with the Commissioner of Insurance
of the State of Alabama or his/ her designee and the Principal and Surety agree to be bound by
such mode of service above described and consents that such service shall be the same as
personal service on the Principal or Surety.

(c) The Surety shall not be liable hereunder for any damages or compensation
recoverable under any workmen's compensation or employer's liability statute.

(d) In no event shall the Surety be liable for a greater sum than the penalty of this bond, or subject to any suit, action or proceeding thereon that is instituted later than one year after the final settlement of said contract.

(e) This bond is given pursuant to the terms of Title 39, Chapter 1, Section 1 of the Ala. Code (1975), and all the provisions of law with reference to this character of bond as set forth in said section or as may hereinafter be enacted are hereby made a part hereof to the same extent as if set out herein in full.

IN WITNESS WHEREOF, the said Contractor has hereunder affixed its signature and said Surety has hereunto caused to be affixed its corporate signature and seal, by its duly

authorized officers on the ____ day of _____, 20____

Principal

By: _____

Title

Surety

ATTEST:

By: _____

ITEM VII
Alabama Immigration Act Contract Requirements

7.1 Background

The **Beason-Hammon Alabama Taxpayer and Citizen Protection Act, Act No 2011-535, as amended by Act No 2012-491, Code of Alabama (1975) Section 31-13-1 through Section 31-13-30** (also known as and hereinafter referred to as “the Alabama Immigration Act”) is applicable to contracts with the City of Fairhope, Alabama. All business entities entering into contracts with the City of Fairhope, Alabama will comply with the Alabama Immigration Act.

7.2 Definitions

- 7.2.1 ALIEN. Any person who is not a citizen or national of the United States, as described in 8 U.S.C. § 1101, et seq., and any amendments thereto.
- 7.2.2 BUSINESS ENTITY. Any person or group of persons employing one or more persons performing or engaging in any activity, enterprise, profession, or occupation for gain, benefit, advantage, or livelihood, whether for profit or not for profit. Business entity shall include but not be limited to the following:
- 7.2.2.1 Self-employed individuals, business entities filling articles of incorporation, partnerships, limited partnerships, limited liability companies, foreign corporations, foreign limited partnerships, foreign liability companies authorized to transact business in this state, business trusts, and any business entity that registers with the Secretary of State.
- 7.2.2.2 Any business entity that possesses a business license, permit, certificate, approval, registration, charter, or similar form of authorization issued by the state, any business entity that is exempt by law from obtaining such a business license, an any business entity that is operating unlawfully without a business license.
- 7.2.3 CONTRACTOR. A person, employer, or business entity that enters into an agreement to perform any service or work or to provide a certain product in exchange for valuable consideration. This definition shall include, but not be limited to, a general CONTRACTOR, sub-contractor, independent CONTRACTOR, contract employee, project manager, or a recruiting or staffing entity.
- 7.2.4 EMPLOYEE. Any person directed, allowed, or permitted to perform labor or service of any kind by an employer. The employees of an independent CONTRACTOR working for a business entity shall not be regarded as the employees of the business entity, for the purposes of this chapter. This term does not include any inmate in the legal custody of the state, a county, or a municipality.
- 7.2.5 EMPLOYER. Any person, firm, corporation, partnership, joint stock association, agent, manager, representative, foreman, or other person having control or custody of any employment, place of employment, or of any employee, including any person or entity employing any person for hire within the State of Alabama, including a public employer. This term shall not include the occupant of a household contracting with another person to perform casual domestic labor within the household.
- 7.2.6 E-VERIFY. The electronic verification of federal employment authorization program of the Illegal Immigration Reform and Immigrant Responsibility Act of 1996, P.L. 104-208, Division c, Section 403 (a); 8 U.S.C. §1324(a), and operated by the United States Department of Homeland Security, or its successor program.
- 7.2.7 STATE-FUNDED ENTITY. Any governmental entity of the state or a political subdivision thereof or any other entity that receives any monies from the state or a political subdivision thereof; provided, however, an entity that merely provides a service or a product to any governmental entity of the state or a political subdivision thereof, and receives compensation for the same, shall not be considered a state-funded entity.

- 7.2.8 SUB-CONTRACTOR. A person, business entity, or employer who is awarded a portion of an existing contract by a CONTRACTOR, regardless of its tier.
- 7.2.9 UNAUTHORIZED ALIEN. An alien who is not authorized to work in the United States as defined in 8 U.S.C. § 1324a (h) (3).

7.3 Mandatory Clause

- 7.3.1 All contracts or agreements to which the state, a political subdivision, or state-funded entity are a party shall include the following clause:

"By signing this contract, the contracting parties affirm, for the duration of the agreement, that they will not violate federal immigration law or knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama. Furthermore, a contracting party found to be in violation of this provision shall be deemed in breach of the agreement and shall be responsible for all damages resulting therefrom."

- 7.3.2 For purposes of this section, "contract" shall mean a contract awarded by the state, any political subdivision thereof, or any state-funded entity that was competitively bid or would, if entered into by the state or an agency thereof, be required to be submitted to the Contract Review Permanent Legislative Oversight Committee.

7.4 Contracts Involving Business Entity, or Employer

- 7.4.1 As a condition for the award of any contract, grant, or incentive by the state, any political subdivision thereof, or any state-funded entity to a business entity or employer that employs one or more employees, the business entity or employer shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama.
- 7.4.2 As a condition for the award of any contract, grant, or incentive by the state, any political subdivision thereof, or any state-funded entity to a business entity or employer that employs one or more employees within the state of Alabama, **the business entity or employer shall provide documentation establishing that the business entity or employer is enrolled in the E-Verify program.** During the performance of the contract, the business entity or employer shall participate in the E-Verify program and shall verify every employee that is required to be verified according to the applicable federal rules and regulations.

7.5 Contracts Involving Subcontracting

Any sub-contractor on a project paid for by contract, grant, or incentive by the state, any political subdivision thereof, or any state-funded entity shall not knowingly employ, hire for employment, or continue to employ an unauthorized alien within the State of Alabama and shall also enroll in the E-Verify program prior to performing any work on the project. Furthermore, during the performance of the contract, the sub-contractor shall participate in the E-Verify program and shall verify every employee that is required to be verified according to the applicable federal rules and regulations. This subsection shall only apply to sub-contractors performing work on a project subject to the provisions of this section and not to collateral persons or business entities hired by the sub-contractor.

- 7.6 Proof of E-Verify documentation will be in the form of a copy of the signed Memorandum of Understanding (MOU) generated upon completion of the E-Verify program.

CONTRACTOR INFORMATION

Bid No. 002-21 Drainage Improvements for Oak St and Section St at Big Mouth Gully

Please print this section and turn in with your response

Business Organization

Name of Bidder (exactly as it appears on W-9):

Doing-Business-As Name of Bidder:

Principal Office Address:

Form of Business Entity [check one ("X")]

Corporation _____

Partnership _____

Individual _____

Joint Venture _____

Other (describe): _____

Corporation Statement

If a corporation, answer the following:

Date of incorporation: _____

Location of incorporation: _____

The corporation is held:

Publicly _____

Privately _____

Partnership Statement

If a partnership, answer the following:

Date of organization: _____

Location of organization: _____

The partnership is:

General _____

Limited _____

Joint Venture Statement

If a Joint Venture, answer the following:

Date of organization: _____

Location of organization: _____

JV Agreement recorded?

Yes _____

No _____

Primary Contact _____ Title _____

Telephone Number _____ Fax _____

Email Address: _____

CITY OF FAIRHOPE

**CHANGE
ORDER
REQUEST**

OWNER: CITY OF FAIRHOPE

ARCHITECT/ENGINEER: _____

CONTRACTOR: _____

PROJECT: _____

CHANGE ORDER REQUEST NO. _____ DATE: _____

1. DESCRIPTION OF CHANGE:

2. CHANGE ORDER COSTS: _____

Proposal Attached _____ Cost Estimated/Proposal Required

<i>Item</i>	<i>Quantity</i>	<i>Material Unit Price</i>	<i>Labor (Hours)</i>	<i>Labor Unit Price</i>	<i>Sub-Total Cost</i>
a.					
b.					
c.					
d.					
e.					
f.*					
TOTAL:					

*If more than 6 items, provide attachments.

3. INSTITUTED BY:

4. JUSTIFICATION OF NEED:

5. JUSTIFICATION OF CHANGE ORDER VERSUS COMPETITIVE BIDDING:

6. COSTS REVIEW:

7. THIS CHANGE ORDER IS SUBMITTED FOR REVIEW AND APPROVAL AND IS CLASSIFIED AS THE FOLLOWING TYPE:

- ☐ Minor change of a total monetary value less than required for competitive bidding.
 - ☐ Changes for matters relatively minor and incidental to the original contract necessitated by unforeseeable circumstances arising during the course of work.
 - ☐ Emergencies arising during the course of work.
 - ☐ Change or alternates provided for in the original bidding where there is no difference in price of the Change Order from the original best bid on the Alternate.
 - ☐ Change of relatively minor terms not contemplated when the plans and specifications were prepared and the Project was bid and which are in the public interest and do not exceed 10% of the Contract Price.
-

8. EXTENSION OF TIME REQUESTED: Calendar Days:

RECOMMENDED:

APPROVED:

BY: _____
Fairhope's Consulting Engineer/Architect

BY: _____
Contractor

BY: _____
City Representative

BY: _____
Owner's Legal Advisor

BY: _____
Owner's Authorized Representative

CHANGE ORDER NO. _____

City of Fairhope, Alabama

DATE: _____ **PROJECT:** _____

TO: _____
(Contractor)

TERMS: You are hereby authorized, subject to the provisions of your Contract for this Project, to make the following changes thereto in accordance with the attached Change Order Request and supporting documents and to:

FURNISH the necessary labor, materials and equipment to:

TOTAL ADDITION OR REDUCTION TO CONTRACT PRICE:

(Note: Numbers in parentheses are deductions).

ORIGINAL CONTRACT PRICE	\$ _____
LESS CONTINGENCY/ALLOWANCE	\$ _____
NET ORIGINAL CONTRACT PRICE	\$ _____
Net total of previous Change Orders	\$ _____
Previous revised Contract Price	\$ _____
This Change Order No. _____ <input type="checkbox"/> Add <input type="checkbox"/> Deduct	\$ _____
Revised Contract Price this date	\$ _____

Extension of time resulting from this Change Order _____ (Indicate number of calendar days).

The amount of this Change Order will be the responsibility of _____

This Contract Modification constitutes full and mutual accord and satisfaction for all time and all cost related to this change. By acceptance of this Contract Modification, the Contractor hereby agrees that the modification represents an equitable adjustment to the Contract, and further, agrees to waive all right to file any further claims or changes arising out of or as a result of this change, or the accumulation of executed Contract Modifications on this Contract.

The Contractor and Owner(s) hereby agree to the terms of this Change Order as contained herein.

CONSENT OF SURETY

(Company)

By: _____

RECOMMENDED

By: _____

(Design Engineer or Architect)

CONTRACTING PARTIES

(Contractor)

By: _____
(Authorized Representative)

CITY OF FAIRHOPE

By: _____
(Mayor)

(City Clerk)

CITY OF FAIRHOPE

CLOSEOUT DOCUMENTS

CONSENT OF SURETY COMPANY TO FINAL PAYMENT

CONTRACTOR'S AFFIDAVIT OF PAYMENT

FINAL RELEASE OF LIENS

NOTICE OF COMPLETION ADVERTISEMENT

CITY OF FAIRHOPE
CONSENT OF SURETY COMPANY TO FINAL PAYMENT

PROJECT NO: PW006-20

PROJECT NAME: DRAINAGE IMPROVEMENTS AT OAK ST AND SECTION ST

OWNER: City of Fairhope
P.O. Drawer 429
Fairhope, AL 36533

CONTRACTOR: _____

In accordance with the provision of the Contract between the OWNER and the CONTRACTOR as

indicated above, the _____, Surety Company on bond of _____ CONTRACTOR, hereby approved the final payment to the CONTRACTOR and agrees that final payment to the CONTRACTOR shall not relieve the Surety Company of any of its obligations to the City of Fairhope as set forth in said Surety Company's bond dated the ____ day of _____, 2020.

IN WITNESS WHEREOF

The Surety Company has hereunto set its hand this ____ day of _____, 2020.

ATTEST:
(Seal)

Surety Company

Signature of Authorized Representative

Title

CITY OF FAIRHOPE

CONTRACTOR'S AFFIDAVIT OF PAYMENT OF CLAIMS & DEBTS

PROJECT NUMBER: PW006-20
PROJECT NAME: Drainage Improvements at Oak St and Section St

OWNER: City of Fairhope, Alabama
P.O. Drawer 429
Fairhope, Al 36533

CONTRACTOR:

STATE OF: _____

COUNTY OF: _____

The undersigned hereby certified that, except as listed below, he has paid in full or otherwise satisfied all obligations for all materials and equipment furnished, for all work, Labor and services performed, and for all known indebtedness and claims against the CONTRACTOR for damages arising in any manner in connection with the performance of the Contract referenced above for which the OWNER or his property might in any way be held responsible.

EXCEPTION: (If none, write NONE) _____

CONTRACTOR

By:

Title:

Subscribed and sworn to and before me this ____ day of _____, 2020

.

Notary

My Commission expires ____/____/____

City of Fairhope
FINAL RELEASE OF LIENS

KNOW ALL MEN BY THESE PRESENTS: In consideration of, and contingent upon the receipt of total payments in the amount of _____

Under and pursuant to the following Contract:

Bid No 002-21 Drainage Improvements for Oak St and Section St at Big Mouth Gully
PROJECT NO: PW006-20 Drainage Improvements at Oak St and Section St

The undersigned hereby releases _____ its officers, agents and employees, of and from all liabilities, obligations, and claims whatsoever in law and in equity under or arising out of said contract. We do hereby certify that all labor, materials, equipment, supplies and etc. for this project have been paid in full and there is no outstanding indebtedness.

IN WITNESS WHEREOF, this release has been executed this _____ day of _____, 2020.

Drainage Improvements at Oak St and Section St

CONTRACTOR

By: SIGNATURE

PRINTED NAME

TITLE

STATE OF ALABAMA
COUNTY OF BALDWIN

I, the undersigned authority, a Notary Public in and for said County and State, hereby certify that

_____, whose name is signed to the foregoing instrument and who is known to me, acknowledged before me on this day that, being informed of the contents of the within instrument, he executed the same voluntarily on the day the same bears date.

Given under my hand and seal on this the _____ day of _____, 2020

NOTARY PUBLIC

My Commission Expires:____/____/____

LEGAL NOTICE

NOTICE OF COMPLETION

Pursuant to Ala. Title 39-1-1(1975), notice is hereby given that _____

(Name of Company)

Contractor, has completed the Contract with the City of Fairhope, Alabama, for _____

_____ located at _____
(Name of Project) (Location of the Project)

for the City of Fairhope, Alabama (Owners) and have made request for final settlement of said Contract. Any Claims for labor, materials or otherwise in connection with this project should be itemized, Notarized and presented to

Owner:

CITY OF FAIRHOPE

555 South Section Street

P.O. Drawer 429

Fairhope, AL 36533

On or before (30 days) or same will be barred.

Published in a newspaper of general publication within the City of Fairhope or Baldwin County for a period of once a week for **four (4) successive weeks beginning:** _____, 20____

____ *“(f) The contractor shall, immediately after the completion of the contract, give notice of the completion by an advertisement in a newspaper of general circulation published within the city or county in which the work has been done, for a period of four successive weeks. A final settlement shall not be made upon the contract until the expiration of 30 days after the completion of the notice. Proof of publication of the notice shall be made by the contractor to the authority by whom the contract was made by affidavit of the publisher and a printed copy of the notice published. If no newspaper is published in the county in which the work is done, the notice may be given by posting at the courthouse for 30 days, and proof of same shall be made by the judge of probate, sheriff, and the contractor.”*

Owner:

CITY OF FAIRHOPE

555 South Section Street

P.O. Drawer 429

Fairhope, AL 36533

On or before (30 days) or same will be barred.

Contractor:

Dates ad was run: (once a week for 4 weeks)

Newspapers in which ad run: (dates)

The Courier	_____
Birmingham News	_____
Mobile Press Register	_____
Montgomery Advertiser	_____